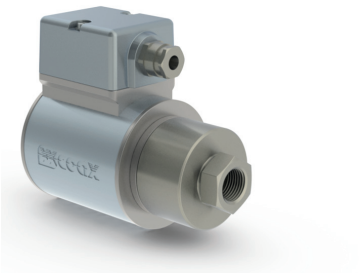
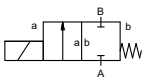
coax® data sheet - cryogenic valve

type KB 20

10/2023



2/2-way valve	**direct acting**
pressure range	PN 0-50 bar
orifice	DN 8-14 mm
connection	thread
function	valve normally closed symbol **NC**



operating principle	direct acting, with spring return	
body material	①	②
	③	⑤
	④	⑥ stainless steel, 1.5662, nickel plated
valve seat	synthetic materials on metal	
seal materials	NBR, VMQ, PTFE, RCH 1000	

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

details needed

- orifice
- port
- function NC
- operating pressure
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

	general specifications		**options**
ports	KB	threads G 1/2	special thread NPT 1/2
function		NC	
pressure range	bar	| 50 | 35 | 25 | 15 |	
	DN	| 8 | 10 | 12 | 14 |	
Kv value	m^3/h	| 1,8 | 2,5 | 2,9 | 3,2 |	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		
back pressure	$P_2 > P_1$		
media		gaseous - liquid	
abrasive media			
damping	opening		
	closing		
flow direction	A ⇨ B	as marked	
switching cycles	1/min	150	
switching time	ms	opening 120	
		closing 270	
media temperature	°C	< -21 °C / -196 °C	
ambient temperature	°C	< -21 °C / -196 °C	
limit switches			
manual override			
approvals			WAZ
mounting			
weight	kg	3,5	
additional equipment			

⚠ 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.

	electrical specifications		**options**
nominal voltage	U_n	DC 24 V +5%/-10%	special voltage upon request
	U_n	AC 230 V +5%/-10% 40-60 Hz	special voltage upon request
actuation	DC	direct-current magnet	
	AC	direct-current magnet with integrated rectifier	under -50 °C with separate rectifier
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection		terminal box M16x1,5	
optional			
additional equipment			
current consumption		DC 24 V 2,64 A	
		AC 230 V 40-60 Hz 0,30 A	
explosion proof			
limit switches			

⚠ 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

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function: **NC**
closed when not energized