coax® data sheet - coaxial valve

type CFM 08

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

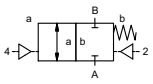
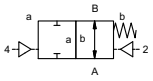
- nominal voltage
- type of protection
- actuation pressure range min/max
- pilot valve type

⚠ 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 0-40 bar	
orifice	DN 8 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
valve seat	synthetic materials on metal	
seal materials	NBR, FPM, PE	PU, PTFE

general specifications			**options**
ports	CFM	threads G 3/8	
function		NC	NO
pressure range	bar	0-40	
Kv value	m^3/h	1.6	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		emulsion - oil - neutral gases	other medias upon request
abrasive media			
damping	opening		
	closing		
flow direction	A ⇨ B	as marked	
switching cycles	1/min	400	
switching time	ms	opening 70	
		closing 80	
media temperature	°C	direct mounted pilot valve 60	> 60 °C upon request
ambient temperature	°C	direct mounted pilot valve 50	> 50 °C upon request
flush ports			
leak ports			
limit switches			temperature range max 70°C
manual override		via pilot valve	
approvals			
mounting			mounting brackets
weight	kg	0.3	
additional equipment			

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	1,2	
cycle speed			
control		via 3/2 way pilot valve	
pilot valve interface		co-ax	CNOMO upon request
actuator ports	2/4	G 1/8	

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

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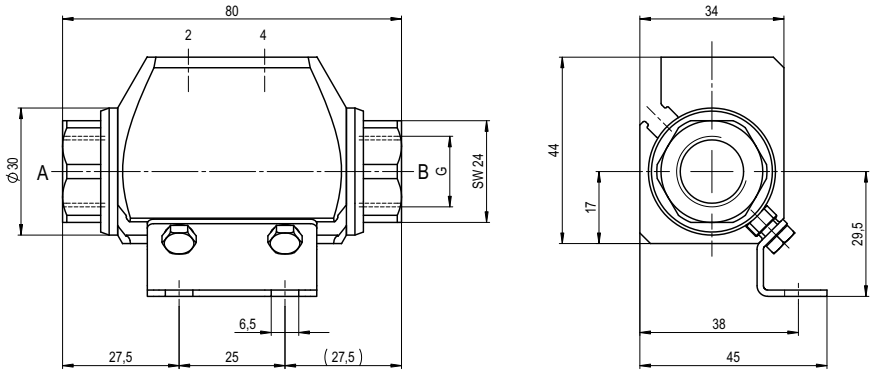
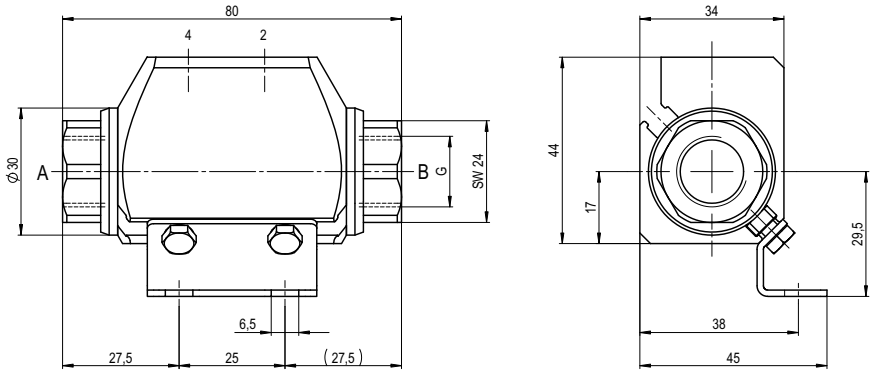
coax® data sheet - coaxial valve

type CFM 08

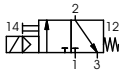
function: **NC**
closed when not energized



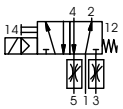
function: **NO**
open when not energized



pneumatic actuation (5/2 separately)



3/2-way pilot valve
flow rate 60 l/min
pressure range 3-10 bar



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 10

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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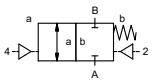
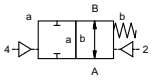
- specifications not highlighted are standard

specifications highlighted in grey are optional

2/2-way valve	**externally controlled**
pressure range	PN 0-100 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 brass, nickel plated	⑤
	④	⑥ stainless steel
	⓪ aluminium	
valve seat	synthetic materials on metal	
seal materials	NBR	PTFE, FPM, CR, EPDM

general specifications			**options**
ports	VMK	threads G 1/4 - G 3/4	special threads
function		NC	NO
pressure range	bar	0-16 / 0-40 / 0-63 / 0-100	
Kv value	m^3/h	2.5 (> 63 bar = 2.1)	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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
ambient temperature	°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
flush ports			
leak ports			
limit switches			inductive
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK 1.7	
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	2	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax	NAMUR acc. VDI / VDE 3845
actuator ports	2/4	G 1/8	

hydraulic specifications			**options**
actuation pressure range	bar	4-10	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/8	
by media			

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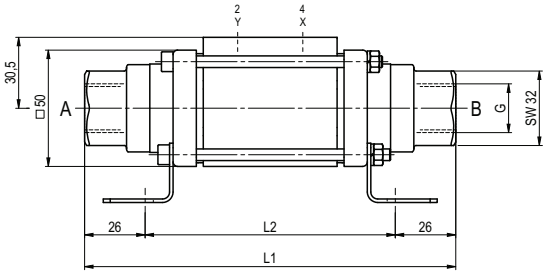
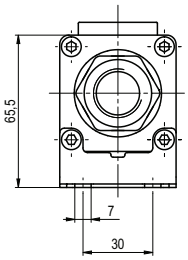
coax® data sheet - coaxial valve

type VMK 10

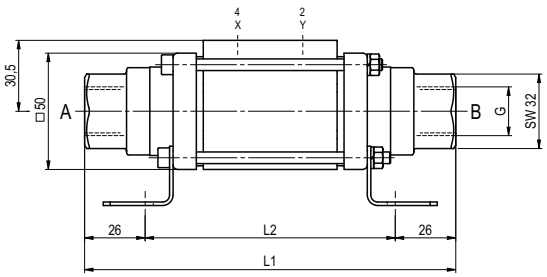
function: **NC**
closed when not energized

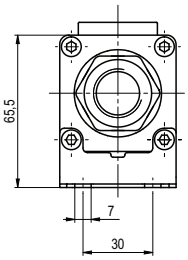




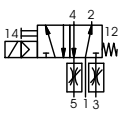
constructive length	L1	L2 (0-63 bar)	L2 (> 63 bar)
standard	159,5	107,5	114,5
with inductive limit switches	179,5	127,5	134,5

function: **NO**
open when not energized





pneumatic specifications



5/2 way pilot valve
flow rate 280 l/min
pressure range 3-10 bar G 1/8

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coax® data sheet - coaxial valve

type VMK 15
VFK 15

09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-100 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 brass ② steel galvanized ③ brass, nickel plated ⑤ without non-ferr. Metals ④ steel, nickel plated ⑥ stainless steel ⓪ aluminium
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

