

Part number:

**Pressure control valves**

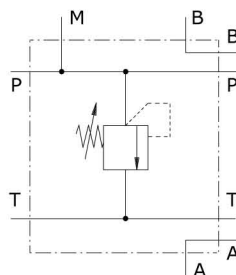


**Type PBL  
pressure relief valves**

- Subplates with pressure relief valve face mounting cetop 3 (6-38) or 5 (10-12)

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

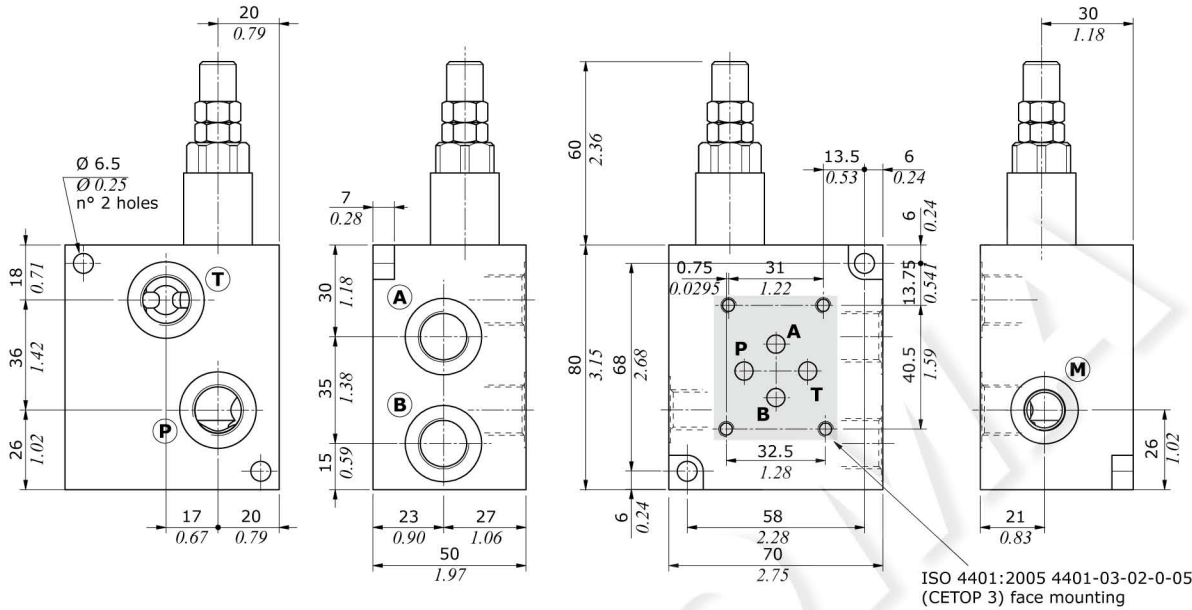
|  | <b>PBL 6/VMP 38</b>                                | <b>PBL 6/VMP 38/5Y</b>   | <b>PBL 10/VMP 12</b>                               |
|--|--|--|--|
| Nominal flow                               | 35 l/min (9.2 US gpm)                              | 35 l/min (9.2 US gpm)  | 60 l/min (16 US gpm)                               |
| Max. pressure                              |  | Aluminium body = 210 bar (3050 psi)<br>Steel body = 350 bar (5100 psi) |  |
| Oil leakage at 80% of max. setting         | 3 cm <sup>3</sup> /min (0.18 in <sup>3</sup> /min) | 1 cm <sup>3</sup> /min (0.06 in <sup>3</sup> /min)                     | 5 cm <sup>3</sup> /min (0.30 in <sup>3</sup> /min) |
| Fluid                                      |  | mineral based oil  |  |
| Viscosity                                  |  | from 10 to 200 cSt   |  |
| Max. level of contamination                |  | 18/16/13 ISO4406   |  |
| Fluid temperature                          |  | with NBR seals from -20°C (-4°F) to 80°C (176°F)                       |  |
| Environmental temp. for working conditions |  | from -40°C (-40°F) to 100°C (212°F)                                    |  |
| Weight                                     | aluminium  | 0.80 kg (1.76 lb)  | 1.70 kg (3.75 lb)                                  |
|  | steel  | 1.98 kg (4.36 lb)  | 4.29 kg (9.46 lb)                                  |



