Hydraulic cylinders

ISO 6020/2

COMER SYSTEM SRL

CONTENTS:

DEFINITIONS[1]:

CYLINDER: appliance which transforms fluid Energy in mechanical force and rectilinear motion

CYLINDER BORE: cylinder internal diameter

PISTON ROD: tool which transforms mechanical force and piston movement

MOUNTING TOOL: appliance to anchor the cylinder

[1] rif. Normativa ISO 6020/2

Hydraulic cylinders ISO 6020/2

Standard construction according to ISO 6020/II

Work pressure 160 BAR

Rated pressure 250 BAR

10 bore sizes

12 rod diameters

12 mounting styles

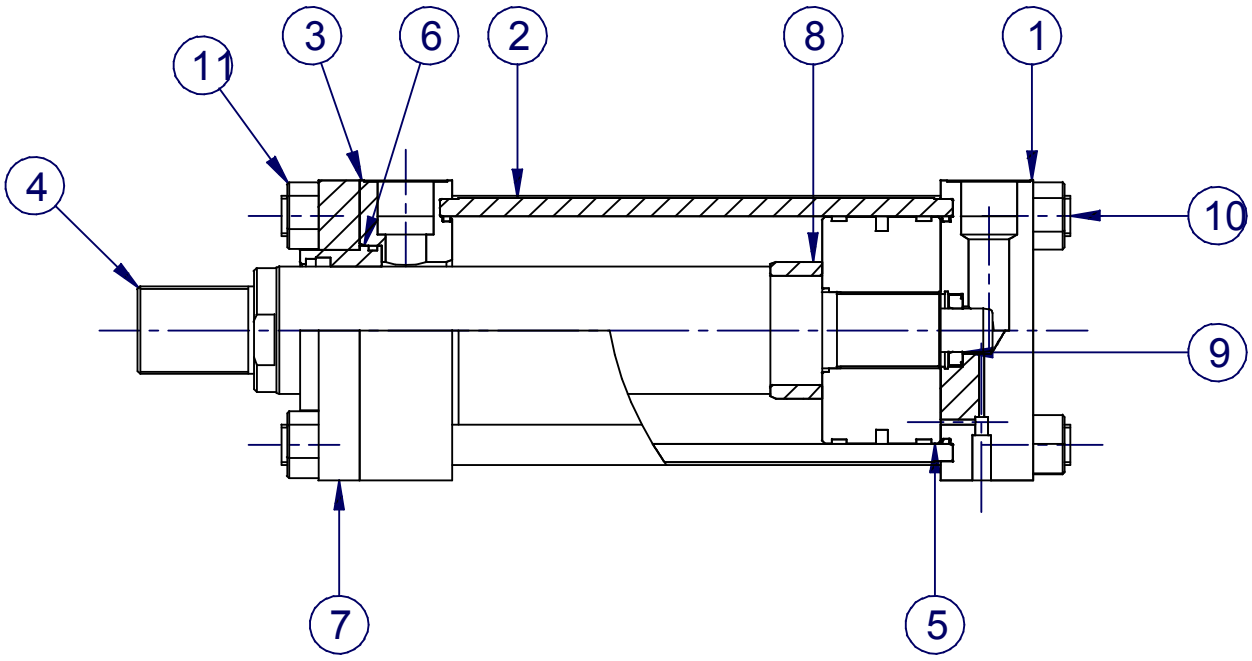
Optional cushioning at the head and cap

Stroke to 4000 mm

Standard male or female rod ends

Squared head and cap

Standard BSP ports, if required we can supply NPTF threated ports or flange ports SAE



1 Cap	5 Piston	9 Back cushioning
2 Body	6 Bronze rod glande	10 Tie rod
3 Head	7 Front flange	11 Nut
4 Piston rod	8 Front cushioning	

CYLINDER BODY

High quality steel tube, cold wide drawing and yield point to 45 kg/mm2.

Internal high surface finishing, max roughness 0,25 μ.

PISTON ROD

High quality steel, polished and chrome plated, diameter tolerance f7 and roughness 0,2 μ. If required we can provide with special materials.

HEAD AND CAP ENDS

Made in steel, high level of precision to ensure maximum concentricity between them and the cylinder body.

PISTON

One-piece type, high quality steel. Particular attention for the concentricity, to ensure a good working for the seals.

SEALS

High quality gland, piston, head and cap ends seals in nitrile (NBR), PTFE and polyurethane, compatible with the work fluid, temperature range between – 10° + 90°C, max speed 0,6 m/s. If required, related to the work conditions, we can supply cylinders with fluorocarbon elastomer (FPM), PTFE or special mixture.

