coax® data sheet - coaxial valve

type A 45

03/2022



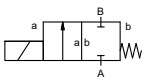
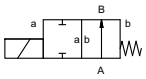
⚠ Above stated body materials refer to the valve port connections that get in contact with the media only!

details needed

- ■ orifice
- ■ port
- ■ function NC/NO
- ■ operating pressure
- ■ flow rate
- ■ media
- ■ media temperature
- ■ ambient temperature
- ■ nominal voltage

⚠ 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.

2/2-way valve	**direct acting**	
pressure range	PN 0-130 bar	
orifice	DN 2/4/6 mm	
connection	thread	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	direct acting, with spring return	
body material	⑥ stainless steel	
valve seat	synthetic materials on metal	
seal materials	NBR, PTFE	FPM, EPDM

general specifications			**options**
ports	A45	threads G 3/8	
function		NC	NO
pressure range	bar	| 10 | 40 | 130 |	| 10 | 60 | 130 |
	DN	| 6 | 4 | 2 |	| 6 | 4 | 2 |
Kv value	l/min	| 9,8 | 5,3 | 1,3 |	| 9,8 | 5,3 | 1,3 |
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		upon request
back pressure	$P_2 > P_1$		
media		gaseous - liquid	
abrasive media			
damping	opening		
	closing		
flow direction	A ⇨ B	as marked	
switching cycles	1/min	200	
switching time	ms	opening 20	
		closing 45	
media temperature	°C	DC: -10 to +80	> 80 °C upon request
		AC: -10 to +80	> 80 °C upon request
ambient temperature	°C	DC: -10 bis +80	
		AC: -10 bis +80	
limit switches			
manual override			
approvals			WAZ
mounting			mounting brackets
weight	kg	1,2	
additional equipment			upon request

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	above 100 °C with separate rectifier
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form A, 4 positions x90° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
current consumption		DC 24 V 1,30 A	
		AC 230 V 40-60 Hz 0,17 A	
explosion proof			
limit switches			

■ specifications not highlighted are standard
specifications highlighted in grey are optional

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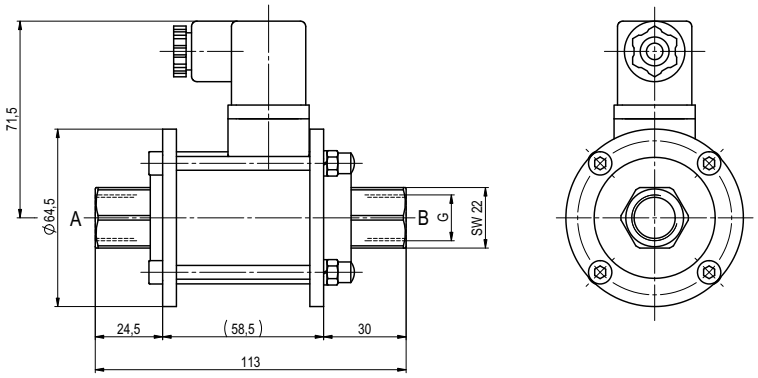
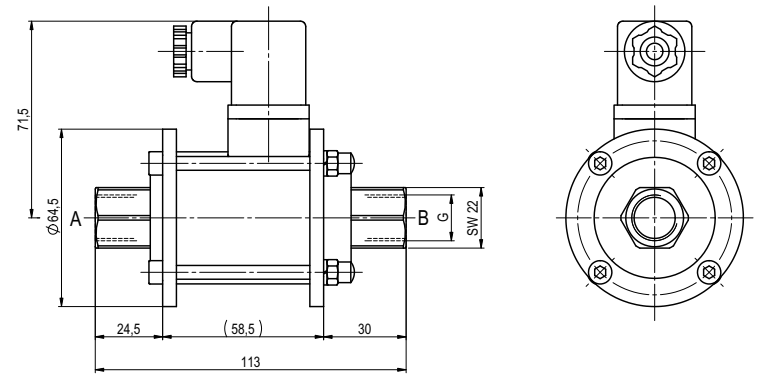
coax® data sheet - coaxial valve

