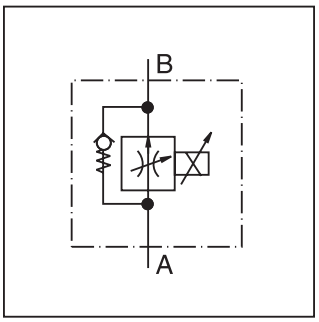
B

General Description

Series DUR*L06 proportional flow control valves are used to generate pressure-compensated flow from A to B. The valves are equipped with a built-in check valve for the return flow.

A rectifier plate can be used for meter-in and meter-out control of an actuator.

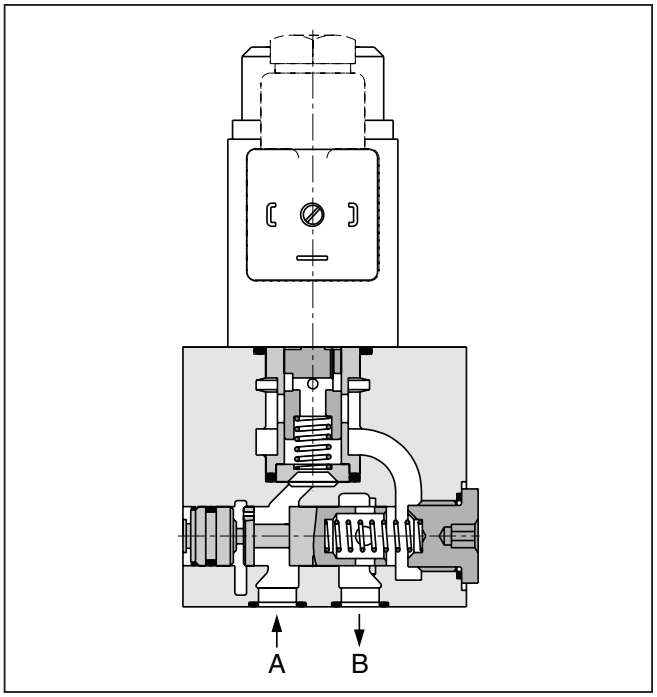


Function

When solenoid current is applied, the metering spool opens against the reset spring and the flow is regulated by the pressure compensating spool to port B.

With the aid of the pressure compensating spool, the pressure drop is held constant on the metering window. Thus pressure load changes are compensated, and the oil flow remains constant.

The valve parameters can be saved, changed and duplicated in combination with the digital electronic module PCD00A-400.



Features

- Low hysteresis
- High reproducibility
- Load-independent oil flow
- Bypass check valve
- Mounting pattern to ISO 6263
- 4 flow rates

Note: See “Accessories” for rectifier plate and subplates.

Ordering Information

DUR	[ ]	L	06	P	K	[ ]	1	–	[ ]
Proportional Pressure Reducing Valve	Nominal Flow	Lineaer Solenoid 24V / 0.68 A	Size NG6	Progressive Performance Curve		Seal			Design Series

NOTE: Not required when ordering.

Code	Description
1.6	1.6 LPM (0.4 GPM)
6.3	6.3 LPM (1.7 GPM)
18	18.0 LPM (4.8 GPM)

