Direct Operated Pressure Reducing Valve Series PRDM

Series PRDM are direct operated pressure reducing valves to regulate pressure in one area of a hydraulic circuit at a predetermined level below normal system pressure. Additionally, an integral pressure relieving function for the secondary reduced pressure circuit is incorporated into the design.

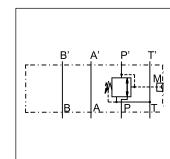
## Funtion

These valves are "normally open" devices that allow fluid to flow through the controlled port during their non-actuated or "at rest" condition. When downstream pressure exceeds the value set by the spring force, the control piston moves off its seat, closing off the flow path and thus reducing the fluid passing through from the main system. The cushioned piston modulates to maintain the preset pressure in this branch of the hydraulic circuit. If, due to external forces, the pressure continues to rise in this branch circuit, the piston will keep moving against the spring force allowing fluid to be drained to the tank, thereby limiting maximum pressure to the valve's setting.

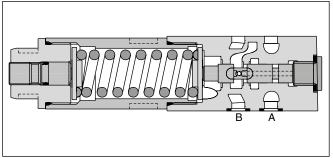
# Features

- 3-way design for pressure relieving of the secondary side
- The direct operated, cushioned piston design results in fast response, low leakage and minimal hysteresis.
- Reduced pressure in the 'P', 'A' or 'B' port.
  Pressure settings:
- 25, 64, 160, 210, 350 bar for PRDM2, 19, 50, 100, 150, 210 bar for PRDM3.
- Gauge port
- PRDM2 NG06 (CETOP 03) PRDM3 - NG10 (CETOP 05)

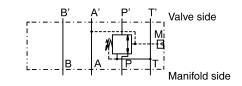




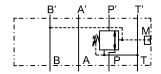




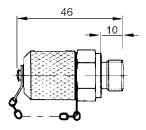
# Schematics PRDM\*AA



#### PRDM\*BB



# Gauge port option C



PRDM UK.INDD CM 13.08.18



#### Parker Hannifin Corporation Hydraulics Group

PRDM\*PP



# Direct Operated Pressure Reducing Valve Series PRDM

Ordering code														
	PR	<b>ND</b>	Μ							V		) [ ] L		
	Press reduc valve, c opera	cing direct	 Manapał	x Size		Port uction	Pressu rang		ustment	Seal FPM	Gauge port	<b>s</b> (not	esign eries requirec ordering)	
Code	Size	]											Code	Gauge port
2	NG06	1											G	G1⁄4
3	NG10	1											С	Coupling M16
		-												
Code	Connection	<u> </u>										Code		Adjustment
PP	Р	1										S		agon socket
AA	Α	1										L	C	ylinder lock
BB	В											К	Tu	rning knob <sup>1)</sup>
		_												
Pre	essure range	}												
Code	PRDM2													
02	up to 25 bar													
06	up to 64 bar													
16	up to 160 bar													
21	up to 210 bar													
35	up to 350 bar													
Code	PRDM3													
01	up to 19 bar													
05	up to 50 bar													
10	up to 100 bar	4												
15	up to 150 bar	-												
21 up to 210 bar Bold letters =														
Short-term availability														

1) NG06 only.

### **Technical data**

General							
Series	PRDM2	PRDM3					
Size	NG06	NG10					
Mounting interface	ISO 4401	ISO 4401					
Ambient temperature	[°C] -20+60	-20+60					
Weight	[kg] 1.3	2.6					
MTTF <sub>D</sub> value [ye	ars] 150	150					
Hydraulic							
Max. operating pressure P, A, B	350	315					
Т	bar] 50	50					
Fluid	Hydraulic oil according to DIN 51	Hydraulic oil according to DIN 51524					
Fluid temperature	[°C] -20+70	-20+70					
Viscosity, permitted [cSt] / [mi recommended [cSt] / [mi	n²/s] 20 400 n²/s] 30 80	20 400 30 80					
Filtration	ISO 4406 (1999); 18/16/13	ISO 4406 (1999); 18/16/13					



