

# VÁLVULA DE DILUVIO ANTICOLUMNA CONTROLADA HIDRÁULICAMENTE CON RESTABLECIMIENTO LOCAL

## Modelo FP-400Y-5M

El modelo de BERMAD 400Y-5M es una válvula de diluvio elastomérica, hidráulica y accionada por presión de línea, diseñada específicamente para sistemas avanzados de protección contra incendios y los estándares más recientes de la industria. La 400Y-5M se activa mediante una válvula de relé accionada por presión, que mantiene la válvula principal abierta hasta que se restablece localmente. La 400Y-5M es ideal para sistemas con líneas piloto húmedas remotas o elevadas, debido a su liberación de presión local reforzada. El indicador de posición de la válvula opcional puede incluir un interruptor de límite adecuado para sistemas de monitoreo de Gas y Fuego.



### Características y ventajas

- Seguridad y confiabilidad
  - Diseño simple, probado en el tiempo, con activación a prueba de fallos
  - Elastómero resistente de una sola pieza, tecnología VRSD
  - Sin partes mecánicas móviles
  - Se mantiene abierta: permanece abierta hasta reiniciarse localmente
  - Interruptores de límite de posición de la válvula (opcional)
  - Indicador luminoso de posición de válvula local (opcional)
- Rendimiento alto
  - Eficiencia de flujo muy alto
  - Cuerpo tipo Y de paso recto
  - Aprobado para PN25/365 psi
- Diseñada específicamente para protección contra incendios
  - Longitud cara a cara estandarizada según ISO 5752 EN 558-1
  - Cumple con los requisitos de los estándares de la industria
  - Diseñada para alta fiabilidad y fácil mantenimiento
  - Apertura rápida para líneas piloto de gran longitud
- Mantenimiento rápido y fácil
  - Servicio en línea
  - Retiro rápido y fácil de la tapa
  - Válvulas de drenaje giratorias (para válvulas de 3" y mayores)

### Aprobaciones



Listada UL  
Válvulas especiales de control de agua para sistemas, tipo diluvio (VLFT)  
Diámetros: 1½" - 16"



Aprobado FM  
Para sistemas de diluvio  
Diámetros 1½" - 8"



Det Norske Veritas  
Aprobación  
Tamaños de 1½" a 16"



ABS  
American Bureau of Shipping  
Aprobación  
Tamaños 1½" - 12"



Lloyd's Register  
Aprobación  
Tamaños 1½" - 10"

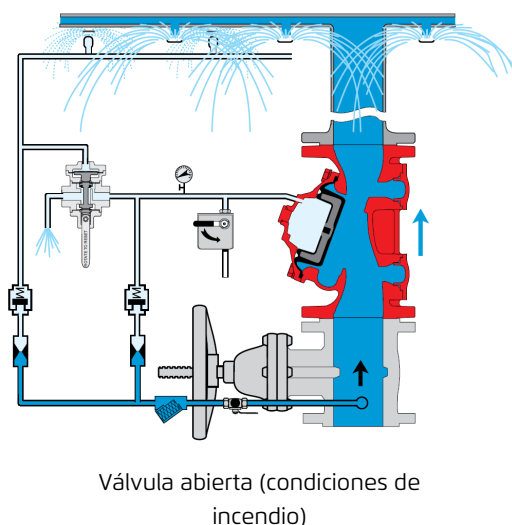
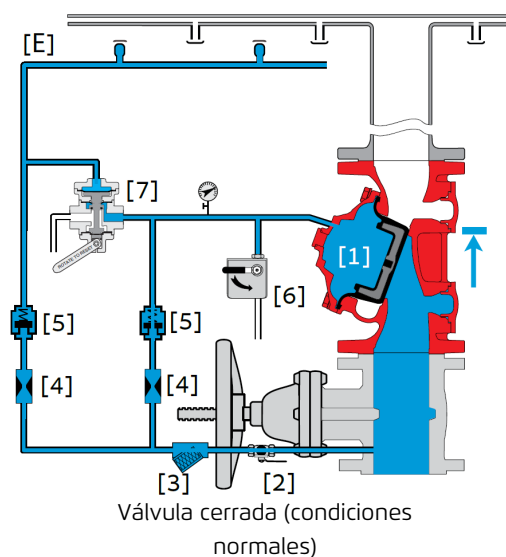
### Aplicaciones típicas

