

Stainless steel tie rod cylinders to ISO 15552 standard

series AX

DESCRIPTION

Stainless steel cylinders series "AX", comply with ISO 15552 standard, are available from Ø 32 to Ø 200. They are cushioned as standard and they result suitable for aggressive environments and for "special" applications (for example food, chemical and pharmaceutical industries). These cylinders have magnetic piston as standard and so it's possible apply magnetic sensors. They are also available in the version to ATEX directive, 2GD category.

TECHNICAL DATA

Operating pressure	1÷10 bar
Working temperature	0°C ÷ +80°C (with dry air -20 °C) 0°C ÷ +150°C with VITON® seals (with dry air -10°C)
Fluid	Filtered, unlubricated or continuous lubricated compressed air
Versions	Double acting; Through rod
Bore	Ø 32,40,50,63,80,100,125,160,200
Port size	Ø 32 = G 1/8 Ø 40 - 50 = G 1/4 Ø 63 - 80 = G 3/8 Ø 100 - 125 = G 1/2 Ø 160 - 200 = G 3/4
Standard strokes (mm)	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800, 900, 1000
Decelerators length	Ø 32 40 50 63 80 100 125 160 200 mm 27 29 32 32 32 32 42 54 54
Maximum strokes (mm)	1000

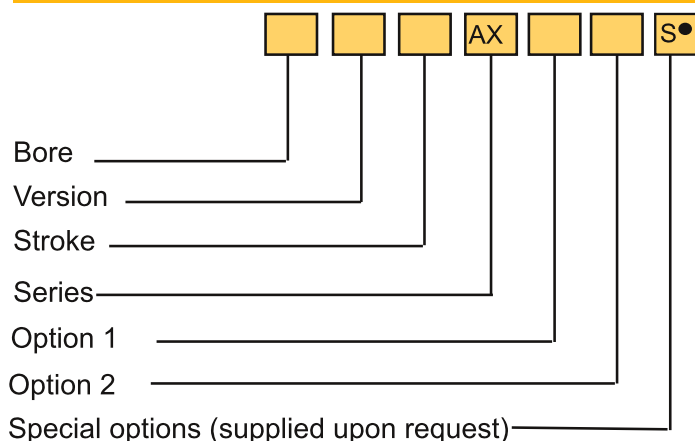


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MATERIALS

End caps	AISI 304 stainless steel
Cylinder barrel	Extruded tube, AISI 304 stainless steel
Tie rods, tie and rod nuts	Ø 32÷100 AISI 316 stainless steel Ø125÷200 AISI 304 stainless steel
Piston rod	AISI 316 stainless steel
Piston rod bearing	Self lubricating sintered bronze
Decelerators ogives	Ø 32÷100 Delrin Ø 125÷200 Aluminium alloy
Piston	NBR rubber block VITON®
Seals	Polyurethane + NBR VITON®

ORDER KEY



P.S.: Magnetic sensors FM100 (see chapter magnetic sensors from page 1.93 CAT.08/EN)

● See technical data on page 0.12 CAT.08/EN

ORDER EXAMPLES

Cylinder Ø32, double acting, 100 mm stroke, ATEX: **32/100 AX/EX**
Cylinder Ø40, through rod, 150 mm stroke, Viton® seals :
40R150 AX2

