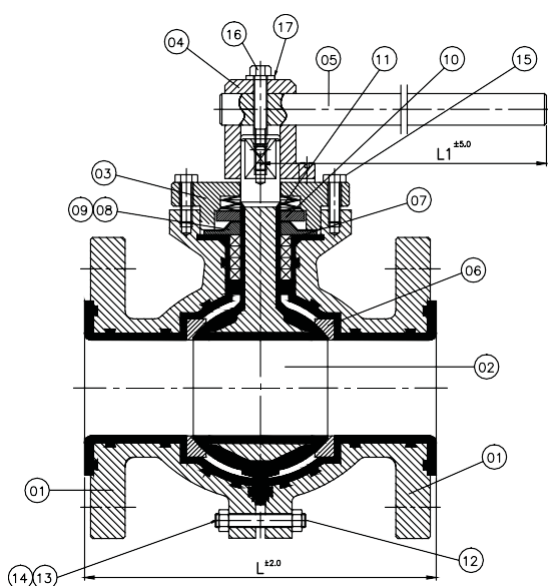


FULL PORT LINED BALL VALVE



NO.	DESCRIPTION	MOC
01	Lined Side Piece	Ductile Iron / WCB (FEP Lined)†
02	Lined Integral Ball	ASTM A216 Gr.WCB (FEP Lined)†
03	Top Cover	ASTM A216 Gr.WCB
04	Lever Boss	ASTM A216 Gr.WCB
05	Lever Rod	MS
06	Seat Ring	PTFE
07	Chevron Ring	PTFE
08	Flexible Diaphragm	PTFE
09	Diaphragm Backup	S.S.
10	Thurst Washer	MS (Nickel Plated)
11	Disc Spring -nickel Plated	Spring Steel
12	Stud	HT 8 8
13	Hex Nut	HT 8 8
14	Spring Washer	Spring Steel
15	Hex Head Bolt For Top Cover	HT 8 8
16	Hex Head Screw For Lever Boss	S.S.
17	Plain Washer For Lever Boss	S.S.

Schematic Representation Only

† Standard Scope of Supply



BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / AISI S.S.304
- ☑ ASTM A351 Gr. CF8M / AISI S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222
- ☑ PP - ASTM D 4101
- ☑ HDPE - ASTM D 3350

SALIENT FEATURES

- ☑ 'Maintenance Free' Glandless Live Load Design
- ☑ One Piece Integral Ball Stem Combination
- ☑ Minimum Cavity & Full Flow Efficient
- ☑ No Backlash in Stem & Ball even after prolonged service
- ☑ Exceptionally Low Torque as compared to Plug Valve
- ☑ 100% Leak tight (class VI leakage rate) operation

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN ISO 17292:2015 (Formerly BS 5351)
- ☑ Drilling : ASA #150 / DIN 2632/2633 / BS 10 Table D, E or F / Customer Specified.
- ☑ Face to Face : ANSI B 16.10 / DIN 3202 / BS EN 558-1/2
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[§] : Body (Shell) - 20 Kg/Cm²
- ☑ Hydrostatic Test[§] : Seat - 11 Kg/Cm²
- ☑ Pneumatic Test[§] : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ Antistatic Clip
- ☑ Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart
- ☑ Gear Box

DIMENSIONAL DATA

SIZE	L [§] (mm)	L1 (mm)	Torque [§] (N.m)
DN15-1/2"	140*†	175	14
DN20-3/4"			
DN25-1"	127		
DN40-1 1/2"	165	235	23
DN50-2"	178	310	37
DN65-2 1/2"	203*†	410	55
DN80-3"	203	405	75
DN100-4"	228	505	115
DN150-6"	267	650	225
DN200-8"	457 [@]	G. Box	980
DN250-10"	533 [@]	G. Box	1200/1700

§ As per BS EN 558-2, Series 3. † Standard Scope of Supply.

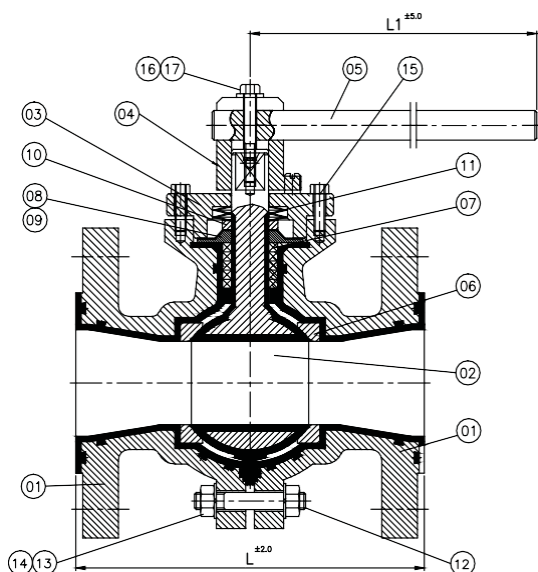
* As per Manufacturer's Standard | § Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Testing in accordance with BS EN 12266-1(2012) Table A.3

@ As per EN558, Sr. 12

Technical Information subject to change without notice

STANDARD PORT LINED BALL VALVE



NO.	DESCRIPTION	MOC
01	Lined Side Piece	Ductile Iron / WCB (FEP Lined)†
02	Lined Integral Ball	ASTM A216 Gr.WCB (FEP Lined)†
03	Top Cover	ASTM A216 Gr.WCB
04	Lever Boss	ASTM A216 Gr.WCB
05	Lever Rod	MS
06	Seat Ring	PTFE
07	Chevron Ring	PTFE
08	Flexible Diaphragm	PTFE
09	Diaphragm Backup	S.S.
10	Thrust Washer	MS (Nickel Plated)
11	Disc Spring-Nickel Plated	Spring Steel
12	Stud	HT 8 8
13	Hex Nut	HT 8 8
14	Spring Washer	Spring Steel
15	Hex Head Bolt For Top Cover	HT 8 8
16	Hex Head Screw For Lever Boss	S.S
17	Plain Washer For Lever Boss	S.S

Schematic Representation Only

† Standard Scope of Supply



DIMENSIONAL DATA

	SIZE	L [§] (mm)	L1 (mm)	Torque [§] (N.m)
ANSI #150 FLANGED RF	DN15-1/2"	140*†	175	14
	DN20-3/4"			
	DN25-1"	127		
	DN40-1 1/2"	165	175	14
	DN50-2"	178	235	23
	DN65-2 1/2"	203*	310	37
	DN80-3"	203	410	55
	DN100-4"	228	405	75
	DN150-6"	267	505	115
	DN200-8"	294	G. Box	225
	DN250-10"	533 [@]	G. Box	Consult

§ As per BS EN 558-2, Series 3. † Standard Scope of Supply.

