



Series 90D  
ANSI 300



## Series 90D Pneumatic Actuated Stainless Steel ANSI 300 Ball Valve – ATEX / FSAS

- Double Acting or Spring Closed/Open
- Stainless Steel Body – Full Bore
- Flanged ANSI 300
- ATEX Approval on valve and actuator
- Fire Safe Seats with Antistatic Device Fitted
- RPTFE Seats



### Description

Fire-Safe and Anti-Static, full bore flanged ATEX ball valve. Fitted onto our pneumatic ATEX approved actuator, offered in both single and double acting options. Sizes range from 1/2" - 6" DN15-DN150. RPTFE Fire-safe seats with Graphite seals. Actuators are designed to the latest ISO/Namur standards.



### Beschreibung

Fire-Safe und Anti-Static, Vollbohrung Flansch ATEX Kugelhahn. Ausgestattet auf unseren pneumatischen ATEX-zugelassenen Antrieb, der sowohl einzeln als auch doppelwirkend angeboten wird. Größen von 1/2" - 6" DN15-DN150. RPTFE Feuersichere Sitze mit Graphitdichtungen. Die Stellantriebe sind auf die neuesten ISO / Namur-Normen ausgelegt.



### Descripción

Fire-Safe y Anti-Static, de agujero lleno de brida ATEX válvula de bola. Equipado con nuestro actuador neumático ATEX, que se ofrece tanto en actuación simple como en doble efecto. Los tamaños van desde 1/2" - 6" DN15-DN150. RPTFE Asientos ignífugos con juntas de grafito. Los actuadores están diseñados según los últimos estándares ISO / Namur.



### Descripción

Soupape à bille ATEX à bride intégrale anti-incendie et anti-statique. Adapté à notre actionneur pneumatique ATEX, offert en option simple et double effet. Les tailles sont comprises entre 1/2" - 6" DN15-DN150. RPTFE Sièges coupe-feu avec joints graphite. Les actionneurs sont conçus selon les normes ISO / Namur les plus récentes.

### Description

A combination of a powerful pneumatic ATEX approved actuator, fitted to a series 90D heavy duty high performance, flanged ANSI 300 ball valve. The valve comprises of a split 2-piece body with seals that are Fire Safe Certified to API 607 4<sup>th</sup> Edition and fitted with an Antistatic spring loaded device. The Pneumatic actuator offers single acting (fail closed or open) or Double acting options. Sized on 5.5 bar pilot air supply with 30% added safety factor. This unit gives you an exceptional combination, that's trouble free. We offer various accessories that can be fitted onto the actuator such as I.S or EX switch boxes, solenoids and positioners, all suitable for hazardous areas.

