

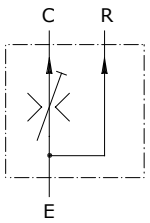
# Type VPF/3/EP
## flow control pressure compensated valves

- 3 ways
- Exceeding flow to pressure
- Whit costant flow in "C"

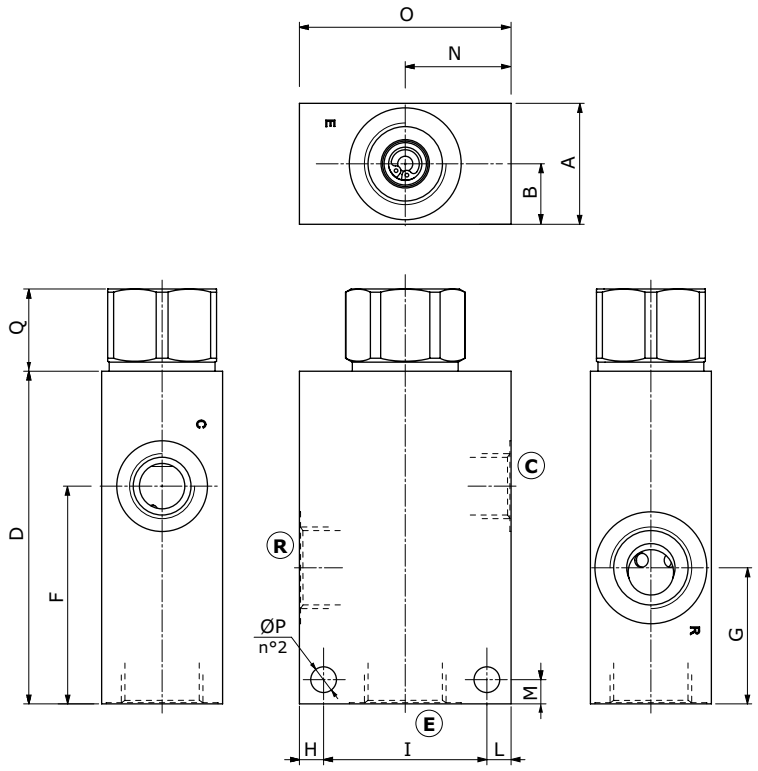
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

| | | VPF/3/EP 38 | VPF/3/EP 12 | VPF/3/EP 34 |
|---|---|---|---|---|
| Nominal flow | | 60 l/min *(15.8 US gpm)* | 100 l/min *(26.4 US gpm)* | 150 l/min *(39.6 US gpm)* |
| Max. pressure | | | Aluminium body = 210 bar *(3050 psi)*<br>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)*<br>*with FPM seals* from -20°C *(-4°F)* to 100°C *(212°F)* | |
| Environmental temperature for working conditions | | | from -40°C *(-40°F)* to 100°C *(212°F)* | |
| Weight | *aluminium* | 0.62 kg *(1.37 lb)* | 0.85 kg *(1.87 lb)* | 1.68 kg *(3.70 lb)* |
| | *steel* | 1.35 kg *(2.98 lb)* | 2.18 kg *(4.81 lb)* | 3.71 kg *(8.18 lb)* |

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



## Dimensions




| Valve type | E | R | C |
|---|---|---|---|
| **VPF/3/EP 38** | G1/2 | G3/8 | G3/8 |
| **VPF/3/EP 12** | G3/4 | G3/4 | G1/2 |
| **VPF/3/EP 34** | 1″ | 1″ | G3/4 |

Dimensions are in mm-*in*

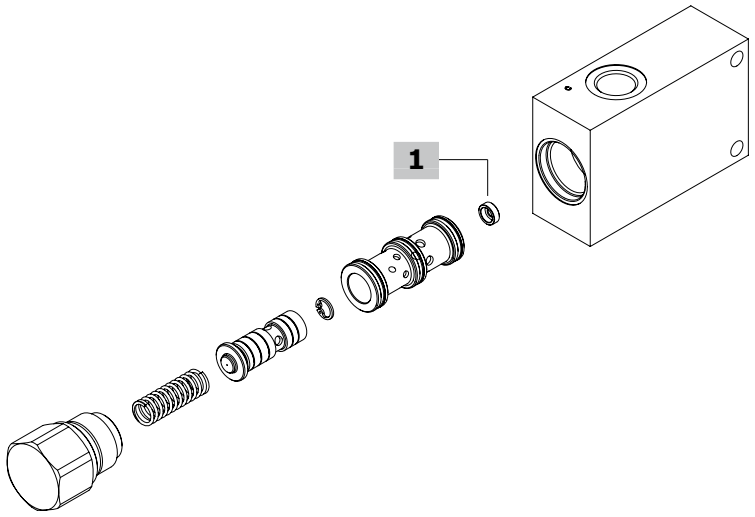
| Valve type | A | B | D | F | G | H | I | L | M | N | O | ØP | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VPF/3/EP 38** | 35<br>*1.38* | 17.5<br>*0.69* | 95<br>*3.74* | 55<br>*2.16* | 35<br>*1.38* | 8<br>*0.31* | 44<br>*1.73* | 8<br>*0.315* | 8<br>*0.315* | 30<br>*1.18* | 60<br>*2.36* | 8.5<br>*0.335* | 10<br>*0.394* |
| **VPF/3/EP 12** | 40<br>*1.57* | 20<br>*0.79* | 110<br>*4.33* | 72<br>*2.83* | 45<br>*1.77* | 8<br>*0.315* | 54<br>*2.12* | 8<br>*0.315* | 8<br>*0.315* | 35<br>*1.38* | 70<br>*2.75* | 8.5<br>*0.335* | 27.2<br>*1.07* |
| **VPF/3/EP 34** | 50<br>*1.97* | 25<br>*0.98* | 120<br>*4.72* | 80<br>*3.14* | 50<br>*1.97* | 10<br>*0.39* | 70<br>*2.75* | 10<br>*0.394* | 10<br>*0.394* | 45<br>1.77 | 90<br>*3.54* | 10.5<br>*0.413* | 24.5<br>*0.96* |

