

## General Description

Series RM relief valves limit system pressure by opening to tank when system pressure reaches the valve setting. With D03 size, they can also be configured to limit the 'A' or 'B' work port pressures independently.

## Features

- RM sandwich style relief valves can be used to limit pressure in the 'P' port, 'A' port, or 'B' port.
- Valve bodies are manufactured from steel which provide extra strength and durability for longer life. Internal hardened steel components also provide longer life.
- Three pressure adjustment options are available: slotted screw, knob and locking knob.
- SAE Gage Port

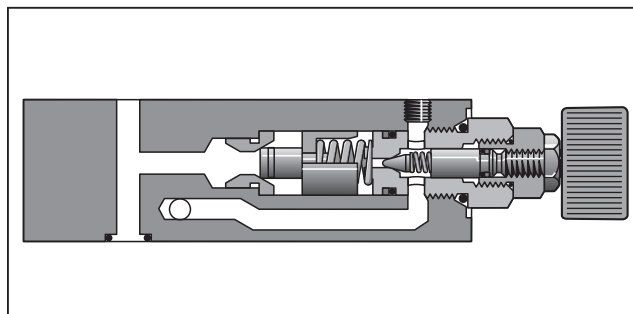
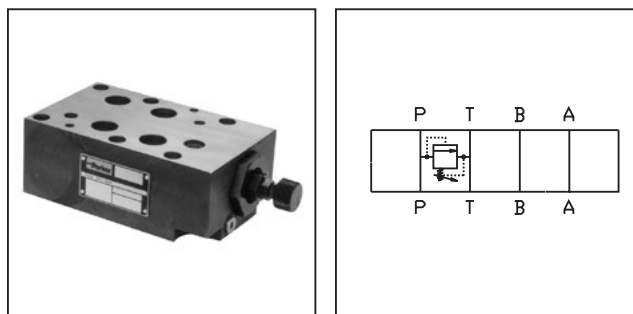
## Specifications

	RM2	RM3	RM6										
<b>Mounting Pattern</b>	NFPA D03, CETOP 3, NG 6	NFPA D05, CETOP 5, NG 10	NFPA D08, CETOP 8, NG 25										
<b>Minimum Pressure</b>	10 Bar (150 PSI) with rated flow, 150 SSU oil, and fluid temperature of 38°C (100°F). <sup>1</sup>												
<b>Maximum Pressure</b>	350 Bar (5000 PSI)	350 Bar (5000 PSI)	350 Bar (5000 PSI)										
<b>Minimum Flow</b>	3.78 LPM (1 GPM)	3.78 LPM (1 GPM)	3.78 LPM (1 GPM)										
<b>Maximum Flow</b>	53 LPM (14 GPM)	76 LPM (20 GPM)	341 LPM (90 GPM)										
<b>Pressure Range</b>	<table border="0"> <tr> <td>Code</td> <td>Pressure Range</td> </tr> <tr> <td>07</td> <td>10 to 70 Bar (150 - 1000 PSI)</td> </tr> <tr> <td>17</td> <td>10 to 175 Bar (150 - 2500 PSI)</td> </tr> <tr> <td>25</td> <td>10 to 250 Bar (150 - 3500 PSI)</td> </tr> <tr> <td>35</td> <td>10 to 350 Bar (150 - 5000 PSI)</td> </tr> </table>			Code	Pressure Range	07	10 to 70 Bar (150 - 1000 PSI)	17	10 to 175 Bar (150 - 2500 PSI)	25	10 to 250 Bar (150 - 3500 PSI)	35	10 to 350 Bar (150 - 5000 PSI)
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<b>Filtration</b>	ISO 4406 (1999); 18/16/13 (meet NAS 1638:7)												
<b>Venting</b>	Connecting the vent port to tank allows the relief valve to divert flow at minimum pressure. <sup>2</sup>												
<b>Remote Control</b>	Remote control valve connected to the vent port can be used to control the pressure. <sup>3</sup>												

<sup>1</sup> Change in flow, temperature or fluid (SSU) rating will affect valve minimum pressure.

