



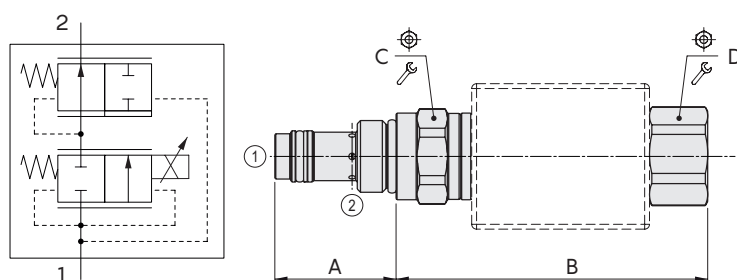
PU..X type flow control pressure compensated valves - 2 way

- Spool type
- Direct acting through proportional solenoid
- Different types of emergencies available
- Adjustment from port 1 to port 2
- 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		10 l/min (2.6 US gpm)	30 l/min (7.9 US gpm)	50 l/min (13 US gpm)	90 l/min (24 US gpm)
Max. pressure		315 bar (4600 psi)			
Oil leakage	at 210 bar (3050 psi)	80 cm³/min (4.9 in³/min)	150 cm³/min (9.2 in³/min)	250 cm³/min (15.3 in³/min)	400 cm³/min (24.4 in³/min)
Fluid		mineral based or synthetic hydraulic fluid with lubricating properties			
Viscosity		10-200 cSt			
Max level of contamination		18/16/13 ISO4406			
Fluid temperature	with NBR seals+PTFE with FPM seals	from -25°C (-13°F) to 90°C (194°F) from -20°C (-4°F) to 110°C (230°F)			
Environmental temp. for working conditions		from -20°C (-4°F) to 60°C (140°F)			
Cavity		SAE 08/2 A	SAE 10/2 A	SAE 12/2 A	SAE 16/2 A
Coil type*		BH or BQP19			
Nominal voltages		12VDC - 24VDC ± 10%			
Power rating		33 W (BH) - 15 W (BQP19)			
Max. control current		12V -> 1.70A - 24V -> 0.85A (BH) 12V -> 1.25A - 24V -> 0.63A (BQP19)			
Dither frequency		150Hz			
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 201.

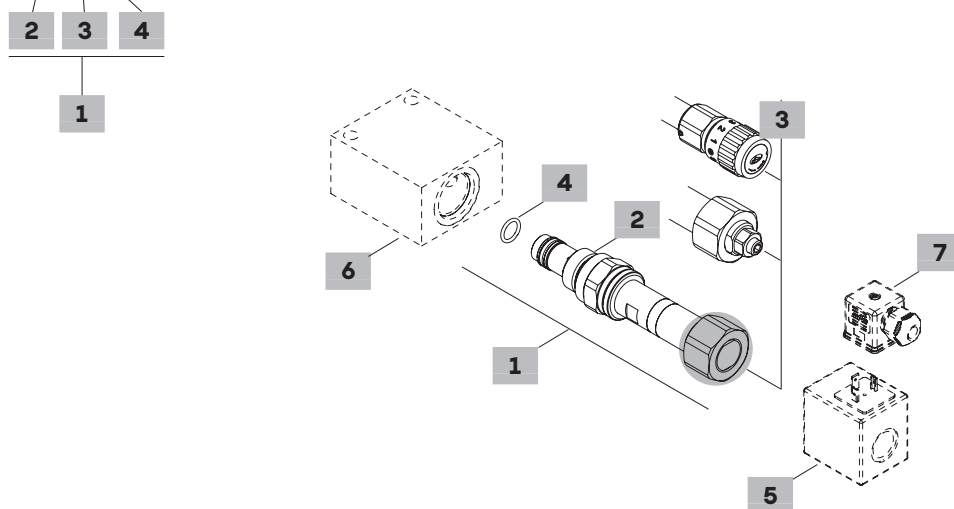


Valve type	A		B		C		D	
	mm	in	mm	in	Nm	lbft	Nm	lbft
PU10X	37.5	1.48	96.4	3.80	27	50	37	28
							5	3.7

