type MK 10 TÜV



03/2022



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

body material

valve seat

seal materials

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.

specifications not highlighted are standard specifications highlighted in grey are optional

2/2-way valve	direct acting	
pressure range	PN 0-40 bar	
orifice	DN 10 mm	
connection	thread	
function	valve normally closed symbol NC	a a b b b b b b b b b b b b b b b b b b
	valve normally open symbol NO	a b b b W
operating principle	pressure balanced, with spring return	

⑦ TÜV (brass)

FPM, PTFE

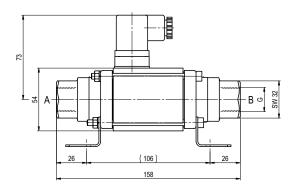
synthetic materials on metal

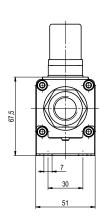
	general s	specifications	options
ports	MK	threads G 1/4 - G 3/4	
	_		
function		NC	NO
pressure range	bar	0-40	
Kv value	m³/h	2,5	
vacuum	leak rate		
pressure-vacuum	P1⇔ P2		
back pressure	P ₂ > P ₁		available (max. 16 bar)
media		liquid fuels	
abrasive media			
damping	opening		
	closing		
flow direction	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			

	electrica	al specifications options
nominal voltage	Un	DC 24 V +5%/-10%
	Un	AC 230 V +5%/-10% 40-60 Hz
actuation	DC	direct-current magnet
	AC	direct-current magnet with integrated
		rectifier
insulating rating	Н	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
		AC 230 Y 40-00 HZ 0,14 A
explosion proof		
limit switches		

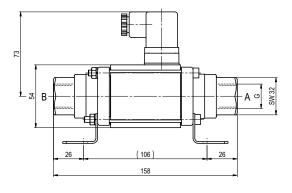
type MK 10 TÜV

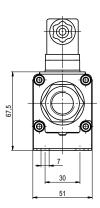
function: **NC** closed when not energized





function: **NO** open when not energized





type MK 20 TÜV FK 20 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.

specifications not highlighted are standard specifications highlighted in grey are optional

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	a B b b

operating principle body material

pressure balanced, with spring return

 \bigcirc TÜV (steel, galvanized)

valve seat	synthetic materials on metal	
seal materials	FPM, PTFE	

valve normally open symbol NO

	50.
ports	MK FK
function	
pressure range	bar
Kv value	m³/h
vacuum	leak
pressure-vacuum	P₁⇔
back pressure	P2 >
media	
abrasive media	
damping	opei
	clos
flow direction	A ⇒
switching cycles	1/m

flow direction
switching cycles
switching time
media temperature

ambient temperature

limit switches manual override

nominal voltage

protection

connection

mounting
weight
additional equipment

insulating rating	
actuation	

optional
additional equipment
current consumption

energized duty rating

limit switches

explosion proof

general specifications		options
MK	threads G 3/4 - G 1 1/4	
FK	flanges PN 40	
	NC	NO
bar	0-40	
m³/h	8,4	
leak rate		
P1⇔ P2		
P2 > P1		available (max. 16 bar)
	liquid fuels	
opening		
closing	-	
A⇔B	as marked	
1/min	150	
ms	opening 110	
	closing 110	
°C	DC: -10 to +140	
	AC: -10 to +140	
°C	DC: -10 to +60	

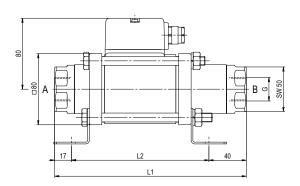
12/11		avaitable (illax. 10 bai)
	liquid fuels	
opening		
closing		
A⇔B	as marked	
1/min	150	
ms	opening 110	
	closing 110	
°C	DC: -10 to +140	
	AC: -10 to +140	
°C	DC: -10 to +60	
	AC: -10 to +60	
		mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725	
		mounting brackets
kg	MK 5,5 FK 7,5	

