



VALVE ACCESSORIES

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VALVE ACCESSORIES

Locking Device (LD)

The robust device locks the valve handle at open or close position and allow to add a pad lock (up to 6mm) for misuse prevention. The spring-load construction ensure handle is lock in position at all valve installation orientations and under vibrating conditions. An accidentally push / pull / turn of the handle is prevented.

Locking device assembly for valves with ISO 5211 top mounting pad

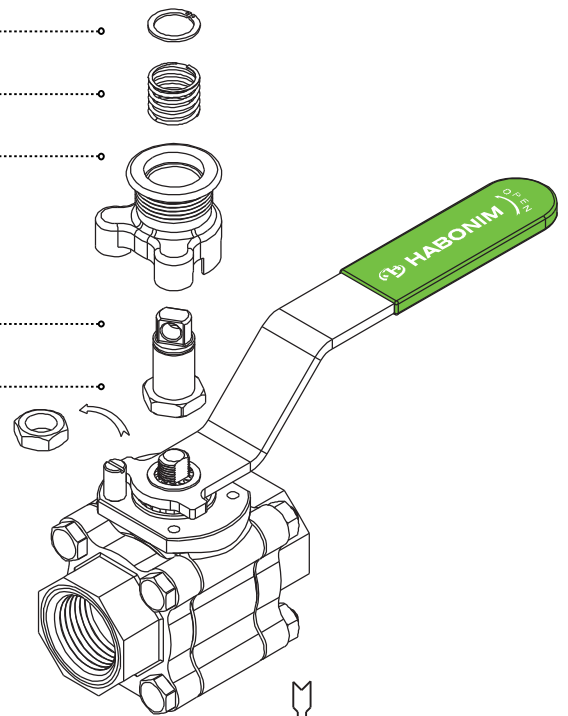
Retaining ring

Spring

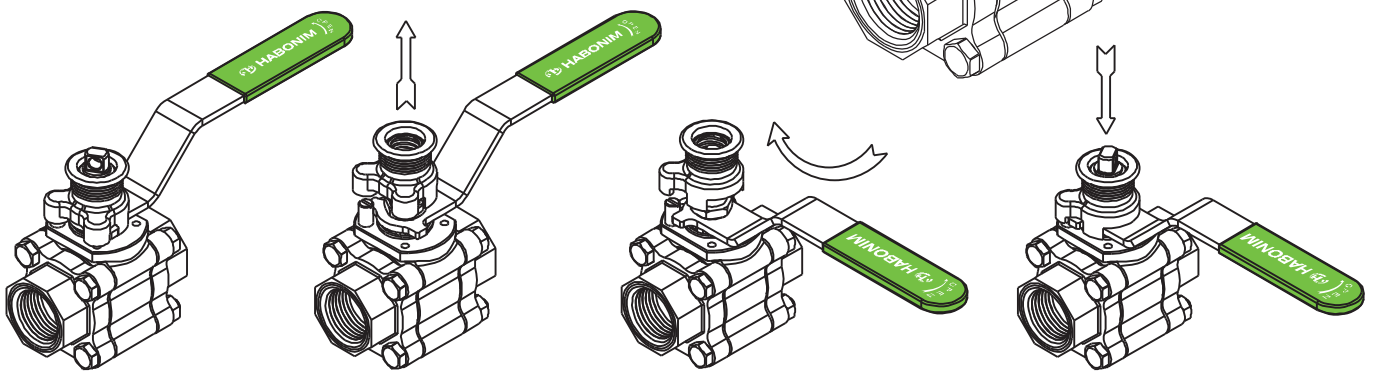
LD housing

Shaft groove

LD shaft



Locking device operation



Valve locked in open position

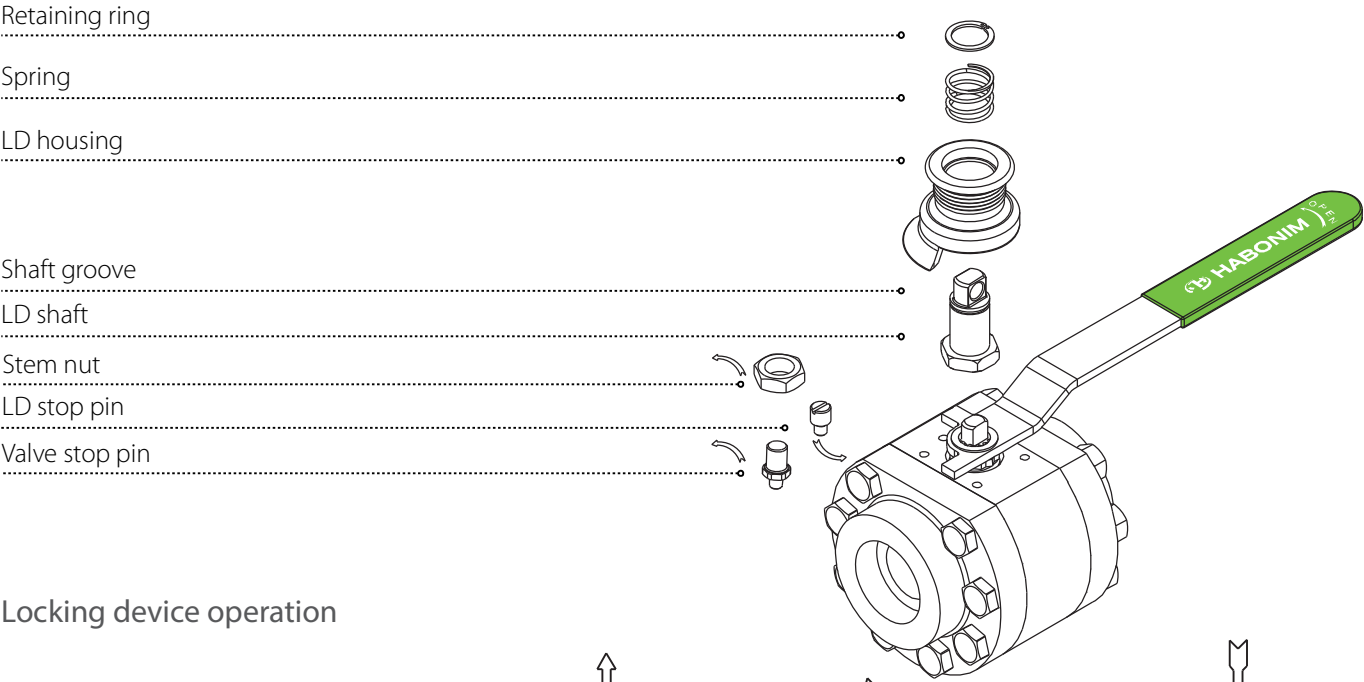
Lift LD housing above valve stop

Turn the valve handle 90° LD housing to the close position

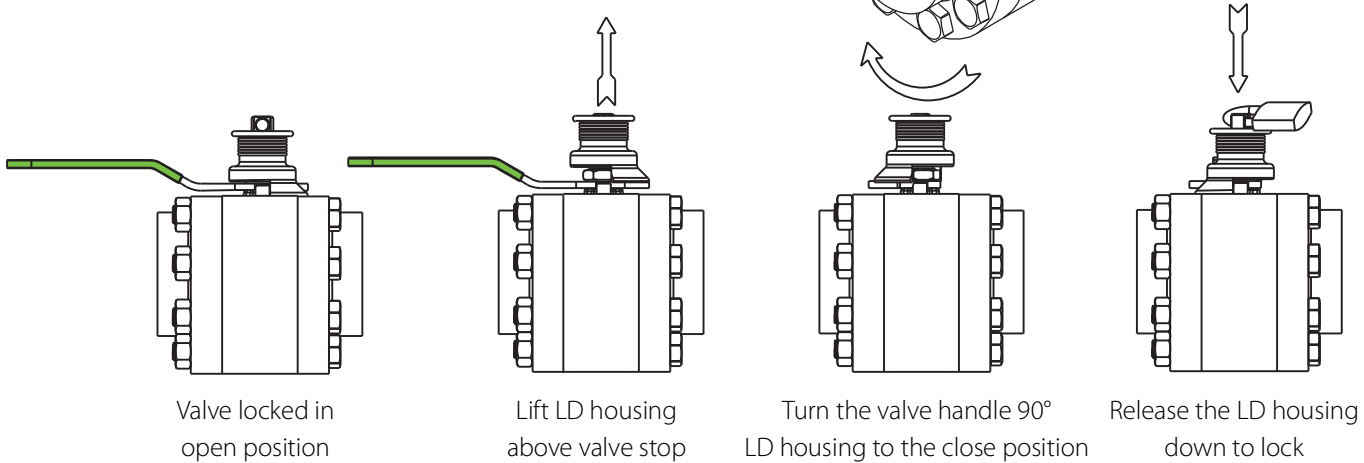
Release the LD housing down to lock

Locking Device (LD)

