

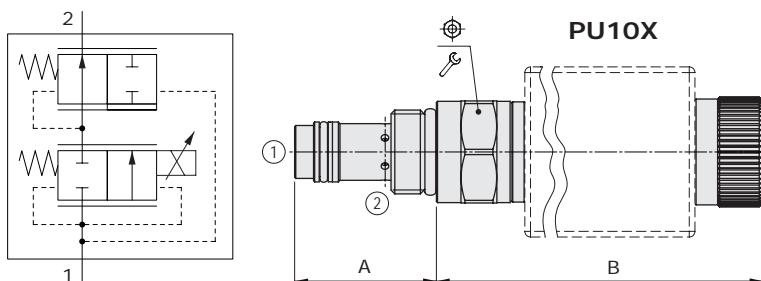
Type PU..X flow control pressure compensated valves - 2 ways

- Solenoid proportional type
- From SAE08 to SAE16 cavities

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

| | PU08X | PU10X | PU12X | PU16X |
|--|----------------------------------|---|---|-------------------------------|
| Nominal flow | 15 l/min (4 US gpm) | 30 l/min (7.9 US gpm) | 50 l/min (13.2 US gpm) | 90 l/min (23.8 US gpm) |
| Max. pressure | | | 315 bar (4600 psi) | |
| Oil leakage | at 210 bar 3050 psi | 80 cm³/min (8.9 in³/min) | 150 cm³/min (9.2 in³/min) | 250 cm³/min (15.3 in³/min) |
| Fluid | | | mineral based oil | |
| Viscosity | | | 10-200 cSt | |
| Max level of contamination | | | 18/16/13 ISO4406 | |
| Fluid temperature | with NBR seals with FPM seals | | from -20°C (-4°F) to 80°C (176°F) from -20°C (-4°F) to 100°C (212°F) | |
| Environmental temp. for working conditions | | | from -20°C (-4°F) to 50°C (122°F) | |
| Cavity | SAE 8/2 A | SAE 10/2 A | SAE 12/2 A | SAE 16/2 A |
| Coil type* | | | BH or BQP19 | |
| Nominal voltages | | 12 VDC - 24V DC ± 10% | | |
| Power rating | | 20.4 W (BH) - 15 W (BQP19) | | |
| Max control current | | 12 V -> 1.70 A - 24 V -> 0.85 A (BH) 12 V -> 1.25 A - 24 V -> 0.63 A (BQP19) | | |
| Dither frequency | | | 150 Hz | |
| Hysteresis | | | 8% | |
| Weight | 0.34 kg (0.75 lb) | 0.39 kg (0.86 lb) | 0.51 kg (1.12 lb) | 0.90 kg (1.98 lb) |

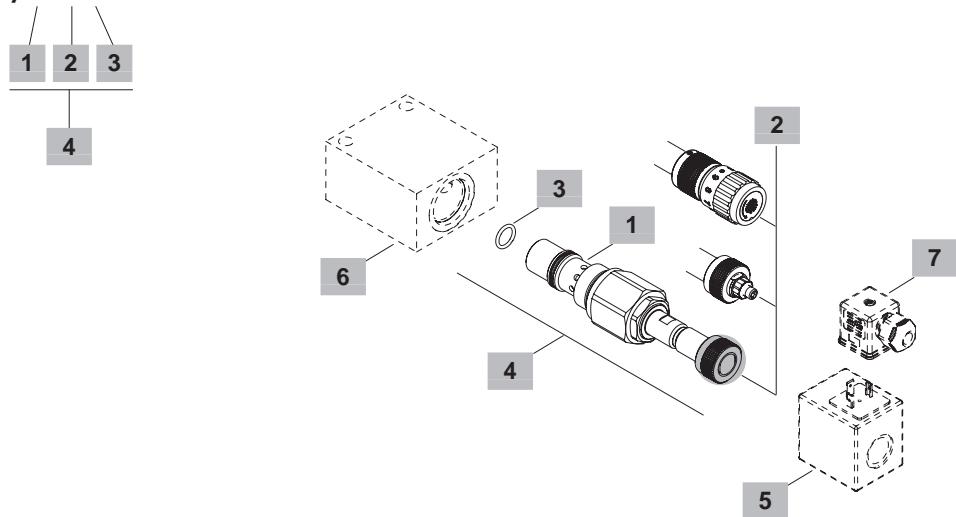
NOTE - For different conditions, please contact Walvoil Sales Dpt. - For coils further features see from page 187.



