

Modelo FP-400Y-6D



Benefícios e Características

- Segurança e confiabilidade
 - Design simples, comprovado pelo tempo, com atuação à prova de falhas
 - Vedação de diafragma elastomérico robusto em peça única - tecnologia VRSD
 - Fluxo livre de obstáculos e ininterrupto
 - Sem partes mecânicas móveis
 - Desliga por comando remoto
 - Indicador local de posição da válvula (opcional)
 - Indicadores de posição chave fim de curso (opcional)
- Alto desempenho
 - Eficiência de vazão muito alta
 - Aprovado para PN25 / 365 psi
 - Corpo tipo Y reto de passagem plena
- Projetado especificamente para proteção contra incêndio
 - Comprimento face a face padronizado conforme ISO 5752 EN 558-1
 - Válvula Solenoide 3 Vias Listada UL429A
 - Atende aos requisitos das normas da indústria
- Manutenção rápida e fácil
 - Manutenção em linha
 - Remoção rápida e fácil da tampa
 - Válvulas de dreno rotativas (para válvulas de 3" e maiores)

Aplicações Típicas

- Sistemas de Pulverização de Água por Controle Remoto
- Aplicações de espuma
- Sistemas de água corrosiva
- Sistemas de detecção redundantes duplos

Aprovações



UL-Listed
Válvulas de Controle de Água para
Sistemas Especiais, Tipo Dilúvio (VLFT)
Diâmetros 1½" - 16"



Det Norske Veritas
Tipo de aprovação
Diâmetros de 1½" a 16"

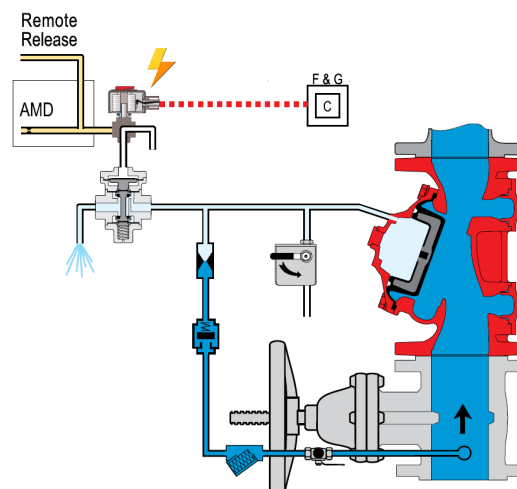
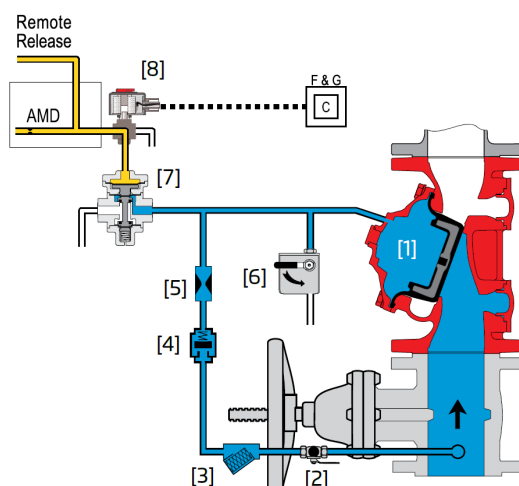


Registro Lloyd's
Tipo de aprovação
Diâmetros 1½" - 10"

