PRAMUKH

ENGINEERING WORKS

VALVE MANUFACTURER

ENGINEERED FOR EXCELLENCE. BUILT ON CAPABILITY.

We design and manufacture high performance industrial valves with precision, strength and reliability. Backed by world-class infrastructure, technology and a commitment to quality.

ADVANCED ENGINEERING
Precision design for critical performance

PRECISION MANUFACTURING
State-of-the-art machining & testing

QUALITY ASSURANCE
Rigorous inspection at every stage

EXPERIENCED TEAM
Skilled workforce driving perfection

LARGE SCALE CAPACITY
Capable of meeting global & large-scale orders

HEAVY. PRECISE. RELIABLE.
WE MAKE VALVES THAT MOVE INDUSTRIES.

OIL & GAS | CHEMICAL | POWER PLANT | WATER & WASTEWATER | MARINE | PHARMACEUTICAL

DESIGNED TO PERFORM. BUILT TO LAST.

Delivering reliable flow control solutions with world-class engineering and unmatched quality.

PRAMUKH

ENGINEERING WORKS

ENGINEERED FOR EXCELLENCE. BUILT ON TRUST.

Pramukh Engineering Works is a leading manufacturer of high-performance industrial valves. We combine advanced engineering, precision manufacturing and rigorous quality standards to deliver reliable flow control solutions for critical industries worldwide.

PRECISION ENGINEERING
Engineered for accuracy, strength and long life.

QUALITY ASSURANCE
Tested at every stage to ensure superior performance.

ADVANCED MANUFACTURING
Modern machines. Skilled workforce. Consistent quality.

CUSTOMER FOCUS
Understanding needs and delivering reliable solutions.

ABOUT PRAMUKH ENGINEERING WORKS

INDUSTRIAL VALVE EXPERTS
Specialized in the design and manufacturing of a wide range of industrial valves.

QUALITY YOU CAN TRUST
Commitment to international standards and continuous quality improvement.

EXPERIENCED TEAM
A dedicated team of engineers and professionals driving excellence.

GLOBAL SUPPLY
Trusted by clients across industries and geographies.

INTEGRITY & RELIABILITY
Built on trust, transparency and long-term relationships.

OUR PRODUCT RANGE


GATE VALVES


GLOBE VALVES


CHECK VALVES


BALL VALVES


BUTTERFLY VALVES


PLUG VALVES


STRAINERS

OUR FOUNDERS

HITESH PATEL
FOUNDER

MAHESH PATEL
CO-FOUNDER

ENGINEERED FOR PERFORMANCE.
FOCUSED ON EXCELLENCE.

BUILT TO MEET CHALLENGES.
READY FOR TOMORROW.

INDEX

Your Guide to Precision Engineered Flow Control Solutions.

PRECISION ENGINEERING
Engineered for accuracy and long-lasting performance.

UNCOMPROMISED QUALITY
Built with the highest quality standards and strict testing.

TRUSTED PARTNERSHIP
Reliable solutions. Strong relationships. Shared success.

RELIABLE PERFORMANCE
Designed to perform in the most demanding applications.

COMPANY PROFILE

ENGINEERED FOR EXCELLENCE.
BUILT ON CAPABILITY.

We are a leading manufacturer of high-performance industrial valves, backed by state-of-the-art in-house machining facilities and a team of skilled professionals.

Our integrated manufacturing setup ensures precision, reliability and consistent quality across every product we deliver.

IN-HOUSE MANUFACTURING
Complete control over quality & delivery

PRECISION MACHINING
Advanced machines for tight tolerances

QUALITY ASSURANCE
Stringent inspection at every stage

EXPERIENCED TEAM
Skilled & dedicated professionals

LARGE SCALE CAPACITY
Equipped to handle complex & large orders

OUR IN-HOUSE MACHINING FACILITY

Powering Precision. Enabling Performance.















IN-HOUSE TESTING CAPACITY

- Hydrostatic testing up to 600 Bar
- Pneumatic testing up to 40 Bar
- Facilities for shell & seat testing
- Testing as per API 598 / BS EN 12266
- Test media: Water, Air
- Calibration of instruments
- Test report provided with every valve

IN-HOUSE PAINTING CAPACITY

- Shot blasting for surface preparation
- Epoxy zinc rich primer application
- Epoxy / PU top coat application
- Dry film thickness measurement
- Curing in controlled environment
- Paint systems as per customer requirements
- Suitable for Indoor & Outdoor service

QUALITY ASSURANCE
Every valve tested and inspected to ensure reliable performance.

ADVANCED FACILITIES
Equipped with calibrated instruments and modern infrastructure.

SKILLED TEAM
Experienced professionals ensuring accuracy and consistency.

COMMITMENT TO QUALITY
Delivering valves that meet national & international standards.

TRIPLE OFFSET
BUTTERFLY VALVE
CRITICAL SERVICE SERIES

TECHNICAL SPECIFICATION

Valve Type	Triple Offset Butterfly Valve
Design Standard	API 609 / ASME B16.34
Face to Face	API 609 Category B
End Connection	Wafer, Lug, Double Flanged
Size Range	2" (50mm) to 120" (3000mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-196°C to 650°C (Depending on Material)
Testing Standard	API 598 / ISO 5208
Inspection & Testing	100% Hydrostatic (Body) 100% Pneumatic (Seat)
Leakage Class	API 598 Class VI (Zero Leakage) MSS SP-61
Operation	Manual / Gear / Electric / Pneumatic / Hydraulic
Application	Oil & Gas, Petrochemical, Power Plant, Refinery, Chemical, LNG, Water Treatment, Marine, Cryogenic Service

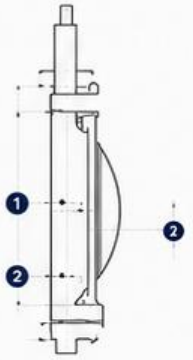
MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex, Nickel Alloys
Disc	Stainless Steel, Duplex, Super Duplex, Nickel Alloys
Shaft	Stainless Steel, Duplex, Nickel Alloys
Seat	Stainless Steel, Duplex, Stellite, Inconel (Metal to Metal)
Seal (Secondary)	Flexible Graphite, Stainless Steel
Bearing	Stainless Steel, Duplex, PTFE Coated
Gasket	Spiral Wound, Graphite, Flexible Graphite
O-Ring	Viton, NBR, EPDM, PTFE (as per service)
Bolting	Carbon Steel, Alloy Steel, Stainless Steel

DESIGN FEATURES

- Triple Offset Design ensures zero friction and longer service life
- Metal to Metal sealing for high temperature and critical applications
- Bi-directional tight shut-off
- Low operating torque
- Fire Safe Design (API 607)
- Blow-out proof shaft
- Anti-static design
- Robust and compact construction

TRIPLE OFFSET DESIGN



1. **First Offset**
   Offset between shaft centerline and seat centerline
2. **Second Offset**
   Offset between seat cone and pipe/valve centerline
3. **Third Offset**
   Conical profile of seat for interference free operation

PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psi)	MAX. WORKING TEMPERATURE (°C)
150	285	425
300	740	425
600	1480	425
900	2220	425
1500	3705	425
2500	6170	425

Note: Pressure - Temperature ratings are in accordance with ASME B16.34.

DIMENSIONS (mm)

SIZE		CLASS 150 - 600		CLASS 900 - 2500	
NPS	DN	L (Wafer)	H (Approx.)	L (Wafer)	H (Approx.)
2	50	108	340	165	370
6	150	140	510	190	570
12	300	178	780	250	870
24	600	267	1200	390	1330
36	900	292	1520	490	1660
48	1200	318	1860	590	2010
60	1800	330	2140	690	2350
72	1800	470	2460	790	2700
96	2400	470	2950	990	3250
120	3000	530	3550	1190	3880

Note: Dimensions are indicative. Contact factory for certified drawings.

TYPICAL APPLICATIONS

OIL & GAS · PETROCHEMICAL · POWER PLANT · CHEMICAL · LNG · WATER TREATMENT · MARINE

BUTTERFLY VALVES

SINGLE OFFSET & DOUBLE OFFSET

ENGINEERED FOR PERFORMANCE. BUILT FOR RELIABILITY.

SPECIFICATIONS	
Valve Type	Butterfly Valve
Design Standard	API 609 / ASME B16.34
Face to Face	API 609 Category A
End Connection	Wafer / Lug / Double Flanged
Pressure Rating	Class 150, 300, 600, PN10, PN16, PN25
Size Range	2" to 96" (DN50 to DN2400)
Temperature Range	-29°C to 200°C
Testing Standard	API 598
Application	Water, Oil & Gas, Chemical, Petrochemical, Power, Marine, HVAC & General Industries

SINGLE OFFSET

Single offset design with precise disc positioning ensures reliable sealing and economical performance for general applications.

DOUBLE OFFSET

Double offset design with cam action seal ensures zero leakage, reduced wear and longer service life for critical applications.

MATERIAL OF CONSTRUCTION

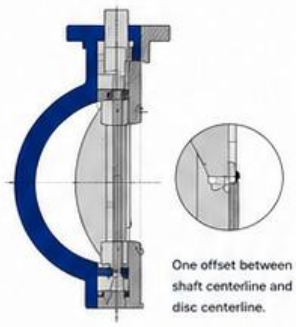
PART NAME	MATERIAL (STANDARD)
Body	ASTM A216 WCB / CF8 / CF8M
Disc	ASTM A351 CF8 / CF8M / CF3M
Shaft	ASTM A182 F6a / F316 / F51
Seat	EPDM / NBR / VITON / PTFE / RPTFE / Metal Seat
Bushing	PTFE / Bronze
O-Ring	NBR / VITON
Packing	Graphite / PTFE
Gland	ASTM A105 / SS
Gland Flange	ASTM A105 / SS
Seat Retainer	ASTM A351 CF8 / CF8M
Bolts & Nuts	ASTM A193 B7 / A194 2H

DESIGN FEATURES

- Robust and compact design
- Low operating torque
- Bi-directional tight shut-off
- Replaceable seat
- Fire safe design as per API 607 (Optional)
- Anti-blowout stem
- Top flange for actuation as per ISO 5211
- Suitable for manual, pneumatic, electric and hydraulic actuation

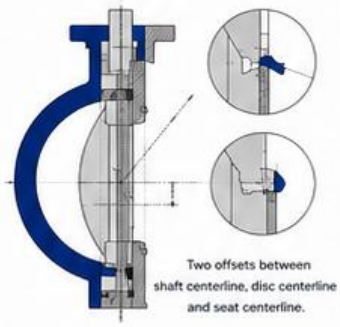
DESIGN PRINCIPLE

SINGLE OFFSET



One offset between shaft centerline and disc centerline.

DOUBLE OFFSET



Two offsets between shaft centerline, disc centerline and seat centerline.

