



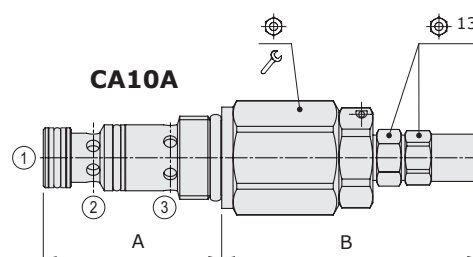
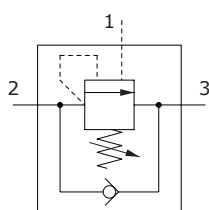
CA..A type counterbalance valves - 3 way

- For open center
- Line mounting
- From SAE10 to SAE16 cavities

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

		CA10A	CA12A	CA16A
Nominal flow		30 l/min (7.9 US gpm)	60 l/min (16 US gpm)	90 l/min (23.8 US gpm)
Max. pressure		350 bar (5100 psi)		
Oil leakage	80% of max. pressure setting	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 oil		
Viscosity		10-200 cSt		
Max level of contamination		20/18/14 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 10/3	SAE 12/3	SAE 16/3
Weight		0.280 kg (0.62 lb)	0.280 kg (0.62 lb)	0.670 kg (1.48 lb)

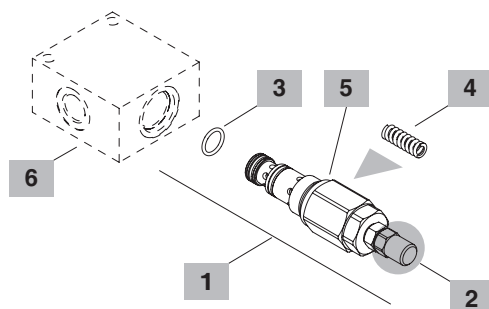
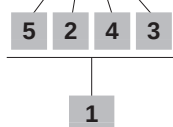
NOTE - For different conditions, please contact Walvoil Sales Dpt.



Valve type		A		B				
		mm	in	mm	in			Nm
CA10A/	4S	47.2	1.86	68.5	2.70	27	50	37
	4W	47.2	1.86	68.5	2.70	27	50	37
CA12A/	4S	73.5	2.89	62.5	2.46	32	80	59
	4W	73.5	2.89	62.5	2.46	32	80	59
CA16A/	4S	75	2.95	69.9	2.74	41	100	74
	4W	75	2.95	69.9	2.74	41	100	74

Ordering codes and description composition

CA10A/4S2B

**1 Cartridges**

TYPE	CODE	DESCRIPTION
SAE cavity 10/3		
CA10A/4S2B	0CA10002007	Screw type adjustment, pilot ratio 1:4 pressure range 2
SAE cavity 12/3		
CA12A/4S2B	0CA12002000	Screw type adjustment, pilot ratio 1:4 pressure range 2
SAE cavity 16/3		
CA16A/4S2B	0CA16002001	Screw type adjustment, pilot ratio 1:4 pressure range 2

2 Adjustments

TYPE	DESCRIPTION
S	Screw
W	Copped adjustment

3 Seals

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

4 Pressure range

Standard setting is referred to 5 l/min (1.32 US gpm) flow

TYPE CODE DESCRIPTION

For CA10A valve

1	3ML1092502 red band	Setting range 50-220 bar (725-3200 psi)
2	3ML1092300 red band	Setting range 180-350 bar (2600-5100 psi)
3	3ML1102800 red band	Setting range 300-700 bar (4350-10150 psi)

For CA12A valve

1	3ML1133201 blue band	Setting range 50-220 bar (725-3200 psi)
2	3ML1133200 red band	Setting range 180-350 bar (2600-5100 psi)
3	3ML1133500 yellow band	Setting range 300-700 bar (4350-10150 psi)

For CA16A valve

1	3ML1164000 blue band	Setting range 50-220 bar (725-3200 psi)
2	3ML1164001 red band	Setting range 180-350 bar (2600-5100 psi)
3	3ML1164002 yellow band	Setting range 300-700 bar (4350-10150 psi)

5 Pilot ratio

TYPE	DESCRIPTION
4	1:4

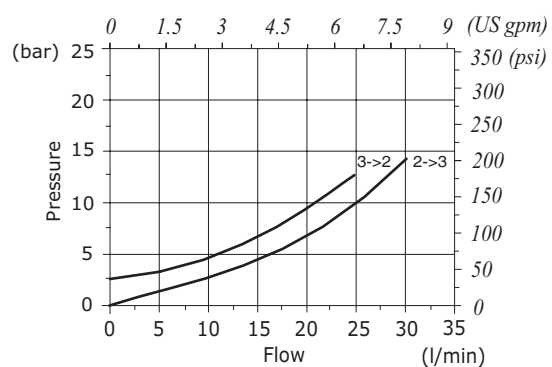
6 Valve body

TYPE	CODE	DESCRIPTION
SAE 10/3-G 3/8	3CC1030C11	Aluminium body for cavity 10, valve G3/8 std thread
SAE 12/3-G 1/2	3CC1230D11	Aluminium body for cavity 12 valve, G1/2 std thread
SAE 16/3-G 3/4	3CC1630E11	Aluminium body for cavity 16 valve, G3/4 std thread

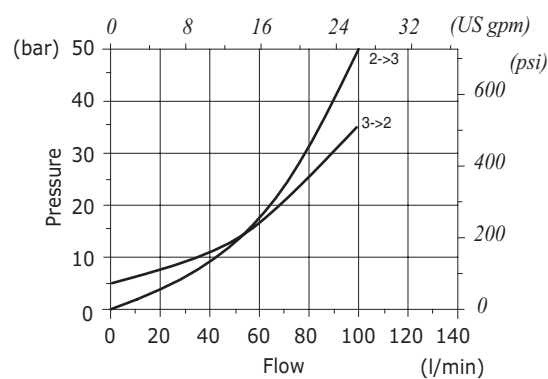
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 217

Rating diagrams

CA10A pressure drop vs flow



CA12A pressure drop vs flow



CA16A pressure drop vs flow

