



Extreme Reliability for Severe
Applications

Minimal Maintenance

Decreased Downtime

Seamless Integration

Fully Customizable

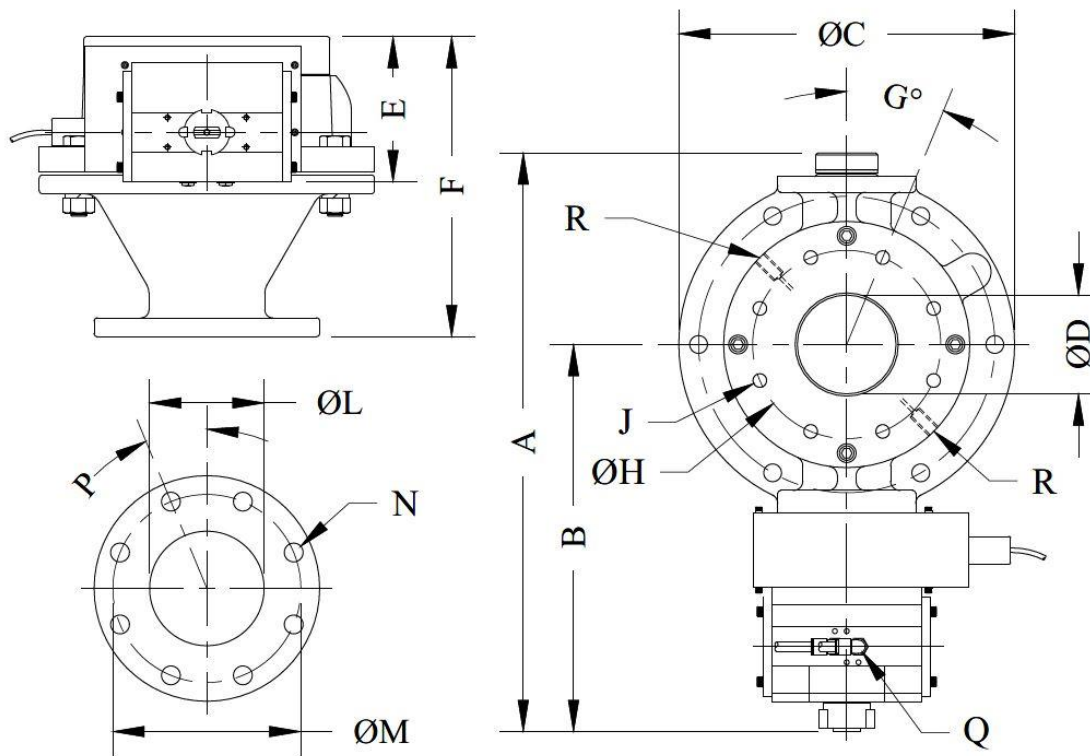
The Macawber Dome Valve® is a hemispherical actuating valve utilized as the filling valve to our various low velocity pneumatic conveying systems allowing a full-port flow of material from a material feed source, such as a hopper or silo. Its unique sealing technique ensures the valve is completely leak proof even when handling abrasive bulk materials across high pressure differentials and high temperatures. The seal member is able to compensate for wear achieving long life and reliability. Due to its simplicity, functionality and robust design it has been deployed into various applications from vessel filling valve to emptying valve in reactors, gasifiers, driers and mixer as well as electrostatic precipitators, baghouses and many others.

- Original patent holder (patent no. 4,137,935 | 5,642,751)
- Temperature rating up to < 400°F (204°C)
- Pressure rating up to 1300 psig (91 barg)
- Designs available from 1 inch to 32 inches
- Standard material A278 cast iron
- Standard #150 ANSI inlet flange pattern. Available in standard custom patterns.
- Available in 304/316 stainless steel, aluminum, galvanized, and others
- Food grade, FDA, and pharmaceutical finishes
- Industrial coatings such as Teflon®, tungsten carbide, nickel, and others
- Elastomer options neoprene, silicone, Viton, EPDM, FDA rubber
- Fully assembled and tested prior to shipment / Manufactured in Maryville, TN USA
- Global customer support for service and spare parts
- ISO 9001:2015 Certified

UK – Mactenn Systems, Ltd.

