

# coaxial valve

## type VSV-F 100 DR

### 5-VSV-F 100 DR

valve type with pilot valve



3/2 way valve externally controlled

pressure range PN 0-40 bar

orifice DN 100 mm

connection flange

function valve

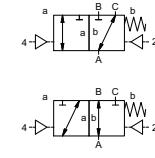
normally closed (A ▷ B)

symbol NC

valve

normally open (A ▷ B)

symbol NO



design pressure balanced, with spring return, switching overlap

body materials ① steel, galvanized  
③ steel, nickel plated  
④ steel, nickel plated  
⑤ without non-ferr. metals  
⑥ stainless steel

valve seat synthetic resin on metal

seal materials NBR PTFE, FPM, CR, EPDM

**⚠** 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
- media
- media temperature
- ambient temperature
- type of actuation

#### details needed for pneumatic actuation

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

#### details needed for hydraulic actuation

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

#### general specifications

ports	VSV-F	flanges PN 16 / 40	special flanges
function	NC	NO	
pressure range	bar 0-16 / 0-40	A ⇒ B max. 40 / B ⇒ A max. 16 / C ⇒ A max. 40 / C ⇒ B max. 40	
Kv value	m³/h 140,0	leak rate < 10⁻⁶ mbar·l·s⁻¹	
vacuum pressure-vacuum	P <sub>1</sub> ⇌ P <sub>2</sub>	pressure side max. 40 bar vacuum side leak rate upon request	
back pressure media	P <sub>2</sub> > P <sub>1</sub>	see pressure range gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
abrasive media damping	opening	version available	
flow direction	closing	by throttles on pilot valve	
switching cycles	1/min 40	see pressure range	
switching time	ms opening 300-3000 closing 300-3000	remote mounted pilot valve outside temperature range of media max. 160 °C	
media temperature	°C direct mounted pilot valve 60	available	
ambient temperature	°C direct mounted pilot valve 50	available	
flush ports	leak ports	inductive / mechanical upon request	
limit switches	manual override	via pilot valve	LR/GL/WAZ
approvals	mounting		
mounting	weight		upon request
additional equipment	kg VSV-F 46,5		

#### electrical specifications

nominal voltage	U <sub>n</sub> DC 24 V	special voltage upon request
	U <sub>n</sub> AC 230 V 50 Hz	special voltage upon request
power consumption	DC 4,8 W	2,5 W
protection	AC pick up 11,0 VA holding 8,5 VA	
energized duty rating	IP65 (P54) acc. DIN 40050	
connection	ED 100%	
optional	plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
additional equipment	M12x1 connector acc. DESINA	connector acc. VDMA
max. temperature	illuminated plug with varistor	
explosion proof	media 60°C	
	ambient 50°C	
	E Ex e II T5 nominal voltage U <sub>n</sub>	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

#### pneumatic specifications

actuation pressure range	bar 4-10	options
air consumption	cm³/stroke 135	
cycle speed	main valve speed variable by throttles on pilot valve	
control	preferably 5/2 way pilot valve	
pilot valve interface	2/4 G 1/4	G 3/8
actuator ports		

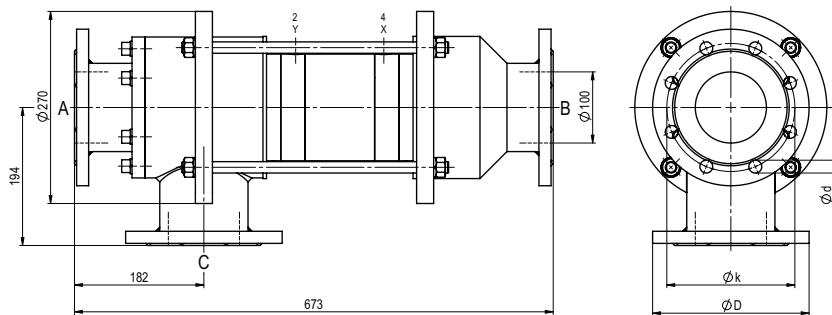
#### hydraulic specifications

actuation pressure range	bar 10-30 / 30-60	options
control	preferably 4/2 way control valve	
actuator ports	X/Y G 1/4	NPT 1/4
by media		upon request

■ specifications not highlighted are standard  
specifications highlighted in grey are optional

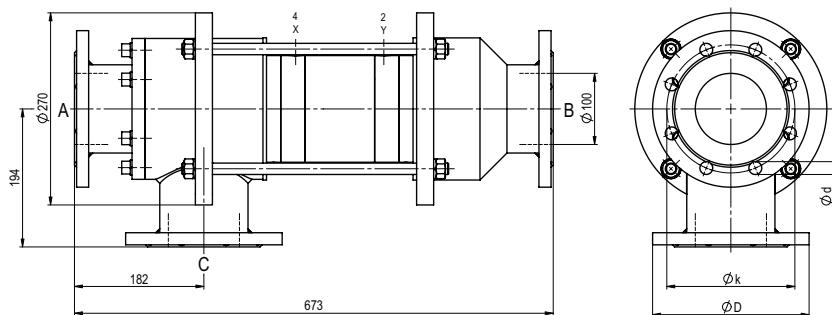
## type VSV-F 100 DR

function: **NC**  
closed when not energized (A ▶ B)



## type VSV-F 100 DR

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



### pneumatic actuation

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