

Features and certifications

Series of cylinders conforming to CNOMO standards. With round barrel and tie rods, available in bores from Ø 25 to 200, double acting, with adjustable cushionings at both ends, magnetic or non magnetic. Supplied as standard in compliance with Reach and RoHS directives, and SIL certificated. On request, they can be also supplied according to the 2014/34/EU ATEX Directive.

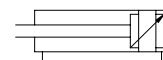



Type CX Ø 32 ÷ 100

from page 1.14.20



Cylinders CNOMO, available in bores from Ø 32 to 100, double acting, with adjustable cushionings at both ends, non magnetic. Supplied with rod nut.

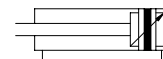


Type CM Ø 25 ÷ 200

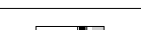
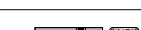
from page 1.14.40



Cylinders CNOMO, available in bores from Ø 32 to 200, double acting, with adjustable cushionings at both ends, magnetic. Supplied with rod nut.



Options

Description	Symbol	Suffix
Through rod		P
Stainless Steel AISI 304 rod		K
Stainless Steel AISI 316 rod		K316
Stainless Steel tie-rods, nuts and grower		K1
FKM seals -20°C ÷ +150°C		V
FKM rod seal -20°C ÷ +80°C		V1
Tandem forward movement piston rods coupled together		TA1
Tandem forward movement piston rods independent		TA2
Tandem back to back		TA3
Tandem front to front		TA4
Special length of front tie rod (indicate the requested length in mm, E.g.: T1=25; the thread will remain standard; for further information please contact the sales department)		T1
Special length of rear tie rod (indicate the requested length in mm, E.g.: T2=25; the thread will remain standard; for further information please contact the sales department)		T2
Without adjustable cushionings		D
Adjustable rear cushioning only		D1
Adjustable front cushioning only		D2
Stainless Steel AISI 316L tube		TX
ATEX versions on request (only with options K or K316; for further information please contact the sales department)		/ATEX
Special versions on request		/S

The options, when this is possible, can be combined with each other. For options matching see from page 1.14.4; For code key see from page 1.14.5

Options matching

Series	Bore	Model	Standard options matching												
			P	K	K316	K1	V	V1	TA..	T.. ⁽¹⁾	D	D1	D2	TX	/ATEX ⁽²⁾
CX	Ø 32 ÷ 100	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●
		Through rod (P)		●	●	●	●	●	-	●	●	●	●	●	●
		Stainless Steel rod (K)	●		-	●	●	●	●	●	●	●	●	●	●
CM	Ø 25 ÷ 200	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●
		Through rod (P)		●	●	●	●	●	-	●	●	●	●	●	●
		Stainless Steel rod (K)	●		-	●	●	●	●	●	●	●	●	●	●

Key

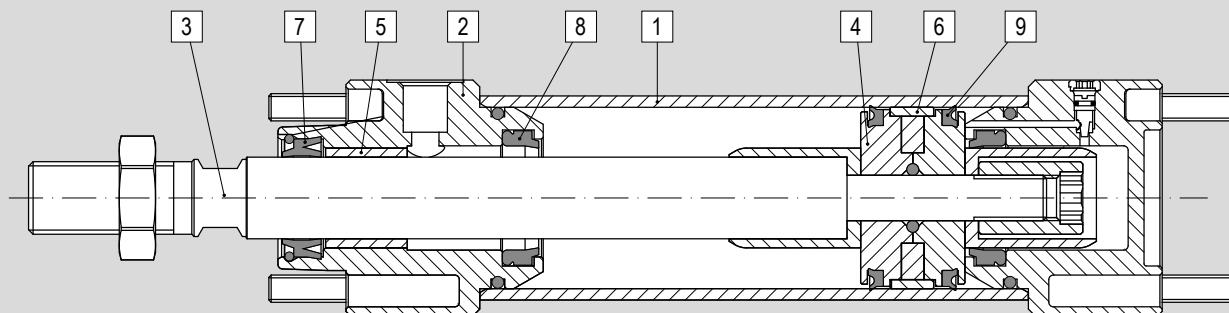
● allowed matching; - not allowed matching

Options matching - notes

(1) Options **T1** or **T2** require to indicate the desired dimension in mm (E.G. "T1=25"). Furthermore, please note that the thread of tie rods will remain standard. For further information please contact the sales department.

(2) In the **/ATEX** versions, is required to mount the stainless steel rod (options **K** or **K316**).

