

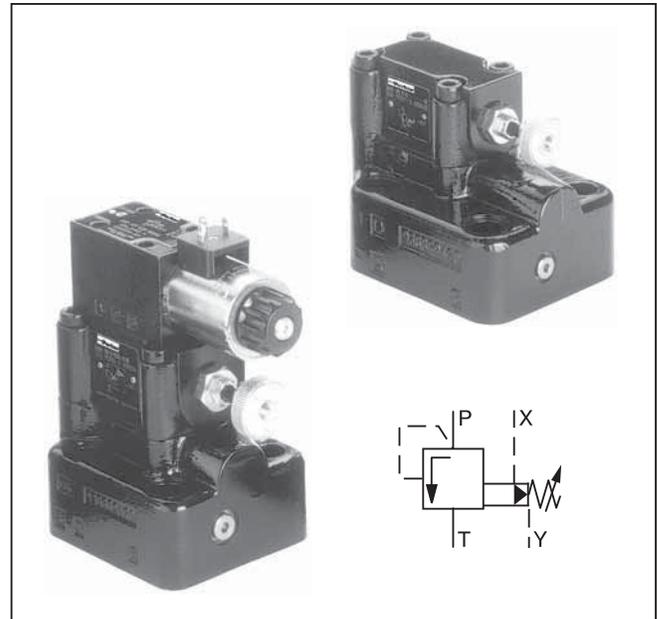
## General Description

Series R4V and R6V pressure relief valves feature a manual adjustment pilot stage which controls a seated type main stage.

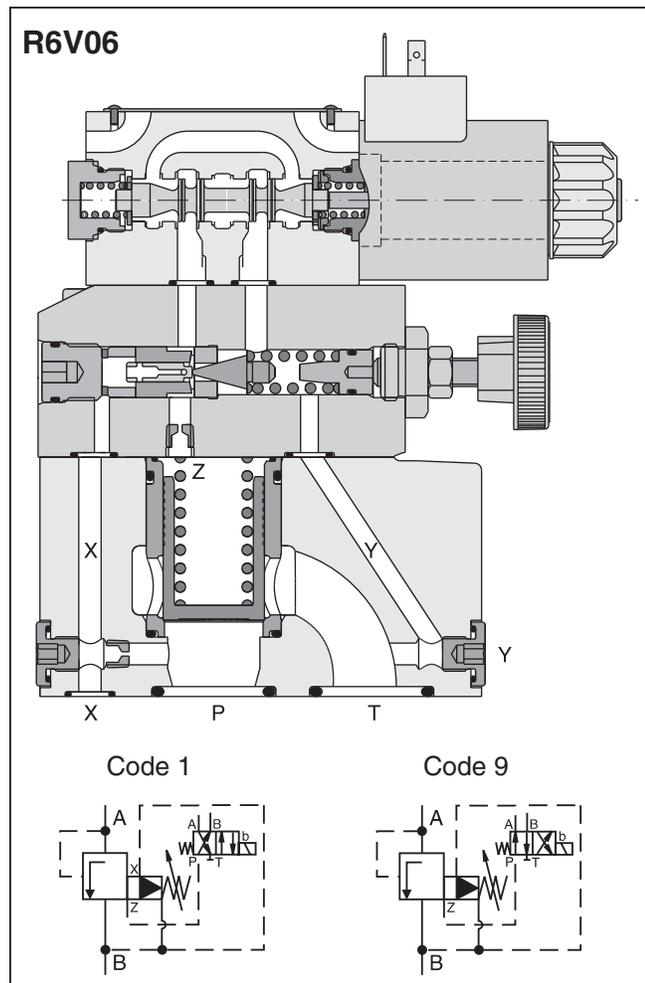
A vent function with a solenoid operated directional valve is available for circulation at minimum pressure.

## Features

- Pilot operated with manual adjustment.
- 2 interfaces:
  - Subplate, ISO 6264 (DIN 24340 Form D) with VV01 vent valve (R4V)
  - Subplate, ISO 6264 (DIN 24340 Form E) with CETOP 03 vent valve (R6V)
- 3 pressure ranges.
- 3 adjustment modes:
  - Hand knob
  - Acorn nut with lead seal
  - Key lock
- Remote control via port X.



**D**



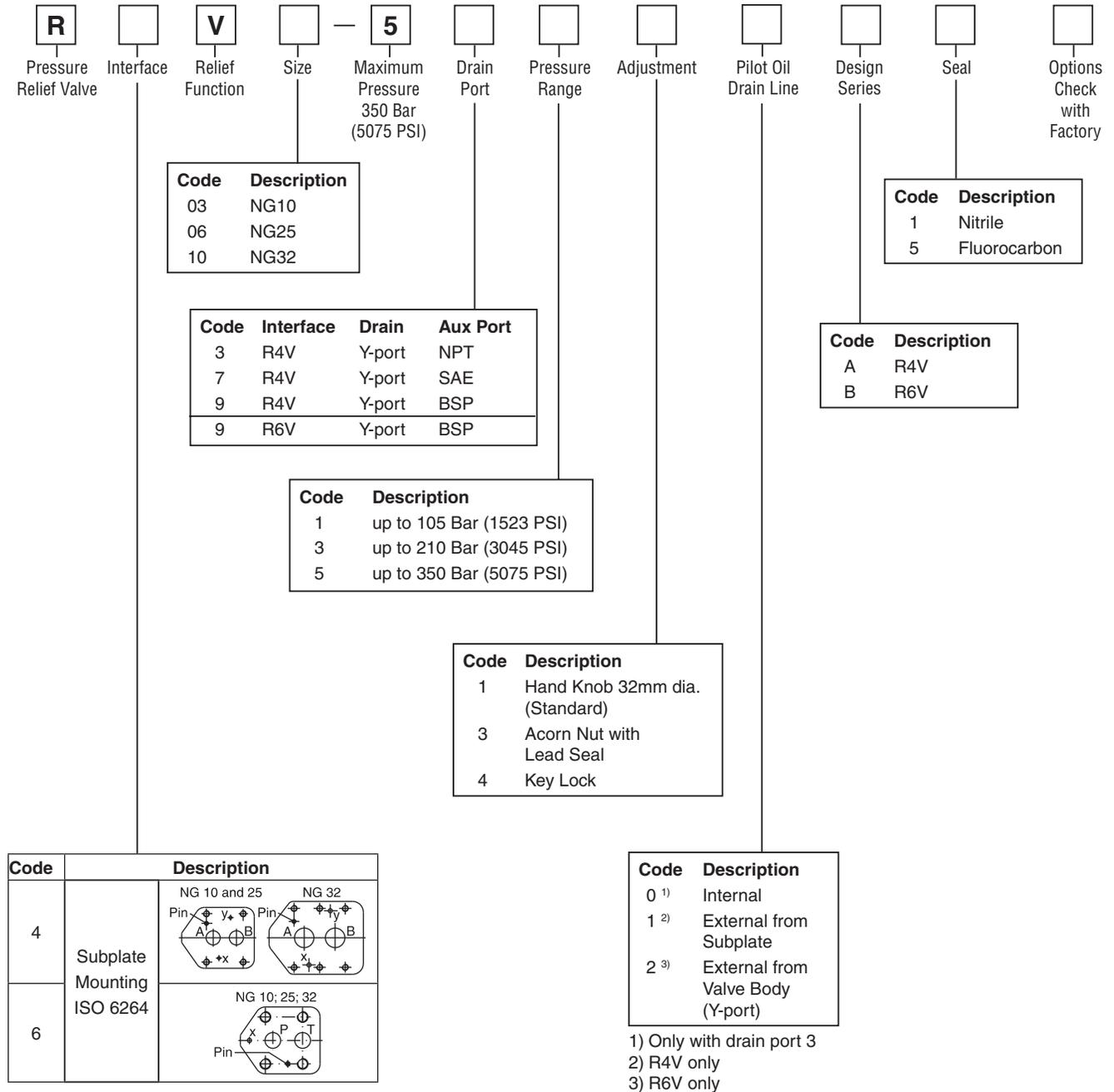
## Function

System pressure in port P is applied via the X gallery to the spring loaded cone in the pilot head. The pilot head controls the pressure in the Z area on top of the main cartridge which is additionally kept close by the main spring.

If the pilot pressure exceeds the setting pressure the pilot cone opens and thus limits the pilot pressure.

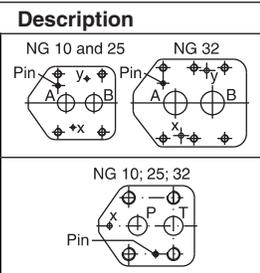
When the system pressure exceeds the pilot pressure plus the spring force, the main cartridge opens to port T and limits the pressure in port P to the adjusted level.

Additionally to the relief function, a solenoid operated vent valve connects the Z area to tank. This allows oil circulation from P to T at minimum pressure drop. The vent valve can either be a standard CETOP 03 valves (mounting form E) or a sandwich unit (mounting form D). For both types the vent position can be either at the energized or de-energized solenoid.



**Weight:**

R4V03	2.7 kg (6.0 lbs.)
R4V06	4.5 kg (9.9 lbs.)
R4V10	6.0 kg (13.2 lbs.)
R6V03	4.5 kg (9.9 lbs.)
R6V06	5.8 kg (12.8 lbs.)
R6V10	7.8 kg (17.2 lbs.)

R	Interface	V	Size	5	Drain Port	Pressure Range	Adjustment	Pilot Oil Drain Line	Vent Valve Function	Solenoid Voltage	Design Series	Seal	Modifications																												
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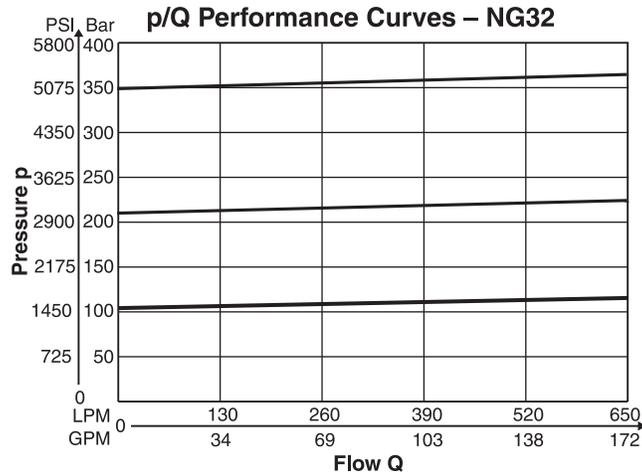
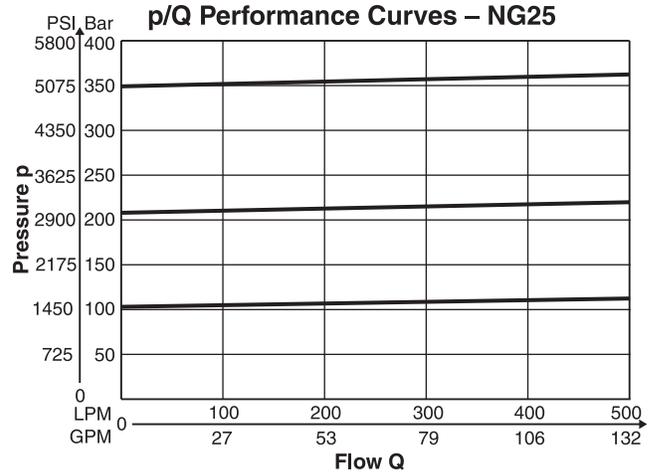
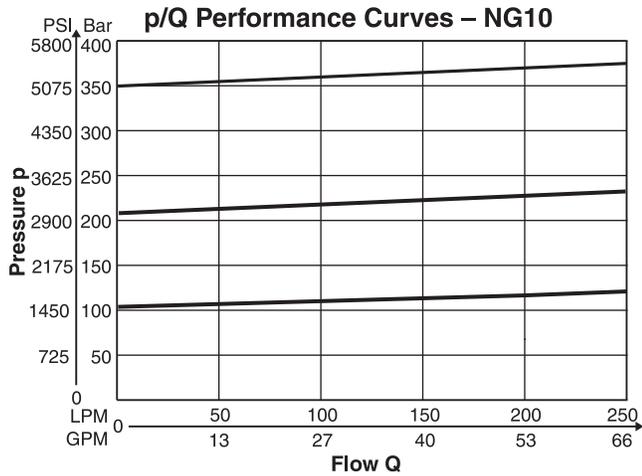
### R4V and R6V

General				
Size	NG10		NG25	NG32
Interface	Subplate mounting acc. ISO 6264 (DIN 24340)			
Mounting Position	As desired, horizontal mounting preferred			
Ambient Temperature	-20°C to +80°C (-4°F to +176°F)			
Hydraulic				
Operating Pressure	Ports P or A and X up to 350 Bar (5075 PSI), Port T or B and Y depressurized			
Pressure Range	105, 210, 350 Bar (1523, 3045, 5075 PSI)			
Nominal Flow	Series R4V	150 LPM (39.7 GPM)	350 LPM (92.6 GPM)	650 LPM (172.0 GPM)
	Series R6V	250 LPM (66.1 GPM)	500 LPM (132.3 GPM)	650 LPM (172.0 GPM)
Fluid	Hydraulic oil according to DIN 51524 ... 51525			
Viscosity	Recommended Permitted	30 to 50 cSt / mm <sup>2</sup> /s (139 to 232 SSU)		
		20 to 380 cSt / mm <sup>2</sup> /s (93 to 1761 SSU)		
Fluid Temperature	Recommended Maximum	+30°C to +50°C (+86°F to +122°F)		
		-20°C to +70° (-4°F to +158°F)		
Filtration	ISO 4406 (1999), 18/16/13			

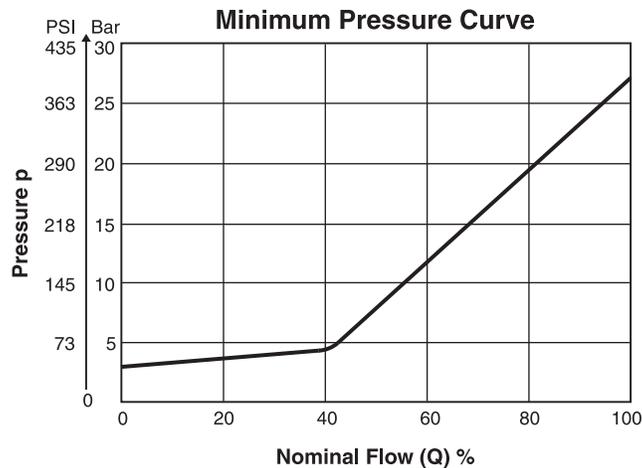
### R4V and R6V with Vent Function

General							
Size	NG10		NG25	NG32			
Interface	Subplate mounting acc. ISO 6264 (DIN 24340)						
Mounting Position	As desired, horizontal mounting preferred						
Ambient Temperature	-20°C to +80°C (-4°F to +176°F)						
Hydraulic							
Operating Pressure	Ports P or A and X up to 350 Bar (5075 PSI), Port T or B and Y depressurized						
Pressure Range	105, 210, 350 Bar (1523, 3045, 5075 PSI)						
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Fluid Temperature	-20°C to +70° (-4°F to +158°F)						
Filtration	ISO 4406 (1999), 18/16/13						
Electrical (solenoid)							
Duty Cycle	100% ED CAUTION: Coil temperature up to 180°C (356°F)						
Solenoid Connector	Connector acc. to EN 175301-803						
Protection Class	IP65 in accordance with EN 60529 (plugged and mounted)						
	Code	G0R	G0Q	GAR	GAG	W30	W31
Supply Voltage		12V	24V	98V	205V	110 at 50Hz 120 at 60Hz	230 at 50Hz 240 at 60Hz
Supply Tolerance		+5...-10	+5...-10	+5...-10	+5...-10	+5...-10	+5...-10
Power Consumption	Hold	31W	31W	31W	31W	78W	78W
	In Rush	31W	31W	31W	31W	264W	264W
Switching Frequency	16,000 (DC), 7200 (AC) switchings/hour maximum						
Wiring Minimum	3 x 1.5 mm <sup>2</sup> Recommended						
Wiring Length Maximum	50 m (164 ft.) Recommended						

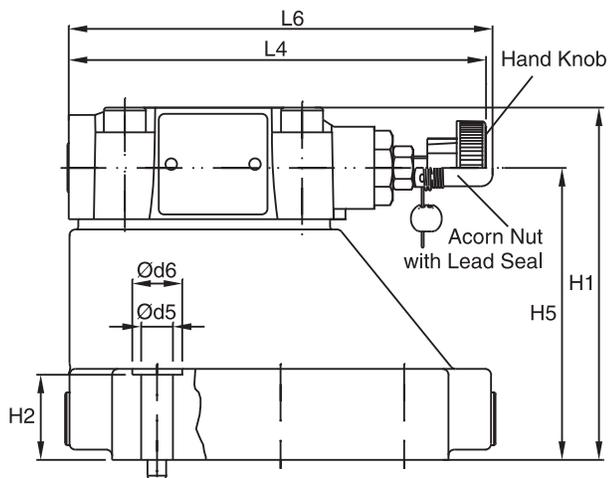
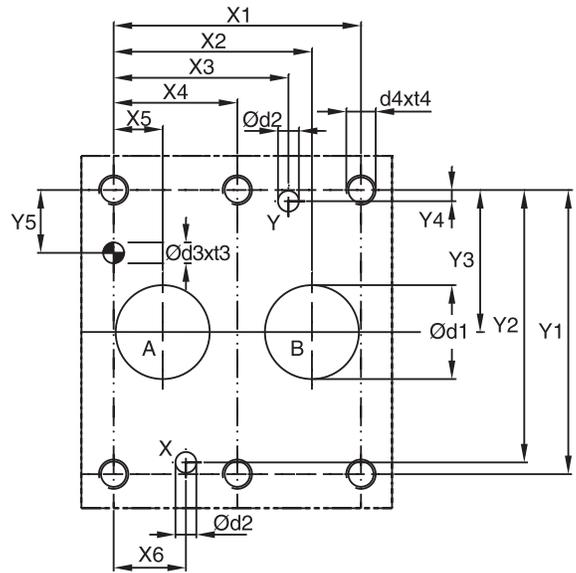
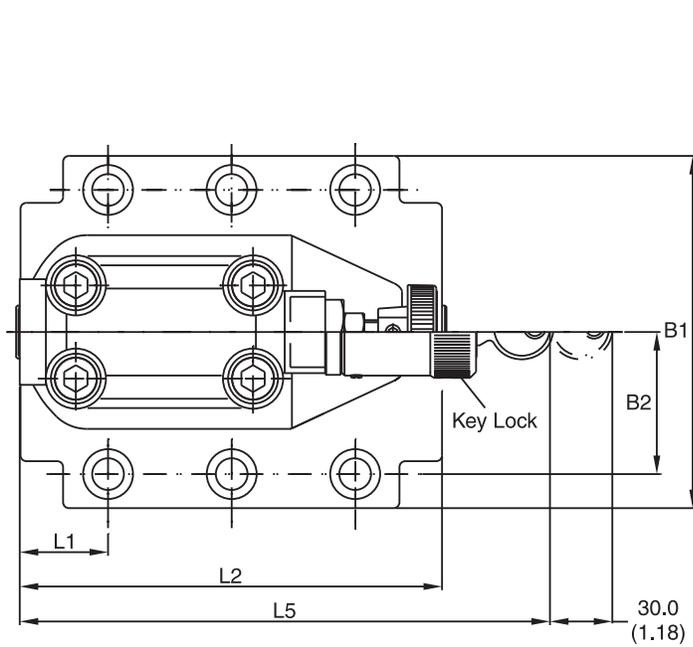
R4V-R6V RS\_R RS\_M.indd, dd



The performance curves are measured with external drain.  
 For internal drain the tank pressure has to be added to curve.



**D**



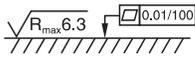
Inch equivalents for millimeter dimensions are shown in (\*\*)

NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	6264-06-07-*-97	42.9 (1.69)	35.8 (1.41)	21.5 (0.85)	– –	7.2 (0.28)	21.5 (0.85)	0.0 (0.00)	66.7 (2.63)	58.8 (2.31)	33.4 (1.31)	7.9 (0.31)	14.3 (0.56)	– –
25	6264-08-11-*-97	60.3 (2.37)	49.2 (1.94)	39.7 (1.56)	– –	11.1 (0.44)	20.6 (0.81)	0.0 (0.00)	79.4 (3.13)	73.0 (2.87)	39.7 (1.56)	6.4 (0.25)	15.9 (0.63)	– –
32	6264-10-15-*-97	84.2 (3.31)	67.5 (2.66)	59.5 (2.34)	42.1 (1.66)	16.7 (0.66)	24.6 (0.97)	0.0 (0.00)	96.8 (3.81)	92.8 (3.65)	48.4 (1.91)	3.8 (0.15)	21.4 (0.84)	– –

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

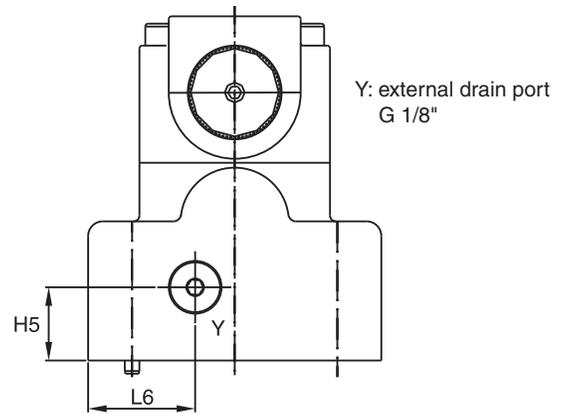
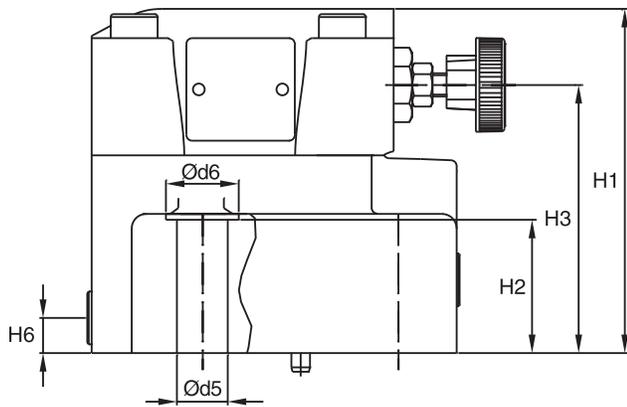
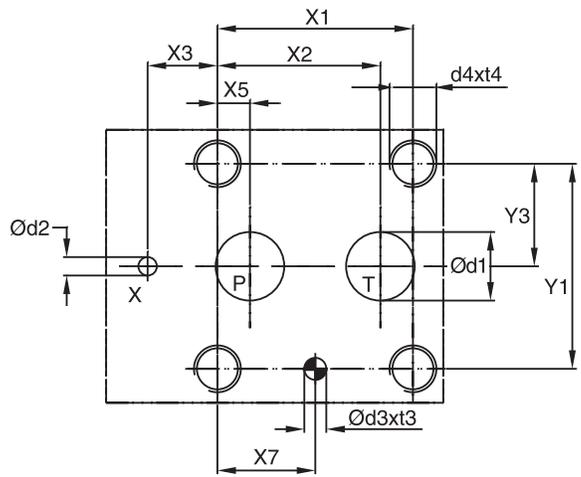
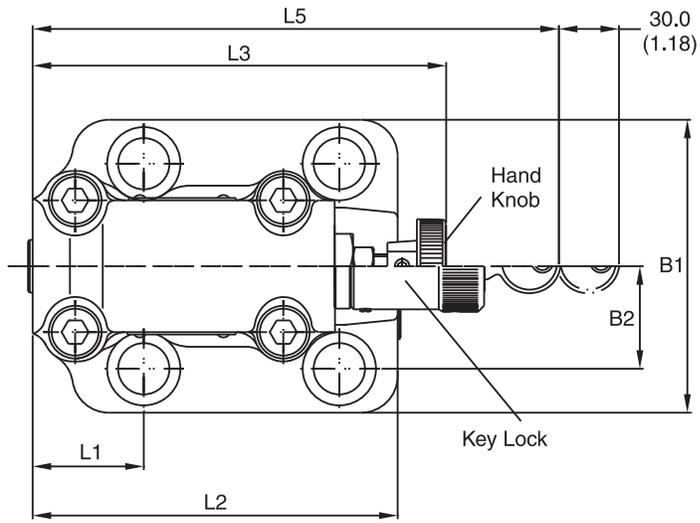
NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6
10	6264-06-07-*-97	87.3 (3.44)	33.4 (1.31)	83.0 (3.27)	21.0 (0.83)	– –	– –	62.5 (2.46)	– –	29.0 (1.14)	94.8 (3.73)	– –	143.0 (5.63)	181.0 (7.13)	144.8 (5.76)
25	6264-08-11-*-97	105.0 (4.13)	39.7 (1.56)	109.5 (4.31)	29.0 (1.14)	– –	– –	89.0 (3.50)	– –	34.7 (1.37)	126.8 (4.99)	– –	143.0 (5.63)	181.0 (7.13)	144.8 (5.76)
32	6264-10-15-*-97	120.0 (4.72)	48.4 (1.91)	120.0 (4.72)	29.0 (1.14)	– –	– –	99.5 (3.92)	– –	30.6 (1.20)	144.3 (5.68)	– –	143.0 (5.63)	181.0 (7.13)	144.8 (5.76)

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	6264-06-07-*-97	15.0 (0.59)	7.0 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	16.0 (0.63)	10.8 (0.43)	17.0 (0.67)
25	6264-08-11-*-97	23.4 (0.92)	7.1 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	18.0 (0.71)	10.8 (0.43)	17.0 (0.67)
32	6264-10-15-*-97	32.0 (1.26)	7.1 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	20.0 (0.79)	10.8 (0.43)	17.0 (0.67)

NG	ISO-code	Bolt Kit			Seal Nitrile	Kit Fluorocarbon	Surface Finish
10	6264-06-07-*-97	BK505	4xM10 x 35-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58507-0	S26-58507-5	
25	6264-08-11-*-97	BK485	4xM10 x 45-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58475-0	S26-58475-5	
32	6264-10-15-*-97	BK506	6xM10 x 45-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58508-0	S26-58508-5	

NG	ISO-code	Subplate	Size
10	6264-06-07-*-97	SPP3M6B910	A, B = 3/4" BSPP x, y = 1/4" BSPP
25	6264-08-11-*-97	SPP6M8B910	A, B = 1" BSPP x, y = 1/4" BSPP
32	6264-10-15-*-97	SPP10M12B910	A, B = 1 1/2" BSPP x, y = 1/4" BSPP

**D**



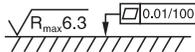
Inch equivalents for millimeter dimensions are shown in (\*\*)

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10	6264-06-09-*-97	53.8 (2.12)	47.5 (1.87)	0.0 (0.00)	— —	22.1 (0.87)	— —	22.1 (0.87)	53.8 (2.12)	— —	26.9 (1.06)	— —	— —	— —
25	6264-08-13-*-97	66.7 (2.63)	55.6 (2.19)	23.8 (0.94)	— —	11.1 (0.44)	— —	33.4 (1.31)	70.0 (2.76)	— —	35.0 (1.38)	— —	— —	— —
32	6264-10-17-*-97	88.9 (3.50)	76.2 (3.00)	31.8 (1.25)	— —	12.7 (0.50)	— —	44.5 (1.75)	82.6 (3.25)	— —	41.3 (1.63)	— —	— —	— —

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6
10	6264-06-09-*-97	80.0 (3.15)	26.9 (1.06)	114.0 (4.49)	27.0 (1.06)	88.0 (3.46)	— —	25.0 (0.98)	25.0 (0.98)	52.5 (2.07)	118.5 (4.67)	141.0 (5.55)	— —	180.0 (7.09)	29.5 (1.16)
25	6264-08-13-*-97	100.0 (3.94)	35.0 (1.38)	117.5 (4.63)	45.5 (1.79)	91.5 (3.60)	— —	25.0 (0.98)	12.0 (0.47)	37.9 (1.49)	124.5 (4.90)	141.0 (5.55)	— —	180.0 (7.09)	36.5 (1.44)
32	6264-10-17-*-97	120.0 (4.72)	41.3 (1.63)	123.0 (4.83)	52.0 (2.05)	97.0 (3.82)	— —	25.0 (0.98)	13.5 (0.53)	45.0 (1.77)	153.0 (6.02)	141.0 (5.55)	— —	180.0 (7.09)	36.5 (1.83)

