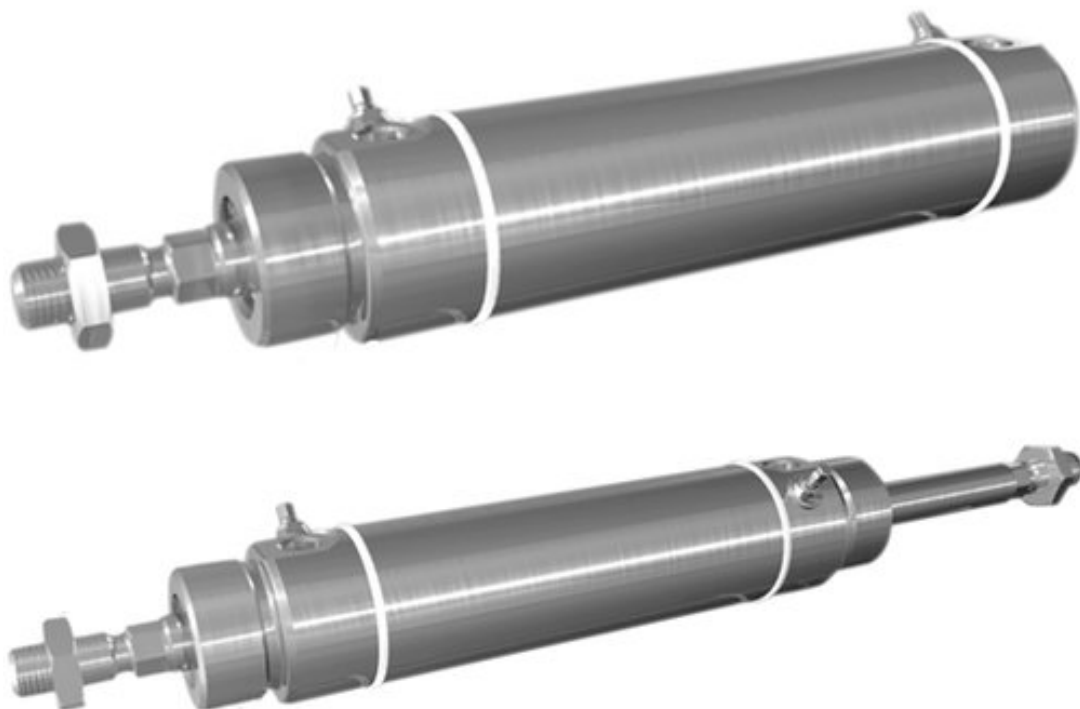


Series ICS-D2

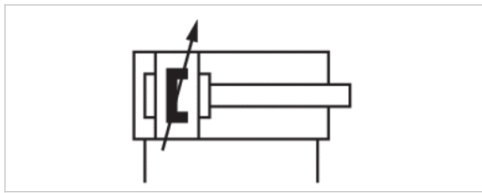


AVENTICS™ Series ICS-D2



Round cylinder, Series ICS-D2-MR3

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- cylinder outer thread with mounting nut
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

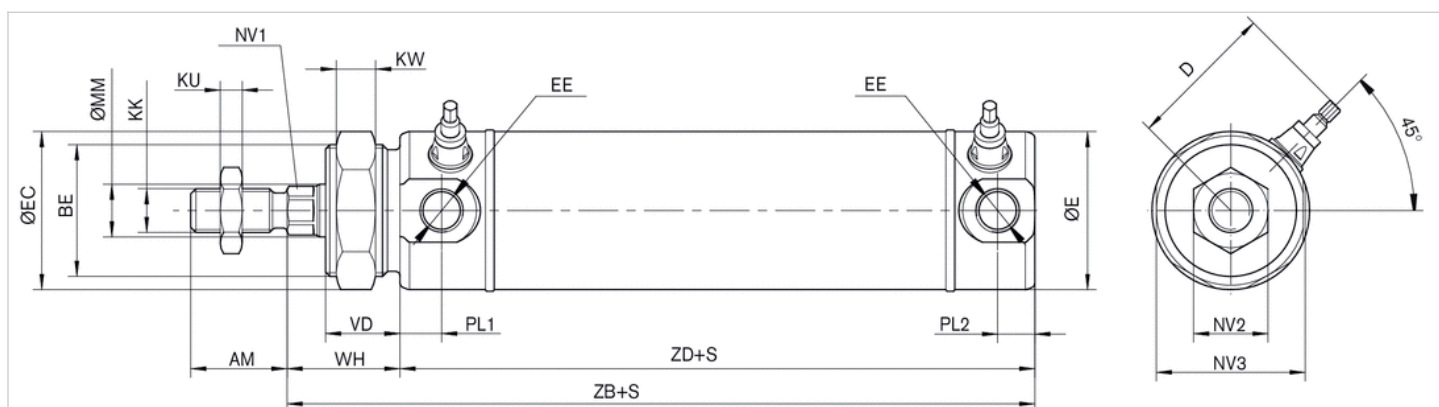
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for cylinder mounting	Stainless steel
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

Threaded neck with nut, MR3, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

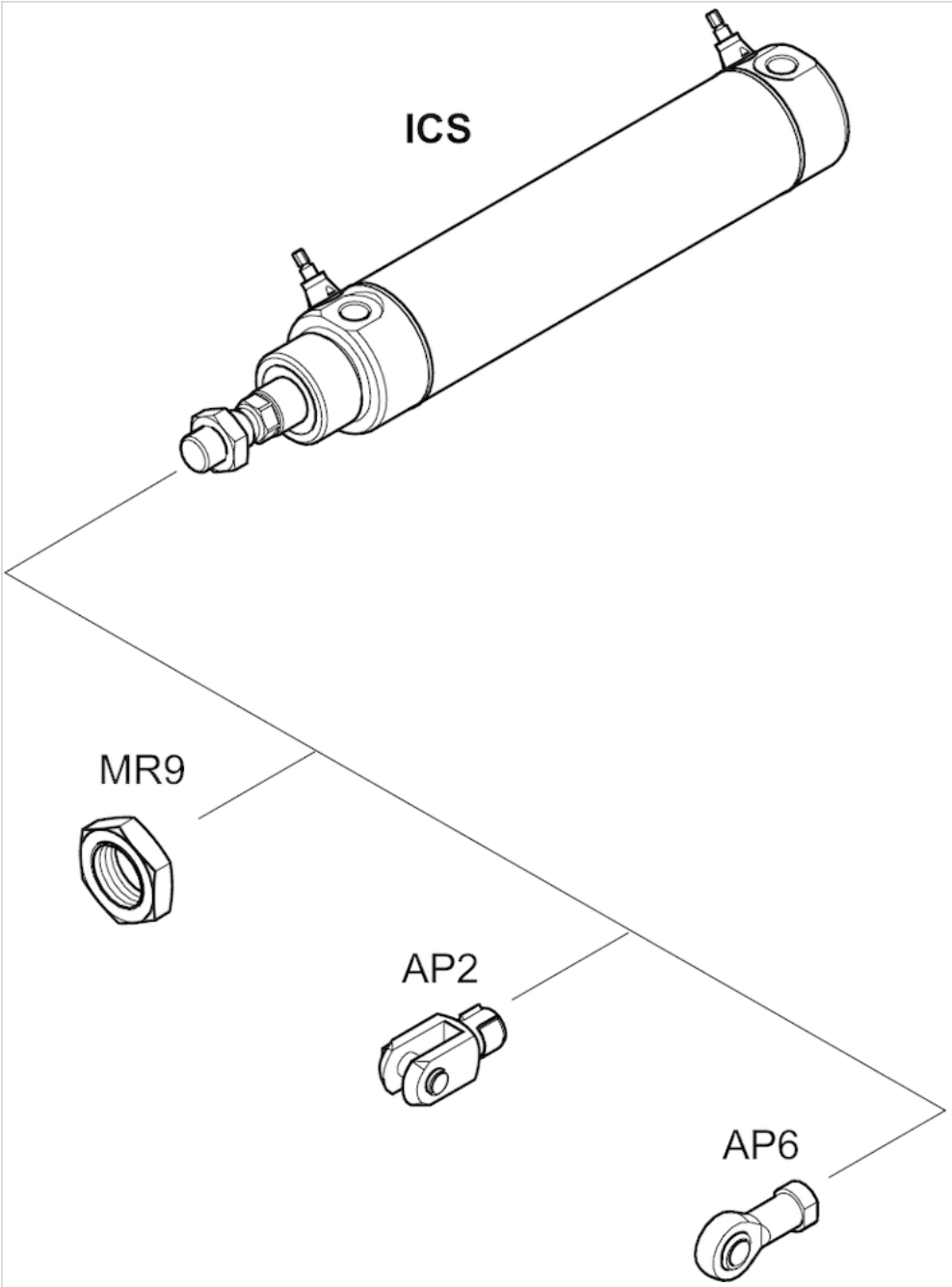
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
BE	M30x1,5	M35x1,5	M40x1,5	M45x1,5	M55x1,5	M65x1,5
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106
EC	36	45	52	58	80	90
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
KW	10	10	10	12	13	15
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
NV3	34	42	48	54	72	85

Ø	32	40	50	63	80	100
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

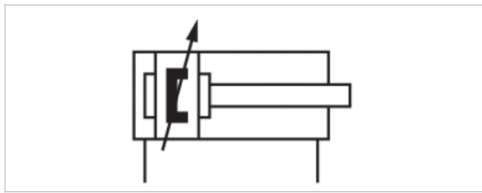
Overview drawing



NOTE:
This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MP4

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with rear end cover bushing
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

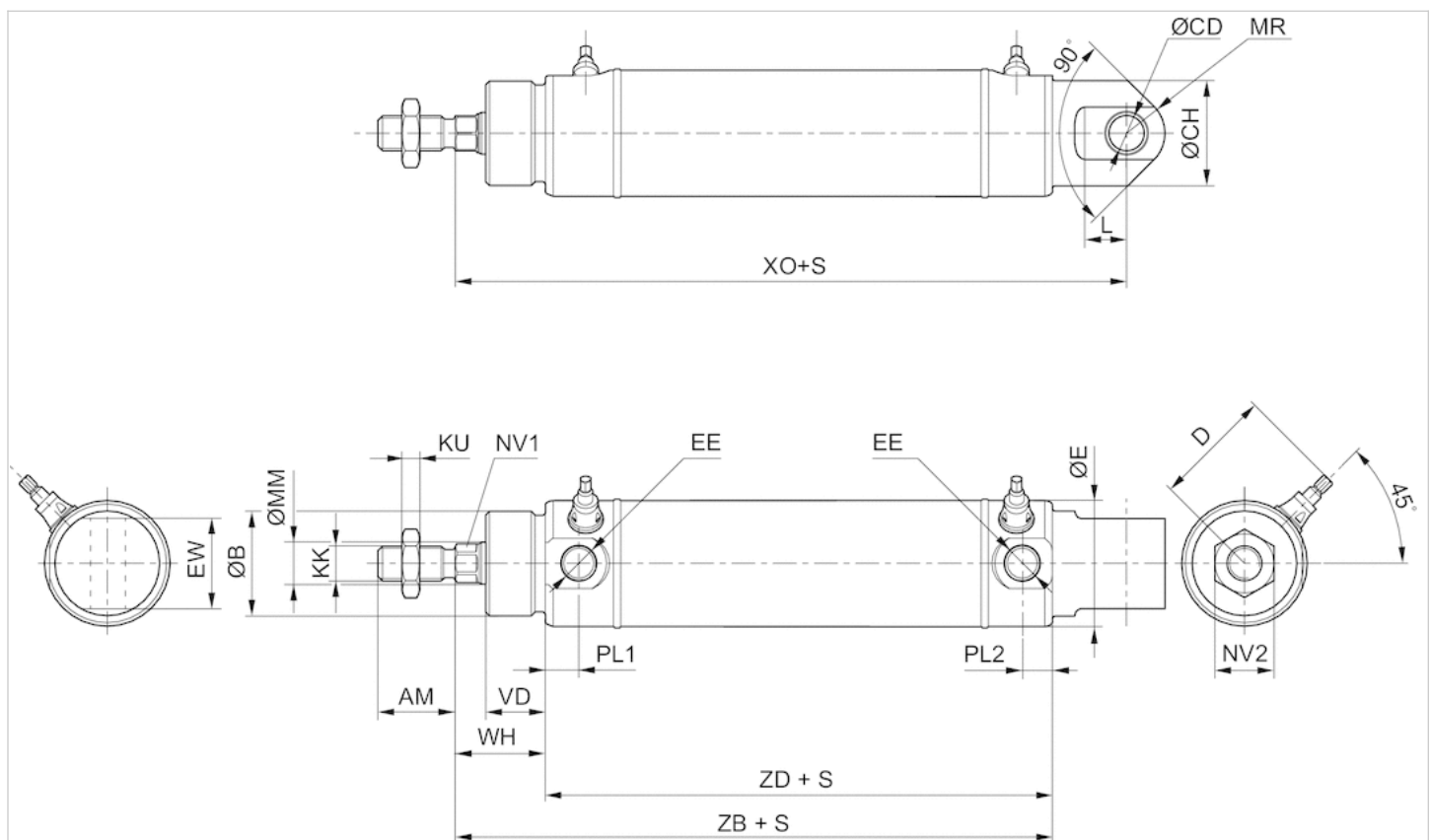
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

Rear end cover bushing (ISO 6431), MP4, Piston Ø 32 - 63



S = stroke, tolerance $\varnothing 32-50 \text{ mm} = +2/-0$, $\varnothing 63 \text{ mm} = +2.5/-0$. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

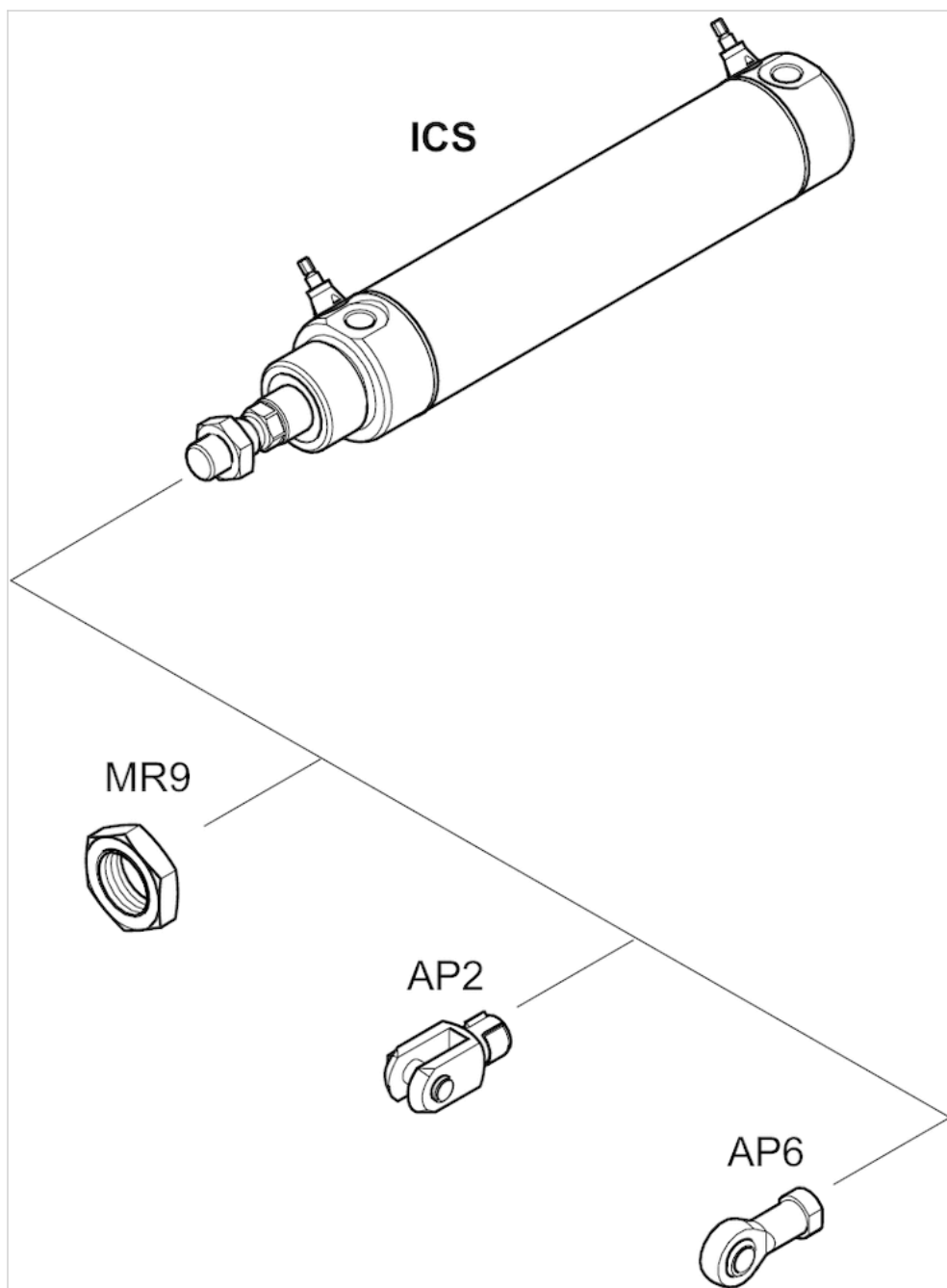
Dimensions

$\varnothing$	32	40	50	63	80	100
AM	22	24	32	32	40	40
$\varnothing B \text{ e11}$	30	35	40	45	55	65
$\varnothing CD \text{ H10}$	10	12	12	16	16	20

Ø	32	40	50	63	80	100
Ø CH	30	33	36	45	54	66
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
EW	26	28	32	40	50	60
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
min. L	13	12	13	15	17	21
MM g8	12	16	20	20	25	25
MR	11	13	13	17	17	21
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XO	142 ±1,3	160 ±1,3	170 ±1,3	190 ±1,6	210 ±1,6	230 ±1,6
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

Overview drawing



NOTE:

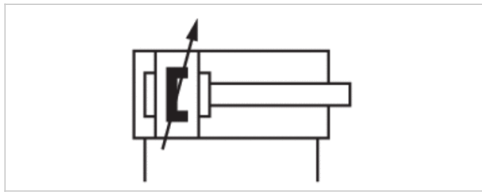
This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MP5

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with rear eye with spherical bearing
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar



Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

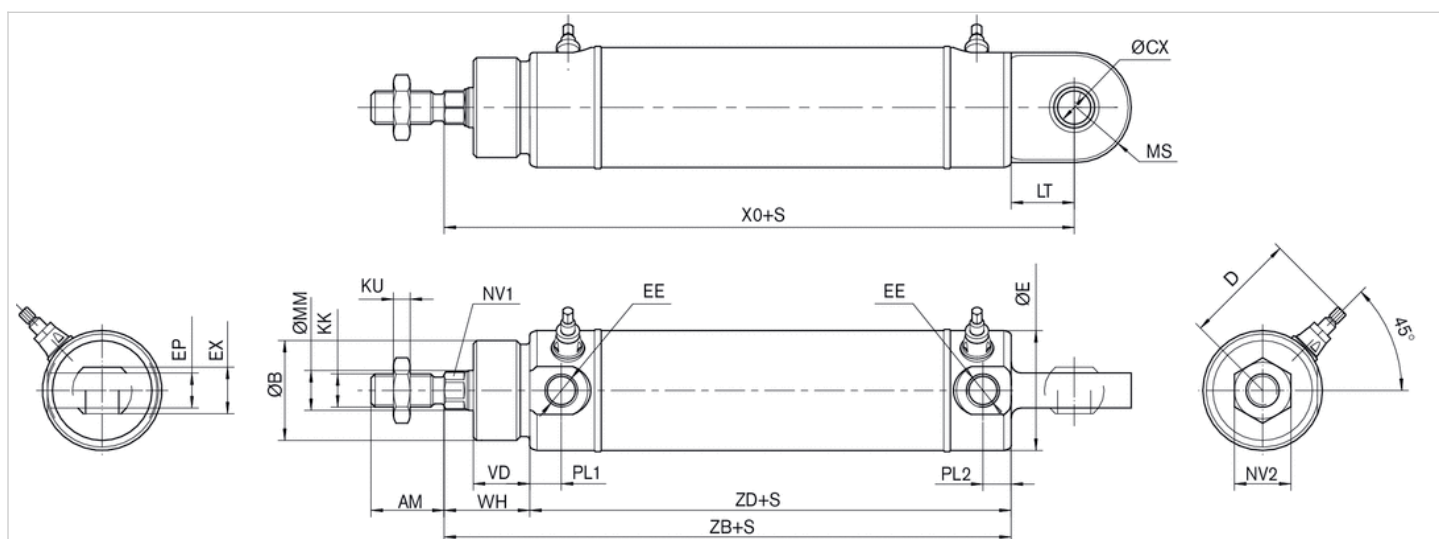
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Scraper	Polyethylene
Spherical bearing	Stainless steel

Dimensions

Rear eye with spherical bearing, MP5, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

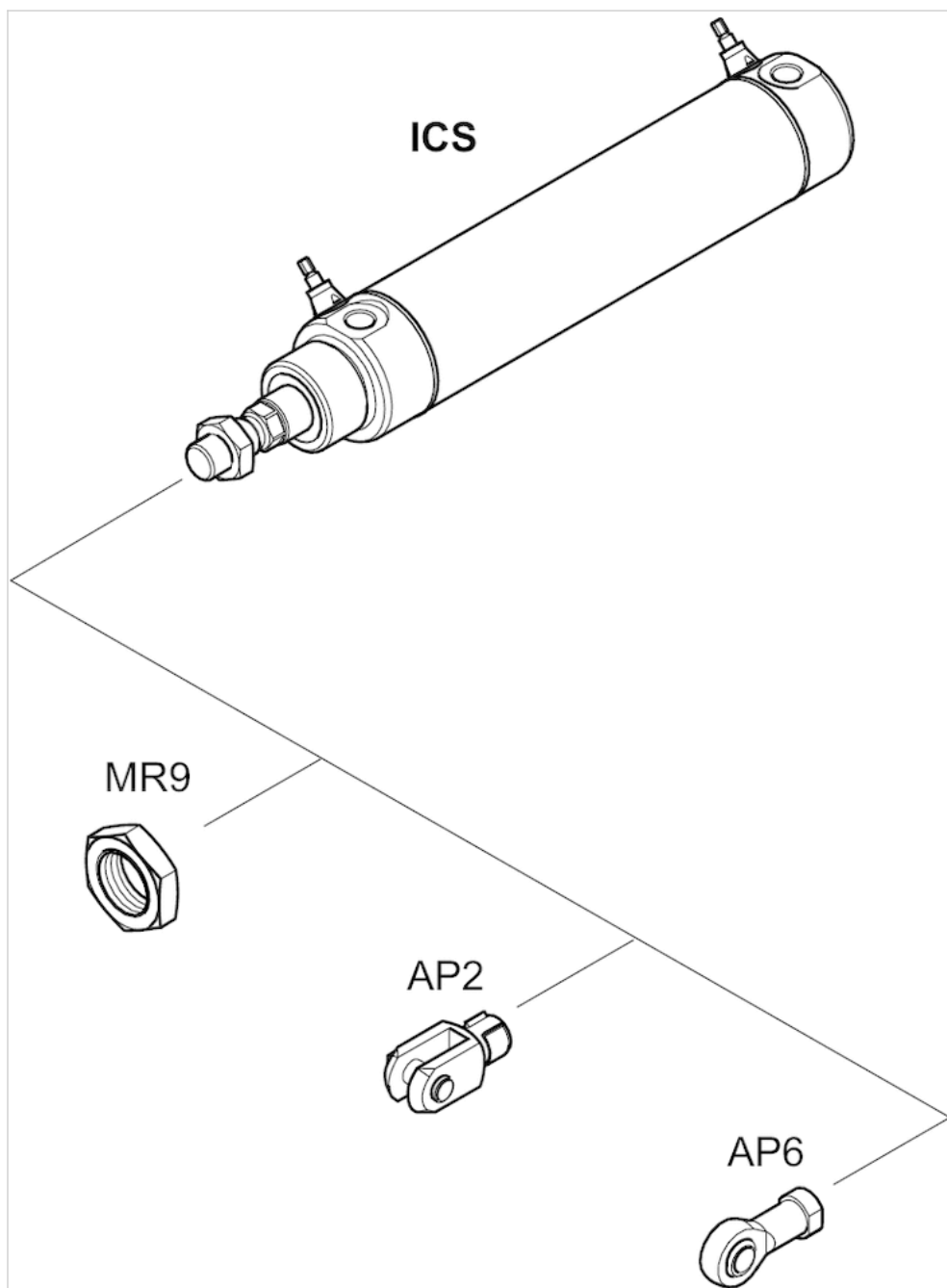
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
Ø CX H7	10	12	12	16	16	20
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
EP	10.5	12	12	15	15	18
EX	14	16	16	21	21	25
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5

