coax® data sheet - coaxial valve

type MK 10 TÜV

03/2022

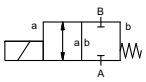
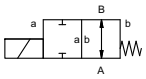
⚠ Above stated body materials refer to the valve port connections that get in contact with the media only!

details needed

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

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

⚠ If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application. To avoid hydraulic shocks in pipelines, the flow velocities must be taken into account when designing valves for liquids.

2/2-way valve	**direct acting**
pressure range	PN 0-40 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	⑦ TÜV (brass)
valve seat	synthetic materials on metal
seal materials	FPM, PTFE

		general specifications	options
ports	MK	threads G 1/4 - G 3/4	
function		NC	NO
pressure range	bar	0-40	
Kv value	m³/h	2,5	
vacuum	leak rate		
pressure-vacuum	$P_1 \Leftrightarrow P_2$		
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		liquid fuels	
abrasive media			
damping	opening		
	closing		
flow direction	A ⇨ B	as marked	
switching cycles	1/min	200	
switching time	ms	opening 135	
		closing 20	
media temperature	°C	DC: -10 to +140	
		AC: -10 to +140	
ambient temperature	°C	DC: -10 to +60	
		AC: -10 to +60	
limit switches			
manual override			
approvals	TÜV	DIN EN ISO 23553-1 + E DIN 32725	
mounting			mounting brackets
weight	kg	MK 1,7	
additional equipment			

		electrical specifications	options
nominal voltage	U_n	DC 24 V +5%/-10%	
	U_n	AC 230 V +5%/-10% 40-60 Hz	
actuation	DC	direct-current magnet	
	AC	direct-current magnet with integrated rectifier	
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form A, 4 positions x90° / wire diameter 6-8 mm	
optional			
additional equipment			
current consumption	N-coil	DC 24 V 1,33 A	
		AC 230 V 40-60 Hz 0,14 A	
explosion proof			
limit switches			

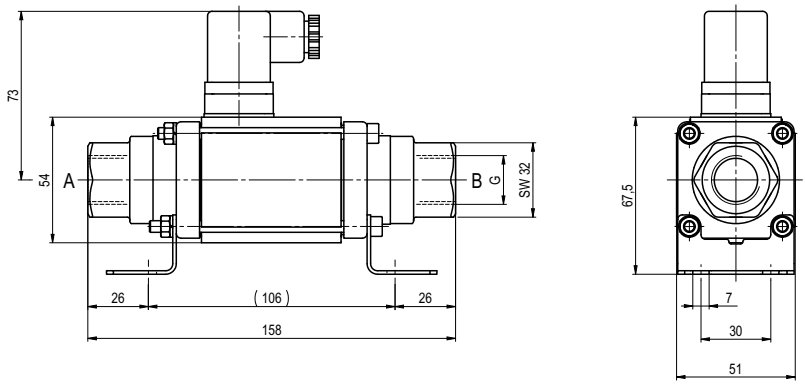
specifications not highlighted are standard
specifications highlighted in grey are optional

müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

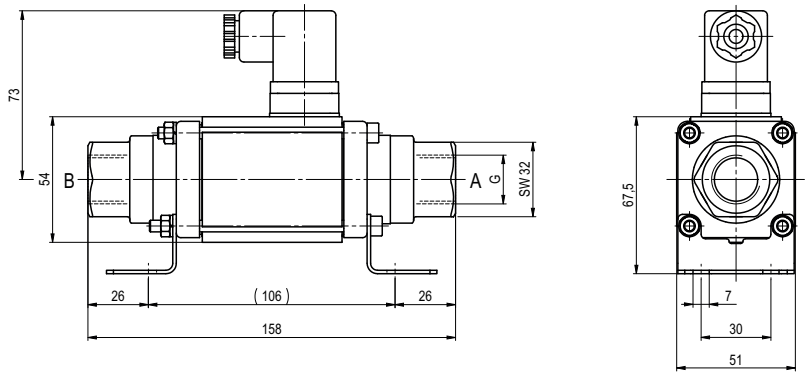
coax® data sheet - coaxial valve

type MK 10 TÜV

function: **NC**
closed when not energized



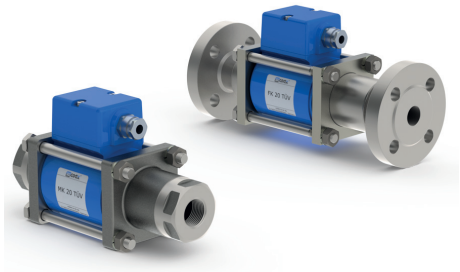
function: **NO**
open when not energized



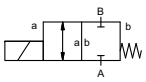
coax® data sheet - coaxial valve

type MK 20 TÜV
FK 20 TÜV

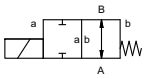
03/2022



2/2-way valve	**direct acting**
pressure range	PN 0-40 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	⑦ TÜV (steel, galvanized)

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

valve seat	synthetic materials on metal
seal materials	FPM, PTFE

details needed

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

general specifications		**options**
ports	MK	threads G 3/4 - G 1 1/4
	FK	flanges PN 40
function		NC	NO
pressure range	bar	0-40	
Kv value		m^3/h	8,4	
vacuum		leak rate		
pressure-vacuum		$P_1 \Leftrightarrow P_2$		
back pressure		$P_2 > P_1$		available (max. 16 bar)
media		liquid fuels	
abrasive media			
damping		opening	
		closing	
flow direction		A ⇨ B	as marked	
switching cycles		1/min	150	
switching time		ms	opening 110	
			closing 110	
media temperature		°C	DC: -10 to +140	
			AC: -10 to +140	
ambient temperature		°C	DC: -10 to +60	
			AC: -10 to +60	
limit switches				mechanical
manual override				
approvals		TÜV	DIN EN ISO 23553-1 + E DIN 32725	
mounting				mounting brackets
weight		kg	MK 5,5 FK 7,5	
additional equipment				

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

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

⚠ 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.

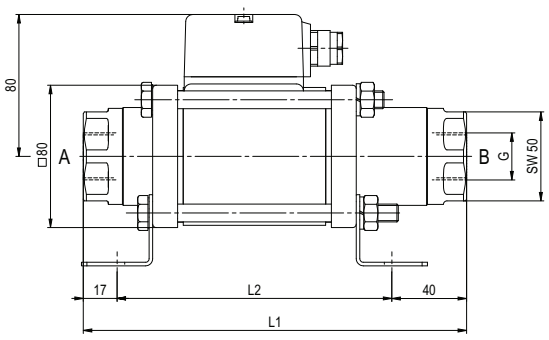
specifications not highlighted are standard
specifications highlighted in grey are optional

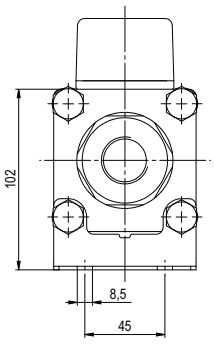
müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

coax® data sheet - coaxial valve

type MK 20 TÜV
FK 20 TÜV

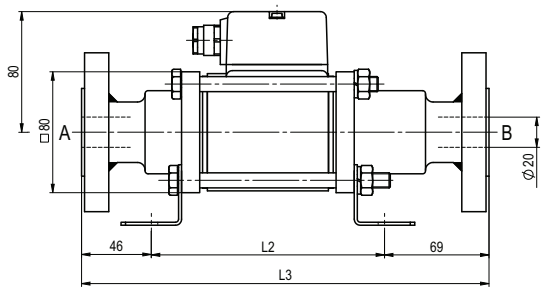
function: **NC**
closed when not energized

