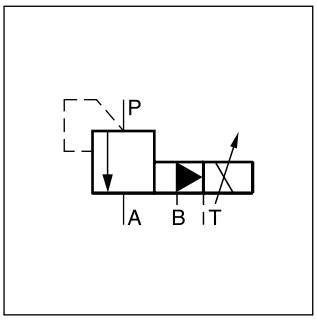
Pilot operated relief valve with proportional adjustment. Series VBY*K is a pilot operated pressure valve with external drain.

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

VBY*K06



VBY*K06

Features

- Proportional adjustment
- Subplate mounting acc. to ISO 5781
- External drain
- Main stage spool type valve
- Pilot stage seated type valve

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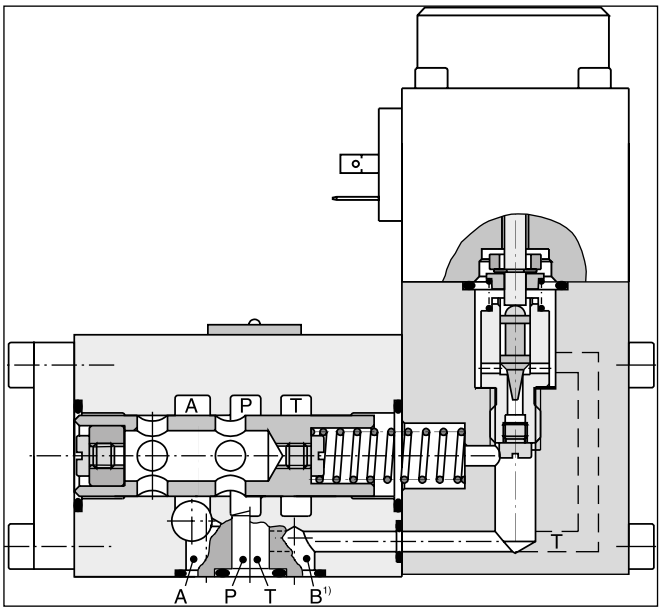


Ordering code

VBY		K	06		
Pressure relief valve	**Max. setting range**	**Proportional solenoid 9 VDC / 2.5 A**	**Nominal size NG06**	**Seals**	**Design series** (not required for ordering)

Code	Max. setting range
064	**64 bar**
100	100 bar
160	**160 bar**
210	210 bar
315	315 bar

Code	Seals
N	**NBR**
V	FPM

Bold letters =
Short-term availability

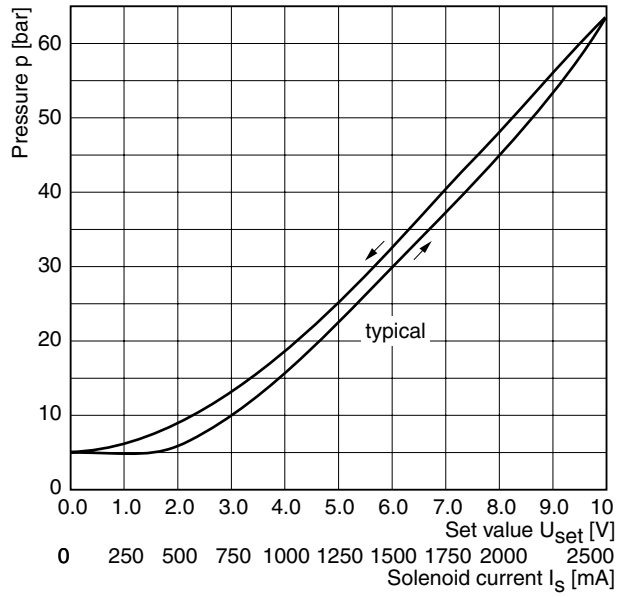
1) Port B for remote control, otherwise to be blocked.