Code	Description
A	Nitrile
1	Fluorocarbon

B01_Cat2550.indd, ddp, 04/19

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

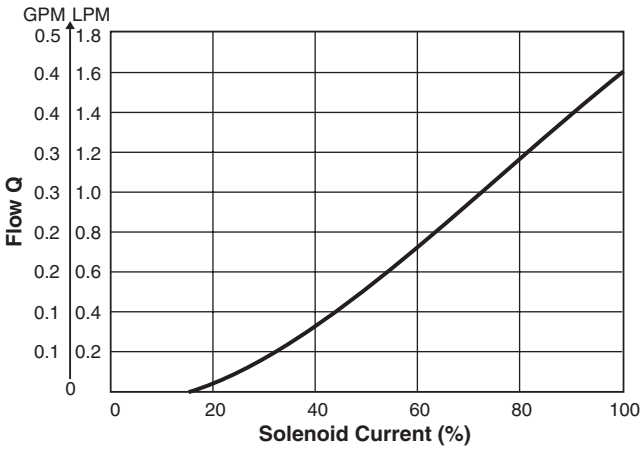
B

Specifications

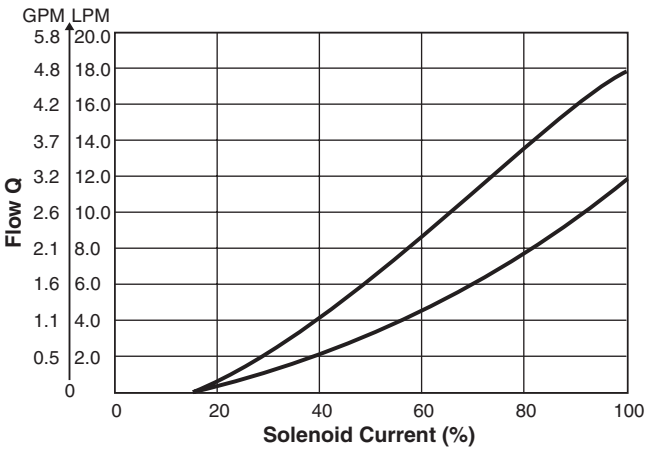
General		
Design		Electrically adjustable orifice valve with load sensing
Mounting Interface		Subplate NG6, Interface DIN 24340, ISO, CETOP
Mounting Position		Unrestricted, preferably horizontal
Ambient Temperature	**[°C]**	-20...+60; (-43°F...+140°)
$MTTF_D$ Value	**[years]**	150
Supply Voltage	**[V]**	24
Solenoid Nominal Current	**[mA]**	680
Duty Cycle	**[%]**	100 ED; CAUTION: Coil temperature up to 150°C (302°F) possible
Solenoid Connection		Connector as per EN 175301-803
Protection Class		IP 65 in accordance with EH 60529 (plugged and mounted)
Amplifier Module		PCD00A-400
Maximum Operating Pressure		210 Bar (3045 PSI)
Fluid		Hydraulic oil according to DIN 51524
Fluid Temperature	**[°C]**	-20 ... +70 (-43°F...+158°F) / Nitrile: -25 ... +70 (-13°F...+158°F)
Viscosity Range		
Permitted	**[cSt]/[mm²/s]**	20...400 (93...1853 SSU)
Recommended	**[cSt]/[mm²/s]**	30...80 (139...371 SSU)
Filtration		ISO 4406 (1999); 18/16/13 (acc. NAS 1638: 7)
Minimum Pressure Difference		DUR 1.6/3.2: 3 Bar (43.5 PSI); DUR 6.3/12: 5 Bar (72.5 PSI); DUR 18: 8 Bar (116 PSI)
Hysteresis at Q_{nom}	**[%]**	6
Hysteresis at $Q \leq 20\ \% \bullet Q_{nom}$	**[%]**	6
Repeatability at $\Delta U_{set} = 5$ V	**[%]**	2

