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

For meter-in and meter-out control of an actuator a rectifier plate can be used.

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.

In combination with the digital electronic module PCD00A-400 the valve parameters can be saved changed and duplicated.
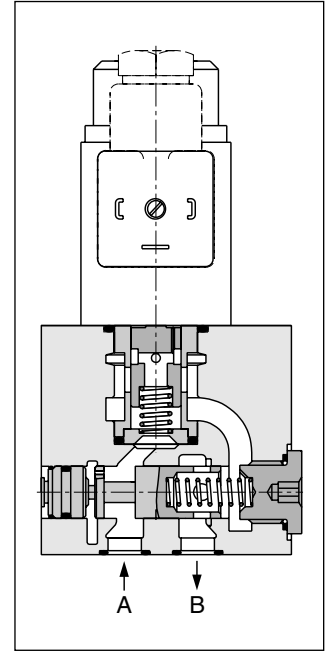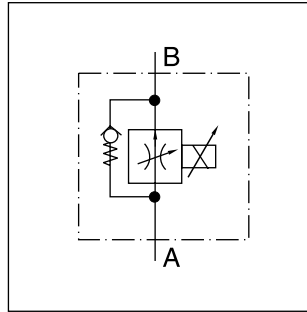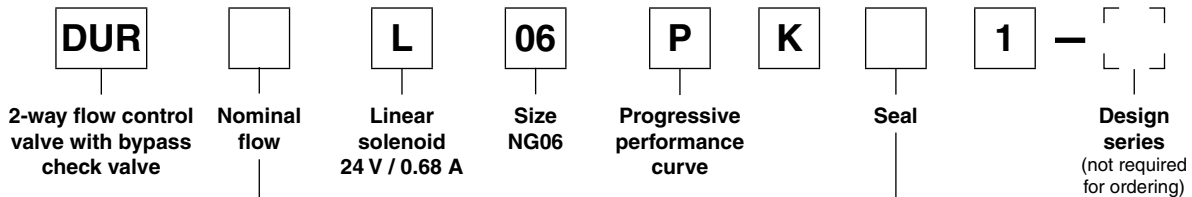
Features

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

Note

Rectifier plate and subplates see 'Accessories' at the end of this chapter.

Ordering code

DUR		L	06	P	K		1	—

2-way flow control valve with bypass check valve — **Nominal flow** — **Linear solenoid 24 V / 0.68 A** — **Size NG06** — **Progressive performance curve** — **Seal** — **Design series** (not required for ordering)

Code	Flow [l/min]
1,6	1.6
6,3	6.3
18	18.0

Code	Seal
A	NBR
1	FPM

DUR UK.indd 22.08.2019

Technical data

Design		Electrically adjustable orifice valve with load sensing
Mounting type		Subplate NG06, interface DIN 24340, ISO, CETOP
Mounting position		Unrestricted, horizontal mounting preferred
Ambient temperature	[°C]	-20...+60
$MTTF_D$ value	[years]	150
Weight	[kg]	1.6
Type of voltage	[V]	24
Solenoid nominal current	[mA]	680
Duty cycle		100 % ED
Solenoid connection		Connector as per EN 175301-803
Protection class		IP 65 in accordance with EH60529 (with correctly mounted plug-in connenctor)
Amplifier module		PCD00A-400
Operating pressure	[bar]	max. 210
Fluid		Hydraulic oil according to DIN 51524
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)
Viskosität, permitted	[cSt] / [mm²/s]	20 ... 400
recommended	[cSt] / [mm²/s]	30 ... 80
Filtration		ISO 4406 (1999); 18/16/13
Min. pressure difference	[bar]	DUR 1.6/: 3; DUR 6.3: 5; DUR 18: 8
Hysteresis at Q_{nom}	[%]	6
Hysteresis at $Q \leq 20 \% \cdot Q_{nom}$	[%]	6
Repeatability at $\Delta U_{set} = 5$ V	[%]	2

