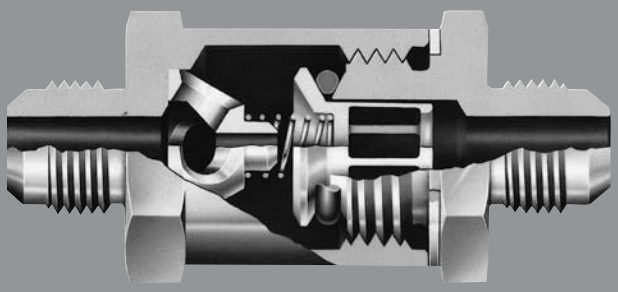


8500/8800 SERIES
0 to 600 PSIG

LOW PRESSURE CHECK VALVES

Features

- Dead Tight Sealing at Any Pressure*
- Low Cracking Pressure
- Excellent Flow Characteristics
- 100% Reliability
- Compatible with Most Fluids
- Easily Installed

Applications

- ECS & Fuel Systems where Zero Leakage is Critical or Leakage Hazardous

Technical Data

Materials of Construction

Body – 2024-T4/T351 Aluminum or 303 Stainless Steel

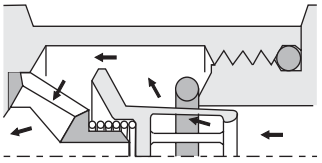
O-Rings – Buna N, EPR, Fluorosilicone, Neoprene, Silicone, Teflon® or Viton®

Pressure Ratings

Operating Pressure – 0 to 600 PSI (42 BAR)
Proof Pressure – 900 PSI (62 BAR)
Burst Pressure – Over 1,500 PSI (103 BAR)

* Contact factory for maximum leakage allowance with Teflon® O-ring.

How It Works

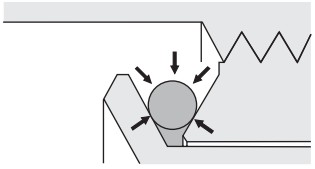


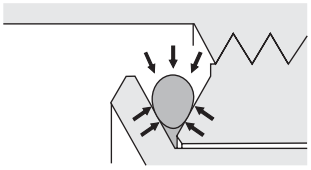
OPEN (8800 Series)**

The full flow passages and the streamlined internal configuration provide pressure drop comparable to aircraft swing check valves.

CLOSING

The floating O-ring automatically establishes line contact with the conical metal surfaces of the poppet and the seat to cushion closing and insure perfect sealing at zero pressure differential.





CLOSED

The conical sealing faces exert light tension on the I.D. of the O-ring to insure a smooth sealing surface. Pressure on the O.D. of the O-ring increases sealing efficiency as pressure increases. The O-ring automatically adjusts for swell in aircraft fluids.

Temperature Range

–80° F to +450° F; –62° C to +232° C
Based On O-Ring Material, See Page 2

Valve Sizes

1/4″ to 1-1/2″

CIRCLE SEAL CONTROLS, INC.
A CIRCOR International company
Certified to ISO 9001
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8500/8800 SERIES
0 to 600 PSIG

How To Order

88 69 A - 4TT - 5

BASIC MODEL NUMBER
- 8500 Series
- 8800 Series

O-RING MATERIAL & TEMPERATURE RANGE

59	-	Buna N	–65° F to	+275° F
69	-	Buna N	–65° F to	+180° F
62	-	EPR	–65° F to	+300° F
64	-	Fluorosilicone	–80° F to	+350° F
53	-	Neoprene	–40° F to	+300° F
24	-	Silicone	–70° F to	+450° F
20	-	Teflon®	–100° F to	+400° F
32	-	Viton®	–20° F to	+400° F

MATERIAL
- A - 2024-T4/T351 Aluminum
- T - 303 Stainless Steel

CRACKING PRESSURE
Call Out Dash Number if Not Standard*
- 5 - 5 Inches H_2O Max.

CONNECTIONS - Inlet/Outlet
- T - Male Flared Tube, AS4395 (MS33656)
- B - Female Tube, AND10050
- H - Hose, AND10058 MS33658

VALVE SIZE
Tube Sizes in 1/16″ Increments
- 4 - 1/4″

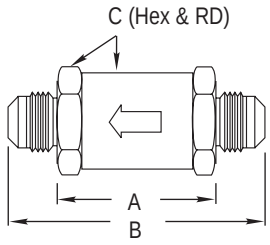
*Standard - 8 Inches H_2O Max.

Notes:
On both the 8500 & 8800 Series, the poppet and end piece are hard anodized as a standard. The body gasket in the 8500 Series is 1100-H14 aluminum for use in systems with high temperatures or with liquid or gases, which would cause excessive swell or shrinkage of elastomeric compounds.
In applications where the valve poppet may see rapid cycling, or for information on special connections, O-rings, operating pressures and temperature ranges, please consult your Circle Seal Controls Representative or our factory.
Teflon® is a registered trademark of DuPont and Viton® is a registered trademark of DuPont Dow Elastomers.

Dimensions & Weights

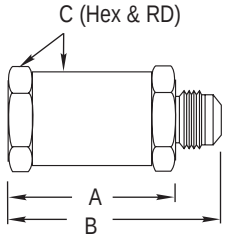
TUBE, MALE INLET & OUTLET AS4395 (MS33656)

Model Number	Valve Sizes	A +.030	B (Ref.)	C +.005 - .015	Weight Lbs. Aluminum
4TT	1/4″	1.34	2.44	1.00	.09
6TT	3/8″	1.50	2.61	1.06	.11
10TT	5/8″	1.56	3.08	1.25	.16
12TT	3/4″	2.06	3.79	1.50	.28
16TT	1″	2.37	4.19	1.87	.47
20TT	1-1/4″	2.69	4.61	2.50	.89



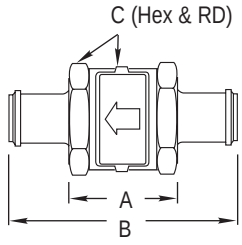
TUBE, FEMALE INLET (AND10050), MALE (MS33656) OUTLET

Model Number	Valve Sizes	A +.030	B (Ref.)	C +.005 - .015	Weight Lbs. Aluminum
4BT	1/4″	1.65	2.20	1.00	.10
10BT	5/8″	2.21	2.97	1.25	.12
12BT	3/4″	2.84	3.70	1.50	.31
16BT	1″	3.37	4.28	1.87	.36



HOSE CONNECTIONS INLET & OUTLET (MS33658)

Model Number	Valve Sizes	A +.030	B (Ref.)	C +.005 - .015	Weight Lbs. Aluminum
12HH	3/4″	2.06	5.06	1.50	.25
16HH	1″	2.37	5.37	1.87	.43
20HH	1-1/4″	2.69	5.69	2.50	.86
24HH	1-1/2″	3.05	6.05	2.75	1.00



Dimensions in inches.

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