Locking device assembly for valves without ISO 5211 top mounting pad



Locking device operation



Ordering Code System

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6	0				F	4	7	W	-	6	6	6	6	A	T	G	/	B	W			-	L	D					
Size		Features				Series		Design		Body material		Ends material		Ball/Stem material		Seat material	Inner Seal	Outer Seal		End Connection				Special features					

Special Features (24-30)	
LD	Locking Device

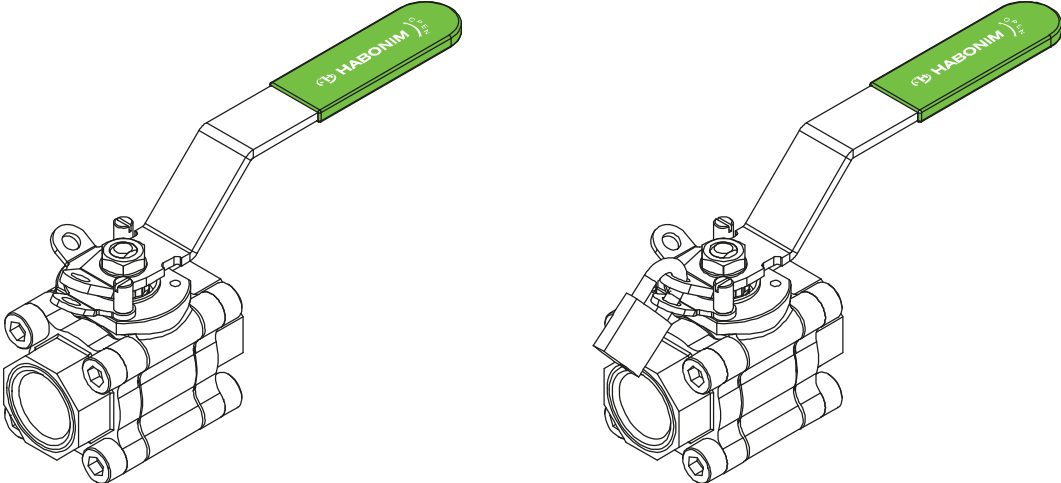
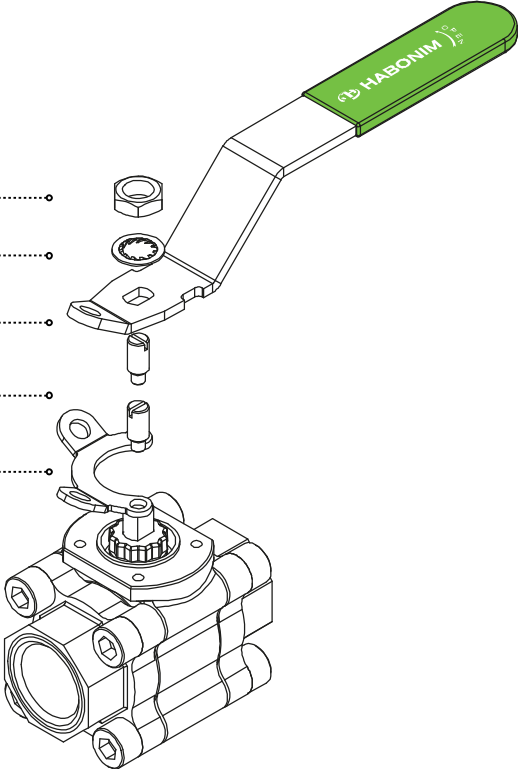
LDN

Lockable Handle (LDN)

A simple way to allow valve lock in open or closed position using a padlock

A simple way to allow valve lock in open or closed position using a padlock

- Handle nut
- Serrated
- LDN Handle
- Stop pin
- LDN piece



Ordering Code System

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6	0				F	4	7	W	-	6	6	6	6	A	T	G	/	B	W			-	L	D	N				
Size		Features				Series		Design	Body material	Ends material		Ball/Stem material		Seat material	Inner Seal	Outer Seal	End Connection					Special features							

Special Features (24-30)	
LDN	Lockable handle

VALVE ACCESSORIES

Spring Return Handle (SRH)

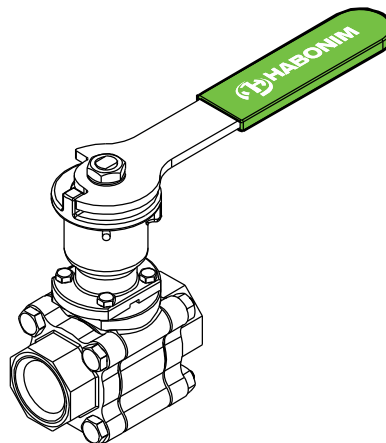
A spring-loaded device that force the valve into close or open base position, by manually forcing the vale handle it can be temporary turned into the opposite position (close or open respectively). Once handle is released the device will automatic force the valve into its base position.

