



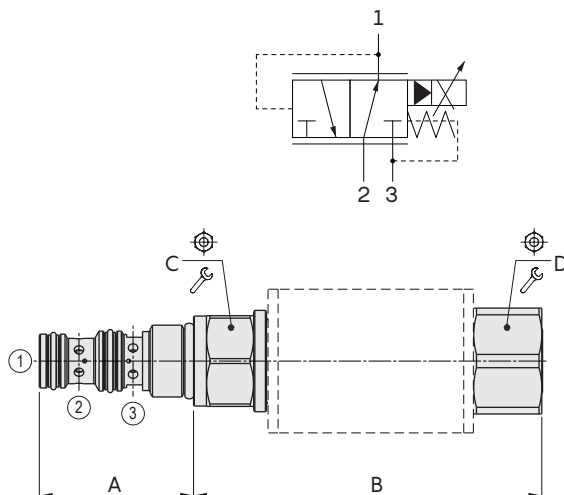
RP..X type pressure reducing valves – 3 way

- Piloted acting with relieving
- Spool type
- Control with proportional solenoid
- External zinc-plated and corrosion-proof components
- Excellent stability throughout the range
- Suitable for applications where high flow rates and low pressure drop are required
- From SAE08 to SAE12 cavities

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

		RP08X	RP10X	RP12X
Nominal flow		50 l/min (13 US gpm)	70 l/min (18.5 US gpm)	70 l/min (18.5 US gpm)
Max. pressure		Port 2= 350 bar (5100 psi) Port 3= 30 bar (435 psi)		Port 2= 350 bar (5100 psi) Port 3= 50 bar (725 psi)
Oil leakage		-		
Fluid		mineral based or synthetic hydraulic fluid with lubricating properties		
Viscosity		12-200 cSt		
Max level of contamination		18/16/13 ISO4406		
Fluid temperature	with NBR seals+Polyurethane 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 08/3	SAE 10/3	SAE 12/2
Coil type*		BQP19/BH		
Nominal voltages		12 VDC - 24 VDC		
Power rating		15 W (BQP19) - 33 W (BH)		
Max. control current		12V->1.25 A - 24V->0.63 A (BQP19) 12V->1.7 A- 24V->0.85 A (BH)		
Dither frequency		150-200 Hz		
Hysteresis		-		
Weight		0.44 kg (0.97 lb)	0.49 kg (1.08 lb)	0.61 kg (1.34 lb)

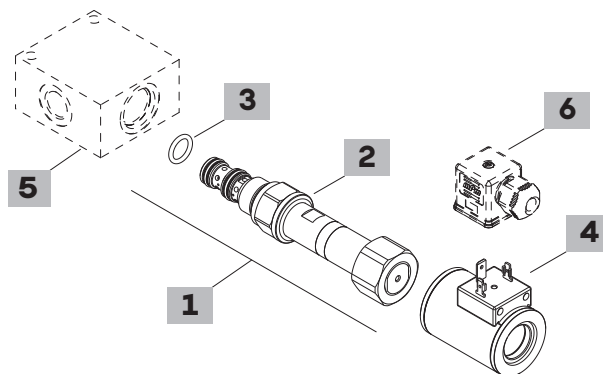
NOTE - For different conditions, please contact Walvoil Sales Dpt. - *For coils further features see from page 201.



Valve type	A		B		C		D	
	mm	in	mm	in	Nm	lbf·ft	Nm	lbf·ft
RP08X	40.8	1.61	92.3	3.63	24	30	22	28
RP10X	47.2	1.86	90.5	3.56	27	50	37	28
RP12X	73.5	2.89	93	3.66	32	80	59	28