B

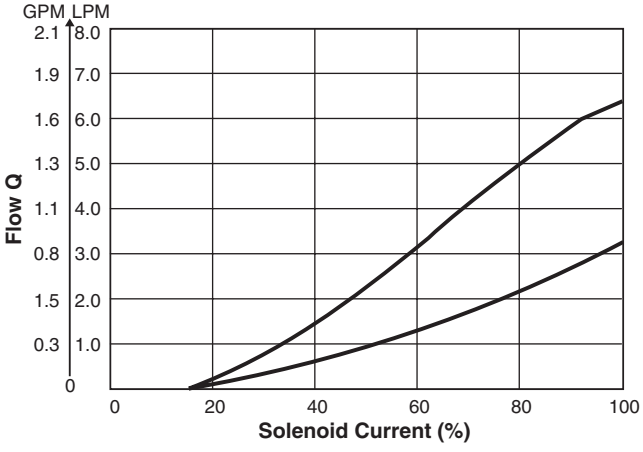
DUR 1.6 L 06 PK*



DUR 18 L 06 PK*



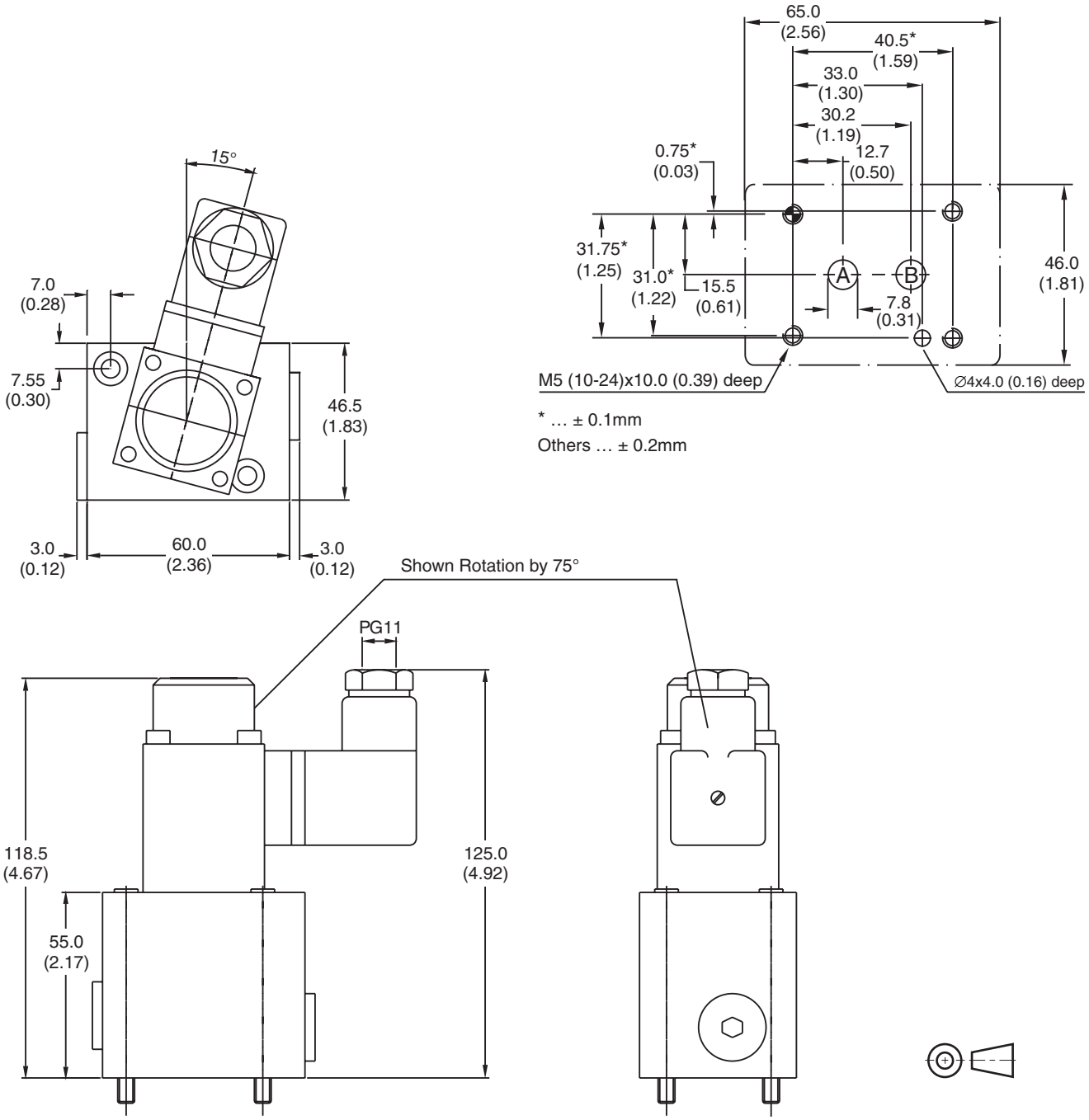
DUR 3.2 L 06 PK* / DUR 6.3 L 06 PK*



All performance curves measured with HLP46 at 50 °C (122 °F).