type A 45

function: **NC**
closed when not energized



function: **NO**
open when not energized



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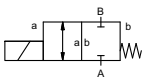
coax® data sheet - coaxial valve

type KB 15

08/2022



2/2-way valve	**direct acting**
pressure range	PN 0-400 bar
orifice	DN 2-8 mm
connection	thread
function	valve normally closed symbol **NC**



operating principle	direct acting, with spring return	
body material	⑧ 1.4104/steel, nickel plated	②
	③	⑤
	④	⑥ stainless steel, steel, nickel plated
valve seat	synthetic materials on metal	
seal materials	NBR, PTFE	FPM

⚠ 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
- switching cycles

	general specifications		**options**
ports	KB	threads G 3/8	special threads
function		NC (1-coil operation)	NC (2-coil operation)
pressure range	bar	| 30 | 50 | 80 | 120 | 250 | 300 |	| 40 | 70 | 100 | 150 | 300 | 400 |
	DN	| 8 | 6 | 5 | 4 | 3 | 2 |	| 8 | 6 | 5 | 4 | 3 | 2 |
Kv value	l/min	| 24.0 | 17.4 | 13.5 | 11.0 | 4.1 | 1.7 |	| 24.0 | 17.4 | 13.5 | 11.0 | 4.1 | 1.7 |
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		upon request
back pressure	$P_2 > P_1$		upon request
media		gaseous - liquid	
abrasive media			
damping	opening		
	closing		
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles	1/min	260	370
switching time	ms	opening 60	opening 40
		closing 170	closing 120
media temperature	°C	DC: -20 to +100	> 100 °C upon request
		AC: -20 to +100	> 100 °C upon request
ambient temperature	°C	DC: -20 to +80	
		AC: -20 to +80	
limit switches			
manual override			
approvals			WAZ
mounting			
weight	kg	2.5	
additional equipment			upon request

⚠ 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	above 100 °C with separate rectifier
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100% (upon request)	
connection		plug acc. DIN EN 175301-803 form A, 4 positions x90° / wire diameter 6-8 mm	terminal box M16x1,5
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
current consumption	1-coil operation	DC 24 V 2.29 A	
		AC 230 V 40-60 Hz 0.24 A	
	2-coil operation	pick up power	DC 24 V 4.21 A / AC 230 V 0.58A
		holding power	DC 24 V 1.54 A / AC 230 V 0.15A
explosion proof			terminal box M16x1,5
			⟨Ex⟩ II 3G Ex ec IIC T3 Ta -20...+80°C Gc
			⟨Ex⟩ II 3D Ex tc IIIC T195°C Ta -20...+80°C Dc
			⟨Ex⟩ II 3G Ex h IIC T3 Gc
			⟨Ex⟩ II 3D Ex h IIIC T195°C Dc
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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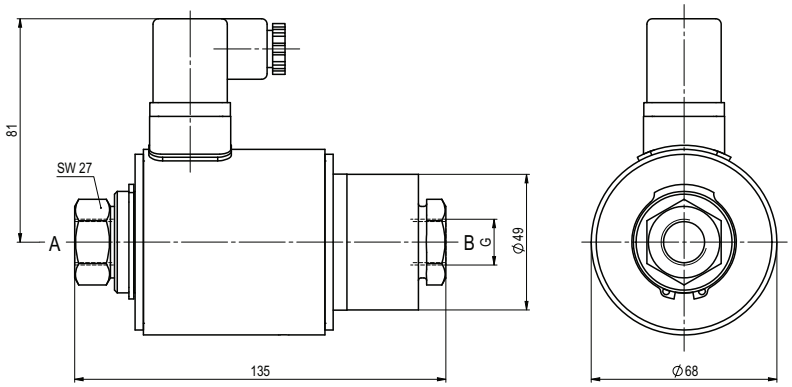
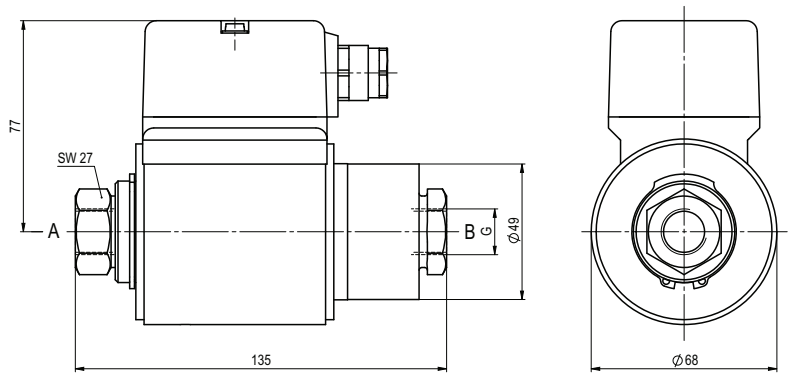
coax® data sheet - coaxial valve