| Valve type | A | | B | | | Nm | lbft |
|------------------|------|------|-------|------|----|----|------|
| | mm | in | mm | in | | | |
| PU08X/AON | 36.6 | 1.44 | 94 | 3.70 | 24 | 30 | 22 |
| PU10X/AON | 37.5 | 1.48 | 96.4 | 3.79 | 27 | 50 | 37 |
| PU12X/AON | 58.5 | 2.30 | 97.4 | 3.83 | 32 | 75 | 55 |
| PU16X/AON | 68 | 2.68 | 121.4 | 4.78 | 41 | 95 | 70 |

For dimensions with different type of emergency see page 192

Ordering codes and description composition

PU08X/A0NB**1 Pressure drop from 1 to 2**

| TYPE | DESCRIPTION |
|------|------------------|
| A | 12 bar (170 psi) |

2 Emergency

| TYPE | DESCRIPTION |
|------|-------------------|
| N | Without emergency |
| T | Screw type |
| V | Handknob |

3 Seals

| TYPE | DESCRIPTION |
|------|--|
| B | NBR (Buna) Std configuration without addition |
| V | For valve with FPM (Viton) o-ring seals, contact Sales Dept. |

4 Cartridges

| TYPE | CODE | DESCRIPTION |
|------------------------|-------------|----------------------|
| SAE cavity 8/2 | | |
| PU08X/A0NB | OPU08002012 | Without emergency |
| PU08X/A0TB | OPU08002013 | Screw type emergency |
| PU08X/A0VB | OPU08002014 | Handknob emergency |
| SAE cavity 10/2 | | |
| PU10X/A0NB | OPU10002020 | Without emergency |
| PU10X/A0TB | OPU10002021 | Screw type emergency |
| PU10X/A0VB | OPU10002022 | Handknob emergency |
| SAE cavity 12/2 | | |
| PU12X/A0NB | OPU12002007 | Without emergency |
| PU12X/A0TB | OPU12002008 | Screw type emergency |
| PU12X/A0VB | OPU12002009 | Handknob emergency |
| SAE cavity 16/2 | | |
| PU16X/A0NB | OPU16002010 | Without emergency |
| PU16X/A0TB | OPU16002011 | Screw type emergency |
| PU16X/A0VB | OPU16002012 | Handknob emergency |

5 Coils

| TYPE | CODE | DESCRIPTION |
|-------|------------|--------------------|
| BQP19 | 4SL5000126 | 12VDC-ISO4400 coil |
| BH | 4SLD001200 | 12VDC-ISO4400 coil |

For complete coils list see from page 186

6 Valve body

| TYPE | CODE | DESCRIPTION |
|----------------|------------|--|
| SAE 08/2-G 3/8 | 3CC0820C11 | Aluminium body for cavity 8 valve G3/8 std thread |
| SAE 10/2-G 3/8 | 3CC1020C11 | Aluminium body for cavity 10 valve G3/8 std thread |
| SAE 12/2-G 1/2 | 3CC1220D11 | Aluminium body for cavity 12 valve G1/2 std thread |
| SAE 16/2-G 3/4 | 3CC1620E11 | Aluminium body for cavity 16 valve G3/4 std thread |

Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see page 194

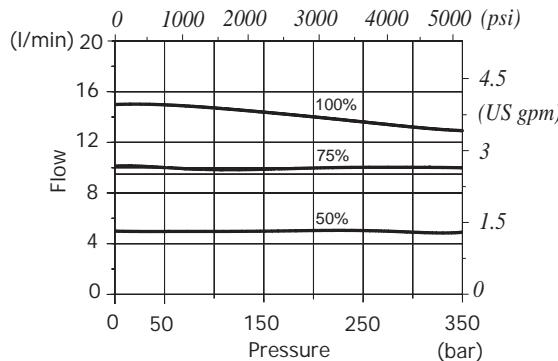
7 Connector

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

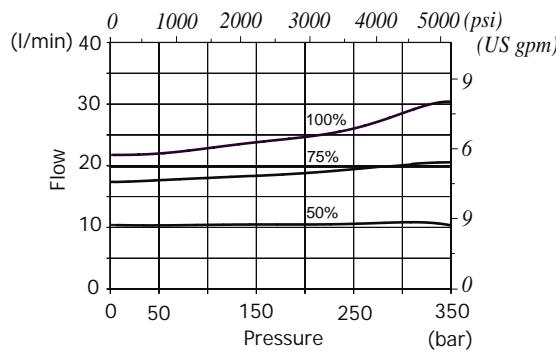
For complete connectors list see from page 186