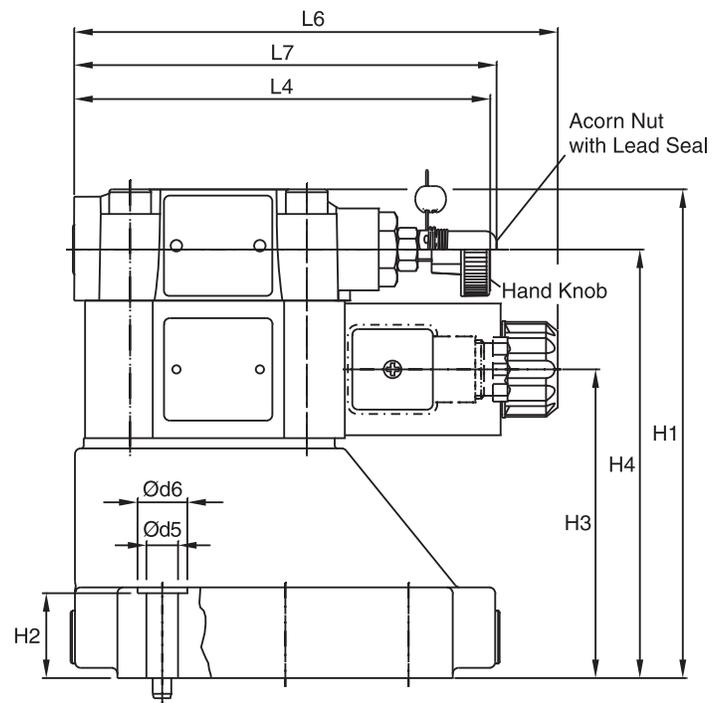
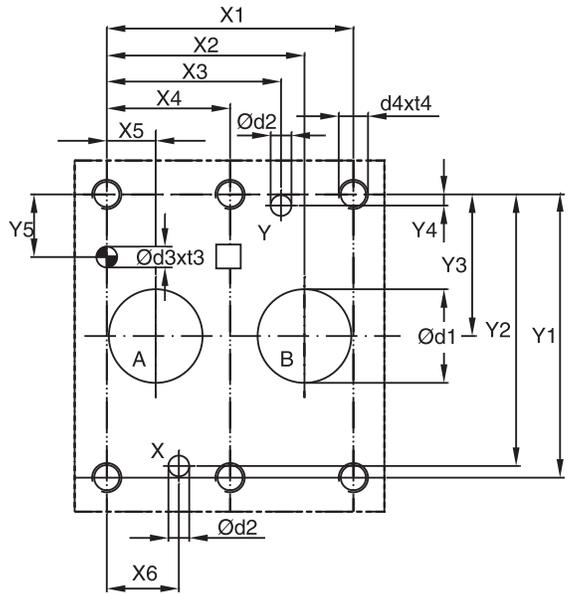
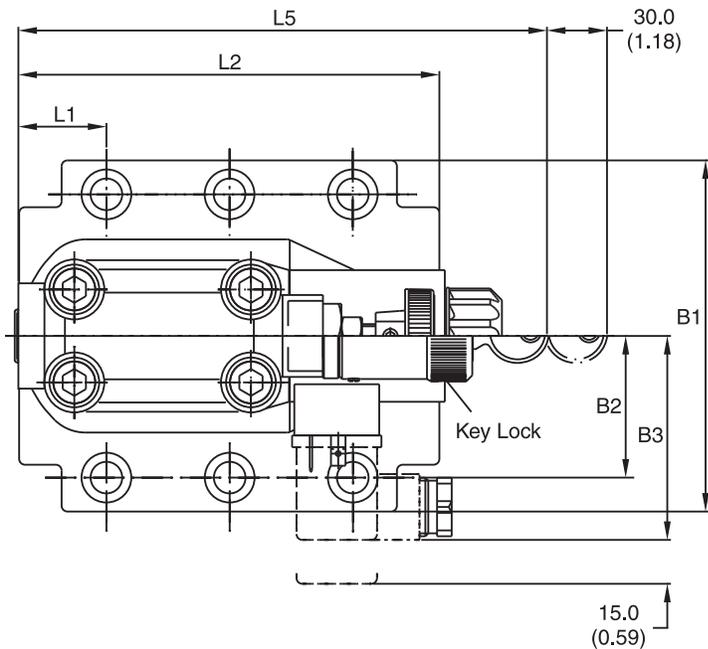
NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	6264-06-09-*-97	14.7 (0.58)	4.8 (0.19)	7.5 (0.30)	10.0 (0.39)	M12	20.0 (0.79)	13.5 (0.53)	20.0 (0.79)
25	6264-08-13-*-97	23.4 (0.92)	6.3 (0.25)	7.5 (0.30)	10.0 (0.39)	M16	27.0 (1.06)	17.5 (0.69)	25.0 (0.98)
32	6264-10-17-*-97	32.0 (1.26)	6.3 (0.25)	7.5 (0.30)	10.0 (0.39)	M18	28.0 (1.10)	20.0 (0.79)	30.0 (1.18)

NG	ISO-code	Bolt Kit			Seal Nitrile	Kit Fluorocarbon	Surface Finish
10	6264-06-09-*-97	BK494	4xM12 x 45-DIN 912 12.9	108 Nm (79.6 lb.-ft.) ±15%	S26-96396-0	S26-96396-5	
25	6264-08-13-*-97	BK366	4xM16 x 70-DIN 912 12.9	264 Nm (194.7 lb.-ft.) ±15%	S26-96589-0	S26-96589-5	
32	6264-10-17-*-97	BK507	4xM18 x 75-DIN 912 12.9	398 Nm (293.5 lb.-ft.) ±15%	S26-96392-0	S26-96392-5	

NG	ISO-code	Subplate	Size
10	6264-06-09-*-97	SPP3R6B910	P, T = 3/4" BSPP x = 1/4" BSPP
25	6264-08-13-*-97	SPP6R8B910	P, T = 1 1/4" BSPP x = 1/4" BSPP
32	6264-10-17-*-97	SPP10R12B910	P, T = 1 1/2" BSPP x, y = 1/4" BSPP



**D**



**Dimensions**

**Pressure Control Valves  
Series R4V with Vent Function**

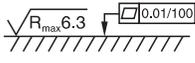
Inch equivalents for millimeter dimensions are shown in (\*\*)

NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	6264-06-07-*-97	42.9 (1.69)	35.8 (1.41)	21.5 (0.85)	— —	7.2 (0.28)	21.5 (0.85)	0.0 (0.00)	66.7 (2.63)	58.8 (2.31)	33.4 (1.31)	7.9 (0.31)	14.3 (0.56)	— —
25	6264-08-11-*-97	60.3 (2.37)	49.2 (1.94)	39.7 (1.56)	— —	11.1 (0.44)	20.6 (0.81)	0.0 (0.00)	79.4 (3.13)	73.0 (2.87)	39.7 (1.56)	6.4 (0.25)	15.9 (0.63)	— —
32	6264-10-15-*-97	84.2 (3.31)	67.5 (2.66)	59.5 (2.34)	42.1 (1.66)	16.7 (0.66)	24.6 (0.97)	0.0 (0.00)	96.8 (3.81)	92.8 (3.65)	48.4 (1.91)	3.8 (0.15)	21.4 (0.84)	— —

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

NG	ISO-code	B1	B2	B3	H1	H2	H3	H4	L1	L2	L3	L4	L5	L6	L7
10	6264-06-07-*-97	87.3 (3.44)	33.4 (1.31)	70.0 (2.76)	130.0 (5.12)	21.0 (0.83)	68.5 (2.70)	109.5 (4.31)	29.0 (1.14)	94.8 (3.73)	— —	143.0 (5.63)	181.0 (7.13)	165.6 (6.52)	144.8 (5.70)
25	6264-08-11-*-97	105.0 (4.13)	39.7 (1.59)	70.0 (2.76)	156.5 (6.16)	29.0 (1.14)	95.0 (3.74)	136.0 (5.35)	34.7 (1.37)	126.8 (4.99)	— —	143.0 (5.63)	181.0 (7.13)	165.6 (6.52)	144.8 (5.70)
32	6264-10-15-*-97	120.0 (4.72)	48.4 (1.91)	70.0 (2.76)	167.0 (6.57)	29.0 (1.14)	105.5 (4.15)	146.5 (5.77)	30.6 (1.20)	144.3 (5.68)	— —	143.0 (5.63)	181.0 (7.13)	165.6 (6.52)	144.8 (5.70)

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	6264-06-07-*-97	15.0 (0.59)	7.0 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	16.0 (0.63)	10.8 (0.43)	17.0 (0.67)
25	6264-08-11-*-97	23.4 (0.92)	7.1 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	18.0 (0.71)	10.8 (0.43)	17.0 (0.67)
32	6264-10-15-*-97	32.0 (1.26)	7.1 (0.28)	7.1 (0.28)	8.0 (0.31)	M10	20.0 (0.79)	10.8 (0.43)	17.0 (0.67)

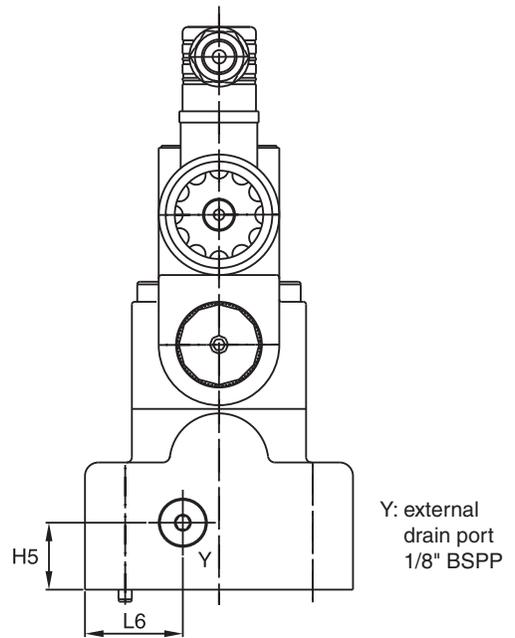
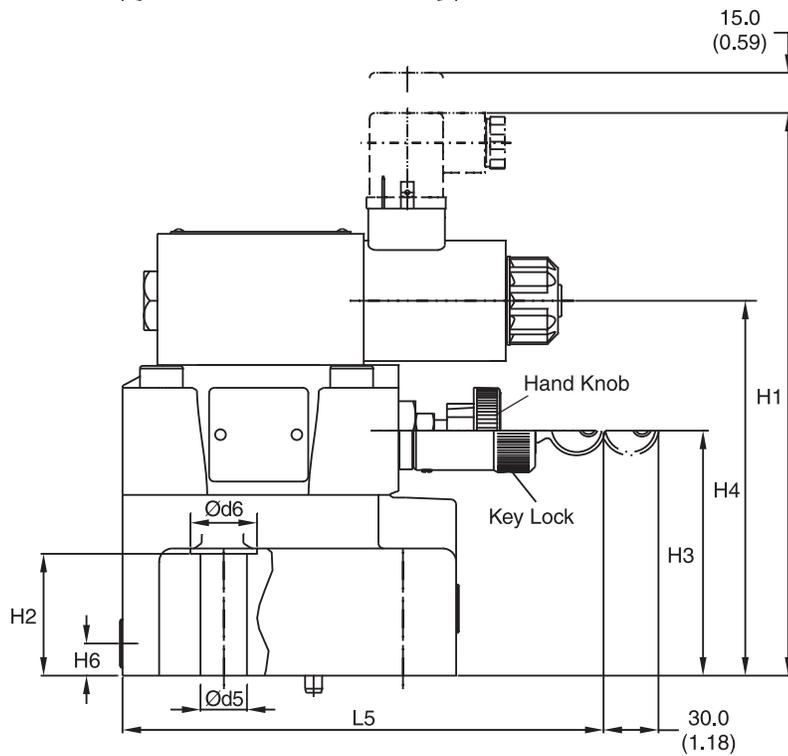
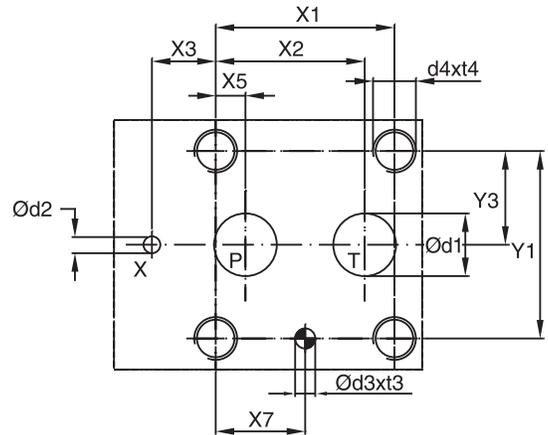
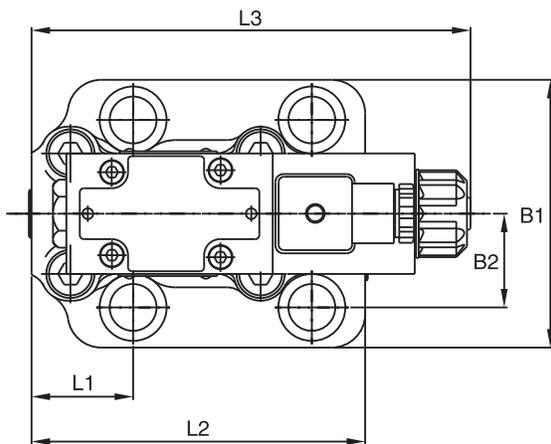
NG	ISO-code	Bolt Kit			Seal Nitrile	Kit Fluorocarbon	Surface Finish
10	6264-06-07-*-97	BK505	4xM10 x 35-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58507-0	S26-58507-5	
25	6264-08-11-*-97	BK485	4xM10 x 45-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58475-0	S26-58475-5	
32	6264-10-15-*-97	BK506	6xM10 x 45-DIN 912 12.9	63 Nm (46.5 lb.-ft.) ±15%	S26-58508-0	S26-58508-5	
VV01*					S56-40609-0	S56-40609-5	

\*Please combine seal kit of one size with seal kit of VV01 solenoid for complete seal kit.

NG	ISO-code	Subplate	Size
10	6264-06-07-*-97	SPP3M6B910	A, B = 3/4" BSPP x, y = 1/4" BSPP
25	6264-08-11-*-97	SPP6M8B910	A, B = 1" BSPP x, y = 1/4" BSPP
32	6264-10-15-*-97	SPP10M12B910	A, B = 1 1/2" BSPP x, y = 1/4" BSPP



**D**



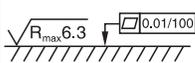
Inch equivalents for millimeter dimensions are shown in (\*\*)

NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	6264-06-09-*-97	53.8 (2.12)	47.5 (1.87)	0.0 (0.00)	— —	22.1 (0.87)	— —	22.1 (0.87)	53.8 (2.12)	— —	26.9 (1.06)	— —	— —	— —
25	6264-08-13-*-97	66.7 (2.63)	55.6 (2.19)	23.8 (0.91)	— —	11.1 (0.44)	— —	33.4 (1.31)	70.0 (2.76)	— —	35.0 (1.38)	— —	— —	— —
32	6264-10-17-*-97	88.9 (3.50)	76.2 (3.00)	31.8 (1.25)	— —	12.7 (0.50)	— —	44.5 (1.75)	82.6 (3.25)	— —	41.3 (1.63)	— —	— —	— —

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6
10	6264-06-09-*-97	80.0 (3.15)	26.9 (1.06)	206.0 (8.11)	27.0 (1.06)	88.0 (3.46)	136.5 (5.37)	25.0 (0.98)	12.0 (0.47)	52.5 (2.07)	118.5 (4.67)	163.8 (6.45)	— —	180.0 (7.09)	36.5 (1.44)
25	6264-08-13-*-97	100.0 (3.94)	35.0 (1.38)	210.0 (8.27)	45.5 (1.79)	91.5 (3.60)	140.0 (5.51)	25.0 (0.98)	12.0 (0.47)	37.9 (1.49)	124.5 (4.90)	163.8 (6.45)	— —	180.0 (7.09)	36.5 (1.44)
32	6264-10-17-*-97	120.0 (4.72)	41.3 (1.63)	215.5 (8.48)	52.0 (2.05)	97.0 (3.82)	145.5 (5.73)	25.0 (0.98)	12.0 (0.47)	45.0 (1.77)	153 (6.02)	163.8 (6.45)	— —	180.0 (7.09)	36.5 (1.44)

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	6264-06-09-*-97	14.7 (0.58)	4.8 (0.19)	7.5 (0.30)	10.0 (0.39)	M12	20.0 (0.79)	13.5 (0.53)	20.0 (0.79)
25	6264-08-13-*-97	23.4 (0.92)	6.3 (0.25)	7.5 (0.30)	10.0 (0.39)	M16	27.0 (1.06)	17.5 (0.69)	25.0 (0.98)
32	6264-10-17-*-97	32.0 (1.26)	6.3 (0.25)	7.5 (0.30)	10.0 (0.39)	M18	28.0 (1.10)	20.0 (0.79)	30.0 (1.18)

NG	ISO-code	Bolt Kit			Seal Nitrile	Kit Fluorocarbon	Surface Finish
10	6264-06-09-*-97	BK494	4xM12 x 45-DIN 912 12.9	108 Nm (79.6 lb.-ft.) ±15%	S26-96395-0	S26-96395-5	
25	6264-08-13-*-97	BK366	4xM16 x 70-DIN 912 12.9	264 Nm (194.7 lb.-ft.) ±15%	S26-96589-0	S26-96589-5	
32	6264-10-17-*-97	BK507	4xM18 x 75-DIN 912 12.9	398 Nm (293.5 lb.-ft.) ±15%	S26-96392-0	S26-96392-5	

NG	ISO-code	Subplate	Size
10	6264-06-09-*-97	SPP3R6B910	P, T = 3/4" BSPP x = 1/4" BSPP
25	6264-08-13-*-97	SPP6R8B910	P, T = 1 1/4" BSPP x = 1/4" BSPP
32	6264-10-17-*-97	SPP10R12B910	P, T = 1 1/2" BSPP x, y = 1/4" BSPP

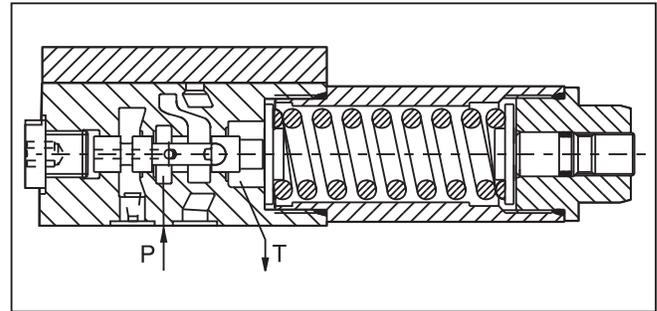
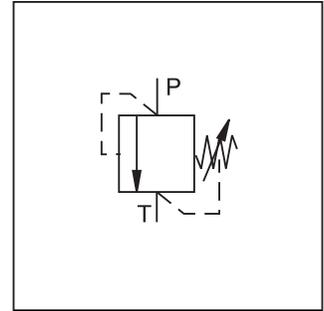


**General Description**

Series VS pressure relief valve is a direct operated spool valve for subplate mounting with internal drain to port T. The connection and function is according to ISO 6264.

**Specifiactions**

<b>Size</b>	NFPA D03 / NG6
<b>Mounting Interface</b>	ISO 6264
<b>Mounting Position</b>	Unrestricted
<b>Ambient Temperature Range</b>	-20°C to +70°C (-4°F to +158°F)
<b>Working Pressure</b>	Port P: 350 Bar (5075 PSI) Port T: depressurized
<b>Pressure Range</b>	25 Bar (363 PSI) 64 Bar (928 PSI) 160 Bar (2320 PSI) 210 Bar (3045 PSI) 350 Bar (5075 PSI)
<b>Nominal Flow</b>	25 LPM (6.6 GPM)
<b>Pressure Fluid</b>	Hydraulic oil as per DIN 51524 ... 525
<b>Fluid Temperature Recommended Permitted</b>	+30°C to +50°C (+86°F to +122°F) -20°C to +70°C (-4°F to +158°F)
<b>Viscosity Recommended Permitted</b>	30 to 50 cSt/mm <sup>2</sup> /s (139 to 232 SSU) 20 to 380 cSt / mm <sup>2</sup> /s (93 to 1761 SSU)
<b>Filtration</b>	ISO 4406 (1999), 18/16/13



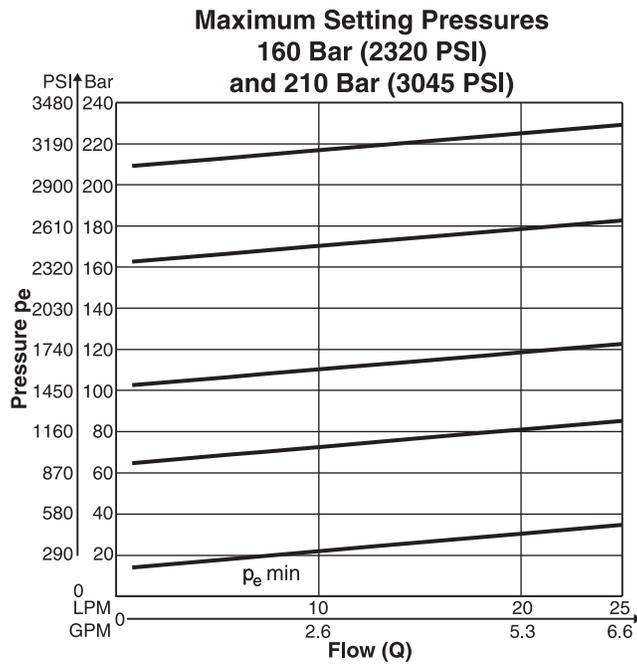
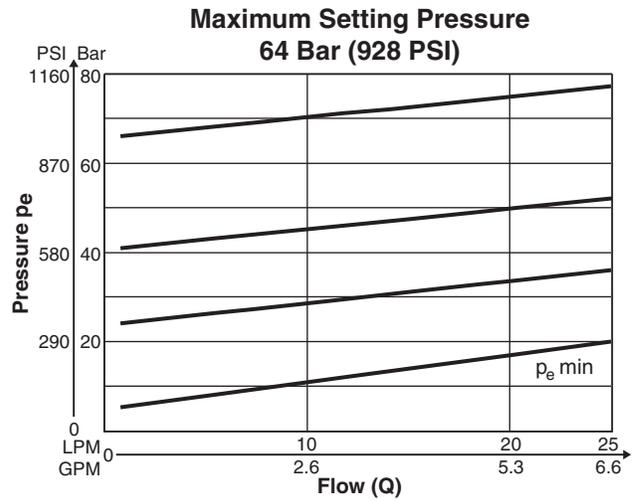
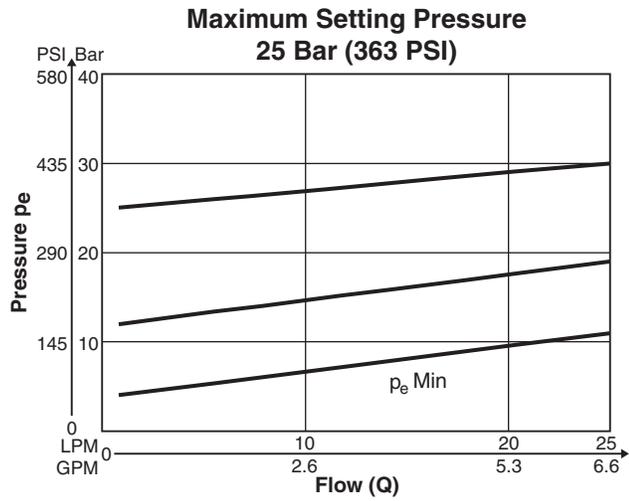
**Features**

- Spool type valve.
- Manifold mounting.
- 5 pressure ranges.
- 2 adjustment modes.

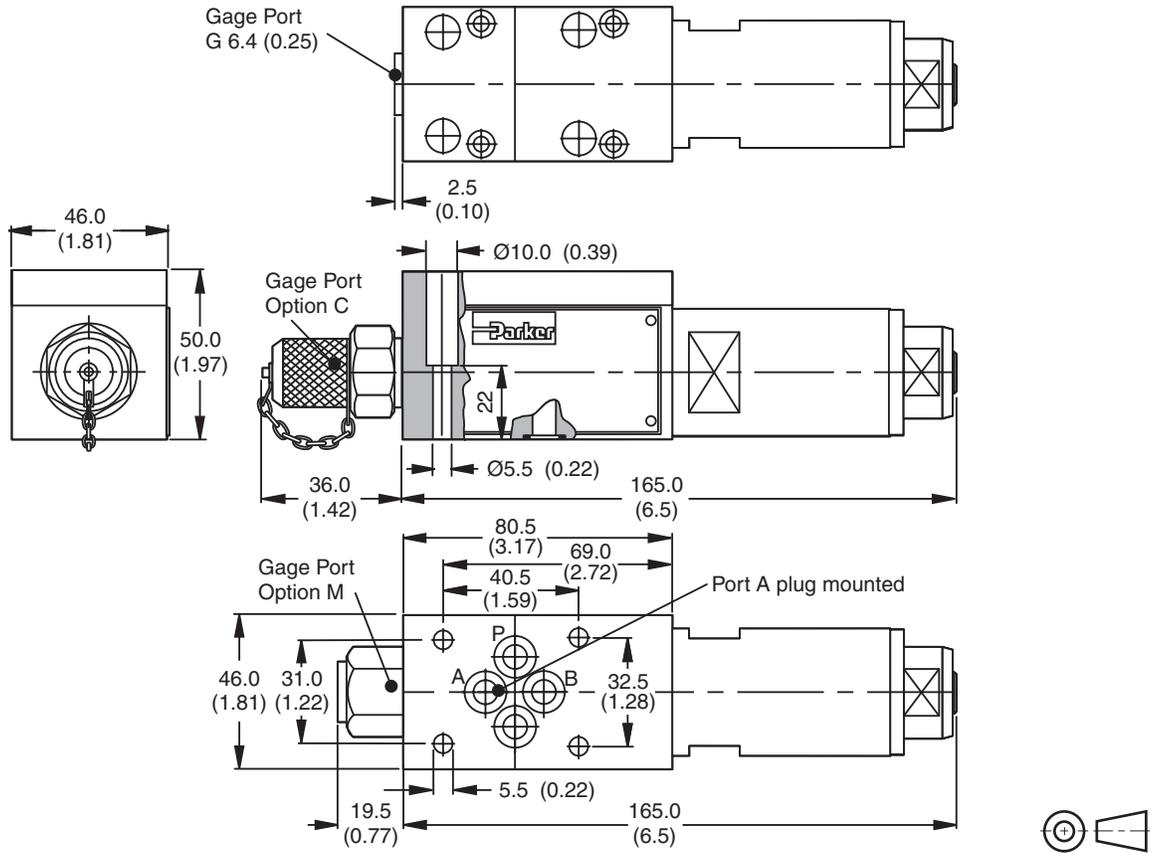
**Ordering Information**

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">VS</div> <p>Pressure Relief Valve</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Pressure Range</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">A</div> <p>Adjustment Screw with Hexagon Socket</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">06</div> <p>Size</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">V</div> <p>Seal Fluorocarbon</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Gage Port</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Lock</p>	<div style="border: 1px dashed black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Design Series NOTE: Not required when ordering.</p>																												
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**Weight:** 1.3 kg (2.9 lbs.)