type KB 15

function: **NC**
closed when not energized



function: **NC**
closed when not energized



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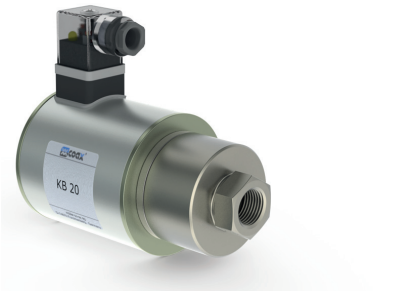
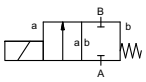
coax® data sheet - coaxial valve

type KB 20

08/2022



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	⑧ 1.4104/steel, nickel plated	②
	③	⑤
	④	⑥ stainless steel, steel, nickel plated
valve seat	synthetic materials on metal	
seal materials	NBR, PTFE	FPM

⚠ 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	m³/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	DC: -20 to +100	> 100 °C upon request
		AC: -20 to +100	> 100 °C upon request
ambient temperature	°C	DC: -20 to +80	
		AC: -20 to +80	
limit switches			
manual override			
approvals			WAZ
mounting			
weight	kg	3.5	
additional equipment			

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	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	above 100 °C with separate rectifier
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form A, 4 positions x90° / wire diameter 6-8 mm	terminal box M16x1,5
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
current consumption		DC 24 V 2.64 A	
		AC 230 V 40-60 Hz 0.30 A	
explosion proof			terminal box M16x1,5
			⟨Ex⟩ II 3G Ex ec IIC T3 Ta -20...+80°C Gc
			⟨Ex⟩ II 3D Ex tc IIIC T195°C Ta -20...+80°C Dc
			⟨Ex⟩ II 3G Ex h IIC T3 Gc
			⟨Ex⟩ II 3D Ex h IIIC T195°C Dc
limit switches			

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specifications not highlighted are standard
specifications highlighted in grey are optional