- Líneas piloto húmedas remotas o elevadas
- Sistemas automáticos de rociadores de agua
- Sistemas controlados hidráulicamente a distancia
- Aplicaciones de espuma

### Características adicionales

- Interruptores de límite de posición de válvula
- Baliza indicadora de posición de la válvula local
- Interruptor de presión de alarma
- Kit de alarma para motor hidráulico, aluminio recubierto de epoxi
- Compatibilidad con agua de mar
- Válvula de desagüe entrada/salida

## Operación

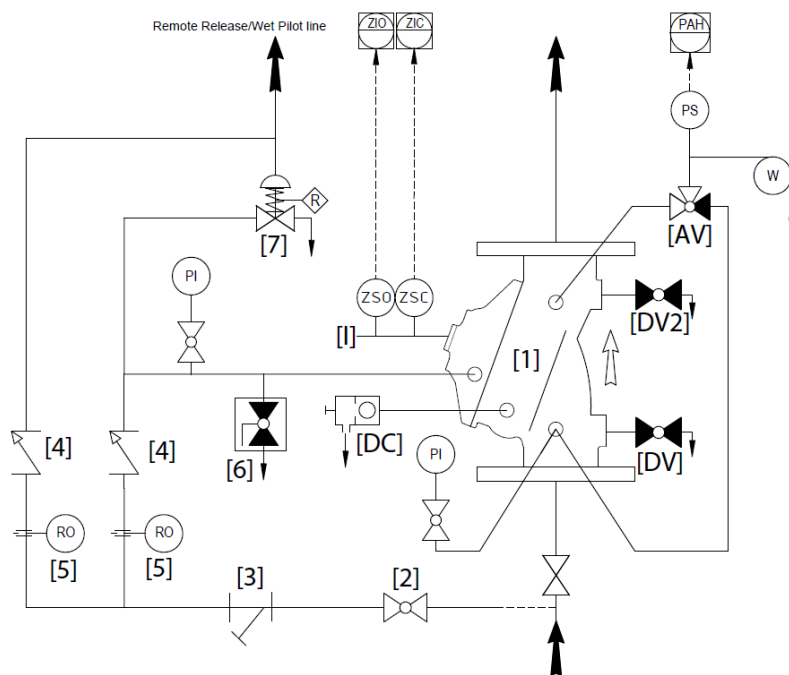


El modelo 400Y-5M de BERMAD se mantiene cerrado por la presión de agua en la cámara de control [1]. Al liberar la presión de la cámara de control, la válvula se abre.

En condiciones NORMALES, la presión de agua se suministra a la cámara de control a través de la línea de cebado [2] y el filtro [3], un orificio de restricción [5] y luego queda atrapada en la cámara de control por una válvula de retención [4], un accionamiento manual de emergencia [6] y una válvula de relé (URV-M) [7] que se mantiene cerrada por la presión de la línea piloto hidráulica [E]. La presión de agua atrapada en la cámara de control mantiene el diafragma contra el asiento de la válvula, sellándola herméticamente y manteniendo las tuberías del sistema secas.

En condiciones de INCENDIO, la presión de agua se libera de la cámara de control, ya sea mediante el accionamiento manual de emergencia o porque la URV-M se abre automáticamente en respuesta a una disminución de la presión en la línea piloto hidráulica. Esto enclava la válvula de diluvio 400Y-5M en posición abierta, permitiendo que el agua fluya hacia las tuberías del sistema y hacia el dispositivo de alarma [9]. La URV-M viene ajustada de fábrica para operar con una elevación mínima de la línea piloto de 10 metros por encima de la válvula. Se puede ajustar una tensión adicional del resorte para adaptarse a mayores elevaciones, hasta un máximo de 70 metros por encima de la válvula (consulte la Designación del Código de Válvula en la última página).

