

# ISO VALVES

ISO STANDARDS - BOLT ON



ISO SIZE: M06 & M10



**Pilot Operated Reliefs**  
Sizes 06 and 10

1. Maximum Flow:  
3/4"= 50 gpm, 1-1/4"= 100 gpm
2. Minimum Flow: 3/4"= 2.0 gpm, 1-1/4"= 4 gpm
3. 3K pressure standard (1000-3500 psi)
4. 1K pressure range available (350-1000 psi)
5. Recommended for petroleum based fluids- ISO VG32-68
6. Recommended filtration- 10 micron
7. Cold starts: 250 SUS maximum viscosity
8. Maximum temperature: 180°F, (82.2°C) or minimum fluid viscosity of 80 SUS
9. All pressure relief valves may vented to obtain remote pressure control (use direct acting remote relief see DR2 series). Use small diameter line when plumbing the remote relief as short in length as possible to prevent pressure surges.
10. Specify suffix "D03" for integral solenoid control of relief valve.



**Pressure Reducing Valves**  
Sizes 06 and 10

1. Maximum Flow (Inlet @3000 psi):  
3/4"=33 gpm, 1-1/4"= 66 gpm
2. Pilot Flow: 3/8" & 3/4"= 0.25 gpm,  
1-1/4"= 0.4 gpm
3. 3K pressure standard (adj. 1000-3000 psi)
4. 1K pressure range avail. (100-1000 psi)
5. Recommended for petroleum based fluids- ISO VG32-68
6. Recommended filtration- 10 micron
7. Cold starts: 250 SUS maximum viscosity
8. Maximum temperature: 180°F, (82.2°C) or minimum fluid viscosity of 80 SUS
9. All pressure reducing valves may vented to obtain remote pressure control (use direct acting remote relief see DR2 series). Use small diameter line when plumbing the remote relief as short in length as possible to prevent pressure surges.



**Unloading Relief Valves**  
Size 06

1. Maximum Flow: 3/4"=33 gpm
2. Pilot Flow: 3/4"= 0.25 gpm,
3. 2K pressure standard (adj. 500-2000 psi)
4. Maximum Pressure: 3000 psi
5. Recommended for petroleum based fluids- ISO VG32-68
6. Recommended filtration- 10 micron
7. Cold starts: 250 SUS maximum viscosity
8. Maximum temperature: 180°F, (82.2°C) or minimum fluid viscosity of 80 SUS
9. All unloading relief valves may vented to obtain remote pressure control (use direct acting remote relief see DR2 series). Use small diameter line when plumbing the remote relief as short in length as possible to prevent pressure surges.

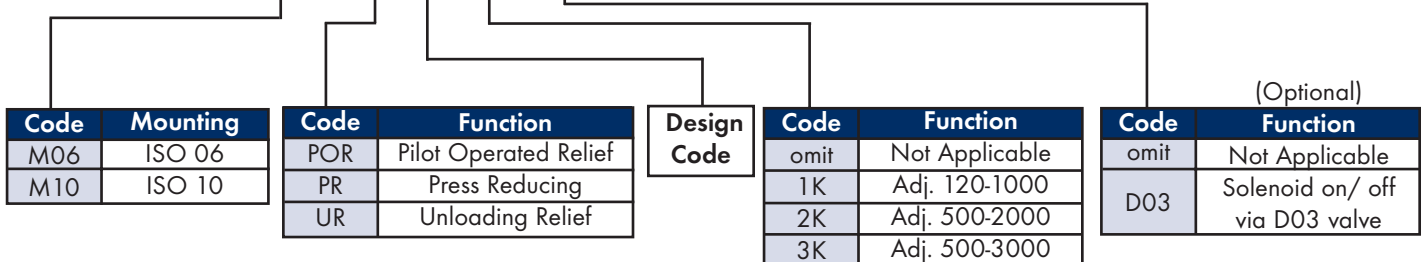
## ORDERING INFORMATION



### ISO VALVE PART NUMBERING SYSTEM:

**M06 - POR 1 - 3K - D03**

Example: ISO 06 size pilot operated relief valve (series 1), adjustable 500-3000 psi., with D03 solenoid pattern



# ISO VALVES

## PILOT OPERATED RELIEF VALVES



ISO SIZE: M06 & M10

### Dimensional Data

Standard Reliefs:

M06-POR1-3K

M10-POR1-3K

With D03 pattern for Solenoid:

