



Type VPR/3/EP+VMP+VE flow control pressure compensated valves

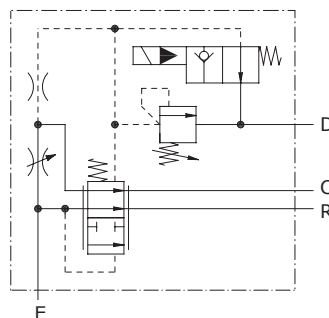
- 3 ways
- Exceeding flow to pressure
- Electric venting
- With pressure relief valve

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

| | | VPR/3/EP 38 | VPR/3/EP 12 | VPR/3/EP 34 | VPR/3/EP 100 | VPR/3/EP 114 |
|--|-----------|--|---------------------------|----------------------------|----------------------------|---------------------------|
| Max. inlet flow | Line E | 50 l/min (13.2 US gpm) | 90 l/min (23.8 US gpm) | 150 l/min (39.6 US gpm) | 240 l/min (63.4 US gpm) | 450 l/min (119 US gpm) |
| Max. regulated flow | Line C | 30 l/min (7.9 US gpm) | 50 l/min (13.2 US gpm) | 90 l/min (23.8 US gpm) | 150 l/min (39.6 US gpm) | 250 l/min (66 US gpm) |
| Max. regulated flow "SB" | | 15 l/min (4.0 US gpm) | 25 l/min (6.6 US gpm) | 45 l/min (11.9 US gpm) | 75 l/min (18.1 US gpm) | 125 l/min (33 US gpm) |
| Max. pressure | | Aluminium body = 210 bar (3050 psi) Steel body = 350 bar (5100 psi) | | | | |
| 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 temperature for working conditions | | from -40°C (-40°F) to 100°C (212°F) | | | | |
| Weight | aluminium | 2.12 kg (4.67 lb) | 2.10 kg (4.63 lb) | 3.47 kg (7.65 lb) | 5.49 kg (12.10 lb) | 7.45 kg (16.42 lb) |
| | steel | 4.19 kg (6.28 lb) | 4.13 kg (6.17 lb) | 7.03 kg (10.91 lb) | 11.26 kg (24.83 lb) | 18.20 kg (40.12 lb) |

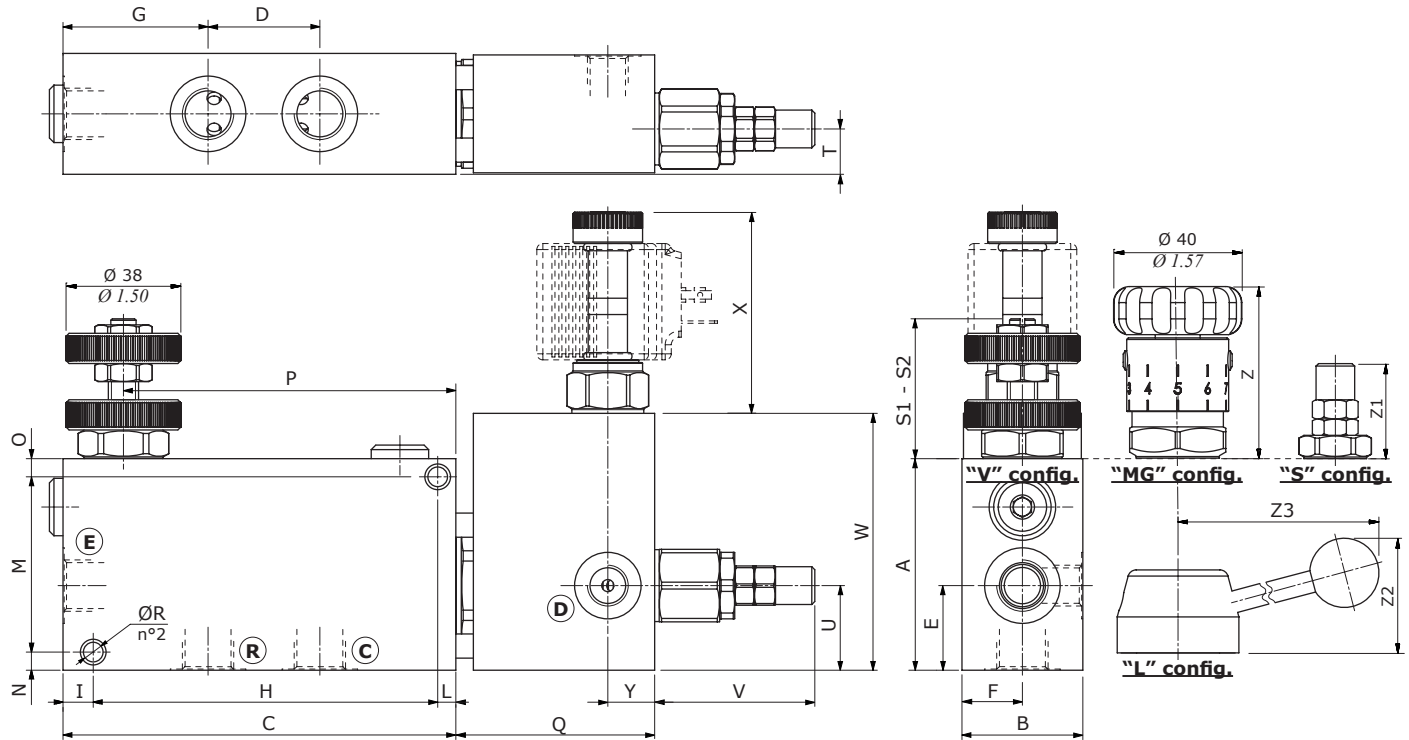
NOTE - For different conditions, please contact Walvoil Sales Dpt.

