

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.

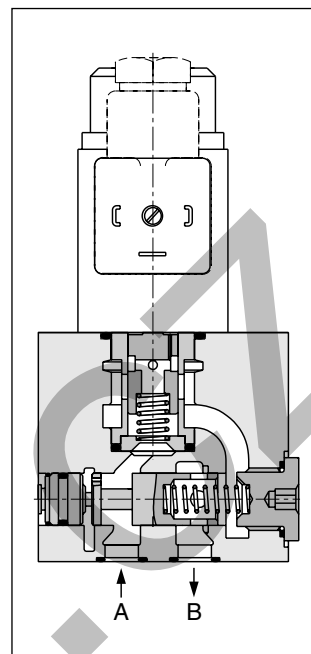
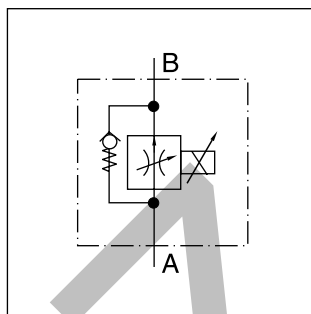
For meter-in and meter-out control of an actuator a rectifier plate can be used.

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

2-way flow control
valve with bypass
check valve



Nominal
flow

L

Linear
solenoid
24 V / 0.68 A

06

Size
NG06

P

Progressive
performance
curve

K

Seal

1

Design
series
(not required
for ordering)

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

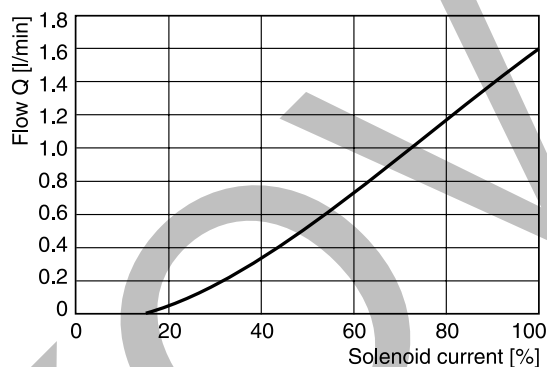
Code	Seal
A	NBR
1	FPM

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 connector)	
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 recommended	[cSt] / [mm²/s]	20 ... 400	
	[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 $Q \leq 20 \% \bullet Q_{nom}$	[%]	6	
Repeatability at $\Delta U_{set} = 5 V$	[%]	2	