Standard materials



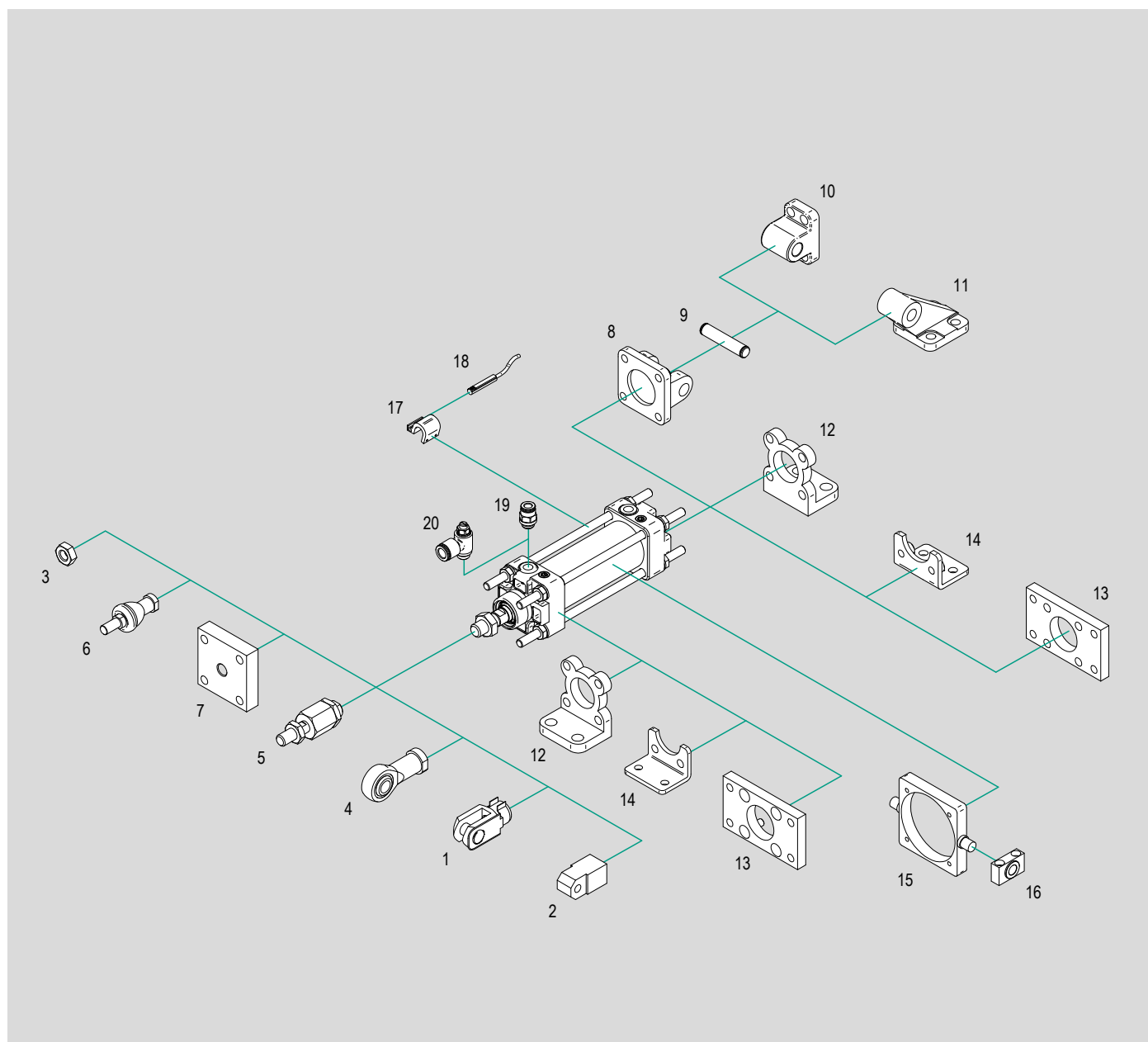
Position	Description	Materials	
		CX..	CM..
1	Tube	Anodised aluminium	
2	Heads	Die-cast aluminium powder coated	
3	Rod	Chrome-plated C45 steel	
4	Piston	Monobloc	Aluminium
5	Bushing	Self-lubricating sintered bronze	
6	Guide ring	-	Acetalic resin (POM)
7	Rod seal	NBR with metal core	
8	Cushioning seal	Polyurethane (PU)	
9	Piston seal	Polyurethane (PU)	
-	Other seals	NBR	

Code key

Bore	/	Stroke	Type	Options				Tandem version	Options				/	ATEX version	Special version
40	/	80	CM	P			V						/		
Ø 25*, 32, 40, 50, 63, 80, 100, 125*, 160*, 200* (*CM type only)															
10 mm ÷ 2800 mm															

Accessories

1 - CYLINDERS



N.	Cylinder bore	Item	Description	Compliance	Matching		Code page	Data sheet page
					CX	CM		
1	Ø 25 ÷ 125	FF..CN	CNOMO female clevis with clip	-	●	●	1.14.90	1.87.1
	Ø 25 ÷ 200	FFP..CN	CNOMO female clevis with pin and seeger		●	●		
		FFN..CN	CNOMO female clevis (body only)		●	●		
2	Ø 25 ÷ 200	FM..CN	CNOMO male clevis with pin and seeger		●	●		1.87.2
		FMN..CN	CNOMO male clevis (body only)		●	●		
3	Ø 25 ÷ 200	D..	Rod nut	UNI 5589	●	●	1.14.90	1.90.70
4	Ø 25 ÷ 200	RF..SE	Bearing head (DIN 648K) with female thread	ISO 8139	●	●		1.90.1
5	Ø 25 ÷ 200	GB..	Bearing - Self-aligning articulated coupling	-	●	●		1.90.10
6	Ø 25 ÷ 100	RBI..	Bearing - Axial articulated coupling	ISO	●	●		1.90.20
	Ø 40 ÷ 125	RBL..	Bearing - Angular articulated coupling		●	●		1.90.30
7	Ø 50 ÷ 200	GC..	Self-aligning coupling		●	●		1.90.40
8	Ø 32 ÷ 200	CF..ALCN	Rear clevis	CNOMO	●	●	1.14.91	1.99.1
9	Ø 32 ÷ 200	SEC..AQC	Pin for rear clevis		●	●	1.14.92	1.99.51
10	Ø 32 ÷ 200	AN..ALCN	Rear standard hinge		●	●	1.14.90	1.99.1
11	Ø 32 ÷ 200	AS..ALCN	Rear 90° hinge		●	●	1.14.91	1.99.2
12	Ø 25 ÷ 200	P..ALCN	High foot		●	●		1.99.50
13	Ø 32 ÷ 200	FL..AQC	Counterbored flange		●	●		
		FLF..AQC	Threaded flange		●	●		
14	Ø 32 ÷ 200	PB..AQC	Low foot		●	●		1.99.51
15	Ø 32 ÷ 200	CT..AQC	Adjustable center trunnion		●	●	1.14.92	1.99.52
		CTN..AQC	Non adjustable center trunnion		●	●		1.99.53
16	Ø 32 ÷ 200	ST..AQIS	Support for center trunnion	ISO AT4	●	●		
17	Ø 25 ÷ 200	AS..	Bracket for T type magnetic reed switches	-	-	●	1.14.91	1.120.3
			Bracket for hi-temp. magnetic reed switches		-	●		1.120.4
18	Ø 25 ÷ 200	ASV..	Magnetic reed switch T groove	2014/34/EU	-	●	1.14.92	1.110.10
		MK..	ATEX magnetic reed switch T groove		-	●		1.113.1
		ASH..	Hi-temperatures magnetic reed switch		-	●		1.111.1
19	Ø 25 ÷ 200	R..	Push-in fittings	-	●	●	4.2.1	
20	Ø 25 ÷ 200	V..C	Flow controls, for cylinders		●	●	4.94.1	