Features

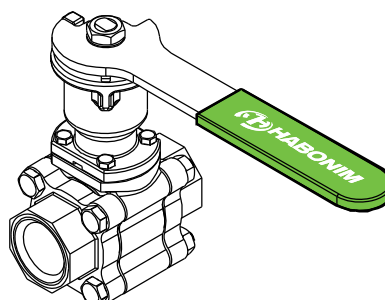
- compact size, rugged construction, device internals are open to atmosphere (no pressure is build inside)
- In-Line Assembly: The SRH can be fitted on valves in line without shutting down the system or removing the valve from the line
- Fail to close, fail to open options
- Size range:
 - Standard port: ½"- 1¼" (DN15 - DN32)
 - Full port: ½"- 1" (DN15 - DN25)
- Stroke End Output Torque: 11 Nm (97 in-lb)
- Construction materials: Stainless Steel
- Direct mount on top of Habonim valve ISO 5211 pad
- Optional locking device

CAUTION! While operating the spring-loaded device, hold lever firmly and release gently. Slamming the unit might cause human injuries or handle deformation.

Fail Open Assembly



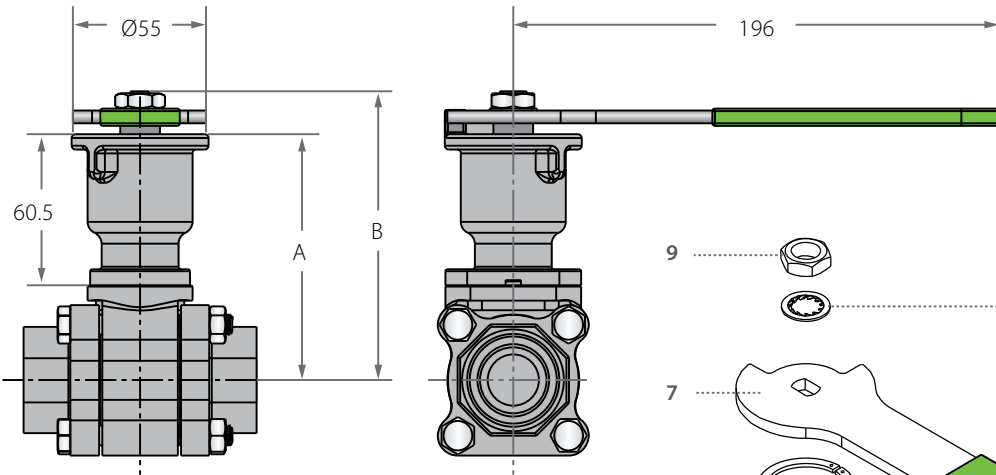
Fail Close Assembly





Spring Return Handle (SRH)

