coax® data sheet - coaxial valve

type VSV-F 150



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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
- flow rate
- media
- 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

2/2-way valve pressure range orifice connection

function

externally controlled

PN 0-40 bar DN 150 mm

flange valve

normally closed symbol NC

valve normally open



symbol NO pressure balanced, with spring return

 $@\ {\sf aluminium}\\$

② steel galvanized

(3)

4 steel, nickel plated

(5) without non-ferr. Metals

6 stainless steel

valve seat synthetic materials on metal

seal materials

operating principle

body material

general specifications

pressure range	function	
Kv value	pressure	range

back pressure

ports

abrasive	media
damping	

flow direction	
switching cycles	
switching time	

media temperature
ambient temperature
flush ports
leak ports
limit switches
manual override
approvals
mounting
weight

nominal voltage

power	consumption

additional equipment

explosion proof

protection
energized duty rating
connection
optional
additional equipment
max. temperature
· ·

actuation pressure runge
air consumption
cycle speed
control
pilot valve interface
actuator ports

actuation pressure range actuator ports by media

PTFE, FPM, CR, EPDM options

VSV-F	flanges PN 16 / 40	special flanges
	.	•
	NC	NO
bar	0-16 / 0-40	
m³/h	274.0	
leak rate		< 10 ⁻⁶ mbar•l•s ⁻¹
P1⇔ P2		pressure side max. 40 bar
		vacuum side leak rate upon request
P2 > P1		available (max. 16 bar)
	gaseous - liquid - highly viscous -	
	gelatinous - pasty - contaminated	
		available
opening		
closing	by throttles on pilot valve	
A ⇒ B	as marked	bi-directional upon request
1/min	20	

closing	by throttles on pilot valve	
A⇒B	as marked	bi-directional upon request
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

upon request

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 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 U₁	DC 24 V 3.25 W
	power consumption	AC 230 V 50 Hz 2.90 W

pneumatic specifications

nar	4-8	
m³/stroke	550	
	main valve speed variable by throttleso	n pilot valve
	preferably 5/2 way pilot valve	
2/4	G 1/4	G 3/8

hydraulic specifications

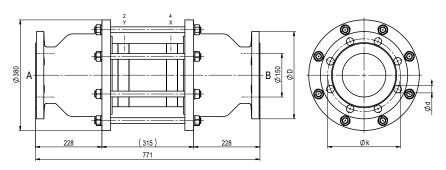
options

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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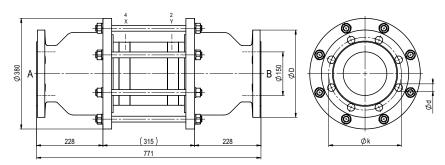
type VSV-F 150

function: **NC** closed when not energized



flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	285	240	22
40	EN 1092-1	300	250	26

function: **NO** open when not energized



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