atex

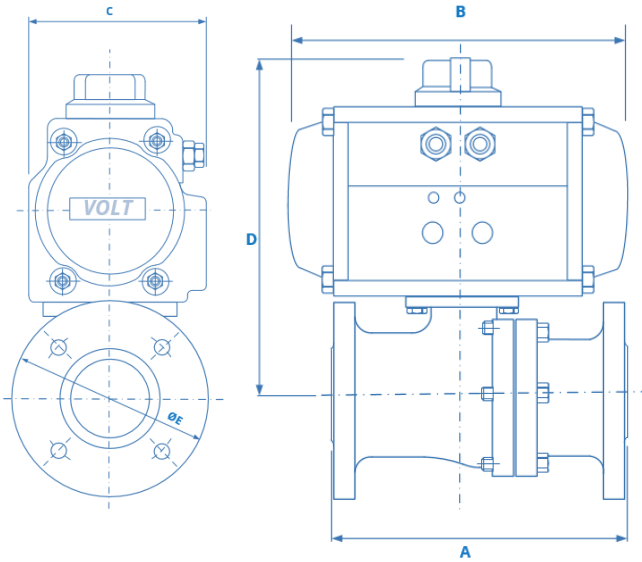


Fire Safe Tested  
API 607 Rev. 4

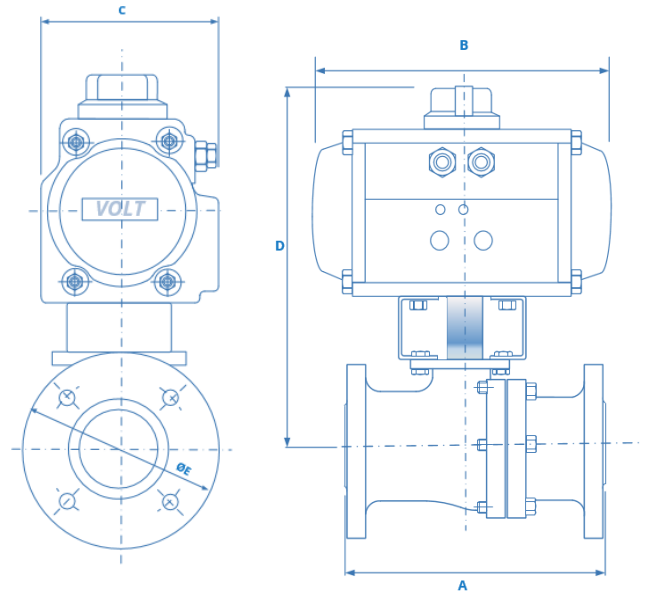
Anti-Static Device

Stem to Ball and Stem to Body as standard

All information is sourced from our manufacturer's data and is intended for guidance only - ValvesOnline can accept no liability for changes, omissions or errors.



Direct Mount



With Mounting Kit

## Double Acting

90D-20 ANSI 300 Double Acting Dimensions							Weight Kg
Size	DA Act.	A	B	C	D	E	
1/2"	HP50D	139.7	144	72	141.7	95.3	3.51
3/4"	HP50D	152.4	144	72	146.7	117.3	5.1
1"	HP63D	165.1	163	85	165.8	124	6.7
1 1/2"	HP75D	190.5	210	96	213.1	155.4	13.05
2"	HP75D	215.9	210	96	220.6	165.1	15.56
2 1/2"	HP88D	241.3	247	108	252	190.5	24
3"	HP115D	282.4	316	141	298.5	209.6	36.6
4"	HP115D	304.8	316	141	323	254	55.2
6"	HP145D	403.2	414	172	419.2	317.5	113.4

## Spring Return

90D-20 ANSI 300 Spring Return Dimensions							Weight Kg
Size	SR Act.	A	B	C	D	E	
1/2"	HP63S	139.7	163	85	155.7	95.3	4
3/4"	HP66S	152.4	202	85	170.5	117.3	5.6
1"	HP75S	165.1	210	96	185.7.5	124	8
1 1/2"	HP88S	190.5	247	108	225.1	155.4	13.2
2"	HP100S	215.9	268	123	244.6	165.1	18.8
2 1/2"	HP115S	241.3	316	141	282	190.5	25.7
3"	HP115S	282.4	316	141	298.5	209.6	36.5
4"	HP125S	304.8	347	151	336	254	55.3
6"	HP160S	403.2	467	190	436.2	317.5	121.4

### Valve / Actuator Sizing

THE VALVE AND ACTUATOR COMBINATION HAS BEEN SIZED WITH A MAXIMUM OF 10 BAR (150 PSI) MEDIUM LINE PRESSURE AND BASED ON A MINIMUM OF 5.5 BAR (80 PSI) PILOT AIR PRESSURE. SEE GRAPH. FOR HIGHER PRESSURES PLEASE CONTACT SALES WHO WILL ACCOMMODATE YOUR REQUIREMENTS, QUICKLY AND EASILY.