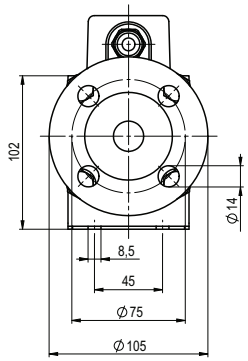




constructive length	L1	L2	L3
standard	215	158	269
with mechanical limit switches	235	178	289

function: **NO**
open when not energized



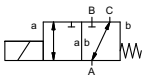


coax® data sheet - coaxial valve

type MK 20 DR TÜV
FK 20 DR TÜV

03/2022

3/2 way valve	**direct acting**
pressure range	PN 0-40 bar
orifice	DN 20 mm
connection	thread/flange
function	valve normally closed (A ►B) symbol **NC**



operating principle	pressure balanced, with spring return, intersecting switch-over
body material	⑦ TÜV (steel, galvanized)
valve seat	synthetic materials on metal
seal materials	FPM, PTFE

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

details needed

- orifice
- port
- function NC
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

general specifications		**options**
ports	MK	threads G 3/4 - G 1 1/4
	FK	flanges PN 40
function		NC
pressure range	bar	0-40
		A ⇨ B max. 40 / B ⇨ A max. 16 / A ⇨ C max. 40 / C ⇨ A max. 40
Kv value	m³/h	6,7
vacuum	leak rate	
pressure-vacuum	$P_1 \Leftrightarrow P_2$	
back pressure	$P_2 > P_1$	see pressure range
media		liquid fuels
abrasive media		
damping	opening	
	closing	
flow direction		see pressure range
switching cycles	1/min	150
switching time	ms	opening 110
		closing 110
media temperature	°C	DC: -10 to +140
		AC: -10 to +140
ambient temperature	°C	DC: -10 to +60
		AC: -10 to +60
limit switches		mechanical
manual override		
approvals	TÜV	DIN EN ISO 23553-1 + E DIN 32725
mounting		mounting brackets
weight	kg	MK 6,0 FK 8,4
additional equipment		

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

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

⚠ 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.

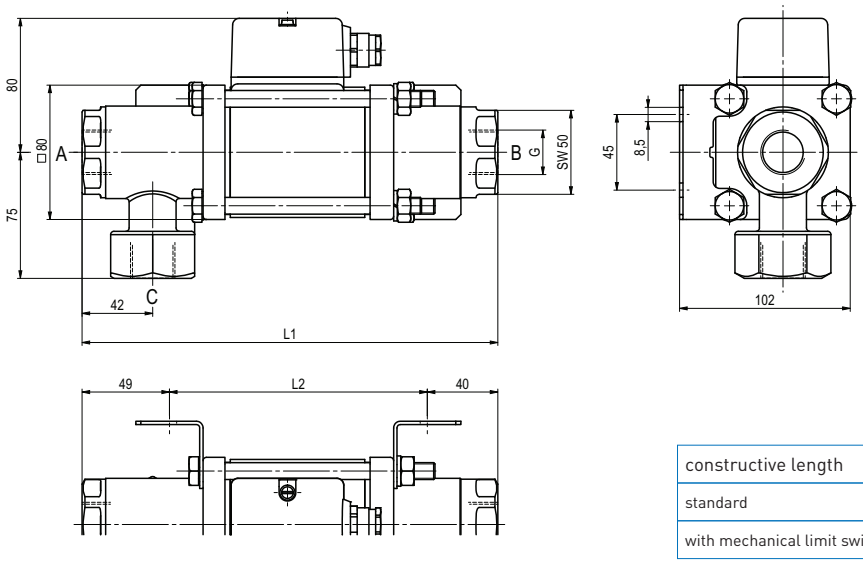
specifications not highlighted are standard
specifications highlighted in grey are optional

müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

coax® data sheet - coaxial valve

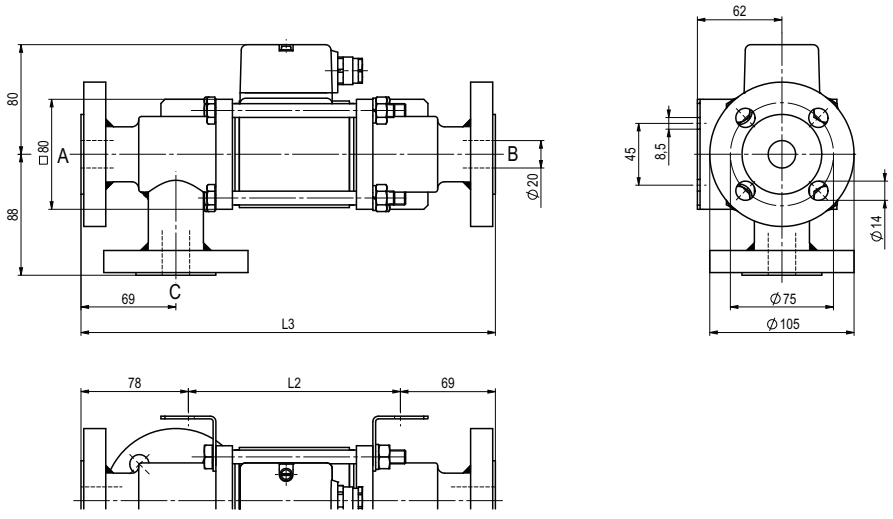
type MK 20 DR TÜV
FK 20 DR TÜV

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



constructive length	L1	L2	L3
standard	247	158	301
with mechanical limit switches	267	178	321

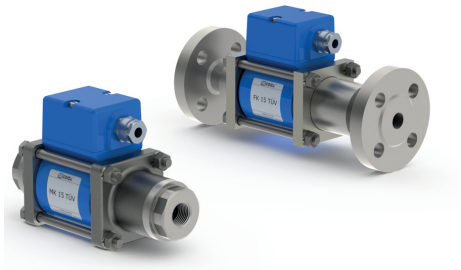
function: **NC**
closed when not energized (A ▶B)



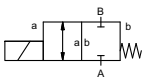
coax® data sheet - coaxial valve

type MK 15 TÜV
FK 15 TÜV

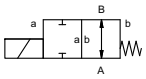
03/2022



2/2-way valve	**direct acting**
pressure range	PN 0-40 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	⑦ TÜV (steel, galvanized)

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

valve seat	synthetic materials on metal
seal materials	FPM, PTFE

details needed

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

general specifications		**options**
ports	MK	threads G 3/8 - G 3/4
	FK	flanges PN 40
function		NC — NO
pressure range	bar	0-40
Kv value	m^3/h	6,0
vacuum		leak rate
pressure-vacuum		$P_1 \Leftrightarrow P_2$
back pressure		$P_2 > P_1$ — available (max. 16 bar)
media		liquid fuels
abrasive media		
damping		opening closing
flow direction		A ⇨ B — as marked
switching cycles	1/min	200
switching time	ms	opening 80 closing 80
media temperature	°C	DC: -10 to +140 AC: -10 to +140
ambient temperature	°C	DC: -10 to +60 AC: -10 to +60
limit switches		mechanical
manual override		
approvals		TÜV — DIN EN ISO 23553-1 + E DIN 32725
mounting		mounting brackets
weight	kg	MK 3,8 FK 5,0
additional equipment		

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

electrical specifications		**options**
nominal voltage	U_n	DC 24 V +5%/-10%
	U_n	AC 230 V +5%/-10% 40-60 Hz
actuation	DC	direct-current magnet
	AC	direct-current magnet with separate rectifier
insulating rating	H	180°C
protection	IP65	
energized duty rating	ED	100%
connection	M16x1,5	terminal box
optional		
additional equipment		
current consumption	N-coil	
	H-coil	DC 24 V 2,29 A AC 230 V 40-60 Hz 0,24 A
explosion proof		
limit switches		mechanical — single pole double throw-SPDT

⚠ 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.