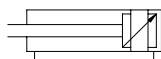
Key

● matching accessory; - not matching accessory

Main features

32 ÷ 100

Bores Ø



Double acting
Non magnetic
With cushioning

CX

Type



Technical data

Bore Ø mm		32	40	50	63	80	100
Fluid		Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.					
Pressure range		1 ÷ 10 bar					
Temperature range		-20°C ÷ +80°C (standard / V1)		-20°C ÷ +150°C (V)			
Strokes		10 ÷ 2800 mm					
Cushion length		21	28	28	34	34	38
Port		1/8"	1/4"	3/8"			1/2"
Rod thread		M10x1,5	M16x1,5		M20x1,5		M27x2
Weight (g.)	Stroke zero	453	842	1231	1962	2867	4772
	Additional 10 mm	24	35	50	60	76	107

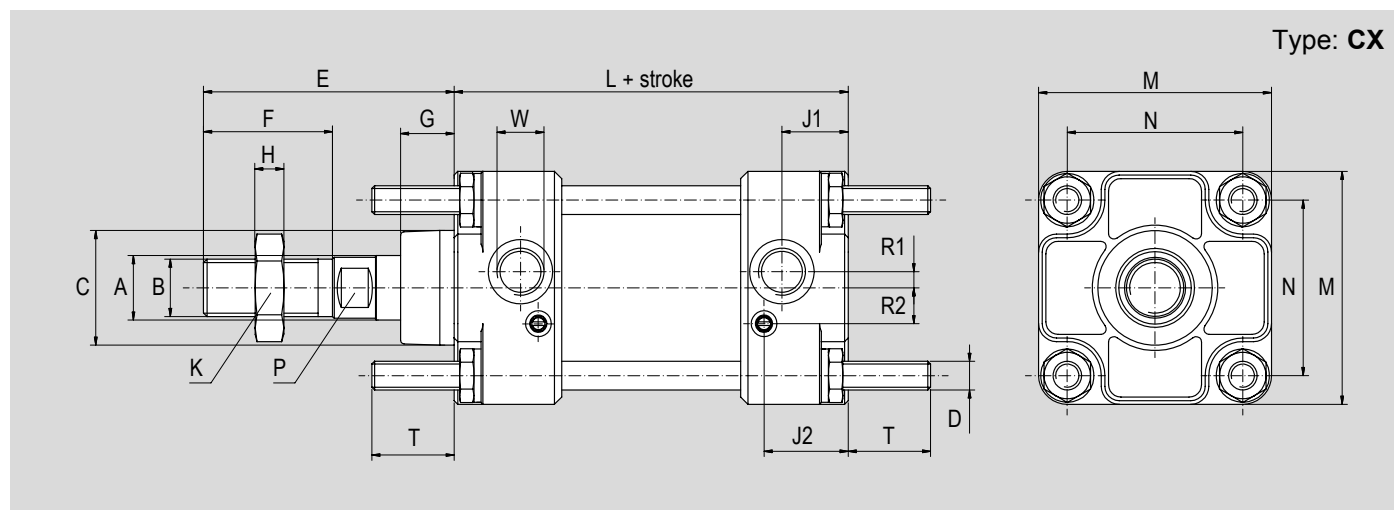
Standard strokes

Stroke mm	CX Bore Ø mm					
	32	40	50	63	80	100
10						
25						
50						
80						
100						
125						
150						
160						
200						
250						
300						
320						
400						
450						
500						