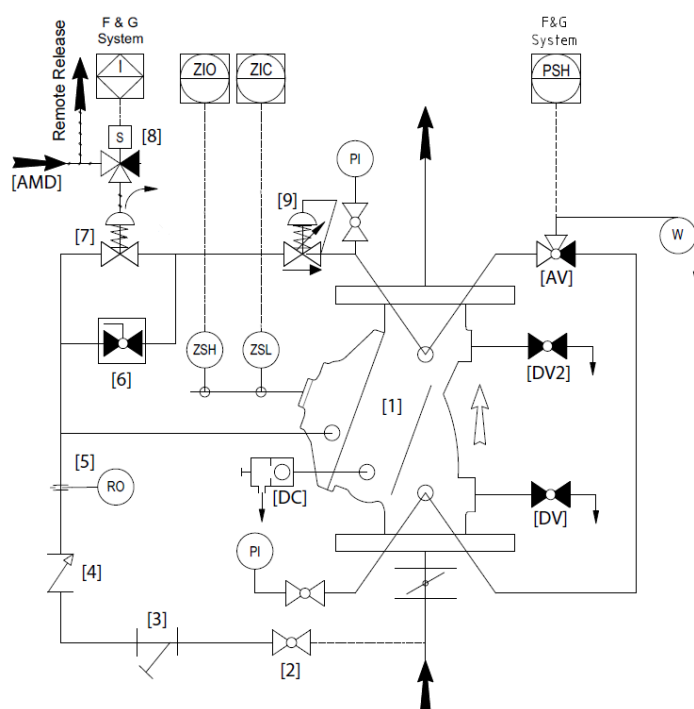
Características Adicionais

- Indicadores de posição chave fim de curso
- Indicador de posição local da válvula
- Pressostato de alarme
- Compatibilidade com água do mar
- Válvula de dreno/s entrada/saída
- Dispositivo de Manutenção de Ar
- Para "ativação automática", selecione o modelo de reinicialização local ou remoto BERMAD
- Revestimento epóxi de alto desempenho à base de zinco resistente à corrosão

Operação



P&ID do Sistema



Componentes	
	Itens Opcionais do Sistema
ZS	
I	
PI	
DV2	
W	válvula automática de retenção de gotejamento
AMD	
DC	válvula automática de retenção de gotejamento
DV	
AV	

** Incluído com o sufixo A no código da válvula (componentes de dreno e indicação)
Veja as designações de código e "itens adicionais fornecidos de fábrica" na página 4*

Instalação do Sistema

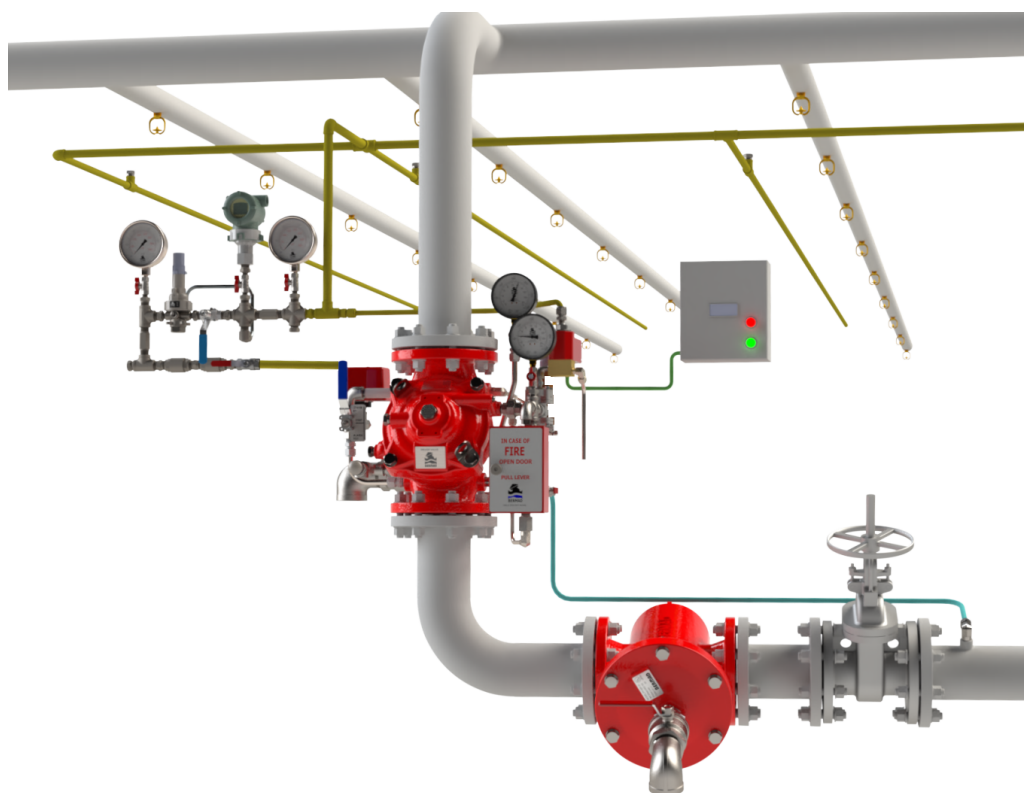
Itens Opcionais do Sistema



Pressure Gauge



Pressure Switch

Rotating Limit
Switch BoxBasket Strainer -
60F

Especificações Sugeridas

Todas as imagens neste catálogo são meramente ilustrativas

Dados Técnicos

Tamanhos Disponíveis:

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

Ranhurada- 1½, 2, 2½, 3, 4, 6, 8 & 10"

Classe de Pressão:

ANSI#150 - 17.2 bar | 250 psi

ANSI#300 - 1½" até 10" - 25 bar | 365 psi

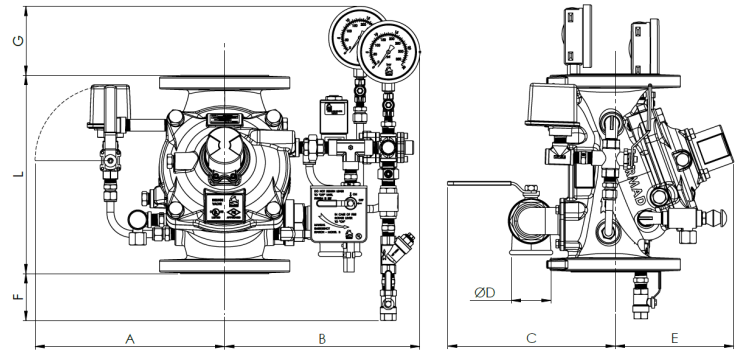
ANSI#300 - 12" até 16" - 20 bar | 300 psi

Ranhurada - 17.2 / 25 bar | 250 / 365 psi

Elastômero:

HTNR - Fabric Reinforced High Temperature

Compound - See engineering data



Tamanho da Válvula	L #150 mm in	Ranhura em L mm in	L #300 mm in	A mm in	B mm in	C mm in	ØD in	E mm in	F mm in	G mm in
DN40 1½"	230 9.1	230 9.1	230 9.1	293 11.5	-	177 7	¾"	-	-	-
DN50 2"	230 9.1	230 9.1	238 9.4	293 11.5	-	177 7	¾"	-	-	-
DN65 2½"	235 9.3	235 9.3	241 9.5	293 11.6	-	177 7.2	1½"	-	-	-
DN80 3"	310 12.2	310 12.2	326 12.8	313 12.3	-	177 7	1½"	-	-	-
DN100 4"	350 13.8	350 13.8	368 14.5	343 13.5	-	287 11.3	2"	-	-	-
DN150 6"	480 18.9	480 18.9	506 19.9	358 14	-	302 11.9	2"	-	-	-
DN200 8"	600 23.6	600 23.6	626 24.7	392 15.4	-	317 12.5	2"	-	-	-
DN250 10"	730 28.7	730 28.7	730 28.7	406 16	-	317 12.5	2"	-	-	-
DN300 12"	850 33.5	-	888 35	478 18.8	-	380 15	2"	-	-	-
DN350 14"	980 38.6	-	980 38.6	478 18.8	-	379 14.9	2"	-	-	-
DN400 16"	1100 43.3	-	1100 43.3	478 18.8	-	405 16.1	2"	-	-	-

IMPORTANTE: As dimensões do envelope ou extensão do conjunto referem-se à orientação vertical e podem variar conforme o posicionamento específico dos componentes – Exceto para a dimensão "L", permita uma tolerância de pelo menos ±15%

