



It Just Works

Industrial Valve Solutions

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Product Catalogue

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Because Every System Deserves Valves That Perform

We specialise in high-performance industrial valves, including ball valves, globe valves and bellows-seal valves, engineered for demanding applications such as palm oil processing, chemicals, semiconductors, power generation, petrochemicals, manufacturing and water treatment. With decades of experience rooted in local industries, ValveWerkz is a trusted partner for businesses that cannot afford downtime or compromised quality. What sets us apart is our dual commitment to performance and cost-efficiency.

We're product-first and results-focused, delivering one thing and doing it well: high-performing valves that bring real value to the industries that keep your operations moving. Driven by customer-centric thinking and innovative solutions, we tailor our offerings to meet the demands of performance, reliability and efficiency.

Strict Quality Control To Outperform

We operate with strict quality control aligned to international standards. Every ValveWerkz product is tested for leak-tight sealing, extended life cycles and corrosion resistance, because we understand what is at stake when systems fail.

At the same time, our regional presence and streamlined supply model ensure long-term value, often outperforming other alternatives in both durability and efficiency.



A South-East Asian Footprint

Headquartered in Singapore, with representation across Malaysia, China Thailand, Indonesia, Vietnam & Phillippines we combine global quality benchmarks with local support.

Our team is responsive, practical and accessible, offering technical documentation, expert consultation and a ready stock of spares when it matters most. What truly defines us is how our valves perform in the field, from plants that run without unplanned shutdowns to municipal systems that achieve lower leakage rates through better sealing performance.



Built for Where It Matters Most

ValveWerkz products are trusted across industries where failure is not an option. Where a single valve can impact safety, output, or entire production lines.

Our valves are selected, tested, and supported with the realities of Southeast Asia's toughest operating environments in mind. From high-heat processing lines to corrosive flow media and 24/7 operations, we help teams keep their systems running smoothly, day in and day out.

Key Industries We Serve

Our products are chosen not just because they meet specification but because they keep performing in the field.

Palm Oil, Oleochemical & Fats Processing

24-hour processing, abrasive flow media, and constant heat make these environments especially tough on equipment. ValveWerkz valves are trusted in pressing, refining, blending and condensate recovery systems, where sealing strength, chemical resistance and spare part availability matter. Our ball valves and steam traps help reduce unplanned shutdowns, improve cleanability and ensure long-term value in high-volume production.

Semiconductor & Cleanroom Systems

In semiconductor and electronics manufacturing, purity is everything. ValveWerkz provides solutions for ultra-clean media transfer, gas lines and process utilities. Our valves support cleanroom standards, helping to safeguard production yield and minimise particle contamination.

Petrochemical & Refining

Heavy-duty, high-temperature and corrosive environments are standard in petrochemical applications. Our valves are selected for their material integrity, pressure resistance and proven durability in refineries, terminals and processing lines where downtime is costly.

Manufacturing & General Industry

Whether it's a compressed air line, a chilled water system or a batching process, our valves are used to keep systems stable and repeatable. Maintenance teams choose ValveWerkz for its fast response, broad product compatibility and ability to support multi-plant operations with consistent stock and supply.

Chemical Processing & Blending

Operators in chemical environments can't afford leaks or emission risks. Our bellow-sealed globe and chemical-resistant seat materials offer confidence in transfer lines, blending skids and reactor feed systems. Designed for harsh media and safety-critical performance, our valves ensure reliability and containment.

Power Generation

From condensate lines to high-pressure steam applications, our valves are engineered to withstand thermal cycling, pressure extremes and demanding maintenance cycles. Power plants rely on ValveWerkz for leak-tight sealing, durability and reliable performance under load.

Pharmaceutical & Sanitary Applications

Cleanliness. Precision. Compliance. Our valves meet the stringent hygiene and cleaning standards required in pharmaceutical manufacturing. With polished internals, low dead space and sanitary-compatible options, we help ensure contamination-free processes and long-term integrity in sterile environments.

Water Treatment & Utilities

From chemical dosing to valve chamber isolation, our valves are used across treatment plants and piping systems. We help utility engineers control flow accurately, reduce leakage rates and meet local certification requirements. Our range of seat materials supports varying pH and chlorination levels with dependable performance.

Ball Valves

Technical Specification

Model:
10Series



Please refer to page 17 for more details.

Design	1-Piece Body Design Reduced Bore
Body Material	SS316
Ball Material	SS316
Seat Material	PTFE
Connection	Threaded End
Size	DN8 (¼") to DN50 (2")
Automation Option & Accessories	N/A
Flow Capacity	Cv = 6 to Cv = 165
Pressure Rating	800 WOG

Model:
20Series



Please refer to page 20 for more details.

Design	2-Piece Body Design Full Bore
Body Material	SS316
Ball Material	SS316
Seat Material	PTFE
Connection	Threaded End
Size	DN8 (¼") to DN80 (3")
Automation Option & Accessories	N/A
Flow Capacity	Cv = 7 to Cv = 1250
Pressure Rating	1000 WOG

Model:
205S Series



Please refer to page 23 for more details.

Design	2-Piece Body Design Reduced Bore
Body Material	SS316
Ball Material	SS316
Seat Material	PTFE
Connection	Threaded End
Size	DN8 (¼") to DN50 (2")
Automation Option & Accessories	N/A
Flow Capacity	Cv = 6 to Cv = 165
Pressure Rating	2000 WOG

Ball Valves

Technical Specification

Model:
50Series



Please refer to page 26 for more details.

Design	3-Piece Body Design Full Bore
Body Material	Carbon Steel, SS316
Ball Material	SS316
Seat Material	PTFE 25% Carbon filled PTFE 50% SS filled PTFE
Connection	Threaded End Socket Weld End Butt Weld End
Size	DN8 (¼") to DN100 (4")
Automation Option & Accessories	N/A
Flow Capacity	Cv = 7 to Cv = 2000
Pressure Rating	1000 WOG

Model:
90Series



Please refer to page 29 for more details.

Design	3-Piece Body Full Bore
Body Material	SS316
Ball Material	SS316
Seat Material	RPTFE 25% Carbon filled PTFE 50% SS filled PTFE
Connection	Threaded End Socket Weld End Butt Weld End
Size	DN8 (¼") to DN100 (4")
Automation Option & Accessories	Pneumatic Actuator (Single Acting / Double Acting) Electric Actuator
Flow Capacity	Cv = 7 to Cv = 2000
Pressure Rating	PN64 ¼" - 2" PN50 2 ½" - 4"

Model:
80Series



Please refer to page 36 for more details.

Design	3-Piece Body Design Full Bore / Reduced Bore
Body Material	Carbon Steel, SS316
Ball Material	SS316
Seat Material	25% Carbon filled PTFE 50% SS filled PTFE PEEK
Connection	Threaded End (¼" - 4") Socket Weld End (¼" - 4") Butt Weld End (¼" - 10")
Size	DN8 (¼") to DN100 (4") *Refer to connection tab
Automation Option & Accessories	Pneumatic Actuator (Single Acting / Double Acting) Electric Actuator
Flow Capacity	Cv = 7 to Cv = 2000
Pressure Rating	PN100 ¼" - 1" PN64 1 ¼" - 2" PN50 2 ½" - 4" PN16 5" - 10"

Ball Valves

Technical Specification

Model:

81FS Series



Please refer to page 46 for more details.

Design	3-Piece Body Design - Fire Safe Full Bore / Reduced Bore	
Body Material	Carbon Steel, SS304, SS316	
Ball Material	SS316	
Seat Material	CPTFE TFM4215 + 50%SS PEEK	TFM4215
Connection	Threaded End (¼" - 4") Socket Weld End (¼" - 4") Butt Weld End (¼" - 10")	
Size	Full Bore DN8 (¼") to DN100 (4") Reduced Bore DN15(½") to DN100 (4")	
Automation Option & Accessories	Pneumatic Actuator (Single Acting / Double Acting) Electric Actuator	
Flow Capacity	Cv = 9.2 to Cv = 1020	
Pressure Rating	Full Bore 2000psi ¼" - 1" 1500psi 1 ¼" - 2" 1000psi 2 ½" - 4" Reduced Bore 2000psi ½" - 1" 1500psi 1 ¼" - 2" 1000psi 2 ½" - 4"	

Steam Traps

Technical Specification

Model:

ST60 Series



Please refer to page 65 for more details.

Design	Ball Float
Body Material	Carbon Steel, SS304
Internal parts	SS304
Connection	Threaded End Socket Weld End Flanged End
Size	DN15 (½") to DN150 (6")
Automation Option & Accessories	N/A
Flow Capacity	Max Discharge = 150 t/hr
Pressure Rating	PN25 - PN40 Max W.P = 16 - 32 Bar

Model:

203 Series



Please refer to page 52 for more details.

Design	2-Piece Body Design Full Bore	
Body Material	Carbon Steel, SS304, SS316	
Ball Material	SS316	
Seat Material	RPTFE 25% Carbon filled PTFE 50% SS filled PTFE PEEK	
Connection	ANSI (ANSI 150 / ANSI 300) DIN (PN16 / PN40) JIS (JIS-10K / JIS-20K)	
Size	DN15 (½") to DN150 (6") *Refer to connection tab	
Automation Option & Accessories	Pneumatic Actuator (Single Acting / Double Acting) Electric Actuator	
Flow Capacity	Cv = 15 to Cv = 5150	
Pressure Rating	ANSI (ANSI 150 / ANSI 300) DIN (PN16 / PN40) JIS (JIS-10K / JIS-20K)	

Model:

ST61 Series



Please refer to page 78 for more details.

Design	Thermodynamic
Body Material	Carbon Steel, SS304
Internal parts	SS304
Connection	Threaded End Socket Weld End Flanged End
Size	DN15 (½") to DN25 (1")
Automation Option & Accessories	N/A
Flow Capacity	Max Discharge = 700 kg/hr
Pressure Rating	PN25 - PN63 Max W.P = 16 Bar

Model:
ST62Series



Please refer to page 83 for more details.

Design	Bimetallic
Body Material	Carbon Steel, SS304
Internal parts	SS304
Connection	Threaded End Socket Weld End Flanged End
Size	DN15 (½”) to DN25 (1”)
Automation Option & Accessories	N/A
Flow Capacity	Max Discharge = 800 kg/hr
Pressure Rating	PN25 - PN40 Max W.P = 16 - 32 Bar

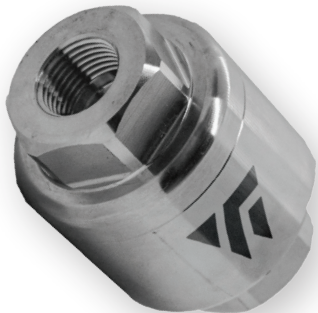
Model:
GL25Series



Please refer to page 96 for more details.

Design	Straight Type	
Body Material	Cast Iron, GG25 Ductile Iron, GGG40 Carbon Steel 1.0619	Forged Steel / A105 St. St. 304 St.St 316 / 1.4571
Plug Material & Design	Plug Material: St. Steel 1.4021 + Hard Faced 13% Cr Plug Design: 1. Parabolic (For regulating) 2. Conical (For On Off) 3. Balancing (For 5” and above, high pressure)	
Seat / Bellow Material	321Ti St.St 316 / 1.4571	St.St 304 Hastelloy C
Connection	BSPT - Tapped Socket Weld Butt Weld	NPT Flanged End
Size	DN15 (½”) to DN150 (6”)	
Automation Option & Accessories	N/A	
Flow Capacity	For Standard Plug: KVS = 4.8 - 1691 For Throttling Plug: KVS = 4.36 - 1410	
Pressure Rating	ANSI 150 ANSI 300 ANSI 600 ANSI 900	PN16 PN25 PN40

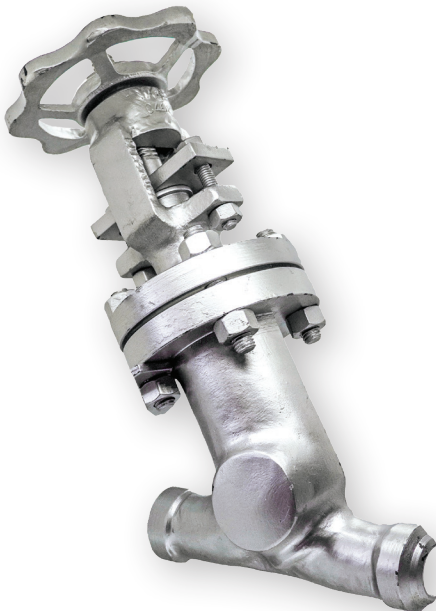
Model:
ST63Series



Please refer to page 89 for more details.

Design	Thermostatic Capsule
Body Material	SS304
Internal parts	SS304
Connection	Threaded End Flanged End
Size	DN15 (½”) to DN25 (1”)
Automation Option & Accessories	N/A
Flow Capacity	Max Discharge = 300 kg/hr
Pressure Rating	PN25 Max W.P = 16 Bar

Model:
GL26Series



Please refer to page 100 for more details.

Design	Y Type	
Body Material	Cast Iron, GG25 Ductile Iron, GGG40 Carbon Steel 1.0619	Forged Steel / A105 St. St. 304 St.St 316 / 1.4571
Plug Material & Design	Plug Material: St. Steel 1.4021 + Hard Faced 13% Cr Plug Design: 1. Parabolic (For regulating) 2. Conical (For On Off) 3. Balancing (For 5” and above, high pressure)	
Seat / Bellow Material	321Ti St.St 316 / 1.4571	St.St 304 Hastelloy C
Connection	BSPT - Tapped Socket Weld Butt Weld	NPT Flanged End
Size	DN15 (½”) to DN150 (6”)	
Automation Option & Accessories	N/A	
Flow Capacity	For Standard Plug: KVS = 4.8 - 1691 For Throttling Plug: KVS = 4.36 - 1410	
Pressure Rating	ANSI 150 ANSI 300 ANSI 600 ANSI 900	PN16 PN25 PN40

Model:
BU25Series



Please refer to page 107 for more details.

Body Type	Wafer, Lug
Body Materials	Cast Iron GJL-250, Ductile Iron GGG40, Carbon Steel 1.0619, Stainless Steel 1.4308, Stainless Steel 1.4408
Liner	EPDM, NBR(Buna N), PTFE, Viton, Natural Rubber, Silicone
Working Pressure	PN10, PN16, ANSI 150, JIS 10K, JIS 16K
Face to Face	API609, EN558-120 Series, ISO5752, DIN3202K1
Top Flange	ISO 5211
Flange Drilling	BS EN1092, JIS B2220, ASME Class 125 / Class 150
Disc and Stem Connection Type	Two Pieces Shaft Design (2" to 12") Spline Design (14" & Above)
Stem Top	Square Stem Top

Model:
BU26Series

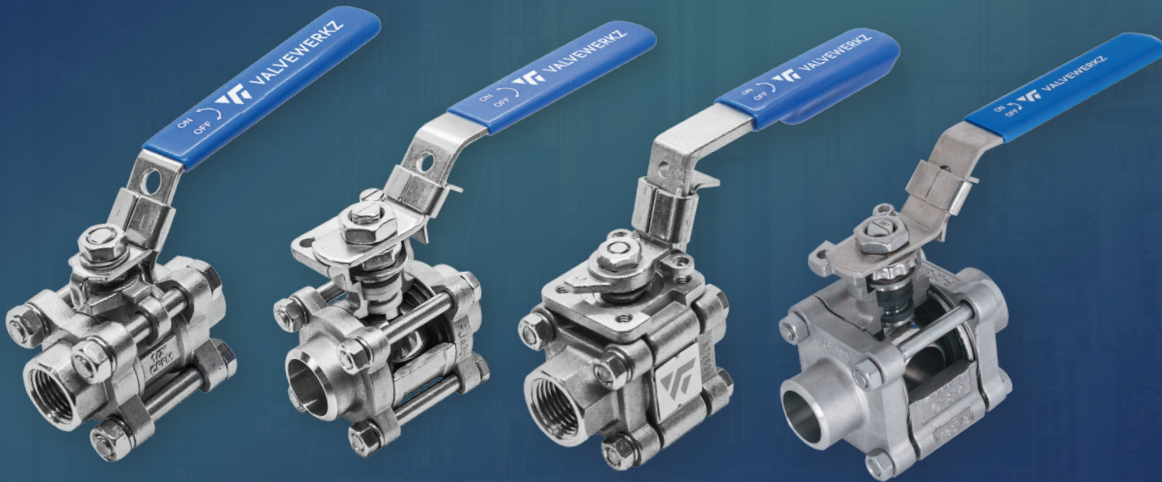


Please refer to page 115 for more details.

Body Type	Wafer, Lug
Body Materials	Ductile Iron GGG40 Carbon Steel 1.0619 Stainless Steel 1.4408
Liner	PFA / PTFE / RTFE / TFM
Working Pressure	PN10, PN16, ANSI 150, JIS 10K, JIS 16K
Face to Face	API609, EN558-120 Series, ISO5752, DIN3202K1
Top Flange	ISO 5211
Flange Drilling	BS EN1092, JIS B2220, ASME Class 125 / Class 150
Stem Top	Square Top Flange



BALL VALVES



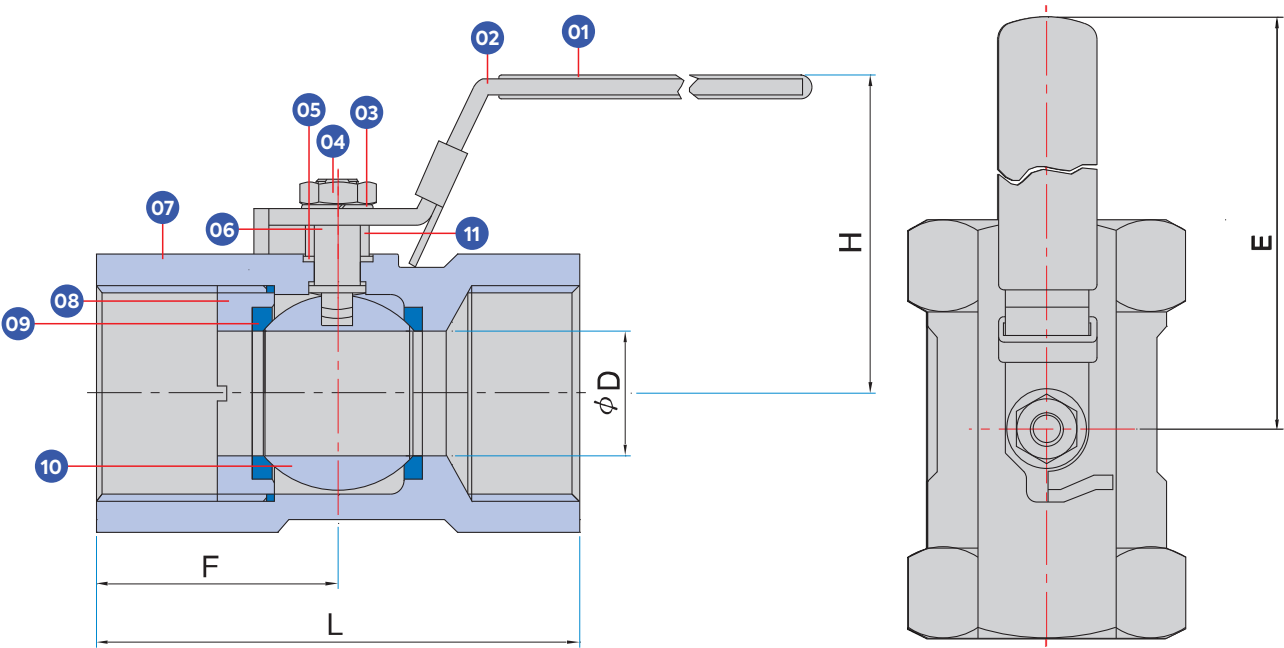
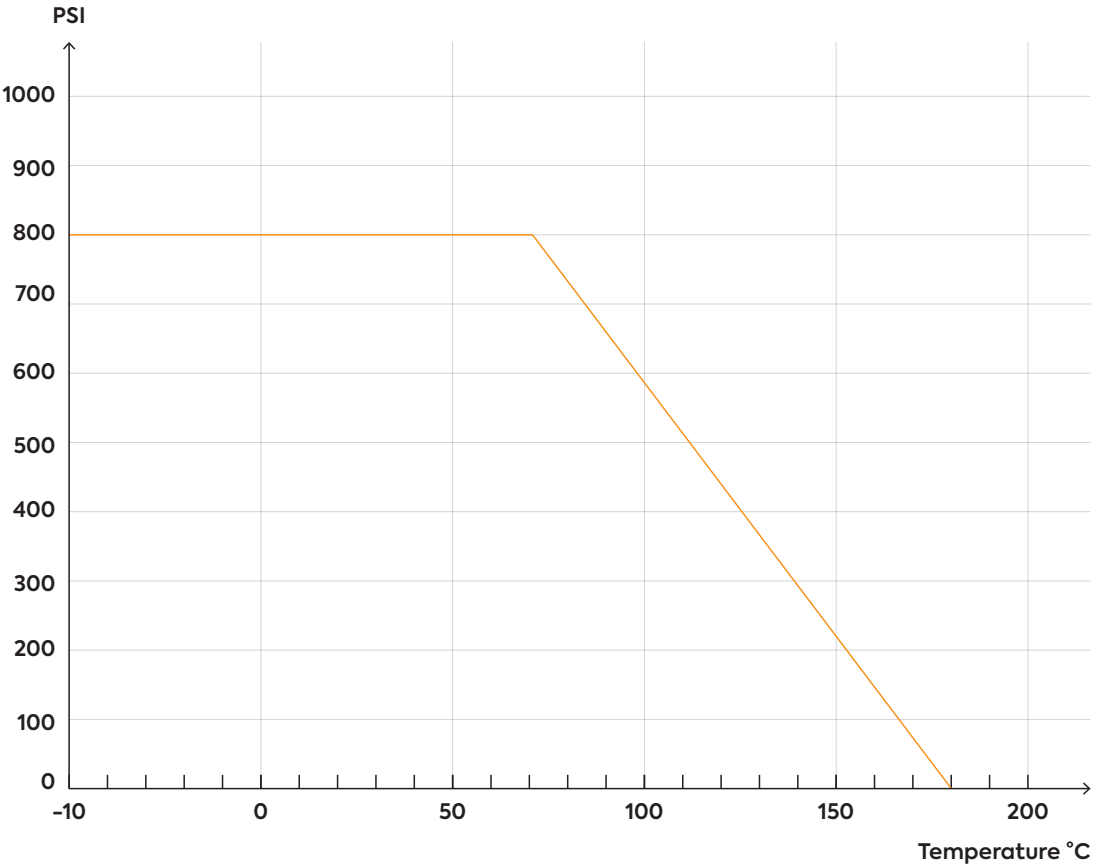


10 Series
1-Piece Body Design

- Reduced Bore
- Sizes ¼" – 2"
- 800 WOG
- Available in SS316 body only
- Threaded End
- Investment Casting
- Compact Design
- Blowout-Proof Stem
- Standard Seat:
- PTFE (max.180°C)
- Lockable Handle

ValveWerkz 10 series ball valves feature a high quality investment casting body and ends. They are available ¼" – 2" threaded.

Pressure/Temperature Ratings



Part NameMaterial			Part NameMaterial			Part NameMaterial		
1.	Handle Sleeve	VINYL	5.	Stem Packing	PTFE	9.	Seat	PTFE
2.	Handle	SUS304	6.	Stem	SUS316	10.	Ball	SUS316
3.	Washer	SUS304	7.	Body	SUS316	11.	Bushing	SUS304
4.	Stem Nut	SUS304	8.	Insert	SUS316			

Dimensions(mm)

Size(Inch)	ØD	E	F	H	L	CV	Weight(kg)
¼"	5	61	19	31	39	6	0.07
⅜"	7	72	21	36	44	7	0.12
½"	9.2	85	27.5	41	56.5	10	0.19
¾"	12.5	85	30	44	59	19	0.27
1"	16	101	36	48	71	42	0.43
1 ¼"	20	101	40	54	78	60	0.72
1 ½"	25	125	42.5	65	83	125	0.87
2"	32	125	51	72	100	165	1.36

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REQUEST FOR QUOTE

**STEP 1**

Find the model series

**STEP 2**

Define the specification/
valve code

**STEP 3**

Fill up ordering sheet (back of the brochure) or Scan the QR code below

**STEP 4**

Submit your order via our website or contact your local partner

**STEP 5**

Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner.
A sales engineer will be assigned to assist you.

Valve Coding Sheet 10 Series

01	02	03	04	05	06
S2	T	A			L
Body Material	Seat Material	Rating	Size	Connection	Operation
Code Material S2 SS316	Code Material T PTFE	Code Rating A 800WOG	Code Material A 1/4" B 3/8" C 1/2" D 3/4" E 1" F 1 1/2" G 2"	Code Material B BSP N NPT	Code Type L Lever

Your Valve Ordering Code:

10	01	02	03	04	05	06
	S2	T	A			L

Example:

10 Series - S2TABBL.
SS316 Material. PTFE Seat. Pressure Rating of 800WOG, 3/8 inch size. Connection Type of BSPT - Tapered. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



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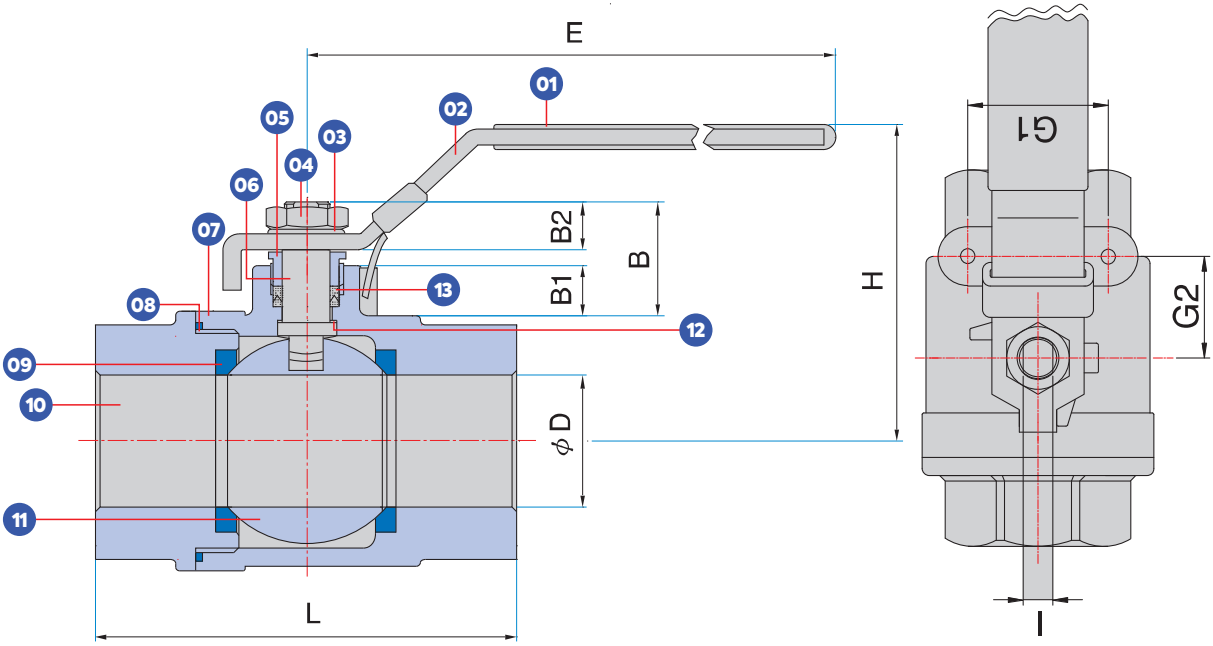
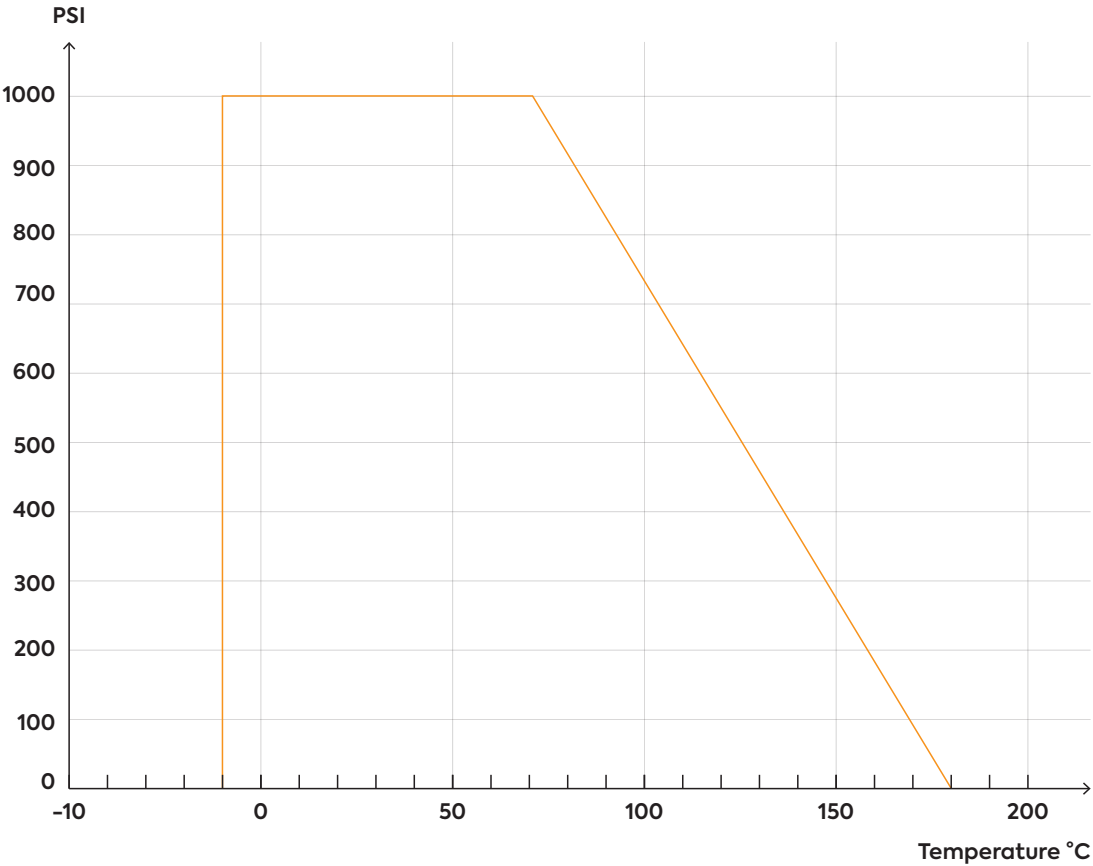


20 Series
2-Piece Body Design

- Full Bore
- Sizes ¼" – 3"
- 1000 WOG
- Available in SS316 body only
- Threaded End
- Investment Casting
- Compact Design
- Blowout-Proof Stem
- Standard Seat:
- PTFE (max. 180°C)
- Lockable Handle

ValveWerkz 20 series ball valves feature a high quality investment casting body and ends. They are available ¼" – 3" threaded.

Pressure / Temperature Ratings



Part Name	Material
1. Handle Sleeve	VINYL
2. Handle	SUS304
3. Washer	SUS304
4. Stem Nut	SUS304
5. Gland Nut	SUS304
6. Stem	SUS304
7. Body	SUS316

Part Name	Material
8. Body Seal	PTFE
9. Seat	TFM1600
10. End Cap	SUS316
11. Ball	SUS316
12. Stem Seal	PTFE
13. Stem Packing	PTFE

Dimensions(mm)

Size(Inch)	B	B1	B2	ØD	E	H	I	L	G1	G2	CV	Weight(kg)
¼"	23.5	8.3	11	11.6	108	54	5	55.2	28	12.7	7	0.26
⅜"	23.5	8.3	11	12.5	108	54	5	55.2	28	12.7	8	0.26
½"	24.7	9.8	11	15	133	55	6.3	65.3	28	12.7	25	0.41
¾"	25.5	10.7	11	20	133	59	6.3	75.5	35	22.4	50	0.56
1"	30.4	11.6	14.8	25	153	70	8	88.7	35	22.4	80	0.90
1 ¼"	29.7	11.1	14.8	32	153	75	8	101.4	38.1	25.4	150	1.34
1 ½"	33	12	16	38	190	84	9.5	109.3	38.1	25.4	240	1.94
2"	30.7	9	16	50	190	92	9.5	124	38.1	25.4	460	3.00
2 ½"	48.5	15.7	23	65	247	128	12	159.3	55	35	820	6.70
3"	47.5	14	23	80	247	137	12	175.3	55	35	1250	9.06

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Valve Coding Sheet
20 Series

01	02	03	04	05	06
S2	T	A			L
Body Material	Seat Material	Rating	Size	Connection	Operation
Code Material	Code Material	Code Rating	Code Material	Code Material	Code Type
S2 SS316	T PTFE	A 1000WOG	A 1/4" B 3/8" C 1/2" D 3/4" E 1" F 1 1/2" G 2" H 2 1/2" I 3"	B BSP N NPT	L Lever

Your Valve Ordering Code:

20	01	02	03	04	05	06
	S2	T	A			L

Example:

20 Series – S2TABBL.
SS316 Material. PTFE Seat. Pressure Rating of 1000WOG, 3/8 inch size. Connection Type of BSPT – Tapped. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



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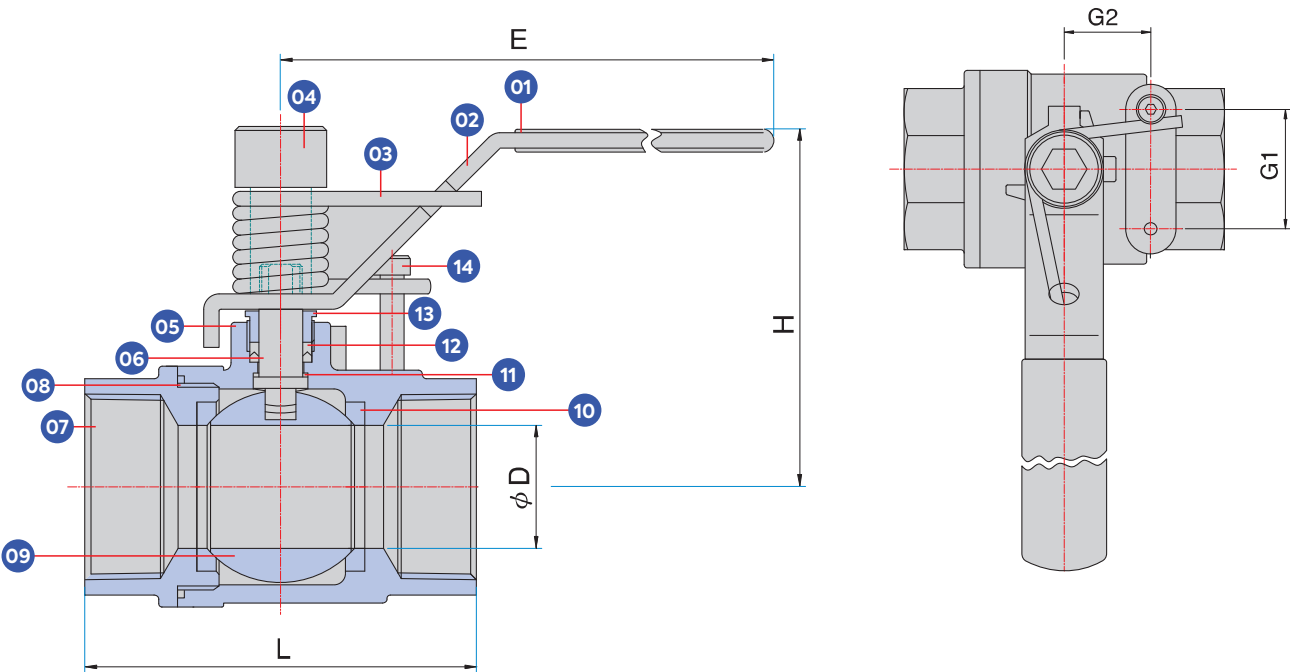
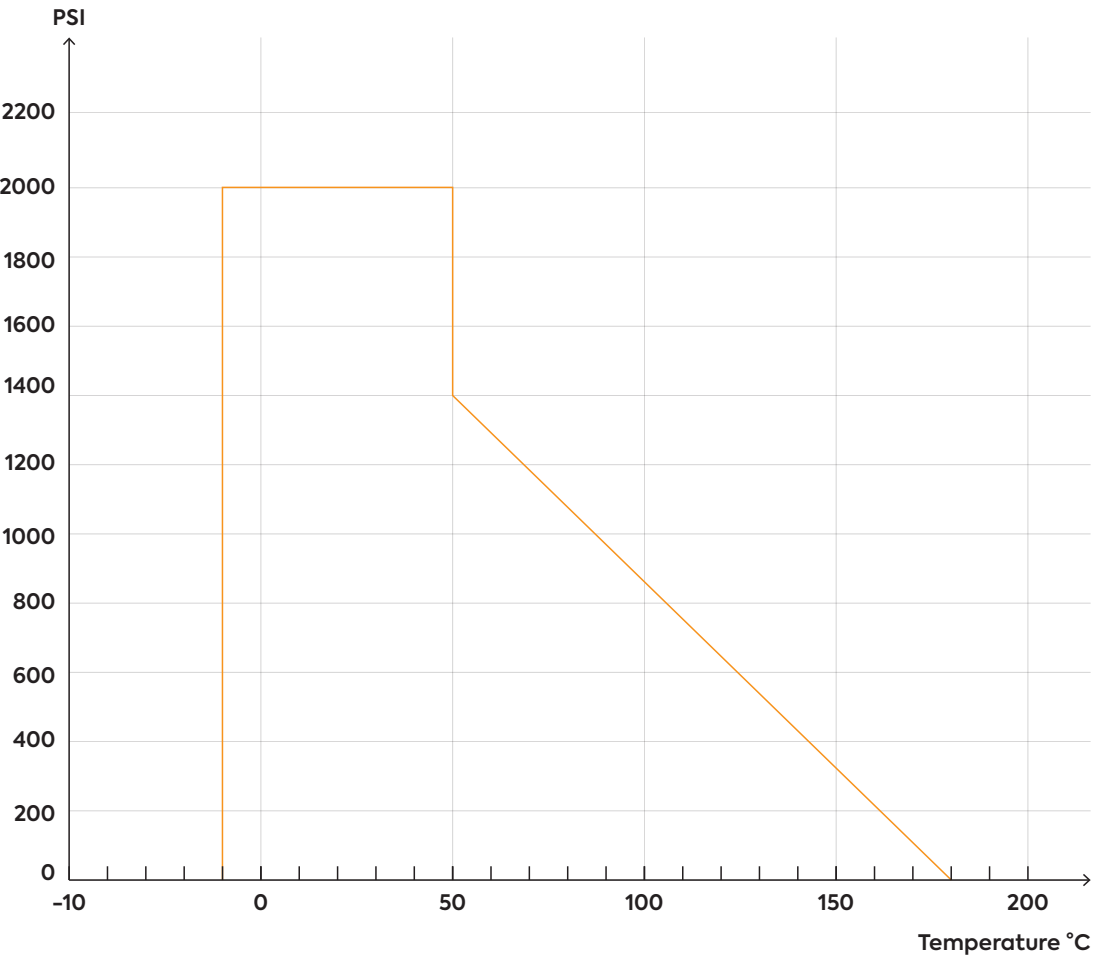


205S Series
2-Piece Body Design

Reduced Bore
Sizes ¼" - 2"
2000 WOG
Available in SS316 body only
Threaded End
Investment Casting
Compact Design
Blowout-Proof Stem
Standard Seat: PTFE (max. 180°C)
Spring Return Handle

ValveWerkz 205S series ball valves feature a high quality investment casting body and ends. They are available ¼" - 2" with threaded.