Ordering codes and description composition

RP08X/001B



1 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 08/3		
RP08X/001B	ORP080002016	Pressure range 1
RP08X/002B	ORP080002015	Pressure range 2
RP08X/003B	ORP080002017	Pressure range 3
RP08X/004B	ORP080002018	Pressure range 4
SAE cavity 10/3		
RP10X/001B	ORP10002035	Pressure range 1
RP10X/002B	ORP10002033	Pressure range 2
RP10X/003B	ORP10002036	Pressure range 3
RP10X/004B	ORP10002037	Pressure range 4
SAE cavity 12/3		
RP12X/001B	ORP12002019	Pressure range 1
RP12X/002B	ORP12002020	Pressure range 2
RP12X/003B	ORP12002021	Pressure range 3
RP12X/004B	ORP12002022	Pressure range 4

2 Pressure range

TYPE	DESCRIPTION
1	Pressure range 10÷50 bar (145÷725 psi);
2	Pressure range 10÷170 bar (145÷2465 psi);
3	Pressure range 90÷350 bar (1300÷5075 psi);
4	Pressure range 10÷90 bar (145÷1300 psi);

3 Seals

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

4 Coils

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

For complete coils list see from page 201

5 Valve body

TYPE	CODE	DESCRIPTION
SAE08/3-G 3/8	3CC0830C11	Aluminium body for cavity 08 valve, G 3/8 std thread
SAE10/3-G 3/8	3CC1030C11	Aluminium body for cavity 10 valve, G 3/8 std thread
SAE12/3-G 1/2	3CC1230D11	Aluminium body for cavity 12 valve, G 1/2 std thread

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

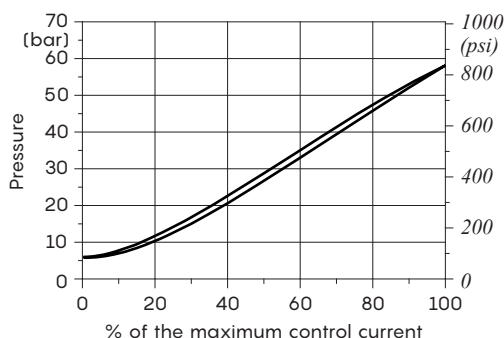
6 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

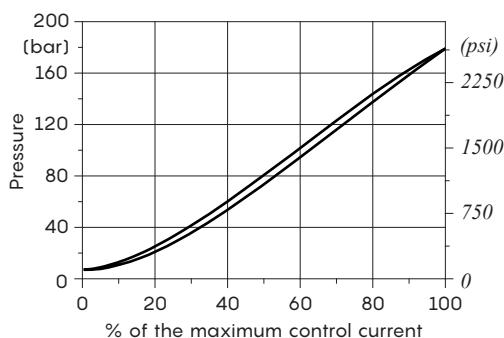
For complete connectors list see from page 201

Rating diagrams

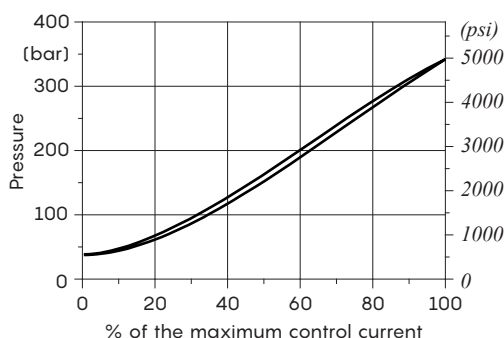
Pressure reducing vs. control current
RP08X/001B



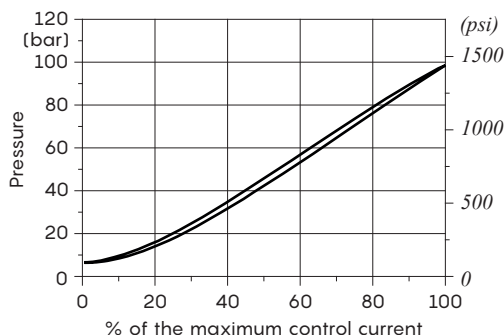
Pressure reducing vs. control current
RP08X/002B