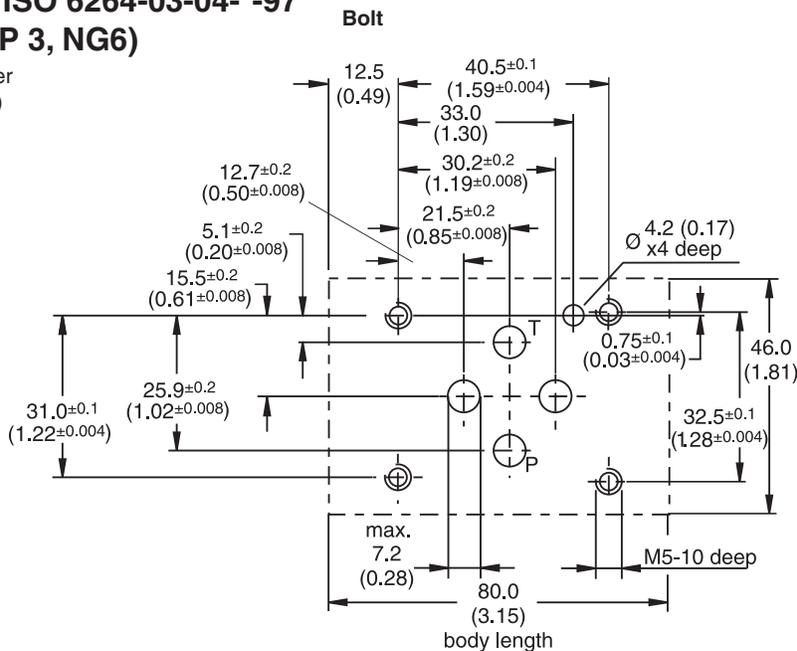
Inch equivalents for millimeter dimensions are shown in (\*\*)



<b>Surface Finish</b>	<b>Bolt kit</b> <b>DIN912 12.9</b>		<b>Seal Kit</b> <b>Fluorocarbon</b>
	M5x30-4pcs	8.1Nm (6.0 lb.-ft.)	SK-VB/VM/VS V

**Mounting Pattern ISO 6264-03-04-\*-97  
(NFPA D03, CETOP 3, NG6)**

Inch equivalents for millimeter dimensions are shown in (\*\*)

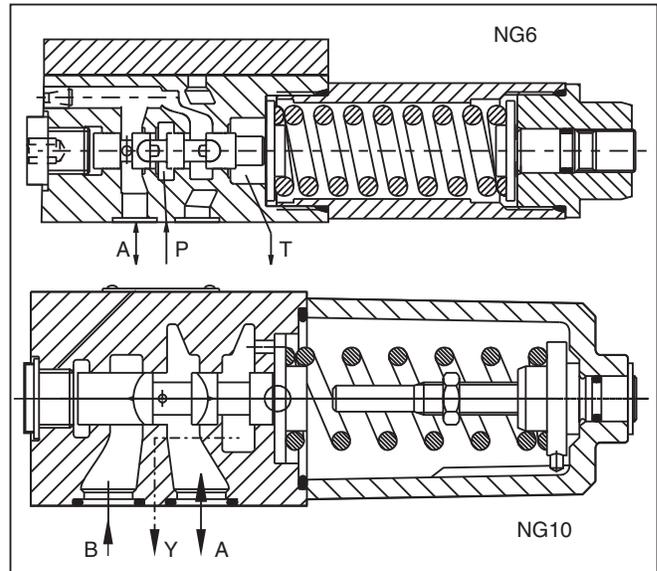
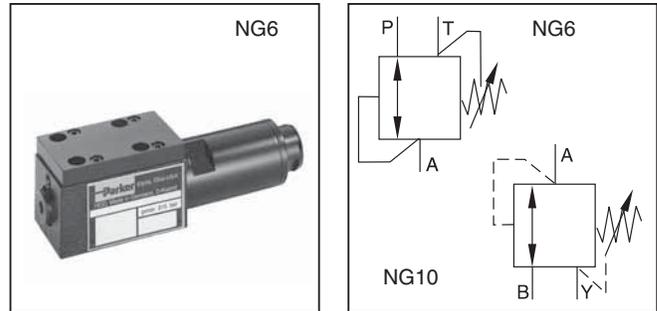


VS.indd, dd

**General Description**

Series VM direct operated, pressure reducing valve with manual adjustment. Series VM is a direct-controlled, spring loaded 3-way pressure reducing valve, that is open in neutral position. The valve closes the connection from P to A (NG6) or B to A (NG10) when the pre-set pressure is exceeded.

If the pressure increases due to an external influence in connection A, the spool moves and opens the connection from A to T (NG6) or A to Y (NG10) until the pre-set pressure is reached.



**D Features**

- Spool type valve.
- Manifold mounting acc. to ISO 5871.
- 5 pressure ranges at NG6.
- 3 pressure ranges at NG10.
- 2 adjustment modes.

**Ordering Information**

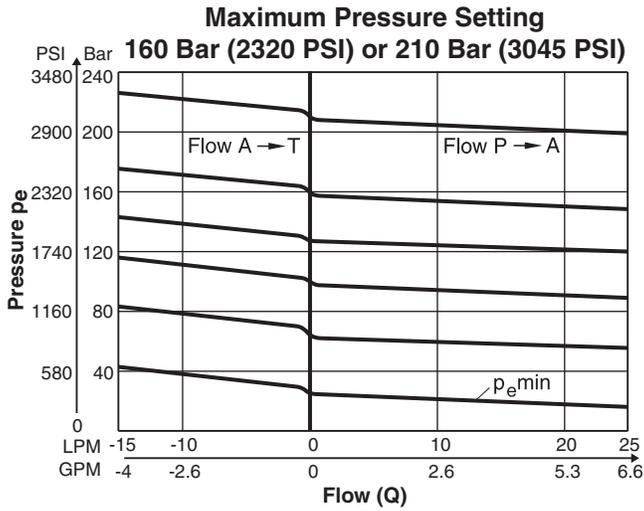
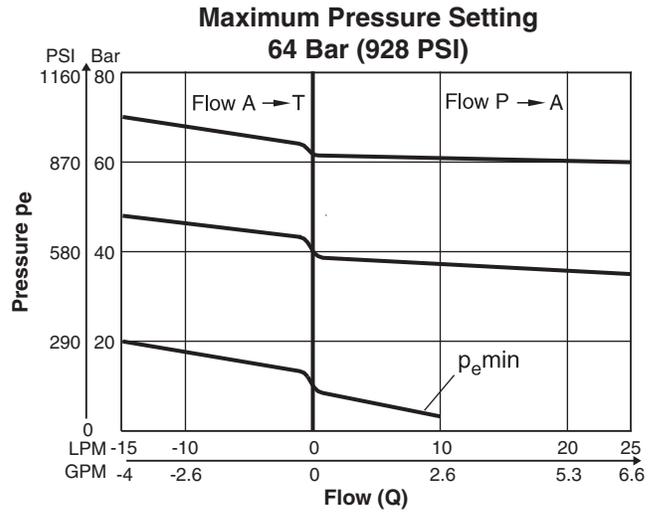
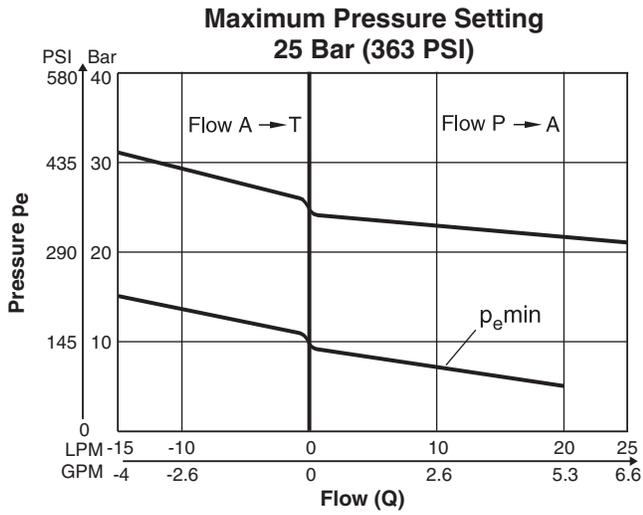
<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">V</div> <p style="text-align: center; margin: 5px 0;">Pressure Reducing Valve</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">M</div> <p style="text-align: center; margin: 5px 0;">Maximum Pressure Setting</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">A</div> <p style="text-align: center; margin: 5px 0;">Adjustment Screw with Hexagon Socket</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">Size</div>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">V</div> <p style="text-align: center; margin: 5px 0;">Seal Fluorocarbon</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">Gage Port</div>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">Lock</div>	<div style="border: 1px dashed black; padding: 2px; width: 30px; margin: 0 auto;">Design Series</div> <p style="text-align: center; margin: 5px 0;">NOTE: Not required when ordering.</p>																																
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**Weight:**  
 VM\*A06 1.3 kg (2.9 lbs.)  
 VM\*A10 3.7 kg (8.2 lbs.)

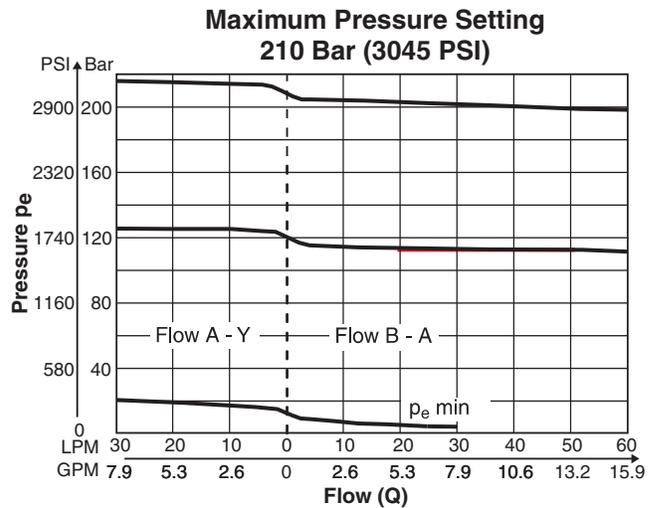
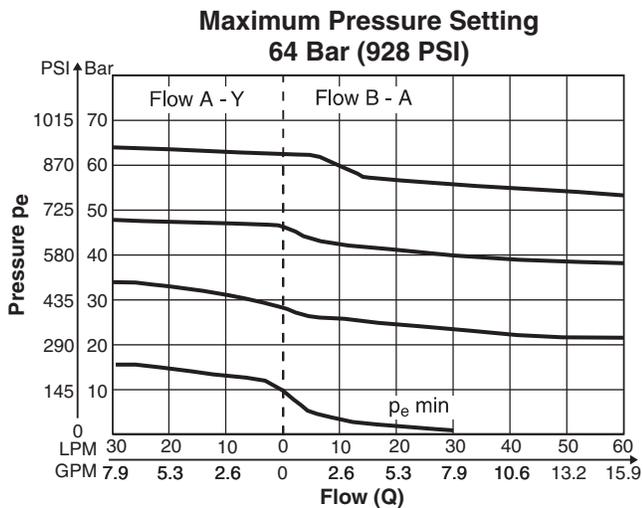
General		
Size	NG6	NG10
Interface	Subplate mounting acc. ISO 5781	
Mounting Position	Unrestricted	
Ambient Temperature	-20°C to +70° (-4°F to +158°F)	
Hydraulic		
Working Pressure	Ports P and A 350 Bar (5075 PSI) Port T depressurized	Ports A and B 210 Bar (3045 PSI) Port Y depressurized
Pressure Range	25, 64, 160, 210, 350 Bar (363, 928, 2320, 3045, 5075 PSI)	64, 125, 210 Bar (928, 1813, 3045 PSI)
Nominal Flow	25 LPM (6.6 GPM)	60 LPM (15.9 GPM)
Pressure Fluid	Hydraulic oil according to DIN 51524 ... 525	
Viscosity Recommended Maximum	30 to 50 cSt / mm <sup>2</sup> /s (139 to 232 SSU) 20 to 380 cSt / mm <sup>2</sup> /s (93 to 1761 SSU)	
Pressure Fluid Temperature Recommended Permitted	+30°C to +50°C (+86°F to +122°F) -20°C to +70° (-4°F to +158°F)	
Filtration	ISO 4406 (1999), 18/16/13	

**D**

**VM\*06**



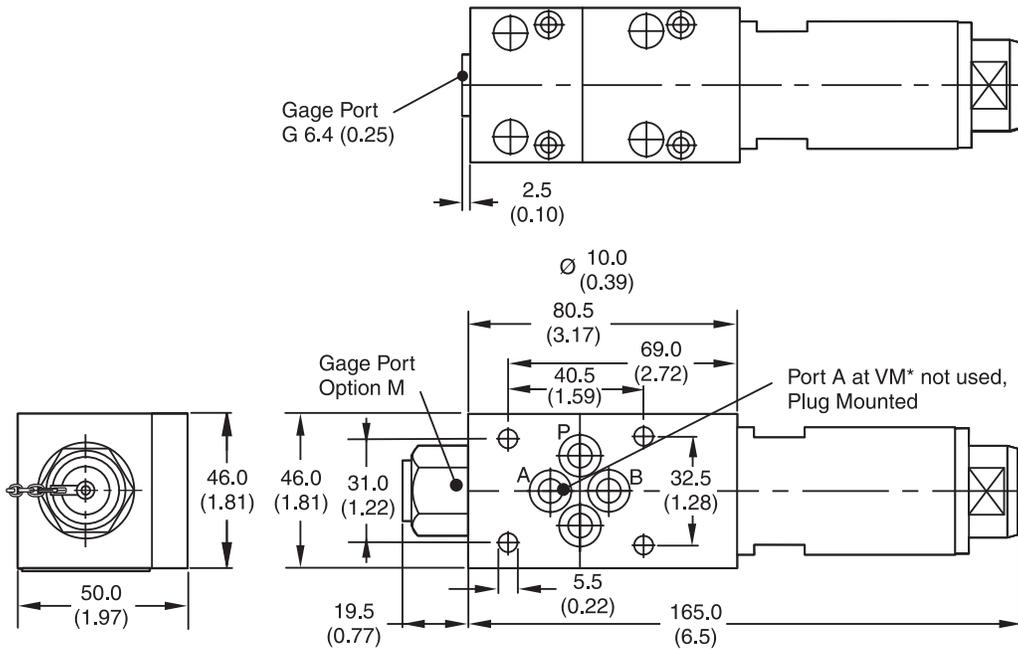
**VM\*10**



VM.indd, dd

**VM\*06**

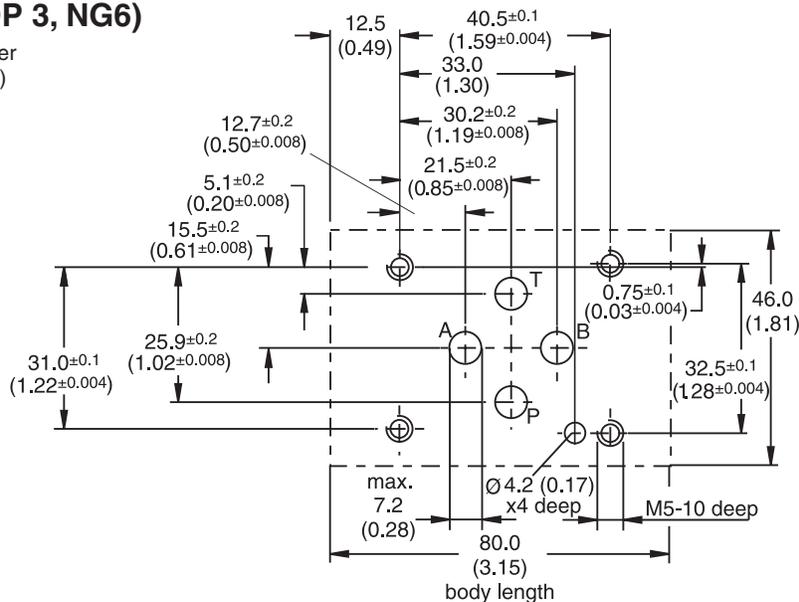
Inch equivalents for millimeter dimensions are shown in (\*\*)



<b>Surface Finish</b>	<b>Bolt Kit</b>  <b>DIN912 12.9</b>		<b>Seal Kit</b>  <b>Fluorocarbon</b>
	BK375 4x M5x30	8.1 Nm (6.0 lb.-ft.)	SK-VB/VM/VS-V

**Mounting Pattern ISO 5871-03-04-0-00  
(NFPA D03, CETOP 3, NG6)**

Inch equivalents for millimeter dimensions are shown in (\*\*)

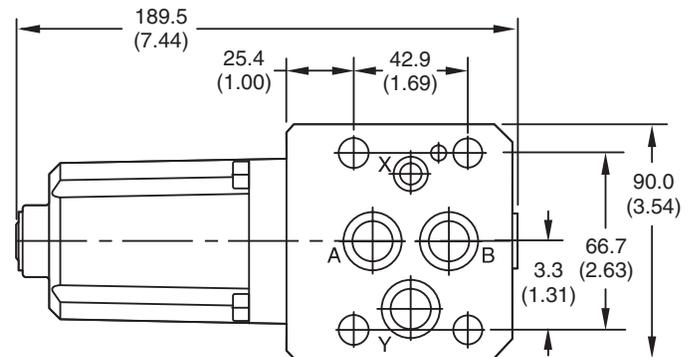
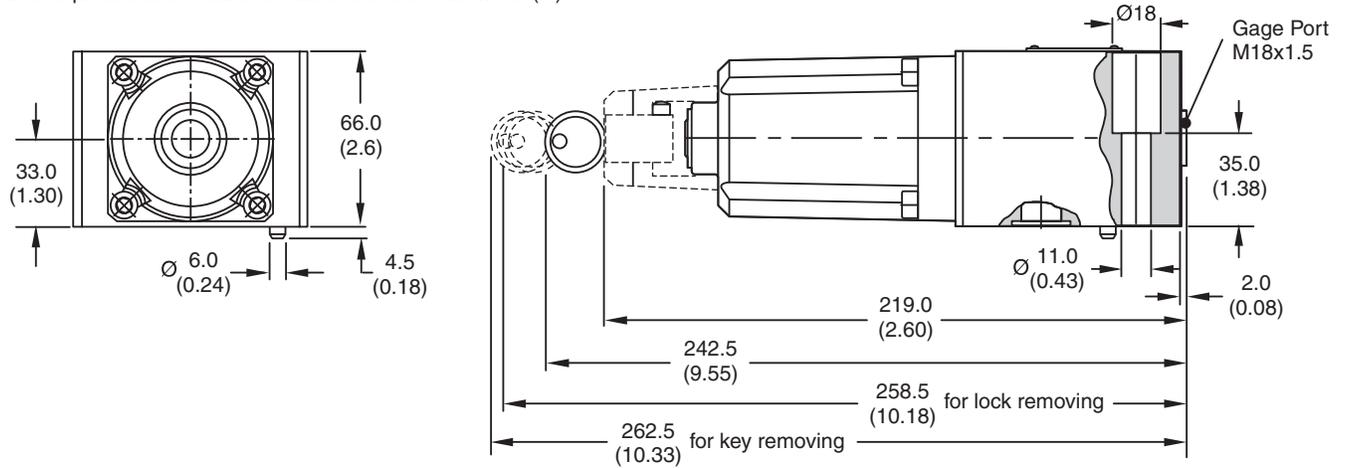


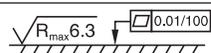
VM.indd, dd



**VM\*10**

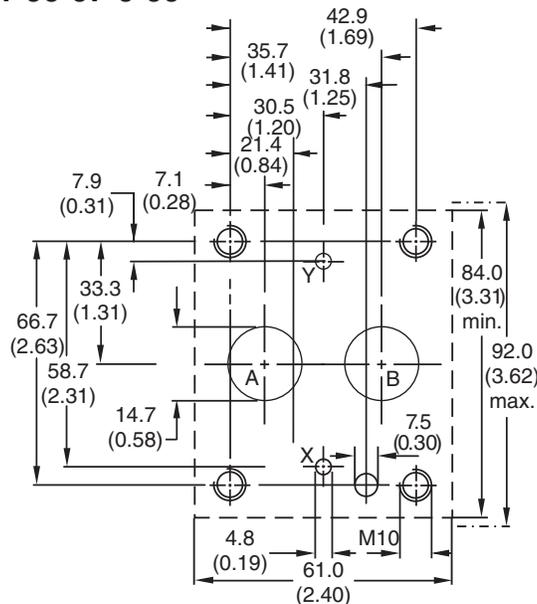
Inch equivalents for millimeter dimensions are shown in (\*\*)



<b>Surface Finish</b>	<b>Bolt Kit</b>  <b>DIN912 12.9</b>		<b>Seal Kit</b>  <b>Fluorocarbon</b>
	BK389 4x M10x50	65 Nm (47.9 lb.-ft.)	SK-VB/VM-A10V

**Mounting Pattern ISO 5871-06-07-0-00**

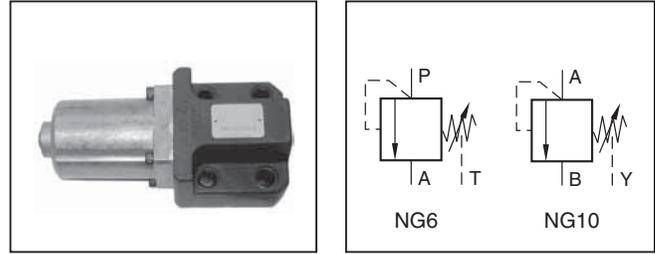
Inch equivalents for millimeter dimensions are shown in (\*\*)



Subplate	Size
SPP3M6B910	A, B = 3/4" BSPP x, y = 1/4" BSPP

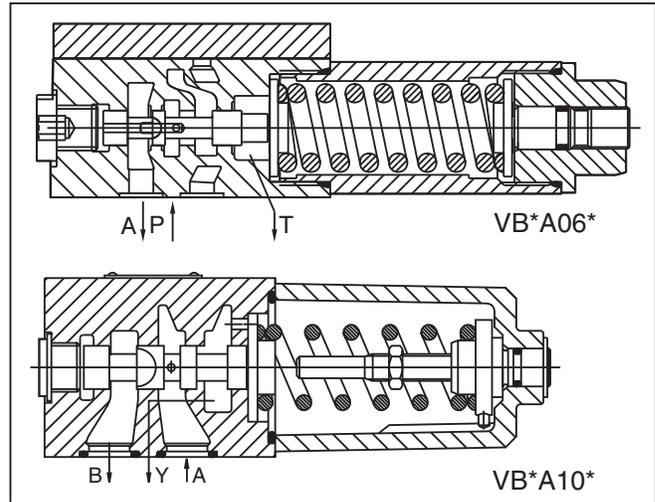
**General Description**

Series VB are direct operated pressure relief valves with manual adjustment. Series VB valves can also be used as pressure sequence valves because of the high pressure capability in the outlet port and the external drain port.



**Specifications**

<b>Size</b>	NG6, NG10
<b>Interface</b>	ISO 5791
<b>Mounting Pos.</b>	Unrestricted
<b>Ambient Temp.</b>	-20°C to +80°C (-4°F to +176°F)
<b>Max. Operating Pressure</b>	Size 6: Ports P and A 350 Bar (5075 PSI), Port T depressurized  Size 10: Ports A and B 315 Bar (4568 PSI), Port Y depressurized
<b>Pressure Range</b>	Size 6: 25, 64, 160, 210, 350 Bar (363, 928, 2320, 3045, 5075 PSI) Size 10: 64, 125, 210 Bar (928, 1813, 3045 PSI)
<b>Nominal Flow</b>	Size 6: 25 LPM (6.6 GPM) Size 10: 60 LPM (15.9 GPM)
<b>Pressure Fluid</b>	Hydraulic oil according to DIN 51524 ... 525
<b>Pressure Fluid Temperature</b>	Recommended: +30C to +50°C (+86°F to +122°F) Permitted: -20°C to +70°C (-4°F to +158°F)
<b>Viscosity</b>	Recommended: 30 to 50 cSt (mm <sup>2</sup> /s) Permitted: 20 to 380 cSt (mm <sup>2</sup> /s)
<b>Filtration</b>	ISO 4406 (1999), 18/16/13



**Features**

- Spool valve.
- Manifold mounting.
- Five pressure ranges at NG6.
- Three pressure ranges at NG10.
- Two adjustment modes.

**Ordering Information**

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">VB</div> <p>Sequence Valve</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Maximum Pressure Setting</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">A</div> <p>Adjustment Screw with Hexagon Socket</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Size</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">V</div> <p>Seal Fluorocarbon</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Gauge Port</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Lock</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Design Series</p> <p>NOTE: Not required when ordering.</p>
-----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------

Code	Description
025 <sup>1)</sup>	25 Bar (363 PSI)
064	64 Bar (938 PSI)
125 <sup>2)</sup>	125 Bar (1813 PSI)
160 <sup>1)</sup>	160 Bar (2320 PSI)
210	210 Bar (3045 PSI)
350 <sup>1)</sup>	350 Bar (5075 PSI)

Code	Description
06	NG6
10	NG10

Code	Description
G <sup>1)</sup>	G 1/4"
M	M12x1.5

<sup>1)</sup> only NG6

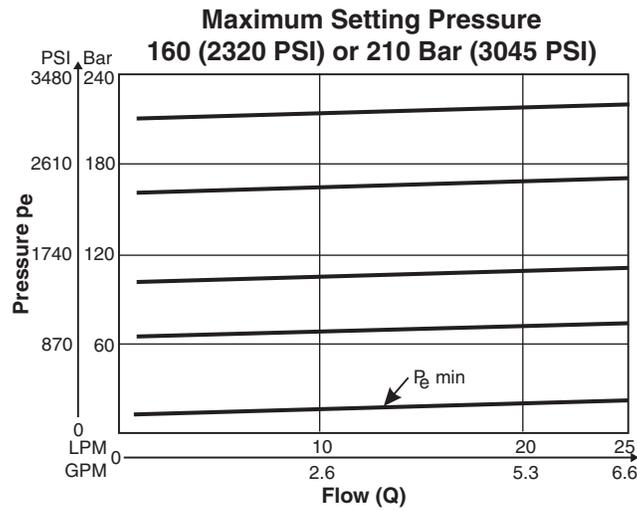
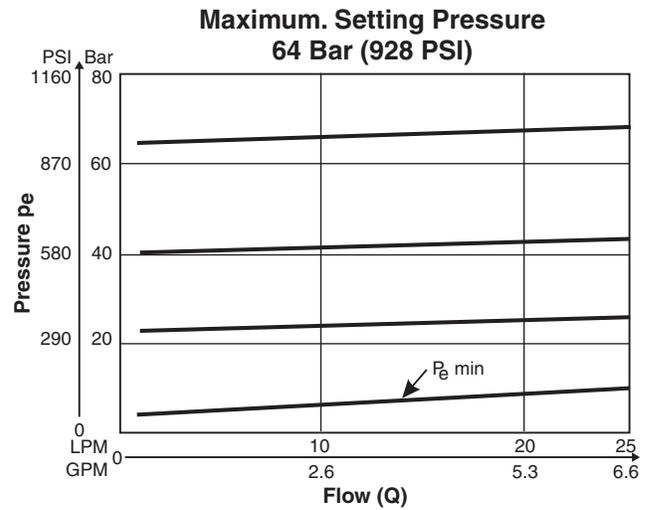
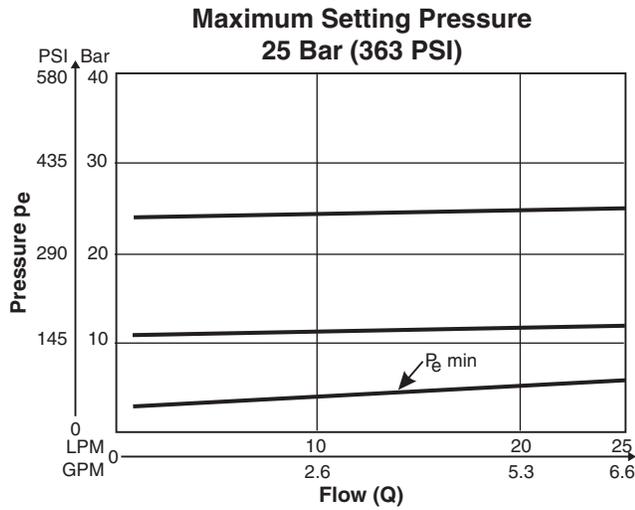
  

Code	Description
Omit	No Lock
Z	Cylinder Lock

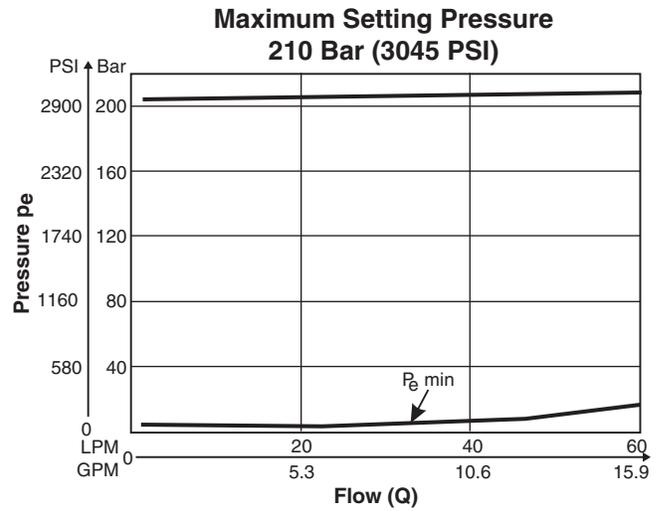
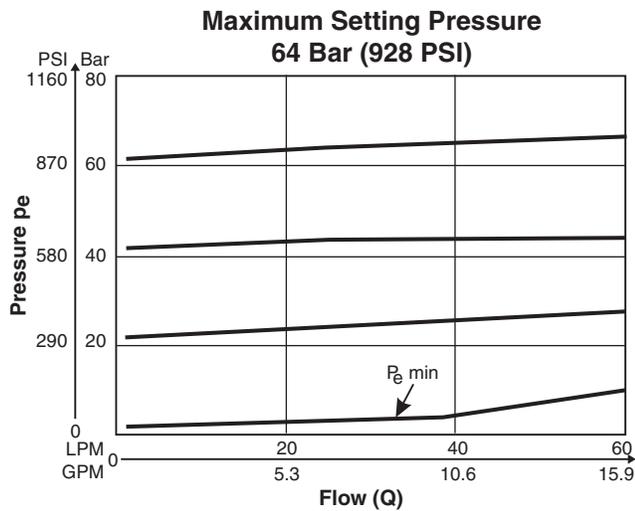
<sup>1)</sup> only NG6  
<sup>2)</sup> only NG10

