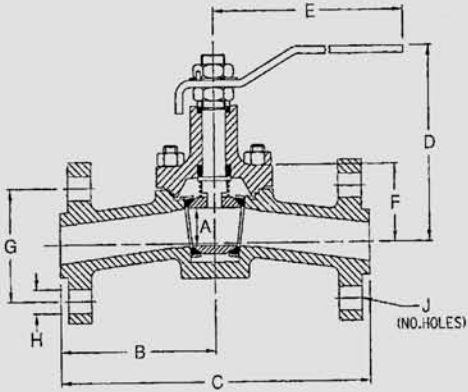


Top Entry Valves

Flanged Top Entry Full Port Dimensional Data



ANSI 150 Class Full Port Flanged Top Entry Valves

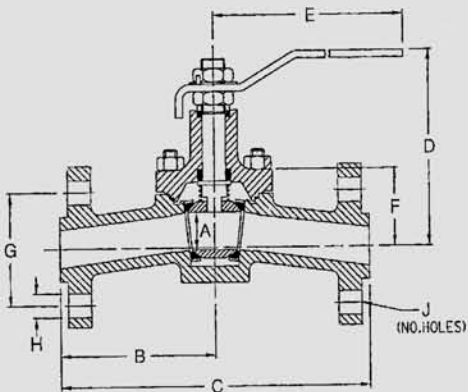
Size	A	B	C	D	E	F	G	H	J
1"	1.17	3.50	7.00	4.27	5.94	2.05	3.12	.62	4
1-1/2"	1.50	4.37	8.75	5.05	7.87	2.51	3.87	.62	4
2"	2.25	5.25	10.50	7.61	19.12	3.23	4.75	.62	4
3"	3.00	6.75	13.50	9.33	19.50	3.80	6.00	.75	4
4"	4.50	8.50	17.00	12.32	36.00	5.39	7.50	.75	8
6"	6.00	10.75	21.50	15.57	43.00	6.67	9.50	.87	8
8"	8.00	12.25	24.50	18.32	NA	9.39	11.75	.87	8*

* Top 2 Holes in each flange are tapped 3/4-10 UNC-2B

ANSI 300 Class Full Port Flanged Top Entry Valves

Size	A	B	C	D	E	F	G	H	J
1"	1.17	3.75	7.50	4.27	5.94	2.08	3.50	.75	4
1-1/2"	1.50	4.75	9.50	5.05	7.87	2.55	4.50	.87	4
2"	2.25	5.56	11.13	7.61	19.12	3.27	5.00	.75	8
3"	3.00	7.62	15.25	9.33	19.50	3.91	6.63	.87	8
4"	4.50	9.00	18.00	12.32	36.00	5.45	7.88	.87	8
6"	6.00	11.00	22.00	15.57	43.00	6.70	10.63	.87	12
8"	8.00	13.50	27.00	18.32	NA	9.54	13.00	1.00	12*

* Top 2 Holes in each flange are tapped 7/8-9 UNC-2B



ANSI 600 Class Full Port Flanged Top Entry Valves

Size	A	B	C	D	E	F	G	H	J
1"	1.17	5.00	10.00	6.06	12.50	2.40	3.50	.75	4
1-1/2"	1.50	6.25	12.50	7.15	14.75	3.06	4.50	.87	4
2"	2.25	6.50	13.00	9.76	19.12	3.70	5.00	.75	8
3"	3.00	8.75	17.50	11.45	19.50	4.48	6.63	.87	8
4"	4.50	10.00	20.00	12.44	NA	6.13	8.50	1.00	8
6"	6.00	13.00	26.00	15.28	NA	7.50	11.50	1.12	12
8"	8.00	15.62	31.25	18.58	NA	11.42	13.75	1.25	12*