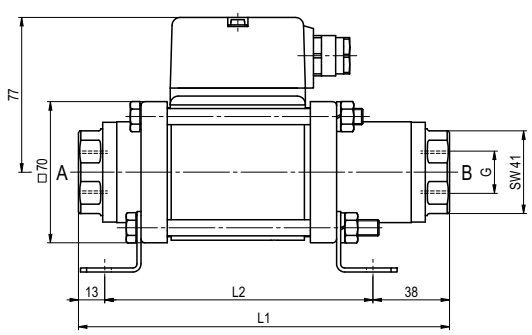
specifications not highlighted are standard
specifications highlighted in grey are optional

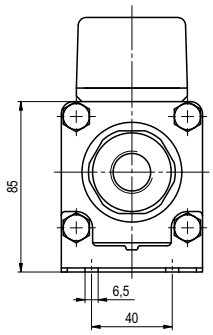
müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

coax® data sheet - coaxial valve

type MK 15 TÜV
FK 15 TÜV

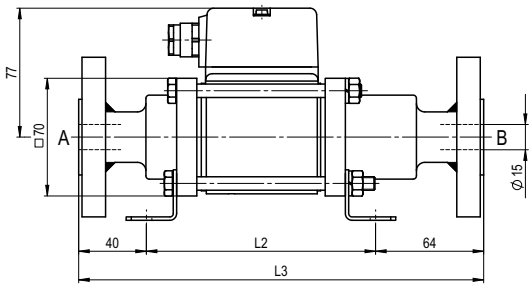
function: **NC**
closed when not energized

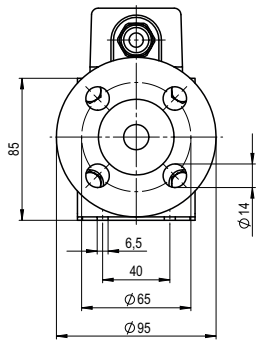




constructive length	L1	L2	L3
standard	184	133	241
with mechanical limit switches	204	153	261

function: **NO**
open when not energized



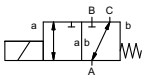


coax® data sheet - coaxial valve

type MK 15 DR TÜV
FK 15 DR TÜV

03/2022

3/2 way valve	**direct acting**
pressure range	PN 0-40 bar
orifice	DN 15 mm
connection	thread/flange
function	valve normally closed (A ►B) symbol **NC**



operating principle	pressure balanced, with spring return, intersecting switch-over
body material	⑦ TÜV (steel, galvanized)

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

valve seat	synthetic materials on metal
seal materials	FPM, PTFE

details needed

- orifice
- port
- function NC
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

general specifications		**options**
ports	MK	threads G 3/8 - G 3/4
	FK	flanges PN 40
function		NC
pressure range	bar	0-40
		A ⇨ B max. 40 / B ⇨ A max. 16 / A ⇨ C max. 40 / C ⇨ A max. 40
Kv value	m³/h	4,3
vacuum	leak rate	
pressure-vacuum	$P_1 \Leftrightarrow P_2$	
back pressure	$P_2 > P_1$	see pressure range
media		liquid fuels
abrasive media		
damping	opening	
	closing	
flow direction		see pressure range
switching cycles	1/min	200
switching time	ms	opening 80
		closing 80
media temperature	°C	DC: -10 to +140
		AC: -10 to +140
ambient temperature	°C	DC: -10 to +60
		AC: -10 to +60
limit switches		mechanical
manual override		
approvals	TÜV	DIN EN ISO 23553-1 + E DIN 32725
mounting		mounting brackets
weight	kg	MK 4,3 FK 5,9
additional equipment		

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

electrical specifications		**options**
nominal voltage	U_n	DC 24 V +5%/-10%
	U_n	AC 230 V +5%/-10% 40-60 Hz
actuation	DC	direct-current magnet
	AC	direct-current magnet with separate rectifier
insulating rating	H	180°C
protection	IP65	
energized duty rating	ED	100%
connection	M16x1,5	terminal box
optional		
additional equipment		
current consumption	N-coil	
	H-coil	DC 24 V 2,29 A
		AC 230 V 40-60 Hz 0,24 A
explosion proof		
limit switches		mechanical — single pole double throw-SPDT

⚠ 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.