*"SB" execution (sensibilized adjustment)



Dimensions

VPR/3/EP 38+VMP+VE - VPR/3/EP 12+VMP+VE - VPR/3/EP 34+VMP+VE



| Valve type | Ⓔ | Ⓓ | Ⓒ | Ⓓ |
|---------------------|--------|--------|--------|------|
| VPR/3/EP 38+VMP+VE | G3/8 | G3/8 | G3/8 | G1/4 |
| VPR/3/EP 12+VMP+VE | G1/2 | G1/2 | G1/2 | G1/4 |
| VPR/3/EP 34+VMP+VE | G3/4 | G3/4 | G3/4 | G1/4 |
| VPR/3/EP 100+VMP+VE | G1" | G1" | G1" | G1/4 |
| VPR/3/EP 114+VMP+VE | G1"1/4 | G1"1/4 | G1"1/4 | G1/4 |

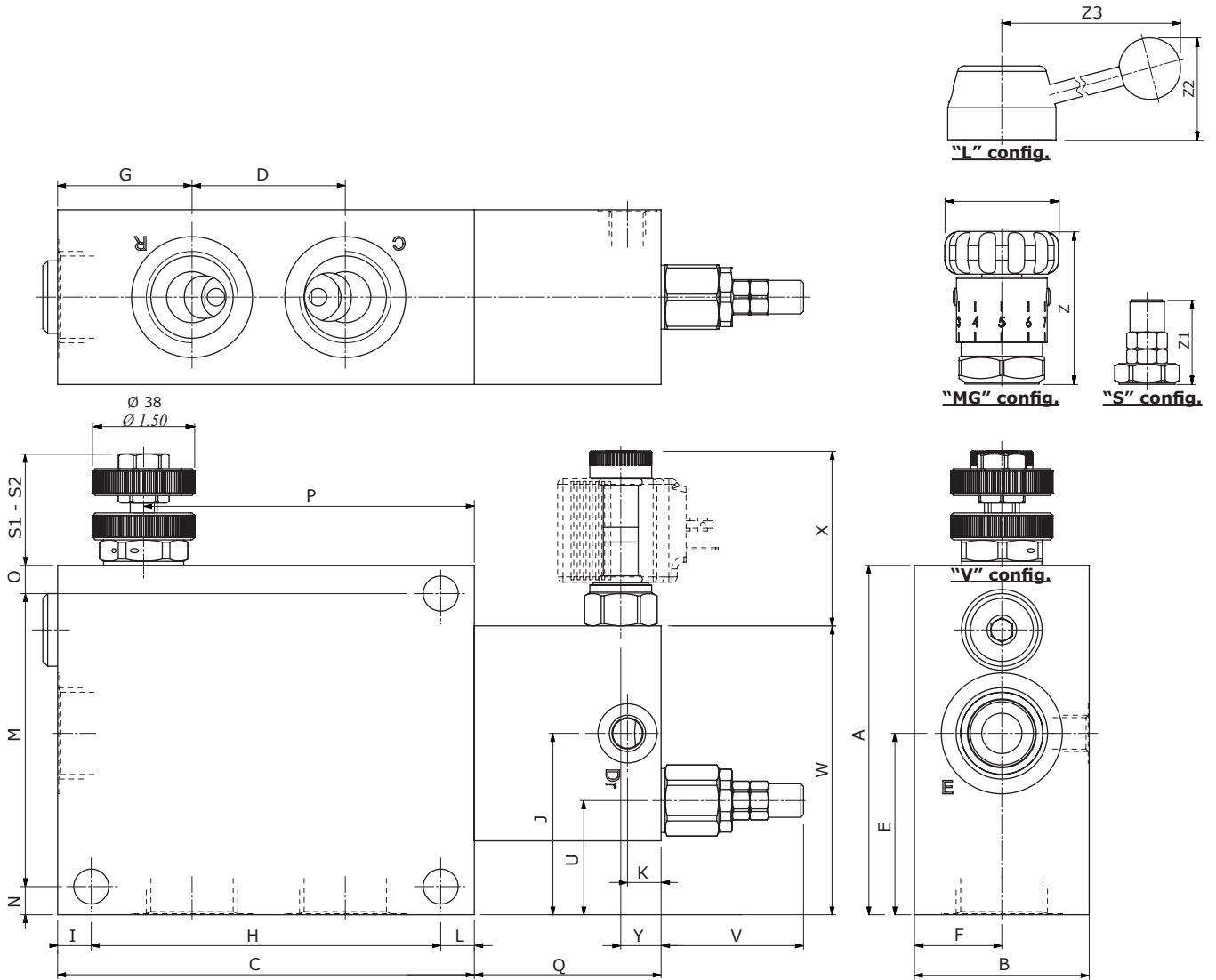
Dimensions are in mm-in

| Valve type | A | B | C | D | E | F | G | H | I | L | K | J | M | N |
|---------------------|-------------|-------------------------------|-------------|------------|--------------|---------------------------------|------------|-------------|--------------|--------------|--------------|--------------|-------------|---------------|