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general specifications			**options**
ports	VMK	threads G 3/8 - G 3/4	special threads
	VFK	flanges PN 16 / 40 / 100	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40 / 0-63 / 0-100	> 100 bar upon request
Kv value	m^3/h	5.7	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 3.4 VFK 5.0	
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	11	
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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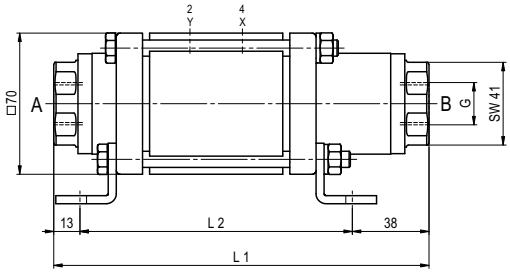
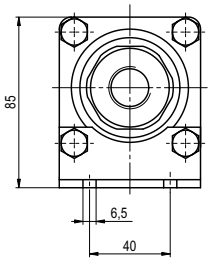
coax® data sheet - coaxial valve

type VMK 15
VFK 15

function: **NC**
closed when not energized

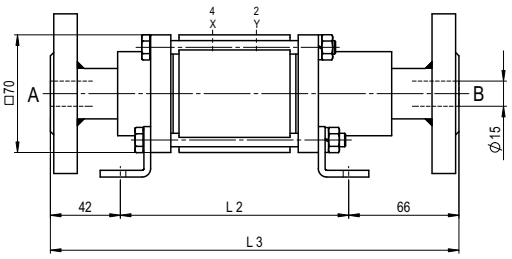


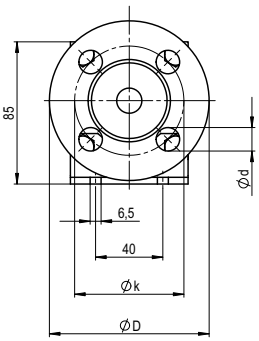


constructive length	L1	L2	L3
standard	186	135	243
with inductive limit switches	212	161	269
with force-feed lubrication nipple	219	168	276
with mechanical limit switches	212	161	269

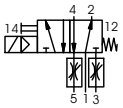
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	95	65	14
40	EN 1092-1	95	65	14
100	EN 1092-1	105	75	14

function: **NO**
open when not energized

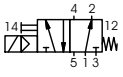




pneumatic specifications



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 20
VFK 20

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

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

2/2-way valve	**externally controlled**
pressure range	PN 0-100 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 brass ② steel galvanized ③ brass, nickel plated ⑤ without non-ferr. Metals ④ steel, nickel plated ⑥ stainless steel ⓪ aluminium
valve seat	synthetic materials on metal
seal materials	NBR PTFE, FPM, CR, EPDM

general specifications			**options**
ports	VMK	threads G 3/4 - G 1 1/4	special threads
	VFK	flanges PN 16 / 40 / 100	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40 / 0-63 / 0-100	> 100 bar upon request
Kv value	m^3/h	8.8	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 4.7 VFK 6.7	
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	11	
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			

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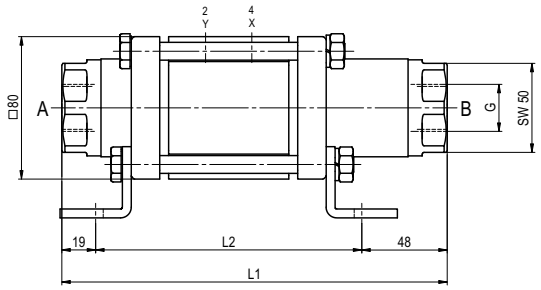
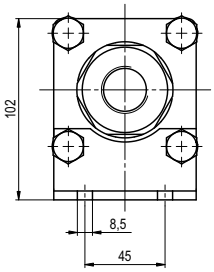
coax® data sheet - coaxial valve

type VMK 20
VFK 20

function: **NC**
closed when not energized

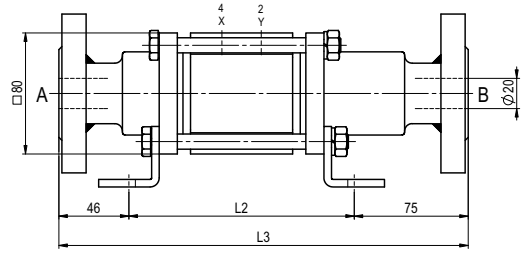


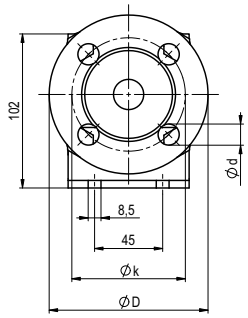


constructive length	L1	L2	L3
standard	216	149	270
with inductive limit switches	235	168	289
with force-feed lubrication nipple	254	187	308
with mechanical limit switches	250	183	304

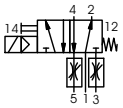
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	105	75	14
40	EN 1092-1	105	75	14
100	EN 1092-1	130	90	18

function: **NO**
open when not energized

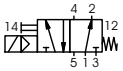




pneumatic specifications



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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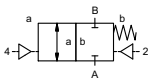
coax® data sheet - coaxial valve

type VMK 32
VFK 32

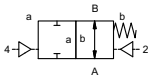
09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-100 bar
orifice	DN 32 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 brass	② steel galvanized
	③ brass, nickel plated	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	threads G 1 1/4 - G 1 1/2	special threads
	VFK	flanges PN 16 / 40 / 100	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40 / 0-63 / 0-100	
Kv value	m^3/h	20.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK 7.8 VFK 11.6	
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	23	
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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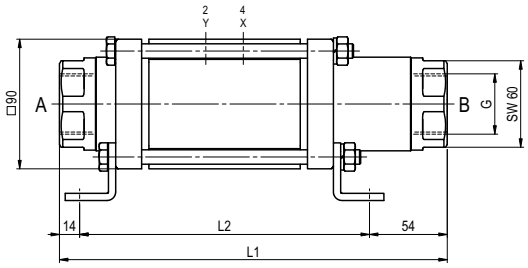
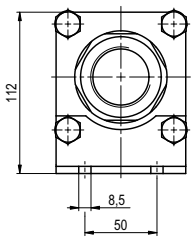
coax® data sheet - coaxial valve