Performance curves

DUR 1.6 L 06 PK*

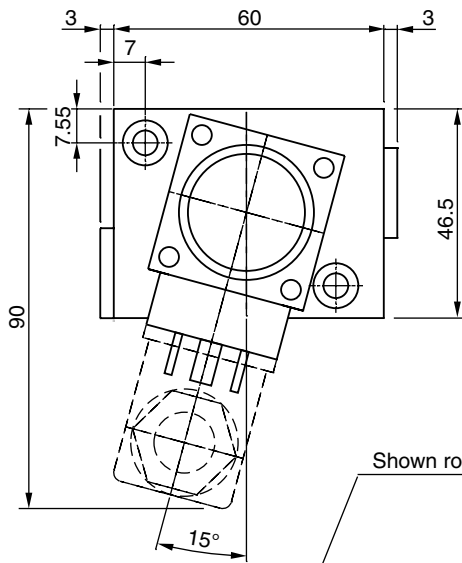### DUR 18 L 06 PK*

DUR 6.3 L 06 PK*

All characteristic curves measured with HLP46 at 50 °C.

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Mounting pattern

Shown rotation by 15°

PG11
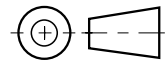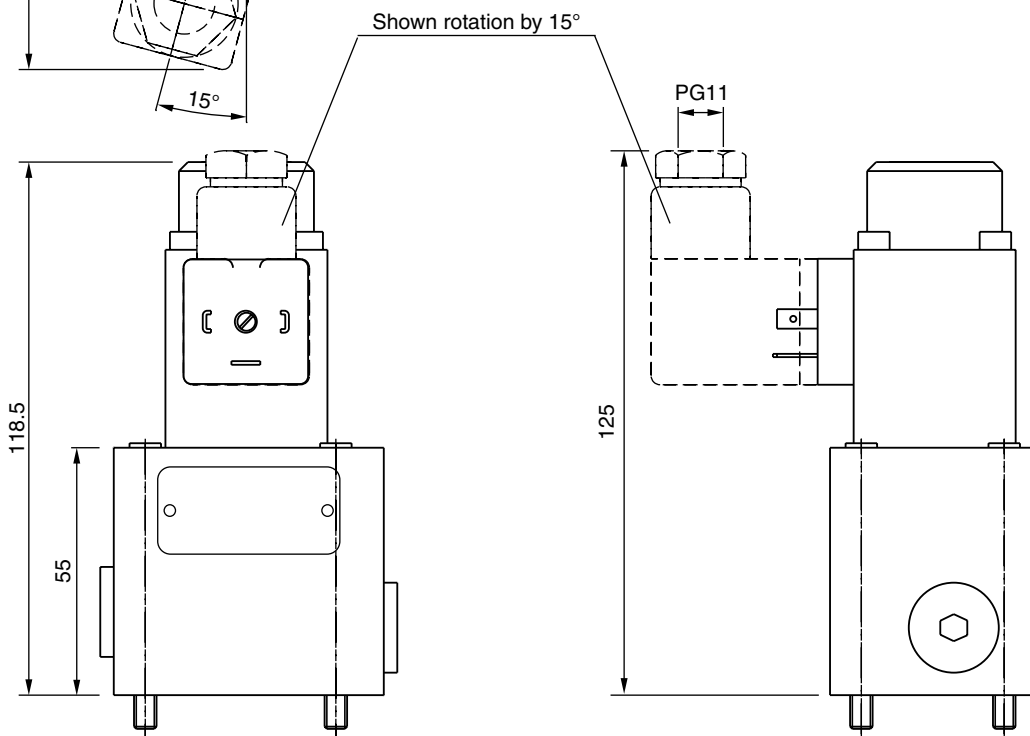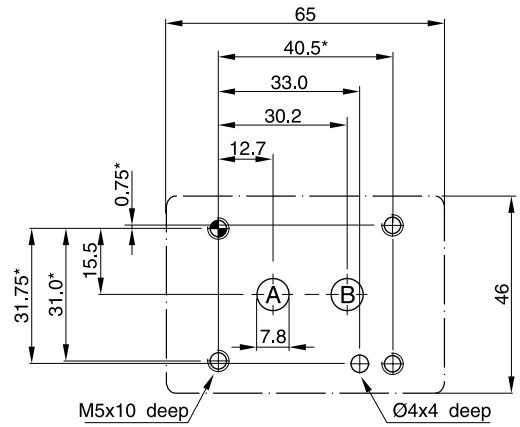
Bolt kits (Cylinder head ISO 4762-12.9 not included)

