

HYDRO TEST PRESSURE
1.5 TIMES
COLD WORKING PRESSURE (CWP)

PART NO.	PART NAME
1	BODY
2	COVER
3	DISC
4	GASKE T
5	COVER BOLT
20	OIL DASHPOT ASSEMBLY

SEE DRAWING NO. VM-506B-M FOR STANDARD MATERIALS OF CONSTR UCTION.
SEE DRAWING NO. SS-1402 FOR OIL DASHPOT SEQUE NCE OF OPERATION.

ANSI CLASS 125											
VALVE SIZE	MODEL NO.	CWP	A	B	C	D	E	F	G	BOLT SIZE	NO. OF BOLTS
6	506B	200	15	9 1/2	11	1	6	6 7/8	16	3/4	8
8	508B	200	19 1/2	11 3/4	13 1/2	1 1/8	8	8 3/8	17	3/4	8
10	510B	200	24 1/4	14 1/4	16	1 3/16	10	10 3/4	18	7/8	12
12	512B	200	27 1/2	17	19	1 1/4	12	12 1/2	20	7/8	12
14	514B	150	31	18 3/4	21	1 3/8	14	13	21	1	12
16	516B	150	32	21 1/4	23 1/2	1 7/16	16	14 1/4	23	1	16
18	518B	150	36	22 3/4	25	1 9/16	18	15 1/4	24	1 1/8	16
20	520B	150	40	25	27 1/2	1 11/16	20	16 7/8	25	1 1/8	20
24	524B	150	48	29 1/2	32	1 7/8	24	19 1/4	27	1 1/4	20
30	530B	150	56	36	38 3/4	2 1/8	30	23	35	1 1/4	28
36	536B	150	63	42 3/4	46	2 3/8	36	27 3/8	39	1 1/2	32

Revised 8-14-01

SWING-FLEX® CHECK VALVE WITH BOTTOM MOUNTED OIL DASHPOT

DATE 10-9-00



VALVE AND MANUFACTURING CORP.

DRWG. NO.

VM-506B

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Website: www.ValveAndEquipment.com

SWING-FLEX® CHECK VALVE WITH BOTTOM MOUNTED OIL DASHPOT
SERIES NO. 506B ANSI CLASS 125
STANDARD MATERIALS OF CONSTRUCTION

<u>PART NO.</u>	<u>PART NAME</u>	<u>MATERIAL</u>
1	BODY	DUCTILE IRON ASTM A536, GRADE 65-45-12
2	COVER	DUCTILE IRON ASTM A536, GRADE 65-45-12
3	DISC	BUNA-N W/ STEEL & NYLON REINFORCEMENT
4	GASKET	COMPRESSED NON-ASBESTOS FIBER
5	COVER BOLT	ALLOY STEEL SAE GRADE 5
20	OIL DASHPOT	ALUMINUM BRONZE, 17-4 STAINLESS STEEL

NOTE: ALL SPECIFICATIONS AS
LAST REVISED.

MATERIALS OF CONSTRUCTION

DATE 10/11/00

VAL-MATIC® VALVE AND MANUFACTURING CORP.

