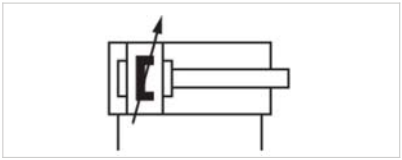
Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- Piston rod External thread
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627295	R480627367	R480627451	R480627463
50	R480627296	R480627368	R480627452	R480630857
80	R480627297	R480627369	R480627453	R480627465
100	R480627298	R480627370	R480627454	R480627466
125	R480627299	R480627371	R480627455	R480627467
160	R480627300	R480627372	R480627456	R480627468
200	R480627301	R480627373	R480627457	R480627469
250	R480627302	R480627374	R480627458	R480627470
320	R480627303	R480627375	R480627459	R480627471
400	R480627304	R480627376	R480627460	R480627472
500	R480627305	R480627377	R480627461	R480627473

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 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

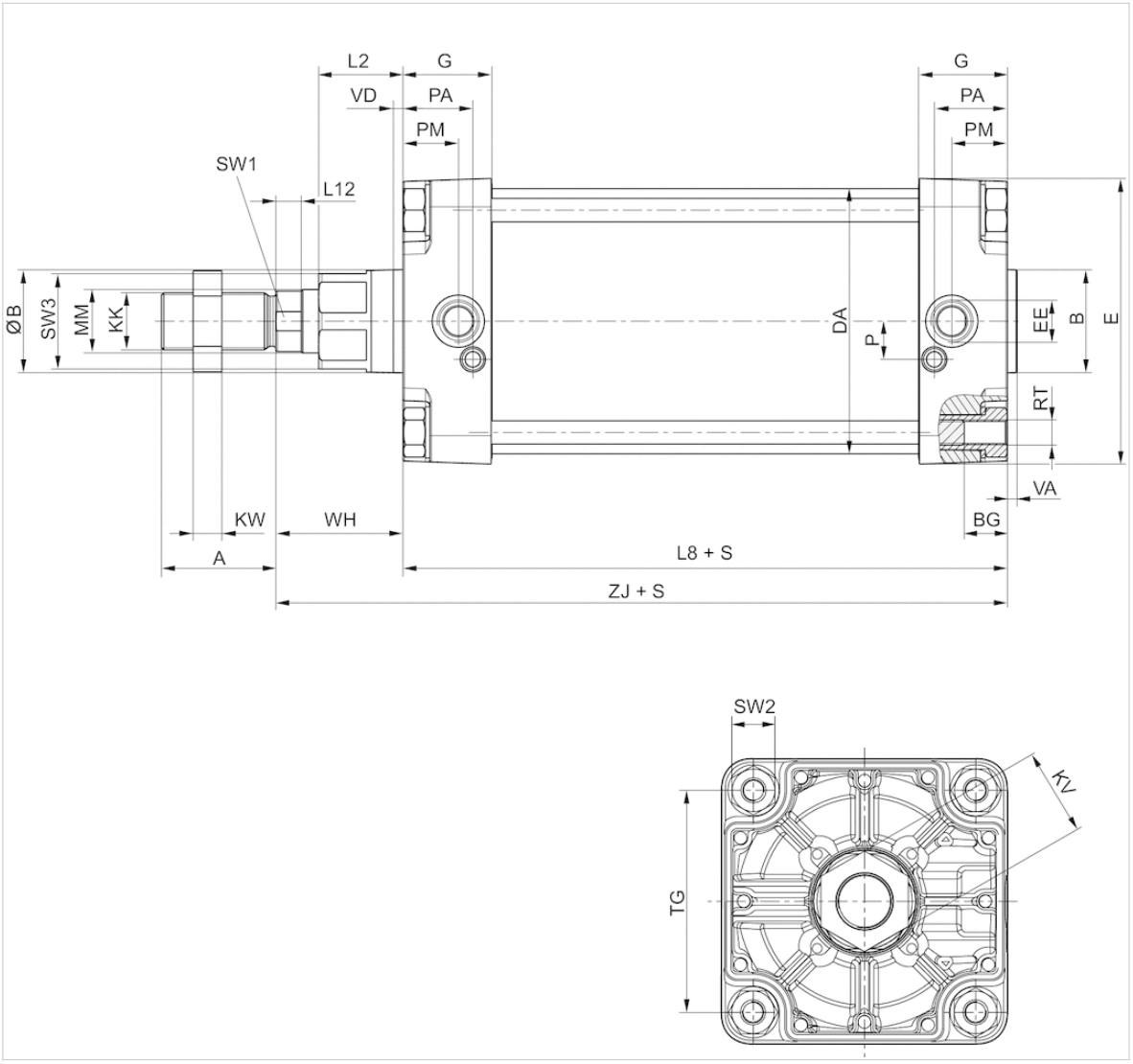
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

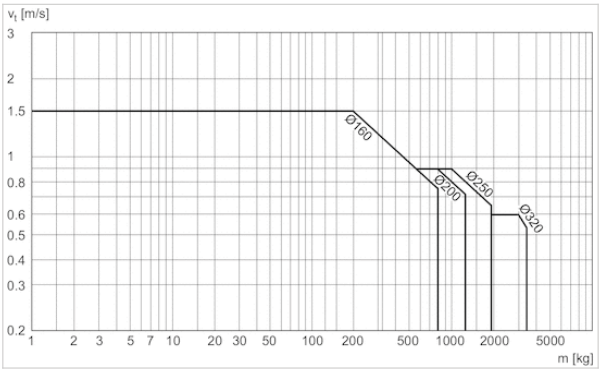
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
160 mm	36	27	60	140	6	6	80	260
200 mm	36	27	60	175	6	6	95	275
250 mm	46	41	80	220	10	31	105	305.3
320 mm	55	50	95	270	10	34	120	340.5

Diagrams

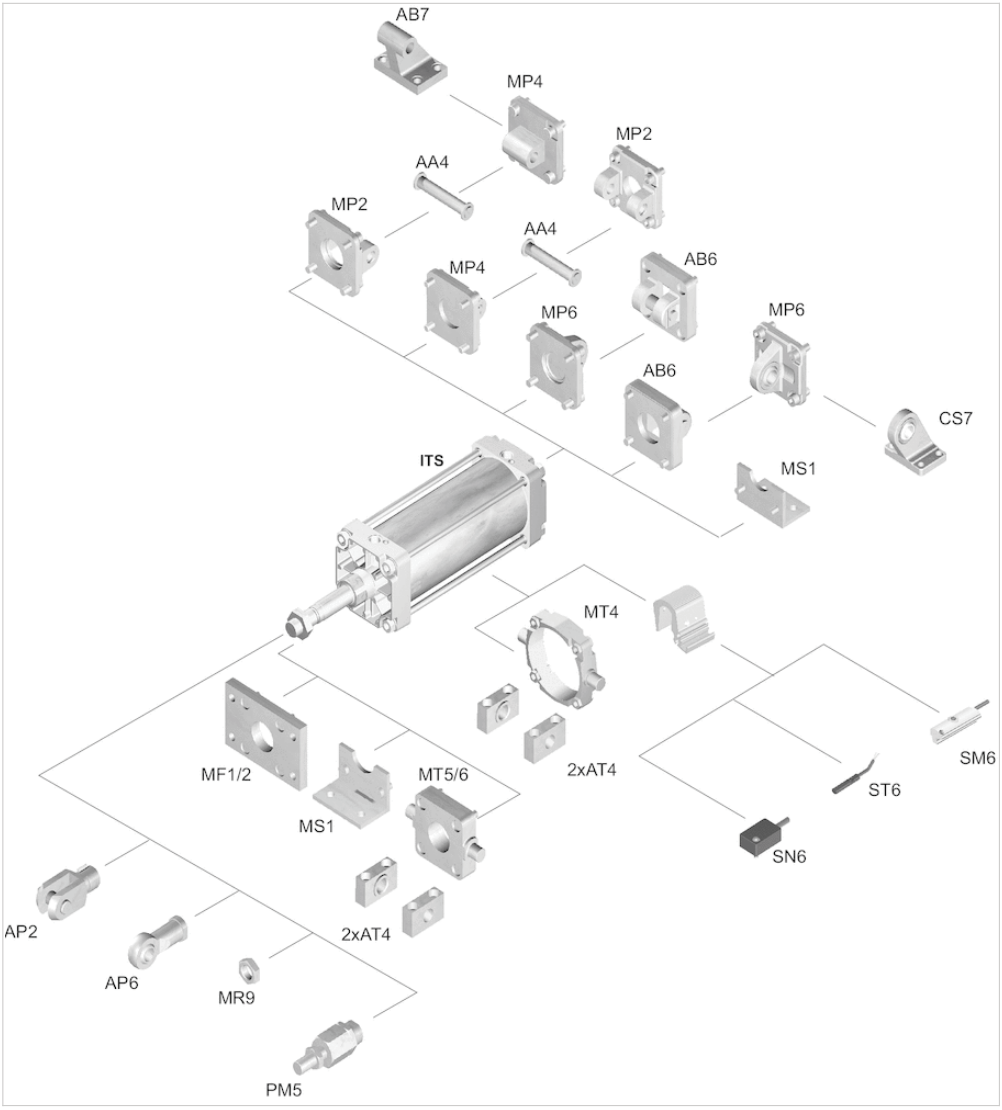
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

Overview drawing

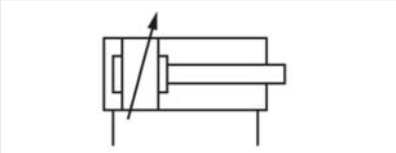


NOTE:
This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- Cushioning Pneumatically adjustable
- Piston rod External thread
- ATEX optional

Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar



Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627283	R480627355	R480627427	R480627439
50	R480627284	R480627356	R480627428	R480627440
80	R480627285	R480627357	R480627429	R480627441
100	R480627286	R480627358	R480627430	R480627442
125	R480627287	R480627359	R480627431	R480627443
160	R480627288	R480627360	R480627432	R480627444
200	R480627289	R480627361	R480627433	R480627445
250	R480627290	R480627362	R480627434	R480627446
320	R480627291	R480627363	R480627435	R480627447
400	R480627292	R480627364	R480627436	R480627448
500	R480627293	R480627365	R480627437	R480627449

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 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).