Technical data

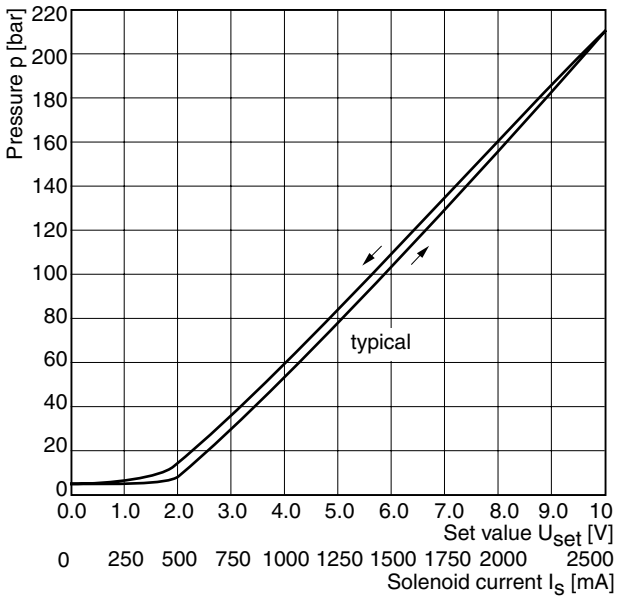
General			
Design			Proportional pressure relief valve
Nominal size			**NG06**
Interface			Subplate mounting according to ISO 5781
Actuation			Proportional solenoid
Mounting position			unrestricted
Ambient temperature		[°C]	-20 ... +60
$MTTF_D$ value		[years]	75
Weight		[kg]	2.4
Hydraulics			
Max. operating pressure		[bar]	P, A: 315, Port B blocked, Port T depressurized
Nominal flow		[l/min]	40
Adjustment range		[bar]	up to 64, 100, 160, 210, 315
Fluid			Hydraulic oil according to DIN 51524
Viscosity	permitted	[cSt] / [mm²/s]	20 ... 400
	recommended	[cSt] / [mm²/s]	30 ... 80
Fluid temperature		[°C]	-20...+70 (NBR: -25...+70)
Filtration			ISO 4406; 18/16/13
Linearity		[%]	±3.5 at > 15 % pnom.
Repeatability		[%]	<±2
Hysteresis		[%]	<3
Response time		[ms]	<150
Electrical			
Duty ratio		[%]	100 ED
Protection class			IP65 at EN 60529 (with correctly mounted plug-in connector)
Nominal voltage		[VDC]	9
Max. current		[A]	2.7
Nom. current		[A]	2.5
Ambient temperature		[°C]	-20...+70
Coil resistance		[Ohm]	2.1 at 20 °C
Solenoid connection			Connector as per EN 175301-803
Power amplifier			PCD00A-400

Characteristic pressure curves, p = f (U_{set})

Setting range max. 64 bar



Setting range max. 210 bar



All characteristic curves measured with HLP46 at 50 °C.

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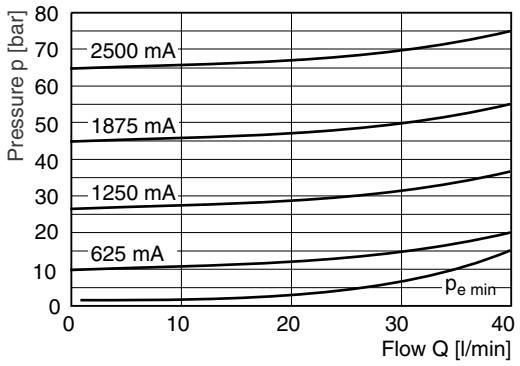
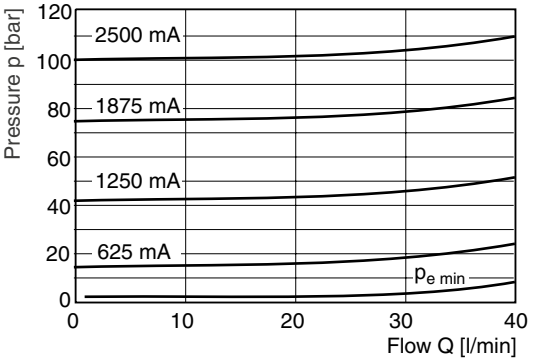
P/Q characteristics