type VMK 32
VFK 32

function: **NC**
closed when not energized

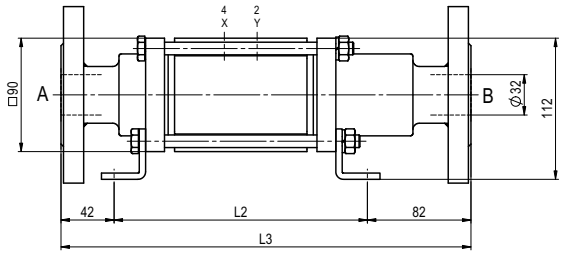


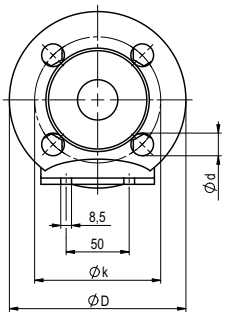


constructive length	L1	L2	L3
standard	269	201	325
with inductive limit switches	276	208	332
with force-feed lubrication nipple	306	238	362
with mechanical limit switches	304	236	360

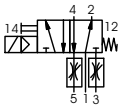
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	140	100	18
40	EN 1092-1	140	100	18
100	EN 1092-1	155	110	22

function: **NO**
open when not energized

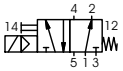




pneumatic specifications



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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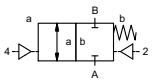
coax® data sheet - coaxial valve

type VMK 32
VFK 32

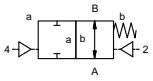
09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-100 bar
orifice	DN 32 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 brass	② steel galvanized
	③ brass, nickel plated	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	threads G 1 1/4 - G 1 1/2	special threads
	VFK	flanges PN 16 / 40 / 100	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40 / 0-63 / 0-100	
Kv value	m^3/h	20.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK 7.8 VFK 11.6	
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	23	
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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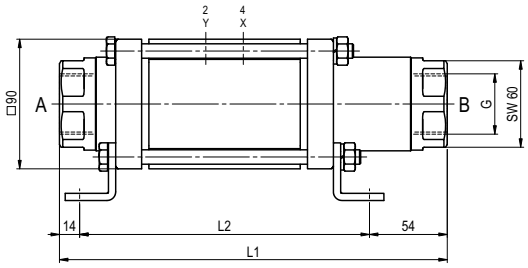
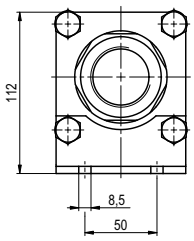
coax® data sheet - coaxial valve

type VMK 32
VFK 32

function: **NC**
closed when not energized

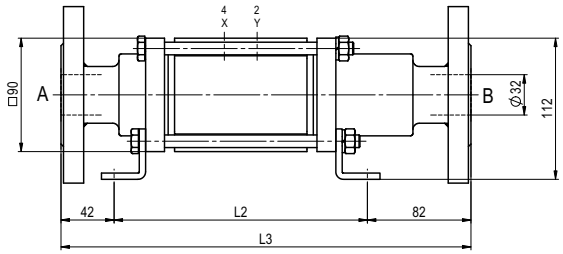


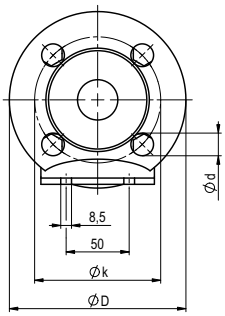


constructive length	L1	L2	L3
standard	269	201	325
with inductive limit switches	276	208	332
with force-feed lubrication nipple	306	238	362
with mechanical limit switches	304	236	360

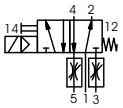
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	140	100	18
40	EN 1092-1	140	100	18
100	EN 1092-1	155	110	22

function: **NO**
open when not energized

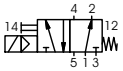




pneumatic specifications



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 40
VFK 40

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

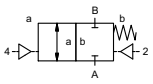
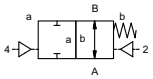
details needed for hydraulic actuation
- actuation pressure range min/max
- hydraulic control valve function

⚠ 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 0-100 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

	general specifications		**options**
ports	VMK	threads G 1 1/2 - G 2	special threads
	VFK	flanges PN 100	special flanges
function		NC	NO
pressure range	bar	0-63 / 0-100	> 100 bar upon request
Kv value	m^3/h	31.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VMK 11.2 VFK 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

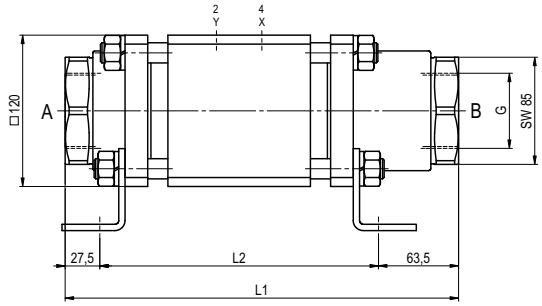
	pneumatic specifications		**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	65	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

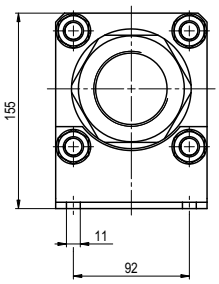
	hydraulic specifications		**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

coax® data sheet - coaxial valve

type VMK 40
VFK 40

function: **NC**
closed when not energized

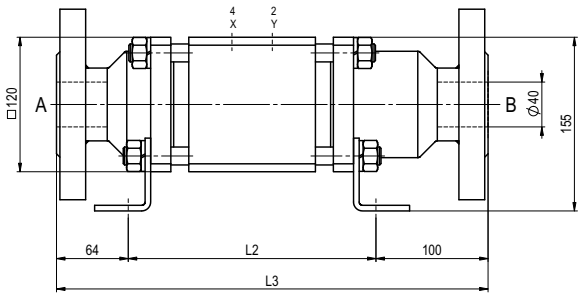


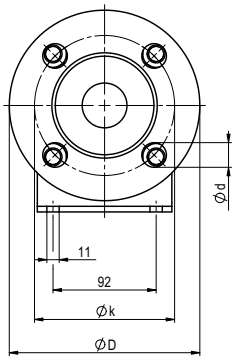


constructive length	L1	L2	L3
standard	312	221	385
with inductive limit switches	312	221	385
with force-feed lubrication nipple	312	221	385
with mechanical limit switches	-	-	-

