

FLOWTREN D

SMARTER, FASTER FLUID HANDLING SOLUTIONS

EDF SHUTTER CHECK VALVES. MAGNETIC TECHNOLOGY.

Captured Seat

Fully Hygienic Design

Reduced Maintenance



3-A Certification
Authorization #: 3414

THE CLEANEST DESIGN FOR HIGH PURITY APPLICATIONS

Flowtrend technology sets new standards for check valves, thanks to a patented magnetic principle which replaces the conventional spring, guide plate and stem.

FEATURES & BENEFITS

No Spring, Guide plate, or stem in product zone

- No maintenance as a result of broken or jammed spring
- Springless design allows for use in corrosive areas (brine systems, etc.)
- Precision machining from bar stock insures Superior Hygienic Design
- Shutter guides insure proper seating
- Reduced parts and shutter "wings" insure laminar vs. turbulent flow
- THE EDF HPSCV is a non-return valve which prevents back flow in a system. The valve is powered by product flow and magnetic technology which eliminates the need for springs. Shutter alignment is controlled by the vains (wings) of the shutter which eliminate the need for a stem and guideplate.
- Hot water and steam compatible; good resistance to aging and weathering

Retained Seat

- Prevents product contamination caused by seat loss in product
- Prevents valve failure as a result of seat loss
- Allows for PTFE seat which will extend service life [less maintenance]
- Unlike "friction" fit O-Ring/V-Ring seats, the "compression" fit insures the seat does not separate from the shutter and enter the product.

Bolts vs. clamp

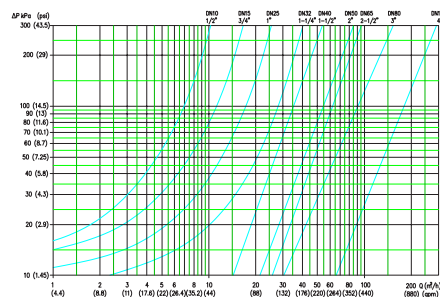
Controlled Compression prevents over torque of clamp which cause gaskets or profiled O-rings to deform and enter product stream.

Technical Information

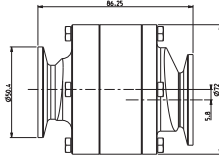
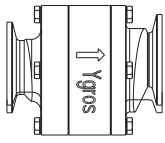
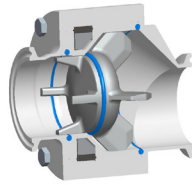
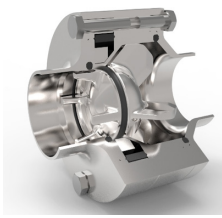
- Sizes: ½" – 6"
- Connections: US Clamp and Weld. DIN Clamp and Weld
- Option: Eccentric body for Horizontal Installation
- Materials: Body = 316L Stainless Steel; Shutter = Duplex Stainless Steel
 - Optional materials available
- Seal Materials: Available in EPDM, FPM, Silicone, PTFE
- Polish: 32Ra is standard.
 - Optional polishes available
- Temp Range: -40C [-40F] to 150C [302F] in standard version
- Max Product Pressure: 300 psi
- All product contact materials and seals are fully traceable
- Suitable for CIP/SIP

Pressure Drop Diagram

Based on water at 20C [68F]



DN15 = ½" DN40 = 1 ½" DN65 = 2 ½" DN100 = 4"
DN25 = 1" DN50 = 2" DN80 = 3"



Vertical Configuration

SIZE	EDF WELD	EDF CLAMP
.50"	51mm [2.01"]	61mm [2.40"]
.75"	60mm [2.36"]	70mm [2.76"]
1.0"	72mm [2.83"]	77mm [3.03"]
1.5"	88mm [3.46"]	88mm [3.46"]
2.0"	98mm [3.86"]	98mm [3.86"]
2.5"	115mm [4.43"]	118mm [4.65"]
3.0"	140mm [5.51"]	145mm [5.71"]
4.0"	150mm [5.91"]	155mm [6.10"]
6"	179.5 mm [7.07"]	183.5 mm [7.2"]