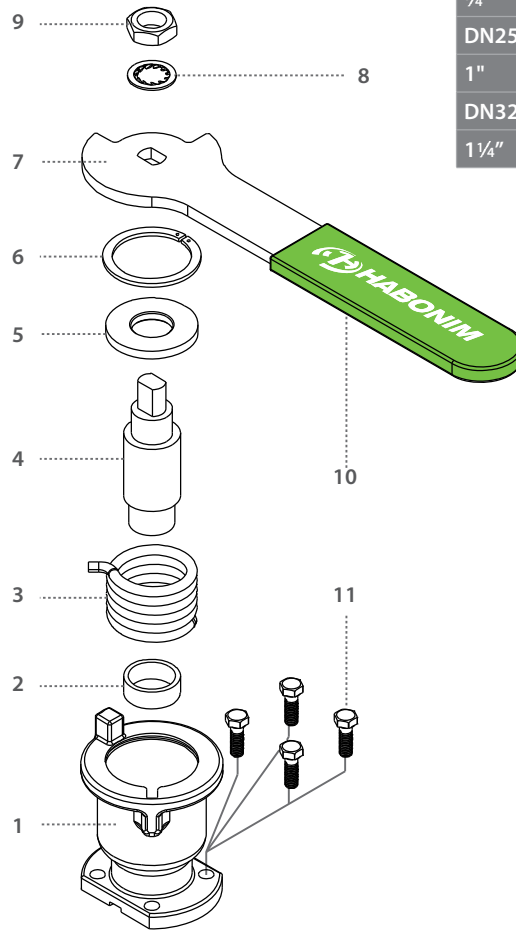
Device dimensions



Valve size		A	B
DN15	mm	89.50	106.80
1/2"	inch	3.52	4.20
DN20	mm	91.90	109.20
3/4"	inch	3.62	4.30
DN25	mm	98.70	116.00
1"	inch	3.89	4.57
DN32	mm	103.20	120.50
1 1/4"	inch	4.06	4.74

Components & materials

Item	Description	Material specification	Qty.
1	Body housing	Stainless St. ASTM A351 CF8M	1
2	Bottom bearing	PTFE	1
3	Spring	Spring Steel ASTM A401	1
4	Stem	Stainless Steel 17-4 PH	1
5	Top bearing	BRASS ASTM B121	1
6	Locking clip	A167 304	1
7	Handle	Stainless Steel AISI 430	1
8	Serrated washer	A240 410	1
9	Handle nut	Stainless Steel 316 ASTM A194	1
10	Handle sleeve	PVC	1
11	Housing screws	Stainless Steel A2-70 ISO 4014	4



Ordering Code System

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6	0				F	4	7	W	-	6	6	6	6	A	T	G	/	B	W			-	S	R	H				
Size		Features				Series	Design		Body material	Ends material	Ball/Stem material	Seat material	Inner Seal	Outer Seal	End Connection				Special features										

Special Features (24-30)	
SRH	Spring Return Handle

VALVE ACCESSORIES

Fugitive Emission Bonnet (FE)

A device for improved Fugitive Emission prevention from valve stem sealing. The device adds a secondary sealing layer on top of the valve integral steam sealing.

Features

- Secondary HermetiX or High temperature graphite sealing arrangement.
- Any media that might breach the valve stem seal is contained within the device bonnet until valve maintenance can be safely held.
- The bonnet design allows a sensing device to be fitted between the two sealing arrangements, allow immediate breach identification or alerting.
- A machined lip on the bonnet bottom plane ensures a safe fit over the valve ISO pad. A static seal provides sealing to the atmosphere.
- Double blowout proof stems.
- Linear alignment between valve stem, extension and actuator to reduce side load.



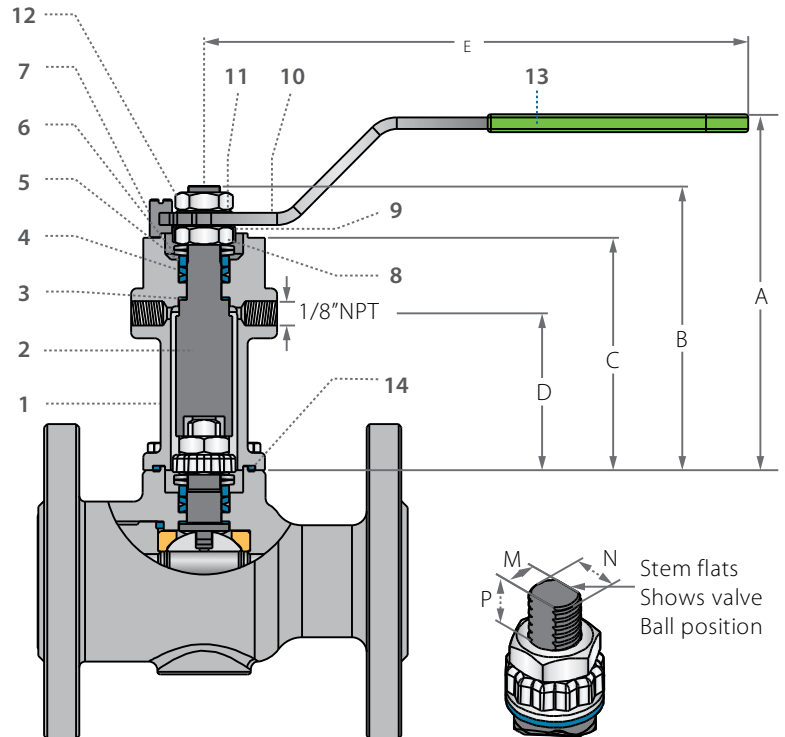


Fugitive Emission Bonnet (FE)