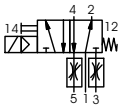
flanges PN	DIN	ØD	Øk	Ød
100	EN 1092-1	170	125	22

function: **NO**
open when not energized

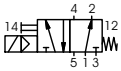




pneumatic specifications



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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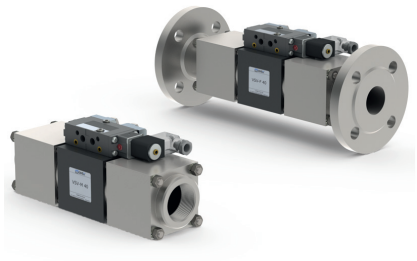
coax® data sheet - coaxial valve

type VSV-M 40
VSV-F 40

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

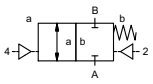
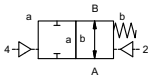
details needed for hydraulic actuation
- actuation pressure range min/max
- hydraulic control valve function

⚠ 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 0-40 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

	general specifications		**options**
ports	VSV-M	threads G 1 1/2 - G 2	special threads
	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m^3/h	31.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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 / mechanical upon request
manual override		via pilot valve	
approvals			LR/DNV/WAZ
mounting			mounting brackets
weight	kg	VSV-M 7.2 VSV-F 11.4	
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

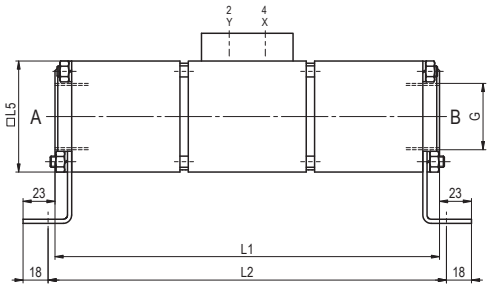
	pneumatic specifications		**options**
actuation pressure range	bar	4-8	
air consumption	cm^3/stroke	44	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax / Namur	ISO 1
actuator ports	2/4	G 1/8	G 1/4

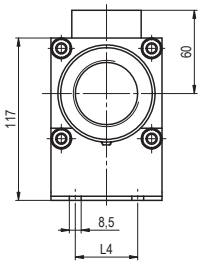
	hydraulic specifications		**options**
actuation pressure range	bar	15-30 / 30-60	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/4	NPT 1/4
by media			

coax® data sheet - coaxial valve

type VSV-M 40
VSV-F 40

function: **NC**
closed when not energized

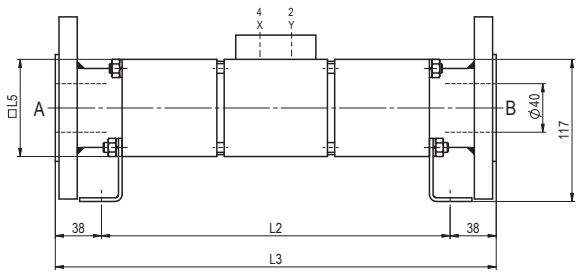


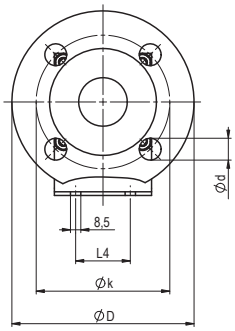


constructive length	L1	L2	L3	L4	L5
standard	277	287	363	45	80
with inductive limit switches	312	318	417	50	90
with force-feed lubrication nipple	297	307	383	45	80
with mechanical limit switches	304	314	390	50	90

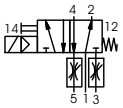
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	150	110	18
40	EN 1092-1	150	110	18

function: **NO**
open when not energized

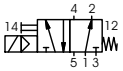




pneumatic specifications



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 VSV-M 50
VSV-F 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.

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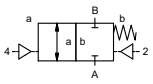
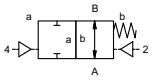
■ specifications not highlighted are standard
specifications highlighted in grey are optional

2/2-way valve	**externally controlled**	
pressure range	PN 0-40 bar	
orifice	DN 50 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	VSV-M	threads G 2	special threads
	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m^3/h	43.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	100	
switching time	ms	opening 150-3000	
		closing 150-3000	
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	VSV-M 11.9 VSV-F 18.2	
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	55	
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			

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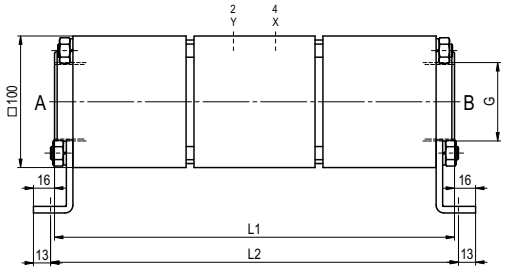
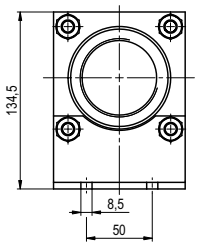
coax® data sheet - coaxial valve

type VSV-M 50
VSV-F 50

function: **NC**
closed when not energized

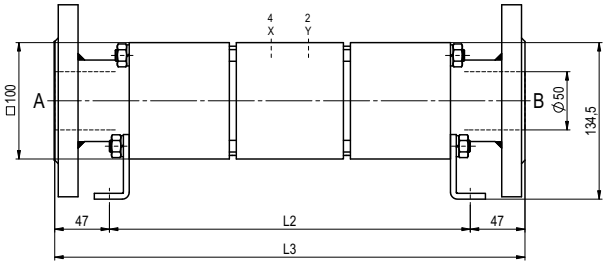


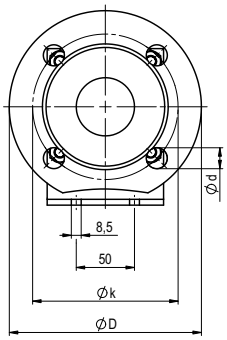


constructive length	L1	L2	L3
standard	304	310	404
with inductive limit switches	330	336	430
with force-feed lubrication nipple	322	328	422
with mechanical limit switches	344	350	444

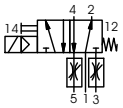
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	165	125	18
40	EN 1092-1	165	125	18

function: **NO**
open when not energized

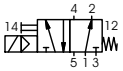




pneumatic specifications



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 VSV-F 65

09/2026



⚠ 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

details needed for hydraulic actuation
- actuation pressure range min/max
- hydraulic control valve function

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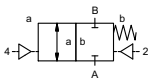
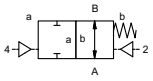
⚠ If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application. 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 0-40 bar	
orifice	DN 65 mm	
connection	flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	⓪	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	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m³/h	68,0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	50	
switching time	ms	opening 200-3000	
		closing 200-3000	
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			
weight	kg	VSV-F 20,0	
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	cm³/stroke	50	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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