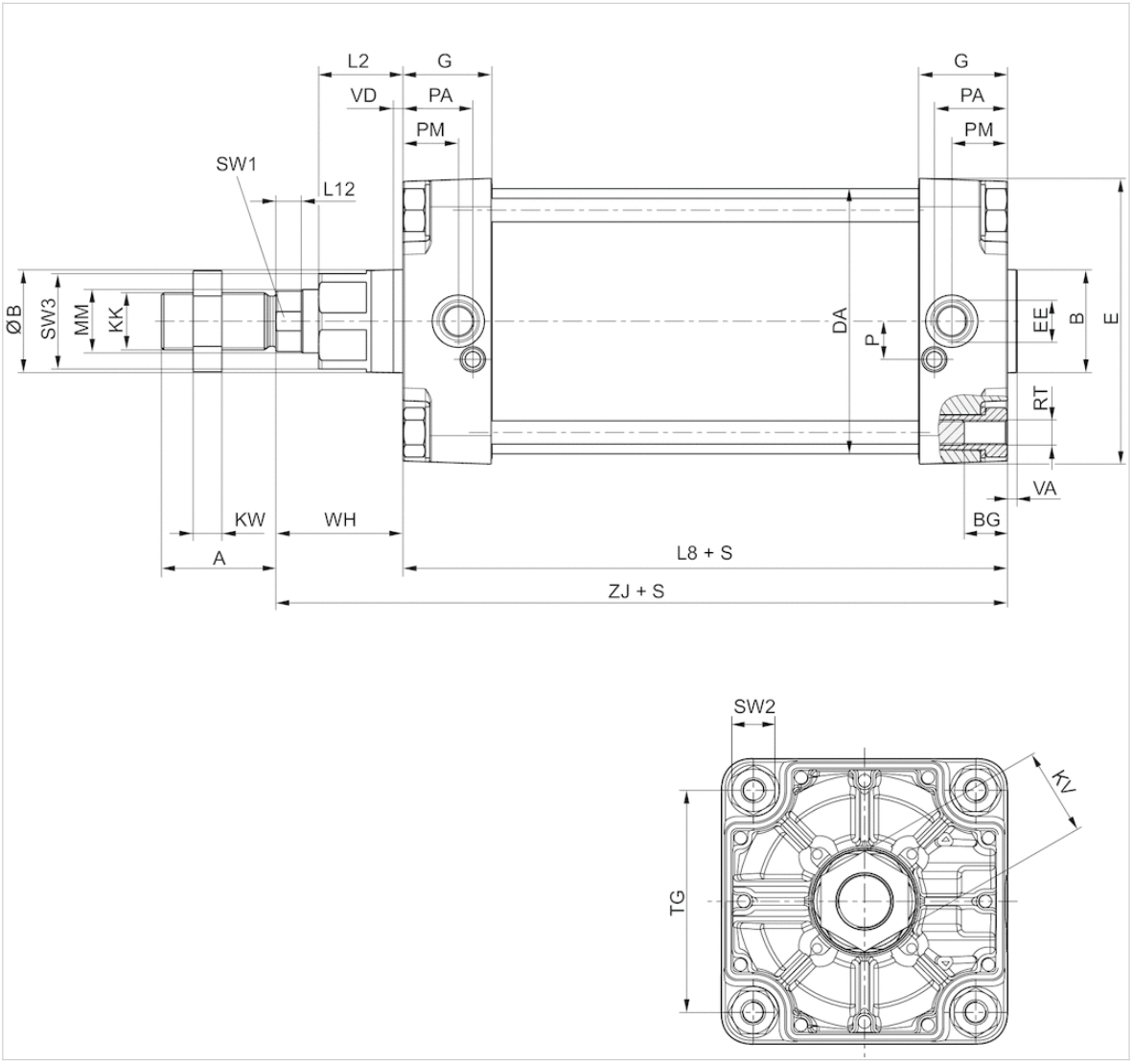
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

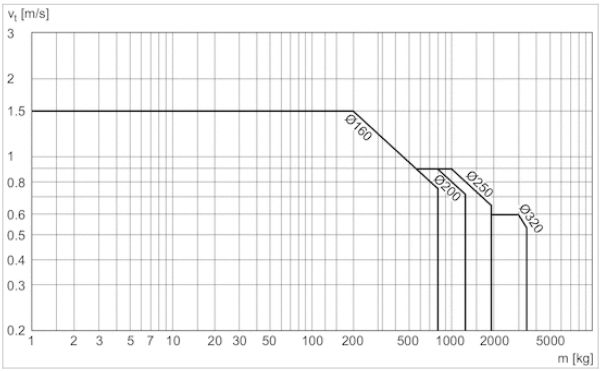
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
160 mm	36	27	60	140	6	6	80	260
200 mm	36	27	60	175	6	6	95	275
250 mm	46	41	80	220	10	31	105	305.3
320 mm	55	50	95	270	10	34	120	340.5

Diagrams

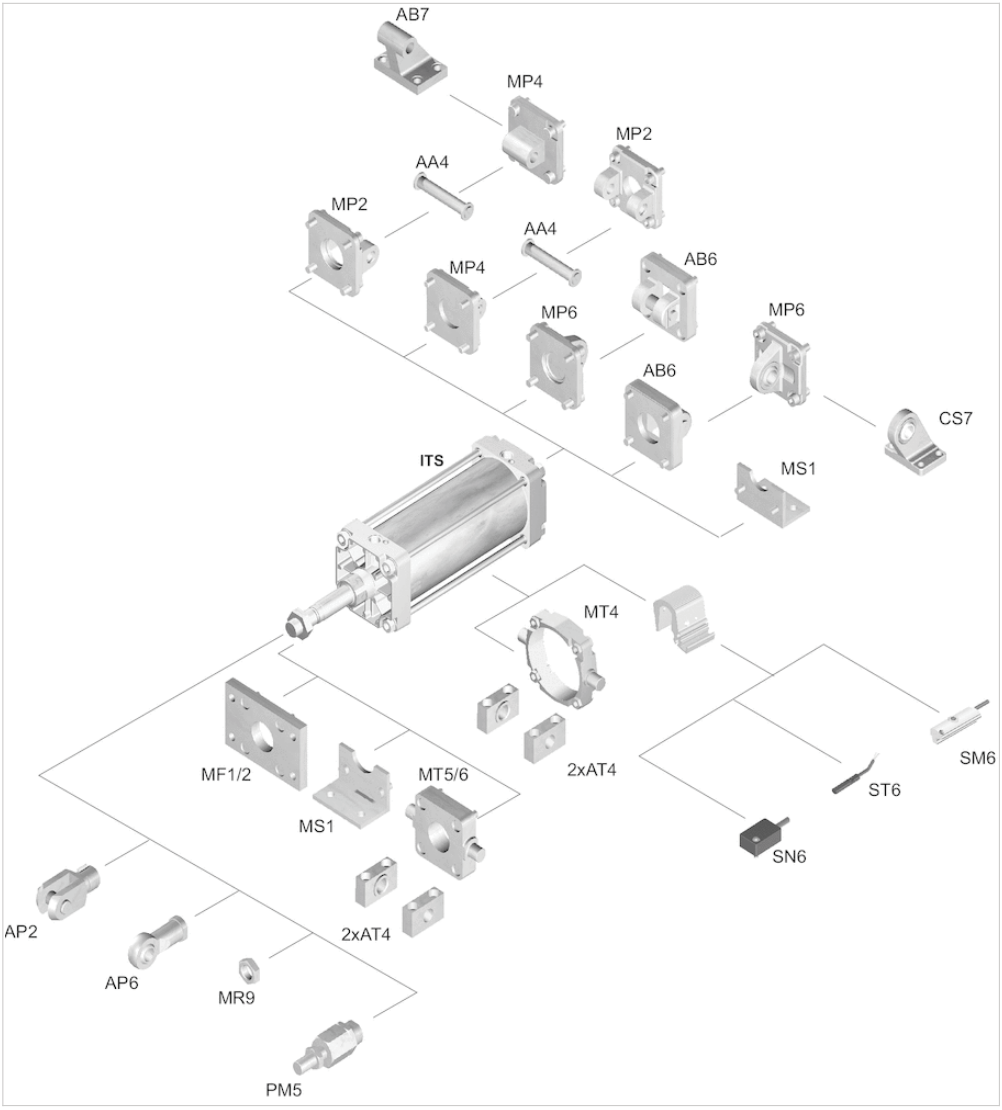
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

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.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning elastic, elastic
- Piston rod External thread
- ATEX optional

Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480635034	R480627583	R480627595	R480627607
50	R480627572	R480627584	R480627596	R480627608
80	R480627573	R480627585	R480627597	R480627609
100	R480627574	R480627586	R480627598	R480627610
125	R480627575	R480627587	R480627599	R480627611
160	R480627576	R480627588	R480627600	R480627612
200	R480635134	R480627589	R480627601	R480627613
250	R480627578	R480627590	R480627602	R480627614
320	R480627579	R480627591	R480627603	R480627615
400	R480627580	R480627592	R480627604	R480627616
500	R480627581	R480627593	R480627605	R480627617

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Impact energy	10 J	15 J	24 J	39 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 mm

The cushioning diagram can be found in the “Technical information” document (available in the MediaCentre).

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

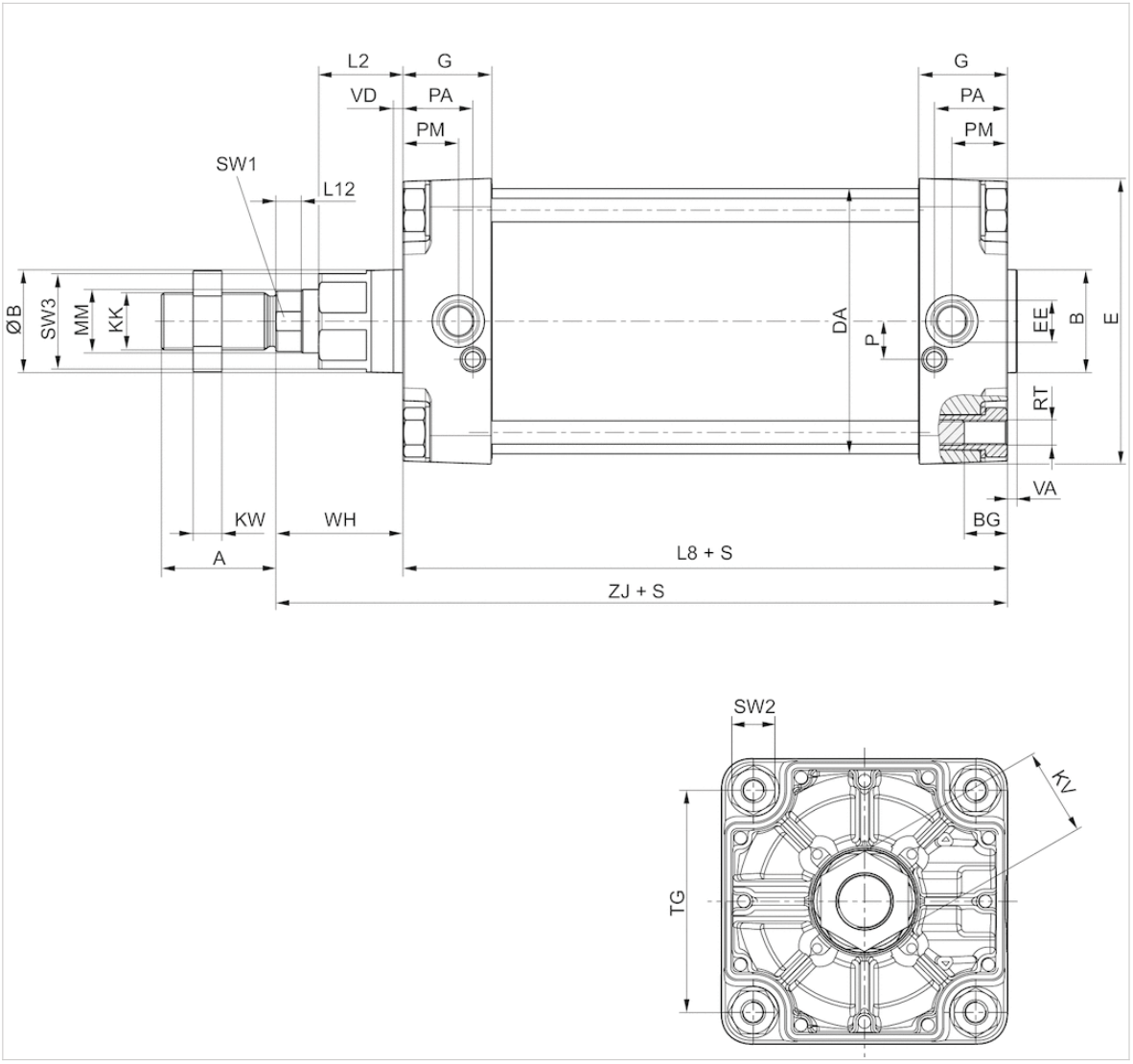
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