## Ordering codes and description composition

Port size

**VPF/3/EP 38/Ds1**

**1**




### VPF/3/EP complete valves

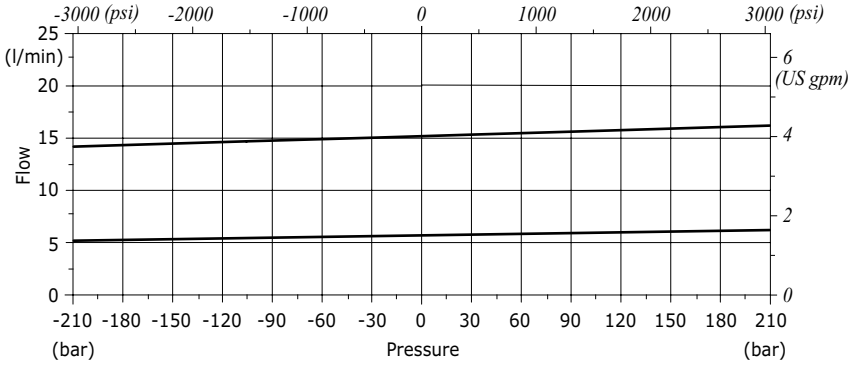
TYPE: **VPF/3/EP 38/Ds1** CODE: 1640021100
DESCRIPTION: Aluminium body, G3/8 ports, fixed orifice Ø1 mm-*0.039 in* (Qc 1.2 l/min-*0.31 US gpm*)
TYPE: **VPF/3/EP 12/Ds2** CODE: 1640031102
DESCRIPTION: Aluminium body, G1/2 ports, fixed orifice Ø2 mm-*0.078 in* (Qc 4 l/min-*1.05 US gpm*)
TYPE: **VPF/3/EP 34/Ds3** CODE: 1640041105
DESCRIPTION: Aluminium body, G3/4 ports, fixed orifice Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*)
TYPE: **VPF/3/EP 38/Ds2,5/ac** CODE: 1640022100
DESCRIPTION: Steel body, G3/8 ports, fixed orifice Ø2.5 mm-*0.14 in* (Qc 7.5 l/min-*1.98 US gpm*)
TYPE: **VPF/3/EP 12/Ds3/ac** CODE: 1640032103
DESCRIPTION: Steel body, G1/2 ports, fixed orifice Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*)
TYPE: **VPF/3/EP 34/Ds4/ac** CODE: 1640042100
DESCRIPTION: Steel body, G3/4 ports, fixed orifice Ø4 mm-*0.16 in* (Qc 20.5 l/min-*5.41 US gpm*)
For other steel body configurations, SAE thread and configurations with FPM (Viton) seals, please contact our Sales Dpt.