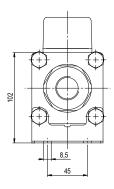
		mounting brackets
kg	MK 5,5 FK 7,5	
electrica	l specifications	options
Un	DC 24 V +5%/-10%	
Un	AC 230 V +5%/-10% 40-60 Hz	
DC	direct-current magnet	
AC	direct-current magnet with separate	
	rectifier	
Н	180°C	
IP65		
ED	100%	
M16x1,5	terminal box	

N-coil		
H-coil	DC 24 V 2,64 A	
	AC 230 V 40-60 Hz 0,30 A	
	mechanical	single pole double throw-SPDT

type MK 20 TÜV FK 20 TÜV

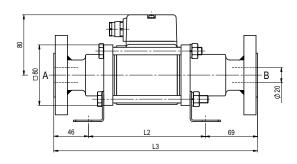
function: **NC** closed when not energized

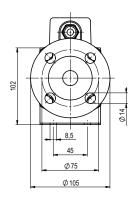




constructive length	L1	L2	L3
standard	215	158	269
with mechanical limit switches	235	178	289

function: **NO** open when not energized





type MK 20 DR TÜV FK 20 DR 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
- operating pressure
- inlet pressure at A, B or C
- 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.

specifications not highlighted are standard specifications highlighted in grey are optional

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 body material

pressure balanced, with spring return, intersecting switch-over

① TÜV (steel, galvanized)

valve seat seal materials

ports

function

Kv value

vacuum

flow direction
switching cycles
switching time
media temperature
ambient temperature
limit switches
manual override
approvals
mounting
weight
additional equipment

pressure range

back pressure

abrasive media

nominal voltage

insulating rating protection

connection

optional additional equipment

energized duty rating

current consumption

explosion proof

limit switches

actuation

synthetic materials on metal

FPM, PTFE

generals	specifications options
MK	threads G 3/4 - G 1 1/4
FK	flanges PN 40
	NC
bar	0-40
	$A \Rightarrow B \text{ max. } 40 / B \Rightarrow A \text{ max. } 16 / A \Rightarrow C \text{ max. } 40 / C \Rightarrow A \text{ max. } 40$
m³/h	6,7
leak rate	
P1⇔ P2	
P2 > P1	see pressure range
	liquid fuels
opening	
closing	
	see pressure range
1/min	150
ms	opening 110
	closing 110
°C	DC: -10 to +140
	AC: -10 to +140
°C	DC: -10 to +60
	AC: -10 to +60
	mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725
	mounting brackets
kq	MK 6,0 FK 8,4

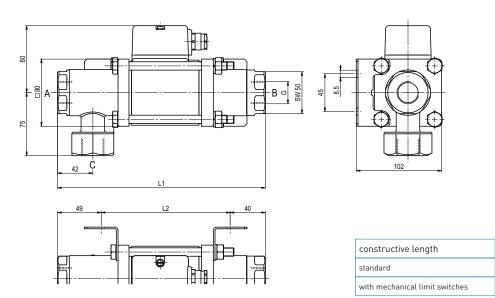
		mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725	
		mounting brackets
kg	MK 6,0 FK 8,4	
electrica	l specifications	options
Un	DC 24 V +5%/-10%	
Un	AC 230 V +5%/-10% 40-60 Hz	
DC	direct-current magnet	
AC	direct-current magnet with separate	
	rectifier	
Н	180°C	
IP65		
ED	100%	
M16x1,5	terminal box	
N-coil		
H-coil	DC 26 V 2 66 Δ	

	-		
H-coil	DC 24 V	2,64 A	
	AC 230 V 40-60 Hz	z 0,30 A	

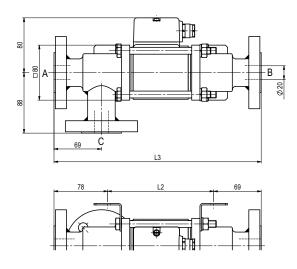
mechanical single pole double throw-SPDT

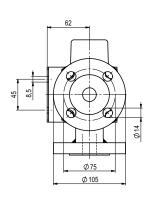
type MK 20 DR TÜV FK 20 DR TÜV

function: NC closed when not energized (A \blacktriangleright B)