Key

☐ Standard stroke

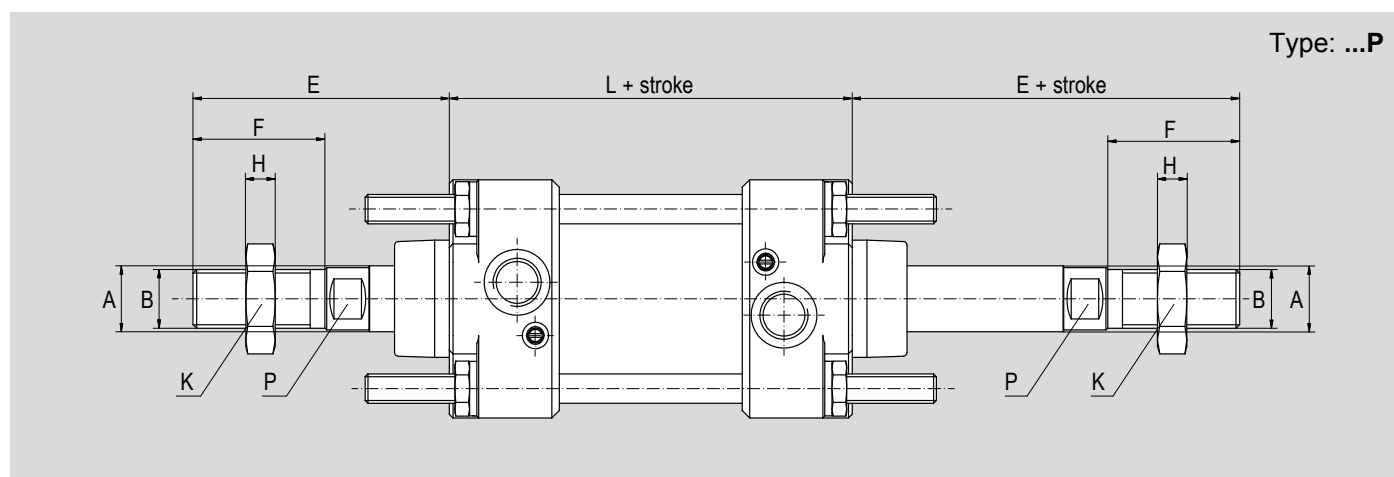
Standard dimensions



Ø (mm)	ØA f7	B	ØC e9	E	F	G	L ±1	P	K	H	D	T*	W	M	N	J1	J2	R1	R2
32	12	M10x1.5	25	45	20	15	80	8	17	6	M6	17	1/8"	45	33	15	16.5	6	8
40	18	M16x1.5	32	70	36	15	110	13	24	8	M6	17	1/4"	52	40	17.5	23	3	11
50	18	M16x1.5	32	70	36	15	110	13	24	8	M8	23	1/4"	65	49	18.5	23.5	4.5	10
63	22	M20x1.5	45	85	46	20	125	17	30	9	M8	23	3/8"	75	59	19	23	4.5	14
80	22	M20x1.5	45	85	46	20	125	17	30	9	M10	28	3/8"	95	75	22	25	8	13
100	30	M27x2	55	110	63	20	145	22	41	12	M10	28	1/2"	115	90	26	31	12	10

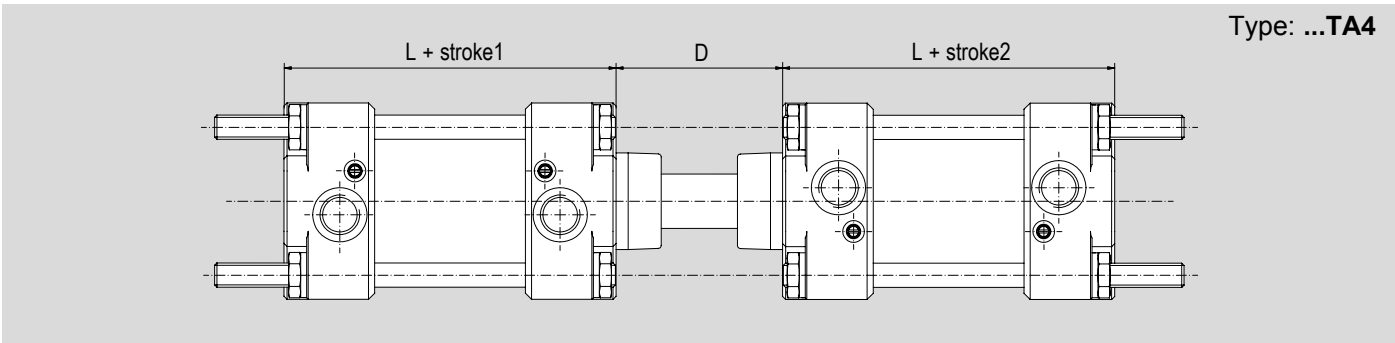
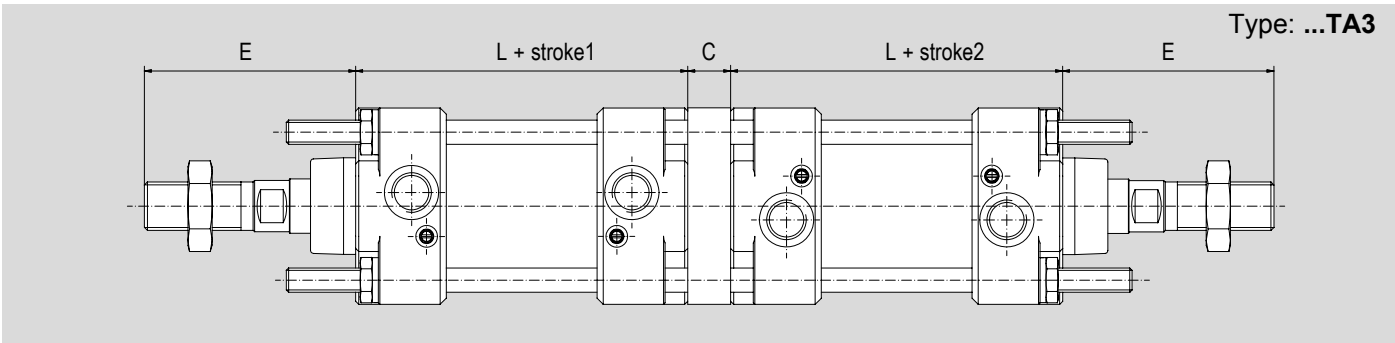
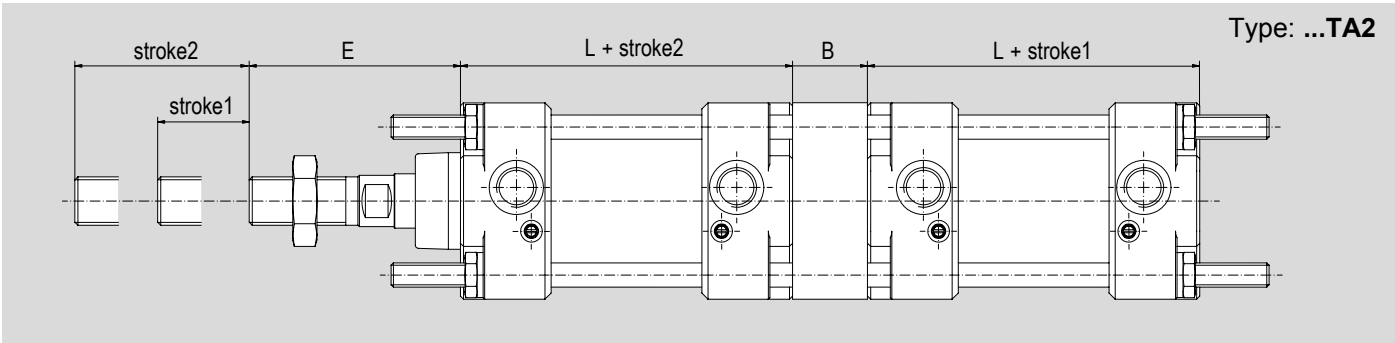
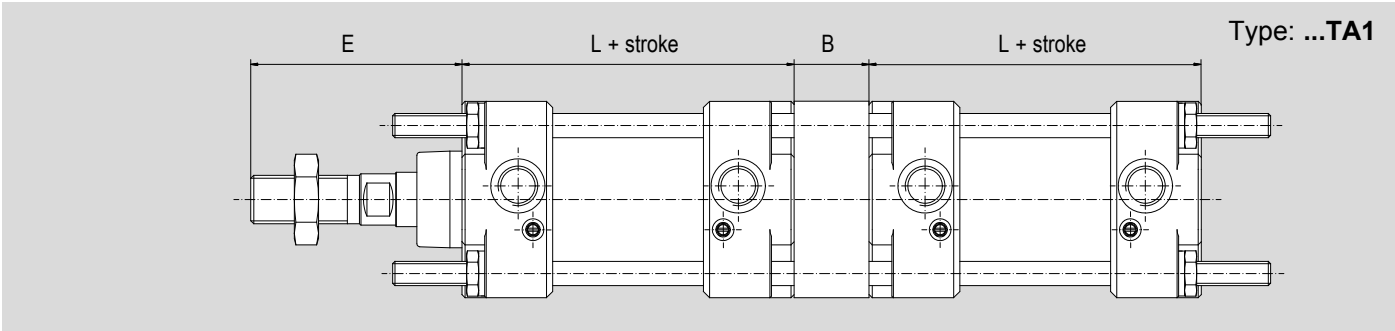
*In case of combination with center trunnion (CT..AQC or CTN..AQC, see page 1.14.92), T dimension is equal 0 in every bore; In case of combination with threaded flange (FLF..AQC, see page 1.14.91), T dimension of tie-rods is 1 mm lower of the flange thickness (AS dimension, see page 1.99.50), while on the opposite side, T dimension is equal 0. These accessories necessarily have to be ordered with the cylinder.