**Weight:**  
 VB\*A06 1.3 kg (2.9 lbs.)  
 VB\*A10 3.7 kg (8.2 lbs.)

**VB\*06**



**VB\*10**

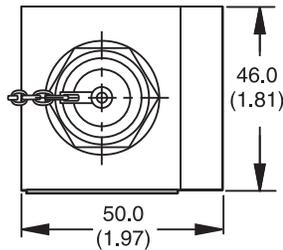
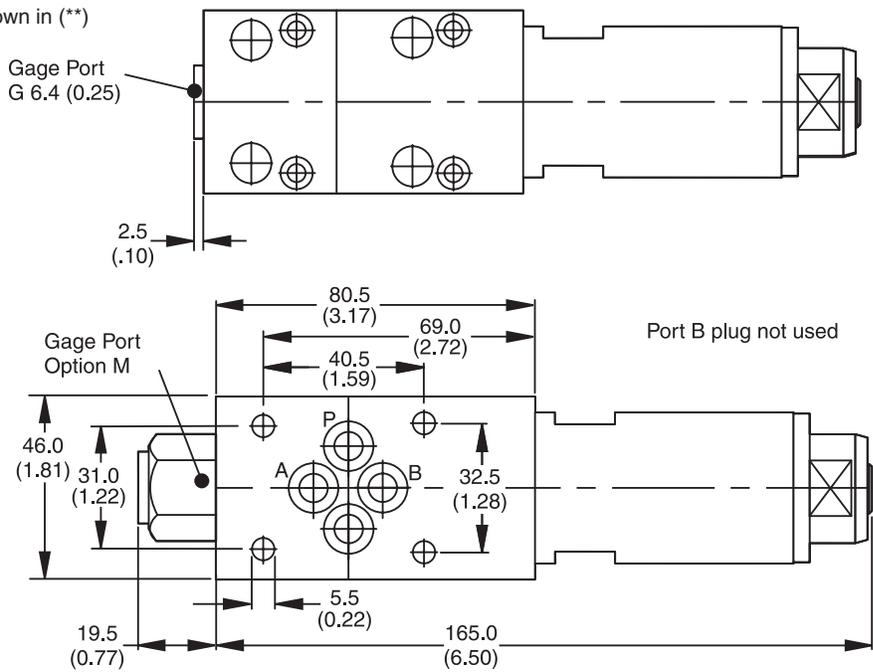


VB.indd, dd



**VB\*06**

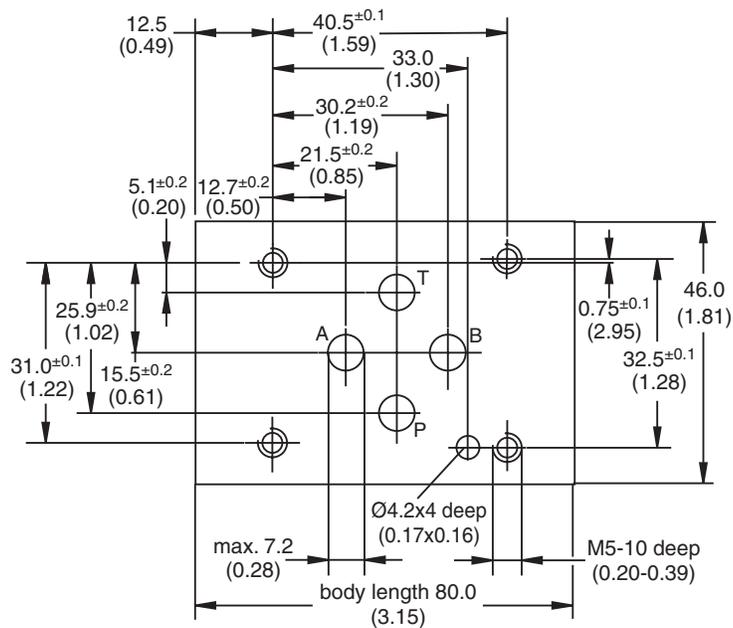
Inch equivalents for millimeter dimensions are shown in (\*\*)



<b>Surface Finish</b>	$\sqrt{R_{max} 6.3}$ $\square 0.01/100$
<b>Bolt Kit</b> DIN912 12.9	BK375 4x M5x30
	7.6 Nm (5.6 lb.-ft.) ±15%
<b>Seal Kit</b> Fluorocarbon	SK-VB/VM/VS V

**Mounting Pattern ISO 5781-03-04-0-00 (NFPA D03, CETOP 3, NG6)**

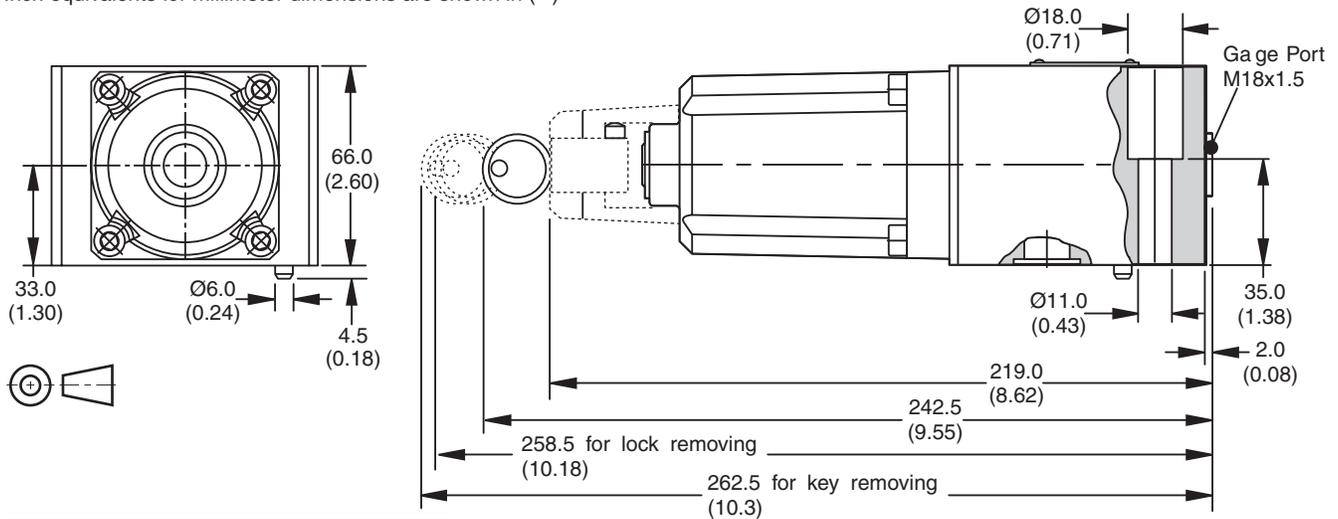
Inch equivalents for millimeter dimensions are shown in (\*\*)



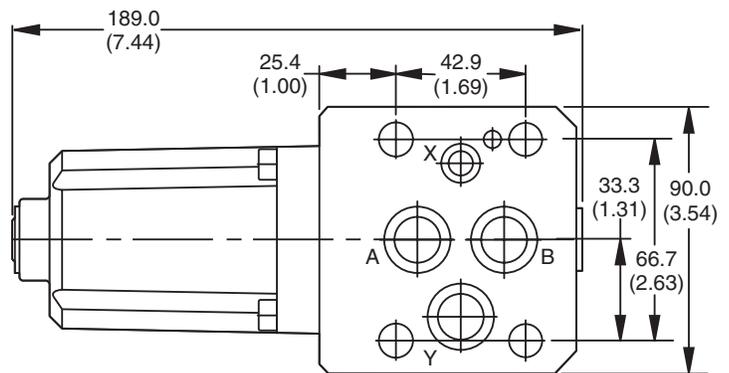
VB.indd, dd

**VB\*10**

Inch equivalents for millimeter dimensions are shown in (\*\*)

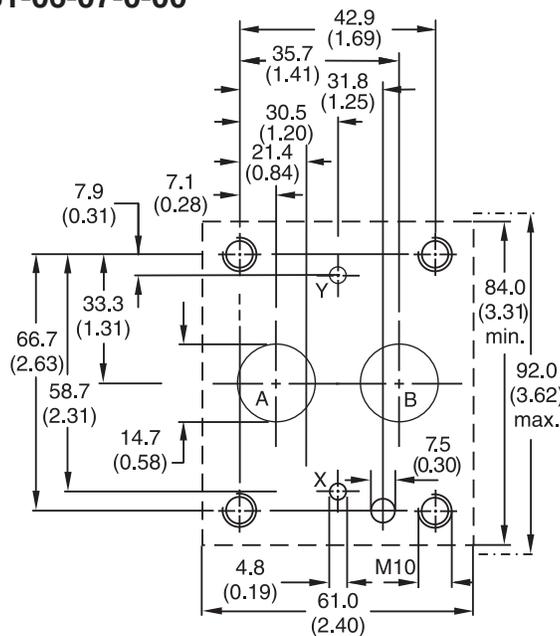


<b>Surface Finish</b>	$\sqrt{R_{max}6.3}$ $\square 0.01/100$
<b>Bolt Kit</b> DIN912 12.9	BK389 4x M10x50
	65 Nm (48 lb.-ft.) ±15%
<b>Seal Kit</b> Fluorocarbon	SK-VB/VM-A10V
<b>Subplate</b>	<b>Size</b>
SPP3M6B910	A, B = 3/4" BSPP x, y = 1/4" BSPP



**Mounting Pattern ISO 5781-06-07-0-00**

Inch equivalents for millimeter dimensions are shown in (\*\*)



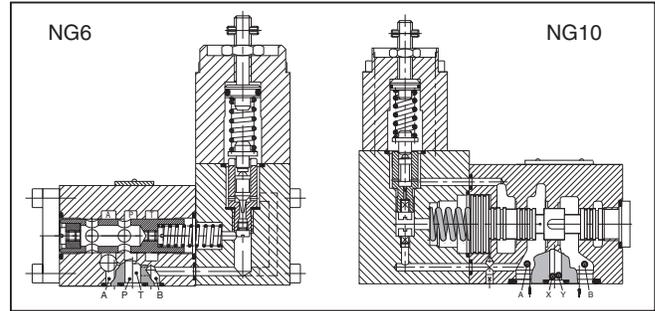
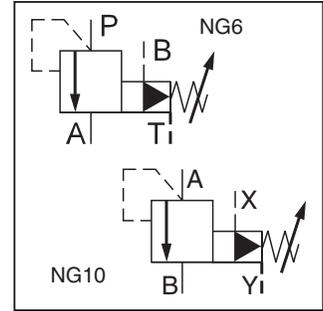
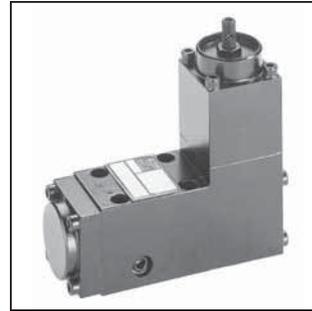
### General Description

Series VBY pilot operated sequence valves consist of a pilot with manual adjustment and a main part with spool execution. The valve has an external drain.

This valve can also be used as a pressure relief valve. Please observe hydraulic connection.

### Features

- Manifold mounting acc. to ISO 5781.
- Type VBY with external drain.
- Main stage spool type valve.
- Pilot stage seated type valve.
- 4 pressure ranges.
- 2 adjustment modes
  - Screw with hexagon socket
  - DIN knob



### Specifications

Size	NG6	NG10
Mounting Pattern	ISO 5781	
Mounting Position	As desired	
Ambient Temperature	-20°C to +80°C (-4°F to +176°F)	
Operating Pressure, Ports External Drain Port Pressure	P, A, B up to 315 Bar (4568 PSI) T up to 100 Bar (1450 PSI)	A, B, X up to 315 Bar (4568 PSI) Y up to 100 Bar (1450 PSI)
Pressure Range	64, 160, 210, 315 Bar (928, 2320, 3045, 4568 PSI)	
Pressure Fluid Temperature	-20°C to +70°C (-4°F to +158°F)	
Viscosity Range Recommended Permitted	30 to 50 cSt / mm <sup>2</sup> /s (139 to 232 SSU) 20 to 380 cSt / mm <sup>2</sup> /s (93 to 1761 SSU)	
Filtration	ISO 4406 (1999), 18/16/13	
Pilot Oil Flow	approx. 500 cm <sup>3</sup> /min	approx. 1000 cm <sup>3</sup> /min

### Ordering Information

**VBY**

Pressure Relief Valve

□

Pressure Range

□

Adjustment

□

Size

□

Seal

□ □

Design Series

NOTE:

Not required when ordering.

Code	Description
064	64 Bar (928 PSI)
160	160 Bar (2320 PSI)
210	210 Bar (3045 PSI)
315	315 Bar (4568 PSI)

Code	Description
A	Adjustment Screw with Hexagon Socket
H	Turning Knob with Cylinder Lock

Code	Description
06	NG6
10	NG10

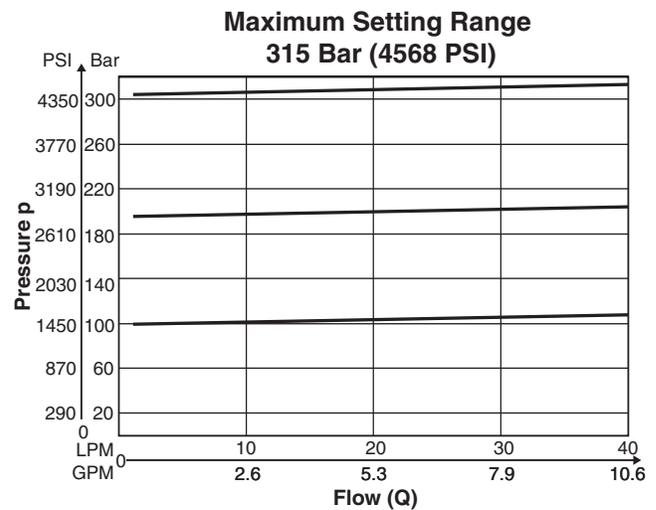
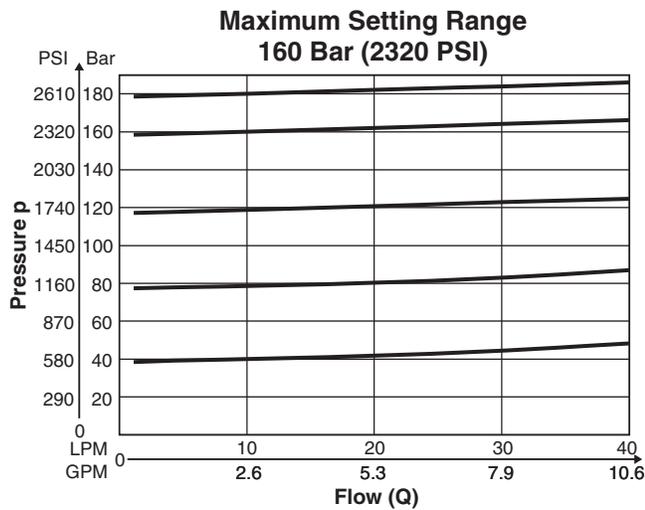
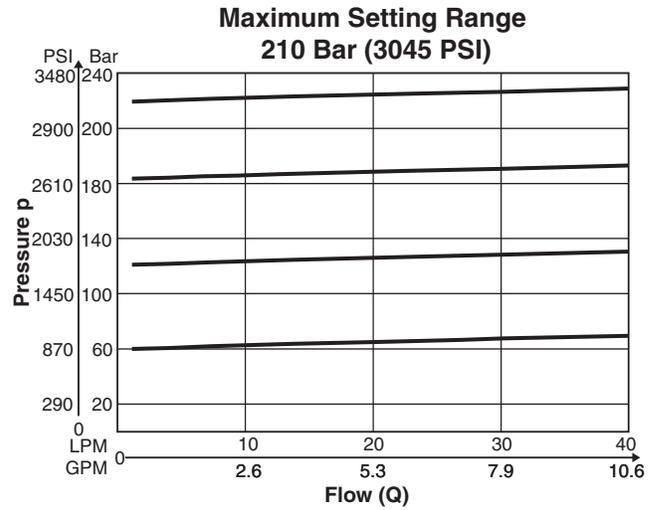
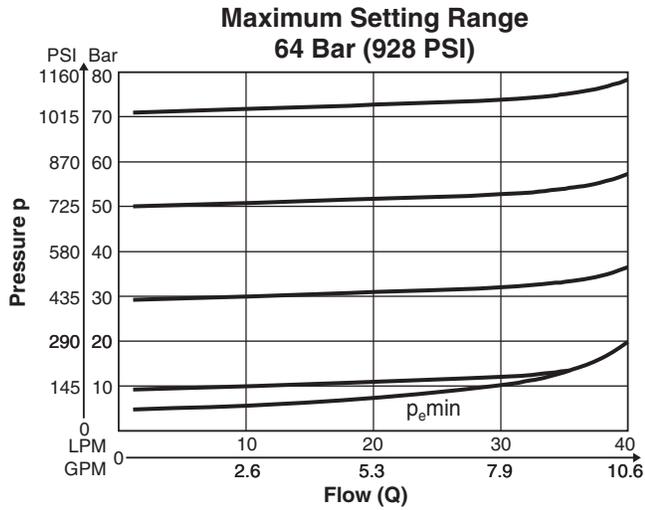
Code	Description
N	Nitrile
V	Fluorocarbon

**Weight:**

VBV\*06 2.4 kg (5.29 lbs.)  
 VBV\*10 4.5 kg (9.92 lbs.)

**VBY\*06**

p/Q measured at t = 50°C (122°F) and v = 36mm<sup>2</sup>/s

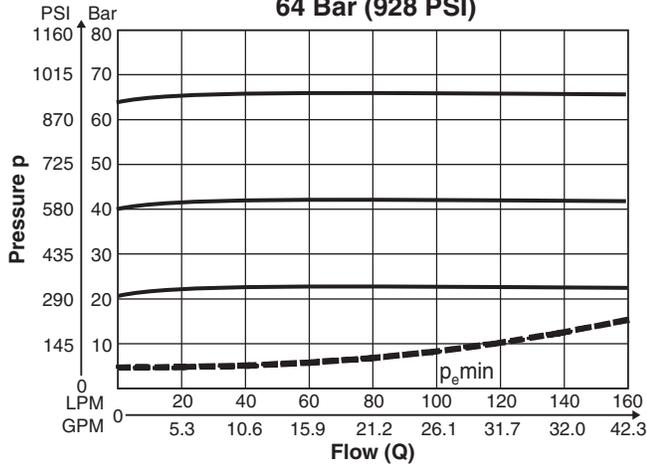


**VBY\*10**

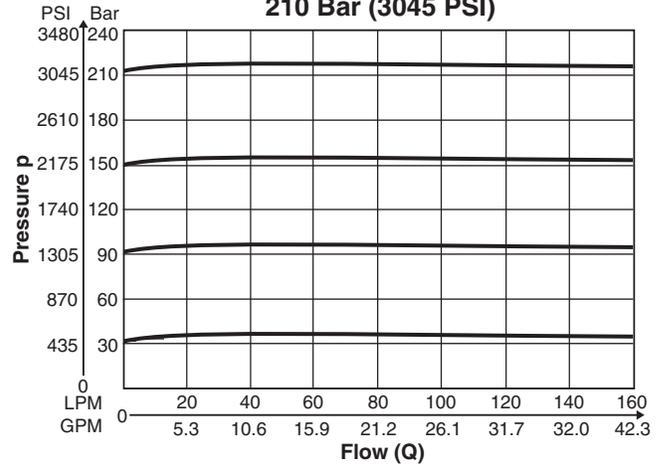
p/Q measured at  $t = 50^{\circ}\text{C}$  ( $122^{\circ}\text{F}$ ) and  $v = 36\text{mm}^2/\text{s}$

**D**

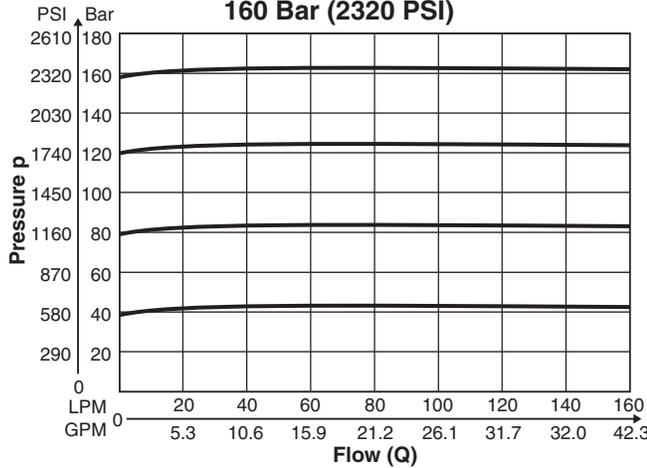
**Maximum Setting Range  
 64 Bar (928 PSI)**



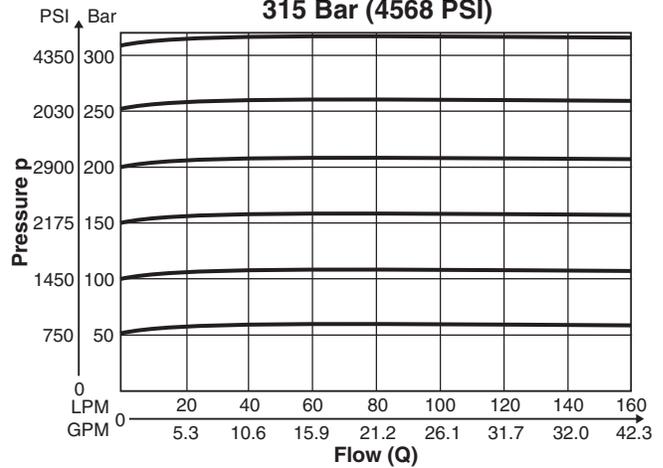
**Maximum Setting Range  
 210 Bar (3045 PSI)**



**Maximum Setting Range  
 160 Bar (2320 PSI)**

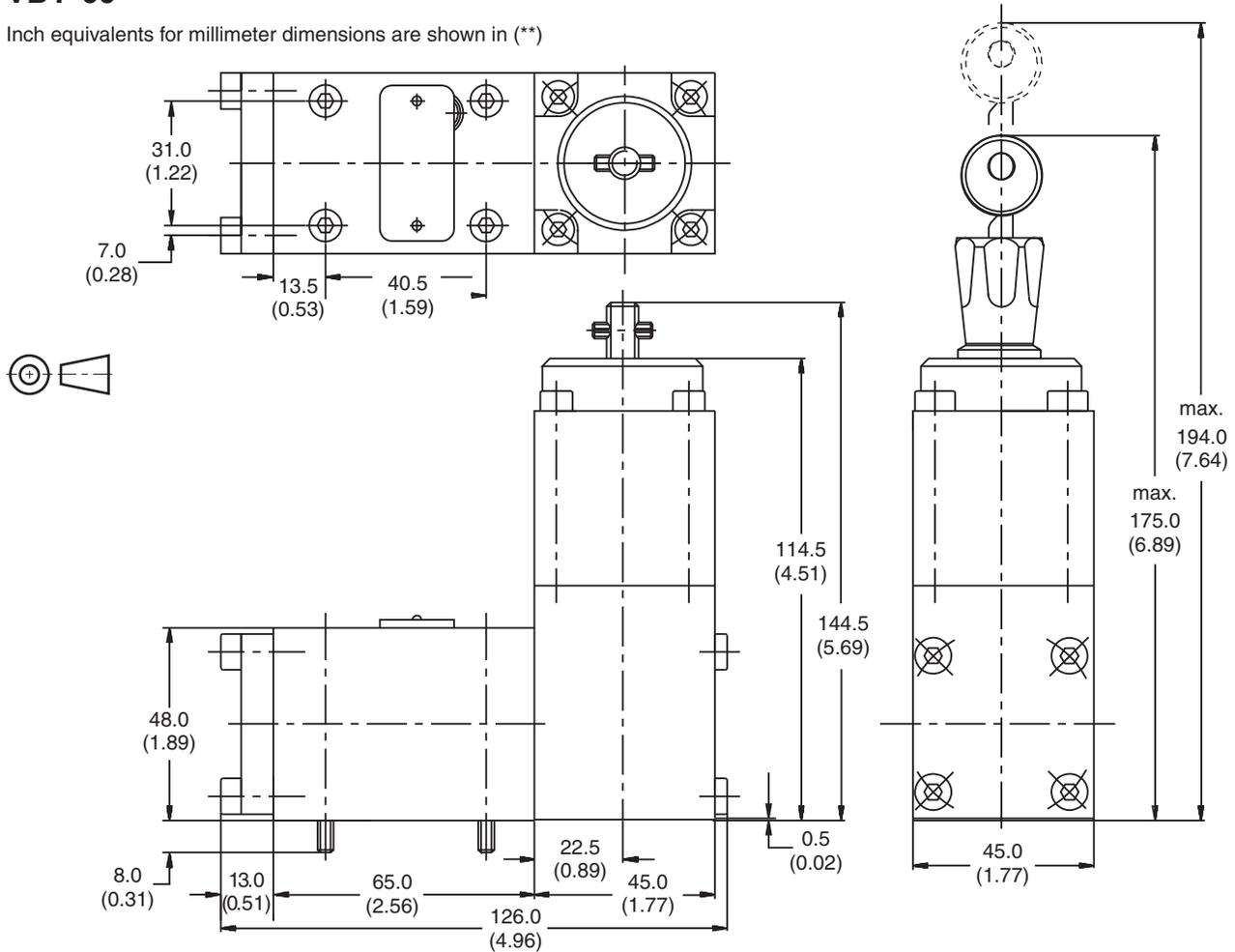


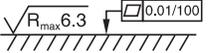
**Maximum Setting Range  
 315 Bar (4568 PSI)**



**VBY\*06**

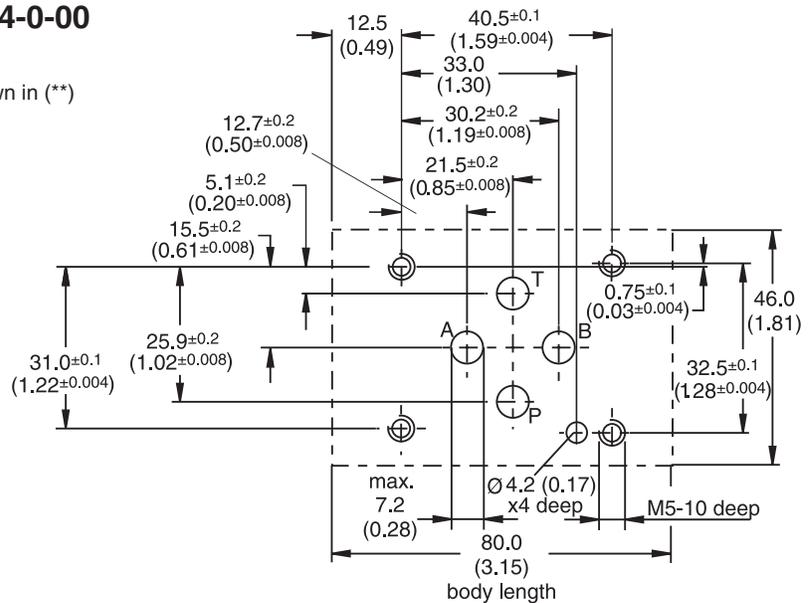
Inch equivalents for millimeter dimensions are shown in (\*\*)



Surface Finish	Bolt Kit  DIN912 12.9		Seal  Kit
	BK375 4x M5x30	7.5 Nm (5.5 lb.-ft.)	Nitrile: SK-VB/VM/VS Fluorocarbon: SK-VB/VM/V5 V

**Mounting Pattern ISO 5781-03-04-0-00  
(NFPA D03, CETOP 3, NG6)**

Inch equivalents for millimeter dimensions are shown in (\*\*)

