

General Description

Series RE06M*W proportional relief valves are direct operated proportional valves typically used as remote control valves for flow rates of below 3 LPM (0.8 GPM).

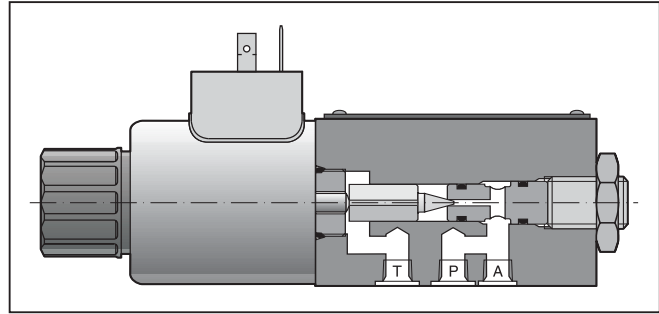
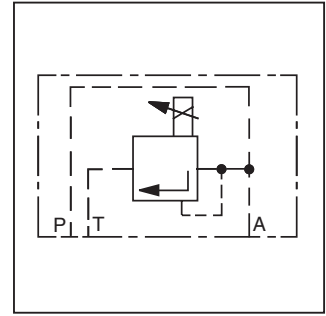
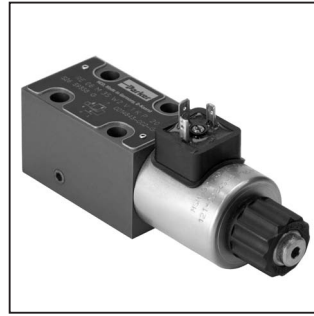
Function

When the pressure in port P or A exceeds the pressure setting at the solenoid, the cone opens to port T and limits the pressure in port P to the adjusted level.

The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400.

Features

- Direct operated by proportional solenoid.
- Very low pressure adjustment of p_{min} .
- Two pressure ports, A and P.
- Subplate mounting according to ISO 6264.
- Four pressure ranges available.



Specifications

General	
Nominal Size	DIN NG6 / CETOP 3 / NFPA D03
Interface	Subplate mounting according to ISO 6264
Mounting Position	as desired, horizontal mounting preferred
Ambient Temperature	[°C] -20 ... +70 (-4°F ... +158°F)
MTTF _d value	[years] 150
Hydraulic	
Maximum Operating Pressure	Ports P and A up to 350 (5075 PSI); port T 30 Bar (435 PSI)
Pressure Range	105 Bar (1523 PSI), 175 Bar (2538 PSI), 250 Bar (3625 PSI), 350 (5075 PSI)
Nominal Flow	[l/min] See p/Q curves
Fluid	Hydraulic oil as per DIN 51524...51535, other on request
Viscosity, Recommended Permitted	[cSt] / [mm ² /s] 30 ... 80 (139 ... 371 SSU) 12 ... 380 (56 ... 1761SSU)
Fluid Temperature	[°C] -20 ... +60; (-4°F ... +140°F)
Filtration	ISO 4406 (1999), 18/16/13 (acc. NAS 1638: 7)
Linearity	[%] ±2.8
Repeatability	[%] <±1
Hysteresis	[%] ±1.5 of p_{max}
Electrical	
Duty Ratio	[%] 100 ED; CAUTION: Coil temperature up to 150°C (302°F) possible
Protection Class	IP 65 in accordance with EN 60529 (plugged and mounted)
Nominal Voltage	[V] 12 (2.3 A max. current), 16 (1.3 A max. current)
Coil Resistance	[Ohm] 4 at 20°C (68°F) = K Coil 11.4 - 12 for X Coil
Solenoid Connection	Connector as per DIN 43650
Power Amplifier, Recommended	PCD00A-400