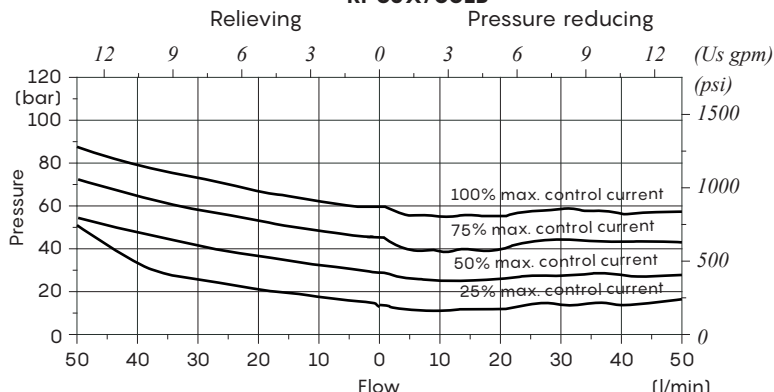
Pressure reducing vs. control current
RP08X/003B



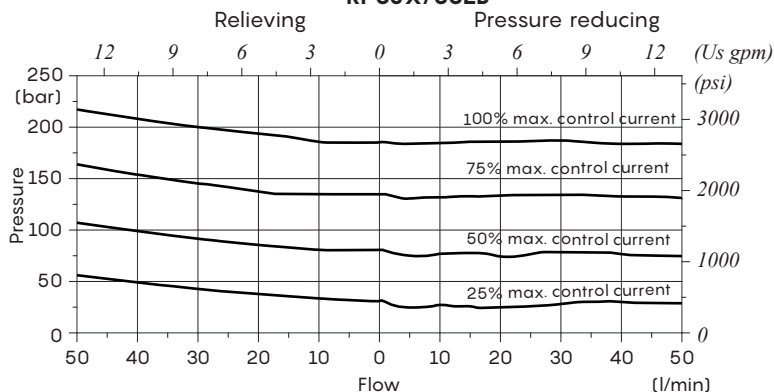
Pressure reducing vs. control current
RP08X/004B



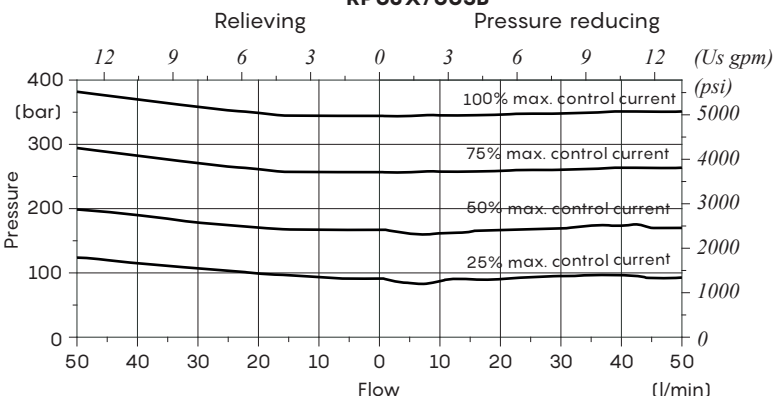
Reducing/relieving pressure vs. flow
RP08X/001B



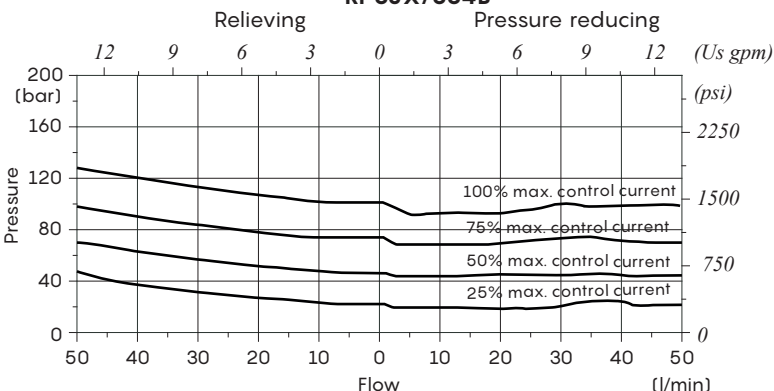
Reducing/relieving pressure vs. flow
RP08X/002B



