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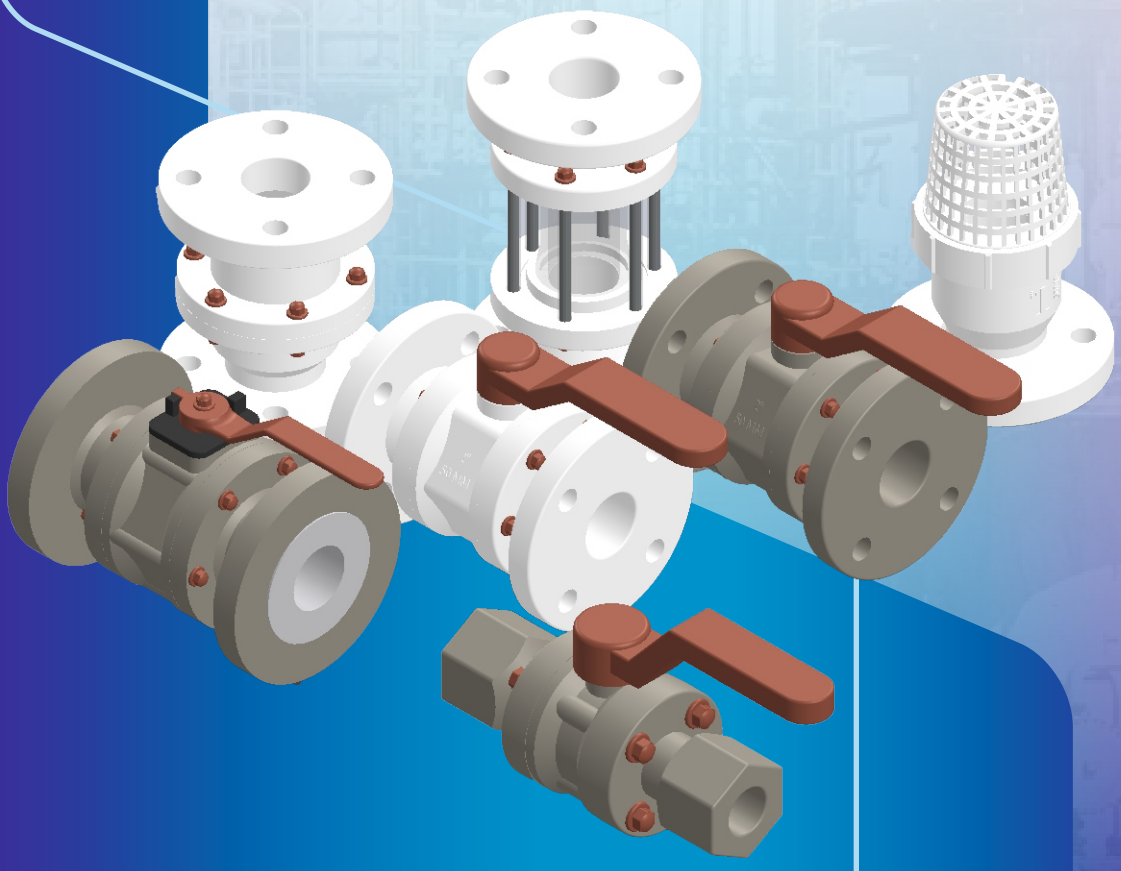


Our products are manufactured using only high-quality graded materials, resulting in outstanding levels of customer satisfaction. We have established ourselves as one of the most preferred manufacturers of ball valve systems because of our quality and we promise to manufacture all valves exactly as their requirements & demands.

Corrosive media damage to pipes, valves, and fittings can have a significant financial impact on wastewater and water treatment plants. As a result, experienced engineers and procurement personnel turn to cost-effective and dependable materials, including PP, PP-H and PVDF.

These sophisticated plastics have a lot of advantages:
Corrosion is eliminated.
When compared to their metallic equivalents, they have a lower life-cycle cost.
Mechanical strength is exceptional.
Installation and maintenance times are reduced due to the lightweight design.

Out Testing Mechanism for Ball Valve: While most manufacturers test their products on a partial base, we pledge to test our products on a 100% scale giving full surety of its error-proof working and design. We also always accept third party inspection (TPI) from customers for their satisfaction and until the product does not fulfill all criteria, we do not deliver it to our customers.