PRESSURE - TEMPERATURE RATINGS

TEMPERATURE °C (°F)	MAX. ALLOWABLE WORKING PRESSURE		
	CLASS 150 psi (bar)	CLASS 300 psi (bar)	CLASS 660 psi (bar)
-29 to 38 (-20 to 100)	285 (19.6)	740 (51)	1480 (102)
93 (200)	230 (15.9)	590 (40.8)	1180 (81.3)
149 (300)	190 (13.1)	485 (33.4)	970 (66.9)
204 (400)	160 (11.0)	395 (27.2)	790 (54.5)
260 (500)	130 (8.9)	325 (22.4)	650 (44.8)
315 (600)	100 (6.9)	265 (18.3)	530 (36.5)

Note: Pressure - Temperature ratings are in accordance with ASME B16.34 / API 609.

DIMENSIONS (mm)

SIZE		SINGLE OFFSET (CLASS 150)			DOUBLE OFFSET (CLASS 150)		
NPS	DN	L (Wafer)	L (Lug)	H	L (Wafer)	L (Lug)	H
2"	50	43	108	180	43	108	180
3"	80	46	127	190	46	127	190
4"	100	52	157	200	52	157	200
6"	150	56	190	230	56	190	230
8"	200	60	216	285	60	216	285
10"	250	68	270	315	68	270	315
12"	300	78	324	345	78	324	315
14"	350	78	356	410	78	356	410
16"	400	102	406	440	102	406	440
18"	450	114	457	470	114	457	470
20"	500	127	508	500	127	508	500
24"	600	154	610	560	154	610	560
30"	750	190	762	680	190	762	680
36"	900	203	864	760	203	864	760
48"	1200	305	1067	970	305	1067	970

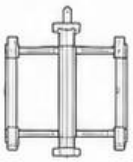
Note: Dimensions are subject to change without notice.

END CONNECTIONS

WAFER TYPE

LUG TYPE

DOUBLE FLANGED TYPE



TYPICAL APPLICATIONS

- OIL & GAS
- PETROCHEMICAL
- WATER & WASTEWATER
- POWER PLANT
- MARINE & SHIPBUILDING
- HVAC

NOTES

- For critical and high performance applications, double offset design is recommended.
- Actuation options: Lever, Gear Operator, Pneumatic, Electric, Hydraulic.
- Custom materials and special designs available on request.
- Regular inspection & maintenance ensured for reliable operation.

WEDGE GATE VALVE

TECHNICAL SPECIFICATION

SIZE RANGE
2" TO 48"
(50mm TO 1200mm)

PRESSURE RATING
ASME CLASS 150
TO CLASS 2500
PN 10 TO PN 420

TEMPERATURE RANGE
-29°C TO 650°C

TECHNICAL SPECIFICATION

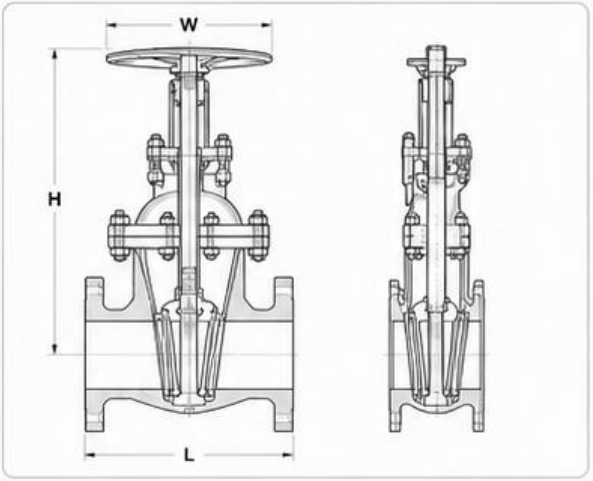
Valve Type	Wedge Gate Valve
Design Standard	API 600 / BS 1414
Face to Face	API 600 / ASME B16.10
End Connection	Flanged / RTJ / Butt Weld
Size Range	2" (50mm) to 48" (1200mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-29°C to 650°C (Depending on Material)
Testing Standard	API 598 / ISO 5208
Inspection & Testing	100% Pressure Testing 100% Seat Tightness Testing
Operation	Manual / Gear / Electric / Pneumatic
Application	Oil & Gas, Petrochemical, Power Plant, Refinery, Chemical, LNG, Water Treatment, Marine, Cryogenic Service

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Bonnet	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Wedge	Carbon Steel + 13Cr, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Stem	Stainless Steel, Alloy Steel
Seat Ring	Stainless Steel, Stellite, Alloy Steel
Gland	Carbon Steel, Stainless Steel
Packing	Graphite, PTFE, Flexible Graphite
Gasket	Spiral Wound, Graphite, PTFE
Bolting	Carbon Steel, Alloy Steel, Stainless Steel
Handwheel	Ductile Iron, Carbon Steel

DESIGN FEATURES

- Rising stem with non-rising handwheel
- Outside screw and yoke (OS&Y)
- Wedge type disc for tight shut-off
- Renewable seat rings
- Back seat design
- Flexible wedge design for better sealing
- Low operating torque
- Bi-directional sealing
- Available in various materials for different media
- Suitable for on-off service



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psi)		MAX. WORKING TEMPERATURE (°C)
150	285	19.6	425
300	740	51.0	425
600	1480	102.0	425
900	2220	153.0	425
1500	3705	295.0	425
2500	6170	425.0	425

Note: Pressure - Temperature ratings are in accordance with ASME B16.34.

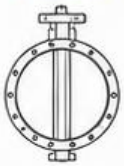
DIMENSIONS (mm)

NPS	DN	CLASS 150		CLASS 300		CLASS 600		CLASS 900		CLASS 1500		CLASS 2500	
		L	H (Approx.)	L	H (Approx.)	L	H (Approx.)	L	H (Approx.)	L	H (Approx.)	L	H (Approx.)
2	50	178	385	216	415	292	455	368	620	461	700	508	800
3	80	203	510	283	540	356	600	381	770	498	800	578	900
4	100	229	603	305	600	432	720	457	870	546	930	673	1050
6	150	267	765	403	690	559	840	610	1000	705	1090	864	1200
8	200	292	949	419	995	660	1140	737	1290	832	1400	1022	1330
10	250	330	1155	457	1190	737	1260	842	1450	990	1620	1270	1590
12	300	356	1295	502	1380	838	1510	965	1670	1130	1800	1422	2100
14	350	381	1430	762	1535	889	1680	1030	1850	1257	2000	1651	2300
16	400	406	1595	914	1875	991	1880	1130	1970	1334	2090	1854	2650
20	500	457	1960	991	2000	1194	2260	1257	2460	1484	2330	2159	3150
24	600	508	2230	1143	2400	1387	2670	1549	2900	1691	3330	2540	3620
30	750	610	2840	1346	2960	1686	3360	1842	3450	2046	3600	3048	4200
36	900	711	3390	1524	3280	2066	3710	2066	4020	2378	4590	3686	4850
48	1200	864	3890	1829	3730	2438	4290	2677	4930	3081	5660	4519	6600

Note: Dimensions are indicative. Contact factory for certified drawings.

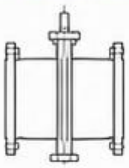
END CONNECTIONS

WAFER TYPE



LUG TYPE

DOUBLE FLANGED TYPE



TYPICAL APPLICATIONS

- OIL & GAS
- PETROCHEMICAL
- WATER & WASTEWATER
- POWER PLANT
- MARINE & SHIPBUILDING
- HVAC

NOTES

- For critical and high performance applications, double offset design is recommended.
- Actuation options: Lever, Gear Operator, Pneumatic, Electric, Hydraulic.
- Custom materials and special designs available on request.
- Regular inspection & maintenance ensured for reliable operation.

GATE VALVE

TECHNICAL SPECIFICATION &
MATERIAL OF CONSTRUCTION

TECHNICAL SPECIFICATION

Valve Type	Gate Valve
Design Standard	API 600 / ISO 10434
Face to Face	ASME B16.10
End Connection	ASME B16.5 / ASME B16.47
Size Range	2" (50mm) to 120" (3000mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-29°C to 425°C (Depending on Material)
Testing Standard	API 598 / ISO 5208
Inspection & Testing	100% Hydrostatic Testing
Operation	Manual / Gear / Electric / Pneumatic
Application	Water, Oil, Gas, Steam, Petrochemical, Power Plant, Chemical & General Industries

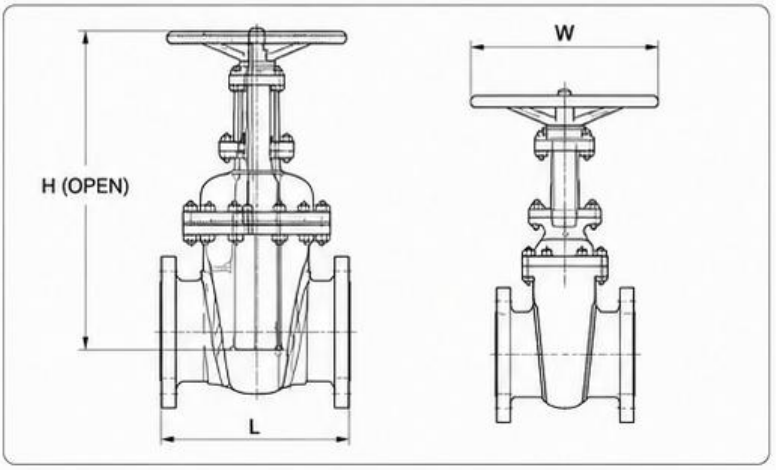
LARGEST SIZE MANUFACTURED
120" (3000mm)
CLASS 2500

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Iron, Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Bonnet	Cast Iron, Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Wedge	Carbon Steel + 13%Cr, SS 304, SS 316, Duplex, Bronze, Monel
Stem	SS 410, SS 304, SS 316, Monel, Duplex
Seat Ring	SS 13%Cr, Stellite, Integral Seat (Welded)
Gland	Carbon Steel, Stainless Steel
Packing	Graphite, PTFE, Asbestos Free
Gasket	Spiral Wound, Graphite, PTFE
Bolting	Carbon Steel, Alloy Steel, Stainless Steel

PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING TEMPERATURE
150	425°C
300	425°C
600	425°C
900	425°C
1500	425°C
2500	425°C



Note: Materials can be defined as per customer requirement.