Pressure/Temperature Ratings



Part Name	Material
1. Handle Sleeve	VINYL
2. Handle	SUS304
3. Spring	Steel
4. Bolt	Steel
5. Body	SUS316
6. Stem	SUS316
7. End Cap	SUS316

Part Name	Material
8. Body Seal	PTFE
9. Ball	SUS316
10. Seat	TFM1600
11. Stem Seal	PTFE
12. Stem Packing	PTFE
13. Gland Nut	SUS304
14. Stopper Bolt	Steel

Dimensions(mm)

Size(Inch)	ØD	E	H	L	G1	G2	CV	Weight(kg)
¼"	9.5	119	58	52	28	12.7	6	0.29
⅜"	9.5	119	58	52	28	12.7	7	0.29
½"	12.7	119	61	62	28	12.7	10	0.35
¾"	15	137	70	69	35	22.4	19	0.52
1"	20	137	73	84	35	22.4	42	0.76
1 ¼"	25	177	86	90	38.1	25.4	60	1.24
1 ½"	32	177	92	104	38.1	25.4	125	1.66
2"	38	216	104	117	38.1	25.4	165	2.34

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Valve Coding Sheet
205S Series

01	02	03	04	05	06
S2	T	A			L
Body Material	Seat Material	Rating	Size	Connection	Operation
CodeMaterial	CodeMaterial	CodeRating	CodeMaterial	CodeMaterial	CodeType
S2SS316	TPTFE	A2000WOG	A1/4" B3/8" C1/2" D3/4" E1" F1 1/2" G2"	B BSP N NPT	L Lever

Your Valve Ordering Code:

205S	01	02	03	04	05	06
	S2	T	A			L

Example:

205S Series – S2TACBL reduced bore.
SS316 Material. PTFE Seat. Pressure Rating of 2000WOG, 1/2 inch size. Connection Type of BSPT – Tapered. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



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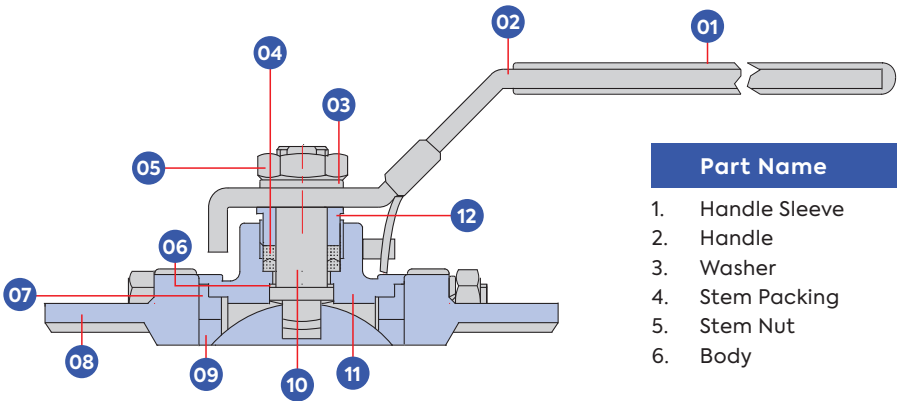
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Website: www.valvewerkz.com



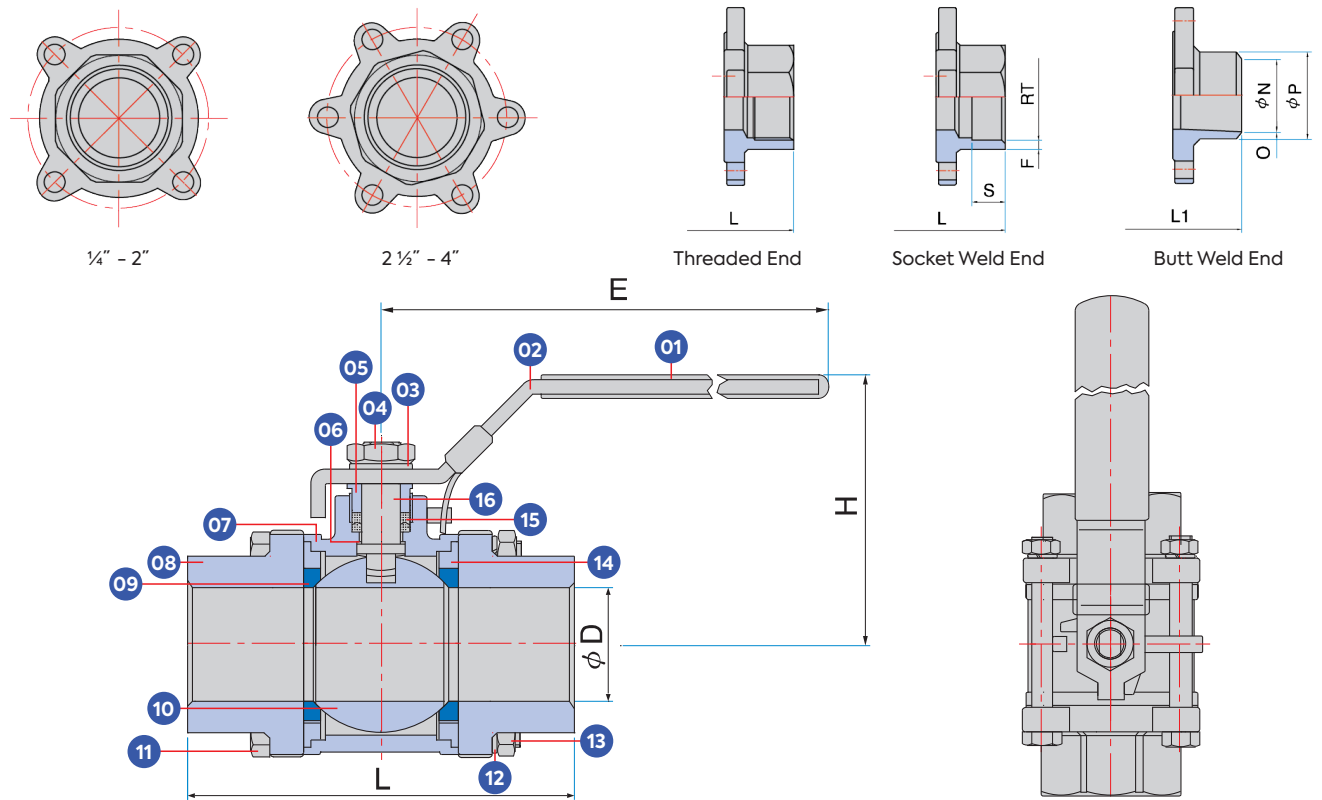
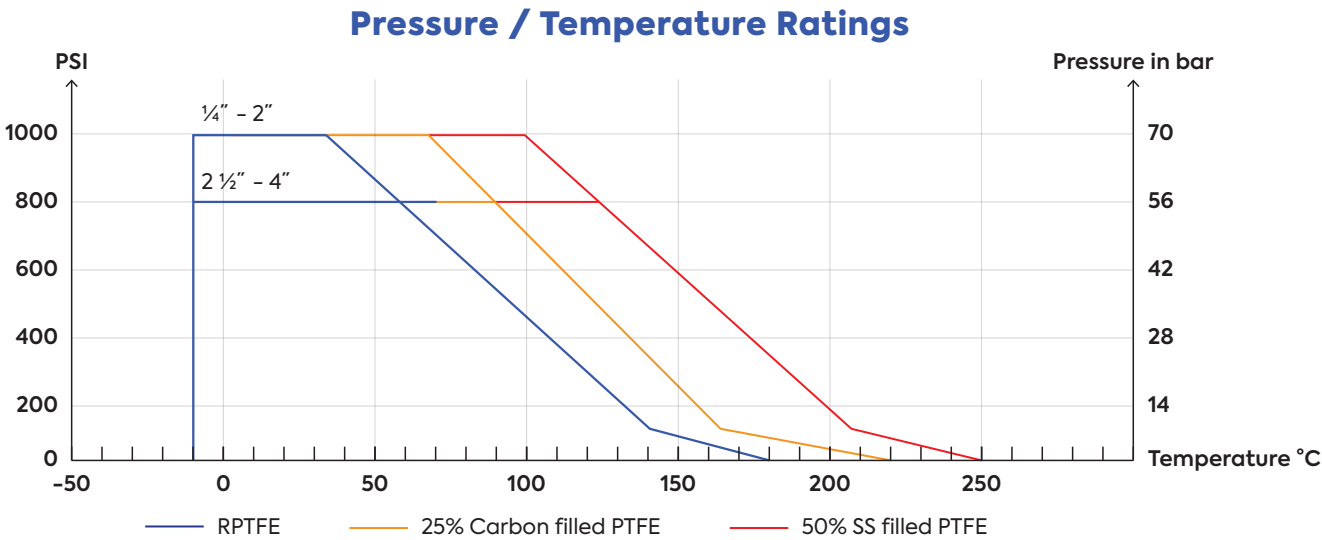
50 Series
3-Piece Body Design

- Full Bore
- Sizes ¼" – 4"
- 1000 WOG
- WCB / SS316 body
- Threaded End, Socket Weld End, Butt Weld End
- Superior Live Loaded Packing System
- Blowout-Proof Stem
- Dual Anti-Static Device
- Standard Seat:
RPTFE (max. 180°C)
- Seat Options:
25% Carbon filled (max. 220°C)
50% SS filled (max. 240°C)
- Lockable Handle

ValveWerkz 50 series ball valves feature a high quality investment casting body and ends. They are available ¼" – 4" with threaded, socket weld and butt weld ends. Superior leak protection is, accomplished by using a live-loaded packing system including Belleville washers and double "V" ring packing.



Part Name			
1.	Handle Sleeve	7.	Joint Gasket
2.	Handle	8.	Body Seal
3.	Washer	9.	Seat
4.	Stem Packing	10.	Stem
5.	Stem Nut	11.	Body
6.	Body	12.	Gland Nut



Part Name	Material	Part Name	Material	Part Name	Material
1. Handle Sleeve	VINYL	7. Body	SUS316 / WCB	13. Bolt Nut	SUS304
2. Handle	SUS304	8. End Cap	SUS316 / WCB	14. Joint Gasket*	PTFE
3. Washer	SUS304	9. Seat*	RPTFE	15. Stem Packing*	PTFE
4. Stem Nut	SUS304	10. Ball	SUS316	16. Stem	SUS316
5. Gland Nut	SUS304	11. Bolt	SUS304		
6. Stem Seal*	PTFE	12. Washer	SUS304		

*Spare Parts available in Repair Kit. Please refer to page 59 for more details.

Dimensions(mm)																
Size	ØD	E	F	H	S	L	L1	LE	ØN	ØN1	O	ØP	ØP1	RT	CV	Weight(kg)
¼"	11.6	103	3.6	54	11	59	61	223	11.6	11.6	1	18	15	14.2	7	0.34
⅜"	12.5	103	2	54	11	59	61	223	12.5	14	1	18	17	17.7	8	0.32
½"	15	133	2	55	12	69	69	225	17	15.6	1	22.7	21	21.9	15	0.56
¾"	20	133	2.6	59	14	78	78	225	22.5	20.7	1	27.7	26.8	27.2	10	0.72
1"	25	153	3.2	70	14	84	84	244	26	25.8	1	33.5	34.4	33.9	70	1.02
1 ¼"	32	153	4.05	75	15	104	104	253	34.4	33.3	1	42.2	43.4	42.7	110	1.5
1 ½"	38	191	3.7	84	17	119	119	258	41.5	40.5	1	48.8	49.8	48.8	250	2.38
2"	50	191	4.35	92	19	131	131	275	53	51.5	1	61	61	61.3	400	3.54
2 ½"	65	247	5.75	128	21	162	162	332	65.8	68	1	77	77	74	600	7.12
3"	80	247	5.25	137	25	182	182	351	81	81	1	91	91	90	1100	12.3
4"	100	295	5.7	173	30	230	230	360	102	101	1	115	115	115.6	2000	19.65

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REQUEST FOR QUOTE

**STEP 1**

Find the model series

**STEP 2**

Define the specification/
valve code

**STEP 3**

Fill up ordering sheet (back of the brochure) or Scan the QR code below

**STEP 4**

Submit your order via our website or contact your local partner

**STEP 5**

Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner.
A sales engineer will be assigned to assist you.

Valve Coding Sheet 50 Series

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Your Valve Ordering Code:

50	01	02	03	04	05	06
			A			L

Example:

50 Series - S2TABBL.
SS316 Material. RPTFE Seat. Pressure Rating of 1000WOG, 3/8 inch size. Connection Type of BSPT - Tapered. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



SCAN FOR ONLINE
ORDERING FORM

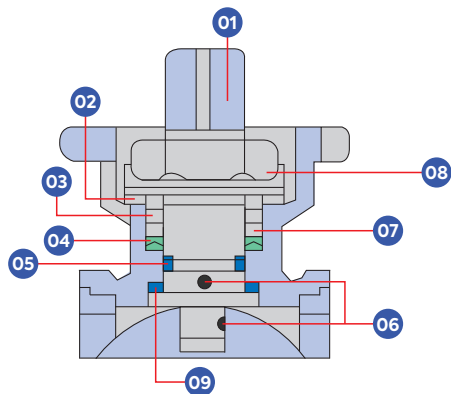
Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com



90 Series
3-Piece Body Design

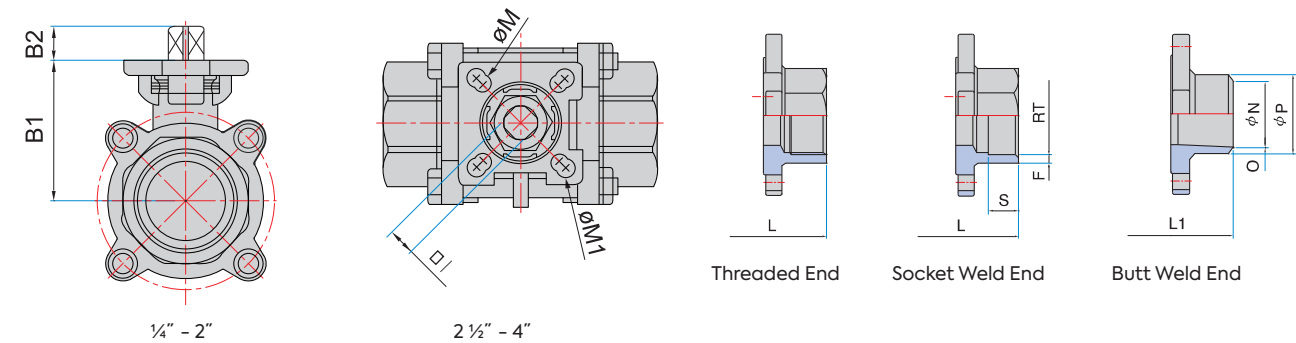
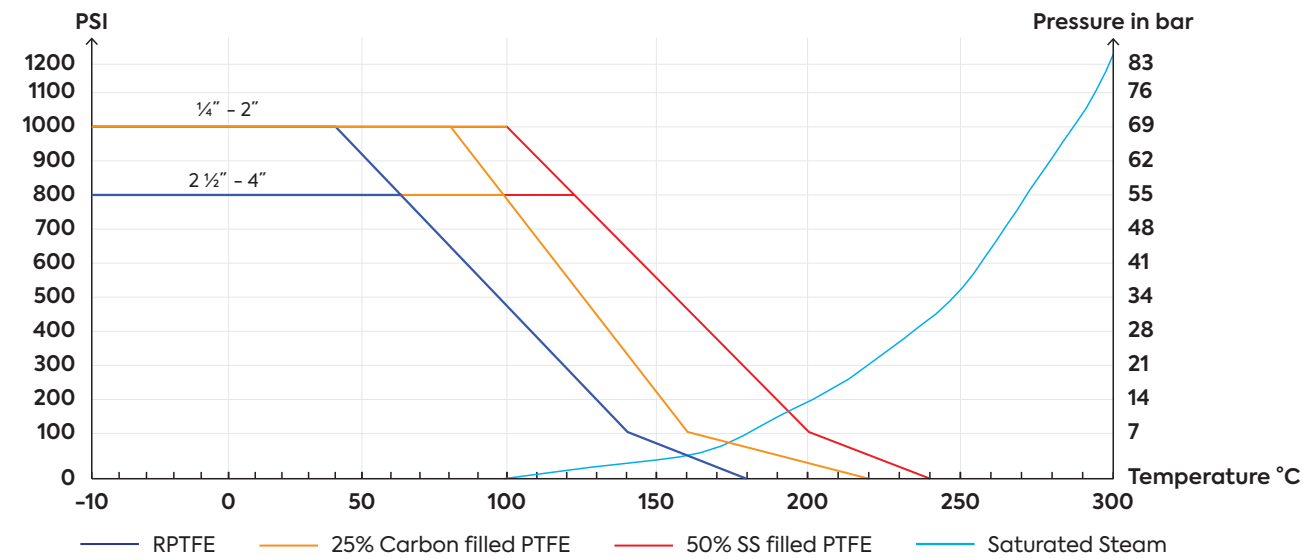
Full Bore	
Sizes ¼" - 4"	
PN64	¼" - 2"
PN50	2 ½" - 4"
SS316 body	
Threaded End, Socket Weld End, Butt Weld End	
Super Live Load Loaded Packing System	
Blowout-Proof Stem	
Dual Anti-Static Device	
ISO 5211 Direct Mounting Pad	
Standard Seat:	
RPTFE (max. 180°C)	
Seat Options:	
25% Carbon filled PTFE (max. 220°C)	
50% SS filled PTFE (max. 240°C)	
Lockable Handle	

ValveWerkz 90 series ball valves feature a high quality investment cast body and ends. They are available ¼" - 4" with threaded, socket weld, and butt weld ends. Superior leak protection is accomplished by using a live-loaded packing system including Belleville washers and double "V" ring packing.



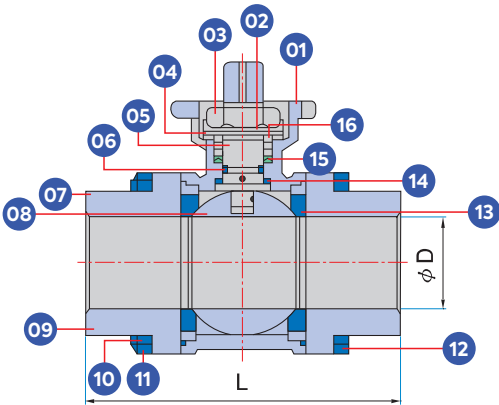
Part Name
1. Lock Saddle
2. Belleville Washer
3. Gland
4. V-Ring
5. Compress Ring & Lower/Stem Seal
6. Anti-Static Devices
7. Bushing
8. Stem Nut
9. O-Ring

Pressure / Temperature Ratings



Part Name	Qty	Material
1. Body	1	SUS316 / WCB
2. Belleville Washer	2	SUS301
3. Stem Nut	1	SUS304
4. Gland	1	SUS304
5. Stem	1	SUS316
6. Stem Seal*	1	RPTFE
7. Joint Gasket*	2	RPTFE
8. Ball	1	SUS316
9. End Cap	1	SUS304
10. Bolt Nut	2	SUS316 / WCB
11. Washer	*	SUS304
12. Bolt	*	SUS304
13. Seat*	2	TFM1600
14. O-Ring	1	PTFE
15. V-Ring Packing*	1 Set	PTFE
16. Bushing*	1	50% S.S. Powder filled PTFE

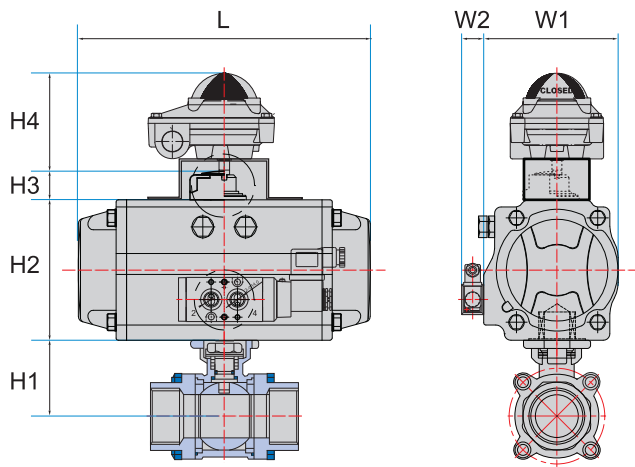
*Spare Parts available in Repair Kit.
Please refer to page 59 for more details.



Dimensions(mm)

Size(Inch)	B1	B2	ØD	E	F	ØM	ØM1	I	L	L1	O	ØP	RT	ISO 5211	CV	Weight(kg)
¼"	40.2	9	11.6	136	3.6	5.5	5.5	9	60	70	1	18	14.2	F03, F04	7	0.62
⅜"	40.2	9	12.5	136	2	5.5	5.5	9	60	70	1	18	17.7	F03, F04	8	0.64
½"	40.2	9	15	136	2	5.5	5.5	9	69	69	1	22.7	21.9	F03, F04	15	0.68
¾"	43.4	9	20	136	2.6	5.5	5.5	9	78	78	1	27.7	27.2	F03, F04	40	0.78
1"	52	11	25	152	3.2	6.5	6.5	11	84	84	1	33.5	33.9	F04, F05	70	1.18
1 ¼"	56.5	11	32	152	5.35	6.5	6.5	11	110	104	1	42.2	42.7	F04, F05	110	1.62
1 ½"	65.7	15.5	36	190	5.7	6.5	8.5	14	120	119	1	48.8	48.8	F05, F07	250	2.7
2"	73.95	15.5	50	190	6.1	8.5	8.5	14	140	131	1	61	61.3	F05, F07	400	3.9
2 ½"	93	16.5	65	287	7.15	9	11	17	185	190	1	78	74	F07, F10	600	8.89
3"	102	16.5	80	304	7.6	9	11	17	205	220	1	90.7	90	F07, F10	1100	12.4
4"	132	21.5	100	440	7.85	N/A	11	22	230	270	1	115.8	115.6	F10	2000	21.69

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Pneumatic Actuator (Double Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
8	¼"	5	HP-50	40.20	73.00	20.00	90.00	72.00	29.50	144.00	2.24
10	⅜"	5	HP-50	40.20	73.00	20.00	90.00	72.00	29.50	144.00	2.26
15	½"	5	HP-50	40.20	73.00	20.00	90.00	72.00	29.50	144.00	2.30
20	¾"	7	HP-50	43.40	73.00	20.00	90.00	72.00	29.50	144.00	3.02
25	1"	12	HP-50	52.00	73.00	20.00	90.00	72.00	29.50	144.00	3.42
32	1 ¼"	17	HP-63	56.50	87.00	20.00	90.00	85.00	29.50	163.00	4.38
40	1 ½"	22	HP-63	65.70	87.00	20.00	90.00	85.00	29.50	163.00	5.46
50	2"	26	HP-66	73.95	87.00	20.00	90.00	85.00	29.50	202.00	7.38
65	2 ½"	40	HP-75	93.00	104.00	20.00	90.00	96.00	29.50	210.00	12.97
80	3"	50	HP-88	102.00	116.00	20.00	90.00	108.00	29.50	247.00	17.78
100	4"	90	HP-100	132.00	128.00	20.00	90.00	123.00	29.50	268.00	28.77

The selection of the actuators are based on the below conditions:

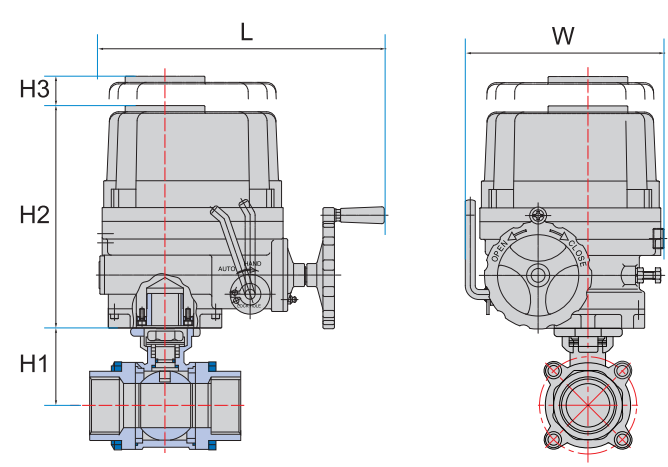
- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

Pneumatic Actuator (Single Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
8	¼"	5	HP-50S (S11)	73.00	20.00	90.00	90.00	72.00	29.50	144.00	2.96
10	⅜"	5	HP-50S (S11)	73.00	20.00	90.00	90.00	72.00	29.50	144.00	2.98
15	½"	5	HP-50S (S11)	73.00	20.00	90.00	90.00	72.00	29.50	144.00	3.02
20	¾"	7	HP-63S (S11)	87.00	20.00	90.00	90.00	85.00	29.50	163.00	3.73
25	1"	12	HP-63S (S11)	87.00	20.00	90.00	90.00	85.00	29.50	202.00	4.89
32	1 ¼"	17	HP-75S (S11)	104.00	20.00	90.00	90.00	96.00	29.50	210.00	6.06
40	1 ½"	22	HP-88S (S11)	116.00	20.00	90.00	90.00	108.00	29.50	247.00	8.70
50	2"	26	HP-88S (S11)	116.00	20.00	90.00	90.00	108.00	29.50	247.00	9.90
65	2 ½"	40	HP-100S (S11)	128.00	30.00	90.00	90.00	123.00	29.50	268.00	16.83
80	3"	50	HP-115S (S11)	146.00	30.00	90.00	90.00	141.00	29.50	316.00	23.81
100	4"	90	HP-145S (S11)	179.00	30.00	90.00	90.00	172.00	29.50	414.00	39.09

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Air to Open, Spring to Close



Electric Actuator

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	W	L	Weight(kg)
8	¼"	5	HQ-004	40.20	124.30	N/A	88.60	166.60	2.90
10	⅜"	5	HQ-004	40.20	124.30	N/A	88.60	166.60	2.92
15	½"	5	HQ-004	40.20	124.30	N/A	88.60	166.60	2.96
20	¾"	7	HQ-004	43.40	124.30	N/A	88.60	166.60	3.06
25	1"	12	HQ-004	52.00	124.30	N/A	88.60	166.60	3.46
32	1 ¼"	17	HQ-004	56.50	124.30	N/A	88.60	166.60	3.90
40	1 ½"	22	HQ-004	65.70	124.30	N/A	88.60	166.60	4.98
50	2"	26	HQ-006	73.95	137.00	N/A	105.00	126.00	7.98
65	2 ½"	40	HQ-008	93.00	235.00	120.00	170.00	258.00	17.37
80	3"	50	HQ-010	102.00	235.00	120.00	170.00	258.00	20.88
100	4"	90	HQ-015	132.00	268.00	160.00	229.00	338.00	39.37

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

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L	Lever																																																																										
D	Double Acting																																																																										
	Pneumatic Actuated																																																																										
S	Single Acting																																																																										
	Pneumatic Actuated																																																																										
E	Electric Actuated																																																																										

Your Valve Ordering Code:

90	01	02	03	04	05
	S2				

Example:

90 Series – S2TABL reduced bore.
SS316 Material. RPTFE Seat. Pressure Rating of PN64, 3/8 inch size. Connection Type of BSPT – Tapered. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.

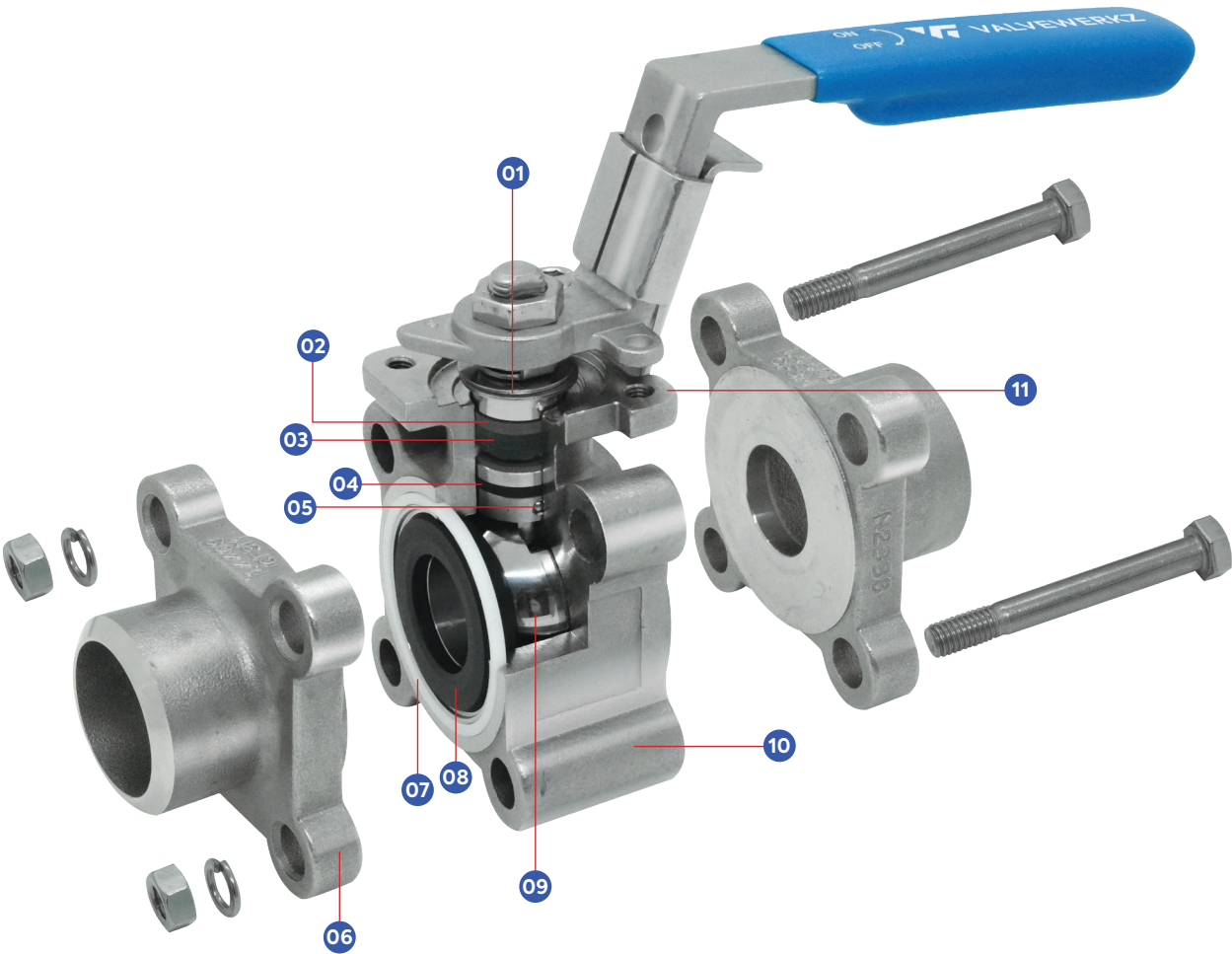


SCAN FOR ONLINE
ORDERING FORM

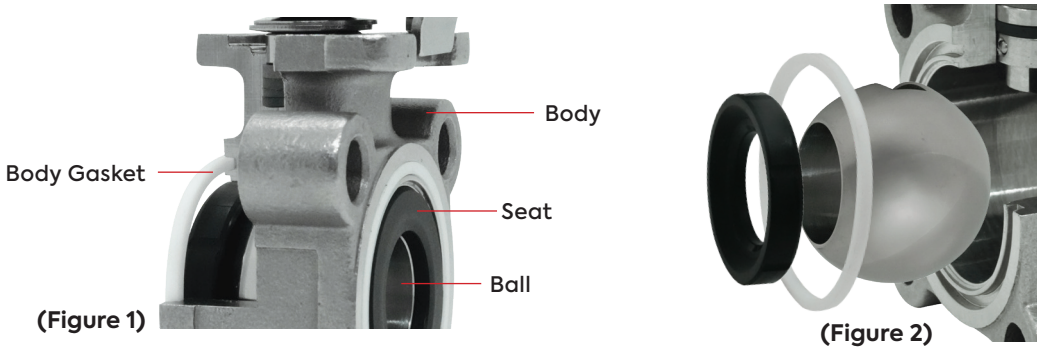
Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

80 SERIES - HIGH PERFORMANCE

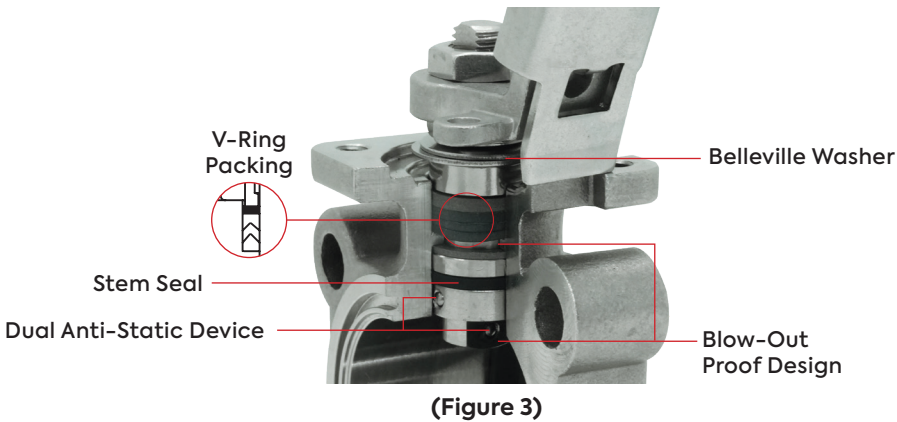
The ball valve consists of a body, end caps, and a ball. The ball is connected to the stem and rotates 90 degrees to enable on-off functionality. It is primarily used for pipeline on-off control and emergency shut-off applications. When equipped with a V-port ball, it can also be used for precise flow adjustment.



Part Name	Part Name
1. Belleville Washer	7. Body Gasket
2. Bushing	8. Seat
3. V-Ring Packing	9. Ball
4. Upper and Lower Stem Seal	10. Body
5. Dual Anti-Static Device	11. ISO 5211 Mounting Pad
6. End Cap	



- 1. Low Operating Torque**
The seat provides elastic cushioning during ball rotation, ensuring smooth, uniform torque without jamming. (Figure 1)
- 2. Reliable Sealing**
Once the valve is closed, the seat maintains a tight seal through self-sealing under media pressure. (Figure 2)
- 3. Extended Service Life**
The elastic seat features a long pre-compression stroke, offering high wear compensation for longer durability.
- 4. Cold Flow Control Design**
The seat's trimming and wrapping structure supports non-contact areas of the ball and seat. This design prevents cold flow deformation and enables high-pressure performance. (Figure 1)



- 5. Blow-Out Prevention**
The stem includes an integral shoulder design to prevent blow-out and leakage. (Figure 3)
- 6. Anti-Static Protection**
The anti-static design reduces the risk of safety hazards caused by static electricity. (Figure 3)
- 7. Effective Stem Sealing**
An O-Ring on the valve stem offers excellent self-sealing capability, effectively sealing the valve cavity. (Figure 3)
- 8. Dual Stem Sealing**
Designed to meet TA-LUFT emission control standards for enhanced sealing reliability. (Figure 3)
- 9. Self-Adjusting Packing**
Two pre-loaded Belleville washers allow for automatic packing adjustment, minimising the need for re-tightening in low-leakage applications. (Figure 3)
- 10. Precision Engineering**
ValveWerkz's valve designs integrate advanced CNC machining, structural optimisation, and precise component sizing — all tailored to meet strict cobarny specifications. This ensures high usability and maximised service life.

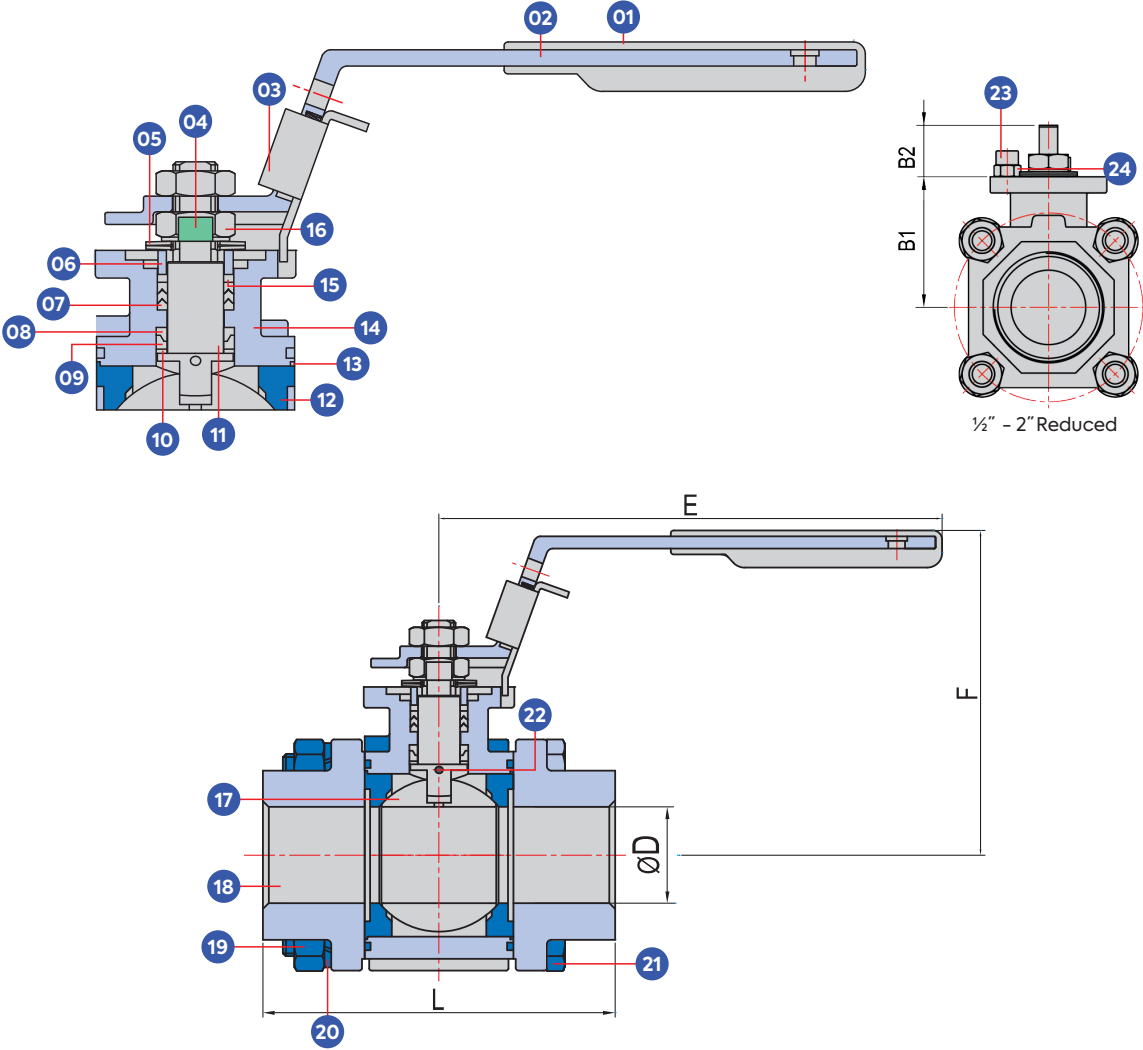
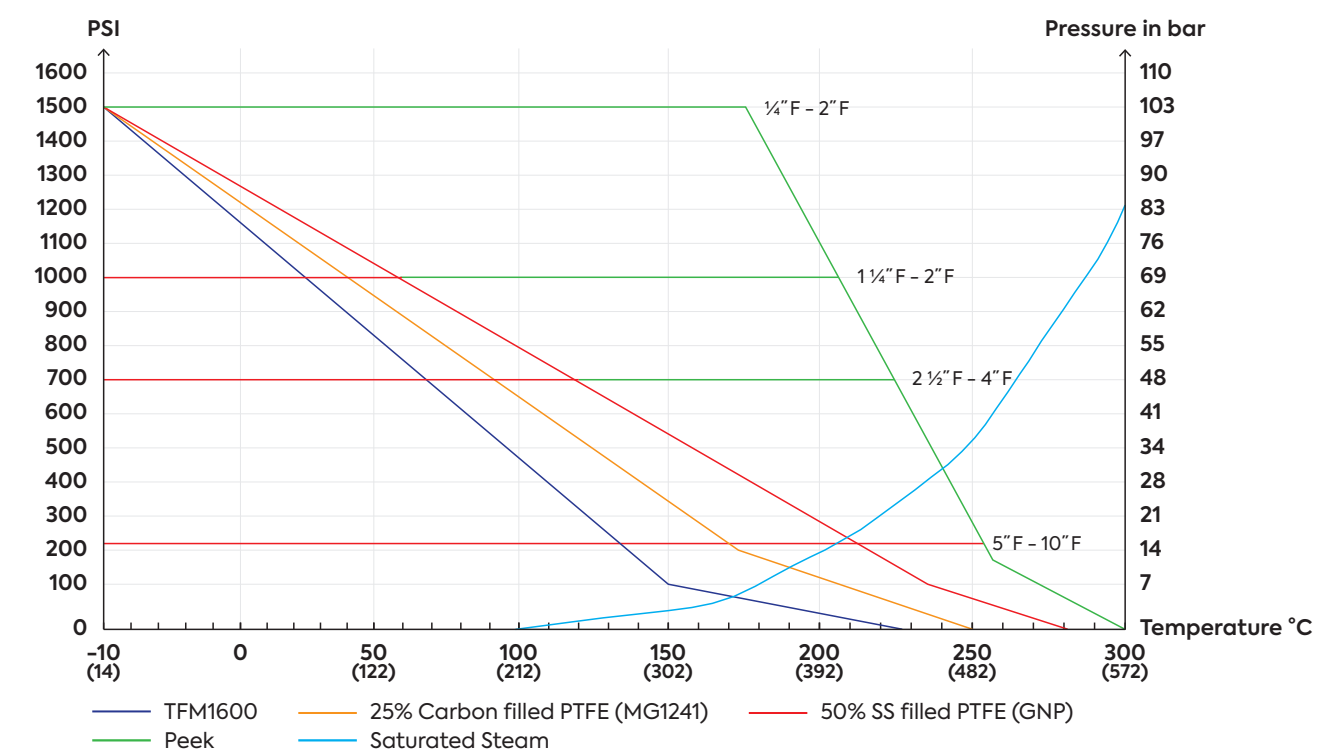


80 Series
3-Piece Body Design

Reduced Bore / Full Bore	
Sizes ½" – 10"	
½" – 1 ¼" PN100	
1 ½" – 2 ½" PN64	
3" – 4" PN50	
5" – 10" PN16	
WCB / SS316 body	
Threaded End (½" – 4")	
Socket Weld End (½" – 4")	
Butt Weld End (½" – 10")	
Superior Live Loaded Packing System	
ISO 5211 Mounting Pad (Bracket Required)	
Blowout-Proof Stem	
Dual Anti-Static Devices	
Standard Seat:	
25% Carbon Filled PTFE - max. 250°C	
Seat Options:	
RPTFE - max. 230°C	
50% SS Filled PTFE - max. 280°C	
PEEK - max. 300°C	
Lockable Handle (½" – 4")	
Gearbox (5" – 10")	

ValveWerkz 80 series 3-piece ball valve are one of the finest quality 3-piece valves in the market. The high quality investment casting feature a fully machined bore. The superior live-loaded packing system is accomplished with Belleville washers, "V" ring packing and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valve.