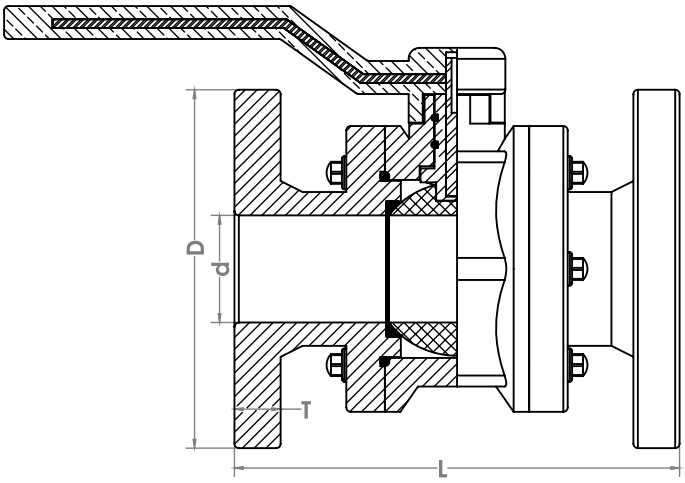
Material	Designation	Manufacturer	Permissible Temperatures
Polypropylene	PP	IOCL	0°C to 80°C
PP- Hostalen	PP-H	LyondellBasell, Europe	0°C to 100°C
Polyvinylidene Fluoride	PVDF	Arkema Kynar	-20°C to 120°C
Nitrile Rubber	NBR	--	-10°C to 80°C
Fluorine Rubber (AKA Viton®)	FKM	--	0°C to 140°C
Polytetrafluoroethylene	PTFE	--	-20°C to 180°C

Testing Standard

Body	15 NB To 150 NB	10 kg/cm^2 (140 psi)
Seat	15 NB To 150 NB	10 kg/cm^2 (140 psi)

PP Ball Valve

- Valves are of three-piece design,
- Special design features ensure high reliability and long service life.
- Two O-rings integrated into the stem interface provide maximum protection.
- Body and Stem seals are offered in various elastomers like EPDM, Neoprene, and in Viton for good chemical resistance.
- Steel inserts in stem and handle give more strength, sturdiness, longer life, and better performance.
- Available in screwed end connections also.

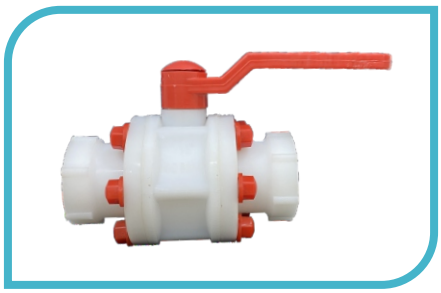


Dimensions

Size		D	d	T	L
15NB	½"	93	15	17	133
20NB	¾"	98	20	17	142
25NB	1"	115	23	17	156
40NB	1.5"	141	38	17	175
50NB	2"	163	50	21	204
65NB	2.5"	181	64	22	225
80NB	3"	204	73	27	263
100NB	4"	228	97	29	306
150NB	6"	300	147	32	435

All dimensions are in mm (±2 mm)

Polypropylene is a durable and flexible thermoplastic polymer. Polypropylene valves are often lightweight and easy to install, and are also resistant to corrosion.
Full-port ball valve designed for controlling liquid flow in oil, petrochemical, food & beverage, and agriculture industries.
Features a self-aligning ball and self-lubricating stem bushings for smooth and leak-proof operation.
Wide grip handle for minimum force requirement, user comfort and ease of use