DRWG. NO.
VM-506B-M

BOTTOM MOUNTED OIL DASHPOT SEQUENCE OF OPERATION

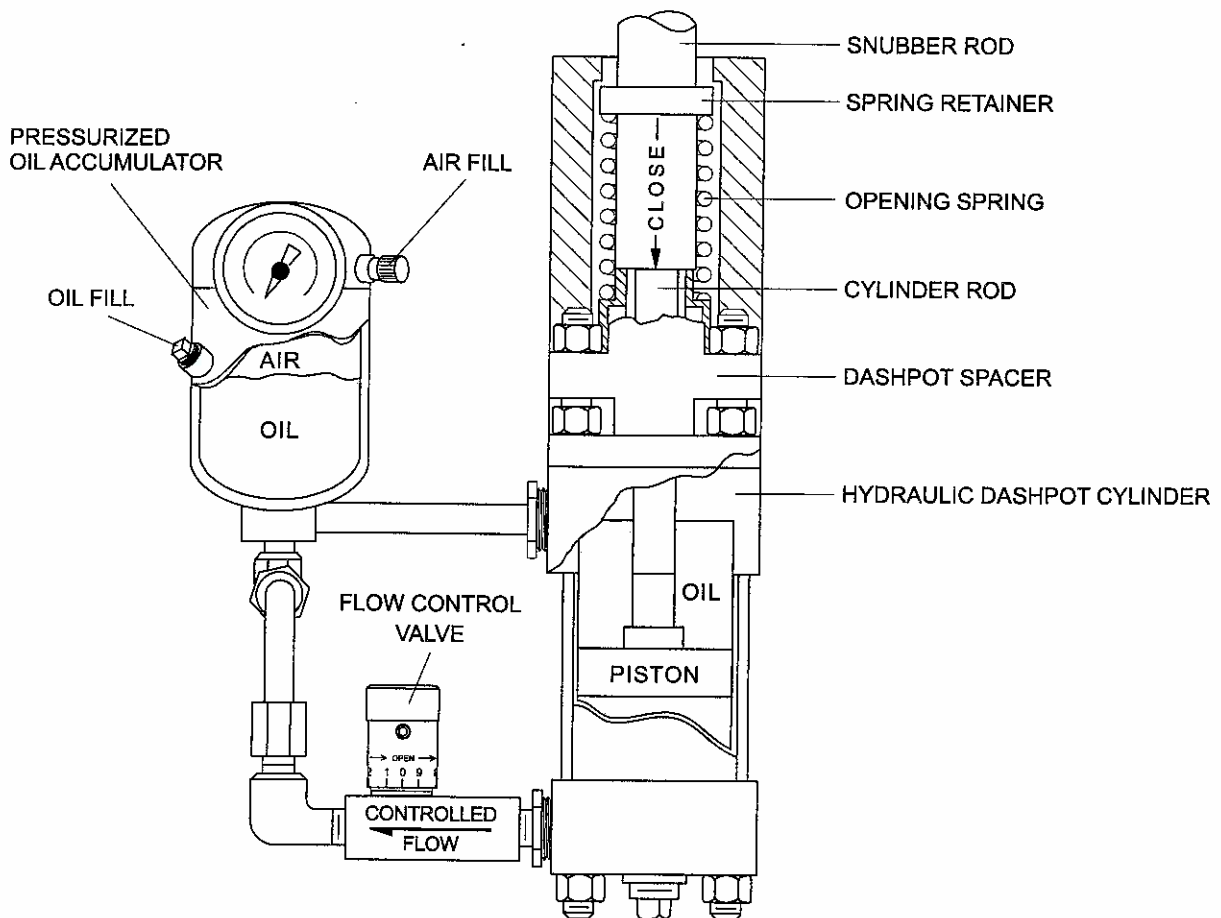
The last 10% of closing of the Tilted Disc® Check Valve can be controlled by an optional hydraulic dashpot cylinder to prevent slamming where rapid flow reversals are expected. The "Cylinder Rod" pushes against a "Snubber Rod" which in turn makes contact with the valve disc. Both sides of the "Hydraulic Cylinder" are connected to a "Pressurized Oil Accumulator" which is held at the maximum line pressure plus 10 psi. Because the cylinder "Piston" has a greater pressure area opposite the rod end, the air pressure in the accumulator will tend to extend the rod. The "Opening Spring" is also designed to extend the rod.

OPENING STROKE:

When the water system pump is started, the water pressure will force the check valve disc open. The air pressure in the accumulator and the spring will extend the cylinder and snubber rods into the valve port.

CLOSING STROKE:

When the water system pump is stopped, the weight of the disc and reverse flow of water will force the check valve disc closed thereby striking the "Snubber Rod". The "Snubber Rod" will push on the "Cylinder Rod" in the direction shown and force oil through the adjustable "Flow Control Valve". The "Flow Control Valve" will control the speed of closure for the last 10% of valve travel in typically 1 to 5 seconds.



Revised 4-7-98

BOTTOM MOUNTED OIL DASHPOT SEQUENCE OF OPERATION

DATE 7-31-97

VAL-MATIC®

VALVE AND MANUFACTURING CORP.

DRWG. NO.

SS-1402