VERSION

I Double acting **R** Through rod

OPTION 1

2 VITON® seals *

OPTION 2

/EX Complies with the ATEX directive

II 2GDc T5 T100°C -20°C<Ta<80°C

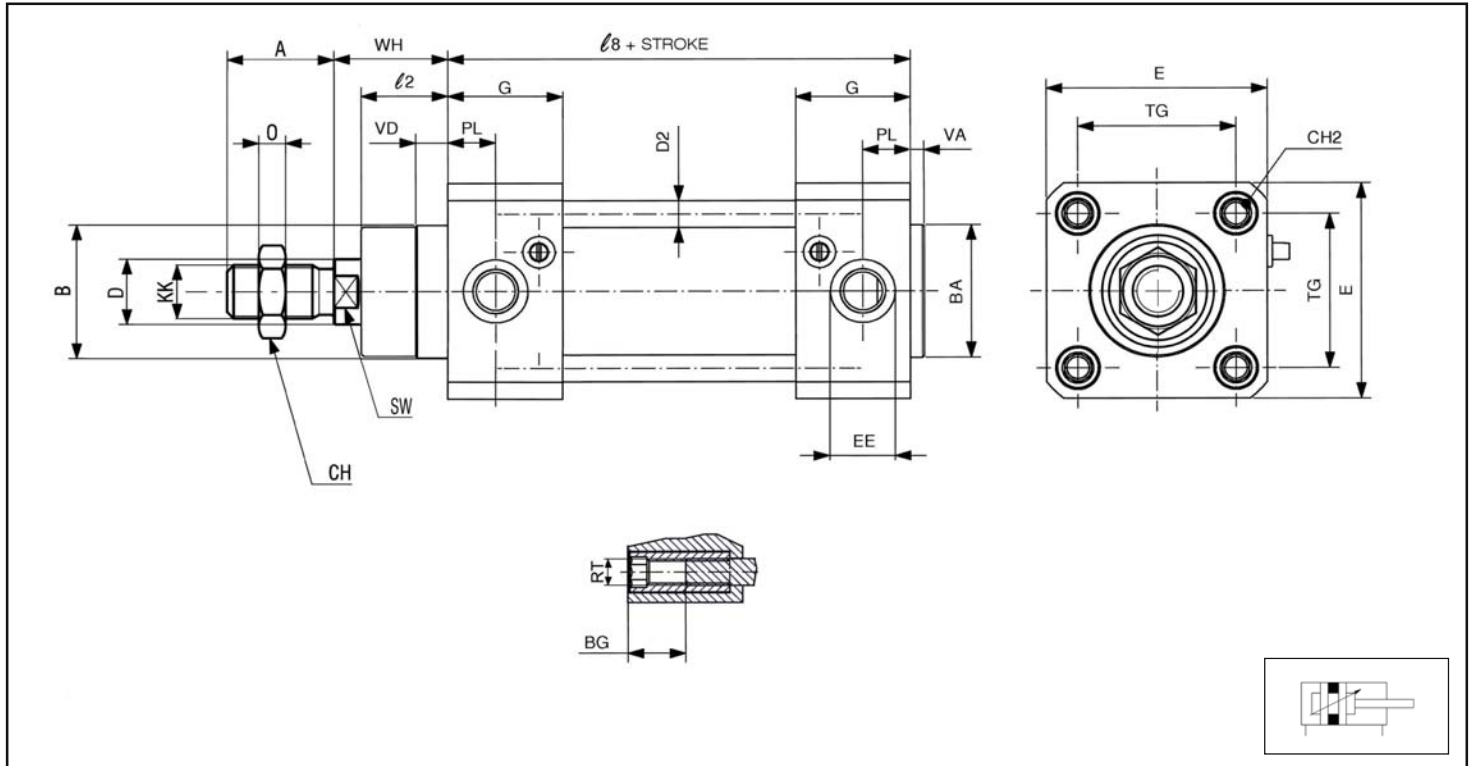
* It's possible use it with VITON® seals for applications with chemical compatibility; it's not supplied for high temperature applications.

SPARE PARTS

SEALS KIT

Polyurethane	Ø/SG/AX
Through rod polyurethane	Ø/SG/R/AX
VITON®	Ø/SG/AX2
Through rod VITON®	Ø/SG/R/AX2

