

STAINLESS STEEL

cylinders ISO 15552



Find out our
key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



Main features and certifications

Series of Stainless Steel AISI 316L cylinders conforming to ISO 15552 standards in bores from Ø 32 to 200, double acting, magnetic. Supplied as standard in compliance to Reach and RoHS directives, and SIL certified. Lubrication with synthetic grease long lasting, for applications with low start up, granting low friction and a permanent lubrication film. Fully composed by non-toxic elements conforming to FDA Directive section 21 CFR 178 about accidental contact with food (registered NSF H1). On request, can be also supplied according to the 2014/34/EU ATEX Directive.

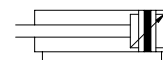


Type AMX Ø 32 ÷ 200

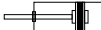
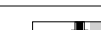
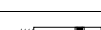
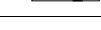
from page 5.5.20



Stainless Steel AISI 316L Cylinders ISO 15552, available in bores from Ø 32 to 200, double acting magnetic with adjustable cushioning, made with round tube and tie-rods. Rod seal in special polyurethane developed for chemical and food&beverage. The design is modern and clean, with care for the details. Particular attention was addressed to the end caps design, infacts no external casting cavities are present, thus avoid contamination traps. In order to easy and fast replace the rod seal for standard maintenance, nose was designed demountable.



Options

Description		Symbol	Suffix
Through rod			P
FKM seals	-20°C ÷ +150°C		V
FKM rod seal	-20°C ÷ +80°C		V1
Low temperature seals	-40°C ÷ +80°C		BT
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
Extended rod (indicate the requested WH dimension in mm, E.g.: WH=100; for further information please contact the sales department)			WH=..
Without adjustable cushionings			D
Adjustable rear cushioning only			D1
Adjustable front cushioning only			D2
Special male thread (indicate the requested thread. E.g.: R-M 10x1,5; the dimension AM of the special thread will be the same as the standard; cylinder will be supplied without rod nut; for further information please contact the sales department)			R-M..
Female thread			F
With bellow for protection of the rod (in this case the dimension WH should be extended according the stroke of the cylinder; for further information please contact the sales department)			Z
NBR seals	-20°C ÷ +80°C		H
NBR rod seal	-20°C ÷ +80°C		H1
ATEX versions on request			/ATEX
Special versions on request			/S

The options, when this is possible, can be combined with each other. For options matching see from page 5.5.4; For code key see from page 5.5.6.

Options matching

Series	Bore	Model	Standard options matching							
			P	V	V1	BT	TA1	TA2	TA3	TA4
AMX	Ø 32 ÷ 200	Standard	●	●	●	●	●	●	●	●
		Through rod (P)		●	●	●	-	-	-	-
		Female thread (F)	● ⁽⁴⁾	●	●	●	●	●	●	-
		Bellow (Z)	-	●	-	●	-	-	-	-