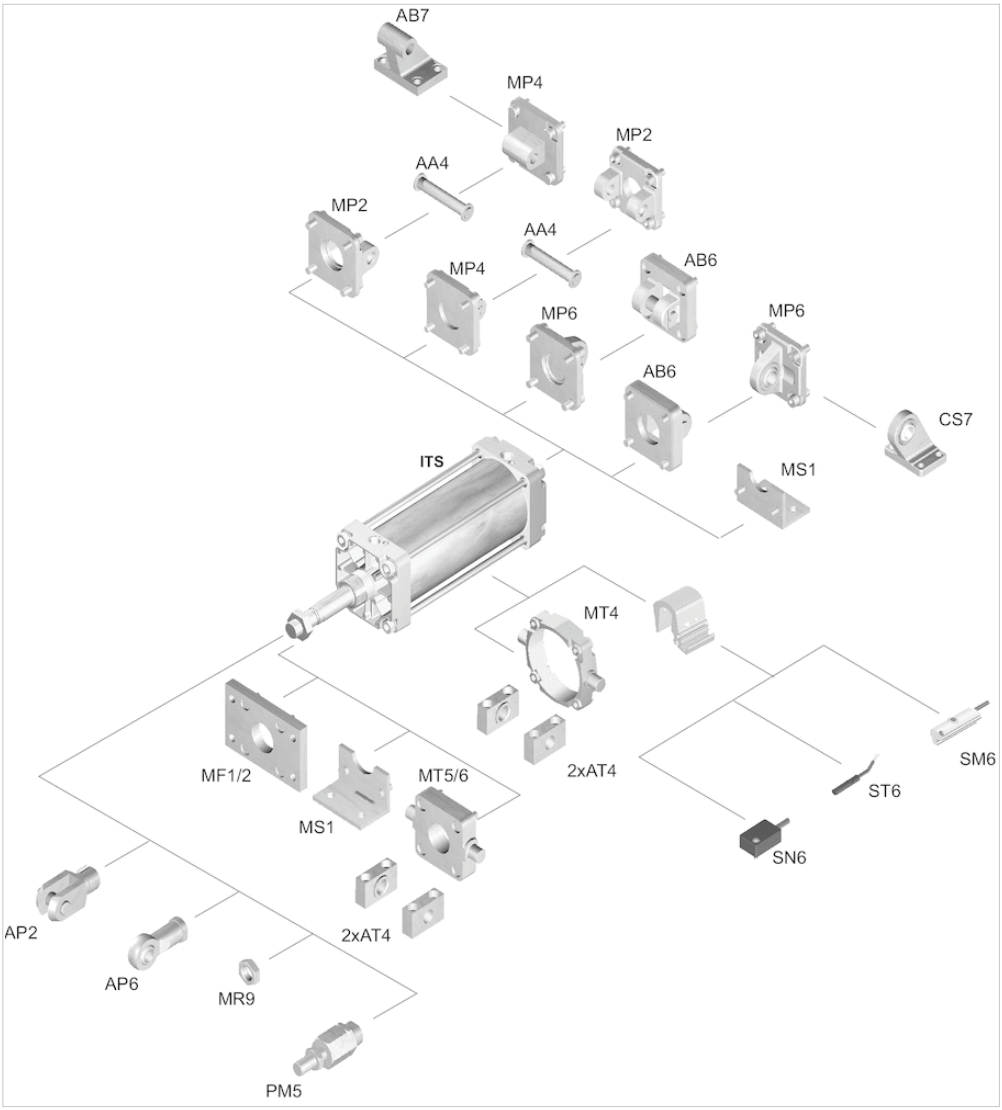
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
160 mm	36	27	60	140	6	6	80	260
200 mm	36	27	60	175	6	6	95	275
250 mm	46	41	80	220	10	31	105	305.3
320 mm	55	50	95	270	10	34	120	340.5

Accessories overview

Overview drawing



NOTE:
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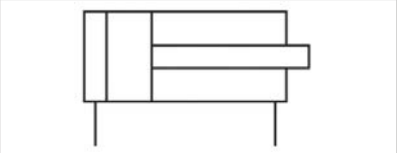
Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- Cushioning elastic
- Piston rod External thread
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480635020	R480627679	R480627691	R480627703
50	R480627668	R480627680	R480627692	R480627704
80	R480627669	R480627681	R480627693	R480627705
100	R480627670	R480627682	R480627694	R480627706
125	R480627671	R480627683	R480627695	R480627707
160	R480627672	R480627684	R480627696	R480627708
200	R480627673	R480627685	R480627697	R480627709
250	R480627674	R480627686	R480627698	R480627710
320	R480627675	R480627687	R480627699	R480627711
400	R480627676	R480627688	R480627700	R480627712
500	R480627677	R480627689	R480627701	R480627713

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Impact energy	10 J	15 J	24 J	39 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 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).

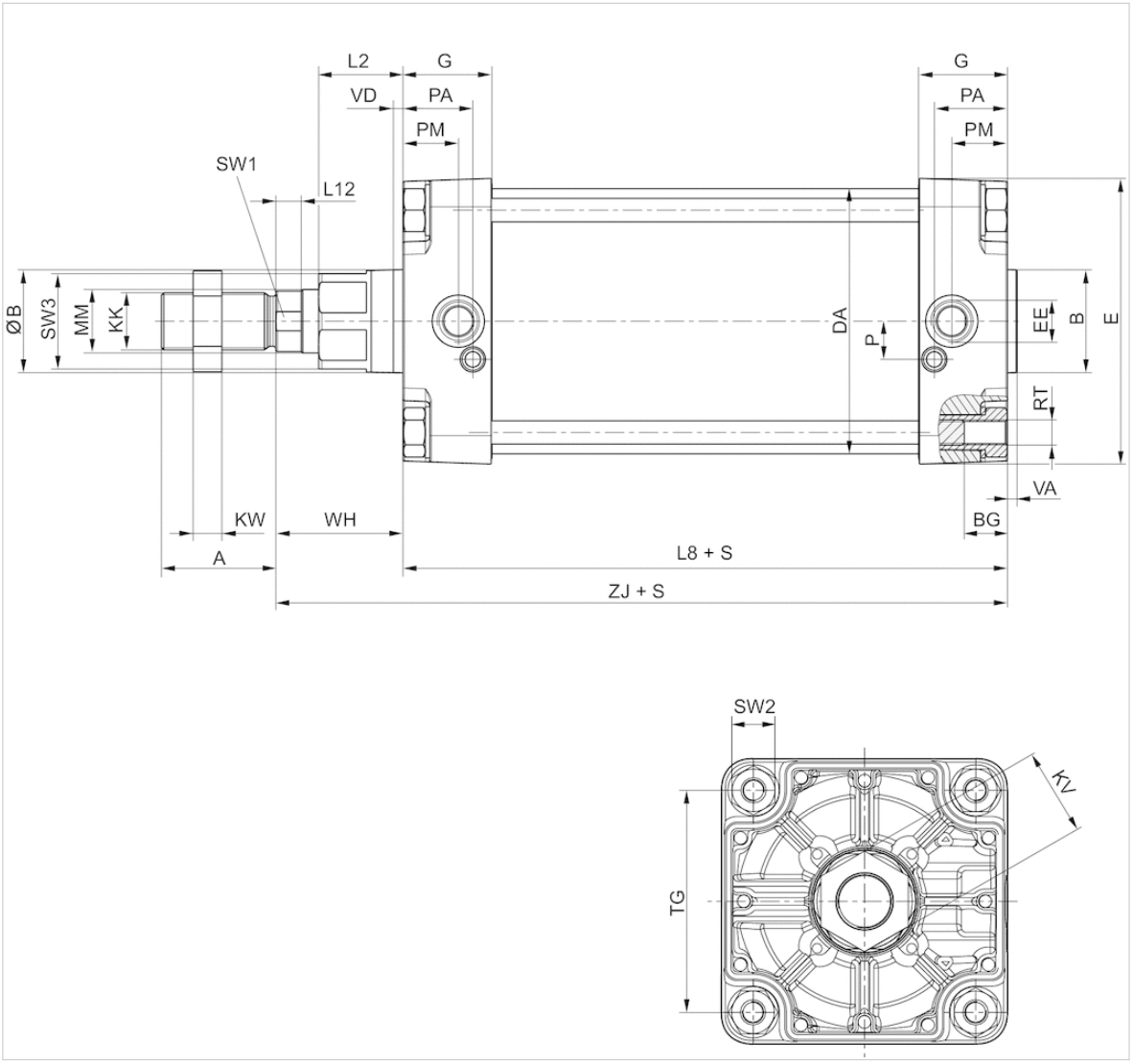
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

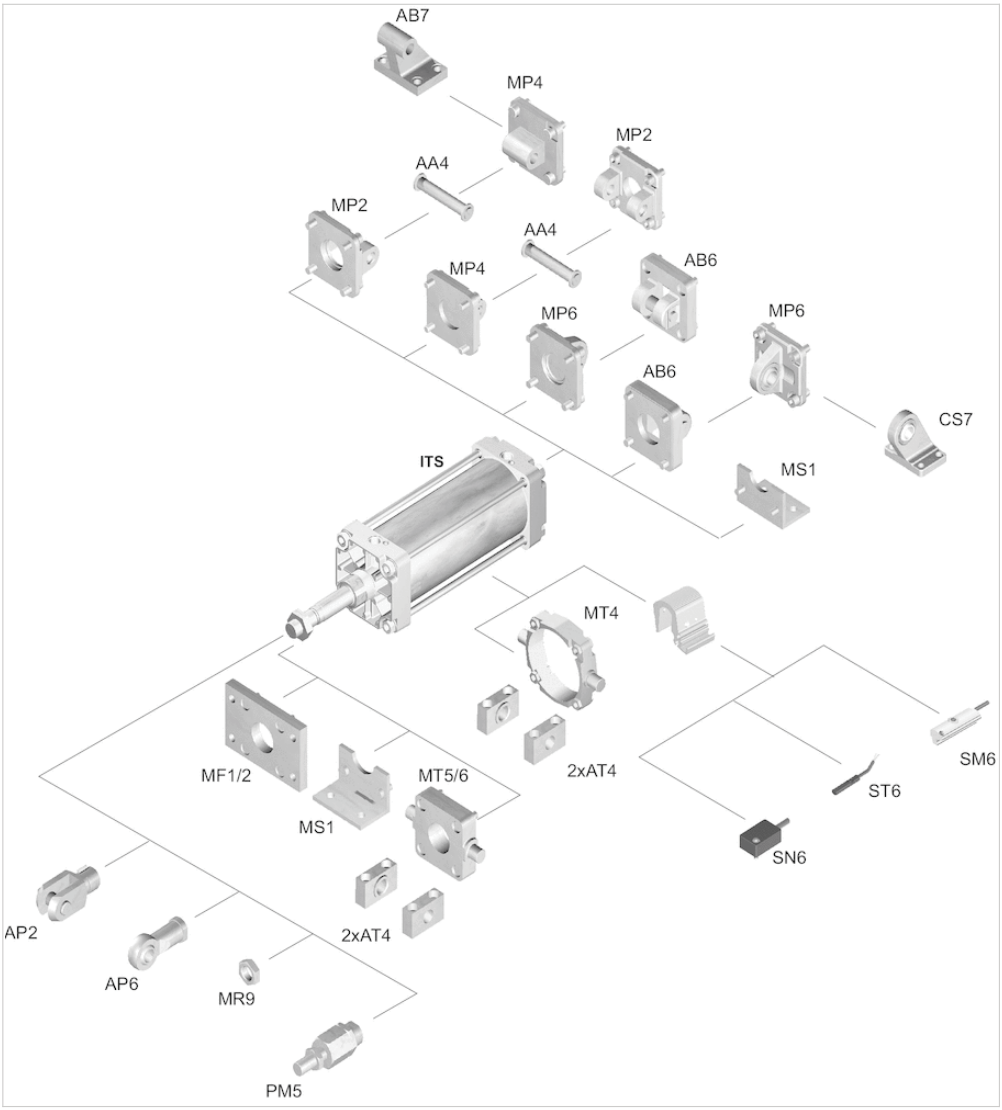
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
160 mm	36	27	60	140	6	6	80	260
200 mm	36	27	60	175	6	6	95	275
250 mm	46	41	80	220	10	31	105	305.3
320 mm	55	50	95	270	10	34	120	340.5