Reducing/relieving pressure vs. flow
RP08X/003B

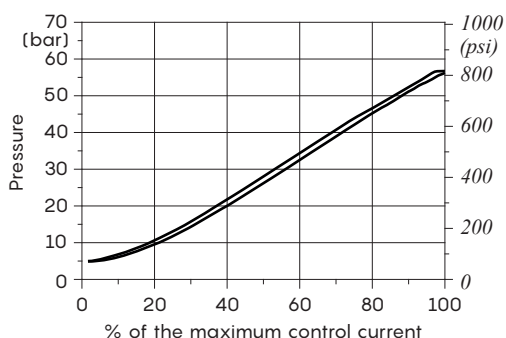


Reducing/relieving pressure vs. flow
RP08X/004B

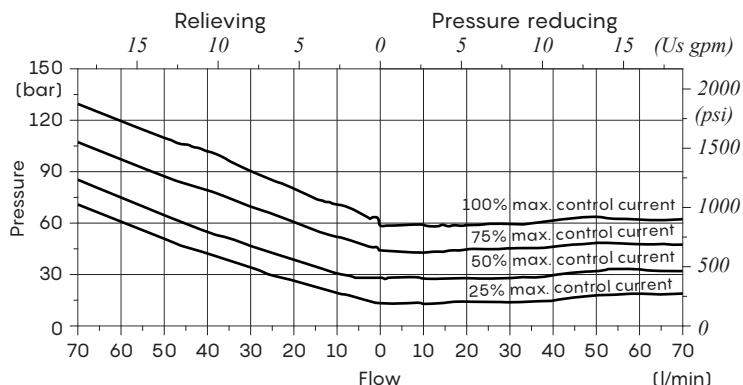


Rating diagrams

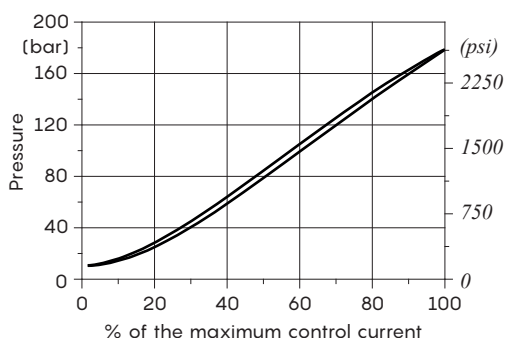
Pressure reducing vs. control current
RP10X/001B



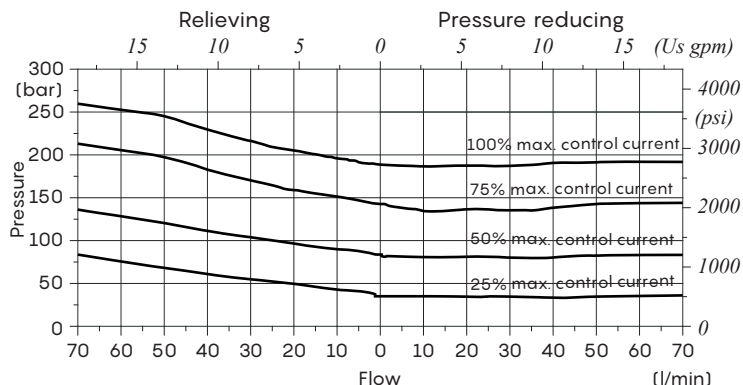
Reducing/relieving pressure vs. flow
RP10X/001B



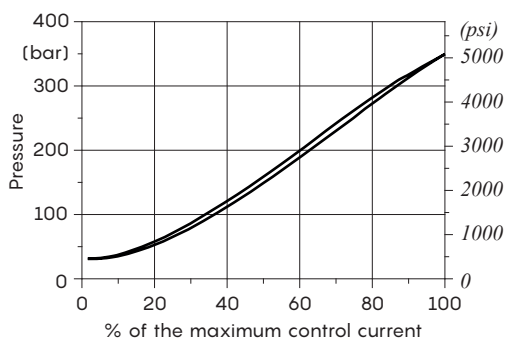
Pressure reducing vs. control current
RP10X/002B