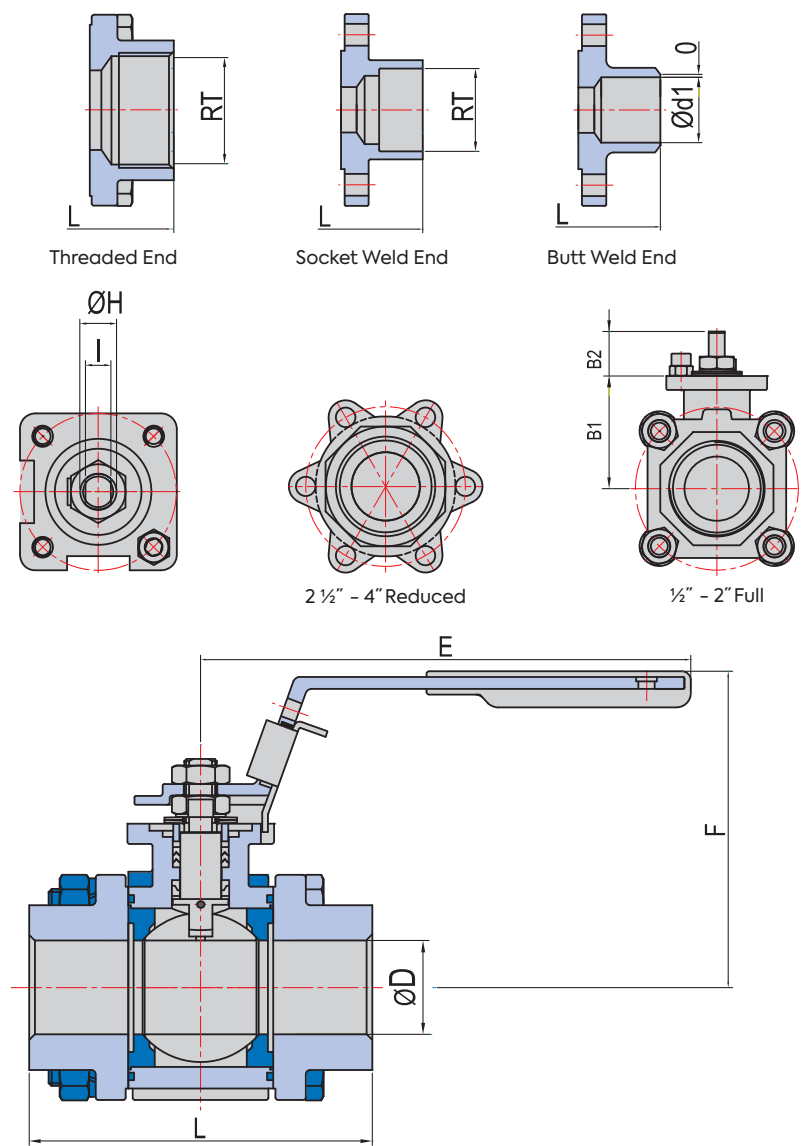
Pressure / Temperature Ratings



Part Name	Material
1. Handle Sleeve	VINYL
2. Handle	SUS304
3. Locking Device	SUS304
4. Lock Saddle	SUS304
5. Belleville Washer	SUS304
6. Gland	SUS304
7. V-Ring Packing*	MG1241
8. Upper Stem Seal*	TFM4215
9. Compress Ring*	SUS316
10. Lower Stem Seal*	50% S.S. Powder Filled PTFE
11. Stem	SUS316
12. Seat*	RPTFE / 50% SS Filled PTFE / 25% Carbon Filled PTFE / PEEK

Part Name	Material
13. Packing*	PTFE
14. Body	SUS316 / WCB
15. Bushing	50% S.S. Powder Filled PTFE
16. Stem Nut	SUS304
17. Ball	SUS316
18. End Cap	SUS316 / WCB
19. Bolt Nut	SUS304
20. Washer	SUS304
21. Bolt	SUS304
22. Anti-Static Device	Stainless Steel
23. Stop Pin	SUS304
24. Stop Pin Nut	SUS304

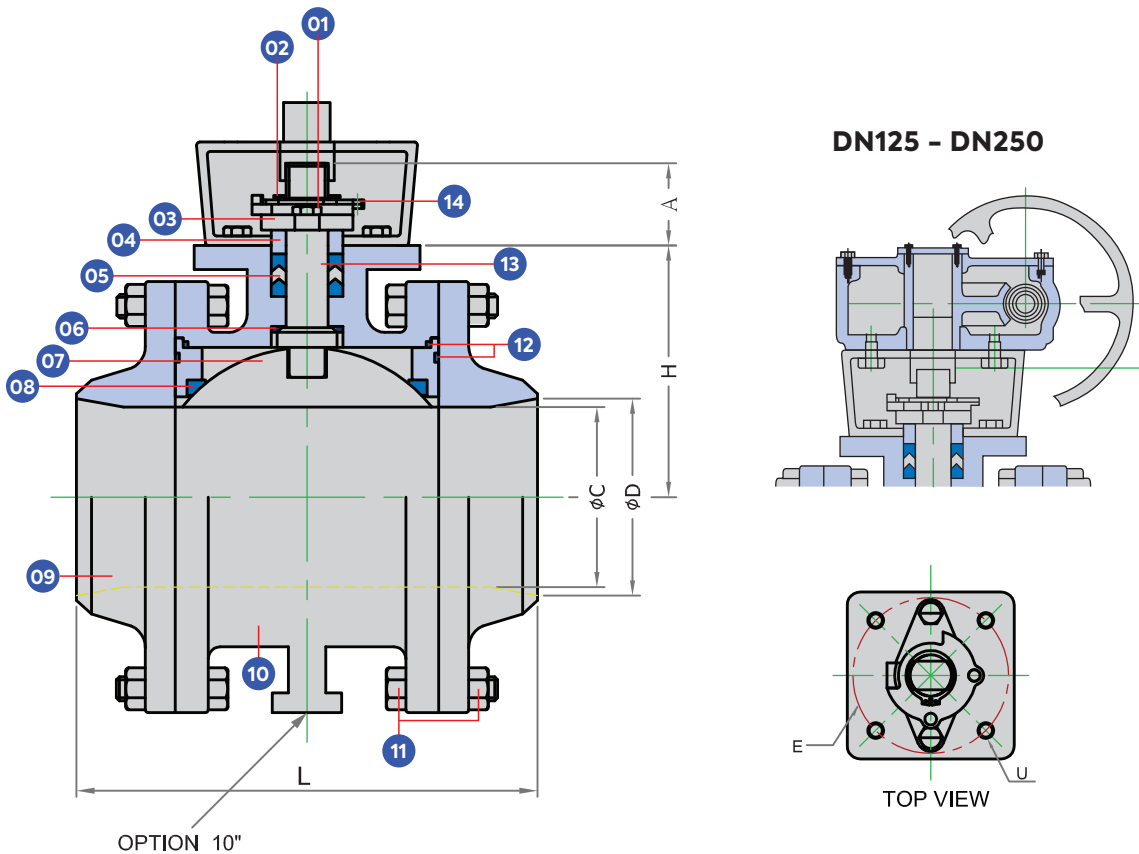
*Spare Parts available in Repair Kit. Please refer to page 59 for more details.



Dimensions(mm)

DN(mm)	Size	DN(mm)	Size	B1	B2	ØD	ØD1	E	F	ØH	I	L	O	RT	ISO5211	RB	FB	Weight(kg)
Full Bore		Reduced Bore																
8	¼"	-	-	27.7	12.7	12.7	9.5	120.0	66.0	8.0	5.0	66.8	0.5	14.1	F03	-	7.0	0.5
10	⅜"	15	½"	27.7	12.7	12.7	15.8	120.0	66.0	8.0	5.0	66.8	0.5	17.5	F03	10.0	8.0	0.6
15	½"	20	¾"	38.1	15.0	15.0	21.0	134.0	84.0	9.7	6.3	71.0	0.5	22.4	F04	19.0	25.0	0.9
20	¾"	25	1"	41.8	20.0	20.0	26.6	134.0	88.0	9.7	6.3	96.5	0.5	27.4	F04	42.0	50.0	1.4
25	1"	32	1¼"	51.6	21.4	25.4	35.1	167.0	98.0	11.2	8.0	109.0	0.5	34.2	F05	60.0	80.0	2.1
32	1¼"	40	1½"	55.9	21.7	32.0	41.2	167.0	101.0	11.2	8.0	117.0	0.5	43.0	F05	125.0	150.0	2.8
40	1½"	50	2"	66.2	25.6	28.0	53.0	204.0	117.0	16.0	9.5	128.3	1.0	49.0	F07	165.0	240.0	4.1
50	2"	65	2½"	75.4	25.2	50.8	68.4	204.0	125.0	16.0	9.5	141.5	1.0	61.1	F07	260.0	460.0	5.9
65	2½"	80	3"	89.4	42.7	65.0	77.8	250.0	165.0	22.3	17.0	174.0	1.6	77.1	F10	440.0	820.0	10.2
80	3"	100	4"	101.2	39.4	76.0	102.5	250.0	174.0	22.3	17.0	193.0	1.6	90.2	F10	780.0	1,250.0	15.8
100	4"	-	-	131.5	21.5	100.0	102.3	250.0	-	SQ22	17.0	240.0	1.6	115.5	F10	-	2,300.0	22.5

The information provided in this document is intended for informational purposes only and is subject to change without notice.

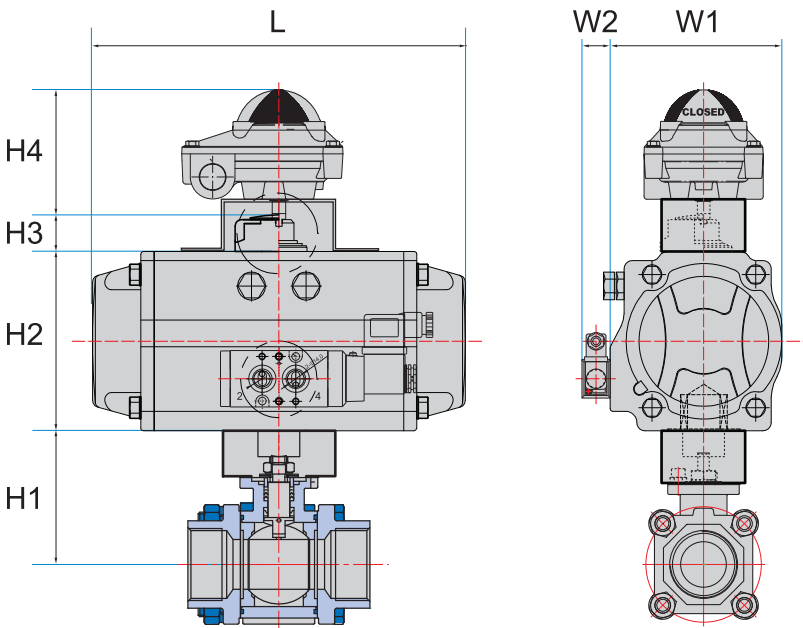


Part Name	Material
1. Snap Ring	SS304
2. Gland Bolt	SS304
3. Gland	A351 GR.CF8
4. Gland Bush	SS304
5. Packing	PTFE
6. Stem Seal	25% Carbon Filled PTFE
7. Ball	SS316/ SS304

Part Name	Material
8. Ball Seat	RPTFE / 50% SS Filled PTFE / 25% Carbon Filled PTFE / PEEK
9. Body	SS316/ WCB
10. Butt Weld End Cap	SS316/ WCB
11. Bolt & Nut	B8/8 / B7/2h
12. Gasket	PTFE
13. S2 Stem	SS316
14. Stop Plate	SS304

Dimensions(mm)

DN(mm)	Size	DN(mm)	Size	ØD		ØC		L		H	A	E	U	L		Weight(kg)	
FB		RB		FB	RB	FB	RB	FB	RB					FB	RB	FB	RB
-	-	125	5"	-	125.0	-	100.0	-	289.0	134.0	45.0	102.0	0.5	-	1,700	-	56.0
125	5"	150	6"	-	150.0	100.0	125.0	303.6	303.6	140.0	63.0	102.0	0.5	1,700	2,705	68.0	104.0
150	6"	200	8"	-	200.0	125.0	150.0	344.0	344.0	172.5	69.0	125.0	0.5	2,705	4,600	125.0	153.0
200	8"	250	10"	-	247.6	150.0	200.0	372.0	372.0	224.0	86.0	125.0	0.5	4,600	9,900	184.0	263.0
250	10"	-	-	-	-	200.0	-	520.0	-	267.0	86.0	125.0	0.5	9,900	-	316.0	-



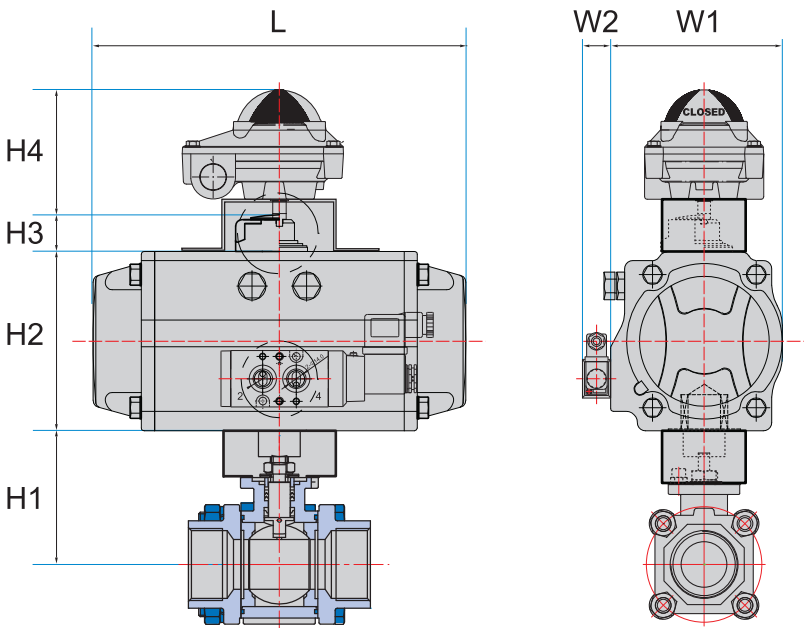
Pneumatic Actuator (Double Acting)

DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
FB		RB											
8	¼"	8	¼"	5.3	HP-50	66.7	73	20	90	72	29.5	144	3.01
10	⅜"	10	⅜"	5.3	HP-50	66.7	73	20	90	72	29.5	144	3.15
15	½"	15	½"	5.3	HP-50	77.1	73	20	90	72	29.5	144	3.38
20	¾"	20	¾"	7.8	HP-50	80.8	73	20	90	72	29.5	144	3.92
25	1"	25	1"	10.1	HP-50	91.6	73	20	90	72	29.5	144	4.56
32	1 ¼"	32	1 ¼"	13.1	HP-63	95.9	87	20	90	85	29.5	163	5.32
40	1 ½"	40	1 ½"	20.9	HP-66	106.2	87	20	90	85	29.5	202	7.19
50	2"	50	2"	29.7	HP-66	115.4	104	20	90	96	29.5	210	9.74
65	2 ½"	65	2 ½"	64.4	HP-88	157.4	116	20	90	108	29.5	247	14.61
80	3"	80	3"	84.5	HP-100	169.2	128	20	90	123	29.5	268	24.16
100	4"	100	4"	110.0	HP-115	199.5	146	20	90	141	29.5	316	30.86
125	5"	125	5"	375.0	HP-160	179.0	179	30	90	172	29.5	414	89.10
150	6"	150	6"	405.0	HP-160	203.0	196	30	90	190	29.5	467	146.10
200	8"	200	8"	510.0	HP-180	241.5	221	30	90	206	29.5	497	213.00
250	10"	250	10"	1,320.0	HP-211	290.0	256	30	90	236	29.5	504	369.00

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

*Compatible with various actuator types.



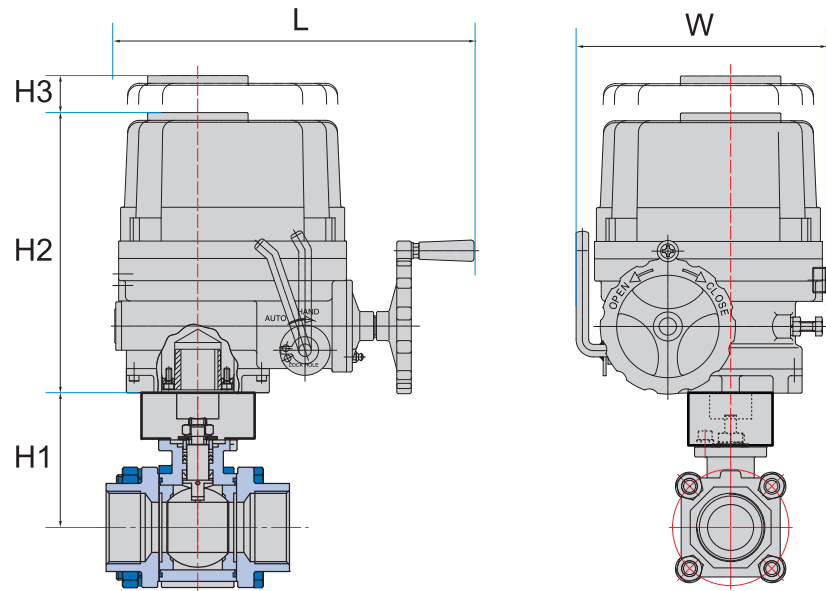
Pneumatic Actuator (Single Acting)

DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
FB		RB											
8	¼"	-	-	5.3	HP-63S (S11)	66.7	87	20	90	85	29.5	163	3.72
10	⅜"	15	½"	5.3	HP-63S (S11)	66.7	87	20	90	85	29.5	163	3.86
15	½"	20	¾"	5.3	HP-63S (S11)	77.1	87	20	90	85	29.5	163	4.09
20	¾"	25	1"	7.8	HP-66S (S11)	80.8	87	20	90	85	29.5	202	4.63
25	1"	32	1 ¼"	10.1	HP-75S (S11)	91.6	87	20	90	85	29.5	202	6.03
32	1 ¼"	40	1 ½"	13.1	HP-75S (S11)	95.9	104	20	90	96	29.5	210	6.79
40	1 ½"	50	2"	20.9	HP-88S (S11)	106.2	116	20	90	108	29.5	247	8.87
50	2"	65	2 ½"	29.7	HP-100S (S11)	115.4	128	20	90	123	29.5	268	12.26
65	2 ½"	80	3"	64.4	HP-125S (S11)	157.4	159	20	90	151	29.5	347	18.47
80	3"	100	4"	84.5	HP-145 (S11)	169.2	179	20	90	172	29.5	414	31.28
100	4"	125	5"	110.0	HP-145 (S11)	199.5	179	30	90	172	29.5	414	41.18
125	5"	150	6"	375.0	HP-200 (S11)	179.0	247	30	90	227	29.5	555	114.10
150	6"	200	8"	405.0	HP-211 (S11)	203.0	256	30	90	236	29.5	669	192.10
200	8"	250	10"	510.0	HP-212 (S11)	241.5	256	30	90	236	29.5	1,022	290.20
250	10"	-	-	1,320.0	-	290.0	-	-	-	-	-	-	-

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Air to Open, Spring to Close

*Compatible with various actuator types.



Electric Actuator

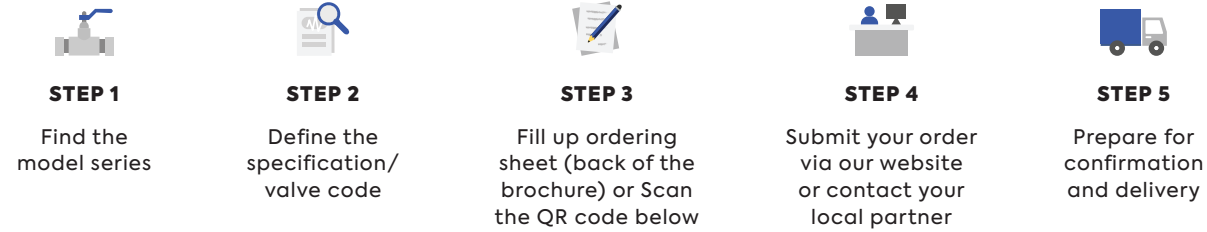
DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	W	L	Weight(kg)
FB		RB									
8	¼"	-	-	5.3	HQ-004	66.7	124.3	-	88.6	166.6	3.05
10	⅜"	15	½"	5.3	HQ-004	66.7	124.3	-	88.6	166.6	3.19
15	½"	20	¾"	5.3	HQ-004	77.1	124.3	-	88.6	166.6	3.42
20	¾"	25	1"	7.8	HQ-004	80.8	124.3	-	88.6	166.6	3.96
25	1"	32	1 ¼"	10.1	HQ-004	91.6	124.3	-	88.6	166.6	4.60
32	1 ¼"	40	1 ½"	13.1	HQ-004	95.9	124.3	-	88.6	166.6	5.36
40	1 ½"	50	2"	20.9	HQ-006	106.2	137.0	-	88.6	126.0	6.71
50	2"	65	2 ½"	29.7	HQ-006	115.4	235.0	-	105.0	126.0	10.34
65	2 ½"	80	3"	64.4	HQ-015	157.4	235.0	-	105.0	338.0	14.61
80	3"	100	4"	84.5	HQ-020	169.2	268.0	160	229.0	338.0	34.76
100	4"	-	-	110.0	HQ-020	199.5	268.0	160	229.0	338.0	41.46

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

*Compatible with various actuator types.

REQUEST FOR QUOTE



*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
80 Series

01

Design

Code	Material
F	Full Bore
R	Reduced Bore

02

Body Material

Code	Material
C1	WCB
S2	SS316

03

Seat Material

Code	Material
T	PTFE
M	25% Carbon Filled PTFE
G	50% SS Filled PTFE
P	Peek

04

Pressure Rating/Size

Code	Pressure	Size
A	PN100	½"
B	PN100	¾"
C	PN100	1"
D	PN100	1 ¼"
E	PN64	1 ½"
F	PN64	2"
G	PN64	2 ½"
H	PN50	3"
I	PN50	4"
J	PN16	5"
K	PN16	6"
L	PN16	8"
M	PN16	10"

05

Connection

Code	Material
B	BSP
N	NPT
S	Socket Weld
W	Butt Weld
X	Others (To be specified)

06

Operation

Code	Type
L	Lever
D	Double Acting
S	Pneumatic Actuated
	Single Acting
E	Pneumatic Actuated Electric Actuated

Your Valve Ordering Code:

80

01

02

03

04

05

06

Example:

80 Series – RS2TABL reduced bore.
Reduced Bore. SS316 Material. PTFE Seat. Pressure Rating of PN100, ½ inch size.
Connection Type of BSPT – Tapped. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



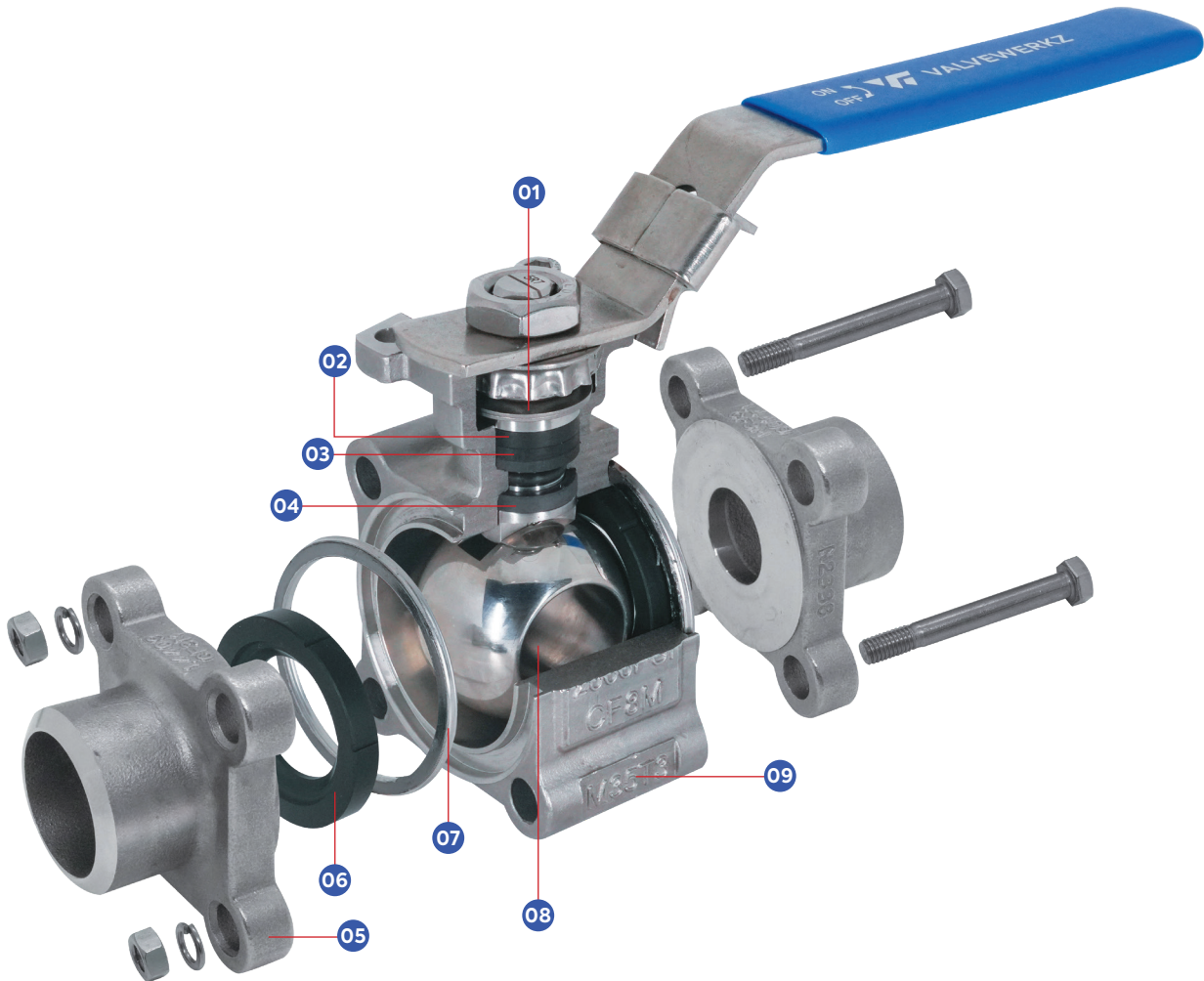
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Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

81FS SERIES - HIGH PERFORMANCE

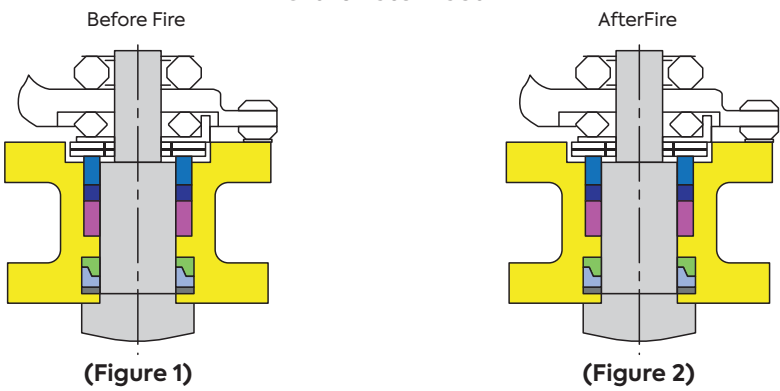
Fire Tested To API 607 4th Edition On ValveWerkz 81FS Soft-Seated 3pc Ball Valve

Plant fires are serious concern for soft-seated ball valve especially when the flammable fluids or dangerous gases are in service. The possible flammable fluid leakage during the fire consequently increases the fire magnitude and worsens the situation.



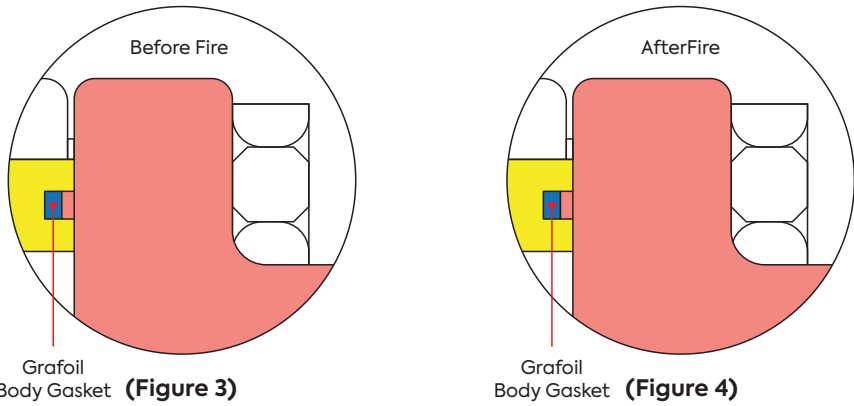
Part Name	Part Name
1. Belleville Washer	6. Seat
2. Bushing	7. Body Gasket
3. V-Ring Packing	8. Ball
4. Upper and Lower Stem Seal	9. Body
5. End Cap	

Grafoil Stem Seal



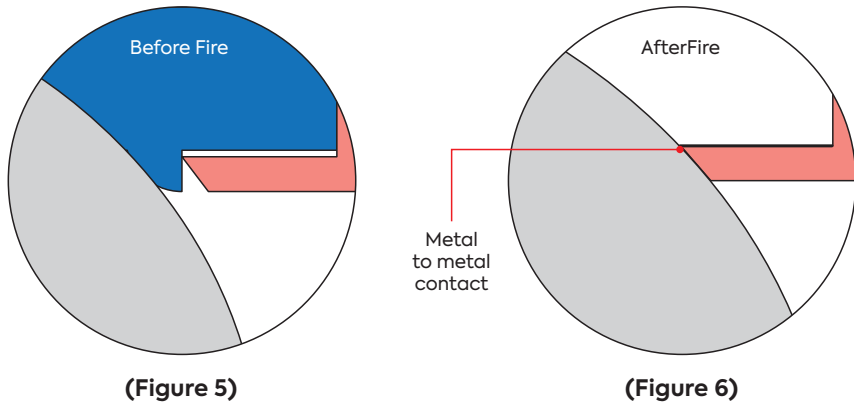
ValveWerkz 81FS series ball valves are designed to be fire safe to minimize both external and internal fluid leakage after plant fires due to:

Contact between ball & end cap fire safe lip for through leakage prevention. During a fire, the soft seats are destroyed and the ball is free to move to downstream to form metal to metal contact between the ball and the end cap fire safe lip. This lip is integral part of the end connection which has very tight clearance with the ball. (See fig. #1 & #2)



To maintain the integrity between end cap and body, our independent end cap bolts are screwed to body instead of using through bolts to attach the end caps and center section of the valve. It eliminates the end cap bolts from thermal expansion and contraction resulted from the fire and make fire resistance grafoil body gasket (encapsulated to body groove) to function as the way it should be and prevent the line fluid permeation and resultant leakage to external. (See fig. #3& #4)

Stem packing, seal arrangement remain unaffected due to grafoil material for fire resistance. (See fig. #5 & #6)





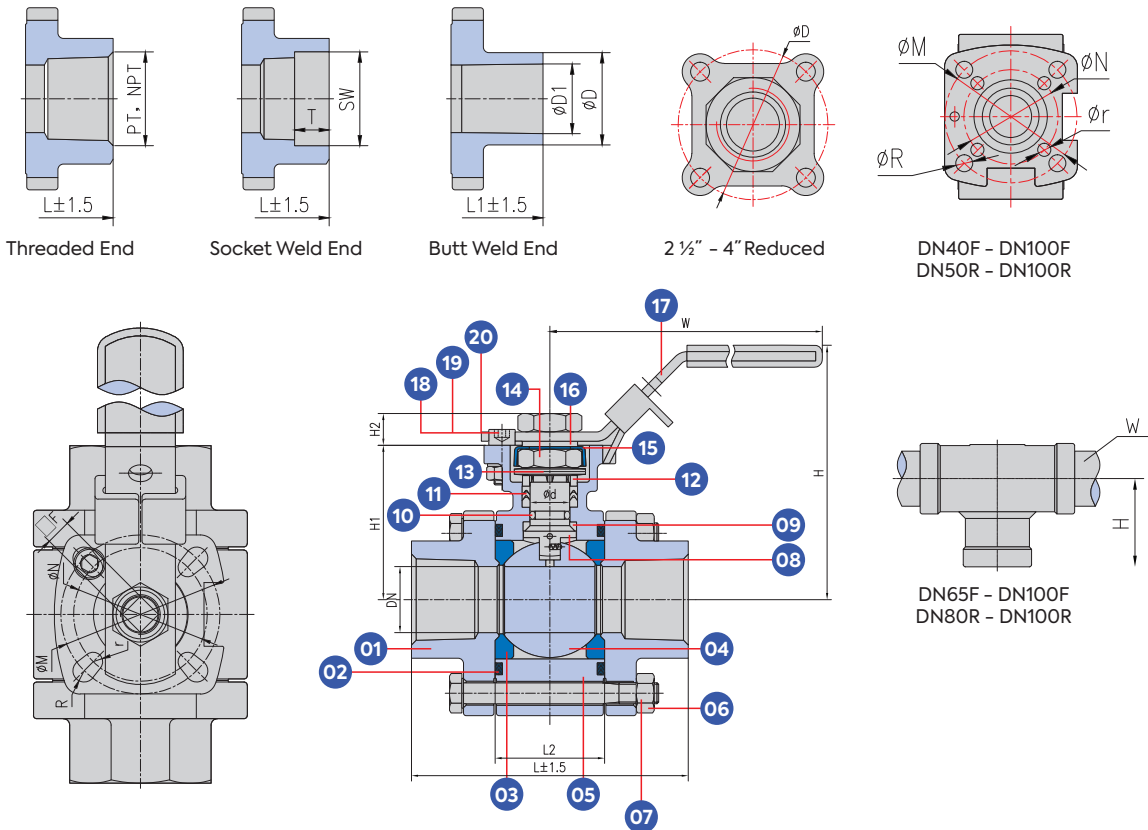
81FS Series
3-Piece Body Design

Full Bore / Reduced Bore	
Carbon Steel, SS304, SS316	
SS316	
CPTFE	TFM4215
TFM4215 + 50% SS	PEEK
Threaded End (¼" – 4")	
Socket Weld End (¼" – 4")	
Butt Weld End (¼" – 10")	
Full Bore DN8 (¼") to DN100 (4")	
Reduced Bore DN15(½") to DN100 (4")	
Pneumatic Actuator	
(Single Acting / Double Acting)	
Electric Actuator	
Cv = 9.2 to Cv = 1020	
Full Bore	
2000psi	¼" – 1"
1500psi	1 ¼" – 2"
1000psi	2 ½" – 4"
Reduced Bore	
2000psi	½" – 1"
1500psi	1 ¼" – 2"
1000psi	2 ½" – 4"

The 81FS series fire-safe ball valves have passed fire tests in accordance with API 607. These valves are ideal for transporting petroleum products, flammable, or hazardous materials, and are also widely applicable in general and corrosive environments. The materials of the 81FS series valves can meet the requirements of NACE MR0103 and, with special treatment, can be used in oxygen or high-vacuum environments. The valves comply with ANSI, API, BS, and MSS standards. The standard fire-safe valve features a carbon steel body and 316 stainless steel construction and other alloys. Available seat materials include CPTFE, TFM4215, TFM4215+50%SS, and PEEK, suitable for applications involving chemicals, petrochemicals, acids, alkalis, and steam.

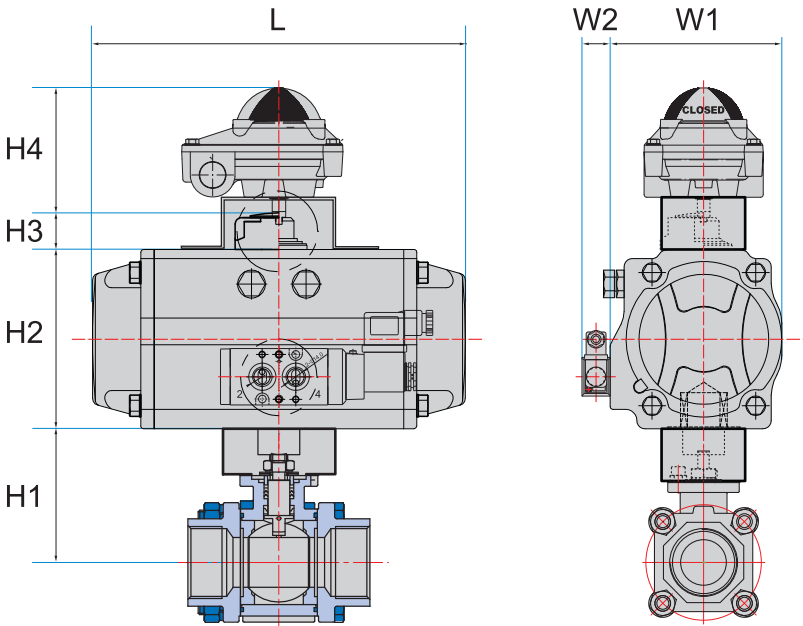
Dimensions(mm)

DN(mm)	Size	DN(mm)	Size	SW		T		BW		D1		L	L2	H	H1	H2	W	d	D
FB		RB		FB	RB	FB	RB	FB	RB	FB	RB								
8	¼"	-	-	14.6	-	9.5	-	14.0	-	11.5	-	75	24.5	73	42.5	8	134	12	54.0
10	⅜"	15	½"	19.0	22.2	9.5	9.5	17.2	21.7	12.6	15.0	75	24.5	73	42.5	8	134	12	54.0
15	½"	20	¾"	22.2	27.6	9.5	12.5	21.7	27.2	15.0	20.5	75	24.5	73	42.5	8	134	12	54.0
20	¾"	25	1"	27.6	34.3	12.5	12.5	27.2	34.0	20.5	25.7	85	31.5	78	46.5	8	134	12	62.5
25	1"	32	1 ¼"	34.3	43.1	12.5	12.5	34.0	42.7	25.7	34.4	105	41.5	96	58.5	12	165	15	71.0
32	1 ¼"	40	1 ½"	43.1	49.2	12.5	12.5	42.7	48.6	34.4	40.3	111	48.5	100	62.5	12	165	15	80.0
40	1 ½"	50	2"	49.2	61.7	12.5	16.0	48.6	60.5	40.3	51.3	127	56.3	125	78.0	15	215	22	94.0
50	2"	65	2 ½"	61.7	74.4	16.0	16.0	60.5	76.3	51.3	67.1	143	71.5	135	88.0	15	215	22	112.5
65	2 ½"	80	3"	74.4	90.3	16.0	16.0	76.3	88.9	67.1	80.0	185	86.5	148	109.0	19	300	25	139.0
80	3"	100	4"	90.3	115.7	16.0	19.0	88.9	116.0	80.0	103.1	205	100.0	155	117.5	19	370	25	162.0
100	4"	-	-	115.7	-	19.0	-	116.0	-	103.1	-	240	127.0	171	133.5	19	500	25	193.0



*Spare Parts available in Repair Kit. Please refer to page 60 for more details.