Device dimensions

Components & materials

Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Stem	Acc. Ordering Code	1
3	Stem thrust seal	Virgin PEEK	1
4	Stem seal	TFM	1
5	Follower	S. Steel	1
6	Disc spring	S. Steel	2
7	Stop pin	S. Steel	1
8	Stem nut	S. Steel	1
9	Locking clip	S. Steel	1
10	Handle	S. Steel	1
11	Serrated washer	S. Steel	1
12	Handle nut	S. Steel	1
13	Handle sleeve	PVC	1
14	Bonnet seal	PTFE / GRAPHITE	1



Dimensions

Valve size	FE Size	A	B	C	D	S	M	N	P	F
DN15 & DN20 1/2" & 3/4"	05	114.00 4.48	89.10 3.50	80.00 3.15	55.25 2.17	150.00 5.90	5.50 0.21	3/8" UNF	7.20 (F03)	36.00 1.42
DN25 & DN32 1" & 1 1/4"	10	122.00 4.83	97.40 3.83	80.00 3.15	54.00 2.12	187.00 7.36	7.54 0.29	1/2" UNF	7.20 (F04)	42.00 1.65
DN40 & DN50 1 1/2" & 2"	15	154.00 6.03	129.40 5.09	100.00 3.93	77.00 3.03	236.00 9.29	8.71 0.34	3/4" UNF	80.00 (F05)	50.00 1.97
DN65 2 1/2"	25	144.00 5.66	118.10 4.65	100.00 3.93	76.50 3.01	236.00 9.29	8.71 0.34	1" UNF	13.50 (F07)	70.00 2.76

F.E. Stem operating torque

Reduced port Valve size	FE Size	HC / HermetiX™		AI packing		Control valves (N) / Graphite packing (KG)	
		N*m	lbf*inch	N*m	lbf*inch	N*m	lbf*inch
DN15 & DN20 1/2" & 3/4"	05	2.00	17.70	3.00	26.50	4.00	35.40
DN25 & DN32 1" & 1 1/4"	10	5.00	44.20	7.00	62.00	9.00	79.60
DN40 & DN50 1 1/2" & 2"	15	7.00	62.00	11.00	97.30	13.00	115.00
DN65 2 1/2"	25	7.00	62.00	11.00	97.30	13.00	115.00

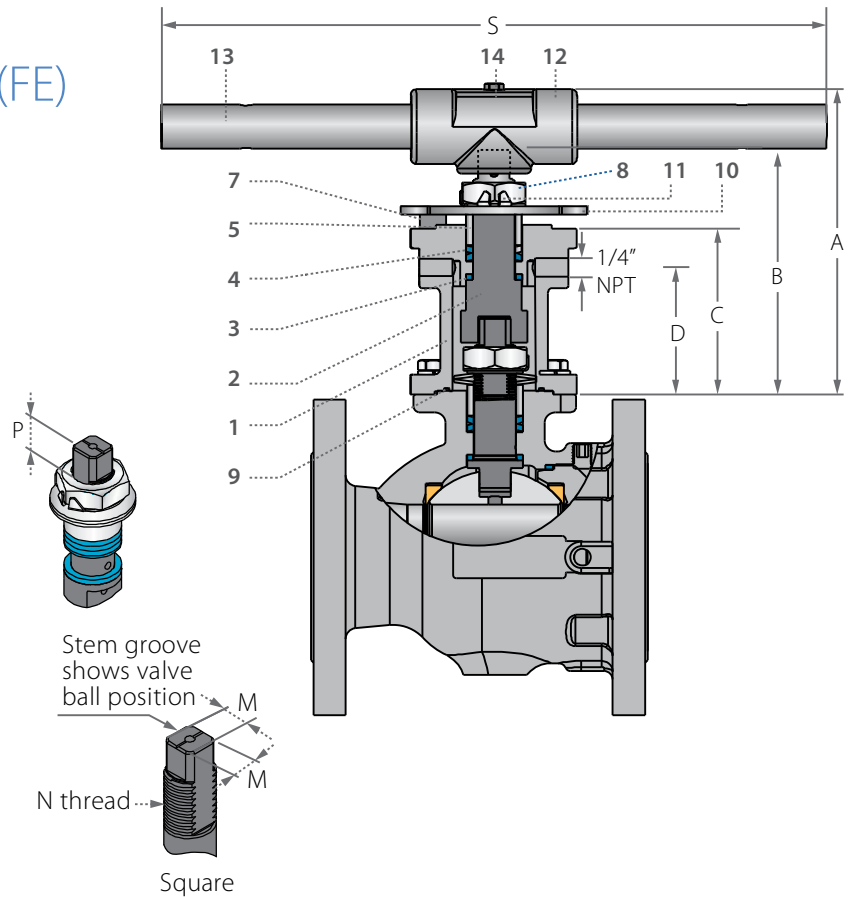
Note: When sizing an actuator add the above figures to the valve operating torque