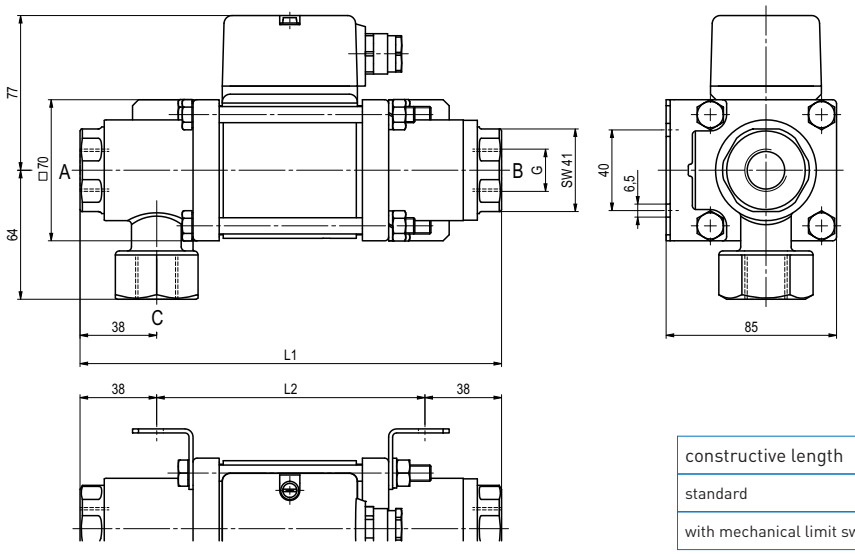
specifications not highlighted are standard
specifications highlighted in grey are optional

müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

coax® data sheet - coaxial valve

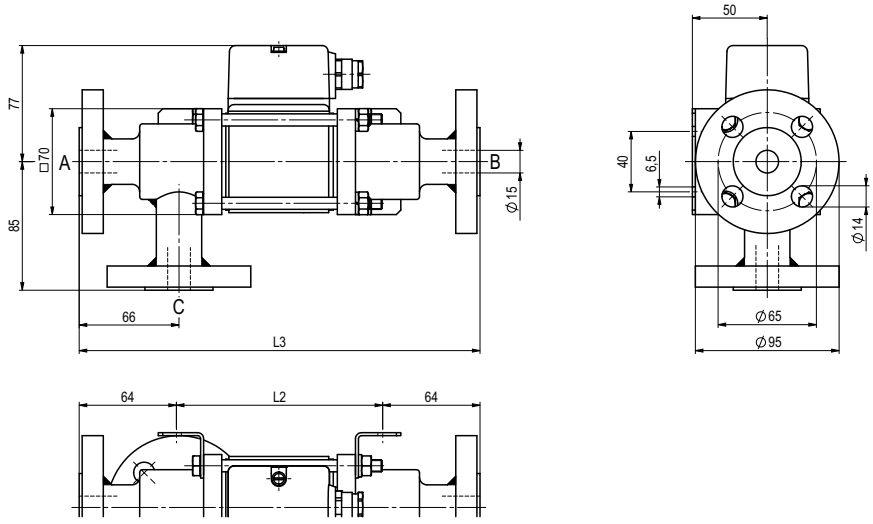
type MK 15 DR TÜV
FK 15 DR TÜV

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



constructive length	L1	L2	L3
standard	209	133	265
with mechanical limit switches	229	153	285

