

type VMK 50
VFK 50

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
- 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

2/2-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

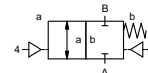
actuation pressure range
air consumption
cycle speed
control
pilot valve interface
actuator ports

actuation pressure range
control
actuator ports
by media

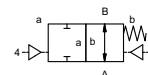
externally controlled

PN 0-100 bar
DN 50 mm
thread/flange

valve normally closed
symbol **NC**



valve normally open
symbol **NO**



pressure balanced, with spring return

- 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 threads G 2
VFK flanges PN 63 / 100
NC
bar 0-63 / 0-100

options

special threads
special flanges
NO
> 100 bar upon request

m³/h 43.0
leak rate < 10⁻⁶ mbar•L•s⁻¹
P₁ ⇔ P₂ pressure side max. 100 bar
vacuum side leak rate upon request
available (max. 16 bar)
P₂ > P₁ gaseous - liquid - highly viscous -
gelatinous - pasty - contaminated

opening by throttles on pilot valve
closing as marked
A ⇔ B bi-directional upon request

1/min 100
ms opening 150-3000
closing 150-3000
°C direct mounted pilot valve 60 remote mounted pilot valve outside
°C direct mounted pilot valve 50 temperatur range of media max. 160 °C

available
available
inductive / mechanical upon request
via pilot valve
LR/DNV/WAZ
mounting brackets
kg VMK 12.3 VFK 18.7
upon request

electrical specifications

U_n DC 24 V 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]

options

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

pneumatic specifications

bar 4-8
cm³/stroke 65
main valve speed variable by throttle 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

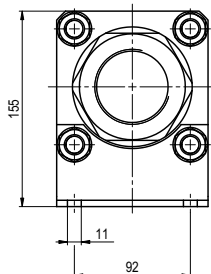
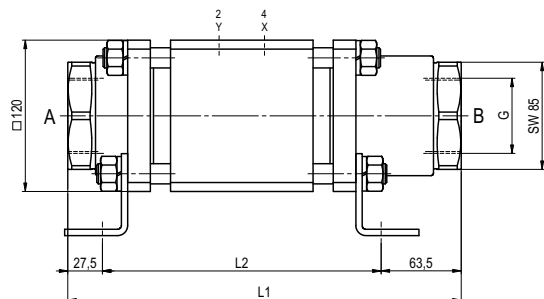
bar 15-30 / 30-60
preferably 4/2 way control valve
X/Y G 1/4 NPT 1/4

options

coax® data sheet - coaxial valve

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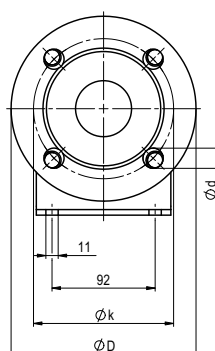
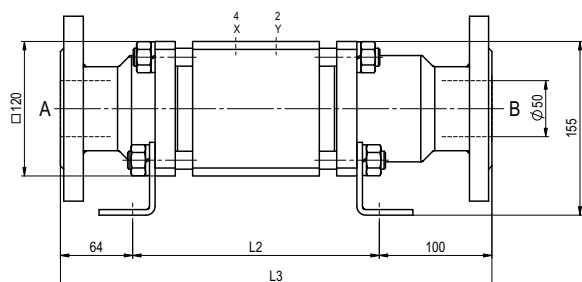
function: **NC**
closed when not energized



constructive length	L1	L2	L3
standard	312	221	385
with inductive limit switches	312	221	385
with force-feed lubrication nipple	312	221	385
with mechanical limit switches	-	-	-

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

function: **NO**
open when not energized



pneumatic specifications