Ø	32	40	50	63	80	100
KU	5	6	8	8	10	10
LT	21	17	20.5	25.5	26.5	32
MM g8	12	16	20	20	25	25
MS	16.5	19	24.5	30	35	35
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XO	142 ±1,3	160 ±1,3	170 ±1,3	190 ±1,6	210 ±1,6	230 ±1,6
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

Overview drawing

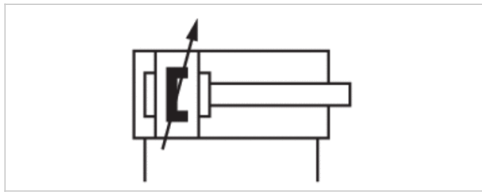


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MT1

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with mounting bolts in front end cover MT1
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Clamping piece for magnetic field sensor necessary

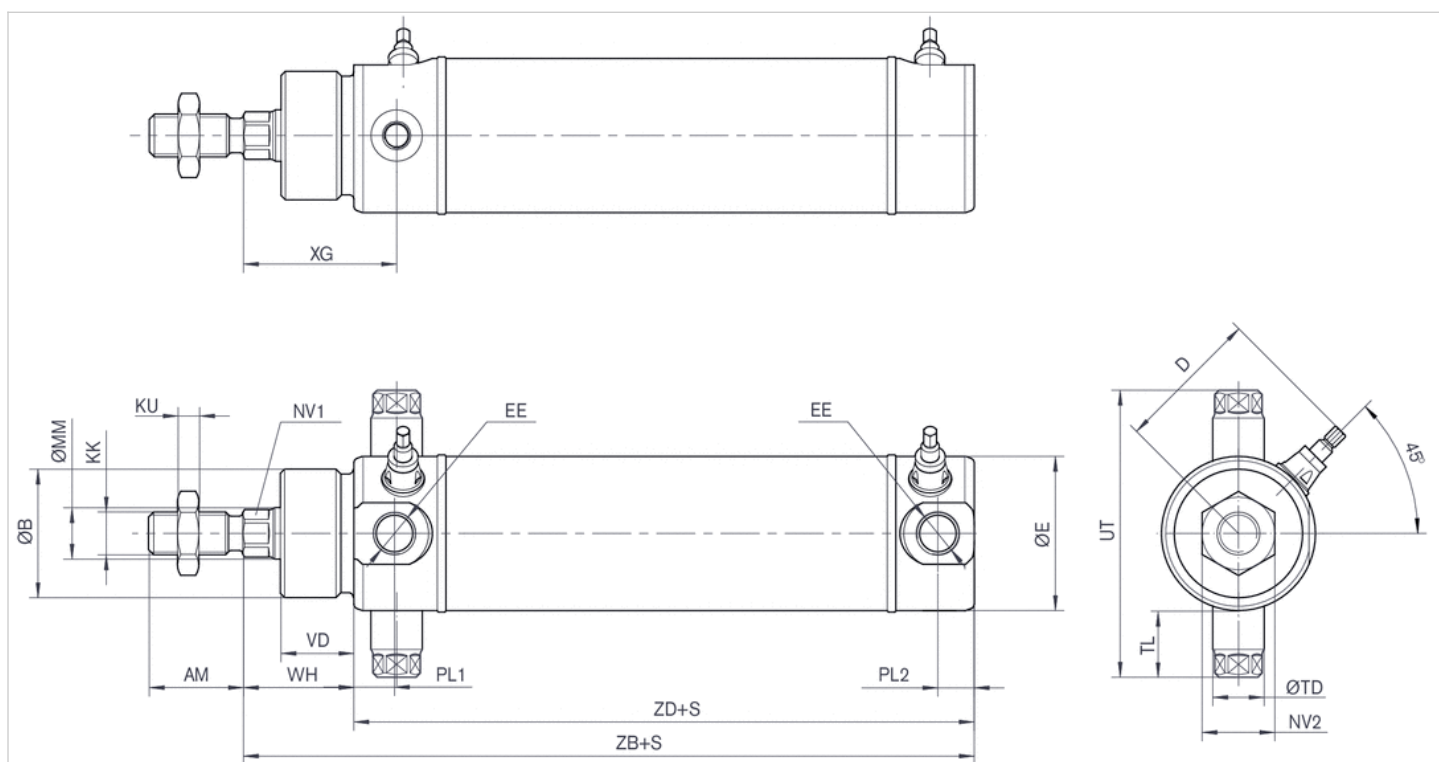
Max. continuous temperature 85 °C . Peak temperature of 150 °C . Higher temperatures on request.

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Mounting bolts	Stainless steel
Scraper	Polyethylene

Dimensions

Mounting bolts in front end cover MT1, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

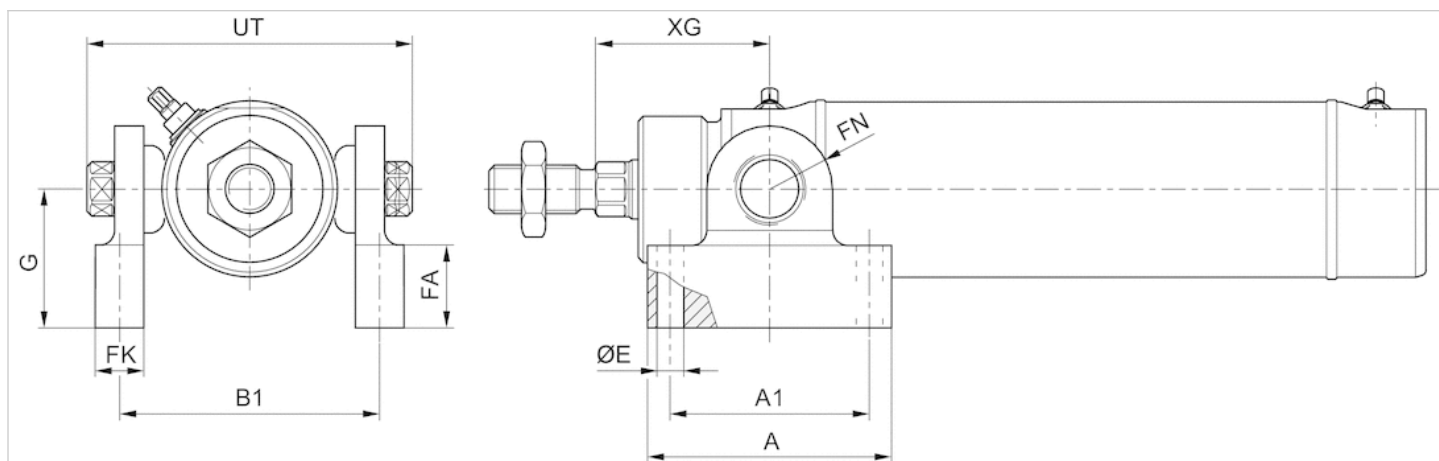
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106

Ø	32	40	50	63	80	100
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
Ø TD h9	12	12	16	16	16	20
TL	17	17	20	24	27	32
UT	67	74	89	109	132	164
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XG	36	47.5	49.5	55.5	62	63
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Dimensions

Mounting bolts with bearing blocks in front end cover F12

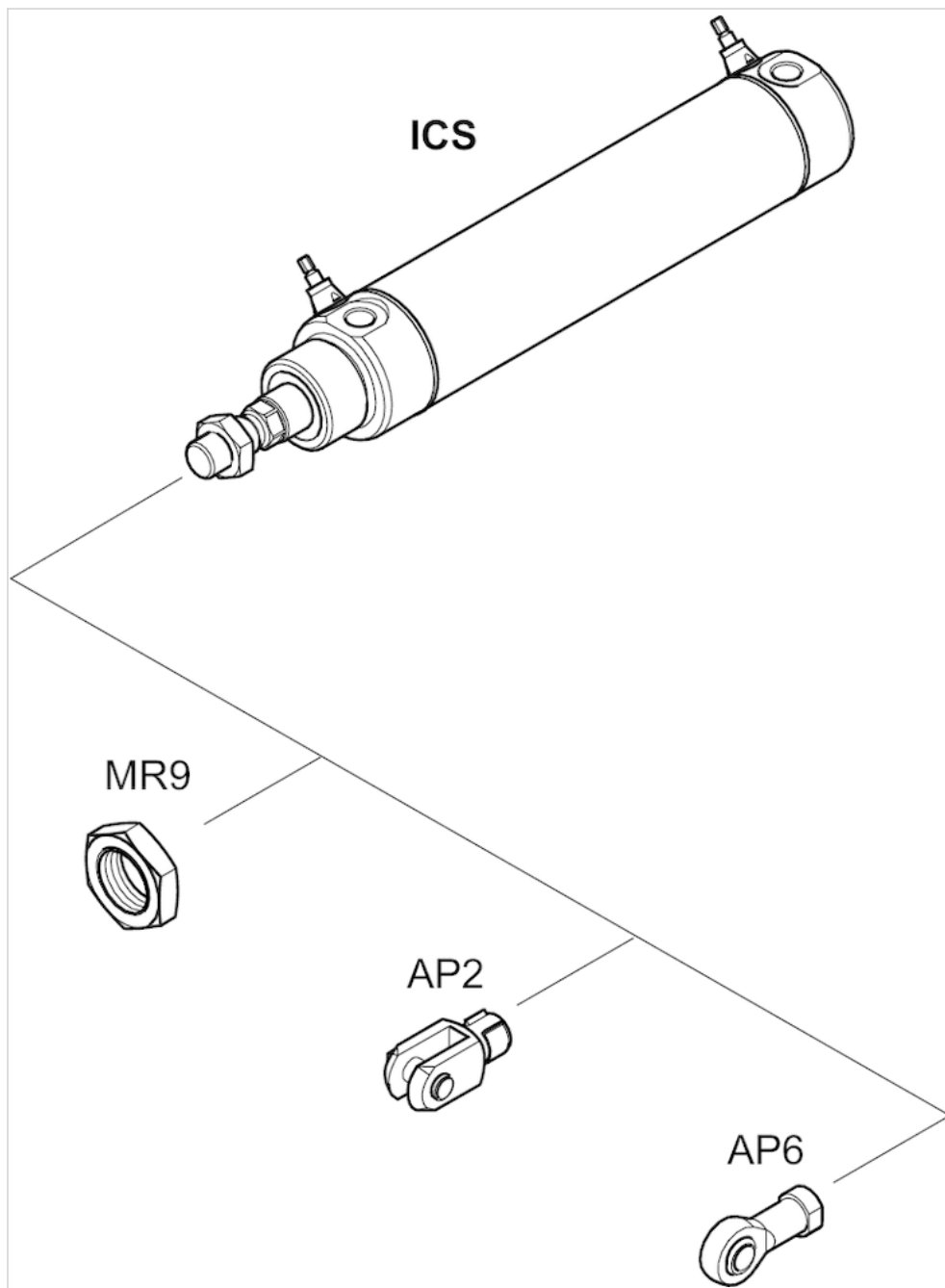


Dimensions

Ø	32	40	50	63	80	100
A	50	55	64	66	82	108
A1	41	46	53	56	72	88
B1	54.5	62.5	76.5	96.5	114.5	132.5
Ø E	5.5	5.5	6.5	6.5	6.5	9
FA	17	17	18.5	18.5	18.5	22
FK	10	10	12	12	12	16
FN	13	15.5	17.5	19	26	26
G	28.5	38	38	46.5	50.5	65
XG	36	47.5	49.5	55.5	62	63
UT	67	74	89	109	132	164

Accessories overview

Overview drawing

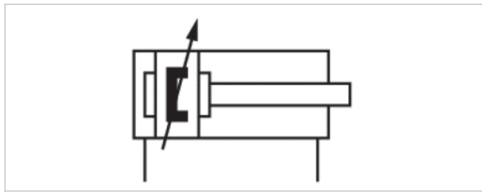


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MT2

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with mounting bolts in rear end cover MT2
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Max. continuous temperature 85 °C . Peak temperature of 150 °C . Higher temperatures on request.

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

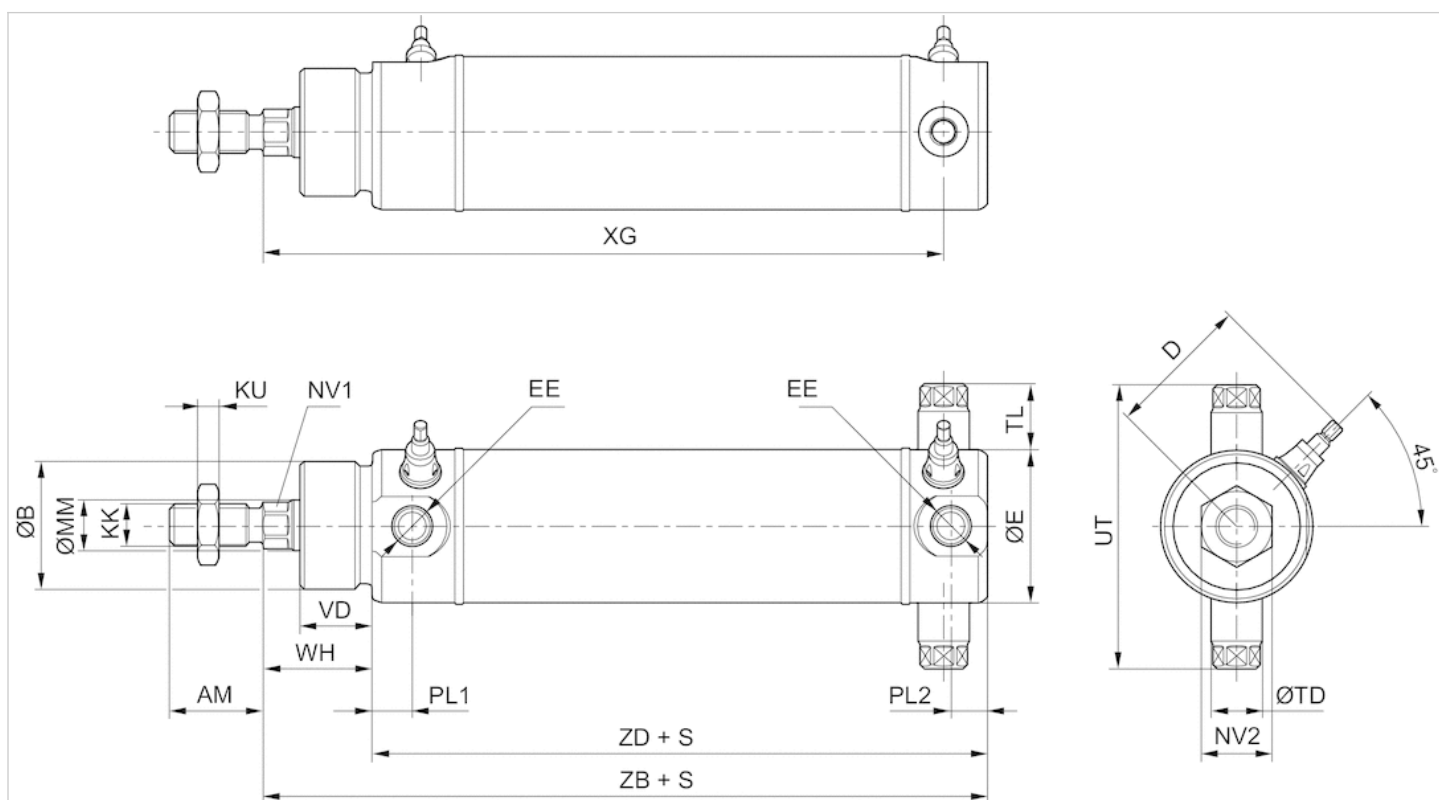
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Mounting bolts	Stainless steel
Scraper	Polyethylene

Dimensions

Mounting bolts in rear end cover MT2, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

Dimensions

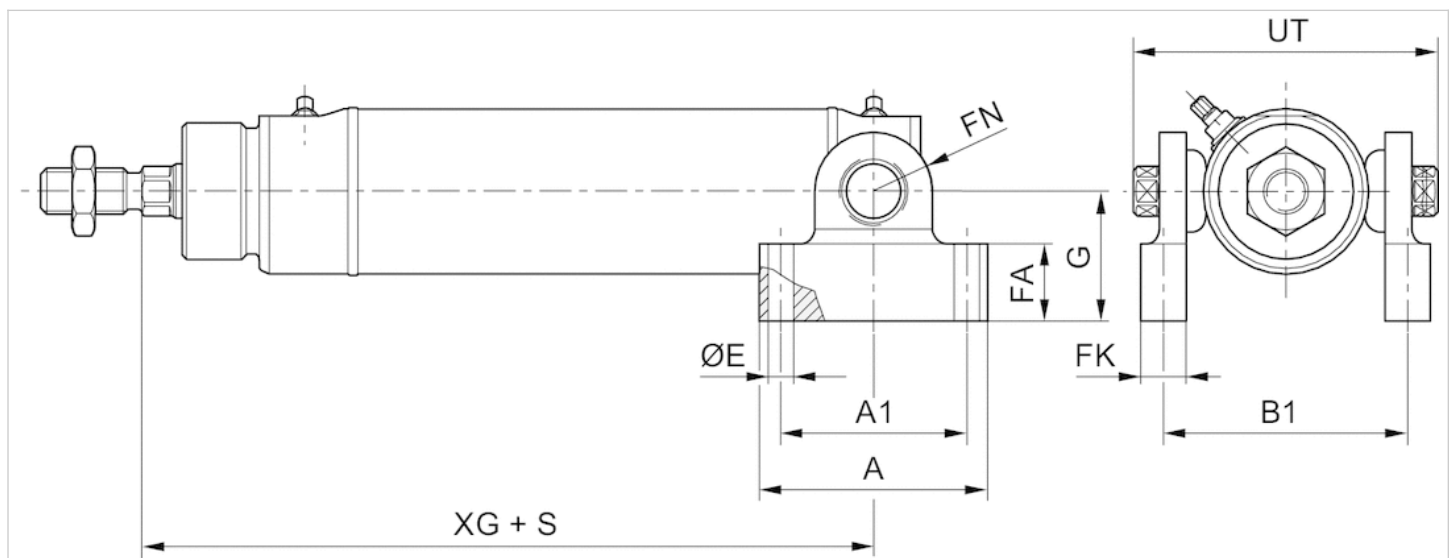
Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
max. D	34	38	50	57	70.5	80.5

Ø	32	40	50	63	80	100
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
Ø TD h9	12	12	16	16	16	20
TL	17	17	20	24	27	32
UT	67	74	89	109	132	164
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XG	110.5	129	134.5	149.5	164	177
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

1) max.

