

5-VMK-H 20 DR

5-VFK-H 20 DR

valve type with pilot valve

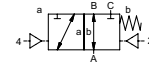
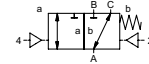
coaxial valve


type VMK-H 20 DR

VFK-H 20 DR



3/2 way valve externally controlled
pressure range PN 0-200 bar
orifice DN 20 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.

general specifications		options
ports	VMK-H threads G 3/4	special threads
	VFK-H flanges PN 160 /250	special flanges
function	NC	NO
pressure range	bar 0-200	
	A ⇒ B max. 200 / B ⇒ A max. 100 / A ⇒ C max. 200 / C ⇒ A max. 200	
Kv value	m³/h 7,6	
vacuum	leak rate	< 10 ⁻⁶ mbar·l·s ⁻¹
pressure-vacuum	P ₁ ⇄ P ₂	pressure side max. 200 bar vacuum side leak rate upon request
back pressure	P ₂ > P ₁	see pressure range
media	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
abrasive media		version available
damping	opening	
	closing	by throttles on pilot valve
flow direction	see pressure range	
switching cycles	1/min 200	
switching time	ms opening 50-3000 closing 50-3000	
media temperature	°C direct mounted pilot valve 60	remote mounted pilot valve outside temperature 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-H 7,8 VFK-H 9,2	
additional equipment		upon request

electrical specifications		options
nominal voltage	U _n DC 24 V	special voltage upon request
	U _n AC 230 V 50 Hz	special voltage upon request
power consumption	DC 4,8 W	2,5 W
	AC pick up 11,0 VA holding 8,5 VA	
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 _n	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

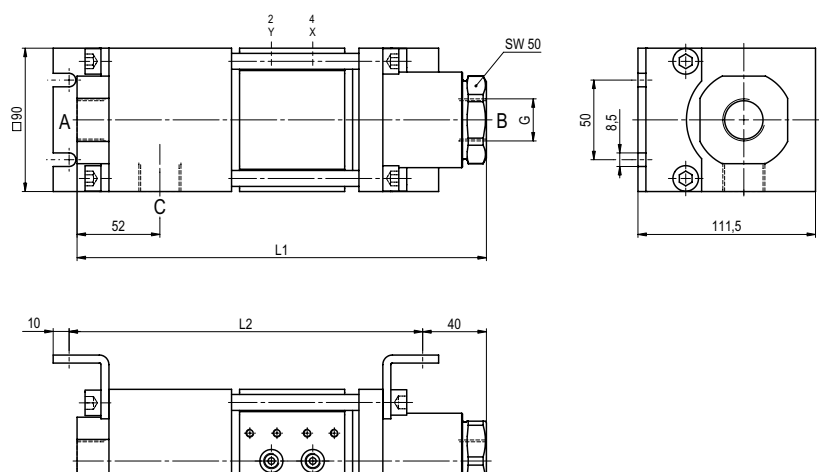
pneumatic specifications		options
actuation pressure range	bar 4-10	
air consumption	cm³/stroke 24	
cycle speed		main valve speed variable by throttles on pilot valve
control		preferably 5/2 way pilot valve
pilot valve interface	co-ax / NAMUR	ISO 1
actuator ports	2/4 G 1/8	G 1/4

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		

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

type **VMK-H 20 DR**

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

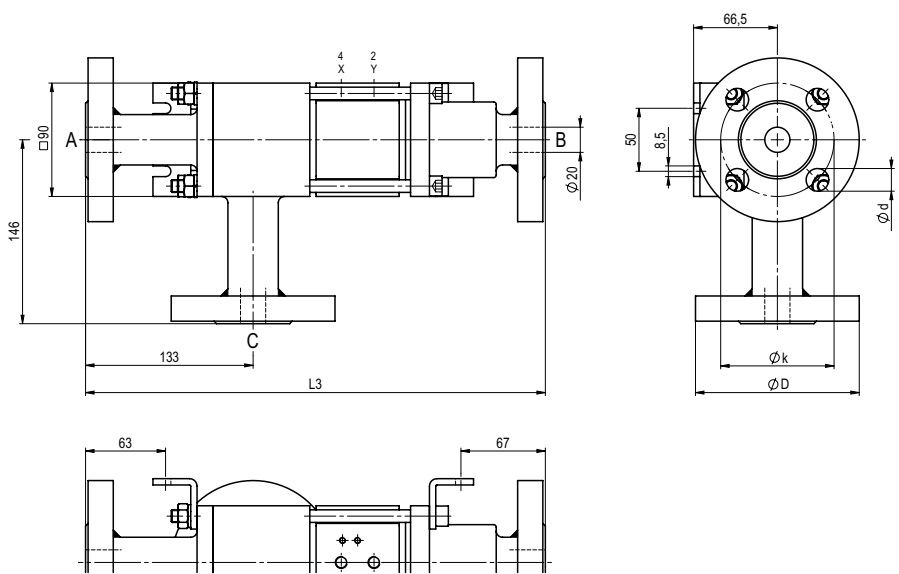


constructive length	L1	L2	L3
standard	257	222	365
with 1/2 inductive limit switches	287	252	395
with force-feed lubrication nipple	287	252	395
with mechanical limit switches	-	-	-

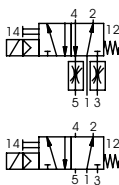
flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	130	90	18
250	EN 1092-1	135	95	18

type **VFK-H 20 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