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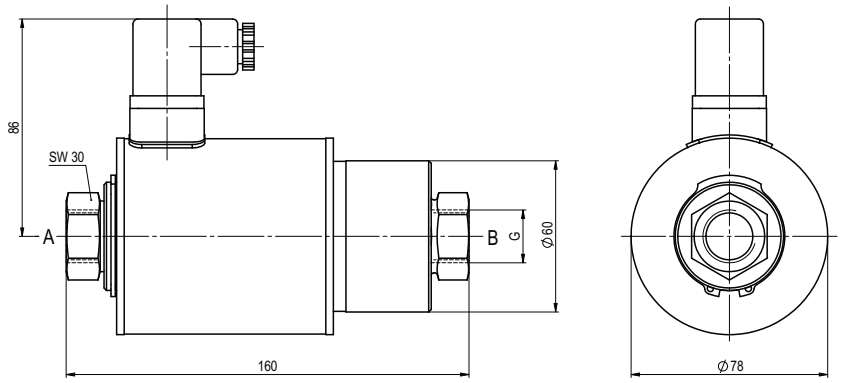
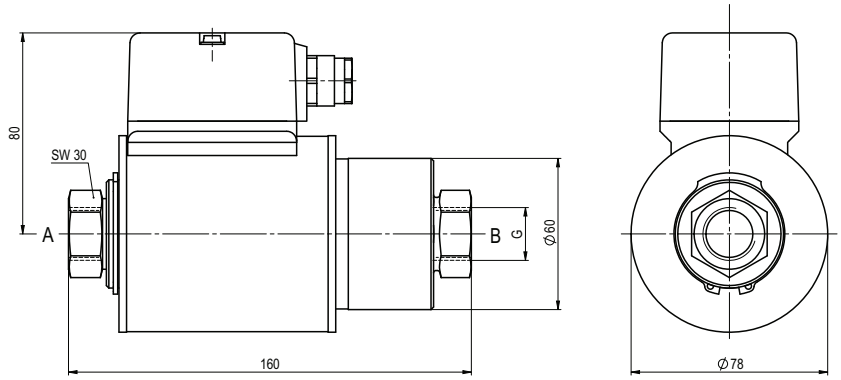
function: **NC**
closed when not energized



function: **NC**
closed when not energized



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coax® data sheet - coaxial valve

type VMK-H 10

07/2026



⚠ 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

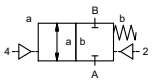
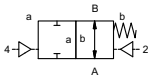
- nominal voltage
- type of protection
- actuation pressure range min/max
- pilot valve type

⚠ 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	**externally controlled**	
pressure range	PN 0-200 bar	
orifice	DN 10 mm	
connection	thread	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	① brass	②
	③	⑤
	④	⑥ stainless steel
valve seat	synthetic materials on metal	
seal materials	NBR	PTFE, FPM

	general specifications		**options**
ports	VMK	threads G 3/8 - G 1/2	special threads
function		NC	NO
pressure range	bar	0-200	
Kv value	m^3/h	3,5	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 200 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous	
abrasive media			upon request
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles	1/min	680	
switching time	ms	opening 30-3000	
		closing 50-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside tem-
ambient temperature	°C	direct mounted pilot valve 50	peratur range of media max. 160 °C
flush ports			
leak ports			
limit switches			inductive
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting		mounting holes	mounting brackets
weight	kg	VMK-H 2,6	
additional equipment			upon request

	electrical specifications		**options**
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4,8 W	2.5 W (actuation pressure range 4-7 bar)
	AC	pick up 11.0 VA holding 8.5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	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		**options**
actuation pressure range	bar	4-6	
air consumption	cm^3/stroke	5	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve incl. exhaust throttle	
pilot valve interface		Namur	
actuator ports	2/4	G 1/8	

	hydraulic specifications	**options**
actuation pressure range		
control		
actuator ports		
by media		

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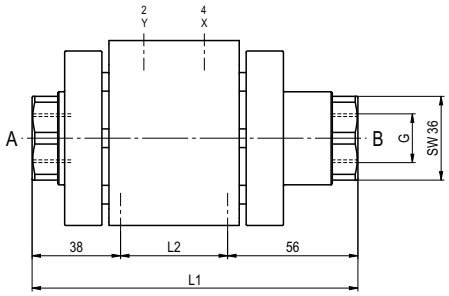
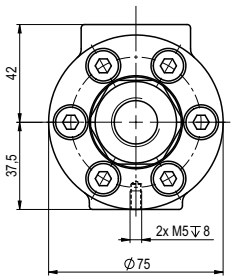
coax® data sheet - coaxial valve

type VMK-H 10

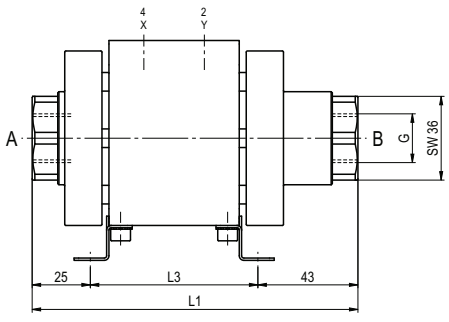
function: **NC**
closed when not energized

