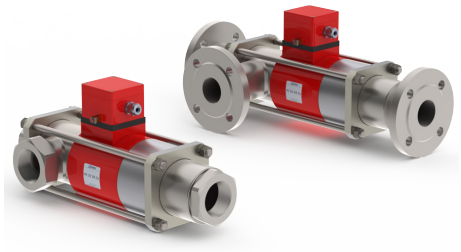
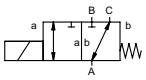
coaxial valve

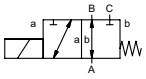
type MK 50 DR Ex
FK 50 DR Ex



3/2 way valve	**direct acting**
pressure range	PN 0-16 bar
orifice	DN 50 mm
connection	thread/flange
function	valve normally closed (A ►B) symbol **NC**



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



design	pressure balanced, with spring return, intersecting switch-over
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

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

details needed

- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

		general specifications	options
ports	MK	threads G 2	special threads
	FK	flanges PN 16	special flanges
function		NC	NO
pressure range	bar	0-16	
		A ⇨ B max. 16 / B ⇨ A max. 10 / A ⇨ C max. 16 / C ⇨ A max. 16	
Kv value	m³/h	28,2	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	P_1⇔ P_2		upon request
back pressure	P_2 > P_1	see pressure range	
media		gaseous - liquid - highly viscous - gelatinous - contaminated	
abrasive media			upon request
damping	opening		
	closing		
flow direction		see pressure range	
switching cycles	1/min	40	
switching time	ms	opening 400	
		closing 400	
media temperature	°C	DC: -20 to +40	
		AC: -20 to +40	
ambient temperature	°C	DC: -20 to +40	
		AC: -20 to +40	
limit switches			inductive
manual override			available
approvals			LR/GL/WAZ
mounting			mounting brackets
weight	kg	MK 31,5 FK 38,5	
additional equipment			upon request

		electrical specifications	options
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 40-60 Hz	special voltage upon request
actuation	DC	direct-current magnet	
	AC	direct-current magnet with separate rectifier outside of the explosion-proof area	sand sealed rectifier
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection	M16x1,5	terminal box	
optional additional equipment			
current consumption	U_n	V-DC 24 210	48 98 110 220
	I_n	A 2,80 0,33	1,48 0,72 0,57 0,32
explosion proof		II 2 G Ex mb e II T4	
		II 2 D Ex tD A21 IP65 T130 °C	
		PTB 03 ATEX 2056 X	
limit switches		inductive NAMUR	circuit amplifier

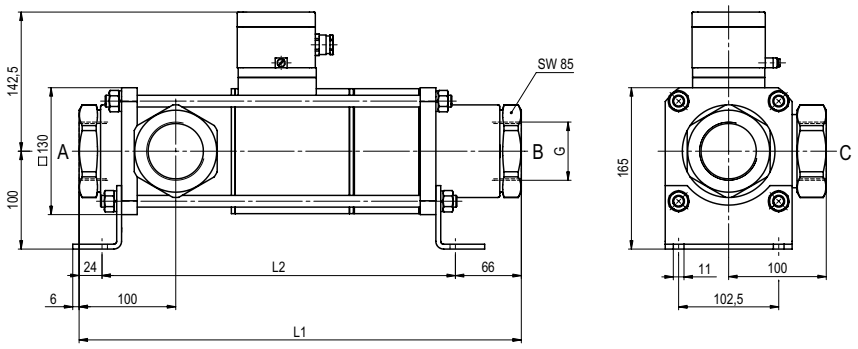
⚠ The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

⚠ 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

type **MK 50 DR Ex**

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



constructive length	L_1	L_2	L_3
standard	453	363	553
with inductive limit switches	453	363	553
with manual override / inductive limit switches	453	363	553

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	165	125	18

type **FK 50 DR Ex**

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