Fugitive Emission Bonnet (FE)

Device dimensions

Components & materials

Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Stem	Acc. Ordering Code	1
3	Stem thrust seal	Virgin PEEK	1
4	Stem seal	TFM	1
5	Follower	S. Steel	1
6	Disc spring	S. Steel	2
7	Stop pin	S. Steel	1
8	Stem nut	S. Steel	1
9	Bonnet seal	PTFE / GRAPHITE	1
10	Stop plate	S. Steel	1
11	Tab lock washer	ASTM A240 304	1
12	Wrench head	S. Steel	1
13	Wrench handle	304	1
14	Wrench handle bolt	ISO 4014 A2-70	1



FE dimensions

Valve size	FE Size	A	B	C	D	S	M	N	P	F	
DN80 & DN100	mm	87.00	196.00	150.00	76.50	401.00	18.90	1" -14	16.70	(F10)	102.00
3" & 4"	inch	7.36	7.74	5.90	3.01	15.79	0.74	UNS-2A	0.66		4.02
DN150 & DN200	mm	273.00	219.00	150.00	100.00	401.00	18.90	1" -14	16.70	(F12)	125.00
6" & 8"	inch	10.74	8.62	5.90	3.93	15.79	0.74	UNS-2A	0.66		4.92

FE Stem operating torque

Reduced port Valve size	FE Size	HC / HermetiX™		Al packing		Control valves (N) / Graphite packing (KG)	
		N*m	lbf*inch	N*m	lbf*inch	N*m	lbf*inch
DN80 & DN100 3" & 4"	30	13.00	115.00	18.00	159.30	25.00	221.20
DN150 & DN200 6" & 8"	60	32.00	283.00	43.00	380.50	60.00	531.00

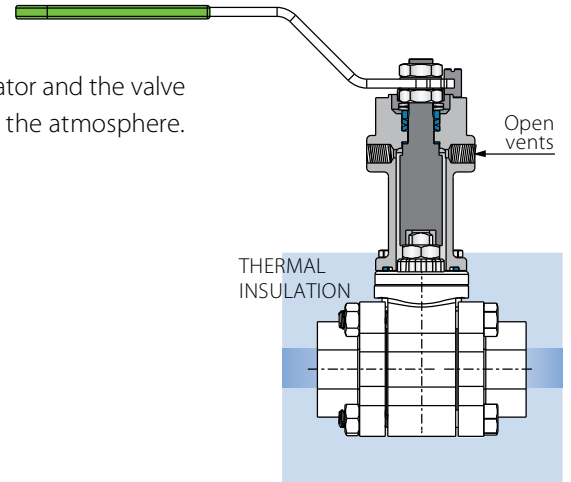


Extended Bonnet (EXT)

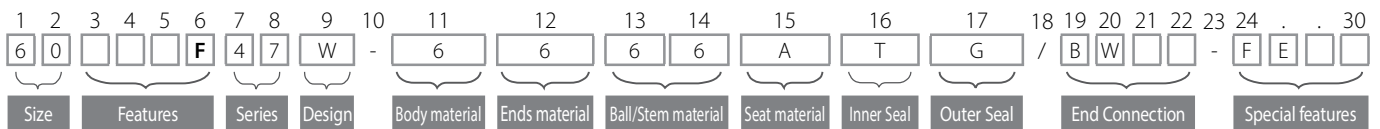
An extension device to allow a larger distance between the handle or actuator and the valve body. The extension bonnet does not seal at its upper end and is open to the atmosphere. The valve steam seal is in use for media sealing.