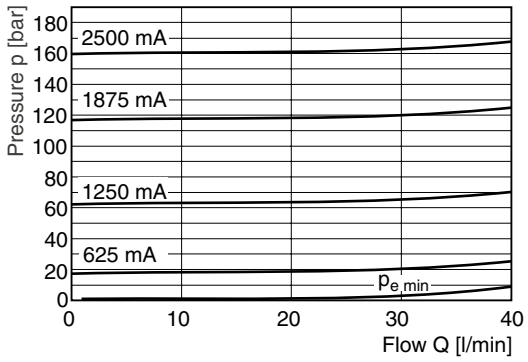
Setting range max. 64 bar



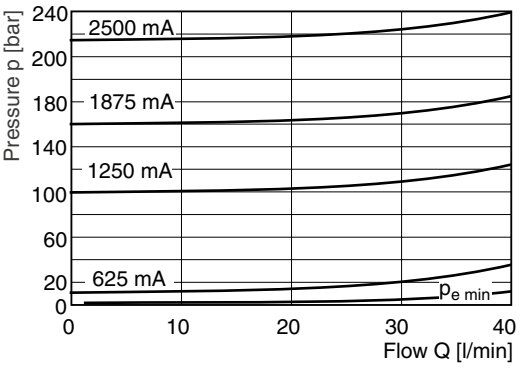
Setting range max. 100 bar



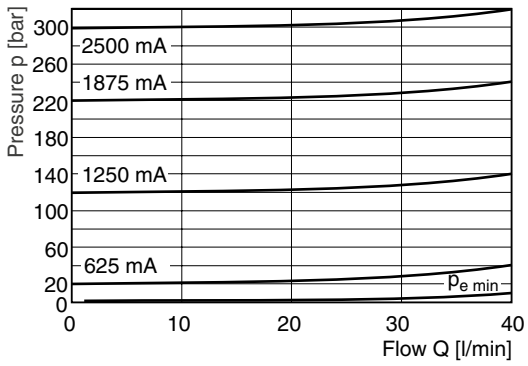
Setting range max. 160 bar



Setting range max. 210 bar

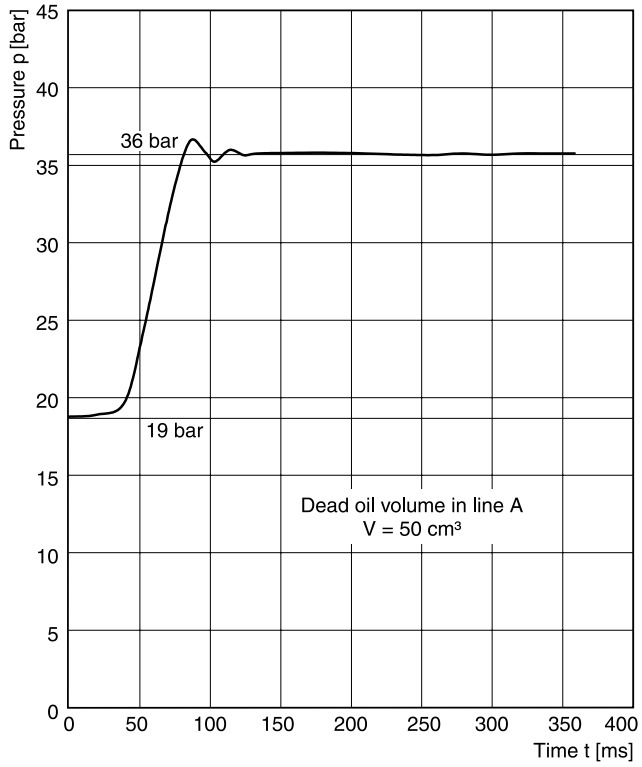


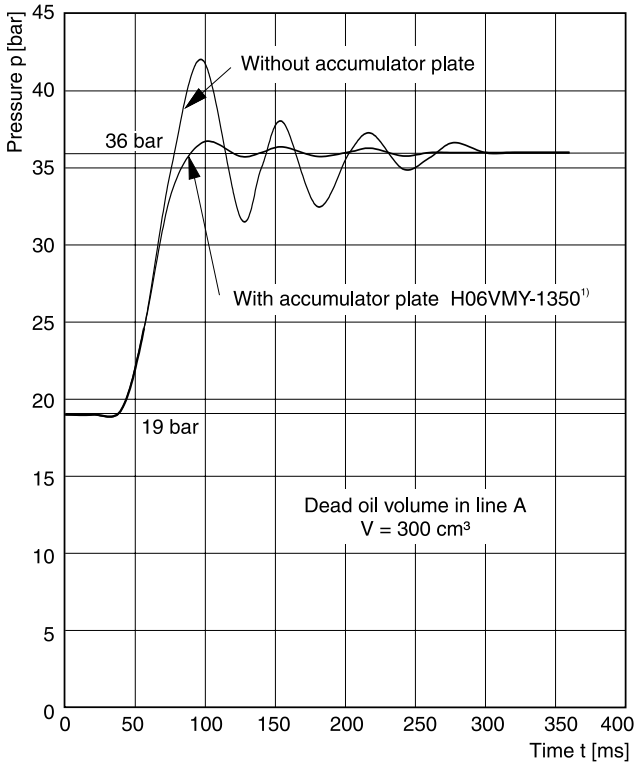
Setting range max. 315 bar



All characteristic curves measured with HLP46 at 50 °C.