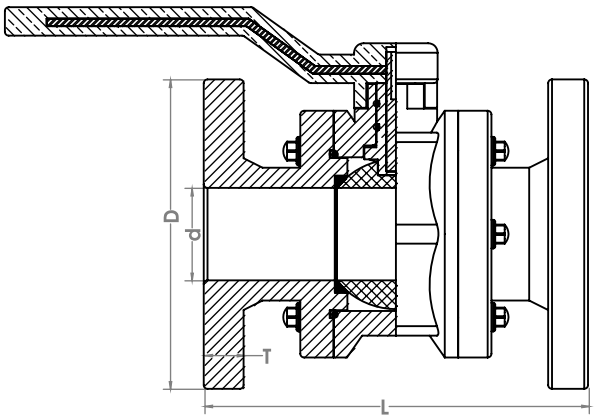


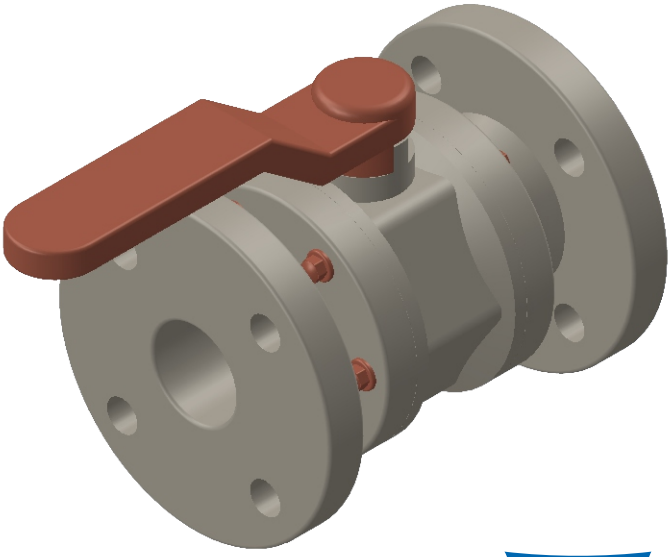
Material Specification

Part Name	Material
Flange Connection	PP
Body	PP
Ball	PP-H / PVDF
Stem	PP-H (EN-8 / SS-304/SS-316 Inserted)
Body & Stem Seal	NBR, Viton
Body & Stem Seal	PTFE
Body Seal	Neoprene / Viton
Ball & Stem Seat	PTFE
Fasteners	MS Galvanized, SS-304, SS-316

PP Ball Valve Thread End
Technical Specification:
Construction: 3-piece design
Standard: As per manufacturer's
Connection End: Thread End (BSP/NPT thread)
Available Size: ½", 1" and 1.5"

PP-H Ball Valve





Bills of Material

Part Name	Material
Flange Connection	PP-H
Body	PP-H
Ball	PP-H / PVDF
Stem	PP-H (EN8, SS-304, SS-316 Inserted)
Body & Stem Seal	NBR, Viton
Ball & Stem Seat	PTFE
Fasteners	MS Galvanized, SS-304, SS-316

Dimensions

Size		D	d	T	L
15NB	½”	93	15	17	133
20NB	¾”	98	20	17	142
25NB	1"	115	23	17	156
40NB	1.5"	141	38	17	175
50NB	2"	163	50	21	204
65NB	2.5"	181	64	22	225
80NB	3"	204	73	27	263
100NB	4"	228	97	29	306
150NB	6”	300	147	32	435

All dimensions are in mm (±2 mm)

PP-H is the best thermoplastic for chemical uses resins and partially crystalline resin belonging to the engineering thermoplastic family of polyolefins. PPH Ball Valve is obtained through the polymerization of propylene (C3H6) with the aid of catalysts.

PPH Ball Valve provides optimum use in chemical piping systems, the latest-generation Polypropylene Homopolymer variant, or PP-H, offers excellent performance at working temperatures of up to 100° C and high resistance to chemicals due to the excellent physical and thermal characteristics of the resin.

In addition to ensuring excellent chemical resistance, especially against halogens and alkaline solutions, the use of PP-H resins with special additives also ensures.

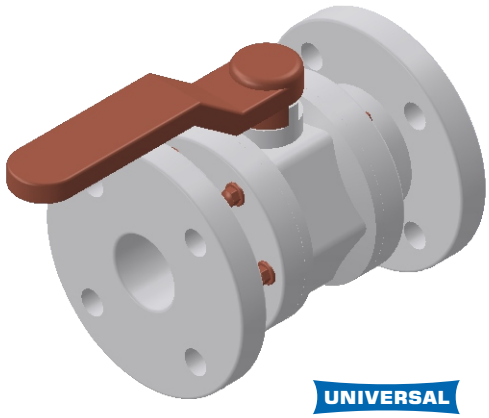
excellent mechanical properties when conveying detergents and similar chemicals. PP-H resins are also fully compatible with the transport of drinking, unconditioned, demineralized and spa water uses.

Particularly in the intermediate temperature range between 10° C and 80°C typical of industrial applications, PP-H ensures excellent mechanical strength and impact resistance with high safety factors.

PP-H resins have a high circumferential breaking strength (Minimum Required Strength MRS ≥ 10.0 MPa at 20°C) and allow long installation lifetimes without showing any signs of significant physical-mechanical deterioration.

PVDF

Ball Valve

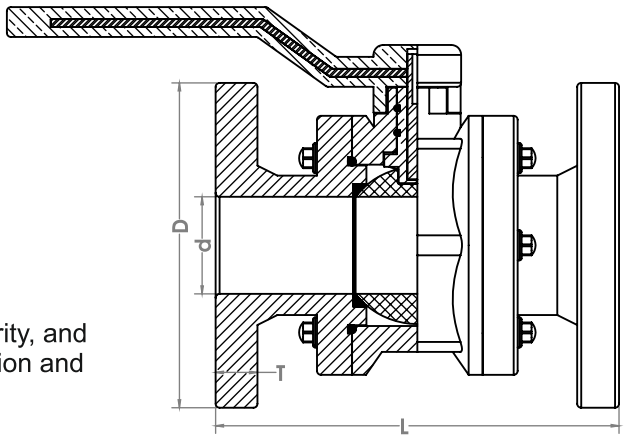


Features of PVDF ball valve

- Better resistance to solvents, chemicals and temperatures.
- Suitable for bromine, Chlorine Derivatives.
- High abrasion resistance.