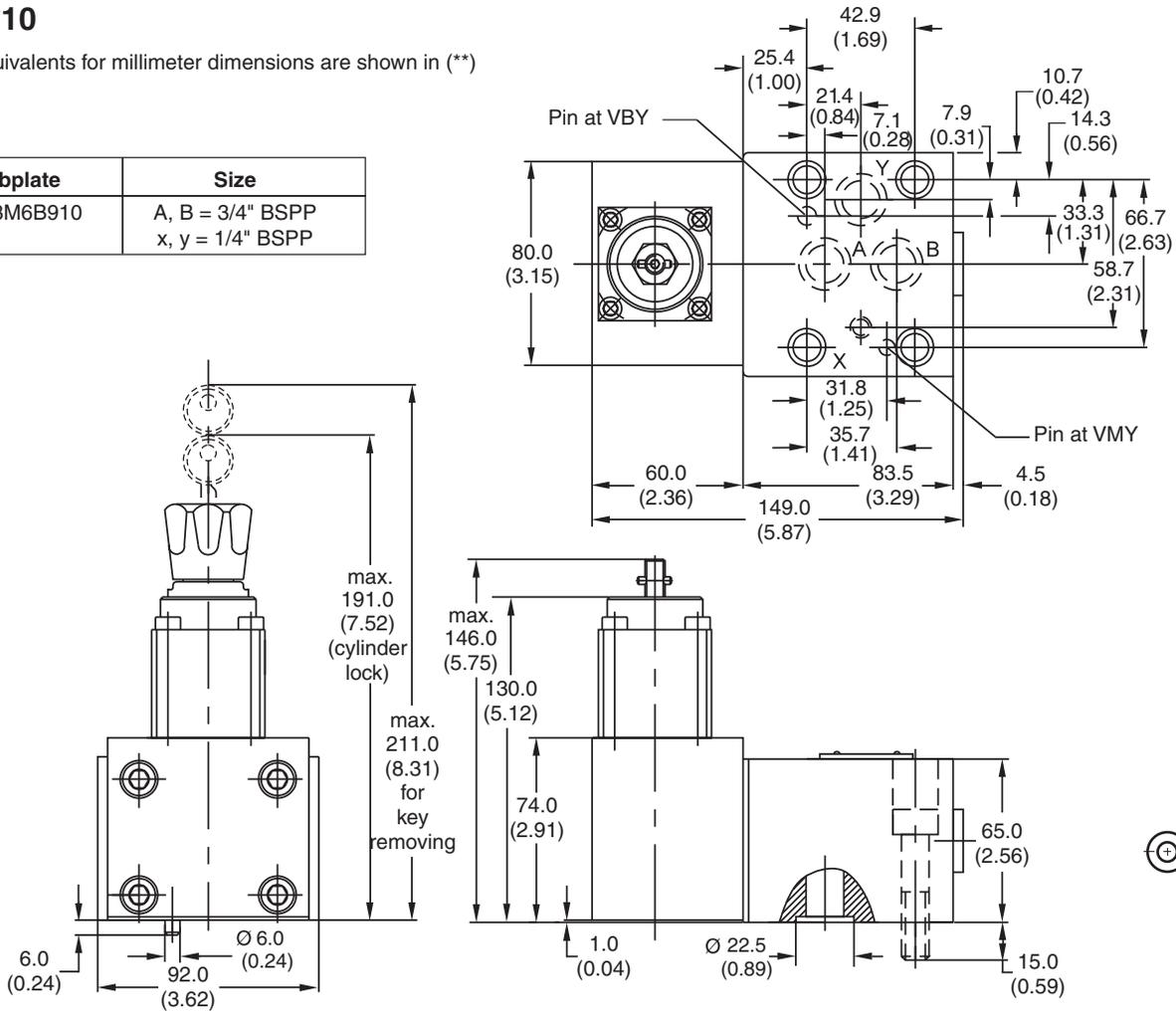


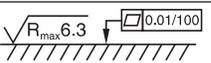
VBY.indd, dd

**VBY\*10**

Inch equivalents for millimeter dimensions are shown in (\*\*)

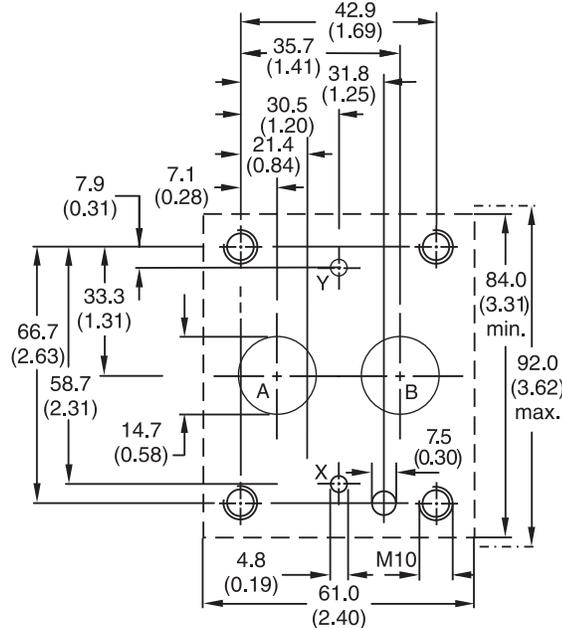
Subplate	Size
SPP3M6B910	A, B = 3/4" BSPP x, y = 1/4" BSPP



Surface Finish	Bolt Kit  DIN912 12.9	 65 Nm (47.9 lb.-ft.)	Seal  Kit
	BK389 4x M10x50		Nitrile: SK-VB/VM-A10 Fluorocarbon: SK-VB/VM-A10V

**Mounting Pattern ISO 5781-06-07-0-00**

Inch equivalents for millimeter dimensions are shown in (\*\*)



**General Description**

Series R5V pilot operated pressure relief valves have a similar design to the subplate mounted R4V series. The SAE flanges allow to mount the valves directly on the outlet flanges of pumps or inlet flanges of actuators to achieve a very compact design.

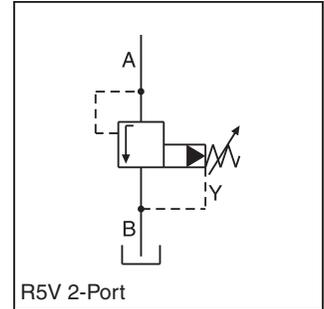
Valves with SAE flanges can also be bolted together to combine functions without the need of a manifold block.

**Operation**

The system pressure in Port A is applied to the pilot valve and to the top surface of the main poppet via an orifice in X. The hydraulically balanced main poppet is held against the seat by the main spring. In this state there is no flow through the valve. The adjusted spring force acting on the pilot cone determines the relief pressure. If the pressure in Port A exceeds the set point, the pilot cone is lifted from its seat, releasing a small pilot flow to tank. The flow through the control orifice in X creates a pressure drop which limits the pressure at the top of the main poppet to the set point. The higher system pressure in Port A now lifts the main poppet off its seat and allows flow to Port B. In the resulting float position only enough flow is passed from Port A to Port B to maintain the inlet pressure in Port A at the set point. When the pressure in Port A falls below the set point, the hydraulic balance on the main poppet is restored. The main spring then forces the main poppet to close.



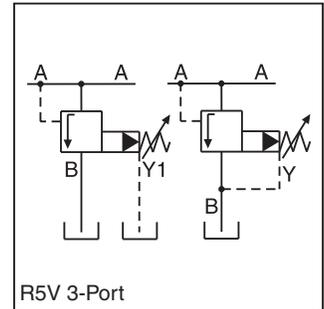
R5V 2-Port



R5V 2-Port



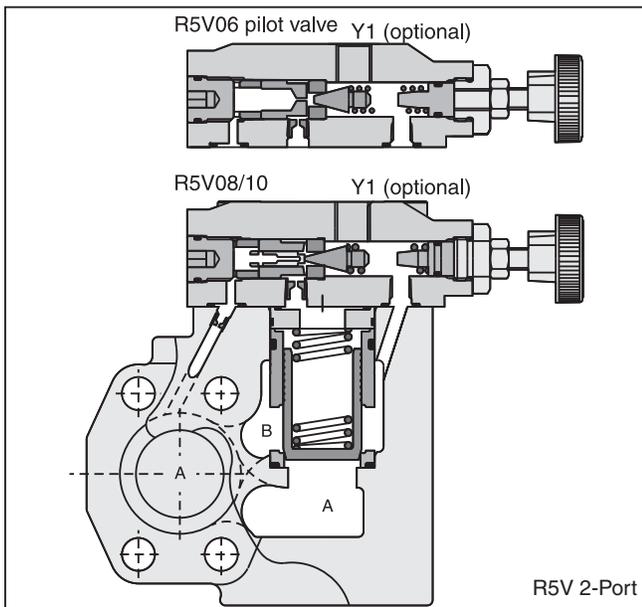
R5V 3-Port



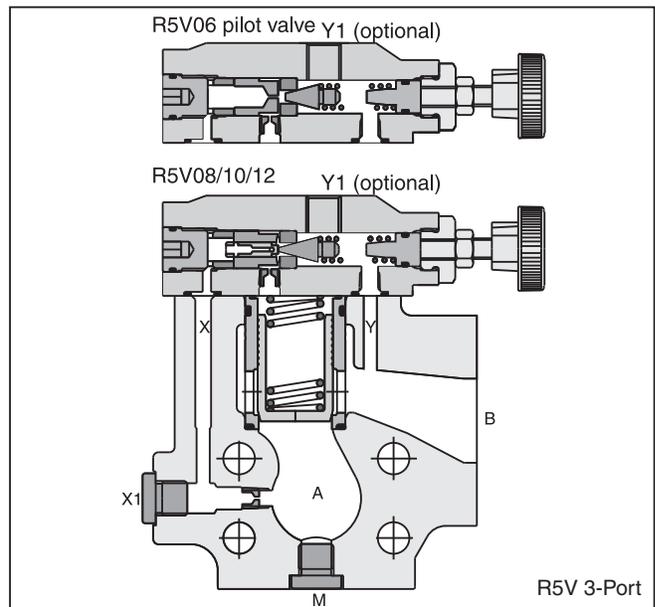
R5V 3-Port

**Features**

- Pilot operated with manual adjustment.
- R5V with 2-port body:
  - 3 sizes (SAE 3/4", 1", 1-1/4")
  - SAE 61 flange
- R5V with 3-port body:
  - 4 sizes (SAE 3/4", 1", 1-1/4", 1-1/2")
  - SAE 61 and SAE 62 flange
- 3 pressure stages.
- 3 adjustment modes:
  - Hand knob
  - Acorn nut with lead seal
  - Key lock
- With optional vent function.



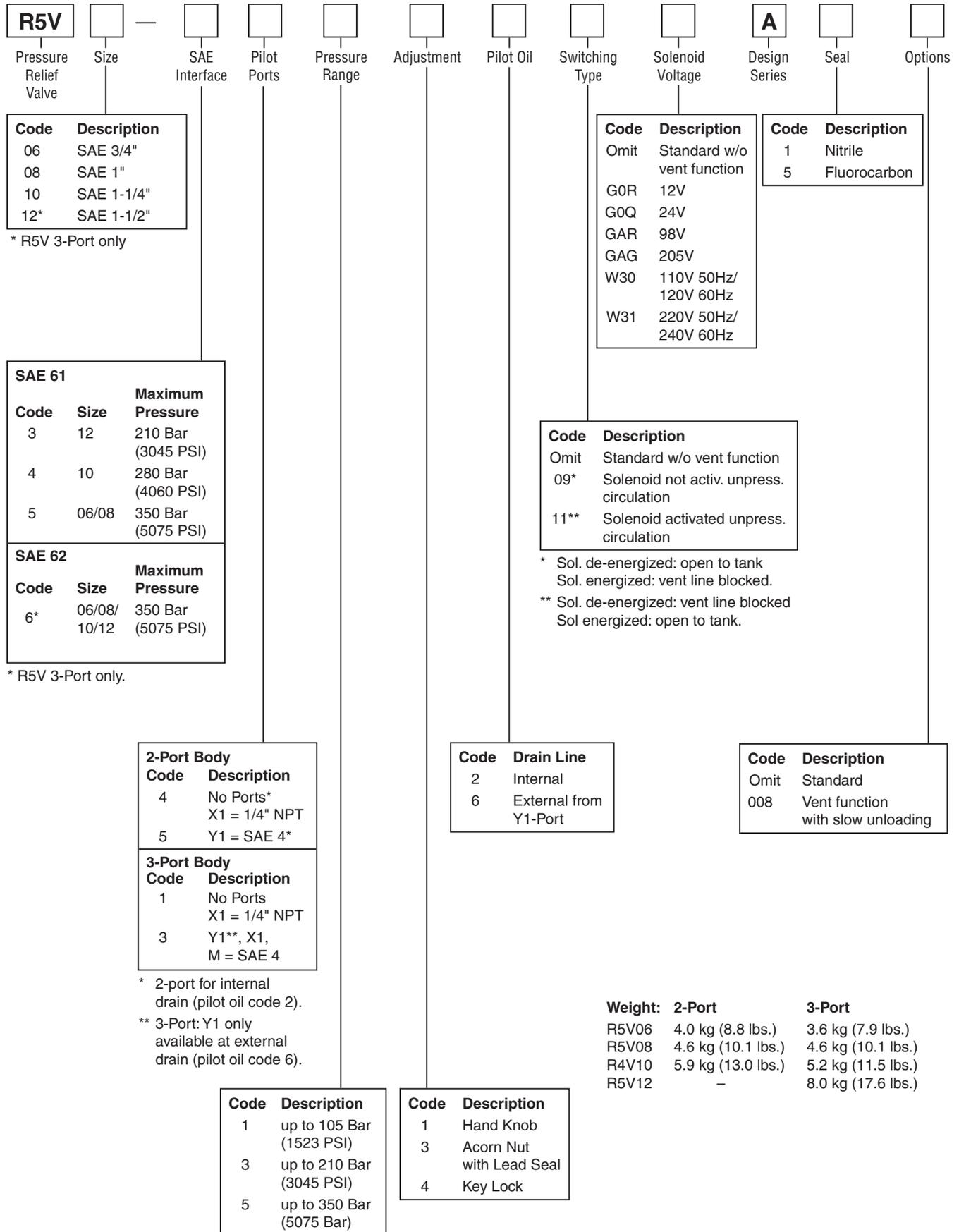
R5V 2-Port



R5V 3-Port

R5V.indd, dd



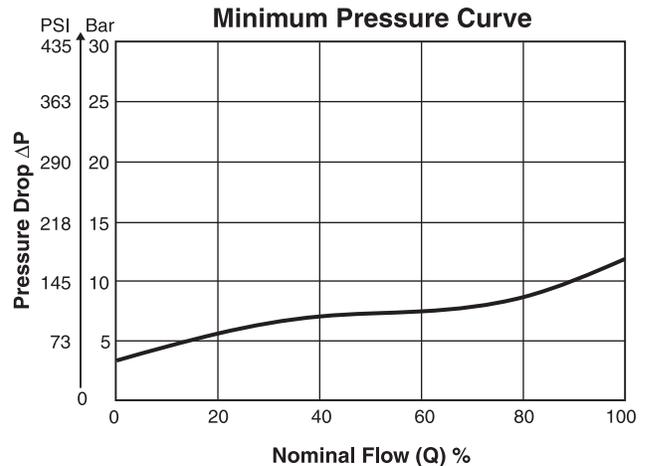
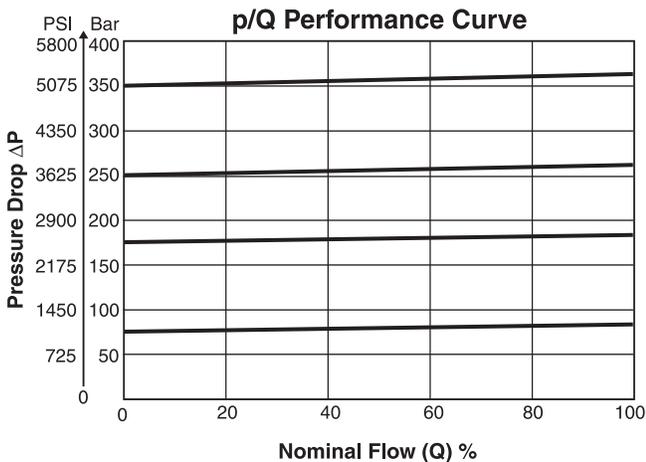


### Specifications

General						
<b>Size</b>		<b>06</b>	<b>08</b>	<b>10</b>	<b>12</b>	
<b>Mounting</b>	Flanged according to SAE 61 / SAE 62					
<b>Mounting Position</b>	Unrestricted					
<b>Ambient Temperature Range</b>	-20°C to +50°C (-4°F to +122°F)					
Hydraulic						
<b>Maximum Operating Pressure</b>	<b>SAE 61 Ports A, B</b>	350 Bar (5075 PSI)	350 Bar (5075 PSI)	280 Bar (4060 PSI)	210 Bar (3045 PSI)	
	<b>SAE 61 Port Y1</b>	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)	
	<b>SAE 62 Ports A, B</b>	350 Bar (5075 PSI)	350 Bar (5075 PSI)	350 Bar (5075 PSI)	350 Bar (5075 PSI)	
	<b>SAE 62 Port Y1</b>	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)	
<b>Pressure Ranges</b>	105 Bar (1523 PSI), 210 Bar (3045 PSI), 350 Bar (5075 PSI)					
<b>Nominal Flow</b>	90 LPM (23.8 GPM)	300 LPM (79.4 GPM)	600 LPM (158.7 GPM)	600 LPM (158.7 GPM)		
<b>Fluid</b>	Hydraulic oil as per DIN 51524 to 51525					
<b>Fluid Temperature</b>	-20°C to +80°C (-4°F to +176°F)					
<b>Viscosity</b>	<b>Permitted</b>	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU)				
	<b>Recommended</b>	30 cSt / mm <sup>2</sup> /s (139 SSU)				
<b>Filtration</b>	ISO Class 4406 (1999) 18/16/13 (acc. NAS 1638: 7)					
Electrical (Solenoid)						
<b>Duty Ratio</b>	100%					
<b>Solenoid Connection</b>	Connector as per EN175301-803					
<b>Protection Class</b>	IP65 in accordance with EN60529 (plugged and mounted)					
	<b>Code</b>	<b>G0R</b>	<b>G0Q</b>	<b>GAR</b>	<b>GAG</b>	<b>W30</b>
<b>Supply Voltage</b>		12V	24V	98V	205V	110V at 50Hz/ 120V at 60Hz
<b>Tolerance Supply Voltage</b>		+5 to -10	+5 to -10	+5 to -10	+5 to -10	±5
<b>Power Consumption</b>	<b>Hold</b>	31W	31W	31W	31W	78W
	<b>In Rush</b>	31W	31W	31W	31W	264W
<b>Response Time</b>	Energized / De-energized AC 20/18ms, DC 46/27 ms					
<b>Maximum Switching Frequency</b>	AC up to 7200 switchings/hour; DC up to 16,000 switchings/hour					
<b>Coil Insulation Class</b>	H (180°C) (356°F)					



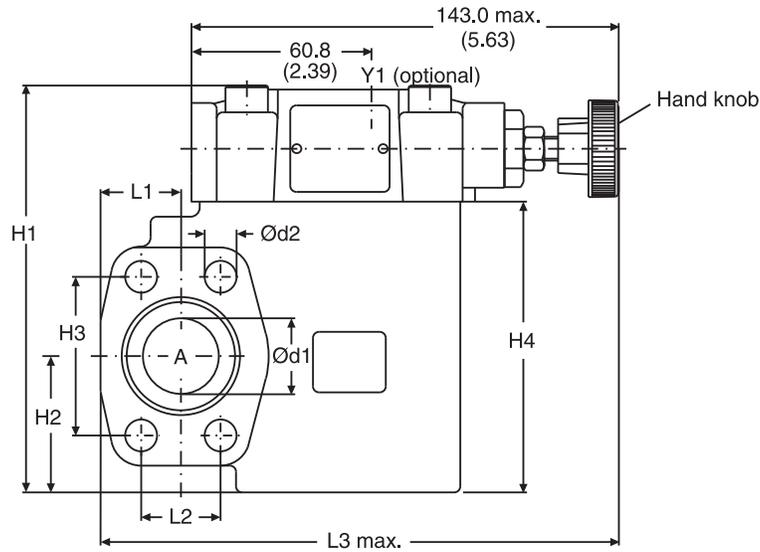
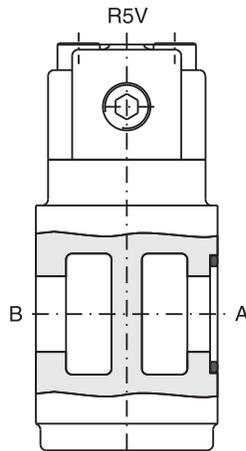
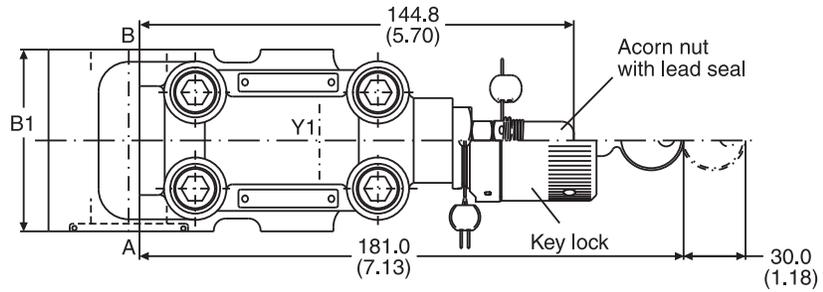
### Performance Curves



R5V.indd, dd

Inch equivalents for millimeter dimensions are shown in (\*\*)

**2-Port**



Seal Kits		
Size	Nitrile	Fluorocarbon
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5

**SAE 61**

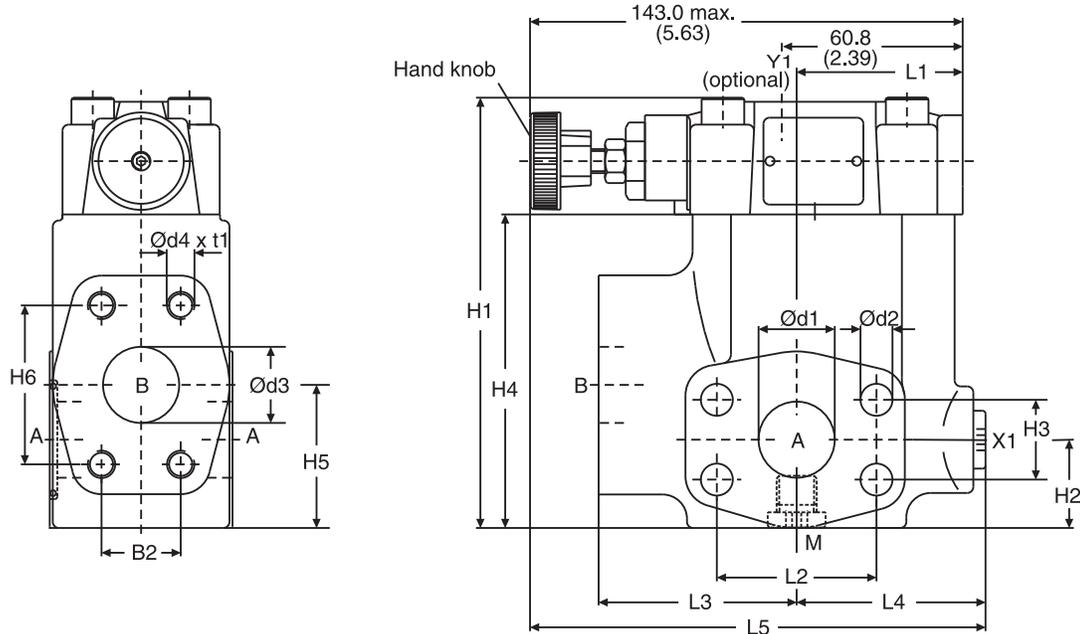
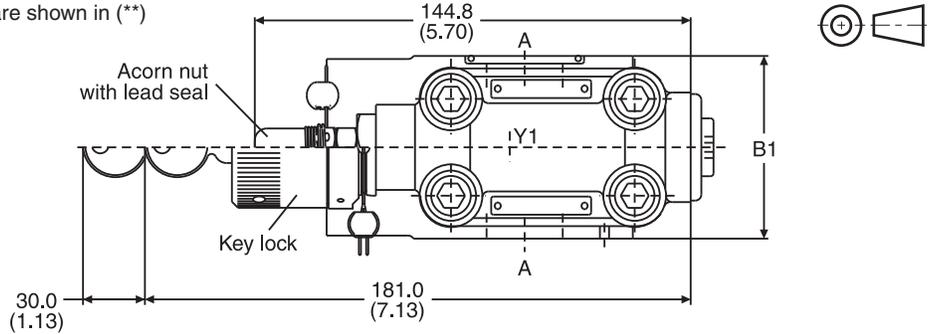
Size	B1	H1	H2	H3	H4	L1	L2	L3	d1	d2
06	60.0 (2.36)	131.6 (5.18)	37.0 (1.46)	47.6 (1.87)	90.0 (3.54)	24.6 (0.97)	22.2 (0.89)	152.0 (5.98)	19.0 (0.75)	10.5 (0.41)
08	60.0 (2.36)	137.6 (5.42)	45.0 (1.77)	52.4 (2.06)	96.0 (3.78)	26.5 (1.04)	26.2 (1.03)	171.0 (6.73)	25.0 (0.98)	10.5 (0.41)
10	75.0 (2.95)	150.6 (5.93)	48.0 (1.89)	58.7 (2.31)	109.0 (4.29)	34.0 (1.34)	30.2 (1.19)	179.0 (7.05)	32.0 (1.26)	12.5 (0.49)

Port	Function	Port Size		
		R5V06	R5V08	R5V10
A	Pressure	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61
B	Tank	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61
Y1	External Drain	SAE 4		

Inch equivalents for millimeter dimensions are shown in (\*\*)

**3-Port**

Seal Kits		
Size	Nitrile	Fluorocarbon
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5
12	S26-27421-0	S26-27421-5



**SAE 61**

Size	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	t1
06	60.0 (2.36)	22.2 (0.87)	119.0 (4.69)	28.0 (1.10)	22.2 (0.87)	81.0 (3.19)	41.6 (1.64)	47.6 (1.87)	50.3 (1.98)	47.6 (1.87)	63.0 (2.48)	56.0 (2.20)	152.0 (5.98)	19.0 (0.75)	10.5 (0.41)	19.0 (0.75)	20.0 (0.79)
08	60.0 (2.36)	26.2 (1.03)	141.0 (5.55)	29.0 (1.14)	26.2 (1.03)	103.0 (4.06)	47.0 (1.85)	52.4 (2.06)	55.8 (2.20)	52.4 (2.06)	65.0 (2.56)	58.0 (2.28)	149.0 (5.87)	25.0 (0.98)	10.5 (0.41)	25.0 (0.98)	23.0 (0.91)
10	75.0 (2.95)	30.2 (1.19)	151.0 (5.94)	34.5 (1.36)	30.2 (1.19)	113.0 (4.45)	64.0 (2.52)	58.7 (2.31)	57.8 (2.28)	58.7 (2.31)	61.0 (2.40)	62.0 (2.44)	150.5 (5.93)	32.0 (1.26)	12.5 (0.49)	32.0 (1.26)	22.0 (0.87)
12	80.0 (3.15)	35.7 (1.41)	178.0 (7.01)	34.0 (1.34)	35.7 (1.41)	140.0 (5.51)	73.0 (2.87)	69.8 (2.75)	37.3 (1.47)	37.3 (1.47)	92.5 (3.64)	55.2 (2.17)	171.2 (6.74)	38.0 (1.50)	13.5 (0.53)	38.0 (1.50)	27.0 (1.06)

**SAE 62**

Size	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	t1
06	60.0 (2.36)	23.8 (0.94)	119.0 (4.69)	28.0 (1.10)	23.8 (0.94)	81.0 (3.19)	41.6 (1.64)	50.8 (2.00)	50.3 (1.98)	50.8 (2.00)	63.0 (2.48)	56.0 (2.20)	152.0 (5.98)	19.0 (0.75)	10.5 (0.41)	19.0 (0.75)	20.0 (0.79)
08	60.0 (2.36)	27.8 (1.09)	141.0 (5.55)	29.0 (1.14)	27.8 (1.09)	103.0 (4.06)	47.0 (1.85)	57.2 (2.25)	55.8 (2.20)	57.2 (2.25)	65.0 (2.56)	58.0 (2.28)	149.0 (5.87)	25.0 (0.98)	12.5 (0.49)	25.0 (0.98)	22.0 (0.87)
10	75.0 (2.95)	31.8 (1.25)	151.0 (5.94)	34.5 (1.36)	31.8 (1.25)	113.0 (4.45)	64.0 (2.52)	66.7 (2.63)	57.8 (2.28)	66.7 (2.63)	61.0 (2.40)	62.0 (2.44)	150.5 (5.93)	32.0 (1.26)	13.5 (0.53)	32.0 (1.26)	24.0 (0.94)
12	80.0 (3.15)	36.5 (1.44)	178.0 (7.01)	34.0 (1.34)	36.5 (1.44)	140.0 (5.51)	73.0 (2.87)	79.4 (3.13)	37.3 (1.47)	79.4 (3.13)	92.5 (3.64)	55.2 (2.17)	171.2 (6.74)	38.0 (1.50)	17.0 (0.67)	38.0 (1.50)	33.0 (1.30)

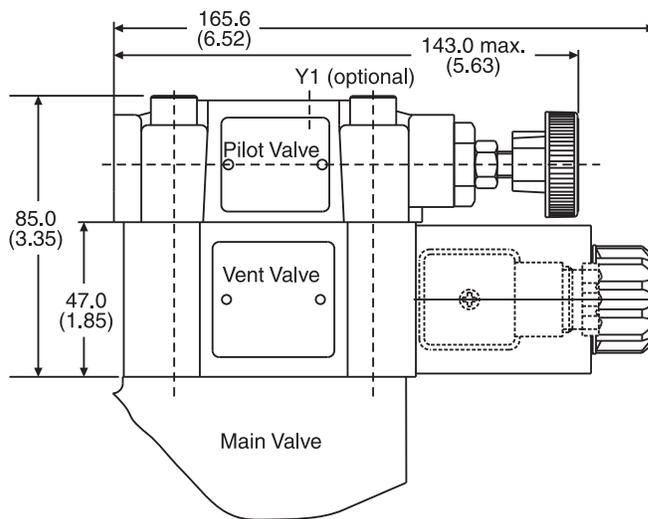
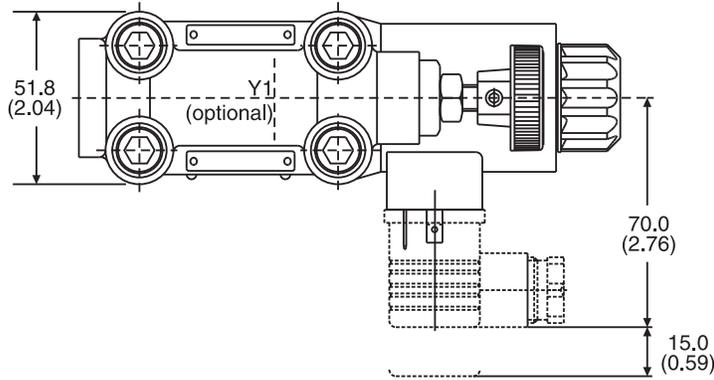
Port	Function	Port size			
		R5V06	R5V08	R5V10	R5V12
A (2)	Pressure	3/4" SAE 61/62	1" SAE 61/62	1-1/4" SAE 61/62	1-1/2" SAE 61/62
B	Tank	3/4" SAE 61/62	1" SAE 61/62	1-1/4" SAE 61/62	1-1/2" SAE 61/62
X1	External pilot port *	SAE 4			
Y1	External drain	SAE 4			
M	Pressure gauge	SAE 4			

R5V.indd, dd

\* closed when supplied.