AX BASIC CYLINDER



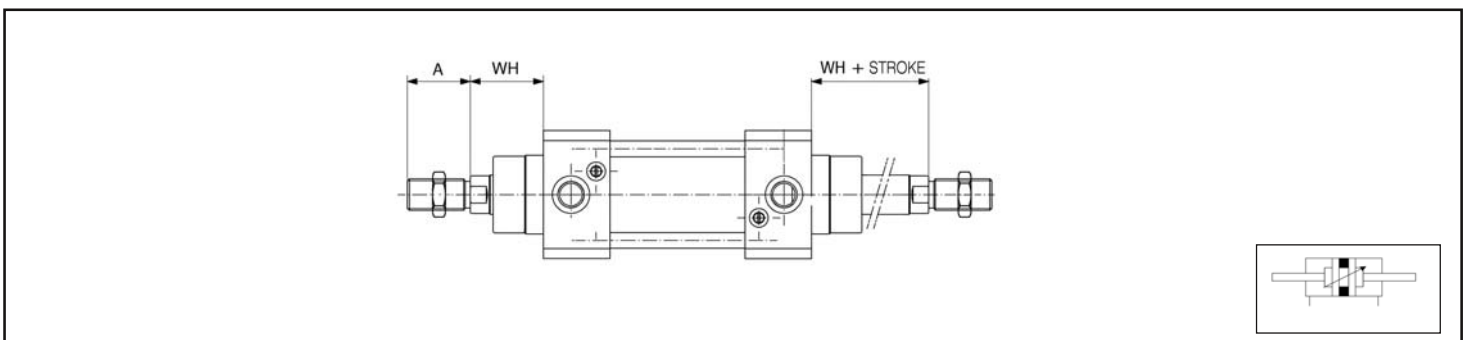
P.S.: Rod nut supplied as standard

DIMENSIONS AND WEIGHTS BASIC CYLINDER

∅	A*	BA* B*	BG*	CH	RT*	E*	EE*	G	D	D2	KK*	l ₂ *	l ₈ *	O	PL*	SW*	TG*	VA*	WH*	WEIGHT (g)	INCR.(g) every 10 mm
32	22	30	16.5	17	M6	50	G1/8	30	12	6	M10x1.25	18	94	6	13	10	32.5	4	26	1330	24
40	24	35	16.5	19	M6	55	G1/4	33	16	6	M12x1.25	22	105	7	14	13	38	4	30	1800	32
50	32	40	17.5	24	M8	65	G1/4	33.8	20	8	M16x1.5	25.5	106	8	14	17	46.5	4	37	2760	55
63	32	45	17.5	30	M8	75	G3/8	38	20	8	M16x1.5	25	121	8	16	17	56.5	4	37	7110	59
80	40	45	17.5	30	M10	95	G3/8	39.8	25	10	M20x1.5	35	128	9	17	22	72	4	46	7700	108
100	40	55	17.5	30	M10	110	G1/2	43.5	25	10	M20x1.5	38	138	9	18	22	89	4	51	11320	139
125	54	60	20.5	41	M12	140	G1/2	52.5	32	12	M27x2	46	160	12	18	27	110	6	65	21831	207
160	72	65	22.5	55	M16	180	G3/4	45	40	16	M36x2	50	179.5	14	22.5	36	140	6	80	28023	323
200	72	75	22.5	55	M16	220	G3/4	45	40	16	M36x2	55	180	14	22.5	36	175	6	95	40469	466

* STANDARDIZED DIMENSIONS

THROUGH ROD



P.S.: Rod nuts supplied as standard

Accessories

AISI 316 stainless steel fixings

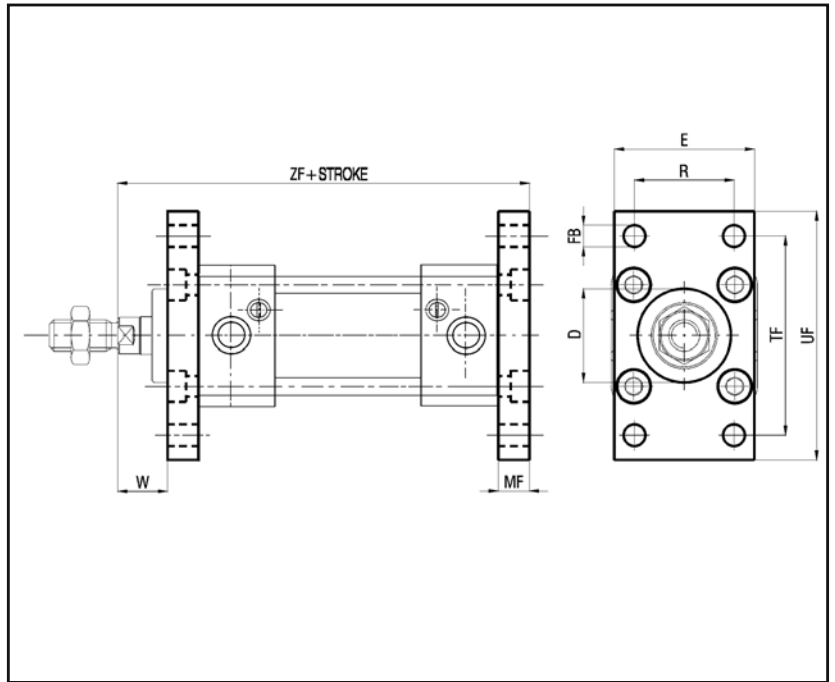
for cylinders to ISO 15552 standard

series AX

FLANGE - STAINLESS STEEL - AX/F Ø (supplied with screws)

Ø	D H11	FB H13	E	MF JS14	R JS14	TF JS14	UF
32	30	7	45	10	32	64	80
40	35	9	52	10	36	72	90
50	40	9	65	12	45	90	110
63	45	9	75	12	50	100	120
80	45	12	95	16	63	126	150
100	55	14	115	16	75	150	170
125	60	16	140	20	90	180	205
160	65	18	180	20	115	230	260
200	75	22	220	25	135	270	300

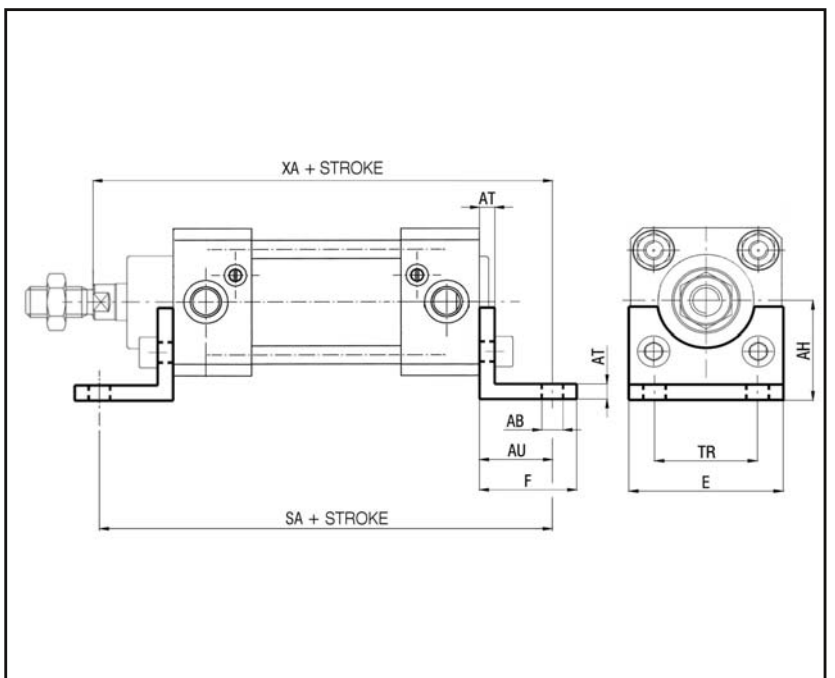
Ø	W	ZF	WEIGHT (g)
32	16	130	190
40	20	145	246
50	25	155	478
63	25	170	622
80	30	190	1430
100	35	205	1986
125	45	245	3750
160	60	280	6350
200	75	300	11350