Key

● allowed matching; - not allowed matching

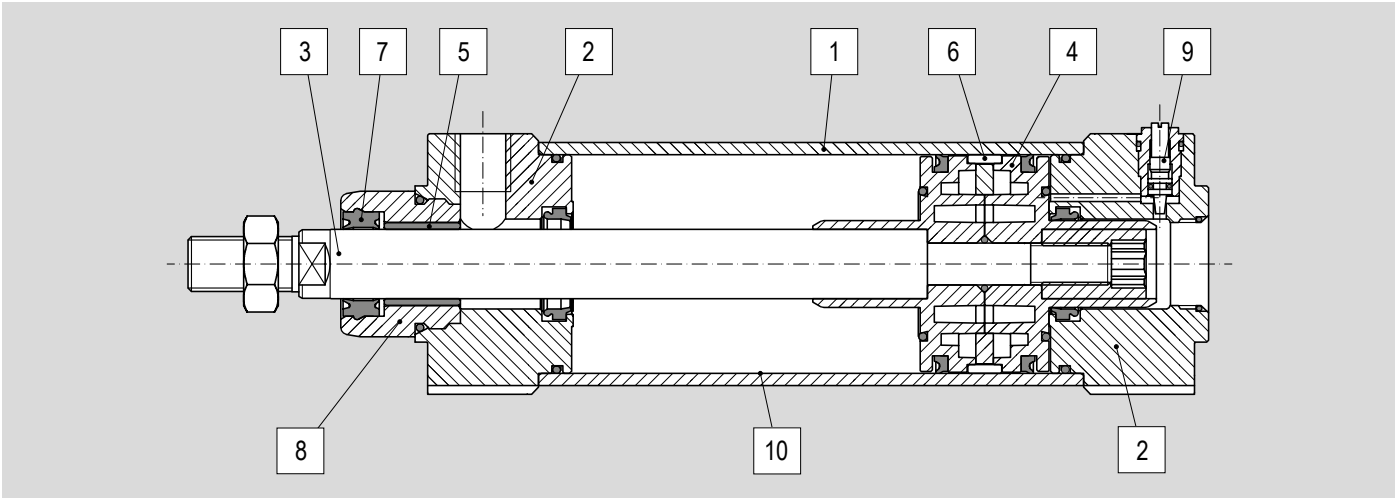
Options matching - note

- (1) Option **WH=..** require to indicate the desired dimension in mm, whereas for some combinations the option **WH=..** should be required or optional. For further information please contact the sales department. If you choose the female thread (option **F**), please indicate the dimension **WF=..** and then the actual desired dimension.
- (2) Option **R-M..** require to indicate the desired thread. For further information please contact the sales department.
- (3) For some bore and strokes, with bellow option (**Z**) could be necessary the extended rod option (**WH=..**), or the **WH=..** as an option can be different according to customer choiche. For further information please contact the sales department.
- (4) With through rod (option **P**) the option female thread (**F**) and the option special male thread (**R-M..**) are applied on both sides of the rod. While the option extended rod (**WH=..**) is applied only to one side at the rod.

Standard options matching

WH=.. ⁽¹⁾	D	D1	D2	R-M.. ⁽²⁾	F	Z ⁽³⁾	H	H1	/ATEX
•	•	•	•	•	•	•	•	•	•
• ⁽⁴⁾	•	•	-	• ⁽⁴⁾	• ⁽⁴⁾	-	•	•	•
•	•	•	•	-		•	•	•	•
• ⁽³⁾	•	•	•	•	•		•	•	•

Standard materials



Position	Description	Material	
		Ø 32 ÷ 125	Ø 160 ÷ 200
1	Tube	Stainless Steel AISI 316 L	Stainless Steel AISI 304
2	Heads	Stainless Steel AISI 316 L	
3	Rod	Lapped Stainless Steel AISI 316 L	
4	Piston	Die-cast aluminium	
5	Bushing	Self-lubricating sintered bronze	
6	Guide ring	Natural acetatic resin	
7	Rod seal	Special polyurethane	
8	Disassembling nose	Stainless Steel AISI 316 L	
9	Cushioning screw assembly	Stainless Steel AISI 316 L	
10	Tie-rods	Stainless Steel AISI 316 L	
-	Other seals	NBR / Polyurethane (PU)	

Code key

Bore	/	Stroke	Type	Options		
63	/	100	AMX	P	V	
Ø 32, 40, 50, 63, 80, 100, 125, 160, 200		10 mm ÷ 2500 mm	AMX Double acting Magnetic	P	V V1 BT H H1	D D1 D2