Valve Code Designations

FP	6"	400Y-6D	03	V	C	A5	ER	4DC	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>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>60 mm⁽⁶⁾</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"	60 mm ⁽⁶⁾	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>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	<table><tr><th>Material Body & Cover⁽¹⁾</th><th>Code</th></tr><tr><td>Ductile Iron A356⁽²⁾</td><td>C</td></tr><tr><td>Steel ASTM A216 WCB⁽²⁾</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 5A</td><td>D</td></tr></table>	Material Body & Cover ⁽¹⁾	Code	Ductile Iron A356 ⁽²⁾	C	Steel ASTM A216 WCB ⁽²⁾	S	Stainless Steel 316	N	Nickel Al Bronze C95800	U	Super Duplex Grade 5A	D	<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⁽⁵⁾</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 ⁽⁵⁾	ZR	Uncoated	UC	<table><tr><th>Voltage - Main Valve N.O or N.C *</th><th>Code</th></tr><tr><td>24VDC - N.C.</td><td>4DC</td></tr><tr><td>24VDC - N.O.</td><td>4DO</td></tr><tr><td>24VDC - Latch</td><td>4DS</td></tr><tr><td>110VDC - N.C.</td><td>5DC</td></tr><tr><td>110VDC - N.O.</td><td>5DO</td></tr><tr><td>110 - 120/AC - N.C.</td><td>5AC</td></tr><tr><td>110 - 120/AC - N.C.</td><td>5AO</td></tr><tr><td>220 - 240/AC - N.C.</td><td>2AC</td></tr><tr><td>221 - 240/AC - N.C.</td><td>2AO</td></tr></table>	Voltage - Main Valve N.O or N.C *	Code	24VDC - N.C.	4DC	24VDC - N.O.	4DO	24VDC - Latch	4DS	110VDC - N.C.	5DC	110VDC - N.O.	5DO	110 - 120/AC - N.C.	5AC	110 - 120/AC - N.C.	5AO	220 - 240/AC - N.C.	2AC	221 - 240/AC - N.C.	2AO	<table><tr><th>Factory Supplied Additional Items</th><th>Code</th></tr><tr><td>General Purpose NEMA-4 Pressure Switch⁽³⁾</td><td>P</td></tr><tr><td>Ex Proof NEC, Div.1 Pressure Switch⁽³⁾</td><td>P7</td></tr><tr><td>Ex d ATEX Pressure Switch⁽³⁾</td><td>P9</td></tr><tr><td>Ex d Pressure Switch, SS316 Enclosure⁽³⁾</td><td>P9Jn</td></tr><tr><td>Ex d Pressure Switch, SS316 Enclosure, Monel Sensor⁽³⁾</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⁽³⁾</td><td>6</td></tr><tr><td>S.S Glycerin Pressure Gauge Assembly⁽³⁾</td><td>6n</td></tr><tr><td>Monel Pressure Gauge Assembly⁽³⁾</td><td>6m</td></tr><tr><td>Ex Proof NEC Class 1 Div 1 Solenoid</td><td>7</td></tr><tr><td>Ex. d Atex Solenoid</td><td>9</td></tr><tr><td>Magna Latch – 2 wires</td><td>H2</td></tr><tr><td>Magna Latch – 3 wires</td><td>H3</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⁽³⁾</td><td>W</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><tr><td>S.S Solenoid Valve</td><td>K</td></tr><tr><td>Pressure Transmitter⁽³⁾</td><td>Q</td></tr><tr><td>Drain and Indicating Components</td><td>A</td></tr></table>	Factory Supplied Additional Items	Code	General Purpose NEMA-4 Pressure Switch ⁽³⁾	P	Ex Proof NEC, Div.1 Pressure Switch ⁽³⁾	P7	Ex d ATEX Pressure Switch ⁽³⁾	P9	Ex d Pressure Switch, SS316 Enclosure ⁽³⁾	P9Jn	Ex d Pressure Switch, SS316 Enclosure, Monel Sensor ⁽³⁾	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 ⁽³⁾	6	S.S Glycerin Pressure Gauge Assembly ⁽³⁾	6n	Monel Pressure Gauge Assembly ⁽³⁾	6m	Ex Proof NEC Class 1 Div 1 Solenoid	7	Ex. d Atex Solenoid	9	Magna Latch – 2 wires	H2	Magna Latch – 3 wires	H3	Stainless steel 316 Solenoid Valve	K	Drain Valve	DV	Water Motor Alarm Assembly ⁽³⁾	W	Large Control Filter	F	Valve Position Indicator	I	S.S 316 Trim Accessories	N	S.S Solenoid Valve	K	Pressure Transmitter ⁽³⁾	Q	Drain and Indicating Components	A	<table><tr><th>Tubing & 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
Category	Code																																																																																																																																																
Standard	FP																																																																																																																																																
Seawater	FS																																																																																																																																																
Foam	FC																																																																																																																																																
Valve Size																																																																																																																																																	
1½"	40 mm																																																																																																																																																
2"	50 mm																																																																																																																																																
2½"	60 mm ⁽⁶⁾																																																																																																																																																
3"	80 mm																																																																																																																																																
4"	100 mm																																																																																																																																																
6"	150 mm																																																																																																																																																
8"	200 mm																																																																																																																																																
10"	250 mm																																																																																																																																																
12"	300 mm																																																																																																																																																
14"	350 mm																																																																																																																																																
16"	400 mm																																																																																																																																																
Installation	Code																																																																																																																																																
Vertical	V																																																																																																																																																
Horizontal	H																																																																																																																																																
Material Body & Cover ⁽¹⁾	Code																																																																																																																																																
Ductile Iron A356 ⁽²⁾	C																																																																																																																																																
Steel ASTM A216 WCB ⁽²⁾	S																																																																																																																																																
Stainless Steel 316	N																																																																																																																																																
Nickel Al Bronze C95800	U																																																																																																																																																
Super Duplex Grade 5A	D																																																																																																																																																
Coating	Code																																																																																																																																																
High Build Epoxy	ER																																																																																																																																																
Zinc Based High Build Epoxy ⁽⁵⁾	ZR																																																																																																																																																
Uncoated	UC																																																																																																																																																
Voltage - Main Valve N.O or N.C *	Code																																																																																																																																																
24VDC - N.C.	4DC																																																																																																																																																
24VDC - N.O.	4DO																																																																																																																																																
24VDC - Latch	4DS																																																																																																																																																