CUSHIONING

All cylinders can be provided with cushioning at the head and cap end, with progressive and controller deceleration. Valves are provided at both ends, to permit a precise cushion adjustment.

LIMITED STROKE

When the stroke is particularly long.

The recommended length is:

50 mm for strokes between 1000÷1500 mm

100 mm for strokes between 1500÷2000 mm

150 mm for strokes between 2000÷2500 mm

For longer strokes please contact our technical office.

MOUNTING STYLES

ISO 6020/2 mounting styles are:

-MX3: tie rod extended head end

-MX2: tie rod extended cap end

-MX1: tie rod extended both ends

-ME5: head rectangular flange

-ME6: cap rectangular flange

-MS2: side lugs

-MP3: cap fixed eye

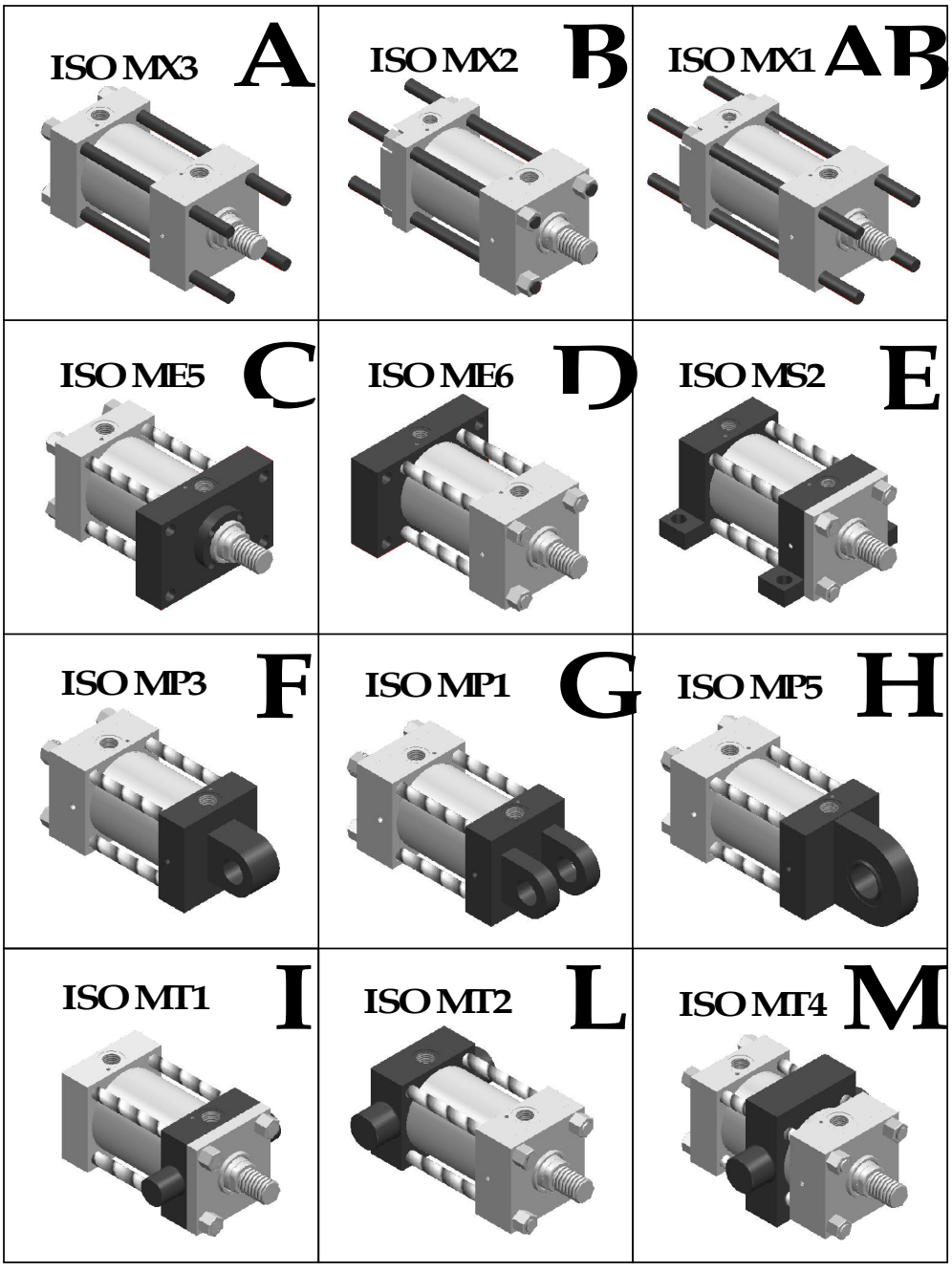
-MP1: cap fixed clevis

-MP5: cap fixed eye with spherical bearing

-MT1: head trunnion

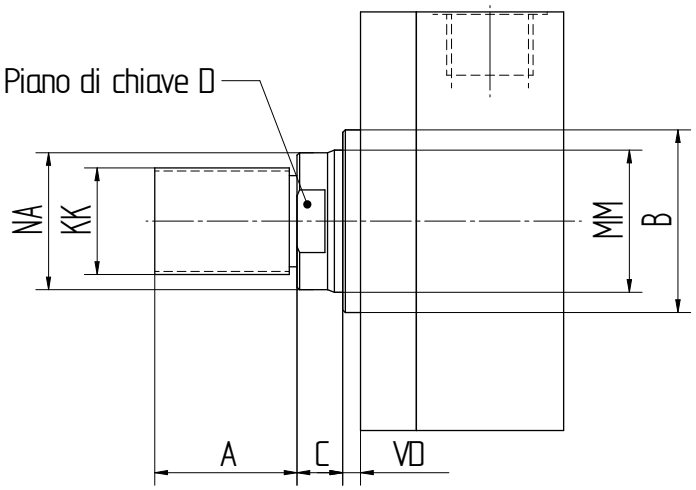
-MT2: back trunnion

-MT4: intermediate fixed trunnion

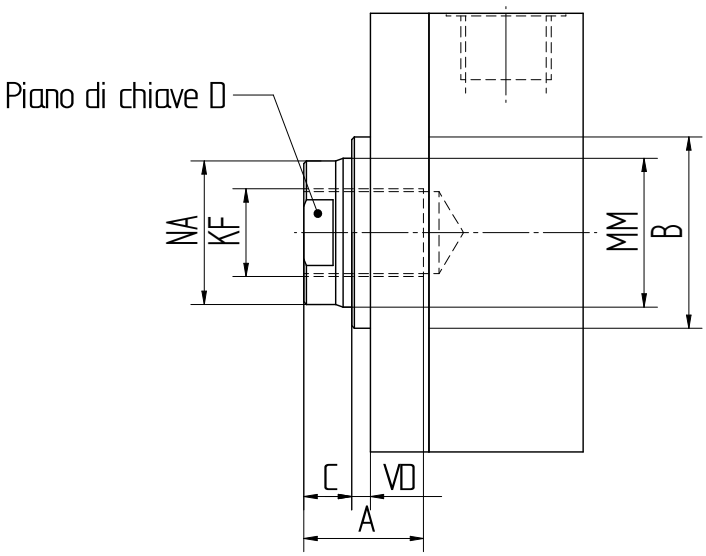


PISTON ROD END CHARACTERISTICS

MALE THREAD (M)

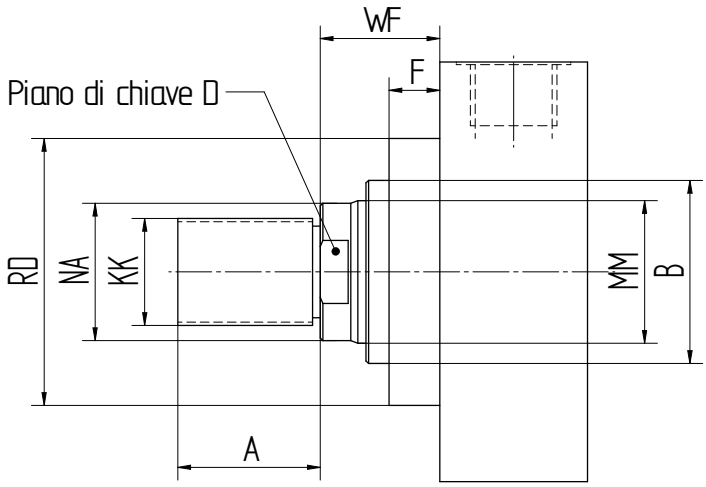


FEMALE THREAD (F)