FOOT - STAINLESS STEEL - AX/PB Ø (supplied with screws)

Ø	AB H14	AH JS15	AT	AU	E	F	SA
32	7	32	4	24	45	35	142
40	9	36	4	28	52	36	161
50	9	45	5	32	65	47	170
63	9	50	5	32	75	45	185
80	12	63	6	41	95	55	210
100	14	71	6	41	115	57	220
125	16	90	8	45	140	70	250
160	18	115	10	60	180	75	300
200	24	135	12	70	220	100	320

Ø	TR JS14	XA	WEIGHT (g)
32	32	144	66
40	36	163	78
50	45	175	168
63	50	190	190
80	63	215	382
100	75	230	452
125	90	270	1090
160	115	320	1188
200	135	345	3450



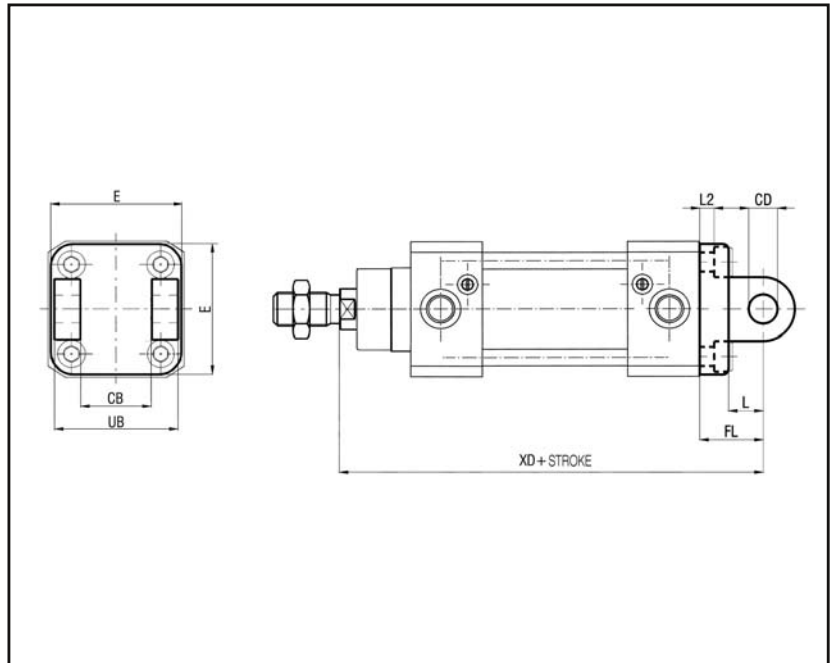
AISI 316 stainless steel fixings for cylinders to ISO 15552 standard

series AX

REAR FEMALE HINGE - STAINLESS STEEL - AX/CF Ø (Supplied with screws)

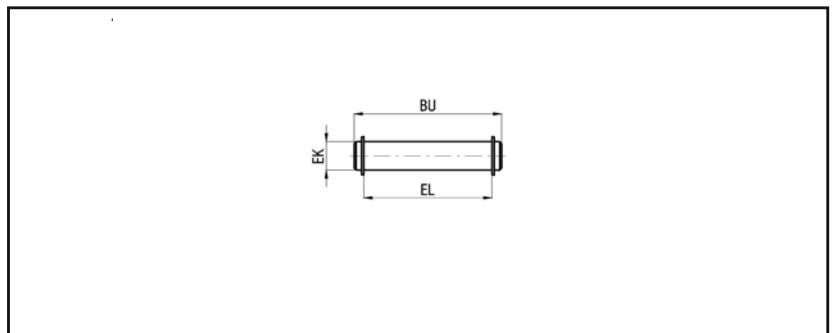
Ø	CB H14	CD H9	E	FL	L	L4	UB h14
32	26	10	45	22	13	5.5	45
40	28	12	52	25	16	5.5	52
50	32	12	65	27	16	6.5	60
63	40	16	75	32	21	6.5	70
80	50	16	95	36	22	10	90
100	60	20	115	41	27	10	110
125	70	25	140	50	30	10	130
160	90	30	180	55	35	10	170
200	90	30	220	60	35	11	170

Ø	XD	WEIGHT (g)
32	142	138
40	160	230
50	170	338
63	190	540
80	210	1000
100	230	1700
125	275	3350
160	315	5750
200	335	8900