Dimensions with options



Ø (mm)	ØA f7	B	E	F	L ±1	P	K	H
32	12	M10x1.5	45	20	90	8	17	6
40	18	M16x1.5	70	36	129	13	24	8
50	18	M16x1.5	70	36	129	13	24	8
63	22	M20x1.5	85	46	143	17	30	9
80	22	M20x1.5	85	46	143	17	30	9
100	30	M27x2	110	63	164	22	41	12

Dimensions tandem versions

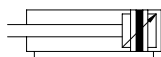


Ø mm	E	L	B	C	D
32	45	80	30	5	38
40	70	110	30	8	40
50	70	110	30	8	47
63	85	125	40	10	59
80	85	125	40	10	62
100	110	145	40	15	55

Main features

25 ÷ 200

Bores Ø



Double acting
Magnetic
With cushioning

CM

Type



Technical data

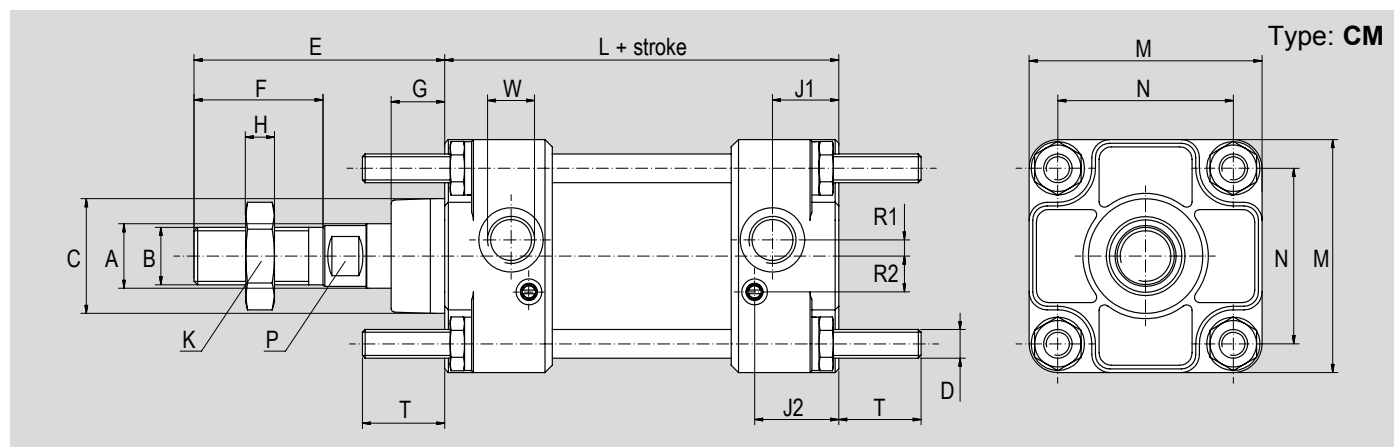
Bore Ø mm		25	32	40	50	63	80	100	125	160	200
Fluid		Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.									
Pressure range		1 ÷ 10 bar									
Temperature range		-20°C ÷ +80°C (standard / V1)					-20°C ÷ +150°C (V)				
Strokes		10 ÷ 2800 mm									
Cushion length		21		28		34		38	27	40	
Port		1/8"		1/4"		3/8"		1/2"		3/4"	
Rod thread		M10x1,5		M16x1,5		M20x1,5		M27x2		M36x2	
Weight (g.)	Stroke zero	377	453	842	1231	1962	2867	4772	6146	12846	16175
	Additional 10 mm	22	24	35	50	60	76	107	135	232	249

Standard strokes

Stroke mm	CM Bore Ø mm									
	25	32	40	50	63	80	100	125	160	200
10										
25										
50										
80										
100										
125										
150										
160										
200										
250										
300										
320										
400										
450										
500										