Accessories overview

Overview drawing



NOTE:
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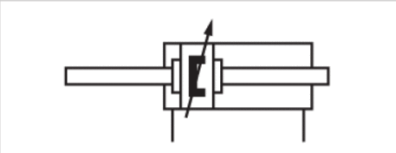
Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- Piston rod External thread
- Piston rod through
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 10	R480627318	R480627390	R480627486	R480632135
25	R480632697	R480627391	R480627487	R480627499
50	R480627320	R480627392	R480627488	R480627500
80	R480627321	R480627393	R480627489	R480627501
100	R480627322	R480627394	R480627490	R480627502
125	R480627323	R480627395	R480627491	R480627503
160	R480635054	R480627396	R480627492	R480627504
200	R480627325	R480627397	R480627493	R480631095
250	R480627326	R480627398	R480627494	R480627506
320	R480627327	R480627399	R480627495	R480627507
400	R480627328	R480627400	R480627496	R480627508
500	R480627329	R480627401	R480627497	R480627509

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	11875 N	19000 N	29688 N	48704 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	14,44 kg	17,93 kg	28,46 kg	51,23 kg
Weight +10 mm stroke	0,42 kg	0,42 kg	0,76 kg	1,22 kg
Working pressure min./max.	1,5 ... 10 bar	1,5 ... 10 bar	1,5 ... 10 bar	2 ... 10 bar
Stroke max.	1000 mm	1000 mm	1000 mm	1000 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

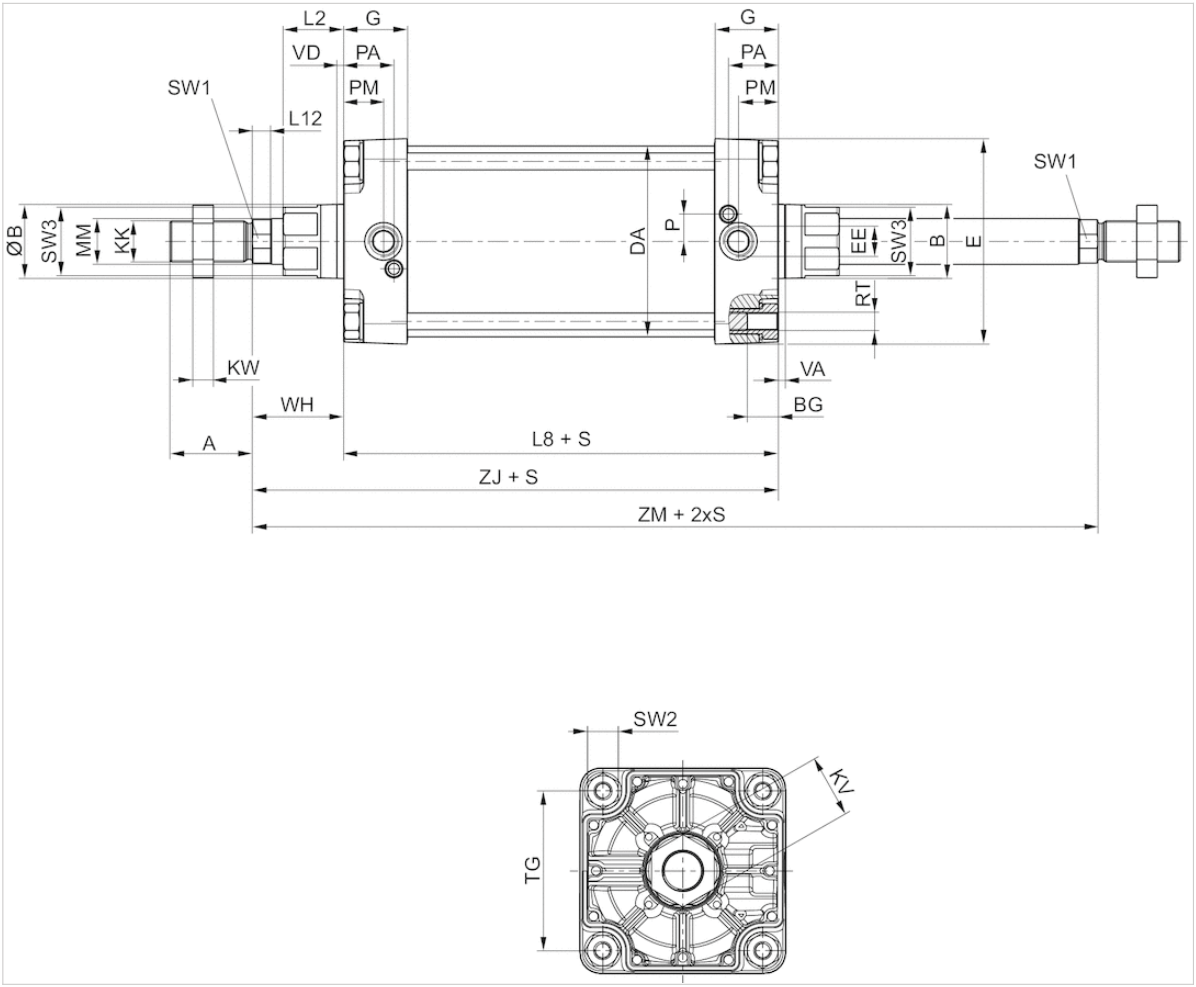
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

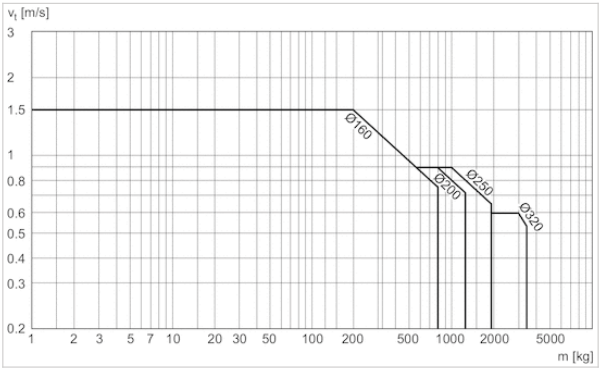
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VD	WH	ZJ	ZM
160 mm	36	27	60	140	6	80	260	340
200 mm	36	27	60	175	6	95	275	370
250 mm	46	41	80	220	31	105	305.3	411
320 mm	55	50	95	270	34	120	340.5	462

Diagrams

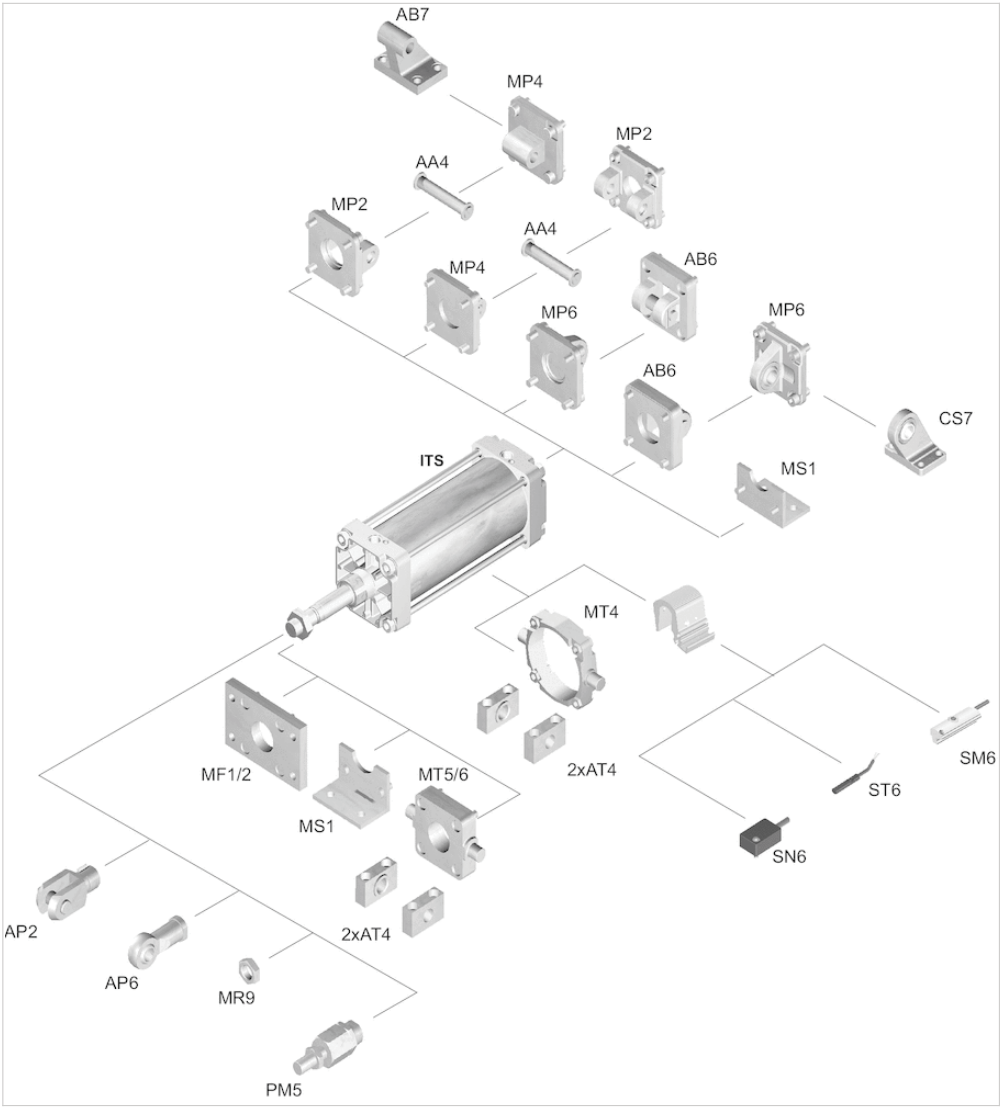
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

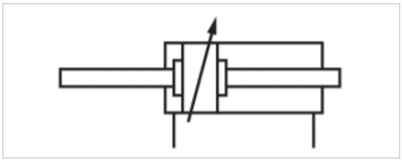
Overview drawing



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.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- Cushioning Pneumatically adjustable
- Piston rod External thread
- Piston rod through
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627715	R480627727	R480627739	R480627751
50	R480627716	R480627728	R480627740	R480627752
80	R480635557	R480635566	R480627741	R480627753
100	R480627718	R480627730	R480627742	R480627754
125	R480635556	R480627731	R480627743	R480627755
160	R480627720	R480627732	R480627744	R480627756
200	R480627721	R480627733	R480627745	R480627757
250	R480627722	R480627734	R480627746	R480627758
320	R480627723	R480635572	R480627747	R480627759
400	R480627724	R480627736	R480627748	R480627760
500	R480627725	R480627737	R480627749	R480627761

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	11875 N	19000 N	29688 N	48704 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	14,44 kg	17,93 kg	28,46 kg	51,23 kg
Weight +10 mm stroke	0,42 kg	0,42 kg	0,76 kg	1,22 kg
Stroke max.	1000 mm	1000 mm	1000 mm	1000 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).