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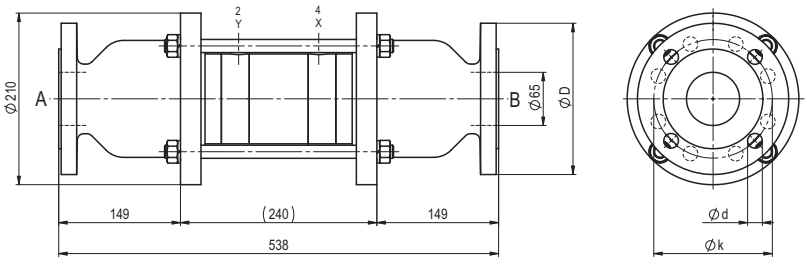
coax® data sheet - coaxial valve

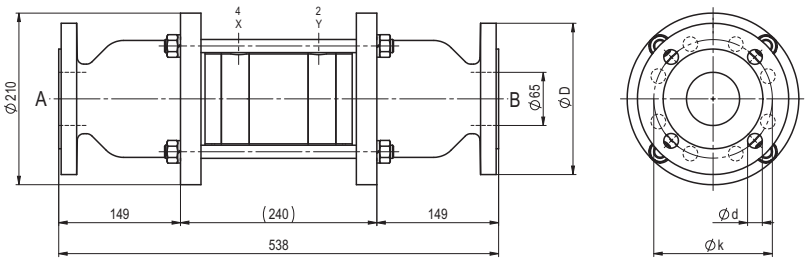
type VSV-F 65

function: **NC**
closed when not energized

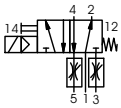


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	185	145	4x 18
40	EN 1092-1	185	145	8x 18

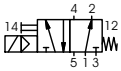
function: **NO**
open when not energized



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 VSV-F 80

09/2026



⚠ 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

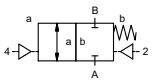
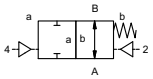
details needed for hydraulic actuation
- actuation pressure range min/max
- hydraulic control valve function

⚠ 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 0-40 bar	
orifice	DN 80 mm	
connection	flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	⓪	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	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m^3/h	90,0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	50	
switching time	ms	opening 200-3000	
		closing 200-3000	
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			
weight	kg	VSV-F 27,0	
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	75	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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

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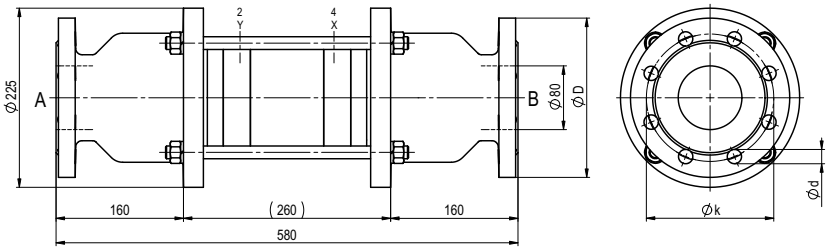
coax® data sheet - coaxial valve

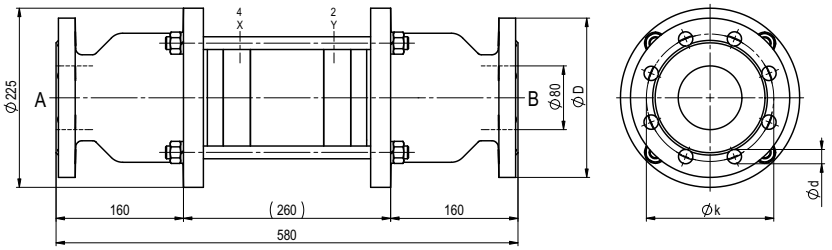
type VSV-F 80

function: **NC**
closed when not energized

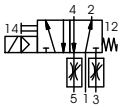


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	200	160	18
40	EN 1092-1	200	160	18

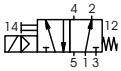
function: **NO**
open when not energized



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 VSV-F 100

09/2026



⚠ 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

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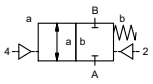
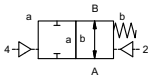
■ specifications not highlighted are standard
specifications highlighted in grey are optional

2/2-way valve	**externally controlled**	
pressure range	PN 0-40 bar	
orifice	DN 100 mm	
connection	flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	⓪	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	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m^3/h	140,0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	40	
switching time	ms	opening 300-3000	
		closing 300-3000	
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			
weight	kg	VSV-F 38,0	
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	135	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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

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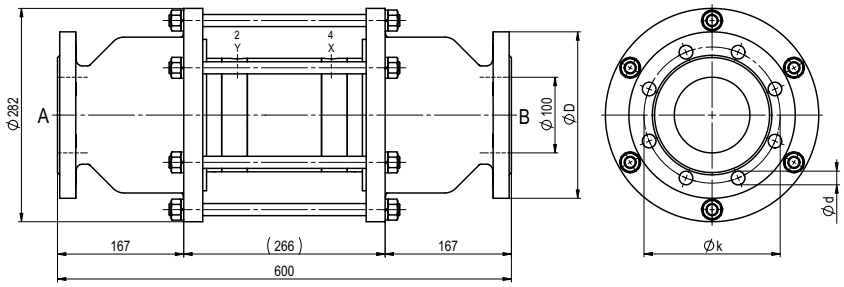
coax® data sheet - coaxial valve

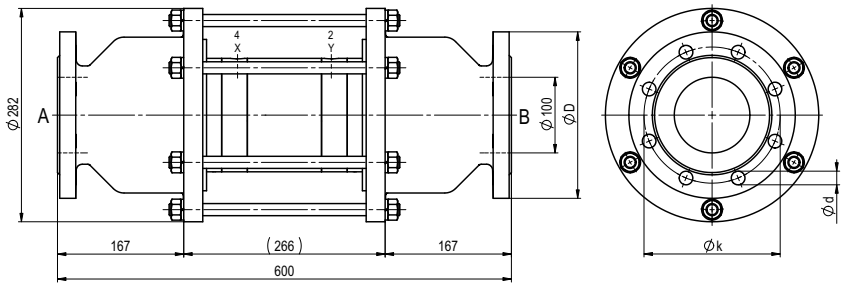
type VSV-F 100

function: **NC**
closed when not energized

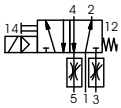


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	220	180	18
40	EN 1092-1	235	190	22

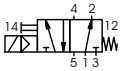
function: **NO**
open when not energized



