

Prefill Valve

AD Series



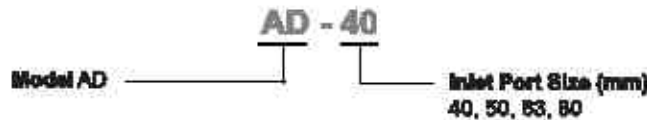
Features and Handling

- AD Series is pilot operated check valve which allows free flow in one direction (port A to port B) and prevent reverse flow in the reverse direction (port B to port A) until operated by a pilot pressure to allow free reverse flow. The pilot operation is worked by a control spool at port X.
- AD Series comes with decompression feature which allows rapid and smooth exhaust of the high pressured oil. The decompression feature works by having 2 poppets in the valve. The pilot poppet (small one) open first and followed by the main poppet (large one). The opening and closing time can be adjusted by adding a throttle valve or check valve in the pilot line before port X.
- All models come with the connection flanges for inlet port.
- The specified cracking pressure is required to open the valve to allow free flow direction. The cracking pressure of spring return of main poppet is 0.2 bar (2.9 psi)



- The maximum operating pressure :
 Port A : 16 bar (230 psi)
 Port B : 315 bar (4560 psi)
 Port X : 315 bar (4560 psi)

Order Code

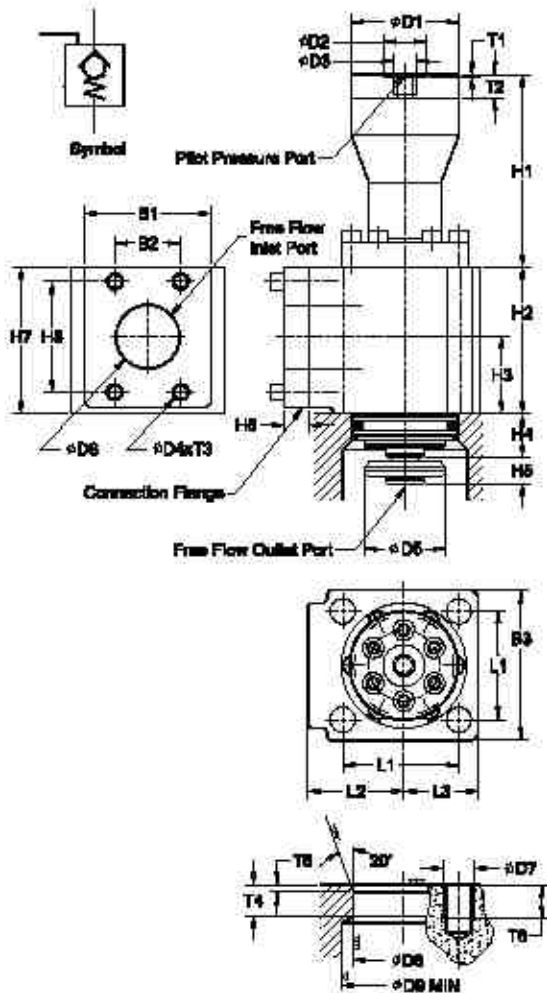


Specification

Model	Maximum Flow L/min (gpm)	Maximum Pressure bar (psi)	Inlet Port Size mm (Inch)	Fixing Screw at Outlet Port mm (Inch)	Weight kg (lb)
AD-40	305 (78)	210 (3000)	40 (1.5)	M16x130 (5.12)	10 (22.0)
AD-50	470 (120)	210 (3000)	50 (2.0)	M20x140 (5.51)	18 (41.8)
AD-63	740 (188)	210 (3000)	63 (2.5)	M24x180 (7.08)	29 (63.8)
AD-80	1200 (308)	210 (3000)	78 (3.0)	M30x200 (7.87)	50 (110.0)

Installation Dimensions mm (Inch)

AD



Model	AD-48	AD-60	AD-83	AD-80
B1	70 (2.8)	100 (3.9)	116 (4.5)	116 (4.5)
B2	43 (1.7)	51 (2.0)	62 (2.4)	62 (2.4)
B3	100 (3.9)	120 (4.7)	145 (5.7)	160 (7.1)
D1	72 (2.8)	87 (3.4)	105 (4.1)	132 (5.2)
D2	34 (1.3)	34 (1.3)	34 (1.3)	42 (1.7)
D3	1/2" BSP	1/2" BSP	1/2" BSP	1/2" BSP
D4	M12	M12	M16	M16
D5	62 (2.0)	67 (2.6)	82 (3.2)	102 (4.0)
D6	40 (1.6)	50 (2.0)	63 (2.5)	78 (3.0)
D7	M16	M20	M24	M30
D8	62 (2.4)	60 (3.1)	95 (3.7)	115 (4.5)
D9	66 (2.6)	84 (3.3)	104 (4.1)	130 (5.1)
H1	127 (5.0)	157 (6.2)	185 (7.3)	237 (9.3)
H2	103 (4.1)	113 (4.4)	139 (5.5)	160 (6.3)
H3	63 (2.1)	66 (2.5)	72 (2.8)	78 (3.1)
H4	30 (1.2)	36 (1.5)	40 (1.6)	43 (1.7)
H5	10 (0.4)	12 (0.5)	16 (0.6)	20 (0.8)
H6	15 (0.6)	27 (1.1)	30 (1.2)	30 (1.2)
H7	100 (3.9)	110 (4.3)	135 (5.3)	160 (6.3)
H8	78 (3.1)	88 (3.5)	107 (4.2)	107 (4.2)
L1	75 (3.0)	90 (3.5)	106 (4.1)	130 (5.1)
L2	85 (2.6)	75 (3.0)	90 (3.5)	102 (4.0)
L3	50 (2.0)	60 (2.4)	73 (2.9)	90 (3.5)
T1	1 (0.0)	1 (0.0)	1 (0.0)	1 (0.0)
T2	15 (0.6)	15 (0.6)	15 (0.6)	17 (0.7)
T3	18 (0.7)	16 (0.7)	25 (1.0)	25 (1.0)
T4	20 (0.8)	25 (1.0)	25 (1.0)	30 (1.2)
T5	4 (0.2)	6 (0.2)	5 (0.2)	6 (0.2)
T6	27 (1.1)	27 (1.1)	42 (1.7)	45 (1.8)