### 1 Fixed orifice

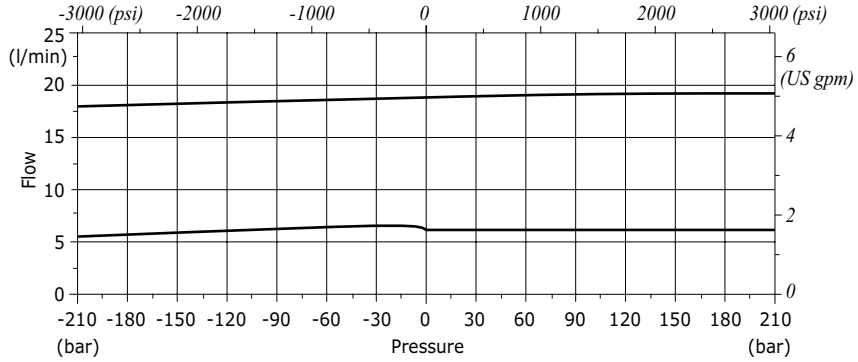
| TYPE | CODE | DESCRIPTION |
|---|---|---|
| **For VPF/3/EP 38 valve** | | |
| **Ds1** | 3DF1091000 | Ø1 mm-*0.039 in*(Qc 1.2 l/min-*0.31 US gpm*) |
| **Ds1,5** | 3DF1091500 | Ø1.5 mm-*0.059 in* (Qc 2.8 l/min-*0.73 US gpm*) |
| **Ds2** | 3DF1092000 | Ø2 mm-*0.079 in* (Qc 5 l/min-*1.32 US gpm*) |
| **Ds2,5** | 3DF1092500 | Ø2.5 mm-*0.098 in* (Qc 7.5 l/min-*1.98 US gpm*) |
| **Ds2,8** | 3DF1092800 | Ø2. 8 mm-*0.11 in* (Qc 9.5 l/min-*2.5 US gpm*) |
| **Ds3** | 3DF1093000 | Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*) |
| **Ds3,5** | 3DF1093500 | Ø3.5 mm-*0.14 in* (Qc 16 l/min-*4.2 US gpm*) |
| **Ds3,8** | 3DF1093800 | Ø3.8 mm-*0.15 in* (Qc 20 l/min-*5.9 US gpm*) |
| **Ds4** | 3DF1094000 | Ø4 mm-*0.16 in* (Qc 25 l/min-*6.6 US gpm*) |
| **For VPF/3/EP 12 valve** | | |
| **Ds1** | 3DF1111000 | Ø1 mm-*0.039 in* (Qc 1.1 l/min-*0.29 US gpm*) |
| **Ds1,5** | 3DF1111500 | Ø1.5 mm-*0.059 in* (Qc 2.5 l/min-*0.66 US gpm*) |
| **Ds2** | 3DF1112000 | Ø2 mm-*0.079 in* (Qc 4 l/min-*1.05 US gpm*) |
| **Ds2,5** | 3DF1112500 | Ø2.5 mm-*0.098 in* (Qc 6.5 l/min-*1.72 US gpm*) |
| **Ds2,8** | 3DF1112800 | Ø2,8 mm-*0.11 in* (Qc 8 l/min-*2.1 US gpm*) |
| **Ds3** | 3DF1113000 | Ø3 mm-*0.12 in* (Qc 9.5 l/min-*2.5 US gpm*) |
| **Ds3,5** | 3DF1113500 | Ø3.5 mm-*0.14 in* (Qc 13 l/min-*3.43 US gpm*) |
| **Ds3,8** | 3DF1113800 | Ø3.8 mm-*0.15 in* (Qc 16 l/min-*4.22 US gpm*) |
| **Ds4** | 3DF1114000 | Ø4 mm-*0.16 in* (Qc 18 l/min-*4.75 US gpm*) |
| **Ds4,5** | 3DF1114500 | Ø4.5 mm-*0.18 in* (Qc 25 l/min-*6.6 US gpm*) |
| **Ds5** | 3DF1115000 | Ø5 mm-*0.2 in* (Qc 32 l/min-*8.45 US gpm*) |
| **Ds5,5** | 3DF1115000 | Ø5,5 mm-*1.2 in* (Qc 41 l/min-*10.83 US gpm*) |
| **For VPF/3/EP 34 valve** | | |
| **Ds1** | 3DF1151000 | Ø1 mm-*0.039 in* (Qc 1.3 l/min-*0.34 US gpm*) |
| **Ds1,5** | 3DF1151500 | Ø1.5 mm-*0.059 in* (Qc 3 l/min-*0.4 US gpm*) |
| **Ds2** | 3DF1152000 | Ø2 mm-*0.079 in* (Qc 5 l/min-*1.32 US gpm*) |
| **Ds2,5** | 3DF1152500 | Ø2.5 mm-*0.14 in* (Qc 7.5 l/min-*1.98 US gpm*) |
| **Ds3** | 3DF1153000 | Ø3 mm-*0.15 in* (Qc 11 l/min-*2.9 US gpm*) |
| **Ds3,5** | 3DF1153500 | Ø3.5 mm-*0.15 in* (Qc 15 l/min-*3.96 US gpm*) |
| **Ds4** | 3DF1154000 | Ø4 mm-*0.16 in* (Qc 20.5 l/min-*5.41 US gpm*) |
| **Ds4,5** | 3DF1154500 | Ø4.5 mm-*0.18 in* (Qc 26.5 l/min-*7 US gpm*) |
| **Ds5** | 3DF1155000 | Ø5 mm-*0.2 in* (Qc 33 l/min-*8.72 US gpm*) |
| **Ds5,5** | 3DF1155500 | Ø5.5 mm-*1.2 in* (Qc 42 l/min-*11.09 US gpm*) |
| **Ds6** | 3DF1156000 | Ø6 mm-*0.18 in* (Qc 52 l/min-*13.74 US gpm*) |
| **Ds6,5** | 3DF1156500 | Ø6.5 mm-*0.2 in* (Qc 63 l/min-*16.64 US gpm*) |
| **Ds7** | 3DF1157000 | Ø7 mm-*1.2 in* (Qc 77 l/min-*20.34 US gpm*) |

## Rating diagrams

**VPF/3/EP 38 compensation diagram in C changing the Δp between E and R**




**VPF/3/EP 12 compensation diagram in C changing the Δp between E and R**




**VPF/3/EP 34 compensation diagram in C changing the Δp between E and R**

