Proportional pressure reducing valves series PRPM keep a constant pressure p_{red} on the secondary side - independent of pressure fluctuations on the primary side. The integrated pressure relief function obviates the need for an additional pressure relief valve on the secondary side and reliefs to tank, if the reduced pressure rises above the setting pressure.

The proportional pressure reducing valve reduces the pressure in output port $\mathbf{p}_{\mathrm{red}}$ in proportion to the solenoid current. The PRPM works practically independent of the inlet pressure. In non-activated mode, the connection to the tank is fully open with a min. pressure corresponding to the spring force.

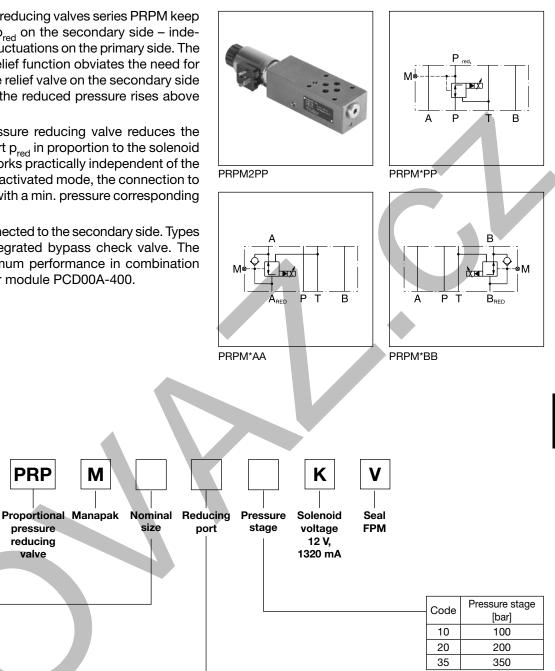
The gauge port is connected to the secondary side. Types A and B have an integrated bypass check valve. The PRPM provides optimum performance in combination with a digital amplifier module PCD00A-400.

PRP

pressure

reducing

valve



Ordering code

Code

2

3

Code

AA

BB

PP

Nominal size

NG06

NG10

Port

А

В

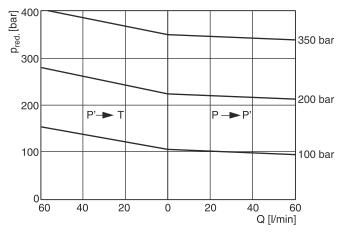
Ρ

General				
Design			Pilot operated proportional pressure reducing valve	
Construction			Sandwich type	
Operation			Proportional solenoid	
Size			NG06	NG10
Mounting interface			ISO 4401	
Mounting position			unrestricted	
Ambient temperature [°C]		-20 +60		
MTTF _D value [years]		75		
Weight		[kg]	2.0	3.2
Hydraulic				
Fluid		Hydraulic oil according to DIN 51524		
Fluid temperature [°C]		-20 +70		
Viscosity,	permitted recommended	[cSt] / [mm²/s] [cSt] / [mm²/s]		
Max. operating pressure [bar]		350		
Reduced nom. pressure [bar]		100; 200; 350		
Max. flow [l/min]		60	60	
Pilot flow		see performance curves		
Filtration		ISO 4406 (1999); 18/16/13		
Resolution [mA]		1 mA		
Repeatability [%]		≤1 (with optimal dither signal)		
Hysteresis [%]		≤4 (with optimal dither signal)		
Electrical				
Solenoid		Proportional solenoid, wet-pin push type, pressure tight		
Duty ratio [%]		100 ED		
Protection class		IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)		
Supply voltage [V]			12 (1320 mA)	
Solenoid connection		Connector as per EN 175301-803		
Amplifier		PCD00A-400		

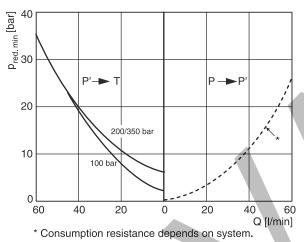


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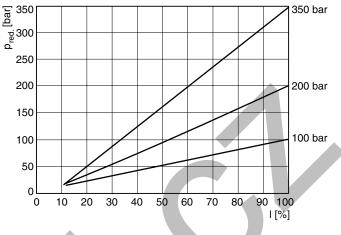
Pressure/flow NG06/NG10



Pressure/flow (min. adjustable)



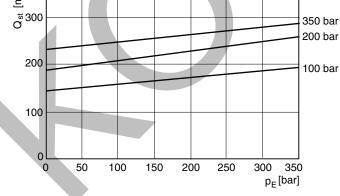
Pressure/adjustment at Q=0I/min (static)



7

Lim 400 Lim 10 0 0 0 0

Pilot flow NG06/NG10

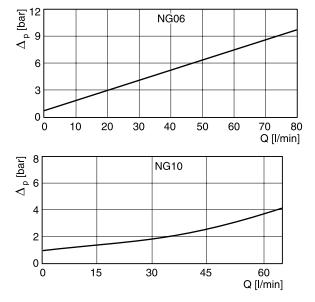


All characteristic curves measured with HLP46 at 50 °C.

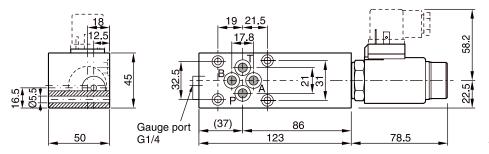
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Pressure drop/flow over check valve

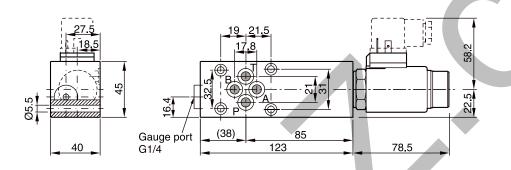


PRPM2AA*, BB**

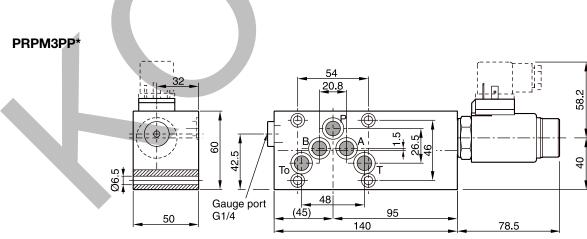


PRPM2PP*

7



PRPM3AA*, BB** 54 20.8 ┦╴╒┞╴ 58.2 \oplus .∩ -† 26.5 46 А 60 40 Ð 42 Ø6.5 Τc mmin (() ⇔ mmm 48 Gauge port G1/4 (45) 95 50 140 78.5



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