

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

operating principle

body material

valve seat

seal materials

ports

function
pressure range

Kv value
vacuum
pressure-vacuum

back pressure
media

abrasive media
damping

flow direction
switching cycles
switching time

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

nominal voltage

power consumption

protection
energized duty rating
connection
optional additional equipment
max. temperature

explosion proof

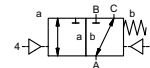
actuation pressure range
air consumption
cycle speed
control
pilot valve interface
actuator ports

actuation pressure range
control
actuator ports
by media

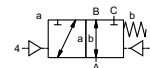
externally controlled

PN 0-200 bar
DN 20 mm
thread/flange

valve normally closed (A ► B)
symbol **NC**



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



pressure balanced, with spring return, intersecting switch-over

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

synthetic materials on metal

NBR PTFE, FPM, CR, EPDM

general specifications

VMK-H threads G 3/4
VFK-H flanges PN 160 / 250
NC
0-200
A ⇒ B max. 200 / B ⇒ A max. 100 / A ⇒ C max. 200 / C ⇒ A max. 200
m³/h 7.6
leak rate < 10⁻⁶ mbar•L•s⁻¹
P₁ ⇔ P₂ pressure side max. 200 bar
vacuum side leak rate upon request
P₂ > P₁ see pressure range
gaseous - liquid - highly viscous

options

special threads
special flanges
NO
available
remote mounted pilot valve outside
temperatur range of media max. 160 °C
available
inductive / mechanical upon request

opening by throttles on pilot valve
closing see pressure range

1/min 200
ms opening 50-3000
closing 50-3000

°C direct mounted pilot valve 60
°C direct mounted pilot valve 50

via pilot valve

LR/DNV/WAZ

mounting brackets

kg VMK-H 7.8 VFK-H 9.2
upon request

electrical specifications

U_n DC 24 V
U_n AC 230 V 50 Hz
DC 4.8 W
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
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

options

special voltage upon request
special voltage upon request
2.5 W [actuation pressure range 4-7 bar]

connector acc. VDMA

pneumatic specifications

bar 4-8
cm³/stroke 24
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

options

hydraulic specifications

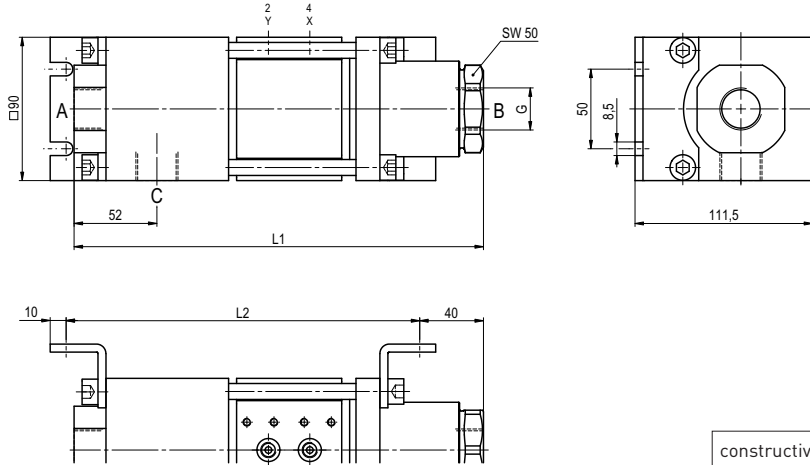
bar 15-30 / 30-60
preferably 4/2 way control valve
X/Y G 1/4 NPT 1/4

options

coax® data sheet - coaxial valve

type VMK-H 20 DR
VFK-H 20 DR

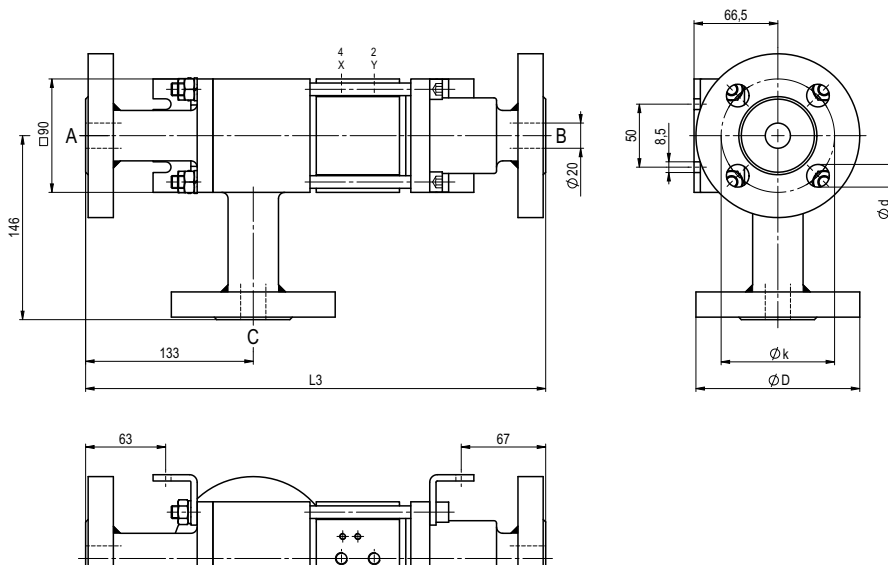
function: **NC**
closed when not energized (A ► B)



constructive length	L1	L2	L3
standard	257	222	365
with 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

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



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