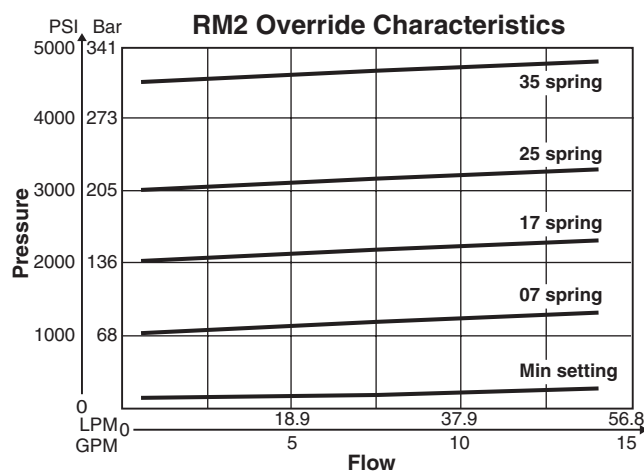
<sup>2</sup> Not available on Model RM2.

<sup>3</sup> Set main valve pressure 10 Bar (150 PSI) higher than remote pilot.



**B**

## Performance Curves



VISCOSITY CORRECTION FACTOR							
Viscosity (SSU)	75	150	200	250	300	350	400
% of ΔP (Approx.)	93	111	119	126	132	137	141

Curves were generated using 100 SSU hydraulic oil. For any other viscosity, pressure drop will change per chart.

**WARNING:** This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**B**

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">RM</div> Relief Valve	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> Size	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> Port Option	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> Pressure Range	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> Adjustment	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> Seal	<div style="border: 1px dashed black; padding: 2px; width: 30px; height: 30px; margin: 0 auto;">*</div> Design Series NOTE: Not required when ordering.
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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>NFPA D03 Subplate Mounting</td> </tr> <tr> <td>3</td> <td>NFPA D05 Subplate Mounting</td> </tr> <tr> <td>6</td> <td>NFPA D08 Subplate Mounting</td> </tr> </tbody> </table>	Code	Description	2	NFPA D03 Subplate Mounting	3	NFPA D05 Subplate Mounting	6	NFPA D08 Subplate Mounting	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>PT</td> <td>Relief P to T</td> </tr> <tr> <td>AT*</td> <td>Relief A to T</td> </tr> <tr> <td>BT*</td> <td>Relief B to T</td> </tr> </tbody> </table> <p>* RM2 only.</p>	Code	Description	PT	Relief P to T	AT*	Relief A to T	BT*	Relief B to T	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>07</td> <td>10 to 70 Bar (150 to 1000 PSI)</td> </tr> <tr> <td>17</td> <td>10 to 175 Bar (150 to 2500 PSI)</td> </tr> <tr> <td>25</td> <td>10 to 250 Bar (150 to 3500 PSI)</td> </tr> <tr> <td>35</td> <td>10 to 350 Bar (150 to 5000 PSI)</td> </tr> </tbody> </table>	Code	Description	07	10 to 70 Bar (150 to 1000 PSI)	17	10 to 175 Bar (150 to 2500 PSI)	25	10 to 250 Bar (150 to 3500 PSI)	35	10 to 350 Bar (150 to 5000 PSI)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Type</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Nitrile</td> </tr> <tr> <td>V</td> <td>Fluorocarbon</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Type</th> </tr> </thead> <tbody> <tr> <td>K</td> <td>Knob</td> </tr> <tr> <td>L</td> <td>Locking Knob</td> </tr> <tr> <td>S</td> <td>Slotted Screw with Jam Nut</td> </tr> </tbody> </table>	Code	Type	N	Nitrile	V	Fluorocarbon	Code	Type	K	Knob	L	Locking Knob	S	Slotted Screw with Jam Nut
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	<p><b>Unit Weight:</b></p> <p>RM2 .95 kg (2.1 lbs.)</p> <p>RM3 3.0 kg (6.6 lbs.)</p> <p>RM6 5.9 kg (13.0 lbs.)</p>
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**Bold:** Designates Tier I products and options.