* As per Manufacturer's Standard | § Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Testing in accordance with BS EN 12266-1(2012) Table A.3

@ As per EN558, Sr. 12

BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / AISI S.S.304
- ☑ ASTM A351 Gr. CF8M / AISI S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222
- ☑ PP - ASTM D 4101
- ☑ HDPE - ASTM D 3350

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN ISO 17292:2015 (Formerly BS 5351)
- ☑ Drilling : ASA #150 / DIN 2632/2633 / BS 10 Table D, E or F / Customer Specified.
- ☑ Face to Face : ANSI B 16.10 / DIN 3202 / BE EN 558-1/2
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ 'Maintenance Free' Glandless Live Load Design
- ☑ One Piece Integral Ball Stem Combination
- ☑ Minimum Cavity & Full Flow Efficient
- ☑ No Backlash in Stem & Ball even after prolonged service
- ☑ Exceptionally Low Torque as compared to Plug Valve
- ☑ 100% Leak tight (class VI leakage rate) operation

TEST & INSPECTION DATA

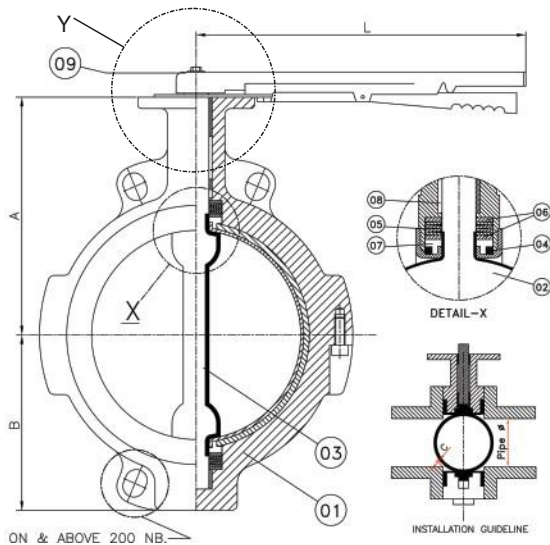
- ☑ Hydrostatic Test[§] : Body (Shell) - 20 Kg/Cm²
- ☑ Hydrostatic Test[§] : Seat - 11 Kg/Cm²
- ☑ Pneumatic Test[§] : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

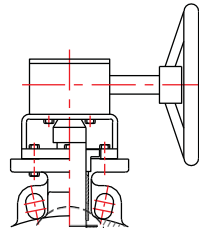
- ☑ Antistatic Clip
- ☑ Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart
- ☑ Gear Box

Technical Information subject to change without notice

WAFER TYPE LINED BUTTERFLY VALVE



NO.	DESCRIPTION	MOC
01	Wafer Type Body	ASTM A216 Gr WCB†
02	Body Liner	PFA† / PTFE
03	Disc with Shaft	SS 304 Encapsulated With PFA†
04	Elastomer Backup	Silicon
05	Wedge Ring	PTFE
06	Thrust Washer	S.S.
07	Support Bush	TFM / SS PFA LINED / Coated
08	Guide Bush	S.S. PTFE Coated
09	Lever Assembly	CS



"Y" Gear Box Mounting (Optional)

Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PTFE - ASTM D 4895
- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN 593:2015 (Formerly BS 5155)
- ☑ Drilling : ANSI B16.5 / DIN PN10/16
- ☑ Face to Face : API 609 / DIN 3202 K1 / BS 5155 / ISO 5752 / BS EN 558-1/2
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ 'Maintenance Free' High Performance Design
- ☑ Bubble Tight Closer provides process efficiency
- ☑ Dynamic Live Loaded Seal Design give super safe operation
- ☑ Intact Performance in severe conditions of corrosion, abrasion and temperature fluctuation.
- ☑ Leakage rate : class VI, zero leakage - tight shut off

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Seat - 11 Kg/Cm²
- ☑ Pneumatic Test[#] : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ Anti-static Clip
- ☑ Gear Box / Actuator
- ☑ Unlined Disc - Astm A351 Gr.CF8 / CF3M
- ☑ Extended Stem Design
- ☑ Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart

DIMENSIONAL DATA

SUITABLE TO MOUNT BETWEEN ANSI #150 / PN10-16 FLANGES							
SIZE	F/F' (±2) (mm)	A (mm)	B (mm)	L (mm)	Min. Pipe Ø* (mm)	C\$ (mm)	Torque [§] (N.m)
DN40-1 1/2"	33	85	65	260	26	1.5	15
DN50-2"	43	100	67	260	29	1.5	30
DN65-2 1/2"	46	115	65	260	49	1.5	40
DN80-3"	46	120	80	260	68	1.5	40
DN100-4"	52	158	95	260	88	1.5	50
DN150-6"	58*	190	120	325	145	1.5	100
DN200-8"	64*	220	162	G.Box	196	3	180
DN250-10"	70*	235	200	G.Box	245	3	250
DN300-12"	80*	270	232	G.Box	293	3	350
DN350-14"	90*	300	255	G.Box	332	3	500
DN400-16"	102	330	290	G.Box	378	3	600
DN450-18"	114	395	310	G.Box	430	3	1200
DN500-20"	127	420	342	G.Box	480	3	1500
DN600-24"	156*	510	400	G.Box	572	6	2000
DN700-28"	165*	635	480	G.Box	695	6.5	Consult

* Smallest Pipe Ø of connecting pipe for Inline Mounting.

