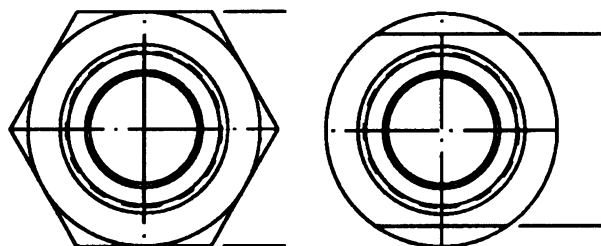
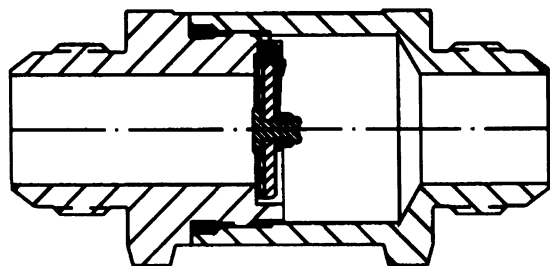


## Catalog Series 580, 590

## Specifications

**B**



### Features

- Zero leakage (less than 1 drop per min.)
- Full flow with low opening pressure.
- Improved hinge controls.
- Mounts in any position.
- MS valves meet the following specifications: MS28882A or B, MS28884A or B (see chart).

### Service Applications:

Hydraulic or pneumatic.

### Pressure Range:

**Working:** Size 4 to 16, 350 PSI  
Size 20 to 32, 300 PSI

**Cracking:** 8" (0.29 PSI) water maximum

### Temperature Range:

**Code 1** -67° to 160° F.

**Code 63** -67° to 350° F.

### Sizes:

**NPT:** 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1-1/4, 1-1/2, 2.

**IST, FLD:** 4, 6, 8, 10, 12, 16, 20, 24, 32.

### Type Ports:

**NPT:** Pipe threads.

**IST:** Internal straight threads.

**FLD:** Flared tube connection SAE 37° MS 33656 (AND 10056).

**Internal Leakage:** .01 cc/min. maximum.

**Mounting:** Inline, mounts in any position.

### Materials:

**Body and Cap:** Aluminum alloy, anodized.

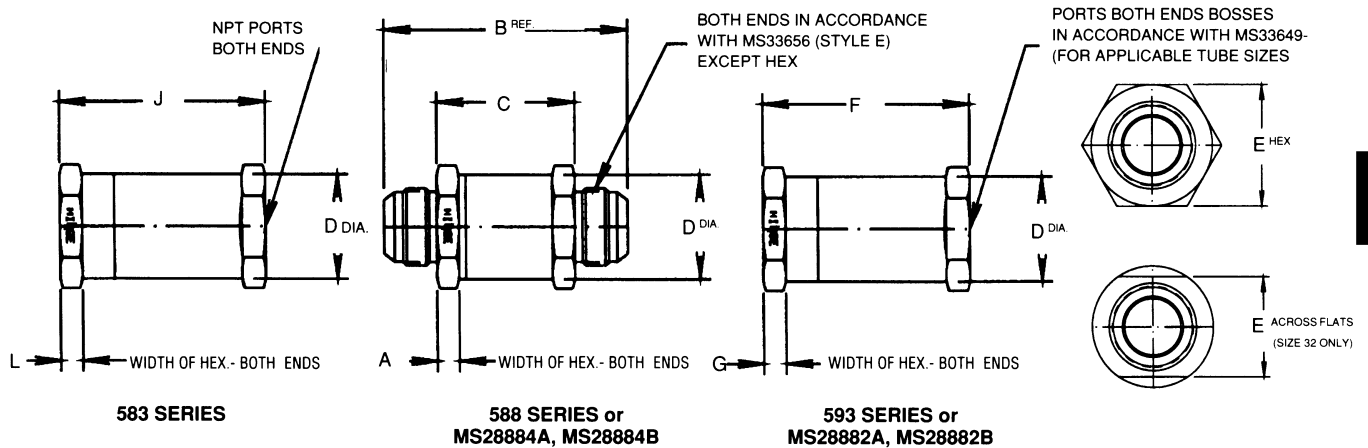
**Internal parts:** Aluminum alloy, anodized, and stainless steel.