How to order

Bore		Stroke	Type	Options
63	/	100	AMX	P V

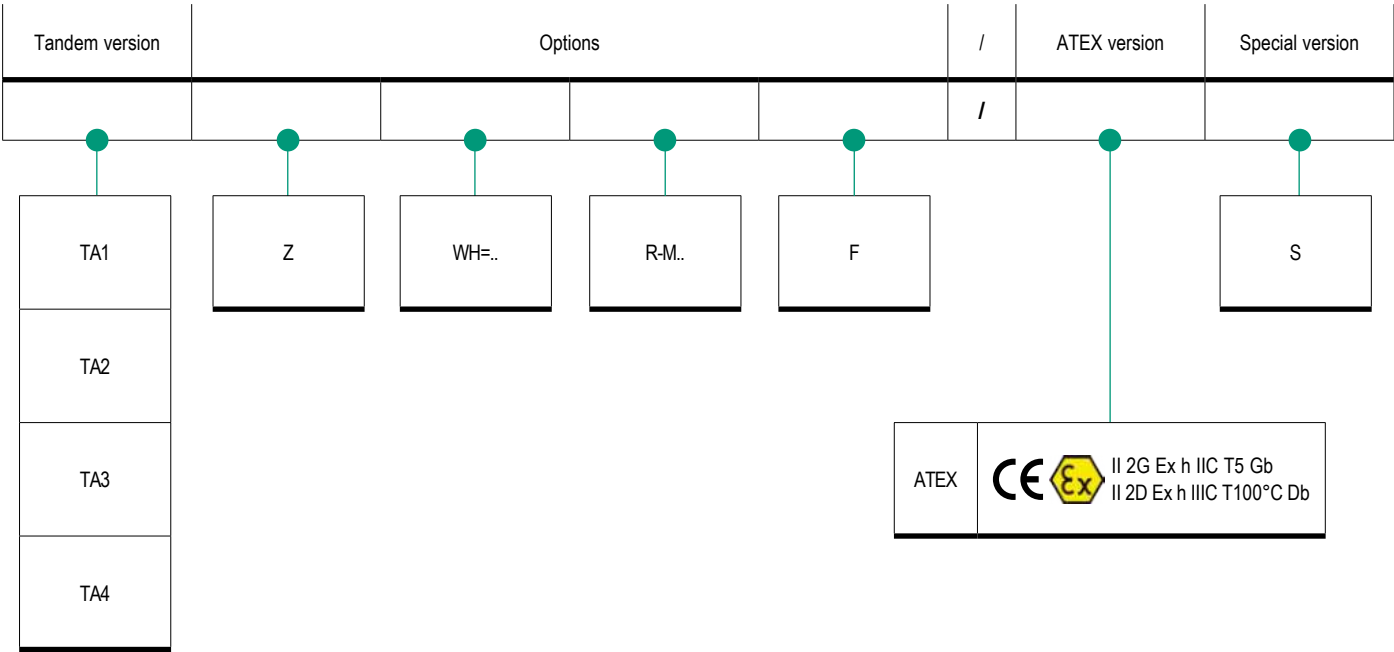
Notes

For standard materials see the table at page 5.5.5

Options in the same grid are alternative to each others.

For further information on options and their matching, see page 5.5.3 and 5.5.4

For further information on the ATEX 2014/34/EU Directive, on classifications and protections, see from page III.1

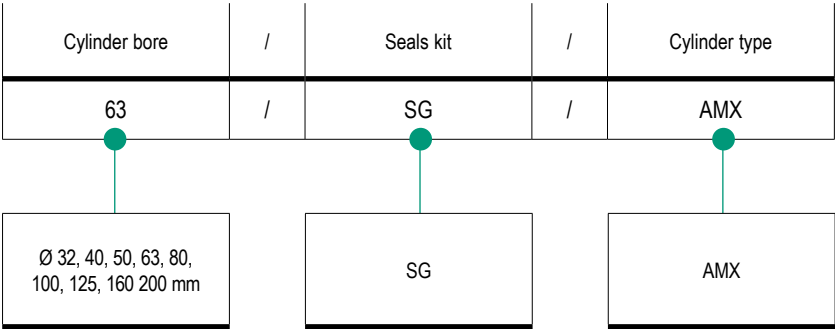


Standard* seal kit

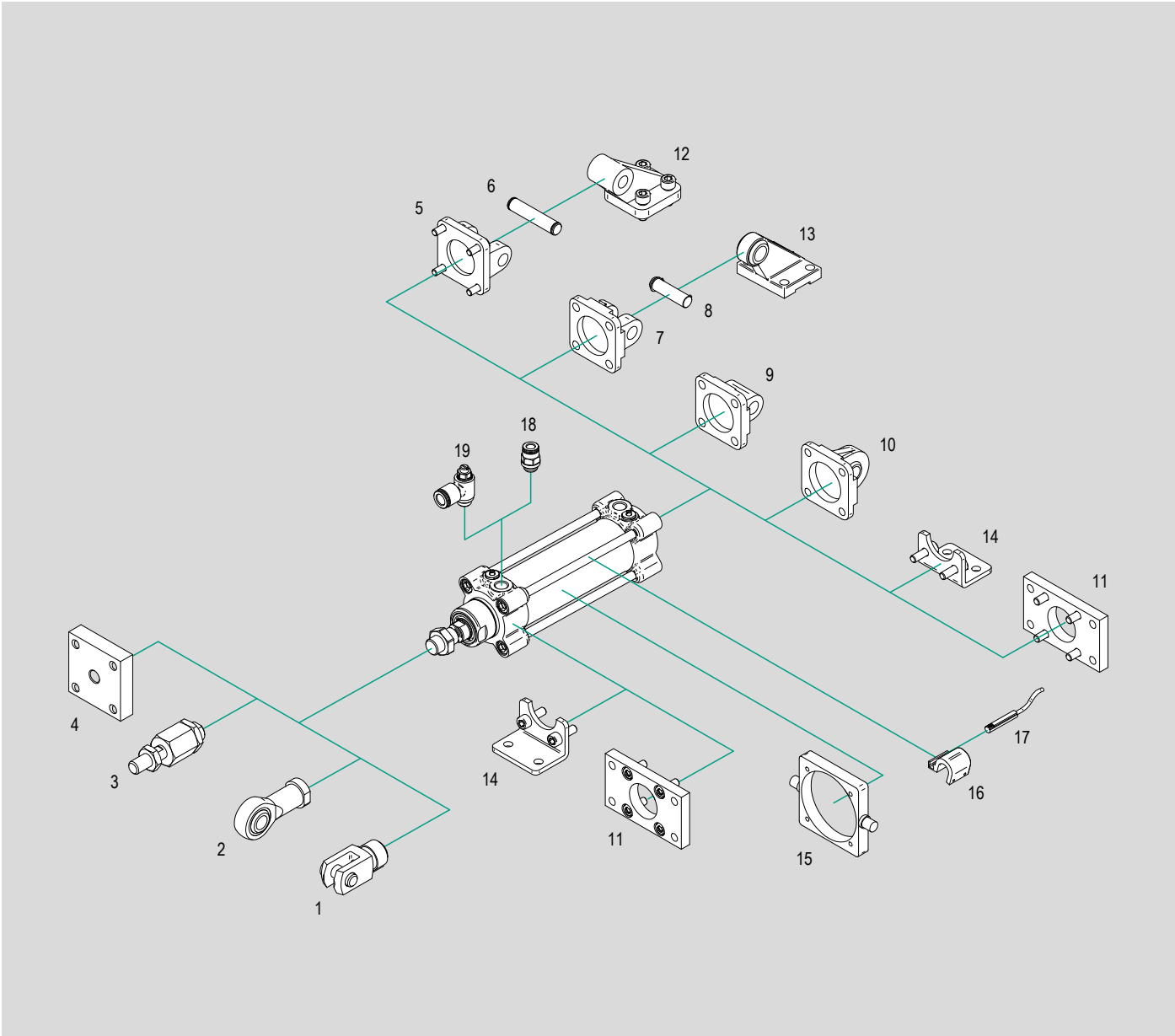
Number of components	Description
n. 1	Rod seal
n. 2	Cushioning seal
n. 2	Piston seal
n. 1	Nose seal
n. 1	Plug seal
n. 1	Linear rubber ring for piston (damper)
n. 2	Tube-head O-ring
n. 1	Piston guiding ring
n. 4	Adjustment screw O-ring
n. 1	Semipiston O-ring