KNIFE GATE VALVE

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION

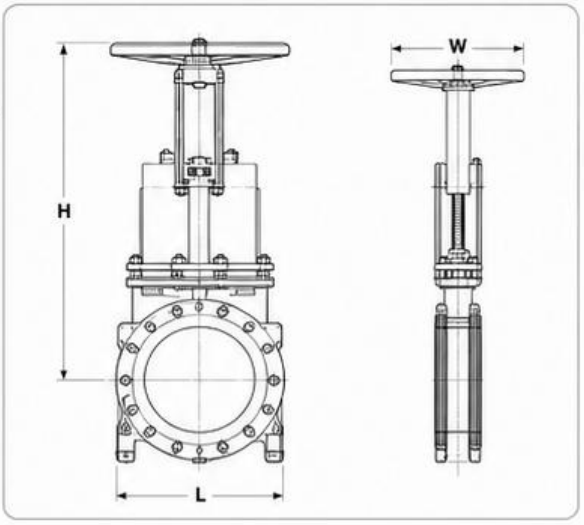
Valve Type	Knife Gate Valve
Design Standard	MSS SP-81 / API 6D
Face to Face	MSS SP-81
End Connection	Wafer / Lug / Double Flanged
Size Range	2" (50mm) to 48" (1200mm)
Pressure Rating	ASME Class 150 to Class 300 PN 10 to PN 50
Temperature Range	-29°C to 425°C (Depending on Material)
Testing Standard	API 598 / MSS SP-81
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing
Operation	Manual / Gear / Electric / Pneumatic
Application	Pulp & Paper, Mining, Power Plant, Water Treatment, Chemical, Cement, Food & Beverage, Slurry Handling

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Iron, Carbon Steel, Stainless Steel, CF8M, Duplex, Super Duplex
Gate	Stainless Steel 304, 316, 316L, Duplex, 2205, 2507
Seat	EPDM, NBR, PTFE, Viton, Metal Seated
Packing	PTFE, Graphite, Aramid Fiber
Gland	Carbon Steel, Stainless Steel
Stem	Stainless Steel 410, 304, 316, 316L
Yoke	Carbon Steel, Stainless Steel
Bolting	Carbon Steel, Alloy Steel, Stainless Steel

DESIGN FEATURES

- Full port design for unrestricted flow
- Bi-directional sealing
- Replaceable seat for extended service life
- Low operating torque
- One-piece through-going gate for high strength
- Various seat materials available for different media
- Compact design, light weight
- Suitable for slurry, viscous and abrasive media



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psi)	MAX. WORKING TEMPERATURE (°C)
150	285	425
300	740	425
PN 10	145	425
PN 16	232	425
PN 25	362	425
PN 40	580	425
PN 50	725	425

DIMENSIONS (mm)

SIZE		CLASS 150				CLASS 300			
NPS	DN	L (Wafer)	L (Lug)	H (Approx.)	W	L (Wafer)	L (Lug)	H (Approx.)	W
2	50	40	40	285	180	64	64	320	200
3	80	51	51	350	200	64	64	385	200
4	100	51	51	415	250	64	64	460	250
6	150	57	57	560	290	70	70	615	300
8	200	70	70	690	300	71	71	750	350
10	250	70	70	785	350	76	76	890	400
12	300	76	76	925	400	83	83	1015	450
14	350	76	76	1025	450	92	92	1130	500
16	400	89	89	1170	500	102	102	1290	550
18	450	89	89	1280	550	114	114	1405	600
20	500	114	114	1400	600	127	127	1625	650
24	600	114	114	1640	600	154	154	1795	700
30	750	127	127	1980	650	165	165	2190	800
36	900	154	154	2310	800	190	190	2535	1000
48	1200	154	154	2870	1000	210	210	3220	1200

TYPICAL APPLICATIONS

PULP & PAPER · MINING · WATER TREATMENT · POWER PLANT · CHEMICAL · FOOD & BEVERAGE

Note:

- Dimensions are subject to change without notice.
- For higher ratings and special materials, contact factory.

DUAL PLATE CHECK VALVE

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION	
Valve Type	Dual Plate Check Valve (Wafer Type)
Design Standard	API 594 / BS 1868
Face to Face	API 594 / ASME B16.10
End Connection	Wafer / Lug
Size Range	2" (50mm) to 60" (1500mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-29°C to 650°C (Depending on Material)
Testing Standard	API 598 / ISO 5208
Inspection & Testing	100% Pressure Testing 100% Seat Tightness Testing
Operation	Automatic
Application	Water, Oil & Gas, Petrochemical, Power Plant, Marine, HVAC, Pulp & Paper, Water Treatment

SIZE RANGE
2" TO 60"
(50mm TO 1500mm)

PRESSURE RATING
CLASS 150 TO 2500
PN 10 TO PN 420

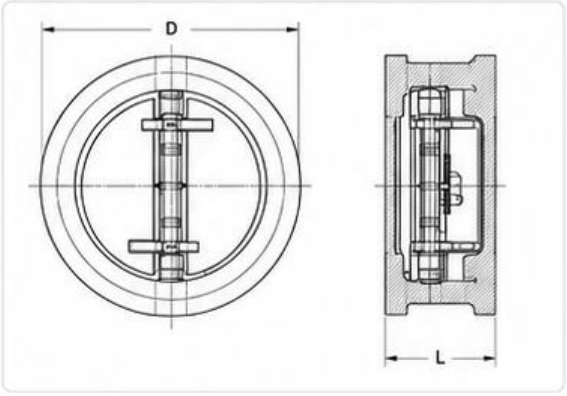
TEMPERATURE RANGE
-29°C TO 650°C

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex, Bronze
Plate	Stainless Steel, Duplex, Super Duplex, Bronze, Alloy Steel
Shaft	Stainless Steel, Duplex, Super Duplex
Spring	Stainless Steel, Inconel, Hastelloy
Seat	Stainless Steel, Bronze, NBR, EPDM, Viton
Body Seat	Stainless Steel, Bronze
Plug	Carbon Steel, Stainless Steel
Fixing Pin	Stainless Steel
Bushing (Optional)	Bronze, PTFE

DESIGN FEATURES

- Wafer or lug design for easy installation
- Dual plates with torsion spring assisted closure
- Low cracking pressure
- Short face to face dimensions
- Zero leakage performance
- Suitable for horizontal, vertical & inclined piping
- Available in multiple materials for wide range of applications
- Compact, light weight and space saving



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE		MAX. WORKING TEMPERATURE
	(psi)	(bar)	(°C)
150	285	19.6	425
300	740	51.0	425
600	1480	102.0	425
900	2220	153.0	425
1500	3705	255.0	425
2500	6170	425.0	425

DIMENSIONS (mm)

NPS	DN	CLASS 150		CLASS 300		CLASS 600		CLASS 900		CLASS 1500		CLASS 2500	
		D	L	D	L	D	L	D	L	D	L	D	L
2	50	150	43	127	48	165	54	191	60	216	67	232	73
3	80	127	64	152	64	190	64	210	70	241	76	267	80
4	100	152	64	178	64	216	70	241	76	292	83	311	92
6	150	203	70	216	70	292	83	318	83	356	92	394	114
8	200	254	71	279	89	343	102	381	111	419	108	419	114
10	250	305	79	330	114	406	114	445	127	508	127	508	127
12	300	336	83	381	127	483	127	521	127	559	140	610	140
14	350	381	102	419	127	533	140	584	140	610	140	641	140
16	400	406	102	470	140	597	152	648	152	686	152	705	152
18	450	432	114	533	152	635	165	711	178	743	165	787	165
20	500	457	127	584	152	698	178	775	190	813	178	857	190
24	600	521	140	686	165	813	190	914	203	921	203	1054	229
30	750	610	165	838	203	984	216	1067	216	1130	229	1213	229
36	900	711	165	991	216	1130	229	1245	254	1245	254	1321	254
42	1050	813	216	1143	254	1334	254	1422	280	1384	279	1467	279
48	1200	914	216	1245	279	1549	305	1715	305	1575	305	1824	305
60	1500	1397	305	1549	305	1866	305	1924	356	1924	368	1824	368

Note: Dimensions are indicative. Contact factory for certified drawings.

TYPICAL APPLICATIONS

WATER TREATMENT · OIL & GAS · PETROCHEMICAL · POWER PLANT · CHEMICAL · HVAC · FOOD & BEVERAGE

Note:
- Dimensions are subject to change without notice.
- For higher ratings and special materials, contact factory.

SWING CHECK VALVE

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION	
Valve Type	Swing Check Valve
Design Standard	API 594 / BS 1868
Face to Face	API 594 / ASME B16.10
End Connection	Flanged / RTJ
Size Range	2" (50mm) to 48" (1200mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-29°C to 650°C (Depending on Material)
Testing Standard	API 598 / ISO 5208
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing
Operation	Automatic
Application	Oil & Gas, Petrochemical, Power Plant, Refinery, Chemical, LNG, Water Treatment, Marine, Cryogenic Service

SIZE RANGE
2" TO 48"
(50mm TO 1200mm)

PRESSURE RATING
CLASS 150 TO 2500
PN 10 TO PN 420

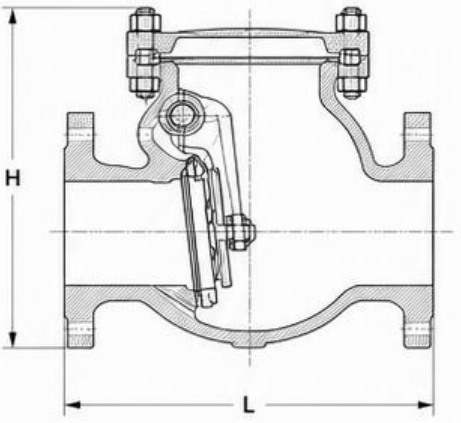
TEMPERATURE RANGE
-29°C TO 650°C

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Bonnet	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Disc	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex
Hinge	Stainless Steel, Alloy Steel
Seat Ring	Stainless Steel, Stellited, Ni-Cr Alloy
Gasket	Spiral Wound, Graphite, PTFE
Bolting	Carbon Steel, Alloy Steel, Stainless Steel
Plug	Carbon Steel, Stainless Steel

DESIGN FEATURES

- Full port, low pressure drop
- Simple and robust construction
- Hinged disc for smooth operation
- Renewable seat ring
- Back seat design for easy maintenance
- Bolted bonnet for reliable sealing
- Various trim materials available for different media
- Suitable for horizontal and vertical installation
- Reliable performance and maintenance friendly



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psig)	MAX. WORKING TEMPERATURE (°C)		
		Carbon Steel	Alloy Steel	Stainless Steel
150	285	425	425	537
300	740	425	425	537
600	1480	425	425	537
900	2220	425	425	537
1500	3705	425	425	537
2500	6170	425	425	537

Note: Pressure - Temperature ratings are in accordance with ASME B16.34.

DIMENSIONS (mm)

SIZE		CLASS 150 - 600		CLASS 900 - 1500		CLASS 2500	
NPS	DN	L (RF)	H (Approx.)	L (RF)	H (Approx.)	L (RF)	H (Approx.)
2	50	203	165	216	185	232	200
3	80	241	185	283	215	292	230
4	100	292	215	305	240	330	265
6	150	356	255	368	310	431	330
8	200	406	310	502	355	545	380
10	250	495	350	568	420	673	445
12	300	622	420	648	485	730	510
14	350	698	450	762	540	795	560
16	400	787	500	838	600	853	620
18	450	914	550	991	665	980	680
20	500	991	600	1130	730	1042	740
24	600	1295	715	1433	830	1270	860
30	750	1549	830	1807	965	1631	990
36	900	1727	875	1969	1115	1661	1050
48	1200	2020	1020	2607	1410	2063	1450

Note: Dimensions are indicative. Contact factory for certified drawings.

