



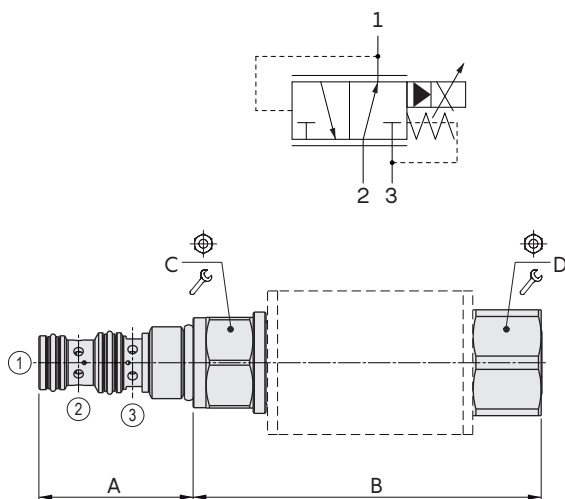
RP..X type pressure reducing valves – 3 way

- 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)

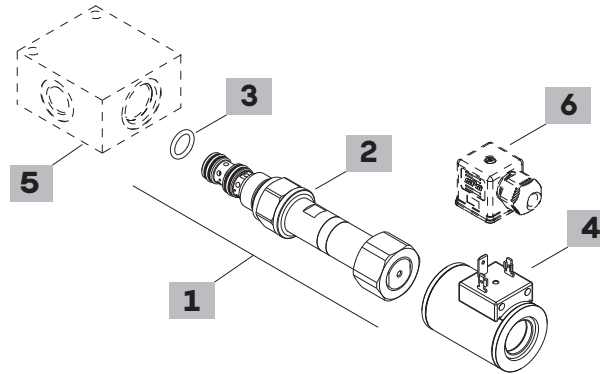
NOTE – For different conditions, please contact Walvoil Sales Dpt. – *For coils further features see from page 201.



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	5
RP10X	47.2	1.86	90.5	3.56	27	50	37	5
RP12X	73.5	2.89	93	3.66	32	80	59	5

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-SAE8	3CC0830K11	Aluminium body for cavity 08 valve, SAE8 std thread
SAE10/3-SAE8	3CC1030K11	Aluminium body for cavity 10 valve, SAE8 std thread
SAE12/3-SAE10	3CC1230L11	Aluminium body for cavity 12 valve, SAE10 std thread

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

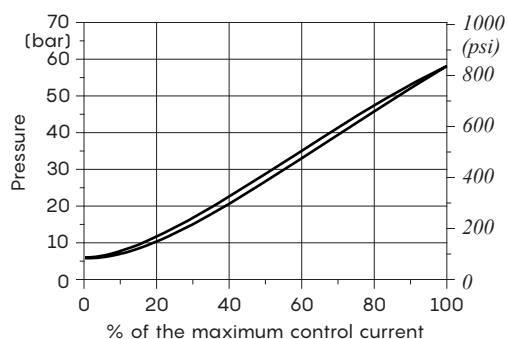
6 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

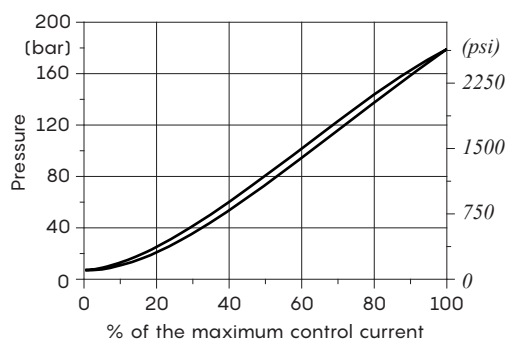
For complete connectors list see from page 201

Rating diagrams

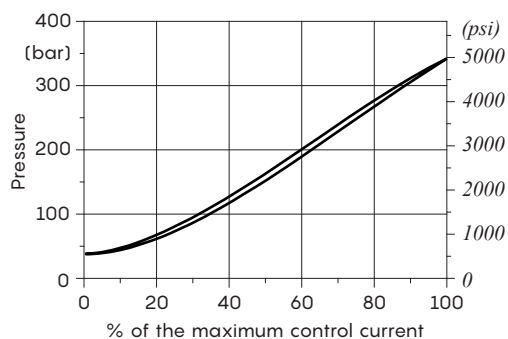
**Pressure reducing vs. control current
RP08X/001B**