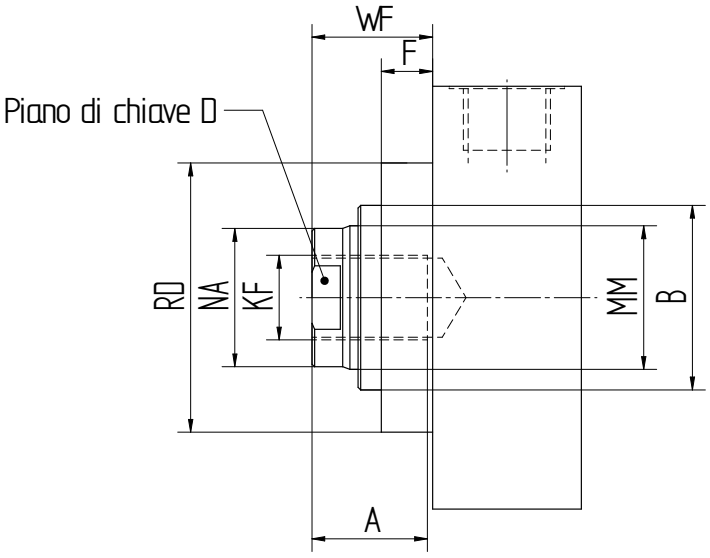


In particolar for mounting style C (ISO ME5):

MALE THREAD (M)



FEMALE THREAD (F)



Piston rod thread

Special thread:
If a different rod end thread is required, indicate the S in the cylinder, pointing the value of the required thread.

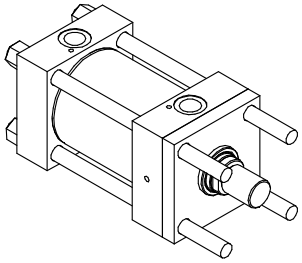
PISTON ROD END DIMENSIONS

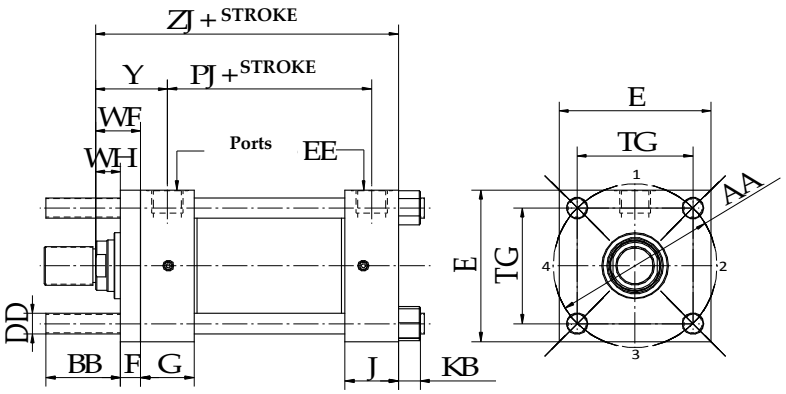
Bore Ø	Piston rod ØMM	KK	KF[1]	A	B f9	C	D	F	WF	VD	RD f8
25	12	M 10x1,25	M 8x1	14	24	9	10	10	25	6	38
	18	M 14x1,5	M 12x1,25	18	30	9	15	10	25	6	38
32	14	M 12x1,25	M 10x1,25	16	26	13	12	10	35	12	42
	22	M 16x1,5	M 16x1,5	22	34	13	18	10	35	12	42
40	18	M 14x1,5	M 12x1,25	18	30	13	15	10	35	12	62
	28	M 20x1,5	M 20x1,5	28	42	13	22	10	35	12	62
50	22	M 16x1,5	M 16x1,5	22	34	16	18	16	41	9	74
	28*	M 20x1,5	M 20x1,5	28	42	16	22	16	41	9	74
	36	M 27x2	M 27x2	36	50	16	30	16	41	9	74
63	28	M 20x1,5	M 20x1,5	28	42	19	22	16	48	13	75
	36*	M 27x2	M 27x2	36	50	19	30	16	48	13	75
	45	M 33x2	M 33x2	45	60	19	38	16	48	13	88
80	36	M 27x2	M 27x2	36	50	22	30	20	51	9	82
	45*	M 33x2	M 33x2	45	60	22	38	20	51	9	88
	56	M 42x2	M 42x2	56	72	22	48	20	51	9	105
100	45	M 33x2	M 33x2	45	60	25	38	22	57	10	92
	56*	M 42x2	M 42x2	56	72	25	48	22	57	10	105
	70	M 48x2	M 48x2	63	88	25	62	22	57	10	125
125	56	M 42x2	M 42x2	56	72	25	48	22	57	10	105
	70*	M 48x2	M 48x2	63	88	25	62	22	57	10	125
	90	M 64x3	M 64x3	85	108	25	80	22	57	10	150
160	70	M 48x2	M 48x2	63	88	25	62	25	57	7	125
	90*	M 64x3	M 64x3	85	108	25	80	25	57	7	150
	110	M 80x3	M 80x3	95	133	25	100	25	57	7	170
200	90	M 64x3	M 64x3	85	108	25	80	25	57	7	150
	110*	M 80x3	M 80x3	95	133	25	100	25	57	7	170
	140	M 100x3	M 100x3	112	163	25	128	25	57	7	210

* Special executions

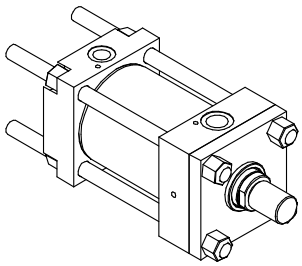
[1] Stenting from bore size Ø160 , it is not possible to have a stroke length less then 50 mm, if the rod end is a female thread.