40

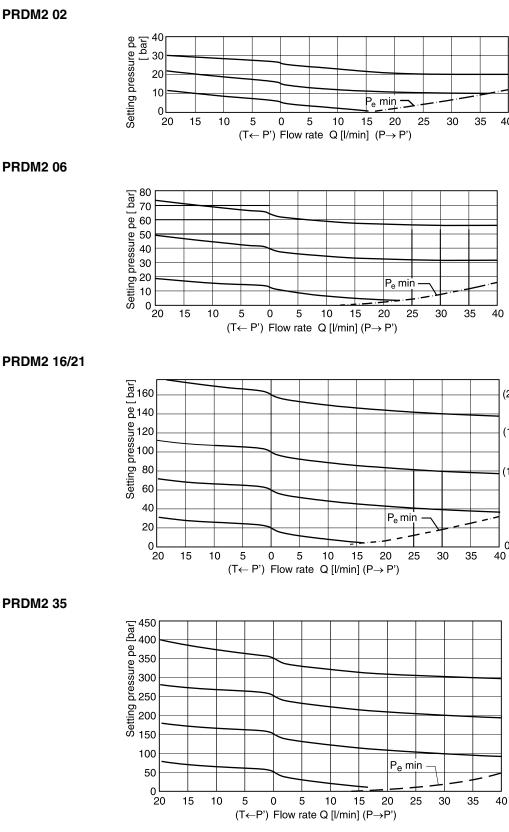
(200)

(150)

(100)

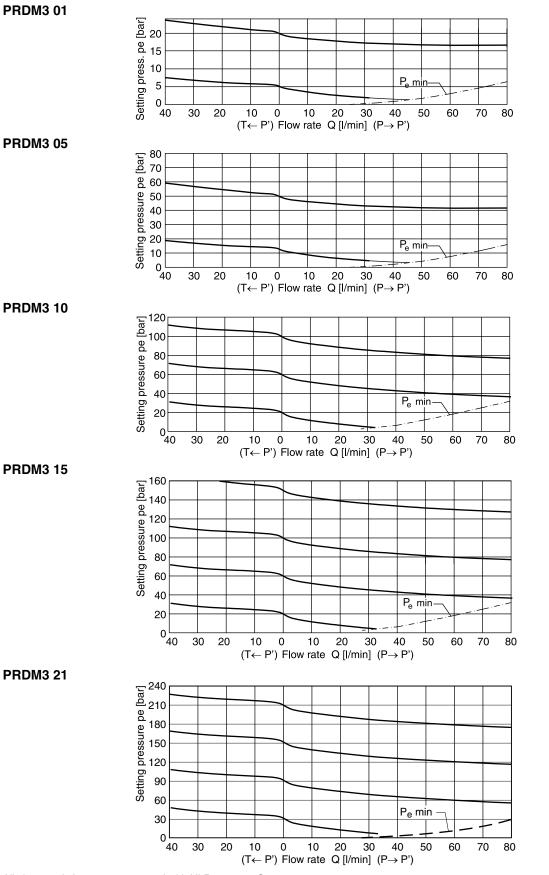
(50)

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All characteristic curves measured with HLP46 at 50 °C.

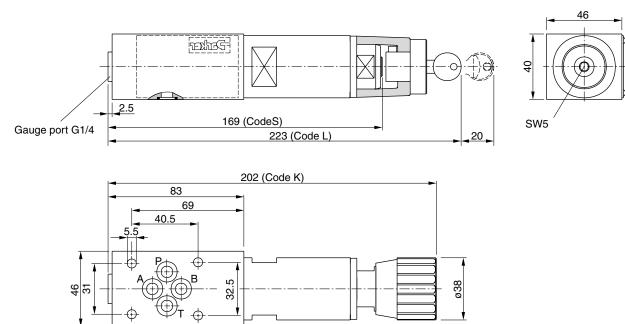


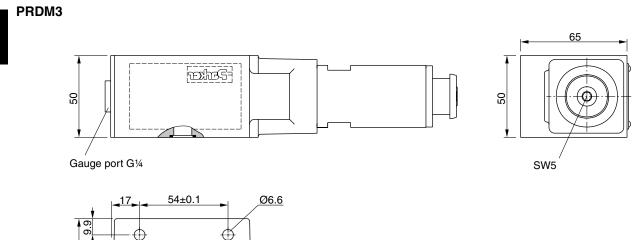


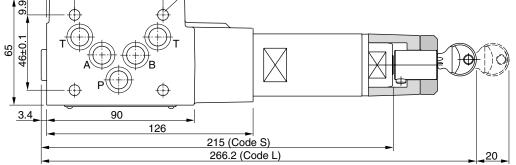
All characteristic curves measured with HLP46 at 50 °C.



# PRDM2







Seal kit order code					
	Seal	PRDM2	PRDM3		
	V	SK-PRDM2-V	SK-PRDM3-V		