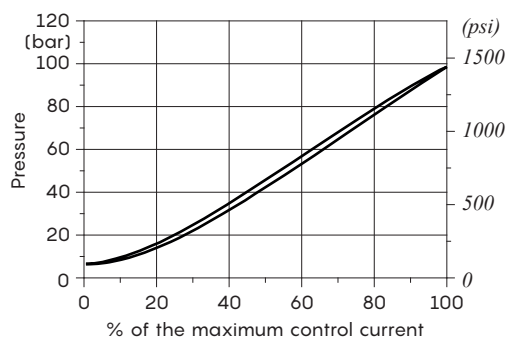
**Pressure reducing vs. control current
RP08X/002B**



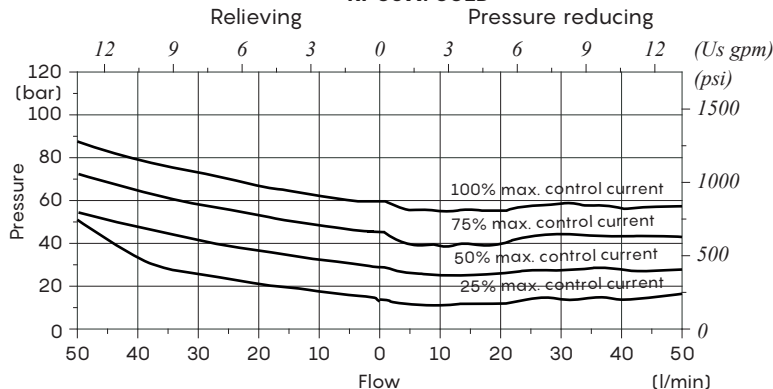
**Pressure reducing vs. control current
RP08X/003B**



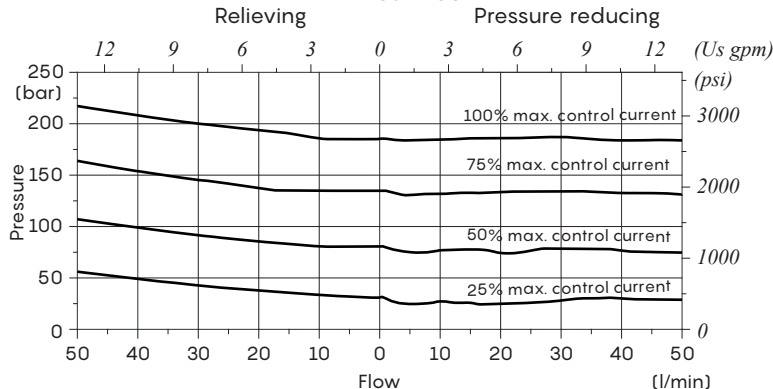
**Pressure reducing vs. control current
RP08X/004B**



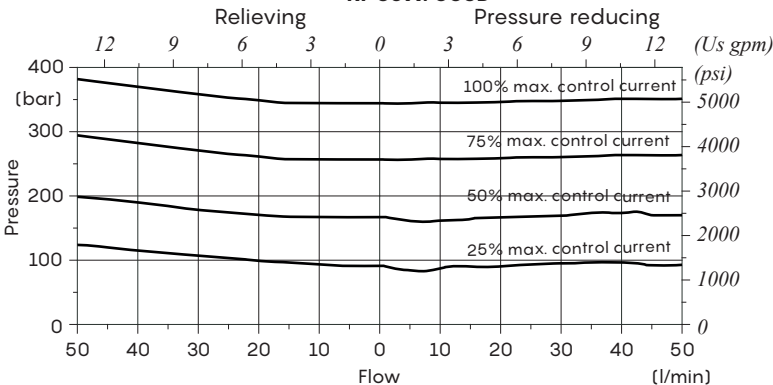
**Reducing/relieving pressure vs. flow
RP08X/001B**



