

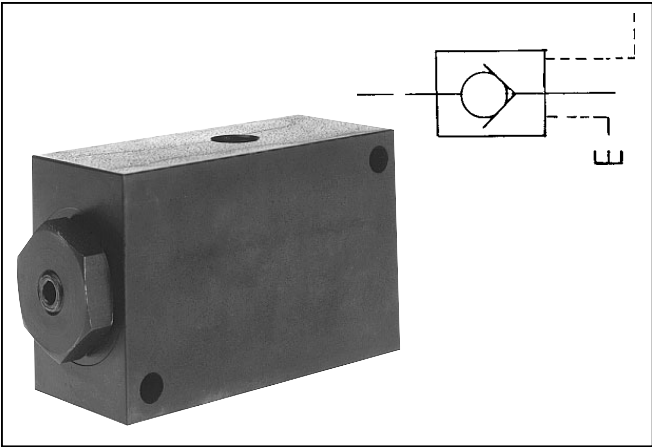
General Description

Series CP check valves permit free flow in one direction; flow in the opposite direction is blocked until pilot pressure unseats the poppet and permits flow in the opposite direction.

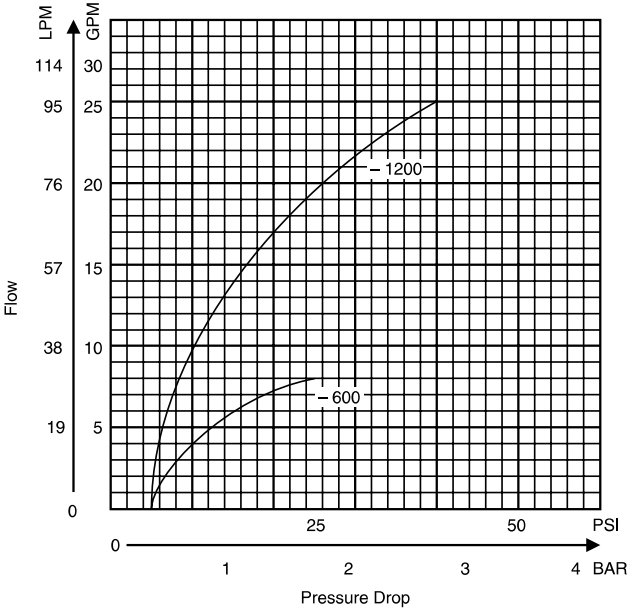
Choice of pilots operated by either air or oil.

For fast response without decompression, select the single-stage poppet having a 5 to 1 ratio of pilot piston area to check valve area.

To eliminate hydraulic shock and surge on opening, select the decompression type 2-stage poppet which has a 40 to 1 ratio of pilot piston area to decompression poppet area. This valve is ideal for controlling 207 Bar (3000 PSI) line pressures by means of 5.5 Bar (80 PSI) pilot pressure.



Performance Curves



Specifications

Maximum Operating Pressure	Poppet Type B: 7 Bar (100 PSI) Poppet Type N: 60 Bar (800 PSI) Poppet Type M: 210 Bar (3000 PSI)
Maximum Pilot Pressure	Air: BACP, BACPS 6 Bar (80 PSI) Oil: CP1200, CPS1200 70 Bar (1000 PSI) CP600, CPS600 210 Bar (3000 PSI)
Cracking Pressure	0.4 Bar (5 PSI) Free flow direction
Material	Type B: Nitrile Type N: Nylon Type M: Solid Metal