Ordering Information

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">RE</div> <p>Proportional Pressure Relief Valve</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;">M</div> <p>Manifold Mounting</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"> </div> <p>Pressure Range</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">W</div> <p>Offboard Electronics</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">2</div> <p>Seal</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">1</div> <p>Valve Open at Zero Command</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"> </div> <p>Solenoid Type</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">W</div> <p>Electronic Connection</p>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"> </div> <p>Design Series</p> <p>NOTE: Not required when ordering.</p>
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Code	Description
06	NG6 D03, CETOP 3

Code	Description
N	Nitrile
V	Fluorocarbon

Code	Solenoid Voltage
K*	12 V, 2.5 A
X**	16 V, 1.3 A

* Use with "PCD" Series Driver cards
 ** Order if currently using "ED" card

Code	Description
	Socket Connector
W	DIN 43650 without plug

Please order plug separately. See Accessories.

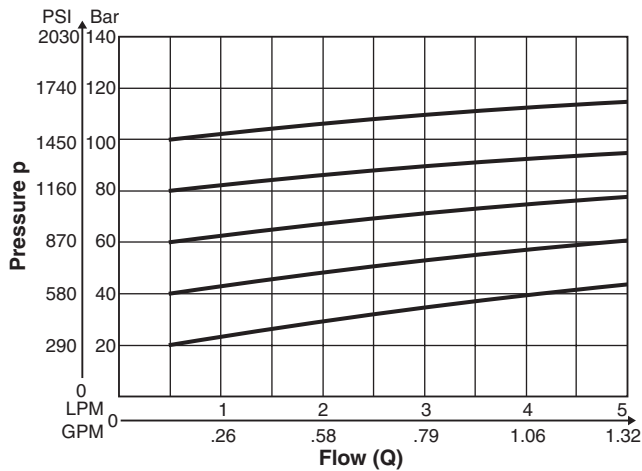
Bolt Kit	Qty	Size
BK209	4	10-24 X 1.25"
BK375	4	M5 x 30mm

Weight: 1.8 kg (4.0 lbs.)