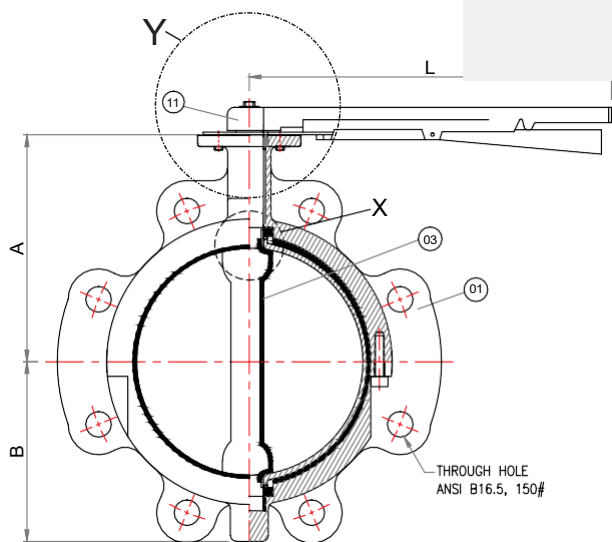
\$ 'C' Shows the minimum clearance required between Valve Disc & Pipe ID

♦ per Manufacturer's Standard † As per BS EN 558-2, Series-20

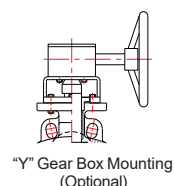
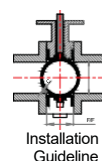
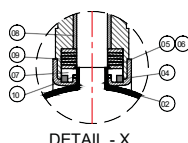
§ Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Technical Information subject to change without notice

LUG TYPE LINED BUTTERFLY VALVE

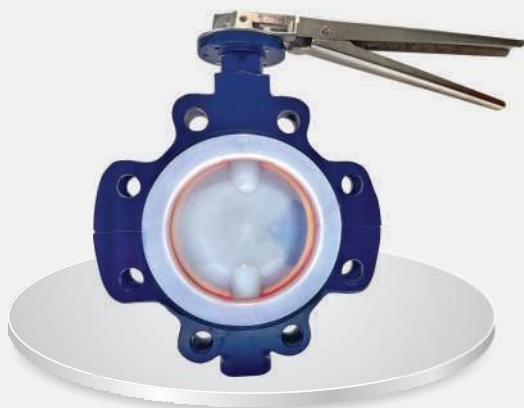


NO.	DESCRIPTION	MOC
01	Lug Type Body	ASTM A216 Gr.WCB†
02	Body Liner	PFA† / PTFE
03	Disc with Shaft	SS 304 Encapsulated With PFA†
04	Elastomer Backup	Silicon
05	Wedge Ring	PTFE
06	Thrust Washer	S.S.
07	Support Bush	TFM / SS PFA LINED / Coated
08	Guide Bush	S.S. PTFE Coated
09	Disc Spring	Spring Steel (Nickel Plated)
10	O Ring	Viton Rubber
11	Lever Assembly	CS (Nickel Plated)



Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PTFE - ASTM D 4895
- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN 593:2015 (Formerly BS 5155)
- ☑ Drilling : ANSI B16.5 / DIN PN10/16
- ☑ Face to Face : API 609 / DIN 3202 K1 / BS 5155 / ISO 5752 / BS EN 558-1/2
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ 'Maintenance Free' High Performance Design
- ☑ Bubble Tight Closer provides process efficiency
- ☑ Dynamic Live Loaded Seal Design give super safe operation
- ☑ Intact Performance in severe conditions of corrosion, abrasion and temperature fluctuation.
- ☑ Leakage rate : class VI, zero leakage - tight shut off

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Seat - 11 Kg/Cm²
- ☑ Pneumatic Test[#] : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ Anti-static Clip
- ☑ Gear Box / Actuator
- ☑ Unlined Disc - Astm A351 Gr.CF8 / CF3M
- ☑ Extended Stem Design
- ☑ Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart

DIMENSIONAL DATA

SUITABLE TO MOUNT BETWEEN ANSI #150 / PN10-16 FLANGES							
SIZE	F/F' (±2) (mm)	A (mm)	B (mm)	L (mm)	Min. Pipe Ø* (mm)	C\$ (mm)	Torque [§] (N.m)
DN40-1 1/2"	33	85	65	260	26	1.5	15
DN50-2"	43	100	67	260	29	1.5	30
DN65-2 1/2"	46	115	65	260	49	1.5	40
DN80-3"	46	120	80	260	68	1.5	40
DN100-4"	52	158	95	260	88	1.5	50
DN150-6"	58'	190	120	325	145	1.5	100
DN200-8"	64'	220	162	G.Box	196	3	180
DN250-10"	70'	235	200	G.Box	245	3	250
DN300-12"	80'	270	232	G.Box	293	3	350
DN350-14"	90'	300	255	G.Box	332	3	500
DN400-16"	102	330	290	G.Box	378	3	600
DN450-18"	114	395	310	G.Box	430	3	1200
DN500-20"	127	420	342	G.Box	480	3	1500
DN600-24"	156'	510	400	G.Box	572	6	2000
DN700-28"	165'	635	480	G.Box	695	6.5	Consult

* Smallest Pipe Ø of connecting pipe for Inline Mounting.

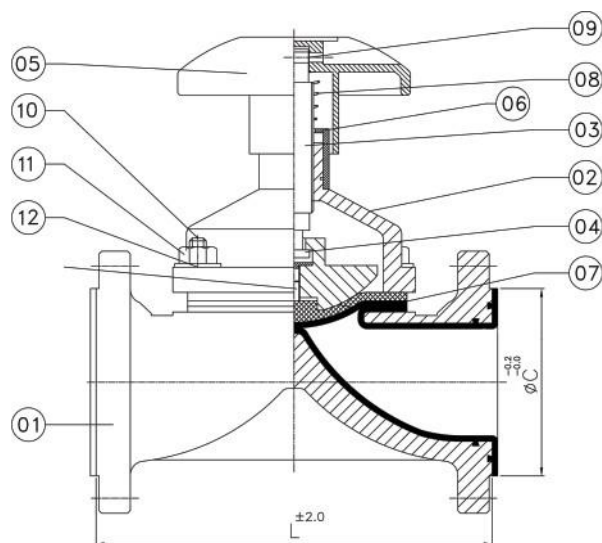
\$ 'C' Shows the minimum clearance required between Valve Disc & Pipe ID

◆ per Manufacturer's Standard † As per BS EN 558-2, Series-20

§ Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Technical Information subject to change without notice

WEIR TYPE DIAPHRAGM VALVE



NO.	DESCRIPTION	MOC
01	Lined Body	Ductile Iron GGG40.3 FEP Lined †
02	Bonnet	Ductile Iron / WCB
03	Spindle	C.S PTFE Coated
04	Compressor Pin Type	Ductile Iron/WCB
05	Handwheel	ABS / Mettalic
06	Opening Indicator Sleeve	HDPE
07	Diaphragm (Pin Type)	PTFE Backed With EPDM Rubber
08	Compression Spring	S.S. (upto 50 NB)
09	Dowell Pin	Spring Steel
10	Stud	S.S.
11	Nut	S.S.
12	Washer	S.S.