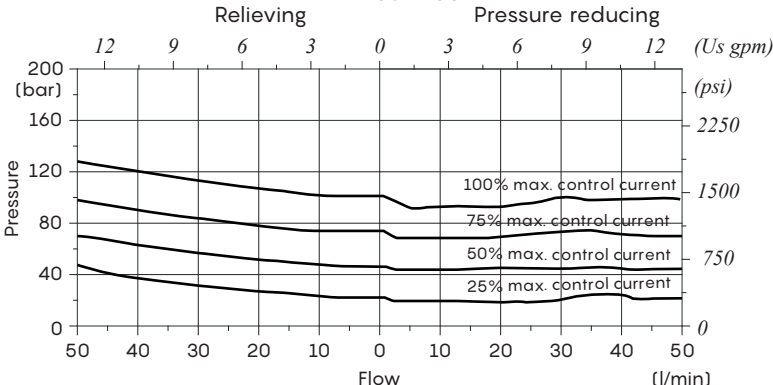
**Reducing/relieving pressure vs. flow
RP08X/002B**



**Reducing/relieving pressure vs. flow
RP08X/003B**

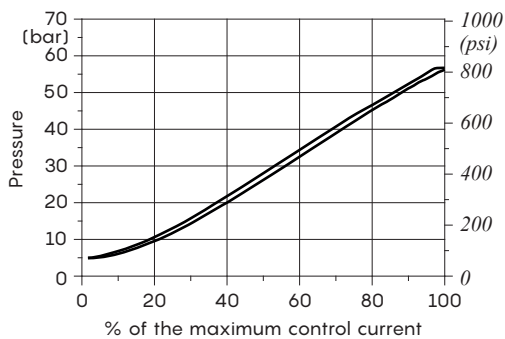


**Reducing/relieving pressure vs. flow
RP08X/004B**

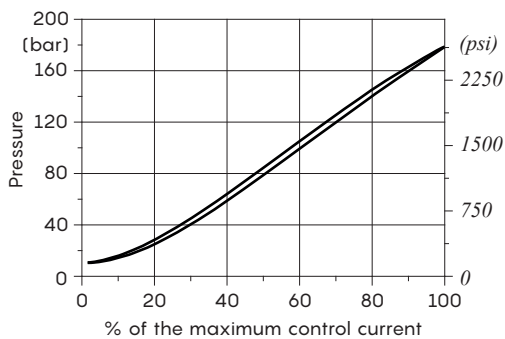


Rating diagrams

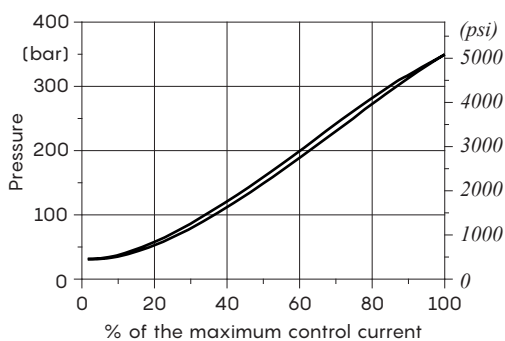
Pressure reducing vs. control current
RP10X/001B



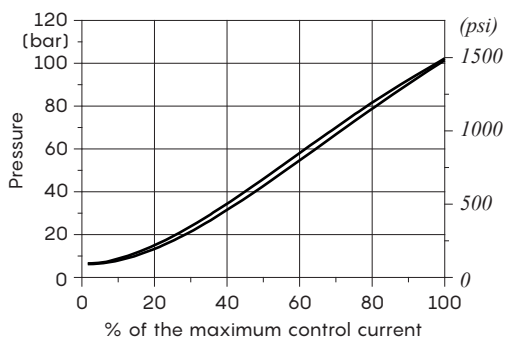
Pressure reducing vs. control current
RP10X/002B