Suitable for critical applications when:

- Valve and pipe lines need to be insulated
- Valve operation must be elevated from extreme temperature areas
- Direct mounting of actuator to a valve is not suitable



Ordering Code System



Special Features (24-30)	
FE	Fugitive Emission
EXT	Extended Bonnet

ACCESSORIES

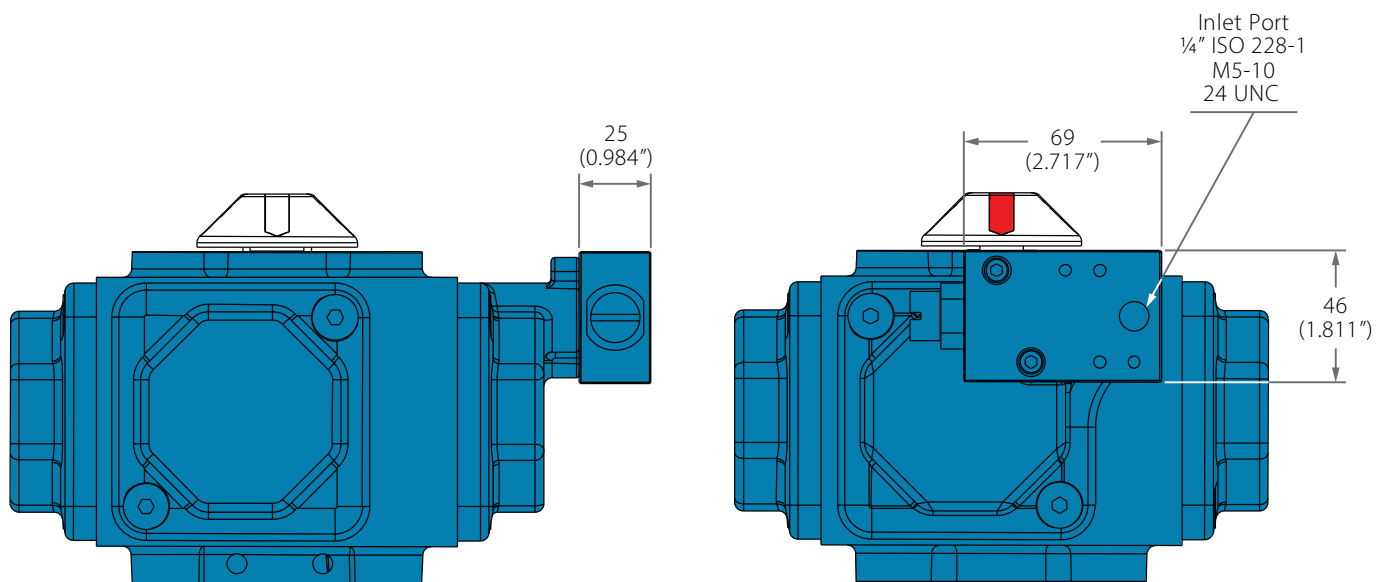
Breather Block

In applications that use a fail-safe actuator, the spring chambers are exposed to the surrounding environment. Every stroke generated by the force of the springs introduces air from the surroundings into the actuator's inner parts. In the case of corrosive and/or abrasive working environments, the springs and the interior of the spring chamber become prone to damage that could cause the product to malfunction.

The Breather Block isolates the actuator's internal parts from the corrosive/abrasive surroundings by allowing only dry and filtered instrument air to flow into the spring chamber during the actuator's spring stroke. The Breather Block's exhaust port only allows air to flow out of the spring chamber and prevents outside air from flowing in.

Features

- Fits directly onto any actuator with a Namur interface
- Interface for direct mounting of Namur solenoids
- When using remote solenoids, air supply tubes can be connected to the inlet port with a ¼" NPT (Imperial) or M5-10/24 UNC (Metric) connector
- Aluminum anodized coating and external paint layer for extreme protection
- Optional metallic construction materials are available. The O-ring and membrane are made from Buna-N
- Operating limits: pressures up to 10 bar (150 psi) and temperature range of -20° C to +85° C (-4° F to +185° F)
- One unit fits all actuator sizes





IMPACT™ - Spring Assist

In a failsafe actuator compressed air inside the actuator preloads the springs. During normal operation, each time the solenoid valve is tripped the compressed air is released into the atmosphere through the solenoid valve's exhaust port.

The patented IMPACT™ unit diverts part of this energy to the spring chamber in order to boost the torque of the actuator by at least 50%.

The IMPACT™ also functions as a Breather Block that isolates the spring chamber from the atmosphere, and as a check valve that ensures that the temporary reduction of the compressed air pressure does not trigger movement of the valve and actuator to the mid-position.

IMPACT
SPRING ASSIST

Features

- Boosts the torque of any spring return actuator
- One size down actuator for the same functionality
- Increases system reliability
- Internal Breather Block
- No external energy required
- NAMUR interface
- Single mechanical unit