Schematic Representation Only

† Standard Scope of Supply



BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222
- ☑ PP - ASTM D 4101

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN 13397:2002 (Formerly BS 5156)
- ☑ Face to Face : BS 2080, DIN 3202, MSSP 88, EN 558
- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Drilling : ASA #150 / DIN 2632/33 / BS 10 TABLE D, E, F
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ IDEAL for Industrial & Corrosive Duties.
- ☑ 100% Leak tight (Class VI Leakage Rate) Operation
- ☑ Low Maintenance
- ☑ Best performance in Throttling & Flow control applications.
- ☑ Complete isolation of working parts from process stream

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Body (Shell) - 15 Kg/Cm²
Seat - 11 Kg/Cm²
- ☑ Pneumatic Test[#] : Seat - 6 Kg/Cm² (Class VI Sealing)
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN / COMPONENTS

- ☑ VITON / BUTYL DIAPHRAGM BACKUP
- ☑ METALLIC HANDWHEEL
- ☑ SPINDLE - SS 304/316/410
- ☑ PNEUMATIC ACTUATOR WITH ACCESSORIES
- ☑ STRAIGHT THROUGH (KB TYPE) DESIGN
- ☑ 3 LAYER PTFE DIAPHRAGM

DIMENSIONAL DATA

SIZE	L [§] (mm)	ØC (mm)	Torque [§] (N.m)
DN15-1/2"	108	35	80
DN20-3/4"	117	43	85
DN25-1"	127	60	115
DN40-1 1/2"	159	73	155
DN50-2"	190	92	155
DN65-2 1/2"	216	104	190
DN80-3"	254	127	200
DN100-4"	305	158	245
DN125-5"	353	185	300
DN150-6"	406	214	360
DN200-8"	520	266(min)	Consult
DN250-10"	635	320(min)	Consult

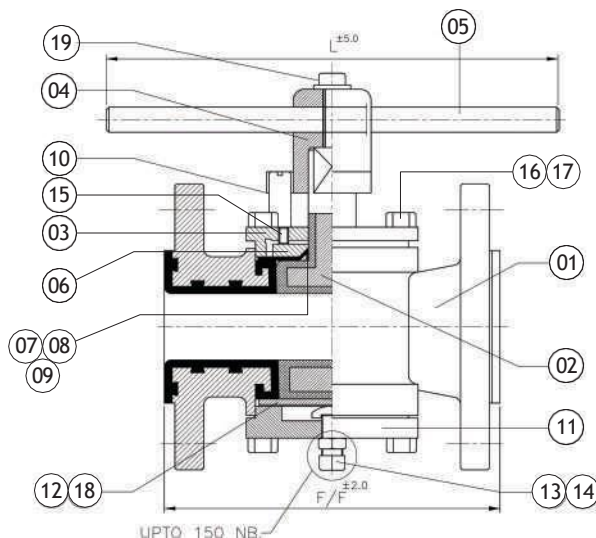
* As per BS EN 558 - 2, Series-7

Testing in accordance with BS EN 12266-1(2012) Table A.3

§ Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Technical Information subject to change without notice

LINED PLUG VALVE (NON JACKETED)



NO.	DESCRIPTION	MOC
01	Body With Lining	Ductile Iron GGG40.3 / ASTM A216 Gr.WCB (FEP Lined) [†]
02	Lined Plug	ASTM A216 Gr.WCB (FEP Lined) [†]
03	Top Cover	Ductile Iron / WCB
04	Lever Boss	ASTM A216 Gr.WCB
05	Lever Rod	M.S
06	Wedge Ring	PTFE
07	Diaphragm	PTFE
08	Diaphragm Backup	S.S.
09	Thrust Washer	S.S.
10	Stopper Pin	WCB/S.S.
11	Bottom Cover	Ductile Iron/WCB
12	Blind Gasket	PTFE
13	Pusher Bolt	S.S.
14	Pusher Nut	S.S.
15	Grub Screw	S.S.
16	Hex Head Bolt	S.S.
17	Washer	S.S.
18	Blind Gasket Backup	S.S.
19	L.boss Bolt & Washer	S.S.

Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS 5158:1989
- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Drilling : ASA #150 / DIN 2632/33 / BS 10 TABLE D, E, F
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ Cavity Less High Performance Design
- ☑ Zero Leakage (Class VI Leakage Rate) due to large sealing area
- ☑ Unique Lining makes it Fully Locked from Top, Bottom & Port.
- ☑ Totally Maintenance Free Design.

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Body (Shell) - 20 Kg/Cm²
- : Seat - 10 Kg/Cm²
- ☑ Pneumatic Test[#] : Seat - 6 Kg/Cm²
- ☑ Spark Test :

OPTIONAL DESIGN/COMPONENTS

- ☑ Anti-static Clip
- ☑ Gear Box / Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart
- ☑ Sleeved Plug Valve

DIMENSIONAL DATA

SIZE	F/F [§] (mm)	L (mm)	Torque [§] (N.m)
DN15-1/2"	108	270	30
DN20-3/4"	118	270	30
DN25-1"	127	270	40
DN40-1 1/2"	165	320	60
DN50-2"	178	470	75
DN80-3"	203	478	140
DN100-4"	229	630	210
DN150-6"	267	G.BOX	550
DN200-8"	360	G.BOX	1500
DN250-10"	360	G.BOX	1500

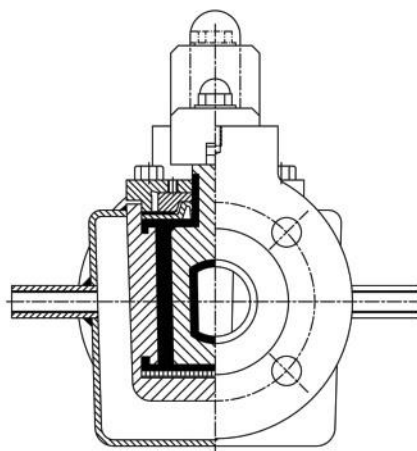
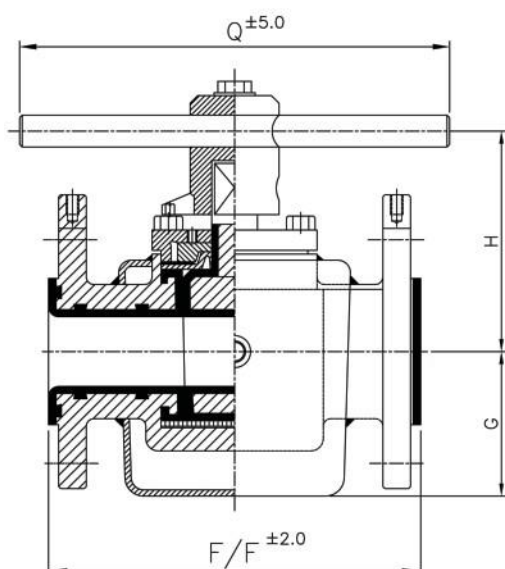
*As per BS EN 558 - 2, Series-3.