Inch equivalents for millimeter dimensions are shown in (\*\*)

**with Vent Function**

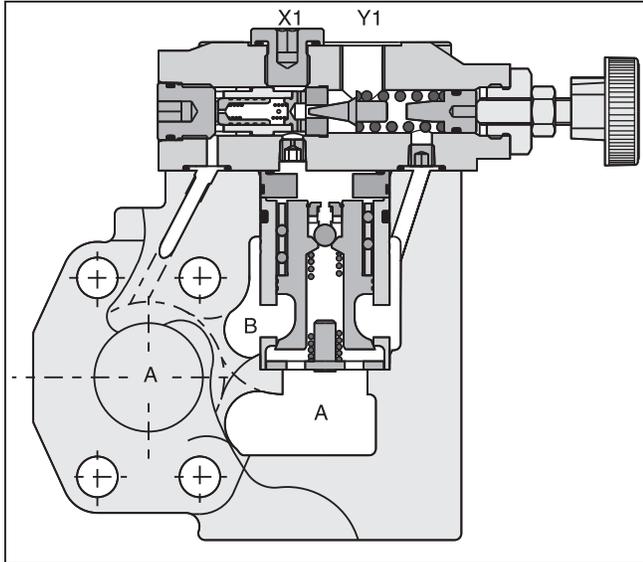
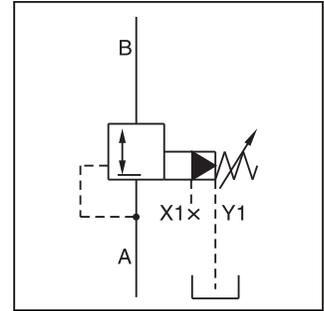
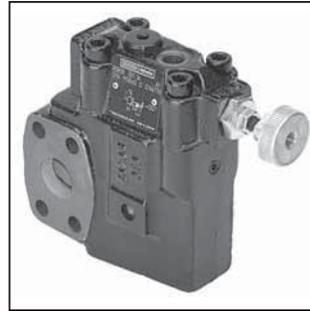


Vent Valve Seal Kits	
Nitrile	Fluorocarbon
<b>DC Solenoid</b>	
S26-58515-0	S26-58515-5
<b>AC Solenoid</b>	
S26-35237-0	S26-35237-5

Code	R5V 2-Port		R5V 3-Port	
	Internal Drain	External Drain	Internal Drain	External Drain
11				
09				

**General Description**

Series R5R pilot operated pressure reducing valves have a similar design as the subplate mounted R4R series. The SAE flanges allow to mount the valves directly on the inlet flanges of actuators to achieve a very compact design.



**Features**

- Pilot operated with manual adjustment.
- Normally closed to avoid unintended motion.
- 2-port body with SAE61 flange.
- 3 sizes (SAE 3/4", 1", 1-1/4").
- 3 pressure stages.
- 3 adjustment modes:
  - Hand knob
  - Acorn nut with lead seal
  - Key lock
- With optional vent function.
- Flow direction B → A.

**Ordering Information**

<b>R5R</b>	□	—	□	<b>2</b>	□	□	<b>6</b>	□	□	<b>A</b>	□	□
Pressure Reducing Valve	Size		SAE 61 Interface	2-Port Body X1, Y1 = SAE 4	Pressure Range	Adjustment	External Drain from Y1 Port	Switching Type	Solenoid Voltage	Design Series	Seal	Options Check with Factory

Code	Description
06	SAE 3/4"
08	SAE 1"
10	SAE 1-1/4"

Code	Size	Max. Pressure
4	10	280 Bar (4060 PSI)
5	06/08	350 Bar (5075 PSI)

Code	Description
1	Hand Knob
3	Acorn Nut with Lead Seal
4	Key Lock

Code	Description
Omit	Standard w/o vent function
G0R	12V
G0Q	24V
GAR	98V
GAG	205V
W30	110V 50Hz/ 120V 60Hz
W31	220V 50Hz/ 240V 60Hz

Code	Description
Omit	Standard w/o vent function
09*	Solenoid not activ. unpress. circulation
11**	Solenoid activated unpress. circulation

Code	Description
1	Nitrile
5	Fluorocarbon

Further options on request.

**Weight:**

- R5R06 4.0 kg (8.8 lbs.)
- R5R08 4.6 kg (10.1 lbs.)
- R5R10 5.9 kg (13.0 lbs.)

R5R.indd, dd

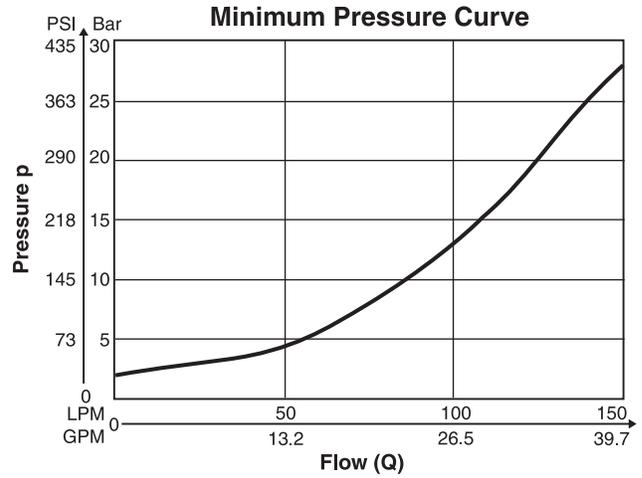
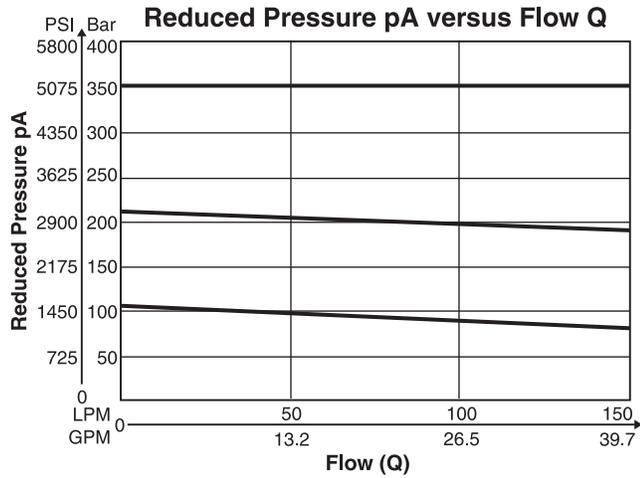
\* Sol. de-energized: open to tank  
 Sol. energized: vent line blocked  
 \*\* Sol. de-energized: vent line blocked  
 Sol energized: open to tank



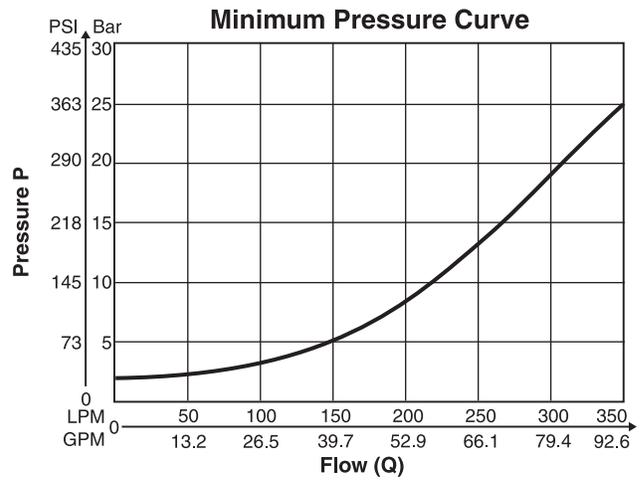
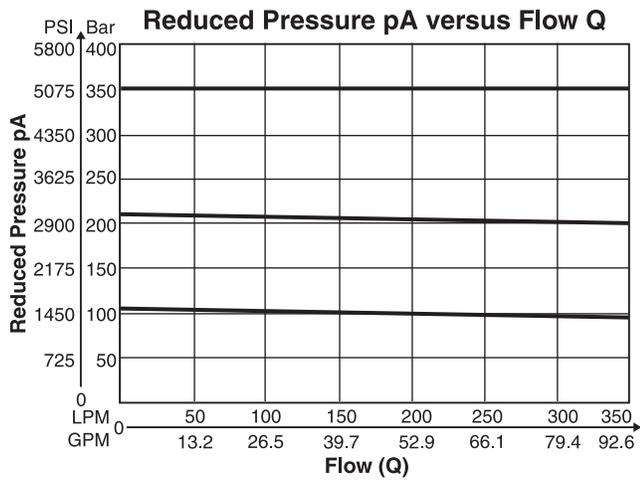
General							
Size	06		08		10		
Mounting	Flanged according to SAE 61						
Mounting Position	Unrestricted						
Ambient Temperature Range	-20°C to +50°C (-4°F to +122°F)						
Hydraulic							
Max. Operating Pressure	Ports A,B, X1	350 Bar (5075 PSI)		350 Bar (5075 PSI)		280 Bar (4060 PSI)	
	Port Y1	30 Bar (435 PSI)		30 Bar (435 PSI)		30 Bar (435 PSI)	
Pressure Ranges	105 Bar (1523 PSI), 210 Bar (3045 PSI), 350 Bar (5075 PSI)						
Nominal Flow	90 LPM (23.8 GPM)		300 LPM (79.4 GPM)		500 LPM (132.3 GPM)		
Fluid	Hydraulic oil as per DIN 51524 ... 51525						
Fluid Temperature	-20°C to +80°C (-4°F to +176°F)						
Viscosity Permitted Recommended	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU) 30 cSt / mm <sup>2</sup> /s (139 SSU)						
Filtration	ISO Class 4406 (1999) 18/16/13 (acc. NAS 1638: 7)						
Electrical (Solenoid)							
Duty Ratio	100%						
Solenoid Connection	Connector as per EN175301-803						
Protection Class	IP65 in accordance with EN60529 (plugged and mounted)						
	Code	G0R	G0Q	GAR	GAG	W30	W31
Supply Voltage		12V	24V	98V	205V	110V at 50Hz 120V at 60Hz	2200V at 50Hz 240V at 60Hz
Tolerance Supply Voltage		+5 to -10	+5 to -10	+5 to -10	+5 to -10	±5	±5
Power Consumption	Hold In Rush	31W	31W	31W	31W	78W	78W
		31W	31W	31W	31W	264W	264W
Response Time	Energized / De-energized AC 20/18ms, DC 46/27 ms						
Max. Switching Frequency	AC up to 7200, DC 70 to 16,000 switchings/hour						
Coil Insulation Class	H (180°C) (356°F)						

D

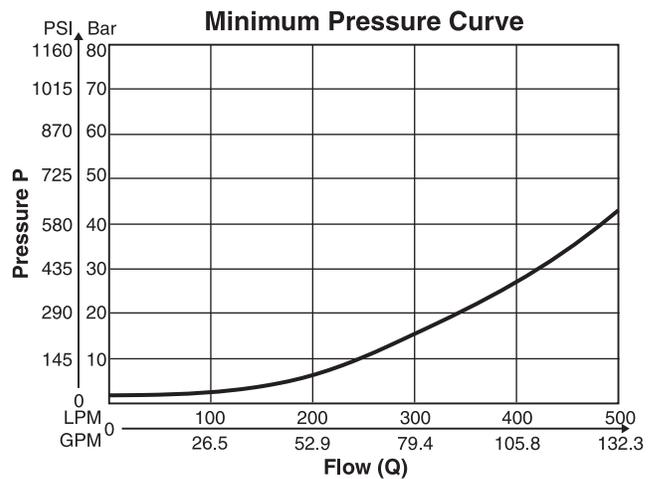
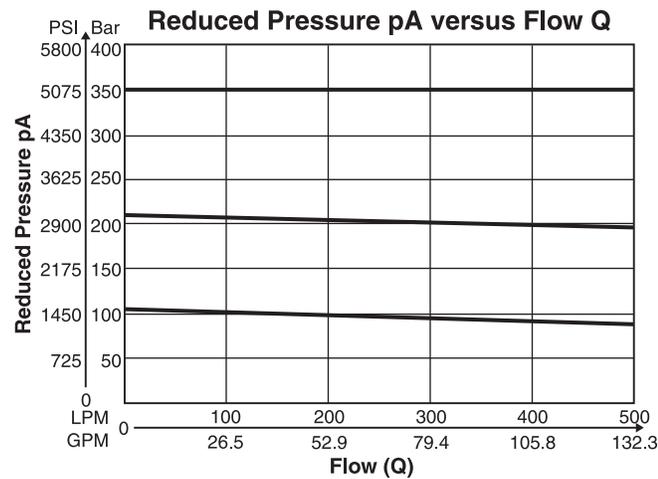
**R5R06\***



**R5R08\***



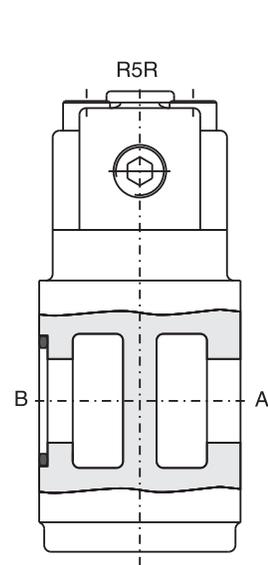
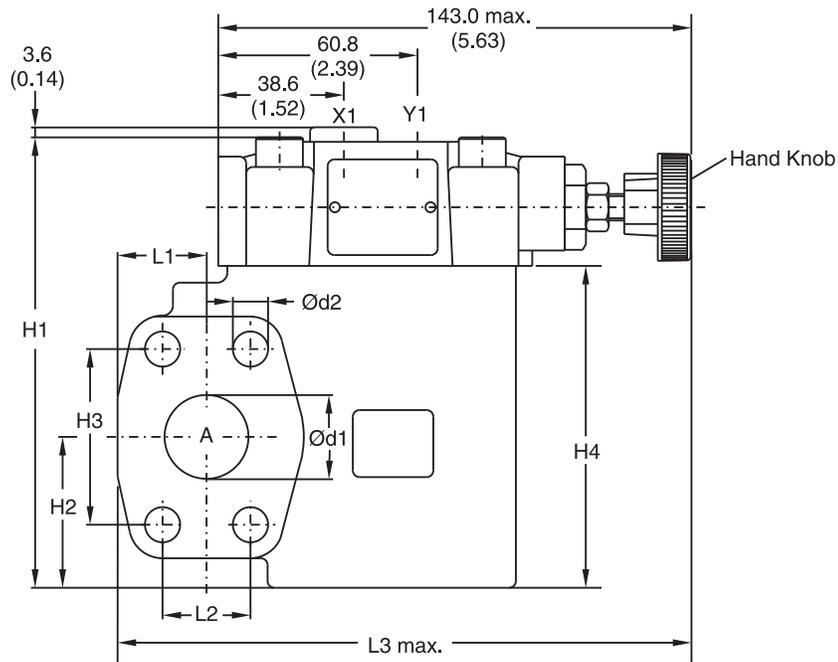
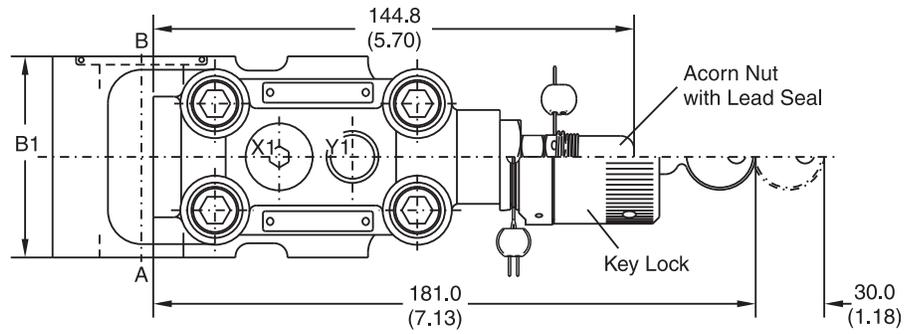
**R5R10\***



\*Measured at 350 Bar (5075 PSI) primary pressure pB.



Inch equivalents for millimeter dimensions are shown in (\*\*)



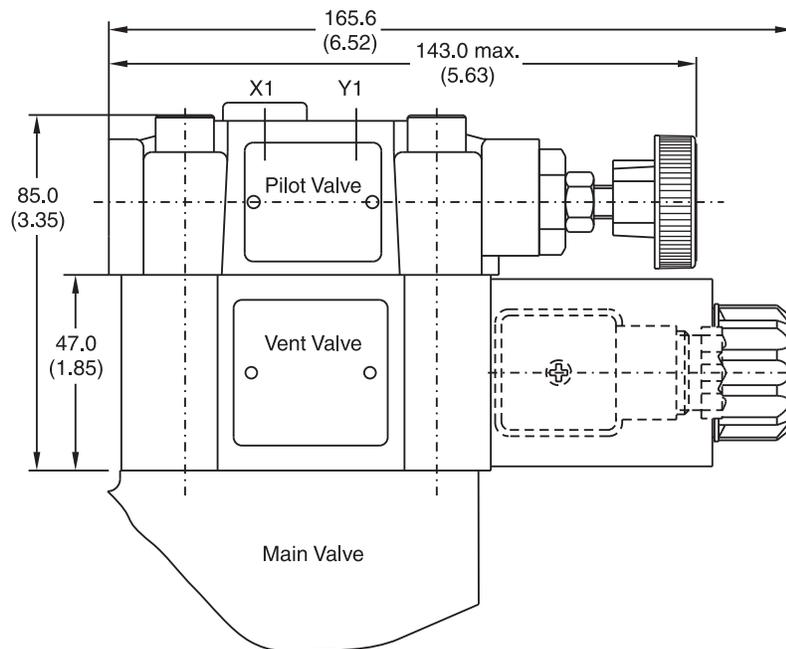
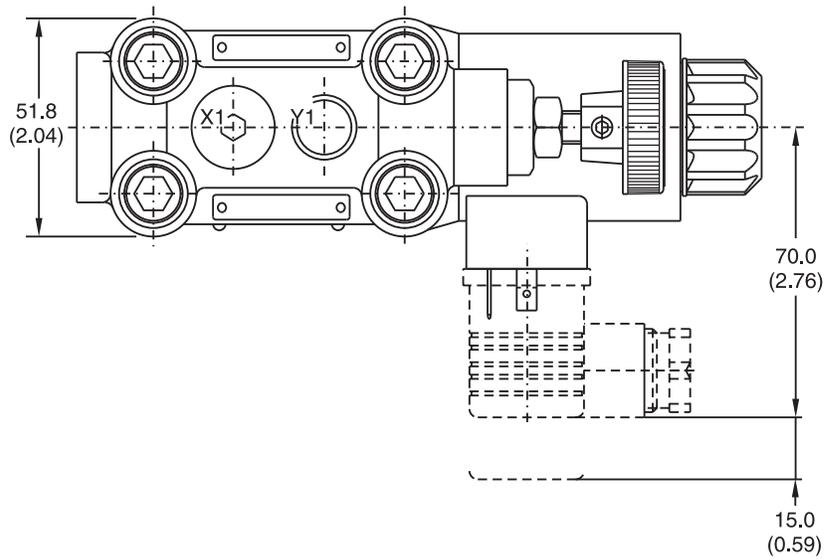
Seal Kits		
Size	Nitrile	Fluorocarbon
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5

Size	B1	H1	H2	H3	H4	L1	L2	L3	d1	d2
06	60.0 (2.36)	131.6 (5.18)	37.0 (1.46)	47.6 (1.87)	90.0 (3.54)	24.6 (0.97)	22.2 (0.87)	152.0 (5.98)	19.0 (0.75)	10.5 (0.41)
08	60.0 (2.36)	137.6 (5.42)	45.0 (1.77)	52.4 (2.06)	96.0 (3.78)	26.5 (1.04)	26.2 (1.03)	171.0 (6.73)	25.0 (0.98)	10.5 (0.41)
10	75.0 (2.95)	150.6 (5.93)	48.0 (1.89)	58.7 (2.31)	109.0 (4.29)	34.0 (1.34)	30.2 (1.19)	179.0 (7.05)	32.0 (1.26)	12.5 (0.49)

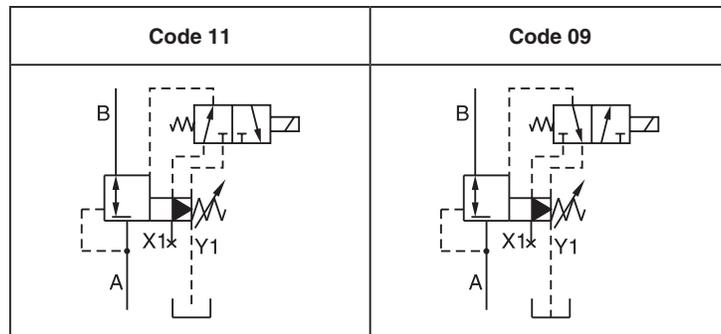
Port	Function	Port Size		
		R5R06	R5R08	R5R10
B	Inlet Pressure	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61
A	Reduced Outlet Pressure	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61
Y1	External Drain	SAE 4		
X1	Pressure Gauge	SAE 4		

R5R.indd, dd

Inch equivalents for millimeter dimensions are shown in (\*\*)



**External Drain**



Vent Valve Seal Kits	
Nitrile	Fluorocarbon
<b>DC Solenoid</b>	
S26-58515-0	S26-58515-5
<b>AC Solenoid</b>	
S26-35237-0	S26-35237-5

R5R.indd, dd

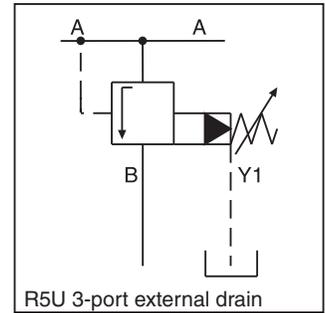
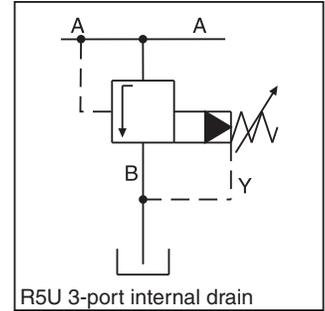
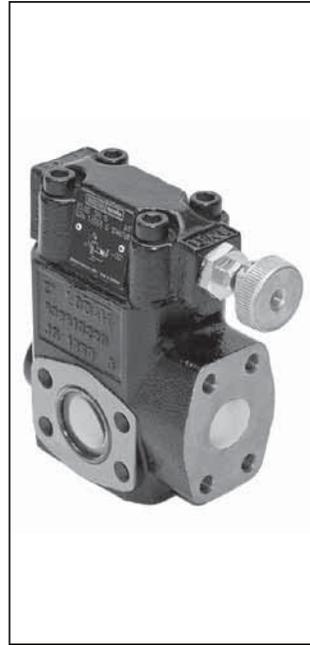
**General Description**

Series R5U pilot operated, pressure unloading valves have a similar design to the subplate mounted R4U series. The SAE flanges allow to mount the valve directly on the outlet flanges of pumps.

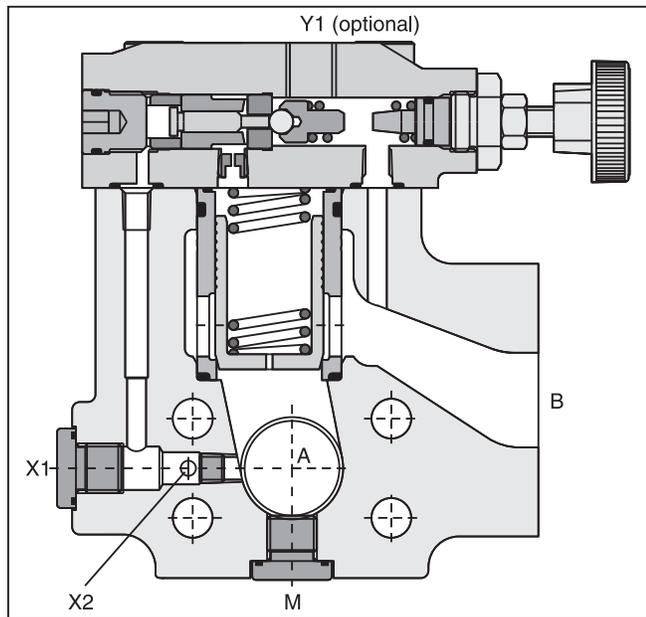
A typical application is the unloading of a pump in an accumulator circuit. The combination of an R5U, C5V and R5V on a double pump generates a high pressure / low pressure pump system without the need of a manifold block or piping between the valves.

**Features**

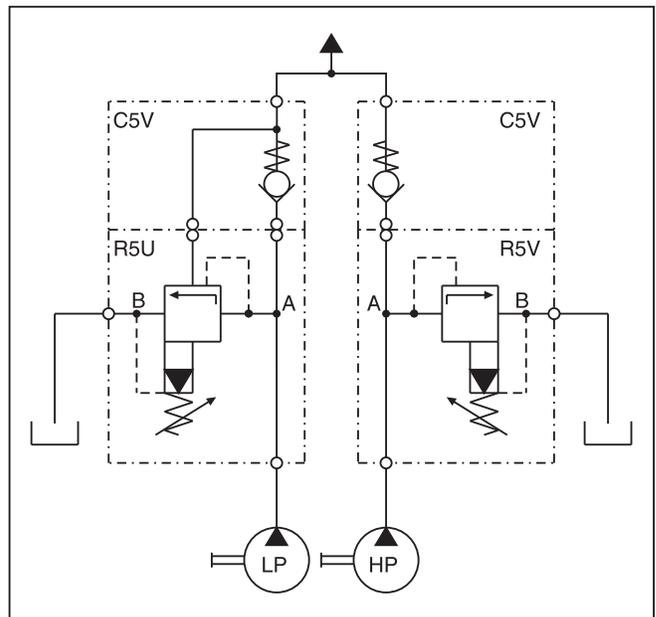
- Pilot operated unloading valve.
- 3-port body with SAE 61 flange.
- 4 sizes (SAE 3/4", 1", 1 1/4", 1 1/2").
- 3 pressure stages.
- 3 adjustment modes:
  - Hand knob
  - Acorn nut with lead seal
  - Key lock
- With optional vent function.