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





L1

247

267

L2

158 178 L3

301

321

type MK 15 TÜV FK 15 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.

specifications not highlighted are standard specifications highlighted in grey are optional

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	a B b W
	valve normally open	a b b

operating principle body material

pressure balanced, with spring return

 \bigcirc TÜV (steel, galvanized)

symbol NO

valve seat	synthetic materials on meta	
seal materials	FPM, PTFE	

	•
ports	MK FK
function	
pressure range	bar
Kv value	m³/h
vacuum	leak rat
pressure-vacuum	P1⇔ P2
back pressure	P2 > P1
media	
abrasive media	
damping	opening
	closing
flow direction	A ⇒ B
switching cycles	1/min
switching time	ms

ambient temperature	
limit switches	
manual override	
approvals	
mounting	

media temperature

weight additional equipment

anctlav Icain

insulating rating

nonniat vottage				
actua	tion			

limit switches

ptional	
dditional equipmer	ıt
urrent consumptio	n

Synthetic materials on metal
FPM, PTFE

general specifications

30	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- p
MK	threads G 3/8 - G 3/4	
FK	flanges PN 40	
	NC	NO
bar	0-40	
m³/h	6,0	
leak rate	•	
P1⇔ P2		
P2 > P1		available (max. 16 bar)
	liquid fuels	
opening		
closing		
A⇔B	as marked	
1/min	200	
ms	opening 80	
	closing 80	
°C	DC: -10 to +140	
	AC: -10 to +140	
°C	DC: -10 to +60	
	AC: -10 to +60	
		mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725	
		mounting brackets

options

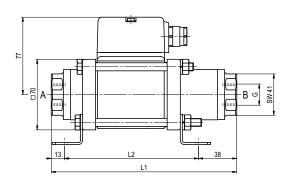
	AC: -10 to +140		
°C	DC: -10 to +60		
	AC: -10 to +60		
		mechanical	
TÜV	DIN EN ISO 23553-1 + E DIN 32725		
101	BIN EN 130 20000 1 1 E BIN 02720	mounting brackets	
kg	MK 3,8 FK 5,0		
oloctri	cal specifications	options	
etectiii	cat specifications	options	
Un	DC 24 V +5%/-10%		
Un	AC 230 V +5%/-10% 40-60 Hz		
DC	direct-current magnet		
AC	direct-current magnet with separate		

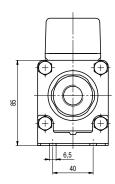
AC	direct-current magnet with separate rectifier
Н	180°C
IP65	
ED	100%
M16x1,5	terminal box

N-coil			
H-coil	DC 24 V	2,29 A	
	AC 230 V 40-60	Hz 0,24 A	
		•	
	-		
	-		
	mechanical		single pole double throw-SPDT

type MK 15 TÜV FK 15 TÜV

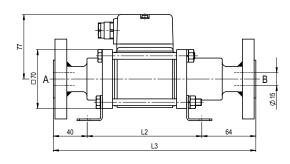
function: **NC** closed when not energized

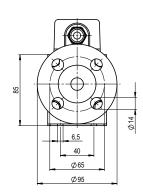




constructive length	L1	L2	L3
standard	184	133	241
with mechanical limit switches	204	153	261

function: **NO** open when not energized





type MK 15 DR TÜV FK 15 DR TÜV



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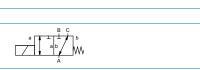


Above stated body materials refer to the valve port connections that get in contact with the media only!