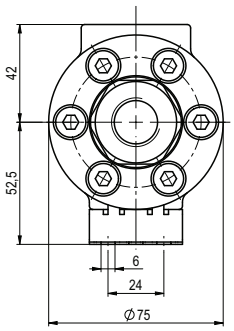




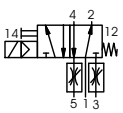
constructive length	L1	L2	L3
standard	140	46	72
with inductive limit switches	158	64	90

function: **NO**
open when not energized





pneumatic specifications



5/2 way pilot valve
flow rate 700 l/min
pressure range 3-10 bar G 1/8

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coax® data sheet - coaxial valve

type VMK-H 15
VFK-H 15

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.

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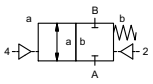
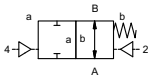
- specifications not highlighted are standard

specifications highlighted in grey are optional

2/2-way valve	**externally controlled**	
pressure range	PN 0-200 bar	
orifice	DN 15 mm	
connection	thread/flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	①	② steel galvanized
	③	⑤ without non-ferr. Metals
	④ steel, nickel plated	⑥ stainless steel
valve seat	synthetic materials on metal	
seal materials	NBR	PTFE, FPM, CR, EPDM

	general specifications		**options**
ports	VMK-H	threads G 1/2	special threads
	VFK-H	flanges PN 160 / 250	special flanges
function		NC	NO
pressure range	bar	0-200	
Kv value	m^3/h	5.6	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 200 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous	
abrasive media			available
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles	1/min	200	
switching time	ms	opening 50-3000	
		closing 50-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside
ambient temperature	°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
flush ports			available
leak ports			available
limit switches			inductive / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK-H 5.3 VFK-H 7.1	
additional equipment			upon request

	electrical specifications		**options**
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4.8 W	2.5 W (actuation pressure range 4-7 bar)
	AC	pick up 11.0 VA holding 8.5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	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

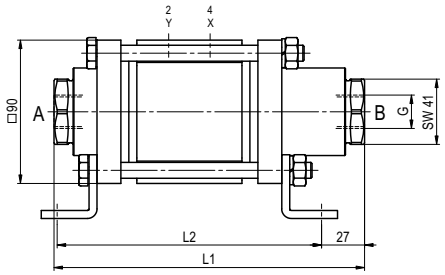
	pneumatic specifications		**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	24	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

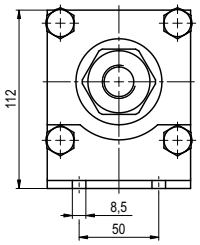
	hydraulic specifications		**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

coax® data sheet - coaxial valve

type VMK-H 15
VFK-H 15

function: **NC**
closed when not energized

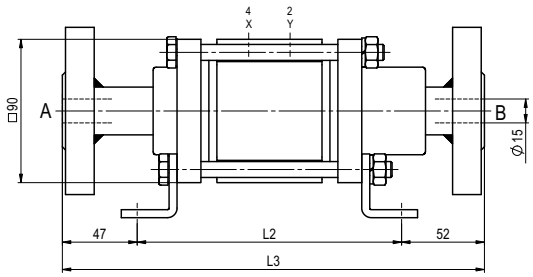


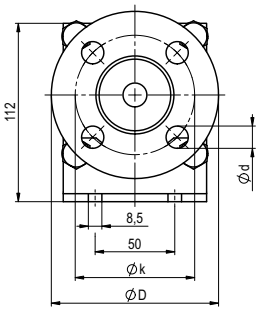


constructive length	L1	L2	L3
standard	195	166	265
with inductive limit switches	225	196	295
with force-feed lubrication nipple	225	196	295
with mechanical limit switches	225	196	295