TYPICAL APPLICATIONS

WATER TREATMENT · OIL & GAS · PETROCHEMICAL · POWER PLANT · CHEMICAL · WATER TREATMENT · MARINE · LNG

Note:

- Dimensions are subject to change without notice.
- For higher ratings and special materials, contact factory.

TRUNNION MOUNTED
BALL VALVE
TECHNICAL SPECIFICATION

120" (3000mm)
CLASS 2500

TECHNICAL SPECIFICATION

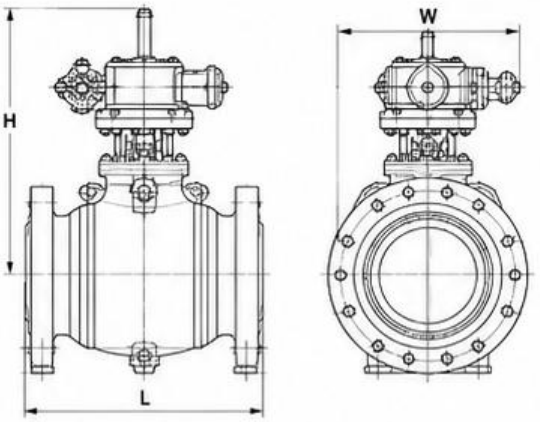
Valve Type	Trunnion Mounted Ball Valve
Design Standard	API 6D / ASME B16.34
Face to Face	API 6D / ASME B16.10
End Connection	Flanged / RTJ
Size Range	2" (50mm) to 120" (3000mm)
Pressure Rating	ASME Class 150 to Class 2500 PN 10 to PN 420
Temperature Range	-196°C to 650°C (Depending on Material)
Testing Standard	API 598 / ISO 5208 / API 6D
Inspection & Testing	100% Hydrostatic Testing 100% Pneumatic Testing
Fire Safe	API 607 / API 6FA
Operation	Manual / Gear / Electric / Pneumatic / Hydraulic
Application	Oil & Gas, Petrochemical, Power Plant, Refinery, Chemical, LNG, Water Treatment, Marine, Cryogenic Service

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Carbon Steel, Stainless Steel, Alloy Steel, Duplex, Super Duplex, Nickel Alloys
Ball	Stainless Steel, Duplex, Super Duplex, Nickel Alloys, Coated
Stem	Stainless Steel, Duplex, Nickel Alloys
Seat	PTFE, RPTFE, PEEK, DEVLON, NYLON, METAL SEATED
Body Seal	Graphite, PTFE, Flexible Graphite
O-Ring	Viton, NBR, EPDM, PTFE (as per service)
Bearing	PTFE, Stainless Steel
Bolting	Carbon Steel, Alloy Steel, Stainless Steel

DESIGN FEATURES

- Trunnion mounted for high pressure and large size
- Low operating torque
- Blow-out proof stem
- Fire safe design (API 607)
- Anti-static device
- Double block and bleed (DBB)
- Emergency sealant injection
- Bidirectional flow
- Reliable seat sealing
- Floating seat options for low pressure



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psi)	MAX. WORKING TEMPERATURE (°C)
150	285	425
300	740	425
600	1480	425
900	2220	425
1500	3705	425
2500	6170	425

TYPICAL APPLICATIONS

OIL & GAS · PETROCHEMICAL · POWER PLANT · CHEMICAL · LNG · WATER TREATMENT · MARINE

DIMENSIONS (mm)

SIZE		CLASS 150 - 600		CLASS 900 - 1500		CLASS 2500	
NPS	DN	L (RF)	H (Approx.)	L (RF)	H (Approx.)	L (RF)	H (Approx.)
2	50	178	285	216	315	232	315
3	80	203	340	283	375	292	390
4	100	229	390	305	430	330	450
6	150	267	510	403	560	431	590
8	200	292	580	502	635	545	680
10	250	330	670	568	720	673	770
12	300	356	780	648	840	730	890
14	350	381	885	762	960	795	1020
16	400	406	980	838	1080	853	1140
18	450	432	1080	991	1200	980	1270
20	500	457	1180	1130	1320	1042	1400
24	600	521	1370	1433	1530	1270	1620
30	750	610	1580	1807	1760	1631	1860
36	900	711	1760	1969	1960	1661	2070
42	1050	813	1960	2286	2160	1848	2280
48	1200	914	2160	2610	2360	2063	2470
60	1500	1397	2560	3810	2870	3470	3020

Note: Dimensions are indicative. Contact factory for certified drawings.

Note:
- Dimensions are subject to change without notice.
- For higher ratings and special materials, contact factory.

BALL VALVE

THREADED / SOCKET WELD ENDS

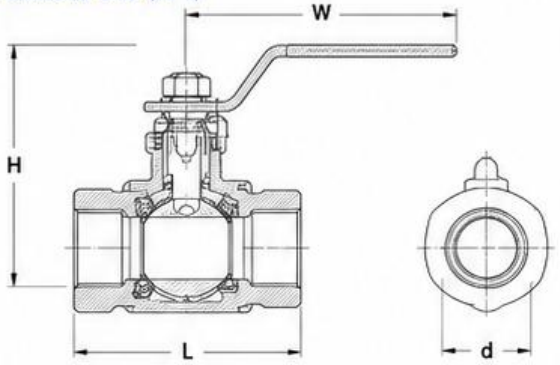
TECHNICAL SPECIFICATION

UP TO 1000 WOG

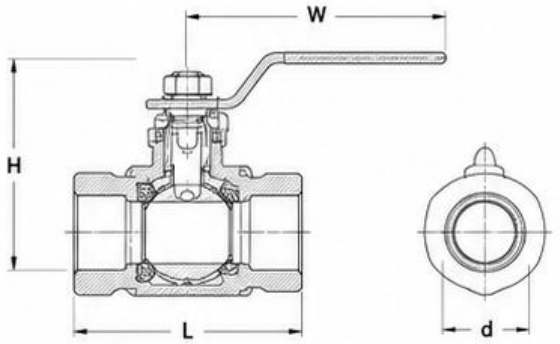
THREAD OR SOCKET WELD ENDS

TECHNICAL SPECIFICATION	
Valve Type	Ball Valve
Design Standard	ANSI B16.34
End Connections	Threaded: NPT (ANSI B1.20.1) Socket Weld: ANSI B16.11
Pressure Rating	1000 WOG (PN 68) Gas Pressure - Temperature Rating
Temperature Range	-20°C to 200°C (Depending on Material)
Testing Standard	API 598
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing (Air)
Operation	Manual (Lever Handle)
Application	Water, Oil & Gas, Chemical, Petrochemical, Power Plant, HVAC, General Industrial Services

THREADED END (NPT)



SOCKET WELD END



MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	CF8M (316), CF8 (304), WCB
End Cap	CF8M (316), CF8 (304), WCB
Ball	CF8M (316), CF8 (304)
Stem	SS316, SS304
Steat	PTFE, RPTFE, PEEK, DEVLON
Body Seal	PTFE, RPTFE
Thrust Washer	PTFE, RPTFE
Packing	PTFE
Gland	SS304
Handle	SS304 with Vinyl Grip
Handle Nut	SS304
Locking Device	SS304 (Optional)

DESIGN FEATURES

- Full port design for minimal pressure drop
- Blow-out proof stem
- Anti-static device (Optional)
- Locking device (Optional)
- PTFE seat for tight shut-off and long life
- Compact and lightweight construction
- Suitable for wide range of fluids and industries
- Available in various materials and seat options

PRESSURE - TEMPERATURE RATINGS

TEMPERATURE (°C)	MAX. ALLOWABLE WORKING PRESSURE			
	1000 WOG (Threaded)		1000 WOG (Socket Weld)	
	(bar)	(psi)	(bar)	(psi)
-20 to 38	68	1000	68	1000
50	58	870	58	870
100	52	735	52	735
150	45	653	45	653
200	42	609	42	609

Note: Pressure - Temperature ratings are in accordance with ANSI B16.34.

DIMENSIONS (mm)

THREADED END (NPT)					
SIZE	d NPT	L	H (Approx.)	W (Approx.)	Cv
1/4"	1/4"	60	48	110	5
3/8"	3/8"	60	48	110	5
1/2"	1/2"	70	54	130	15
3/4"	3/4"	80	60	130	31
1"	1"	90	67	160	59
1-1/4"	1-1/4"	110	78	160	96
1-1/2"	1-1/2"	120	86	200	140
2"	2"	140	95	200	220

SOCKET WELD END (ANSI B16.11)					
SIZE	d (SW)	L	H (Approx.)	W (Approx.)	Cv
1/4"	11.1	60	48	110	5
3/8"	12.7	60	48	110	5
1/2"	15.9	70	54	130	15
3/4"	20.6	80	60	130	31
1"	26.9	90	67	160	59
1-1/4"	32.7	110	78	160	96
1-1/2"	38.1	120	86	200	140
2"	50.8	140	95	200	220

Note: Dimensions are subject to change without notice.

TYPICAL APPLICATIONS

OIL & GAS · CHEMICAL · WATER TREATMENT · HVAC · POWER PLANT · GENERAL INDUSTRIES

NOTE

- For other materials and seat options, please contact factory.
- Not recommended for throttling service.
- Regular inspection and maintenance is recommended for reliable operation.