Part Name		Material	
		Thread / SW BW	Thread / SW BW
1.	End Cap	A351 CF8 A351 CF8	A351 CF8M A351 CF3M
2.	Gasket	SS304 + Graphite	SS316 + Graphite
3.	Seat	CPTFE	TFM4215
4.	Ball	SS304	SS316
5.	Body	A351 CF8	A351 CF8M
6.	Bolt	A2–70	A2–70
7.	Nut	A2–70	A2–70
8.	Stem	SS304	SS316
9.	Stem Washer	RPTFE	RPTFE
10.	O-Rings	Viton	Viton
11.	Packing	Graphite	Graphite
12.	Gland	SS304	SS304
13.	Belleville Washer	SS301	SS301
14.	Nut	A2–70	A2–70
15.	Stop Lock Cap	SS304	SS304
16.	Washer	SS304	SS304
17.	Handle	SS304	SS304
18.	Stop Bolt	A2–70	A2–70
19.	Washer	SS304	SS304
20.	Nut	A2–70	A2–70



Pneumatic Actuator (Double Acting)

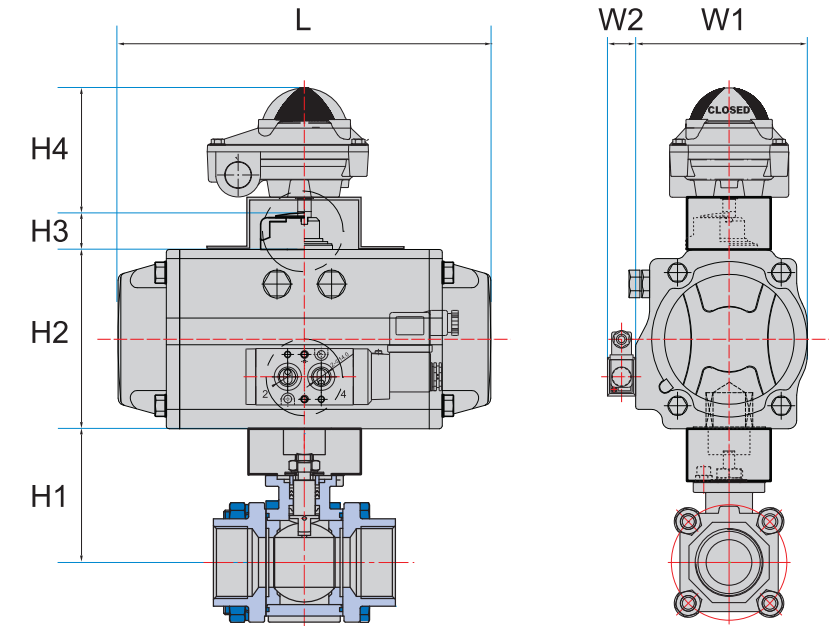
DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	H4	W1	W2	L
FB	RB											
8	¼"	-	-	7.8	HP-050	42.5	73	20	90	72	29.5	144
10	⅜"	15	½"	7.8	HP-050	42.5	73	20	90	72	29.5	144
15	½"	20	¾"	13.0	HP-050	42.5	73	20	90	72	29.5	144
20	¾"	25	1"	16.9	HP-063	42.5	87	20	90	85	29.5	163
25	1"	32	1 ¼"	23.4	HP-066	58.5	87	20	90	85	29.5	202
32	1 ¼"	40	1 ½"	39.0	HP-066	62.5	87	20	90	85	29.5	202
40	1 ½"	50	2"	45.5	HP-075	78.0	104	20	90	96	29.5	210
50	2"	65	2 ½"	52.0	HP-088	88.0	116	20	90	108	29.5	247
65	2 ½"	80	3"	91.0	HP-100	109.0	128	20	90	123	29.5	268
80	3"	100	4"	123.5	HP-115	117.5	146	20	90	172	29.5	316
100	4"	-	-	182.0	HP-115	133.5	146	20	90	172	29.5	316

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Seat : RPTFE

*Compatible with various actuator types.

Note: For fire safe ball valves, explosion proof limit switch & solenoid valve may be required.



Pneumatic Actuator (Single Acting)

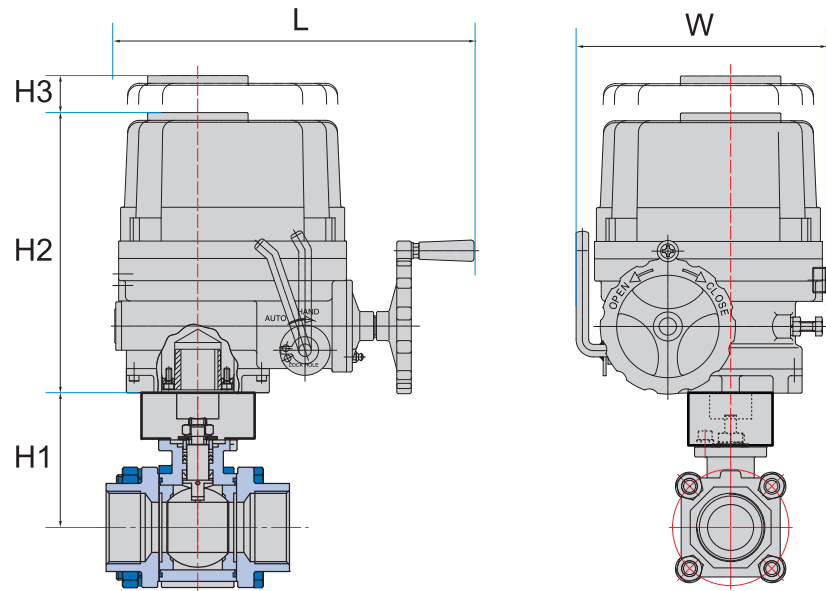
DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	H4	W1	W2	L
FB	RB											
8	¼"	-	-	7.8	HP-63S	42.5	87	20	90	85	29.5	163
10	⅜"	15	½"	7.8	HP-63S	42.5	87	20	90	85	29.5	163
15	½"	20	¾"	13.0	HP-63S	42.5	87	20	90	85	29.5	163
20	¾"	25	1"	16.9	HP-75S	42.5	104	20	90	96	29.5	210
25	1"	32	1 ¼"	23.4	HP-100S	58.5	128	20	90	123	29.5	268
32	1 ¼"	40	1 ½"	39.0	HP-100S	62.5	128	20	90	123	29.5	268
40	1 ½"	50	2"	45.5	HP-100S	78.0	128	20	90	123	29.5	268
50	2"	65	2 ½"	52.0	HP-115S	88.0	146	20	90	141	29.5	316
65	2 ½"	80	3"	91.0	HP-125S	109.0	159	20	90	151	29.5	347
80	3"	100	4"	123.5	HP-145S	117.5	179	30	90	172	29.5	414
100	4"	-	-	182.0	HP-145S	133.5	179	30	90	172	29.5	414

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Seat : RPTFE
- Air to Open, Spring to Close

*Compatible with various actuator types.

Note: For fire safe ball valves, explosion proof limit switch & solenoid valve may be required.



Electric Actuator

DN(mm)	Size	DN(mm)	Size	Torques	Actuator	H1	H2	H3	W	L
FB		RB								
8	¼"	-	-	5.3	HQ-004	42.5	124	-	89	117
10	⅜"	15	½"	5.3	HQ-004	42.5	124	-	89	117
15	½"	20	¾"	5.3	HQ-004	42.5	124	-	89	117
20	¾"	25	1"	7.8	HQ-004	42.5	124	-	89	117
25	1"	32	1 ¼"	10.1	HQ-004	58.5	124	-	89	117
32	1 ¼"	40	1 ½"	13.1	HQ-006	62.5	139	-	105	126
40	1 ½"	50	2"	20.9	HQ-006	78.0	139	-	105	126
50	2"	65	2 ½"	29.7	HQ-006	88.0	139	-	105	126
65	2 ½"	80	3"	64.4	HQ-010	109.0	235	120	170	258
80	3"	100	4"	84.5	HQ-015	117.5	268	160	229	338
100	4"	-	-	110.0	HQ-020	133.5	268	160	229	338

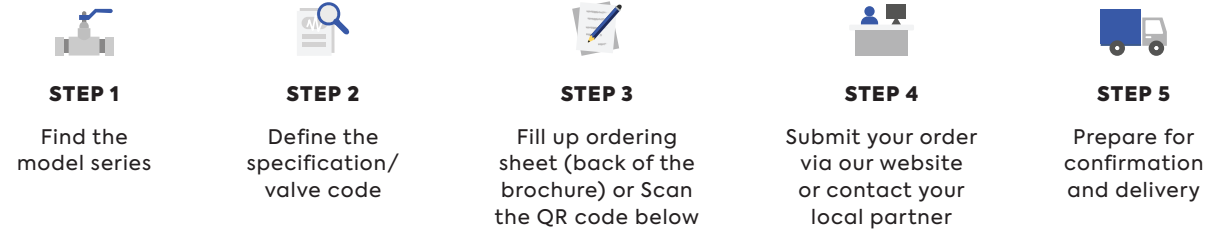
The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Seat : RPTFE

*Compatible with various actuator types.

Note: For fire safe ball valves, explosion proof limit switch & solenoid valve may be required.

REQUEST FOR QUOTE



*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
81FS Series

01	—	02	—	03	—	04	—	05																																																																																				
Body Material <table><tr><td>Code</td><td>Material</td></tr><tr><td>C1</td><td>WCB</td></tr><tr><td>S2</td><td>SS316</td></tr></table>	Code	Material	C1	WCB	S2	SS316		Seat Material <table><tr><td>Code</td><td>Material</td></tr><tr><td>T</td><td>PTFE</td></tr><tr><td>M</td><td>25% Carbon Filled PTFE</td></tr><tr><td>G</td><td>50% SS Filled PTFE</td></tr><tr><td>P</td><td>Peek</td></tr></table>	Code	Material	T	PTFE	M	25% Carbon Filled PTFE	G	50% SS Filled PTFE	P	Peek		Pressure Rating/Size <table><tr><td>Code</td><td>Pressure</td><td>Size</td></tr><tr><td>A</td><td>PN100</td><td>½"</td></tr><tr><td>B</td><td>PN100</td><td>¾"</td></tr><tr><td>C</td><td>PN100</td><td>1"</td></tr><tr><td>D</td><td>PN100</td><td>1 ¼"</td></tr><tr><td>E</td><td>PN64</td><td>1 ½"</td></tr><tr><td>F</td><td>PN64</td><td>2"</td></tr><tr><td>G</td><td>PN64</td><td>2 ½"</td></tr><tr><td>H</td><td>PN50</td><td>3"</td></tr><tr><td>I</td><td>PN50</td><td>4"</td></tr><tr><td>J</td><td>PN16</td><td>5"</td></tr><tr><td>K</td><td>PN16</td><td>6"</td></tr><tr><td>L</td><td>PN16</td><td>8"</td></tr><tr><td>M</td><td>PN16</td><td>10"</td></tr></table>	Code	Pressure	Size	A	PN100	½"	B	PN100	¾"	C	PN100	1"	D	PN100	1 ¼"	E	PN64	1 ½"	F	PN64	2"	G	PN64	2 ½"	H	PN50	3"	I	PN50	4"	J	PN16	5"	K	PN16	6"	L	PN16	8"	M	PN16	10"		Connection <table><tr><td>Code</td><td>Material</td></tr><tr><td>B</td><td>BSP</td></tr><tr><td>N</td><td>NPT</td></tr><tr><td>S</td><td>Socket Weld</td></tr><tr><td>W</td><td>Butt Weld</td></tr><tr><td>X</td><td>Others (To be specified)</td></tr></table>	Code	Material	B	BSP	N	NPT	S	Socket Weld	W	Butt Weld	X	Others (To be specified)		Operation <table><tr><td>Code</td><td>Type</td></tr><tr><td>L</td><td>Lever</td></tr><tr><td>D</td><td>Double Acting</td></tr><tr><td>S</td><td>Pneumatic Actuated</td></tr><tr><td></td><td>Single Acting</td></tr><tr><td>E</td><td>Pneumatic Actuated</td></tr><tr><td></td><td>Electric Actuated</td></tr></table>	Code	Type	L	Lever	D	Double Acting	S	Pneumatic Actuated		Single Acting	E	Pneumatic Actuated		Electric Actuated
Code	Material																																																																																											
C1	WCB																																																																																											
S2	SS316																																																																																											
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E	Pneumatic Actuated																																																																																											
	Electric Actuated																																																																																											

Your Valve Ordering Code:

81FS — 01 02 03 04 05

Example:

81FS Series – S2TABL reduced bore.
SS316 Material. PTFE Seat. Pressure Rating of PN100, ½ inch size. Connection Type of BSPT – Tapered. Lever Operating type.

*For special material or customisation, please refer to our sales engineer.

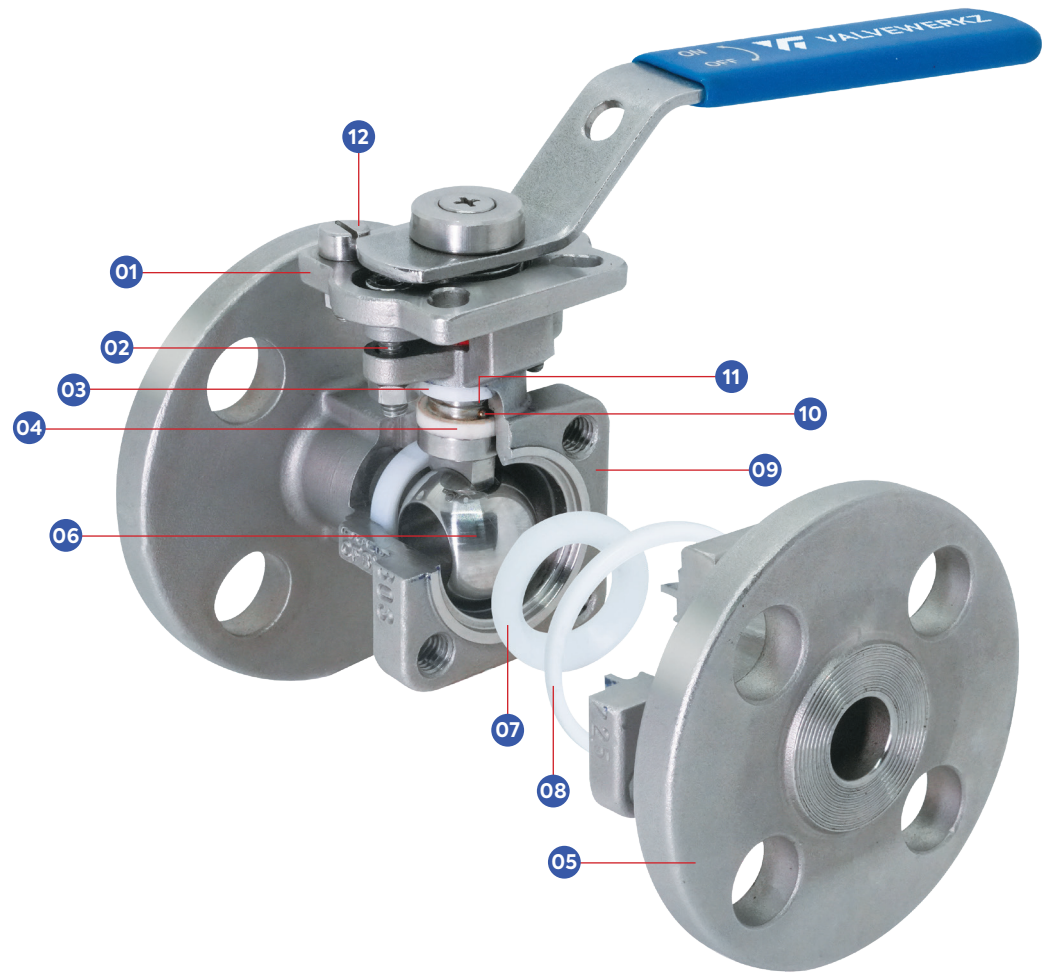


SCAN FOR ONLINE ORDERING FORM

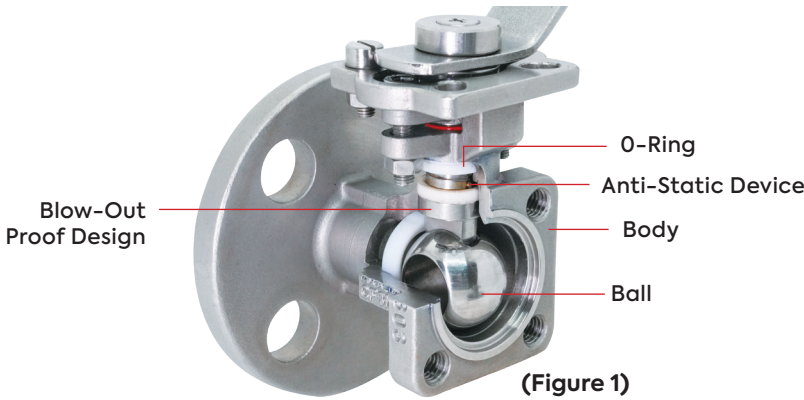
Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

203 SERIES - FLANGE BALL VALVE

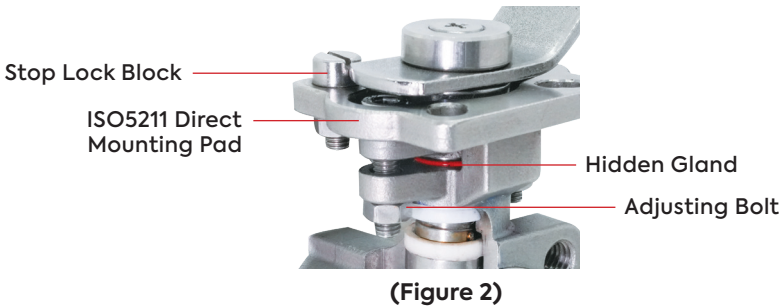
The pressing plate-type ball valve consists of a body, end cap, and a ball. The ball is connected to the stem and rotates 90 degrees to enable on-off functionality. It is primarily used for on-off control and emergency shut-off in pipelines. When equipped with a V-port ball, it can also regulate flow for precise adjustment.



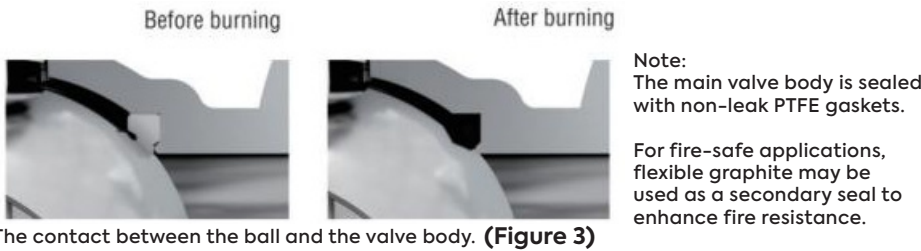
Part Name	Part Name	Part Name
1. ISO5211 Direct Mounting Pad	5. End Cap	9. Body
2. Adjusting Bolt	6. Ball	10. Anti-Static Device
3. V-Ring Packing	7. Seat(Pressure Relief Groove)	11. Belleville Washer
4. O-Ring	8. Body Gasket	12. Stop Lock Block



- 1. Blow-Out Prevention**
The stem features an integral shoulder design to prevent blow-out and leakage. (Figure 1)
- 2. Anti-Static Safety**
An anti-static design helps to eliminate safety risks caused by static electricity. (Figure 1)



- 3. Effective Stem Sealing**
The O-ring on the stem provides reliable self-sealing performance to contain the medium. (Figure 2)
- 4. Misoperation Prevention**
A dedicated limit device is included to prevent accidental or incorrect valve operation. (Figure 2)
- 5. Fire-Safe Seal Design**
The metal-to-metal sealing structure prevents external leakage and offers flame resistance for enhanced safety.



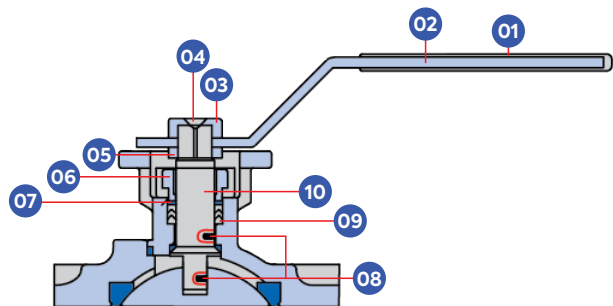
- 6. Dual Stem Sealing**
Designed to meet TA-LUFT emission control standards, providing enhanced sealing reliability. (Figure 3)
- 7. Self-Adjusting Belleville Washers**
Two pre-loaded Belleville washers reduce the need for re-tightening in low-leakage applications by maintaining consistent packing compression. (Figure 1)
- 8. Adjustable Hidden Gland**
Stem packing can be tightened to stop the leakage from stem without removing the actuator from the valve. (Figure 2)



203 Series
2-Piece Body Design

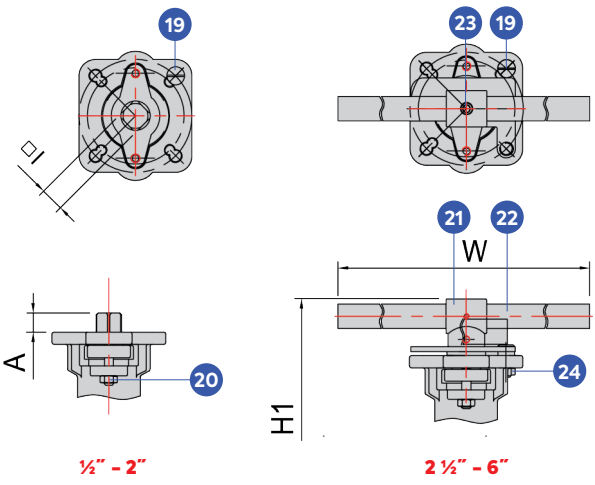
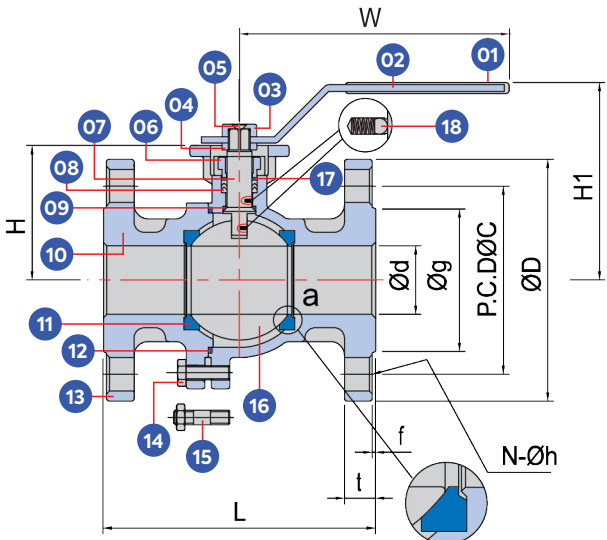
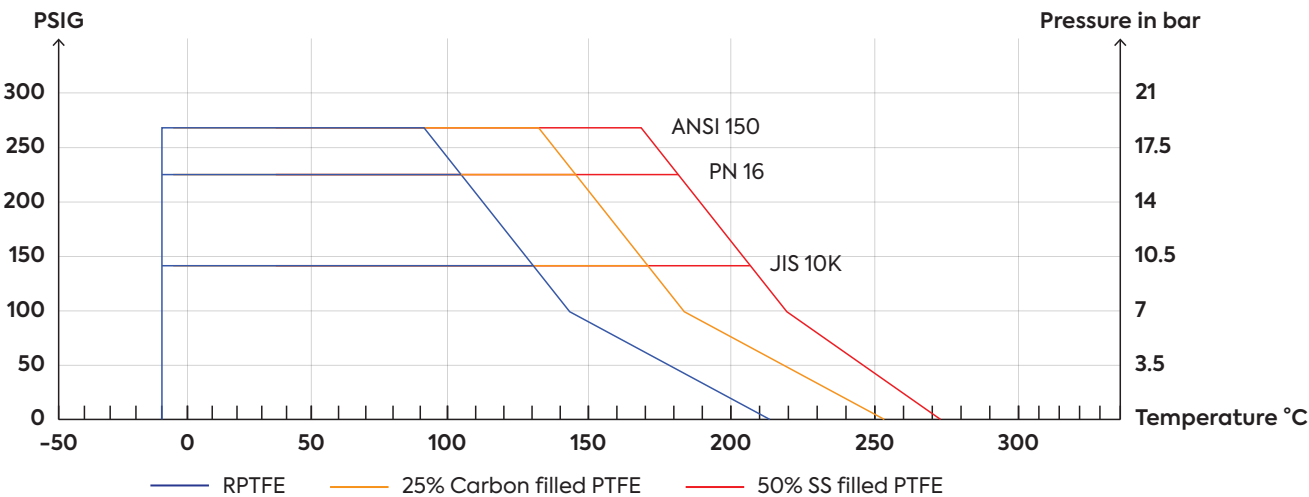
Full Bore	
Sizes ¼" – 6"	
WCB / SS304 / SS316	
203AU	ANSI (ANSI 150 / ANSI 300)
203AD	DIN (PN16 / PN40)
203AJ	JIS (JIS-10K / JIS-20K)
Superior Live Loaded Packing System	
ISO 5211 Direct Mounting Pad	
Blowout-Proof Stem	
Dual Anti-Static Device (Ball-Stem-Body)	
Standard Seat:	
25% Carbon Filled PTFE (max. 250°C)	
Seat Options:	
RPTFE (max. 210°C)	
50% SS Filled PTFE (max. 270°C)	
Patent Pending Product	
Fire Safe Design	

ValveWerkz 203 series flanged ball valves feature a split body design. The high-quality investment castings feature a fully machined bore. The superior live-loaded packing system (includes) Belleville washers, “V” ring packing, and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valves.



Part Name	
1. Handle Sleeve	6. Gland
2. Handle	7. Bushing
3. Stem Washer	8. Anti-Static Device
4. Handle Bolt	9. V-Ring Packing
5. Handle Washer	10. Stem

Pressure / Temperature Ratings



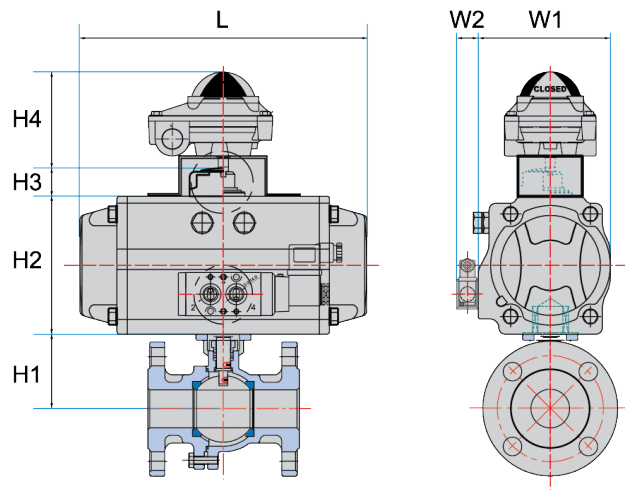
Part Name	Material
1. Handle Sleeve (½" – 2")	VINYL
2. Handle (½" – 2")	SUS304
3. Stem Washer (½" – 2")	SUS304
4. Handle Washer (½" – 2")	SUS304
5. Handle Bolt	SUS304
6. Gland	SUS304
7. Stem	SUS316
8. V-Ring Packing	50% SS/50%
9. Stem Seal	RPTFE
10. Body	WCB / CF8 / CF8M
11. Body Seat	PTFE
12. Packing	PTFE

Part Name	Material
13. End Cap	WCB / SS304 / SS316
14. Bolt (½" – 2")	SUS304
15. Stud & Nut (2 ½" – 6")	SUS304
16. Ball	SS304 / SS316
17. Bushing	SUS304
18. Anti-Static Device	Stainless Steel
19. Stop Pin	SUS304
20. Stud & Nut	SUS304
21. Handle Adapter (2 ½" – 6")	SUS304
22. Pipe Handle (2 ½" – 6")	SUS304
23. Handle Bolt (½" – 2")	SUS304
24. Stop Pin Nut	SUS304

*Spare Parts available in Repair Kit. Please refer to page 60 for more details.

Dimensions(mm)

Size(Inch)	A	W	H	H1	□I	L	Ød	Øg	ØC	ØD	t	f	Øh	N	ISO 5211	CV	Weight(kg)
½" 10K PN16 150LB	8	130	50.5	79.5	9	108 115 108	15	45 95 35	70 65 60.3	95 89	12.5 16 11.2	1 2 1.6	15 14 16	4	F03 F04	15	1.87
¾" 10K PN16 150LB	8	130	53.8	82.8	9	117 120 117	20	56 58 42	75 75 69.9	100 105 98.4	14.5 18 12.7	1 2 1.6	15 14 16	4	F03 F04	45	2.33
1" 10K PN16 150LB	9.5	168	64.5	96.5	11	127 125 127	25	67 68 50.8	90 85 79.4	125 115 108	14.3 18 11.5	1 2 1.6	19 14 16	4	F04 F05	85	3.68
½" 10K PN16 150LB	9.5	168	70	102	11	140 130 140	32	76 77 64	100 100 88.9	135 140 117	16 18 13	2 3 1.6	19 18 16	4	F04 F05	150	4.76
1 ½" 10K PN16 150LB	14	221	77	110	14	165 140 165	40	81 87 73	105 110 98.5	140 150 127	16.5 18 14.5	2 3 1.6	19 18 16	4	F05 F07	275	5.91
2" 10K PN16 150LB	14	221	85.3	118	14	178 150 178	50	96 102 92	120 125 120.7	155 165 152.4	16.5 18 15.9	2 3 1.6	19 18 19	4	F05 F07	460	7.82
2 ½" 10K PN16 150LB	17	495	111.5	172	17	190 170 190	65	116 122 104.8	140 145 139.7	175 185 177.8	18.7 18 17.6	2 3 1.6	19 18 19	4	F07 F10	700	13.97
3" 10K PN16 150LB	17	495	120.5	181	17	203 180 203	80	126 137 127	150 160 152.4	185 200 190.5	19 20 19.5	2 3 1.6	19 18 19	4	F07 F10	1100	17.03
4" 10K PN16 150LB	22	595	145	206	22	229 190 229	100	151 157 157.2	175 180 190.5	210 220 228.6	19 20 23.9	2 3 1.6	19 18 19	8 8 4	F10	2200	25.27
5" 10K PN16 150LB	27	600	178.5	250	27	365 325 356	125	182.7 187 185.7	210 210 215.9	250 250 254	20 22 23.9	2 3 1.6	23 18 22.4	8	F12 F14	3500	49.67
6" 10K PN16 150LB	27	800	196	267	27	394 350 394	150	215 212 215.9	240 240 214.3	280 285 279	22 22 25.4	2 3 1.6	23 22 22.4	8	F12 F14	5150	70.61



Pneumatic Actuator (Double Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
15	½"	3.3	HP-35	50.5	49	20	90	54	29.5	126	3.49
20	¾"	5.4	HP-50	58.3	73	20	90	72	29.5	144	3.95
25	1"	6.6	HP-50	58.3	73	20	90	72	29.5	144	5.92
32	1 ¼"	13.2	HP-63	77	85	20	90	85	29.5	159	7
40	1 ½"	16.4	HP-63	77	85	20	90	85	29.5	159	7
50	2"	19.6	HP-63	85.3	87	20	90	85	29.5	163	10.58
65	2 ½"	30	HP-75	104	104	20	90	114	29.5	190	17.45
80	3"	36	HP-75	104	104	20	90	114	29.5	190	22.41
100	4"	87	HP-115	145	146	20	90	141	29.5	316	32.35
125	5"	120	HP-145	177.6	178	20	90	172	29.5	414	59.75
150	6"	150	HP-145	196	179	20	90	172	29.5	414	80.69

The selection of the actuators are based on the below conditions:

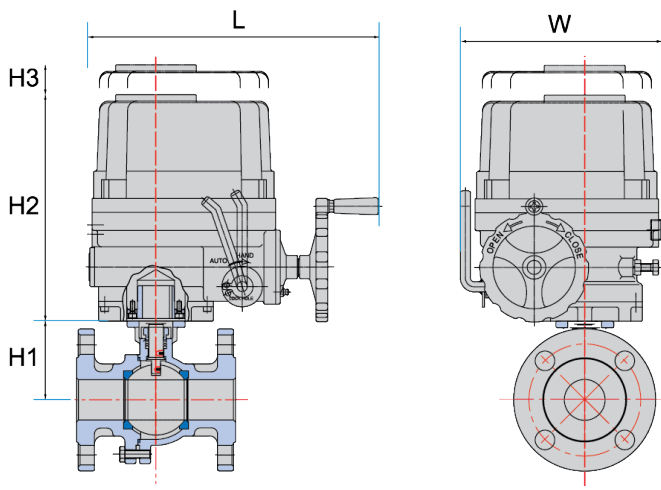
- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

Pneumatic Actuator (Single Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
15	½"	3.3	HP-50S (S11)	50.5	73	20	90	72	29.5	144	4.82
20	¾"	5.4	HP-63S (S11)	58.3	87	20	90	85	29.5	163	5.28
25	1"	6.6	HP-63S (S11)	64.5	87	20	90	85	29.5	163	6.63
32	1 ¼"	13.2	HP-75S (S11)	70	104	20	90	96	29.5	180	9.2
40	1 ½"	16.4	HP-75S (S11)	77	104	20	90	96	29.5	180	10.35
50	2"	19.6	HP-88S (S11)	85.3	116	20	90	108	29.5	247	13.82
65	2 ½"	30	HP-100S (S11)	110	128	20	90	128	29.5	268	21.91
80	3"	36	HP-100S (S11)	120.5	128	20	90	123	29.5	268	27.45
100	4"	87	HP-145S (S11)	145	179	30	90	172	29.5	414	42.67
125	5"	144	HP-160S (S11)	177.5	196	30	90	190	29.5	467	70.28
150	6"	150	HP-160S (S11)	196	196	30	90	190	29.5	467	97.64

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Air to Open, Spring to Close



Electric Actuator

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	W	L	Weight(kg)
15	½"	3.3	HQ-004	50.5	124.3	N/A	88.6	166.6	4.15
20	¾"	5.4	HQ-004	53.8	124.3	N/A	88.6	166.6	4.61
25	1"	6.6	HQ-004	64.5	124.3	N/A	88.6	166.5	5.92
32	1 ¼"	13.2	HQ-004	70	124.3	N/A	88.6	166.6	7.04
40	1 ½"	16.4	HQ-004	77	124.3	N/A	88.6	166.6	8.19
50	2"	19.6	HQ-004	85.3	124.3	N/A	88.6	166.6	10.5
65	2 ½"	32.1	HQ-006	111	137	N/A	105	168	16.68
80	3"	36	HQ-006	120.5	137	N/A	105	126	21.11
100	4"	87	HQ-015	145	268	160	160	338	42.95
125	5"	144	HQ-030	177.5	304	180	180	368	70.75
150	6"	150	HQ-030	196	304	180	180	368	93.69

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/valve code



STEP 3

Fill up ordering sheet (back of the brochure) or Scan the QR code below



STEP 4

Submit your order via our website or contact your local partner



STEP 5

Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
203 Series

01

02

03

04

05

06

Body Material	
Code	Material
C1	WCB
S1	SS304
S2	SS316

Seat Material	
Code	Material
T	RPTFE
M	25% Carbon Filled PTFE
G	50% SS Filled PTFE

Rating	
Code	Rating
A	ANSI 150
B	ANSI 300
C	PN16
D	PN40
E	JIS-10K
F	JIS-20K

Size	
Code	Size
A	1/2"
B	3/4"
C	1"
D	1 1/4"
E	1 1/2"
F	2"
G	2 1/2"
H	3"
I	4"
J	5"
K	6"
L	8"

Connection	
Code	Material
F	Flanged End

Operation	
Code	Type
L	Lever
D	Double Acting Pneumatic Actuated
S	Single Acting Pneumatic Actuated
E	Electric Actuated

Your Valve Ordering Code:

203

01

02

03

04

05

06

F

Example:

203 Series - S2TABFL full bore.
SS316 Material. RPTFE Seat. Pressure Rating of ANSI 150, 3/4 inch size. Flanged End Connection.
Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



SCAN FOR ONLINE ORDERING FORM

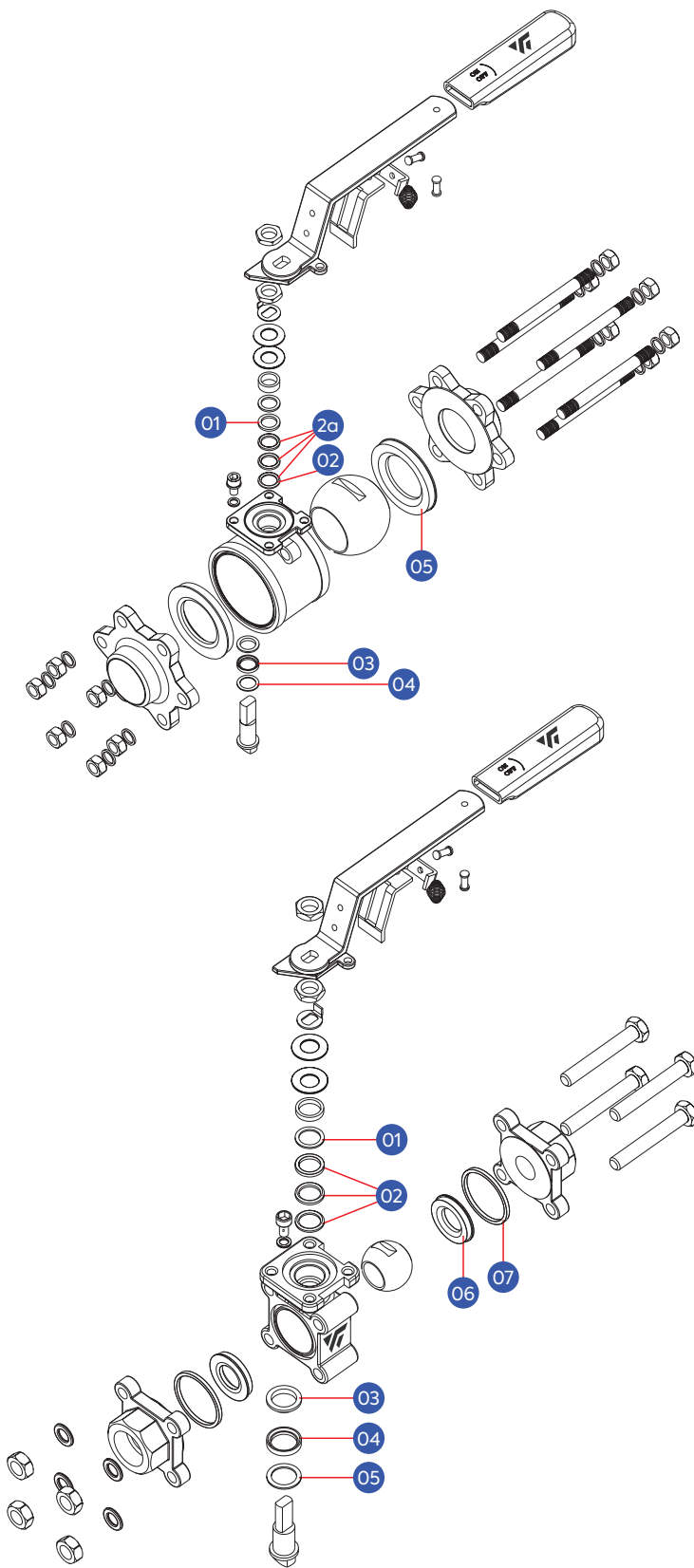
Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

Repair Kits Available

Extend the life of your valves with ready-to-order repair kits. Swap out critical parts like bushings, seals, and seats on-site without replacing the whole valve. It's faster, more economical, and keeps your operations moving.