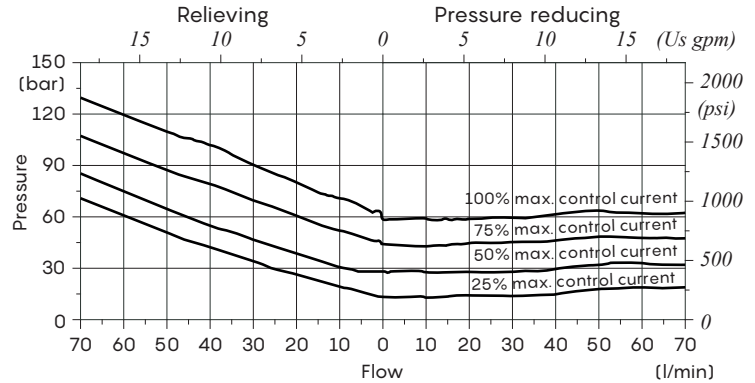
Pressure reducing vs. control current
RP10X/003B



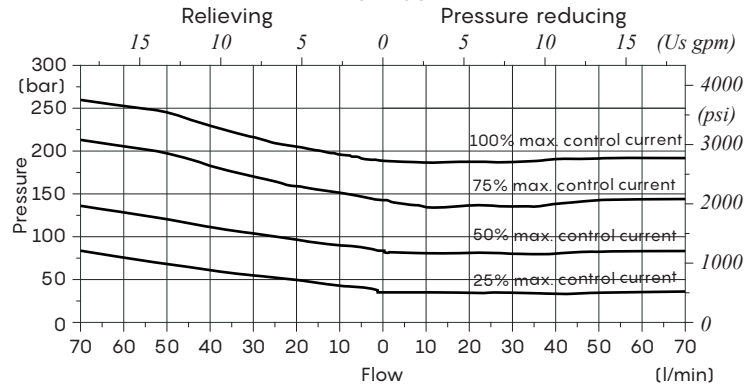
Pressure reducing vs. control current
RP10X/004B



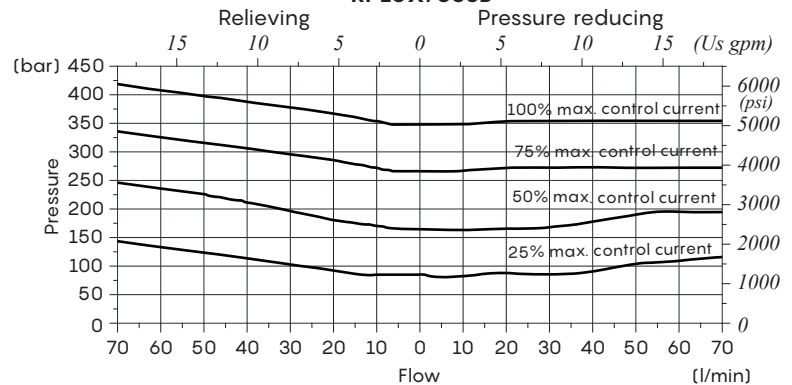
Reducing/relieving pressure vs. flow
RP10X/001B



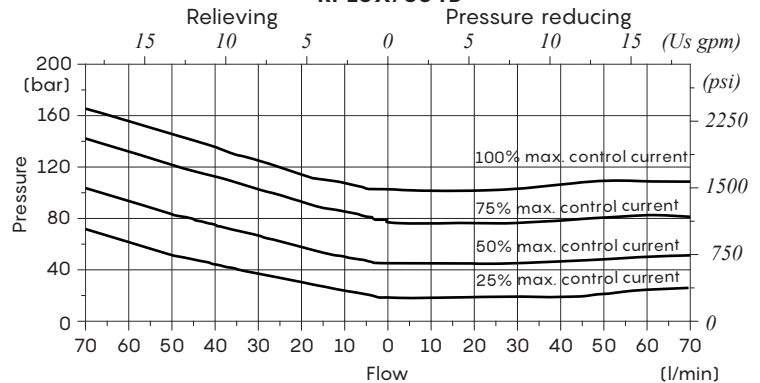
Reducing/relieving pressure vs. flow
RP10X/002B



