



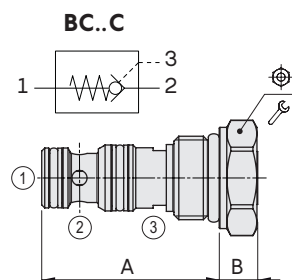
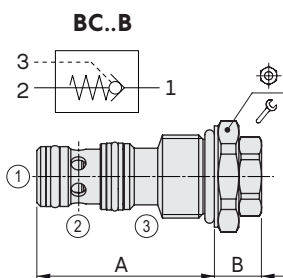
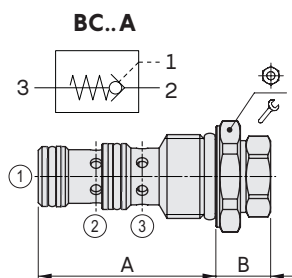
BC...type pilot operated check valves – 3 way

- Poppet type
- Direct acting
- From SAE08 to SAE16 cavities
- Different pilot ratio available

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

		BC08A	BC10A-B	BC10C	BC12A-B	BC16A-B
Nominal flow		15 l/min (4 US gpm)	30 l/min (8 US gpm)	60 l/min (16 US gpm)	50 l/min (13 US gpm)	100 l/min (26 US gpm)
Max. pressure		350 bar (5100 psi)				
Oil leakage	at 100 bar (1450 psi)	0.25 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)
Fluid		mineral based or sinthetic hydraulic fluid with lubricating properties				
Viscosity		10-200 cSt				
Max level of contamination		20/18/14 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 10/3	SAE 12/3	SAE 16/3
Weight		0.080 kg (0.18 lb)	0.100 kg (0.22 lb)	0.111 kg (0.24 lb)	0.230 kg (0.51 lb)	0.440 kg (0.97 lb)

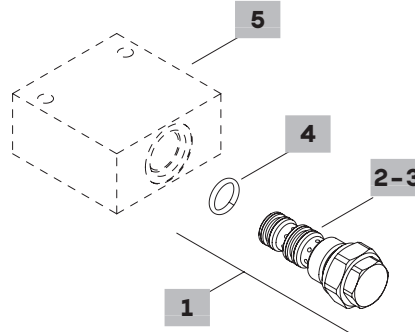
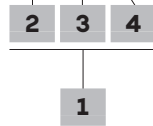
NOTE - For different conditions, please contact Walvoil Sales Dpt.



Valve type		A		B				
		mm	in	mm	in	Nm	lbft	
BC..A	SAE 08/3	40.8	1.61	17	0.67	24	30	22
	SAE 10/3	47	1.85	12.5	0.49	27	50	36
	SAE 12/3	73.5	2.89	14	0.55	32	80	59
	SAE 16/3	75	2.97	24	0.94	41	100	73
BC..B	SAE 10/3	47	1.85	12.5	0.49	27	50	36
	SAE 12/3	73.5	2.89	14	0.55	32	80	59
BC..C	SAE 16/3	75	2.95	24	0.94	41	100	73
	SAE 10/3	47	1.85	10.2	0.40	27	50	36

Ordering codes and description composition

BC08A/3 0 1 B

**1 Cartridges**

TYPE	CODE	DESCRIPTION
SAE cavity 08/3		
BC08A/301B	OBC08002000	Pilot ratio 1:2.5 Opening press. 2 to 3=5 bar (72.5 psi)
SAE cavity 10/3		
BC10A/301B	OBC10002001	Pilot ratio 1:3 Opening press. 2 to 3=5 bar (72.5 psi)
BC10B/301B	OBC10002008	Pilot ratio 1:2 Opening press. 1 to 2=5 bar (72.5 psi)
BC10C/401B	OBC10002011	Pilot ratio 1:4 Opening press. 2 to 1=5 bar (72.5 psi)
SAE cavity 12/3		
BC12A/301B	OBC12002000	Pilot ratio 1:3 Opening press. 2 to 3=5 bar (72.5 psi)
BC12B/301B	OBC12002005	Pilot ratio 1:3 Opening press. 1 to 2=5 bar (72.5 psi)
SAE cavity 16/3		
BC16A/301B	OBC16002000	Pilot ratio 1:2.5 Opening press. 2 to 3=5 bar (72.5 psi)
BC16B/301B	OBC16002004	Pilot ratio 1:2.5 Opening press. 1 to 2=5 bar (72.5 psi)

2 Pilot ratio

TYPE	DESCRIPTION
For BC..A	
BC08A/3	1:2.5
BC10A/3	1:3
BC12A/3	1:3
BC16A/3	1:2.5
For BC..B	
BC10B/3	1:2
BC12B/3	1:3
BC16B/3	1:2.5
For BC..C	
BC10B/3	1:4