Key
☐ Standard stroke

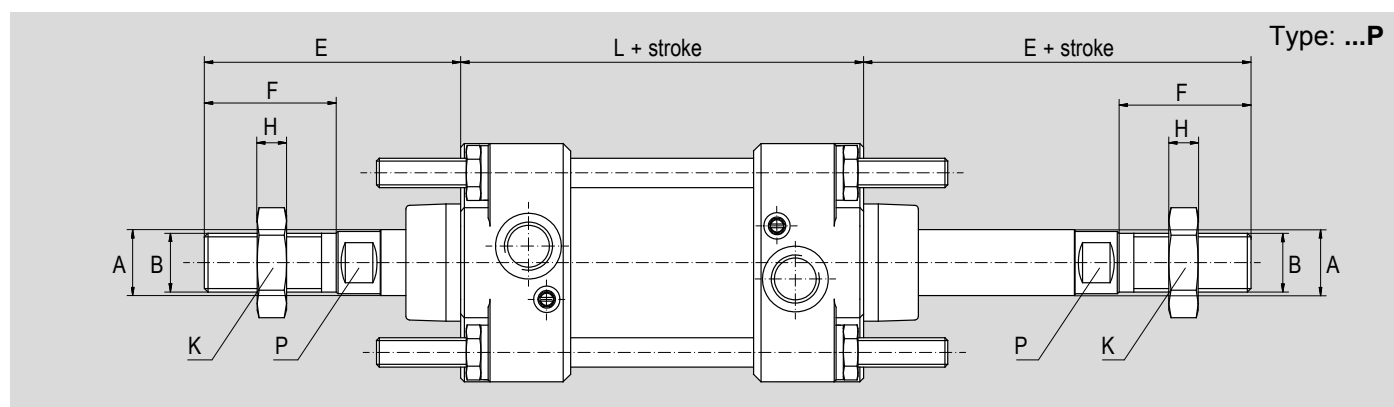
Standard dimensions



Ø (mm)	ØA f7	B	ØC e9	E	F	G	L ±1	P	K	H	D	T*	W	M	N	J1	J2	R1	R2
25	12	M10x1.5	25	45	20	15	80	8	17	6	M6	17	1/8"	40	28	7	11	0.75	7.5
32	12	M10x1.5	25	45	20	15	80	8	17	6	M6	17	1/8"	45	33	15	16.5	6	8
40	18	M16x1.5	32	70	36	15	110	13	24	8	M6	17	1/4"	52	40	17.5	23	3	11
50	18	M16x1.5	32	70	36	15	110	13	24	8	M8	23	1/4"	65	49	18.5	23.5	4.5	10
63	22	M20x1.5	45	85	46	20	125	17	30	9	M8	23	3/8"	75	59	19	23	4.5	14
80	22	M20x1.5	45	85	46	20	125	17	30	9	M10	28	3/8"	95	75	22	25	8	13
100	30	M27x2	55	110	63	20	145	22	41	12	M10	28	1/2"	115	90	26	31	12	10
125	30	M27x2	55	110	63	20	145	22	41	12	M12	34	1/2"	140	110	-	-	-	-
160	40	M36x2	65	135	85	25	180	32	54	14	M16	42	3/4"	180	140	-	-	-	-
200	40	M36x2	65	135	85	25	180	32	54	14	M16	42	3/4"	220	175	-	-	-	-

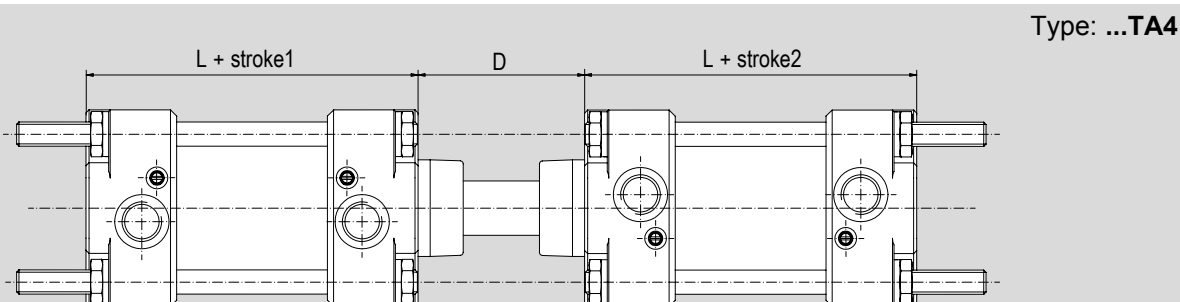
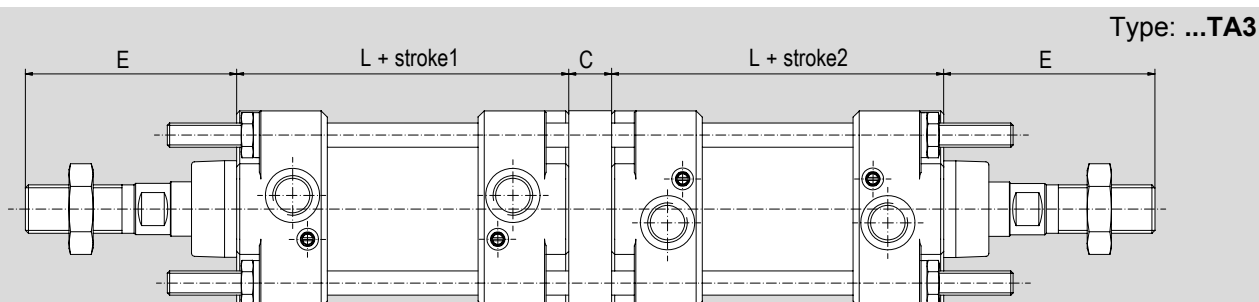
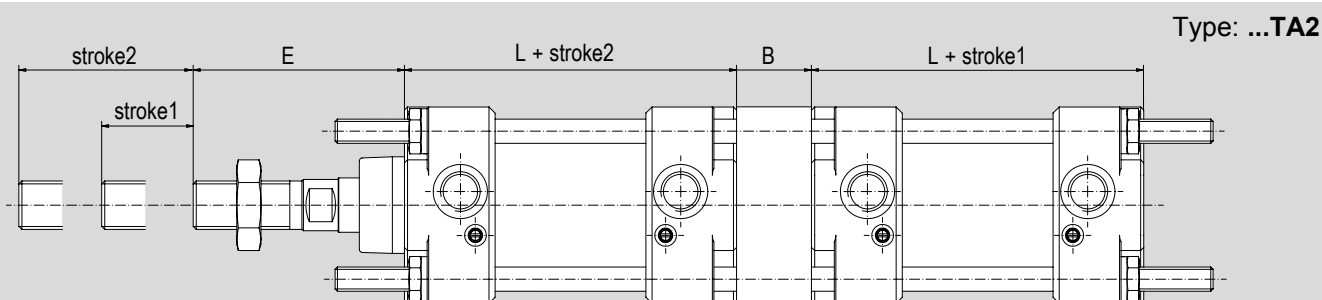
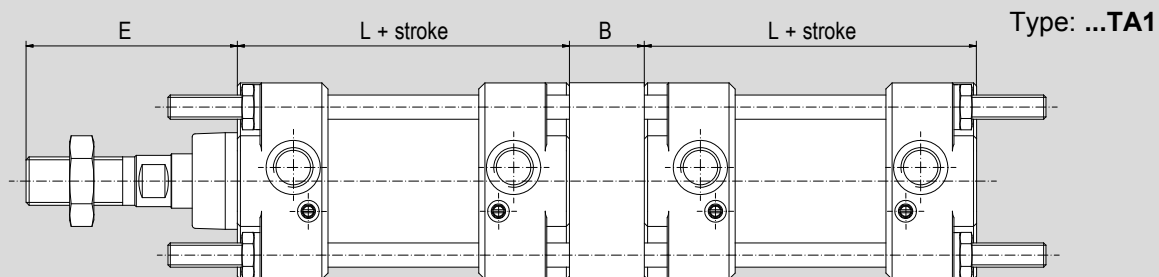
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Dimensions with options