PIVOT FOR REAR FEMALE HINGE - STAINLESS STEEL - AX/SEC Ø

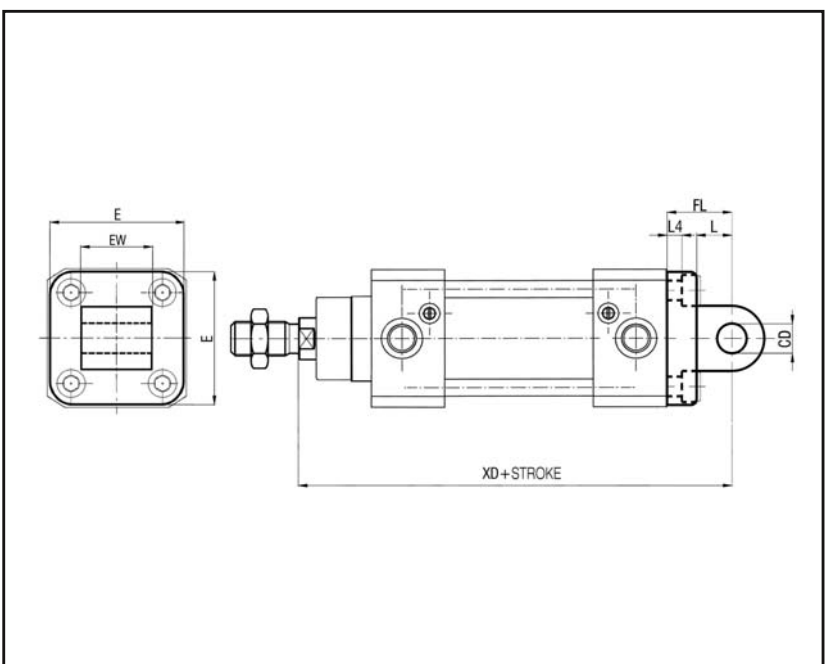
Ø	BU	EK f7	EL	WEIGHT (g)
32	53	10	46	32
40	60	12	53	52
50	68	12	61	60
63	78	16	71	122
80	98	16	91	152
100	118	20	111	290
125	139	25	132	530
160	178	30	171,5	978
200	178	30	171,5	978



REAR MALE HINGE - STAINLESS STEEL - AX/CM Ø (Supplied with screws)

Ø	CD H9	E	EW	FL	L	L4	XD
32	10	45	26	22	13	5.5	142
40	12	52	28	25	16	5.5	160
50	12	65	32	27	16	6.5	170
63	16	75	40	32	21	6.5	190
80	16	95	50	36	22	10	210
100	20	115	60	41	27	10	230
125	25	140	70	50	30	10	275
160	30	180	90	55	35	10	315
200	30	220	90	60	35	11	335

Ø	WEIGHT (g)
32	138
40	230
50	338
63	540
80	1000
100	1700
125	3350
160	5890
200	8470



Accessories

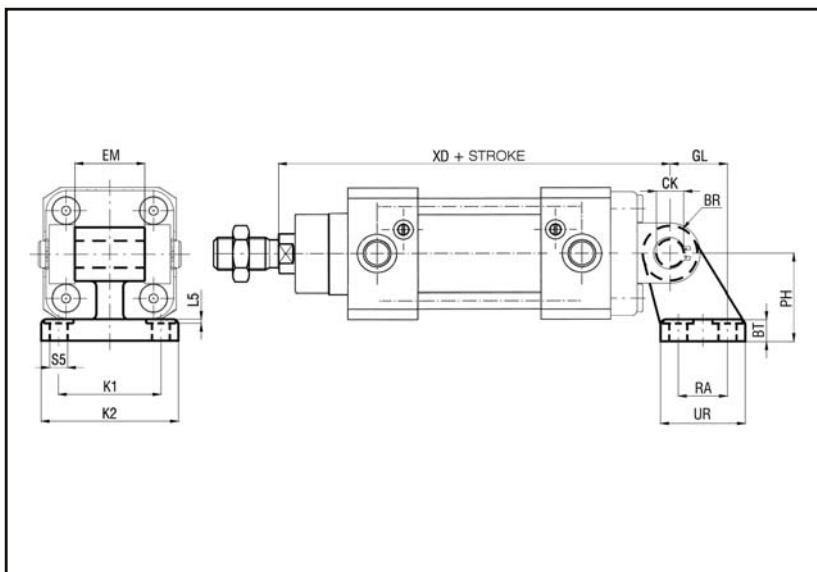
AISI 316 stainless steel fixings for cylinders to ISO 15552 standard

series AX

SQUARE JOINT - STAINLESS STEEL - AX/AS Ø

Ø	PH JS15	CK H9	EM	GL JS14	RA JS14	UR	BT	L5
32	32	10	26	21	18	31	8	1.6
40	36	12	28	24	22	35	10	1.6
50	45	12	32	33	30	45	12	1.6
63	50	16	40	37	35	50	14	1.6
80	63	16	50	47	40	60	14	2.5
100	71	20	60	55	50	70	17	2.5
125	90	25	70	70	60	90	20	3.2