GLOBE VALVE

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION

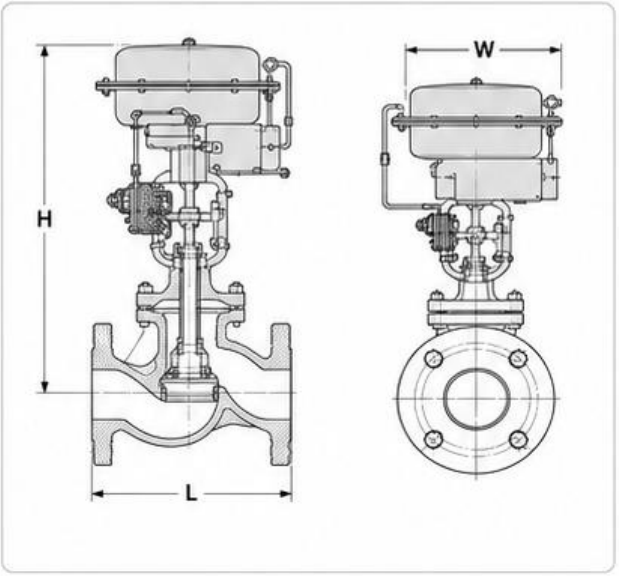
Valve Type	Globe Valve with Actuator
Design Standard	DIN EN 13709
Face to Face	DIN EN 558-1 Series 1
End Connection	Flanged ends DIN EN 1092-1 PN40
Nominal Size	DN40
Pressure Rating	PN40
Temperature Range	-10°C to 450°C (Depending on Material)
Actuator Type	Pneumatic Diaphragm Actuator (Double Acting)
Testing Standard	DIN EN 12266-1
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing
Operation	Automatic (Pneumatic Actuator)
Application	Water, Steam, Oil & Gas, Chemical, Petrochemical, Power Plant, HVAC and General Industrial Services

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Steel (GS-C25) / (1.0619) Stainless Steel (SUS/CF8M/1.4408)
Bonnet	Cast Steel (GS-C25) / (1.0619) Stainless Steel (SUS/CF8M/1.4408)
Disc	Stainless Steel (X20Cr13) / (1.4021) Stellite Faced (Optional)
Seat	Stainless Steel (X20Cr13) / (1.4021) Stellite Faced (Optional)
Stem	Stainless Steel (X20Cr13) / (1.4021)
Gland	Carbon Steel / Stainless Steel
Packing	Graphite / PTFE
Paskng	Spiral Wound SS + Graphite
Bolting	Carbon Steel (8.8) / Stainless Steel (A2-70)
Handwheel	Ductile Iron (GGG40.3)

DESIGN FEATURES

- Straight pattern globe valve
- Precision machined seating for leak tight shut-off
- Renewable seat ring
- Rising stem with inside screw and yoke
- Bolted bonnet for easy maintenance
- Graphite packing for reliable stem sealing
- Suitable for throttling and regulation
- Actuator for remote operation and accurate control
- Robust design for long service life and high reliability



PRESSURE - TEMPERATURE RATINGS

TEMPERATURE (°C)	MAX. ALLOWABLE WORKING PRESSURE (bar)
-10 to 100	40
150	37.7
200	35.3
250	32.8
350	30.3
350	27.7
400	25.1
450	22.6

Note: Pressure - Temperature ratings are in accordance with DIN EN 13709.

DIMENSIONS (mm)

PN40								
DN	DIN EN 558-1 Series 1	DIN EN 1092-1 PN40	K	d	n-Ød1	H (Approx.)	W (Approx.)	WEIGHT (Approx.) (kg)
40	230	150	110	84	4-Ø18	300	180	17.0

L = Face to Face (DIN EN 558-1 Series 1)
D = Flange Outside Diameter
K = Bolt Circle Diameter
d = Flange Bore Diameter
n-Ød1 = Number of Bolts – Bolt Hole Diameter
H = Height (Approx.)
W = Handwheel Diameter (Approx.)

End Connection Standard:
DIN EN 1092-1 PN40
Drilling: 4 Holes

TYPICAL APPLICATIONS

POWER PLANT · OIL & GAS · CHEMICAL · STEAM SYSTEMS · WATER TREATMENT · HVAC

NOTE

- Material options other than listed are available on request.
- Dimensions and weights are subject to change without notice.
- For special requirements, please contact factory.

Y PATTERN GLOBE VALVE

TECHNICAL SPECIFICATION

DIN
DN40
PN40

TECHNICAL SPECIFICATION

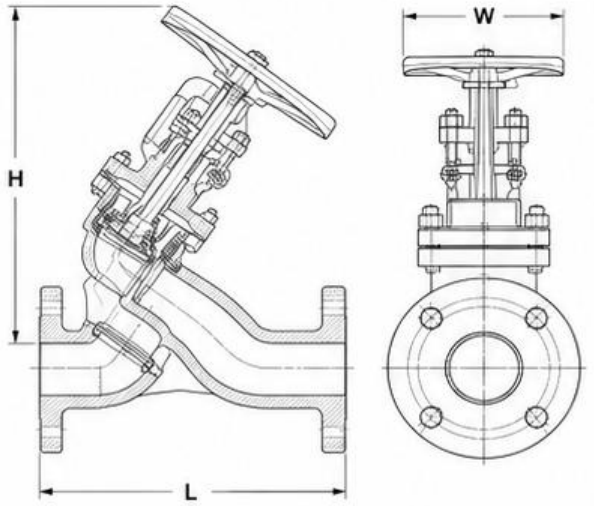
Valve Type	Y Pattern Globe Valve
Design Standard	DIN EN 13709
Face to Face	DIN EN 558-1 Series 1
End Connection	Flanged ends DIN EN 1092-1 PN40
Nominal Size	DN40
Pressure Rating	PN40
Temperature Range	-10°C to 450°C (Depending on Material)
Testing Standard	DIN EN 12266-1
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing
Operation	Manual (Handwheel)
Application	Water, Steam, Oil & Gas, Chemical, Petrochemical, Power Plant, HVAC and General Industrial Services

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Steel (GS-C25) / 1.0619 Stainless Steel (GX5CrNiMo19-11-2 / 1.4408)
Bonnet	Cast Steel (GS-C25) / 1.0619 Stainless Steel (GX5CrNiMo19-11-2 / 1.4408)
Disc	Stainless Steel (X20Cr13 / 1.4021) Stellite Faced (Optional)
Seat	Stainless Steel (X20Cr13 / 1.4021) Stellite Faced (Optional)
Stem	Stainless Steel (X20Cr13 / 1.4021)
Gland	Carbon Steel / Stainless Steel
Packing	Graphite / PTFE
Gasket	Spiral Wound SS + Graphite
Bolting	Carbon Steel (8.8) / Stainless Steel (A2-70)
Handwheel	Ductile Iron (GGG40.3)

DESIGN FEATURES

- Y pattern design for lower pressure drop and efficient flow
- Precision machined seating for leak tight shut-off
- Renewable seat ring
- Rising stem with inside screw and yoke
- Bolted bonnet for easy maintenance
- Graphite packing for reliable stem sealing
- Suitable for throttling and regulation
- Actuator for remote operation and accurate control
- Robust design for long service life and high reliability



PRESSURE - TEMPERATURE RATINGS

TEMPERATURE (°C)	MAX. ALLOWABLE WORKING PRESSURE (bar)
-10 to 100	40
150	37.7
200	35.3
250	32.8
300	30.3
350	27.7
400	25.1
450	22.6

Note: Pressure - Temperature ratings are in accordance with DIN EN 13709.

DIMENSIONS (mm)

PN40								
DN	DIN EN 558-1 Series 1	H (Approx.)	W (Approx.)	D DIN 1092-1	K	d	n-Ød1	WEIGHT (Approx.) (kg)
40	230	295	160	150	110	84	4-Ø18	17.0

L = Face to Face (DIN EN 558-1 Series 1)
H = Height (Approx.)
W = Handwheel Diameter (Approx.)
D = Flange Outside Diameter
K = Bolt Circle Diameter
d = Flange Bore Diameter
n-Ød1 = Number of Bolts – Bolt Hole Diameter

End Connection Standard:
DIN EN 1092-1 PN40
Drilling: 4 Holes

TYPICAL APPLICATIONS

POWER PLANT | OIL & GAS | CHEMICAL PLANTS | STEAM SYSTEMS | WATER TREATMENT | HVAC | GENERAL INDUSTRIES

NOTE

- Material options other than listed are available on request.
- Dimensions and weights are subject to change without notice.
- For special requirements, please contact factory.

DIAPHRAGM VALVE

TECHNICAL SPECIFICATION

SIZE RANGE
1/2" TO 24"
(15mm TO 600mm)

PRESSURE RATING
CLASS 150 TO 300
PN 10 TO PN 40

TECHNICAL SPECIFICATION

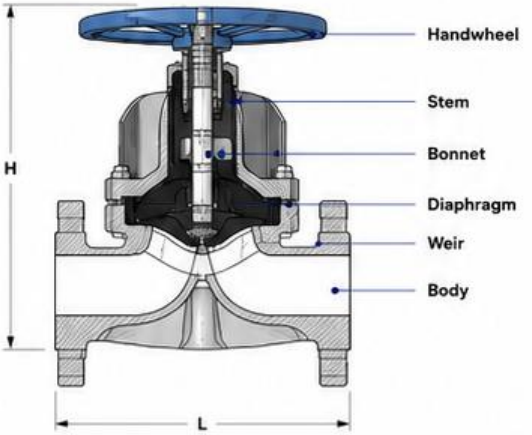
Valve Type	Weir Type / Straight Through Type Diaphragm Valve
Design Standard	BS EN 13397 / API 609
Face to Face	BS EN 558-1 / ISO 5752
End Connection	Flanged / Wafer / Lug / Threaded / Socket Weld / Butt Weld
Size Range	1/2" (15mm) to 24" (600mm)
Pressure Rating	ASME Class 150 to Class 300 PN 10 to PN 40
Temperature Range	-20°C to 180°C (Depending on Material)
Testing Standard	API 598 / EN 12266-1
Inspection & Testing	100% Hydrostatic Testing 100% Seat Tightness Testing
Operation	Manual / Pneumatic / Electric
Application	Chemical, Water Treatment, Pulp & Paper, Pharmaceutical, Food & Beverage, Mining, Power Plant, General Process

MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Iron, Cast Steel, Stainless Steel 304, 304L, 316, 316L, Duplex, Super Duplex, PP, PVC, UPVC
Bonnet	Cast Iron, Cast Steel, Stainless Steel 304, 304L, 316, 316L, Duplex, Super Duplex, PP, PVC, UPVC
Diaphragm	EPDM, PTFE/EPDM, NBR, FKM (Viton), PTFE/Butyl, PTFE/FKM
Weir	Stainless Steel 316, Alloy 20, PP, PVDF
Stem	Stainless Steel 304, 316, 316L
Stem	Integral with Diaphragm
O-Ring	EPDM, NBR, FKM
Bolting	Carbon Steel, Stainless Steel

DESIGN FEATURES

- Weir type and straight through type available
- Leak-tight shut-off
- Corrosion resistant materials
- Isolated working mechanism
- No packing, maintenance free stem sealing
- Excellent flow regulation
- High purity and contamination free operation
- Suitable for abrasive and corrosive fluids
- Compact design and low operating torque



PRESSURE - TEMPERATURE RATINGS

ASME CLASS	MAX. WORKING PRESSURE (psig)		MAX. WORKING TEMPERATURE (°C)
	(bar)	(psig)	
150	285	19.6	180
200	200	13.8	180
300	740	51.0	180
	515	35.5	180
PN 10	145	10	120
PN 16	232	16	120
PN 25	362	25	120
PN 40	580	40	120

Note: Pressure - Temperature ratings are in accordance with ASME B16.34.

DIMENSIONS (mm)

SIZE		CLASS 150		CLASS 300		PN 10/16		PN 25/40	
NPS	DN	L (RF)	H (Approx.)	L (RF)	H (Approx.)	L	H (Approx.)	L	H (Approx.)
1/2	15	108	120	140	120	108	115	108	115
3/4	20	117	120	152	120	117	120	152	120
1	25	127	140	165	140	127	140	165	140
1 1/2	40	165	160	190	160	165	160	190	160
2	50	178	180	216	180	178	180	216	180
2 1/2	65	190	220	241	220	190	210	241	210
3	80	203	240	283	240	203	235	283	235
4	100	229	280	305	280	229	280	305	280
6	150	267	340	403	340	267	340	403	340
8	200	292	410	419	410	292	385	419	340
10	250	330	460	508	460	330	460	508	460
12	300	356	560	559	560	356	520	559	520
14	350	381	600	603	600	381	560	603	560
16	400	406	680	645	680	406	640	645	640
20	500	470	800	749	800	470	750	749	750
24	600	533	950	914	950	533	900	914	900

Note: Dimensions are indicative. Contact factory for certified drawings.