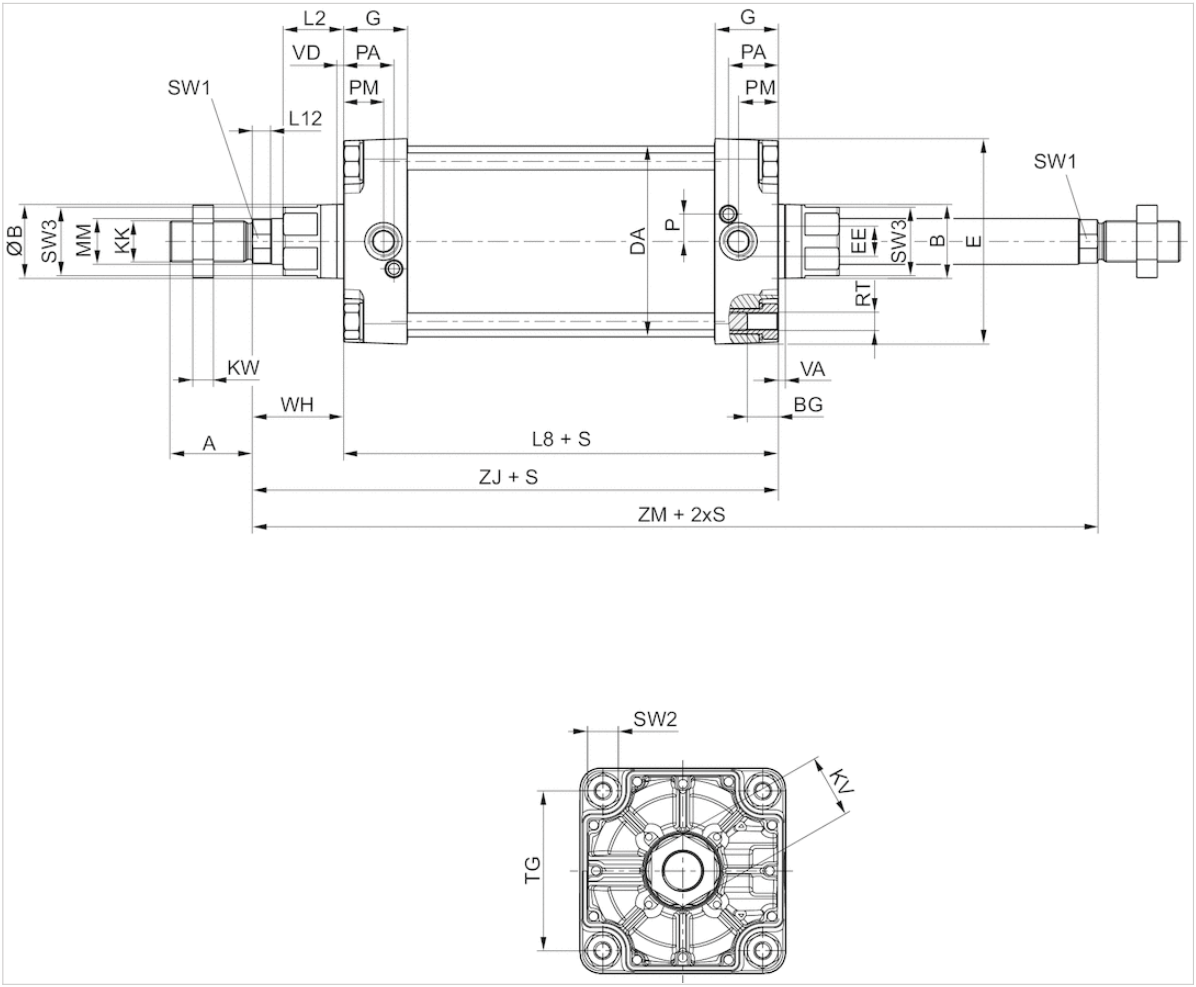
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

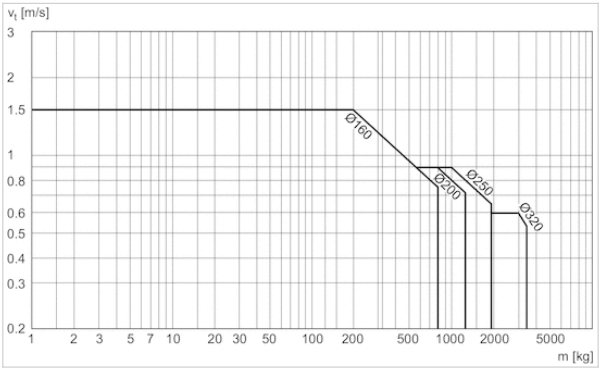
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VD	WH	ZJ	ZM
160 mm	36	27	60	140	6	80	260	340
200 mm	36	27	60	175	6	95	275	370
250 mm	46	41	80	220	31	105	305.3	411
320 mm	55	50	95	270	34	120	340.5	462

Diagrams

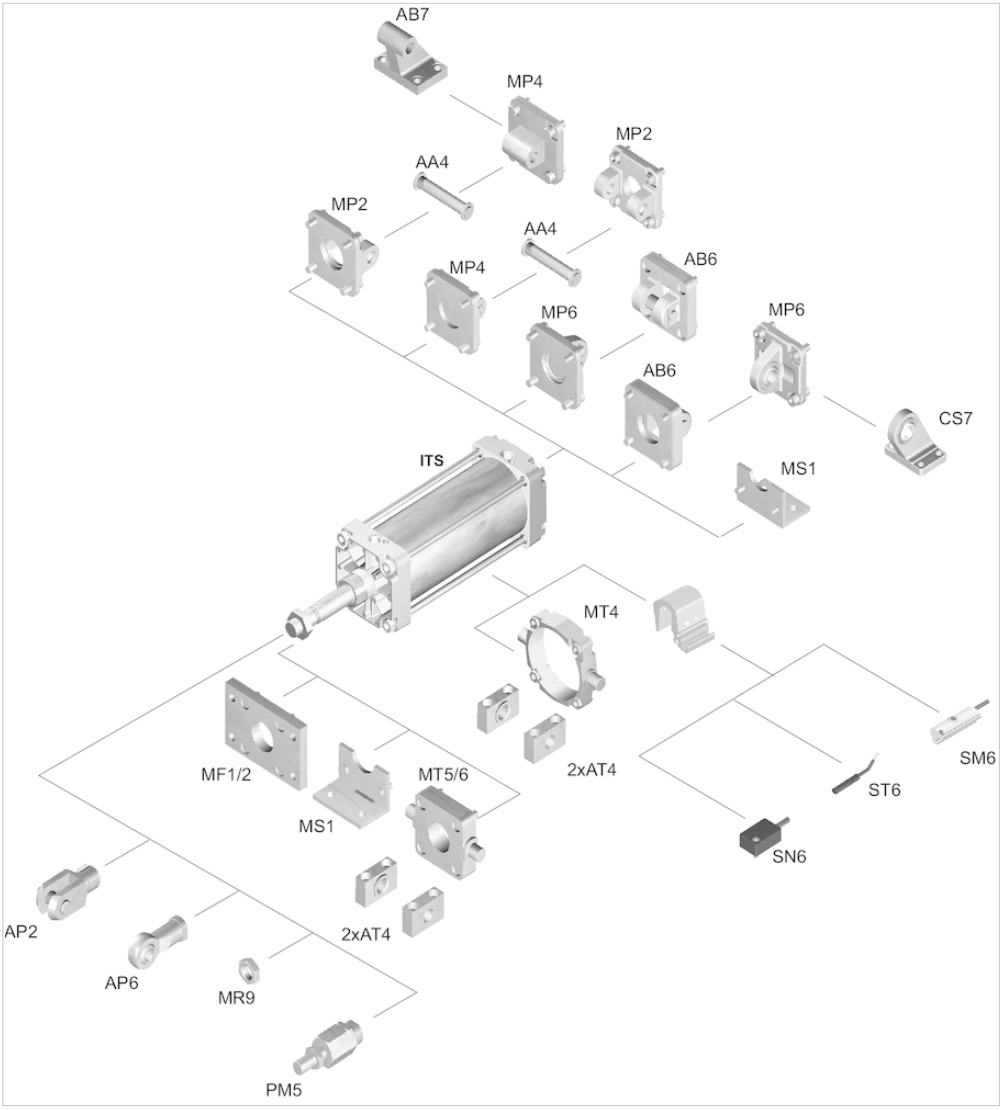
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

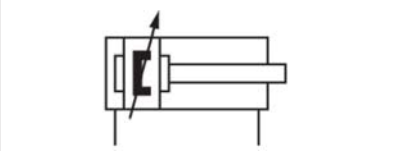
Overview drawing



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.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- with trunnion mounting
- Piston rod External thread
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627343	R480627415	R480627535	R480627547
50	R480627344	R480627416	R480627536	R480627548
80	R480627345	R480627417	R480627537	R480627549
100	R480627346	R480627418	R480627538	R480627550
125	R480627347	R480627419	R480627539	R480627551
160	R480627348	R480627420	R480627540	R480627552
200	R480627349	R480627421	R480627541	R480627553
250	R480627350	R480627422	R480627542	R480627554
320	R480627351	R480627423	R480627543	R480627555
400	R480627352	R480627424	R480627544	R480627556
500	R480627353	R480627425	R480627545	R480627557

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	15,67 kg	20,25 kg	34,98 kg	82,49 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 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

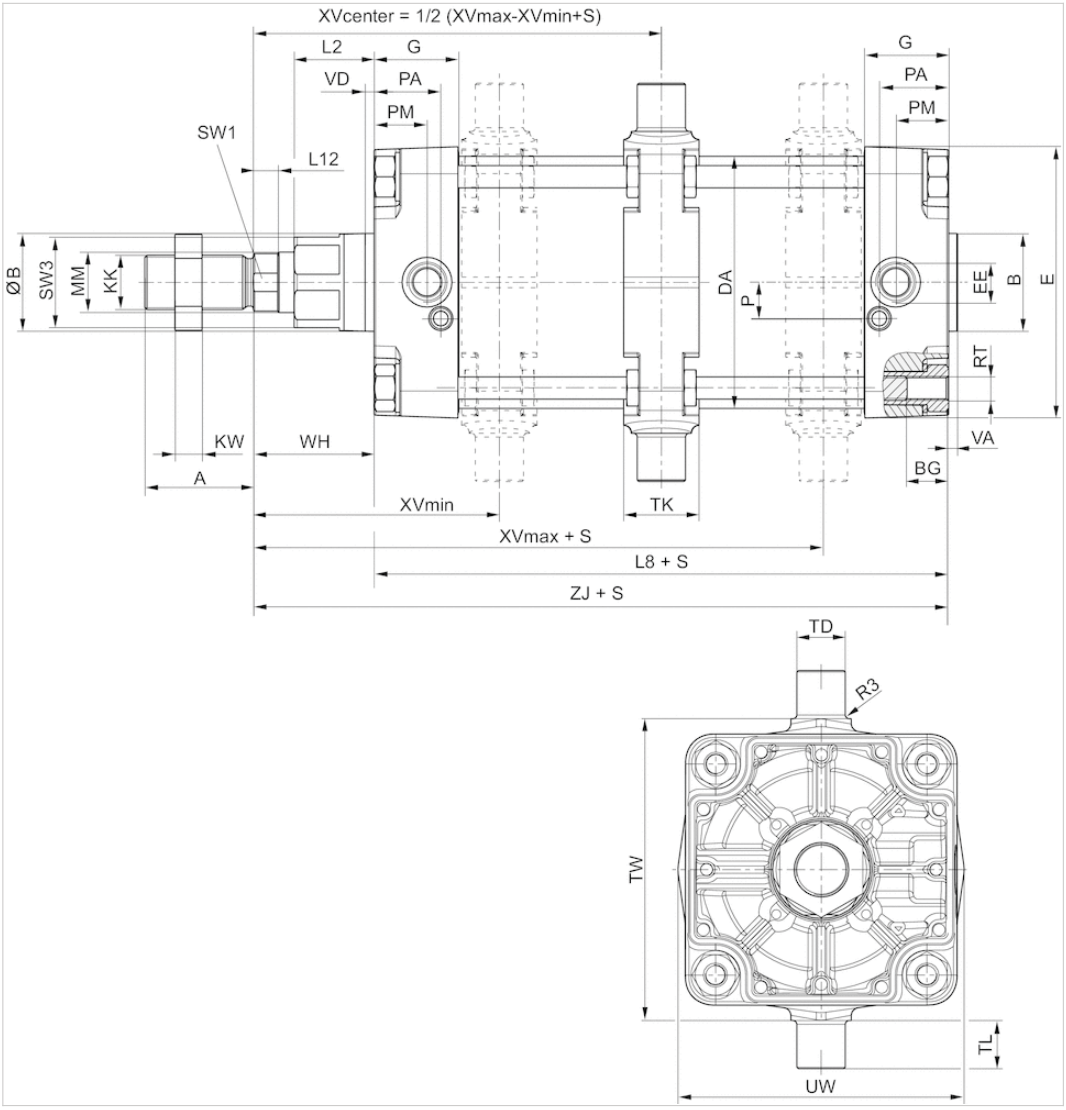
The trunnion mounting is positioned in the center at the factory and can be adjusted later.
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Trunnion mounting	Nodular graphite iron
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