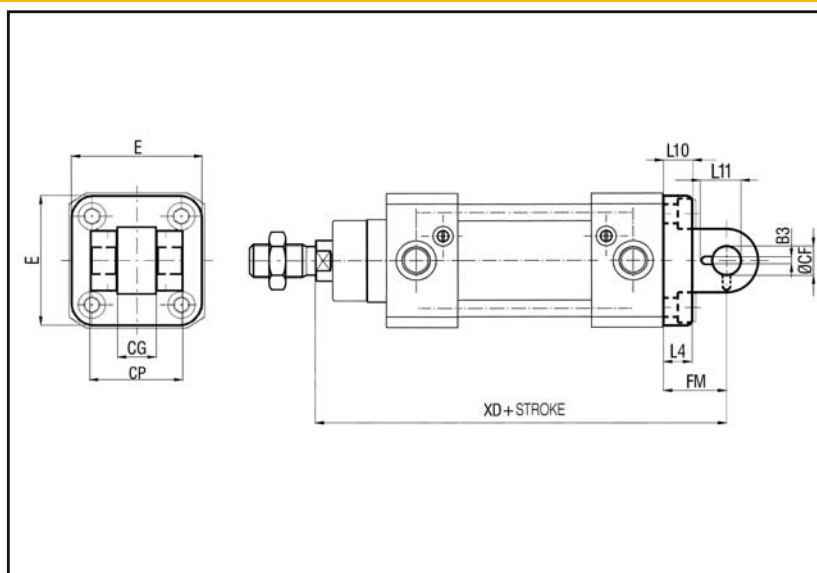
Ø	BR	S5 H13	K1 JS14	K2	XD	WEIGHT (g)
32	10	6.6	38	51	142	158
40	11	6.6	41	54	160	238
50	13	9	50	65	170	418
63	15	9	52	67	190	526
80	15	11	66	86	210	1055
100	19	11	76	96	230	1360
125	22.5	14	94	124	275	3150



NARROW REAR FEMALE HINGE - STAINLESS STEEL - AX/CFS Ø (Supplied with screws)

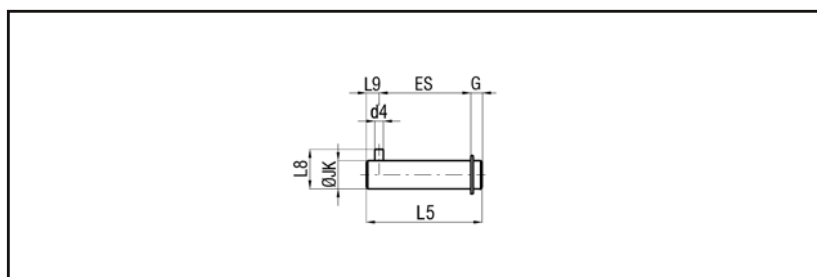
Ø	CG D10	CP d12	B3	Ø CF F7	E	FM	L10	L11
32	14	34	3.3	10	45	22	9	16.5
40	16	40	4.3	12	52	25	9	18
50	21	45	4.3	16	65	27	11	22
63	21	51	4.3	16	75	32	11	22
80	25	65	4.3	20	95	36	14	26
100	25	75	6.3	20	115	41	14	26
125	37	97	6.3	30	140	50	20	39

Ø	L4	XD	WEIGHT (g)
32	5.5	142	140
40	5.5	160	230
50	6.5	170	336
63	6.5	190	546
80	10	210	1190
100	10	230	1840
125	10	275	3550



NON-ROTATING PIVOT FOR NARROW REAR FEMALE HINGE - STAINLESS STEEL - AX/SEC Ø AT

Ø	d4 H12	ØJK f7	L8	ES	L9	L5	G	WEIGHT (g)
32	3	10	14	32.5	4.5	41	4	26
40	4	12	16	38	6	48	4	42
50	4	16	20	43	6	54	5	84
63	4	16	20	49	6	60	5	94
80	4	20	24	63	6	75	6	184
100	4	20	34	73	6	85	6	208
125	6	30	36	94	9	110	7	606



AISI 316 stainless steel fixings for cylinders to ISO 15552 standard

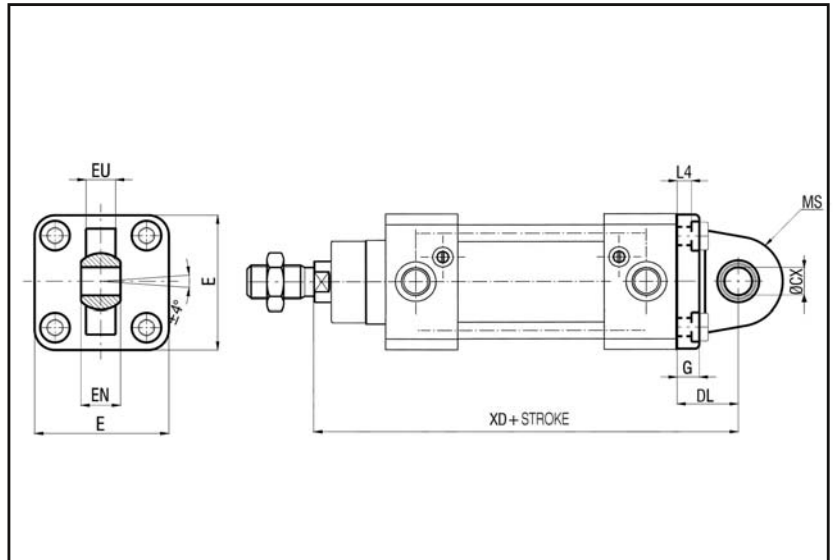
series AX

NARROW MALE HINGE WITH ARTICULATED HEAD (ISO 12240) - STAINLESS STEEL - AX/CMSS Ø

(Supplied with screws)