Dimensions

Mounting bolts with bearing blocks in rear end cover R12



S = stroke

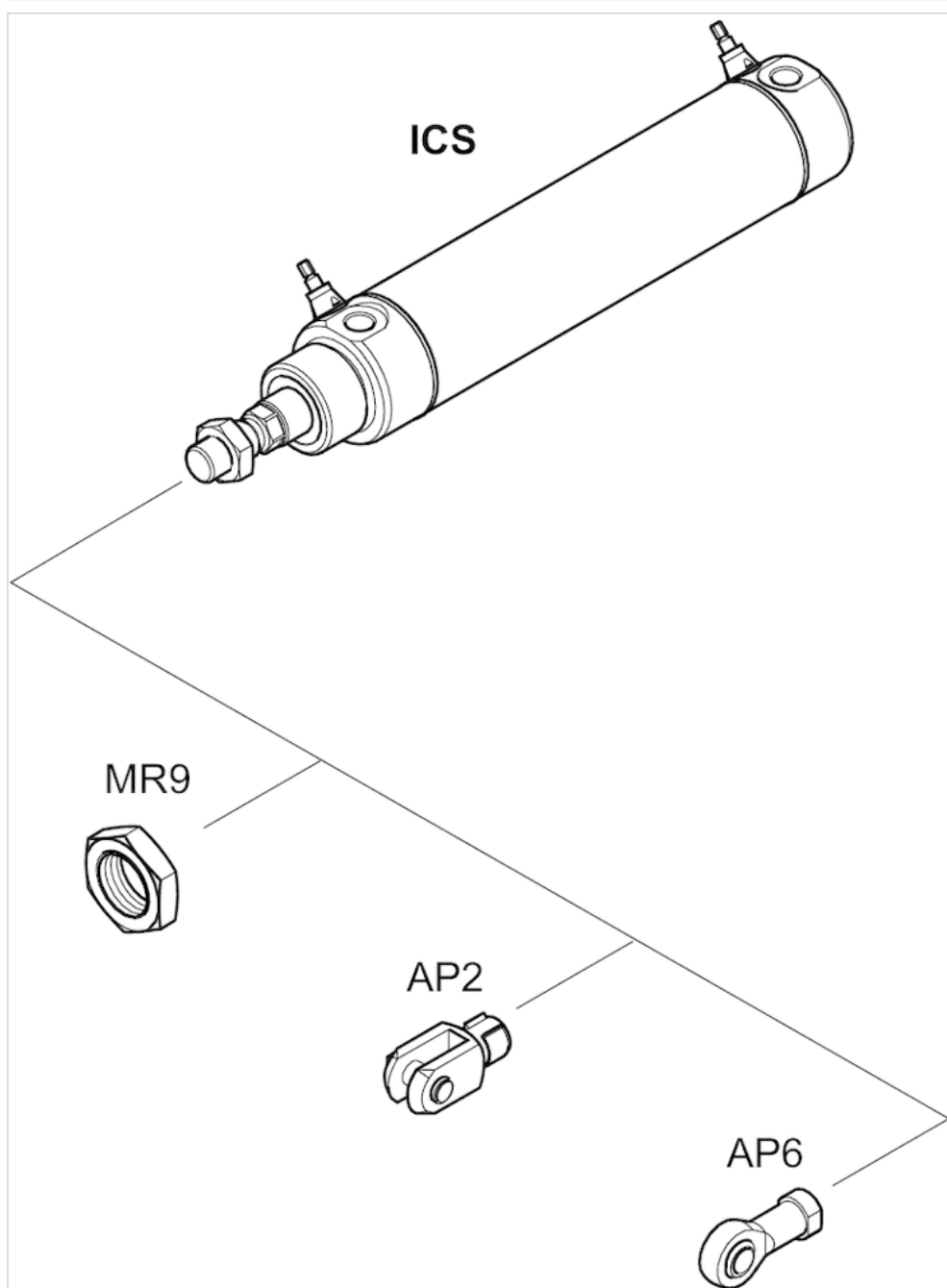
Dimensions

Ø	32	40	50	63	80	100
A	50	55	64	66	82	108
A1	41	46	53	56	72	88
B1	54.5	62.5	76.5	96.5	114.5	132.5
Ø E	5.5	5.5	6.5	6.5	6.5	9

Ø	32	40	50	63	80	100
FA	17	17	18.5	18.5	18.5	22
FK	10	10	12	12	12	16
FN	13	15.5	17.5	19	26	26
G	28.5	38	38	46.5	50.5	65
XG	110.5	129	134.5	149.5	164	177
UT	67	74	89	109	132	164

Accessories overview

Overview drawing

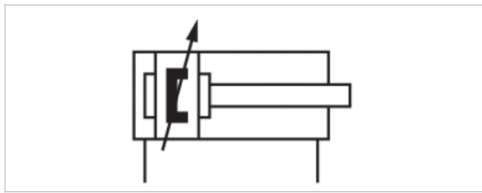


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MH1

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with mounting holes position front
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

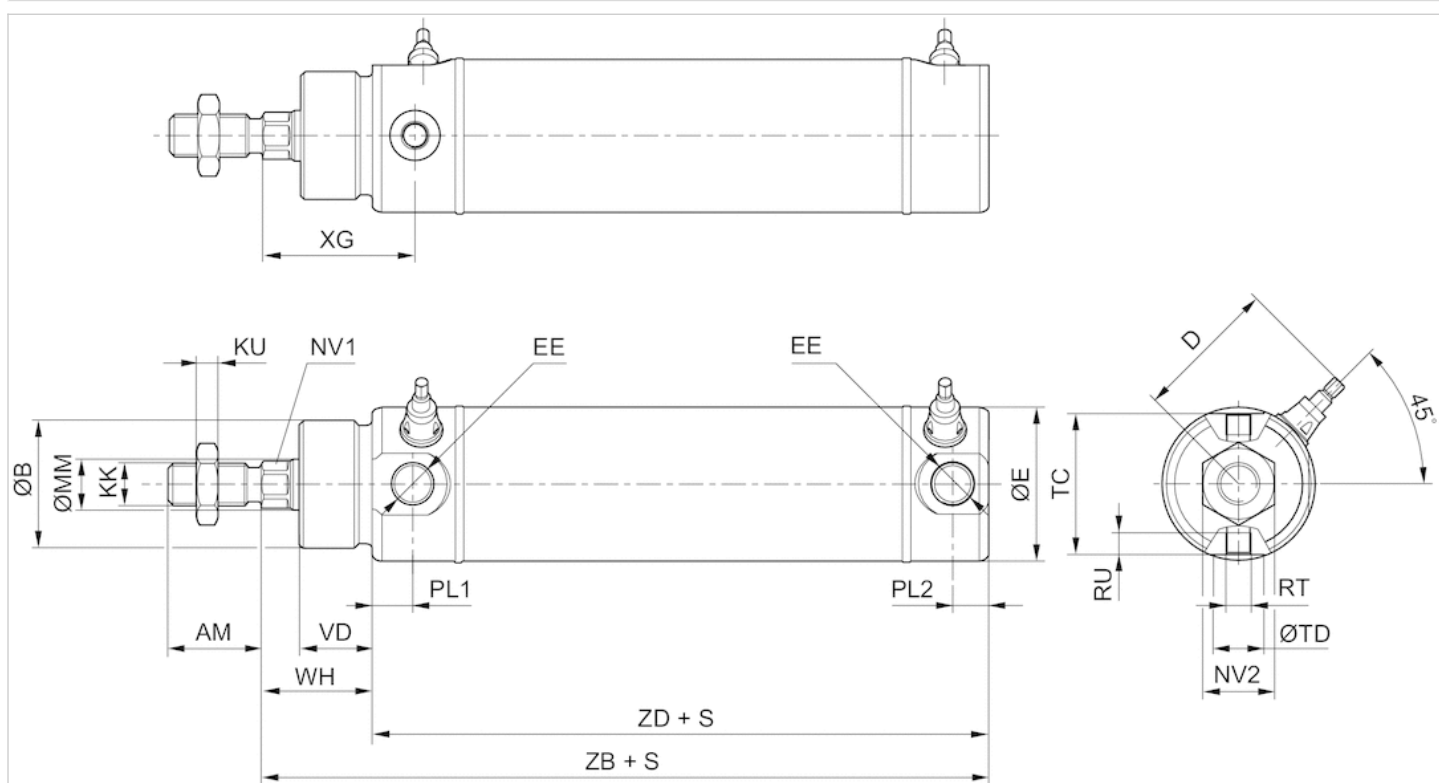
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

Threaded holes in front end cover MH1, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

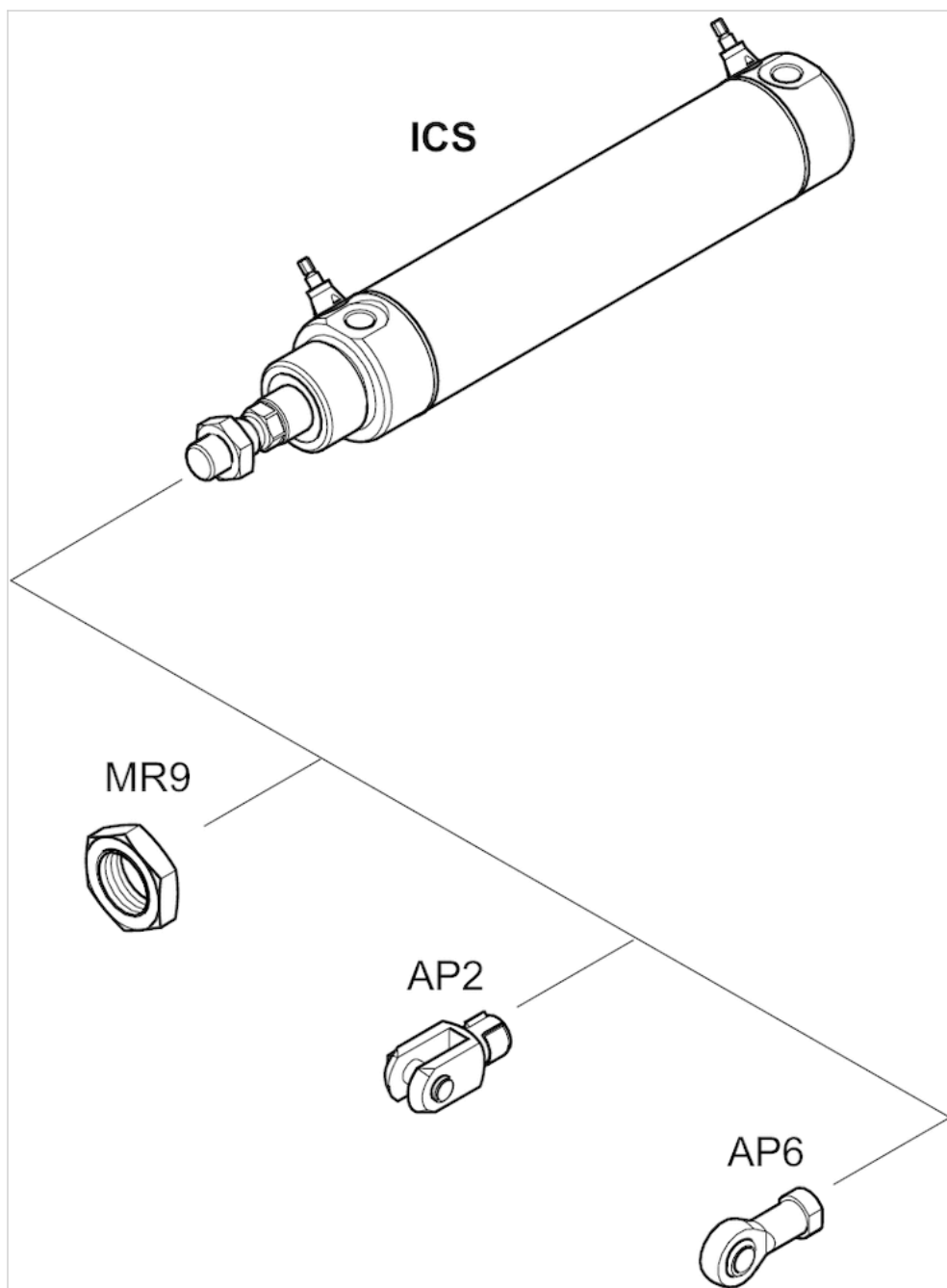
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106

Ø	32	40	50	63	80	100
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
RT	M6x0,5	M6x0,5	M8x0,75	M10x1	M12x1	M16x1,5
min. RU	5	6	7.5	12.5	16	16
TC	33	40	49	61	78	100
Ø TD h9	12	12	16	16	16	20
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XG	36	47.5	49.5	55.5	62	63
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

Overview drawing

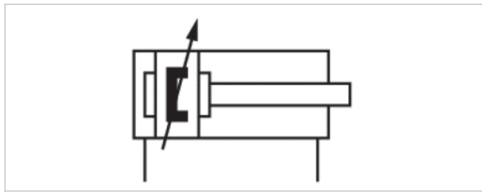


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MH2

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with mounting holes position rear
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

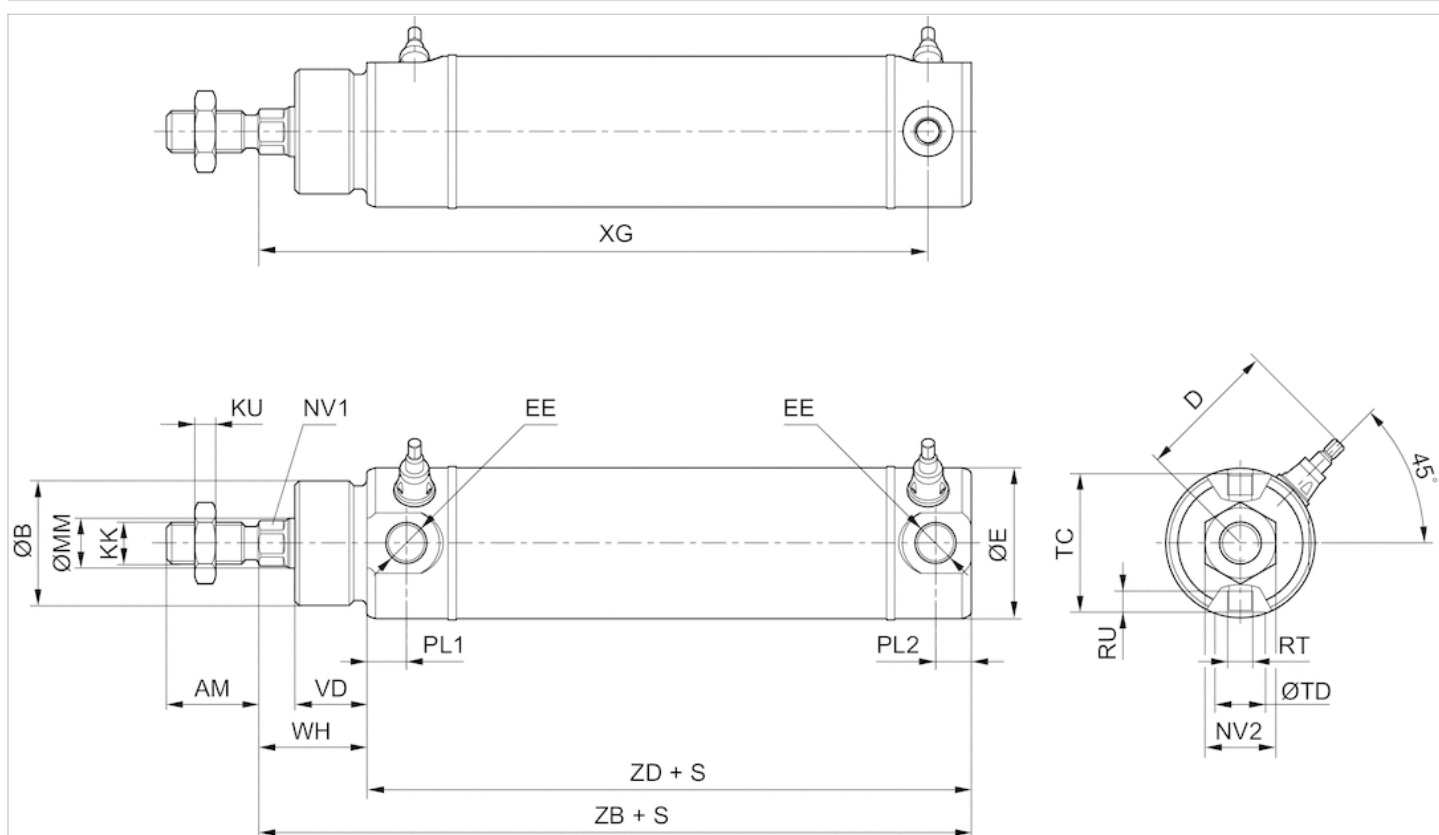
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

Threaded holes in rear end cover MH2, Piston Ø 32 ... 100



S = stroke, tolerance $\varnothing 32-50 \text{ mm} = +2/-0$, $\varnothing 63-100 \text{ mm} = +2.5/-0$. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

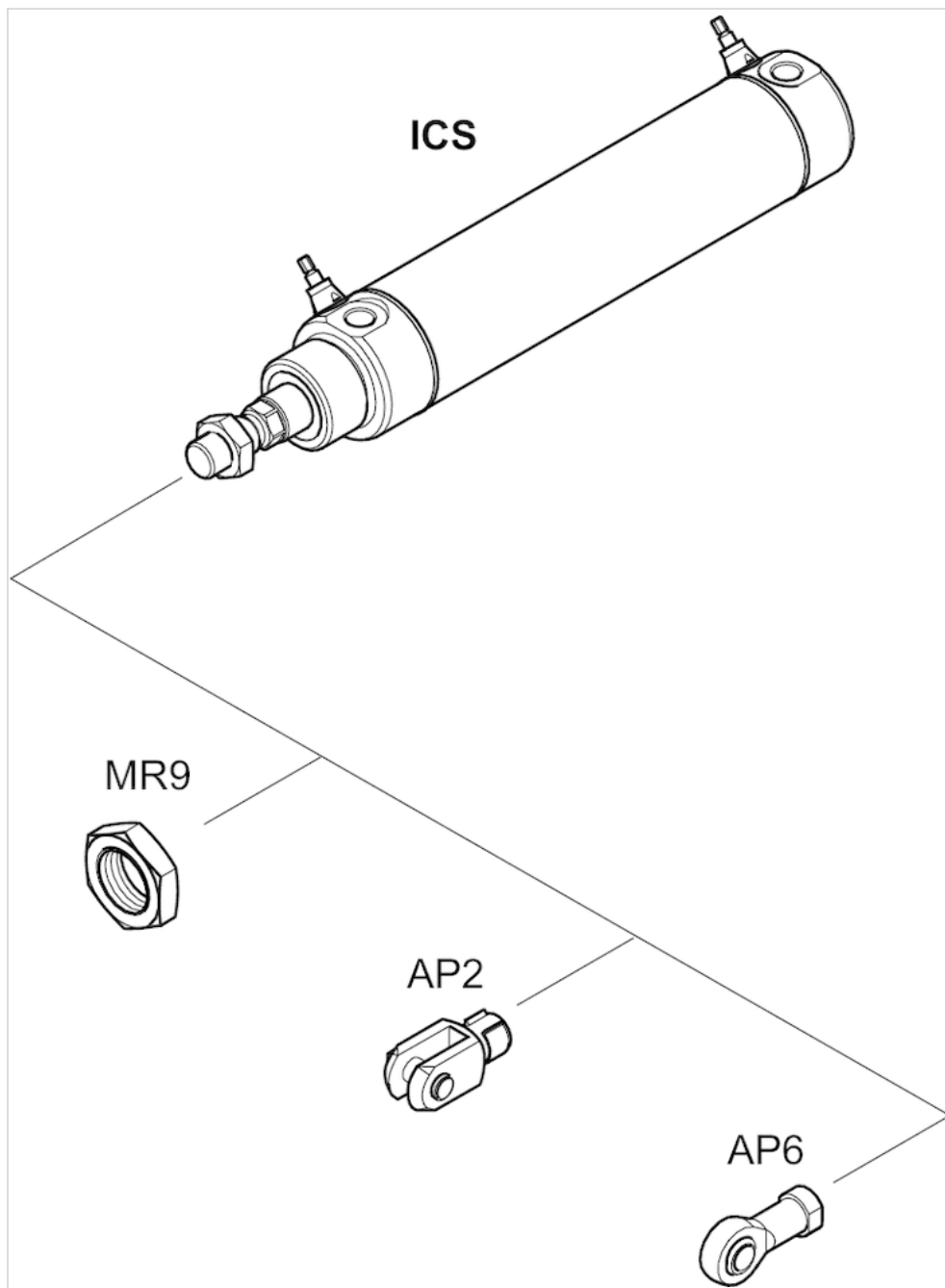
Dimensions

$\varnothing$	32	40	50	63	80	100
AM	22	24	32	32	40	40
$\varnothing B$ e11	30	35	40	45	55	65
max. D	34	38	50	57	70.5	80.5

Ø	32	40	50	63	80	100
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
RT	M6x0,5	M6x0,5	M8x0,75	M10x1	M12x1	M16x1,5
min. RU	5	6	7.5	12.5	16	16
TC	33	40	49	61	78	100
Ø TD h9	12	12	16	16	16	20
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
XG	110.5	129	134.5	149.5	164	177
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

Overview drawing

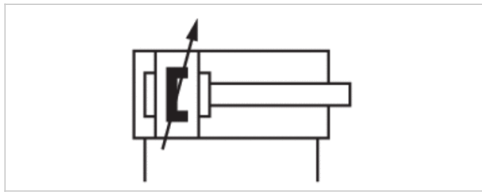


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2-MX6

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- with rear end cover with threaded holes
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.6 kg	1.2 kg	1.7 kg	3 kg	4 kg	7.7 kg
Weight +10 mm stroke	0.025 kg	0.036 kg	0.05 kg	0.065 kg	0.1 kg	0.135 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

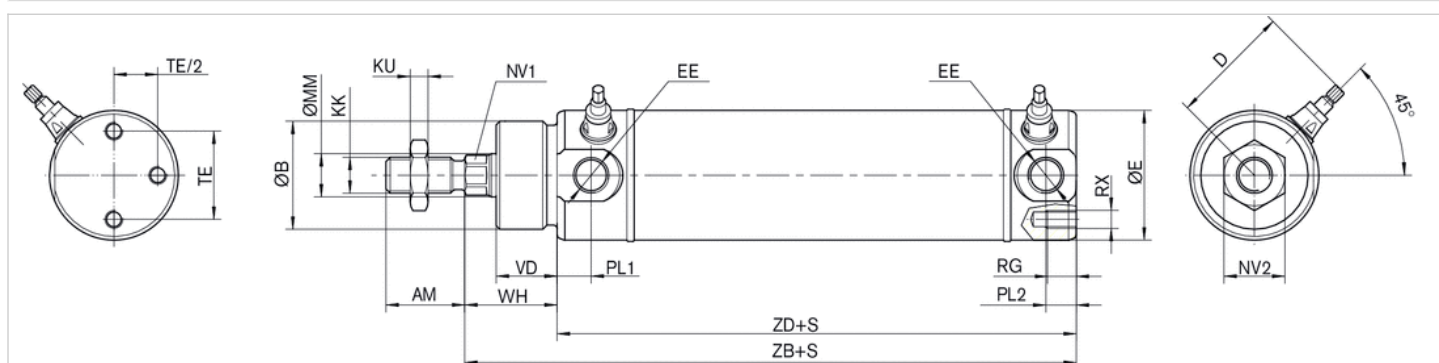
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

Rear eye with threaded holes, MX6, Piston Ø 32 ... 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035, DIN 439.