* Top 2 Holes in each flange are tapped 1-1/8 UN-2B

Top Entry Valves

Flanged Top Entry Ball Valves

Flanged Valve Dimensions

ANSI 150 Class Flanged Top Entry Valves

Size	A	B	C	D	E	F	G	H	J
1/2"	0.81	2.85	5.69	3.48	5.15	1.70	2.38	0.62	4
3/4"	0.81	2.31	4.62	3.54	5.15	1.76	2.75	0.62	4
1"	0.81	2.50	5.00	3.48	5.15	1.70	3.12	0.62	4
1-1/2"	1.17	3.25	6.50	4.17	5.94	1.96	3.87	0.62	4
2"	1.50	3.50	7.00	4.74	7.87	2.22	4.75	0.75	4
3"	2.25	4.00	8.00	6.60	19.12	2.93	6.00	0.75	4
4"	3.00	4.50	9.00	8.07	19.50	3.32	7.50	0.75	8*
6"***	4.50	7.75	15.50	10.59	36.00	4.97	9.50	0.87	8
8"***	6.00	9.00	18.00	14.39	47.00	6.51	11.75	0.87	8
10"***	7.50	10.50	21.00	15.50	NA	NA	14.25	1.00	12

* Top 2 holes in each flange are tapped 5/8-11 UNC-2B

** Gear Operator or Actuation Recommended.

ANSI 300 Class Flanged Top Entry Valves

Size	A	B	C	D	E	F	G	H	J
1/2"	0.81	2.85	5.69	3.48	5.15	1.70	2.62	0.62	4
3/4"	0.81	3.00	6.00	3.63	5.15	1.86	3.25	0.75	4
1"	0.81	3.25	6.50	3.48	5.15	1.70	3.50	0.75	4
1 1/2"	1.17	3.75	7.50	4.17	5.94	1.96	4.50	0.88	4
2"	1.50	4.25	8.50	4.74	7.87	2.22	5.00	0.75	8
3"	2.25	5.56	11.13	6.60	19.12	2.93	6.63	0.88	8
4"	3.00	6.00	12.00	8.07	19.50	3.32	7.88	0.88	8
6" **	4.50	7.94	15.87	10.99	36.00	4.97	10.63	0.88	12
8" **	6.00	9.87	19.75	14.39	47.00	6.51	13.00	1.00	12
12"***	9.00	12.75	25.50	18.75	NA	NA	17.75	1.25	16*

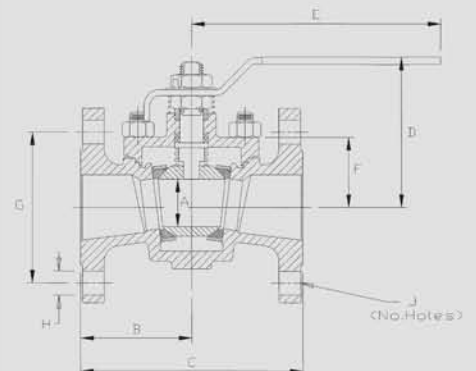
* Top 6 holes in each flange are tapped 1 1/8-8UN-2B.

** Gear Operator or Actuation Recommended.

ANSI 600 Class Flanged Top Entry Valves

Size	A	B	C	D	E	F	G	H	J
1/2"	0.81	3.25	6.50	4.93	8.50	1.92	2.62	.62	4
3/4"	0.81	3.75	7.50	5.17	8.50	2.18	3.25	0.75	4
1"	0.81	4.25	8.50	5.23	8.50	2.21	3.50	0.75	4
1-1/2"	1.17	4.75	9.50	6.00	12.50	2.36	4.50	0.88	4
2"	1.50	5.75	11.50	7.06	14.75	2.97	5.00	0.75	8
3"	2.25	7.00	14.00	8.82	19.12	3.47	6.63	0.88	8
4" **	3.00	8.50	17.00	10.45	19.12	4.15	8.50	1.00	8
6" **	4.50	11.00	22.00	NA	NA	5.78	11.50	1.12	12

** Gear Operator or Actuation Recommended.



Top Entry Valves

How To Specify Apollo Top Entry Ball Valves

0 0 - 0 0 0 - 0 0

BODY MATERIAL

A - Alloy 20
B - CF3M SS
(Flanged)
C - Carbon Steel
F - Inconel
H - Hastelloy C
M - M35-1
N - Nickel
S - 316 SS
T - Titanium

TRIM MATERIAL

A - Alloy 20
B - 316L SS
D - Hastelloy C Stem M35-1
Ball
E - 410 SS
F - Inconel
H - Hastelloy C
M - M35-1 (Monel)
N - Nickel
S - 316 SS
T - Titanium