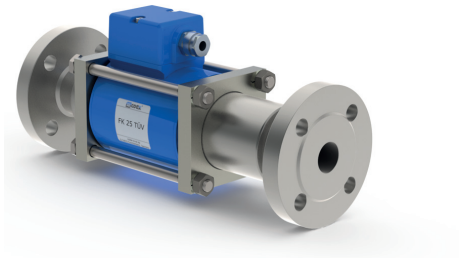
function: **NC**
closed when not energized (A ▶B)



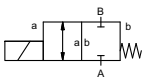
coax® data sheet - coaxial valve

type FK 25 TÜV

03/2022



2/2-way valve	**direct acting**
pressure range	PN 0-40 bar
orifice	DN 25 mm
connection	flange
function	valve normally closed symbol **NC**



operating principle	pressure balanced, with spring return
body material	⑦ TÜV (steel, galvanized)

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

valve seat	synthetic materials on metal
seal materials	FPM, PTFE

details needed

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

general specifications			**options**
ports	FK	flanges PN 40	
function		NC	
pressure range	bar	0-40	
Kv value	m³/h	13,0	
vacuum	leak rate		
pressure-vacuum	$P_1 \Leftrightarrow P_2$		
back pressure	$P_2 > P_1$		available (max. 16 bar)
media		liquid fuels	
abrasive media			
damping	opening closing		
flow direction	A ⇨ B	as marked	
switching cycles	1/min	130	
switching time	ms	opening 130 closing 130	
media temperature	°C	DC: -10 to +140 AC: -10 to +140	
ambient temperature	°C	DC: -10 to +60 AC: -10 to +60	
limit switches			mechanical
manual override			
approvals	TÜV	DIN EN ISO 23553-1 + E DIN 32725	
mounting			mounting brackets
weight	kg	FK 10,5	
additional equipment			

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

electrical specifications			**options**
nominal voltage	U_n	DC 24 V +5%/-10%	
	U_n	AC 230 V +5%/-10% 40-60 Hz	
actuation	DC	direct-current magnet	
	AC	direct-current magnet with separate rectifier	
insulating rating	H	180°C	
protection	IP65		
energized duty rating	ED	100%	
connection	M16x1,5	terminal box	
optional			
additional equipment			
current consumption	N-coil		
	H-coil	DC 24 V 2,96 A AC 230 V 40-60 Hz 0,33 A	
explosion proof			
limit switches		mechanical	single pole double throw-SPDT

⚠ 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.

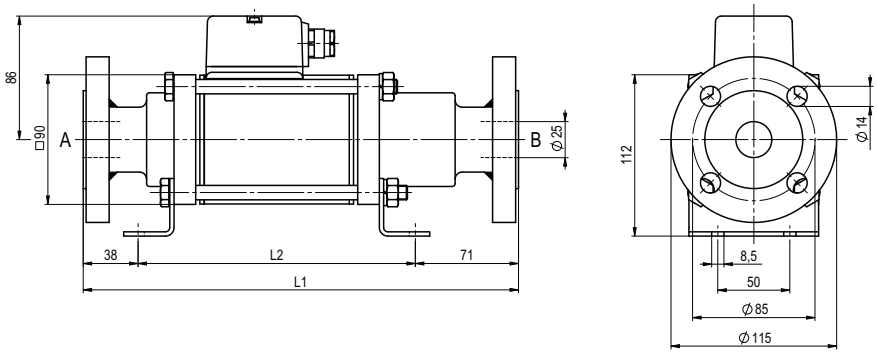
specifications not highlighted are standard
specifications highlighted in grey are optional

müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

coax® data sheet - coaxial valve

type FK 25 TÜV

function: **NC**
closed when not energized

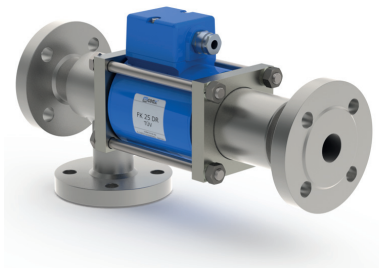


constructive length	L1	L2
standard	302	192
with mechanical limit switches	355	245