Dimensions

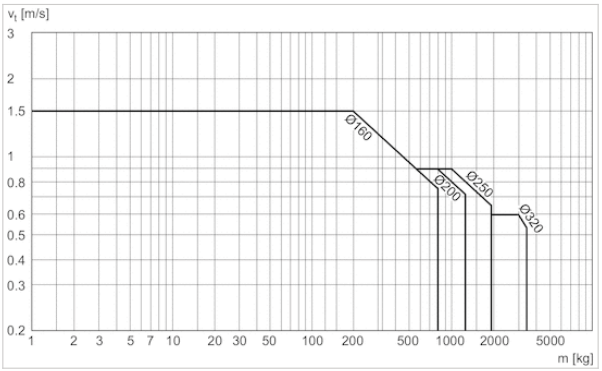
Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	R3
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	2.5
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	2.5
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	3
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	3.2

Piston Ø	RT	SW1	SW2	SW3	TD e9	TG	TK	TL h14	TW h14	UW	VD	WH	XV min	XV max
160 mm	M16	36	27	60	32	140	50	32	200	190	6	80	163	177
200 mm	M16	36	27	60	32	175	50	32	250	240	6	95	177	193
250 mm	M20	46	41	80	40	220	60	40	320	310	31	105	195	215
320 mm	M24	55	50	95	50	270	70	50	400	400	34	120	228	233

Piston Ø	ZJ
160 mm	260
200 mm	275
250 mm	305.3
320 mm	340.5

Diagrams

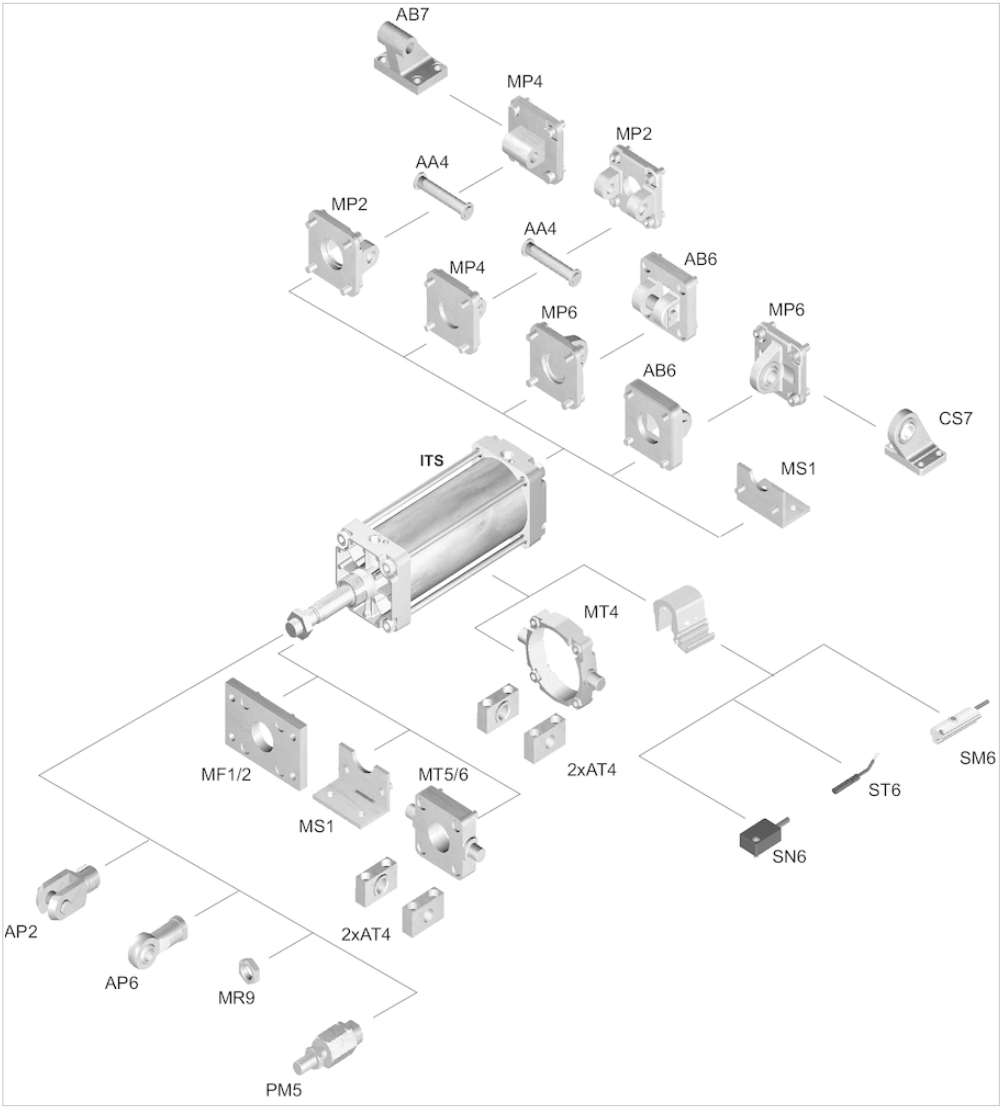
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

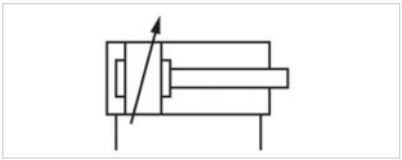
Overview drawing



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.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- Cushioning Pneumatically adjustable
- with trunnion mounting
- Piston rod External thread
- ATEX optional



Standards	ISO 15552
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627331	R480633348	R480627511	R480627523
50	R480627332	R480633346	R480627512	R480627524
80	R480627333	R480627405	R480627513	R480627525
100	R480627334	R480631340	R480627514	R480627526
125	R480627335	R480631542	R480627515	R480627527
160	R480627336	R480627408	R480627516	R480627528
200	R480627337	R480627409	R480627517	R480627529
250	R480627338	R480627410	R480627518	R480627530
320	R480627339	R480627411	R480627519	R480627531
400	R480627340	R480627412	R480627520	R480627532
500	R480627341	R480627413	R480627521	R480627533

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	19000 N	48704 N
Extracting piston force	12667 N	19792 N	19792 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	15,67 kg	20,25 kg	34,98 kg	82,49 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 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).

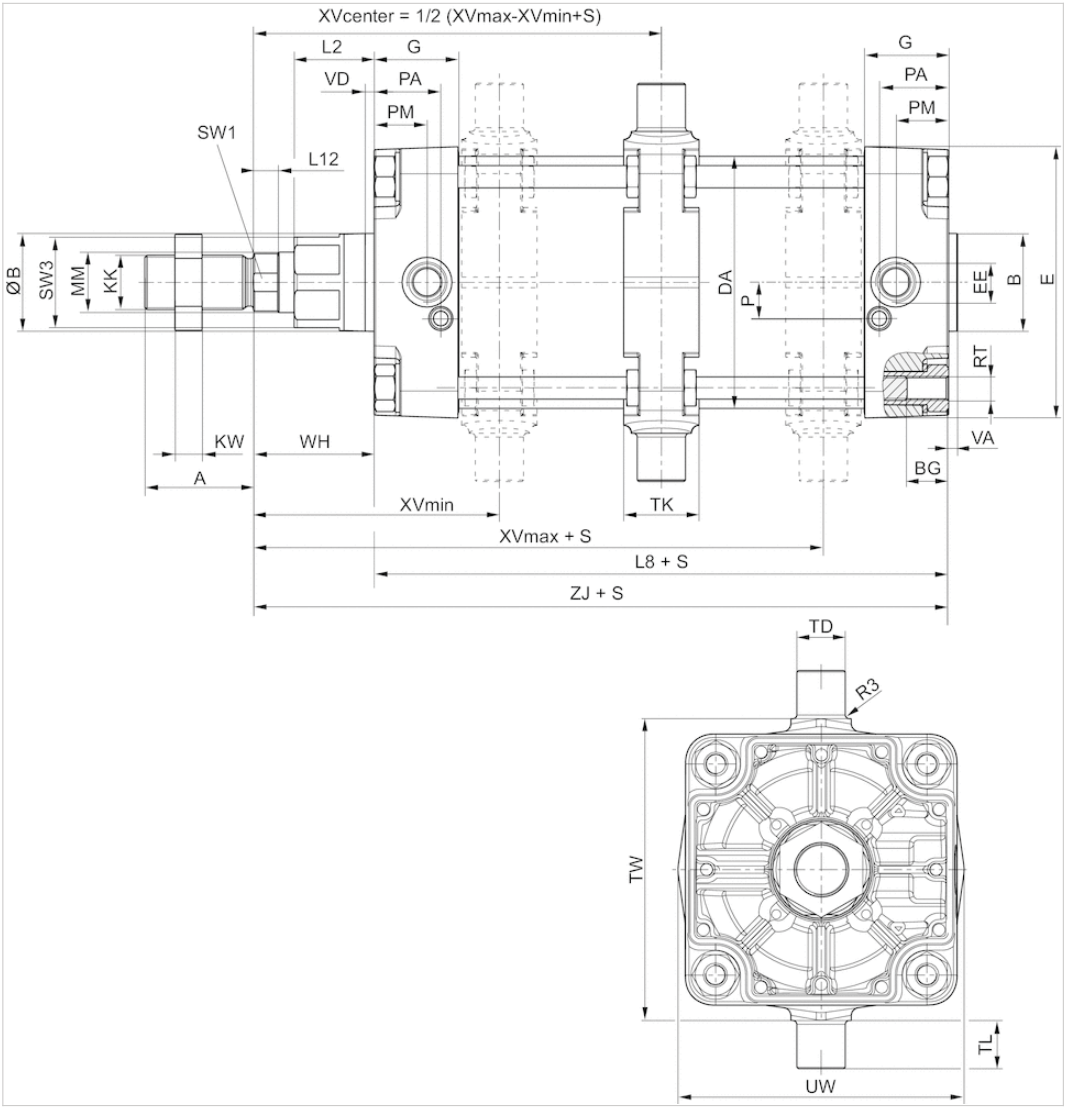
The trunnion mounting is positioned in the center at the factory and can be adjusted later.
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Trunnion mounting	Nodular graphite iron
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

Dimensions

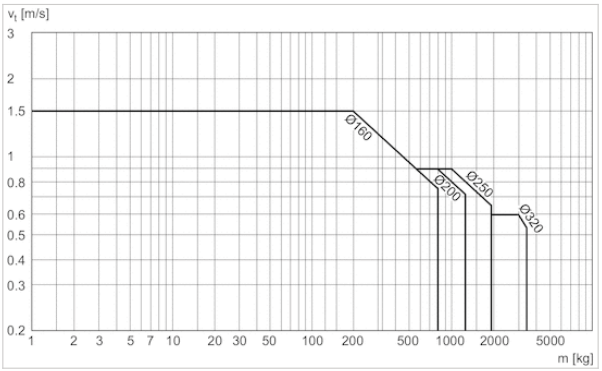
Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	R3
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	2.5
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	2.5
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	3
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	3.2

Piston Ø	RT	SW1	SW2	SW3	TD e9	TG	TK	TL h14	TW h14	UW	VD	WH	XV min	XV max
160 mm	M16	36	27	60	32	140	50	32	200	190	6	80	163	177
200 mm	M16	36	27	60	32	175	50	32	250	240	6	95	177	193
250 mm	M20	46	41	80	40	220	60	40	320	310	31	105	195	215
320 mm	M24	55	50	95	50	270	70	50	400	400	34	120	228	233