Material Specification

Part Name	Material
Flange Connection	PVDF
Body	PVDF
Ball	PVDF
Stem	PVDF (SS-304, SS-316 Inserted)
Body & Stem Seal	Viton
Ball & Stem Seat	PTFE
Body Seal	Viton (FPM/FKM)
Ball Seat	PTFE
Fasteners	SS-304, SS-316



Polyvinylidene fluoride (PVDF) resin offers high strength, purity, and chemical resistance to acids and bases. It also resists abrasion and impact, is flame retardant, and offers thermal stability.

PVDF, or Polyvinylidene difluoride, is a fluorinated, semi-crystalline techno polymer that contains 59 percent fluorine by weight. This material is created by polymerizing vinylidene fluoride.

It has excellent mechanical, physical, and chemical resistance, and excellent thermal stability up to 120° C.

Properties of PVDF	Benefits
Thermal resistance	Operating range: -40°C to +120°C
Slow surface roughness	High flow coefficients (Extremely smooth internal walls)
Chemical resistance	Exceptional chemical resistance (generally inert to inorganic acids and bases, aromatic and aliphatic hydrocarbons, organic acids, alcohols, and halogenated solvents)
Abrasion resistance	Extremely low operating costs due to its long service life
Easy jointing	Low installation costs
Excellent mechanical properties	PVDF responds to the need to provide suitable mechanical resistance meeting the design requirements of industrial plants

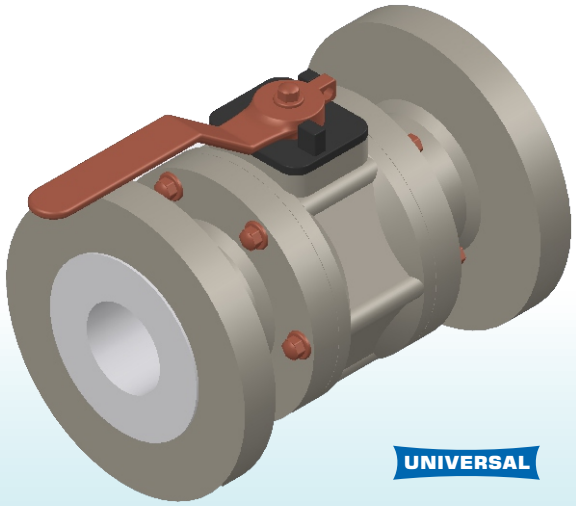
Dimensions

Size		D	d	T	L
15NB	½”	93	15	17	133
20NB	¾”	98	20	17	142
25NB	1"	115	23	17	156
40NB	1.5"	141	38	17	175
50NB	2"	163	50	21	204
65NB	2.5"	181	64	22	225
80NB	3"	204	73	27	263
100NB	4"	228	97	29	306

All dimensions are in mm (±2 mm)

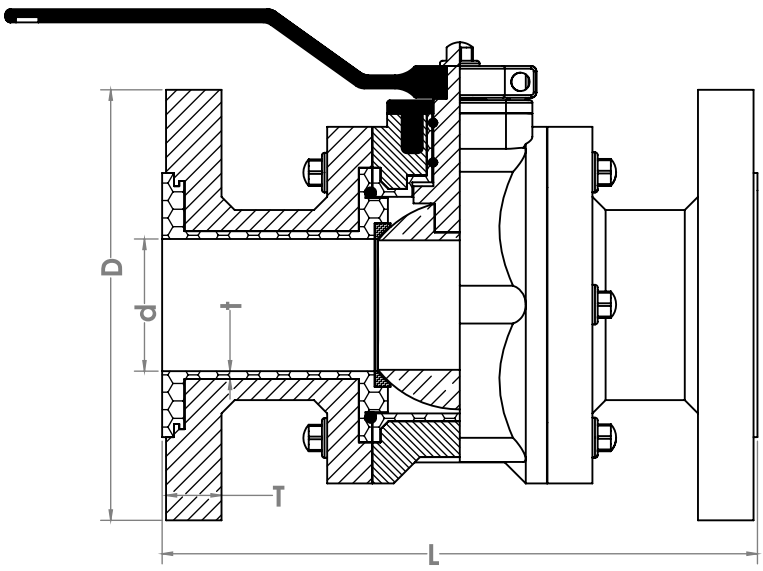
PVDF Lined

Ball Valve



Material Specification

Part Name	Material
Flange Connection	PP-H with adequate PVDF Lining
Body	PP-H with adequate PVDF Lining
Ball	PVDF
Stem	PVDF (SS-304, SS-316 Inserted)
Body & Stem Seal	Viton
Ball & Stem Seat	PTFE
Fasteners	SS-304, SS-316



