

# Parker Series RDM Direct Operated Pressure Relief Valve Service Manual

The direct operated pressure relief valves series RDM are in sandwich design for easy configuration of stock systems. They relieve the pressure of the hydraulic system to the adjusted value.

## Function

PT... pressure is relieved from P to T.

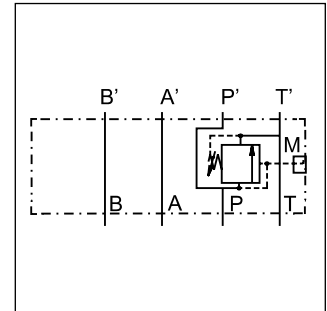
TT... pressure pre-loading in T.

## Features

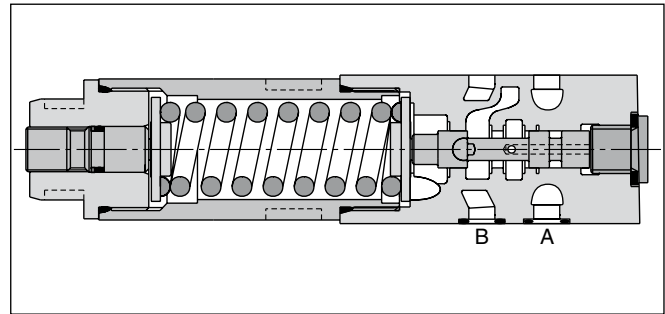
- The direct operated, cushioned piston design results in fast response, low leakage and minimal hysteresis.
- Pressure settings:  
bar 25, 64, 160, 210, 350 for RDM2,  
bar 19, 50, 100, 150, 210 for RDM3.
- Adjustment modes:
  - Hexagon socket
  - Cylinder lock
  - Turning knob
- Gauge port
- RDM2 - NG06 (CETOP 03)  
RDM3 - NG10 (CETOP 05)



RDM2



Example PT



RDM2

## Ordering code

<b>RD</b>	<b>M</b>					<b>V</b>		
Pressure relief valve, direct operated	Manapak	Size	Pressure relief	Pressure range	Adjustment	Seal FPM	Gauge port	Design series (not required for ordering)
Code	Code	Code	Code	Code	Code	Code	Code	Code
<b>2</b>	<b>NG06</b>		<b>PT</b>		<b>S</b>		<b>G<sup>2)</sup></b>	
<b>3</b>	<b>NG10</b>		TT <sup>1)</sup>		L		C	
					K			

Code	Size
<b>2</b>	<b>NG06</b>
<b>3</b>	<b>NG10</b>

Code	Pressure relief
<b>PT</b>	<b>P</b>
TT <sup>1)</sup>	T

Code	Gauge port
<b>G<sup>2)</sup></b>	<b>G<sup>1/4</sup></b>
C	Coupling M16

Code	Adjustment
<b>S</b>	<b>Hexagon socket</b>
L	Cylinder lock
K	Turning knob <sup>3)</sup>

Pressure range	
Code	RDM2
02	1.5 to 25 bar
<b>06</b>	<b>1.5 to 64 bar</b>
<b>16</b>	<b>3 to 160 bar</b>
<b>21</b>	<b>3 to 210 bar</b>
35	5 to 350 bar
Code	RDM3
01	1.5 to 19 bar
05	1.5 to 50 bar
10	3 to 100 bar
15	3 to 150 bar
21	3 to 210 bar

**Bold letters = Short-term availability**

<sup>1)</sup> NG06 only, max. 160 bar.

<sup>2)</sup> Standard in housing.

<sup>3)</sup> NG06 only.