| VPR/3/EP 38+VMP+VE | 70 2.76 | 40 1.57 | 130 5.12 | 37 1.46 | 28 1.10 | 20 0.79 | 48 1.89 | 114 4.49 | 10 0.394 | 6 0.236 | - | - | 58 2.28 | 6 0.236 |
| VPR/3/EP 12+VMP+VE | 70 2.76 | 40 1.57 | 130 5.12 | 37 1.46 | 28 1.10 | 20 0.79 | 48 1.89 | 114 4.49 | 10 0.394 | 6 0.236 | - | - | 58 2.28 | 6 0.236 |
| VPR/3/EP 34+VMP+VE | 90 3.54 | 50 1.97 | 155 6.10 | 44 1.73 | 35 1.38 | 25 0.98 | 57 2.24 | 135 5.31 | 10 0.394 | 10 0.394 | 15 0.59 | 35 1.38 | 74 2.91 | 8 0.315 |
| VPR/3/EP 100+VMP+VE | 130 5.12 | Alum:70-2.76 Steel:65-2.56 | 155 6.10 | 57 2.24 | 67.5 2.66 | Alum:35-1.38 Steel:32.5-1.28 | 50 1.97 | 130 5.12 | 12.5 0.49 | 12.5 0.49 | 12.5 0.49 | 67.5 2.66 | 109 4.29 | 10.5 0.413 |
| VPR/3/EP 114+VMP+VE | 160 6.30 | 75 2.95 | 184 7.24 | 70 2.76 | 83 3.27 | 37.5 1.48 | 60 2.36 | 159 6.26 | 12.5 0.49 | 12.5 0.49 | 15 0.59 | 83 3.27 | 135 5.31 | 12.5 0.49 |