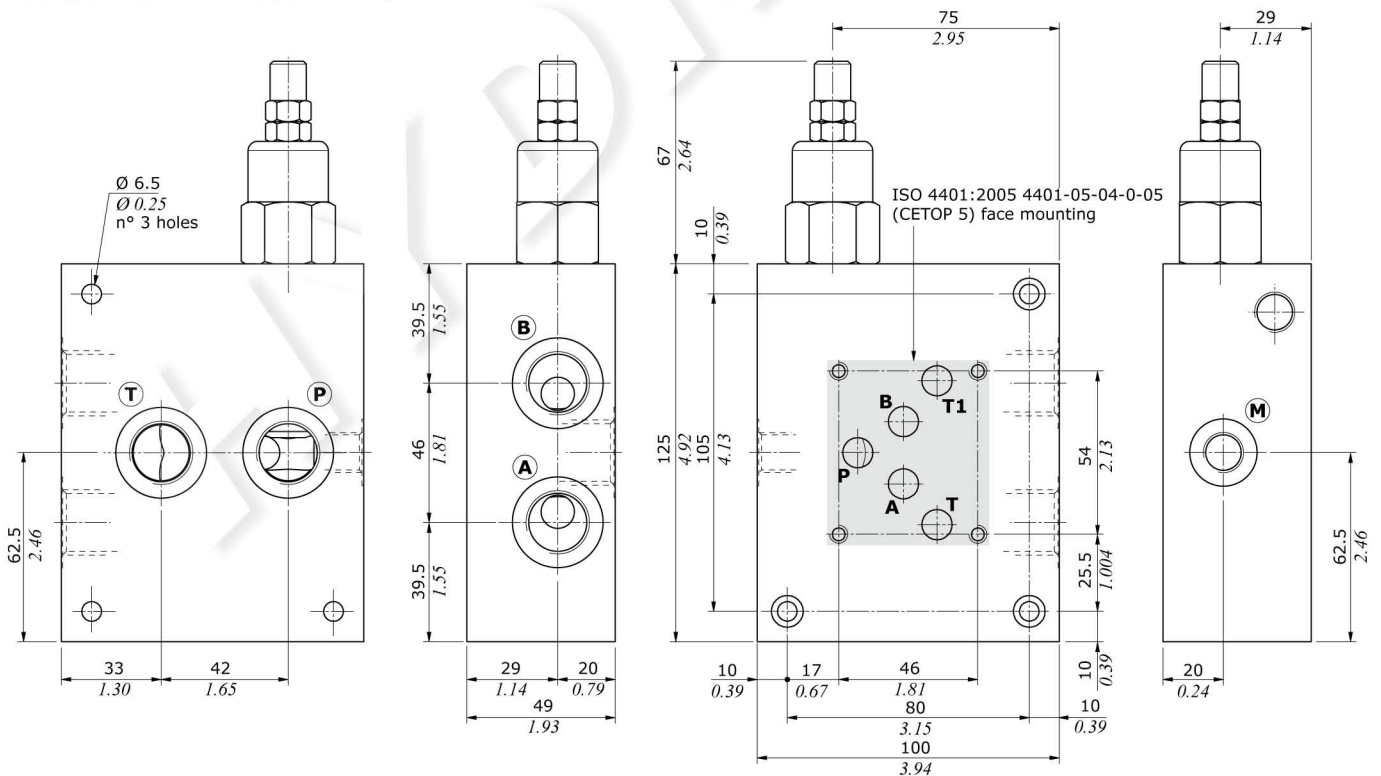
Dimensions

| Valve type      | P    | T | A | B | M    |
|-----------------|------|---|---|---|------|
| PBL 6/VMP 38    | G3/8 |   |   |   | G1/4 |
| PBL 6/VMP 38/5Y | G3/8 |   |   |   | G1/4 |

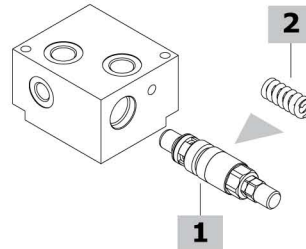
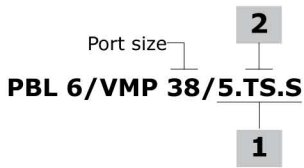
| Valve type       | P    | T | A | B | M    |
|------------------|------|---|---|---|------|
| PBL 6/VMP 38/SAE | SAE8 |   |   |   | SAE6 |



| Valve type    | P    | T | A | B | M    |
|---------------|------|---|---|---|------|
| PBL 10/VMP 12 | G1/2 |   |   |   | G1/4 |



**Ordering codes and description composition**



**PBL complete valves**

*With direct acting valves; standard setting is referred to 5 l/min (1.32 US gpm)*

**Configuration with G3/8 standard thread and ISO 4401:2005 4401-03-02-0-05 (CETOP 3) face mounting**

TYPE: **PBL 6/VMP 38/5.TS.S** CODE: 1114021102  
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).  
Standard setting 160 bar (2300 psi)

TYPE: **PBL 6/VMP 38/5.TS.S/ac** CODE: 1114022101  
DESCRIPTION: Steel body, as previous one

TYPE: **PBL 6/VMP 38/5Y.TS.S** CODE: 1114021123  
DESCRIPTION: Aluminium body, range 140-190 bar (2030-2750 psi).  
Standard setting 150 bar (2200 psi)

**Configuration with G1/2 standard thread and ISO 4401:2005 4401-05-04-0-05 (CETOP 5) face mounting**

TYPE: **PBL 10/VMP 12/10.TS.S** CODE: 1114031102  
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).  
Standard setting 160 bar (2300 psi)

TYPE: **PBL 10/VMP 12/10.TS.S/ac** CODE: 1114032101  
DESCRIPTION: Steel body, as previous one

**Configuration with SAE8 standard thread and ISO 4401:2005 4401-03-02-0-05 (CETOP 3) face mounting**

TYPE: **PBL 6/VMP 38/5.TS.S/SAE** CODE: 1114021200  
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).  
Standard setting 160 bar (2300 psi)

For other steel body configurations, SAE thread and configurations with FPM (Viton) seals please contact our Sales Dpt.