Nominal size Valve	Valve model	Quantity	Tightening torque [Nm]	Valve without rectifier plate		Valve with rectifier plate	
				Dimensions	Order No.	Dimensions	Order No.
NG06	DUR*L06	2	7.6 Nm	2x M5x60	BK380	2x M5x100	BK466

Seal kits

| NBR	FPM
SK-DUR***L	SK-DUR***L FPM

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Parker Hannifin Corporation

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 4 identical, symmetrically arranged check valves. Thus the differential pressure is the same in both flow directions.
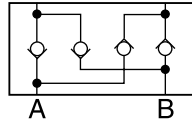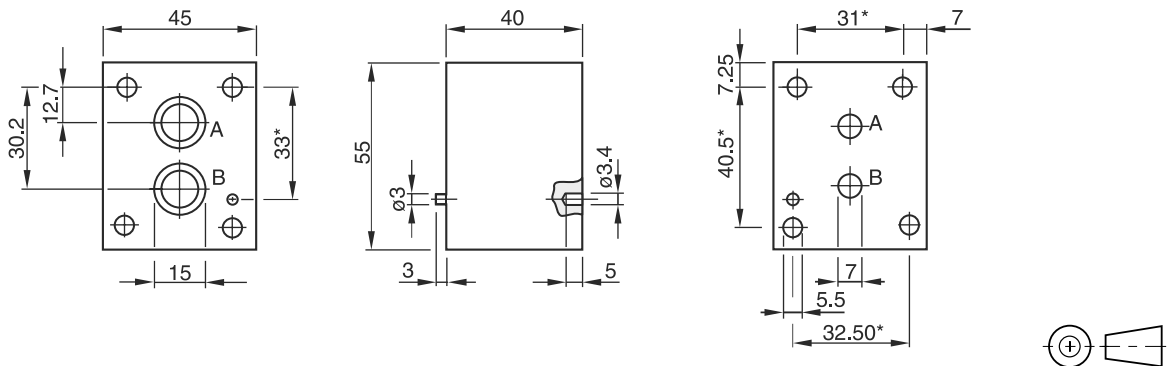
∆p/Q-curve

Measured with HLP46 at 50 °C.

5
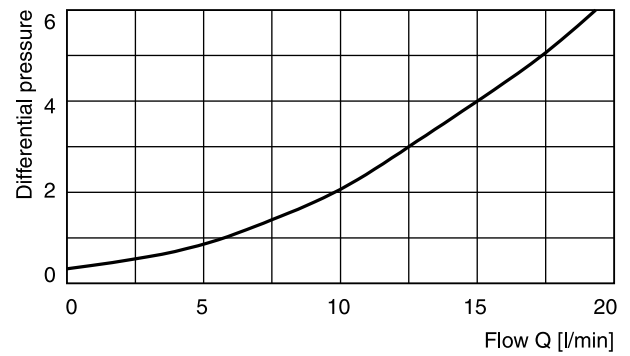
Dimensions

Dimension tolerances
* : ± 0.1mm
others : ± 0.2 mm
holes and silhouette of valve body : untoleranced dimension

Ordering code: HR OA 06 C

O-ring for sealing the connecting surface

Connections	Dimensions	required units
A, B	12 x 1.5	2

Subplates [1]

Ordering code	
SPD 22 B 910	P, A, B and T = G1/4
SPD 23 B 910	P, A, B and T = G1/8

[1] Details see chapter 12, series SPD.

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