## Esquema del sistema



| Componentes |                                          |
|-------------|------------------------------------------|
| 1           | Válvula de Diluvio BERMAD 400Y           |
| 2           | Priming ball valve                       |
| 3           | Priming strainer                         |
| 4           | Válvula de retención (cheque), tipo Lift |
| 5           | Restriction Orifice                      |
| 6           | Manual Emergency Release                 |
| 7           | Válvula de relé URV-2-M                  |

| Elementos opcionales del sistema |                                                                   |
|----------------------------------|-------------------------------------------------------------------|
| I                                |                                                                   |
| PS                               | Presostato PS-10 o PS-40                                          |
| W                                | Kit de alarma para motor hidráulico, aluminio recubierto de epoxi |
| ZS                               | Conjunto del interruptor de límite *                              |
| DV2                              |                                                                   |
| DV                               |                                                                   |
| PI                               |                                                                   |
| AV                               |                                                                   |
| DC                               | Automatic drip check valve                                        |

\* Incluido con el sufijo A en el código de la válvula y obligatorio para la aprobación FM (componentes de drenaje e indicación). Ver designaciones de código en la página 4 "Elementos adicionales suministrados de fábrica"

## Instalación del sistema

Una instalación típica del modelo BERMAD 400Y-5M cuenta con activación automática mediante una válvula de relé accionada por presión, disparada por una línea piloto húmeda con tapones fusibles cerrados elevados por encima de la válvula de diluvio. Cuando está abierta y equipada con un interruptor de límite, la válvula envía una señal de retroalimentación al sistema remoto de monitoreo de posición de válvula.

## Elementos opcionales del sistema



S.S. Glycerin Filled  
Pressure Gauge



S.S. Pressure Switch  
E xd



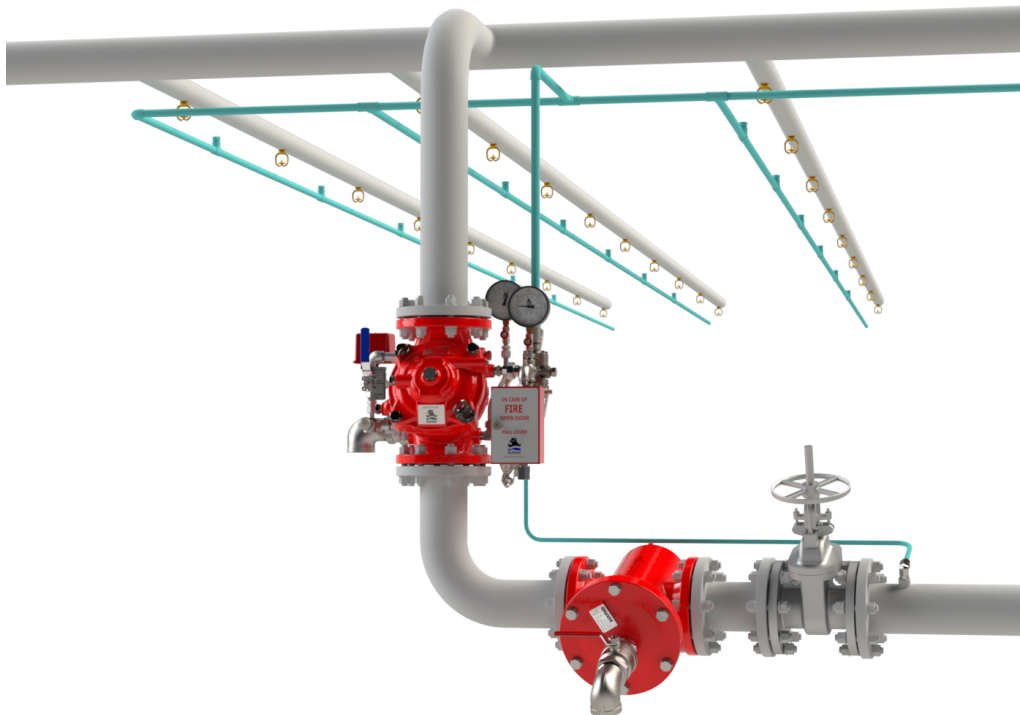
Visual Position  
Indicator



Rotating Limit  
Switch Box



Basket Strainer -  
60F



## Especificaciones sugeridas

La válvula de diluvio deberá estar listada UL y aprobada FM, con presión nominal de 365 psi/25 bar, y cuerpo tipo Y de paso recto.

La válvula deberá tener un paso de flujo sin obstrucciones, sin guía de vástago ni costillas de soporte.