For dimensions with different type of emergency see list page 116

Ordering codes and description composition

PU08X/A0NB



1 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 08/2 A		
PU08X/A0NB	OPU08002012	Without emergency
PU08X/A0TB	OPU08002013	Screw type emergency
PU08X/A0VB	OPU08002014	Handknob emergency
SAE cavity 10/2 A		
PU10X/A0NB	OPU10002020	Without emergency
PU10X/A0TB	OPU10002021	Screw type emergency
PU10X/A0VB	OPU10002022	Handknob emergency
SAE cavity 12/2 A		
PU12X/A0NB	OPU12002007	Without emergency
PU12X/A0TB	OPU12002008	Screw type emergency
PU12X/A0VB	OPU12002009	Handknob emergency
SAE cavity 16/2 A		
PU16X/A0NB	OPU16002010	Without emergency
PU16X/A0TB	OPU16002011	Screw type emergency
PU16X/A0VB	OPU16002012	Handknob emergency

2 Pressure drop from 1 to 2

TYPE	DESCRIPTION
A	12 bar (170 psi)

3 Emergency

TYPE	DESCRIPTION
N	Without emergency
T	Screw type
V	Handknob

4 Seals

TYPE	DESCRIPTION
B	NBR (Buna)+PTFE o-ring seals, std configuration
V	FPM (Viton) o-ring seals, contact Sales Dept

5 Coils

TYPE	CODE	DESCRIPTION
BH 12VDC	4SLD001200A	12VDC-ISO4400 coil
BQP19 12VDC	4SL5000126A	12VDC-ISO4400 coil

For complete coils list see from page 201

6 Valve body

TYPE	CODE	DESCRIPTION
SAE08/2-G 3/8	3CC0820C11	Aluminium body for cavity 08 valve, G 3/8 std thread
SAE10/2-G 3/8	3CC1020C11	Aluminium body for cavity 10 valve, G 3/8 std thread
SAE12/2-G 1/2	3CC1220D11	Aluminium body for cavity 12 valve, G 1/2 std thread
SAE16/2-G 3/4	3CC1620E11	Aluminium body for cavity 16 valve, G 3/4 std thread

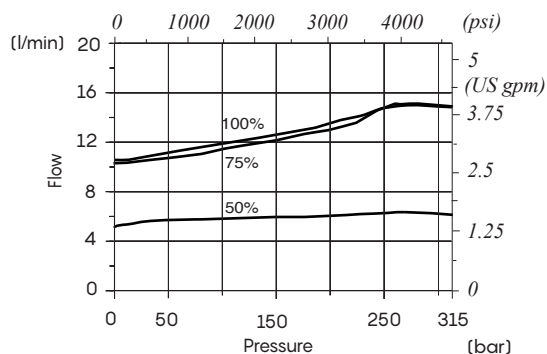
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 208

7 Connector

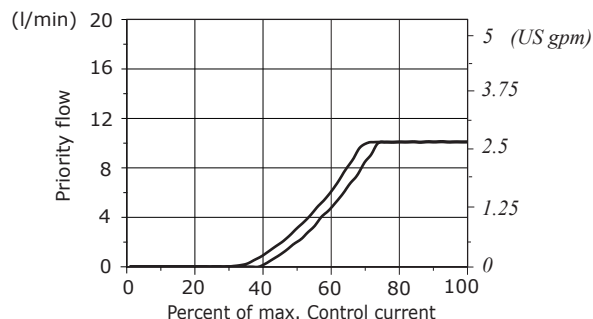
TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

For complete connectors list see from page 201

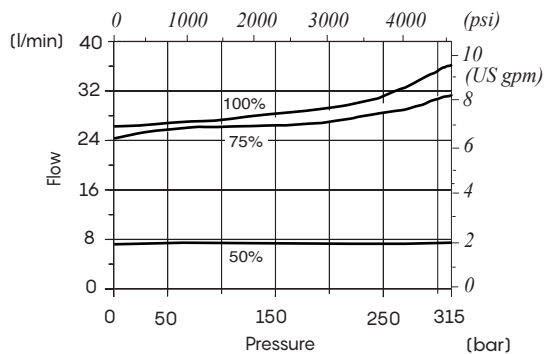
PU08X: pressure compensation diagram 1→2
for % of control current