B

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



* … ± 0.1mm
Others … ± 0.2mm

Seal Kits

Nitrile	Fluorocarbon
SK-DUR***L	SK-DUR***L FPM

Weight: 1.6 kg (3.5 lbs.)

Bolt Kits (Cylinder head ISO 4662-12.9 not included)

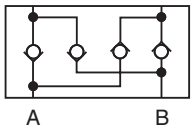
Size	Valve Model	Quantity	Tightening Torque [Nm]	Valve Without Rectifier Plate		Valve Without Rectifier Plate	
				Dimensions	Order No.	Dimensions	Order No.
NG06	DUR*L06	2	7.6 Nm	2x M5X60	BK380	2x M5X100	BK466

Sandwich Rectifier Plate

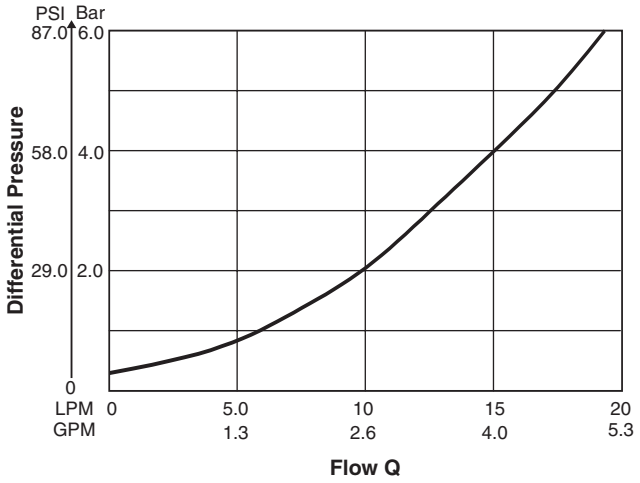
If a 2-way flow control valve is used in combination with a rectifier plate, the valve can be used for meter-in and meter-out flow control of an actuator.

Design

The intermediate rectifier plate is designed with four identical, symmetrically arranged check valves. Thus the differential pressure is the same in both flow directions.



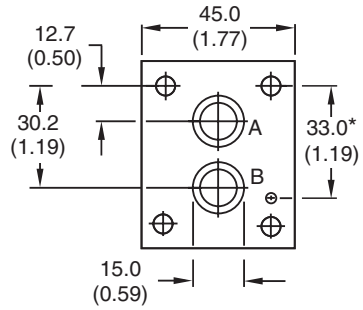
Performance Curve Δp/Q

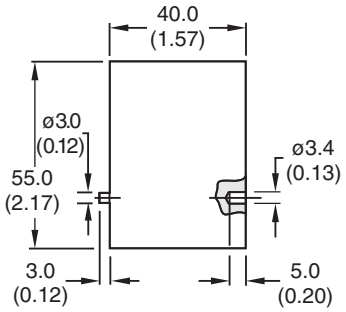


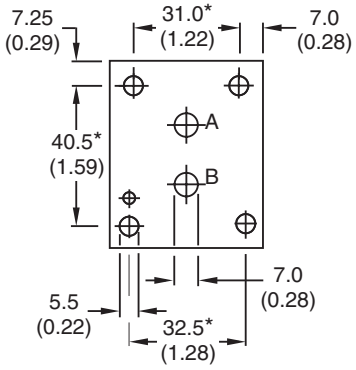
All performance curves measured with HLP46 at 50 °C (122 °F).

B

Dimensions







Dimension Tolerances

* … ± 0.1mm

Others … ± 0.2mm

Holes and Silhouette of Valve Body … Untoleranced Dimension

Rectifier Plate
Ordering Code: HROA06C

O-ring for sealing the connecting surface (not included)

Connections	Dimensions	Required Units
A, B	12 x 1.5	2

Subplates

Ordering Code	Description
SPD22B910	P, A, B and T = G1/4
SPD23B910	P, A, B and T = G1/8