



## Pneumatic Actuated Carbon Steel PN16 Ball Valve

- Double Acting or Spring Closed/Open
- Carbon Steel Body WCB – Full Bore
- DN15-DN100 / 1/2" - 4"
- ATEX Approval on valve and actuator
- Many Options Offered
- PTFE Seats



### Description

A well proven full bore flanged ball valve, that's fitted onto our pneumatic actuator, that is offered in both single and double acting options. Sizes range from 1/2" - 4" DN15-DN100. PTFE Fire seats as standard. Actuators are designed to the latest ISO/Namur standards and the ball valves have mounting platforms that enable the units to be fitted without brackets.



### Beschreibung

Ein bewährter Vollbohr-Flansch-Kugelhahn, der auf unseren pneumatischen Antrieb montiert ist, der sowohl in ein- als auch in doppeltwirkenden Optionen angeboten wird. Größen von 1/2" - 4" DN15-DN100. PTFE-Feuersitze serienmäßig. Die Stellantriebe sind nach den neuesten ISO / Namur-Normen ausgelegt und die Kugelhähne verfügen über Montageplattformen, die es ermöglichen, die Geräte ohne Halterungen einzubauen.



### Descripción

Una válvula de bola con brida de agujero completo, probada, que está montada en nuestro actuador neumático, que se ofrece en ambas opciones de simple y doble efecto. Los tamaños van desde 1/2"- 4" DN15-DN100. PTFE Asientos de fuego de serie. Los actuadores están diseñados según las últimas normas ISO / Namur y las válvulas de bola tienen plataformas de montaje que permiten montar las unidades sin soportes.



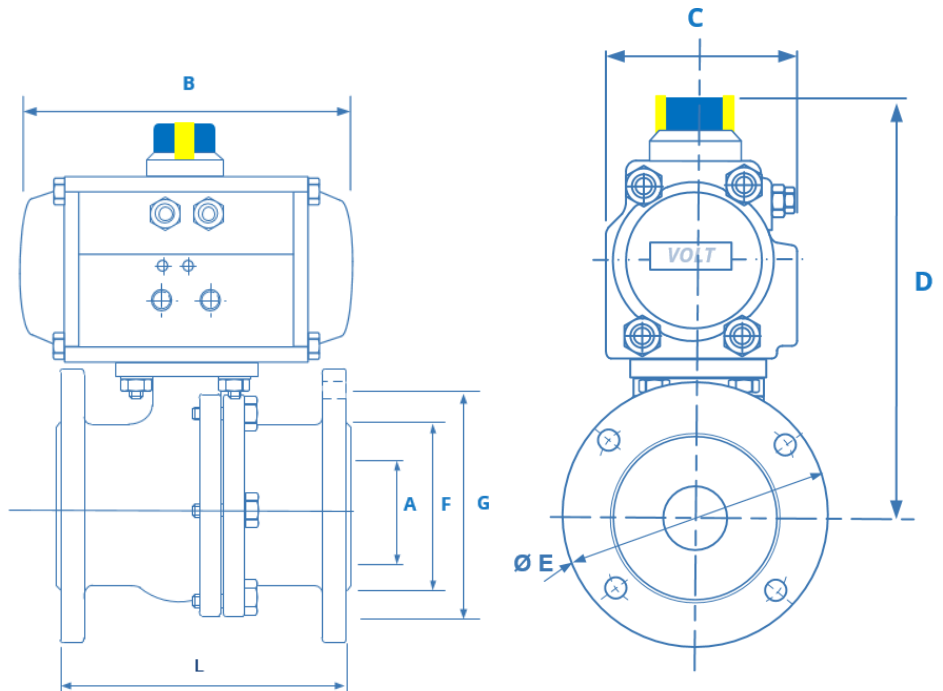
### Description

Une vanne à bille à bride pleine perforée, bien éprouvée, qui est montée sur notre actionneur pneumatique. Ceci est offert en option à simple ou double action. Les tailles sont comprises entre 1/2" - 4" DN15-DN100. Sièges d'incendie PTFE en standard. Les actionneurs sont conçus selon les normes ISO / Namur les plus récentes et les vannes à bille ont des plates-formes de montage qui permettent d'installer les unités sans supports.

### Description

A well engineered combination of a powerful pneumatic actuator, fitted to our heavy duty high performance, flanged PN16 ball valve. The valve comprises of a split 2- piece body with PTFE seats. 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 the valve in Stainless Steel or Carbon Steel with seat permutations and various accessories that can be fitted onto the actuator such as de-clutchable gearboxes, switch boxes, solenoids and positioners.