50 & 90 Series

Part NameQty		
50 Series		
1.	Bushing	-
2.	Packing	1
3.	Stem Seal	1
4.	O-Ring Packing	1
5.	Seat	2
90 Series		
1.	Bushing	1
2a.	V-Ring Packing	1 Set (3 pcs)
3.	Stem Seal	1
4.	O-Ring Packing	1
5.	Seat	2

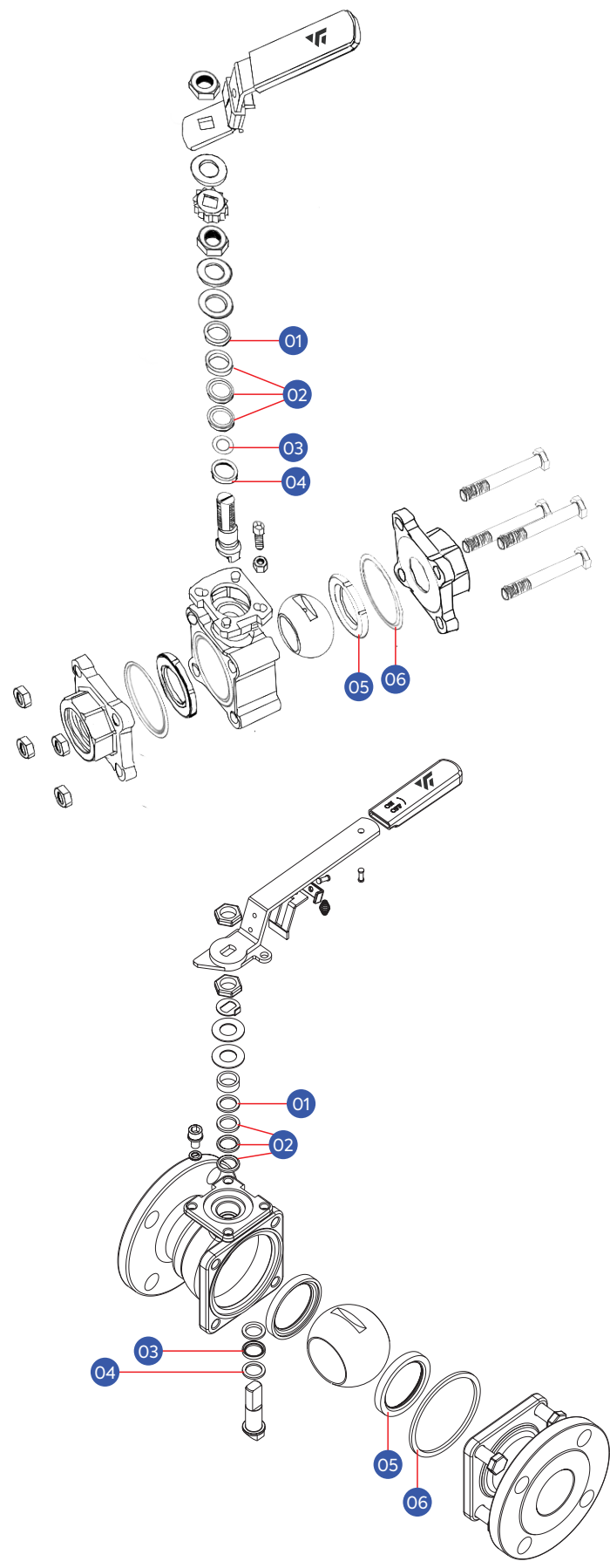


80 Series

Part NameQty		
1.	Bushing	1
2.	V-Ring Packing	1 Set (3 pcs)
3.	Upper Stem Seal	1
4.	Compress Ring	1
5.	Stem Seal	1
6.	Seat	2
7.	Body Gasket	2

81FS Series

Part NameQty		
1.	Compress Ring	1
2.	V-Ring Packing	1 Set (3 pcs)
3.	O-Ring	1
4.	Stem Washer	1
5.	Seat	2
6.	Body Gasket	2

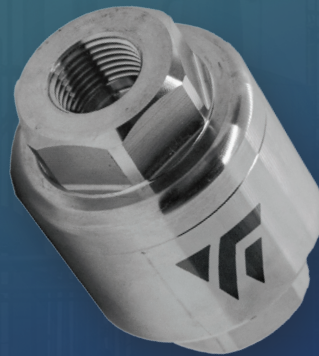


203 Series

Part NameQty		
1.	Bushing	1
2.	V-Ring Packing	1 Set (3 pcs)
3.	Compress Ring	1
4.	Stem Seal	1
5.	Seat	2
6.	Body Gasket	1



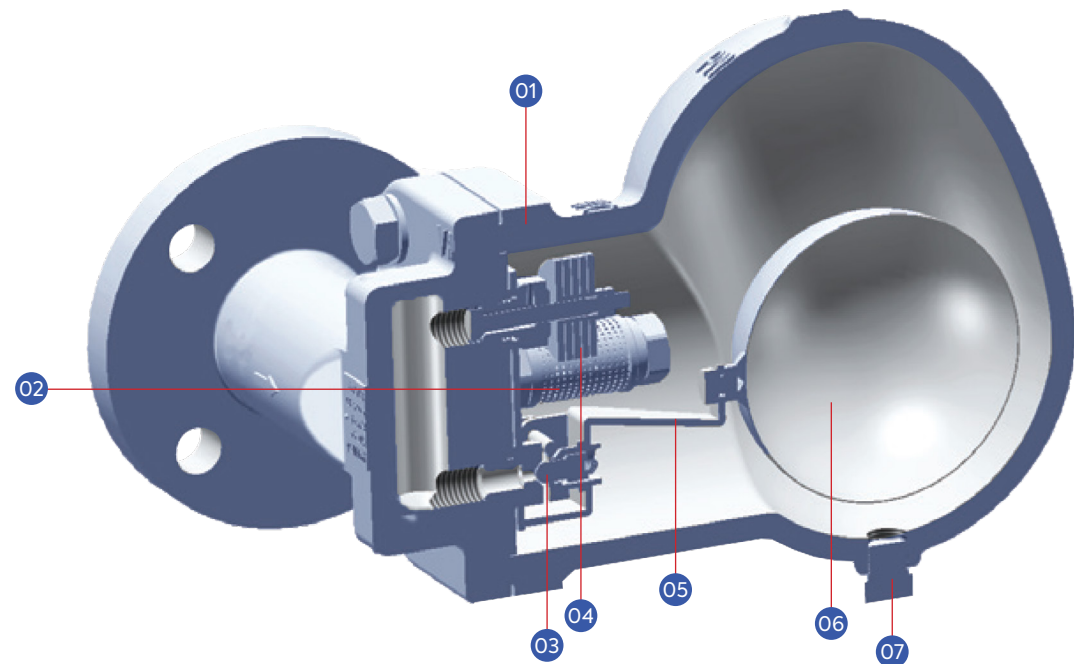
STEAM TRAPS



BALL FLOAT STEAM TRAP

Ball float steam traps are known for their high discharge capacity, long service life, excellent energy efficiency, resistance to water hammer, and sleek design. They are commonly used in process heat tracing, jacketed heating kettles, reboilers, and various other equipment.

ValveWerkz steam traps stand out for their unique and well-engineered internal structure, delivering high precision and reliable performance.



- 1. High-Strength Corrosion Resistance**
Constructed with WCB material, the design fully accounts for corrosion allowance, shell wall thickness, and pressure and temperature ratings.
- 2. Integrated Filtering Device**
Effectively blocks pipeline impurities from entering the valve, ensuring reliable trap operation.
- 3. Precision Closing System**
Micron-level valve seat and core deliver high sealing reliability, preventing steam leakage.
- 4. Optimised Exhaust Valve**
The air exhaust valve prevents blockage from non-condensable gases (e.g. air) during startup or normal operation.
- 5. Engineered Float Assembly**
Precisely calculated floating ball design enables consistent closure under water seal conditions without steam loss.
- 6. Stainless Steel Float**
The laser-welded stainless steel float offers exceptional durability and a long service life.
- 7. Dedicated Sewage Outlet**
Reserved outlet design allows for effective discharge of accumulated residue.

Structural Features

ValveWerkz incorporates a flexible closing system into its ball float steam trap, addressing common issues such as short service life and poor sealing. The design thoughtfully considers key factors including:

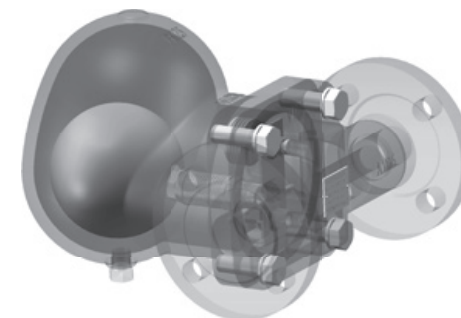
- Shell strength
- Pressure and temperature ratings
- Casting processability
- Fluid flow paths
- Water and steam mixing ibarct
- Auxiliary water seal closure
- Gasket performance in low-temperature environments

The ball float steam trap operates based on the density difference between steam and

condensate. When the valve body fills with condensate and non-condensable gases, the air exhaust valve opens to release the gas. As condensate is drained, the float ball rises, lifting the valve core to open the trap. Once drainage is complete, the float lowers and closes the valve.

The primary advantages of the ball float steam trap include:

- High back pressure tolerance (capable of operating with pressure differences as low as 0.01 bar)
- Long service life
- Reliable performance
- Easy maintenance
- Zero steam leakage during normal operation



Material & Performance Specifications

The ball float steam trap is manufactured from ASTM A216 WCB cast steel, with parts of the valve cover made from ASTM A105. The internals are constructed from stainless steel and include a built-in filter.

- Nominal pressure: PN25
- Maximum allowable temperature: 425°C
- Maximum working pressure: 16 Bar
- Maximum working temperature: 400°C
- Connection type: Threaded RC or flange (GB/T 9115.1-2000; HG/T20515-2009; HG/T20592-2009, etc.)

Selection and Installation

The ball float steam trap provides continuous drainage. It operates with a subcooling level of approximately 5°C and supports a back pressure ratio above 95% (back-end pipeline pressure to steam pressure). This makes it ideal for pipelines and Compact equipment where condensate removal and back pressure recovery are required.

When selecting a model, it's recommended to apply:

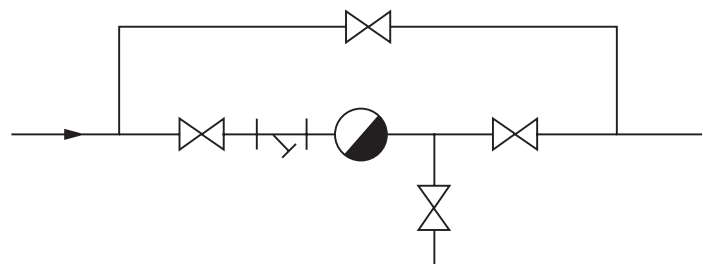
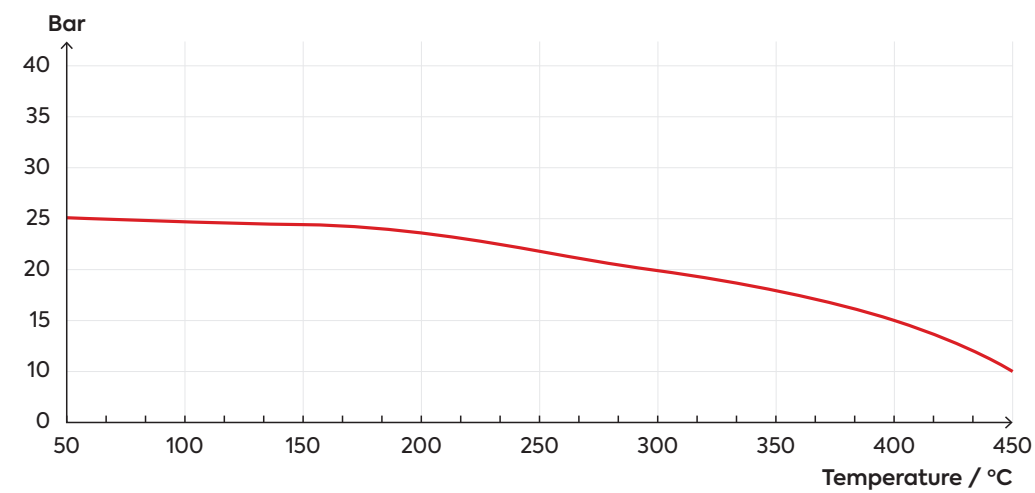
- A safety factor of 2 - 3 times for standard applications
- A safety factor of 5 - 8 times for air separation units and drying cylinders

The volume of condensate and the pressure differential in the steam system are key indicators when choosing the correct trap type. For the same model, displacement increases as pressure difference rises, it is important to refer to the displacement curve for accurate selection.

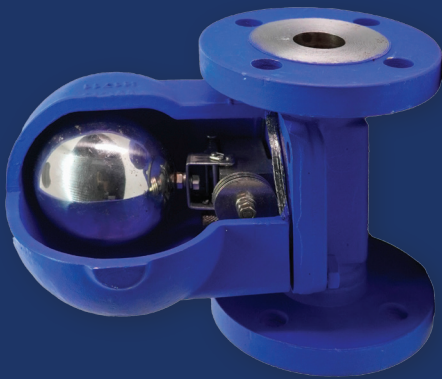
Special Reminder

Do not confuse high displacement with a trap intended for large-diameter piping. Displacement does not equate to physical size.

Valve Body Pressure - Rating Temperature (25 Bar; WCB)



The bimetal steam trap can be installed at any point along the pipeline or within equipment. The diagram above illustrates the standard configuration for proper installation.

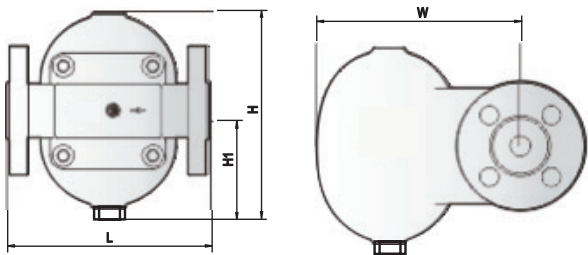
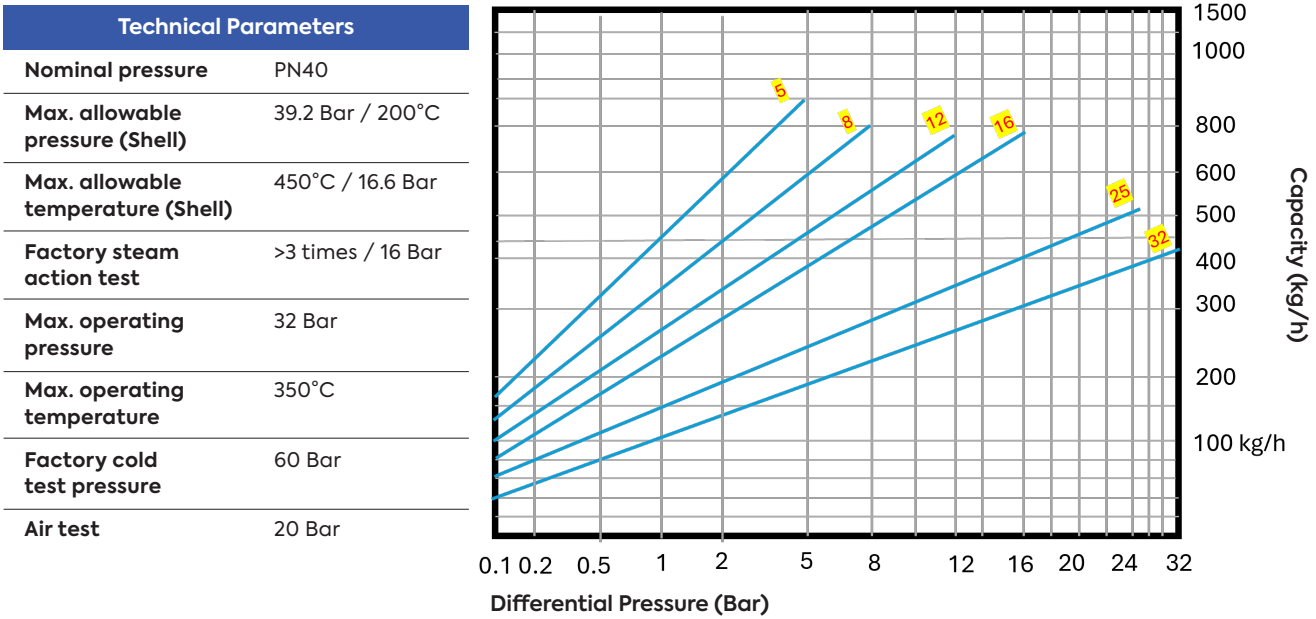


ST60 Series
Ball Float Steam Trap

Carbon Steel
SS304
SS304
Threaded End
Socket Weld End
Flanged End
DN15 (½") to DN80 (3")
Max Discharge = 150 T/hr
PN25 - PN100
Max W.P = 16 - 100 Bar

ST60.1 | Max Capacity = 900 kg/h

Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	WCB / CF8 / CF8M
Seat	420
Disc	440C
Other Internal Parts	304

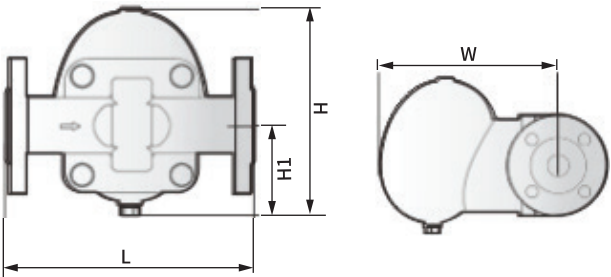
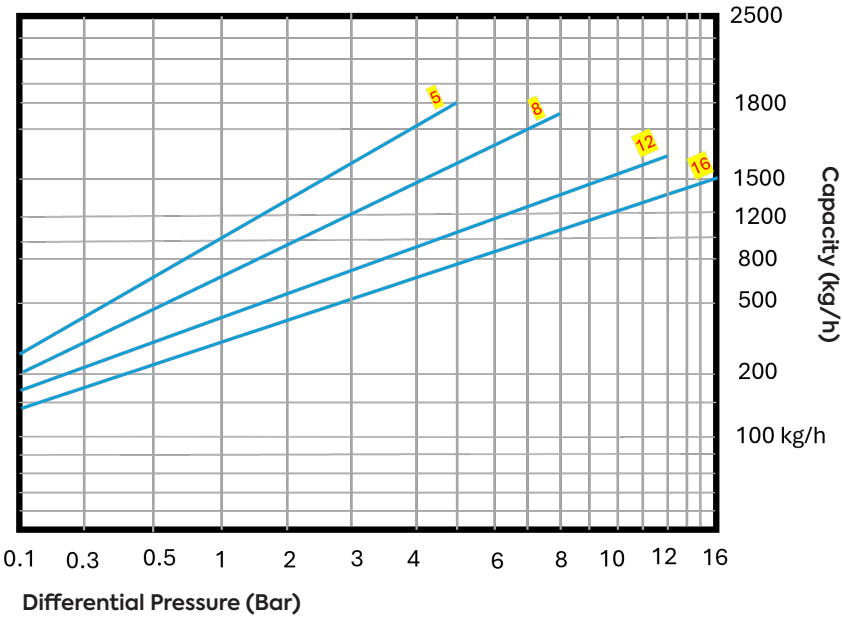
Data Size Table

Connection	Size	L(mm)	H (mm)	H1 (mm)	W (mm)	Weight(kg)
Threaded	DN15 - 20 DN25	120 145	154 154	82 82	155 155	5.0 5.7
Butt Weld / Socket Weld	DN15 - 20 DN25	120 145	154 154	82 82	155 155	5.0 5.7
Flanged	DN15 - 20 DN25	150 160	154 154	82 82	155 155	7.0 8.1

ST60.2 | Max Capacity = 1800 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN25	Max. operating pressure	16 Bar
Max. allowable pressure (Shell)	24.5 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar	Factory cold test pressure	38 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar

Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	WCB / CF8 / CF8M
Seat	420
Disc	440C
Other Internal Parts	304

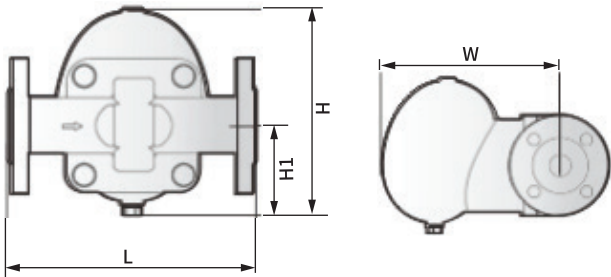
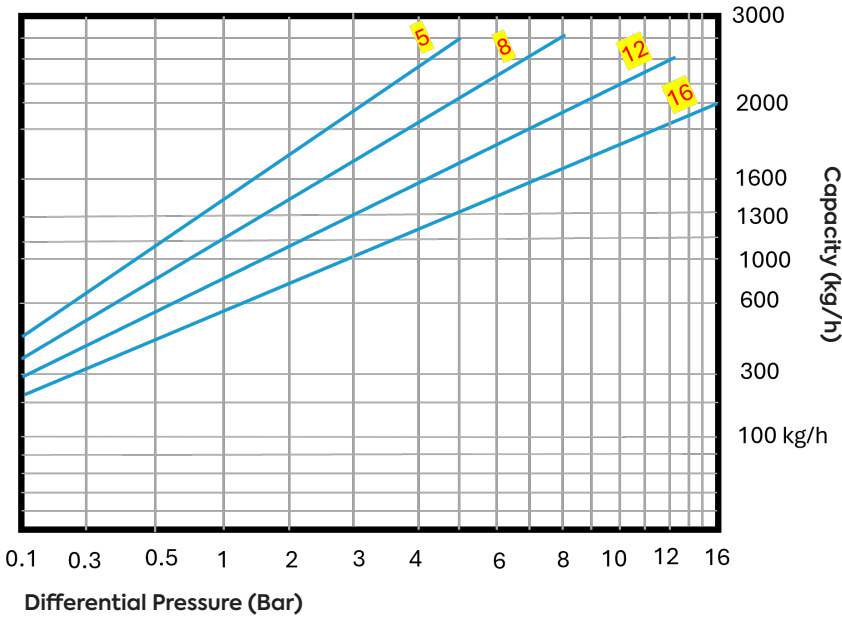
Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15- 25	150	180	75	183	8.5
Butt Weld / Socket Weld	DN15 - 25	150	180	75	183	8.5
Flanged	DN15 - 25	210	180	75	183	11

ST60.3 | Max Capacity = 2750 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN25	Max. operating pressure	16 Bar
Max. allowable pressure (Shell)	24.5 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar	Factory cold test pressure	38 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar

Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	WCB / CF8 / CF8M
Seat	420
Disc	440C
Other Internal Parts	304

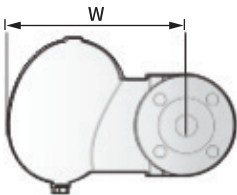
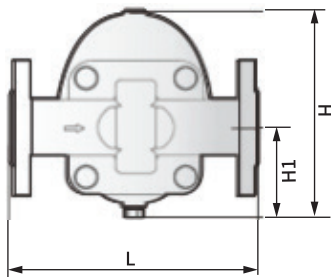
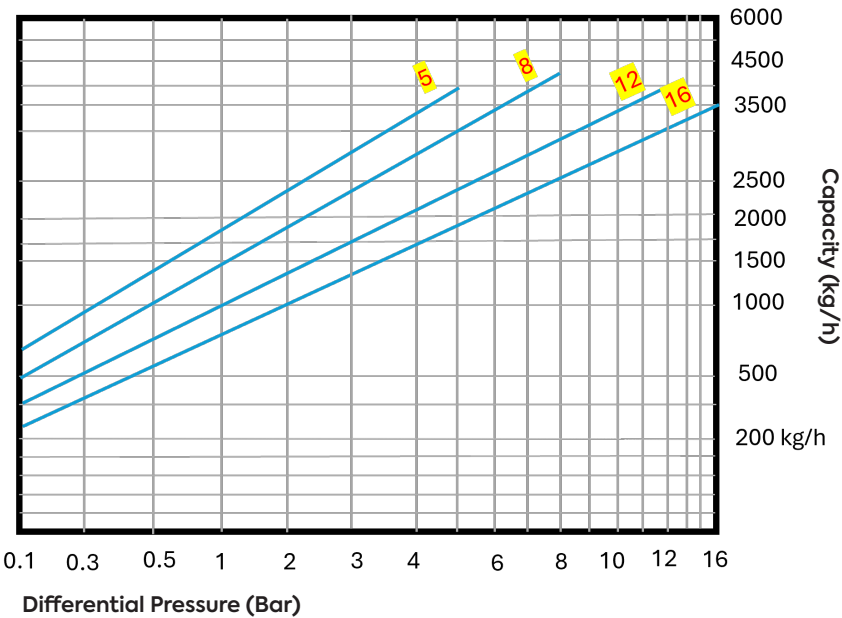
Data Size Table

Connection	Size	L (mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN25 - 32	170	210	90	235	12
Butt Weld / Socket Weld	DN25 - 32	170	210	90	235	12
Flanged	DN25 - 50	230	210	90	235	16.5

ST60.4 | Max Capacity = 4200 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN25	Max. operating pressure	16 Bar
Max. allowable pressure (Shell)	24.5 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar	Factory cold test pressure	38 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar

Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	WCB / CF8 / CF8M
Seat	420
Disc	440C
Other Internal Parts	304

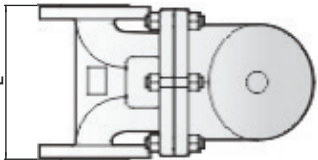
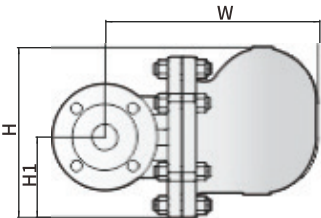
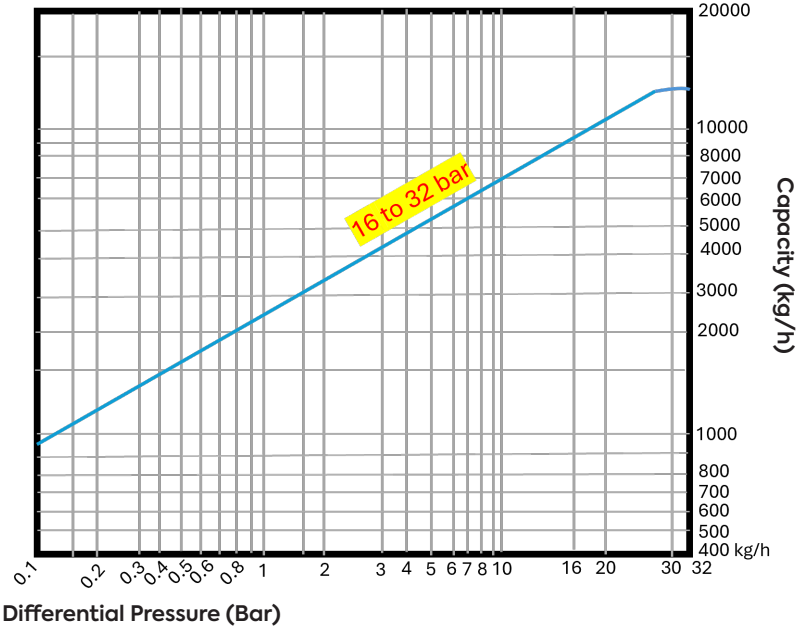
Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN25 - 32	210	260	115	285	20
Butt Weld / Socket Weld	DN25 - 32	210	260	115	285	20
Flanged	DN25 - 50	270	260	115	285	26

ST60.5 | Max Capacity = 12500 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN40	Max. operating pressure	32 Bar
Max. allowable pressure (Shell)	39.2 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 16.6 Bar	Factory cold test pressure	60 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar

Displacement Curve



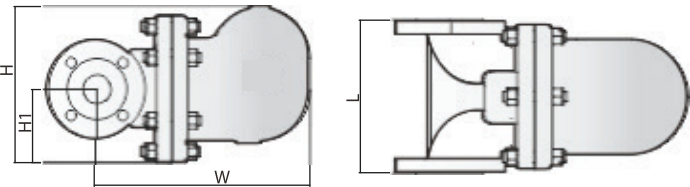
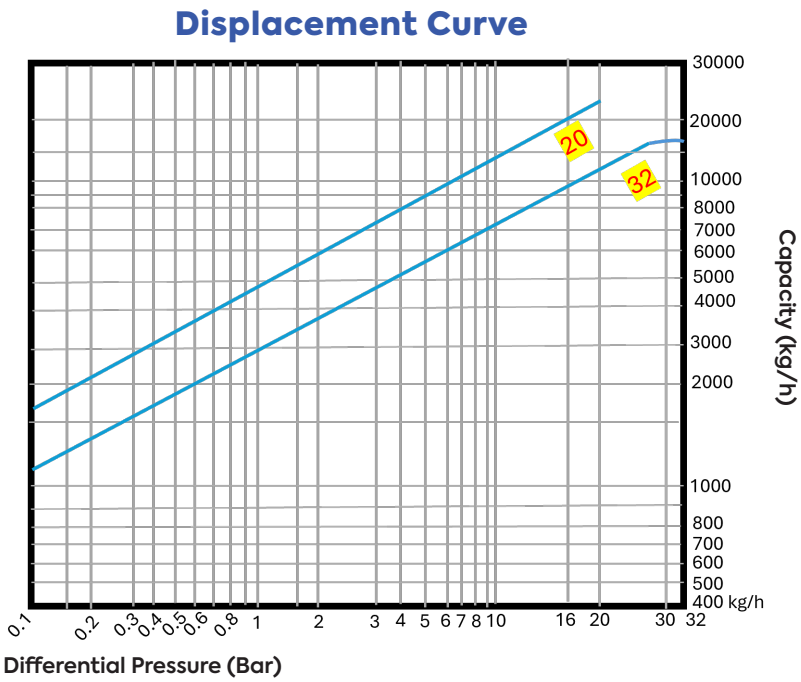
Part Name	Material
Bonnet	WCB
Body	WCB
Seat	420
Disc	420
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Flanged	DN32	230	265	122	340	27
	DN40	230	265	122	340	27.5

ST60.6 | Max Capacity = 23000 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN40	Max. operating pressure	32 Bar
Max. allowable pressure (Shell)	39.2 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 16.6 Bar	Factory cold test pressure	60 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar



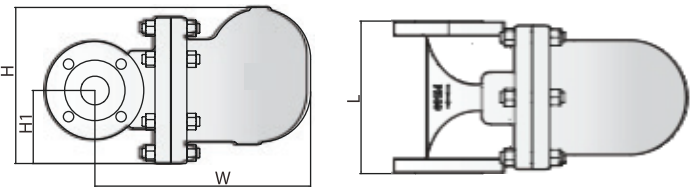
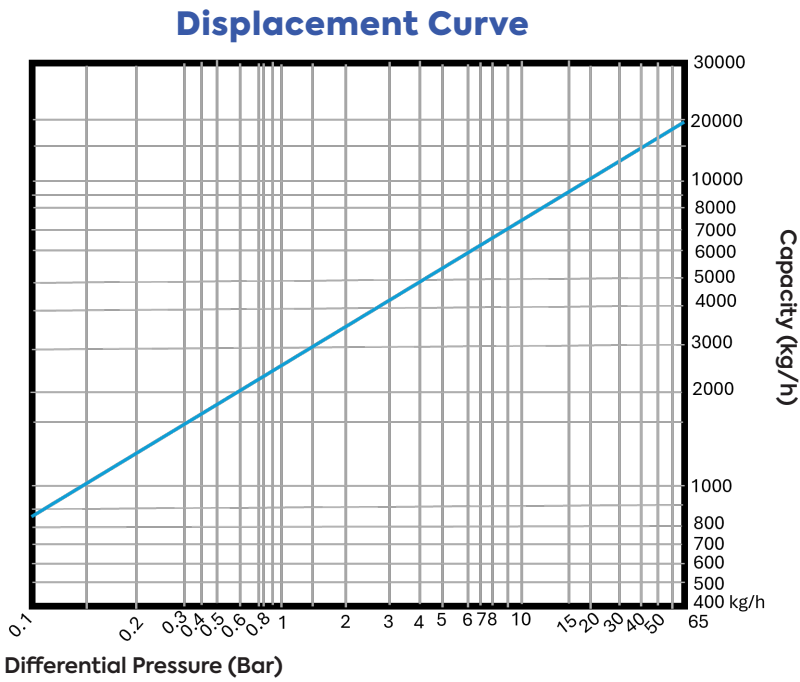
Part Name	Material
Bonnet	WCB
Body	WCB
Seat	420
Disc	420
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Flanged	DN32	230	266	125	360	31
	DN40	230	266	125	360	32
	DN50	230	266	125	360	33

ST60.7 | Max Capacity = 20000 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN100	Max. operating pressure	60 Bar
Max. allowable pressure (Shell)	98 Bar / 200°C	Max. operating temperature	425°C
Max. allowable temperature (Shell)	450°C / 72.9 Bar	Factory cold test pressure	150 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar



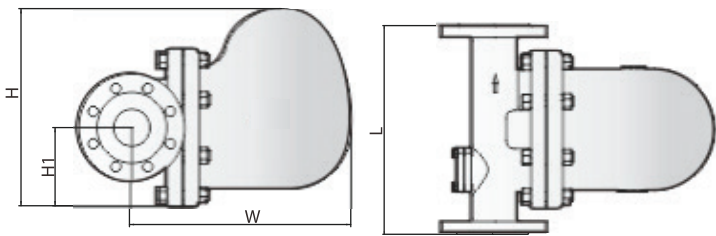
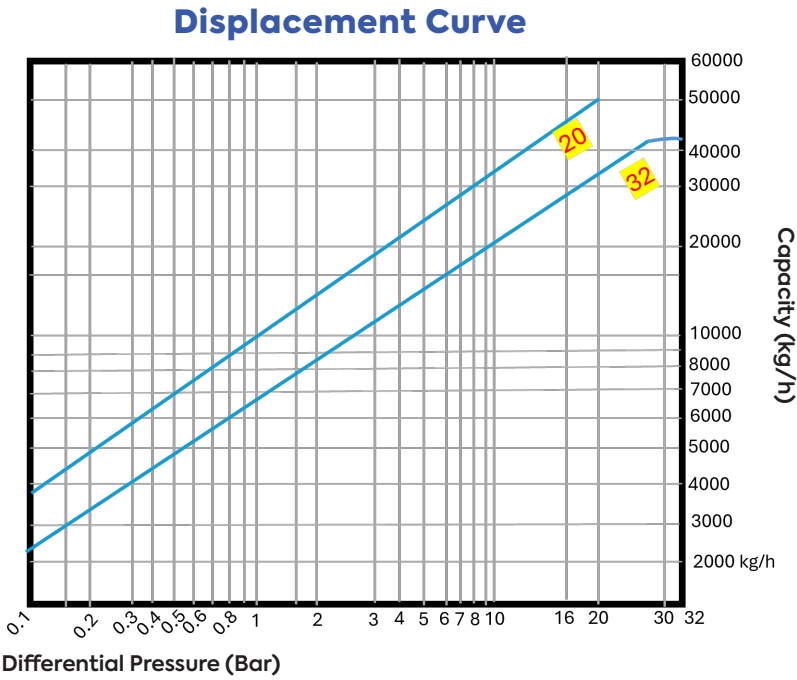
Part Name	Material
Bonnet	WC6
Body	WC6
Seat	420
Disc	420
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Flanged	DN50	330	267	114	378	41
	DN65	350	267	114	378	42
	DN80	350	267	114	378	45

ST60.8 | Max Capacity = 50000 kg/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN40	Max. operating pressure	32 Bar
Max. allowable pressure (Shell)	39.2 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 16.6 Bar	Factory cold test pressure	60 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar



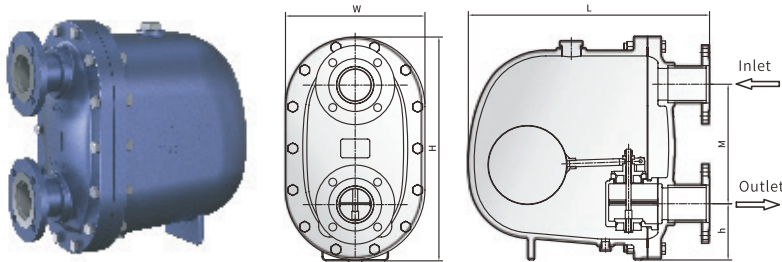
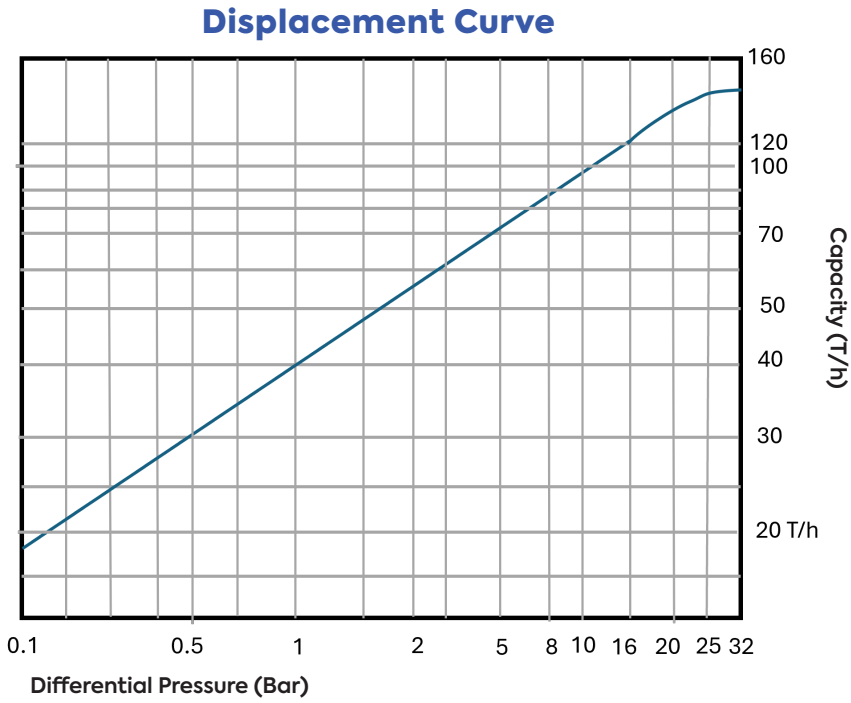
Part Name	Material
Bonnet	WCB
Body	WCB
Seat	420
Disc	420
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Flanged	DN50	380	345	135	385	53
	DN65	380	345	135	385	54
	DN80	380	345	135	385	56

ST60.9 | Max Capacity = 140 T/h

Technical Parameters		Technical Parameters	
Nominal pressure	PN40	Max. operating pressure	32 Bar
Max. allowable pressure (Shell)	39.2 Bar / 200°C	Max. operating temperature	350°C
Max. allowable temperature (Shell)	450°C / 16.6 Bar	Factory cold test pressure	60 Bar
Factory steam action test	>3 times / 16 Bar	Air test	20 Bar



Part Name	Material
Bonnet	WCB
Body	WCB
Seat	420
Disc	420
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	W(mm)	h(mm)	M(mm)	Weight(kg)
Flanged	DN80	570	538	335	135	287	138
	DN100	590	538	335	135	287	145
	DN150	630	538	335	135	287	150

REQUEST FOR QUOTE



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Define the specification/
valve code



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STEP 4

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STEP 5

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*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
Ball Float Steam Trap

01

Body Material

Code	Material
C1	WCB
S1	SS304
S2	SS316

02

Internal Parts

Code	Material
A	SS304

03

Rating

04

Size

05

Connection

06

Orifice

Your Valve Ordering Code:

ST60

01

02

03

04

05

06

Example:

ST60 Series - C1AAAB1.
WCB Body Material. SS304 Internal Parts. Pressure Rating of PN 16, 1/2 inch size. Connection Type of BSPT – Tapped. Orifice 5 BAR.

*For special material or customisation, please refer to our sales engineer.