### TORQUE FIGURES

Valve Size		Break Away Torque (R-PTFE Seats)		C.v.
Size	DN	In/LB	Nm	G.P.M
1/2"	15	92	10	28
3/4"	20	127	14	50
1"	25	150	17	95
1 1/4"	32	207	23	132
1 1/2"	40	357	40	260
2"	50	392	44	485
2 1/2"	65	518	59	800
3"	80	852	96	1250
4"	100	1302	147	2250
5"	125	2073	234	3620
6"	100	2188	247	5400



Exd Switchbox



Exd Pilot Solenoid

### Technical - Actuator

Body material	Hard anodised extruded aluminium alloy
End Caps	Die cast aluminium epoxy coated
Spring	High tensile steel
Indicator	Open/Closed
Pinion shaft	Alloy steel nickle plated
Pinion Guides	Self Lubricating Polypropylene + GF
Piston seals	NBR steel

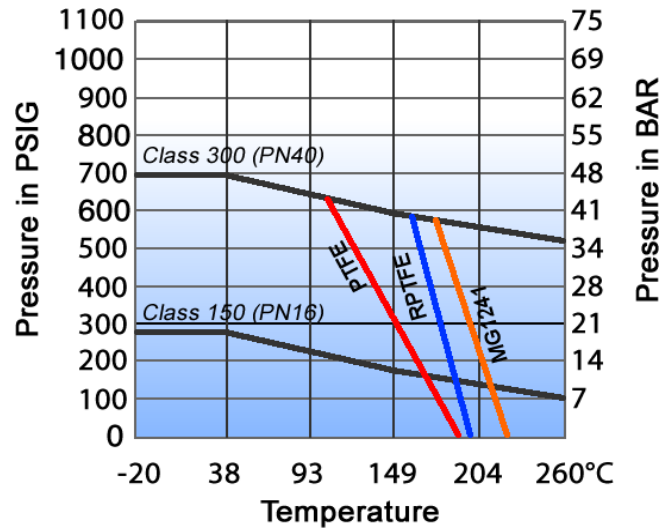
### Specification

Pressure range	10 Bar, pilot pressure 5.5 - 8 Bar
Double acting	2.5 Bar - 8 Bar
Single acting - Open or Close	2.5 Bar - 8 Bar
Temperature range	minus 20°C - 80°C
Movement	90 Degree adjustable -5-+5 Degree
Lubrication	All moving parts are lubricated
Cycle Life	1,000,000 operations
Approvals	ATEX, CE, PED

### Valve Specification

Pressure Rating	Fig 90D-20 ANSI 300#
Size	1/2" to 6" Full Bore
Temperature range	minus 20° to + 200° (see graph)
Movement	90 deg turn
Cycle life	1,000,000 operations
Approvals	CE Marked 0035 PED/97/23/EC, TA-Luft ATEX 94/9/EC II 2 GD Fire-Safe Certified to API 607 4th Edition API 6D

### Temperature v Pressure Chart



### Valve / Actuator Sizing

THE VALVE AND ACTUATOR COMBINATION HAS BEEN SIZED WITH A MAXIMUM OF 10 BAR (150 PSI) MEDIUM LINE PRESSURE AND BASED ON A MINIMUM OF 5.5 BAR (80 PSI) PILOT AIR PRESSURE. SEE GRAPH. FOR HIGHER PRESSURES PLEASE CONTACT SALES WHO WILL ACCOMMODATE YOUR REQUIREMENTS, QUICKLY AND EASILY.



**Fire Safe Tested**  
API 607 Rev. 4

**Anti-Static Device**  
Stem to Ball and  
Stem to Body as  
standard

### Valve Materials

No	Part Name	Material	Qty
1	Body	CF8M / WCB	1
2	Cap	CF8M / WCB	1
3	Ball	SUS316	1
4	Seat	RPTFE	1
5	Joint Gasket	PTFE	2
6	O-Ring	Viton	2
7	Stem	SUS304	1
8	Stem Seal	RPTFE	2
9	O-Ring	SUS304	1
10	Stem Packing	GRAPHITE	2
11	Gland Packing	RPTFE	1
12	Gland Bush	SUS304	1
13	Belleville washer	PTFE	1
14	Stop Washer	SUS304	*
15	Stem Nut	SUS304	1
16	Stem Washer	Vinyl	1
17	Handle	25% RTFE	1
18	Stop Pin	SUS304	1
19	Locking Device	SUS304	1
20	Handle Sleeve	SUS304	1
21	Pin Nut	SS304	1
22	Anti-static Device	SS 316	1