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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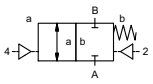
coax® data sheet - coaxial valve

type VSV-F 125

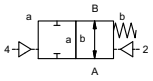
09/2026



2/2-way valve	**externally controlled**
pressure range	PN 0-40 bar
orifice	DN 125 mm
connection	flange
function	valve normally closed symbol **NC**



valve
normally open
symbol **NO**



operating principle	pressure balanced, with spring return	
body material	⓪	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	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m³/h	198,0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	30	
switching time	ms	opening 400-3000	
		closing 400-3000	
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			
weight	kg	VSV-F 51,0	
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	cm³/stroke	275	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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

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

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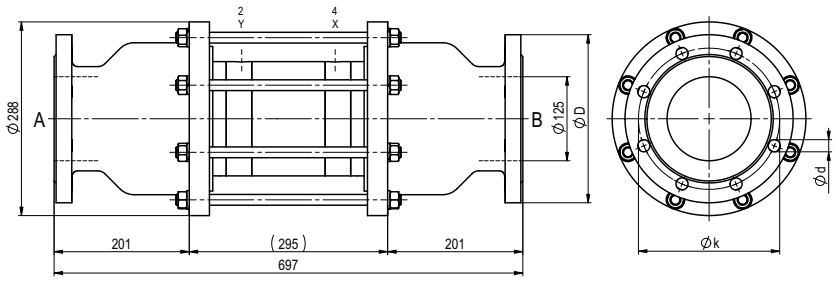
coax® data sheet - coaxial valve

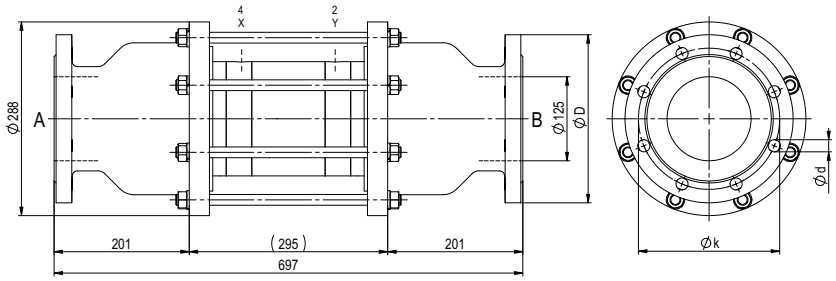
type VSV-F 125

function: **NC**
closed when not energized

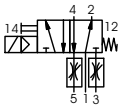


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	250	210	18
40	EN 1092-1	270	220	26

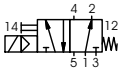
function: **NO**
open when not energized



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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coax® data sheet - coaxial valve

type VSV-F 150

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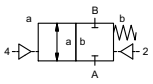
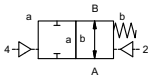
2/2-way valve	**externally controlled**
pressure range	PN 0-40 bar
orifice	DN 150 mm
connection	flange
function	valve normally closed symbol **NC**



valve
normally open
symbol **NO**



operating principle	pressure balanced, with spring return	
body material	⓪	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	VSV-F	flanges PN 16 / 40	special flanges
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m³/h	274,0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	20	
switching time	ms	opening 600-3000	
		closing 600-3000	
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			
weight	kg	VSV-F 87,0	
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	cm³/stroke	550	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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

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

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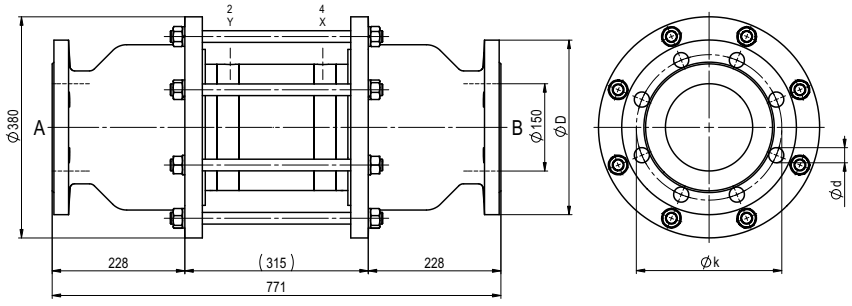
coax® data sheet - coaxial valve

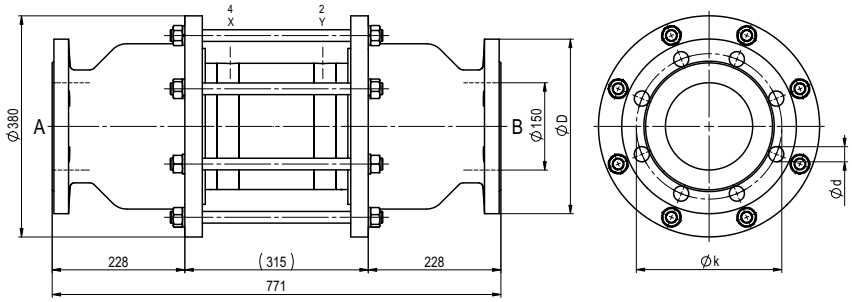
type VSV-F 150

function: **NC**
closed when not energized

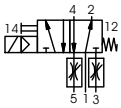


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	285	240	22
40	EN 1092-1	300	250	26

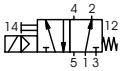
function: **NO**
open when not energized



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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coax® data sheet - coaxial valve

type VSV-F 200

09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-16 bar
orifice	DN 200 mm
connection	flange
function	valve normally closed symbol **NC**
	valve normally open symbol **NO**
operating principle	pressure balanced, with spring return
body material	⓪ ③ ④ steel, nickel plated ② steel galvanized ⑤ 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.

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

general specifications			**options**
ports	VSV-F	flanges PN 16	special flanges
function		NC	NO
pressure range	bar	0-16	
Kv value	m³/h	450.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 16 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	10	
switching time	ms	opening 800-3000	
		closing 800-3000	
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			
weight	kg	VSV-F 159.0	
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	cm³/stroke	700	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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			upon request

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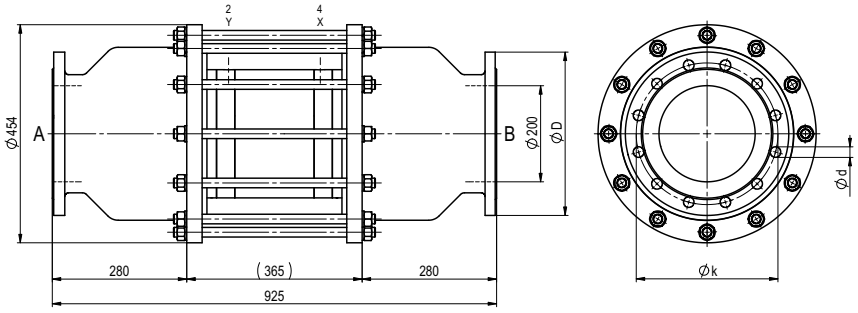
coax® data sheet - coaxial valve