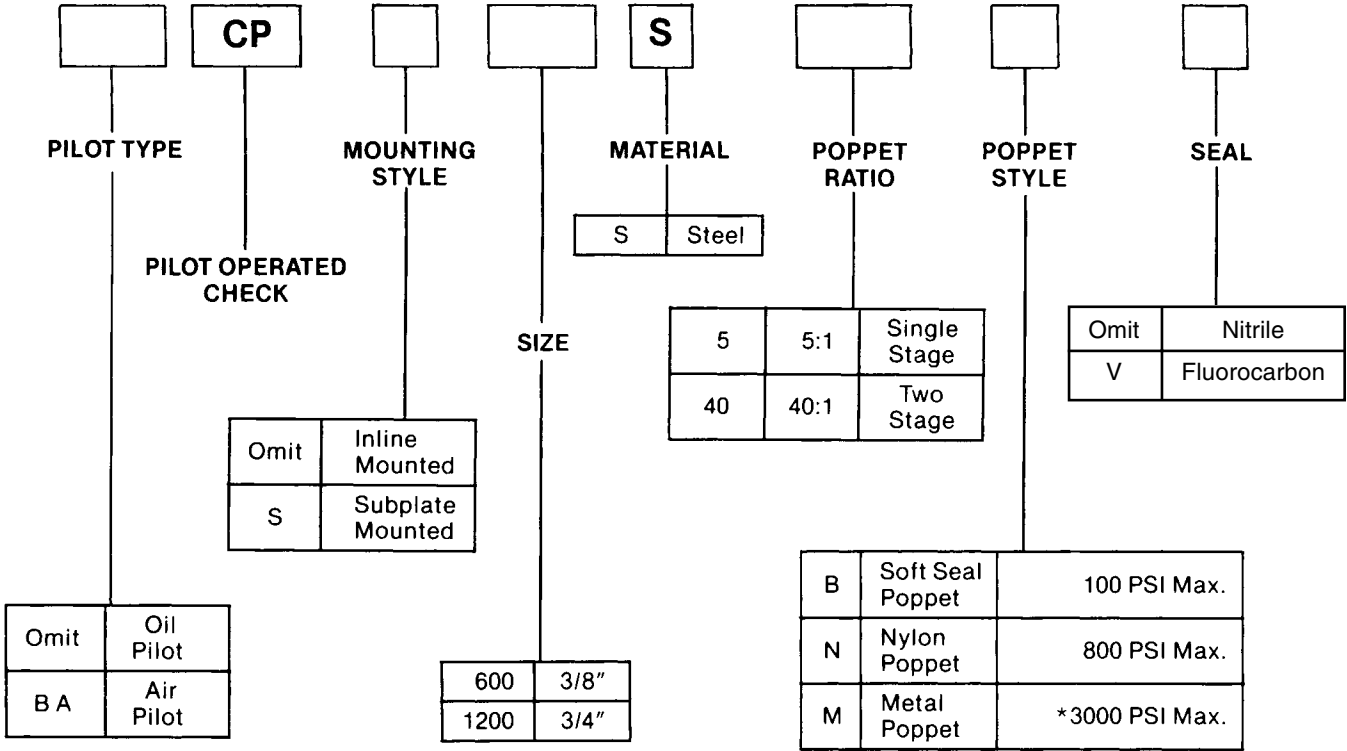
Flow Data

Valve Model	Flow, Max. GPM (L/M)	Pilot Piston Area To Decompression Poppet Area	Pilot Piston Area To Check Valve Area	Port Size
CP*600S5 BACP*600S5	8 (30)	—	5:1	3/8 NPTF
CP*600S40 BACP*600S40	8 (30)	40:1	5:1	3/8 NPTF
CP*1200S5 BACP*1200S5	25 (95)	—	5:1	3/4 NPTF
CP*1200S40 BACP*1200S40	25 (95)	40:1	5:1	3/4 NPTF

Note: Models CP/CPS are oil-operated pilot
Models BACP/BACPS are air-operated pilots

*Insert "S" in model code for subplate mounted valve.

Example: "BACP600S40N" means air pilot-operated 3/8" in-line check valve, steel, two-stage 40-to-1 pilot ratio, nylon poppet for 800 PSI maximum line pressure, with nitrile seals.



*3000 PSI is the system pressure rating. The pilot pressure rating is 80 PSI for Air Pilot, 1000 PSI for Oil Pilot 1200 size and 3000 PSI for Oil Pilot 600 size.