| Valve type | O | P | Q | ØR | S1 | S2 | T | U | V | W | X(NA) | Y | Z | Z1 | Z2 | Z3 |
|---------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| VPR/3/EP 38+VMP+VE | 6 0.236 | 110 4.33 | 65.8 2.59 | 6.5 0.256 | 46.3 1.82 | 52.6 2.07 | 15 0.59 | 28 1.10 | 53 2.09 | 85 3.35 | 66.7 2.63 | 15.5 0.61 | 53.3 2.10 | 38.5 1.52 | 47.5 1.87 | 101.3 3.99 |
| VPR/3/EP 12+VMP+VE | 6 0.236 | 110 4.33 | 65.8 2.59 | 6.5 0.256 | 46.3 1.82 | 53.1 2.09 | 14.5 0.59 | 28 1.10 | 53 2.09 | 85 3.35 | 66.7 2.63 | 15.5 0.61 | 53.3 2.10 | 38.5 1.52 | 47.5 1.87 | 101.3 3.99 |
| VPR/3/EP 34+VMP+VE | 8 0.315 | 130 5.12 | 76.8 3.02 | 8.5 0.335 | 41.5 1.63 | 50.5 1.99 | - | 35 1.38 | 53 2.09 | 90 3.54 | 66.7 2.63 | 16 0.63 | 49.5 1.95 | 38.5 1.52 | 50.1 1.97 | 103.6 4.08 |
| VPR/3/EP 100+VMP+VE | 10.5 0.413 | 123 4.84 | 69.5 2.74 | 13 0.51 | 41.5 1.63 | 50.5 1.99 | - | 42.5 1.67 | 53 2.09 | 107.5 4.23 | 62.5 2.46 | 15 0.59 | 49.5 1.95 | 38.5 1.52 | 50.1 1.97 | 103.6 4.08 |
| VPR/3/EP 114+VMP+VE | 12.5 0.49 | 151 5.94 | 80 3.15 | 12.5 0.49 | 52 2.05 | xxx- xxx | - | 58 2.28 | 53 2.09 | 123 4.84 | 66.7 2.63 | 15 0.59 | 52.5 2.06 | 41.5 1.63 | 50.5 1.99 | 107.3 4.22 |

Dimensions

VPR/3/EP 100+VMP+VE - VPR/3/EP 114+VMP+VE



Ordering codes and description composition

VPR/3/EP 38+VMP+VE complete valves

Pressure relief valve setting range is 50-200 bar (725-2900 psi)

Adjustment kit type "V" (handwheel)

Configuration with normally open (NA) solenoid valve

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NA/V/03.TS** CODE: 1634021100

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NA/V/03.TS** CODE: 1634031100

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NA/V/03.TS** CODE: 1634041100

DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NA/V/03.TS** CODE: 1634051100

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NA/V/03.TS/ac** CODE: 1634022100

DESCRIPTION: steel body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NA/V/03.TS/ac** CODE: 1634032100

DESCRIPTION: steel body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NA/V/03.TS/ac** CODE: 1634042100

DESCRIPTION: steel body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NA/V/03.TS/ac** CODE: 1634052100

DESCRIPTION: steel body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NA/V/03.TS/ac** CODE: 1634062100

DESCRIPTION: steel body, 1"1/4 ports

DESCRIPTION: steel body, 1"1/4 ports

Configuration with normally closed (NC) solenoid valve

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NC/V/03.TS** CODE: 1634021103

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NC/V/03.TS** CODE: 1634031103

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NC/V/03.TS** CODE: 1634041103

DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NC/V/03.TS** CODE: 1634051103

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NC/V/03.TS** CODE: 1634061103

DESCRIPTION: aluminium body, 1"1/4 ports

Adjustment kit type "MG" (handknob)

Configuration with normally open (NA) solenoid valve

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NA/MG/03.TS** CODE: 1634021101

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NA/MG/03.TS** CODE: 1634031101

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NA/MG/03.TS** CODE: 1634041101

DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NA/MG/03.TS** CODE: 1634051101

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NA/MG/03.TS** CODE: 1634061101

DESCRIPTION: aluminium body, 1"1/4 ports

Configuration with normally closed (NC) solenoid valve

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NC/MG/03.TS** CODE: 1634021104

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NC/MG/03.TS** CODE: 1634031104

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NC/MG/03.TS** CODE: 1634041104

DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NC/MG/03.TS** CODE: 1634051104

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NC/MG/03.TS** CODE: 1634061104

DESCRIPTION: aluminium body, 1"1/4 ports

Adjustment kit type "L" (lever)

Configuration with electric valve normally open (NA)

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634021102

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634031102

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634041102

DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634051102

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634061102

DESCRIPTION: aluminium body, 1"1/4 ports

Configuration with electric valve normally closed (NC)

TYPE: **VPR/3/EP 38+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634021105

DESCRIPTION: aluminium body, 3/8 ports

TYPE: **VPR/3/EP 12+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634031105

DESCRIPTION: aluminium body, 1/2 ports

TYPE: **VPR/3/EP 34+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634041105