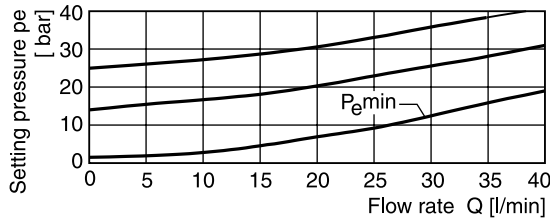
Technical Data / Performance Curves

Technical data

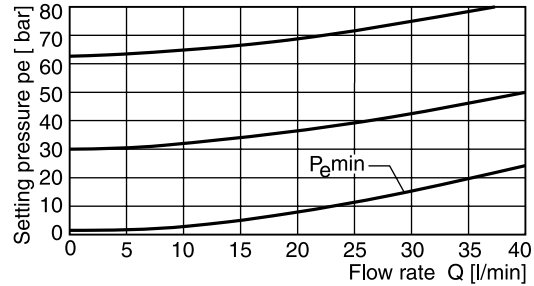
General			RDM2	RDM3
Series			NG06	NG10
Size				
Mounting interface		ISO 4401		
Weight	[kg]		1.3	2.6
MTTF <sub>D</sub> value	[years]	150		
Ambient temperature	[°C]	-20...+60		
Hydraulic				
Max. operating pressure	P, A, B [bar]		350	315
	T [bar]		50	10
Fluid		Hydraulic oil according to DIN 51524		
Fluid temperature	[°C]	-20...+70		
Viscosity, permitted	[cSt] / [mm <sup>2</sup> /s]	20 ... 400		
Viscosity, recommended	[cSt] / [mm <sup>2</sup> /s]	30 ... 80		
Filtration		ISO 4406 (1999); 18/16/13		
Max. flow	[l/min]		40	80

Performance curves

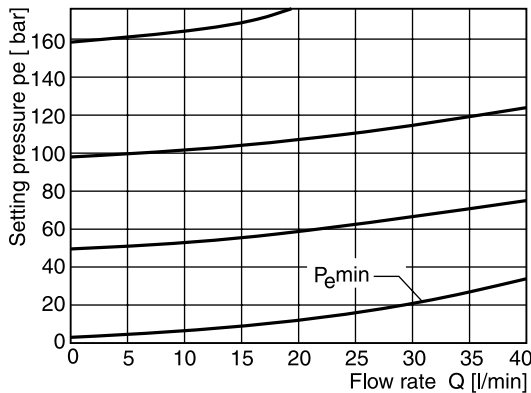
RDM2 02



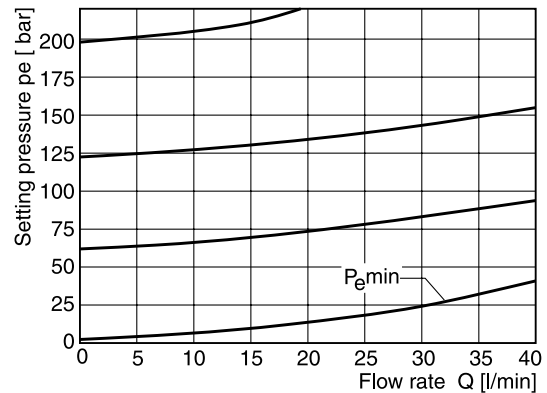
RDM2 06



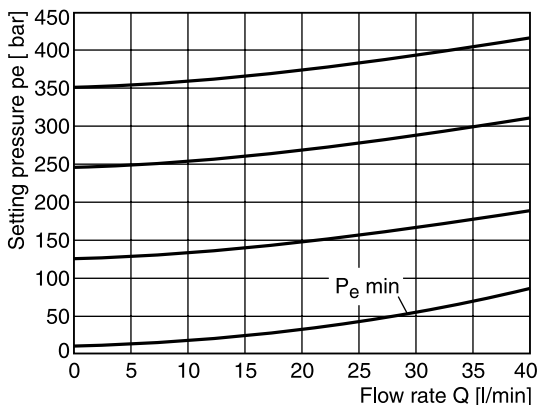
RDM2 16



RDM2 21



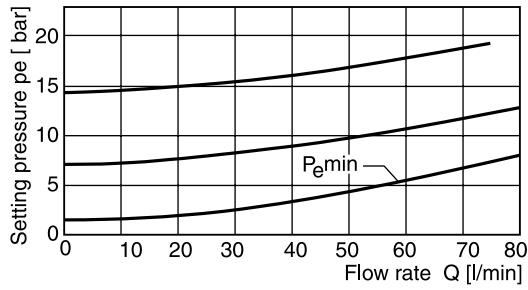
RDM2 35



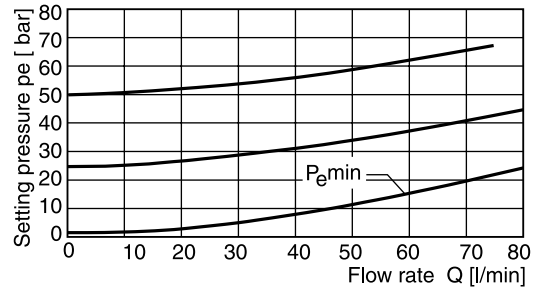
All characteristic curves measured with HLP46 at 50 °C.