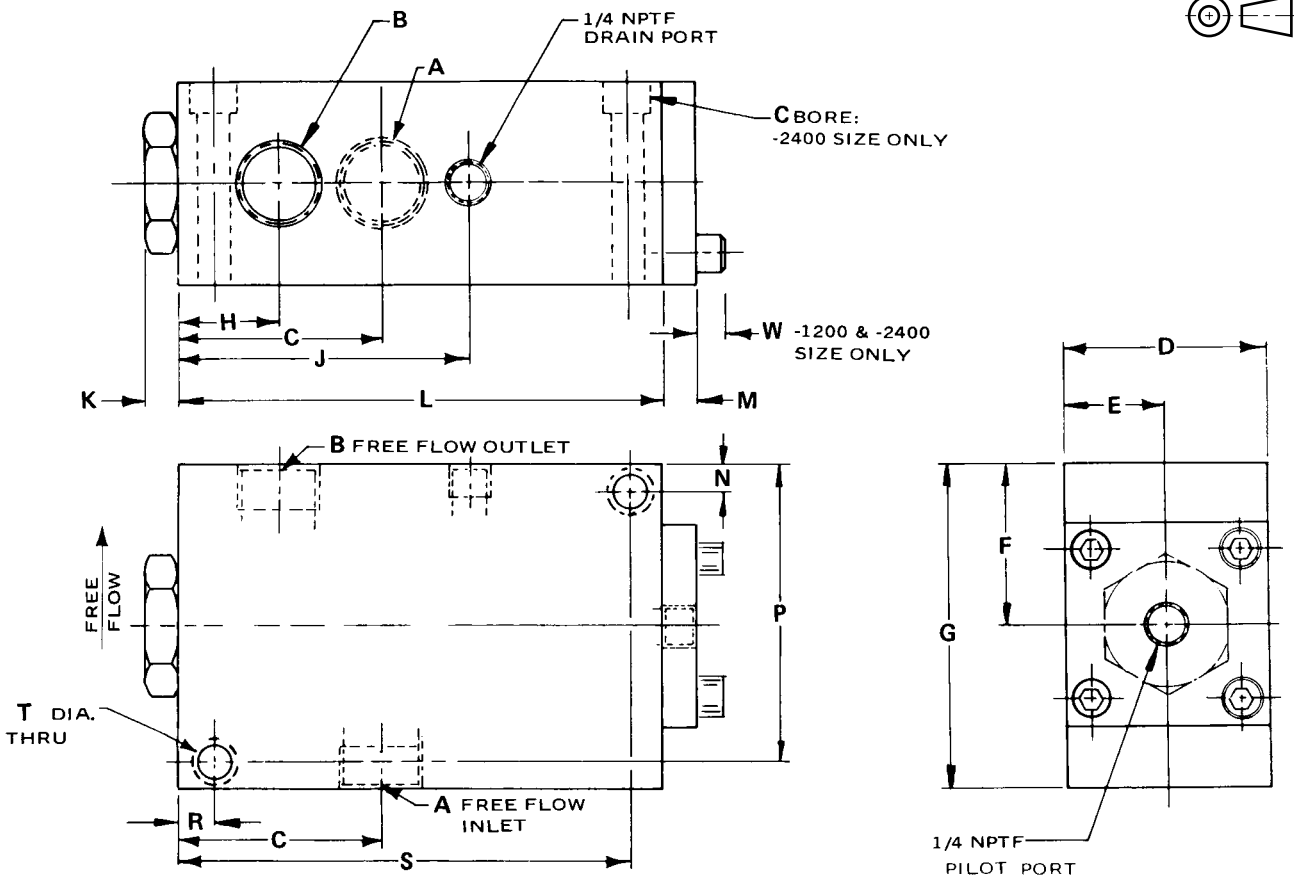
Bolt Kits

Valve	Bolt Kit	Bolt Specification* SAE Grade 8 or Better	Bolt Torque
CPS600S BACPS600S	BK10	5/16-18 x 2-1/2"	20-25 FT.-LB.
CPS1200S BACPS1200S	BK14	3/8-16 x 3"	45-50 FT.-LB.

Millimeter equivalents for inch dimensions are shown in (**)