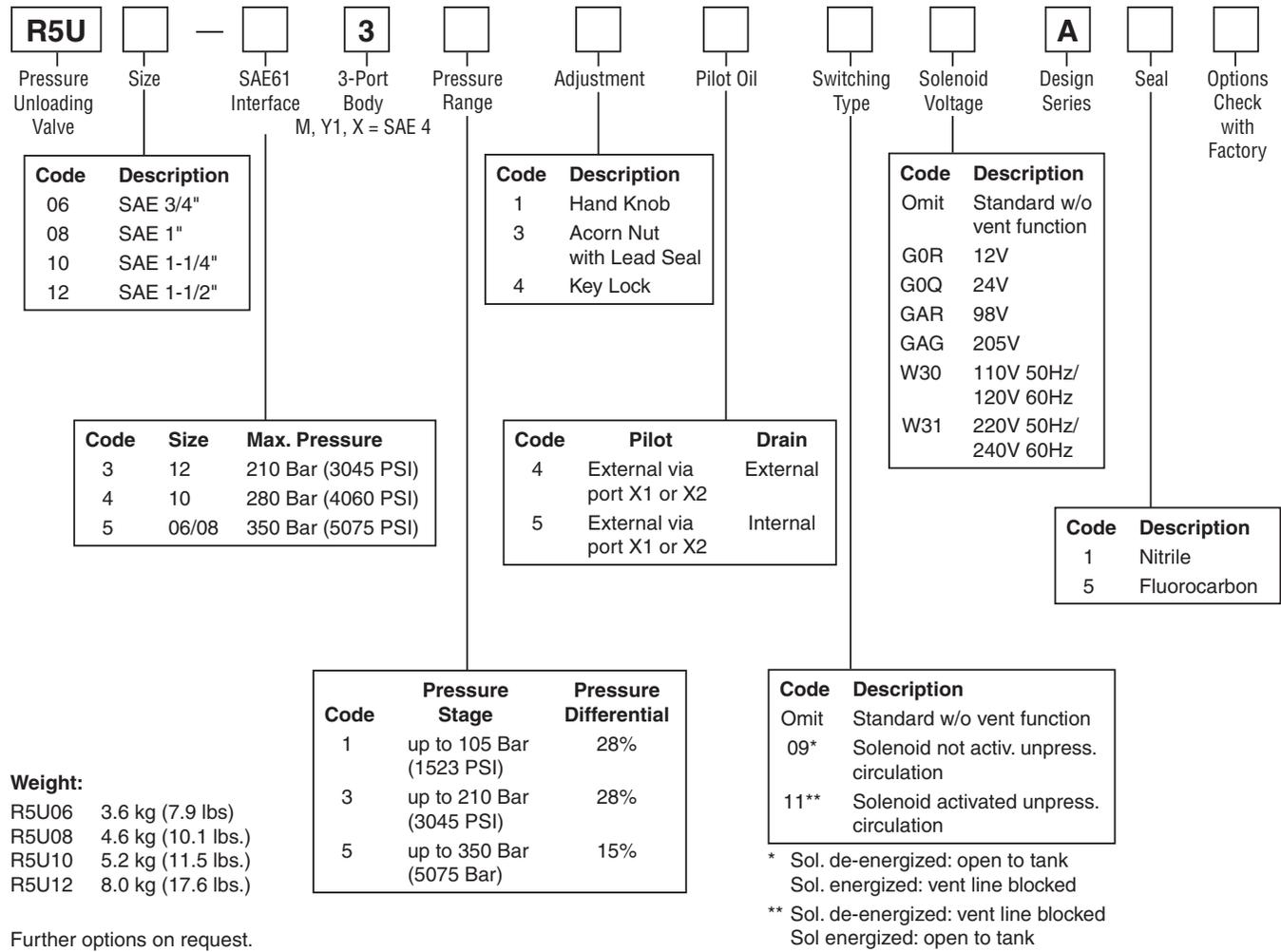
**D**



**High Pressure / Low Pressure System**

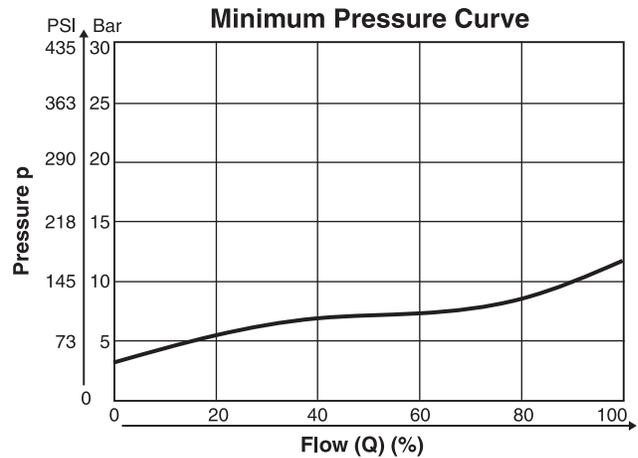
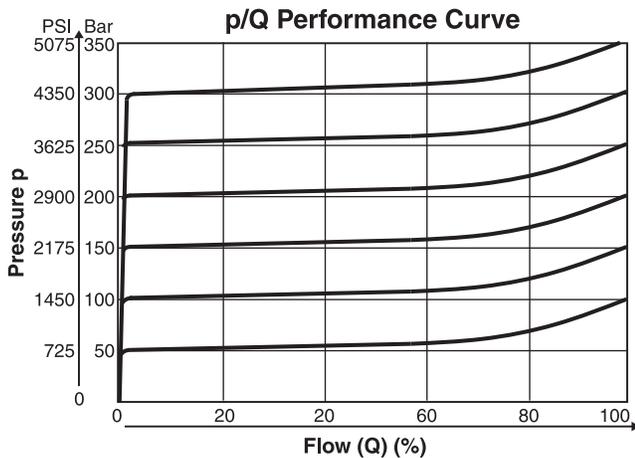


**Ordering Information**



Further options on request.

**Performance Curves**



The performance curves are measured with external drain.  
 For internal drain the tank pressure has to be added to curve.

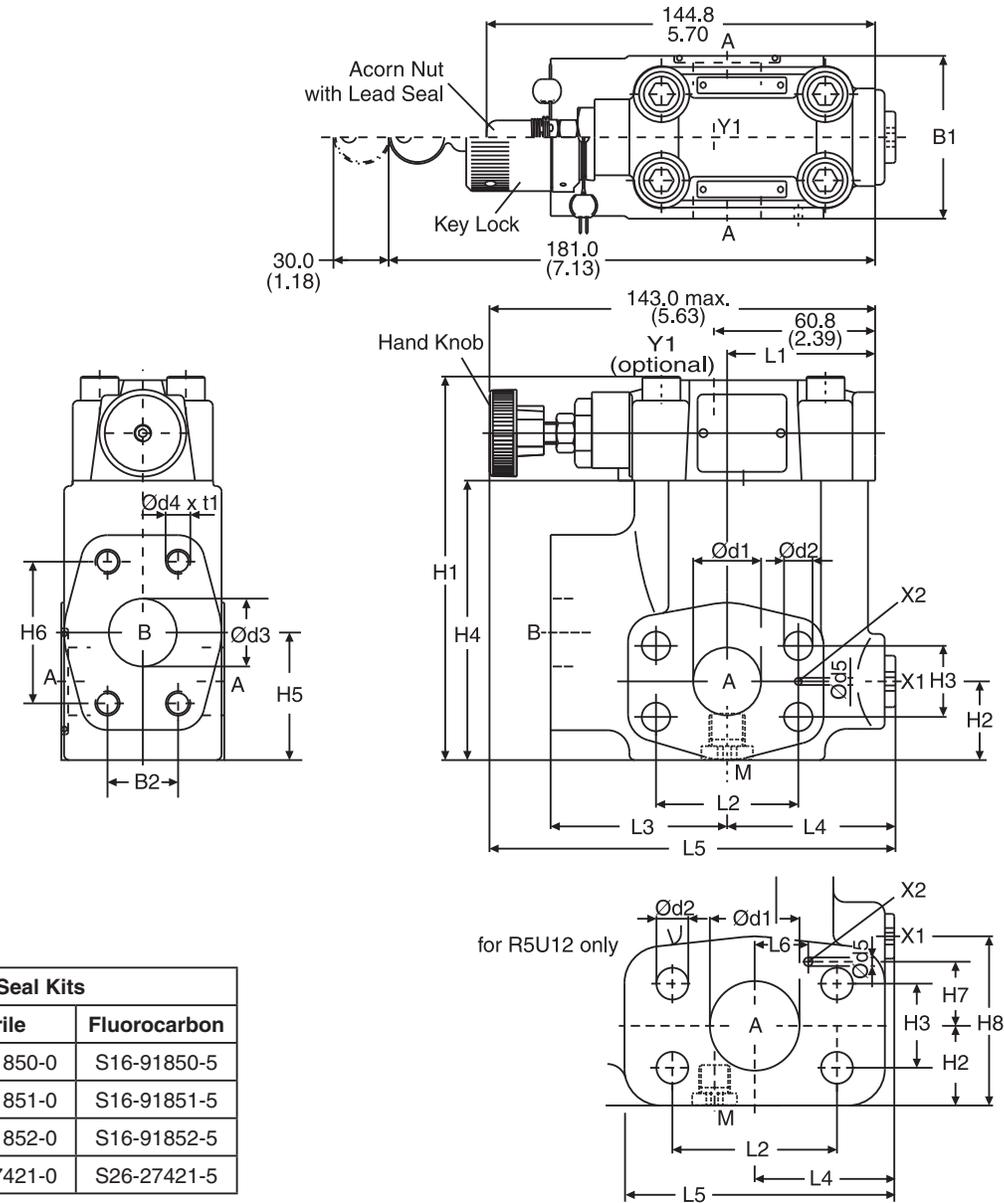
R5U.indd, dd



General							
<b>Size</b>		<b>06</b>	<b>08</b>	<b>10</b>	<b>12</b>		
<b>Mounting</b>	Flanged according to SAE 61						
<b>Mounting Position</b>	Unrestricted						
<b>Ambient Temperature</b>	-20°C to +50°C (-4°F to +122°F)						
Hydraulic							
<b>Maximum Operating Pressure</b>	<b>Ports A,B, X</b>	350 Bar (5075 PSI)	350 Bar (5075 PSI)	280 Bar (4060 PSI)	210 Bar (3045 PSI)		
	<b>Ports Y, Y1</b>	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)	30 Bar (435 PSI)		
<b>Pressure Ranges</b>	105 Bar (1523 PSI), 210 Bar (3045 PSI), 350 Bar (5075 PSI)						
<b>Nominal Flow</b>		90 LPM (23.8 GPM)	300 LPM (79.4 GPM)	600 LPM (158.7 GPM)	600 LPM (158.7 GPM)		
<b>Fluid</b>	Hydraulic oil as per DIN 51524 ... 51525						
<b>Fluid Temperature</b>	-20°C to +80°C (-4°F to +176°F)						
<b>Viscosity Permitted Recommended</b>	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU) 30 cSt / mm <sup>2</sup> /s (139 SSU)						
<b>Filtration</b>	ISO Class 4406 (1999) 18/16/13 (acc. NAS 1638: 7)						
Electrical							
<b>Duty Ratio</b>	100%						
<b>Solenoid Connection</b>	Connector as per EN175301-803						
<b>Protection Class</b>	IP65 in accordance with EN60529 (plugged and mounted)						
<b>Supply Voltage</b>	<b>Code</b>	<b>G0R</b>	<b>G0Q</b>	<b>GAR</b>	<b>GAG</b>	<b>W30</b>	<b>W31</b>
		12V	24V	98V	205V	110V at 50Hz 120V at 60Hz	220V at 50Hz 240V at 60Hz
<b>Tolerance Supply Voltage</b>		+5 to -10	+5 to -10	+5 to -10	+5 to -10	±5	±5
<b>Power Consumption</b>	<b>Hold</b>	31W	31W	31W	31W	78W	78W
	<b>In Rush</b>	31W	31W	31W	31W	264W	264W
<b>Response Time</b>	Energized / De-energized AC 20/18ms, DC 46/27 ms						
<b>Maximum Switching Frequency</b>	AC up to 7200 switchings/hour DC up to 16,000 switchings/hour						
<b>Coil Insulation Class</b>	H (180°C) (356°F)						

D

Inch equivalents for millimeter dimensions are shown in (\*\*)



Seal Kits		
Size	Nitrile	Fluorocarbon
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5
12	S26-27421-0	S26-27421-5

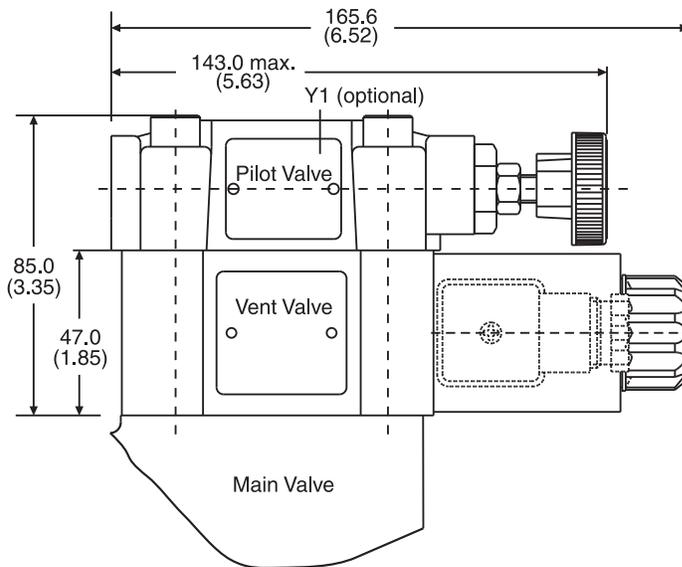
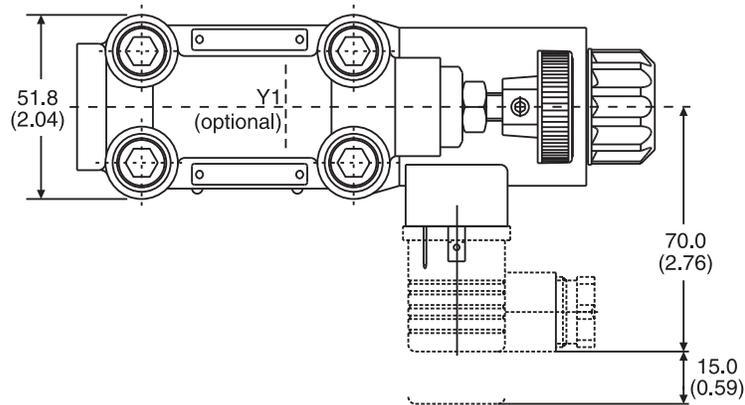
Size	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	d4	t1	d5	L6	H7	H8
06	60.0 (2.36)	22.2 (0.87)	119.0 (4.69)	28.0 (1.10)	22.2 (0.87)	81.0 (3.19)	41.6 (1.64)	47.6 (1.87)	50.0 (1.98)	47.6 (1.87)	63.0 (2.48)	56.0 (2.20)	152.0 (5.98)	19.0 (0.75)	10.5 (0.41)	19.0 (0.75)	3/8"-16 UNC	20.0 (0.79)	3.0 (0.12)	-	-	-
08	60.0 (2.36)	26.2 (1.03)	141.0 (5.55)	29.0 (1.14)	26.2 (1.03)	103.0 (4.06)	47.0 (1.85)	52.4 (2.06)	55.8 (2.20)	52.4 (2.06)	65.0 (2.56)	58.0 (2.28)	149.0 (5.87)	25.0 (0.98)	10.5 (0.41)	25.0 (0.98)	3/8"-16 UNC	23.0 (0.91)	3.0 (0.12)	-	-	-
10	75.0 (2.95)	30.2 (1.19)	151.0 (5.94)	34.5 (1.36)	30.2 (1.19)	113.0 (4.45)	64.0 (2.52)	58.7 (2.31)	57.8 (2.28)	58.7 (2.31)	61.0 (2.40)	62.0 (2.44)	150.5 (5.93)	32.0 (1.26)	12.5 (0.49)	32.0 (1.26)	7/16"-14 UNC	22.0 (0.87)	3.0 (0.12)	-	-	-
12	80.0 (3.15)	35.7 (1.41)	178.0 (7.01)	34.0 (1.34)	35.7 (1.41)	140.0 (5.51)	73.0 (2.87)	69.8 (2.75)	37.3 (1.47)	69.8 (2.75)	92.5 (3.64)	55.2 (2.17)	171.2 (6.74)	38.0 (1.50)	13.5 (0.53)	38.0 (1.50)	1/2"-13 UNC	27.0 (1.06)	3.0 (0.12)	22.4 (0.88)	27.2 (1.07)	73.0 (2.87)

Port	Function	Port Size			
		R5U06	R5U08	R5U10	R5U12
A (2)	Pressure	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61	1-1/2" SAE 61
B	Tank	3/4" SAE 61	1" SAE 61	1-1/4" SAE 61	1-1/2" SAE 61
X1	External Pilot Port*	SAE 4			
Y1	External Drain	SAE 4			
M	Pressure Gauge	SAE 4			

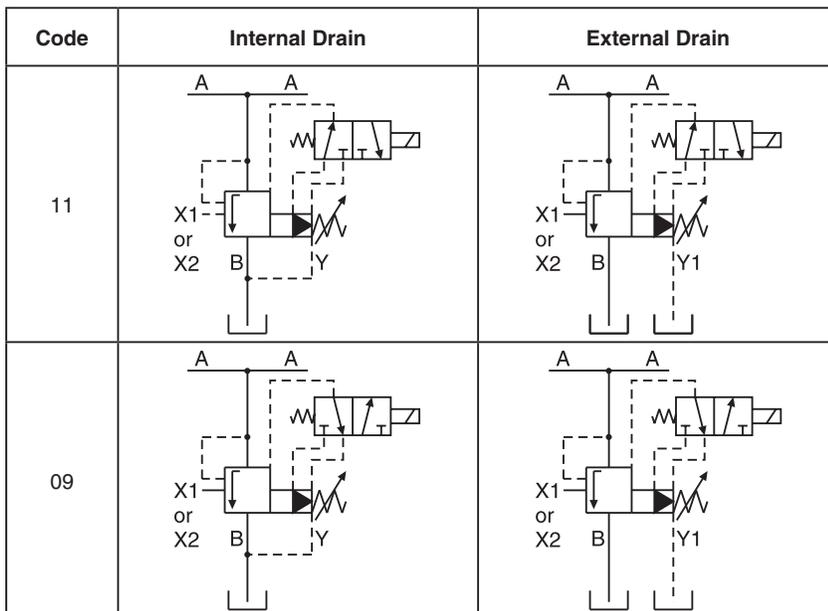
\* closed when supplied.

R5U.indd, dd

Inch equivalents for millimeter dimensions are shown in (\*\*)



**D**



Vent Valve Seal Kits	
Nitrile	Fluorocarbon
<b>DC Solenoid</b>	
S26-58515-0	S26-58515-5
<b>AC Solenoid</b>	
S26-35237-0	S26-35237-5

## General Description

Series R4V pilot operated, pressure relief valves for in-line mounting have a similar design to the subplate mounted R4V series. For single functions where no manifold blocks are used, the valves can be directly placed in the pipework.

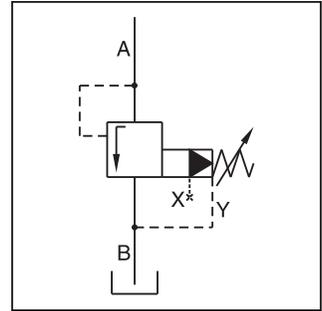
The R4V valves are available with 2 ports (L-body) for in-line relief function or with 3 ports (T-body) for relief functions in the bypass.

## Operation

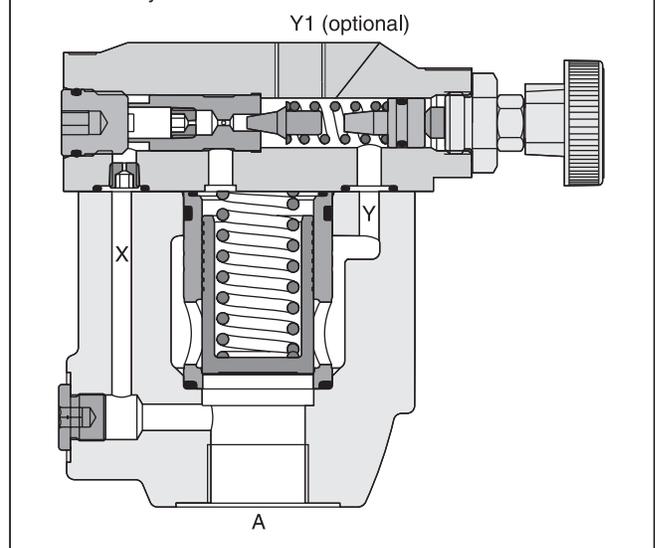
The system pressure in Port A is applied to the pilot valve and to the top surface of the main poppet via an orifice in X. The hydraulically balanced main poppet is held against the seat by the main spring. In this state there is no flow through the valve. The adjusted spring force acting on the pilot cone determines the relief pressure. If the pressure in Port A exceeds the set point, the pilot cone is lifted from its seat, releasing a small pilot flow to tank. The flow through the control orifice in X creates a pressure drop which limits the pressure at the top of the main poppet to the set point. The higher system pressure in Port A now lifts the main poppet off its seat and allows flow to Port B. In the resulting float position only enough flow is passed from Port A to Port B to maintain the inlet pressure in Port A at the set point. When the pressure in Port A falls below the set point, the hydraulic balance on the main poppet is restored. The main spring then forces the main poppet to close.

## Features

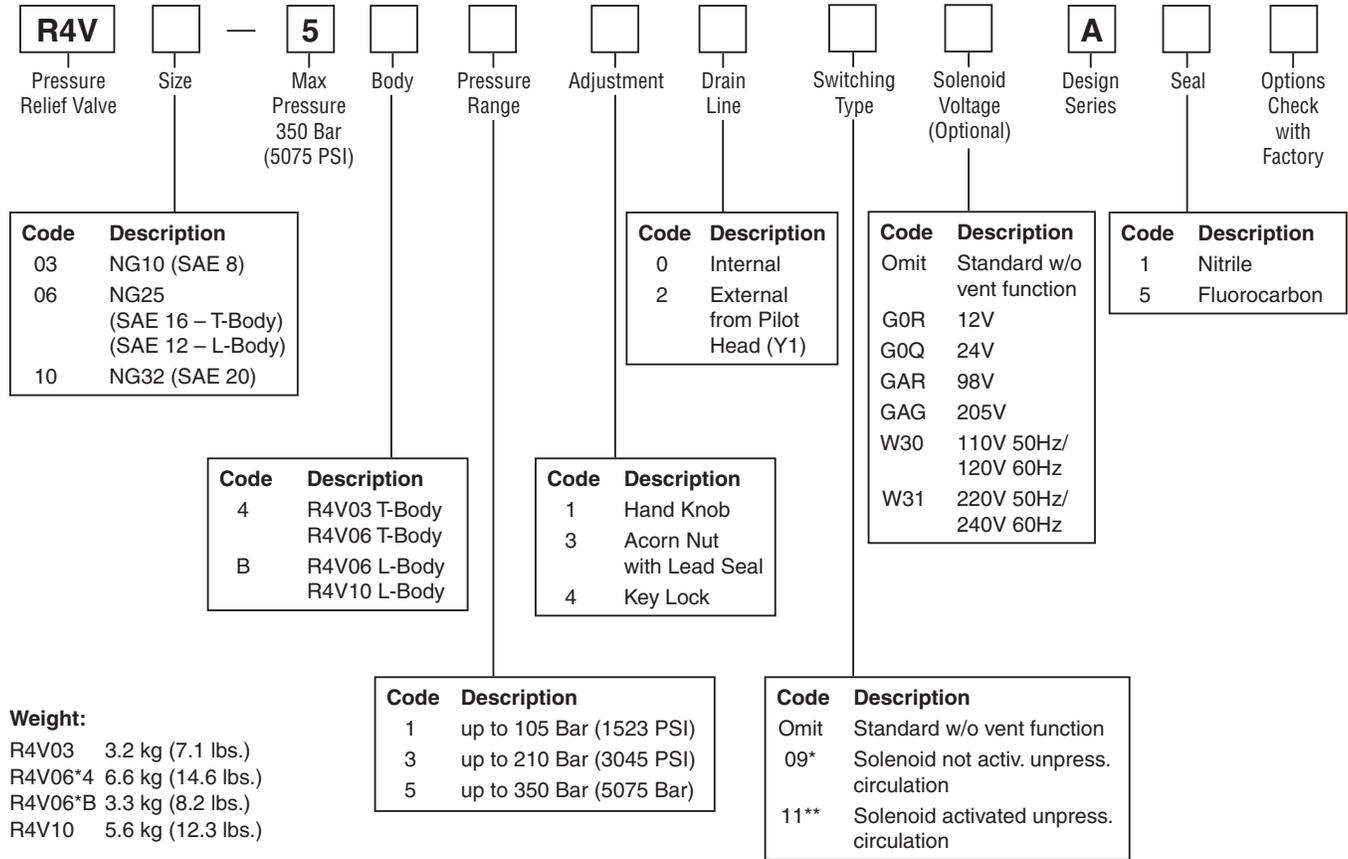
- Pilot operated with manual adjustment.
- 2 interfaces:
  - L-body (R4V06-*SAE* 12, R4V10-*SAE* 20)
  - T-body (R4V03-*SAE* 8, R4V06-*SAE* 16)
- 3 pressure stages.
- 3 adjustment modes:
  - Hand knob
  - Acorn nut with lead seal
  - Key lock
- With optional vent function.



R4V06 L-Body



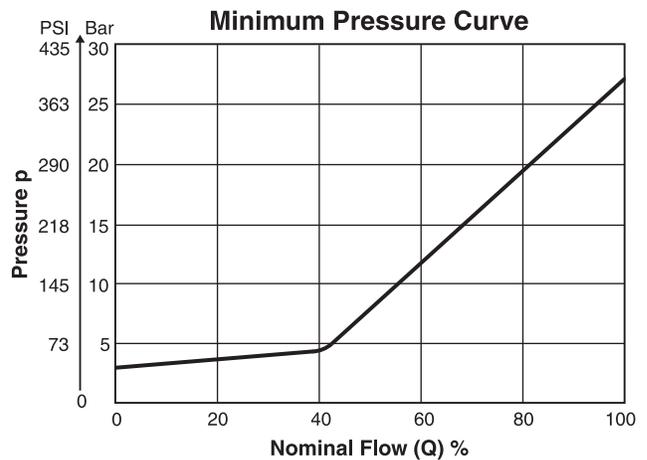
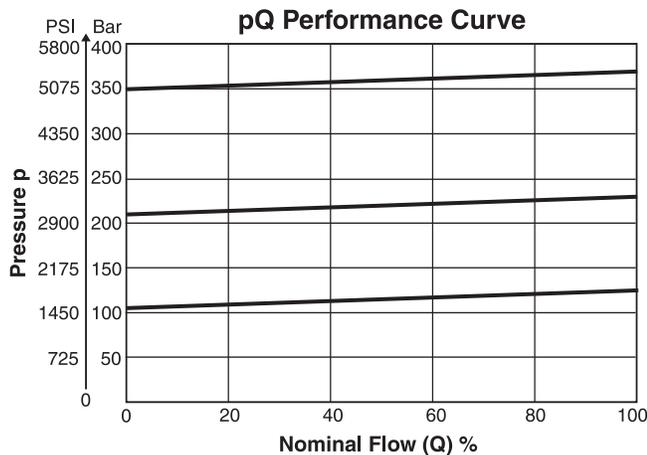
**Ordering Information**



**Weight:**  
R4V03 3.2 kg (7.1 lbs.)  
R4V06\*4 6.6 kg (14.6 lbs.)  
R4V06\*B 3.3 kg (8.2 lbs.)  
R4V10 5.6 kg (12.3 lbs.)