Ø (mm)	ØA f7	B	E	F	L ±1	P	K	H
25	12	M10x1.5	45	20	90	8	17	6
32	12	M10x1.5	45	20	90	8	17	6
40	18	M16x1.5	70	36	129	13	24	8
50	18	M16x1.5	70	36	129	13	24	8
63	22	M20x1.5	85	46	143	17	30	9
80	22	M20x1.5	85	46	143	17	30	9
100	30	M27x2	110	63	164	22	41	12
125	30	M27x2	110	63	164	22	41	12
160	40	M36x2	135	85	200	32	54	14
200	40	M36x2	135	85	200	32	54	14

Dimensions tandem versions



Ø mm	E	L	B	C	D
25	45	80	30	5	36
32	45	80	30	5	38
40	70	110	30	8	40
50	70	110	30	8	47
63	85	125	40	10	59
80	85	125	40	10	62
100	110	145	40	15	55
125	110	145	40	15	80
160	135	180	50	20	102
200	135	180	50	20	87

Female clevis with clip FF..CN

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041081	FF10CN	-
	40-50	041082	FF16CN	
	63-80	041084	FF20CN	
	100-125	041086	FF27CN	
	160-200	-	-	

Female clevis with pin and seeger FFP..CN

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041106	FFP10CN	-
	40-50	041105	FFP16CN	
	63-80	041097	FFP20CN	
	100-125	041087	FFP27CN	
	160-200	041088	FFP36CN	

On request available the clevis FFN..CN (body only) in Ø 25 ÷ 200

Male clevis with pin and seeger FM..CN

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041041	FM10CN	-
	40-50	041042	FM16CN	
	63-80	041044	FM16CN	
	100-125	041046	FM27CN	
	160-200	041048	FM36CN	

On request available the clevis FMN..CN (body only) in Ø 25 ÷ 200

Rod nut D..

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041453	D10x1,5	
	40-50	041455	D16x1,5	
	63-80	041456	D20x1,5	
	100-125	041458	D27x2	
	160-200	041459	D36x2	

Bearing heads (DIN 648K) with female thread RF..SE

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041565	RF10x1,5SE	
	40-50	041557	RF16SE	
	63-80	041559	RF20SE	
	100-125	041562	RF30SE	
	160-200	041563	RF35SE	

Self-aligning articulated coupling GB..

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041705	GB050	-
	40-50	041708	GB100	
	63-80	041709	GB120	
	100-125	041711	GB130	
	160-200	041712	GB160-200	

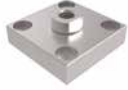
Axial articulated coupling RBL..

	For cylinder Ø mm	Code	Item	Compliance
	25-32	041611	RBI10x1,5	-
	50-63	041607	RBI16	
	80-100	041609	RBI20	

Angular articulated coupling RBL..

	For cylinder Ø mm	Code	Item	Compliance
	40-50	041657	RBL16	-
	63-80	041659	RBL20	

Self-aligning coupling GC..

	For cylinder Ø mm	Code	Item	Compliance
	40-50	041724	GCM16x1,5	-
	63-80	041725	GCM20x1,5	
	100-125	041726	GCM27x2	
	160-200	041727	GCM36x2	

Rear standard hinge in aluminium AN..ALCN

	For cylinder Ø mm	Code	Item	Compliance
	32	040281	AN032ALCN	
	40-50	040282	AN040/050ALCN	
	63-80	040284	AN063/080ALCN	
	100-125	040286	AN100/125ALCN	
	160-200	040288	AN160/200ALCN	

Nuts and growers to be ordered separately, see from page 1.101.20

Rear clevis* in aluminium CF..ALCN

	For cylinder Ø mm	Code	Item	Compliance
	32	040401	CF032ALCN	CNOMO
	40	040402	CF040ALCN	
	50	040403	CF050ALCN	
	63	040404	CF063ALCN	
	80	040405	CF080ALCN	
	100	040406	CF100ALCN	
	125	040407	CF125ALCN	
	160	040408	CF160ALCN	
	200	040409	CF200ALCN	

*Pin SEC..AQC to be ordered separately, see page 1.14.110
Nuts and growers to be ordered separately, see from page 1.101.20