La válvula de diluvio no deberá tener partes móviles mecánicas y la activación deberá utilizar un conjunto de diafragma de una sola pieza con tecnología VRSD.

La válvula deberá estar recubierta interna y externamente con protección UV. Opcional: grado C5-VH de la norma ISO-12944 para ambientes corrosivos.

El trim de control deberá incluir una válvula de relé auxiliar con enclavamiento, una unidad de accionamiento manual de emergencia, un filtro tipo Y, dos manómetros de 4 pulgadas, un dren automático con mando manual y una válvula de drenaje de bola con giro de 360 grados.

Se deberá proporcionar un indicador de posición de válvula, equipado con dos interruptores de límite de proximidad.

La remoción de la tapa de la válvula para inspección y mantenimiento completos deberá realizarse en línea y no requerirá quitar el trim de control.

La válvula de diluvio y el trim de control deberán entregarse pre-ensamblados y probados hidráulicamente por una fábrica certificada UL/FM e ISO 9000, 9001.

## Datos técnicos

### Tamaños disponibles:

Embridada- 1½, 2, 2½, 3, 4, 6, 8, 10, 12, 14 & 16"

Ranura (Victaulic)- 1½, 2, 2½, 3, 4, 6, 8 & 10"

### Presión nominal:

ANSI #150 - 17.2 bar | 250 psi

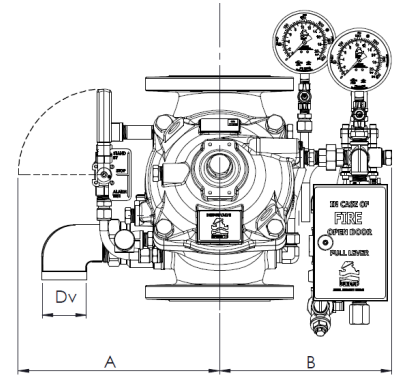
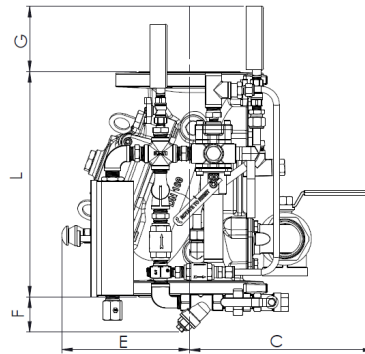
ANSI #300: de 1½" a 10" - 25 bar | 365 psi

ANSI #300 - 12" a 16" - 20 bar | 300 psi

Ranura (Victaulic) - 17.2 / 25 bar | 250 / 365 psi

### Elastómero:

HTNR - Fabric Reinforced High Temperature Compound - See engineering data



| Tamaño de Válvula | L #150<br>mm   in | L ranurado<br>mm   in | L #300<br>mm   in | A<br>mm   in | B<br>mm   in | C<br>mm   in | øD<br>in | E<br>mm   in | F<br>mm   in | G<br>mm   in | Peso #150<br>kg   lb | Peso #300<br>kg   lb |
|-------------------|-------------------|-----------------------|-------------------|--------------|--------------|--------------|----------|--------------|--------------|--------------|----------------------|----------------------|
| DN40   1½"        | 230   9.1         | 230   9.1             | 230   9.1         | 293   11.5   | 200   7.9    | 177   7      | ¾"       | 215   8.5    | 151   5.9    | 178   7      | 18   40              | 20   44              |
| DN50   2"         | 230   9.1         | 230   9.1             | 238   9.3         | 293   11.5   | 200   7.9    | 177   7      | ¾"       | 215   8.5    | 151   5.9    | 178   7      | 19   42              | 21   46              |
| DN65   2½"        | 235   9.3         | 235   9.3             | 241   9.5         | 296   11.6   | 200   7.9    | 183   7.2    | 1½"      | 215   8.5    | 148   5.8    | 157   6.2    | 22   48              | 24   53              |
| DN80   3"         | 310   12.2        | 310   12.2            | 326   12.8        | 313   12.3   | 259   10.2   | 221   8.7    | 1½"      | 186   7.3    | 82   3.2     | 88   3.5     | 36   79              | 41   90              |
| DN100   4"        | 350   13.8        | 320   12.6            | 368   14.5        | 343   13.5   | 268   10.6   | 287   11.3   | 2"       | 199   7.8    | 55   2.2     | 135   5.3    | 50   110             | 57   125             |
| DN150   6"        | 480   18.9        | 480   18.9            | 506   19.9        | 358   14.1   | 321   12.6   | 302   11.9   | 2"       | 234   9.2    | -            | 27   1       | 97   213             | 117   257            |
| DN200   8"        | 600   23.6        | 600   23.6            | 626   24.6        | 392   15.4   | 380   15     | 317   12.5   | 2"       | 301   11.9   | -            | 2   0.1      | 167   367            | 187   411            |
| DN250   10"       | 730   28.7        | 730   28.7            | 730   28.7        | 406   25.4   | 380   15     | 317   12.5   | 2"       | 301   11.9   | -            | -            | 200   440            | 235   517            |
| DN300   12"       | 850   33.5        | -                     | 888   35          | 478   18.8   | 463   18.2   | 380   15     | 2"       | 441   17.4   | -            | -            | 357   785            | 406   895            |
| DN350   14"       | 980   38.6        | -                     | 980   38.6        | 478   18.8   | 463   18.2   | 379   14.9   | 2"       | 441   17.4   | -            | -            | 393   864            | 463   1018           |
| DN400   16"       | 1100   43.3       | -                     | 1100   43.3       | 478   18.8   | 463   18.2   | 405   15.9   | 2"       | 417   16.4   | -            | -            | 444   977            | 564   1240           |