Performance curves

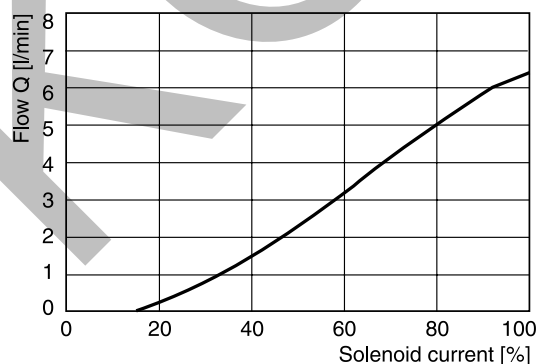
DUR 1.6 L 06 PK*



DUR 18 L 06 PK*

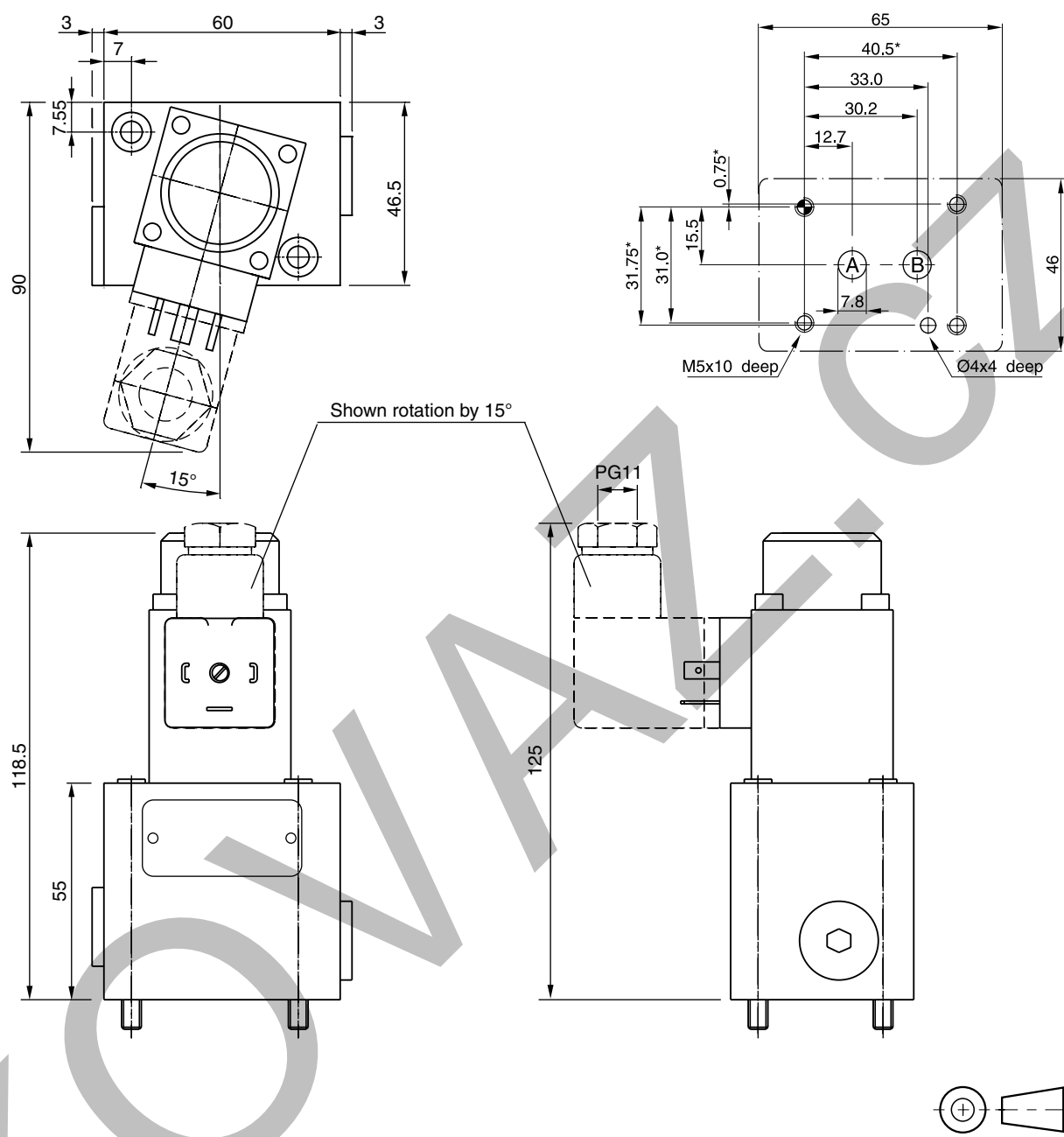


DUR 6.3 L 06 PK*



All characteristic curves measured with HLP46 at 50 °C.

Mounting pattern



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

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

Seal kits

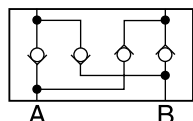
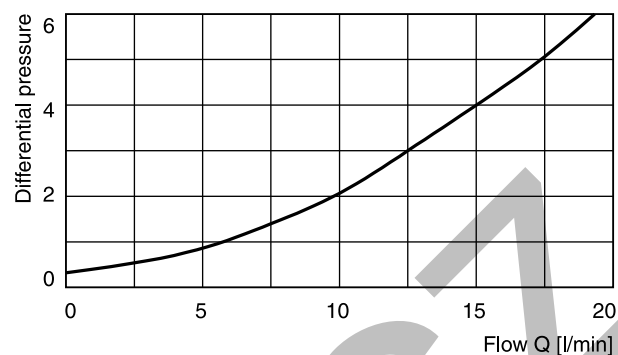
NBR	FPM
SK-DUR***L	SK-DUR***L FPM

Sandwich rectifier plate

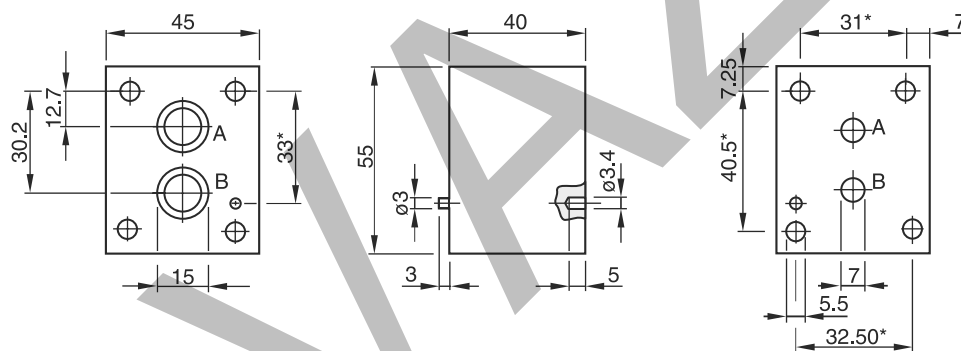
If a 2 way flow control valve is used in combination with a rectifier plate the valve can be used for meter-in and meter-out flow control of an actuator.

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.

 **$\Delta p/Q$ -curve**

Measured with HLP46 at 50 °C.

Dimensions

Dimension tolerances

*

: $\pm 0.1\text{mm}$

others

: $\pm 0.2\text{ mm}$

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.