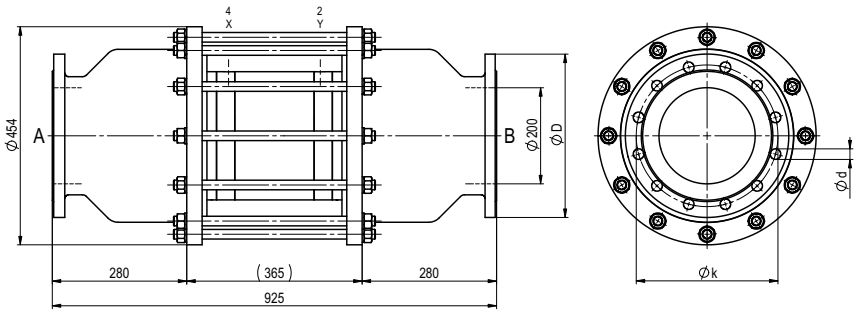
type VSV-F 200

function: **NC**
closed when not energized

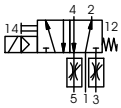


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	340	295	22

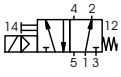
function: **NO**
open when not energized



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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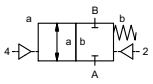
coax® data sheet - coaxial valve

type VSV-F 250

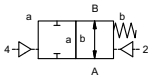
09/2022



2/2-way valve	**externally controlled**
pressure range	PN 0-16 bar
orifice	DN 250 mm
connection	flange
function	valve normally closed symbol **NC**



valve
normally open
symbol **NO**



operating principle	pressure balanced, with spring return	
body material	⓪	② steel galvanized
	③	⑤
	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

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general specifications			**options**
ports	VSV-F	flanges PN 16	special flanges
function		NC	NO
pressure range	bar	0-16	
Kv value	m³/h	650.0	
vacuum	leak rate		< 10^{-6} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 16 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
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	4	
switching time	ms	opening 1500-3000	
		closing 1500-3000	
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			
weight	kg	VSV-F 215.0	
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	cm³/stroke	1000	
cycle speed		main valve speed variable by throttleson pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface			
actuator ports	2/4	G 1/4	G 3/8

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			upon request

- specifications not highlighted are standard

specifications highlighted in grey are optional

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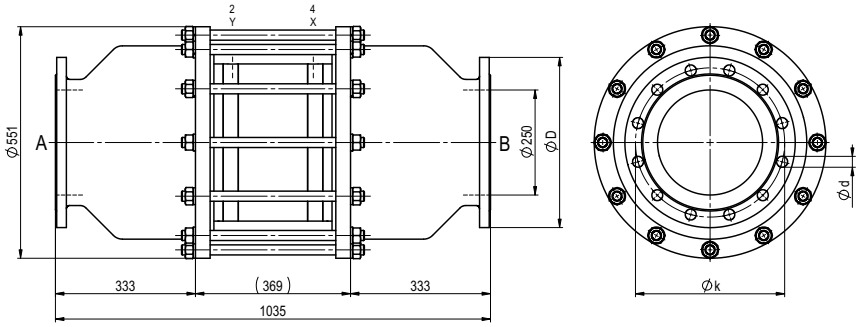
coax® data sheet - coaxial valve

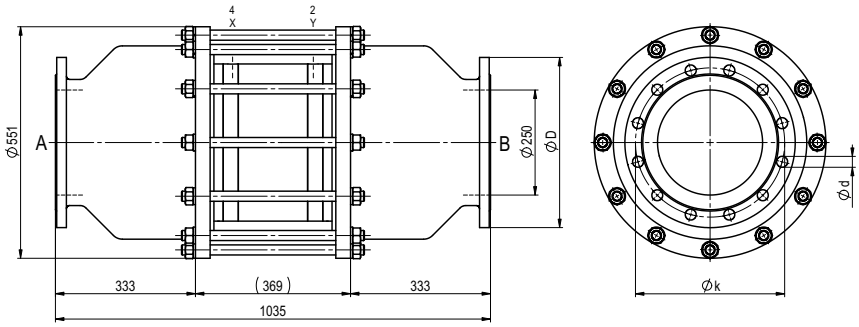
type VSV-F 250

function: **NC**
closed when not energized

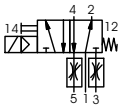


flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	405	355	26

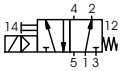
function: **NO**
open when not energized



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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coax® data sheet - coaxial valve

type FCF 25 - FCF 150

04/2026



⚠ 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

details needed for hydraulic actuation
- actuation pressure range min/max
- hydraulic control valve function

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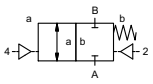
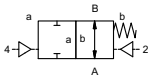
⚠ If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application. 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 0-40 bar	
orifice[1]	DN 25 / 32 / 40 / 50 / 65 / 80 / 100 / 125 / 150 mm	
connection	flange	
function	valve normally closed symbol **NC**	
	valve normally open symbol **NO**	
operating principle	pressure balanced, with spring return	
body material	⓪ aluminium	② steel galvanized (upon request)
	③	⑤
	④	⑥ stainless steel (upon request)
valve seat	synthetic materials on metal	
seal materials	NBR, PU	PTFE, FPM, PE

general specifications			**options**
ports	FCF	flanges PN 16 / 40	
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value[2]		see table	
vacuum	leak rate		< 10^{-4} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		emulsion - oil - neutral gases	other medias upon request
abrasive media			
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles[3]		see table	
switching time[4]		see table	
media temperature	°C	direct mounted pilot valve 60	> 60 °C upon request
ambient temperature	°C	direct mounted pilot valve 50	> 50 °C upon request
flush ports			
leak ports		M6	
limit switches			inductive
manual override		via pilot valve	
approvals			upon request
mounting			
weight[5]		see table	
additional equipment			

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	
	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[6]		see table	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface		NAMUR acc. VDI / VDE 3845	
actuator ports	2/4	G 1/4	NPT 1/4

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

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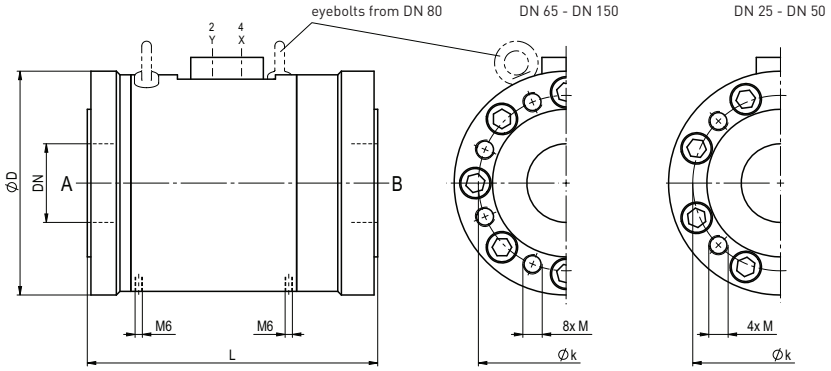
coax® data sheet - coaxial valve