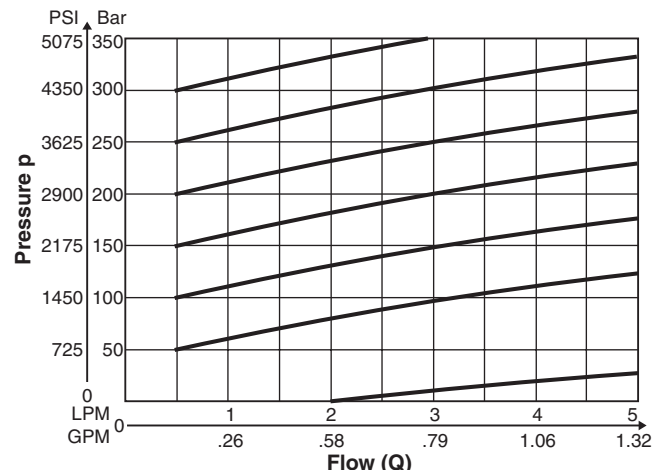
Performance Curves

p/Q Curves

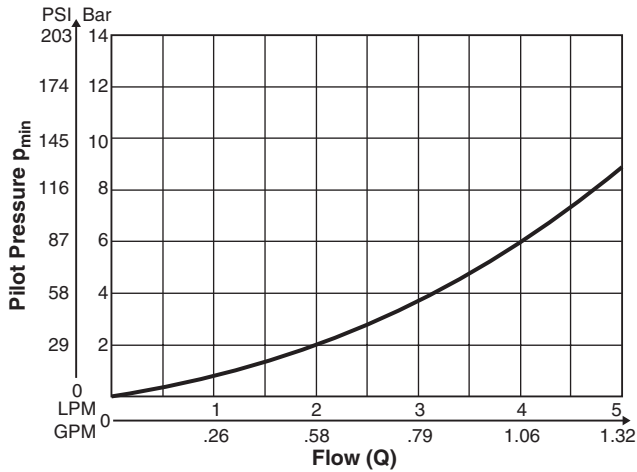
Pressure Stage 105 Bar



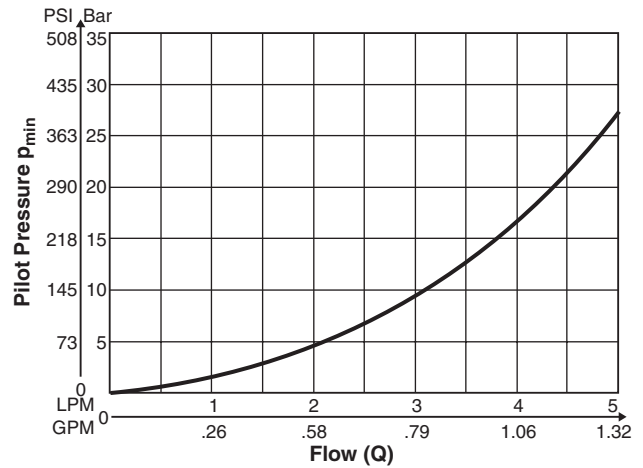
Pressure Stage 350 Bar



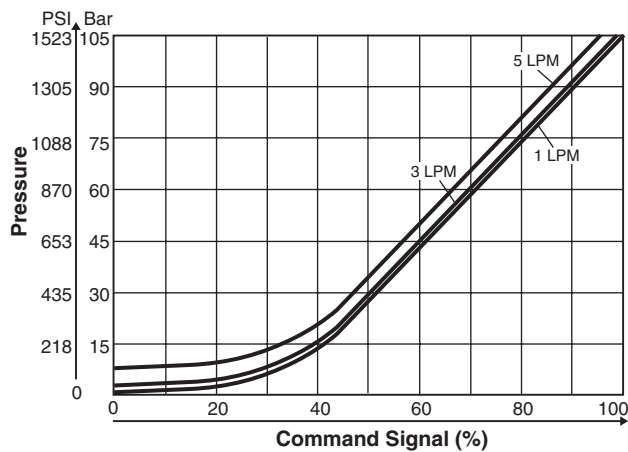
p_{min}/Q Curves
Pressure Stage 105 Bar



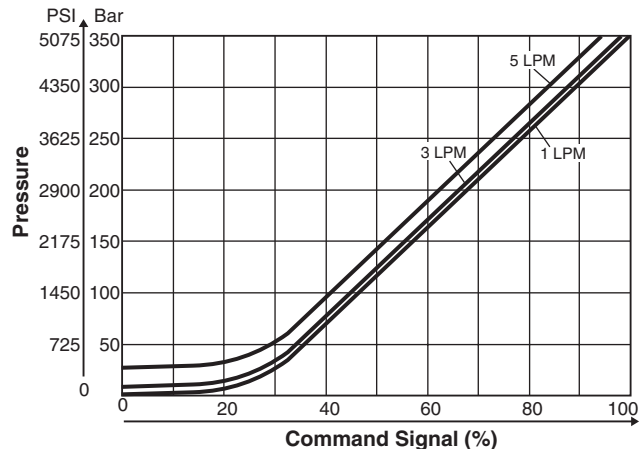
Pressure Stage 350 Bar



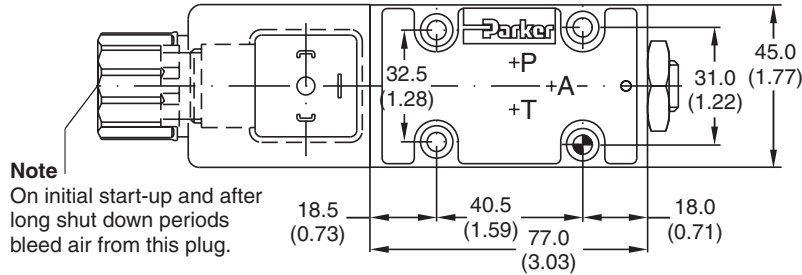
$p_{set-voltage}$ Curves
Pressure Stage 105 Bar