High foot* in aluminium P..ALCN

	For cylinder Ø mm	Code	Item	Compliance
	32	040101	P032ALCN	CNOMO
	40	040102	P040ALCN	
	50	040103	P050ALCN	
	63	040104	P063ALCN	
	80	040105	P080ALCN	
	100	040106	P100ALCN	
	125	040107	P125ALCN	
	160	040108	P160ALCN	
	200	040109	P200ALCN	

*Supplied individually
Nuts and growers to be ordered separately, see from page 1.101.20

Rear 90° hinge in aluminium AS..ALCN

	For cylinder Ø mm	Code	Item	Compliance
	32	040321	AS032ALCN	CNOMO
	40-50	040322	AS040/050ALCN	
	63-80	040324	AS063/080ALCN	
	100-125	040326	AS100/125ALCN	
	160-200	040328	AS160/200ALCN	

Low foot* in steel PB..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040161	PB032AQC	CNOMO
	40	040162	PB040AQC	
	50	040163	PB050AQC	
	63	040164	PB063AQC	
	80	040165	PB080AQC	
	100	040166	PB100AQC	
	125	040167	PB125AQC	
	160	040168	PB160AQC	
	200	040169	PB200AQC	

*Supplied individually; Nuts and growers to be ordered separately, see from page 1.101.20

Counterbored flange in steel FL..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040621	FL032AQC	CNOMO
	40	040622	FL040AQC	
	50	040623	FL050AQC	
	63	040624	FL063AQC	
	80	040625	FL080AQC	
	100	040626	FL100AQC	
	125	040627	FL125AQC	
	160	040628	FL160AQC	
	200	040629	FL200AQC	

Nuts and growers to be ordered separately, see from page 1.101.20

Threaded flange* in steel FLF..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040948	FLF032AQC	CNOMO
	40	040949	FLF040AQC	
	50	040950	FLF050AQC	
	63	040951	FLF063AQC	
	80	040952	FLF080AQC	
	100	040953	FLF100AQC	
	125	040954	FLF125AQC	
	160	040955	FLF160AQC	
	200	040956	FLF200AQC	

*To be ordered together with the cylinder. For tie-rods dimensions, please see page 1.14.21 and 1.14.41; Nuts and growers to be ordered separately, see page 1.101.20

Bracket AS.. for magnetic reed switches T groove

	For cylinder Ø mm	Code	Item	Cylinder matching
	25 ÷ 40	072912	AS105	CM
	50 ÷ 100	072913	AS106	
	125	072909	AS102	
	160 - 200	072910	AS103	

Bracket AS.. for high-temperatures magnetic reed switches

	For cylinder Ø mm	Code	Item	Cylinder matching
	25 ÷ 40	074041	AS117	CM
	50 - 63	074043	AS118	
	80 - 100	074087	AS119	
	125	074155	AS120	
	160 - 200	074169	AS121	

Adjustable center trunnion* in steel with grains CT..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040559	CT032AQC	CNOMO
	40	040558	CT040AQC	
	50	040538	CT050AQC	
	63	040540	CT063AQC	
	80	040545R	CT080AQC	
	100	040546R	CT100AQC	
	125	040580	CT125AQC	
	160	040630	CT160AQC	
	200	040597	CT200AQC	

Support ST..AQIS to be ordered separately, see below.

*When mounting this accessory, the cylinder tie-rod T dimension (see page 1.14.21 or 1.14.41) is 0 for every bore. For the trunnion mounted on the cylinder, please order together with the cylinder.

Non adjustable center trunnion* in steel CTN..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040541	CTN032AQC	CNOMO
	40	040542	CTN040AQC	
	50	040543	CTN050AQC	
	63	040544	CTN063AQC	
	80	040545	CTN080AQC	
	100	040546	CTN100AQC	
	125	040547	CTN125AQC	
	160	040548	CTN160AQC	
	200	040549	CTN200AQC	

Support ST..AQIS to be ordered separately, see below.

*When mounting this accessory, the cylinder tie-rod T dimension (see page 1.14.21 or 1.14.41) is 0 for every bore. For the trunnion mounted on the cylinder, please order together with the cylinder, indicating the XV dimension (cannot be modified), see page 1.99.52

Support for center trunnion in steel ST..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040681	ST032AQIS	ISO AT4
	40-50	040682	ST040/050AQIS	
	63-80	040684	ST063/080AQIS	
	100-125	040686	ST100/125AQIS	
	160-200	040688	ST160/200AQIS	

*Supplied individually

Pin for rear clevis in steel with seeger* SEC..AQC

	For cylinder Ø mm	Code	Item	Compliance
	32	040221	SEC032AQC	CNOMO
	40	040222	SEC040AQC	
	50	040223	SEC050AQC	
	63	040224	SEC063AQC	
	80	040225	SEC080AQC	
	100	040226	SEC100AQC	
	125	040227	SEC125AQC	
	160	040228	SEC160AQC	
	200	040229	SEC200AQC	

*Supplied with 2 seeger

Magnetic reed switch T groove ASV..

	For cylinder Ø mm	Code	Item	Cylinder matching
	25 ÷ 200	070946	ASV1C525	CM*
		071863	ASV1C550	
		071864	ASV1C51K	
		071189	ASV1C5M8	
		073639	ASV4D225	
		070246	ASV4D2M8	
		074900	ASV7N225	
		070247	ASV7N2M8	
		070372	ASV7M2M8	
		072918	ASV1H525	

*With bracket AS.. for magnetic reed switches T groove, see page 1.14.91

ATEX magnetic reed switch T groove MK..

	For cylinder Ø mm	Code	Item	Compliance	Cylinder matching
	25 ÷ 200	071120	MK500A	Ex 3D	CM*
		071108	MK502A	Ex II1G	

*With bracket AS.. for magnetic reed switches T groove, see page 1.14.91

High-temperatures magnetic reed switches ASH..

	For cylinder Ø mm	Code	Item	Cylinder matching
	25 ÷ 200	074047	ASH6C550	CM*

*With bracket AS.. for high-temperatures magnetic reed switches, see page 1.14.91