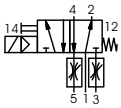
flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	105	75	14
250	EN 1092-1	130	90	18

function: **NO**
open when not energized

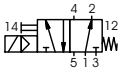




pneumatic specifications



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

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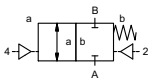
coax® data sheet - coaxial valve

type VMK-H 20
VFK-H 20

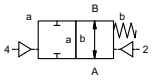
09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-200 bar
orifice	DN 20 mm
connection	thread/flange
function	valve normally closed symbol **NC**



valve
normally open
symbol **NO**



operating principle	pressure balanced, with spring return	
body material	①	② steel galvanized
	③	⑤ without non-ferr. Metals
	④ steel, nickel plated	⑥ stainless steel
valve seat	synthetic materials 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 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.

general specifications			**options**
ports	VMK-H	threads G 3/4	special threads
	VFK-H	flanges PN 160 / 250	special flanges
function		NC	NO
pressure range	bar	0-200	
Kv value	m^3/h	7.7	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 200 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous	
abrasive media			available
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles	1/min	200	
switching time	ms	opening 50-3000	
		closing 50-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside
ambient temperature	°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
flush ports			available
leak ports			available
limit switches			inductive / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK-H 6.7 VFK-H 8.7	
additional equipment			upon request

electrical specifications			**options**
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4.8 W	2.5 W (actuation pressure range 4-7 bar)
	AC	pick up 11.0 VA holding 8.5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	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			**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	24	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

hydraulic specifications			**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

specifications not highlighted are standard
specifications highlighted in grey are optional

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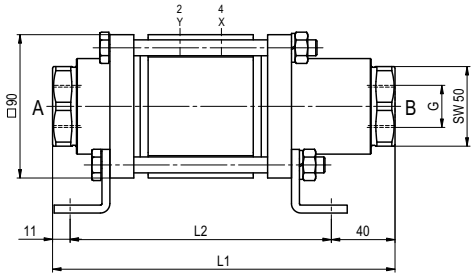
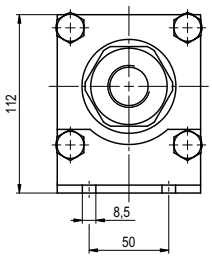
coax® data sheet - coaxial valve

type VMK-H 20
VFK-H 20

function: **NC**
closed when not energized

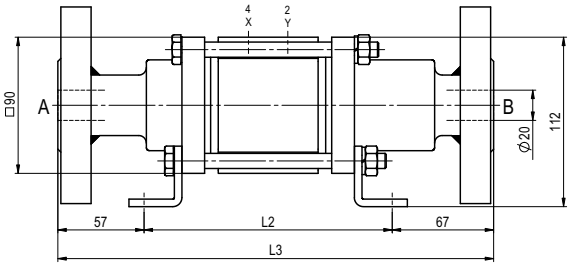


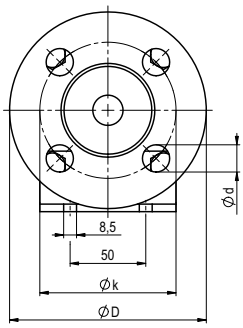


constructive length	L1	L2	L3
standard	215	164	288
with inductive limit switches	245	194	318
with force-feed lubrication nipple	245	194	318
with mechanical limit switches	-	-	-

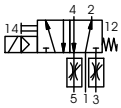
flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	130	90	18
250	EN 1092-1	135	95	18

function: **NO**
open when not energized

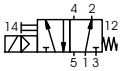




pneumatic specifications



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

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coax® data sheet - coaxial valve

type VMK-H 25
VFK-H 25

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

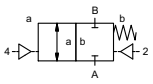
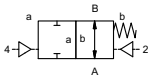
details needed for pneumatic actuation
- nominal voltage
- type of protection
- actuation pressure range min/max
- pilot valve type