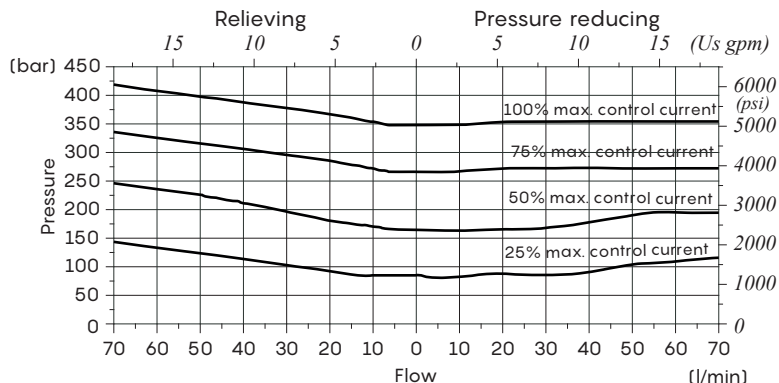
Reducing/relieving pressure vs. flow
RP10X/002B



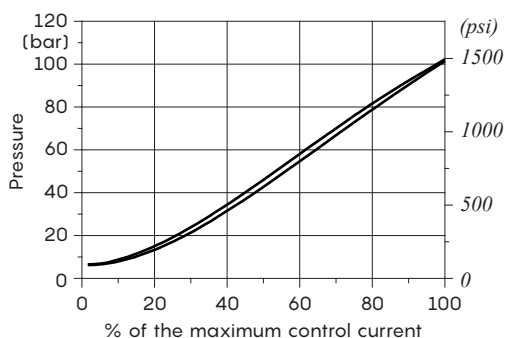
Pressure reducing vs. control current
RP10X/003B



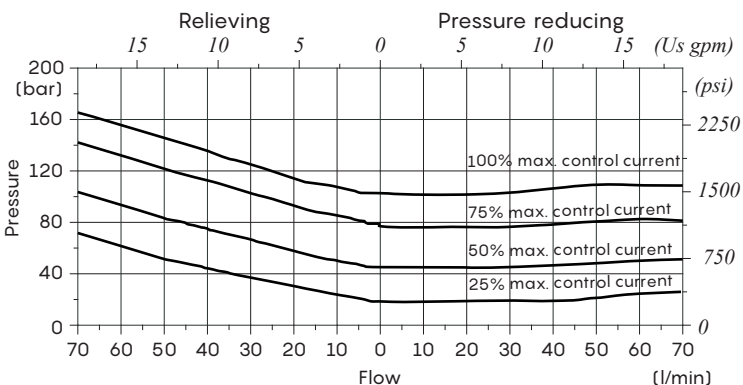
Reducing/relieving pressure vs. flow
RP10X/003B