Testing in accordance with BS EN 12266-1(2012) Table A.3

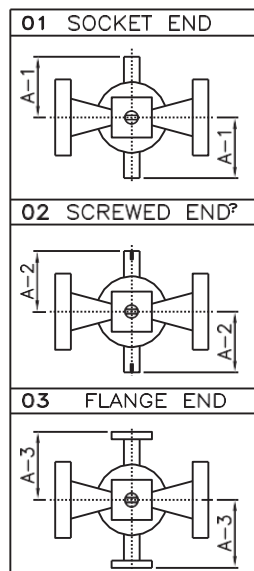
§ Torque measured at ΔP = 11 Bar at Room Temperature in Wet Condition (Test Media - water).

Technical Information subject to change without notice

LINED PLUG VALVE (JACKETED)

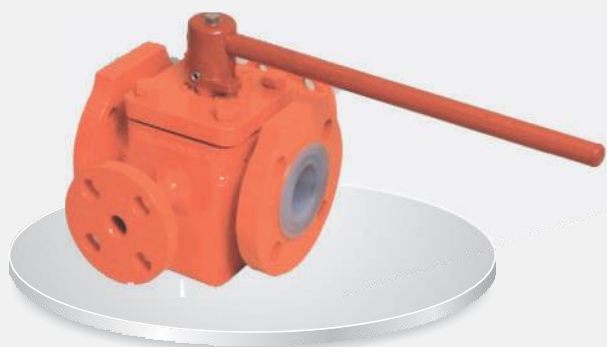


JACKET CONNECTIONS



Schematic Representation Only

† Standard Scope of Supply



BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS 5158:1989
- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Drilling : ASA #150 / DIN 2632/33 / BS 10 TABLE D, E, F
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Body (Shell) - 20 Kg/Cm²
Seat - 10 Kg/Cm²
Jacket - 10 Kg/Cm²
- ☑ Pneumatic Test[#] : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ ANTI-STATIC CLIP
- ☑ GEAR BOX
- ☑ Pneumatic / Electric Actuated ON / OFF & Control Valves
- ☑ Limit switch, Solenoid Valve, Positioners - Electro Pneumatic / Smart

DIMENSIONAL DATA

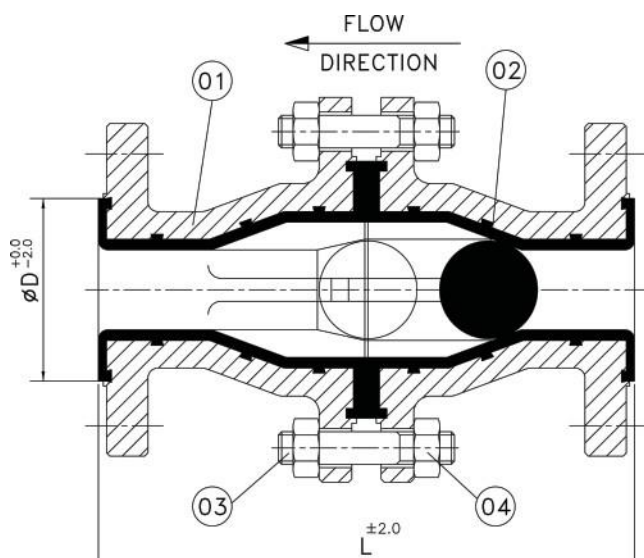
ANSI #150 FLANGED RF							
SIZE	F/F' (±2) (mm)	G (mm)	H (mm)	Q (mm)	A-1 (mm)	A-2 (mm)	A-3 (N.m)
DN15-1/2"	108	70	76	270	135	81	119
DN20-3/4"	118	70	76	270	135	81	119
DN25-1"	127	80	94	270	135	81	119
DN40-1 1/2"	165	90	106	320	135	81	119
DN50-2"	178	110	118	470	141	86	125
DN80-3"	203	120	132	478	150	95	133
DN100-4"	229	145	149	630	160	105	143

* As per BS EN 558 - 2, Series-3.

Testing in accordance with BS EN 12266-1(2012) Table A.3

Technical Information subject to change without notice

LINED CHECK VALVE (BALL TYPE NRV)



NO.	DESCRIPTION	MOC
01	Body With Lining	Ductile Iron GGG40.3 / ASTM A216 Gr. WCB (FEP Lined) †
02	Solid Ball	PTFE
03	Stud	SS 304
04	Nuts	SS 304

INSTALLATION

- When Installed Vertically (or upto 60° angle) check valve close automatically because of centre guided ball.
- When Installed Horizontally (90° to 60°), the valve close automatically if the back flow related to water is 1.5 - 2.5 m/sec.
- Full Bore when valve is opened. i.e. Low Pressure Drop condition.

Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- Ductile Iron GGG40.3 / ASTM A395
- Cast Steel ASTM A216 Gr.WCB
- ASTM A351 Gr. CF8 / S.S.304
- ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- PFA - ASTM D 3307
- ANT. PFA - ASTM D 3307
- FEP - ASTM D 2116
- ETFE - ASTM D 3159
- PVDF - ASTM D 3222
- HDPE - ASTM D 3350

TECHNICAL SPECIFICATIONS

- Design Standard : BS 5351
- Flange : As per ANSI B16.5 / B16.42
- Drilling : ASA #150 / DIN 2632/33 / BS 10 TABLE D, E, F
- Face to Face : ANSI B16.10 / DIN 3202 / BS EN 558-1&2
- Lining Thickness : 3 to 5 mm
- Testing Standard : BS EN 12266-122 (2012)

SALIENT FEATURES

- Extremely Effective in preventing backflow or back pressure in Vertical Installation.
- Full Size Port for maximum capacity.
- Practically 100% Maintenance Free due to presence of single moving part.
- Fully Lined Design to eliminate surface contact which gives maximum corrosion & contamination resistance

TEST & INSPECTION DATA

- Hydrostatic Test[‡] : Body - 15 Kg/Cm²
Back Seat - 2 Kg/Cm² (Leakage Rate D)
- Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- Y TYPE [45°] BALL CHECK DESIGN
- HORIZONTAL INSTALLATION KIT

DIMENSIONAL DATA

SIZE	L* (mm)	ØD (mm)	Pressure to Seat (PSI) [‡]
DN15-1/2"	130	35	40
DN20-3/4" [‡]	120	35	27
DN25-1"	127	55	19
DN40-1 1/2"	165	73	19
DN50-2"	178*	92	18
DN80-3"	203*	127	15
DN100-4"	228*	157	15
DN150-6"	406	216	11
DN200-8" *	495	270	Consult
DN250-10" *	622	322	Consult
DN300-12" *	698	381	Consult

* As per BS EN558-2, Series-3.