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	**externally controlled**	
pressure range	PN 0-200 bar	
orifice	DN 25 mm	
connection	thread/flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	①	② steel galvanized
	③	⑤ without non-ferr. Metals
	④ steel, nickel plated	⑥ stainless steel
valve seat	synthetic materials on metal	
seal materials	NBR	PTFE, FPM, CR, EPDM

	general specifications		**options**
ports	VMK-H	threads G 1	special threads
	VFK-H	flanges PN 160 / 250	special flanges
function		NC	NO
pressure range	bar	0-200	
Kv value	m^3/h	12.6	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 200 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous	
abrasive media			available
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles	1/min	200	
switching time	ms	opening 50-3000	
		closing 50-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside
ambient temperature	°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
flush ports			available
leak ports			available
limit switches			inductive / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK-H 8.7 VFK-H 11.1	
additional equipment			upon request

	electrical specifications		**options**
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4.8 W	2.5 W (actuation pressure range 4-7 bar)
	AC	pick up 11.0 VA holding 8.5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	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

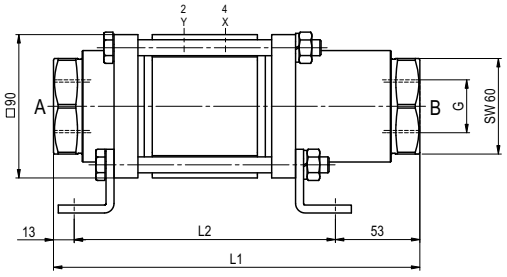
	pneumatic specifications		**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	24	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

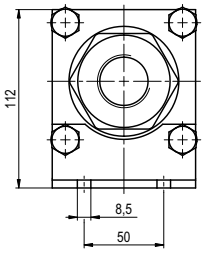
	hydraulic specifications		**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

coax® data sheet - coaxial valve

type VMK-H 25
VFK-H 25

function: **NC**
closed when not energized

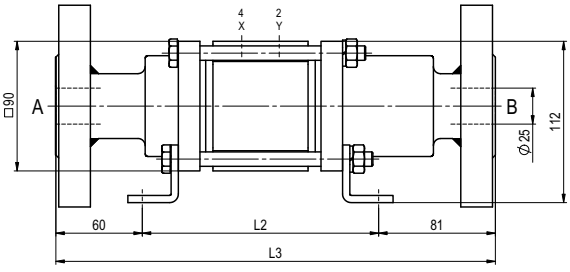


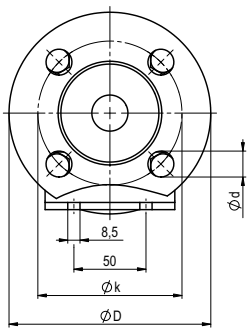


constructive length	L1	L2	L3
standard	230	164	305
with inductive limit switches	260	194	335
with force-feed lubrication nipple	260	194	335
with mechanical limit switches	-	-	-

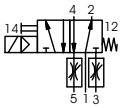
flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	140	100	18
250	EN 1092-1	150	105	22

function: **NO**
open when not energized

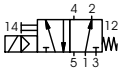




pneumatic specifications



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

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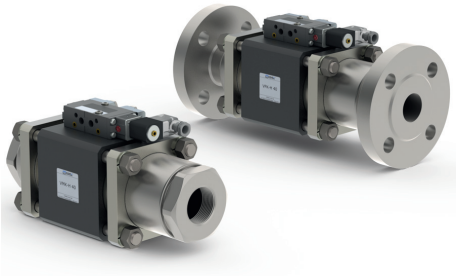
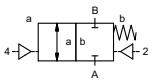
coax® data sheet - coaxial valve

type VMK-H 40
VFK-H 40

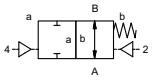
09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-200 bar
orifice	DN 40 mm
connection	thread/flange
function	valve normally closed symbol **NC**



	valve normally open symbol **NO**



operating principle	pressure balanced, with spring return	
body material	①	② steel galvanized
	③	⑤ without non-ferr. Metals
	④ steel, nickel plated	⑥ stainless steel
valve seat	synthetic materials 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 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.