\* Sol. de-energized: open to tank  
Sol. energized: vent line blocked  
\*\* Sol. de-energized: vent line blocked  
Sol energized: open to tank

**Performance Curves\***



\* The performance curves are measured with external drain. For internal drain, the tank pressure has to be added to the curve.



**R4V**

General				
Size	T-Body		L-Body	
	03 (SAE 8)	06 (SAE 16)	06 (SAE 12)	10 (SAE 20)
Mounting	Threaded Body			
Mounting Position	Unrestricted			
Ambient Temp. Range	-20°C to +50°C (-4°F to +122°F)			
Hydraulic				
Max. Operating Pressure	Ports A and X up to 350 Bar (5075 PSI); Ports B and Y 30 Bar (435 PSI)			
Pressure Ranges	105 Bar (1523 PSI), 210 Bar (3045 PSI), 350 Bar (5075 PSI)			
Nominal Flow	60 LPM (15.9 GPM)	200 LPM (52.9 GPM)	200 LPM (52.9 GPM)	450 LPM (119.0 GPM)
Fluid	Hydraulic oil as per DIN 51524 ... 51525			
Fluid Temperature	-20°C to +80°C (-4°F to +176°F)			
Viscosity	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU)			
Permitted Recommended	30 cSt / mm <sup>2</sup> /s (139 SSU)			
Filtration	ISO Class 4406 (1999) 18/16/13 (acc. NAS 1638: 7)			

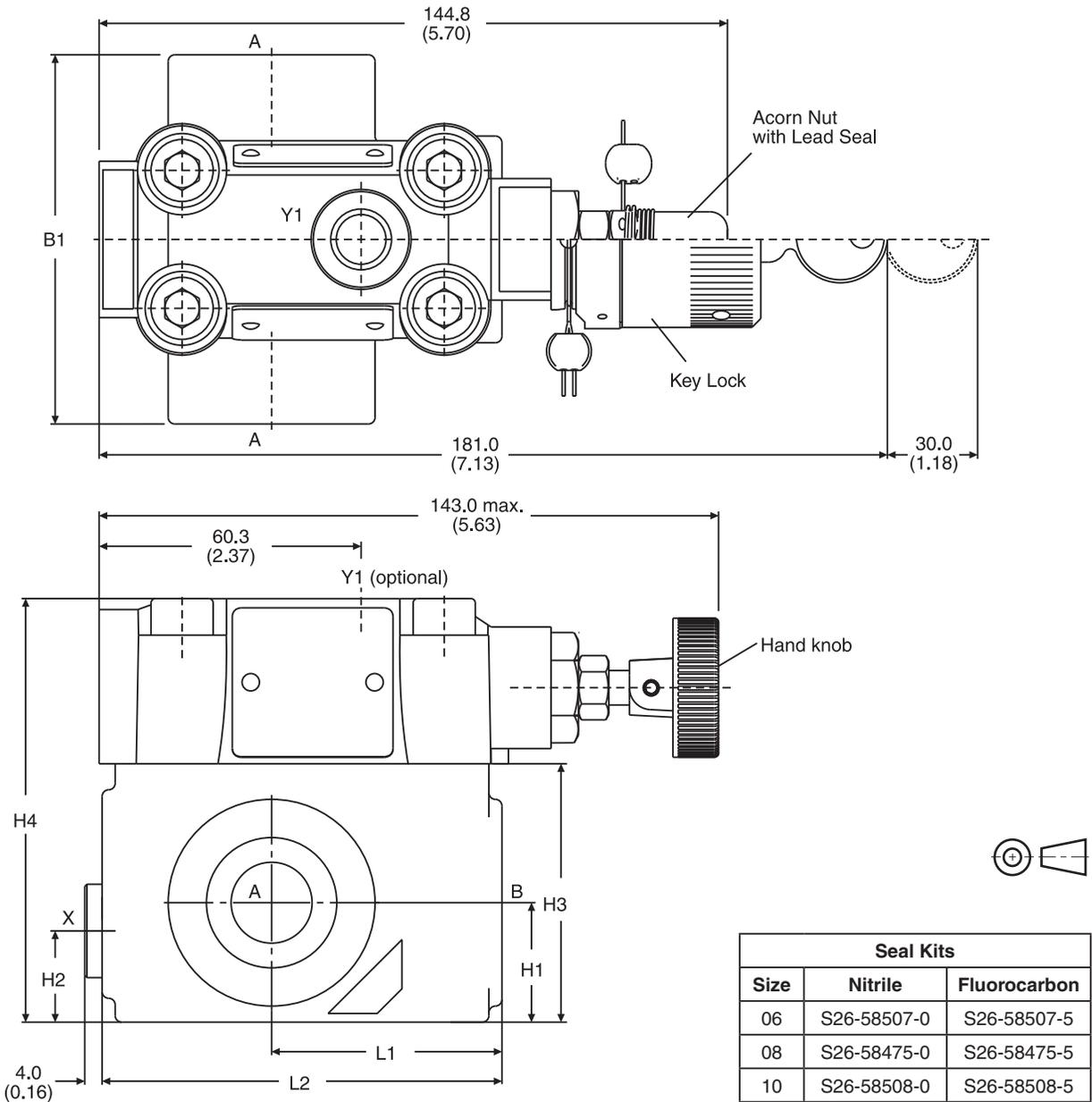
**D**

**R4V with Vent Function**

General						
Size	T-Body			L-Body		
	03 (SAE 8)	06 (SAE 16)	06 (SAE 12)	10 (SAE 20)	06 (SAE 12)	10 (SAE 20)
Mounting	Threaded Body					
Mounting Position	Unrestricted					
Ambient Temp. Range	-20°C to +50°C (-4°F to +122°F)					
Weight	3.2 kg (7.0 lbs)	6.6 kg (14.5 lbs)	3.3 kg (7.3 lbs)	5.6 kg (12.3 lbs)	3.3 kg (7.3 lbs)	5.6 kg (12.3 lbs)
Electrical (Solenoid)						
Duty Ratio	100%					
Response Time	Energized / De-energized AC: 20/18ms, DC: 46/27 ms					
Code	G0R	G0Q	GAR	GAG	W30	W31
Supply Voltage	12V	24V	98V	205V	110V at 50Hz 120V at 60Hz	220V at 50Hz 240V at 60Hz
Tolerance Supply Voltage	+5 to -10	+5 to -10	+5 to -10	+5 to -10	±5	±5
Power Consumption	Hold	31W	31W	31W	31W	78W
In Rush	31W	31W	31W	31W	264W	264W
Maximum Switching Frequency	AC up to 7,200 switchings per hour DC up to 16,000 switchings per hour					
Solenoid Connection	Connector as per EN175301-803					
Protection Class	IP65 in accordance with EN60529 (plugged and mounted)					
Coil Insulation Class	H (180°C) (356°F)					

**T-Body**

Inch equivalents for millimeter dimensions are shown in (\*\*)



Size	Body	B1	B2	B3	B4	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	L3
03	T-body	85.0 (3.35)	-	-	-	27.5 (1.08)	21.0 (0.83)	59.5 (2.34)	97.5 (3.84)	-	-	-	-	53.0 (2.09)	92.0 (3.62)	-
06	T-body	136.0 (5.35)	-	-	-	38.0 (1.50)	28.0 (1.10)	93.0 (3.66)	131.0 (5.16)	-	-	-	-	66.5 (2.62)	117.5 (4.63)	-

Ports	Function	Port size	
		R4V03 T-body	R4V06 T-body
A	Pressure (inlet)	SAE 8	SAE 16
B	Tank (outlet)	SAE 8	SAE 16
X <sup>1)</sup>	Ext. Remote Control or Vent Connection	SAE 4	
Y1 <sup>2)</sup>	External Drain	SAE 4	

<sup>1)</sup> closed when supplied

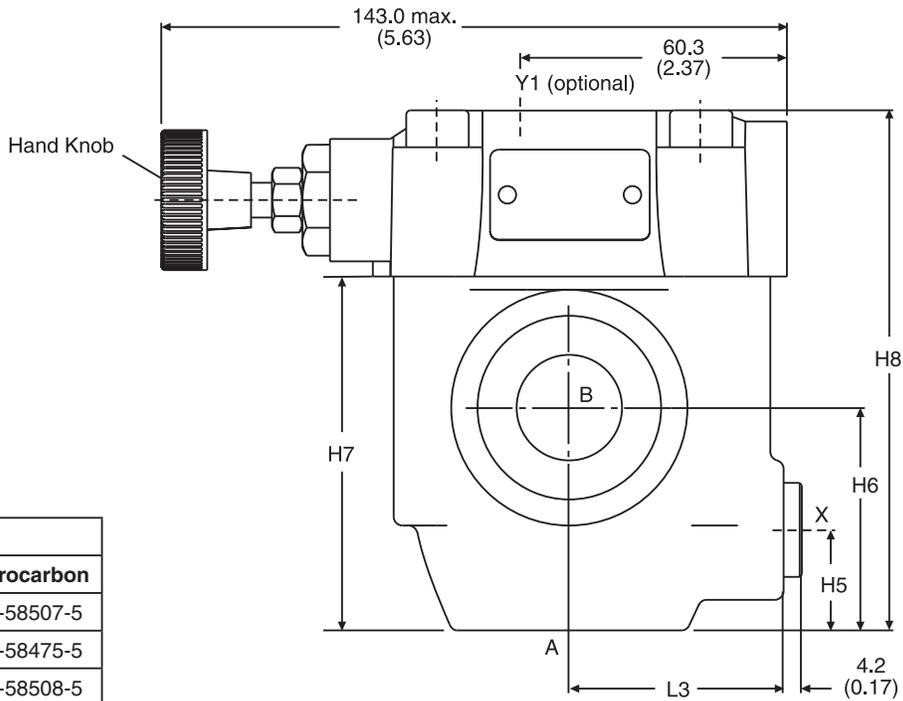
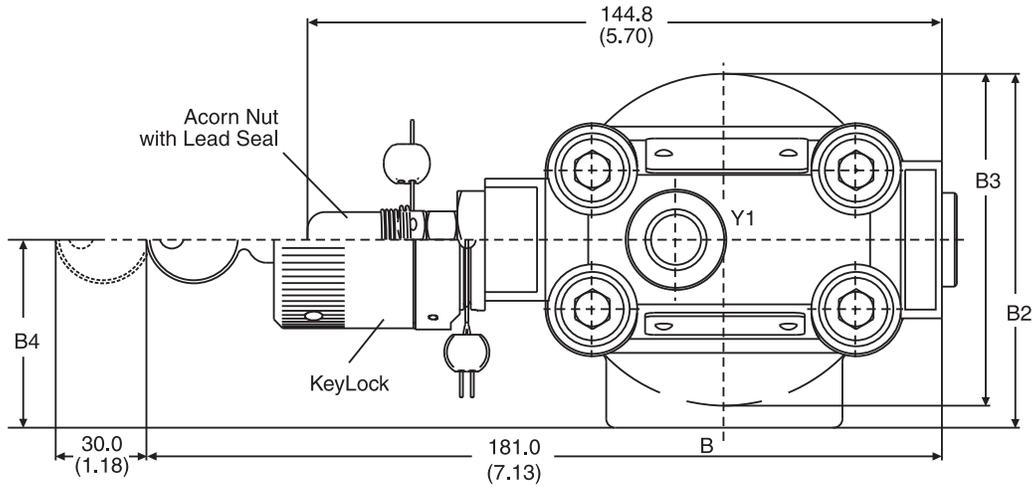
<sup>2)</sup> port Y1 is only available at drain line (code 2) external from the pilot head

R4V.indd, dd



**L-Body**

Inch equivalents for millimeter dimensions are shown in (\*\*)



Seal Kits		
Size	Nitrile	Fluorocarbon
06	S26-58507-0	S26-58507-5
08	S26-58475-0	S26-58475-5
10	S26-58508-0	S26-58508-5

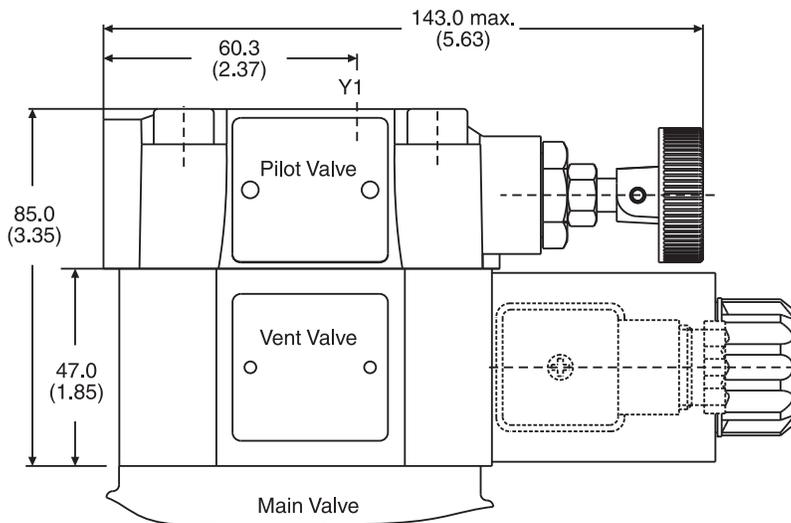
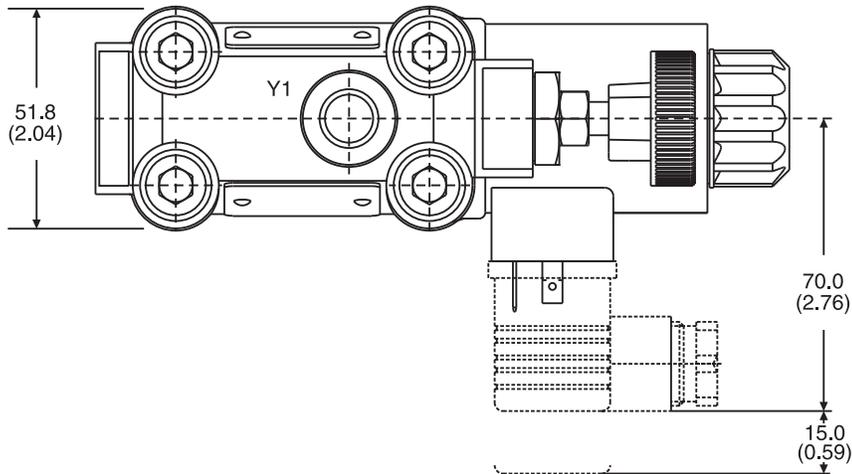
Size	Body	B1	B2	B3	B4	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	L3
06	L-body	-	81.0 (3.19)	76.0 (2.99)	43.0 (1.69)	-	-	-	-	23.0 (0.91)	51.0 (2.01)	81.0 (3.19)	119.0 (4.69)	-	-	49.0 (1.93)
10	L-body	-	120.7 (4.75)	85.8 (3.38)	77.8 (3.06)	-	-	-	-	31.8 (1.25)	50.8 (2.00)	96.0 (3.78)	134.0 (5.78)	-	-	49.8 (1.96)

Ports	Function	Port size	
		R4V06 L-body	R4V10 L-body
A	Pressure (inlet)	SAE 12	SAE 20
B	Tank (outlet)	SAE 12	SAE 20
X <sup>1)</sup>	Ext. Remote Control or Vent Connection	SAE 4	
Y1 <sup>2)</sup>	External Drain	SAE 4	

<sup>1)</sup> closed when supplied

<sup>2)</sup> port Y1 is only available at drain line (code 2) external from the pilot head

Inch equivalents for millimeter dimensions are shown in (\*\*)



Vent Valve Seal Kits	
Nitrile	Fluorocarbon
<b>DC Solenoid</b>	
S26-58515-0	S26-58515-5
<b>AC Solenoid</b>	
S26-35237-0	S26-35237-5

Code	Internal Drain	External Drain
11		
09		

**General Description**

Series R1E02 direct operated, pressure relief valves are seated type valves typically used for remote pressure controls. In applications where the reliability and simplicity of a hydraulic remote control are preferred to an electrohydraulic system, Series R1E02 is an ideal solution.

Typically pilot operated pressure valves or compensators of variable pumps are controlled.

**Features**

- Seated type valve.
- 3 body variants:
  - foot mounting
  - front panel mounting
  - subplate mounting
- 3 pressure ranges.
- 3 adjustment modes:
  - hand knobs
  - acorn nut with lead seal
  - adjusting with lock



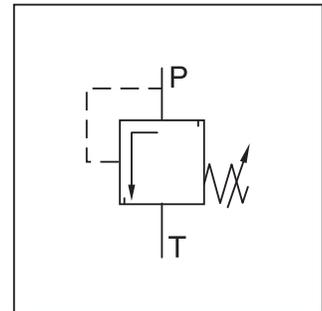
Foot Mounting



Front Panel Mounting

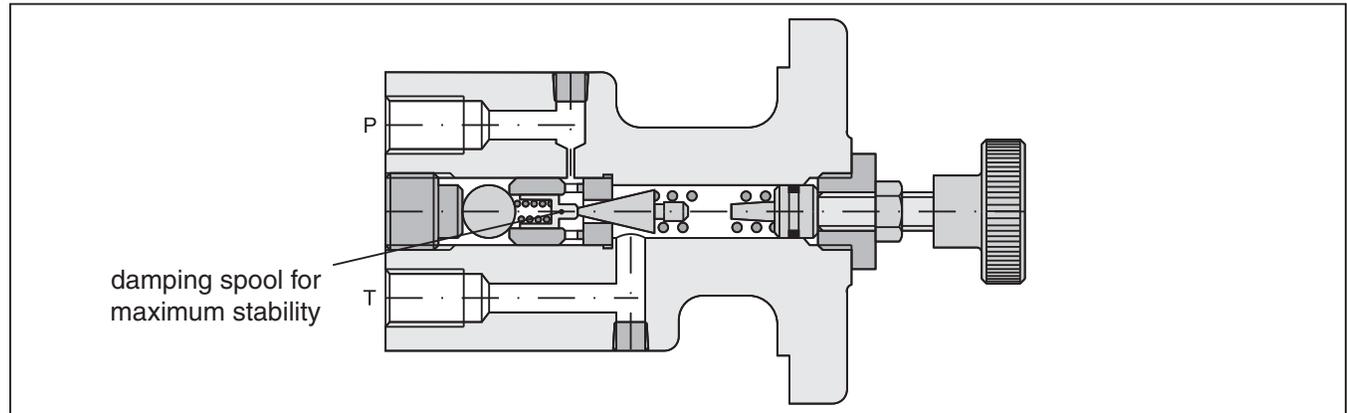


Subplate Mounting

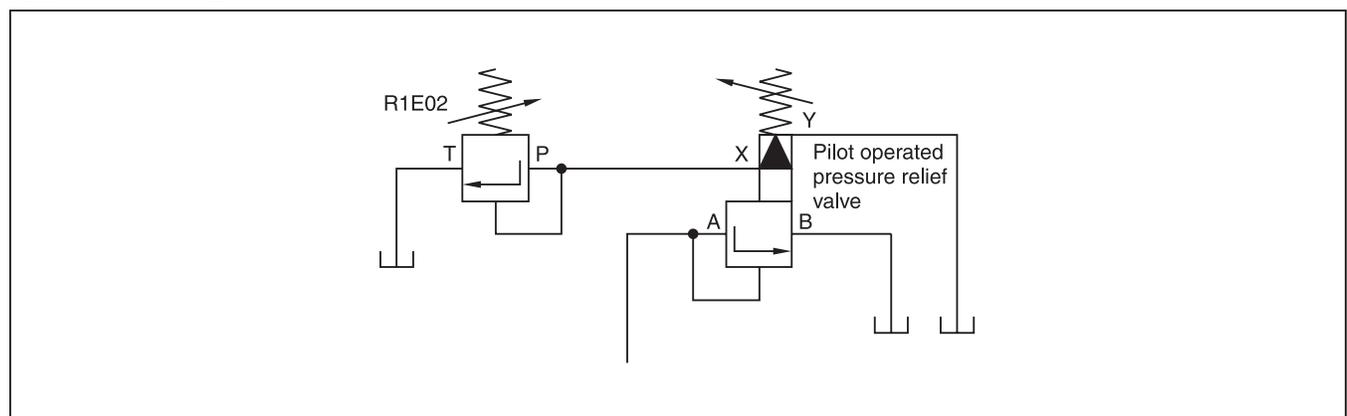


**D**

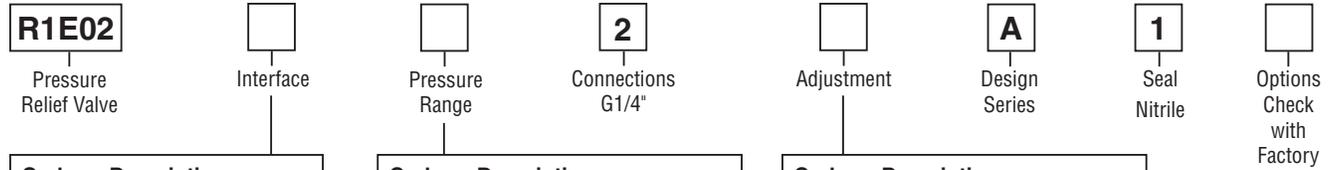
**Front Panel Mounting**



**Typical Configuration as Remote Pilot Valve**



**Ordering Information**



Code	Description
1	Foot Mounting
2	Front Panel Mounting
3	Subplate Mounting

Code	Description
1	up to 105 Bar (1523 PSI)
3	up to 210 Bar (3045 PSI)
5	up to 350 Bar (5075 PSI)

Code	Description
1	Hand Knob Ø32mm
3	Acorn Nut with Lead Seal
4 *	Adjusting Device with Lock (Key Order No. 700-70619)

**Weight:**

R1E021	2.1 kg (4.6 lbs.)
R1E022	2.1 kg (4.6 lbs.)
R1E023	1.0 kg (2.2 lbs.)

**Seal Kit:**

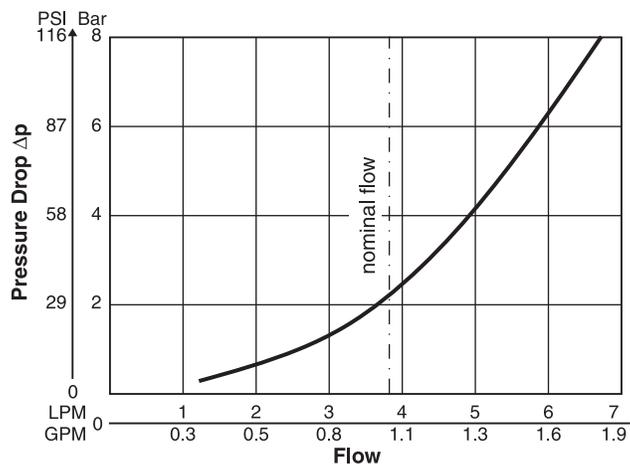
R1E021	S26-58466-0
R1E022	S26-58466-0
R1E023	S16-91963-0

\* on bodies for subplate mounting use plate S16-64188.

**Specifications**

General	
<b>Size</b>	1/4"
<b>Interface</b>	Foot mounting, Front panel mounting, Subplate mounting
<b>Mounting Position</b>	Unrestricted
<b>Ambient Temperature Range</b>	-20°C to +70°C (-4°F to +158°F)
Hydraulic	
<b>Maximum Operating Pressure</b>	Port P 350 Bar (5075 PSI); Port T depressurized
<b>Pressure Range</b>	105 Bar (1523 PSI), 210 Bar (3045 PSI), 350 Bar (5075 PSI)
<b>Fluid</b>	Hydraulic oil as per DIN 51524 ... 51525
<b>Fluid Temperature</b>	-20°C to +70°C (-4°F to +158°F)
<b>Nominal Flow</b>	3.8 LPM (1.0 GPM)
<b>Minimum Pressure Setting</b>	7 Bar (102 PSI)
<b>Viscosity Permitted</b>	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU)
<b>Viscosity Recommended</b>	30 cSt / mm <sup>2</sup> /s (139 SSU)
<b>Filtration</b>	ISO Class 4406 (1999) 18/16/13

**Performance Curve**

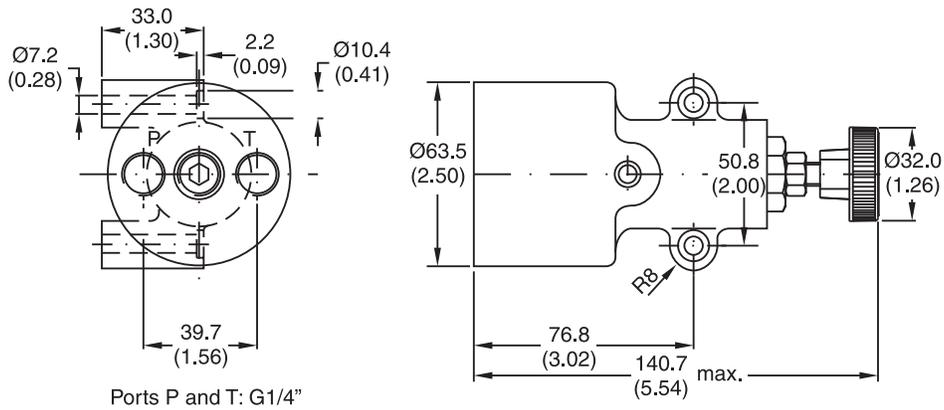


Fluid viscosity 35 cSt at 50°C (122°F) ± 5°C (41°F)



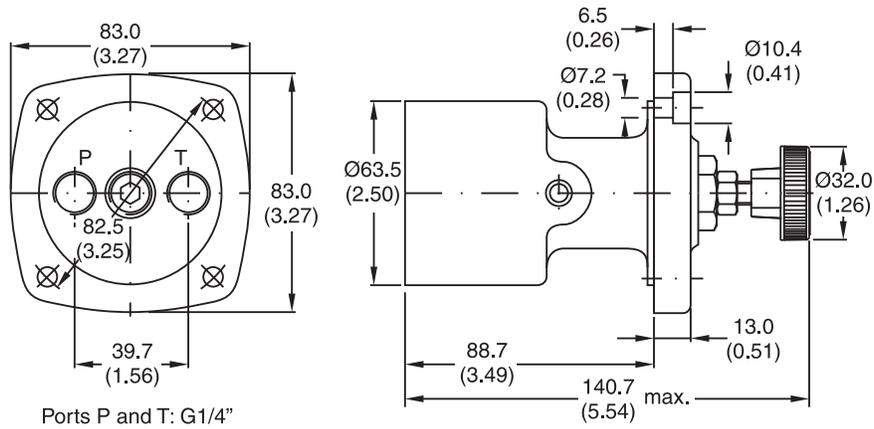
Inch equivalents for millimeter dimensions are shown in (\*\*)

**Foot Mounting**

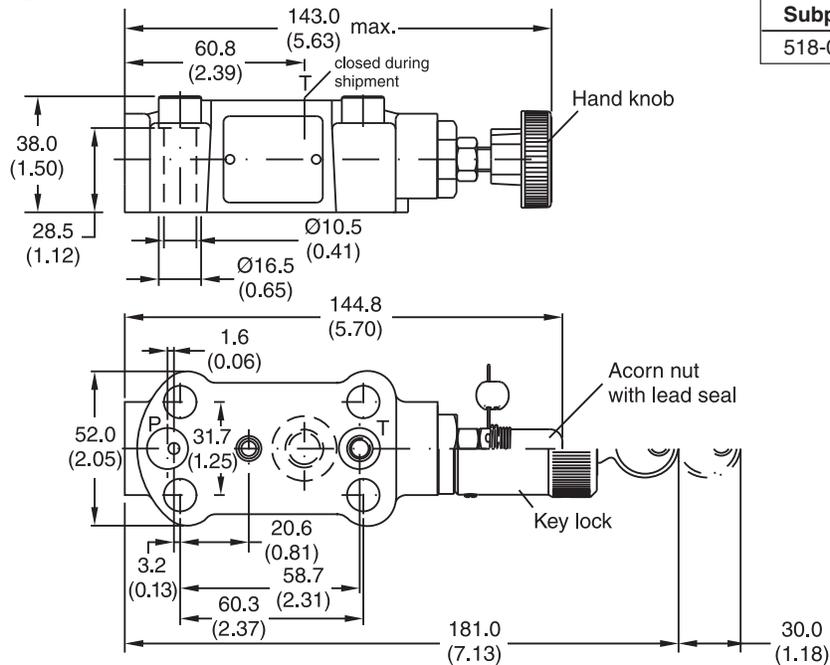


**D**

**Front Panel Mounting**



**Subplate Mounting**



Subplate	Size
518-00139-0	3/8" NPT