‡ Reduced Port Design

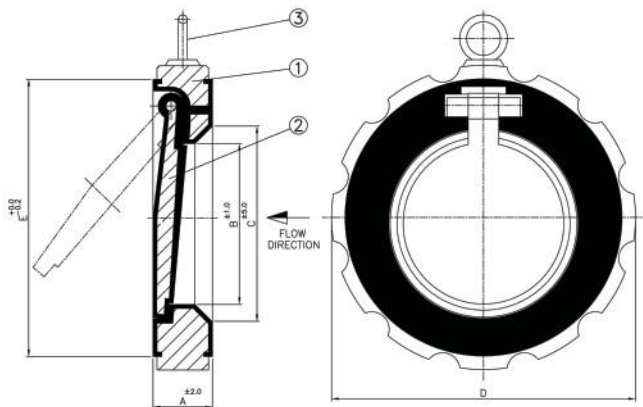
@ As per BS EN 558-2, Series-10.

\$ Flange holes will be threaded. \$ Pressure to Unseat for all sizes will be less than 1 PSI.

Testing in accordance with BS 6755(Part 1) as per D4.1 & D4.3, Limitation Para 2, Leakage Rate D Hydraulic Seat Test shall be provided @1.1 of max. differential pressure for soft seated Valves.

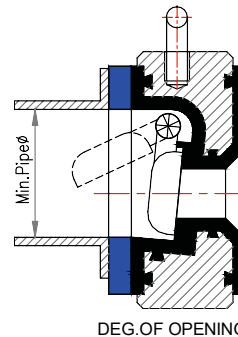
Technical Information subject to change without notice

WAFER TYPE SWING CHECK VALVE



NO. DESCRIPTION MOC

01	Body With Lining	Ductile Iron GGG40.3 / ASTM A216 Gr.WCB (FEP Lined) †
02	Lined Disc	ASTM A216 Gr.WCB (FEP Lined)†
03	Eye Bolt	SS 304

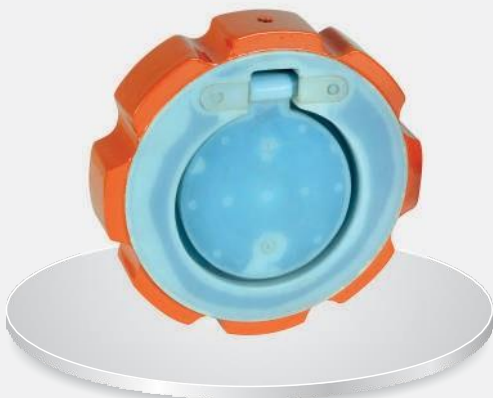


SPECIAL INSTALLATION INSTRUCTION

Use PTFE Retainer Ring if connecting pipe ID is greater than Max. Inner Pipe Ø mentioned in below table. In such case retainer ring ID shall be equal to max. pipe ID required for respective size.

Schematic Representation Only

† Standard Scope of Supply



BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ ETFE - ASTM D 3159
- ☑ PVDF - ASTM D 3222

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : BS EN 593:2015 (Formerly BS 5155)
- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Face to Face : ANSI B16.10 / DIN 3202 K1 / BS 5155 / ISO 5752 / API 609 / BS EN 558 - 1&2
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012)

SALIENT FEATURES

- ☑ Ideal Replacement to costly high alloy valves.
- ☑ No Spring or Pin - No Corrosion or Wear & Tear
- ☑ Low Pressure Drop
- ☑ Special Liner Locking System to hold liner securely in position.

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[†] : Body - 15 Kg/Cm²
Back Seat - 2 Kg/Cm²

ΔP (psi)	Leakage Rate
0 - 40	5-10 cc/min
41 - 74	3-5 cc/min
75 & Above	0 cc/min

- ☑ Spark Test : 15 K.V. D.C Spark Test

OPTIONAL DESIGN/COMPONENTS

- ☑ PTFE SOLID RETAINER RING

DIMENSIONAL DATA

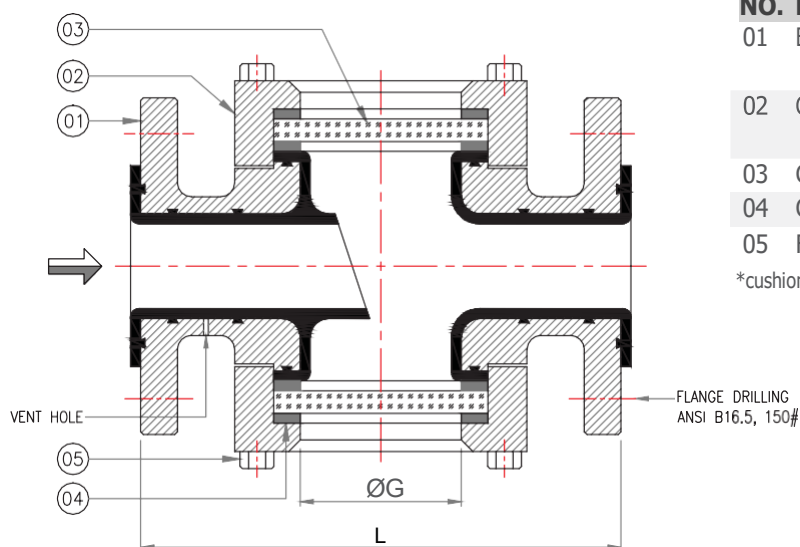
SUITABLE TO MOUNT BETWEEN ANSI 150# / 300# FLANGES								
SIZE	Δ [†] (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Inner Pipe Ø		Max. Opening
DN25-1"	33	12	21	62	53	Min.	Max.	59°
DN40-1 1/2"	33	20	35	80	70	35	46	52°
DN50-2"	43	30	52	100	92	46	56	52°
DN80-3"	46	48	74	133	127	73	82	52°
DN100-4"	52	65	94	162	152	95	100	60°
DN150-6"	58	112	152	240	211	145	150	60°
DN200-8"	62	133	175	295	258	192	195	60°
DN250-10"	68	189	230	348	320	242	260	52°
DN300-12"	78	232	272	398	367	292	310	52°
DN350-14"	92	252	297	426	397	315	330	48°
DN400-16"	102	327	370	510	470	380	390	45°
DN500-20"	127	386	485	603	585	466	480	45°
DN600-24"	154	448	574	710	685	575	590	45°