**IMPORTANTE:** Las dimensiones del contorno del trim o sus extensiones se refieren a una orientación vertical y pueden variar según la posición específica de los componentes. Aparte de la dimensión "L", permita una tolerancia de al menos ±15%.

## Valve Code Designations

| FP                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6"                   | 400Y-5M                                                                                                                              | M6           | 03    | V        | C     | A5         | ER                   | NN | N6nW                                                                                                                                                                                                                                                           |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------|-------|----------|-------|------------|----------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------|--------------------------|--------|----------------------------------------|--------|----------------------------------------|--------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|------------|--------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-----------------------|----|-----------------------|----|-------------------|----|-------------------------------------------|----|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------|------------------------------------|----|--------------------------------------------|----|-------------------------|----|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------|----------------------------------------------------|----|------------------------------------------|----|------------------------------------------------------|------|--------------------------------------------------------------------|-------|--------------------------------------|---|------------------------------------|----|------------------------------------|-----|------------------------------------------------------------|-------|----------------------------------------|---|-----------------------------------------------------|----|----------------------------------------------|----|------------------------------------|---|-------------|----|-------------------------------------------|---|----------------------------------|---|----------------------|---|--------------------------|---|--------------------------|---|
| <table><tr><th>Category</th><th>Code</th></tr><tr><td>Standard</td><td>FP</td></tr><tr><td>Seawater</td><td>FS</td></tr><tr><td>Foam</td><td>FC</td></tr></table>                                                                                                                                                                                                                                                                                                      | Category             | Code                                                                                                                                 | Standard     | FP    | Seawater | FS    | Foam       | FC                   |    | <table><tr><th>Pilot Line Trip Point</th><th>Code</th></tr><tr><td>Elevation below 10m/33ft</td><td>00</td></tr><tr><td>Max elevation 35m/115ft <sup>(7)</sup></td><td>M6</td></tr><tr><td>Max elevation 70m/230ft <sup>(8)</sup></td><td>M7</td></tr></table> | Pilot Line Trip Point | Code   | Elevation below 10m/33ft | 00     | Max elevation 35m/115ft <sup>(7)</sup> | M6     | Max elevation 70m/230ft <sup>(8)</sup> | M7     |     | <table><tr><th>End Connection</th><th>Code</th></tr><tr><td>ANSI#150RF</td><td>A5</td></tr><tr><td>ANSI#150FF</td><td>a5</td></tr><tr><td>ANSI#300RF</td><td>A3</td></tr><tr><td>ANSI#300FF</td><td>a3</td></tr><tr><td>ISO PN16</td><td>16</td></tr><tr><td>ISO PN25</td><td>25</td></tr><tr><td>Grooved 17.2 bar / 250 psi <sup>(5)</sup></td><td>VI</td></tr><tr><td>Grooved 25 bar / 365 psi <sup>(5)</sup></td><td>V2</td></tr></table> | End Connection | Code   | ANSI#150RF | A5     | ANSI#150FF | a5                                                                                                                                                                                                                                                     | ANSI#300RF         | A3   | ANSI#300FF            | a3 | ISO PN16              | 16 | ISO PN25          | 25 | Grooved 17.2 bar / 250 psi <sup>(5)</sup> | VI | Grooved 25 bar / 365 psi <sup>(5)</sup> | V2                                                                                                                                                                                                                                                                                                                                                                  |                                      | <table><tr><th>Coating</th><th>Code</th></tr><tr><td>High Build Epoxy</td><td>ER</td></tr><tr><td>Zinc Based High Build Epoxy <sup>(5)</sup></td><td>ZR</td></tr><tr><td>Uncoated</td><td>UC</td></tr></table> | Coating                          | Code | High Build Epoxy                   | ER | Zinc Based High Build Epoxy <sup>(5)</sup> | ZR | Uncoated                | UC |                       | <table><tr><th>Factory Supplied Additional Items*</th><th>Code</th></tr><tr><td>General Purpose NEMA-4 Pressure Switch</td><td>P</td></tr><tr><td>Ex Proof NEC, Div.1 Pressure Switch <sup>(3)</sup></td><td>P7</td></tr><tr><td>Ex d ATEX Pressure Switch <sup>(3)</sup></td><td>P9</td></tr><tr><td>Ex d Pressure Switch, SS316 Enclosure <sup>(3)</sup></td><td>P9Jn</td></tr><tr><td>Ex d Pressure Switch, SS316 Enclosure, Monel Sensor <sup>(3)</sup></td><td>P9mJn</td></tr><tr><td>Single Limit Switch, General Purpose</td><td>S</td></tr><tr><td>Single Ex d Proximity limit Switch</td><td>S9</td></tr><tr><td>Double Ex d Proximity Limit Switch</td><td>SS9</td></tr><tr><td>Double Ex d Proximity Limit Switch with SS316 Junction Box</td><td>SS9Jn</td></tr><tr><td>Pressure Gauge Assembly <sup>(3)</sup></td><td>6</td></tr><tr><td>S.S Glycerin Pressure Gauge Assembly <sup>(3)</sup></td><td>6n</td></tr><tr><td>Monel Pressure Gauge Assembly <sup>(3)</sup></td><td>6m</td></tr><tr><td>Stainless steel 316 Solenoid Valve</td><td>K</td></tr><tr><td>Drain Valve</td><td>DV</td></tr><tr><td>Water Motor Alarm Assembly <sup>(3)</sup></td><td>W</td></tr><tr><td>Special Elastomer <sup>(4)</sup></td><td>E</td></tr><tr><td>Large Control Filter</td><td>F</td></tr><tr><td>Valve Position Indicator</td><td>I</td></tr><tr><td>S S 316 Trim Accessories</td><td>N</td></tr></table> | Factory Supplied Additional Items* | Code                                                                                                                                                                                               | General Purpose NEMA-4 Pressure Switch | P    | Ex Proof NEC, Div.1 Pressure Switch <sup>(3)</sup> | P7 | Ex d ATEX Pressure Switch <sup>(3)</sup> | P9 | Ex d Pressure Switch, SS316 Enclosure <sup>(3)</sup> | P9Jn | Ex d Pressure Switch, SS316 Enclosure, Monel Sensor <sup>(3)</sup> | P9mJn | Single Limit Switch, General Purpose | S | Single Ex d Proximity limit Switch | S9 | Double Ex d Proximity Limit Switch | SS9 | Double Ex d Proximity Limit Switch with SS316 Junction Box | SS9Jn | Pressure Gauge Assembly <sup>(3)</sup> | 6 | S.S Glycerin Pressure Gauge Assembly <sup>(3)</sup> | 6n | Monel Pressure Gauge Assembly <sup>(3)</sup> | 6m | Stainless steel 316 Solenoid Valve | K | Drain Valve | DV | Water Motor Alarm Assembly <sup>(3)</sup> | W | Special Elastomer <sup>(4)</sup> | E | Large Control Filter | F | Valve Position Indicator | I | S S 316 Trim Accessories | N |