110VDC - N.C.	5DC																																																																																																																																																
110VDC - N.O.	5DO																																																																																																																																																
110 - 120/AC - N.C.	5AC																																																																																																																																																
110 - 120/AC - N.C.	5AO																																																																																																																																																
220 - 240/AC - N.C.	2AC																																																																																																																																																
221 - 240/AC - N.C.	2AO																																																																																																																																																
Factory Supplied Additional Items	Code																																																																																																																																																
General Purpose NEMA-4 Pressure Switch ⁽³⁾	P																																																																																																																																																
Ex Proof NEC, Div.1 Pressure Switch ⁽³⁾	P7																																																																																																																																																
Ex d ATEX Pressure Switch ⁽³⁾	P9																																																																																																																																																
Ex d Pressure Switch, SS316 Enclosure ⁽³⁾	P9Jn																																																																																																																																																
Ex d Pressure Switch, SS316 Enclosure, Monel Sensor ⁽³⁾	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 ⁽³⁾	6																																																																																																																																																
S.S Glycerin Pressure Gauge Assembly ⁽³⁾	6n																																																																																																																																																
Monel Pressure Gauge Assembly ⁽³⁾	6m																																																																																																																																																
Ex Proof NEC Class 1 Div 1 Solenoid	7																																																																																																																																																
Ex. d Atex Solenoid	9																																																																																																																																																
Magna Latch – 2 wires	H2																																																																																																																																																
Magna Latch – 3 wires	H3																																																																																																																																																
Stainless steel 316 Solenoid Valve	K																																																																																																																																																
Drain Valve	DV																																																																																																																																																
Water Motor Alarm Assembly ⁽³⁾	W																																																																																																																																																
Large Control Filter	F																																																																																																																																																
Valve Position Indicator	I																																																																																																																																																
S.S 316 Trim Accessories	N																																																																																																																																																
S.S Solenoid Valve	K																																																																																																																																																
Pressure Transmitter ⁽³⁾	Q																																																																																																																																																
Drain and Indicating Components	A																																																																																																																																																
Tubing & Fittings	Code																																																																																																																																																
Stainless Steel 316	NN																																																																																																																																																
Monel 400	MM																																																																																																																																																
Super Duplex	DD																																																																																																																																																
		<table><tr><th>End Connections</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 Class 250psi/17.2bar⁽⁵⁾</td><td>V1</td></tr><tr><td>Grooved Class 365psi/25bar⁽⁵⁾</td><td>V2</td></tr></table>	End Connections	Code	ANSI#150RF	A5	ANSI#150FF	a5	ANSI#300RF	A3	ANSI#300FF	a3	ISO PN16	16	ISO PN25	25	Grooved Class 250psi/17.2bar ⁽⁵⁾	V1	Grooved Class 365psi/25bar ⁽⁵⁾	V2																																																																																																																													
End Connections	Code																																																																																																																																																
ANSI#150RF	A5																																																																																																																																																
ANSI#150FF	a5																																																																																																																																																
ANSI#300RF	A3																																																																																																																																																
ANSI#300FF	a3																																																																																																																																																
ISO PN16	16																																																																																																																																																
ISO PN25	25																																																																																																																																																
Grooved Class 250psi/17.2bar ⁽⁵⁾	V1																																																																																																																																																
Grooved Class 365psi/25bar ⁽⁵⁾	V2																																																																																																																																																
		<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 & Closing Speed Control</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 Speed Control	03	None	-																																																																																																																																					
Additional Feature	Code																																																																																																																																																
Closing Speed Control	01																																																																																																																																																
Opening Speed Control	02																																																																																																																																																
Opening & Closing Speed Control	03																																																																																																																																																
None	-																																																																																																																																																

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

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

* NO or NC refers to the main valve status when the Solenoid is de-energized

*More options available – consult BERMAD