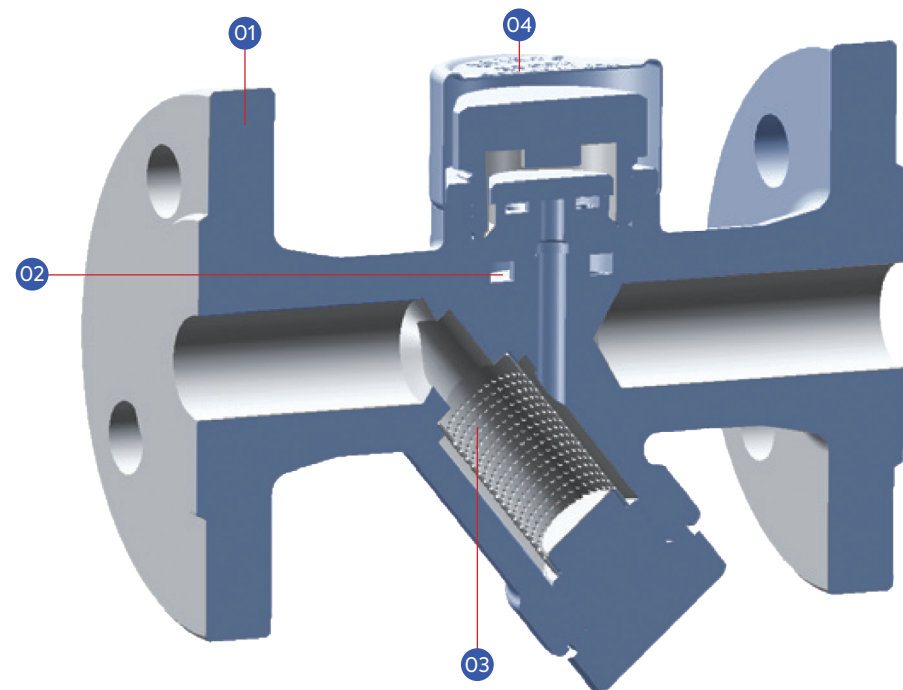
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ORDERING FORM

Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

THERMODYNAMIC STEAM TRAP

Thermodynamic steam traps are commonly used in low, medium, and high-pressure steam delivery systems, process heat tracing, and small displacement equipment. They are valued for their Compact size, high discharge capacity, energy efficiency, long service life, and excellent resistance to low temperatures.

The technical strengths of ValveWerkz thermodynamic traps lie in their well-engineered construction and precision internal components.



- 1. High-Strength Corrosion Resistance**
Manufactured using A105 or 15CrMo materials, with careful consideration given to corrosion allowance, shell wall thickness, and temperature rating in the design process.
- 2. Precision Valve Seat and Disc**
The valve seat and disc are made from martensitic stainless steel. Specialised heat treatment enables effective condensate removal and minimises flash steam, tailored to various operating conditions.
- 3. Integrated Filtering Device**
Prevents pipeline impurities from entering the valve, ensuring consistent and reliable trap performance.
- 4. Stainless Steel Insulation Cover**
The stainless steel cover protects the internal chamber from outdoor environmental conditions, reducing the risk of malfunctions or mechanical instability due to external factors.

Structural Features

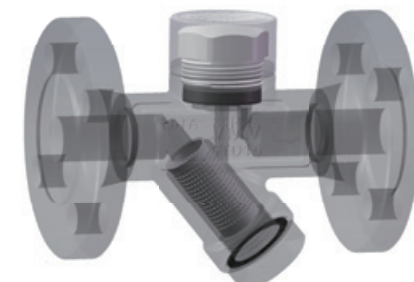
ValveWerkz thermodynamic steam trap use A105 material for low-pressure valve bodies, while 15CrMo is used for medium-pressure variants.

Based on Bernoulli's equation, and following extensive testing and calculation, each trap is optimised to support either low-temperature or saturated condensate discharge:

- The low-temperature type discharges condensate at lower temperatures (with greater subcooling). It operates with minimal noise but has limited air discharge capacity.
- The saturated type discharges condensate close to saturation temperature (with minimal subcooling). It offers better air discharge capability but operates with higher noise levels.

Thermodynamic steam traps function by responding to the flow rate difference between steam and condensate. When condensate passes through the valve seat, the low flow rate causes the valve plate to open and discharge the water. As steam enters, the high flow rate forces the valve seat to close.

The low-temperature type uses flash steam to assist in valve closure. ValveWerkz addresses the common drawbacks of conventional thermal traps, such as energy inefficiency, noise, and steam leakage, by offering a Compact, low-noise solution with long service life, reliable operation, and minimal maintenance requirements. The design ensures no original steam leakage, particularly in the low-temperature model.



Material and Performance Specifications

The body and bonnet of the thermodynamic steam trap are made from ASTM A105 (15CrMo), with internal components made of stainless steel and an integrated filter.

- Nominal pressure: PN25 / PN63
- Maximum allowable temperature: 425°C
- Maximum working pressure: 16 to 42 Bar
- Maximum working temperature: 400 to 425°C
- Connection options: Threaded RC or flange (GB/T9115.1-2000; HG/T20515-2009; HG/T20592-2009, etc.)

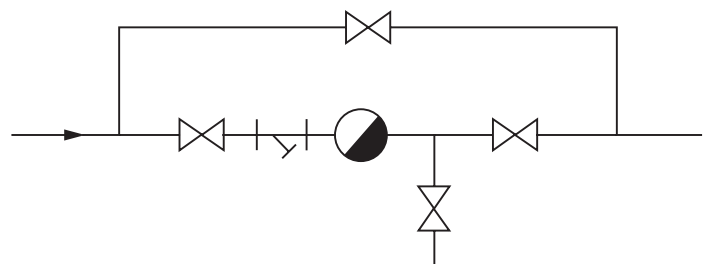
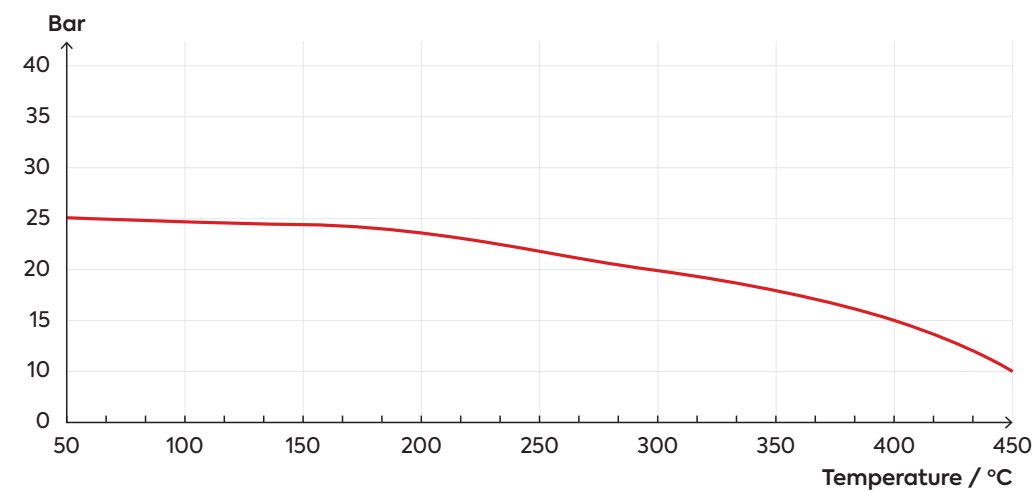
Selection and Installation

Thermodynamic steam traps are intermittent drainage. Normally, orifice of 16 bar have a subcooling degree of 5-10°C, and orifice of 42 bar has a subcooling degree of 20-50°C. If there is a requirement for subcooling, indicate when ordering. The back pressure rate of thermodynamic traps can reach $\geq 80\%$ (back-end pipeline pressure/steam pressure), which is suitable for pipelines and small equipment to remove condensate. In general, the safety factor is 2-3 times.

Warm reminder: The condensed water volume and pressure difference of steam equipment are important indicators for type selection.

Note
The volume of condensate and the pressure differential in your steam system are key factors when selecting the appropriate trap type.

Valve Body Pressure - Rating Temperature (25 Bar; WCB)



The displacement capacity of a steam trap increases with rising pressure difference. Please refer to the displacement curve for accurate sizing. Do not confuse this with a large-diameter trap, which may have a different displacement profile.



ST61 Series
Thermodynamic Steam Trap

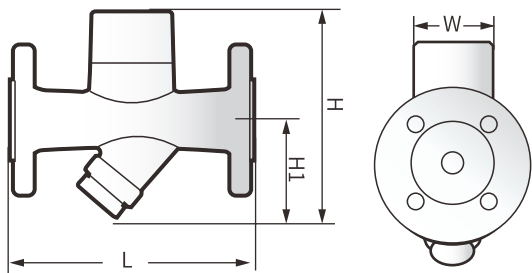
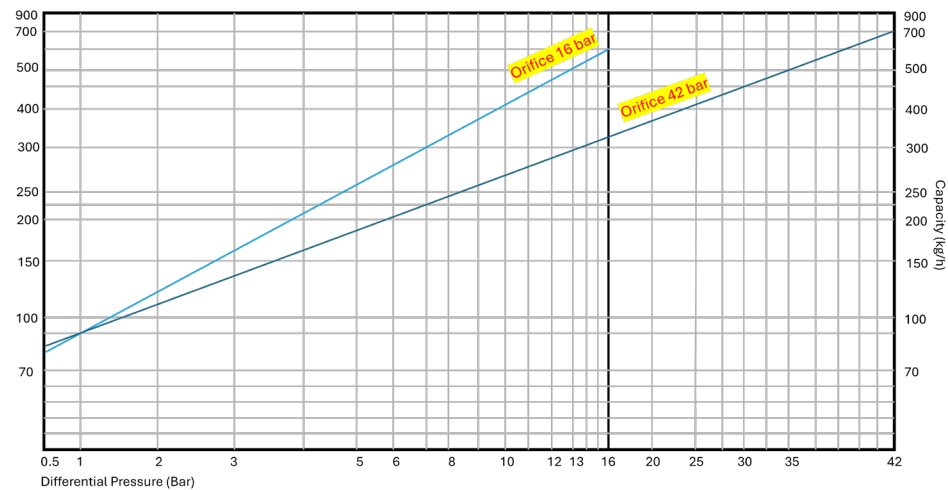
- Carbon Steel
- SS304
- SS304
- Threaded End
- Socket Weld End
- Flanged End
- DN15 (½") to DN25 (1")
- Max Discharge = 800 kg/hr
- PN25 - PN63
- Max W.P = 16 Bar, 42 Bar

ST61

Nominal pressure	PN25	PN63
Max. allowable pressure (Shell)	24.5 Bar / 200°C	62.7 Bar / 200°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar	450°C / 26.7 Bar
Factory steam action test	>3 times / 16 Bar	>3 times / 16 Bar

Nominal pressure	PN25	PN63
Max. operating pressure	16 Bar	42 Bar
Max. operating temperature	350°C	350°C
Factory cold test pressure	38 Bar	95 Bar
Air test	20 Bar	20 Bar

Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	A105 / F304 / F316
Seat	440C
Disc	440C
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15 - 25	90	120	68	48	1/1.5
Butt Weld / Socket Weld	DN15 - 25	90	120	68	48	1/1.5
Flanged	DN15 - 25	150	120	68	48	2.5 - 3

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/ valve code



STEP 3

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STEP 4

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STEP 5

Prepare for confirmation and delivery

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Valve Coding Sheet
Thermodynamic Steam Trap

01

Body Material

Code	Material
C1	WCB
S1	SS304
S2	SS316

02

Internal Parts

Code	Material
A	SS304

03

Rating

04

Size

05

Connection

06

Orifice

Your Valve Ordering Code:

ST61

01

02

03

04

05

06

Example:

ST61 - C1AAAB1.
WCB Body Material. SS304 Internal Parts. Pressure Rating of PN25, ½ inch size. Connection Type of BSPT – Tapped. Orifice 16 BAR.

*For special material or customisation, please refer to our sales engineer.

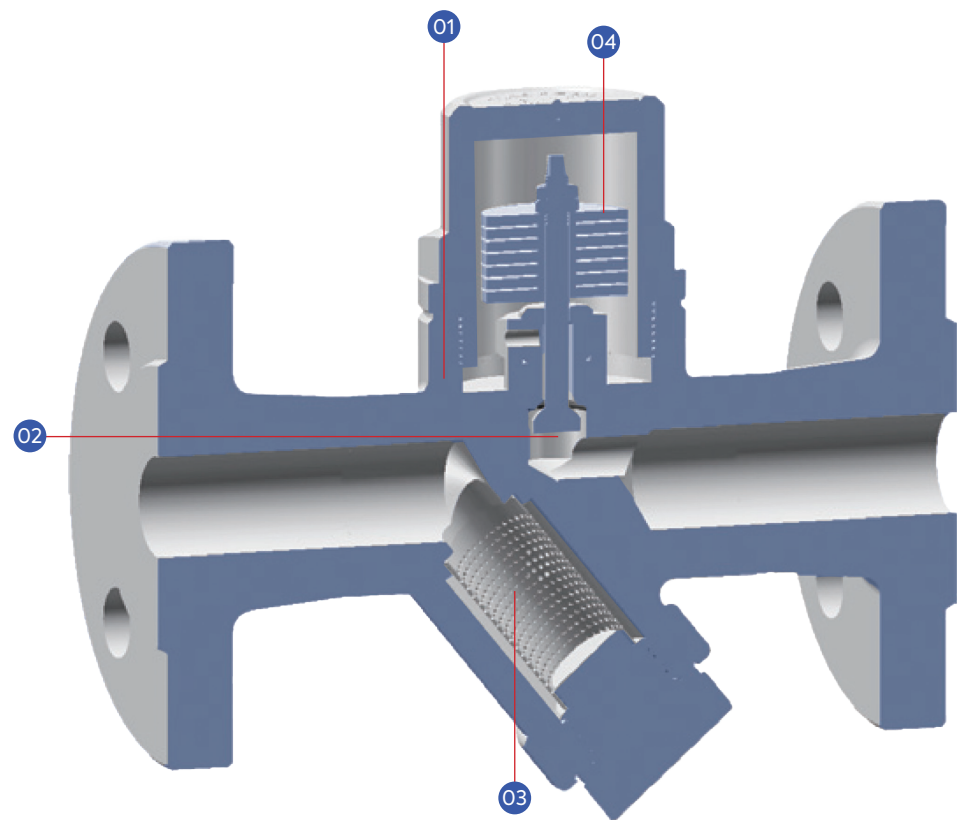


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Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

BIMETALLIC STEAM TRAP

Bimetallic steam traps offer high subcooling capability, long service life, excellent energy efficiency, strong resistance to water hammer, and a clean, Compact design. They are commonly used in heating systems and steam transportation pipelines.



- 1. High-Strength Corrosion Resistance**
Constructed with A105 material, the design takes into account corrosion allowance, shell wall thickness, pressure, and temperature ratings for long-term durability.
- 2. Linear Sealing Closure System**
The trap features a unique linear sealing mechanism with a micron-level precision valve seat and core, ensuring reliable closure and effective steam sealing.
- 3. Built-in Filtering Device**
Prevents pipeline impurities from entering the valve, supports consistent operation, and protects internal components from water hammer damage.
- 4. Imported Bimetal**
Uses high-quality bimetallic sheets imported from the U.S. to ensure accurate bending performance, adjustable temperature control, and precise thermal response.

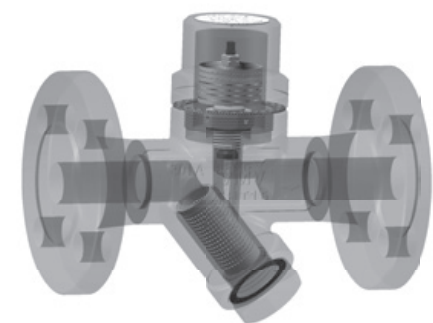
Structural Features

The body and bonnet of the ValveWerkz bimetallic steam trap are made from A105 material. The condensate discharge temperature is adjustable and is factory-set between 120°C and 130°C.

This steam trap uses a line-sealed shut-off system that eliminates original steam leakage and noise. It offers excellent air discharge capability, maximises the sensible heat of condensate water, and provides strong energy-saving performance.

The bimetallic steam trap operates based on the temperature difference between steam and condensate. When condensate remains in the pipeline due to high temperature, the energy to be released gradually lowers. As the temperature drops, the bimetal deforms, causing the valve seat to open and discharge the condensate.

Users can manually adjust the discharge temperature of the trap to suit seasonal conditions and operational requirements.



Material and Performance Specifications

The body and bonnet of the bimetallic steam trap are made from ASTM A105. The bimetal element is manufactured from imported materials, and all internal components are made of stainless steel with an integrated filtering device

- Nominal pressure: PN25 / PN40
- Maximum allowable temperature: 400°C
- Maximum working pressure: 16 to 23 Bar
- Maximum working temperature: 375 to 400°C
- Connection options: Threaded RC or flange (GJB7/1915.1–2000; HG/T20615–2009; HG/T20592–2009, etc.)

Selection and Installation

Thermodynamic steam traps operate with intermittent drainage. The orifice of 16 bar typically features a subcooling range of 5–10°C, while the orifice of 42 bar supports a wider range of 20–50°C. If subcooling is required for your application, please specify this during the ordering process.

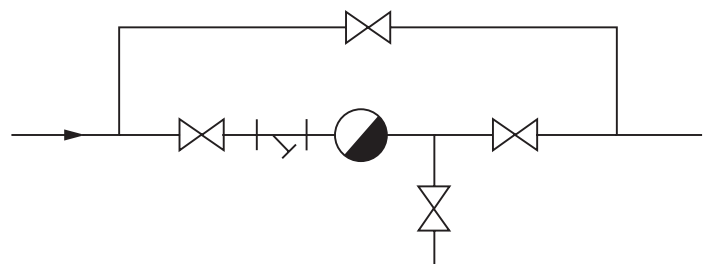
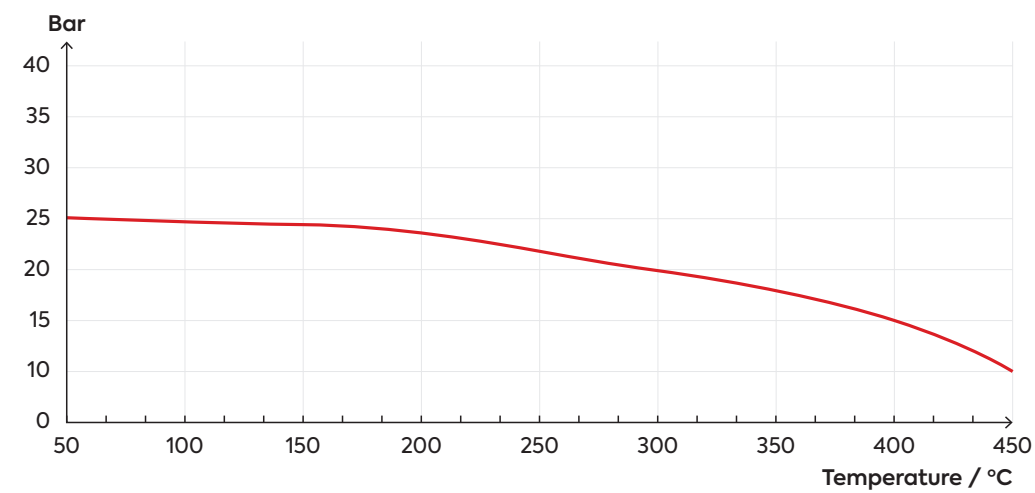
These traps can achieve a back pressure ratio of 80% or more (ratio of back-end pipeline pressure to steam pressure), making them well-suited for pipelines and Compact equipment where condensate removal is essential.

As a general guideline, a safety factor of 2 to 3 times is recommended when selecting trap models.

Note

The volume of condensate and the pressure differential in your steam system are key factors when selecting the appropriate trap type.

Valve Body Pressure - Rating Temperature (25 Bar; WCB)



The displacement capacity of a steam trap increases as the pressure difference rises. Please refer to the displacement curve for accurate selection. Do not confuse this with a large-diameter trap, which may not offer the same displacement characteristics.



ST62 Series
Bimetallic Steam Trap

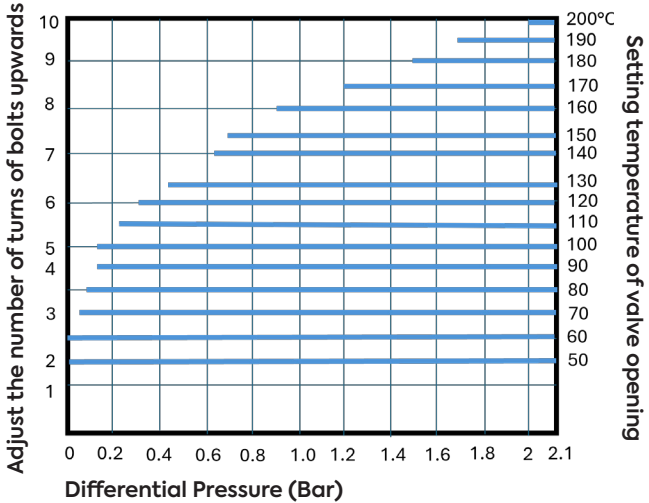
- Carbon Steel
- SS304
- SS304
- Threaded End
- Socket Weld End
- Flanged End
- DN15 (½") to DN25 (1")
- Max Discharge = 800 kg/hr
- PN25 - PN40
- Max W.P = 21 - 32 Bar

ST62.1 |
Max Capacity
= 800 kg/h

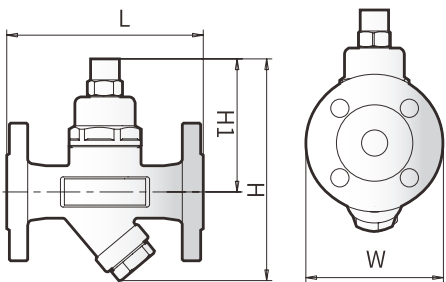
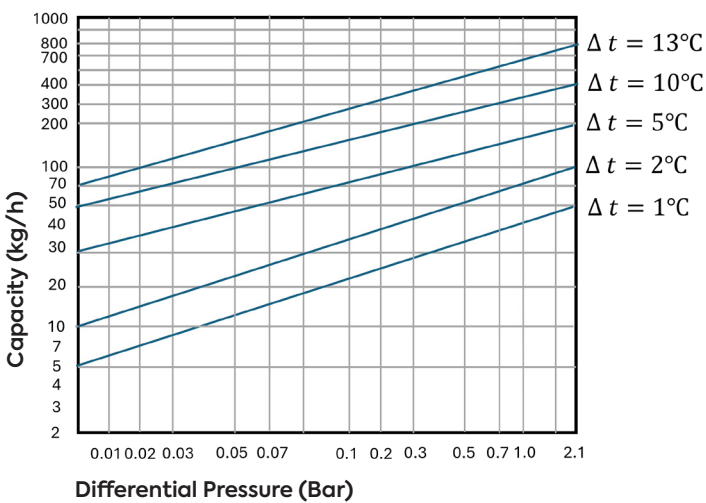
Technical Parameters	
Nominal pressure	PN25
Max. allowable pressure (Shell)	24.5 Bar / 200°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar
Factory steam action test	>3 times / 16 Bar

Technical Parameters	
Max. operating pressure	16 Bar
Max. operating temperature	350°C
Factory cold test pressure	38 Bar
Air test	20 Bar

Temperature Adjustment Table



Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	A105 / F304 / F316
Seat	420
Disc	440C + 304
Other Internal Parts	304

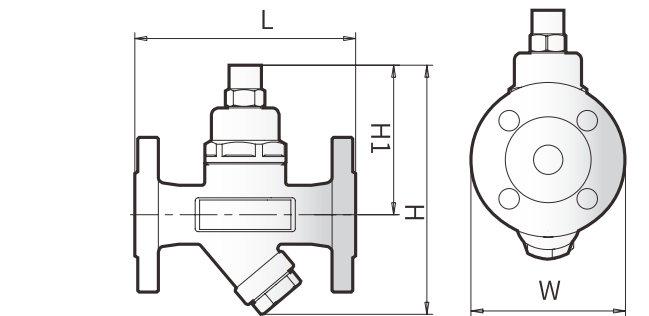
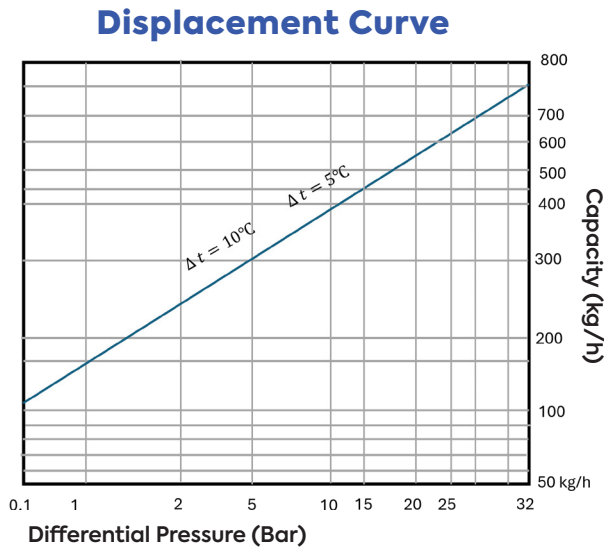
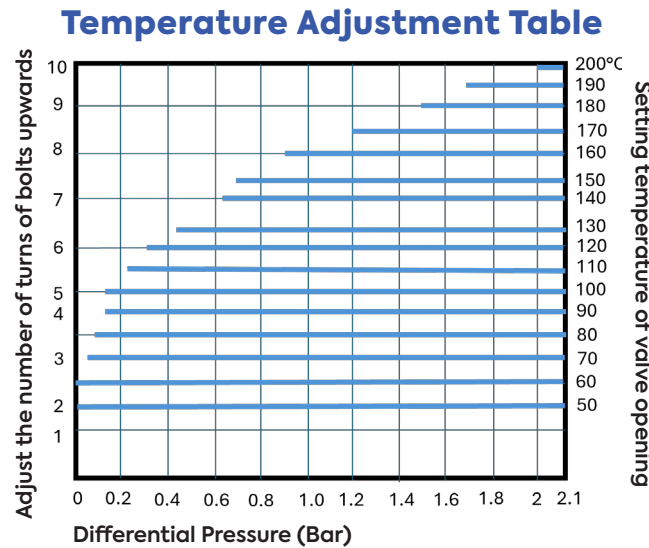
Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15 - 25	90	168	100	55	1.8
Butt Weld / Socket Weld	DN15 - 25	90	168	100	55	1.8
Flanged	DN15 - 25	150	168	100	115	4

ST62.2 | Max Capacity = 750 kg/h

Technical Parameters	
Nominal pressure	PN40
Max. allowable pressure (Shell)	48 Bar / 300°C
Max. allowable temperature (Shell)	427°C / 32 Bar
Factory steam action test	>3 times / 16 Bar

Technical Parameters	
Max. operating pressure	32 Bar
Max. operating temperature	350°C
Factory cold test pressure	95 Bar
Air test	20 Bar



Part Name	Material
Bonnet	A105 / F304 / F316
Body	A105 / F304 / F316
Seat	420
Disc	440C + 304
Other Internal Part	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15 - 25	90	168	100	55	1.8
Butt Weld / Socket Weld	DN15 - 25	90	168	100	55	1.8
Flanged	DN15 - 25	150	168	100	115	4

REQUEST FOR QUOTE

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Valve Coding Sheet
Bimetallic Steam Trap

01

02
A

03

04

05

06

Body Material

Code	Material
C1	WCB
S1	SS304
S2	SS316

Internal Parts

Code	Material
A	SS304

Rating

Code	Rating
A	PN25
B	PN40

Size

Code	Size
A	½"
B	¾"
C	1"

Connection

Code	Material
B	BSPT - Tapped
N	NPT
F	Flanged End
S	Socket Weld

Δ T

Code	Type
1	1°C
2	2°C
3	5°C
5	10°C
6	13°C

Your Valve Ordering Code:

ST62 — 01 02 03 04 05 06

A

Example:

ST62 - C1AAAB1.
WCB Body Material. SS304 Internal Parts. Pressure Rating of PN25, ½ inch size.
Connection Type of BSPT - Tapped. Δ T 1°C.

*For special material or customisation, please refer to our sales engineer.



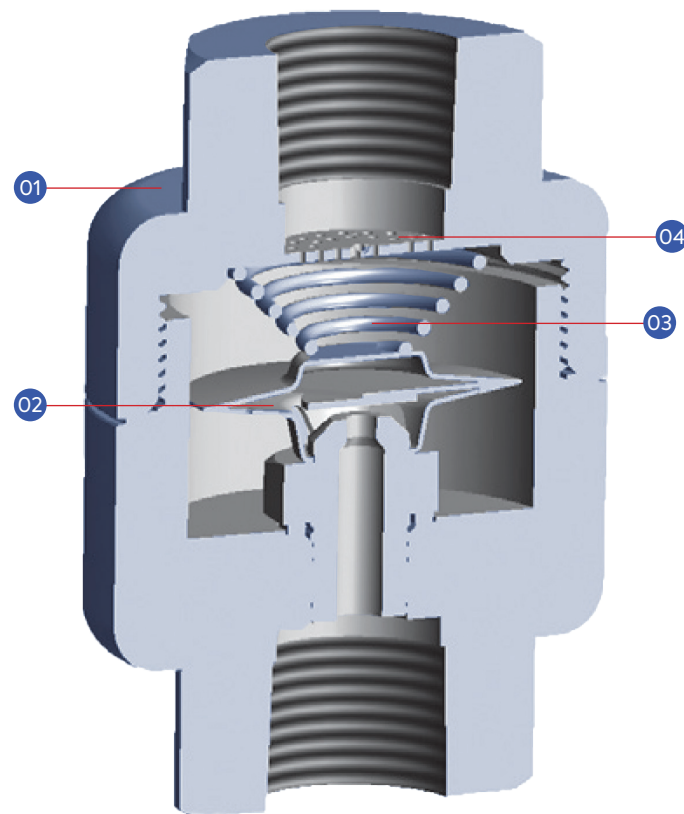
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Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

THERMOSTATIC (CAPSULE) STEAM TRAP

Thermostatic (Capsule) steam traps are commonly used in heat tracing pipelines and equipment requiring small displacement and low-temperature operation. Their Compact design, large subcooling capability, strong energy-saving performance, and excellent resistance to low temperatures make them ideal for such applications.

The technical advantages of ValveWerkz traps lie in their precise internal components and well-engineered construction.



- 1. High Strength Corrosion Resistance**
Constructed from SS304 stainless steel, offering excellent corrosion resistance along with a polished, hygienic appearance.
- 2. Large Subcooling Capsule Module**
Designed with a subcooling range of 15°C, the capsule trap effectively removes condensate below the saturation temperature, ensuring high energy efficiency.
- 3. Suitable for Clean Applications**
All internal components are made from 304 stainless steel, making this trap suitable for use in food, pharmaceutical, and other sanitary industries.
- 4. Integrated Filtration Design**
Built-in filtration prevents pipeline impurities from entering the valve, ensuring consistent and reliable operation.

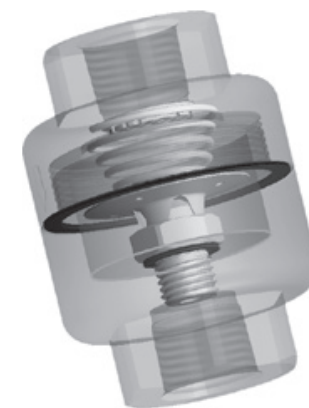
Structural Features

ValveWerkz capsule steam trap uses a valve body and cover made from 304 stainless steel, making it suitable for clean environments such as medical, sanitation, food, and pharmaceutical industries. The trap operates with a condensate discharge temperature range of 15–20°C.

It features a face-sealed closure system that is noiseless, provides excellent air exhaust capability, and maximises the sensible heat of condensate for improved energy efficiency.

The capsule steam trap works based on the temperature difference between steam and condensate. When high pipeline temperatures prevent immediate condensate discharge, the diaphragm inside the trap responds by opening the valve seat as the heat energy decreases, allowing the condensate to be expelled.

Additionally, the capsule steam trap can function as an air exhaust valve.



Material and Performance Specifications

The body of the capsule steam trap is made from 304 stainless steel. The internal components, including the capsule, are also constructed from stainless steel. The inlet is equipped with a built-in filter to ensure clean operation.

- Nominal pressure: PN25
- Maximum allowable temperature: 400°C
- Maximum working pressure: 16 Bar
- Maximum working temperature: 400°C
- Connection options: Threaded RC or flange (GB/T9115.1–2000; HG/T20615–2009; HG/T20592–2009, etc.)

Selection and Installation

The bellows-type capsule steam trap provides continuous drainage. Standard models are factory-set to discharge at a subcooling range of 15–20°C. If a specific subcooling requirement is needed, please indicate this when placing your order.

The back pressure ratio of the bellows trap can reach up to 50% (back-end pipeline pressure to steam pressure). While not suitable for closed recovery systems, it is ideal for pipelines and heating systems used for condensate removal.

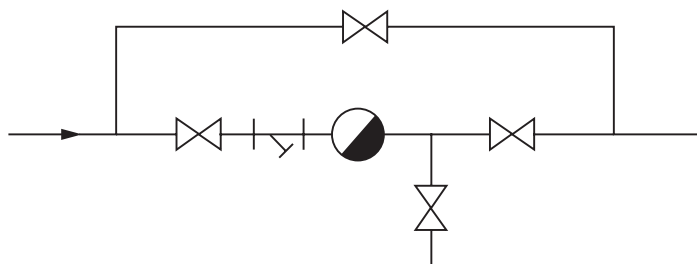
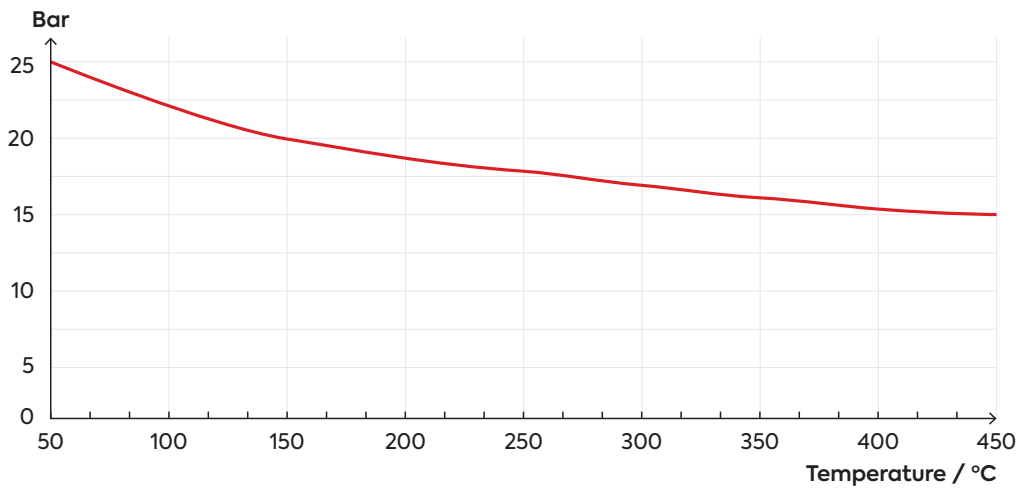
As a general rule, a safety factor of 2 to 3 times is recommended during model selection.

Important

The condensate volume and pressure differential of your steam system are key factors when selecting the appropriate trap. Displacement increases as pressure difference rises. Always refer to the displacement curve for accurate sizing.

Do not confuse high displacement capability with a large-diameter trap.

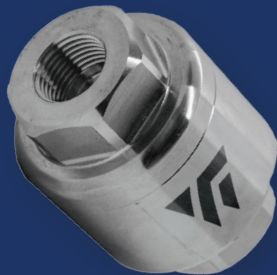
Valve Body Pressure - Rating Temperature (25 Bar; SS 304)



The capsule steam trap can be installed at any position within the pipeline or equipment as required. The diagram above illustrates the standard configuration for correct installation.

ST63 Series

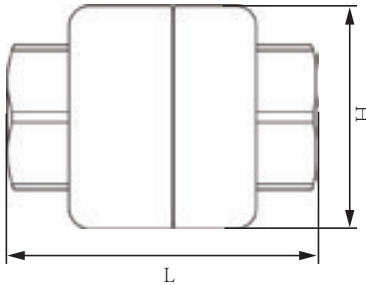
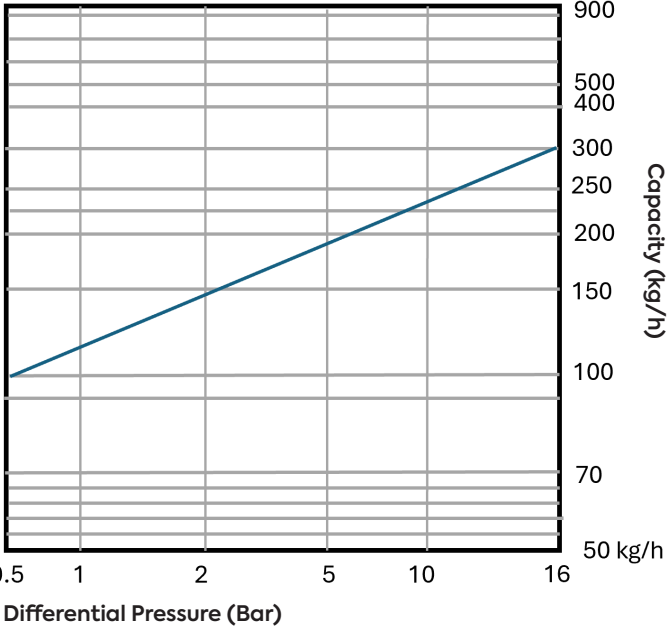
Thermostatic (Capsule) Steam Trap



SS304
SS316
Threaded End
Flanged End
DN15 (½") to DN25 (1")
Max Discharge = 300 kg/hr
PN25
Max W.P = 16 Bar

Displacement Curve

Technical Parameters	
Nominal pressure	PN25
Max. allowable pressure (Shell)	16 Bar / 250°C
Max. allowable temperature (Shell)	350°C / 14.6 Bar
Factory steam action test	>3 times / 16 Bar
Max. operating pressure	16 Bar
Max. operating temperature	204°C
Factory cold test pressure	38 Bar
Air test	6 Bar



Part Name	Material
Bonnet	SS304 / SS316
Body	SS304 / SS316
Seat	420
Valve Core	304
Other Internal Parts	304

Data Size Table

Connection	Size	L(mm)	H(mm)	Weight(kg)
Threaded	DN15 - 20	75	55	1
Butt Weld / Socket Weld	DN25	80	55	1.2
Flanged	DN15 - 25	120	125	3.8

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/ valve code



STEP 3

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STEP 4

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Valve Coding Sheet
Thermostatic (Capsule) Steam Trap

01	02	03	04	05	06
	A				1
Body Material	Internal Parts	Rating	Size	Connection	Orifice
Code Material	Code Material	Code Rating	Code Size	Code Material	Code Type
S1 SS304	A SS316	A PN25	A 1/2"	B BSPT -	1 16 BAR
S2 SS316			B 3/4"	Tappered	
			C 1"	N NPT	
				F Flanged End	

Your Valve Ordering Code:

ST63	01	02	03	04	05	06
		A	A			1

Example:

ST63 - S1AABB1.
SS304 Body Material. SS316 Internal Parts. Pressure Rating of PN25, 1/2 inch size.
Connection Type of BSPT - Tappered. Orifice 16 BAR.

*For special material or customisation, please refer to our sales engineer.