*For cylinders with options P, H, H1, V, V1 and BT, the kit include further components.

Standard seal kit code key



Accessories



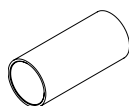
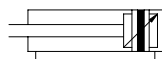
N.	Cylinder bore	Item	Description	Compliance	Matching	Code key page	Data sheet page
					AMX		
1	Ø 32 ÷ 200	FFX..ISO	Stainless Steel ISO female clevis with pin and seeger	ISO 8140	●	5.5.90	5.52.1
2	Ø 32 ÷ 200	RFX..SE	Stainless Steel bearing heads (DIN 648K) with female thread	ISO 8139	●		5.54.1
3	Ø 32 ÷ 125	GBX..	Stainless Steel self-aligning articulated coupling	-	●		5.55.1
4	Ø 32 ÷ 200	GCX..	Stainless Steel self-aligning coupling		●		5.57.1
5	Ø 32 ÷ 200	CFX..AQIS	Stainless Steel rear clevis	ISO MP2	●		5.75.1
6	Ø 32 ÷ 200	SECX..AQIS	Stainless Steel pin with seeger	ISO AA4	●	5.5.91	5.75.5
7	Ø 32 ÷ 125	CFSX..AQIS	Stainless Steel narrow rear clevis (for DIN 648K bearing)	ISO AB6	●	5.5.90	5.75.1
8	Ø 32 ÷ 125	SECX..ARAQIS	Stainless Steel anti-rotating pin with seeger	ISO AA6	●	5.5.91	5.75.5
9	Ø 32 ÷ 200	CMX..AQIS	Stainless Steel rear eye	ISO MP4	●	5.5.90	5.75.2
10	Ø 32 ÷ 125	CMSX..AQIS	Stainless Steel narrow rear eye with DIN 648K bearing	ISO MP6	●		5.75.2
11	Ø 32 ÷ 200	FLVX..AQIS	Stainless Steel flange	ISO VDMA MF1-MF2	●	5.5.91	5.75.4
12	Ø 32 ÷ 125	ASVX..AQIS	Stainless Steel rear 90° hinge	ISO AB7 CETOP RP 107P	●		5.75.3
13	Ø 32 ÷ 125	ASSX..AQIS	Stainless Steel rear 90° hinge with DIN 648K spherical bearing	ISO CS7	●		5.75.3
14	Ø 32 ÷ 200	PBX..	Stainless Steel low foot	ISO MS1	●		5.75.4
15	Ø 32 ÷ 200	CTX..	Stainless Steel center trunnion	-	●		5.75.6
16	Ø 32 ÷ 200	AS..	Bracket for magnetic reed switch T groove		2014/34/UE	●	1.120.3
			Bracket for high temperature magnetic reed switch				1.120.4
17	Ø 32 ÷ 200	ASV..	Magnetic reed switch T groove			●	5.5.92
		MK..	ATEX magnetic reed switch T groove	●		1.113.1	
		ASH..	Hi-temperatures magnetic reed switch	●	1.111.1		
18	Ø 32 ÷ 200	RX	Stainless steel push-in fittings	-	●	5.302.1	
19	Ø 32 ÷ 200	VX..C	Stainless Steel flow controls, for cylinders		●	5.372.1	