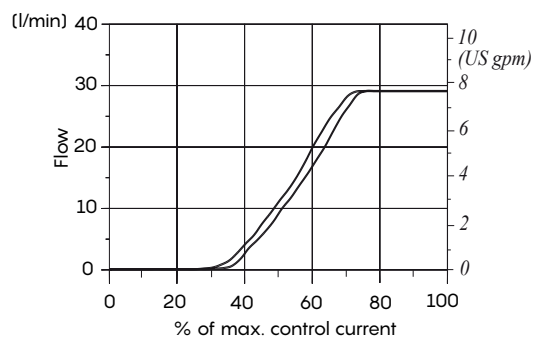
PU08X
flow regulating vs. % max. control current



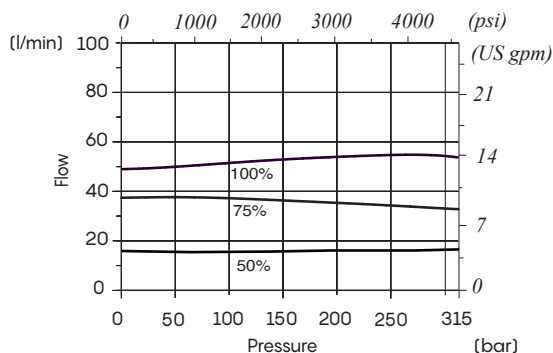
PU10X: pressure compensation diagram 1→2
for % of control current



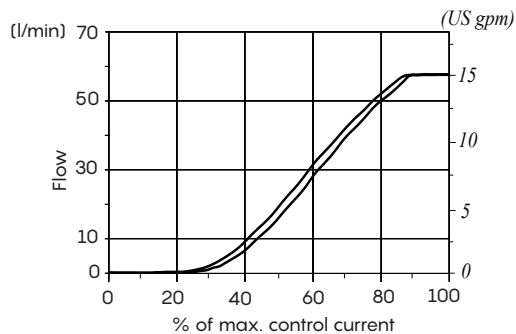
PU10X
flow regulating vs. % max. control current



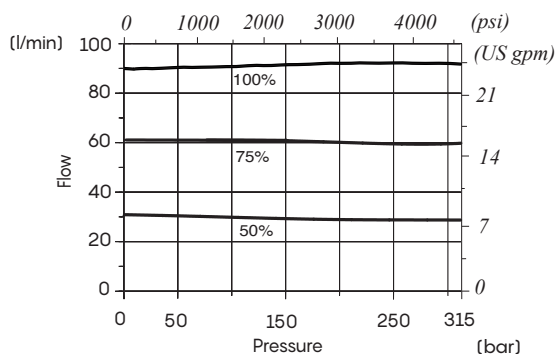
PU12X: pressure compensation diagram 1→2
for % of control current



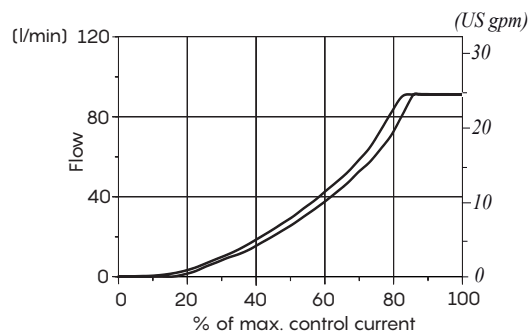
PU12X
flow regulating vs. % max. control current



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



PU16X
flow regulating vs. % max. control current



Types and dimensions

Valve type	A		B						C			D		
	N without emergency		T screw		V handknob									
	mm	in	mm	in	mm	in	mm	in	Nm	lbft	Nm	lbft		
PU08X	36.6	1.44	93.9	3.70	107.9	4.25	139.9	5.51	24	30	22	28	5	3.7
PU10X	37.5	1.48	96.4	3.80	110.4	4.35	142.4	5.61	27	50	37	28	5	3.7
PU12X	58.5	2.30	97.4	3.83	111.4	4.39	145.4	5.72	32	75	55	28	5	3.7
PU16X	68	2.68	121.4	4.78	135.4	5.33	169.4	6.67	41	95	70	28	5	3.7