M06-POR1-3K-D03

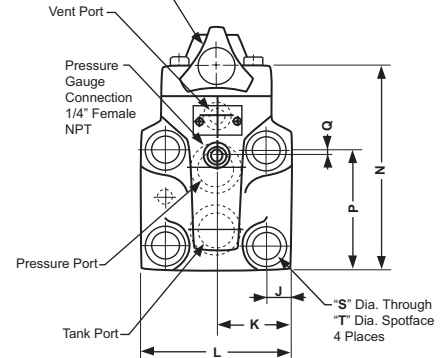
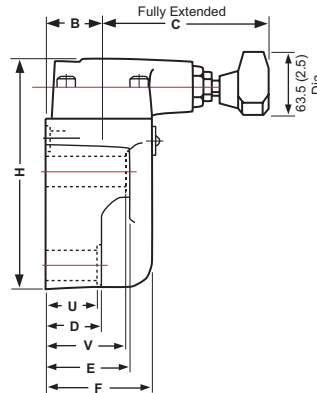
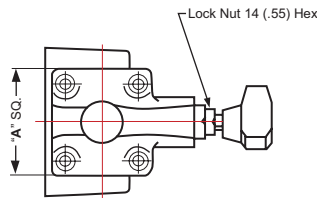
M10-POR1-3K-D03

For more flow and circuit information and solenoid operation see: Inline Pilot Operated Relief Valves, page 52.

M10-POR1-3K-D03  
with D03S-1A-115A



M06-POR1-3K-D03  
with D03S-1A-115A



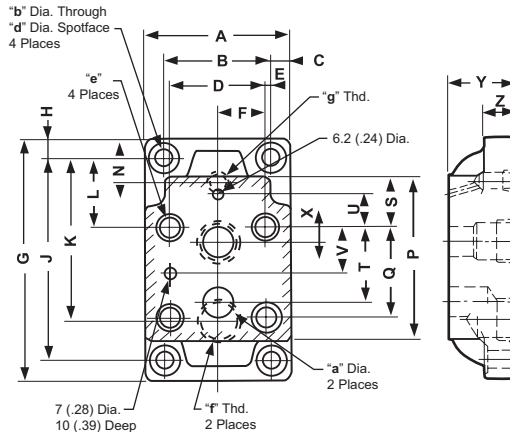
Model	A	B	C	D	E	F	H	J	K	L	N
M06-POR1	75 (2.95)	40 (1.57)	129(5.08)	58.5(2.30)	74(2.91)	79(3.11)	168(6.61)	15(0.59)	51(2.0)	102(4.01)	147(5.79)
M10-POR1	85 (3.35)	42.6(1.68)	168(6.61)	50(1.97)	69(2.72)	85(3.37)	196(7.72)	22(0.87)	61.5(2.42)	123(4.84)	176(6.93)

Model	P	Q	S	T	U	V
M06-POR1	87(3.43)	18(0.71)	17.5(0.69)	26(1.02)	38(1.50)	58(2.28)
M10-POR1	108(4.25)	22(0.87)	21.5(0.85)	32(1.26)	45(1.77)	65(2.56)

Subplates:

SM06-POR1-12FP 3/4"

SM10-POR1-20FP 1-1/4"



Material: Ductile Iron

Bolts (included w/ valve):

M06-POR1 = 5/8" x 2.5" (2 reqd.)  
5/8" x 3.25" (2 reqd.)

M10-POR1 = 3/4" x 2.75" (2 reqd.)  
3/4" x 3.5" (2 reqd.)

Model	A	B	C	D	E	F	G	H	J	K	L	N
SM06-POR1-12FP	108 (4.25)	78 (3.07)	15 (.59)	70 (2.76)	4 (.16)	35 (1.38)	180 (7.09)	15 (.59)	150 (5.91)	106.5(4.19)	51 (2.01)	27.2 (1.07)
SM10-POR1-20FP	126 (4.96)	94 (3.70)	16 (.63)	82.6(3.25)	5.7 (.22)	41.3 (1.63)	227 (8.94)	16 (.63)	195 (7.68)	138.2 (5.44)	62 (2.44)	30.2 (1.19)

Model	P	Q	S	T	U	V	X	Y	Z	a	b	d
SM06-POR1-12FP	121 (4.76)	66.7 (2.63)	37 (1.46)	55.5 (2.19)	23.8 (.94)	33.4 (1.31)	11 (.43)	40 (1.57)	25 (.98)	23 (91)	13.5 (.53)	21 (83)
SM10-POR1-20FP	154 (6.06)	88.9 (3.50)	42 (1.65)	7.62 (3.00)	31.8 (1.25)	44.5 (1.75)	12.7 (50)	50 (1.97)	32 (1.26)	28 (1.10)	17.5 (.69)	26 (1.02)

Model	e	f	g
SM06-POR1-12FP	5/8-11 UNC X 27 (1.06) Deep	3/4 NPT	1/4 NPT
SM10-POR1-20FP	3/4-10 UNC X 28 (1.10) Deep	1-1/4 NPT	1/4 NPT