Key

● matching accessory; - not matching accessory

Main features

32 ÷ 200



AMX



Bores Ø

Double acting
Magnetic
With cushionings

Tube profile

Type

Technical data

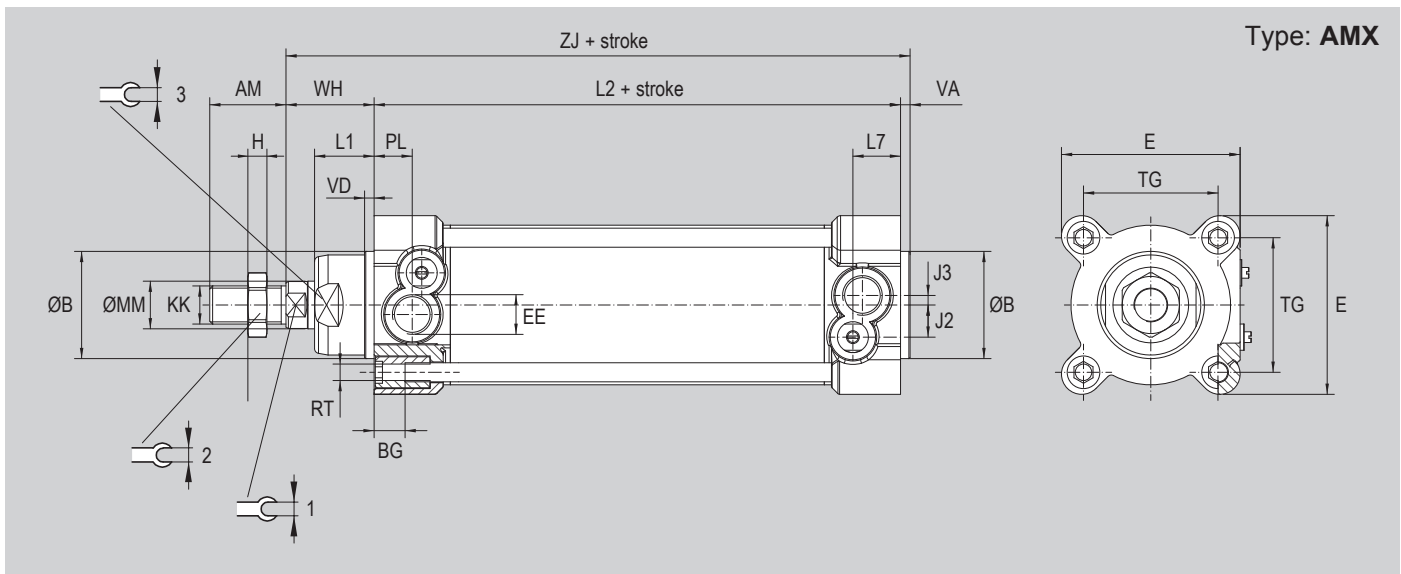
Bore Ø		32	40	50	63	80	100	125	160	200
Fluid		Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.								
Pressure range		0,5 ÷ 10 bar								
Temperature range		-20°C ÷ +80°C (standard / V1)			-20°C ÷ +150°C (V)		-40°C ÷ +80°C (BT)			
Strokes		10 ÷ 2500 mm								
Cushion length		20	22	25		35			48	
Ports		1/8"	1/4"		3/8"			1/2"		3/4"
Rod thread		M10x1,25	M12x1,25	M16x1,5		M20x1,5		M27x2	M36x2	
Weight (g.)	Stroke zero	860	1.350	2.290	2.940	4.960	7.030	12.730	24.780	31.320
	Additional 10 mm	27	35	61	66	106	116	214	331	478

Standard strokes

Stroke mm	AMX Bore Ø mm									
	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