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Website: www.valvewerkz.com

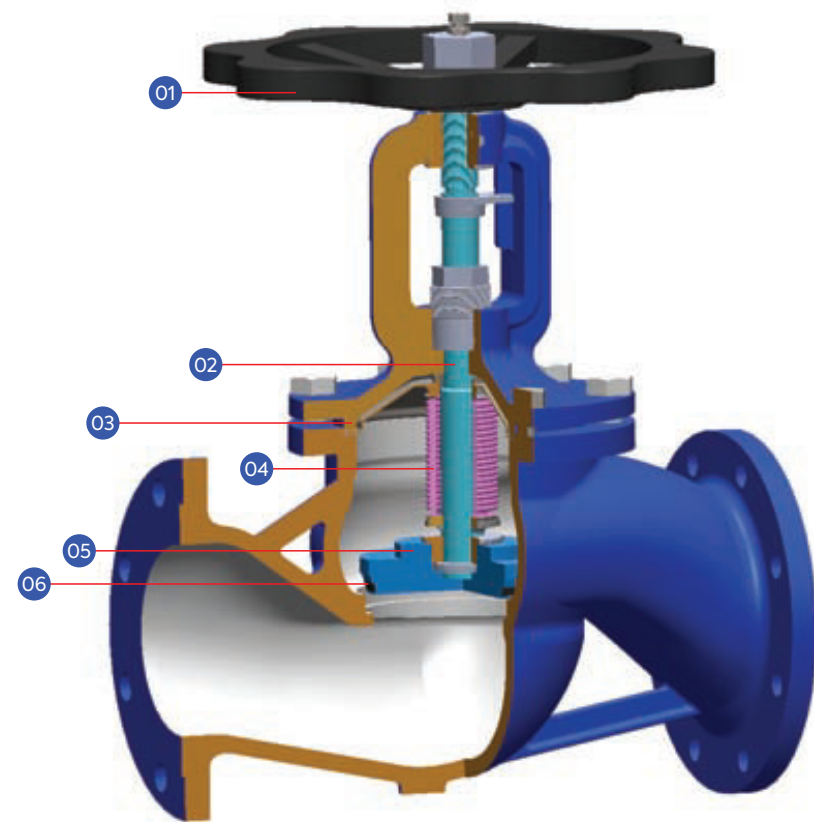
BELLOW SEAL GLOBE VALVES



BELLOW SEAL GLOBE VALVE

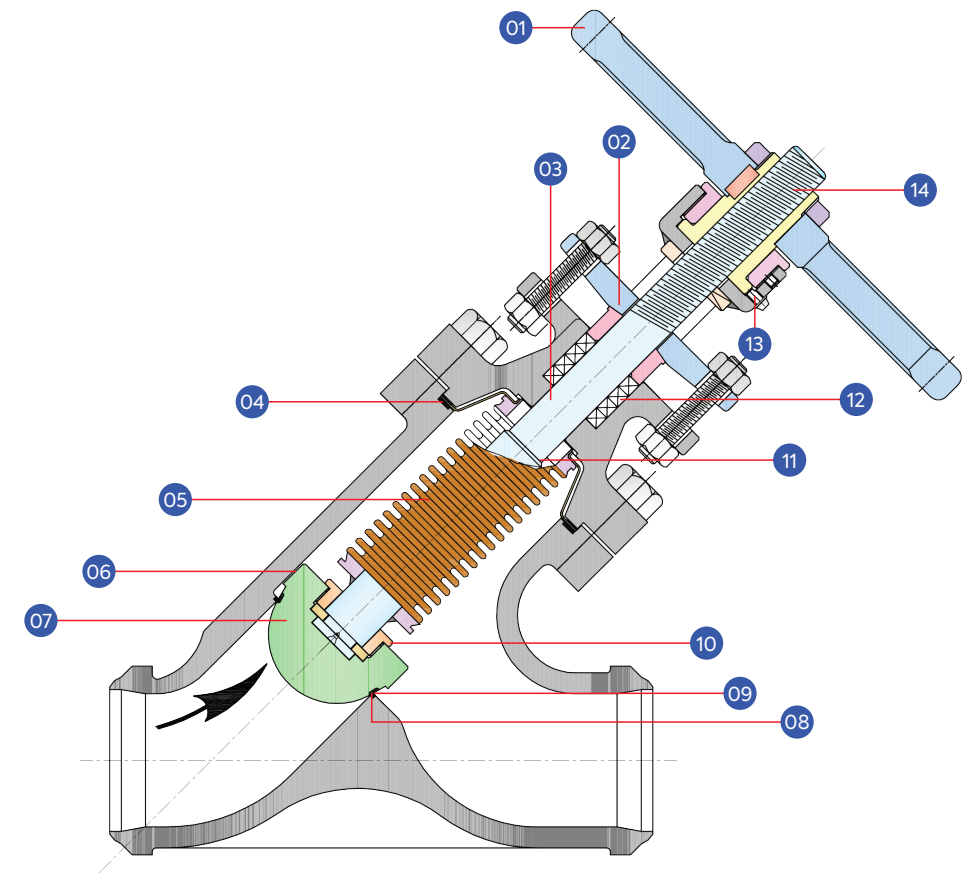
Straight-type bellows seal valves offer reliable zero-leakage sealing, ideal for high-temperature or hazardous media. The Compact, inline design is perfect for vertical or space-limited installations.

Equipped with a welded metal bellows and dual sealing structure, these valves ensure long service life, safety, and precision under demanding conditions.



- 1. Oversized Handwheel**
Oversized handwheel for easy handling and position indicator allows user to know (OPEN / CLOSE) status of the valve.
- 2. Backseat On Stem**
Metal back seat has been provided to arrest leakage to the atmosphere in case of bellow failure.
- 3. Tongue and Groove Body And Bonnet**
Tongue and Groove Body and Bonnet designed to avoid any leak between joints.
- 4. High Quality Multiply Bellow**
Completely welded multiple layer stainless steel bellows are secured against torque and designed to last as per MSS SP-117 cycle life.
- 5. Standard 360° Free Rotation and Conical Plug**
Standard 360° free rotation and conical plug provides a tighter closure while maintaining seat clean from shards. Both seat and plug are made out of hardened chromium steel 1.4021 or with stellite.
- 6. Plug and Seat Hard Faced**
TA-LUFT certified full size safety gland packing made of pure graphite together with our bellows, guaranteeing 100% zero leak to the atmosphere. Can also be supplied in PTFE on request for other chemical applications.

Y TYPE DESIGN



- 1. Non Rising Hand Wheel**
 - Ideal in restricted spaces
- 2. Ease of operation for Secondary Packing**
 - Ease for replacing packing
 - Improves proper sealing
- 3. Non Rotating Stem**
 - High reliability
 - Twist of bellow is avoided
 - Longer packing life
- 4. Body-bonnet Joints**
 - Tongue and groove arrangement
 - No gasket slip possible, long service life
- 5. Multiply Bellows**
 - High service life
- 6. Guided Plug**
 - Body bore guided plug design
- 7. Throttling type plug design**
- 8. Hardfacing or Stellite**
 - Increased service life
- 9. Integral Body Seat**
 - Avoid leak through seating
- 10. Plug and Stem connected by stem nut**
 - Provides 360° rotation of plug
- 11. Back Seat Arrangement on Stem**
 - Additional tertiary safety
 - Anti-blow out under line pressure
- 12. Downstream Safety Gland Packing with Graphite**
 - Additional reliability against bellow failure
- 13. Provision for Lubrication on Yoke Sleeve**
 - Ensures smooth operation
- 14. ACME Stem Thread**
 - Longer service life

WHY OUR VALVES ARE BETTER

Straight type bellow sealed globe valves for demanding applications can be supplied in carbon steel 1.0619 / WCB and stainless steel 1.4408 / CF8M, both with flanged or buttweld ends.

Application (Carbon Steel)

The body and bonnet of the ValveWerkz bellow seal globe valve are made from A105 material. The condensate discharge temperature is adjustable and is factory-set between 120°C and 130°C.

Medium (Carbon Steel)

Medium and high pressure steam, superheated steam, gases, thermal oil, overheated water and gases, etc.

Application (Stainless Steel)

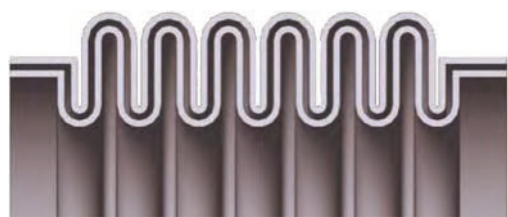
Recycling plants, chemical industry, process water installations, process with aggressive media.

Medium (Stainless Steel)

Process water, aggressive media, corrosive and toxic fluids, ethylene dioxide, H₂SO₄, etc.

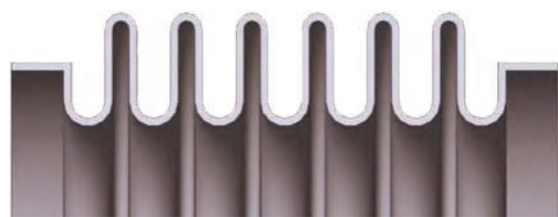
Features	ValveWerkz	Others
Stem with back seat	Yes	No
360° free rotation disc	Yes	On Request
Stroke limiter	Yes	On Request
Wide thread stem that prevents the valve from blocking	Yes	No
Tongued body and bonnet	Yes	No

Multi Layer Bellow (ValveWerkz)



- Multiply bellows depending on the pressure of the valve.
- Bellows designed to better MSS SP-117.
- Bellows are welded to the stem and not to the disc, preventing the transmission of vibrations to the bellows, and therefore extending the life of the bellows.

Others



- Just one bellow layer, which means a lower resistance to breakage.
- Bellows designed to support less than 10,000 operation cycles.
- Bellows are welded to the disc, which transmits the vibrations to the bellows, decreasing their lives.

BELLOWS AS A LEAKAGE BARRIER

Our stainless steel 316Ti German manufactured bellows is welded to the stem, becoming a definitive metallic barrier between the process medium and the atmosphere, and hence guarantying zero leakage performance. Still, for higher security, safety TA-LUFT approved packing is applied in design. Furthermore, our multiple layer bellows are designed to last at least 30,000 cycles according to MSS SP-117 manufacturing standard.



Multi Layer Bellows

- Double, triple and quadruple layer bellows depending on the size of the valve.
- Bellows designed to support 30,000 operation cycles.
- Bellows are welded to the stem and not to the disc, preventing the transmission of vibrations to the bellows, and therefore extending the life of the bellows.

Kvs Value Standard Plug

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
KVS	4.8	7.3	11.7	17.8	27.3	43	75.1	111	176	264	369	701	1056	1691

Throttling Plug Kvs Value

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
KVS	4.36	6.76	9.21	16.3	25.1	36.8	61.7	91.6	137	184	287	471	898	1410

Optional Plug Types



Conical plug



Throttling plug



Plug with soft sealing



Throttling plug with soft sealing

Permissible differential pressure acc. EN13709

PN	DN													
	15	20	25	32	40	50	65	80	100	125	150	200	250	300
PN16							16					14	9	6
PN25							25				21	14	9	6
PN40							40			33	21	14	9	6

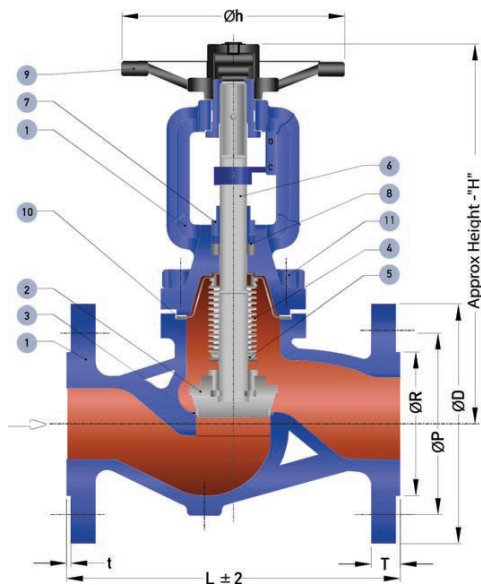


Applications

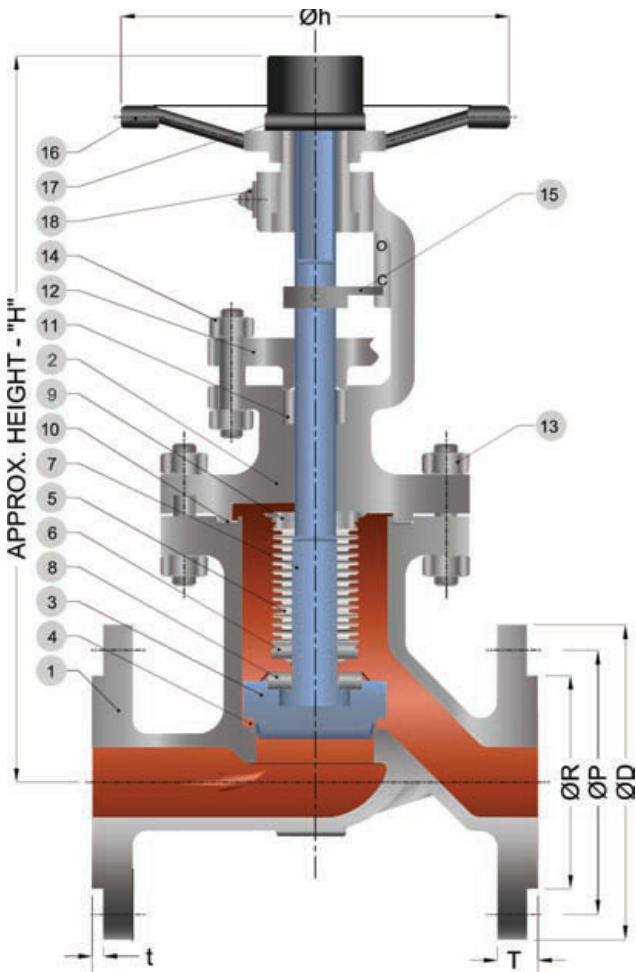
- Hot oil system, steam system, hot and cold water system etc.

GL25 Series
Straight Type

Body Material	
Cast Iron, GG25	Forged Steel / A105
Ductile Iron, GGG40	St. St. 304
Carbon Steel 1.0619	St.St 316 / 1.4571
Plug material & Design	
St. Steel 1.4021 + Hard Faced 13% Cr	
Parabolic (For regulating)	
Conical (For On Off)	
Balancing (For 5" and above, high pressure)	
Bellow Material	
321 Ti	St.St 304
St.St 316 / 1.4571	Hastelloy C
BSPT - Tappered	NPT
Socket Weld	Flanged End
Butt Weld	
DN15 (½") to DN150 (6")	
For Standard Plug: KVS = 4.8 - 1691	
For Throttling Plug: KVS = 4.36 - 1410	
ANSI 150	ANSI 600
ANSI 300	ANSI 900
PN16	PN25
PN40	



Part Name		PN16	PN25
1.	Body & Bonnet	EN-JL 1040 Cast Iron	EN-GJS-400-18-LT Ductile Iron
2.	Plug	St. Steel 1.4021 + Hard Faced 13% Cr	
3.	Seat	ASTM – A105 + Hard Faced 13% Cr	
4.	Bellow	St. Steel 1.4541 / AISI-321	
5.	Bellow Collar	St. Steel 1.4541	
6.	Stem	St. Steel 1.4006	
7.	Gland	St. Steel 1.4021	
8.	Packing	Pure Graphite	
9.	Hand Wheel	EN-GJS-400-18-LT Nodular	
10.	Bonnet Gasket	Graphite + Stainless Steel	
11.	Bolt & Nuts	Carbon Steel Gr.10.9	



Part Materials

Nominal Pressure		PN40	
1.	Body	1.0619/ ASTM – A 216 Gr. WCB	1.4408/ ASTM – A 351 Gr. CF8M (1.4408)
2.	Bonnet	1.0619/ ASTM – A 216 Gr. WCB	1.4408/ ASTM – A 351 Gr. CF8M (1.4408)
3.	Plug	ASTM – A217 Gr. CA15 + 13% Cr. Overlay	1.4408/ ASTM – A 351 Gr. CF8M (1.4408) + Stellite Gr. 6
4.	Integral Seat	1.0619/ ASTM – A216 Gr. WCB + 13% Cr. Overlay	1.4408/ ASTM – A 351 Gr. CF8M (1.4408) + Stellite Gr. 6
5.	Bellow	1.4541 / AISI-321	1.4571/ AISI – 316Ti
6.	Bellow Collar	1.4401 / ASTM – A 276 TYPE 316	1.4401 / ASTM – A 276 TYPE 316
7.	Stem	1.4006 / ASTM – A 276 TYPE 410	1.4401 / ASTM – A 276 TYPE 316
8.	Collar Ring	1.4006 / ASTM – A 276 TYPE 410	1.4401 / ASTM – A 276 TYPE 316
9.	Top Collar	1.4401 / ASTM – A 276 TYPE 316	1.4401 / ASTM – A 276 TYPE 316
10.	Gasket	SPW– SS304 + Graphite	
11.	Packing	Graphite	
12.	Gland bush/Flange	1.0619/ ASTM – A216 Gr. WCB	1.4408/ ASTM – A 351 Gr. CF8M
13.	Fastener	ASTM – A 193 Gr. B7/ A 194 Gr. 2H	ASTM – A 193 Gr. B8M/ A 194 Gr. 8M
14.	Gland Stud & Nut	ASTM – A 193 Gr. B7/ A 194 Gr. 2H	ASTM – A 193 Gr. B8M/ A 194 Gr. 8M
15.	Guide Plate/Indicator	Carbon Steel	1.4408/ ASTM – A 351 Gr. CF8M
16.	Hand Wheel	Mild Steel/ Nodular Cast Iron	
17.	Hand Wheel Nut/Cap	Carbon Steel	1.4401 / AISI –316
18.	Grease Nipple	Carbon Steel	1.4401 / AISI –316

Working Conditions

Temperature (°C)			Pressure (Bar)		
Cast Iron EN-JL 1040		Ductile Iron EN-GJS-400-18-LT		Carbon steel WCB (1.0619)	Stainless Steel CF8M (1.4408)
PN16		PN25		PN40	
-60/-10					40.0
-10/120 -10/100*	16.0	16.0	25.0	40.0	40.0*
150	14.4	15.5	24.3	35.2	36.3
200	12.8	14.7	23.0	33.3	33.7
250	11.2	13.9	21.8	30.4	31.8
300	9.6	12.8	20.0	27.6	29.7
350		11.2	17.5	25.7	28.5
400				23.8	27.4

Dimensions(mm)

DN	PN	ØD (Outer Flange Diameter)	ØP (Bolt Circle)	ØR	T	t	No. of Hole /Ø	L (Face to face)	Øh	Stroke	H (Closed)	Weight (kg)
15	16	95	65	46	16	2	4/Ø14	130	172	4.0	215	4.8
	25	95	65	46	16	2	4/Ø14	130	172	4.0	215	5.0
	40	95	65	45	16	2	4/Ø14	130	172	4.0	260	8.5
20	16	105	75	56	16	2	4/Ø14	150	172	5.0	220	5.2
	25	105	75	56	18	2	4/Ø14	150	172	5.0	220	5.5
	40	105	75	58	18	2	4/Ø14	150	172	5.0	275	9.5
25	16	115	85	65	17	3	4/Ø14	160	172	6.5	230	6.0
	25	115	85	65	19	3	4/Ø14	160	172	6.5	230	6.4
	40	115	85	68	18	2	4/Ø14	160	172	7.0	290	11.5
32	16	140	100	76	18	3	4/Ø19	180	172	8.0	235	7.8
	25	140	100	76	19	3	4/Ø19	180	172	8.0	235	8.3
	40	140	100	78	18	2	4/Ø18	180	200	8.0	297	17.0
40	16	150	110	84	19	3	4/Ø19	200	200	10.0	255	11.2
	25	150	110	84	19	3	4/Ø19	200	200	10.0	265	11.5
	40	150	110	88	18	3	4/Ø18	200	200	10.0	331	19.0
50	16	165	125	99	20	3	4/Ø19	230	200	13.0	265	13.6
	25	165	125	99	20	3	4/Ø19	230	200	13.0	275	14.2
	40	165	125	102	20	3	4/Ø18	230	200	13.0	350	21.5
65	16	185	145	118	20	3	4/Ø19	290	250	16.5	325	22.9
	25	185	145	118	22	3	8/Ø18	290	250	16.5	325	24.8
	40	185	145	122	22	3	8/Ø18	290	250	16.0	435	33.5
80	16	165	160	132	22	3	8/Ø19	310	250	20.0	335	27.4
	25	165	160	132	24	3	8/Ø19	310	250	20.0	355	27.9
	40	165	160	138	24	3	8/Ø18	310	300	19.0	455	45.0
100	16	220	180	156	24	3	8/Ø19	350	300	25.0	385	40.3
	25	235	190	156	24	3	8/Ø28	350	300	25.0	410	42.2
	40	235	190	162	24	3	8/Ø22	350	300	25.0	540	61.5
125	16	250	210	184	26	3	8/Ø19	400	350	32.0	425	67.2
	25	270	220	184	26	3	8/Ø28	400	350	32.0	450	67.0
	40	270	220	188	26	3	8/Ø26	400	350	32.0	640	102.0
150	16	285	240	211	26	3	8/Ø23	480	400	51.0	485	89.2
	25	300	250	211	28	3	8/Ø28	480	400	38.0	525	91.0
	40	300	250	218	28	3	8/Ø26	480	400	38.0	695	122.0
200	16	340	295	266	30	3	12/Ø23	600	450	64.0	615	143.5
	25	360	310	274	34	3	12/Ø28	600	450	51.0	640	147.0
	40	375	320	285	34	3	12/Ø30	600	450	50.0	825	22.0
250	16	400	355	319	32	3	12/Ø28	730	500	62.5	780	241.0
	25	425	370	330	38	3	12/Ø31	730	500	62.5	820	246.0
	40	450	385	345	38	3	12/Ø33	730	600	70.0	1,010	362.0
300	40	515	450	410	42	4	12/Ø33	850	600	80.0	1,210	533.0

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/ valve code



STEP 3

Fill up ordering sheet (back of the brochure) or Scan the QR code below



STEP 4

Submit your order via our website or contact your local partner



STEP 5

Prepare for confirmation and delivery

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Valve Coding Sheet GL25 Series (S-Type)

01

02

03

04

05

06

Body Material

Code	Material
G1	Cast Iron
G2	Ductile Iron
C1	WCB
C2	Forged Steel /A105
S1	St.St 304
S2	St.St 316 /1.4571

Internal Parts

Code	Material
1	321 Ti
2	St.St 304
3	St.St 316 /1.4571
4	Hashtelloy C

Rating

Code	Rating
A	ANSI 150
B	ANSI 300
C	ANSI 600
D	ANSI 900
E	PN16
F	PN25
G	PN40

Size

Code	Size
A	½"
B	¾"
C	1"
D	1 ¼"
E	1 ½"
F	2"
G	2 ½"
H	3"
I	4"
J	5"
K	6"
L	8"
M	10"
N	12"

Connection

Code	Material
B	BSPT - Tapped
N	NPT
S	Socket Weld
F	Flanged End
W	Butt Weld

Design

Code	Type
C	Conical
R	Regulating Plug

Your Valve Ordering Code:

GL25 — 01 02 03 04 05 06

Example:

GL25 Series (S-Type) - C21GDFR.
Forged Steel / A105. 321 Ti Internal Parts. Pressure Rating of PN40, ½ inch size.
Connection Type of Flanged End. Design Regulating Plug.

*For special material or customisation, please refer to our sales engineer.

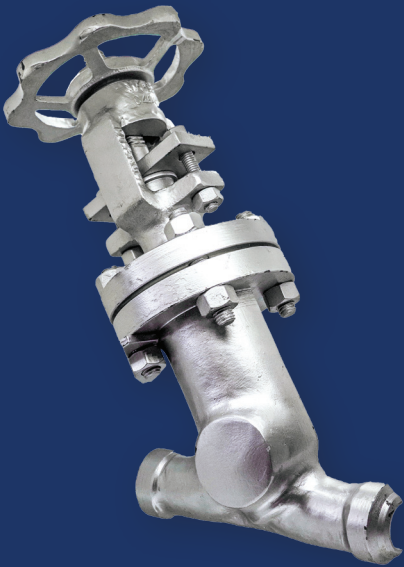


SCAN FOR ONLINE ORDERING FORM

Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

VALVEWERKZ

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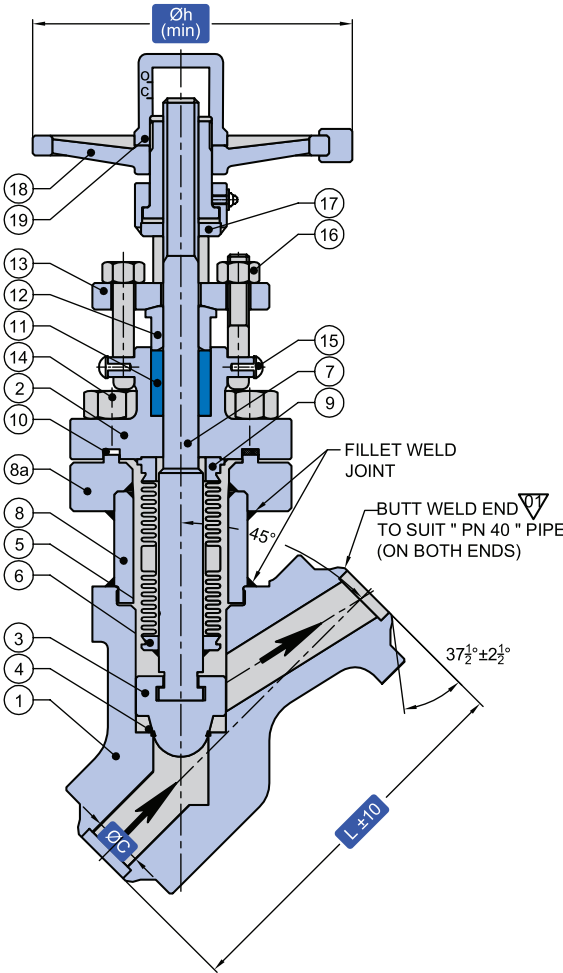


GL26 Series
Y Type

Body Material	
Cast Iron GG25	Forged Steel / A105
Ductile Iron GGG40	St. St. 304
Carbon Steel 1.0619	St.St 316 / 1.4571
Plug Material & Design	
St. Steel 1.4021 + Hard Faced 13% Cr	
Parabolic (For regulating)	
Conical (For On Off)	
Balancing (For 5" and above, high pressure)	
Bellow material	
321 Ti	St.St 304
St.St 316 / 1.4571	Hastelloy C
BSPT - Tappered	NPT
Socket Weld	Flanged End
Butt Weld	
DN15 (½") to DN150 (6")	
For Standard Plug:	
KVS = 4.8 - 1691	
For Throttling Plug:	
KVS = 4.36 - 1410	
ANSI 150	PN16
ANSI 300	PN25
ANSI 600	PN40
ANSI 900	

Applications

- Steam, hot and cold water, oil products, acetic acid, fatty acids, cryogenic liquids, ammonia, natural gas, etc.



Part Materials

Nominal Pressure		PN40		300#	
1.	Body	ASTM – A 105	ASTM – A 182 Gr.F316L	SS317LMN	
2.	Bonnet	ASTM – A 105	ASTM – A 182 Gr.F316L	1.4439	
3.	Parabolic Plug	ASTM – A 276 TYPE 410 / A 217 Gr.CA15 + Hard Faced	ASTM – A 276 TYPE 316L + Stellite Gr.21	AISI – 317L + Stellite Gr.21	
4.	Integral Seat	ASTM – A 105 + Hard Faced	ASTM – A 182 Gr.F316L + Stellite Gr.21	1.4439 + Stellite Gr.21	
5.	Bellow	AISI – 316Ti / AISI – 321			Hastelloy – C276
6.	Bellow Collar	ASTM – A 276 TYPE 316 / 316L			Hastelloy – C276
7.	Stem	ASTM – A 276 TYPE 410	ASTM – A 276 TYPE 316L	AISI – 317L	
8.	Cylinder/ Stem Nut (For Ss317l)	ASTM – A 106 Gr.B	ASTM – A 312 TYPE 316L	AISI – 317L	
8a.	Cylinder Flange	ASTM – A 105	AISI – 316L		
9.	Top Collar	ASTM – A 276 TYPE 316 / 316L			Hastelloy – C276
10.	Gasket	SPW- SS304 + Graphite			
11.	Packing	Graphite			
12.	Gland Bush	ASTM – A 276 TYPE 410 / A 217 Gr.CA15	ASTM – A 276 TYPE 316L / A 351 Gr.CF3M	AISI – 317L	
13.	Gland Flange	ASTM – A 105 / Carbon Steel	ASTM – A 240 TYPE 304 / A 351 Gr.CF8		
14.	Hex Bolt/ Fasterner	ASTM – A 193 Gr.B7			ASTM – A 193 Gr.B8
15.	Rivet / Washer/ Gland Stud / Nut	Carbon Steel	AISI – 304	ASTM – A 240 TYPE 304 / A 351 Gr.CF8	
16.	Eye Bolt / Nut	ASTM – A 193 Gr.B7 / A 194 Gr.2H	ASTM – A 193 Gr.B8 / A 194 Gr.8		
17.	Guide Plate	ASTM – A 216 Gr.WCB / Carbon Steel	ASTM – A 276 TYPE 304 / A 351 Gr.CF8	ASTM – A 276 TYPE 304 / A 351 Gr.CF8	
18.	Hand Wheel	SG IRON / ASTM – A 216 Gr.WCB	SG IRON / ASTM – A 216 Gr.WCB / IS 2062 Gr. E 250 A	SG IRON / ASTM – A 216 Gr.WCB	
19.	Hand Wheel Nut / Key	Carbon Steel	AISI – 304		

Working Conditions

Temperature (°C)	Pressure (Bar)		
	ASTM – A 105	ASTM – A 182 Gr.F316L	SS317LMN
	PN40		ANSI300
-29 to 38	51.1	41.4	41.4
50	50.1	40.4	40.4
100	46.6	34.8	34.8
150	45.1	31.4	31.4
200	43.8	29.2	29.2
250	41.9	27.5	27.5
300	39.8	26.1	26.1
325	38.7	25.5	25.5
350	37.6	25.1	25.1
375	36.4	24.8	24.8
400	34.7	24.3	24.3
425	28.8	23.9	23.9

Dimensions(mm)

DN	PN/ANSI	Body Material	L	H	Øh	Bore Dimension ØC (min)
15	40	ASTM - A 105	150	235	100	9
	300#	ASTM - A 182	130	250	100	12
		Gr.F316L SS317LMN	152	240	150	
20	40	ASTM - A 105	150	240	100	12
	300#	ASTM - A 182	150	266	100	17
		Gr.F316L SS317LMN	178	155	150	
25	40	ASTM - A 105	150	245	100	17
	300#	ASTM - A 182	160	265	150	
		Gr.F316L SS317LMN	203	265	150	
40	40	ASTM - A 105	229	305	200	
	300#	ASTM - A 182	200	305	200	
		Gr.F316L SS317LMN	229	305	200	
50	40	ASTM - A 105	267	335	200	
	300#	ASTM - A 182	230	335	200	
		Gr.F316L SS317LMN	267	335	200	
65	40	ASTM - A 105	292	450	250	
	300#	ASTM - A 182	290	450	250	
		Gr.F316L SS317LMN	292	450	250	
80	40	ASTM - A 105	318	505	300	
	300#	ASTM - A 182	310	505	300	
		Gr.F316L SS317LMN	318	505	300	
100	40	ASTM - A 105	356	605	300	
	300#	ASTM - A 182	350	605	300	
		Gr.F316L SS317LMN	356	605	300	
125	40	ASTM - A 105	400	660	350	
	300#	ASTM - A 182	400	670	350	
		Gr.F316L SS317LMN	400	670	350	
150	40	ASTM - A 105	444	760	350	
	300#	ASTM - A 182	480	750	350	
		Gr.F316L SS317LMN	444	760	350	
200	40	ASTM - A 105	559	900	450	
	300#	ASTM - A 182	600	900	400	
		Gr.F316L SS317LMN	559	900	450	

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/
valve code



STEP 3

Fill up ordering sheet (back of the brochure) or Scan the QR code below



STEP 4

Submit your order via our website or contact your local partner

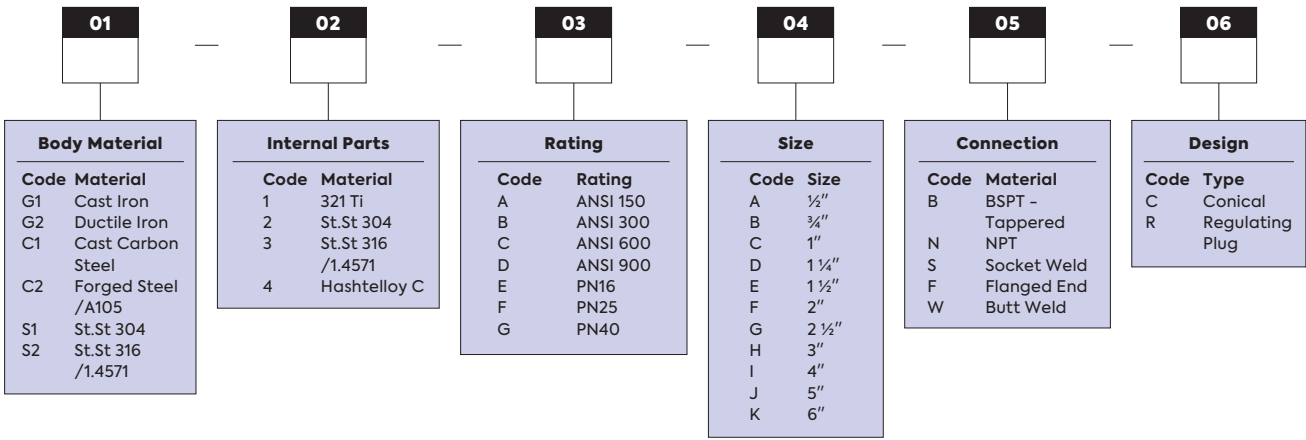


STEP 5

Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner.
A sales engineer will be assigned to assist you.

Valve Coding Sheet
GL26 Series (Y-Type)



Your Valve Ordering Code:

GL26

01

02

03

04

05

06

Example:

GL26 Series (Y-Type) - C21GDFR.
Forged Steel / A105. 321 Ti Internal Parts. Pressure Rating of PN40, 1 ¼ inch size. Connection Type of Flanged End. Design Regulating Plug.

*For special material or customisation, please refer to our sales engineer.



SCAN FOR ONLINE
ORDERING FORM

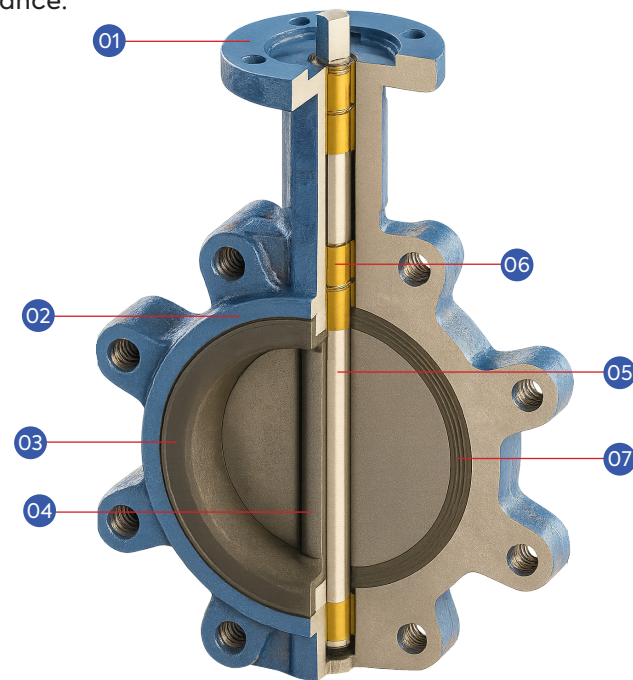
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Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

BUTTERFLY VALVES



RUBBER-LINED BUTTERFLY VALVE

ValveWerkz butterfly valves are developed with over 20 years of scientific research and real-world application experience. They offer enhanced torque control, smooth operation, and simplified installation and maintenance.



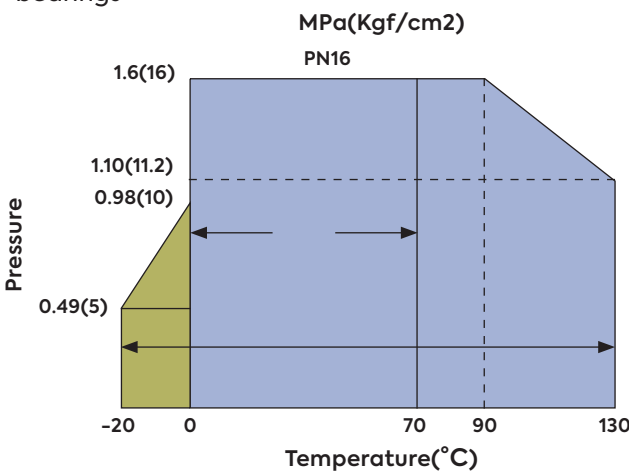
- 1. Top Flange**
ISO 5211 top flange with square or round stem to suit various types of actuators.
- 2. Body**
Available in full lug and wafer styles for compatibility with all flange types. Fully lugged bodies are also suitable for end-of-line service.
- 3. Liner**
The cartridge-style seat uses a phenolic stabilising ring to minimise tearing and fatigue while maintaining low seating torque. It resists extrusion and allows quick replacement without special tools.
- 4. Disc**
The disc edge is precision-machined and polished to ensure a tight shutoff with minimal operating torque.
- 5. Shaft**
Secured with a stem retainer plate, the shaft is designed without a pin between disc and shaft, preventing blowout.
- 6. Bushing**
The five-bushing PTFE design maximises radial support and shaft rigidity. It prevents shaft deflection and insulates the shaft from the valve body, enhancing control and extending service life.
- 7. Bi-Directional Sealing**
The valve provides full-rated bi-directional sealing with equal flow performance in both directions.

Design Features and Advantages

- Concentric design
- Cartridge seat & groove lock boot seat
- Replaceable seat
- Standardised top flange for actuator adaptation
- Direct actuator mounting without additional brackets
- Economical and high-performance
- Blowout-proof stem design
- Low maintenance and long service life
- High Cv and lower head loss for improved energy efficiency
- Streamlined disc design maximises flow and control range
- Extended seat life with low operating torque, achieved through upper and lower stem bearings

Various Applications Under Different Operating Conditions

- Potable water, water treatment plants
- Wastewater treatment and environmental systems
- Agriculture
- Energy, power, and utilities
- HVAC systems
- Fire protection systems
- Chemical and petrochemical plants
- Ferrous metallurgy
- Pulp and paper processing
- Food and beverage production
- General industrial applications



P-T Rating

Notes 1: Some fluid types may have restrictions for service at 130°C. Contact ValveWerkz for details.

Notes 2: P-T rating for sub-zero applications is available upon request. Contact ValveWerkz for technical advice if service conditions exceed the P-T rating range listed above.