Horizontal Configuration

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E		BPE		A1		1.5		CL		FE		T1		C1		316	
TYPE	VERSION	STYLE	INTERNAL POLISH	EXTERNAL POLISH	SIZE	CONNECTIONS	ELAST CERT	ELASTOMER	SHUTTER MATERIAL	SHUTTER TYPE	TEMP RATING	OTHER	BODY MATERIAL				
E = EDF	BPE = ASME BPE	(Blank) Standard A	$Ra \leq 32\mu\text{in}/0.8\mu\text{m}$	$1 = Ra \leq 125\mu\text{in}/0.3.2\mu\text{m}$.50"	CL = ISO Clamp	F = FDA	N = NBR	(Blank)=Duplex/1,4462 (Std)	(Blank) = 2pc Design	(Blank) = 302F/150C (Std)	(Blank) = None	316L = 1.4404				
P = Pharma Ball	H = Horizontal	B = Ra $\leq 32\mu\text{in}/0.8\mu\text{m}$ EP/Pass	$2 = Ra \leq 125\mu\text{in}/0.3.2\mu\text{m}$ EP/Pass	$75" = W = ISO Weld$	U = USP Class VI	E = EPDM	1=Other	S1 = One Piece Design	T1 = 356F/180C	C1 = Certificate Set							
		C = Ra $\leq 16\mu\text{in}/0.4\mu\text{m}$	$3 = Ra \leq 32\mu\text{in}/0.8\mu\text{m}$	1.0"	CL/W= ISO Clamp x Weld*	V = FKM	T2 = 428F/220C	- 3.1b									
		D = Ra $\leq 16\mu\text{in}/0.4\mu\text{m}$ EP/Pass	$4 = Ra \leq 32\mu\text{in}/0.8\mu\text{m}$ EP/Pass	1.5"	W/CL+ ISO Weld x Clamp*	F = FEP	Other: PEEK, PVDF, PTFE	- Elastomer									
		$5 = Ra \leq 16\mu\text{in}/0.4\mu\text{m}$	$5 = Ra \leq 16\mu\text{in}/0.4\mu\text{m}$	2.0"	*Inlet/Outlet	P = PTFE	- Surface Roughness										
		$6 = Ra \leq 16\mu\text{in}/0.4\mu\text{m}$ EP/Pass	$6 = Ra \leq 16\mu\text{in}/0.4\mu\text{m}$ EP/Pass	2.5"													
		3.0"	CC = Clamp ASME BPE														
		4.0"															
		6.0"															
		8.0"															

YGROS EDF

STANDARD OPENING PRESSURES

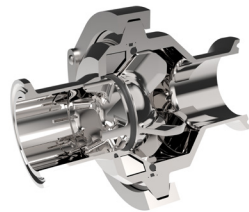
INSTALLATION	FLOW DIRECTION	OPENING PRESSURE
Horizontal Lines		0.44 / 0.73 psi
Vertical Lines	Bottom to Top	0.48 / 0.80 psi

The Complete Family of Magnetic Check Valves



EDF

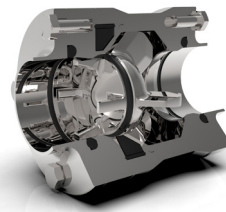
For dairy, food, beverage, brewery, pharmaceutical, cosmetic.



YEV

Clamped Body Valve

For dairy, food, beverage, brewery, pharmaceutical and cosmetic manufacturing that require a clamped body design.



YSV

Extractable Valve

For beverage, brewery, pharmaceutical, cosmetic, and chemical manufacturing that require flange connections.



Wafer Check

For water treatment, vacuum, & Gas.

P +1 281 990 8582 F +1 281 990 8644

www.flowtrend.com

YouTube Videos available

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YGROS VALVES