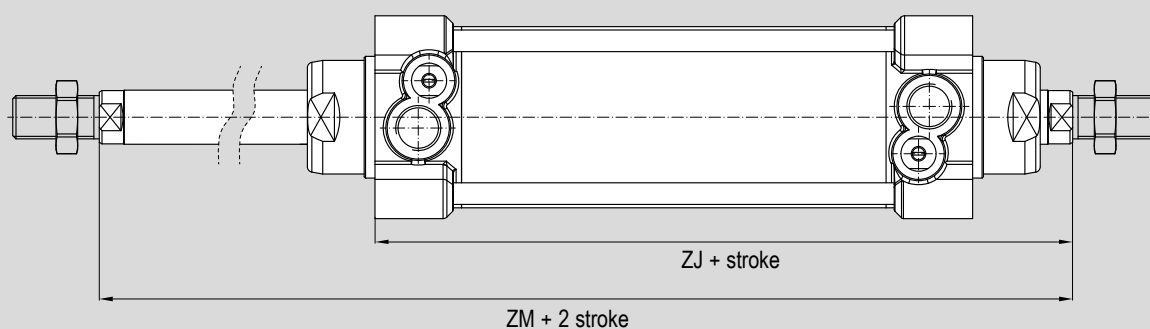


Ø (mm)	AM	B Ø d11	BG	E	EE	J2	J3	KK	L1	L2	H
32	22	30	15	47	G1/8"	6	5	M10x1,25	20	94	8
40	24	35	15	52	G1/4"	7,5	5	M12x1,25	22	105	6
50	32	40	16	65	G1/4"	9,5	7,5	M16x1,5	26	106	8
63	32	45	16	75	G3/8"	13,5	4	M16x1,5	25	121	8
80	40	45	17	95	G3/8"	13,5	6	M20x1,5	32	128	10
100	40	55	17	115	G1/2"	15	6	M20x1,5	38	138	10
125	54	60	21	140	G1/2"	17	8	M27x2	40	160	14
160	72	65	24	180	G3/4"	17	15	M36x2	50	180	14
200	72	75	24	220	G3/4"	17	15	M36x2	65	180	14

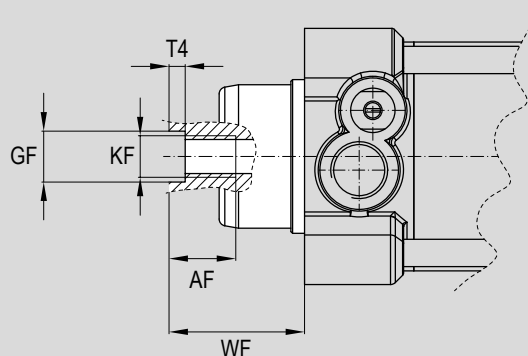
Ø (mm)	L7	MM Ø f7	PL	RT	TG	VA	VD	WH	ZJ	1	2	3
32	17,5	12	10	M6	32,5	4	4	26	124	10	17	27
40	21,5	16	15	M6	38	4	4	30	139	13	19	32
50	20	20	15	M8	46,5	4	4	37	147	17	24	36
63	20	20	16	M8	56,5	4	4	37	162	17	24	38
80	27	25	20	M10	72	4	4	46	178	22	30	42
100	28,5	25	23,5	M10	89	4	4	51	193	22	30	50
125	31,5	32	23,5	M12	110	5	5	65	230	27	41	52
160	33	40	27,5	M16	140	6	8	80	266	36	55	60
200	35	40	27	M16	175	6	8	95	281	36	55	70

Dimensions with options

Type: ...P



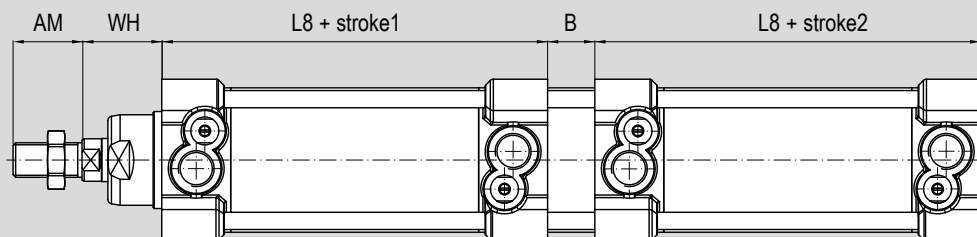
Type: ...F



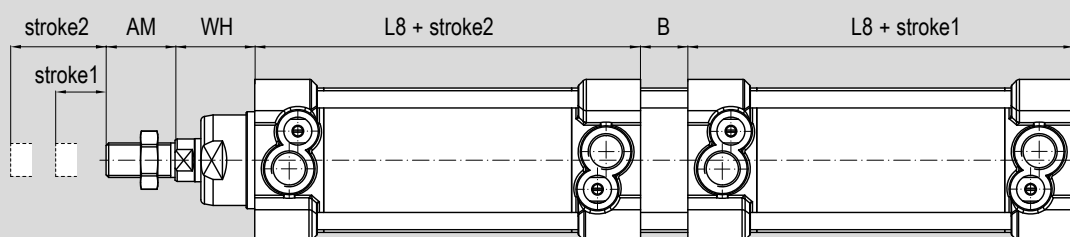
Ø mm	AF	KF	T4	WF	GF	ZJ	ZM
32	12	M6	2,6	26	8	120	146
40	12	M8	3,3	30	10	135	165
50	16	M10	4,7	37	12	143	180
63	16	M10	4,7	37	12	158	195
80	20	M12	6,1	46	14	174	220
100	20	M12	6,1	51	14	189	240
125	32	M16	8	65	18	225	290
160	36	M20	10	80	22	260	340
200	36	M20	10	95	22	275	370