**Non-Bold:** Designates Tier II products and options. These products will have longer lead times.

**Sandwich Bolt Kits**

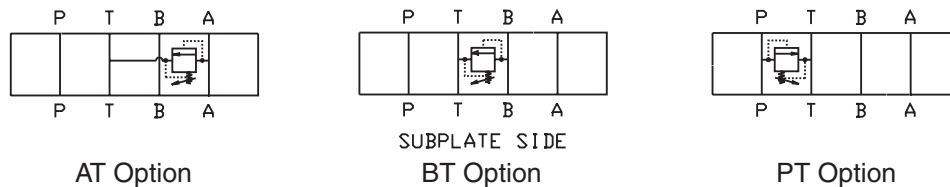
Size "2"				Size "3"			
No. of Sandwich	Sandwich & Valve Combination	Bolt Kit	Bolt Length mm (in)	No. of Sandwich	Sandwich & Valve Combination	D3W-30 D3DW & D31*W*	Bolt Length mm (in)
1	Sandwich & D1	BK243	73.2 (2.88)	1	Sandwich & D3	BK141	88.9 (3.50)
2	Sandwich & D1	BK225	111.3 (4.38)	2	Sandwich & D3	BK142	139.7 (5.50)
3	Sandwich & D1	BK244	152.4 (6.00)	3	Sandwich & D3	BK143	190.5 (7.50)
4	Sandwich & D1	BK245	190.5 (7.50)	* D31VW with internal pilot and internal drain only.			

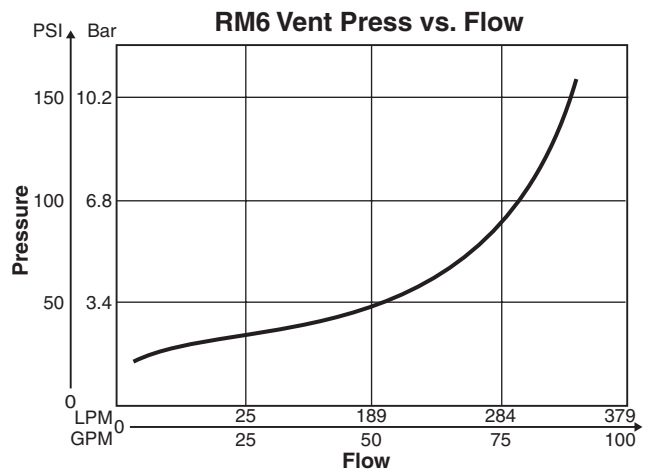
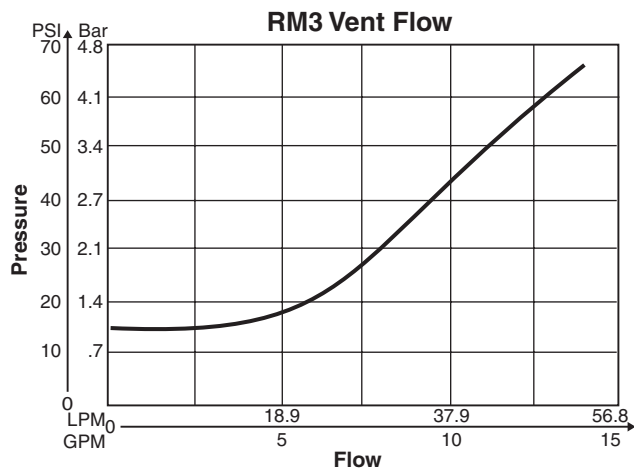
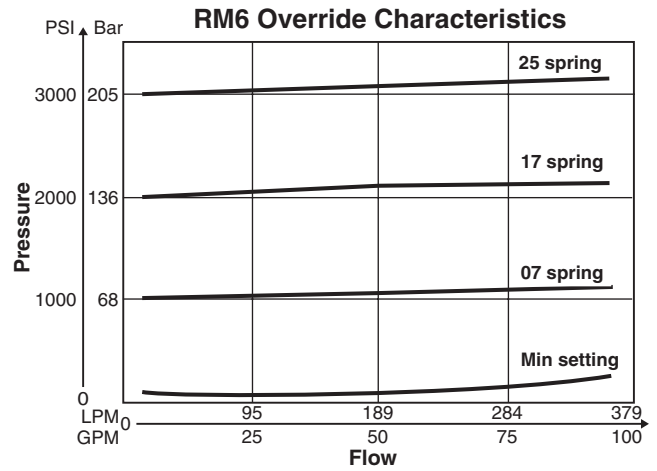
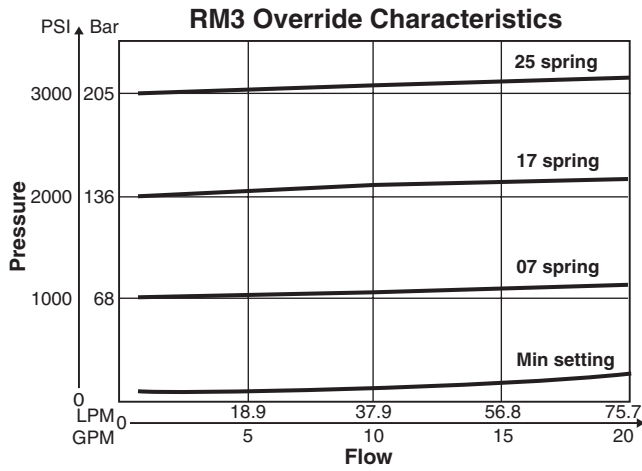
  