End Connection Standard:
DIN EN 1092-1 PN40
Drilling: 4 Holes

CHEMICAL | WATER TREATMENT | PULP & PAPER | PHARMACEUTICAL | FOOD & BEVERAGE | MINING | POWER PLANT

FORGED STEEL GATE / GLOBE VALVE

TECHNICAL SPECIFICATION

	GATE VALVE	GLOBE VALVE
Valve Type	Gate Valve	Globe Valve
Design Standard	API 602 / BS 5352	API 602 / BS 5352
End Connections	Socket Weld, Threaded	Socket Weld, Threaded
Pressure Rating	Class 800, 1500, 2500	Class 800, 1500, 2500
Size Range	1/2" to 2"	1/2" to 2"
Pressure-Temperature	ASME B16.34	ASME B16.34
Testing Standard	API 598	API 598
Body Material	ASTM A105N	ASTM A105N
Bonnet Type	Bolted Bonnet	Bolted Bonnet
Operation	Manual (Handwheel)	Manual (Handwheel)
Application	Oil & Gas, Petrochemical, Power Plant, Refinery, Chemical, Pulp & Paper, Marine and General Industrial Service	

FORGED STEEL GATE VALVE

FORGED STEEL GLOBE VALVE

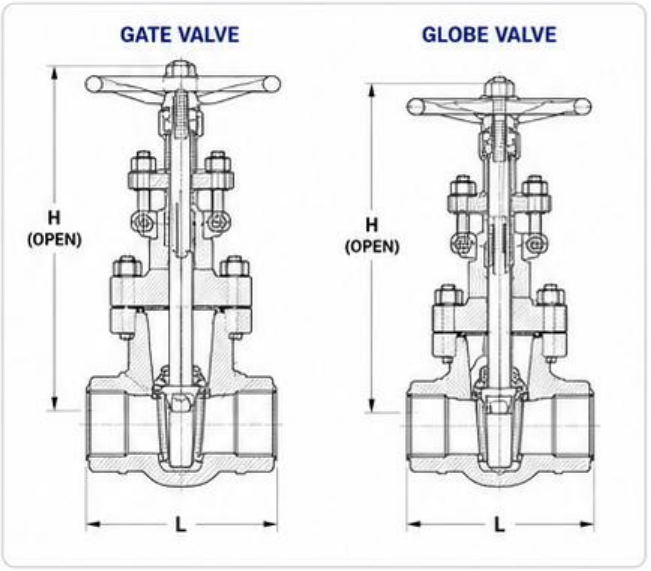
MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL	
	GATE VALVE	GLOBE VALVE
Body	ASTM A105N	ASTM A105N
Bonnet	ASTM A105N	ASTM A105N
Wedge / Disc	ASTM A105N + 13Cr	ASTM A105N + STL
Seat	ASTM A105N + STL	ASTM A105N + STL
Stem	ASTM A182 F6a	ASTM A182 F6a
Gland	ASTM A105N	ASTM A105N
Packing	Graphite	Graphite
Gasket	Spiral Wound SS + Graphite	Spiral Wound SS + Graphite
Handwheel	Ductile Iron	Ductile Iron
Gland Flange	ASTM A105N	ASTM A105N
Handwheel Nut	Carbon Steel	Carbon Steel
Bonnet Bolt	ASTM A193 B7	ASTM A193 B7
Bonnet Nut	ASTM A194 2H	ASTM A194 2H

Note: Materials can be defined as per customer requirements.

DESIGN FEATURES

- Forged steel body for high strength and pressure integrity
- Compact and robust design
- Rising stem with outside screw and yoke (OS&Y)
- Solid wedge (Gate Valve)
- Renewable seat ring (Globe Valve)
- Graphite packing for reliable stem sealing
- Back seat design
- Threaded or socket weld ends as per ASME B16.11
- Suitable for high pressure and high temperature service



PRESSURE - TEMPERATURE RATINGS

CLASS	MAX. ALLOWABLE WORKING PRESSURE		
TEMP.° °C	CLASS 800 (psi)	CLASS 1500 (psi)	CLASS 2500 (psi)
-29"	800	1430	2280
100	739	1284	2045
200	680	1180	1880
300	609	1060	1690
315	544	950	1510
343	500	870	1380
399	460	800	1270
425	425	740	1180
450	400	690	1100

Note: Pressure - Temperature ratings are in accordance with ASME B16.34.

DIMENSIONS (mm)

GATE VALVE								GLOBE VALVE					
SIZE		CLASS 800		CLASS 1500		CLASS 2500		CLASS 800		CLASS 1500		CLASS 2500	
NPS	DN	L (RF)	H (OPEN)	L (RF)	H OPEN)	L (RF)	H (OPEN)	L (RF)	H (OPEN)	L (RF)	H (OPEN)	L (RF)	H (OPEN)
1/2"	15	108	120	120	200	140	240	108	175	120	195	140	235
3/4"	20	117	130	130	210	152	250	117	190	130	205	152	245
1"	25	127	210	140	235	165	280	127	200	140	220	165	265
1/2"	40	165	260	160	280	190	320	165	250	160	270	190	310
2"	50	178	305	180	340	216	385	178	285	180	315	216	365

Note: Dimensions are indicative. Contact factory for certified drawings.

SW = Socket Weld THD = Threaded (NPT)

L = Face to Face Length H = Height (Approx.)

D = Flange Outside Diameter

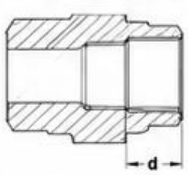
K = Bolt Circle Diameter

d = Flange Bore Diameter

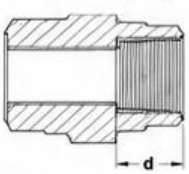
n-Ød1 = Number of Bolts – Bolt Hole Diameter

END CONNECTIONS (ASME B16.11)

SOCKET WELD (SW)



THREADED (NPT)



TYPICAL APPLICATIONS

OIL & GAS

PETROCHEMICAL

POWER PLANT

CHEMICAL

MARINE

GENERAL INDUSTRY

NOTES

- Values are suitable for installation in any position.
- Other materials, trims and ratings available on request.
- For critical service, contact factory for design assistance.
- Regular inspection and maintenance is recommended for reliable operation.

INDUSTRIAL FOOT VALVE

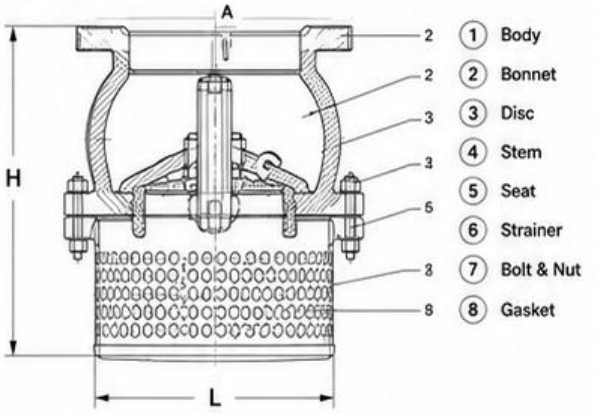
TECHNICAL SPECIFICATION

SPECIFICATIONS	
Valve Type	Foot Valve with Strainer
Design Standard	BS EN 12334 / API 594
End Connection	Flanged End (Drilling as per ANSI B16.5, Class 150)
Pressure Rating	PN16 / Class 150
Size Range	DN50 to DN300 (2" to 12")
Temperature Range	-10°C to 80°C
Body Material	Cast Iron (DL) / Ductile Iron (DI) / Cast Steel (WCB) / Stainless Steel (CF8/CF8M)
Trim Material	Bronze / Stainless Steel
Seat	NBR / EPDM / Metal
Operation	Automatic (Non-Return)
Application	Suitable for Pump Suction Line to prevent back flow and keep the pump primed

FUNCTION

Allows flow in only one direction and prevents back flow from the pump when it is stopped.

SECTIONAL DRAWING



MATERIAL OF CONSTRUCTION

PART NAME	MATERIAL OPTIONS
Body	Cast Iron (DL), Ductile Iron (DI), Cast Steel (WCB), Stainless Steel (CF8/CF8M)
Bonnet	Cast Iron (DL), Ductile Iron (DI), Cast Steel (WCB), Stainless Steel (CF8/CF8M)
Disc	Bronze (BS EN 1982), Stainless Steel (CF8/CF8M)
Seat	NBR, EPDM, Metal (SS or Bronze)
Stem	Stainless Steel (SS304/SS316/SS420)
Strainer	Stainless Steel (SS304/SS316) / Galvanised Steel (GS)
Fasteners	Carbon Steel (Zinc Plated) / Stainless Steel (SS304/SS316)
Gasket	NBR / EPDM

DESIGN FEATURES

- Hydrodynamic design for smooth flow and minimum head loss
- Integral strainer to prevent entry of foreign particles
- Self-cleaning seating design for tight shut-off
- Strong and rugged construction
- Suitable for horizontal and vertical installation (upward flow)
- Available in various materials and seat options
- Easy maintenance and long service life

PRESSURE - TEMPERATURE RATINGS

TEMPERATURE (°C)	MAX. ALLOWABLE WORKING PRESSURE	
	PN16 (bar)	CLASS 150 (psi)
-10 to 50	16	285
100	13.5	240
150	11.5	205
200	10	190
250	9	160

Note: Pressure - Temperature ratings are in accordance with BS EN 12334 / ASME B16.34.

DIMENSIONS (mm)

DN	NPS	L	H (Approx.)	FLANGE DRILLING			WEIGHT (Approx.) (kg)
				D	K	n-Ød	
50	2"	150	165	152	120.5	4-Ø19	6.0
65	2½"	170	185	178	139.5	4-Ø19	8.0
80	3"	180	205	191	152.5	4-Ø19	10.5
100	4"	190	240	229	180.5	8-Ø19	13.5
125	5"	200	270	254	216.0	8-Ø22	19.0
150	6"	210	295	279	241.5	8-Ø22	24.5
200	8"	239	360	343	298.5	8-Ø22	36.0
250	10"	293	430	406	362.0	12-Ø25	56.0
300	12"	270	495	483	431.8	12-Ø25	78.0

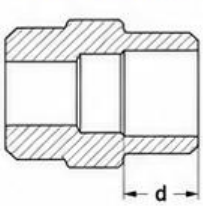
Note: Dimensions are indicative. Contact factory for certified drawings.

SW = Socket Weld THD = Threaded (NPT) L = Face to Face Length H = Height (Approx.)