Rating diagrams

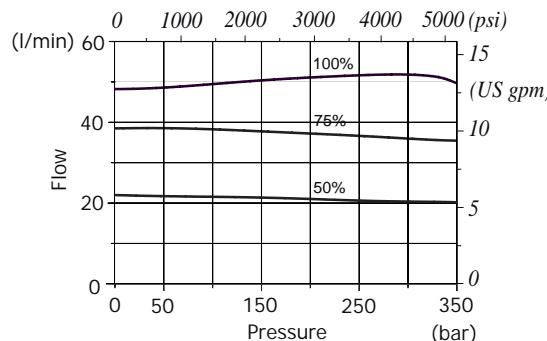
PU08X: pressure compensation diagram 1→2
for % of control current



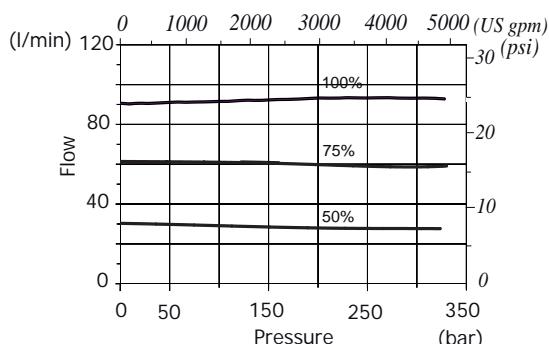
PU10X: pressure compensation diagram 1→2
for % of control current



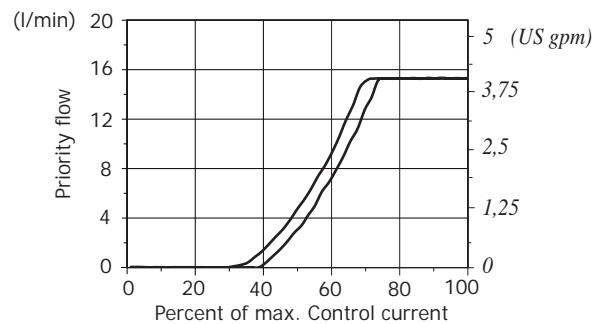
PU12X: pressure compensation diagram 1→2
for % of control current



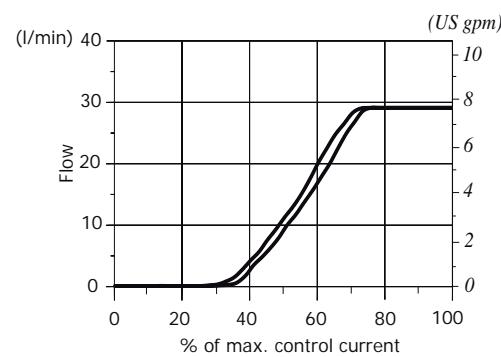
PU16X: pressure compensation diagram 1→2
for % of control current



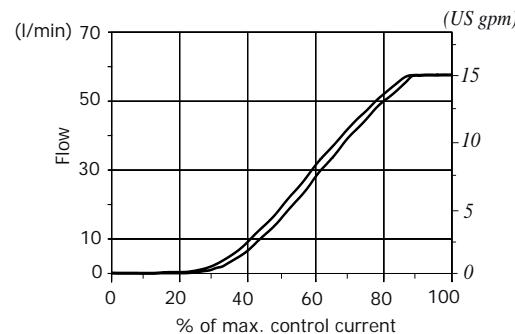
PU08X
flow regulating vs. % max. control current



PU10X
flow regulating vs. % max. control current



PU12X
flow regulating vs. % max. control current



PU16X
flow regulating vs. % max. control current

