

STAINLESS "BALL" CHECK - VALVES

DESCRIPTION

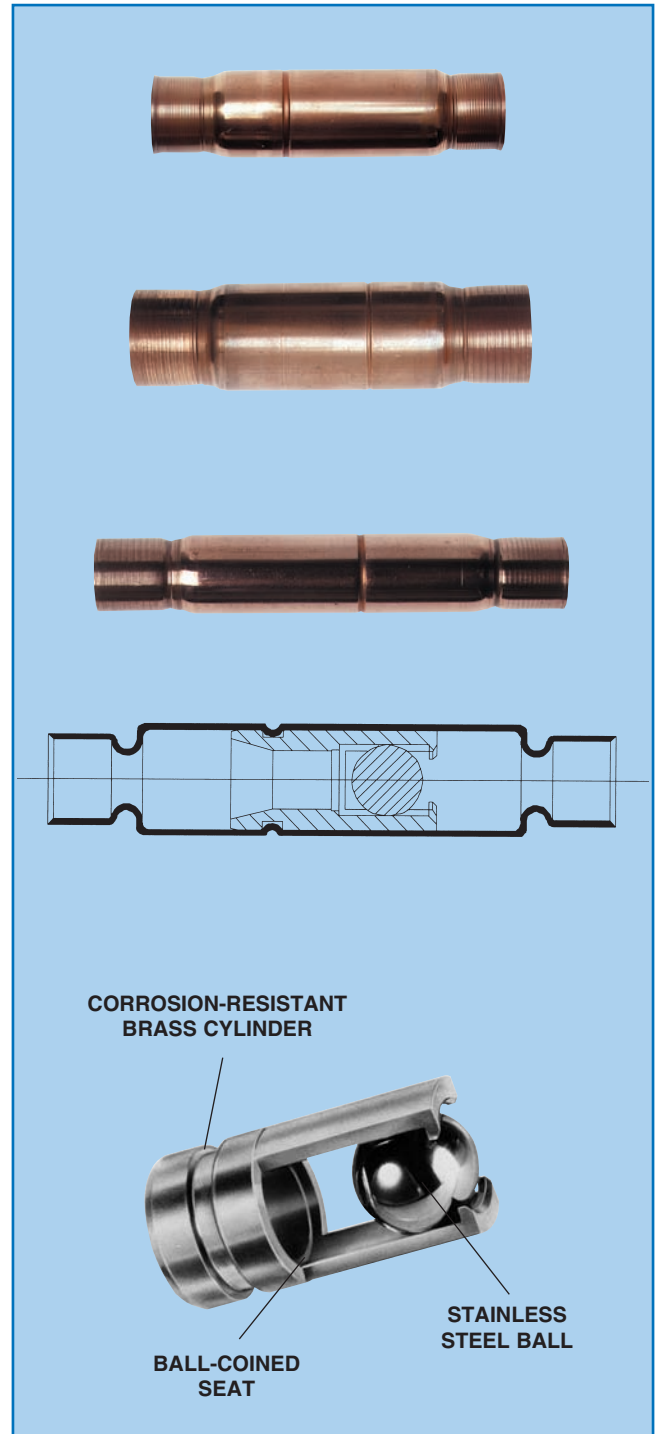
- The copper spun ball check valve has a metal to metal seating (stainless steel ball to brass seat under 65° touching angle).
- Dirt and foreign material are pushed away of the seat. The ball coins its own seat which allows for slight difference in ball diameter.
- The straight through flow around the ball yields high flow capacities for small body diameter valve bodies.
- These check valves are a one piece body constructed of copper tubing which eliminates leaks.

PURPOSES

- The all metal design allows easier welding and installation of the check valve.
- Compact. "in line" installation.
- Ideal for refrigeration and heat pump applications.
- Quick and easy ODS copper to copper soldering.
- **HORIZONTAL INSTALLATION:**
 - No pressure drop and floating ball.
 - If possible, the outlet must be at 30° above horizontal.
- **VERTICAL INSTALLATION (with the outlet pointed up):**
 - Normally close position (ball downs on the seat and we need pressure drop for opening).
 - This is the best installation.
- **VERTICAL INSTALLATION (with the outlet pointed down):**
 - Normally open position (**attention:** down ball out of the seat and pressure drop needed for closing).

SPECIFICATIONS

- Corrosion-resistant (stainless steel, brass and copper).
- Suitable for all **CFC, HCFC, HFC** and their specific lubricant.
- Leak rate: **750 cc/min.** (dry fluid).
- Full flow. No pressure drop to open (see above).
- **U.L. listed** (SA-8571) and **CSA listed** (LR-87950).
- Working pressure: **35 bar** (500 psi).



STANDARD "BALL" CHECK VALVES

CAPACITIES SHOWN IN kW (1kW = 860 kcal/h = 0,284 US TON of Refrigeration)

PART NUMBER	ODS CONNECTIONS	BODY Ø (mm)	LENGTH (mm)	SEAT Ø (mm)	FLOW (in kW/h under 0,14 bar or 2 psi)		
					R12	R22	R502
BCV-4-4	1/4" ODS	12,7	96	6,35	13,4	17,6	11,6
BCV-4-6	3/8" ODS	12,7	96	6,35	13,4	17,6	11,6
BCV-05	1/2" ODS	15,9	96	7,95	23,9	31,6	21,1
BCV-07	5/8" ODS	22,2	115	11,90	45,0	59,8	39,7
BCV-09	7/8" ODS	28,6	115	17,50	92,5	123,0	82,6
BCV-11	1 1/8" ODS	34,9	127	20,70	243,0	323,0	217,0

NOTE: capacities rated at -30°C (86°F) liquid temperature and -15°C (5°F) evaporating temperature.