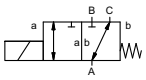
coax® data sheet - coaxial valve

type FK 25 DR TÜV

03/2022



3/2 way valve	**direct acting**
pressure range	PN 0-40 bar
orifice	DN 25 mm
connection	flange
function	valve normally closed (A ►B) symbol **NC**



operating principle	pressure balanced, with spring return, intersecting switch-over
body material	⑦ TÜV (steel, galvanized)
valve seat	synthetic materials on metal
seal materials	FPM, PTFE

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

details needed

- orifice
- port
- function NC
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

general specifications		**options**
ports	FK	flanges PN 40
function		NC
pressure range	bar	0-40
		A ⇨ B max. 40 / B ⇨ A max. 16 / A ⇨ C max. 40 / C ⇨ A max. 40
Kv value	m³/h	11,2
vacuum	leak rate	
pressure-vacuum	$P_1 \Leftrightarrow P_2$	
back pressure	$P_2 > P_1$	see pressure range
media		liquid fuels
abrasive media		
damping	opening	
	closing	
flow direction		see pressure range
switching cycles	1/min	130
switching time	ms	opening 130
		closing 130
media temperature	°C	DC: -10 to +140
		AC: -10 to +140
ambient temperature	°C	DC: -10 to +60
		AC: -10 to +60
limit switches		mechanical
manual override		
approvals	TÜV	DIN EN ISO 23553-1 + E DIN 32725
mounting		mounting brackets
weight	kg	FK 12,0
additional equipment		

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

electrical specifications		**options**
nominal voltage	U_n	DC 24 V +5%/-10%
	U_n	AC 230 V +5%/-10% 40-60 Hz
actuation	DC	direct-current magnet
	AC	direct-current magnet with separate rectifier
insulating rating	H	180°C
protection	IP65	
energized duty rating	ED	100%
connection	M16x1,5	terminal box
optional		
additional equipment		
current consumption	N-coil	
	H-coil	DC 24 V 2,96 A
		AC 230 V 40-60 Hz 0,33 A
explosion proof		
limit switches		mechanical — single pole double throw-SPDT

⚠ 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.

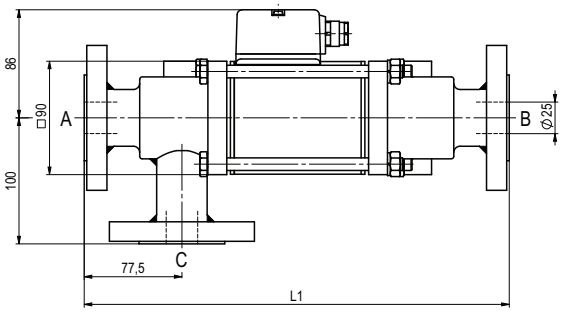
specifications not highlighted are standard
specifications highlighted in grey are optional

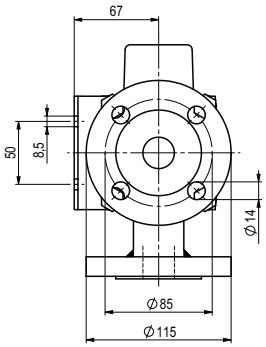
müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

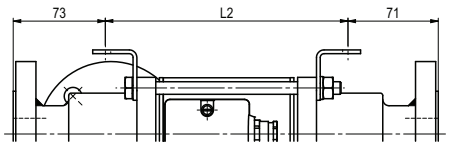
coax® data sheet - coaxial valve

type FK 25 DR TÜV

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







constructive length	L1	L2
standard	337	192