Pressure reducing vs. control current
RP10X/004B

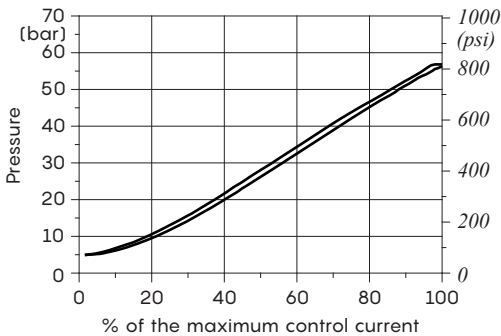


Reducing/relieving pressure vs. flow
RP10X/004B

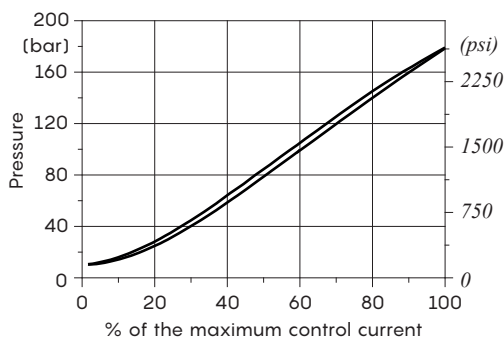


Rating diagrams

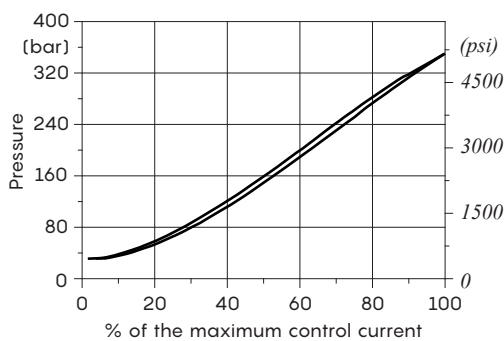
**Pressure reducing vs. control current
RP12X/001B**



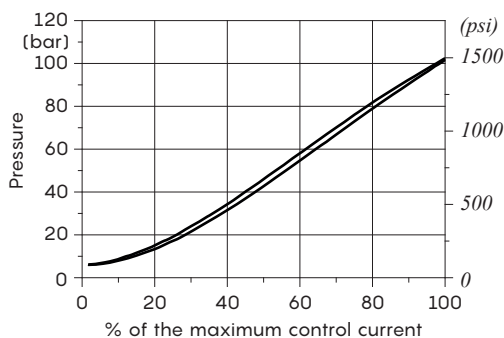
**Pressure reducing vs. control current
RP12X/002B**



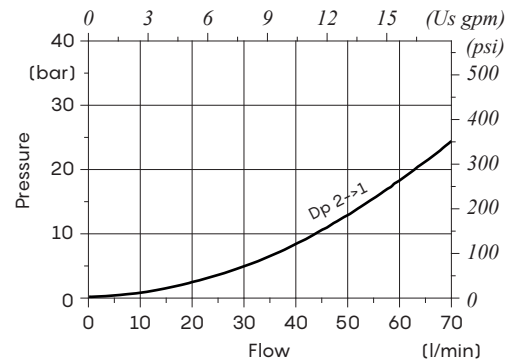
**Pressure reducing vs. control current
RP12X/003B**



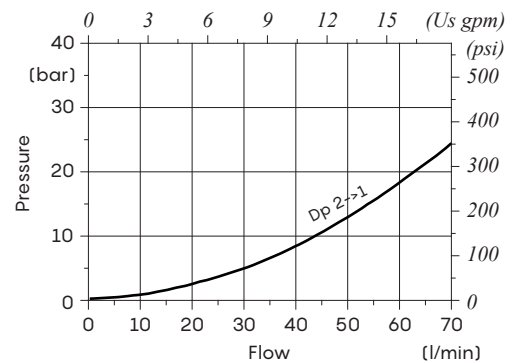
**Pressure reducing vs. control current
RP12X/004B**



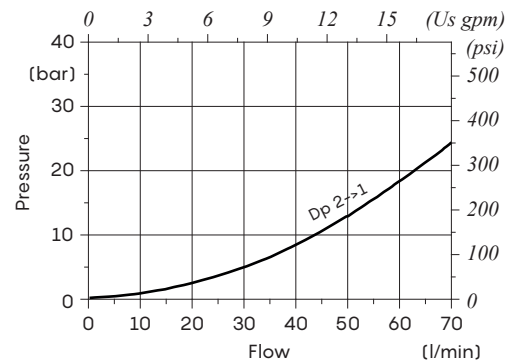
**Reducing/relieving pressure vs. flow
RP12X/001B**



**Reducing/relieving pressure vs. flow
RP12X/002B**



**Reducing/relieving pressure vs. flow
RP12X/003B**



**Reducing/relieving pressure vs. flow
RP12X/004B**