**Molded Seal:** Synthetic rubber.

**O-Ring:** Synthetic rubber.

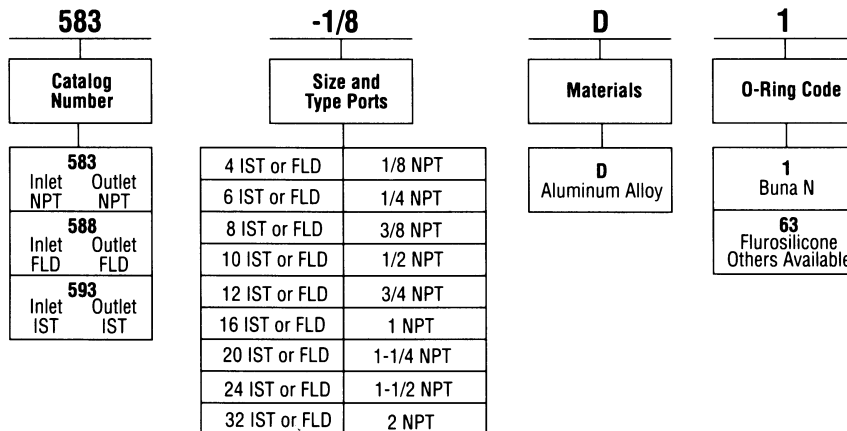
Valve Size		Weight	CV Factor		
Tube	Pipe		583 Series	588 Series	593 Series
4	1/8	2 Oz.	2.5	1.5	1.5
6	1/4	2 Oz.	4.6	3.8	3.8
8	3/8	3 Oz.	7.3	7.1	7.1
10	1/2	3 Oz.	12.0	11.8	11.8
12	3/4	6 Oz.	17.7	17.1	17.1
16	1	8 Oz.	36	35.3	35.3
20	1-1/4	14 Oz.	52	58.8	58.8
24	1-1/2	1.3 Lbs.	84	82.3	82.3
32	2	2.6 Lbs.	155	153	153

**Dimensions**



Valve Size		A	B	C	D	E	F	G	H	J	K	L
Tube	Pipe	Min.		±.031			± .031	Min.	Max.	± .031	Min.	Min.
4	1/8	.125	2.663	1.563	1.032	1.066/1.057	2.031	.250	3/4	1.906	.250	1/4
6	1/4		2.675									
8	3/8		2.988									
10	—	.250	3.298	1.782	1.157	1.190/1.181	2.344	.375	2.031	—	—	
—	1/2	—	—	—	1.220	1.253/1.244	—	—	2.625	—	5/16	
12	3/4	.250	3.791	2.063	1.470	1.503/1.494	3.500	.375	3.000	3.532	.375	1/4
16	1		4.197	2.375	1.782	1.820/1.796	3.594					
20	1-1/4	.312	4.604	2.688	2.470	2.508/2.484	4.062	.500	4.140	4.140	.375	3/8
24	1-1/4	.375	5.229	3.063	2.720	2.758/2.734	4.625					
32	2	.312	6.479	3.813	3.500	3.135/3.115	5.688	3/4	5.000	.750	3/4	

**Interpretation of Valve Number**



**MS Equivalent**

Type Port		MS Number Ref. Only
Inlet	Outlet	
FLD	FLD	MS28884A - 4D1 MS28884A - 6D1 MS28884A - 8D1 MS28884A - 10D1 MS28884A - 12D1 MS28884A - 16D1 MS28884A - 20D1 MS28884A - 24D1 MS28884A - 32D1
IST	IST	MS28882A - 4D1 MS28882A - 6D1 MS28882A - 8D1 MS28882A - 10D1 MS28882A - 12D1 MS28882A - 16D1 MS28882A - 20D1 MS28882A - 24D1 MS28882A - 32D1
FLD	FLD	MS28884B - 4D63 MS28884B - 6D63
IST	IST	MS28882B - 4D63 MS28882B - 6D63

NOTE: Valves requiring military certification must be ordered by the applicable AN or MS part number.