**1 Direct acting pressure relief valves**

*Standard setting is referred to 5 l/min (1.32 US gpm)*

| TYPE   | CODE       | DESCRIPTION  |
|--|------------|--|
| <b>For G3/8 and SAE8 ports configuration</b> |            |  |
| <b>VMP 5/TS.S</b>                            | 1100520400 | Setting range 50-220 bar (725-3200 psi)<br>Standard setting 160 bar (2300 psi)   |
| <b>VMP 5Y/TS.S</b>                           | 1100520406 | Setting range 140-190 bar (2030-2755 psi)<br>Standard setting 150 bar (2200 psi) |

**For G1/2 ports configuration**

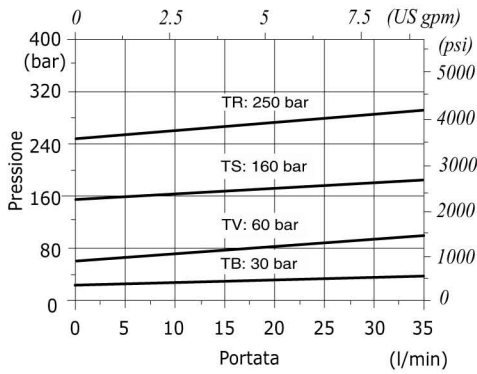
|                    |            |   |
|--------------------|------------|---|
| <b>VMP 10/TS.S</b> | 1100530400 | Setting range 50-220 bar (725-3200 psi) |
|--------------------|------------|---|

**2 Pressure setting spring**

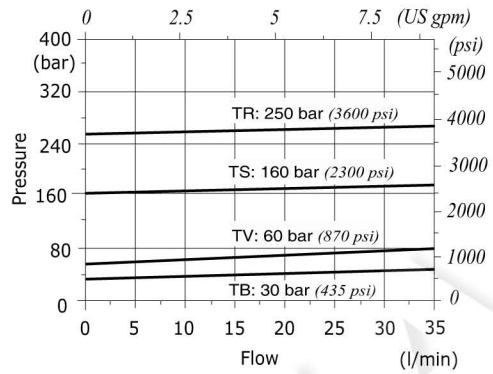
| TYPE                    | CODE       | DESCRIPTION                               |
|-------------------------|------------|---|
| <b>For VMP 5 valve</b>  |            |   |
| <b>TB</b>               | 3MOL314311 | Setting range 5-40 bar (72.5-580 psi)     |
| <b>TV</b>               | 3MOL314330 | Setting range 20-80 bar (290-1160 psi)    |
| <b>TS</b>               | 3MOL315330 | Setting range 50-220 bar (725-3200 psi)   |
| <b>TR</b>               | 3ML1143600 | Setting range 180-350 bar (2600-5100 psi) |
| <b>For VMP 5Y valve</b> |            |   |
| <b>TB</b>               | 3MOL314311 | Setting range 5-80 bar (72.5-1160 psi)    |
| <b>TV</b>               | 3MOL314330 | Setting range 40-150 bar (580-2200 psi)   |
| <b>TS</b>               | 3ML1143400 | Setting range 140-190 bar (2600-5100 psi) |
| <b>TR</b>               | 3MOL315330 | Setting range 180-350 bar (2600-5100 psi) |
| <b>For VMP 10 valve</b> |            |   |
| <b>TB</b>               | 3MOL316410 | Setting range 5-40 bar (72.5-580 psi)     |
| <b>TV</b>               | 3ML1154300 | Setting range 20-80 bar (290-1160 psi)    |
| <b>TS</b>               | 3MOL317420 | Setting range 50-220 bar (725-3200 psi)   |
| <b>TR</b>               | 3MOL317440 | Setting range 180-350 bar (2600-5100 psi) |

**Rating diagrams**

**PBL 6/VMP 38 pressure vs. flow**  
Std. setting @ 5 l/min (1.32 US gpm)



**PBL 6/VMP 38/5Y pressure vs. flow**  
Std. setting @ 5 l/min (1.32 US gpm)



**PBL 10/VMP 12 pressure vs. flow**  
Std. setting @ 5 l/min (1.32 US gpm)

