

Design Release

Date: July 24, 2013

Reference: Design Improvement

Product Line: Ball Valves

In response to evolving market demands requiring refrigeration and air conditioning components become more seamlessly integrated into new space saving equipment designs while improving overall performance and functionality, Mueller Refrigeration has enhanced the design of their CYCLEMASTER® Ball Valves to meet these industry challenges.

Using the latest computer-aided engineering design modeling and analysis software, Mueller Refrigeration has been able to reduce the overall footprint of the CYCLEMASTER® Ball Valve series, while maintaining critical dimensions such as overall lengths for ease of installation and replacement, and internal geometries that minimize pressure drop by line size. Market proven design features that include blow out proof stems with dual O-ring seals are retained in the new valve designs. The new designs allow greater flexibilities in mounting and installation; bi-directional flow characteristics have been maintained throughout the series, while valves have been mass optimized to minimize potential line fatigue.

CYCLEMASTER® series valves are UL and CE approved, and have been extensively tested and rated for use with all refrigerants and oils including systems that incorporate higher pressure refrigerants such as R-410a and subcritical CO₂.

The new CYCLEMASTER® series will be released in phases by valve size. The 1 1/8" series was implemented and accepted by the industry in 2011 followed by the 1 3/8" valves during 2012 and the 3/4" and 7/8" sized valves in 2013.

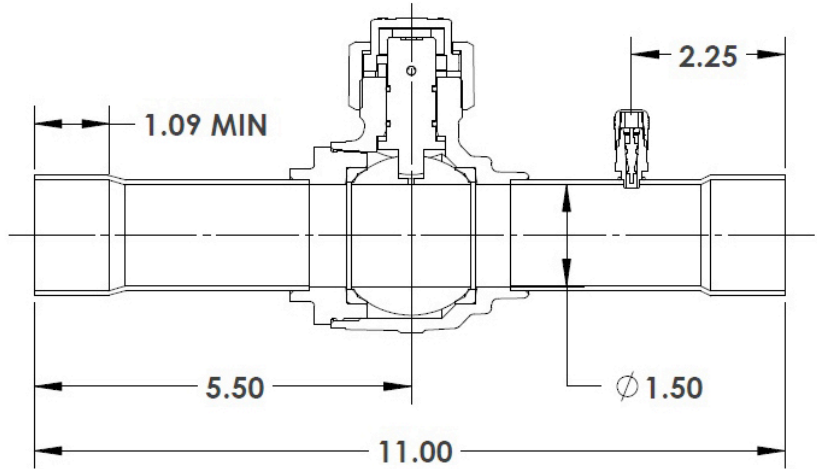
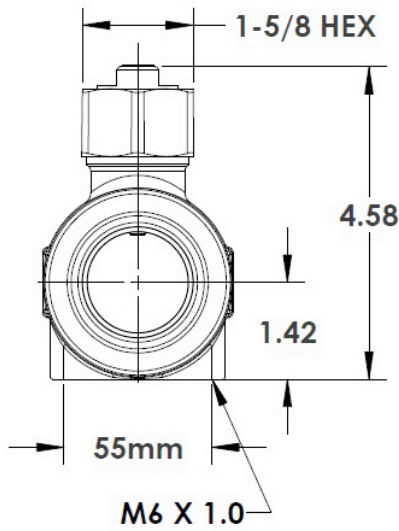
As we approach the end of 2013, the fourth series will begin the process of implementation on the 1 5/8" sized valves. There will not be a transition of part numbers. Affected part numbers are listed below for reference:

PART NO	DESCRIPTION
A 17867	1 5/8 Ball Valve Standard
AC17867	1 5/8 Ball Valve, Standard with Access Port
ACX17867	1 5/8 Ball Valve, Standard with Access, plastic cap
AG17867	1 5/8 Ball Valve Standard with fitting end/access
AP17867	1 5/8 Ball Valve Drilled & Tapped
APM17867	1 5/8 Ball Valve Drilled & Tapped, 1 pc brass cap
APX17867	1 5/8 Ball Valve Drilled & Tapped, plastic cap
AQ17867	1 5/8 Ball Valve Drilled & Tapped, Access Port
AQM17867	1 5/8 Ball Valve Drilled & Tapped, Access Port, 1 pc brass cap
AQX17867	1 5/8 Ball Valve Drilled & Tapped, Access Port, plastic cap
AR17867	1 5/8 Ball Valve, 5/16 FL Access
AW17867	1 5/8 Actuated Ball Valve, Standard

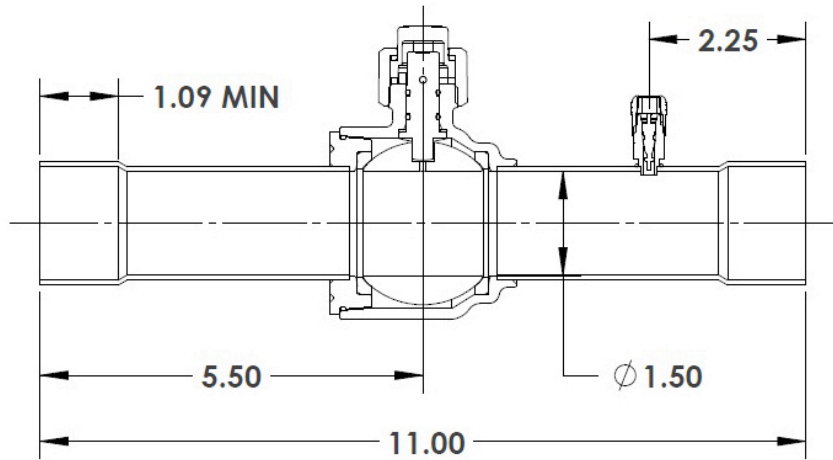
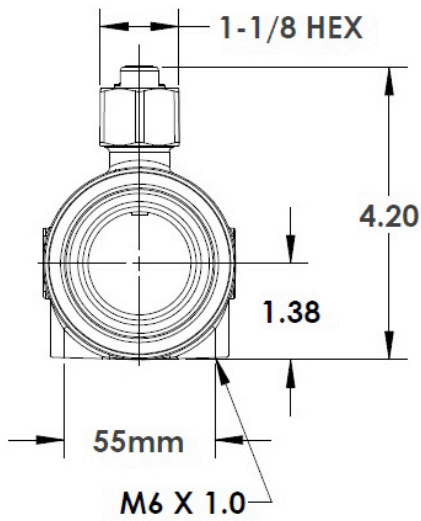
PART NO	DESCRIPTION
AWS17867	1 5/8 Actuated Ball Valve, Standard, Auxiliary Switch
AX17867	1 5/8 Ball Valve Standard, Plastic Cap
B 33984	EA 2 1/8 ODS X FTG BALL VALVE
B 34772	1 5/8 ODE BV ASSY
B 34843	1 5/8 X 1 5/8 BALL VALVE
B 35189	EA 15/8 BV W/BLEED HOLE
B 35321	EA 1 5/8 BENT TUBE BV
B 35371	EA 1 5/8 ODE X ODI BV ASSY
B 35381	EA 1 5/8 BV ASSY W/SCREWS
B 35540	1 5/8 ODE X ODI BV ASSY, 2 PC BRASS CAP
BX35321	EA 1 5/8 BENT TUBE BV

General dimensional information can be found below.

Previous Design



Redesigned



For specific application questions or assistance with product selections, please contact your local Mueller Refrigeration sales representative or authorized distributor.