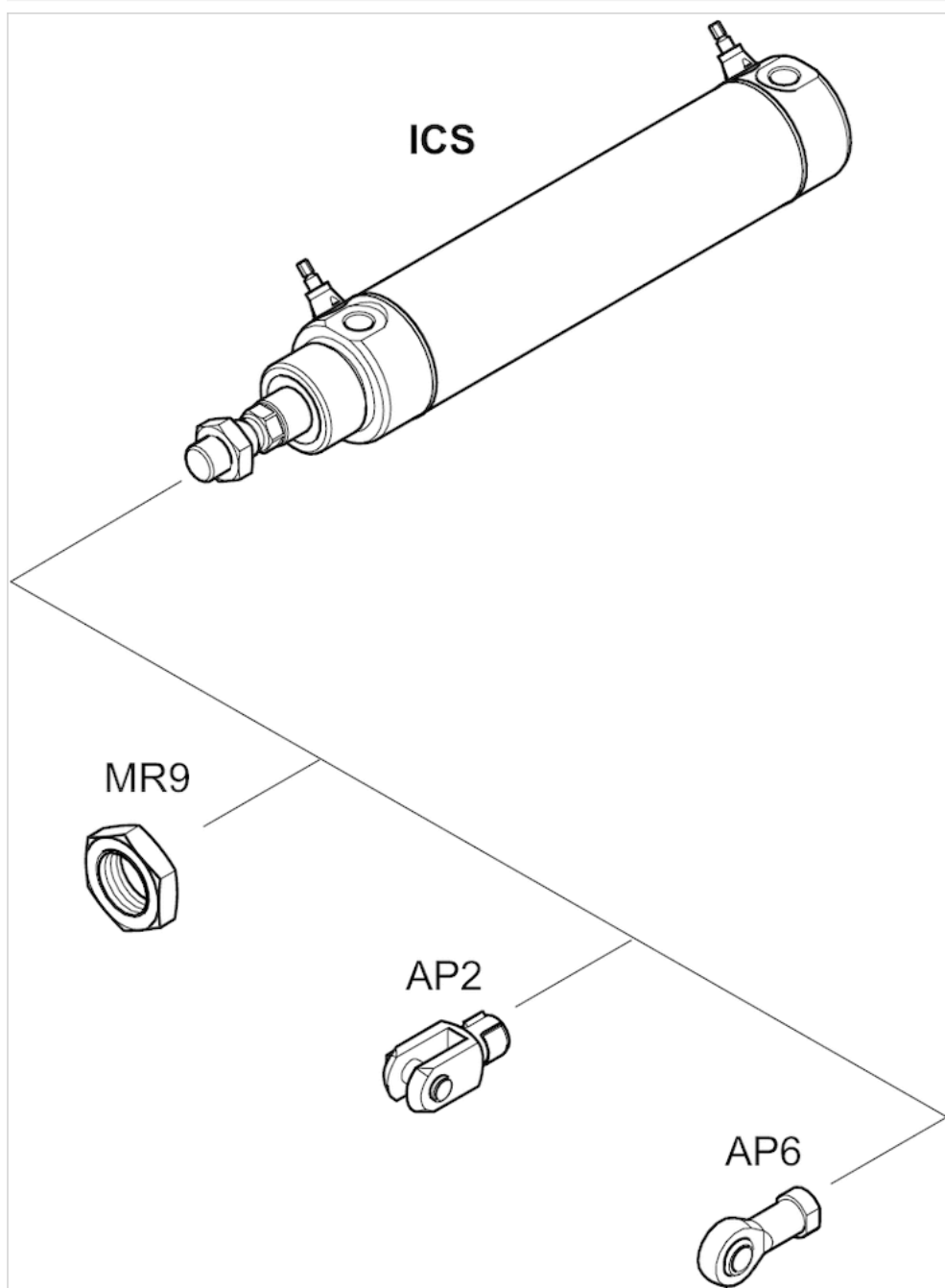
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
max. D	34	38	50	57	70.5	80.5
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
PL2	8.5	11	12	13.5	14	19
RG	8	10	10	12	12	16
RX	M5	M6	M6	M8	M8	M10

Ø	32	40	50	63	80	100
TE	24.5	30	39	49	65	85
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
ZB	121	143	150	165	184	198
ZD	95	108	115	125	142	156

Accessories overview

Overview drawing

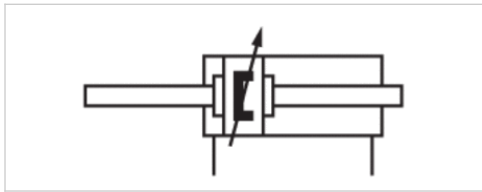


NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Round cylinder, Series ICS-D2

- Ø 32-100 mm
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- corrosion-protected
- Piston rod through
- suitable for use in food processing



Standards	ISO 6431
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-25 ... 70 °C
Medium temperature min./max.	-25 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Extracting piston force	435 N	665 N	1039 N	1766 N	2857 N	4639 N
Cushioning length	11.5 mm	14 mm	17 mm	16 mm	19 mm	22 mm
Cushioning energy	2.4 J	4.5 J	7.5 J	13.5 J	54 J	88 J
Weight 0 mm stroke	0.7 kg	1.4 kg	2 kg	3.5 kg	4.7 kg	9 kg
Weight +10 mm stroke	0.038 kg	0.06 kg	0.075 kg	0.1 kg	0.14 kg	0.17 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	1925 mm	1925 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

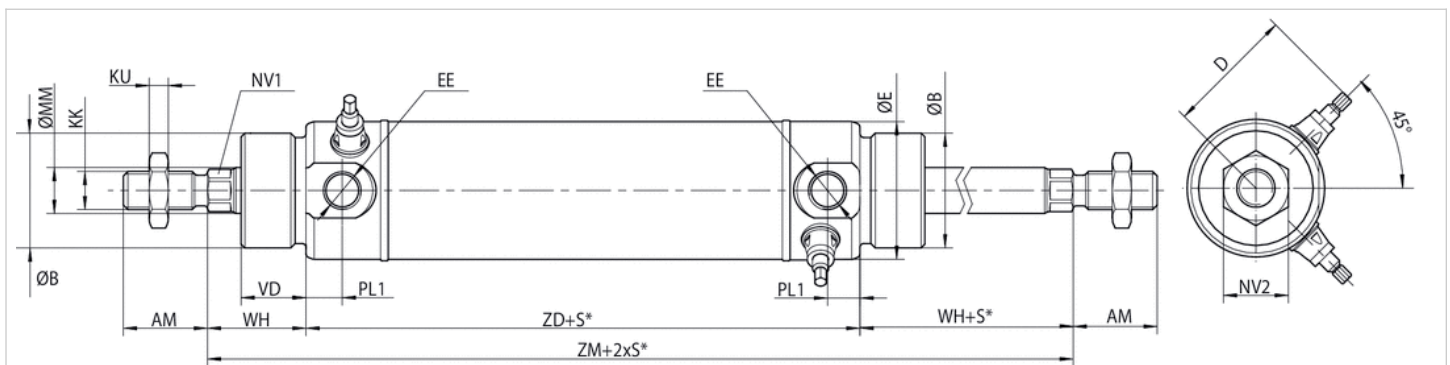
Clamping piece for magnetic field sensor necessary

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Front cover	Stainless steel
End cover	Stainless steel
Seal	Acrylonitrile butadiene rubber Polyethylene
Nut for piston rod	Stainless steel
Scraper	Polyethylene

Dimensions

basic version, M00, with through piston rod, Ø 32 ... 100 mm



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nut in accordance with ISO 4035, DIN 439. For other dimensions, see basic version.

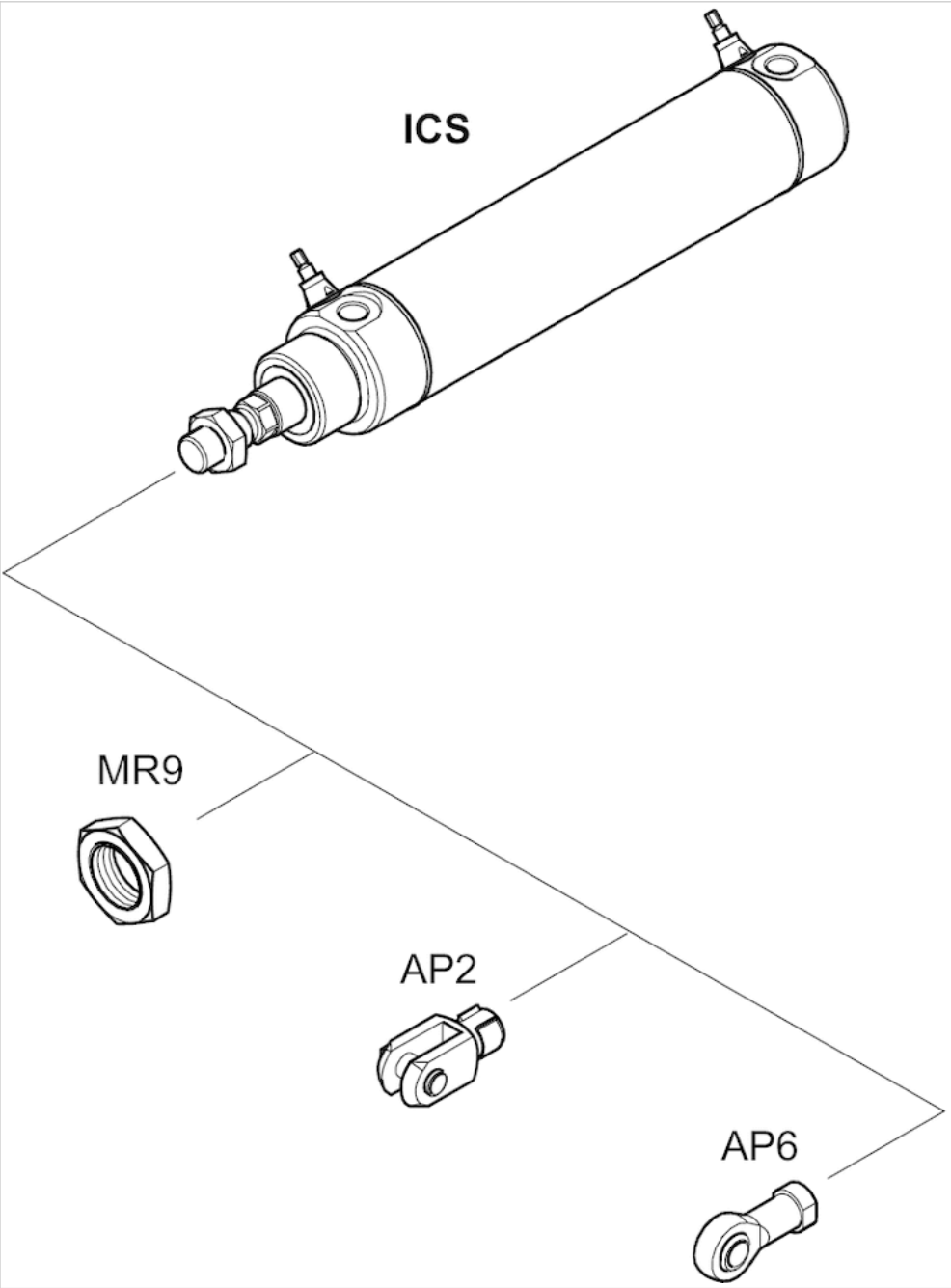
Dimensions

Ø	32	40	50	63	80	100
AM	22	24	32	32	40	40
Ø B e11	30	35	40	45	55	65
max. D	34	40	50	57	70.5	80.5
Ø E	36	44	54	68	86	106
EE	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
KK	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
KU	5	6	8	8	10	10
MM g8	12	16	20	20	25	25
NV1	10	13	17	17	22	22
NV2	17	18	24	24	30	30
PL1	9.5	11	12	14	14	20
VD	17	25	25	30	30	30
WH	26	35	35	40	42	42
ZD	96	107	115	125	142	156

Ø	32	40	50	63	80	100
ZM	148	177	185	205	226	240

Accessories overview

Overview drawing



NOTE:
This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Bearing blocks, Series ICS

- Suitable piston Ø 32 40 50 63 80 100 mm



Technical data

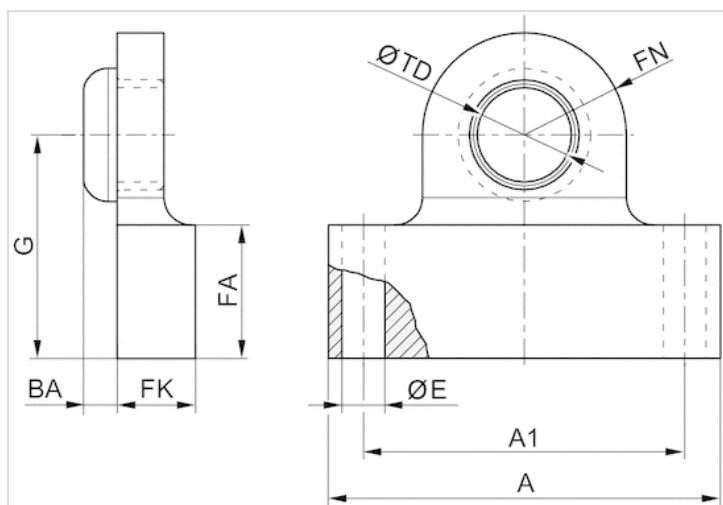
Part No.	Piston Ø
2992112030	32 mm
2992112040	40 mm
2992112050	50 mm
2992112060	63 mm
2992112080	80 mm
2992112100	100 mm

Delivered in pairs, Max. continous temperature 85 °C . Peak temperature of 150 °C . Higher temperatures on request.

Technical information

Material	
Material	Stainless steel, acid-proof
Guide bushing	Plastic

Dimensions



Dimensions

Part No.	Piston Ø	A	A1	BA	Ø E	FA	FK	FN	G	Ø TD h9
2992112030	32 mm	50	41	4.25	5.5	17	10	13	28.5	12
2992112040	40 mm	55	46	4.25	5.5	17	10	15.5	38	12
2992112050	50 mm	64	53	5.25	6.5	18.5	12	17.5	38	16
2992112060	63 mm	66	56	8.25	6.5	18.5	12	19	46.5	16
2992112080	80 mm	82	72	8.25	6.5	18.5	12	26	50.5	16
2992112100	100 mm	108	88	10.25	9	22	16	26	65	20

Mounting bolts

- Suitable piston Ø 32 40 50 63 80 mm



Technical data

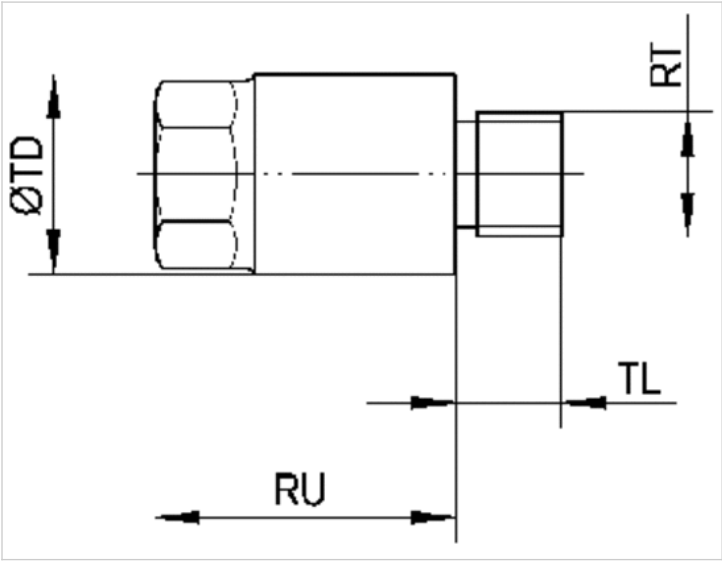
Part No.	Piston Ø
2992113030	32 mm
2992113040	40 mm
2992113050	50 mm
2992113060	63 mm
2992113080	80 mm

Delivered in pairs

Technical information

Material	
Material	Stainless steel, acid-proof

Dimensions



Dimensions

Part No.	Piston Ø	RT	RU	Ø TD h9	TL
2992113030	32 mm	M6x0,5	17	12	5
2992113040	40 mm	M6x0,5	17	12	6
2992113050	50 mm	M8x0,75	20	16	7.5
2992113060	63 mm	M10x1	24	16	8.5
2992113080	80 mm	M12x1	27	16	16

Piston rod nut MR9



Weight

See table below

Technical data

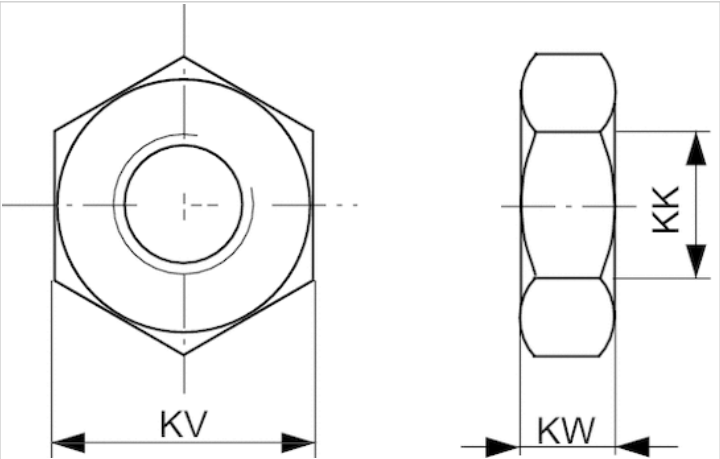
Part No.	Suitable piston rod thread	Weight	
8103190464	M10x1,25	0.008 kg	-
3590304000	M12x1,25	0.02 kg	-
3590305000	M16x1,5	0.03 kg	1)
3590308000	M20x1,5	0.05 kg	-

1) 3590305000 can also be used as an MR3, nut for cylinder mounting.

Technical information

Material	
	Stainless steel

Dimensions



Dimensions

Part No.	KK	KV	KW
8103190464	M10x1,25	17	5
3590304000	M12x1,25	19	6
3590305000	M16x1,5	24	8
3590308000	M20x1,5	30	10

Rod clevis AP2, Series CM2

- with circlip, to mount on cylinder CCL-IS/IC, CCI, SSI, CSL-RD, ICM, ICS-D2, 167



Weight

See table below

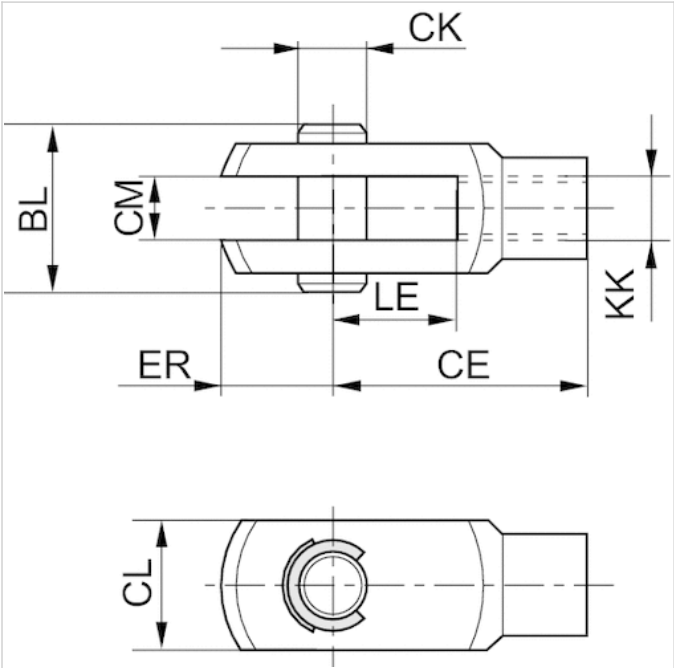
Technical data

Part No.	Suitable piston rod thread	for	Weight
3590502000	M10x1,25	CCL-IS CCL-IC CCI CSL-RD SSI ICM ICS-D2 167	0.1 kg
3590504000	M12x1,25	CCL-IS CCL-IC CCI SSI 167 ICS-D2	0.16 kg
3590505000	M16x1,5	CCL-IS ICS-D2 167	0.4 kg
3590508000	M20x1,5	CCL-IS ICS-D2 167	0.7 kg

Technical information

Material	
	Stainless steel

Dimensions



Dimensions

Part No.	KK	CE	CK e8	CL	CM B12	ER	BL	LE
3590502000	M10x1,25	40	10	20	10	12	26	20
3590504000	M12x1,25	48	12	24	12	14	31	24
3590505000	M16x1,5	64	16	32	16	19	39	32
3590508000	M20x1,5	80	20	40	20	20	49	40

Rod clevis AP2, Series CM2

- with split pin, to mount on cylinder SSI, ICS-D2



Weight

See table below

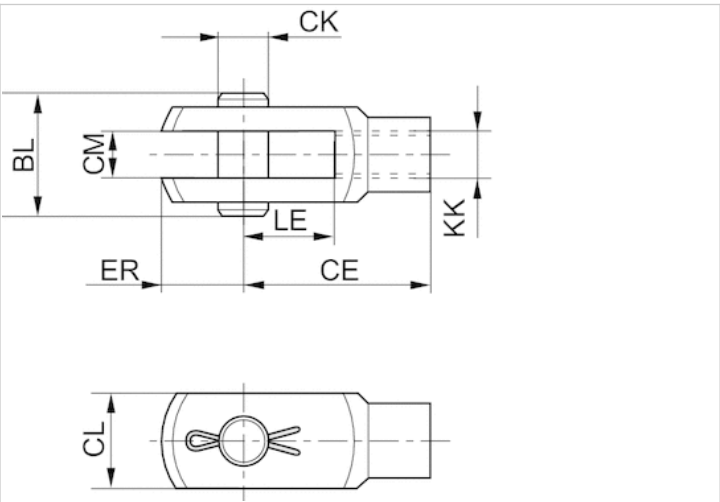
Technical data

Part No.	Suitable piston rod thread	for	Weight
2990600503	M10x1,25	SSI ICS-D2	0.11 kg
2990600504	M12x1,25	ICS-D2	0.19 kg
2990600505	M16x1,5	SSI ICS-D2	0.41 kg
2990600508	M20x1,5	SSI ICS-D2	1.16 kg

Technical information

Material	
	Stainless steel, acid-proof

Dimensions



Dimensions

Part No.	KK	CE	CK e8	CL	CM B12	ER	BL	LE
2990600503	M10x1,25	40	10	20	10	12	26	20
2990600504	M12x1,25	48	12	24	12	14	31	24
2990600505	M16x1,5	64	16	32	16	19	39	32
2990600508	M20x1,5	80	20	40	20	20	49	40

Ball eye rod end AP6, series CM2

- with flange, to mount on cylinder CCL-IS/IC, SSI, CSL-RD, ICM, ICS-D2



Weight

See table below

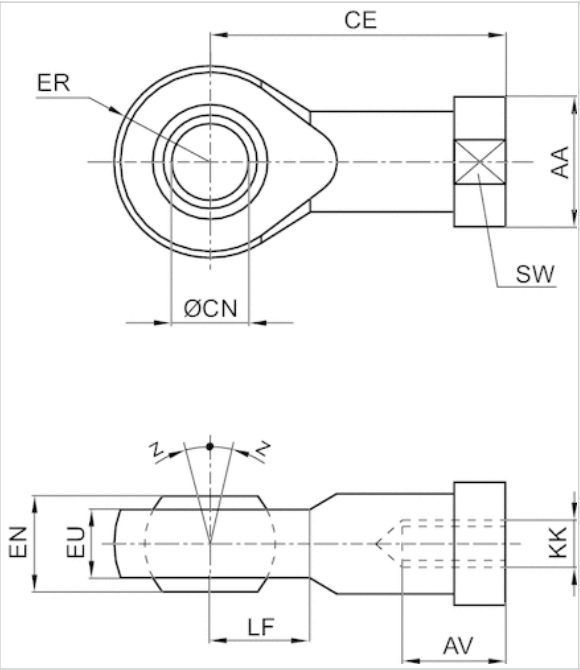
Technical data

Part No.	Suitable piston rod thread	for	Swivel bearing Ø	Weight
8958209032	M10x1,25	CCL-IS CCL-IC SSI CSL-RD ICM ICS-D2	254 mm	0.09 kg
8958209042	M12x1,25	CCL-IS CCL-IC SSI ICS-D2	304.8 mm	0.12 kg
8958209052	M16x1,5	CCL-IS CCL-IC SSI ICS-D2	406.4 mm	0.23 kg
8958209062	M20x1,5	CCL-IS SSI ICS-D2	508 mm	0.41 kg

Technical information

Material	
	Stainless steel

Dimensions



Dimensions

Part No.	KK	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW	Z [°] max.
8958209032	M10x1,25	19	15	43	10	14	14	10.5	14	17	6,5
8958209042	M12x1,25	22	18	50	12	16	16	12	16	19	6,5
8958209052	M16x1,5	27	24	64	16	21	21	15	21	22	7,5
8958209062	M20x1,5	34	30	77	20	25	25	18	25	30	7,5

Check-choke valve, stainless steel, Series CC02-SL

- suitable for use in food processing
- $Q_n 2 \rightarrow 1 = 150-1000 \text{ l/min}$
- direction of throttle $2 \rightarrow 1$
- exhaust air throttling
- push-in fitting / External thread
- Heat resistant