Dimensions tandem versions

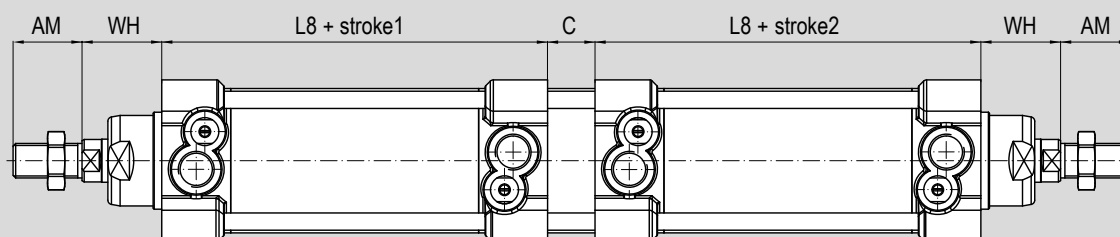
Type: ...TA1



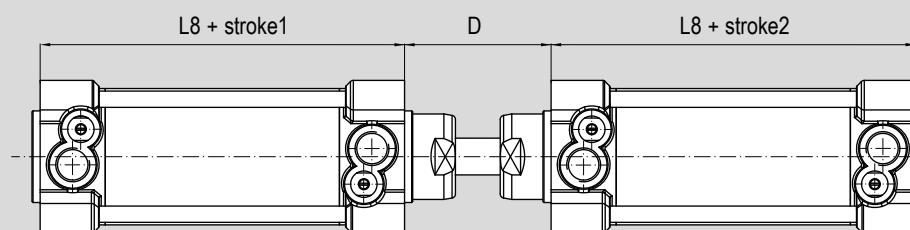
Type: ...TA2



Type: ...TA3



Type: ...TA4



Ø mm	AM	B	C	D	L8	WH
32	22	40	12	48	94	26
40	24	44	12	54	105	30
50	32	52	16	69	106	37
63	32	50	16	69	121	37
80	40	64	20	86	128	46
100	40	76	20	91	138	51
125	54	80	35	120	160	65
160	72	100	50	152	180	80
200	72	130	50	167	180	95

Stainless Steel female clevis with pin and seeger FFX..ISO

	For cylinder Ø mm	Code	Item	Compliance
	32	041055	FFX10ISO	
	40	041056	FFX12ISO	
	50-63	041057	FFX16ISO	
	80-100	041058	FFX20ISO	
	125	041112	FFX27ISO	
	160-200	041113	FFX36ISO	

Stainless Steel bearing heads (DIN 648K) RFX..SE

	For cylinder Ø mm	Code	Item	Compliance
	32	040009	RFX10SE	
	40	041578	RFX12SE	
	50-63	040011	RFX16SE	
	80-100	041579	RFX20SE	
	125	041580	RFX30SE	
	160-200	041581	RFX35SE	

Stainless Steel self-aligning articulated coupling GBX..

	For cylinder Ø mm	Code	Item	Compliance
	32	041737	GBX040	-
	40	041738	GBX060	
	50-63	041739	GBX100	
	80-100	041721	GBX120	
	125	041740	GBX130	

Stainless Steel self-aligning coupling GCX..

	For cylinder Ø mm	Code	Item	Compliance
	32	041728	GCXM10x1,25	-
	40	041729	GCXM12x1,25	
	50-63	041730	GCXM16x1,5	
	80-100	041731	GCXM20x1,5	
	125	041732	GCXM27x2	
	160-200	041733	GCXM36x2	

Stainless Steel rear clevis CFX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040012	CFX032AQIS	
	40	040830	CFX040AQIS	
	50	040801	CFX050AQIS	
	63	040014	CFX063AQIS	
	80	040013	CFX080AQIS	
	100	040838	CFX100AQIS	
	125	040005	CFX125AQIS	
	160	040797	CFX160AQIS	
	200	040798	CFX200AQIS	

Stainless Steel rear eye CMX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040805	CMX032AQIS	
	40	040806	CMX040AQIS	
	50	040802	CMX050AQIS	
	63	040808	CMX063AQIS	
	80	040016	CMX080AQIS	
	100	040799	CMX100AQIS	
	125	040008	CMX125AQIS	
	160	040800	CMX160AQIS	
	200	040804	CMX200AQIS	

Stainless Steel pin type SECX..AQIS to be ordered separately, see page 5.5.91

Stainless Steel narrow rear clevis (for DIN 648K bearing) CFSX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040821	CFSX032AQIS	
	40	040822	CFSX040AQIS	
	50	040823	CFSX050AQIS	
	63	040824	CFSX063AQIS	
	80	040825	CFSX080AQIS	
	100	040826	CFSX100AQIS	
	125	040833	CFSX125AQIS	

Stainless Steel narrow rear eye with DIN 648K bearing CMSX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040834	CMSX032AQIS	
	40	040835	CMSX040AQIS	
	50	040836	CMSX050AQIS	
	63	040010	CMSX063AQIS	
	80	040837	CMSX080AQIS	
	100	040848	CMSX100AQIS	
	125	040849	CMSX125AQIS	