Piston Ø	ZJ
160 mm	260
200 mm	275
250 mm	305.3
320 mm	340.5

Diagrams

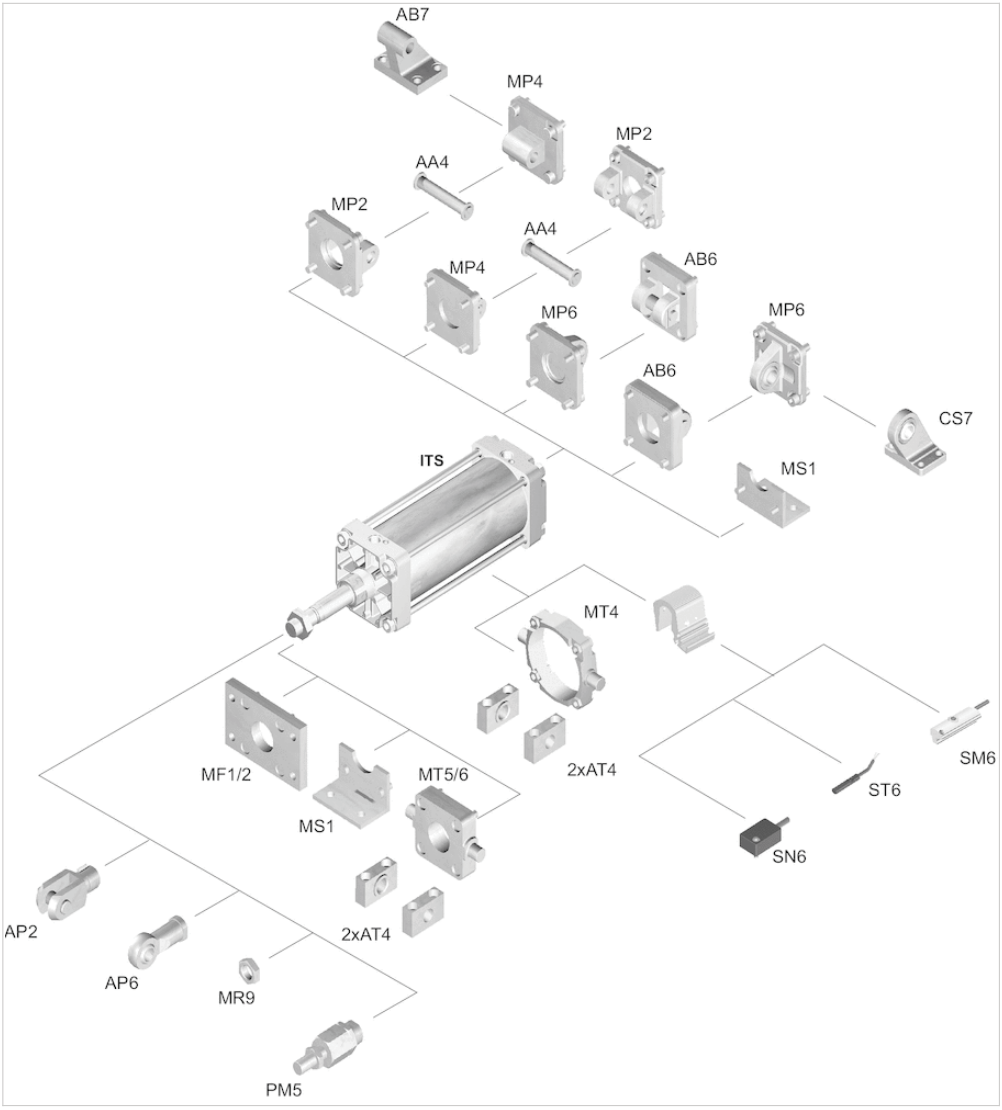
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

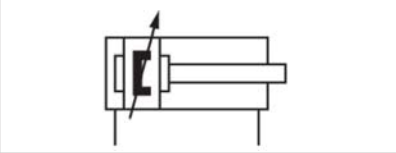
Overview drawing



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.

Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- Piston rod External thread
- Heat resistant



Standards	ISO 15552
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-10 ... 120 °C
Medium temperature min./max.	-10 ... 120 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627619	R480627631	R480627643	R480627655
50	R480627620	R480627632	R480627644	R480627656
80	R480627621	R480627633	R480627645	R480627657
100	R480627622	R480627634	R480627646	R480627658
125	R480627623	R480627635	R480627647	R480627659
160	R480627624	R480627636	R480627648	R480627660
200	R480627625	R480627637	R480627649	R480627661
250	R480627626	R480627638	R480627650	R480627662
320	R480627627	R480627639	R480627651	R480627663
400	R480627628	R480627640	R480627652	R480627664
500	R480627629	R480627641	R480627653	R480627665

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 mm

Technical information

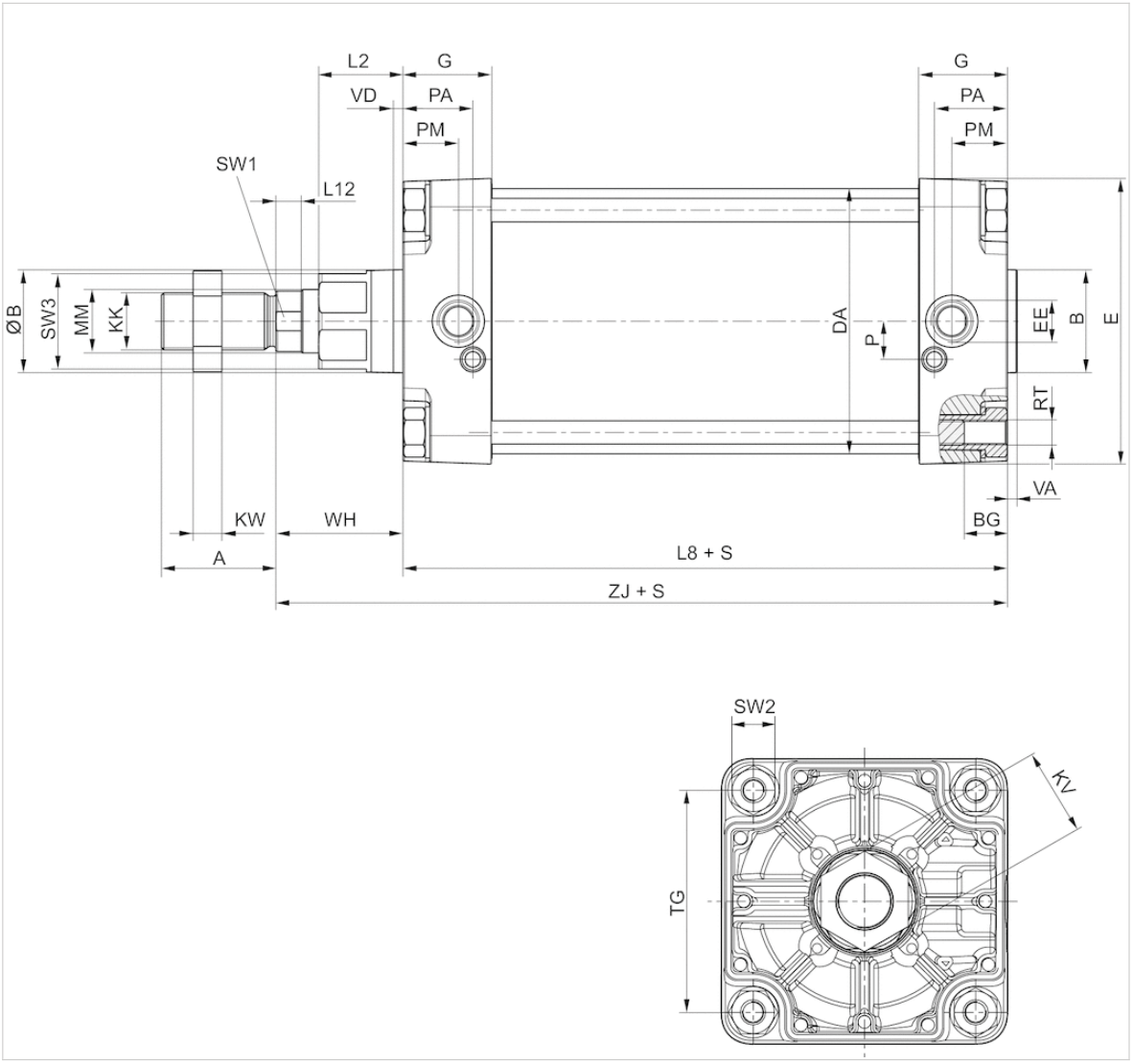
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Fluorocaoutchouc
Nut for piston rod	Steel, galvanized
Scraper	Fluorocaoutchouc
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

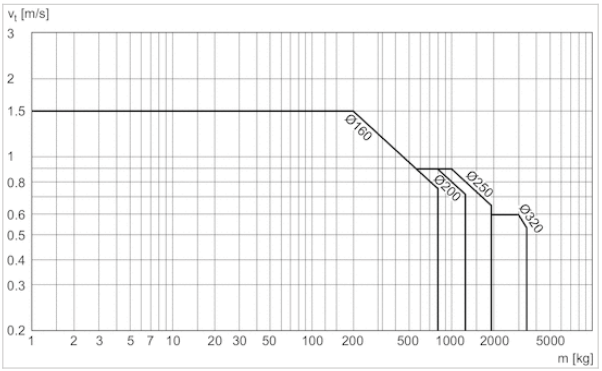
Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
160 mm	72	65	65	24	167	180	G 3/4	56	M36x2	55	18	53	180	16	40	24	45	35	M16
200 mm	72	75	75	24	210	220	G 3/4	54	M36x2	55	18	56	180	16	40	22.5	42	30	M16
250 mm	84	90	90	25	262	280	G 1	59.5	M42x2	65	21	67	200	20	50	29	46	32.8	M20
320 mm	96	110	110	28	336	350	G 1	61.5	M48x2	75	24	76	220	23.25	63	30	48	37	M24

Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
160 mm	36	27	60	140	6	6	80	260
200 mm	36	27	60	175	6	6	95	275
250 mm	46	41	80	220	10	31	105	305.3
320 mm	55	50	95	270	10	34	120	340.5