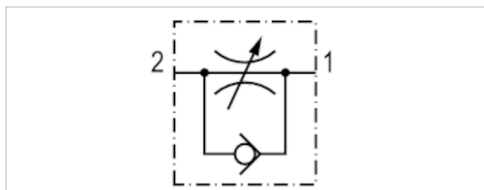


Certificates

Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium

NSF/ANSI 169, FDA conform, EU
Regulation 1935/2004

0.5 ... 10 bar
0 ... 150 °C
0 ... 150 °C
Compressed air



Technical data

Part No.	Port 1	Port 2	Flow	Delivery unit	Fig.
			$Q_n 2 \rightarrow 1$		
R412024740	Ø 6	G 1/4	370 l/min	1 piece	Fig. 5
R412024741	Ø 8	G 1/4	420 l/min	1 piece	Fig. 6
R412024742	Ø 10	G 3/8	1000 l/min	1 piece	Fig. 7
R412024737	Ø 4	G 1/8	150 l/min	1 piece	Fig. 2
R412024738	Ø 6	G 1/8	190 l/min	1 piece	Fig. 3
R412024739	Ø 8	G 1/8	200 l/min	1 piece	Fig. 4

Nominal flow Q_n at 6 bar and $\Delta p = 1 \text{ bar}$

Technical information

Materials according to AISI/FDA:

Housing ► Stainless steel AISI 316L (1.4404)

Flow control screw ► Stainless steel AISI 316L (1.4404)

Seal ► FKM (FDA-compliant)

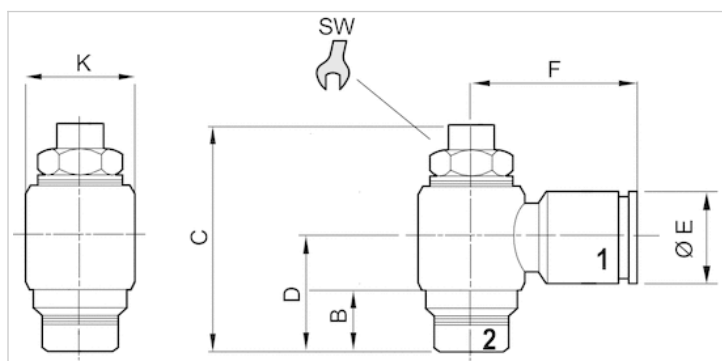
Stainless steel connection ► AISI 316L (1.4404)

Technical information

Material	
Housing	Stainless steel
Flow control screw	Stainless steel
Seals	Fluorocautchouc

Dimensions

Dimensions

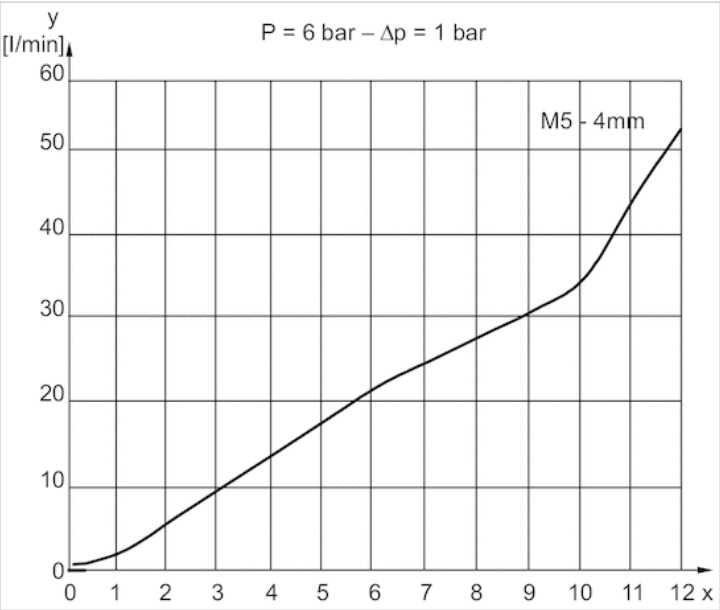


Dimensions

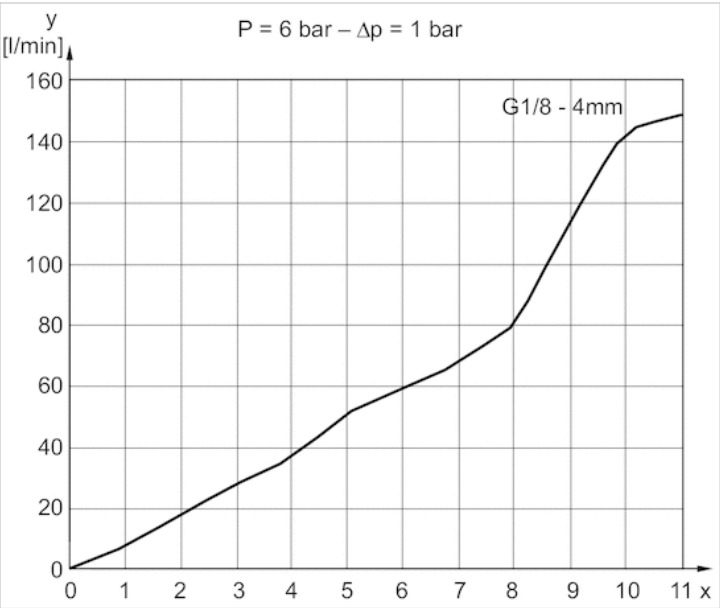
Part No.	Port 1	Port 2	B	C	D	ØE	F	ØK	SW
R412024740	Ø 6	G 1/4	6.5	40	17.5	12	23.5	17	10
R412024741	Ø 8	G 1/4	6.5	40	17.5	14	24	17	10
R412024742	Ø 10	G 3/8	9	52	22	16	28	22	14
R412024737	Ø 4	G 1/8	5	32	15.5	9	19.5	14	9
R412024738	Ø 6	G 1/8	5	32	15.5	12	22	14	9
R412024739	Ø 8	G 1/8	5	32	15.5	14	22.5	14	9

Diagrams

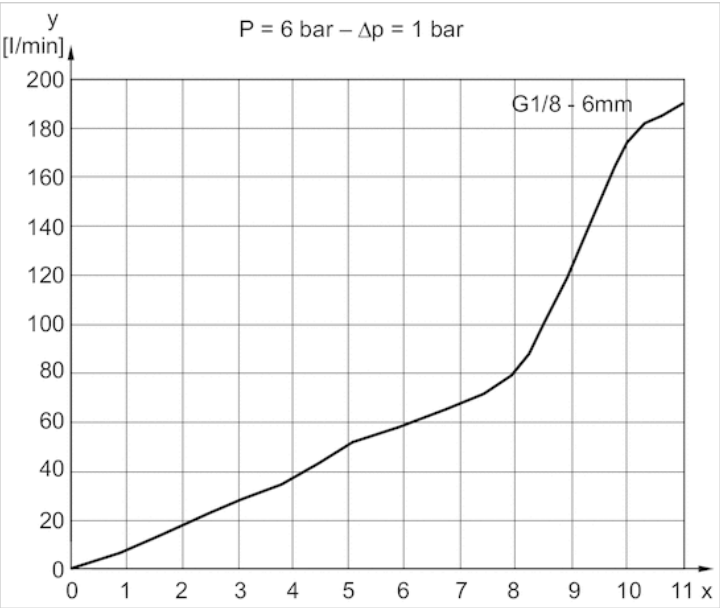
Flow diagram, Fig. 1



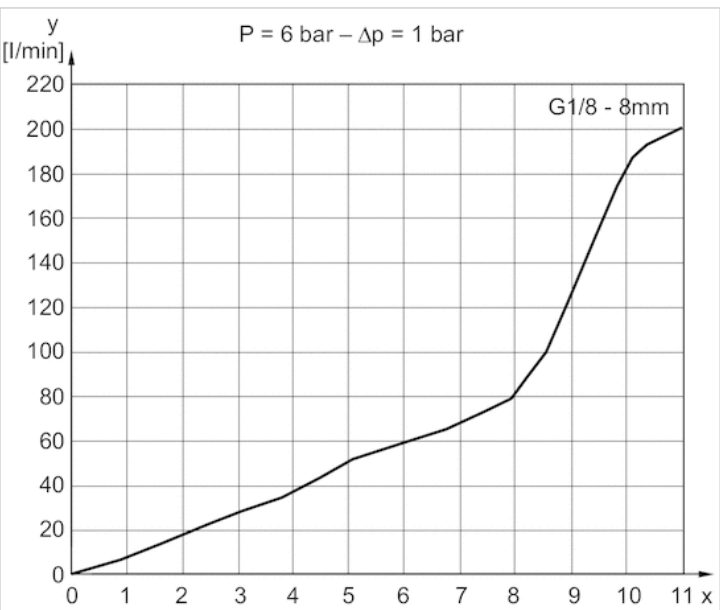
Flow diagram, Fig. 2



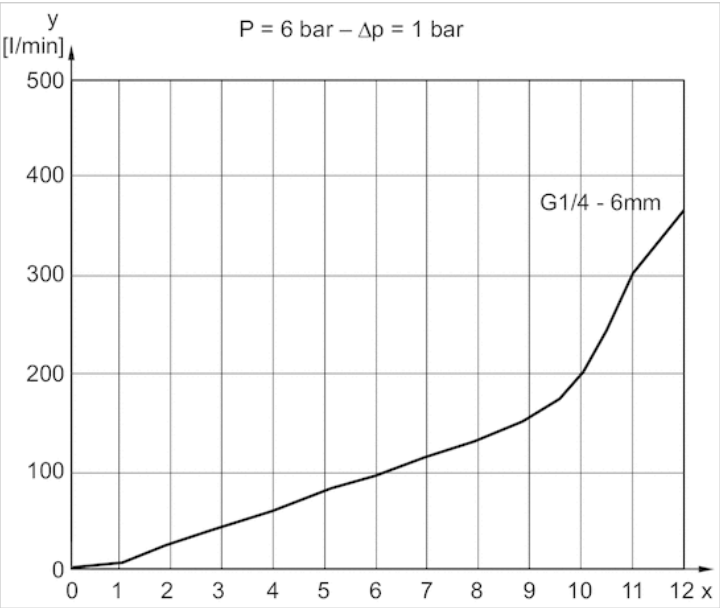
Flow diagram, Fig. 3



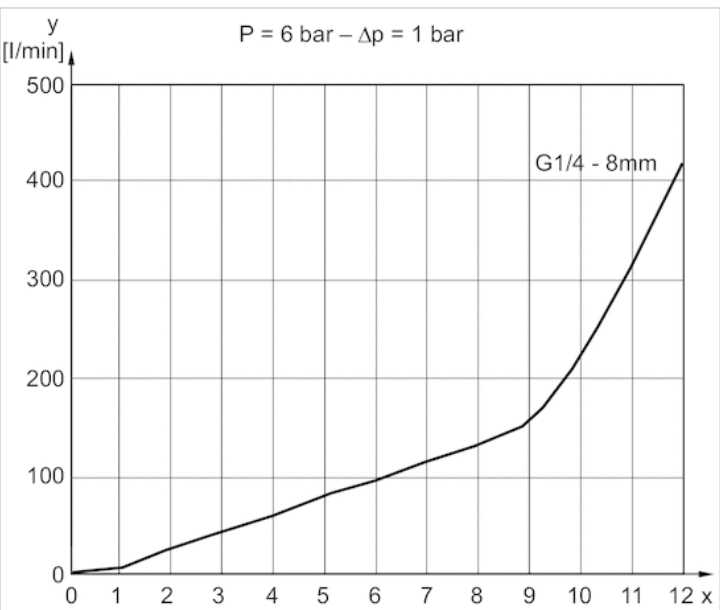
Flow diagram, Fig. 4



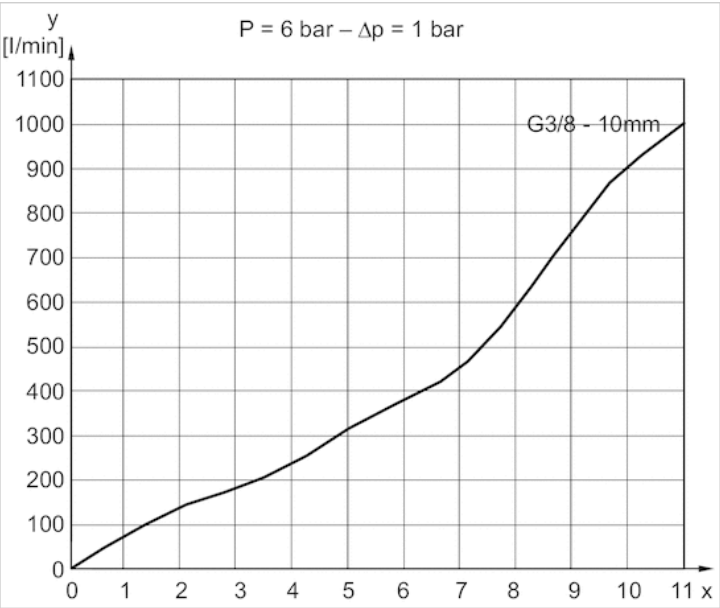
Flow diagram, Fig. 5



Flow diagram, Fig. 6



Flow diagram, Fig. 7



Check-choke valve, stainless steel, Series CC02-SL

- $Q_n 1 \rightarrow 2 = 150-1000 \text{ l/min}$
- direction of throttle $1 \rightarrow 2$
- inlet-side throttling
- push-in fitting / External thread
- Heat resistant



Working pressure min./max.

0.5 ... 10 bar

Ambient temperature min./max.

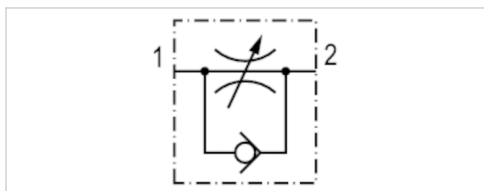
0 ... 150 °C

Medium temperature min./max.

0 ... 150 °C

Medium

Compressed air



Technical data

Part No.	Port 1	Port 2	Flow	Delivery unit	Fig.
			$Q_n 1 \rightarrow 2$		
R412024751	Ø 6	G 1/4	370 l/min	1 piece	Fig. 3
R412024752	Ø 8	G 1/4	420 l/min	1 piece	Fig. 4
R412024753	Ø 10	G 3/8	1000 l/min	1 piece	Fig. 5
R412024749	Ø 4	G 1/8	150 l/min	1 piece	Fig. 1
R412024750	Ø 6	G 1/8	190 l/min	1 piece	Fig. 2

Nominal flow Q_n at 6 bar and $\Delta p = 1 \text{ bar}$

Technical information

Materials according to AISI/FDA:

Housing ▶ Stainless steel AISI 316L (1.4404)

Flow control screw ▶ Stainless steel AISI 316L (1.4404)

Seal ▶ FKM (FDA-compliant)

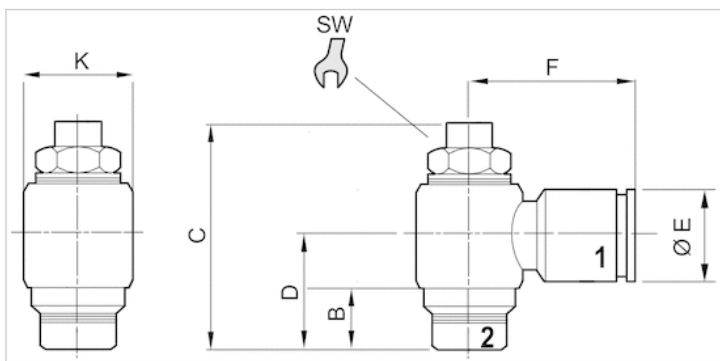
Stainless steel connection ▶ AISI 316L (1.4404)

Technical information

Material	
Housing	Stainless steel
Flow control screw	Stainless steel
Seals	Fluorocaoutchouc

Dimensions

Dimensions

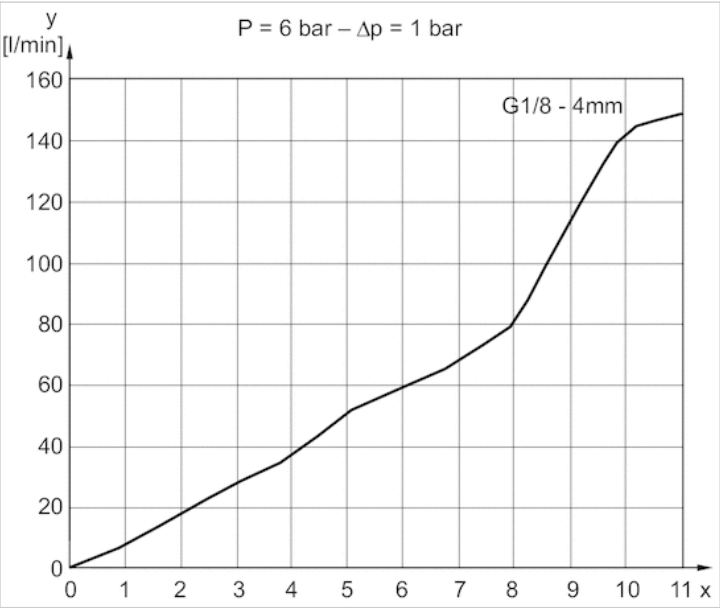


Dimensions

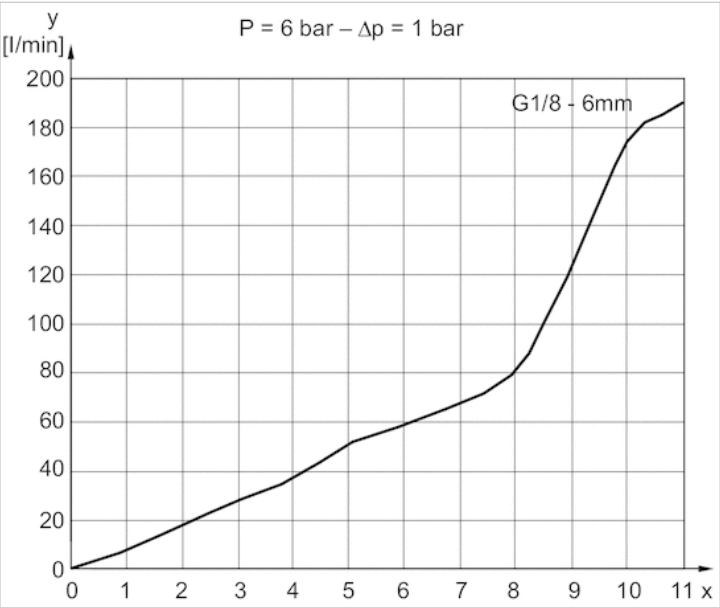
Part No.	Port 1	Port 2	B	C	D	ØE	F	ØK	SW
R412024751	Ø 6	G 1/4	6.5	40	17.5	12	23.5	17	10
R412024752	Ø 8	G 1/4	6.5	40	17.5	14	24	17	10
R412024753	Ø 10	G 3/8	9	52	22	16	28	22	14
R412024749	Ø 4	G 1/8	5	32	15.5	9	19.5	14	9
R412024750	Ø 6	G 1/8	5	32	15.5	12	22	14	9

Diagrams

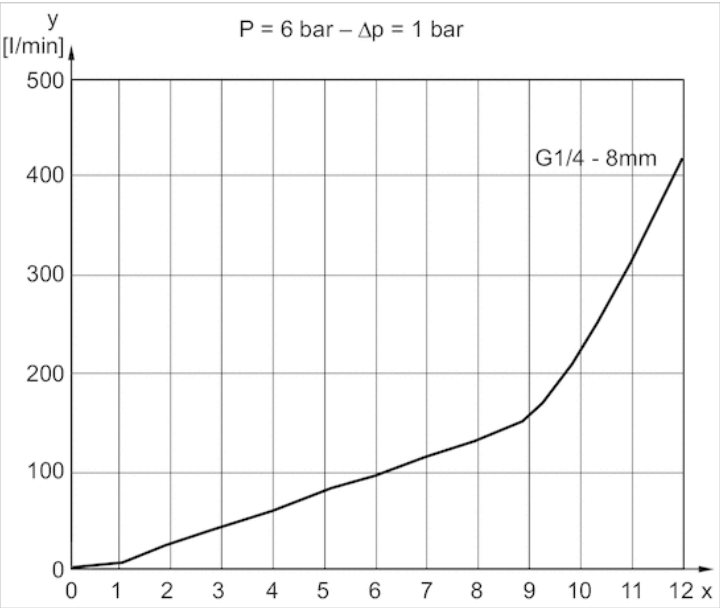
Flow diagram, Fig. 1



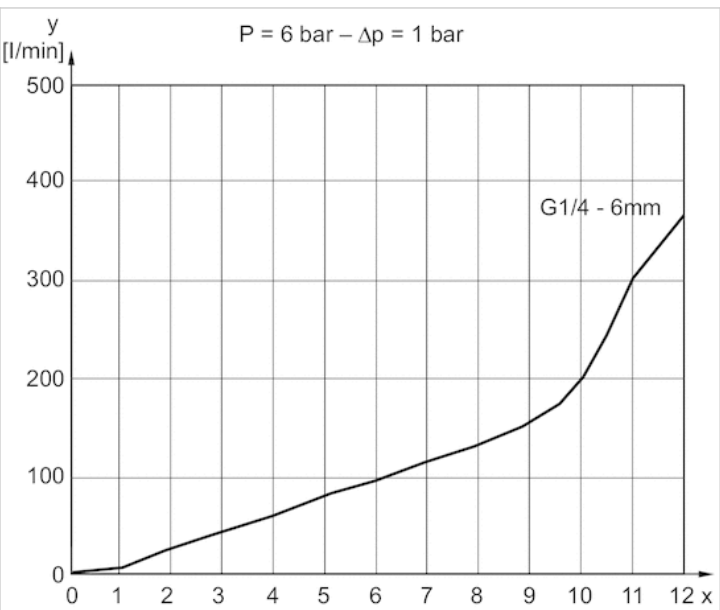
Flow diagram, Fig. 3



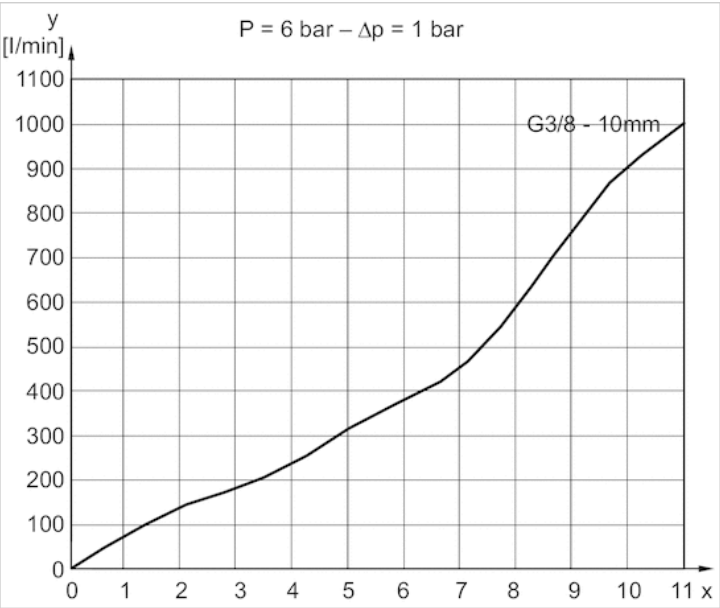
Flow diagram, Fig. 4



Flow diagram, Fig. 5

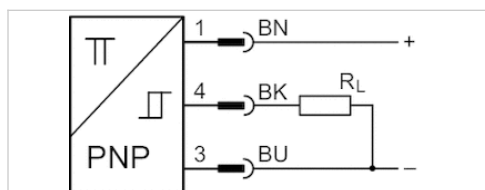


Flow diagram, Fig. 5



Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 3-pin
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates

ATEX class G	ATEX, CE declaration of conformity, cULus, RoHS
ATEX class D	II 3G Ex nA IIC T4 Gc X
Ambient temperature min./max.	II 3D Ex tc IIIC T135°C Dc X
Protection class	-20 ... 50 °C
Switching point precision	IP67
Quiescent current (without load)	±0,1 mT
Min./max. DC operating voltage	10 mA
Switching logic	10 ... 30 V DC
LED status display	NO (make contact)
Vibration resistance	Yellow
Shock resistance	10 - 55 Hz, 1 mm
Cable length L	30 g / 11 ms
	3 5 m

Technical data

Part No.	for	Type of contact	Cable length L
R412022854	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP	3 m
R412022856	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP	5 m

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022854	≤ 2,5 V	0.1 A
R412022856	≤ 2,5 V	0.1 A

Part No.	Max. switching frequency
R412022854	1000 Hz
R412022856	1000 Hz

Part No.	Version
R412022854	short circuit resistant Protected against polarity reversal

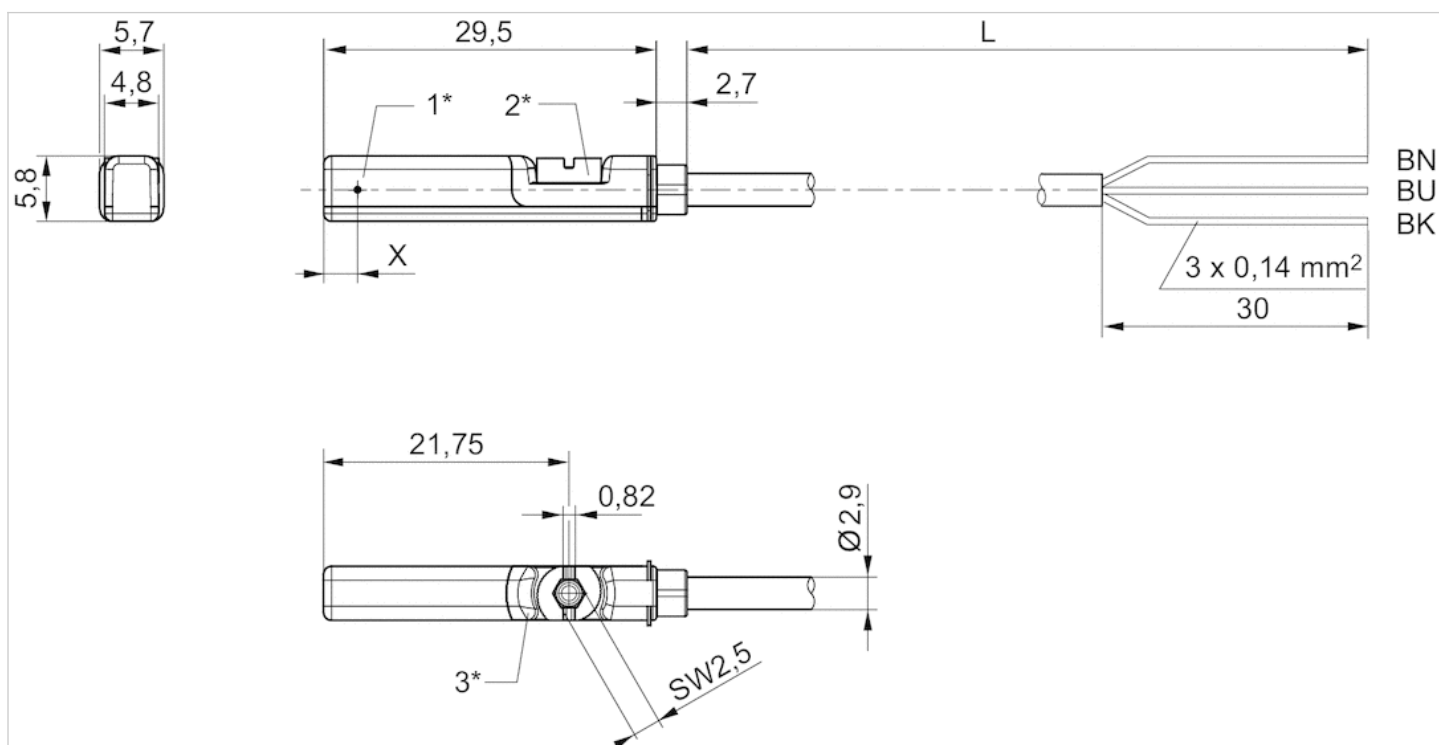
Part No.	Version
R412022856	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

BN = brown, BK = black, BU = blue

X = electronic: 11.6 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 2-pin open cable ends, 3-pin
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65, IP67, IP69K
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Cable length L	3 5 10 m

Technical data

Part No.		for	Type of contact
R412022866		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412027170		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022869		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022870		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022871		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022853		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022855		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022857		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022849		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic NPN
R412022850		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic NPN

Part No.	Cable length L	Min./max. DC operating voltage	Min./max. AC operating voltage
R412022866	3 m	10 ... 230 V DC	10 ... 230 V AC
R412027170	5 m	10 ... 230 V DC	10 ... 230 V AC
R412022869	3 m	10 ... 30 V DC	10 ... 30 V AC
R412022870	5 m	10 ... 30 V DC	10 ... 30 V AC
R412022871	10 m	10 ... 30 V DC	10 ... 30 V AC
R412022853	3 m	10 ... 30 V DC	-
R412022855	5 m	10 ... 30 V DC	-
R412022857	10 m	10 ... 30 V DC	-
R412022849	3 m	10 ... 30 V DC	-
R412022850	5 m	10 ... 30 V DC	-

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022866	≤ 3,5 V	0.13 A
R412027170	≤ 3,5 V	0.13 A
R412022869	I*Rs	0.3 A
R412022870	≤ 0,1 V	0.3 A
R412022871	I*Rs	0.3 A
R412022853	≤ 2,5 V	0.13 A
R412022855	≤ 2,5 V	0.13 A
R412022857	≤ 2,5 V	0.13 A
R412022849	≤ 2,5 V	0.13 A
R412022850	≤ 2,5 V	0.13 A

Part No.	AC switching current, max.	Switching capacity
R412022866	0.13 A	Reed, 2-pin: max. 10 W
R412027170	0.13 A	Reed, 2-pin: max. 10 W
R412022869	0.5 A	Reed, 3-pin: max. 6 W
R412022870	0.5 A	Reed, 3-pin: max. 6 W
R412022871	0.5 A	Reed, 3-pin: max. 6 W

Part No.	AC switching current, max.	Switching capacity
R412022853	-	-
R412022855	-	-
R412022857	-	-
R412022849	-	-
R412022850	-	-

Part No.	Max. switching frequency	Operating current, not switched
R412022866	400 Hz	-
R412027170	400 Hz	-
R412022869	400 Hz	-
R412022870	400 Hz	-
R412022871	400 Hz	-
R412022853	1000 Hz	8 mA
R412022855	1000 Hz	8 mA
R412022857	1000 Hz	8 mA
R412022849	1000 Hz	8 mA
R412022850	1000 Hz	8 mA

Part No.	Operating current, switched
R412022866	-
R412027170	-
R412022869	-
R412022870	-
R412022871	-
R412022853	30 mA
R412022855	30 mA
R412022857	30 mA
R412022849	30 mA
R412022850	30 mA

Part No.	Version	Fig.	
R412022866	Protected against polarity reversal	Fig. 1	1)
R412027170	Protected against polarity reversal	Fig. 1	1)
R412022869	Protected against polarity reversal	Fig. 2	2)
R412022870	Protected against polarity reversal	Fig. 2	2)
R412022871	Protected against polarity reversal	Fig. 2	2)
R412022853	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022855	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022857	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022849	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022850	short circuit resistant Protected against polarity reversal	Fig. 2	3)

1) open cable ends, 2-pin, The product of operating voltage and continuous current must not exceed the maximum switching capacity.

2) open cable ends, 3-pin, The product of operating voltage and continuous current must not exceed the maximum switching capacity.

3) open cable ends, 3-pin

Technical information

No cULus certification for 230 V variant.

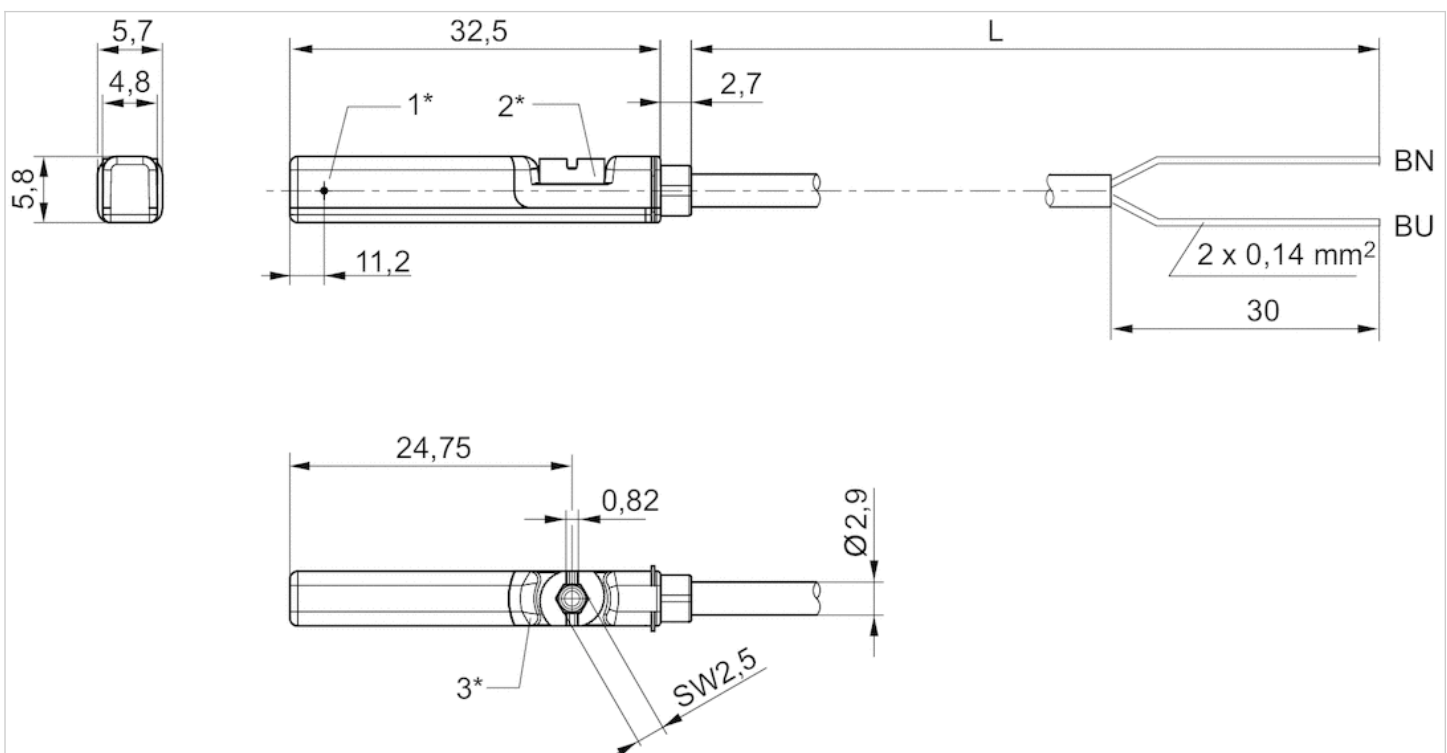
Technical information

Material

Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Fig. 1

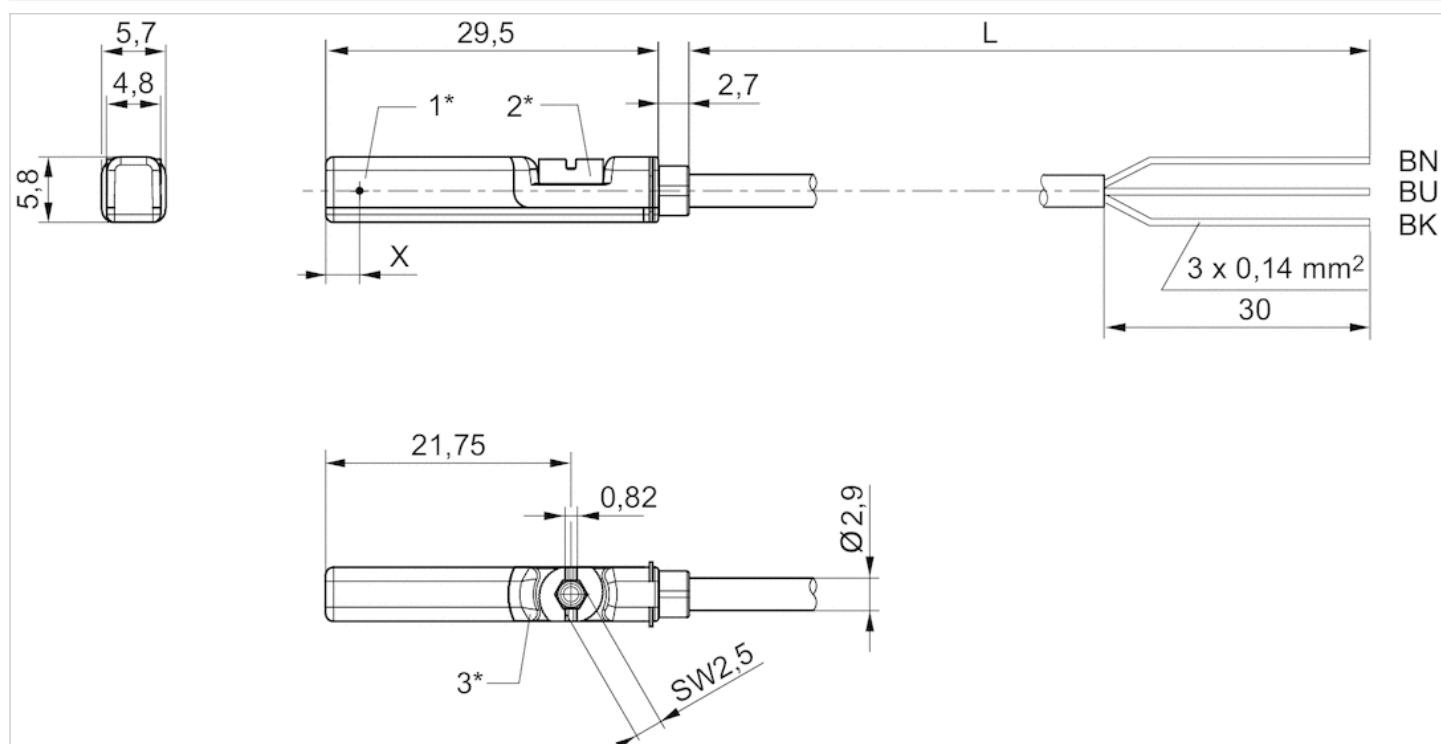


1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

BN=brown, BU=blue

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

BN = brown, BK = black, BU = blue

X = electronic: 11.6 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin Plug, M8, 2-pin
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates

Ambient temperature min./max.

Protection class

Switching point precision

Nominal current, actuated state

Quiescent current (without load)

Min./max. DC operating voltage

Min./max. AC operating voltage

Hysteresis

Switching logic

LED status display

Vibration resistance

Shock resistance

Cable length L

CE declaration of conformity, cULus, RoHS

-30 ... 80 °C

IP65, IP67

±0,1 mT

30 mA

8 mA

10 ... 30 V DC

See table below

≥ 0,2 mT

NO (make contact)

Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

0.3 m

Technical data

Part No.		for	Type of contact
R412022868		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412027172		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022872		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022858		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022851		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic NPN

Part No.	Cable length L	Min./max. AC operating voltage	Voltage drop U at I _{max}
R412022868	0.3 m	10 ... 30 V AC	≤ 3,5 V
R412027172	0.3 m	10 ... 30 V AC	≤ 3,5 V
R412022872	0.3 m	10 ... 30 V AC	≤ 0,1 V
R412022858	0.3 m	-	≤ 2,5 V
R412022851	0.3 m	-	≤ 2,5 V

Part No.	DC switching current, max.	AC switching current, max.
R412022868	0.13 A	0.13 A
R412027172	0.13 A	0.13 A
R412022872	0.3 A	0.5 A
R412022858	0.13 A	-

Part No.	DC switching current, max.	AC switching current, max.
R412022851	0.13 A	-

Part No.	Switching capacity	Max. switching frequency
R412022868	Reed, 2-pin: max. 10 W	400 Hz
R412027172	Reed, 2-pin: max. 10 W	400 Hz
R412022872	Reed, 3-pin: max. 6 W	400 Hz
R412022858	-	1000 Hz
R412022851	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched
R412022868	-	-
R412027172	-	-
R412022872	-	-
R412022858	8 mA	30 mA
R412022851	8 mA	30 mA

Part No.	Version	
R412022868	Protected against polarity reversal	1)
R412027172	Protected against polarity reversal	1)
R412022872	Protected against polarity reversal	1)
R412022858	short circuit resistant Protected against polarity reversal	-
R412022851	short circuit resistant Protected against polarity reversal	-

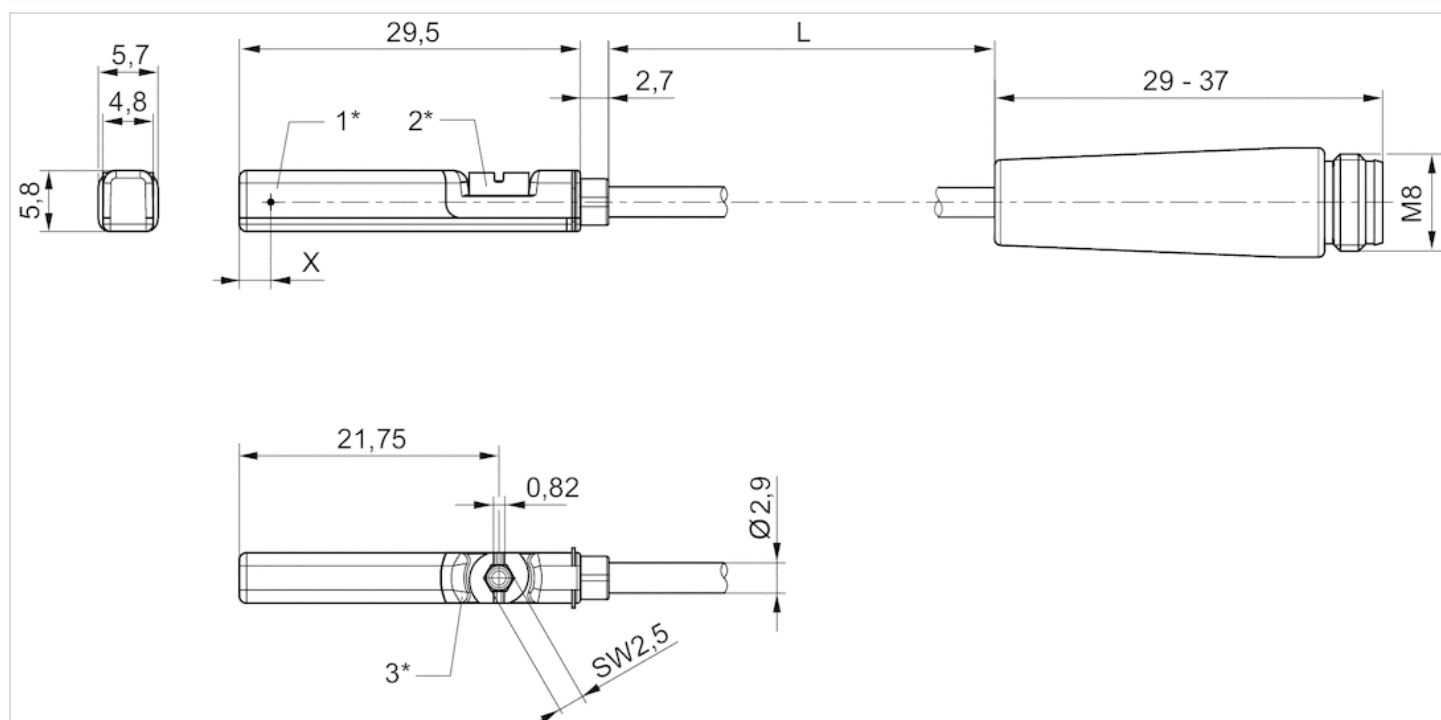
1) The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Dimensions



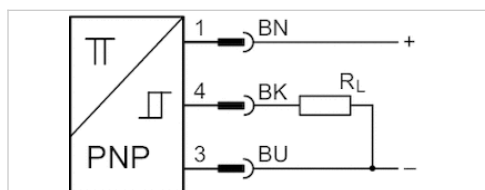
1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

X = electronic: 11,6 mm, Reed: 8,3 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 3-pin, with knurled screw
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates

ATEX class G

ATEX class D

Ambient temperature min./max.