Cv-VALUES

DN(mm)	Size(Inch)	Opening angle α°								
		10°	20°	30°	40°	50°	60°	70°	80°	90°
50	2"	0.06	3	7	15	27	44	70	105	115
65	2 ½"	0.1	6	12	25	45	75	119	178	196
80	3"	0.2	9	18	39	70	116	183	275	302
100	4"	0.3	17	36	78	139	230	364	546	600
125	5"	0.5	29	61	133	237	392	620	930	1022
150	6"	0.8	45	95	205	366	605	958	1437	1579
200	8"	2	89	188	408	727	1202	1903	2854	3136
250	10"	3	151	320	694	1237	2047	3240	4859	5340
300	12"	4	234	495	1072	1911	3162	5005	7507	8250
350	14"	6	338	715	1549	2761	4568	7230	10844	11917
400	16"	8	464	983	2130	3797	6282	9942	14913	16388
450	18"	11	615	1302	2822	5028	8320	13168	19752	21705
500	20"	14	791	1647	3628	6465	10698	16931	25396	27908
600	24"	22	1222	2587	5605	9989	16528	26157	39236	43116
750	30"	37	2080	4406	9546	17010	28147	44545	66818	73426

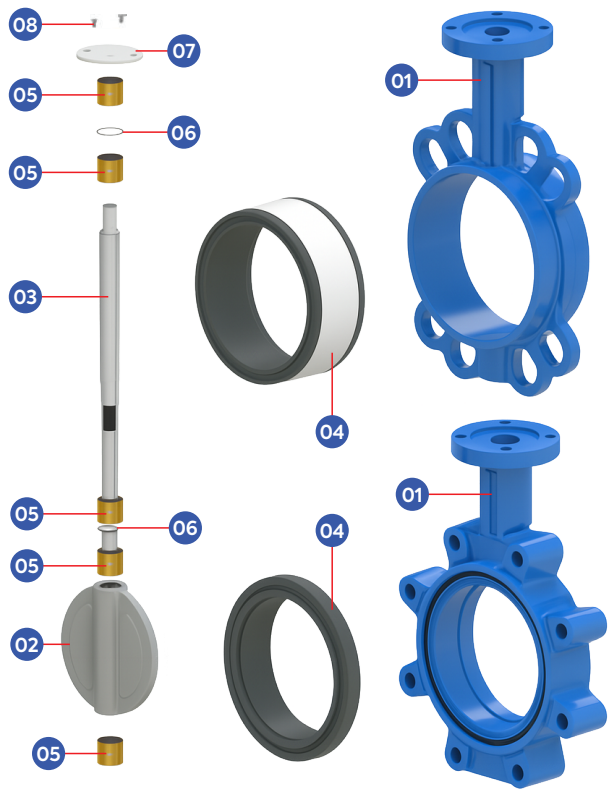


BU25 Series
Uni Body Design

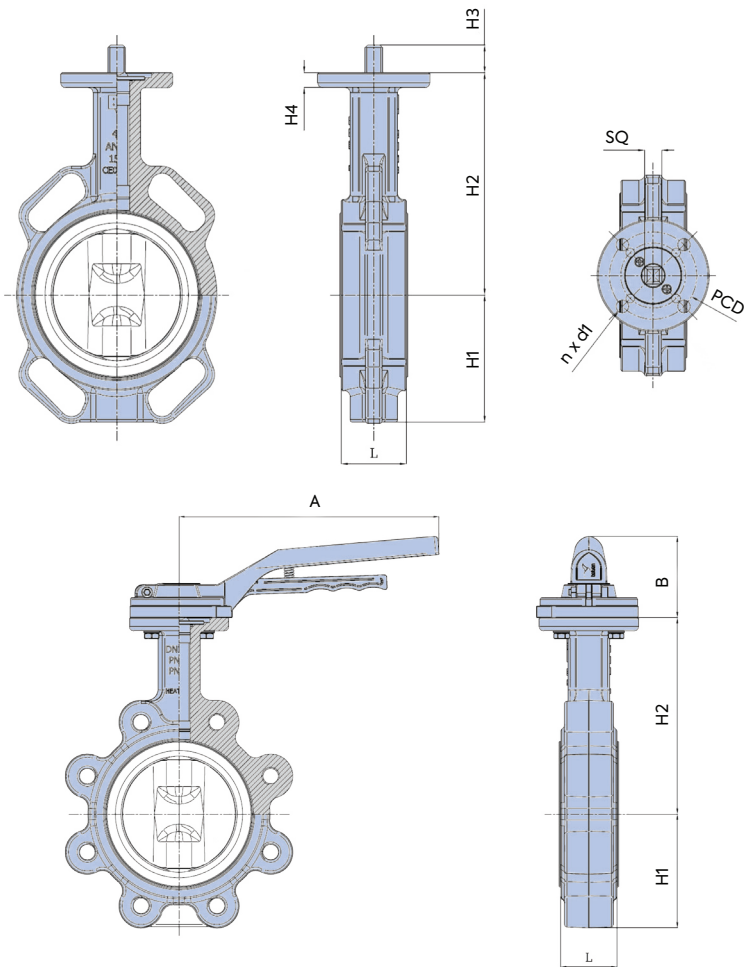
- Wafer, Lug
- Body Material Option:**
Cast Iron GG25, Ductile Iron GGG40,
Carbon Steel 1.0619, Stainless Steel 1.4308,
Stainless Steel 1.4408
- Liner Material Option:**
EPDM, NBR(Buna N), PTFE, Viton,
Natural Rubber, Silicone
- Pressure rating of PN10, PN16, ANSI 150,
JIS 10K, JIS 16K
- Face-to-face Standard API609,
EN558-120 Series, ISO5752, DIN3202K1
- ISO 5211 Top Flange
- Flange Drilling BS EN1092, JIS B2220,
ASME Class 125 / Class 150
- Two Piece Shaft Design (2" to 12")
Spline Design (14" & Above)
- Square Stem Top
- Operating Temperature**
-20°C to 130°C

Performance Characteristics

- The butterfly valve features a universal flange, one-piece wafer-type body for reduced weight and maximum strength.
- The resilient cartridge seat, with a phenolic (or aluminium) hard back, prevents movement and deformation.
- Seat can also be moulded to the body, suitable for dead-end and vacuum service applications.
- Two stem connection types are available: pinless spline and traditional pin-type.
- High Cv and low head loss deliver longer service life with reduced operating torque.
- Operable via hand lever, worm gear, electric actuator or pneumatic actuator.
- The seat is replaceable, with a low-maintenance design for cost efficiency and extended durability.

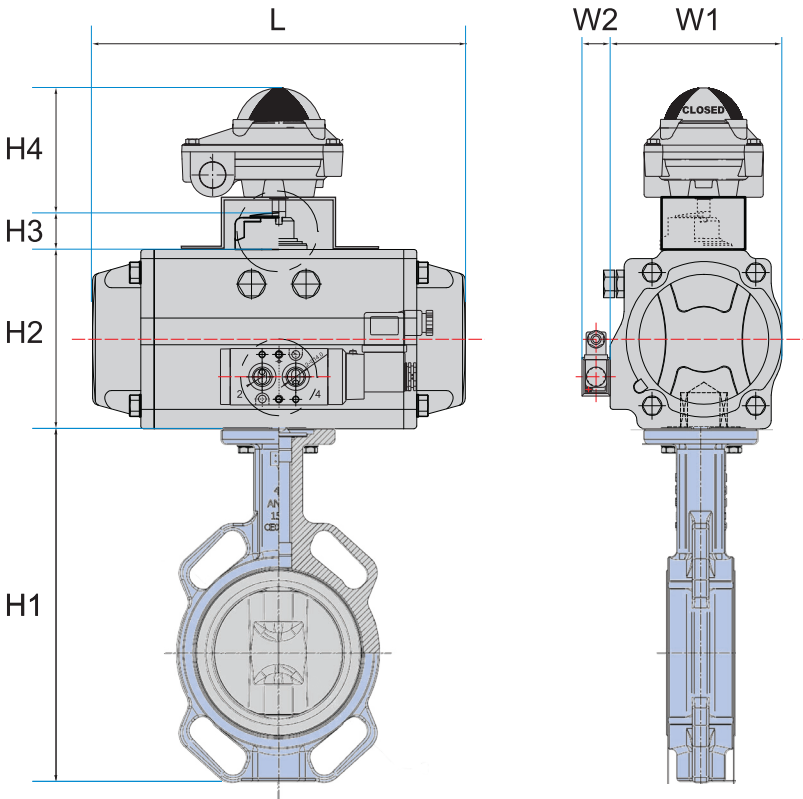


Part Name		Material
1. Body	Cast Iron GG25, Ductile Iron GGG40, Carbon Steel 1.0619, Stainless Steel 1.4308, Stainless Steel 1.4408	
2. Disc	Ductile Iron, Stainless Steel 1.4308, Aluminum Bronze, Duplex SS	
3. Shaft	Stainless Steel 1.4308, Duplex SS, Monel	
4. Liner	EPDM, NBR(Buna N), PTFE, Viton, Natural Rubber, Silicone	
5. Bushing	PTFE	
6. O-Ring	Rubber	
7. Retaining Plate	Stainless Steel 1.4308 / Other Alloys	
8. Retaining Plate Screw	Stainless Steel 1.4308	



Dimensions(mm)

DN	Inch	L	H1		H2		H3		SQ		ISO		PCD		n x d1		Lever		
			Wafer	Lug	Wafer	Lug	Wafer	Lug	Wafer	Lug	Wafer	Lug	Wafer	Lug	Wafer	Lug	A	B	F
2 Piece Shaft Design																			
50	2"	43	71.4	143.0	142.7	57	22.0	29	11	9	F05/F07	F05	70	50	4 x d10	4 x d8	190	65	F05
65	2 ½"	46	77.8	155.0	155.4	68	22.0	29	11	9	F05/F07	F05	70	50	4 x d10	4 x d8	190	65	F05
80	3"	46	89.0	160.0	161.8	82	22.0	29	11	9	F05/F07	F05	70	50	4 x d10	4 x d8	190	65	F05
100	4"	52	102.0	181.0	178.0	100	22.0	29	14	11	F07	F07	70	70	4 x d10	4 x d10	256	76	F07
125	5"	56	123.0	194.0	190.5	112.0	22.0	29	14	14	F07	F07	70	70	4 x d10	4 x d10	256	76	F07
150	6"	56	138.0	202.0	205.2	126.0	22.0	29	14	14	F07	F07	70	70	4 x d10	4 x d10	256	76	F07
200	8"	60	168.0	240.0	237.0	162.0	34.5	35	17	17	F10	F10	102	102	4 x d12	4 x d12	355	106	F10
250	10"	68	207.0	272.0	268.3	193.0	34.5	35	22	22	F10	F10	102	102	4 x d12	4 x d12	355	106	F10
300	12"	78	243.5	318.0	308.5	236.5	34.5	35	27	22	F12	F10	125	102	4 x d14	4 x d12	355	106	F10
Spline Shaft Design																			
350	14"	78	328.0	368.0	264.0	267.0	45.0	45.0			F10	F10							
400	16"	102	360.0	400.0	293.0	298.0	51.2	51.2			F14	F14							
450	18"	114	400.0	422.0	324.0	318.0	51.2	51.2			F14	F14							
500	20"	127	460.0	480.0	350.0	355.0	64.2	64.2			F14	F14							
600	24"	154	540.0	562.0	440.0	444.0	70.2	70.2			F16	F16							
700	28"	165	624.0	624.0	505.0	505.0	66.0	66.0			F25	F25							



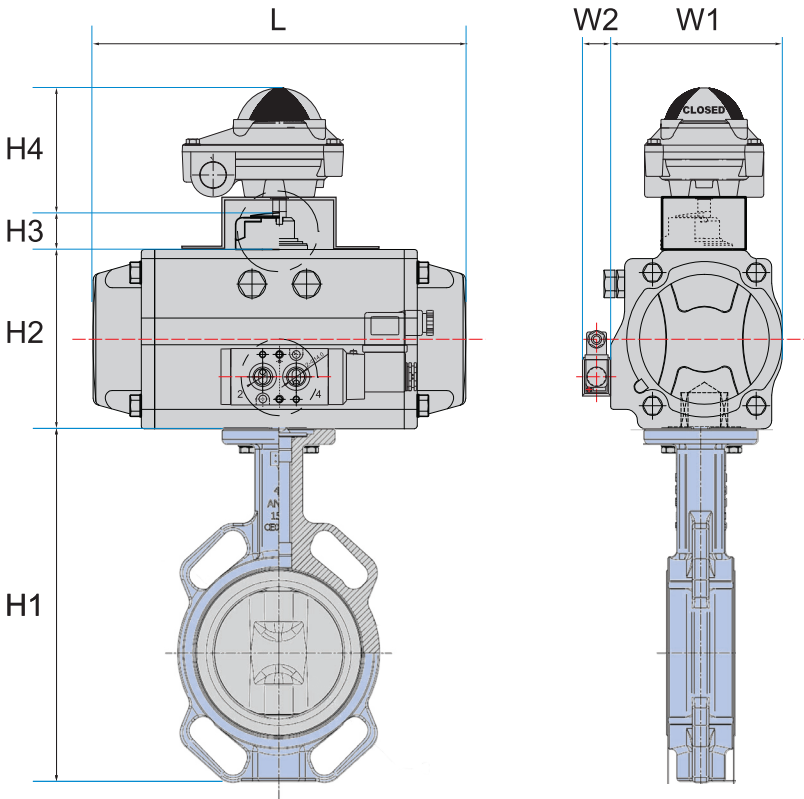
Pneumatic Actuator (Double Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L
50	2"	16.3	HP-50	214.1	73	20	90	72	29.5	144
65	2 1/2"	21.5	HP-63	233.2	87	20	90	85	29.5	163
80	3"	31.2	HP-63	250.8	87	20	90	85	29.5	163
100	4"	53.3	HP-75	280.0	104	20	90	96	29.5	210
125	5"	72.8	HP-88	313.5	116	20	90	108	29.5	247
150	6"	123.5	HP-100	343.2	128	20	90	123	29.5	268
200	8"	240.5	HP-125	405.0	150	20	90	151	29.5	347
250	10"	377.0	HP-145	475.3	179	20	90	172	29.5	414
300	12"	442.0	HP-145	552.0	179	20	90	172	29.5	414

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Liner : NBR

*Compatible with various actuator types.



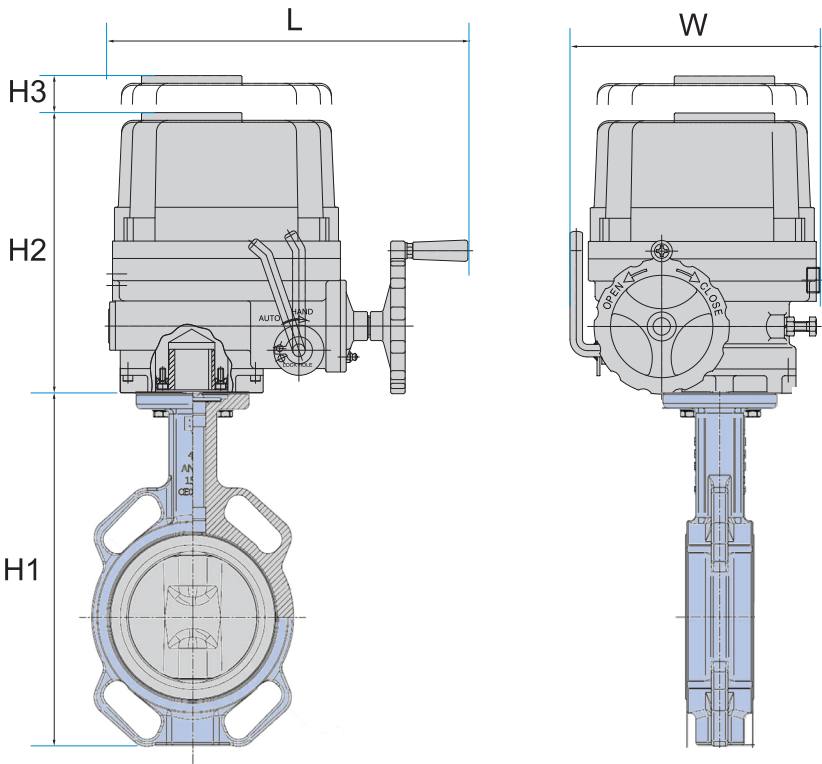
Pneumatic Actuator (Single Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L
50	2"	16.3	HP-66S	214.1	87	20	90	85	29.5	202
65	2 1/2"	21.5	HP-75S	233.2	104	20	90	96	29.5	210
80	3"	31.2	HP-88S	250.8	116	20	90	108	29.5	247
100	4"	53.3	HP-100S	280.0	128	20	90	123	29.5	268
125	5"	72.8	HP-115S	313.5	146	20	90	141	29.5	316
150	6"	123.5	HP-125S	343.2	159	20	90	151	29.5	347
200	8"	240.5	HP-160S	405.0	196	30	90	190	29.5	467
250	10"	377.0	HP-200S	475.3	247	30	90	227	29.5	555
300	12"	442.0	HP-210S	552.0	256	30	90	236	29.5	628

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Liner : NBR
- Air to Open, Spring to Close

*Compatible with various actuator types.



Electrical Actuator Operated

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	W	L
50	2"	16.3	HQ-004	214.1	124	-	89	124
65	2 ½"	21.5	HQ-004	233.2	124	-	89	124
80	3"	31.2	HQ-006	250.8	132	-	126	104
100	4"	53.3	HQ-006	280.0	132	-	126	104
125	5"	72.8	HQ-008	313.5	265	-	166	166
150	6"	123.5	HQ-015	343.2	268	-	229	338
200	8"	240.5	HQ-030	405.0	304	-	259	368
250	10"	377.0	HQ-050	475.3	304	-	259	368
300	12"	442.0	HQ-050	552.0	304	-	259	368

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Liner : NBR

*Compatible with various actuator types.

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STEP 5
Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
BU25

01

02

03

04

05

06

Body Material

Code	Material
G1	Cast Iron
G2	Ductile Iron
C1	WCB
S1	SS304
S2	SS316

Liner Material

Code	Material
E	EPDM
N	NBR
P	PTFE
V	Viton
S	Silicone
R	Natural Rubber (Nr)

Rating

Code	Rating
A	PN10
B	PN16
C	ANSI150
D	JIS 10K
E	JIS 16K

Size

Code	Size
A	½"
B	2"
C	2 ½"
D	3"
E	4"
F	5"
G	6"
H	8"
I	10"
J	12"
K	14"
L	16"
M	18"
N	20"
O	24"
P	28"

Connection

Code	Material
W	Wafer
L	Lug

Operation

Code	Type
L	Lever
G	Gearbox
D	Double Acting
	Pneumatic Actuated
S	Single Acting
	Pneumatic Actuated
E	Electric Actuated

Your Valve Ordering Code:

BU25

01

02

03

04

05

06

Example:

BU25 - S2NADWL.
SS316 Material. NBR Liner. Pressure Rating of PN10, 3 inch size. Wafer Connection Type. Lever Operating Type.

*For special material or customisation, please refer to our sales engineer.

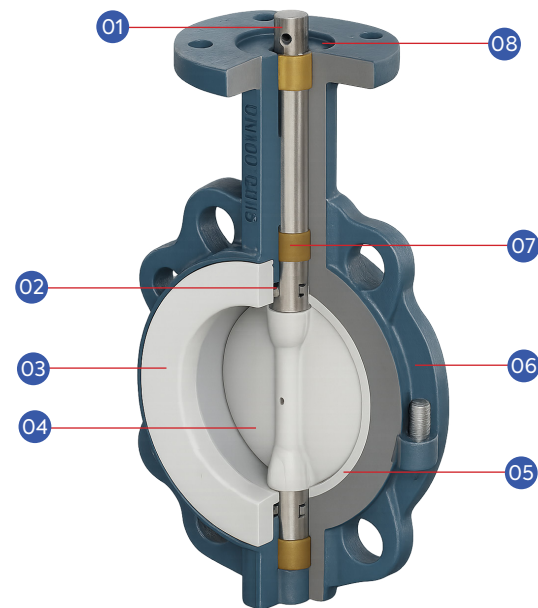


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Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com

PFA-LINED BUTTERFLY VALVE

ValveWerkz BU26 series PFA-lined butterfly valve is engineered for precise control and dependable isolation of aggressive media. This fully PFA-lined valve is ideal for corrosive and abrasive environments where tight shutoff, consistent operating torque, and minimal maintenance are critical. The BU26 series is rated for pressures up to 150 psi and is equally suitable for ultrapure process systems.



- 1. Shaft**
Square-type stem head design enables easy adaptation to automated actuation.
- 2. Belleville Washer**
The specially designed elastomer washer applies live loading to maintain constant pressure on the body lining. Fluoroelastomer materials reduce deformation caused by continuous temperature variation.
- 3. Seat**
Moulded liner is machined to deliver low torque and minimise wear on contact surfaces.
- 4. One-Piece Disc**
The disc features a spherically machined and hand-polished edge to reduce torque and enhance sealing performance.
- 5. Elastomer Back-up**
Matching the width of the disc edge, this back-up element locks into the body groove. It increases resilience to the body liner and provides a bubble-tight seal.
- 6. Body**
Two-piece split body with epoxy coating resists the effects of atmospheric corrosion.
- 7. Stem Bearings**
Bronze, PTFE, or stainless steel bearings maintain shaft alignment. Self-lubricated design reduces shaft loading.
- 8. ISO 5211 Mounting Flange**
Universal mounting dimensions support a wide range of actuators. Direct mounting of several actuation types is possible without adapters.

Lining Material

ValveWerkz uses high-quality virgin resin sourced from reputable global brands for the production of its PFA, PTFE and FEP fluoropolymers. For lined valves, key performance factors such as liner thickness, resin grade, and fabrication quality play a vital role in determining valve reliability and overall service life.

Seat Liner

- Materials used: PFA, PTFE and FEP
- Moulded and machined with a minimum nominal thickness of 3 mm.
- Optional TFM liner available for highly demanding applications.

Disc Lining

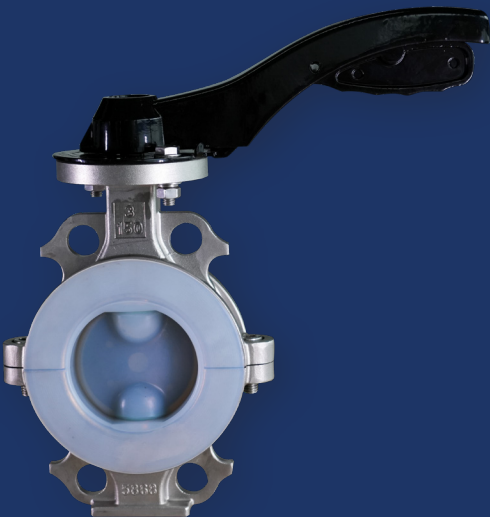
- Fully lined with PFA or PTFE.
- Encapsulated with a minimum 3 mm thick PFA or PTFE layer.

Lining Thickness

In compliance with ASTM F1545, the minimum required lining thickness is 3 mm. In real-world applications, increased thickness enhances protection in vacuum conditions, improves abrasion resistance, and reduces gas permeability. This contributes to better operational safety and a longer service life.

Electrostatic Spark Test

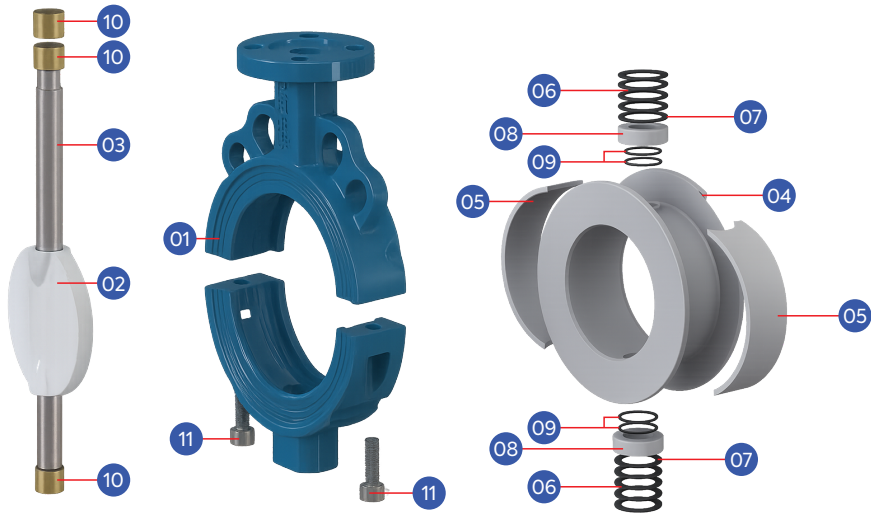
Each lined valve is tested using a non-destructive high-voltage spark method before shipment, following standard QA procedures. The test uses a minimum of 10,000 volts to detect cracks, pinholes, or liner defects, ensuring structural integrity and a leak-tight seal.



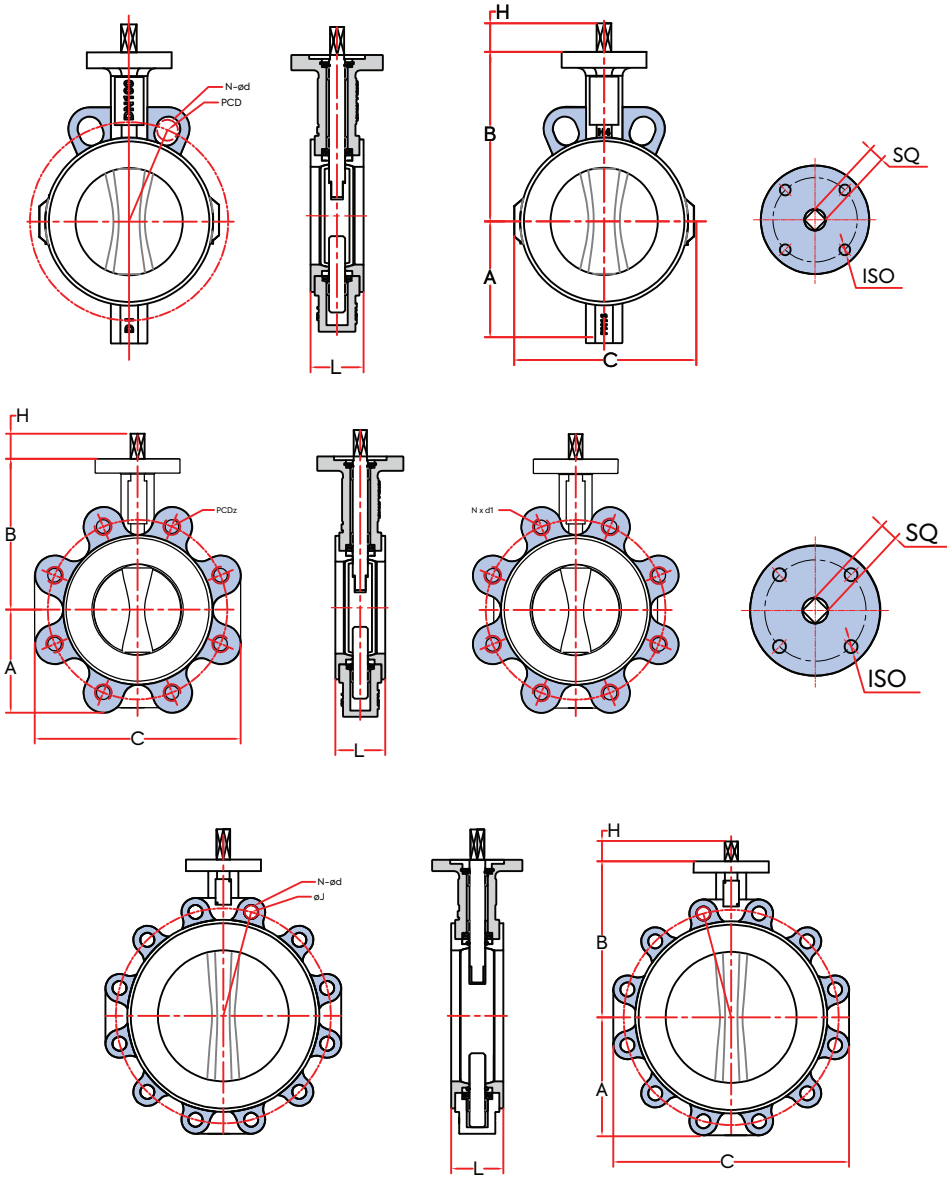
BU26 Series
Split Body Design

- Wafer, Lug
- Body Material Option:
 - Ductile Iron GGG40
 - Carbon Steel 1.0619
 - Stainless Steel 1.4408
- Liner Material Option:
 - PFA / PTFE / RTFE / TFM
- Pressure rating of PN10, PN16, ANSI 150, JIS 10K, JIS 16K
- Face-to-face Standard API609, EN558-120 Series, ISO5752, DIN3202K1
- ISO 5211 Top Flange
- Flange Drilling BS EN1092, JIS B2220, ASME Class 125 / Class 150
- Square Top Flange
- Operating Temperature
 - 40°C to 180°C

ValveWerkz BU26 Series PFA-lined butterfly valve is engineered for precise control and reliable isolation of aggressive media. This PFA-lined design is ideal for corrosive and abrasive environments that require tight shutoff, stable torque, and low-maintenance performance. The BU26 series is rated for pressures up to 150 psi and is suitable for use in ultrapure process systems.

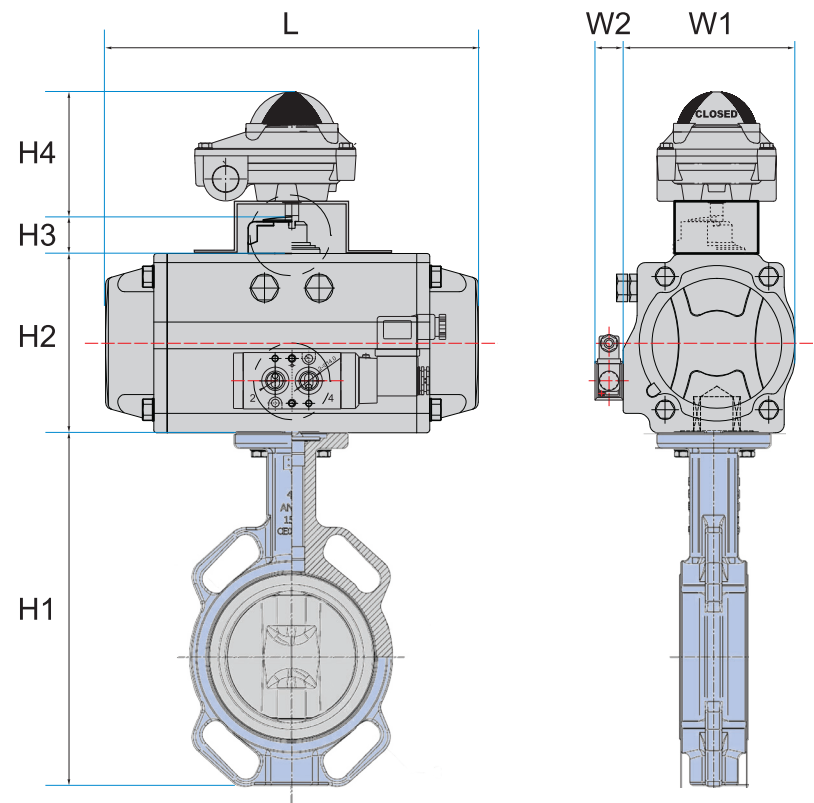


Part Name		Material		
1.	Body	Ductile Iron GGG40	Carbon Steel 1.0619	Stainless Steel 1.4408
2.	Disc	PFA / PTFE / FEP Lined	Stainless Steel 1.4308	Aluminum Bronze
3.	Stem	Stainless Steel 1.4308		
4.	Liner	PFA / PTFE / RTFE / TFM		
5.	Back-up	VMQ Silicon Rubber / FKM / EPDM		
6.	Belleville Washers	VMQ Silicon Rubber		
7.	Washers	PTFE		
8.	Pusher	Stainless Steel 1.4308		
9.	O-Ring	FKM / VMQ / FKM with PTFE		
10.	Bearing	316 with PTFE		
11.	Screw	Stainless Steel 1.4308		



Dimensions(mm)

DN	Inch	L	A		B		C		H	SQ	ISO	PCD	n X Ød	Lever		
			Wafer	Lug	Wafer	Lug	Wafer	Lug						A	B	F
50	2"	47	75.0	66.0	136.0	136	116	149	32	9	F05	65	4-7	190	65	F05
65	2 ½"	50	85.0	70.0	138.0	138	130	159	32	9	F05	65	4-7	190	65	F05
80	3"	50	90.0	92.0	140.0	140	142	182	32	9	F05	65	4-7	190	65	F05
100	4"	55	115.0	108.0	158.0	158	178	217	32	11	F07	90	4-10	256	76	F07
125	5"	59	135.0	120.0	170.0	170.0	217.0	240.0	32	14	F07	90	4-10	256	76	F07
150	6"	59	147.0	134.0	190.0	190.0	233.0	267.0	32	14	F07	90	4-10	256	76	F07
200	8"	63	172.0	160.0	231.0	232.0	288.0	320.0	32	17	F10	125	4-12	355	106	F10
250	10"	73	210.0	200.0	260.0	270.0	344.0	400.0	32	22	F10	125	4-12	355	106	F10
300	12"	81	245.0	233.0	291.0	300.0	306.0	465.0	45	22	F10	125	4-12	355	106	F10
350	14"	81	260.0	258.0	320.0	333.0	456.0	512.0	45	22	F12	150	4-14			
400	16"	102	298.0	292.0	408.0	403.0	585.0	585.0	52.0	27	F14	175	4-18			



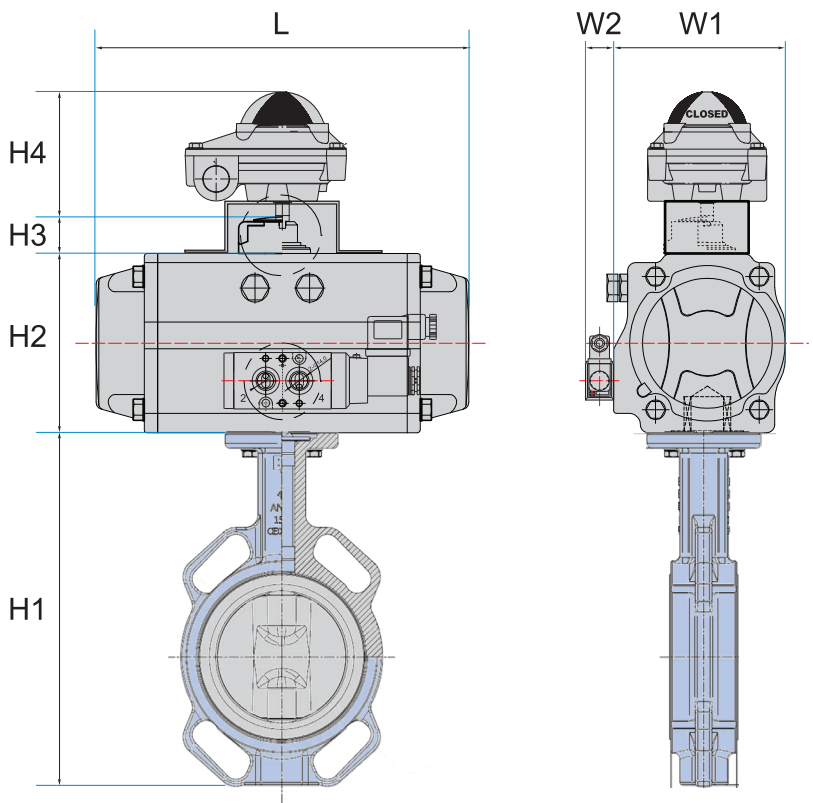
Pneumatic Actuator (Double Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1		H2	H3	H4	W1	W2	L
				Wafer	Lug						
50	2"	39.0	HP-066	211.0	202.0	87	20	90	85	29.5	202
65	2 ½"	45.5	HP-066	223.0	208.0	87	20	90	85	29.5	202
80	3"	71.5	HP-088	230.0	232.0	116	20	90	108	29.5	247
100	4"	84.5	HP-088	273.0	266.0	116	20	90	108	29.5	247
125	5"	149.5	HP-100	305.0	290.0	128	20	90	123	29.5	268
150	6"	195.0	HP-115	337.0	324.0	146	20	90	141	29.5	316
200	8"	325.0	HP-145	403.0	392.0	179	20	90	172	29.5	414
250	10"	468.0	HP-145	470.0	470.0	179	20	90	172	29.5	414
300	12"	585.0	HP-160	536.0	533.0	196	30	90	190	29.5	467

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Liner : PTFE
- Safety Factor : 30%

*Compatible with various actuator types.



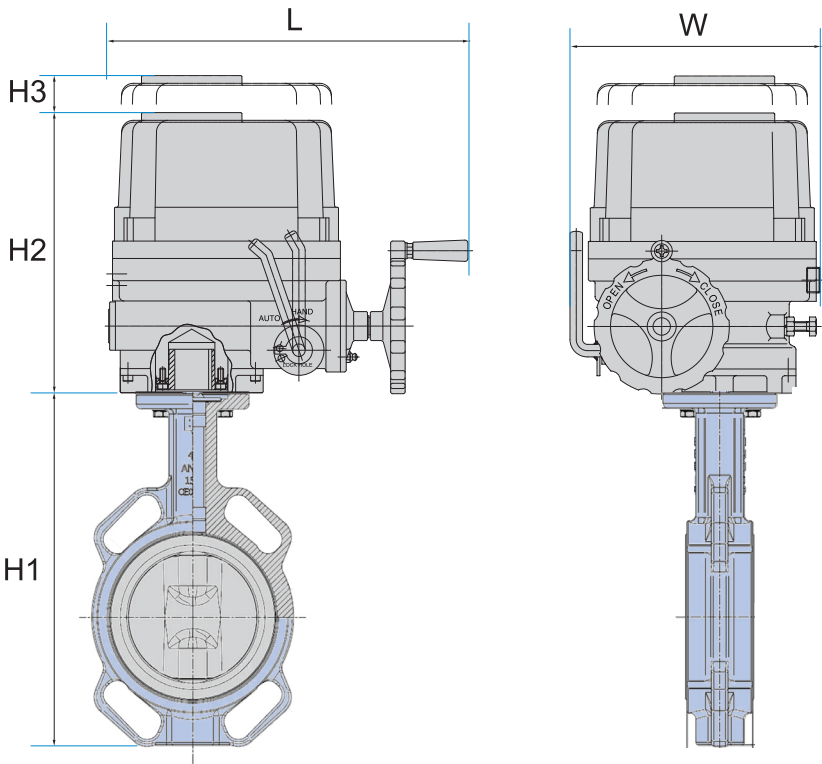
Pneumatic Actuator (Single Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1		H2	H3	H4	W1	W2	L
				Wafer	Lug						
50	2"	39.0	HP-88S	211.0	202.0	116	20	90	108	29.5	247
65	2 ½"	45.5	HP-100S	223.0	208.0	128	20	90	123	29.5	268
80	3"	71.5	HP-115S	230.0	232.0	146	20	90	141	29.5	316
100	4"	84.5	HP-115S	273.0	266.0	146	20	90	141	29.5	316
125	5"	149.5	HP-145S	305.0	290.0	179	20	90	172	29.5	414
150	6"	195.0	HP-145S	337.0	324.0	179	20	90	172	29.5	414
200	8"	325.0	HP-200S	403.0	392.0	247	30	90	227	29.5	555
250	10"	468.0	HP-200S	470.0	470.0	247	30	90	227	29.5	555
300	12"	585.0	HP-211S	536.0	533.0	256	30	90	236	29.5	669

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Liner : PTFE
- Air to Open, Spring to Close
- Safety Factor : 30%

*Compatible with various actuator types.



Electrical Actuator Operated

DN(mm)	Size(Inch)	Torques	Actuator	H1		H2	H3	W	L
				Wafer	Lug				
50	2"	39.0	HQ-006	211.0	202.0	132	-	126	104
65	2 1/2"	45.5	HQ-006	223.0	208.0	132	-	126	104
80	3"	71.5	HQ-008	230.0	232.0	235	-	166	265
100	4"	84.5	HQ-010	273.0	266.0	235	-	166	265
125	5"	149.5	HQ-015	305.0	290.0	268	-	229	338
150	6"	195.0	HQ-030	337.0	324.0	304	-	259	368
200	8"	325.0	HQ-050	403.0	392.0	304	-	259	368
250	10"	468.0	HQ-050	470.0	470.0	304	-	259	368
300	12"	585.0	HQ-060	536.0	533.0	304	-	259	378

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Liner : PTFE

*Compatible with various actuator types.

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Valve Coding Sheet BU26

01

Body Material

Code	Material
G2	Ductile Iron
C1	WCB
S2	SS316

02

Liner Material

Code	Material
P	PTFE
F	RTFE
A	PFA
T	TFM

03

Rating

Code	Rating
A	PN10
B	PN16
C	ANSI150
D	JIS 10K
E	JIS 16K

04

Size

Code	Size
A	1/2"
B	2"
C	2 1/2"
D	3"
E	4"
F	5"
G	6"
H	8"
I	10"
J	12"
K	14"
L	16"

05

Connection

Code	Material
W	Wafer
L	Lug

06

Operation

Code	Type
L	Lever
G	Gearbox
D	Double Acting
	Pneumatic Actuated
S	Single Acting
	Pneumatic Actuated
E	Electric Actuated

Your Valve Ordering Code:

BU26

01

02

03

04

05

06

Example:

BU26 - S2PADWL.
SS316 Material. PTFE Liner. Pressure Rating of PN10, 3 inch size. Wafer Connection Type. Lever Operating Type.

*For special material or customisation, please refer to our sales engineer.



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cor Commerce Rd., Laguna Technopark,
Biñan, Laguna 4024 Philippines
Tel: (63) 49541 3101
Email: sales@osaphils.com

ORDER FORM

Date:

CUSTOMER INFORMATION

Name: Company Name:
Phone: Country:
Email: Shipping Destination:
Delivery Date:

PROCESS DATA

Medium: Opt. Pressure: Opt. Temperature:

ORDER DETAILS

NO.	Valve Type	Model	Valve Coding	Qty	Special Request
eg	Ball Valve	80R	C1TBNL	1	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

OFFICIAL USE



SCAN THE QR CODE TO SUBMIT YOUR ENQUIRY ONLINE AND REQUEST A QUOTATION.

If filling out by hand, please scan or photograph the completed form and email it to enquiry@valvewerkz.com.

Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com