Features of PVDF Lined ball valve

- High temperature and chemical resistance material.
- Low operating torque
- UV stabilized PP-H material to avoid cracks against sunlight.
- Better resistance to solvents, chemicals and temperatures.

Dimensions

Size		D	d	T	t	L
25NB	1"	114	22	20	2.5	156
40NB	1.5"	142	40	19	2.5	188
50NB	2"	162	49	24	3.5	223
80NB	3"	204	75	26	4	261
100NB	4"	228	97	30	4	300

All dimensions are in mm (±2 mm)

Foot Valve

Material Specification

Part Name	Material
End Piece (Flange)	PP
Body	PP
Ball	PP (SS-304, SS-316 Inserted)
Filter	PP
Body & Ball Seal	NBR, Viton

Dimensions

Size		D	d	T	L
25NB	1"	115	25	15	154
40NB	1.5"	142	40	18	160
50NB	2"	162	49	20	195
80NB	3"	205	73	21	238
100NB	4"	230	98	26	275

All dimensions are in mm (±2 mm)

- Free floating ball allows maximum flow through valve.
- The solid polypropylene ball seated on elastomer seat gives good sealing.
- Ball fully supported by guide ribs for full flow.
- Available with various elastomer seats like Neoprene, EPDM, Viton for Tight shut-off achieved at least 1 Meter Water Column.

Non-Return Valve (NRV)

Material Specification

Part Name	Material
Flange Connection	PP
Body	PP
Ball	PP (EN-8, SS-304, SS-316 Inserted)
Body & Ball Seal	NBR, Viton
Fasteners	MS Galvanized, SS-304, SS-316

- Free floating ball allows maximum flow through valve.
- The solid polypropylene ball seated on elastomer seat gives good sealing.
- Ball fully supported by guide ribs for full flow.
- Available with various elastomer seats like Neoprene, EPDM, Viton for Tight shut-off achieved at least 1 Meter Water Column.

Dimensions

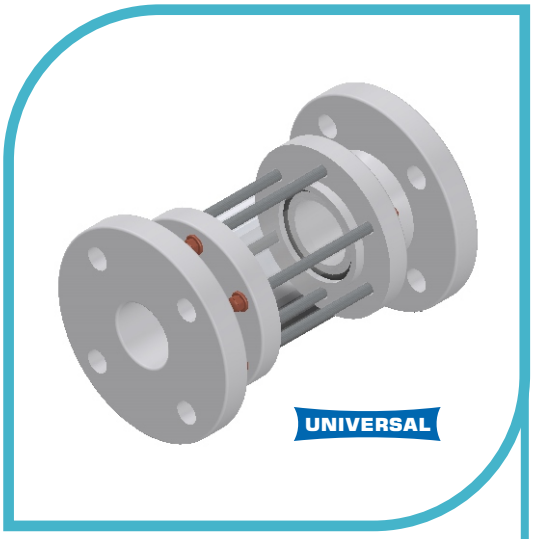
Size		D	d	T	L
25NB	1"	115	25	15	146
40NB	1.5"	142	40	18	163
50NB	2"	162	49	20	177
80NB	3"	205	73	21	272
100NB	4"	230	98	26	312

All dimensions are in mm (±2 mm)

Sight Glass / Flow Indicator

Features of Sight Glass

- Heavy fasteners.
- Full view window of Borosil toughened glass.
- Available in two Glass length 4” (100mm) and 6” (150mm)
- Availability in various sealing (PTFE, Viton and EPDM)
- Acrylic Protection cover provide additional safety against sudden braking in Glass.



Material Specification

Part Name	Material
Flange Connection	PPCP, PP-H, PVDF
Glass	Borosil Toughened Tube
Glass Seal	Neoprene, Viton
Fasteners	MS Galvanized, SS-304, SS-316

Dimensions

Size		D	d	T	L
25NB	1"	115	23	18	219
40NB	1.5"	142	38	19	219
50NB	2"	162	49	20	245
80NB	3"	205	74	21	269
100NB	4"	230	95	28	275

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