“MT” & “MTS” MAGNI CHECK-VALVES

“NORMALLY CLOSED MAGNET DISC”

DESCRIPTION & SPECIFICATIONS

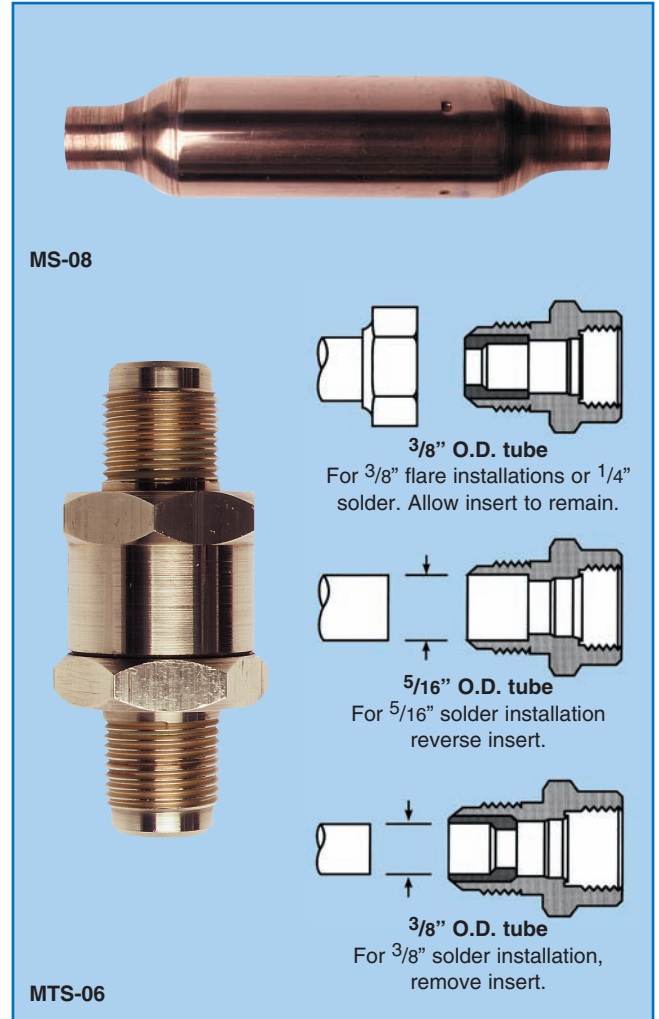
- These magnet seat disc CHECK-VALVES stay *NORMALLY CLOSED* due to their **magnet seat disc** (even when $\Delta p = 0$) and need a low pressure drop to open (see “MT” or “MTS” tables).
- The “MT” spun CHECK-VALVE has an inlet micronic built-in stainless steel strainer (**30 mesh**).
- Suitable for all **CFC, HCFC, HFC** and their specific lubricant.
- **U.L. listed** (SA-4468) and **CSA listed** (LR-96509-1).

GENERAL INSTALLATION

- All these “MAGNI” Check-Valves offer an “*in line*” installation.
- Take care during soldering operation to prevent overheating the disc (use wet rag or heat absorbing paste).
- Can be installed in any position.
- The “MT” spun offers copper **ODS** end connections.
- The “MTS” brass offers **Male Flare SAE** as well as diverse **ODS** solder connections by using included ODS inserts.

TYPICAL APPLICATIONS

- **COMPRESSOR DISCHARGE LINES:**
Prevents any condensating back-flow from condenser to compressor during the “off” cycle.
Prevents flow from an operating compressor to one that is idle.
- **LIQUID LINES:**
Prevents back-flow through the unused expansion valve on heat pump systems or other reversing units.
Prevents back-up into the low pressure liquid line of a recirculating system during a defrost period. Etc...



1. “MT” SPUN “MAGNI” CHECK-VALVES WITH BUILT-IN STRAINER AND “ODS COPPER” CONNECTIONS

PART NUMBER	COPPER END CONNECTIONS (O.D.S.)	BODY LENGTH (mm)	BODY DIAMETER (mm)	OPENING PRESSURE (bar)	MAXIMUM WORKING PRESSURE (bar)
MS-04	1/4" ODS	102	22	0,0040	55
MS-06	3/8" ODS	102	22	0,0040	55
MS-08	1/2" ODS	127	29	0,0095	44
MS-10	5/8" ODS	127	29	0,0095	44
MS-12	3/4" ODS	178	41	0,0240	38
MS-14	7/8" ODS	178	41	0,0240	38
MS-18	1 1/8" ODS	213	54	0,0300	28
MS-22	1 3/8" ODS	238	67	0,0450	30
MS-26	1 5/8" ODS	267	79	0,0620	29
MS-34	2 1/8" ODS	305	92	0,1030	28

2. “MTS” BRASS “MAGNI” CHECK-VALVES WITH NO STRAINER AND “Male Flare SAE” or “ODS” CONNECTIONS

PART NUMBER	MIXED INLET CONNECTIONS OFFERED	MIXED OUTLET CONNECTIONS OFFERED	OPENING PRESSURE	
			(bar)	(psi)
MTS-04	1/4" Flare SAE or 1/4" ODS or 3/16" ODS or 1/8" ODS	3/8" Flare SAE or 3/8" ODS or 5/16" ODS or 1/4" ODS	0,028	0,4
MTS-06			0,028	0,4