**TORQUE FIGURES**

Valve Size		Break Away Torque PTFE Seats	C.v.
Size	DN	Nm	G.P.M
1/2"	15	5.5	28
3/4"	20	7.2	50
1"	25	8.8	95
1 1/4"	32	13	132
1 1/2"	40	20	260
2"	50	24	485
2 1/2"	65	54	800
3"	80	62	1250
4"	100	124	2250

**PN16 Double Acting Dimensions**

Size	DA Act.	L	B	C	D	E	A	F	G	Weight Kg
1/2"	HP50D	115	144	72	141	95	15	45	65	3.26
3/4"	HP50D	120	144	72	146	105	20	58	75	3.28
1"	HP50D	125	144	72	166	115	25	68	85	3.56
1 1/4"	HP63D	130	163	85	178	140	32	48	100	4.68
1 1/2"	HP63D	140	163	85	183	150	40	88	110	5.3
2"	HP66D	150	202	85	192	165	50	102	125	8.5
2 1/2"	HP88D	170	247	108	229.5	185	65	122	145	18.3
3"	HP88D	180	247	108	239	200	80	138	160	22.3
4"	HP115D	190	316	141	298	220	100	158	180	35

**Double Acting**  
Requires 5.5 bar pilot air to open and close. A 4/2 - 5/2 pilot solenoid valve is needed to operate the valve

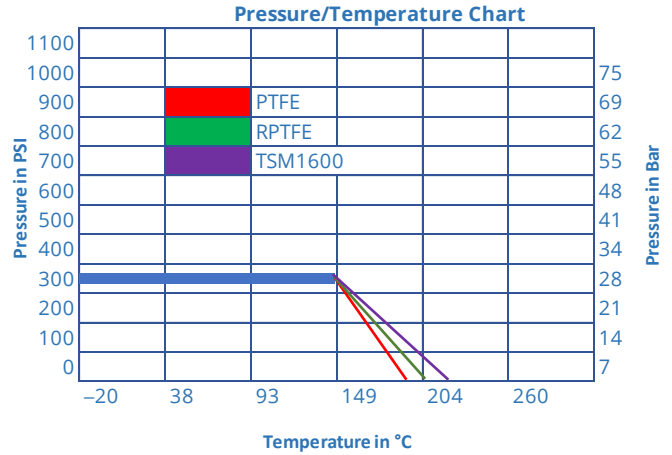
**PN16 Spring Return Dimensions**

Size	SR Act.	L	B	C	D	E	A	F	G	Weight Kg
1/2"	HP50S	115	144	72	141	95	15	45	65	3.3
3/4"	HP50S	120	144	72	146	105	20	58	75	4.5
1"	HP63S	125	163	85	166	115	25	68	85	5.4
1 1/4"	HP66S	130	202	85	178	140	32	48	100	7.7
1 1/2"	HP75S	140	210	96	200	150	40	88	110	9.9
2"	HP88S	150	247	108	221	165	50	102	125	13.9
2 1/2"	HP100S	170	268	123	241.5	185	65	122	145	20
3"	HP115S	180	316	141	269	200	80	138	160	27
4"	HP125S	190	347	151	311	220	100	158	180	37.3

**Spring Return**  
Requires 5.5 bar pilot air to open the actuator. A 3/2 pilot solenoid valve is needed to operate the valve

## 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

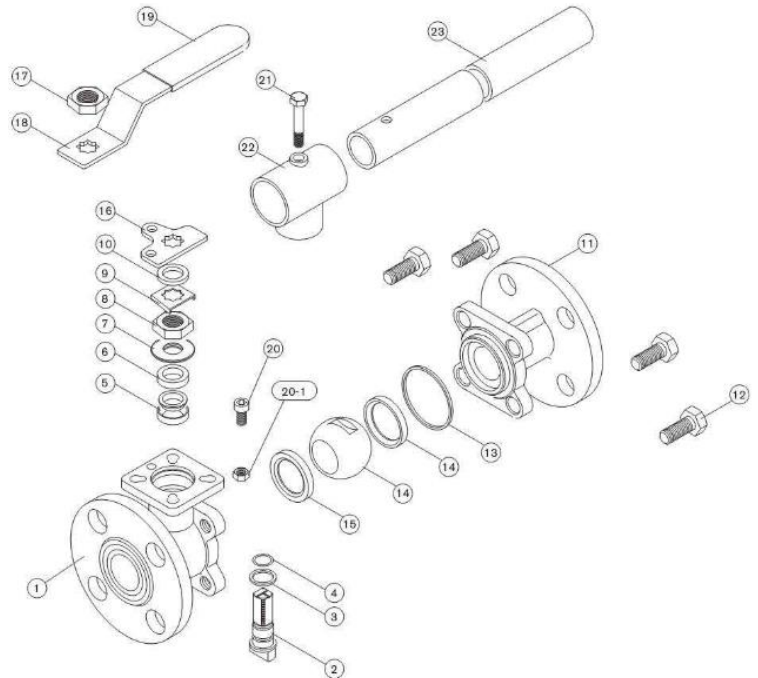
Orifice	1/2"-4" (DN15-DN100)
Valve Design	ASME B16.34, EN12516-1
Steel Casting	MSS SP-55, EN 12680-1/MSS SP-55
Face to Face	ASME B16.10, DIN 3202 F4
Flange Connection	ASME B16.50, DIN 2633
Pressure Test	598 (ISO 5208), EN12266-1 (ISO 5208)
Mounting	ISO 5211 Direct Mount
Valve Body	ASTM A351 CF8M / DIN 1.4408
Material	ASTM A216 WCB / DIN 1.0619
Seat Material	PTFE