Size "6"			
No. of Sandwich	Sandwich & Valve Combination	Bolt Kit	Bolt Length mm (in)
1	Sandwich & D6	BK121	133.4 (5.25)
2	Sandwich & D6	BK122	203.2 (8.00)
3	Sandwich & D6	BK123	273.1 (10.75)
4	Sandwich & D6	BK124	342.9 (13.5)

Bolt Kits must be ordered separately.

**Schematics**





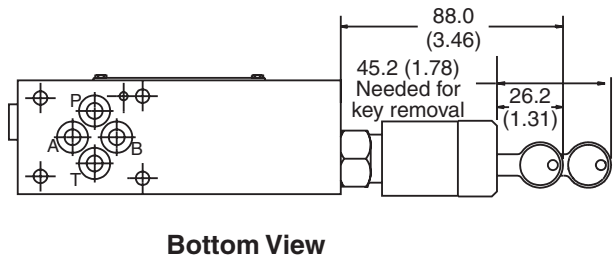
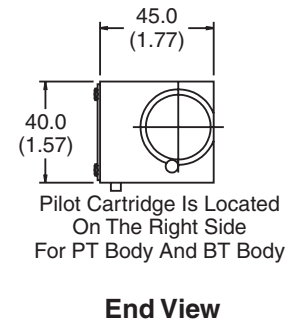
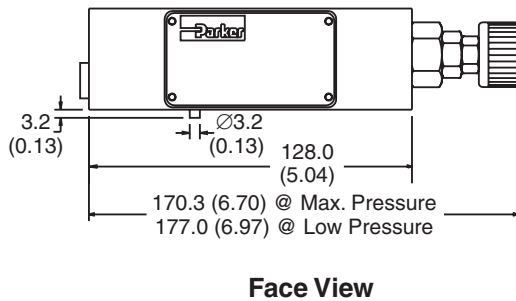
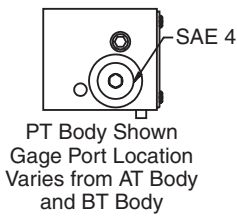
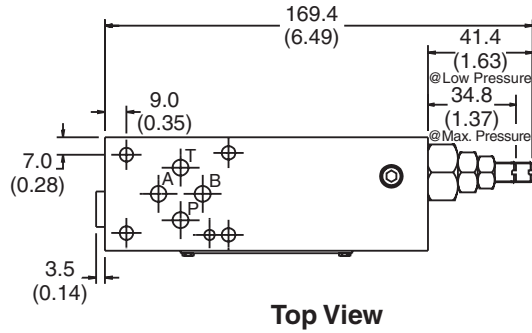
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**Dimensions**

**Series RM2**

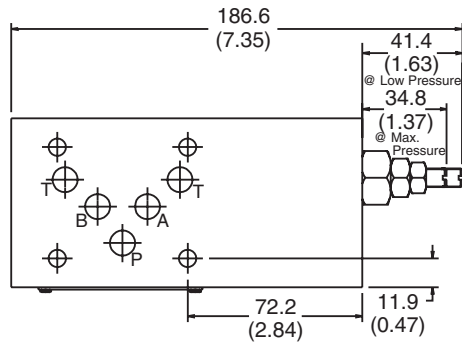
Inch equivalents for millimeter dimensions are shown in (\*\*)

**B**

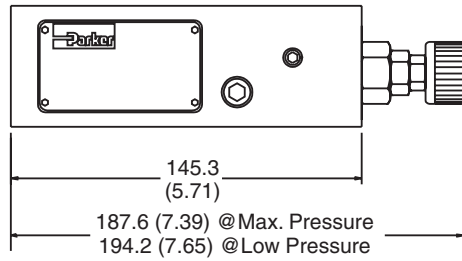
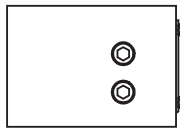


