

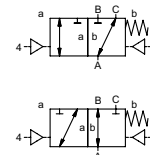
**5-VMK 50 DR**  
**5-VFK 50 DR**

valve type with pilot valve

**coaxial valve**  
type **VMK 50 DR**  
**VFK 50 DR**



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 50 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
symbol **NC**  
valve normally open (A ► B)  
symbol **NO**



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

**design** pressure balanced, with spring return, switching overlap  
**body materials** ① ② steel, galvanized  
③ ⑤ without non-ferr. metals  
④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**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

**⚠** 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.

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

general specifications		options
ports	VMK threads G 2 VFK flanges PN 64 / 100	special threads special flanges
function	NC	NO
pressure range	bar 0-64 / 0-100 A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒ C max. 100 / C ⇒ A max. 100	> 100 bar
Kv value	m <sup>3</sup> /h 43,0	
vacuum	leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>	
pressure-vacuum	P <sub>1</sub> ⇔ P <sub>2</sub>	pressure side max. 100 bar vacuum side leak rate upon request
back pressure	P <sub>2</sub> > P <sub>1</sub> see pressure range	
media	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
abrasive media		version available
damping	opening by throttles on pilot valve closing see pressure range	
flow direction	see pressure range	
switching cycles	1/min 100	
switching time	ms opening 150-3000 closing 150-3000	
media temperature	°C direct mounted pilot valve 60	remote mounted pilot valve outside temper- atur range of media max. 160 °C
ambient temperature	°C direct mounted pilot valve 50	
flush ports		available
leak ports		available
limit switches		inductive / mechanical upon request
manual override	via pilot valve	
approvals		LR/GL/WAZ
mounting		mounting brackets
weight	kg VMK 19,5 VFK 31,4	
additional equipment		upon request

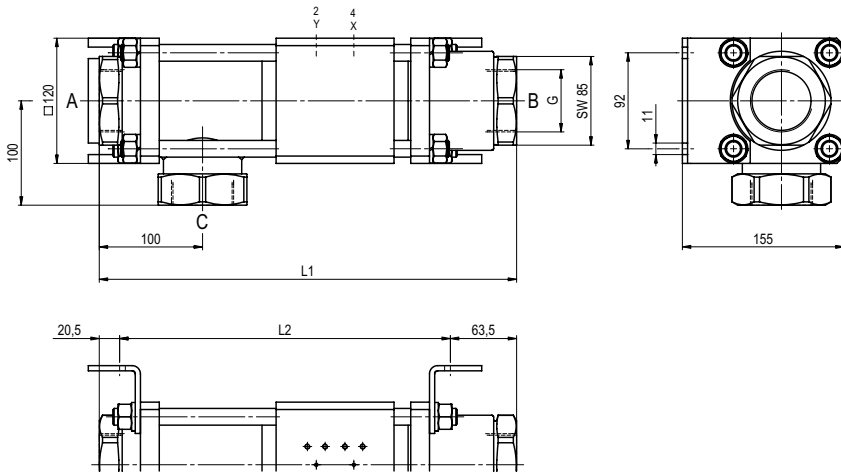
electrical specifications		options
nominal voltage	U <sub>n</sub> DC 24 V AC 230 V 50 Hz	special voltage upon request
power consumption	DC 4,8 W AC pick up 11,0 VA holding 8,5 VA	special voltage upon request 2,5 W
protection	IP65 (P54) acc. DIN 40050	
energized duty rating	ED 100%	
connection	plug acc.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

pneumatic specifications		options
actuation pressure range	bar 4-10	
air consumption	cm <sup>3</sup> /stroke 65	
cycle speed	main valve speed variable by throttles on pilot valve preferably 5/2 way pilot valve	
control		
pilot valve interface	co-ax / NAMUR	ISO 1
actuator ports	2/4 G 1/8	G 1/4

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

# type VMK 50 DR

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

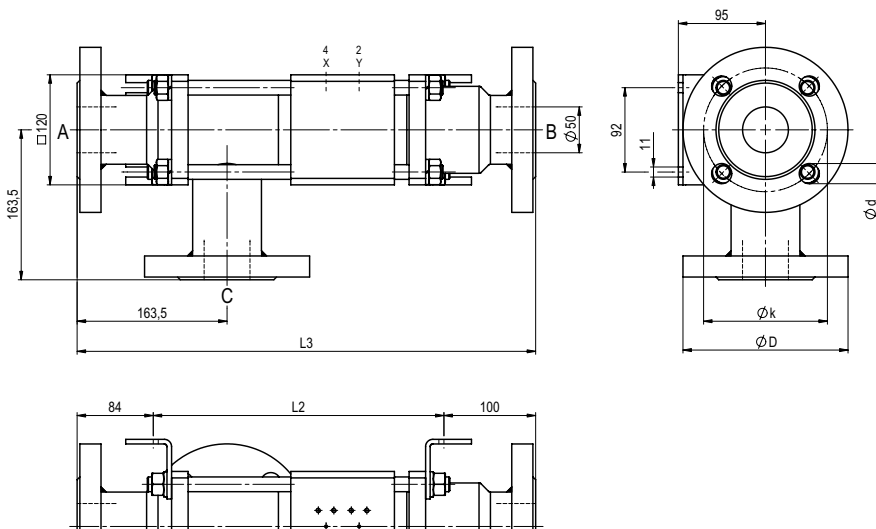


constructive length	L1	L2	L3
standard	400	316	500
with 1/2 inductive limit switches	400	316	500
with force-feed lubrication nipple	400	316	500
with mechanical limit switches	-	-	-

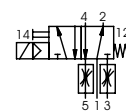
flanges PN	DIN	ØD	Øk	Ød
64	EN 1092-1	180	135	22
100	EN 1092-1	195	145	26

# type VFK 50 DR

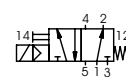
function: **NO**  
open when not energized (A ► B)



### 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