# Performance Curves / Schematics

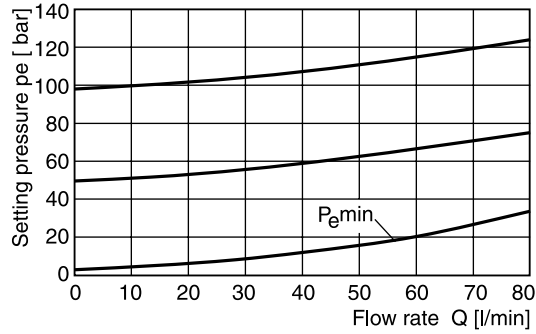
## RDM3 01



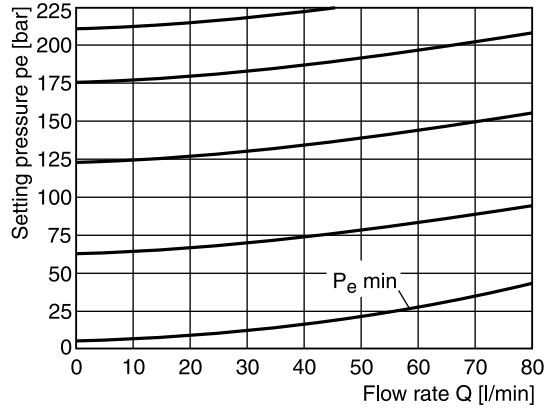
## RDM3 05



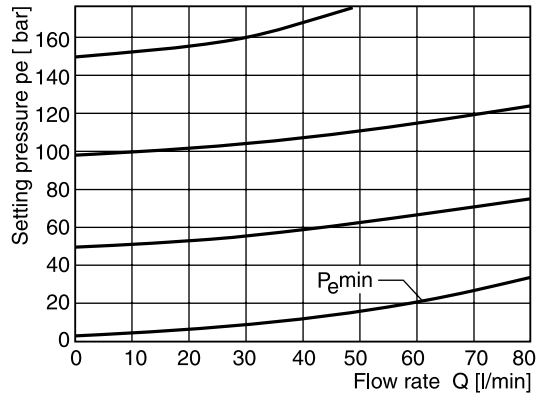
## RDM3 10



## RDM3 21



## RDM3 15

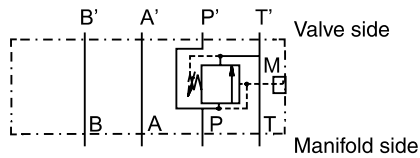


All characteristic curves measured with HLP46 at 50 °C.

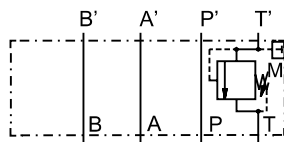
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## Schematics