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FP                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Seawater                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FS                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Foam                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | FC                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Pilot Line Trip Point                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Elevation below 10m/33ft                                                                                                                                                                                                                                                                                                                                                                                                                                               | 00                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Max elevation 35m/115ft <sup>(7)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                 | M6                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Max elevation 70m/230ft <sup>(8)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                 | M7                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| End Connection                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ANSI#150RF                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A5                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ANSI#150FF                                                                                                                                                                                                                                                                                                                                                                                                                                                             | a5                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ANSI#300RF                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A3                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ANSI#300FF                                                                                                                                                                                                                                                                                                                                                                                                                                                             | a3                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ISO PN16                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| ISO PN25                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 25                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Grooved 17.2 bar / 250 psi <sup>(5)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                              | VI                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Grooved 25 bar / 365 psi <sup>(5)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                | V2                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Coating                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| High Build Epoxy                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ER                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Zinc Based High Build Epoxy <sup>(5)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                             | ZR                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Uncoated                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UC                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Factory Supplied Additional Items*                                                                                                                                                                                                                                                                                                                                                                                                                                     | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| General Purpose NEMA-4 Pressure Switch                                                                                                                                                                                                                                                                                                                                                                                                                                 | P                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Ex Proof NEC, Div.1 Pressure Switch <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                     | P7                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Ex d ATEX Pressure Switch <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                               | P9                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Ex d Pressure Switch, SS316 Enclosure <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                   | P9Jn                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Ex d Pressure Switch, SS316 Enclosure, Monel Sensor <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                     | P9mJn                |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Single Limit Switch, General Purpose                                                                                                                                                                                                                                                                                                                                                                                                                                   | S                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Single Ex d Proximity limit Switch                                                                                                                                                                                                                                                                                                                                                                                                                                     | S9                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Double Ex d Proximity Limit Switch                                                                                                                                                                                                                                                                                                                                                                                                                                     | SS9                  |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Double Ex d Proximity Limit Switch with SS316 Junction Box                                                                                                                                                                                                                                                                                                                                                                                                             | SS9Jn                |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Pressure Gauge Assembly <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| S.S Glycerin Pressure Gauge Assembly <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                    | 6n                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Monel Pressure Gauge Assembly <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                           | 6m                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Stainless steel 316 Solenoid Valve                                                                                                                                                                                                                                                                                                                                                                                                                                     | K                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Drain Valve                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DV                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Water Motor Alarm Assembly <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                              | W                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Special Elastomer <sup>(4)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                       | E                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Large Control Filter                                                                                                                                                                                                                                                                                                                                                                                                                                                   | F                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Valve Position Indicator                                                                                                                                                                                                                                                                                                                                                                                                                                               | I                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| S S 316 Trim Accessories                                                                                                                                                                                                                                                                                                                                                                                                                                               | N                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| <table><tr><th>Valve Size</th><th></th></tr><tr><td>1½"</td><td>40 mm</td></tr><tr><td>2"</td><td>50 mm</td></tr><tr><td>2½"</td><td>65 mm <sup>(6)</sup></td></tr><tr><td>3"</td><td>80 mm</td></tr><tr><td>4"</td><td>100 mm</td></tr><tr><td>6"</td><td>150 mm</td></tr><tr><td>8"</td><td>200 mm</td></tr><tr><td>10"</td><td>250 mm</td></tr><tr><td>12"</td><td>300 mm</td></tr><tr><td>14"</td><td>350 mm</td></tr><tr><td>16"</td><td>400 mm</td></tr></table> | Valve Size           |                                                                                                                                      | 1½"          | 40 mm | 2"       | 50 mm | 2½"        | 65 mm <sup>(6)</sup> | 3" | 80 mm                                                                                                                                                                                                                                                          | 4"                    | 100 mm | 6"                       | 150 mm | 8"                                     | 200 mm | 10"                                    | 250 mm | 12" | 300 mm                                                                                                                                                                                                                                                                                                                                                                                                                                       | 14"            | 350 mm | 16"        | 400 mm |            | <table><tr><th>Additional Feature</th><th>Code</th></tr><tr><td>Closing Speed Control</td><td>01</td></tr><tr><td>Opening Speed Control</td><td>02</td></tr><tr><td>Opening &amp; Closing</td><td>03</td></tr><tr><td>None</td><td>-</td></tr></table> | Additional Feature | Code | Closing Speed Control | 01 | Opening Speed Control | 02 | Opening & Closing | 03 | None                                      | -  |                                         | <table><tr><th>Material Body &amp; Cover <sup>(1)</sup></th><th>Code</th></tr><tr><td>Ductile Iron A356 <sup>(2)</sup></td><td>C</td></tr><tr><td>Steel ASTM A216 WCB <sup>(2)</sup></td><td>S</td></tr><tr><td>Stainless Steel 316</td><td>N</td></tr><tr><td>Nickel Al Bronze C95800</td><td>U</td></tr><tr><td>Super Duplex Grade SA</td><td>D</td></tr></table> | Material Body & Cover <sup>(1)</sup> | Code                                                                                                                                                                                                           | Ductile Iron A356 <sup>(2)</sup> | C    | Steel ASTM A216 WCB <sup>(2)</sup> | S  | Stainless Steel 316                        | N  | Nickel Al Bronze C95800 | U  | Super Duplex Grade SA | D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    | <table><tr><th>Tubing &amp; Fittings</th><th>Code</th></tr><tr><td>Stainless Steel 316</td><td>NN</td></tr><tr><td>Monel 400</td><td>MM</td></tr><tr><td>Super Duplex</td><td>DD</td></tr></table> | Tubing & Fittings                      | Code | Stainless Steel 316                                | NN | Monel 400                                | MM | Super Duplex                                         | DD   |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Valve Size                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 1½"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 40 mm                |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 50 mm                |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 2½"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 65 mm <sup>(6)</sup> |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 3"                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 80 mm                |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 100 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 6"                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 150 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 8"                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 200 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 10"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 250 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 12"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 300 