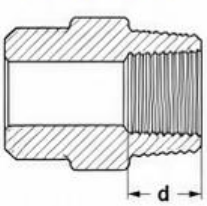
D = Flange Outside Diameter
K = Bolt Circle Diameter
d = Flange Bore Diameter
n - Ød1 = Number of Bolts – Bolt Hole Diameter

END CONNECTIONS (ASME B16.11)

SOCKET WELD (SW)



THREADED (NPT)



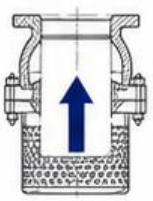
TYPICAL APPLICATIONS

- PUMP SUCTION LINE
- WATER INTAKE SYSTEMS
- INDUSTRIAL PLANTS
- WATER SUPPLY & DISTRIBUTION
- IRRIGATION SYSTEMS

NOTES

- Foot valve must be installed at the end of the suction pipe with adequate submergence.
- Ensure strainer is kept clean for efficient operation.
- Not suitable for viscous fluids or slurries with large solids.
- For other materials or special requirements, please contact factory.

FLOW DIRECTION



HYDRAULIC AND PNEUMATIC TEST PRESSURE FOR VALVES OF VARIOUS PRESSURES

PRESSURE RATING	BODY	SEAT	BACK SEAT	SEAT (AIR)
150 LBS.	31 Kg/cm²	22 Kg/cm²	22 Kg/cm²	6 Kg/cm²
300 LBS.	78 Kg/cm²	58 Kg/cm²	58 Kg/cm²	6 Kg/cm²
600 LBS.	156 Kg/cm²	115 Kg/cm²	115 Kg/cm²	6 Kg/cm²
800 LBS.	211 Kg/cm²	141 Kg/cm²	141 Kg/cm²	6 Kg/cm²
900 LBS.	235 Kg/cm²	178 Kg/cm²	178 Kg/cm²	6 Kg/cm²
1500 LBS.	392 Kg/cm²	287 Kg/cm²	287 Kg/cm²	6 Kg/cm²
2500 LBS.	651 Kg/cm²	478 Kg/cm²	478 Kg/cm²	6 Kg/cm²
PN-40 (Kg/cm²)	60 Kg/cm²	40 Kg/cm²	40 Kg/cm²	6 Kg/cm²
PN-64 (Kg/cm²)	96 Kg/cm²	64 Kg/cm²	64 Kg/cm²	6 Kg/cm²
PN-100 (Kg/cm²)	150 Kg/cm²	100 Kg/cm²	100 Kg/cm²	6 Kg/cm²
PN-250 (Kg/cm²)	375 Kg/cm²	250 Kg/cm²	250 Kg/cm²	6 Kg/cm²

PRESSURE-TEMPERATURE RATING FOR VARIOUS ANSI STANDARD VALVES

TEMPERATURE		Maximum non Shock Service Pressure in Kg/cm²									
		Series 150		Series 300		Series 600		Series 900		Series 1500	
°C	°F	Steel	SS316	Steel	SS316	Steel	SS316	Steel	SS316	Steel	SS316
-29 to 38	-20 to 100	20.0	19.3	52.0	50.6	104	101.2	156.3	152.1	260.9	253.5
66	150	19.0	17.9	49.6	47.1	99.1	94.2	149.2	100.5	249.2	235.5
93	200	18.3	16.9	47.5	43.6	94.9	87.2	142.6	130.9	237.6	217.9
121	250	17.2	15.8	46.7	41.5	93.5	83.0	140.4	124.6	234.1	207.3
149	300	16.2	15.1	46.0	39.4	92.4	78.7	138.7	118.3	230.9	196.8
177	350	15.1	14.4	45.3	37.6	90.7	75.6	136.2	113.3	227.1	188.7
204	400	14.1	13.7	44.6	36.2	89.3	72.4	133.8	108.4	223.2	180.9
232	490	13.0	12.7	43.2	34.8	86.8	69.6	129.9	104.5	216.9	174.6
260	500	12.0	12.0	42.2	33.7	84.4	67.1	126.4	101.0	210.9	168.3
288	550	10.9	10.9	40.4	32.7	80.5	65.4	120.7	98.2	201.7	163.3
316	600	9.8	9.8	38.7	31.6	77.0	63.6	115.4	95.4	192.6	158.8
343	650	8.8	8.8	37.6	31.3	75.6	62.8	113.3	93.6	189.0	156.3
371	700	7.7	7.7	37.6	30.2	74.9	60.8	112.6	91.1	187.6	152.1
399	750	6.7	6.7	35.5	29.9	71.0	59.4	106.3	89.4	177.4	148.5
427	800	5.6	5.6	28.8	29.2	58.0	58.3	86.9	87.6	145.0	146.1
454	850	4.4	4.6	19.0	28.5	37.6	56.9	56.6	85.5	94.3	142.9
468	875	3.9	3.9	15.5	28.1	30.9	55.2	46.4	84.1	77.4	140.8
482	900	3.5	3.5	12.0	27.8	24.3	55.5	36.2	83.0	60.5	138.7
496	925	2.8	2.8	9.5	27.4	19.3	54.8	28.8	82.3	48.2	137.3
510	950	2.5	2.5	7.4	27.1	14.4	54.5	21.8	81.6	36.2	135.9
524	975	1.8	1.8	5.3	26.4	10.9	52.7	16.1	79.2	27.1	132.0
538	1000	1.4	1.4	3.5	25.7	7.4	51.0	10.9	76.7	18.3	128.1

PRESSURE-TEMPERATURE RATING FOR DIN STANDARD VALVES

Service Temperature	Maximum permissible working pressure in Kg/cm²*				
	PN-16	PN-40	PN-64	PN-100	PN-250
Upto 200°C	16	40	64	100	250
Upto 300°C	13	32	50	80	200
Upto 400°C	10	25	40	64	160

Note: Pressure ratings are for reference only. Actual values may vary as per valve design and manufacturer standards.

CHEMICAL & PHYSICAL PROPERTIES OF RAW MATERIALS GENERALLY USED

CHEMICAL PROPERTIES

Sr.No.	Materials	C.Max	Si.max	Mn.max	S.Max	P.Max	NL	Mo.	Cr.	Cu.	Nitrogen
1	Cast Steel ASTM A216 WCB	0.30	0.60	1.00	0.045	0.040	0.5 Max	0.2 Max	0.5 Max	-	-
2	Alloy Steel A 217 WC-1	0.25	0.60	0.50-0.80	0.045	0.040	-	0.45-0.65	-	-	-
3	Alloy Steel A 217 WC-6	0.05-0.20	0.60	0.50-0.80	0.045	0.040	-	0.45-0.65	1.00-1.50	-	-
4	Alloy Steel A 217 WC-9	0.05-0.18	0.60	0.40-0.70	0.045	0.040	-	0.90-1.20	2.00-2.75	-	-
5	Alloy Steel A 217 Cr-12	0.20	1.00	0.35-6.65	0.045	0.040	-	0.90-1.20	8.00-10.0	-	-
6	SS 304 ASTM A 351 CF8	0.08	2.00	1.50	0.040	0.040	8.0-11.0	-	18.0-21.0	-	-
7	SS 304L ASTM A 351 CF 3	0.03	2.00	1.50	0.040	0.040	8.0-12.0	-	19.0-21.0	-	-
8	SS 316 ASTM A351 CF8M	0.08	1.50	2.00	0.040	0.040	9.0-12.0	2.0-3.0	18.0-21.0	-	-
9	SS 316L ASTM A351 CF3M	0.03	1.50	1.50	0.040	0.040	9.0-13.0	2.0-3.0	17.0-21.0	-	-
10	Alloy-20 ASTM A351 CN7M	0.07	1.50	1.50	0.040	0.040	27.5-30.5	2.0-3.0	19.0-22.0	-	-
11	Duplex S.S. CD4MCu.	0.04	1.00	1.00	0.040	0.040	4.75-6.00	1.75-2.25	24.5-26.5	2.75-3.25	-
12	Duplex S.S. CD4MCuN	0.04	1.00	1.00	0.040	0.040	4.7-6.0	1.70-2.3	24.5-26.5	2.7-3.3	0.10-0.25
13	Duplex S.S. CD5MCuN	0.03	1.10	1.20	0.030	0.030	5.6-6.7	2.9-3.8	24.0-26.7	1.4-1.9	0.22-0.31
14	Duplex S.S. CD3MN	0.03	1.00	1.50	0.020	0.040	4.50-6.50	2.50-3.50	21.00	1.00max.	0.10-0.30
15	Cast Steel ASTM A352 LCB	0.30	0.60	1.00	0.045	0.040	0.50 max.	0.50 max.	0.50 max.	0.50 max.	-
16	Cast Steel ASTM A352 LCC	0.25	0.60	1.20	0.045	0.040	0.50 max.	0.20 max.	0.50 max.	-	-

MATERIALS SPECIFICATIONS & PHYSICAL PROPERTIES

Materials Specifications		Physical Properties					
Sr.No.	Materials	Tensil Strength in Mpa	Yield Stress in Mpa	Elongation in [%] Min	Reduction of Area in [%] Min	Impact Value in [J] Min	Testing Temp. Deg.C
1	Cast Steel ASTM A216 WCB	485-655	250 min.	22	35	--	Ambient
2	Alloy Steel A 217 WC-1	450-620	240 min.	24	35	--	Ambient
3	Alloy Steel A 217 WC-6	485-655	275 min.	20	35	--	Ambient
4	Alloy Steel A 217 WC-9	485-655	275 min.	20	35	--	Ambient
5	Alloy Steel A 217Cr-12	620-795	415 min.	18	35	--	Ambient
6	SS 304 ASTM A 351 CF8	485 min.	205 min.	35	--	--	Ambient
7	SS 304L ASTM A 351 CF 3	485 min.	205 min.	35	--	--	Ambient
8	SS316 ASTM A351 CF8M	485 min.	205 min.	30	--	--	Ambient
9	SS316L ASTM A351 CF3M	485 min.	205 min.	30	--	--	Ambient
10	Alloy-20 ASTM A351 CF7M	425 min.	170 min.	35	--	--	Ambient
11	Duplex S.S. CD4MCu.	690 min.	485 min.	16	--	--	Ambient
12	Duplex S.S. CD4MCuN	690 min.	485 min.	16	--	--	Ambient
13	Duplex S.S. CD5MCuN	690 min.	450 min.	25	--	--	Ambient
14	Duplex S.S. CD3MN	620 min.	415 min.	25	--	--	Ambient
15	Cast Steel ASTM A352 LCB	450-620	240 min.	24	35	18	-46
16	Cast Steel ASTM A352 LCC	485-655	275 min.	22	35	20	-46

PRESSURE-TEMPERATURE RATING FOR DIN STANDARD VALVES

Service Temperature	Maximum permissible working pressure in Kg/cm²				
	PN-16	PN-40	PN-64	PN-100	PN-250
Upto 200°C	16	40	64	100	250
Upto 300°C	13	32	50	80	200
Upto 400°C	10	25	40	64	160

Note: Pressure ratings are for reference only. Actual values may vary as per valve design and manufacturer standards.