Protection class

Switching point precision

Quiescent current (without load)

Min./max. DC operating voltage

Switching logic

LED status display

Vibration resistance

Shock resistance

Cable length L

ATEX, CE declaration of conformity, cULus, RoHS

II 3G Ex nA IIC T4 Gc X

II 3D Ex tc IIIC T135°C Dc X

-20 ... 50 °C

IP67

±0,1 mT

10 mA

10 ... 30 V DC

NO (make contact)

Yellow Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

0.3 m

Technical data

Part No.	for	Type of contact	Cable length L
R412022864	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP	0.3 m

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022864	≤ 2,5 V	0.1 A

Part No.	Max. switching frequency
R412022864	1000 Hz

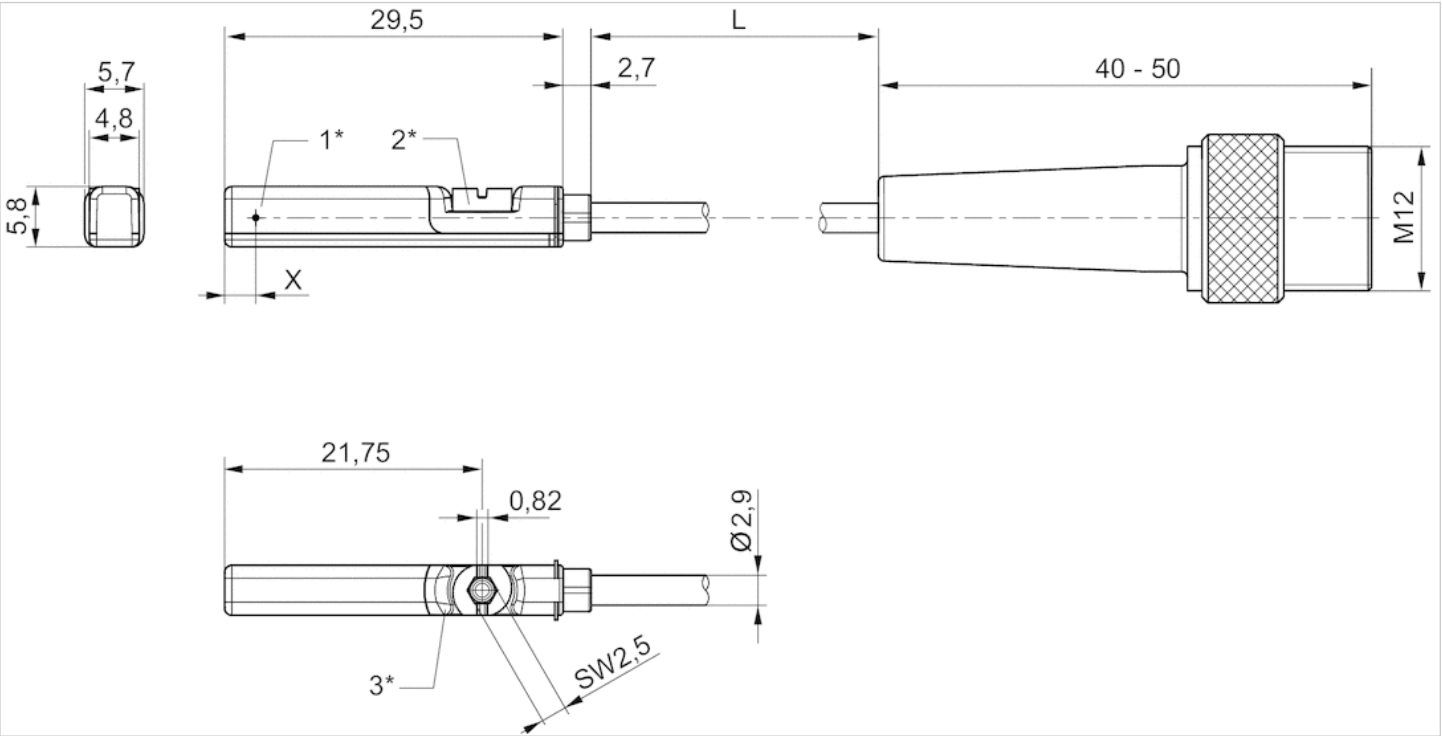
Part No.	Version
R412022864	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 X = PNP: 11,6 mm, reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 2-pin, with knurled screw Plug, M12, 4-pin, with knurled screw
- UL certification
- Reed electronic PNP
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates	CE declaration of conformity, cULus, RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	See table below
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Cable length L	0.3 0.1 3 5 m

Technical data

Part No.		for	Type of contact
R412027171		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022876		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022879		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022863		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022877		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022878		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP

Part No.	Cable length L	Min./max. AC operating voltage	Voltage drop U at I _{max}
R412027171	0.3 m	10 ... 30 V AC	≤ 3,5 V
R412022876	0.3 m	10 ... 30 V AC	≤ 0,1 V
R412022879	0.1 m	-	≤ 2,5 V
R412022863	0.3 m	-	≤ 2,5 V
R412022877	3 m	-	≤ 2,5 V
R412022878	5 m	-	≤ 2,5 V

Part No.	DC switching current, max.	AC switching current, max.
R412027171	0.13 A	0.13 A
R412022876	0.3 A	0.5 A

Part No.	DC switching current, max.	AC switching current, max.
R412022879	0.13 A	-
R412022863	0.13 A	-
R412022877	0.13 A	-
R412022878	0.13 A	-

Part No.	Switching capacity	Max. switching frequency
R412027171	Reed, 2-pin: max. 10 W	400 Hz
R412022876	Reed, 3-pin: max. 6 W	400 Hz
R412022879	-	1000 Hz
R412022863	-	1000 Hz
R412022877	-	1000 Hz
R412022878	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched	Protection class
R412027171	-	-	IP65, IP67
R412022876	-	-	IP65, IP67
R412022879	8 mA	30 mA	IP65, IP67
R412022863	8 mA	30 mA	IP65, IP67, IP69K
R412022877	8 mA	30 mA	IP65, IP67
R412022878	8 mA	30 mA	IP65, IP67

Part No.	Version	
R412027171	Protected against polarity reversal	1)
R412022876	Protected against polarity reversal	1)
R412022879	short circuit resistant Protected against polarity reversal	-
R412022863	short circuit resistant Protected against polarity reversal	-
R412022877	short circuit resistant Protected against polarity reversal	-
R412022878	short circuit resistant Protected against polarity reversal	-

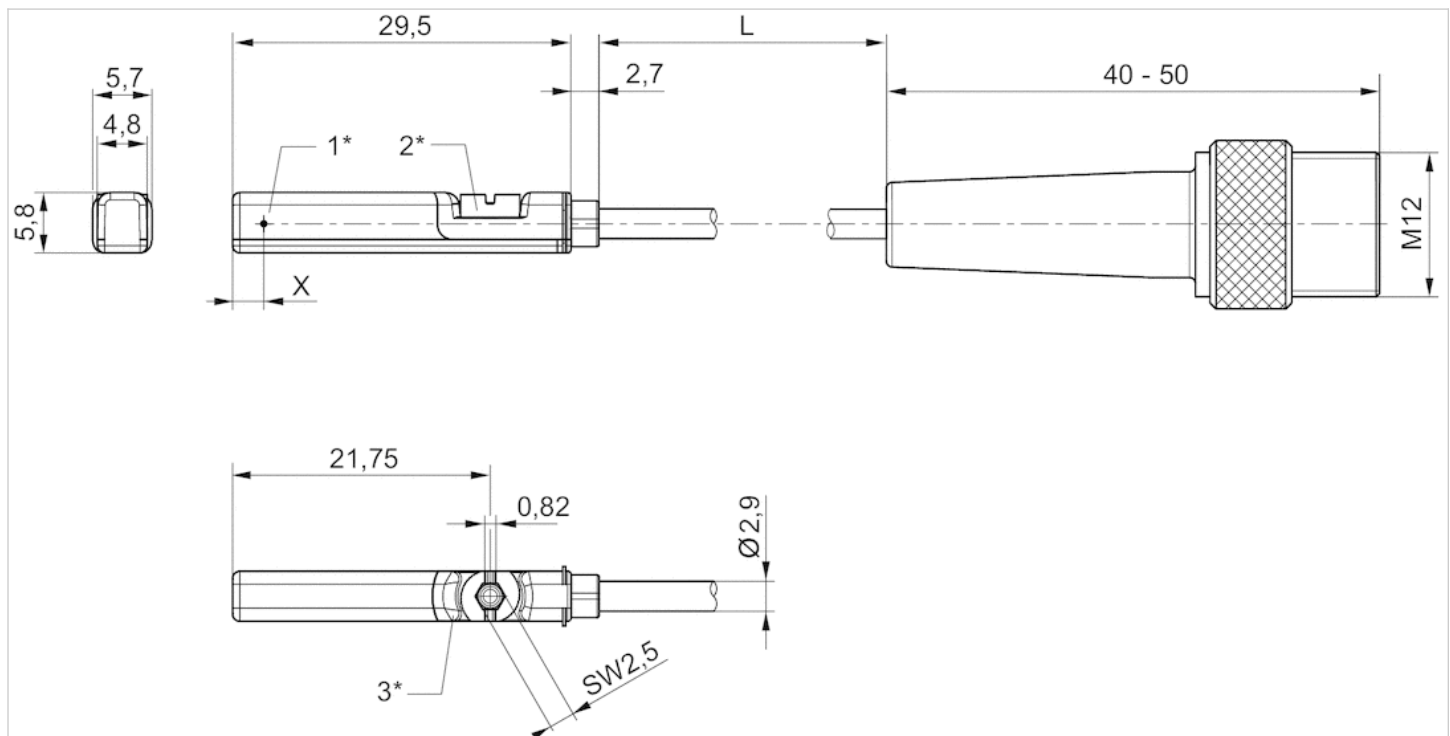
1) The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Dimensions



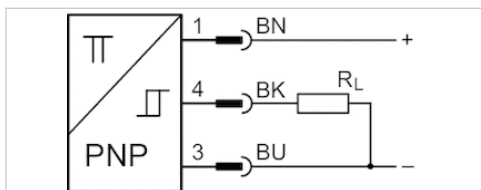
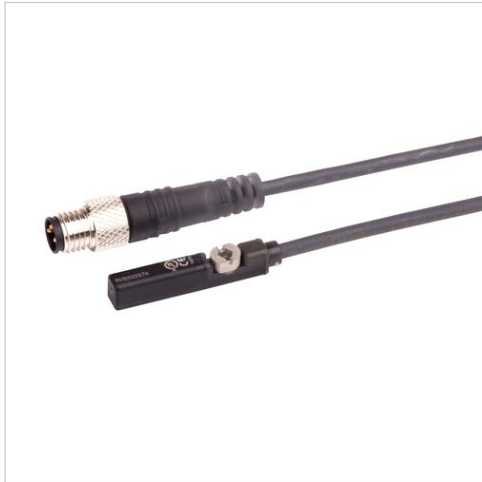
1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

X = PNP: 11,6 mm, reed: 8,3 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates

ATEX class G

ATEX class D

Ambient temperature min./max.

Protection class

Switching point precision

Quiescent current (without load)

Min./max. DC operating voltage

Switching logic

LED status display

Vibration resistance

Shock resistance

Cable length L

ATEX, CE declaration of conformity, cULus, RoHS

II 3G Ex nA IIC T4 Gc X

II 3D Ex tc IIIC T135°C Dc X

-20 ... 50 °C

IP65, IP67

±0,1 mT

10 mA

10 ... 30 V DC

NO (make contact)

Yellow Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

0.3 m

Technical data

Part No.	for	Type of contact	Cable length L
R412022860	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP	0.3 m

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022860	≤ 2,5 V	0.1 A

Part No.	Max. switching frequency
R412022860	1000 Hz

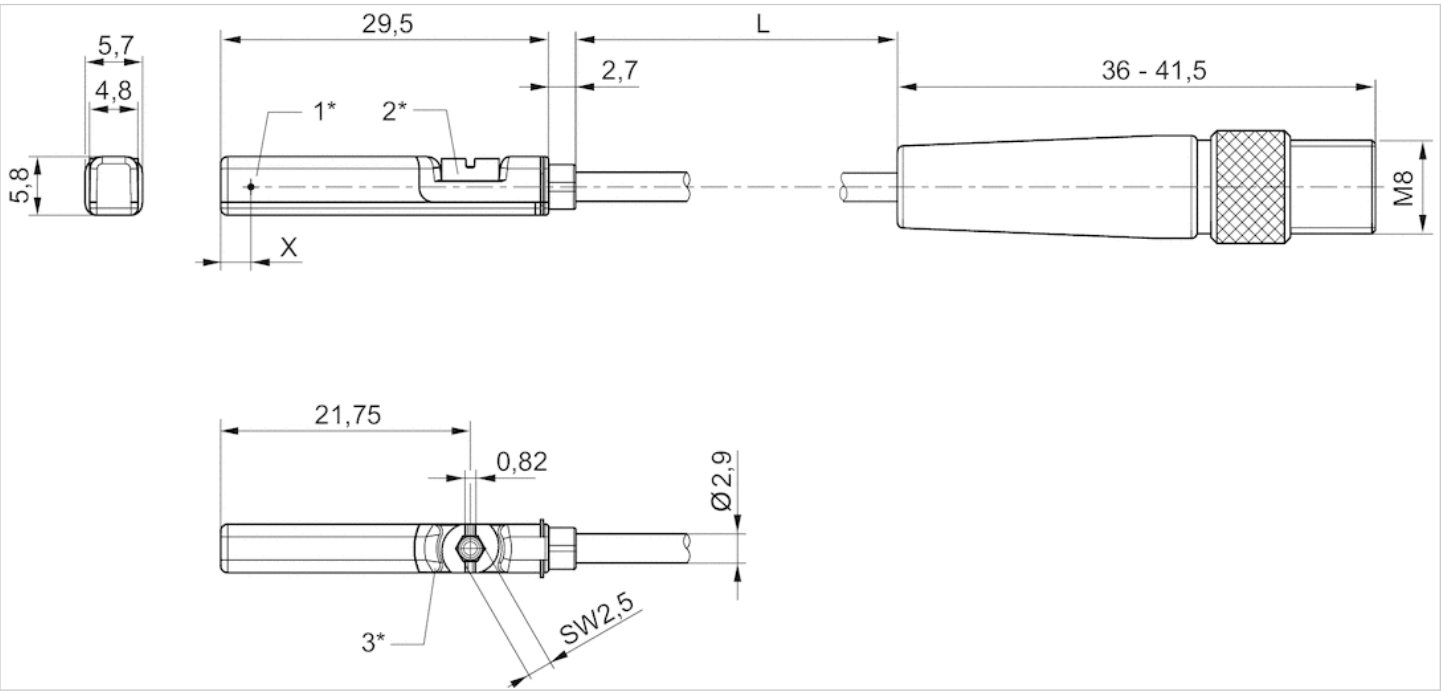
Part No.	Version
R412022860	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

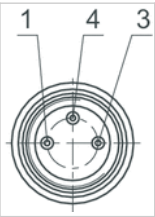
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates	CE declaration of conformity, cULus, RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Cable length L	0.3 0.5 m

Technical data

Part No.		for	Type of contact
R412022873		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022875		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022874		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed
R412022859		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022862		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022861		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP
R412022852		PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic NPN

Part No.	Cable sheath	Cable length L	Min./max. AC operating voltage
R412022873	Polyurethane	0.3 m	10 ... 30 V AC
R412022875	Polyvinyl chloride	0.3 m	10 ... 30 V AC
R412022874	Polyurethane	0.5 m	10 ... 30 V AC
R412022859	Polyurethane	0.3 m	-
R412022862	Polyvinyl chloride	0.3 m	-
R412022861	Polyurethane	0.5 m	-
R412022852	Polyurethane	0.3 m	-

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022873	I*Rs	0.3 A
R412022875	I*Rs	0.3 A
R412022874	I*Rs	0.3 A
R412022859	≤ 2,5 V	0.13 A
R412022862	≤ 2,5 V	0.13 A
R412022861	≤ 2,5 V	0.13 A
R412022852	≤ 2,5 V	0.13 A

Part No.	AC switching current, max.	Max. switching frequency
R412022873	0.5 A	400 Hz
R412022875	0.5 A	400 Hz
R412022874	0.5 A	400 Hz
R412022859	-	1000 Hz
R412022862	-	1000 Hz
R412022861	-	1000 Hz
R412022852	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched
R412022873	-	-
R412022875	-	-
R412022874	-	-
R412022859	8 mA	30 mA
R412022862	8 mA	30 mA
R412022861	8 mA	30 mA
R412022852	8 mA	30 mA

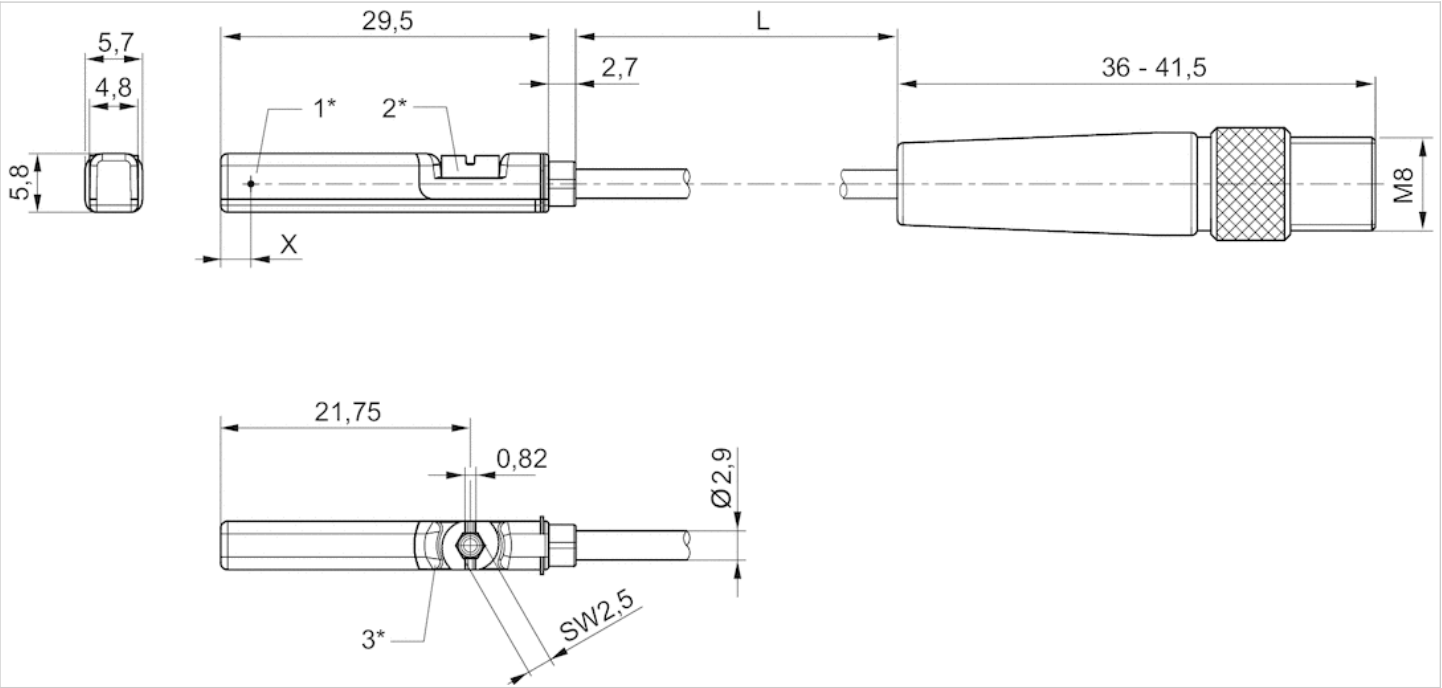
Part No.	Version
R412022873	Protected against polarity reversal
R412022875	Protected against polarity reversal
R412022874	Protected against polarity reversal
R412022859	short circuit resistant Protected against polarity reversal
R412022862	short circuit resistant Protected against polarity reversal
R412022861	short circuit resistant Protected against polarity reversal
R412022852	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane Polyvinyl chloride
Locking screw	Stainless steel

Dimensions

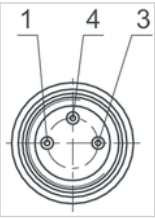
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Series CAT

- Measuring instrument for adjusting the pneumatic cushioning
- for MNI, CSL-RD, CCL-IS, ICS, RPC, PRA/TRB, ITS



Certificates	CE declaration of conformity
Ambient temperature min./max.	0 ... 40 °C
Measurement range Min.	0.2 m/s
Measurement range Max.	2 m/s
LED status display	Green Yellow Red
Protection class	IP50
Weight	0.12 kg

Technical data

Part No.	for series
R412026160	MNI, CSL-RD, CCL-IS, ICS, RPC, PRA/TRB, ITS

Scope of delivery: 1 measuring instrument, 2 fastening strips, 1 power pack 3.7 V, 1 USB charging cable, Operating instructions, QR code notice, 1 case with foam inlay

Technical information

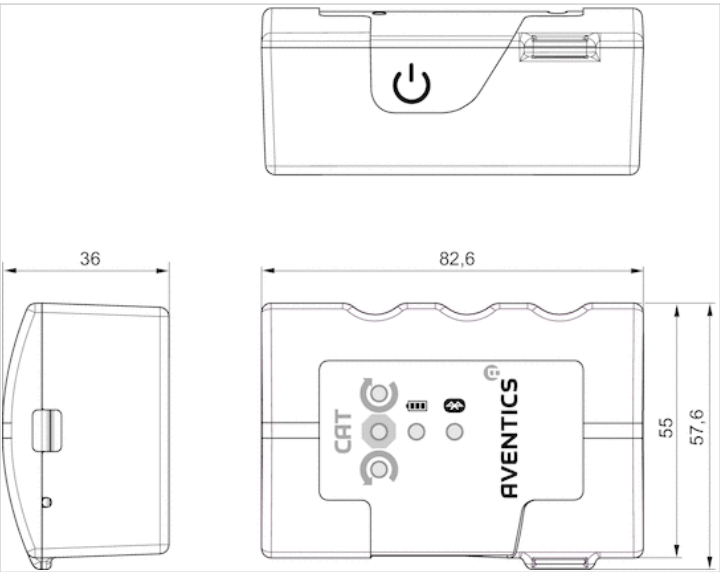
The CAT measuring instrument uses Bluetooth radio technology for wireless connection with the "Aventics" app, which is available free of charge in the Android/Play Store and/or the IOS/App Store.

Technical information

Material	
Housing	Luran S

Dimensions

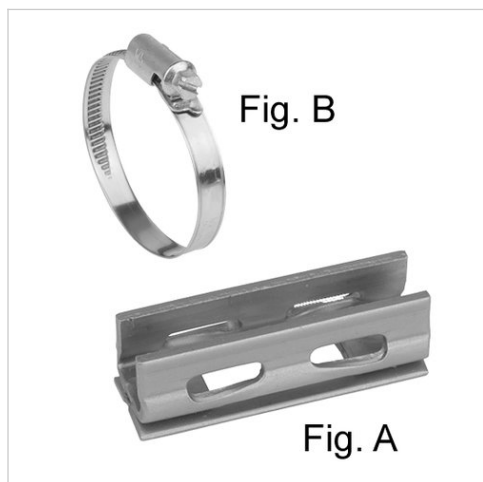
Dimensions



Sensor mounting, Series CB1

- for series ST6

- to mount on cylinder CSL-RD, ICM, ICS-D1, ICS-D2, RPC



Weight

See table below

Technical data

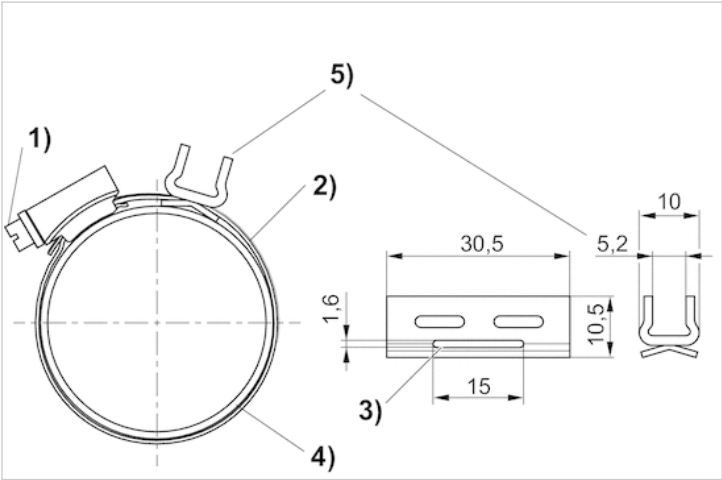
Part No.	Cylinders Ø	Cylinders Ø	for series	Weight	Fig.
	min.	max.			
R412024050	25 mm	32 mm	ST6	-	Fig. B
R412024051	40 mm	40 mm	ST6	-	Fig. B
R412024052	50 mm	50 mm	ST6	-	Fig. B
R412024053	63 mm	63 mm	ST6	-	Fig. B
R412024054	25 mm	63 mm	ST6	0.011 kg	Fig. A

Sensor holder (Fig. A) and tightening strap (Fig. B) must be ordered separately.