Diagrams

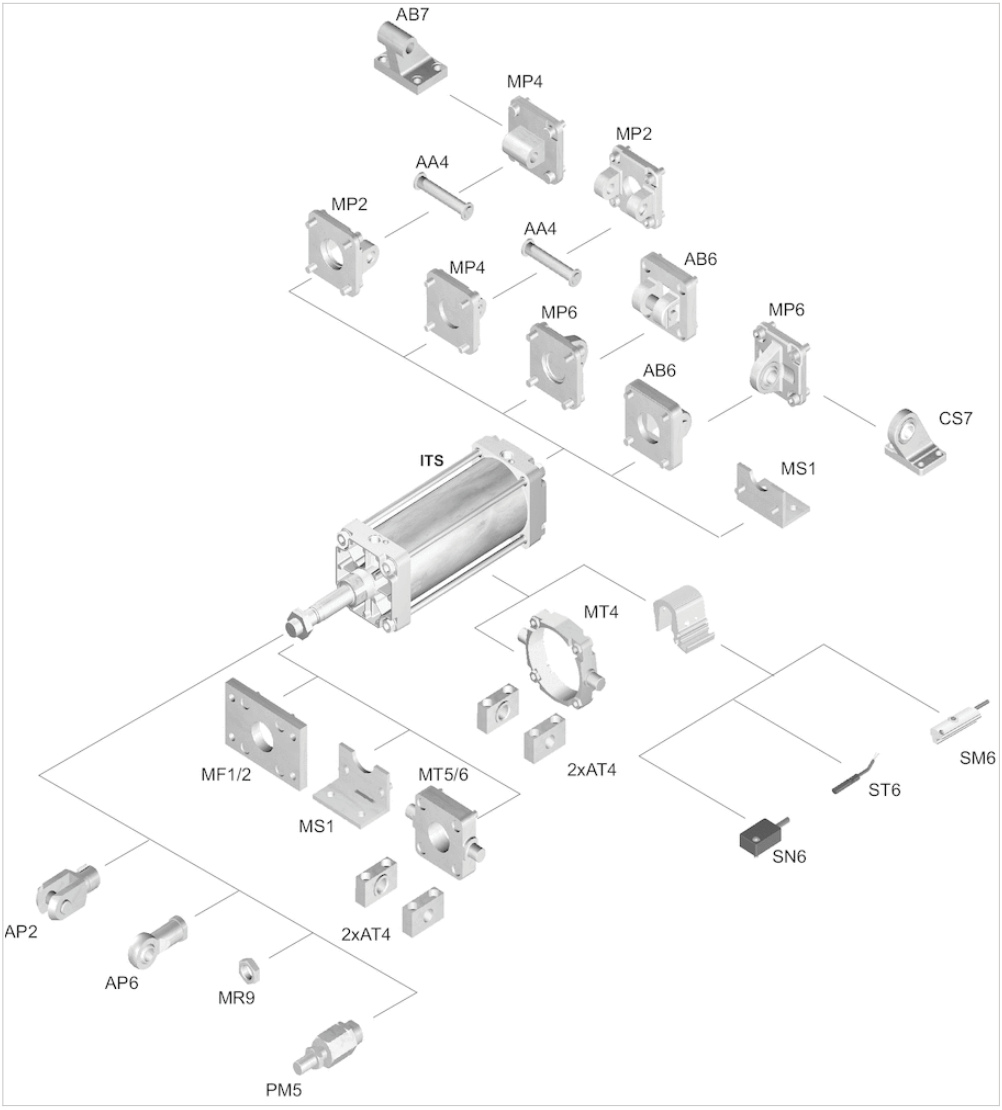
Cushioning diagram



v = Piston velocity [m/s]
m = Cushionable mass [kg]

Accessories overview

Overview drawing



NOTE:
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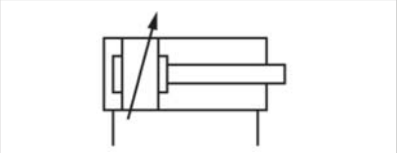
Tie rod cylinder ISO 15552, Series ITS

- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- Cushioning Pneumatically adjustable
- Piston rod External thread
- Heat resistant



Standards	ISO 15552
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-10 ... 150 °C
Medium temperature min./max.	-10 ... 150 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480634923	R480627379	R480627475	R480627559
50	R480627308	R480627380	R480627476	R480627560
80	R480627309	R480627381	R480627477	R480627561
100	R480627310	R480627382	R480627478	R480627562
125	R480627311	R480627383	R480627479	R480627563
160	R480627312	R480627384	R480627480	R480627564
200	R480627313	R480627385	R480627481	R480627565
250	R480627314	R480627386	R480627482	R480627566
320	R480627315	R480627387	R480627483	R480627567
400	R480627316	R480627388	R480627484	R480627568
500	R480627317	R480627389	R480627485	R480627569

Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	50 mm	50 mm	64 mm	55 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 mm

Technical information

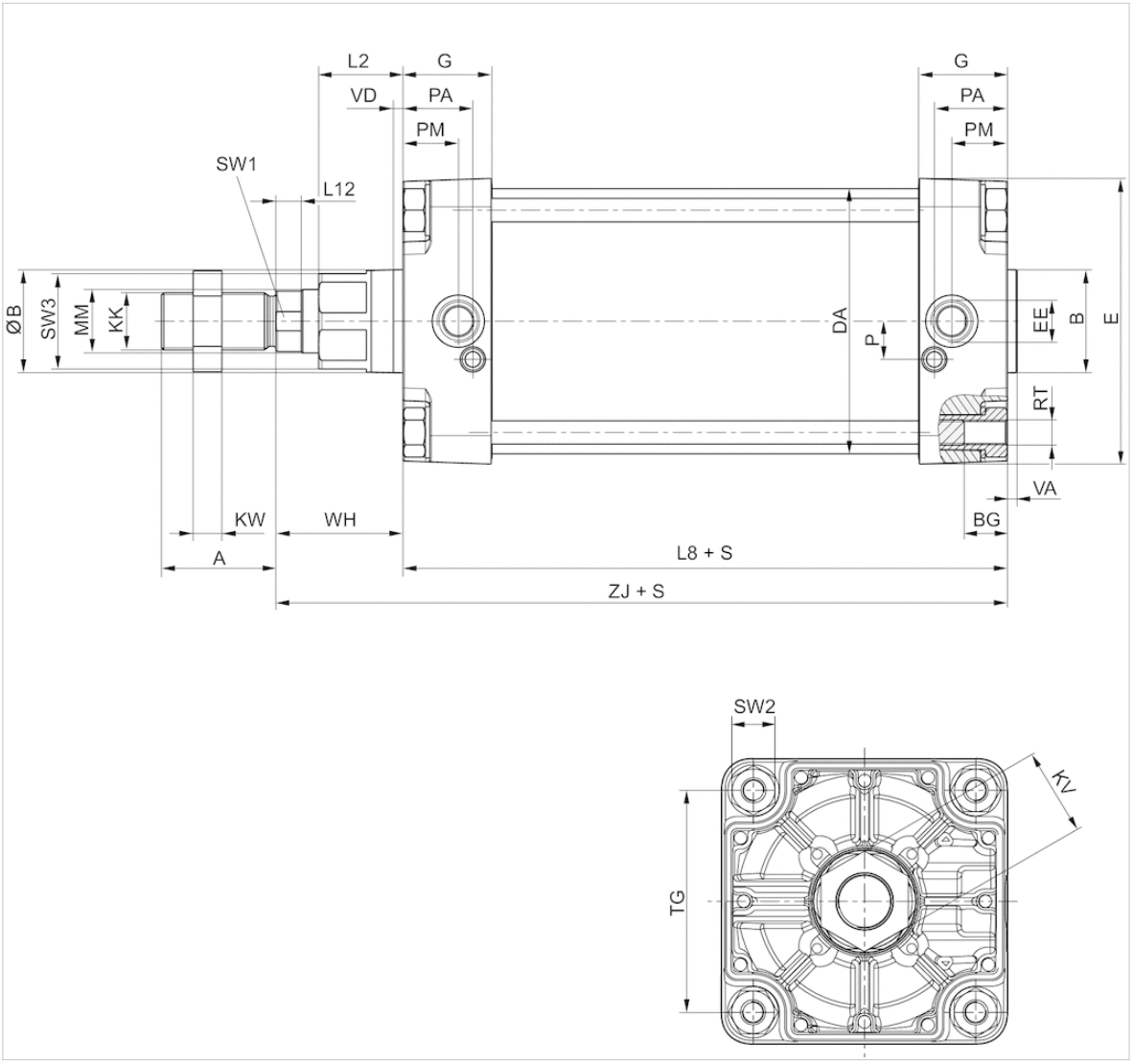
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
Seal	Fluorocaoutchouc
Nut for piston rod	Steel, galvanized
Scraper	Fluorocaoutchouc
Tie-rods	Stainless steel

Dimensions

Dimensions



S = stroke

Dimensions

Piston Ø	A	B	ØB	BG	DA	E	EE	G	KK	KV	KW	L2	L8	L12	MM	P	PA	PM	RT
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Piston Ø	SW1	SW2	SW3	TG	VA	VD	WH	ZJ
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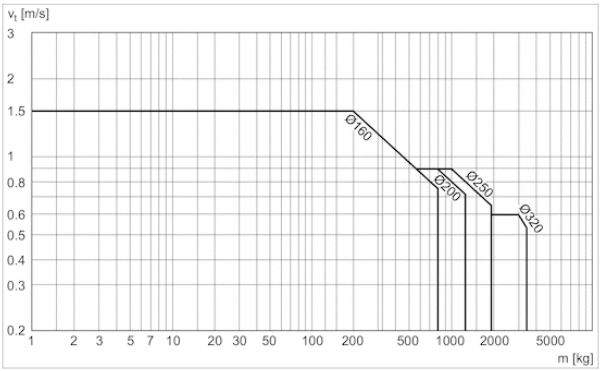
Diagrams

Cushioning diagram



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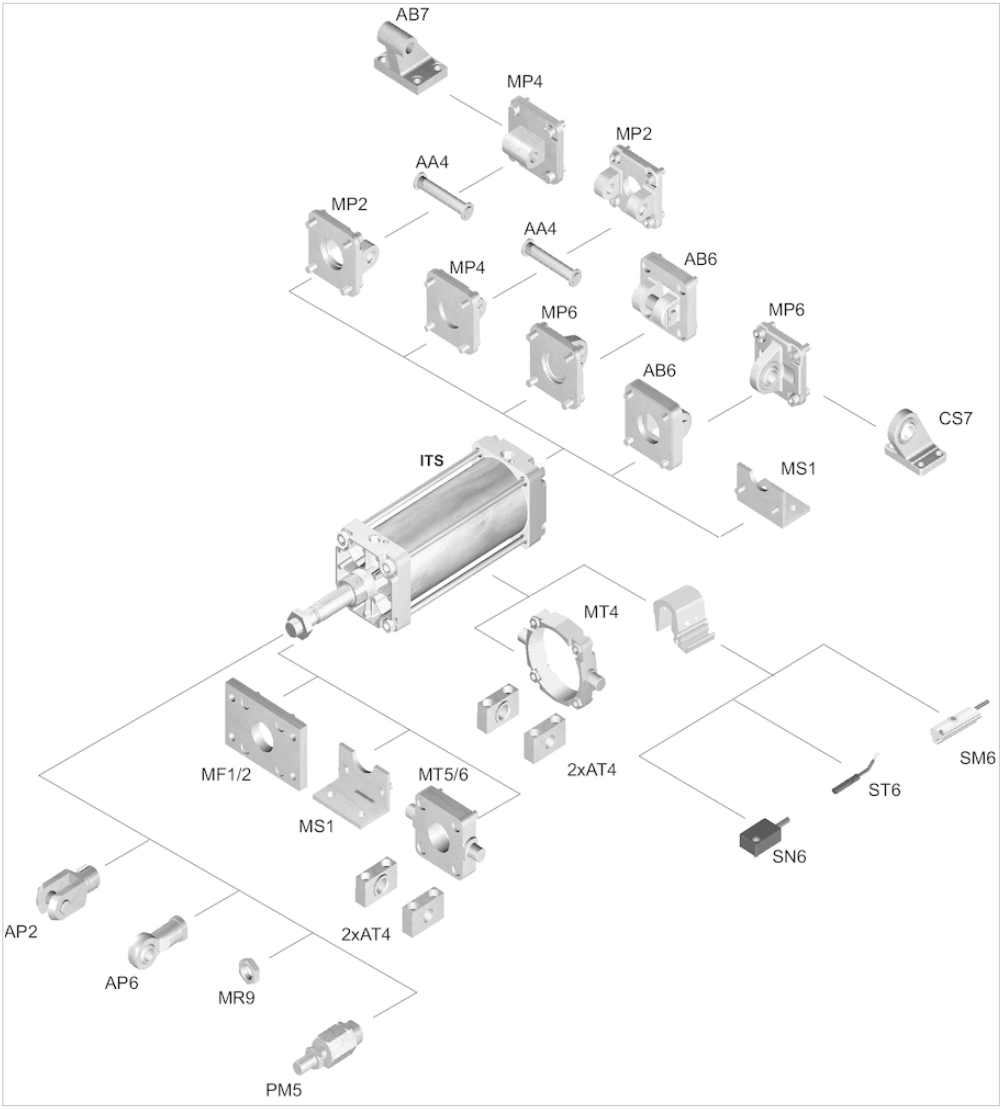
Accessories overview

Overview drawing



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