Stainless Steel pin type SECX..ARAQIS to be ordered separately, see page 5.5.91

Stainless Steel rear 90° hinge ASVX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040809	ASVX032AQIS	ISO AB7
	40	040810	ASVX040AQIS	
	50	040812	ASVX050AQIS	
	63	040813	ASVX063AQIS	
	80	040814	ASVX080AQIS	cetop RP 107P
	100	040815	ASVX100AQIS	
	125	040816	ASVX125AQIS	

Stainless Steel rear 90°hinge with DIN 648K spherical bearing ASSX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040850	ASSX032AQIS	ISO CS7
	40	040851	ASSX040AQIS	
	50	040852	ASSX050AQIS	
	63	040853	ASSX063AQIS	
	80	040854	ASSX080AQIS	
	100	040855	ASSX100AQIS	
	125	040856	ASSX125AQIS	

Stainless Steel low foot* PBX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040872	PBX032AQIS	ISO MS1
	40	040873	PBX040AQIS	
	50	040874	PBX050AQIS	
	63	040875	PBX063AQIS	
	80	040876	PBX080AQIS	
	100	040877	PBX100AQIS	
	125	040878	PBX125AQIS	
	160	040879	PBX160AQIS	
	200	040880	PBX200AQIS	

*Supplied individually

Stainless Steel flange FLVX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040864	FLVX032AQIS	ISO VDMA MF1 / MF2
	40	040865	FLVX040AQIS	
	50	040840	FLVX050AQIS	
	63	040866	FLVX063AQIS	
	80	040867	FLVX080AQIS	
	100	040868	FLVX100AQIS	
	125	040869	FLVX125AQIS	
	160	040870	FLVX160AQIS	
	200	040871	FLVX200AQIS	

Stainless Steel flat head allen screw type VBTRX to be ordered separately, see page 5.79.1

Stainless Steel adjustable center trunnion CTX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040881	CTX032AQIS	ISO MT4
	40	040882	CTX040AQIS	
	50	040883	CTX050AQIS	
	63	040884	CTX063AQIS	
	80	040885	CTX080AQIS	
	100	040550	CTX100AQIS	
	125	040886	CTX125AQIS	
	160	040887	CTX160AQIS	
	200	040888	CTX200AQIS	

*For trunnion mounted on the cylinder, please order together with the cylinder.
Grains to be ordered separately, see page 5.79.1

Stainless Steel pin with seeger* SECX..AQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040829	SECX032AQIS	ISO AA4
	40	040831	SECX040AQIS	
	50	040811	SECX050AQIS	
	63	040832	SECX063AQIS	
	80	040015	SECX080AQIS	
	100	040839	SECX100AQIS	
	125	040818	SECX125AQIS	
	160	040819	SECX160AQIS	
	200	040820	SECX200AQIS	

*Supplied with 2 seeger

Stainless Steel anti-rotating pin with seeger* SECX..ARAQIS

	For cylinder Ø mm	Code	Item	Compliance
	32	040857	SECX032ARAQIS	ISO AA6
	40	040858	SECX040ARAQIS	
	50	040859	SECX050ARAQIS	
	63	040860	SECX063ARAQIS	
	80	040861	SECX080ARAQIS	
	100	040862	SECX100ARAQIS	
	125	040863	SECX200ARAQIS	

*Supplied with 1 seeger

Bracket AS.. for magnetic reed switches T groove

	For cylinder Ø mm	Code	Item	Cylinder matching
	32 ÷ 40	072912	AS105	AMX
	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
	32 ÷ 40	074041	AS117	AMX
	50 ÷ 63	074043	AS118	
	80 ÷ 100	074087	AS119	
	125	074155	AS120	
	160 ÷ 200	074169	AS121	

Magnetic reed switch T groove ASV..

	For cylinder Ø mm	Code	Item	Cylinder matching
	32 ÷ 200	070946	ASV1C525	AMX*
		071863	ASV1C550	
		071864	ASV1C51K	
		071189	ASV1C5M8	
		073639	ASV4D225	
		070246	ASV4D2M8	
		074900	ASV7N225	
		070247	ASV7N2M8	
		070372	ASV7M2M8	
		072918	ASV1H525	

*With bracket type AS.. for magnetic reed switches T groove

ATEX magnetic reed switch T groove MK..

	For cylinder Ø mm	Code	Item	Compliance	Cylinder matching
	32 ÷ 200	071120	MK500A		AMX*
		071108	MK502A		

*With bracket type AS.. for magnetic reed switches T groove

High-temperatures magnetic reed switches ASH..

	For cylinder Ø mm	Code	Item	Cylinder matching
	32 ÷ 200	074047	ASH6C550	AMX*

*With bracket type AS.. for high-temperatures magnetic reed switches