Reducing/relieving pressure vs. flow
RP10X/003B

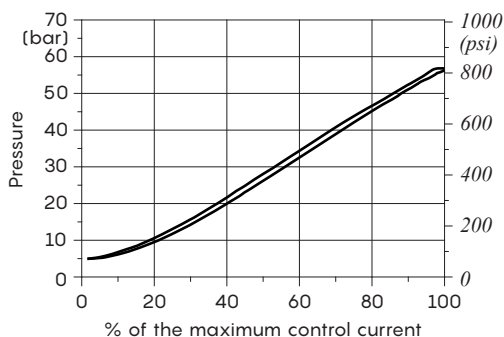


Reducing/relieving pressure vs. flow
RP10X/004B

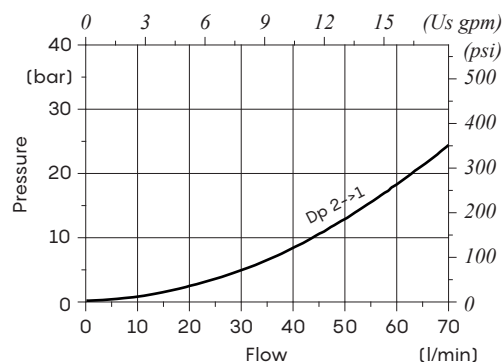


Rating diagrams

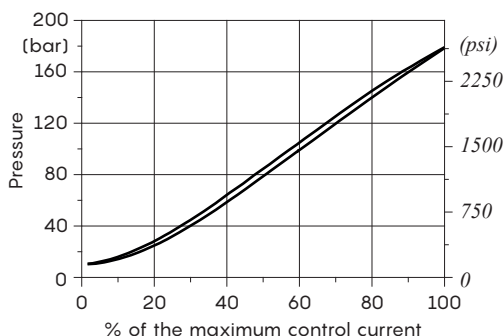
**Pressure reducing vs. control current
RP12X/001B**



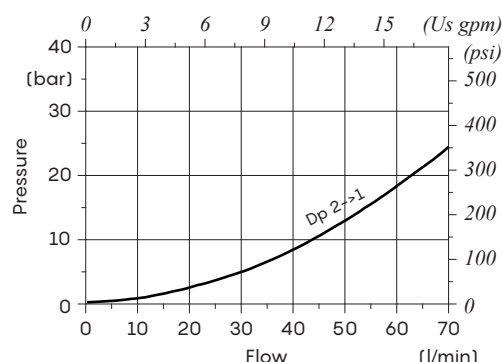
**Reducing/relieving pressure vs. flow
RP12X/001B**



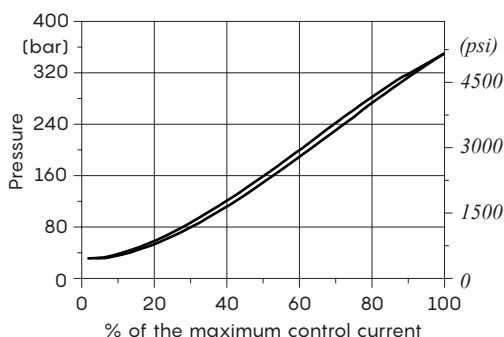
**Pressure reducing vs. control current
RP12X/002B**



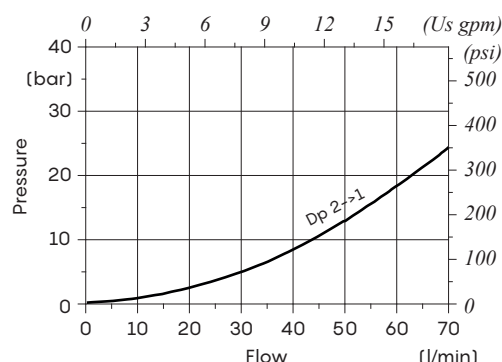
**Reducing/relieving pressure vs. flow
RP12X/002B**



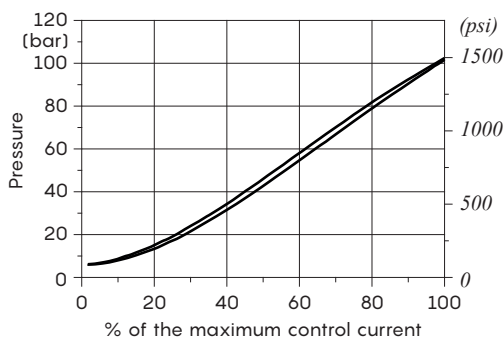
**Pressure reducing vs. control current
RP12X/003B**



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



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



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