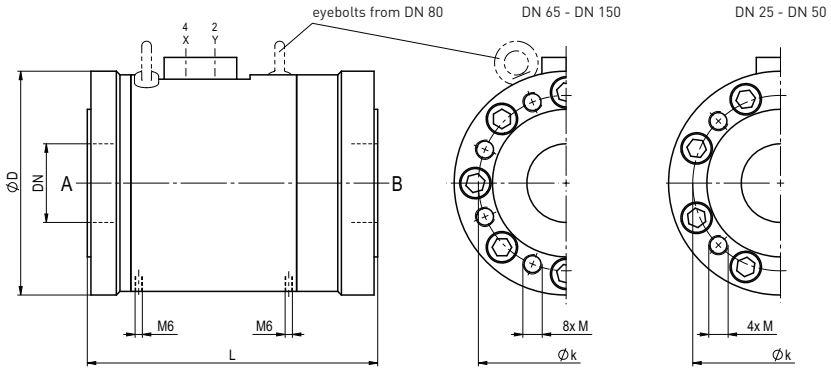
type FCF 25 - FCF 150

function: **NC**
closed when not energized

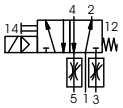


type		FCF 25	FCF 32 | 40	FCF 50	FCF 65	FCF 80	FCF 100	FCF 125	FCF 150
[1]orifice		DN 25 mm	DN 40 mm	DN 50 mm	DN 65 mm	DN 80 mm	DN 100 mm	DN 125 mm	DN 150 mm
[2]Kv value	m³/h	27	45	80	125	170	290	400	550
[3]switching cycles	1/min	50	50	50	50	50	40	30	20
[4]switching time	ms opening	50-3000	100-3000	150-3000	250-3000	350-3000	450-3000	700-3000	600-3000
	ms closing	50-3000	100-3000	150-3000	400-3000	350-3000	300-3000	450-3000	600-3000
[5]weight	kg	4	6,5	8	13	15	26	38	58
[6]air consumption	cm³/Hub	18	26	47	77	120	285	515	640
constructive length	L	170	190	200	240	260	350	400	450
flanges PN 16	ØD	115	150	165	185	200	230	260	295
DIN EN 1092-1	Øk	85	100 | 110	125	145	160	180	210	240
	M	M12	M16	M16	M16	M16	M16	M16	M20
flanges PN 40	ØD	115	150	165	185	200	235	270	300
DIN EN 1092-1	Øk	85	100 | 110	125	145	160	190	220	250
	M	M12	M16	M16	M16	M16	M20	M24	M24

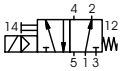
function: **NO**
open when not energized



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 FCF-K 65 - FCF-K 125

04/2026



⚠ 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
- 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

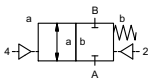
details needed for hydraulic actuation

- 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 0-40 bar	
orifice[1]	DN 65 / 80 / 100 / 125 mm	
connection	flange	
function	valve normally closed symbol **NC**	
operating principle	pressure balanced, with spring return	
body material	⓪ aluminium	② steel galvanized (upon request)
	③	⑤
	④	⑥ stainless steel (upon request)
valve seat	synthetic materials on metal	
seal materials	NBR, PU	PTFE, FPM, PE

general specifications			**options**
ports	FCF-K	flanges PN 16 / 40	
function		NC	
pressure range	bar	0-16 / 0-40	
Kv value[2]		see table	
vacuum	leak rate		< 10^{-4} mbar•l•s^{-1}
pressure-vacuum	$P_1 \Leftrightarrow P_2$		pressure side max. 40 bar vacuum side leak rate upon request
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		emulsion - oil - neutral gases	other medias upon request
abrasive media			
damping	opening		
	closing	by throttles on pilot valve	
flow direction	A ⇨ B	as marked	bi-directional upon request
switching cycles[3]		see table	
switching time[4]		see table	
media temperature	°C	direct mounted pilot valve 60	> 60 °C upon request
ambient temperature	°C	direct mounted pilot valve 50	> 50 °C upon request
flush ports			
leak ports		M6	
limit switches			
manual override		via pilot valve	
approvals			upon request
mounting			
weight[5]		see table	
additional equipment			

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	
	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[6]		see table	
cycle speed		main valve speed variable by throttleson pilot valve	
control		5/2 way pilot valve	
pilot valve interface		NAMUR acc. VDI / VDE 3845	
actuator ports	2/4	G 1/4	NPT 1/4

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

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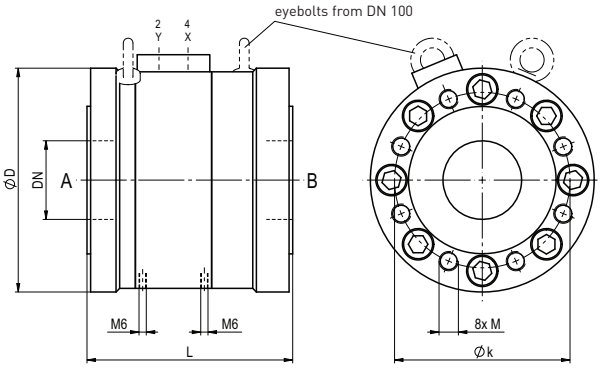
coax® data sheet - coaxial valve

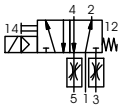
type FCF-K 65 - FCF-K 125

function: **NC**
closed when not energized

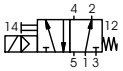


type		FCF-K 65	FCF-K 80	FCF-K 100	FCF-K 125
[1]orifice		DN 65 mm	DN 80 mm	DN 100 mm	DN 125 mm
[2]Kv value	m³/h	98	122	220	315
[3]switching cycles	1/min	50	50	40	30
[4]switching time	ms opening	250-3000	350-3000	450-3000	700-3000
	ms closing	400-3000	350-3000	300-3000	450-3000
[5]weight	kg	10	12	20	31
[6]air consumption	cm³/Hub	75	105	235	495
constructive length	L	170	180	240	300
flanges PN 16	ØD	185	200	230	260
DIN EN 1092-1	Øk	145	160	180	210
	M	M16	M16	M16	M16
flanges PN 40	ØD	185	200	235	270
DIN EN 1092-1	Øk	145	160	190	220
	M	M16	M16	M20	M24

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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