India – Macawber Engineering Systems India, Ltd. Pvt.

China – Macawber China



PHO = 212 F PHV = 400 F MAX. / INLINE CONFIGURATION

VALVE SIZE	A	B	C	D	E	F	Degree G	Inlet Fig. BC H	Inlet Fig. Bolt hole J	No. Inlet Fig. Holes	L	Outlet Fig. BC M	Outlet Fig. Bolt hole N	No. Outlet Fig. Holes	Degree P	Q	R	NET WT (LBS)
2"	16 5/8"	10 1/2"	9"	2 1/8"	6"	11 1/4"	45	4 3/4"	5/8" 11UNC	4	2"	4 3/4"	3/4"	4	45	1/4" NPT	1/4" NPT	46
4"	23 1/16"	15 7/16"	13 3/8"	4 1/8"	5 3/8"	11 15/16"	22.5	7 1/2"	5/8" 11UNC	8	4"	7 1/2"	3/4" THRU	8	22.5	1/4" NPT	1/4" NPT	142
6"	28 13/16"	18 15/16"	17 5/16"	6 3/16"	6 3/4"	15 1/8"	22.5	9 1/2"	3/4" 10UNC	8	6 1/16"	9 1/2"	7/8" THRU	8	22.5	1/4" NPT	1/4" NPT	238
8"	32 15/16"	21 5/16"	20 1/2"	8 1/8"	8 1/16"	17 3/16"	22.5	11 3/4"	3/4" 10UNC	8	8"	11 3/4"	7/8" THRU	8	22.5	1/4" NPT	1/4" NPT	361
10"	39 3/16"	24 3/4"	24 3/8"	9 15/16"	9 9/16"	20 5/8"	15	14 1/4"	7/8" 9UNC	12	10"	14 1/4"	1" THRU	12	15	1/4" NPT	1/4" NPT	587
12"	43 1/2"	27 1/2"	27 3/16"	12 1/16"	11 1/8"	22 3/4"	15	17"	7/8" 9UNC	12	12"	17"	1" THRU	12	15	1/4" NPT	1/4" NPT	880
16"	68 9/16"	34 1/2"	35 13/16"	15 13/16"	16 7/8"	31 11/16"	11.25	21 1/4"	1" 8UNC	16	15 1/2"	21 1/4"	1 1/8" THRU	16	11.25	1/4" NPT	1/4" NPT	1430