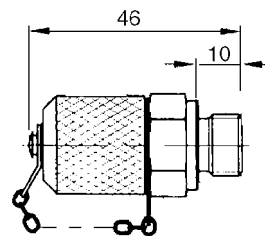
### RDM\*PT



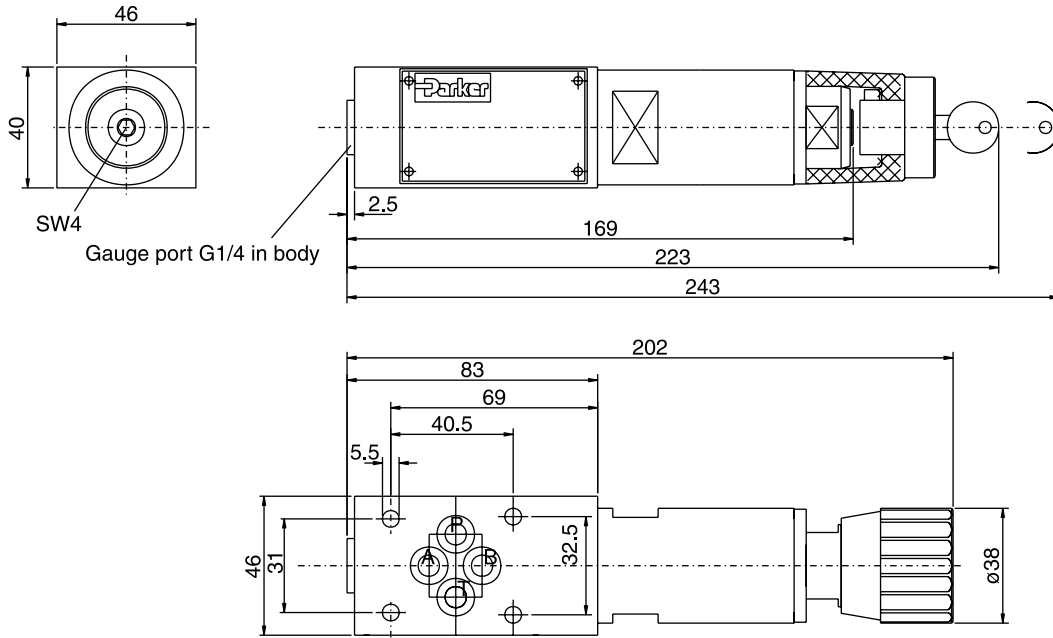
### RDM\*TT



## Gauge port option C

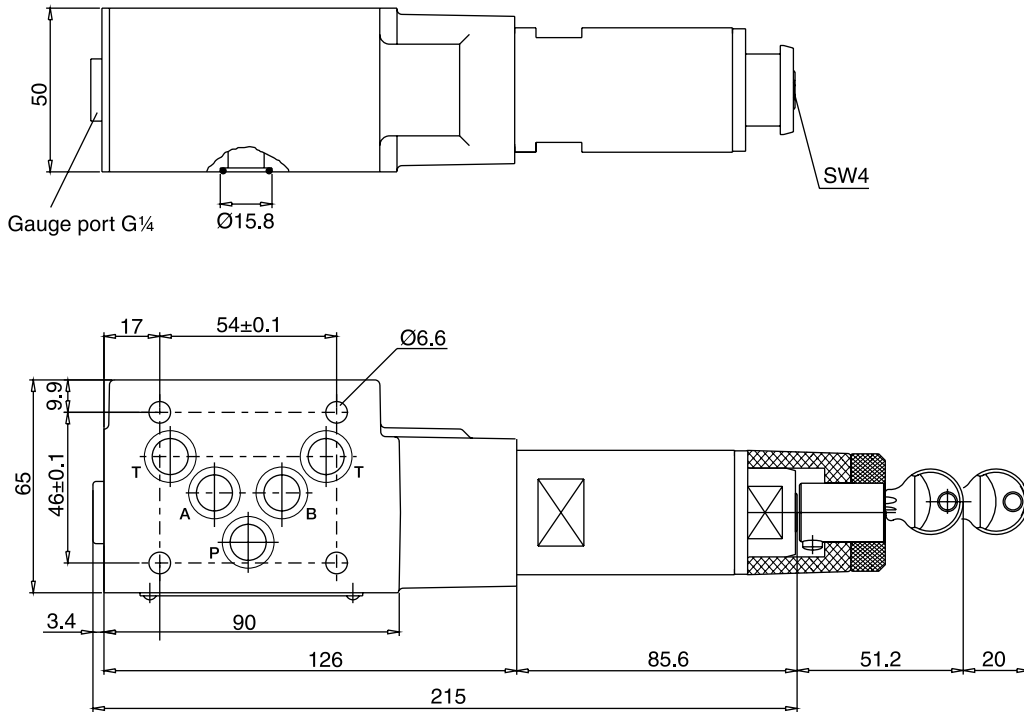


**RDM2**



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**RDM3**



Seal kit order code		
Seal	RDM2	RDM3
V	SK-RDM2-V	SK-RDM3-V