STEEL TUBE WEIGHTS AND SIZES

NB	OUTSIDE DIAMETER (mm)	WALL THICKNESS (mm)	WEIGHT Kg/m	PIPE SCHEDULE
1/8"	10.3	1.24	0.28	10S
		1.73	0.36	40 (S)
		2.41	0.46	80 (S)
1/4"	13.7	1.65	0.43	10S
		2.24	0.63	40 (S)
		3.02	0.80	80 (S)
3/8"	17.1	1.65	0.63	10S
		2.31	0.85	40 (S)
		3.20	1.10	80 (S)
1/2"	21.3	2.77	1.26	40 (S)
		3.73	1.62	80 (S)
		4.78	1.95	160
3/4"	26.7	2.87	1.68	40 (S)
		3.91	2.19	80 (S)
		5.56	2.89	160
1"	33.4	3.38	2.50	40 (S)
		4.55	3.23	80 (S)
		6.35	4.23	160
1.1/4"	42.2	3.56	3.38	40 (S)
		4.85	4.46	80 (S)
		6.35	5.60	160
1.1/2"	48.3	3.68	4.05	40 (S)
		5.08	5.40	80 (S)
		7.14	7.23	160
2"	60.3	3.91	5.43	40 (S)
		5.54	7.47	80 (S)
		8.74	11.10	160
2.1/2"	73.0	5.16	8.62	40 (S)
		7.01	11.40	80 (S)
		9.52	14.90	160
3"	88.9	5.49	11.30	40 (S)
		7.62	15.30	80 (S)
		11.10	21.30	160
4"	114.3	6.02	16.10	40 (S)
		8.56	22.30	80 (S)
		11.10	28.20	120
		13.50	33.50	160
5"	141.3	6.55	21.80	40 (S)
		9.52	30.90	80S
		12.70	40.20	120
		15.90	49.50	160
6"	168.3	7.11	28.20	40 (S)
		11.00	42.50	80 (S)
		14.30	54.20	120
		18.30	67.50	160
8"	219.1	8.18	42.50	40 (S)
		12.70	64.60	80 (S)
		18.30	90.30	120
		20.60	101.00	140
		23.00	111.00	160

NB	OUTSIDE DIAMETER (mm)	WALL THICKNESS (mm)	WEIGHT Kg/m	PIPE SCHEDULE
10"	273.0	9.27	60.20	40 (S)
		15.10	95.80	80
		21.40	133.00	120
		25.40	155.00	140
		25.40	172.00	160
12"	323.9	9.52	73.80	40 S
		12.70	97.40	80S
		25.40	187.00	120
		28.60	208.00	140
		33.30	239.00	160
14"	355.6	7.92	68.00	20
		11.10	94.30	40
		12.70	107.00	80S
		27.80	224.00	120
		31.80	253.00	140
		35.70	281.00	160
16"	406.40	7.92	77.90	20
		9.52	93.10	30/40 S
		21.40	203.00	80
		31.00	286.00	120
		36.50	333.00	140
		40.50	365.00	160
18"	457.20	7.92	87.80	20
		9.52	105.00	40 S
		12.70	139.00	80S
		34.90	363.00	120
		39.70	408.00	140
		45.20	459.00	160
20"	508.00	9.52	117.00	20/40 S
		15.10	183.00	80
		26.20	311.00	120
		38.10	441.00	140
		44.50	512.00	160
		50.00	564.00	160
22"	558.80	9.52	129.00	20/40 S
		15.90	212.00	80
		26.20	373.00	120
		41.30	526.00	140
		47.60	601.00	160
		54.00	671.00	160
24"	609.60	9.52	141.00	20/40 S
		15.90	233.00	80
		26.00	589.00	120
		52.40	719.00	140
		59.50	807.00	160

NOTE:
Weights are theoretical and may vary as per manufacturing tolerances.

All dimensions are in millimeters (mm).

Schedules as per ASME B36.10M / B36.19M

CONVERSION FACTORS

LENGTH & AREA

1 Statute mile	=	1760 yards
	=	5280 feet
	=	1.609 kilometres
1 Yard	=	3 feet
	=	0.914 metre
1 foot	=	12 inches
	=	30.48 centimetres
1 inch	=	25.4 millimetres
10 ft. (Perm.)	=	0.50 metre per sec.
1 square mile	=	640 acres
	=	259.0 hectares
	=	4840 sq. yards
	=	4046 square metres
1 acre	=	4840 sq. yards
	=	4046 square metres
1 sq. yard	=	9 sq. feet
	=	0.836 sq. metre
1 sq. foot	=	144 sq. inches
	=	0.0929 sq. metre
1 sq. inch	=	6.45 sq. centimetres
1 nautical mile	=	6060 feet
	=	1.853 kilometres

1 nautical mile per hour	=	1 knot
1 metre	=	100 centimetres
	=	1000 millimetres
	=	1.094 yards
	=	3.281 feet
	=	39.37 inches
1 millimetre	=	1000 microns
1 metre per sec.	=	196.9 feet per min.
1 sq. kilometre	=	100 hectares
	=	0.3861 sq. mile
1 hectare	=	10000 sq. metres
	=	2.471 acres
1 sq. metre	=	10000 sq. centimetres
	=	1.196 sq. yards
	=	10.764 sq. feet
	=	106 sq. feet
	=	10.763 millimetres
	=	0.1550 sq. inch
1 sq. centimetre	=	100 sq. millimetres

1 metre	=	1 metre
1 metre	=	1 metre
1 metre	=	1 metre
1 metre	=	1 metre
1 metre	=	1 metre

VOLUME

1 cubic yard	=	27 cubic feet
	=	0.764 cubic metre
1 cubic foot	=	1728 cubic inches
	=	28.32 litres
1 cubic inch	=	16.39 cu.cm.
1 Imp. gallon	=	277.4 cubic inches
	=	4.55 litres
1 USA gallon	=	0.833 Imp. gallon
	=	3.785 litres
	=	231 cu. inches
1 USA barrel (Petroleum)	=	35 USA gallons
	=	35 Imp. gallons

1 cu. ft. per min	=	1.699 cu. m/hr
1 cubic metre	=	1000 litres
	=	35.31 cubic yards
	=	33.32 cubic feet
1 litre	=	1000 cu. cm.
	=	0.220 Imp. gallon
	=	0.264 USA gallon
	=	0.176 cu. ft. (water)
	=	0.0361 cu. ft./min.
1 cu. m/hr	=	0.589 cu. ft./min.

WEIGHT

1 ton (Avoirdupois)	=	20 hundredweights
	=	2240 pounds
1 short ton	=	2000 pounds
	=	907.184 kilograms
1 hundredweight	=	4 quarters
	=	112 pounds
1 pound	=	16 ounces
	=	7000 grains
	=	0.454 kilogramme
1 ounce	=	28.35 grammes
1 grain	=	64.8 milligrammes

1 pound per foot	=	1.488 kg/m
1 metric tonne	=	1000 kilogrammes
	=	0.984 ton
	=	1.102 short tons
	=	2205 pounds
1 kilogramme	=	1.000 grammes
	=	2.205 pounds
	=	35.274 ounces
	=	1.543 grammes
1 gramme	=	1000 milligrammes
1 gramme	=	0.03527 ounce
1 milligramme	=	15.43 grains
1 microgramme	=	0.001 gramme
	=	1000 microgrammes
	=	0.001 milligramme
	=	0.6722 lb./hr.

PRESSURE

1 Atmosphere (Physical)	=	760 mm. (29.92 in.) of mercury (76cm)
	=	14.7 pounds per sq. inch absolute
	=	1.033 kg/sq. cm.
	=	1.013 bars
1 Atmosphere (Metric)	=	1 kg/sq. cm.
	=	14.22 pounds per sq. inch absolute
	=	0.9678 bar
1 Bar (kilogram/cm^2)	=	1000 millibars
	=	10 Newtons per sq. cm.
	=	1.02 kg/sq. cm.
	=	14.5038 psi
1 Psia (lb./in.^{2})	=	0.06849 bar

1 lb./sq.in.	=	2.307 ft. head of water (60°F) 0.068 bar
	=	0.705 kg/sq. cm.
	=	70.31 kg/sq. m
	=	0.9678 bar
1 ton/sq.in	=	0.9678 bar
1 in. water gauge	=	0.0361 kg/sq. cm.
1 ft. head of water	=	0.434 lbs/sq. in.
1 in. head of water	=	0.0361 kg/sq. cm.
1 ft. mercury	=	0.1091 kg/sq. cm.
1 in. mercury	=	1.360 lbs/sq. in.
	=	0.947 bar
1 kg./sq. cm.	=	14.22 pounds per sq. inch
	=	0.9809 bar
1 millibar	=	0.001 bar
1 millimetre	=	0.03937 in. water gauge

(In these conversions water is measured at 39.2 degree (4 degree C) and mercury at 32 degree F.)

Information provided in this catalogue are based on our knowledge. We do not confirm these are reproduction of any standards.

NOTE:
Weights are theoretical and may vary as per manufacturing tolerances.

All dimensions are in millimeters (mm).

Schedules as per ASME B36.10M / B36.19M

OUR VALUED CLIENTS

Trusted by Leading Companies. Built on Quality. Driven by Performance.

Valve Tech Industry (VTI)

HTC valves

Brightech Valves And Controls Pvt. Ltd.

dintech Valves pvt.ltd

lumitex valves

micon valves india pvt. ltd

nilon valves pvt ltd

steelstrong valves pvt ltd

hawa valves (india) pvt ltd

hi-tech Applicator

milacron india pvt ltd

prashant west point machinery pvt ltd

horizon polymer engineering pvt ltd

Apex Fluido matics pvt ltd

cesare bonetti international pvt ltd

metso india pvt ltd

thermal casting llp

northern alloys

ENGINEERED FOR PERFORMANCE. DELIVERED WITH TRUST.

PRAMUKH
ENGINEERING WORKS

BRAND OF
PATEL UNIVERSAL TREADERS PVT LTD

At Pramukh Engineering Works, we are committed to delivering precision engineered valve solutions that ensure safety, reliability, and efficiency in every flow control application.

PRECISION. RELIABILITY. PERFORMANCE.

- PRECISION ENGINEERING
- UNCOMPROMISED QUALITY
- TRUSTED PARTNERSHIP
- RELIABLE PERFORMANCE
- DEDICATED SUPPORT

GET IN TOUCH

16 Pushpvrund Industrial Hub,
Hathijan, 382445,
Ahmedabad, India

+91 7859941497 (Dipak Patel)
+91 9601095460 (Pankaj Patel)

pramukhengineeringworks777@gmail.com

THANK YOU FOR YOUR TRUST AND SUPPORT.

We look forward to building stronger partnerships and growing together.

SCAN TO VISIT OUR WEBSITE