

Design Release

Date: December 6, 2011

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.

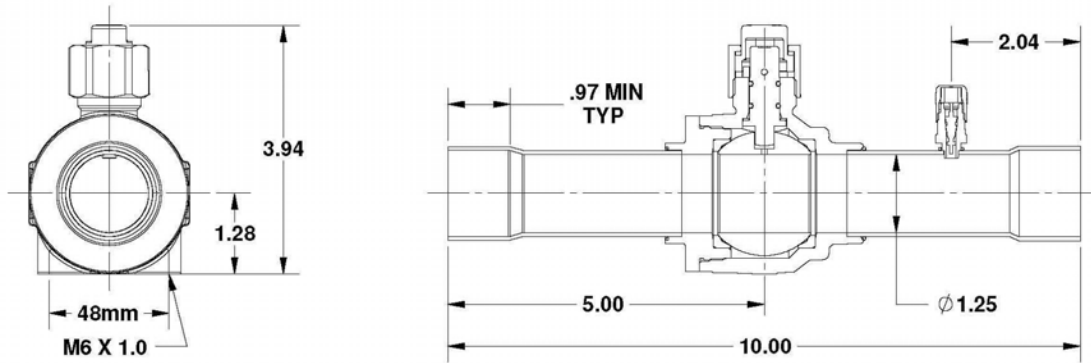
The new CYCLEMASTER® series will be released in phases by valve size. The 1 1/8" series was implemented and accepted by the industry in 2011. During the second quarter of 2012, the second series will be implemented on the 1 3/8" sized valves. There will not be a transition of part numbers. Affective part numbers are listed below for reference:

PARTNO	DESCRIPTION
A 17866	1 3/8 Ball Valve Standard
AX17866	1 3/8 Ball Valve Standard, Plastic Cap
AC17866	1 3/8 Ball Valve, Standard with Access Port
ACX17866	1 3/8 Ball Valve, Standard with Access, plastic cap
AF17866	1 3/8 Ball Valve Standard Straight
AG17866	1 3/8 Ball Valve Standard with fitting end/access
API7866	1 3/8 Ball Valve Drilled & Tapped
APX17866	1 3/8 Ball Valve Drilled & Tapped, plastic cap

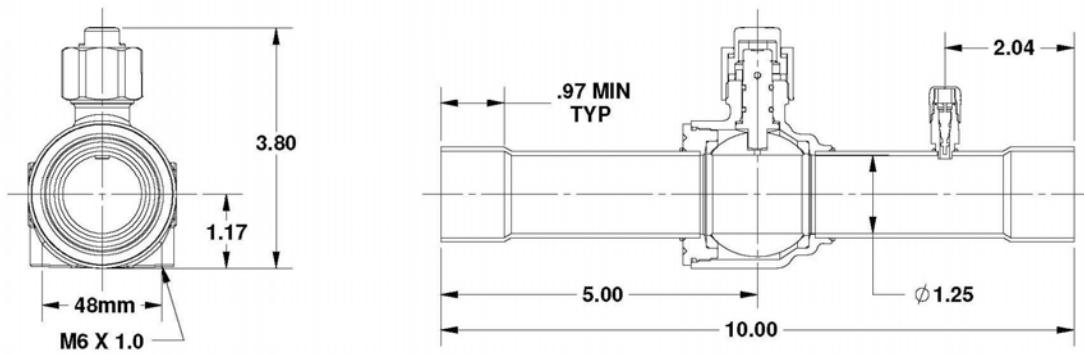
PARTNO	DESCRIPTION
AQ17866	1 3/8 Ball Valve Drilled & Tapped, Access Port
AQM17866	1 3/8 Ball Valve Drilled & Tapped, Access Port
AQX17866	1 3/8 Ball Valve Drilled & Tapped, Access Port
AR17866	1 3/8 Ball Valve, 5/16 FL Access
B 34771	1 3/8 Ball Valve Standard Straight Tube
B 34842	1 3/8 X 1 5/8 BALL VALVE
B 33983	EA 1 5/8 ODS X FTG BALL VALVE
B 35370	EA 1 3/8 ODE X ODI BV ASSY

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.