general specifications			**options**
ports	VMK-H	threads G 1 1/2	special threads
	VFK-H	flanges PN 160 / 250	special flanges
function		NC	NO
pressure range	bar	0-200	
Kv value		m^3/h 31.0	
vacuum		leak rate	< 10^{-4} mbar•l•s^{-1}
pressure-vacuum		$P_1 \Leftrightarrow P_2$	
back pressure		$P_2 > P_1$	available (max. 16 bar)
media		gaseous - liquid - highly viscous	
abrasive media			available
damping	opening		
	closing	by throttles on pilot valve	
flow direction		A ⇨ B as marked	bi-directional upon request
switching cycles		1/min 150	
switching time	ms	opening 100-3000	
		closing 100-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside
ambient temperature	°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
flush ports			available
leak ports			available
limit switches			inductive
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK-H 11.3 VFK-H 13.6	
additional equipment			upon request

electrical specifications			**options**
nominal voltage	U_n	DC 24 V	special voltage upon request
	U_n	AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4.8 W	2.5 W (actuation pressure range 4-7 bar)
	AC	pick up 11.0 VA holding 8.5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	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			**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	65	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

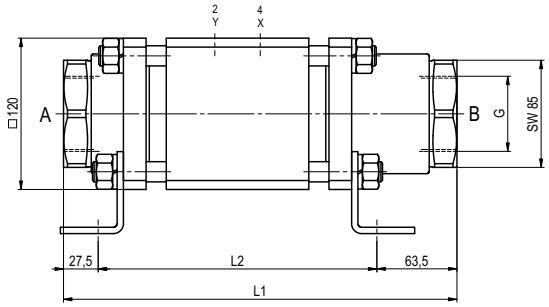
hydraulic specifications			**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

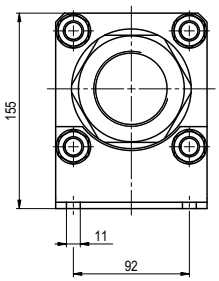
- specifications not highlighted are standard
- specifications highlighted in grey are optional

coax® data sheet - coaxial valve

type VMK-H 40
VFK-H 40

function: **NC**
closed when not energized

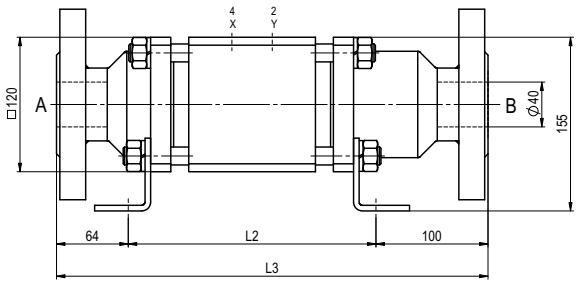


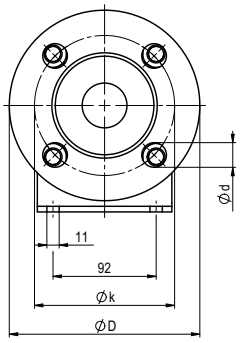


constructive length	L1	L2	L3
standard	312	221	385
with inductive limit switches	312	221	385
with force-feed lubrication nipple	312	221	385
with mechanical limit switches	-	-	-

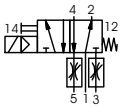
flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	170	125	22
250	EN 1092-1	185	135	26

function: **NO**
open when not energized

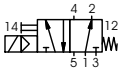




pneumatic specifications



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

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