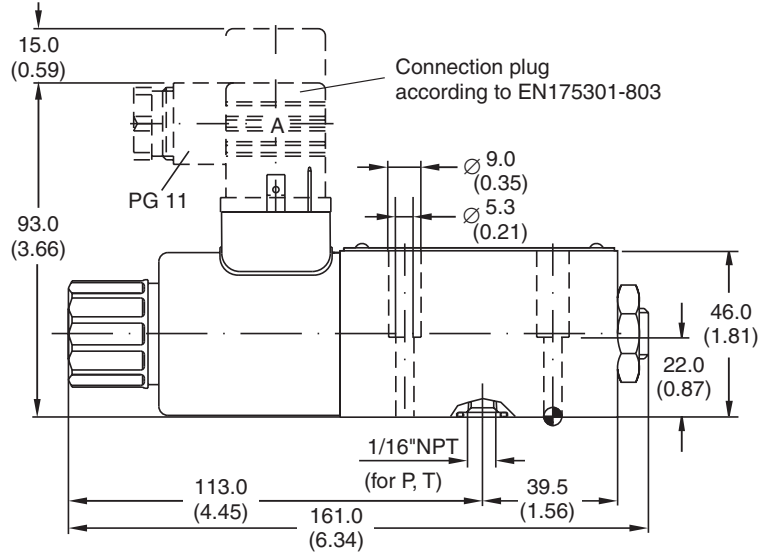
Pressure Stage 350 Bar



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



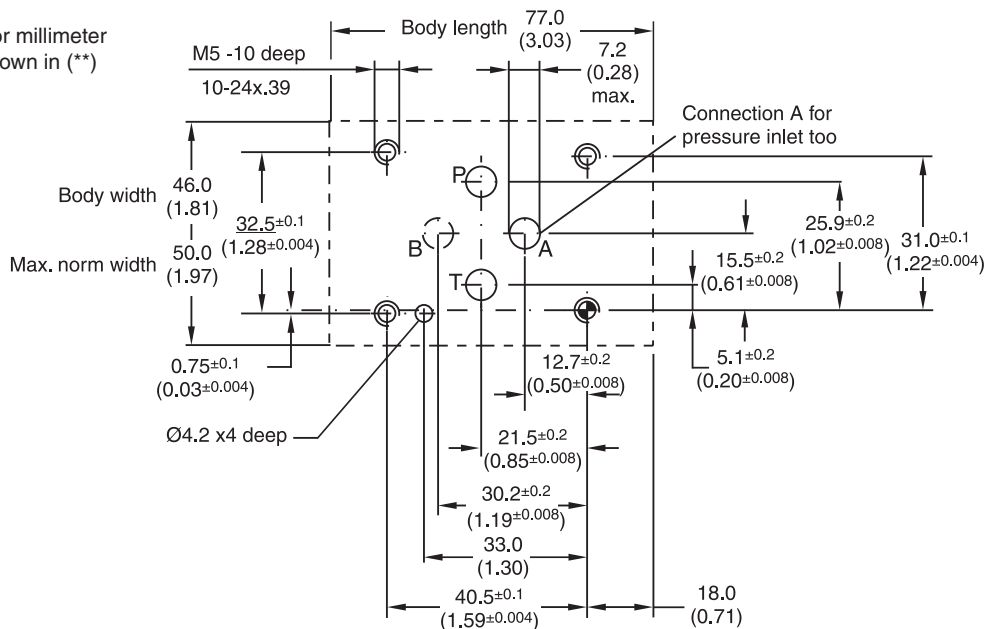
Note
On initial start-up and after long shut down periods bleed air from this plug.



Surface Finish	Bolt Kit			Seal Kit
				Nitrile Fluorocarbon
	BK375 BK209	4x M5x30 DIN 912 12.9 4x 10-24x1.25	7.6 Nm (5.6 lb.-ft.) ±15%	SK-RE06MWN SK-RE06MWV

Mounting Pattern ISO 6264-03-04-*-97

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



Port B: O-ring recess diameter on valve body.