Step response signal, setting range max. 210 bar





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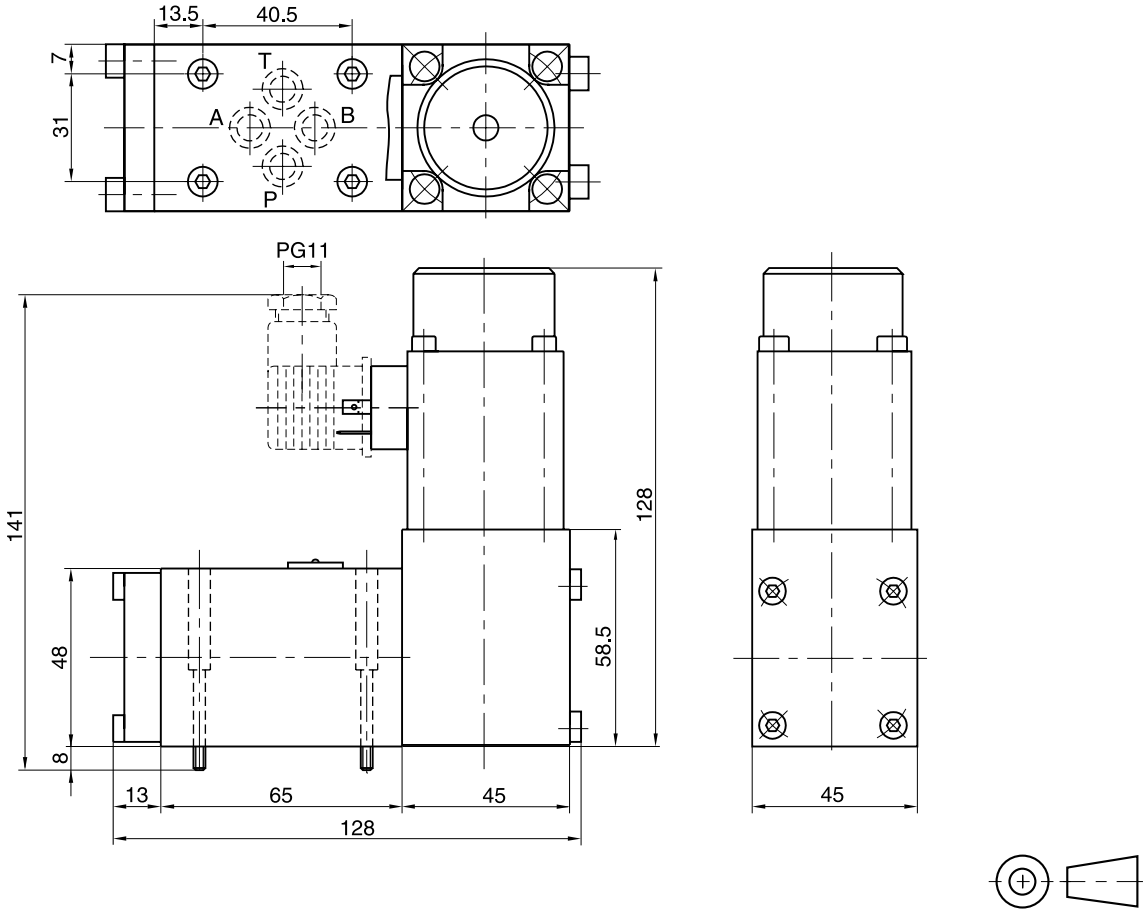
All characteristic curves measured with HLP46 at 50 °C.

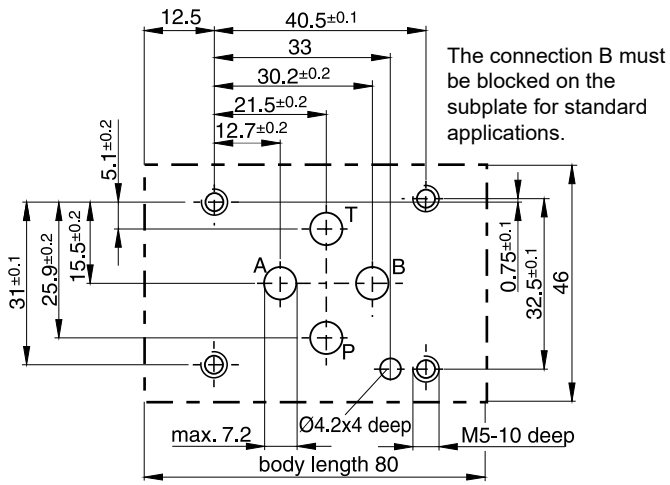
1) See series VMY for details.

NG06



Surface finish	Bolt kit			Kit NBR	Kit FPM
R_{max}6.3 ⏥ 0.01/100	BK375	4x M5x30 ISO 4762-12.9	7.6 Nm ±15 %	SK-VMY-L06-N	SK-VMY-L06-V

Mounting pattern ISO 5781-03-04-0-00



The connection B must be blocked on the subplate for standard applications.