END CONFIGURATION AND PRESSURE CLASS

B - 150# Flanged
C - 300# Flanged
D - 300# NPT
E - 150# FP Flange
F - 300# FP Flange
G - 300# NPT x Soc. Weld
H - 600# NPT
J - 600# Socket Weld
K - 600# Flanged
L - 300# FP NPT
M - 300# FP Soc. Weld
N - 300# Socket Weld
P - 300# Butt weld
Q - 600# NPT x Soc. Weld
R - 300# FLG x Butt weld
S - 300# RTJ Flanges
T - 600# FP Socket Weld
U - 600# FP Flange
W - 600# Butt weld
Y - 300# FP NPT x Socket Weld
3 - 300# FP Butt weld
4 - 600# FP NPT
6 - 600# FP NPT x Socket Weld
7 - 600# FP Butt weld
9 - 900# Flange

SEAT (FIGURES ON PAGE 15)

1 - TFE (Figure 1)
2 - RTFE (Figure 1)
3 - RTFE Seat (Figure 2)
4 - Carbon Graphite -750°F max.
(Figure 1)
5 - 55% Bronze, 5% Moly, (Figure 2)
6 - UHMWPE (Figure 2)
7 - API-607 Certified (TFE Seat, TFE
O-ring, Grafoil® Seal & Pkgs.)
8 - PEEK (Figure 2)
9 - Ceramic
A - API-607 Certified (RTFE Seat,
TFE O-ring, Grafoil® Seal &
Pkgs.)
B - 30% Carbon Reinforced PEEK
(Figure 2)
C - PFA (Figure 2)
D - SRTFE, 60% SS, 40% TFE by
weight (50% SS Min) (Figure 2)
F - CRTFE (Figure 1)
G - PCTFE (Figure 1)
H - High Temp Graphite-1000°F max.
(Figure 1)
K - Stellite Ball & Seats (Figure 4)
M - Malcomized 316 SS Ball & Seats
(Figure 4)
U - UHMWPE (Figure 1)

SIZE

3 - 1/2"
4 - 3/4"
5 - 1"
7 - 1-1/2"
8 - 2"
0 - 3"
A - 4"
C - 6"
E - 8"
G - 10"
H - 12"

OPTIONAL FEATURES

AR - Actuator Ready
BO - Grafoil® Seals & Packings
BN - TFE Spiralwound Bonnet Gasket
BS - Grafoil® Spiral Wound Bonnet
Gasket & Grafoil® Packings
CH - Clamp-On Steam Jacket - Stainless
Steel
CJ - Clamp-On Steam Jacket - Carbon Steel
CL - Cam-Lock Handle
EB - Extended Bonnet
EO - Round Handle
FC - Live Loaded Fugitive Emission w/
Double RPTFE Chevron Packings
FG - Fugitive Emission Bonnet with EVSP®
9000 Graphite Stem Packing
FL - Fugitive Emission Bonnet with Double
RPTFE Stem Packing

FO - Full Jacketed w/Oversize Flanges
FP - Live Loaded Fugitive Emission w/Double
EVSP Packings
GO - 2 1/4" Stem Extension
HH - Vented Body
HO - Vented Body & Cleaned for
Chlorine Service
HP - Vented Body & Cleaned for Hydrogen
Peroxide Service
* MG - Gear Operator
MT - 2 Position Lock Plate
for Standard Bonnet
MU - 2 Position Lock Plate for Extended
Bonnet
NC - NACE Certified Trim
OL - Oval Locking Handle
OO - RPTFE Seals & Packings

OM - RPTFE Bonnet Gasket & UHMWPE
Packings
PJ - Partial Steam Jacket
PO - Cleaned for Oxygen Service
PP - Cleaned for Industrial Gases
RS - Welded Ball Stop with Safety Cap
TP - Two Position Sliding Latch Lock Lever
ZO - PTFE Seals & Packings

NOTE: Optional Features may be used alone or in
combination (simply added in alphabetical
order), however not all combinations are
available on all valves. This is a very
limited list of the available options.
Contact the factory for specific
requirements and availability.

* MG Is Generic for Gear Operators. Contact Factory
or Price Book for Specific Application and Part No.

® EVSP is a registered trademark of Garlock.