Ø	ØCX H7	E	EN	MS	EU	G	DL
32	10	45	14	16	10.5	9	22
40	12	52	16	19	12	9	25
50	16	65	21	21	15	11	27
63	16	75	21	24	15	11	32
80	20	95	25	28.5	18	14	36
100	20	115	25	30	18	14	41
125	30	140	37	40	25	20	50

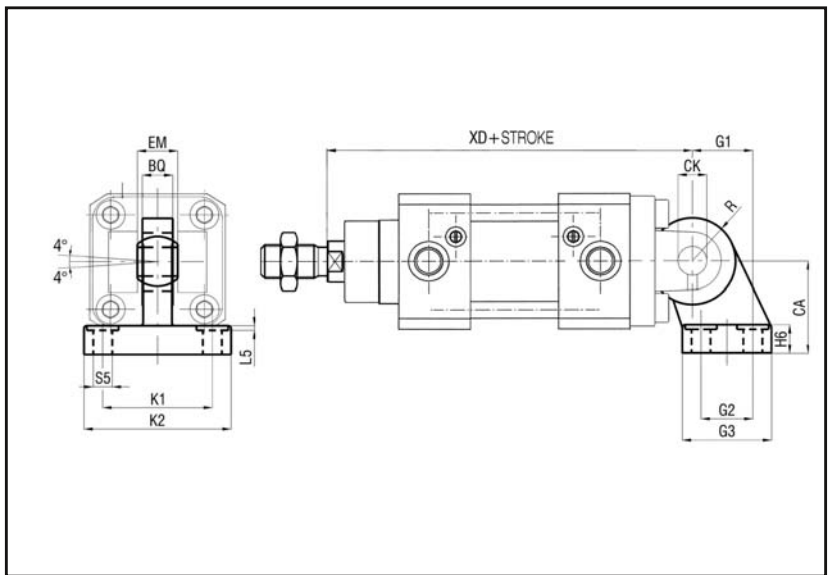
Ø	L4	XD	WEIGHT (g)
32	5.5	142	158
40	5.5	160	254
50	6.5	170	360
63	6.5	190	588
80	10	210	1118
100	10	230	1810
125	10	275	3500



SQUARE JOINT WITH ARTICULATED HEAD (ISO 12240) - STAINLESS STEEL - AX/ASSS Ø

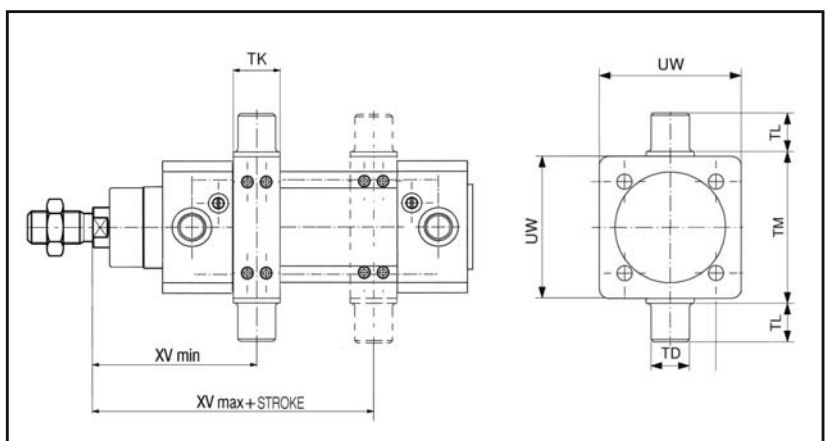
Ø	CA JS15	BQ	CK H7	EM	G1 JS14	G2 JS14	G3	H6
32	32	10.5	10	14	21	18	31	10
40	36	12	12	16	24	22	35	10
50	45	15	16	21	33	30	45	12
63	50	15	16	21	37	35	50	12
80	63	18	20	25	47	40	60	14
100	71	18	20	25	55	50	70	15
125	90	25	30	37	70	60	90	20

Ø	K1 JS14	K2	L5	R	S5 H13	XD	WEIGHT (g)
32	38	51	1.6	15	6.6	142	178
40	41	54	1.6	18	6.6	160	268
50	50	65	1.6	20	9	170	458
63	52	67	1.6	23	9	190	550
80	66	86	2.5	27	11	210	970
100	76	96	2.5	30	11	230	1326
125	94	124	3.2	40	13.5	275	3000



INTERMEDIATE HINGE - STAINLESS STEEL- AX/CTA Ø (Supplied with dowels)

