coax® data sheet - coaxial valve

type VSV-F 150 DR



09/2022



Above stated body materials refer to the valve port connections that get in contact with the media only!

details needed for main valve

- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- **m**edia
- media temperature
- ambient temperature
- type of actuation

details needed for pneumatic actuation

- nominal voltage
- type of protection
- actuation pressure range min/max
- pilot valve type

details needed for hydraulic actuation

- actuation pressure range min/max
- hydraulic control valve function

The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application. To avoid hydraulic shocks in pipelines, the flow velocities must be taken into account when designing valves for liquids.

specifications not highlighted are standard specifications highlighted in grey are optional

3/2 way valve	
pressure range	
orifice	
connection	
function	

operating principle

body material

valve seat

ports

seal materials

flange normally closed (A ►B) symbol NC

externally controlled PN 0-16 bar DN 150 mm





0

(3)

4 steel, nickel plated

pressure balanced, with spring return, intersecting switch-over 2 steel galvanized (5) without non-ferr. Metals 6 stainless steel

synthetic materials on metal

NBR			

flanges PN 16

general specifications

		PTFE,	FPM,	CR,	EPDM	
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options

special flanges

function	
pressure range	
Kv value	
vacuum	
pressure-vacuum	
back pressure	
media	
abrasive media	_
damping	

flow direction	
switching cycles	
switching time	
media temperature	
ambient temperature	
flush ports	
leak ports	
limit switches	
manual override	Ī

teak purts	
limit switche	s
manual over	ride
approvals	
mounting	
weight	
additional eq	uipment

	P2 > P1
	opening
	closing
	1/min
	ms
	°C
	°C
	kg
	110

	NC	NO
bar	0-16	
	A ⇒ B max. 16 / B ⇒ A max. 16 / A =	C max. 16 / C ⇒ A max. 16
m³/h	274.0	
leak rate		< 10 ⁻⁶ mbar•l•s ⁻¹
P1⇔ P2		pressure side max. 16 bar
		vacuum side leak rate upon request
P2 > P1	see pressure range	
	gaseous - liquid - highly viscous -	
	gelatinous - pasty - contaminated	
		available
opening		
closing	by throttles on pilot valve	
	see pressure range	
1/min	20	
ms	opening 600-3000	
	closing 600-3000	
°C	direct mounted pilot valve 60	remote mounted pilot valve outside
°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
		available
		available
		inductive / mechanical upon request
	via pilot valve	
		LR/DNV/WAZ
kg	VSV-F 97.0	
		upon request

max. temperature
additional equipment
optional
connection
energized duty rating
protection

Connection
optional
additional equipment
max. temperature
explosion proof

air consi	umption
cycle sp	eed
control	
pilot val	ve interface
actuator	ports

actuation	pressure range
control	
actuator p	orts
by media	

electrical	specifications	options		
Un	DC 24 V	special voltage upon request		
Un	AC 230 V 50 Hz	special voltage upon request		
DC	4.8 W	2.5 W (actuation pressure range 4-7 bar)		
AC	pick up 11.0 VA holding 8.5 VA			
IP65 (P54)	acc. DIN 40050			
ED	100%			
	plug acc. DIN EN 175301-803 form B, 2	2 positions x180° / wire diameter 6-8 mm		
M12x1	connector acc. DESINA	connector acc. VDMA		
	illuminated plug with varistor			
media	60°C			
ambient	50°C			
E Ex e II T5	nominal voltage Un	DC 24 V 3.25 W		
	power consumption	AC 230 V 50 Hz 2.90 W		

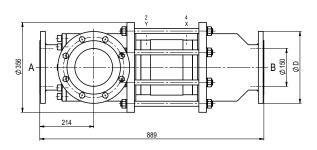
pneumatio	specifications	options	
bar	4-8		
cm³/stroke	550		
	main valve speed variable by throttleson pilot valve		
	preferably 5/2 way pilot valve		
2/4	G 1/4	G 3/8	

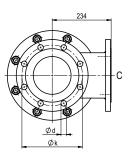
hydraulic specifications		options	
bar	15-30 / 30-60		
	preferably 4/2 way control valve		
X/Y	G 1/4	NPT 1/4	
		upon request	

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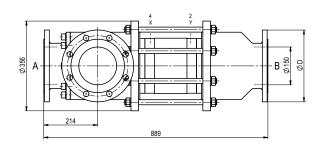
function: NC closed when not energized (A \triangleright B)

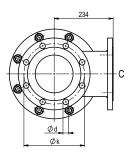




flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	285	240	22

function: **NO** open when not energized (A ►B)





pneumatic specifications



5/2 way pilot valve flow rate 700 l/min pressure range 3-10 bar G 1/8



5/2 way pilot valve ISO 1 flow rate 700 l/min pressure range 3-10 bar G 1/4