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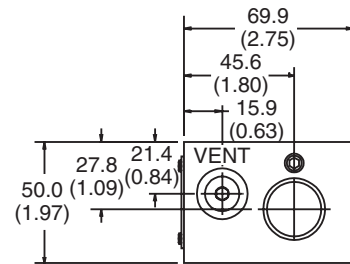
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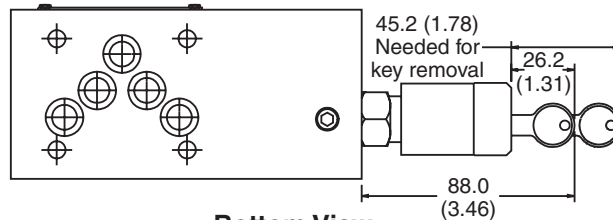
**Top View**



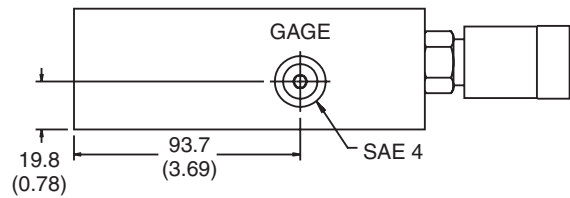
**Face View**



**End View**



**Bottom View**

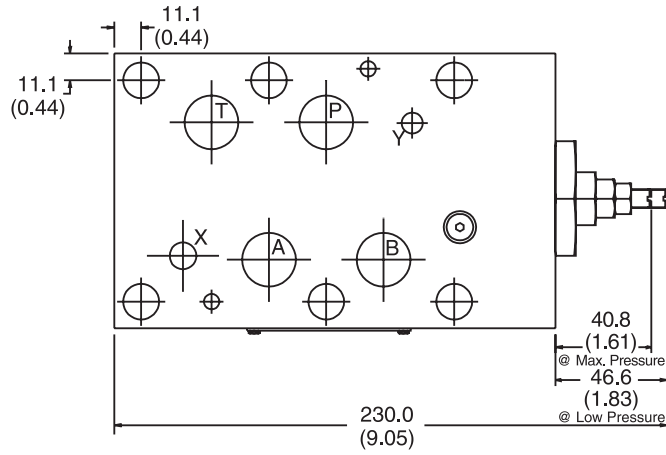


**Back View**

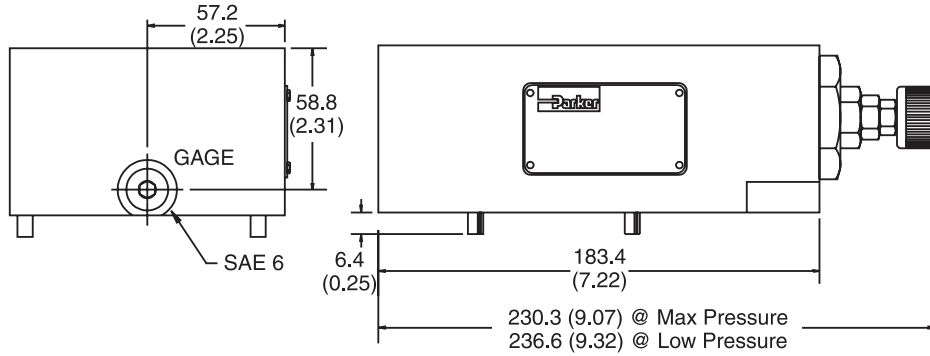


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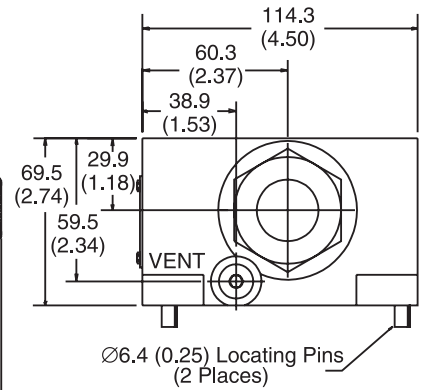
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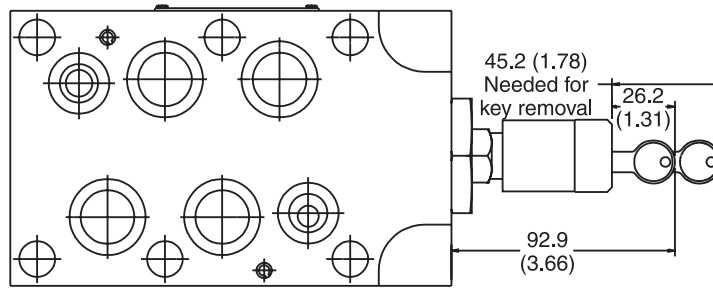
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**Face View**



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**Bottom View**