3/2 way valve pressure range orifice connection function

direct acting PN 0-40 bar DN 15 mm thread/flange

> normally closed (A ▶B) symbol NC



operating principle body material

pressure balanced, with spring return, intersecting switch-over

① TÜV (steel, galvanized)

details needed

port

function NC

operating pressure

inlet pressure at A, B or C

ambient temperature

flow rate **m**edia media 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.

valve seat seal materials

	general :	specifications
ports	MK	threads G 3/8
•	FK	flanges PN 40
function		NC
pressure range	bar	0-40
		A ⇒ B max. 40
Kv value	m³/h	4,3
vacuum	leak rate	
pressure-vacuum	P1⇔ P2	
back pressure	P2 > P1	see pressure
media		liquid fuels
abrasive media		
damping	opening	
	closing	
flow direction		see pressure
switching cycles	1/min	200
switching time	ms	opening
		closing
media temperature	°C	DC: -10 to +14
		AC: -10 to +14
ambient temperature	°C	DC: -10 to +60
		AC: -10 to +60
limit switches		
manual override	_	
approvals	TÜV	DIN EN ISO 23
mounting		

limit switches	
manual override	
approvals	
mounting	
weight	
additional equipmen	ıt

nominal voltage	
actuation	
insulating rating	

optional additional equipmen current consumption
current consumption
·
explosion proof

limit switches

energized duty rating

protection

synthe	etic mate	rials on	metal
EDM I	DTEE		

FPM,	PTFE		

MK	threads G 3/8 - G 3/4
FK	flanges PN 40
	NC NC
bar	0-40
	$A \Rightarrow B \text{ max. } 40 / B \Rightarrow A \text{ max. } 16 / A \Rightarrow C \text{ max. } 40 / C \Rightarrow A \text{ max. } 40$
m³/h	4,3
leak rate	
P1⇔ P2	
P2 > P1	see pressure range
	liquid fuels
opening	
closing	
	see pressure range
1/min	200
ms	opening 80
	closing 80
°C	DC: -10 to +140
	AC: -10 to +140
°C	DC: -10 to +60
	AC: -10 to +60
	mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725
	mounting brackets
kg	MK 4,3 FK 5,9

options

electrical specifications

Jn DC	DC 24 V +5%/-10% AC 230 V +5%/-10% 40-60 Hz direct-current magnet
AC O	direct-current magnet with separate rectifier
+	180°C
P65	

options

Н	180°C			
IP65				
ED	100%			
M16x1,5	terminal box			

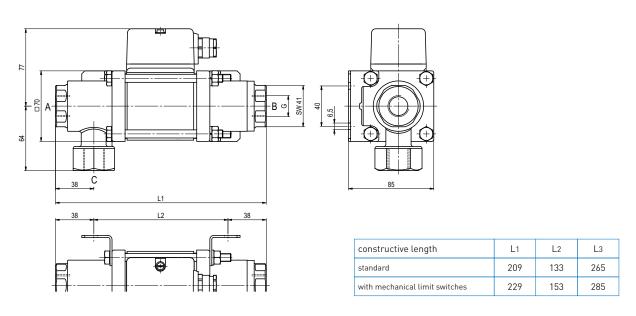
coil			
*1	DO 0/1/	0.00.4	

H-coil	DC 24 V	2,29 A		
	AC 230 V 40-60 Hz	0,24 A		
	mechanical		single pole double throw-SPDT	

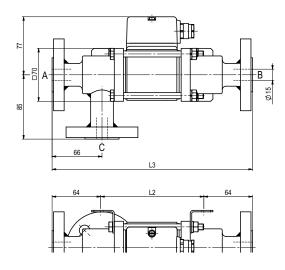
specifications not highlighted are standard specifications highlighted in grey are optional

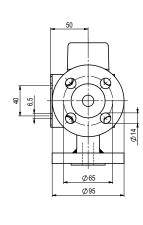
type MK 15 DR TÜV FK 15 DR TÜV

function: NC closed when not energized [A \blacktriangleright B]



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





type FK 25 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
- 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.

specifications not highlighted are standard specifications highlighted in grey are optional