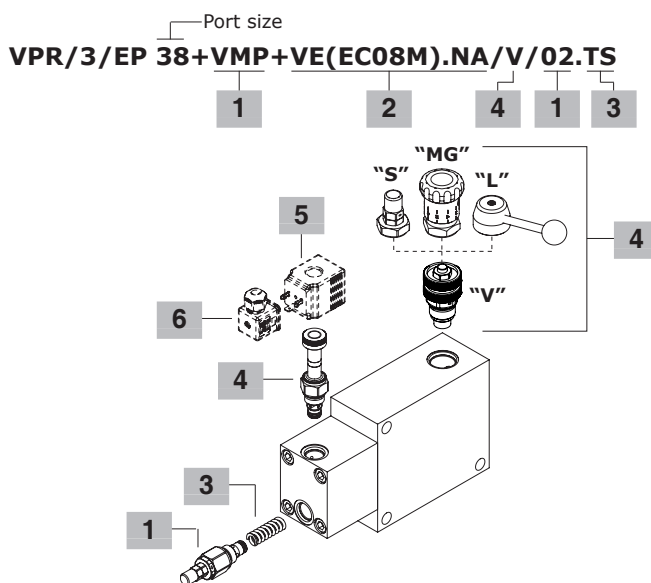
DESCRIPTION: aluminium body, 3/4 ports

TYPE: **VPR/3/EP 100+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634051105

DESCRIPTION: aluminium body, 1" ports

TYPE: **VPR/3/EP 114+VMP+VE(EC08M).NA/L/03.TS** CODE: 1634061105

DESCRIPTION: aluminium body, 1"1/4 ports



1 Pressure relief valve

| TYPE | CODE | DESCRIPTION |
|-------------------|-------------|--|
| MC08A/0S2B | 0MC08002000 | Direct acting cartridge, setting range 50-200 bar (725-2900 psi) |

2 Solenoid valve

| TYPE | CODE | DESCRIPTION |
|-------------------|-------------|------------------------------------|
| EC08M/10NB | 0EC08002031 | Normally open (NA) configuration |
| EC08M/20NB | 0EC08002032 | Normally closed (NC) configuration |

3 Pressure setting springs

| TYPE | CODE | DESCRIPTION |
|-----------|------------|---|
| TV | 3ML1092500 | Setting range 5-50 bar (72.5-725 psi) |
| TS | 3ML1092501 | Setting range 50-200 bar (725-2900 psi) |
| TR | 3ML1092502 | Setting range 150-350 bar (2200-5100 psi) |

4 Adjustment kit

| TYPE | CODE | DESCRIPTION |
|--|------------|--|
| For VPR/3/EP 38+VMP+VE valve | | |
| V.SB | 5KT6200200 | "V" handwheel type in "SB" configuration (sensibilized adjustment) |
| V | 5KT6130200 | "V" handwheel type |
| MG | 5KT6200202 | "MG" handknob type |
| S | 5KT6200211 | "S" screw type |
| For VPR/3/EP 12+VMP+VE valve | | |
| V.SB | 5KT6130301 | "V" handwheel type in "SB" configuration (sensibilized adjustment) |
| V | 5KT6130200 | "V" handwheel type |
| MG | 5KT6200202 | "MG" handknob type |
| S | 5KT6200211 | "S" screw type |
| For VPR/3/EP 34-100+VMP+VE valves | | |
| V | 5KT6130401 | "V" handwheel type |
| MG | 5KT6200400 | "MG" handknob type |
| S | 5KT6130404 | "S" screw type |
| V.SB | 5KT6130402 | "V" handwheel type in "SB" configuration (sensibilized adjustment) |
| For VPR/3/EP 114+VMP+VE valve | | |
| V | 5KT6340603 | "V" handwheel type |
| MG | 5KT6200605 | "MG" handknob type |
| S | 5KT6200604 | "S" screw type |

5 Coils

| TYPE | CODE | DESCRIPTION |
|------------------|-------------|------------------------------|
| BER 12VDC | 4SLE001200A | 12VDC-ISO4400 coil for EC08M |

For complete coils list see from page 433

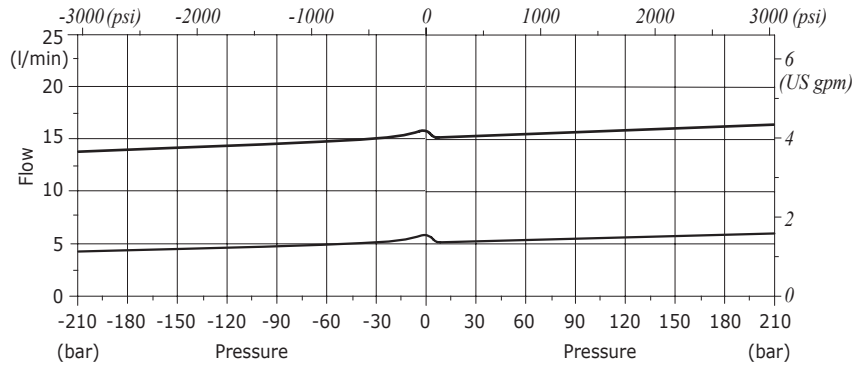
6 Connector

| TYPE | CODE | DESCRIPTION |
|----------------|------------|-------------|
| ISO4400 | 4CN1009995 | Connector |