## Valve / Actuator Sizing

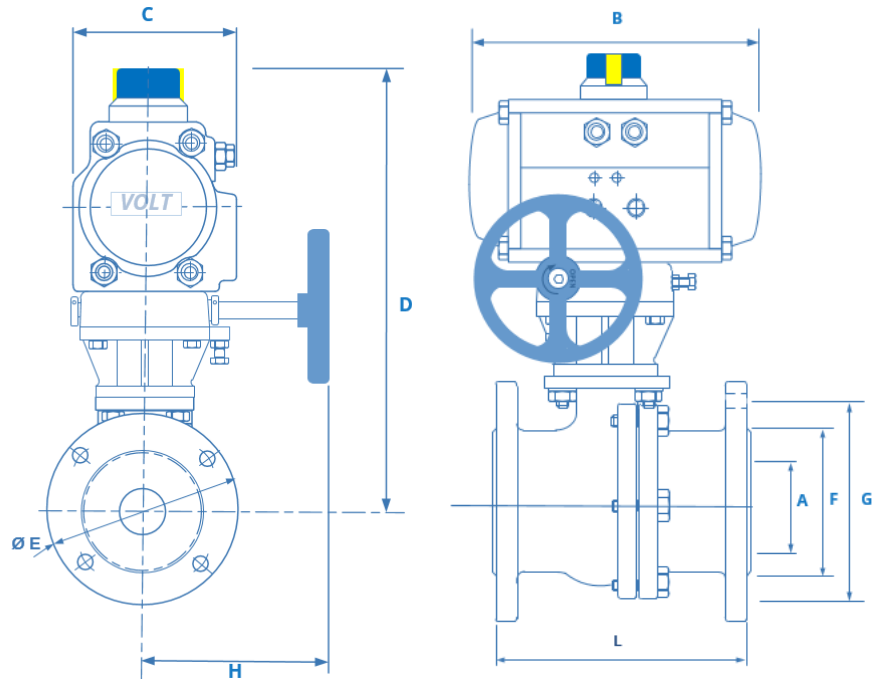
THE VALVE AND ACTUATOR COMBINATION HAS BEEN SIZED WITH A MAXIMUM OF 10 BAR (150 PSI) (clean water) MEDIUM LINE PRESSURE AND BASED ON A MINIMUM OF 5.5 BAR (80 PSI) PILOT AIR PRESSURE. SEE GRAPH. FOR HIGHER PRESSURES PLEASE CONTACT SALES WHO WILL ACCOMMODATE YOUR REQUIREMENTS, QUICKLY AND EASILY.

## Valve Materials

No	Part Name	Material
1	Body	CF8M / WCB
2	Stem	SUS304
3	Thrust washer	RPTFE
4	O-Ring	PTFE
5	Stem Packing	PTFE
6	Gland	SS 304
7	Disc Washer	SS 301
8	Stem Nut	SS304
9	Nut Stop	SS304
10	Washer	SS304
11	Flanged end	CF8M / WCB
12	Bolt	SS304
13	Gasket	PTFE
14	Ball	SS316
15	Ball Seat	PTFE
16	Stopper Plate	SUS304
17	Handle Nut	SS304
18	Handle	SS304
19	Sleeve	Plastic
20	Stop Pin	SUS304
21	Ste Bolt	SUS304
22	Lever Head	CF8M / WCB
23	Pipe Handle	Steel Pipe



## With De-Clutch Gearbox



## PN16 Double Acting Dimensions

PN16 Double Acting Dimensions										Weight Kg
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2"	HP66D	150	202	85	325	165	50	102	125	10.5
2 1/2"	HP88D	170	247	108	378	185	65	122	145	22.3
3"	HP88D	180	247	108	406	200	80	138	160	26.3
4"	HP115D	190	316	141	448	220	100	158	180	39



## PN16 Spring Return Dimensions

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Size	SR Act.	L	B	C	D	E	A	F	G	
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2"	HP88S	150	247	108	391	165	50	102	125	15.9
2 1/2"	HP100S	170	268	123	399	185	65	122	145	24
3"	HP115S	180	316	141	419	200	80	138	160	31
4"	HP125S	190	347	151	461	220	100	158	180	41.3



## Optional extras

We can offer this unit with additions of De-Clutchable gearboxes, Pilot Solenoids, Switchboxes or Combined switchbox and Solenoid.