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 14"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 350 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| 16"                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 400 mm               |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Additional Feature                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Closing Speed Control                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 01                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Opening Speed Control                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 02                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Opening & Closing                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 03                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| None                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Material Body & Cover <sup>(1)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                   | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Ductile Iron A356 <sup>(2)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                       | C                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Steel ASTM A216 WCB <sup>(2)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                     | S                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Stainless Steel 316                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Nickel Al Bronze C95800                                                                                                                                                                                                                                                                                                                                                                                                                                                | U                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Super Duplex Grade SA                                                                                                                                                                                                                                                                                                                                                                                                                                                  | D                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Tubing & Fittings                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Stainless Steel 316                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NN                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Monel 400                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MM                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Super Duplex                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DD                   |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      | <table><tr><th>Installation</th><th>Code</th></tr><tr><td>Vertical</td><td>V</td></tr><tr><td>Horizontal</td><td>H</td></tr></table> | Installation | Code  | Vertical | V     | Horizontal | H                    |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Installation                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Code                 |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Vertical                                                                                                                                                                                                                                                                                                                                                                                                                                                               | V                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |
| Horizontal                                                                                                                                                                                                                                                                                                                                                                                                                                                             | H                    |                                                                                                                                      |              |       |          |       |            |                      |    |                                                                                                                                                                                                                                                                |                       |        |                          |        |                                        |        |                                        |        |     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |        |            |        |            |                                                                                                                                                                                                                                                        |                    |      |                       |    |                       |    |                   |    |                                           |    |                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                      |                                                                                                                                                                                                                |                                  |      |                                    |    |                                            |    |                         |    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                                                                                                                                                                                    |                                        |      |                                                    |    |                                          |    |                                                      |      |                                                                    |       |                                      |   |                                    |    |                                    |     |                                                            |       |                                        |   |                                                     |    |                                              |    |                                    |   |             |    |                                           |   |                                  |   |                      |   |                          |   |                          |   |

#### Notes:

- (1) Other materials available see engineering data  
 (2) Coated internally and externally  
 (3) Supplied loose  
 (4) Consult BERMAD for availability  
 (5) For valves up to and including 10"  
 (6) Available in Ductile Iron only  
 (7) Minimum supply pressure to the Deluge Valve shall be at least 5.0 barg  
 (8) Minimum supply pressure to the Deluge Valve shall be at least 8.5 barg

\*More options available – consult BERMAD