† As per BS EN558-2, Series-20

Testing in accordance with BS EN 12266-1 (2012) Table A.3

Technical Information subject to change without notice

SIGHT FLOW INDICATOR (DOUBLE WINDOW TYPE)



NO. DESCRIPTION MOC

01	Body With Lining	Ductile Iron GGG40.3 /ASTM A216 Gr.WCB (FEP Lined) †
02	Cover Plate	Ductile Iron GGG 40.3 / ASTM A216 Gr.WCB
03	Glass	Toughen Glass
04	Cushion*	PTFE
05	Fasteners	SS 304

*cushion on both side of glass

Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB
- ☑ ASTM A351 Gr. CF8 / AISI S.S.304
- ☑ ASTM A351 Gr. CF8M / AISI S.S.316

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ PVDF - ASTM D 3222
- ☑ PP - ASTM D 4101
- ☑ HDPE - ASTM D 3350

TECHNICAL SPECIFICATIONS

- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Face to Face : DIN 3202 / DIN EN 558-1
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Design : ANSI B16.34

SALIENT FEATURES

- ☑ Drip Tube Indication (Upto 4" - DN 100)
- ☑ Inert to a wide range of Corrosive Chemicals
- ☑ Eliminates need of using expensive, exotic alloys.

TEST & INSPECTION DATA

- ☑ Hydrostatic Test : Body(Shell) - 15 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ FULL VIEW (GLASS TUBE) DESIGN
- ☑ PFA COATING ON GLASS

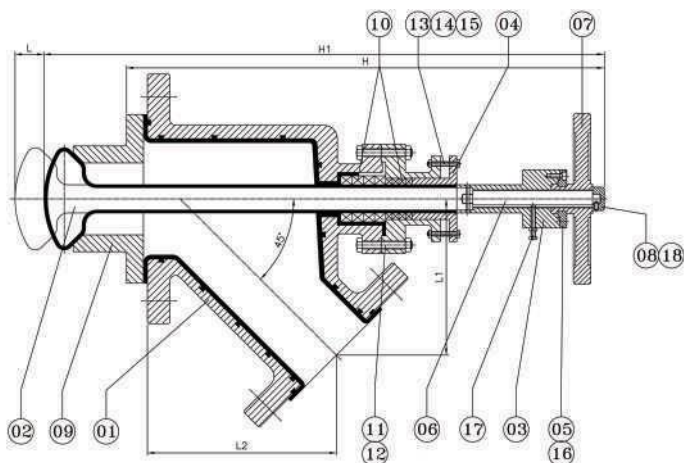
DIMENSIONAL DATA

SIZE	A*(mm)	ØG (mm)
DN15-1/2"	124	35
DN20-3/4"	144	35
DN25-1"	160	45
DN32 - 1 1/4"	180	60
DN40-1 1/2"	200	60
DN50-2"	230	70
DN65-2 1/2"	290	98
DN80-3"	310	98
DN100-4"	350	125
DN150-6"	480	175
DN200-8"	445	216
DN250-10"	522	216

* As per Manufacturer's Standard

Technical Information subject to change without notice

FLUSH BOTTOM TANK VALVE



NO. DESCRIPTION

MOC

01	Body	Ductile Iron GGG 40.3 / ASTM A216 Gr. WCB (FEP Lined) †
02	Spindle	ASTM A216 Gr.WCB / EN8 (FEP Lined) †
03	Bonnet	Ductile Iron / ASTM A216 Gr.WCB
04	Gland	Ductile Iron / A216 Gr.WCB
05	Locking Plate	M.S
06	Ext. Spindle Screw	M.S
07	Hand Wheel	Ductile Iron GGG 40.3 / WCB
08	End Cap	M.S
09	Valve Seat	GFT
10	Gland Packing	PTFE
11	Hex. Head Screw	S.S
12	Spring Washer	S.S
13	Hex. Head Screw	S.S
14	Hex Nut	S.S
15	Spring Washer	S.S
16	Al. Cap Screw	S.S
17	Hex Head Screw & Nut	S.S
18	Al. Soc. Grub Screw	S.S

Schematic Representation Only

† Standard Scope of Supply

BODY MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116

TECHNICAL SPECIFICATIONS

- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Lining Thickness : 3 to 5 mm

TEST & INSPECTION DATA

- ☑ Hydrostatic Test[#] : Seat - 10 Kg/Cm2
- ☑ Pneumatic Test[#] : Sea t - 6 Kg/Cm2
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ TENTALUM TIP WITH RTD SENSOR
- ☑ PNEUMATIC ACTUATOR
- ☑ DOWN TO OPEN DESIGN

DIMENSIONAL DATA

ANSI #150 FLANGED RF

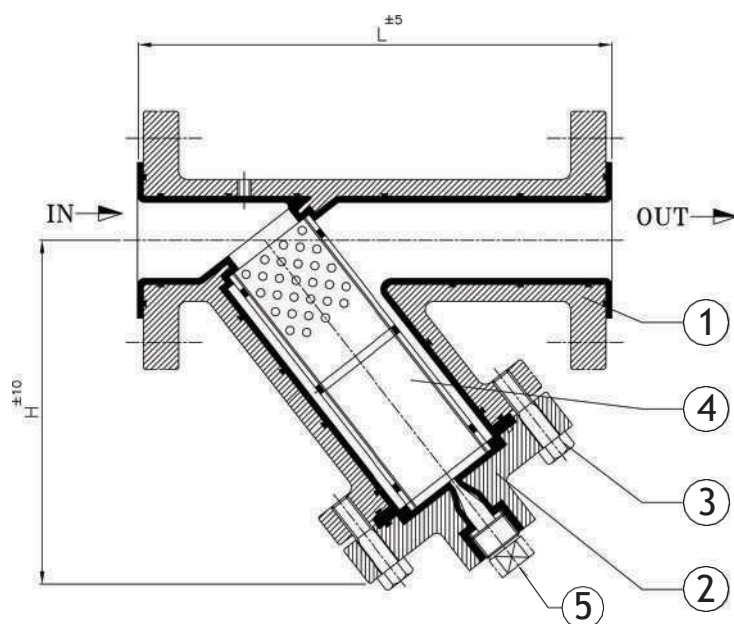
SIZE (NB)	H*	H1	L	L1	L2
50 x 40	410	465	40	112	164
80 x 50	445	535	40	124	164
100 x 80	490	565	40	145	176
150 x 100	625	700	40	191	231

All dimensional data are subject to Technical Revision.

