

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
- 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.

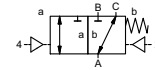
specifications not highlighted are standard
 specifications highlighted in grey are optional

3/2 way valve

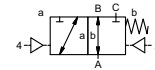
pressure range
orifice
connection
function

externally controlled

PN 0-200 bar
DN 50 mm
thread/flange
valve normally closed (A ► B)
symbol **NC**



valve normally open (A ► B)
symbol **NO**



operating principle

body material

pressure balanced, with spring return, intersecting switch-over

①	② steel galvanized
③	⑤ without non-ferr. Metals
④ steel, nickel plated	⑥ stainless steel

valve seat

seal materials

synthetic materials on metal
NBR PTFE, FPM, CR, EPDM

ports

function
pressure range

general specifications

VMK-H	threads G 2	options	special threads
VFK-H	flanges PN 160 / 250		special flanges
	NC		NO
bar	0-200		
	A ⇒ B max. 200 / B ⇒ A max. 16 / A ⇒ C max. 200 / C ⇒ A max. 200		
m ³ /h	43.0		
leak rate			< 10 ⁻⁴ mbar•L•s ⁻¹
P ₁ ⇔ P ₂			

Kv value
vacuum
pressure-vacuum

back pressure
media

P₂ > P₁ see pressure range
gaseous - liquid - highly viscous

abrasive media
damping

available

flow direction
switching cycles
switching time

opening by throttles on pilot valve
closing see pressure range
1/min 100
ms opening 100-3000
closing 100-3000

media temperature
ambient temperature
flush ports

°C direct mounted pilot valve 60 remote mounted pilot valve outside
°C direct mounted pilot valve 50 temperatur range of media max. 160 °C

leak ports
limit switches
manual override

available
available
inductive

approvals
mounting
weight
additional equipment

via pilot valve
LR/DNV/WAZ
mounting brackets

kg VMK-H 19.5 VFK-H 31.4
upon request

nominal voltage

power consumption

protection
energized duty rating
connection

electrical specifications

U _n	DC 24 V	options	special voltage upon request
U _n	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 U _n	DC 24 V	3.25 W
	power consumption	AC 230 V 50 Hz	2.90 W

optional
additional equipment
max. temperature

explosion proof

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

pneumatic specifications

bar	4-8	options	
cm ³ /stroke	65		
	main valve speed variable by throttles on pilot valve		
	preferably 5/2 way pilot valve		
	co-ax / Namur	ISO 1	
2/4	G 1/8	G 1/4	

actuation pressure range
control
actuator ports
by media

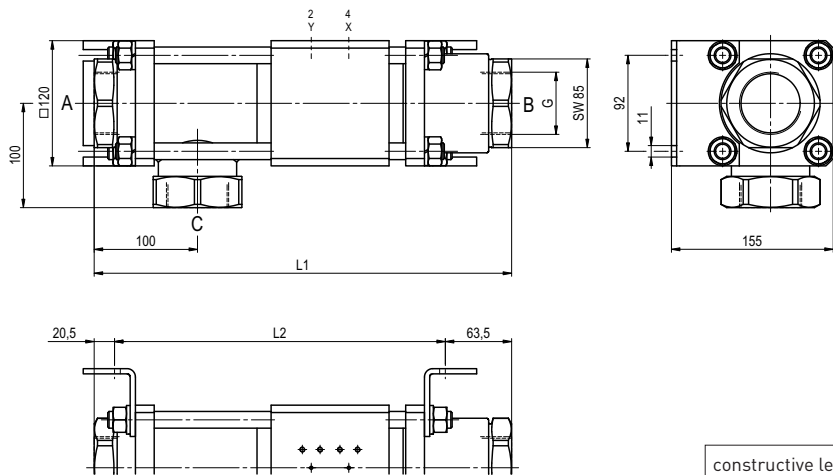
hydraulic specifications

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

coax® data sheet - coaxial valve

type VMK-H 50 DR
VFK-H 50 DR

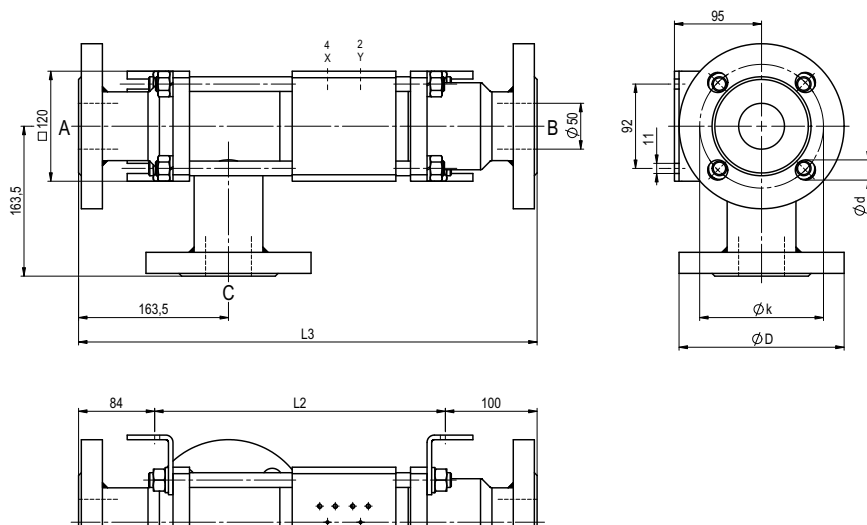
function: **NC**
closed when not energized (A ► B)



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

flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	195	145	26
250	EN 1092-1	200	150	26

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



pneumatic specifications