Technical information

Material	
	Stainless steel

Dimensions



1) Mounting screw 2) Tightening strap 3) Opening for tightening strap 4) Cylinder tube 5) Sensor holder

Dimensions

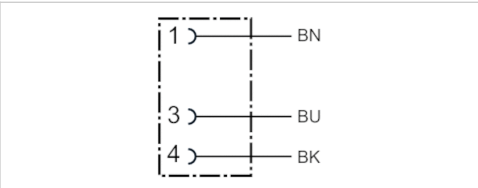
Part No.	Cylinder tube Ø	For series	Fig.
R412024050	25 40 mm	ST6	Fig. B
R412024051	32 50 mm	ST6	Fig. B
R412024052	40 60 mm	ST6	Fig. B
R412024053	50 70 mm	ST6	Fig. B
R412024054	-	ST6	Fig. A

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



Ambient temperature min./max.	-25 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.24 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484166	4 A	3	4.5 mm	3 m	UL (Underwriters Laboratories)	0.087 kg
1834484168	4 A	3	4.5 mm	5 m	UL (Underwriters Laboratories)	0.141 kg
1834484247	4 A	3	4.5 mm	10 m	UL (Underwriters Laboratories)	0.277 kg

Technical information

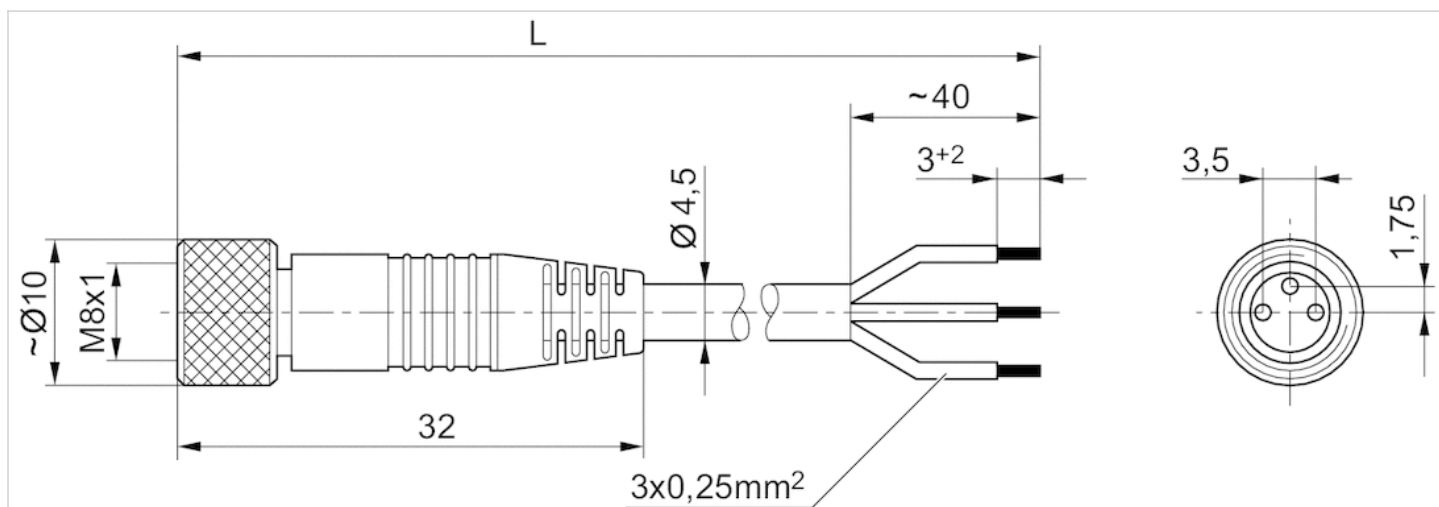
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

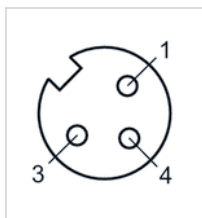
Dimensions



L = length

Pin assignments

Pin assignment, socket



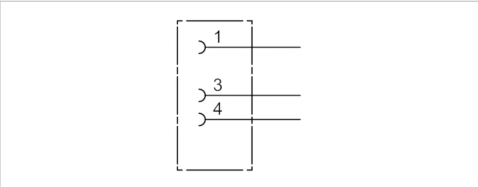
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



Connection type	Soldering
Ambient temperature min./max.	-25 ... 80 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.009 kg



Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484173	4 A	3.5 / 5 mm

Technical information

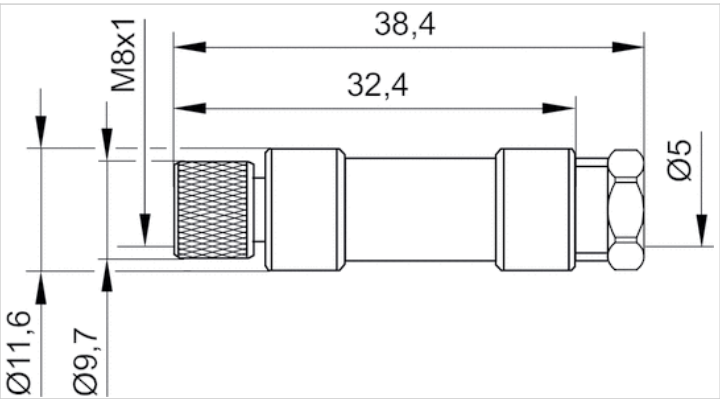
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

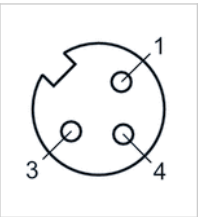
Dimensions

Dimensions



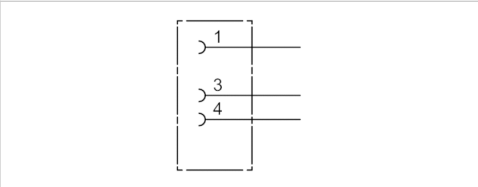
Pin assignments

Pin assignment, socket



Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, angled, 90°
- UL (Underwriters Laboratories)
- unshielded



Connection type	Soldering
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.01 kg

Technical data

Part No.	Max. current	Contact assignment	suitable cable-Ø min./max
1834484174	4 A	3	3.5 / 5 mm

Technical information

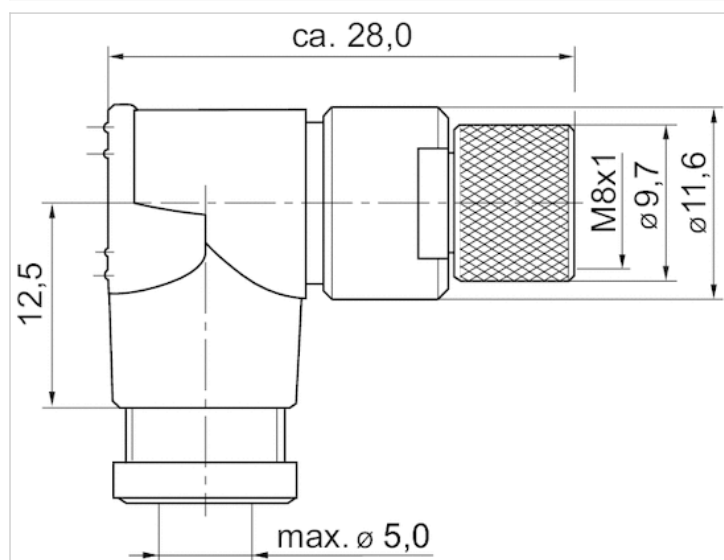
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

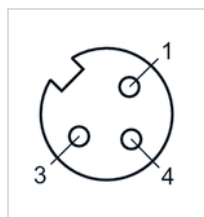
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

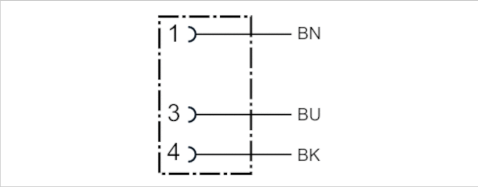


Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.24 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484167	4 A	3	4.5 mm	3 m	0.087 kg
1834484169	4 A	3	4.5 mm	5 m	0.139 kg
1834484248	4 A	3	4.5 mm	10 m	0.279 kg

Technical information

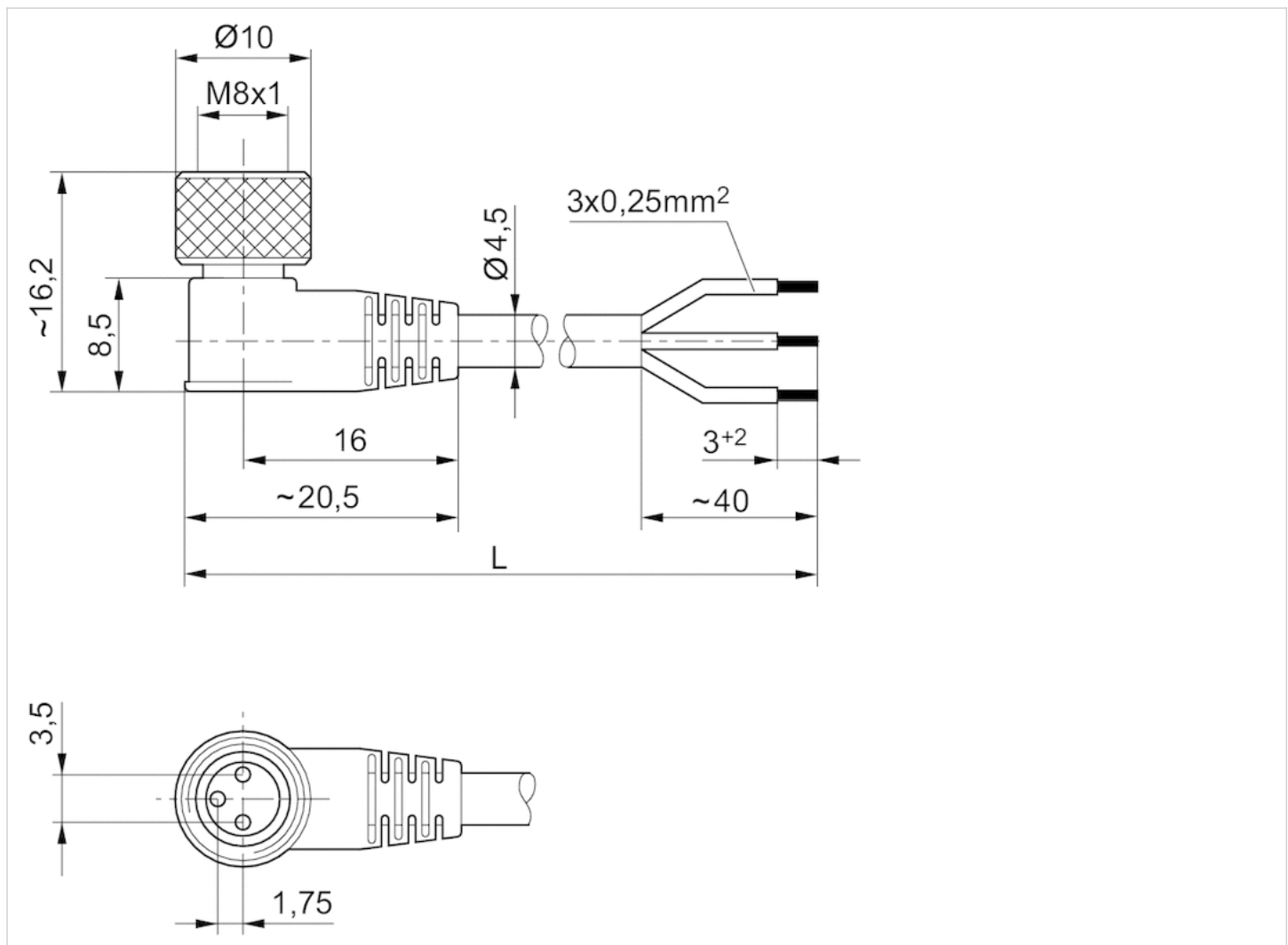
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

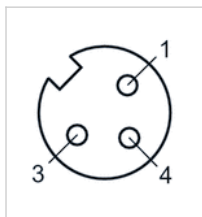
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Silencers, series SI1

- G 1/8 G 1/4 G 3/8 G 1/2

- Stainless steel



Working pressure min./max.

0 ... 12 bar

Ambient temperature min./max.

-20 ... 150 °C

Medium

Compressed air

Sound pressure level

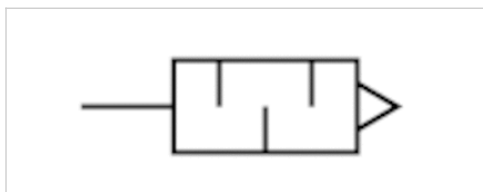
See table below

Weight

See table below

Comment

Flow characteristic curves can be found under "Diagrams".



Technical data

Part No.	Compressed air connection	Sound pressure level	Flow	Delivery unit	Weight
			Qn		
R412010081	G 1/8	90 dB	1312 l/min	1 piece	0.011 kg
R412010082	G 1/4	93 dB	1852 l/min	1 piece	0.021 kg
R412010083	G 3/8	101 dB	2678 l/min	1 piece	0.028 kg
R412010084	G 1/2	95 dB	5649 l/min	1 piece	0.048 kg

Weight per piece

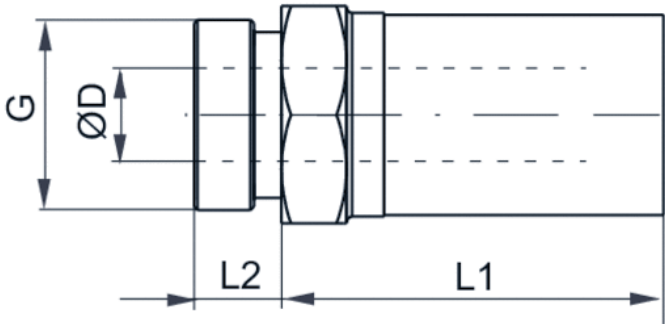
Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Technical information

Material	
Silencer	Stainless steel
Thread	Stainless steel

Dimensions

Dimensions

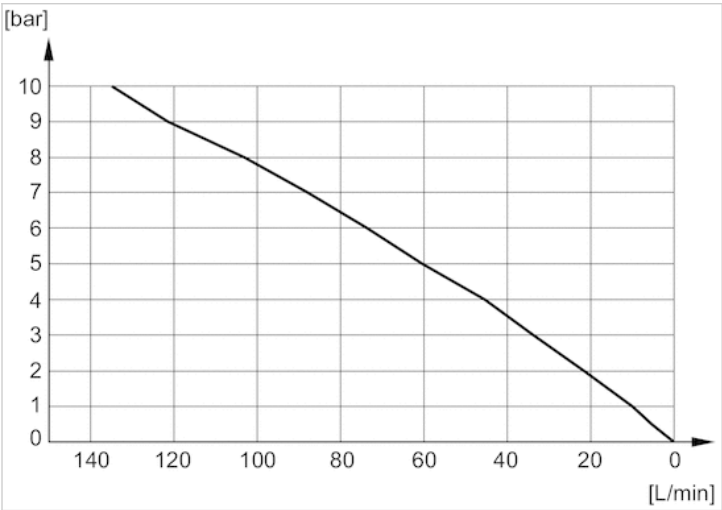


Dimensions

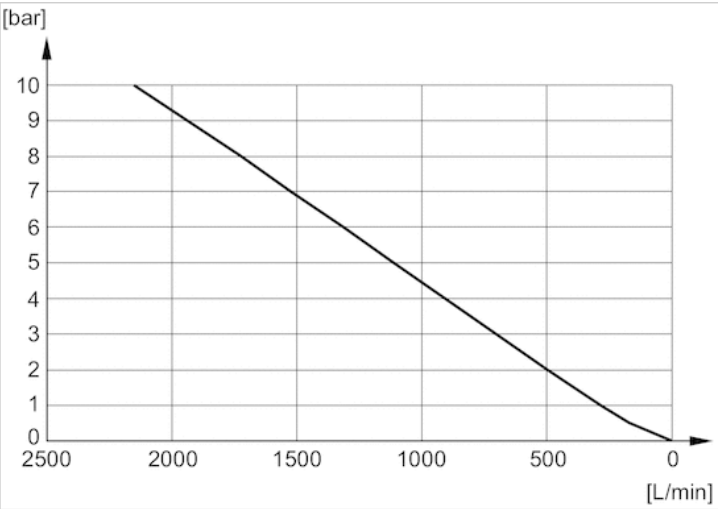
Part No.	Port G	SW	Ø D	L1	L2
R412010081	G 1/8	13	6.6	20	6
R412010082	G 1/4	16	8.6	29.5	7.5
R412010083	G 3/8	19	12.1	33.5	7.5
R412010084	G 1/2	24	15.3	39.5	9.5

Diagrams

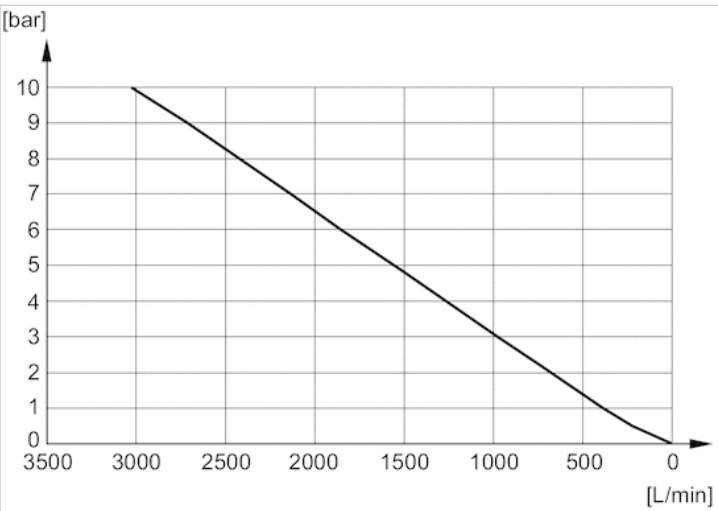
Flow diagram, R412010090



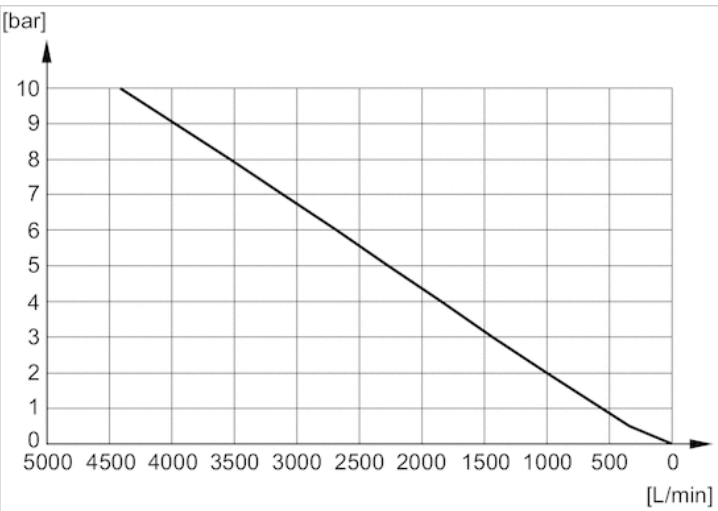
Flow diagram, R412010081



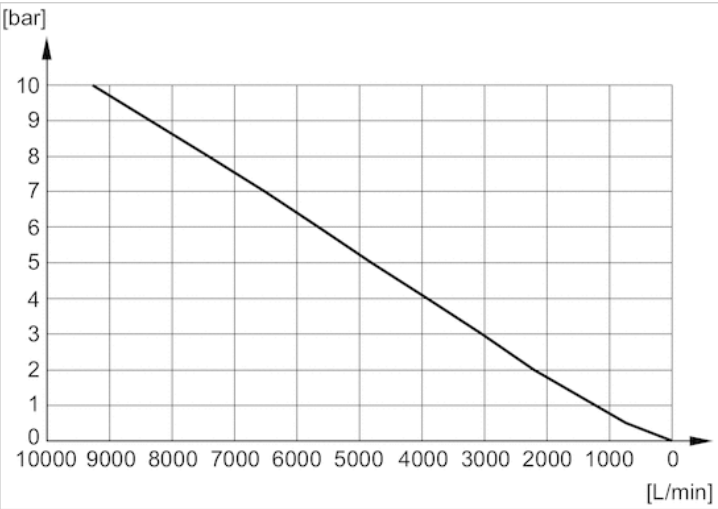
Flow diagram, R412010082



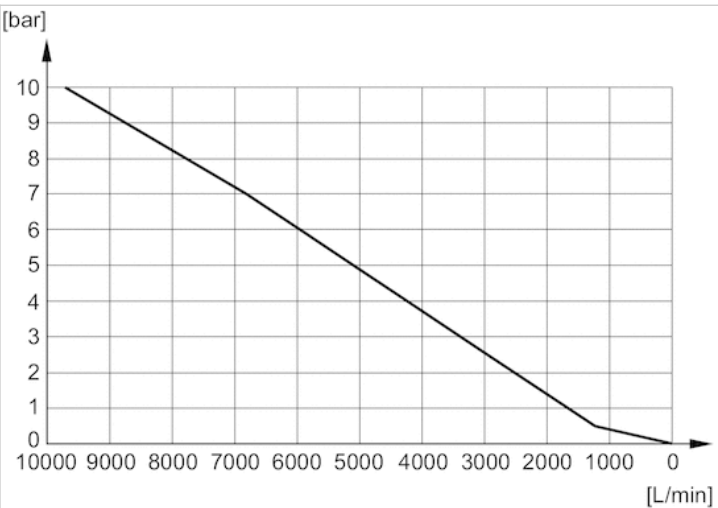
Flow diagram, R412010083



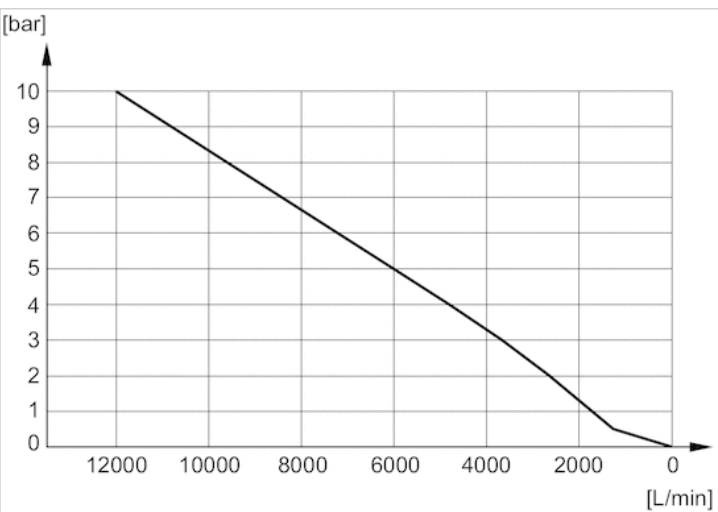
Flow diagram, R412010084



Flow diagram, R412010085



Flow diagram, R412010086



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