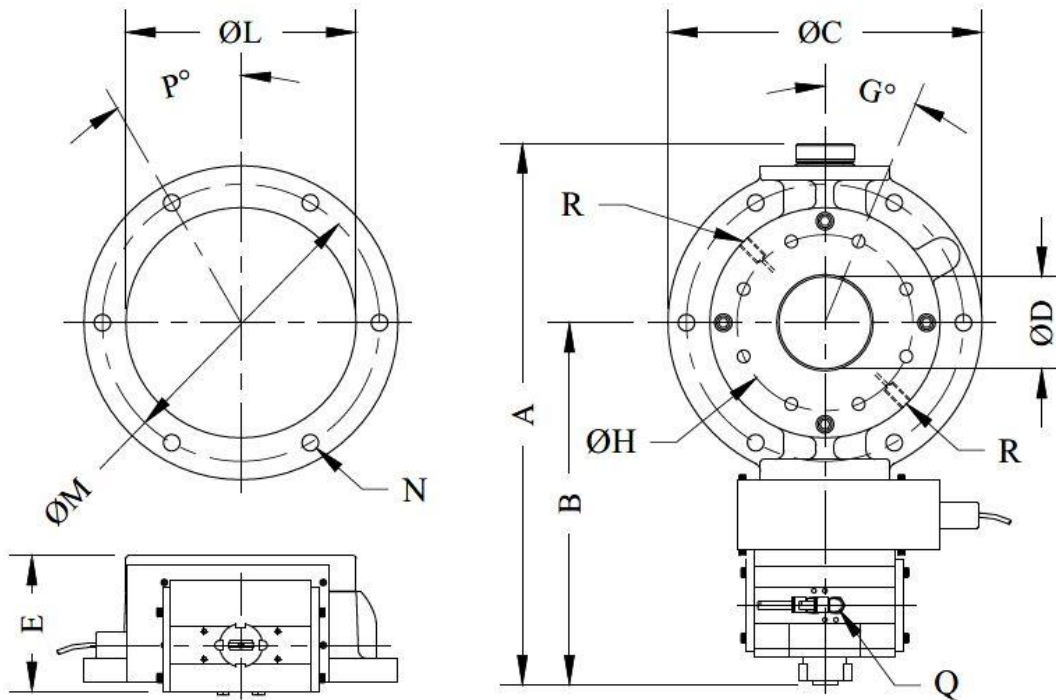
OTHER SIZES AVAILABLE UPON REQUEST

INFORMATION NOT CERTIFIED FOR INSTALLATION PURPOSES

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PHO = 212 F PHV = 400 F MAX. / BULKHEAD CONFIGURATION																	
VALVE SIZE	A	B	C	D	E	Degree G	Inlet Fig. BC H	Inlet Fig. Bolt hole J	No. Inlet Fig. Holes	L	Outlet Fig. BC M	Outlet Fig. Bolt hole N	No. Outlet Fig. Holes	Degree P	Q	R	NET WT (LBS)
2"	16 5/8"	10 1/2"	9"	2 1/8"	6"	45	4 3/4"	5/8" 11UNC	4	5 1/2"	7 1/2"	5/8" THRU	6	30	1/4" NPT	1/8" NPT	46
4"	23 1/16"	15 7/16"	13 3/8"	4 1/8"	5 3/8"	22.5	7 1/2"	5/8" 11UNC	8	7 3/4"	11 11/16"	11/16" THRU	6	30	1/4" NPT	1/4" NPT	98
6"	28 13/16"	18 15/16"	17 5/16"	6 3/16"	6 3/4"	22.5	9 1/2"	3/4" 10UNC	8	12 1/4"	15 3/8"	7/8" THRU	8	22.5	1/4" NPT	1/4" NPT	173
8"	32 15/16"	21 5/16"	20 1/2"	8 1/16"	8 1/16"	22.5	11 3/4"	3/4" 10UNC	8	13 1/4"	18 1/2"	7/8" THRU	8	22.5	1/4" NPT	1/4" NPT	264
10"	39 3/16"	24 3/4"	24 3/8"	9 15/16"	9 9/16"	15	14 1/4"	7/8" 9UNC	12	19 5/16"	22 3/64"	1 1/16" THRU	8	22.5	1/4" NPT	1/4" NPT	417
12"	43 1/2"	27 1/2"	27 3/16"	12 1/16"	11 1/8"	15	17"	7/8" 9UNC	12	19 11/16"	24 13/16"	1 1/8" THRU	12	15	1/4" NPT	1/4" NPT	630
16"	68 9/16"	34 1/4"	35 13/16"	15 13/16"	16 7/8"	11.25	21 1/4"	1" 8UNC	16	26 7/16"	33 1/16"	1 3/8" THRU	20	0	1/4" NPT	1/4" NPT	955
20"	81"	38 15/16"	44"	20 3/16"	20 1/8"	9	25"	1 1/8" 7UNC	20	34 11/16"	40 1/2"	1 5/8" THRU	32	5.625	1/4" NPT	1/4" NPT	1680
24"	77 5/8"	38 13/16"	48"	23 1/4"	22 3/16"	9	29 1/2"	1 1/4" UNC	20	40"	44"	1 1/8" THRU	12	15	1/4" NPT	1/4" NPT	1705
30"	93 11/16"	48 13/16"	53"	29 9/16"	29 9/16"	6.4	36"	1 1/8" UNC	28	32 7/8"	49 1/2"	1 5/8" THRU	36	5	1/4" NPT	1/4" NPT	3000

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