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

operating principle body material

ports

function

Kv value

vacuum

pressure range

back pressure

abrasive media damping flow direction switching cycles switching time media temperature ambient temperature limit switches manual override approvals mounting weight additional equipment

nominal voltage

insulating rating protection

energized duty rating

current consumption

explosion proof

actuation

connection

optional additional equipment pressure balanced, with spring return

 \bigcirc TÜV (steel, galvanized)

valve seat synthetic materials on metal seal materials FPM, PTFE

general specifications		options
FK	flanges PN 40	
	110	
	NC	
bar	0-40	
m³/h	13,0	
leak rate		
P1⇔ P2		
P2 > P1		available (max. 16 bar)
	liquid fuels	
opening		
closing		
A⇒B	as marked	
1/min	130	
ms	opening 130	
	closing 130	
°C	DC: -10 to +140	
	AC: -10 to +140	
°C	DC: -10 to +60	
	AC: -10 to +60	
		mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725	
		mounting brackets

	ctosing 150	
°C	DC: -10 to +140	
	AC: -10 to +140	
°C	DC: -10 to +60	
	AC: -10 to +60	
		mechanical
TÜV	DIN EN ISO 23553-1 + E DIN 32725	
		mounting brackets
kg	FK 10,5	
electric	cal specifications	options
Un	DC 24 V +5%/-10%	
Un	AC 230 V +5%/-10% 40-60 Hz	
DC	direct-current magnet	
ΔC	direct-current magnet with senarate	

On	DC 24 V +3/0/-10/0
Un	AC 230 V +5%/-10% 40-60 Hz
DC	direct-current magnet
AC	direct-current magnet with separate
	rectifier
Н	180°C
IP65	
ED	100%
M16x1 5	terminal hox

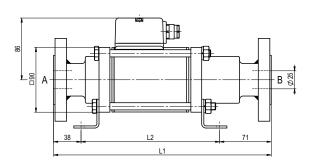
11	160 C	
IP65		
ED	100%	
M16x1,5	terminal box	

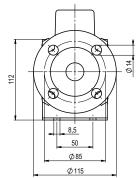
N-coil				
H-coil	DC 24 V	2,96 A		
	AC 230 V 40-6	50 Hz 0,33 A		

limit switches mechanical single pole double throw-SPDT

type FK 25 TÜV

function: **NC** closed when not energized





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

type FK 25 DR TÜV



03/2022



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

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

pressure balanced, with spring return, intersecting switch-over

 \bigcirc TÜV (steel, galvanized)

details needed

orifice

port

function NC

operating pressure

inlet pressure at A, B or C

flow rate

media

media temperature

ambient temperature nominal voltage

ports

function

Kv value vacuum back pressure

damping

flow direction switching cycles switching time

ambient temperature

manual override approvals

mounting weight additional equipment

electrical specifications

options

single pole double throw-SPDT

nominal voltage

actuation

AC 230 V +5%/-10% 40-60 Hz Un DC direct-current magnet AC direct-current magnet with separate rectifier

180°C

100%

terminal box

DC 24 V

mechanical

AC 230 V 40-60 Hz 0,33 A

2,96 A

insulating rating protection

energized duty rating connection

optional additional equipment

current consumption

N-coil H-coil

IP65

FD M16x1,5

explosion proof

limit switches

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

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

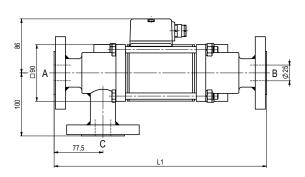
materials and characteristics.

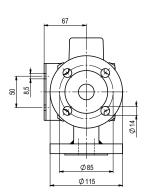
valve seat synthetic materials on metal seal materials FPM, PTFE general specifications options flanges PN 40 bar pressure range 0-40 $A \Rightarrow B \text{ max. } 40 / B \Rightarrow A \text{ max. } 16 / A \Rightarrow C \text{ max. } 40 / C \Rightarrow A \text{ max. } 40$ m³/h leak rate P2 > P1 see pressure range liquid fuels abrasive media opening closina see pressure range 1/min 130 ms opening 130 closing DC: -10 to +140 media temperature °C AC: -10 to +140 DC: -10 to +60 AC: -10 to +60 limit switches mechanical ΤÜV DIN EN ISO 23553-1 + E DIN 32725 mounting brackets kg FK 12,0

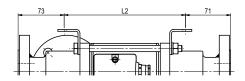
specifications not highlighted are standard specifications highlighted in grey are optional

type FK 25 DR TÜV

function: NC closed when not energized [A \blacktriangleright B]







constructive length	L1	L2
standard	337	192