3 Opening pressure from 2 to 3

TYPE	DESCRIPTION
For BC..A from 2 to 3	
1	5 bar (72.5 psi) with sealed piston
2	2.5 bar (36.2 psi) without sealed piston
For BC..B from 1 to 2	
1	5 bar (72.5 psi) with sealed piston
For BC..C from 2 to 1	
1	5 bar (72.5 psi) with seal

4 Seals

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

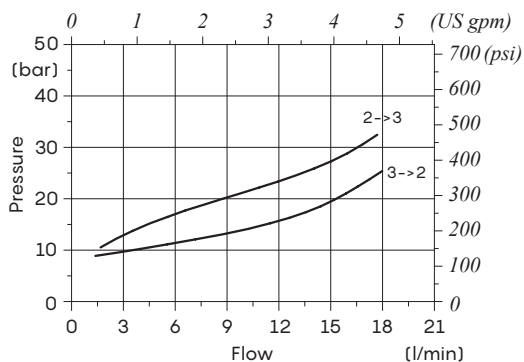
5 Valve body

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
SAE16/3-SAE12	3CC1630M11	Aluminium body for cavity 16 valve, SAE12 std thread

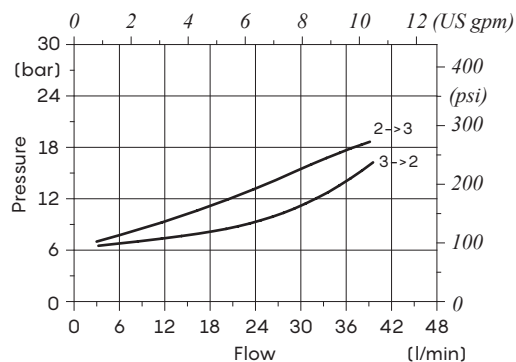
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 210

Rating diagrams

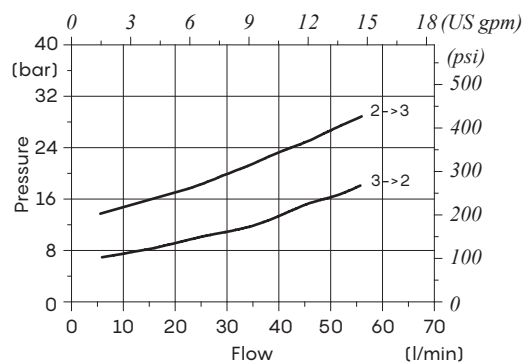
BC08A pressure drop vs flow



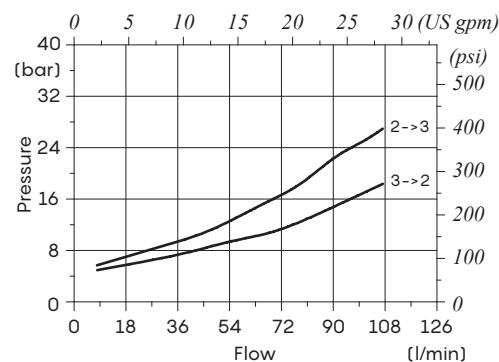
BC10A pressure drop vs flow



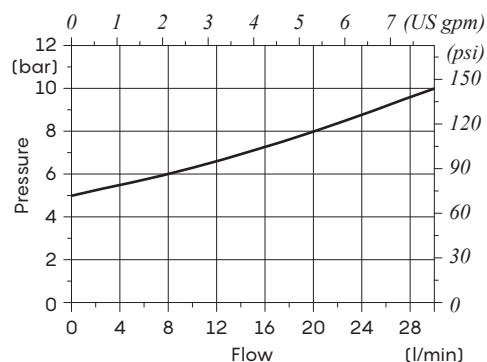
BC12A pressure drop vs flow



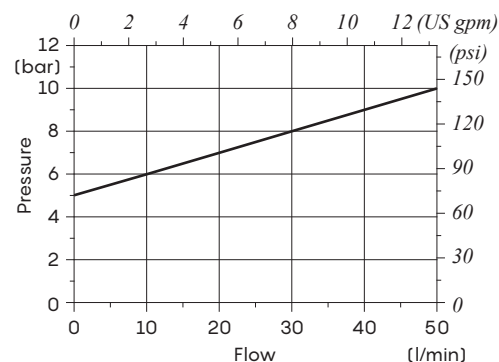
BC16A pressure drop vs flow



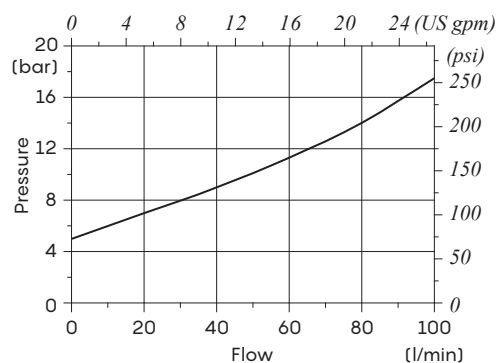
BC10B pressure drop vs flow



BC12B pressure drop vs flow



BC16B pressure drop vs flow



BC10C pressure drop vs flow