Ø	TK	TD e9	TL h14	TM h14	UW	XV min	XV max	WEIGHT (g)
32	15	12	12	50	46	63.5	82.5	110
40	20	16	16	63	59	73	92	290
50	20	16	16	75	69	80.8	99.2	330
63	25	20	20	90	84	87.5	107.5	650
80	25	20	20	110	102	98.3	121.7	830
100	30	25	25	132	125	109.5	130.5	1560
125	32	25	25	160	155	133.5	156.5	2450
160	40	32	32	200	190	145	194.5	4150
200	40	32	32	250	240	160	210	7300



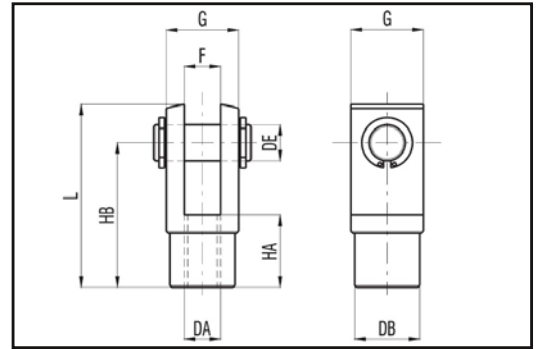
Accessories

AISI 303 Stainless steel piston rod attachments for cylinders to ISO 15552 standards

series AX

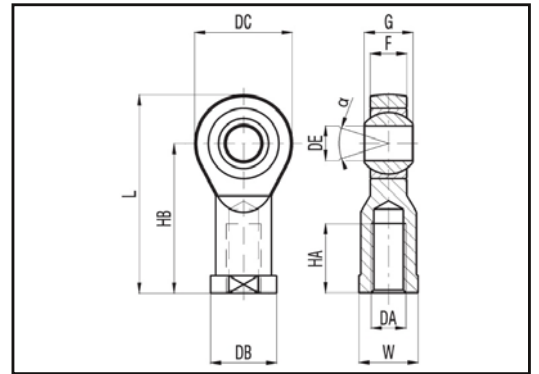
FEMALE PISTON ROD CLEVIS WITH PIN AND SNAP RING TO ISO 8140 - STAINLESS STEEL - A/FFP_

Ø	DA	DB	DE	F b12	G	HA	HB	L	WEIGHT (g)	TYPE
32	M10X1.25	18	10	10	20	20	40	52	90	A/FFP10X1.25
40	M12X1.25	20	12	12	24	24	48	62	130	A/FFP12X1.25
50-63	M16X1.5	26	16	16	32	32	64	83	330	A/FFP16X1.5
80-100	M20X1.5	34	20	20	40	40	80	105	650	A/FFP20X1.5
125	M27X2	48	30	30	55	55	110	148	2100	A/FFP27x2
160-200	M36X2	60	35	35	70	72	144	188	5800	A/FFP36x2



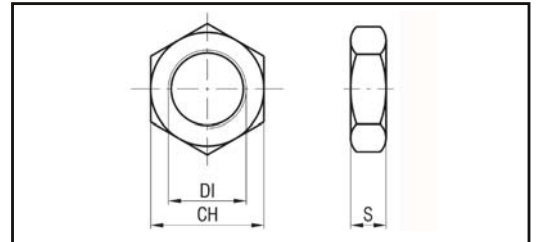
SELF-LUBRICATING PISTON ROD EYE TO DIN ISO 12240 STANDARD - STAINLESS STEEL - A/FF_/SS

Ø	DA	DB	DC	DE H7	F	G	HA	HB	L	W	α	WEIGHT (g)	TYPE
32	M10X1.25	19	28	10	10.5	14	20	43	57	17	13	76	A/FF10X1.25/SS
40	M12X1.25	22	32	12	12	16	22	50	66	19	13	110	A/FF12X1.25/SS
50-63	M16X1.5	27	42	16	15	21	28	64	85	22	15	220	A/FF16X1.5/SS
80-100	M20X1.5	34	50	20	18	25	33	77	102	30	14	409	A/FF20X1.5/SS
125	M27X2	50	70	30	25	37	51	110	145	41	17	1200	A/FF27x2/SS



ROD NUT - STAINLESS STEEL - DSTI

Ø	DI	CH	S	WEIGHT (g)	TYPE
32	M10X1.25	17	6	8.6	DSTI10X1.25
40	M12X1.25	19	7	12.1	DSTI12X1.25
50-63	M16X1.5	24	8	20.1	DSTI16X1.5
80-100	M20X1.5	30	9	36.3	DSTI20X1.5
125	M27X2	41	12	90	DSTI27x2
160-200	M36X2	55	14	190	DSTI27x2



MAGNETIC SENSORS FM100

See chapter magnetic sensors FM series from page 1.93 CAT.08/EN

MAGNETIC SENSORS FIXING SERIES FM100

SENSOR FIXING BRACKETS - STAINLESS STEEL - AISI 304 - IFS_

Ø	TYPE
32 ÷ 100	IFS1
125 ÷ 200	IFS2