*# As per Manufacturer's Standard.

Technical Information subject to change without notice

LINED FILTER STRAINER - 'Y' TYPE



NO.	DESCRIPTION	MOC
01	Body With Lining	Ductile Iron GGG 40.3 / (FEP Lined) †
02	End Cover	Ductile Iron GGG 40.3 / (FEP Lined) †
03	Stud/Nut	S.S
04	Filter Element	PTFE / PFA / ETFE MESH
05	Drain Plug	PTFE / PFA

Schematic Representation Only

† Standard Scope of Supply



BODY / DISC MATERIAL OPTIONS

- ☑ Ductile Iron GGG40.3 / ASTM A395
- ☑ Cast Steel ASTM A216 Gr.WCB

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ HDPE - ASTM D 3350

TECHNICAL SPECIFICATIONS

- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Drilling : ASA #150 / DIN 2632/33 / BS 10 TABLE D, E, F
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Degree of Filtration : Ø1mm Perforated PTFE Filter

DIMENSIONAL DATA

SIZE	L* (mm)	H (mm)	Flow Area ♦
DN25-1"	190	128	3.0X ^s
DN40-1 1/2"	260	190	3.0X
DN50-2"	284	203	3.0X
DN65-2 1/2"	305	235	3.0X
DN80-3"	348	257	2.6X
DN100-4"	415	307	2.6X
DN150-6"	508	410	2.0X
DN200-8"	650	515	2.0X
DN250-10"□	730	740	2.0X

*# As per Manufacturer's Standard \$ X times of Inlet Flow Area

♦ Filter Element Flow Area for Ø1mm perforated filter element

□ 2 pc. Design Body

SALIENT FEATURES

- ☑ Drip Tube Indication
- ☑ Inert to a wide range of Corrosive Chemicals
- ☑ Eliminates need of using expensive, exotic alloys.

TEST & INSPECTION DATA

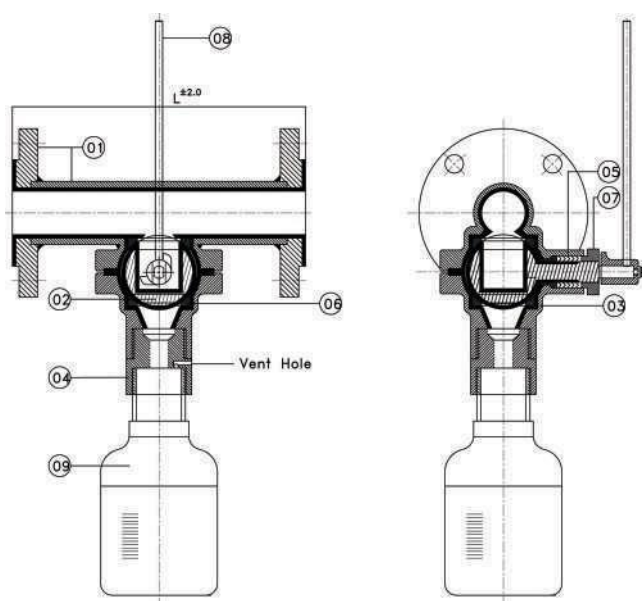
- ☑ Hydrostatic Test[#] : Body(Shell) - 20 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ 'Y' TYPE STRAINER WITH DRAIN BALL VALVE
- ☑ BASKET TYPE STRAINER
- ☑ ETFE FILTER ELEMENT WITH < 500µ FILTRATION

Technical Information subject to change without notice

INLINE SAMPLING VALVE (NON JACKETED)



NO.	DESCRIPTION	MOC
01	Body	ASTM A106 Gr.B+A105 (FEP Lined) †
02	Ball With Stem	ASTM A216 Gr.WCB (FEP Lined) †
03	Ball Housing	ASTM A216 Gr.WCB (FEP Lined) †
04	Adapter	P.T.F.E
05	Sealing Ring	P.T.F.E
06	Seat Ring	P.T.F.E
07	Stem Cover	C.S
08	Handle	M.S
09	Glass Bottle	Borosilicate

Schematic Representation Only

† Standard Scope of Supply



BODY MATERIAL OPTIONS

- ☑ ASTM A216 Gr.WCB
- ☑ ASTM A106 Gr. B, Sch-40 Pipe + A105 Flange
- ☑ ASTM A351 Gr. CF8 / S.S.304
- ☑ ASTM A351 Gr. CF8M / S.S.316
- ☑ ASTM A351 Gr. CF3 / S.S.304L
- ☑ ASTM A351 Gr. CF3M / S.S.316L

LINING MATERIAL OPTIONS

- ☑ PFA - ASTM D 3307
- ☑ ANT. PFA - ASTM D 3307
- ☑ FEP - ASTM D 2116
- ☑ PVDF - ASTM D 3222
- ☑ HDPE - ASTM D 3350

TECHNICAL SPECIFICATIONS

- ☑ Design Standard : Manufacturer's Standard
- ☑ Flange : As per ANSI B16.5 / B16.42
- ☑ Drilling : ASA #150/DIN 2632/33/BS 10 TABLED, E, F
- ☑ Lining Thickness : 3 to 5 mm
- ☑ Testing Standard : BS EN 12266-1&2 (2012) TABLE A.3

TEST & INSPECTION DATA

- ☑ Hydrostatic Test # : Body (Shell) - 15 Kg/Cm²
- Seat - 10 Kg/Cm²
- ☑ Pneumatic Test # : Seat - 6 Kg/Cm²
- ☑ Spark Test : 15 K.V. D.C

OPTIONAL DESIGN/COMPONENTS

- ☑ SAMPLING CABINET
- ☑ JACKETED SAMPLING VALVE
- ☑ UN-LINED SAMPLING VALVE
- ☑ REACTOR SAMPLING SYSTEM

SALIENT FEATURES

- ☑ True & Representative Sample Every Time.
- ☑ Zero Dead Space
- ☑ Always Under Isolation While Sampling - Higher Safety.
- ☑ 100% Maintenance Free Design
- ☑ Safe-True-Reliable Sample without any Process Interruption.

DIMENSIONAL DATA

ANSI #150 FLANGED RF		
SIZE	L ^s (mm)	Sample Capacity
DN25-1"	250	50 ML
DN40-1 1/2"	250	50 ML
DN50-2"	250	50 ML
DN80-3"	250	75 ML
DN100-4"	250	75 ML

All dimensional data are subject to Technical Revision.
*# As per Manufacturer's Standard.

Technical Information subject to change without notice