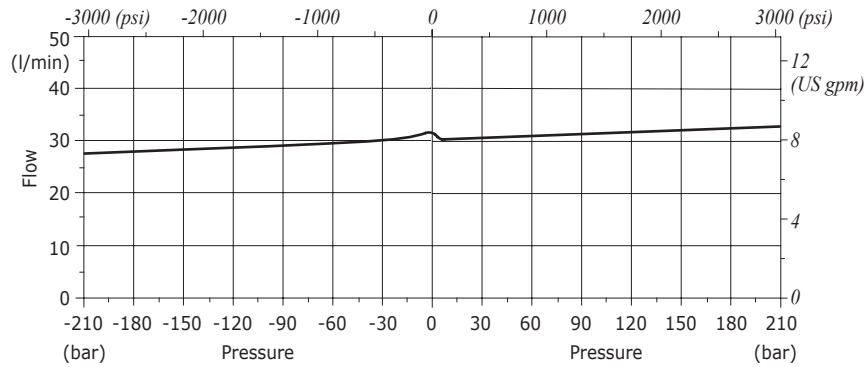
For complete connectors list see from page 433

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

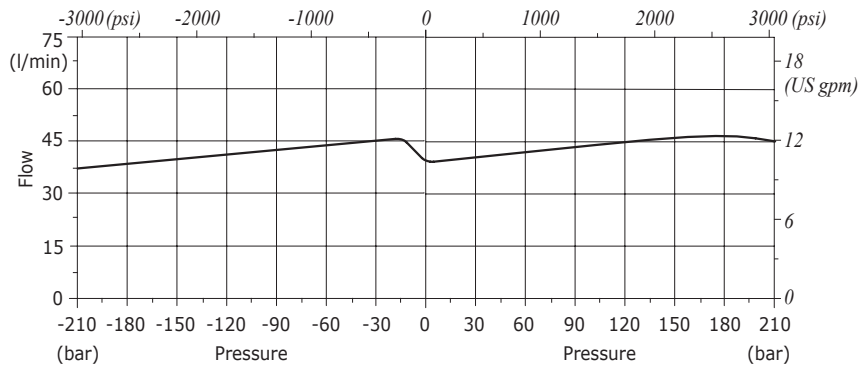
**VPR/3/EP 38+VMP+VE compensation diagram in C
changing the Δp between E and R**



**VPR/3/EP 12+VMP+VE compensation diagram in C
changing the Δp between E and R**

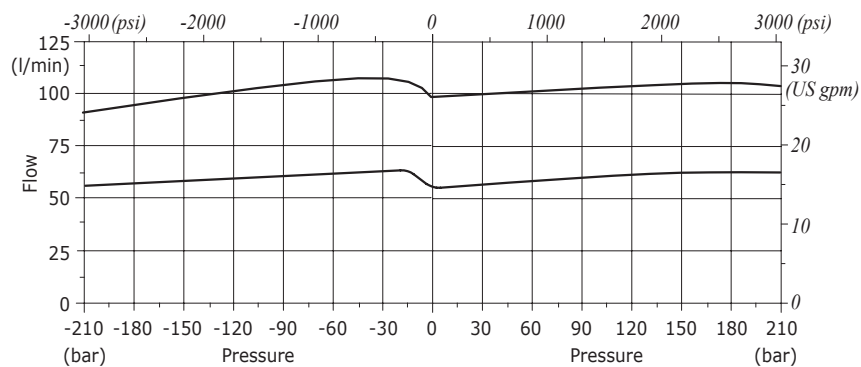


**VPR/3/EP 34+VMP+VE compensation diagram in C
changing the Δp between E and R**



Rating diagrams

**VPR/3/EP 100/VMP+VE compensation diagram in C
changing the Δp between E and R**



**VPR/3/EP 114/VMP+VE compensation diagram in C
changing the Δp between E and R**