Models CP and BACP

In-line pilot operated check valves, optional air or oil operated pilots



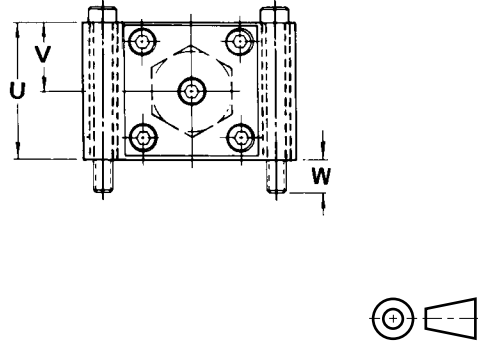
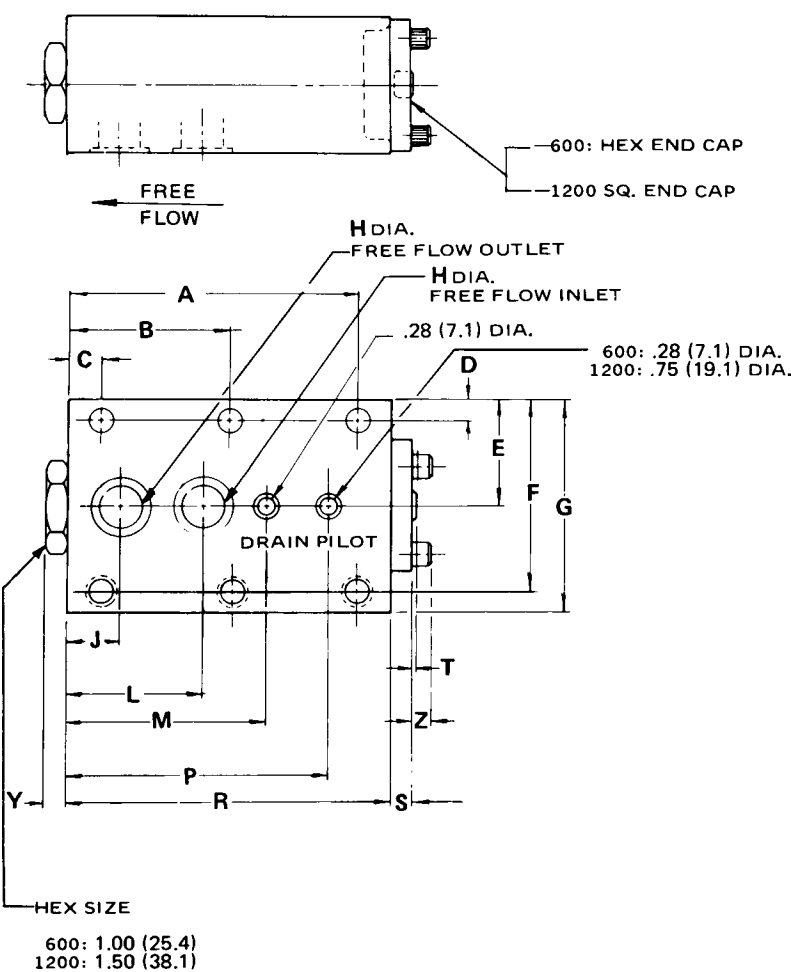
Valve Size	A&B Thread	C	D	E	F	G	H	J	K
CP600S BACP600S	3/8—18 NPTF	2.10 (53.3)	2.00 (50.8)	1.00 (25.4)	1.50 (38.1)	3.00 (76.2)	1.00 (25.4)	3.00 (76.2)	.41 (10.4)
CP1200S BACP1200S	3/4—14 NPTF	2.50 (63.5)	2.50 (63.5)	1.25 (31.8)	2.00 (50.8)	4.00 (101.6)	1.25 (31.8)	3.61 (91.2)	.42 (10.7)

Valve Size	A&B Thread	L	M	N	P	R	S	T	W
CP600S BACP600S	3/8—18 NPTF	4.75 (120.7)	.42 (10.7)	.37 (9.4)	2.62 (66.5)	.37 (9.4)	4.37 (111)	.36 (9.1)	—
CP1200S BACP1200S	3/4—14 NPTF	6.00 (152.4)	.45 (11.43)	.44 (11.2)	3.56 (90.4)	.44 (11.2)	5.56 (141.2)	.42 (10.7)	.31 (7.9)

Millimeter equivalents for inch dimensions are shown in (**)

Models CP and BACP

Manifold mounted pilot operated check valves, optional air or oil operated pilots



	Valve Model	
	CPS600S BACPS600S	CPS1200S BACPS1200S
A	4.25 (108.0)	5.37 (136.4)
B	2.37 (60.2)	3.00 (76.2)
C	.50 (12.7)	.62 (15.7)
D	.34 (8.6)	.40 (10.2)
E	1.50 (38.1)	2.00 (50.8)
F	2.65 (67.3)	3.59 (91.2)
G	3.00 (76.2)	4.00 (101.6)
H	.44 (11.2)	.75 (19.1)
J	.84 (21.3)	1.00 (25.4)
L	2.10 (53.3)	2.50 (63.5)
M	3.00 (76.2)	3.69 (93.7)
P	4.00 (101.6)	5.00 (127.0)
R	4.75 (120.7)	6.00 (152.4)
S	.42 (10.7)	.45 (11.4)
T	.04 (1.0)	.04 (1.0)
U	2.00 (50.8)	2.50 (63.5)
V	1.00 (25.4)	1.25 (31.8)
W	.50 (12.7)	.50 (12.7)
Y	.31 (7.9)	.40 (10.2)
Z	—	.31 (7.9)
Weight Lb. (Kg)	7.7 (4)	16 (7)

F

Millimeter equivalents for inch dimensions are shown in (**)

	Valve Model	
	600	1200
C	.344 (8.7)	.375 (9.5)
D	1.875 (47.6)	2.375 (60.3)
E	1.600 (40.6)	1.880 (47.8)
G	2.500 (63.5)	3.067 (77.9)
H	—	—
J	3.500 (88.9)	4.192 (106.5)
K	3.750 (95.3)	4.750 (120.7)
M	4.750 (120.7)	6.000 (152.4)
R	1.156 (29.4)	1.594 (40.5)
S	2.312 (58.7)	3.187 (81.0)
U	4.500 (114.3)	5.440 (138.2)
V	5/16–18	3/8–16
W	.281 (7.1)	.281 (7.1)
X	.469 (11.9)	.750 (19.1)
Y	.620 (15.7)	.620 (15.7)