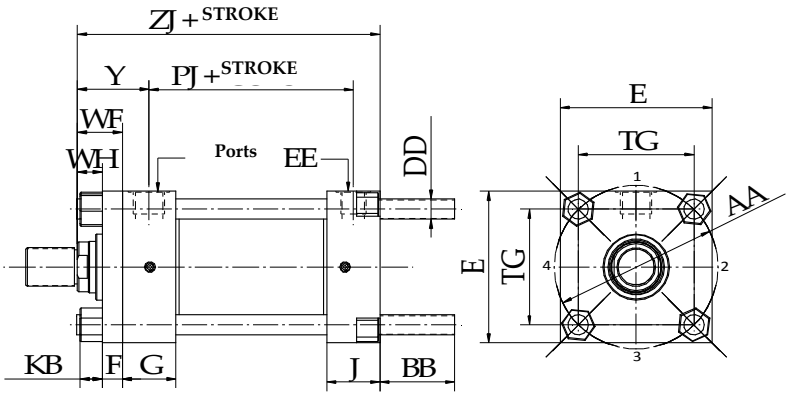
TIPO A - ISO tipo MX3



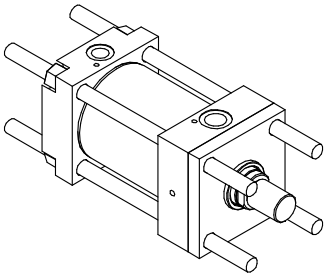


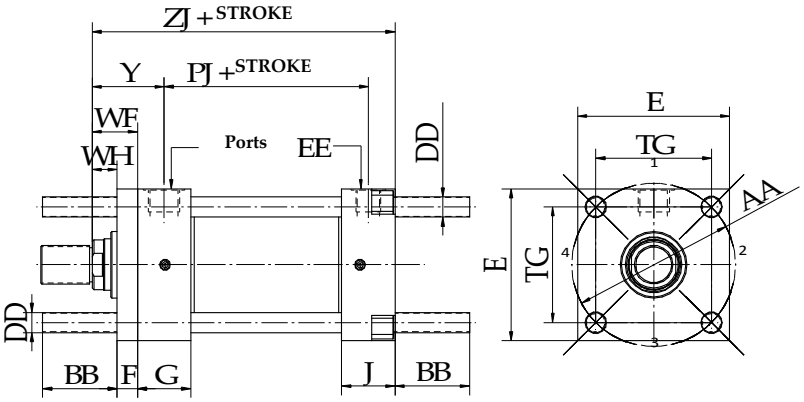
TIPO B - ISO tipo MX2





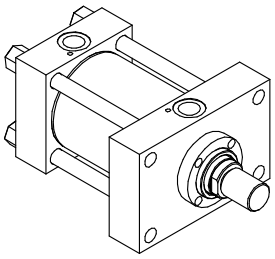
TIPO AB - ISO tipo MX1

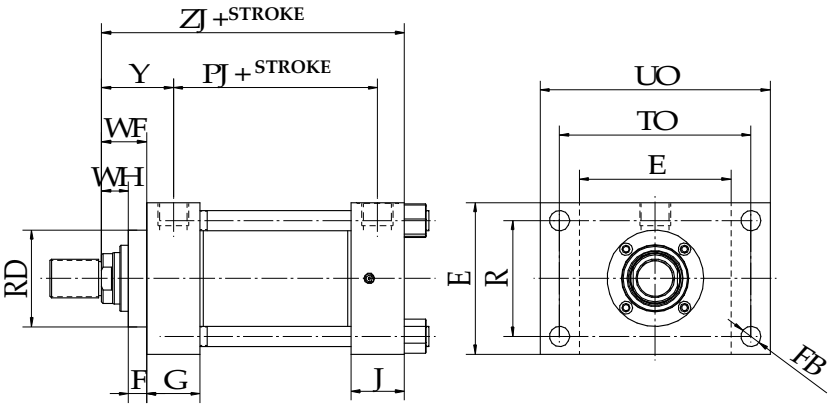




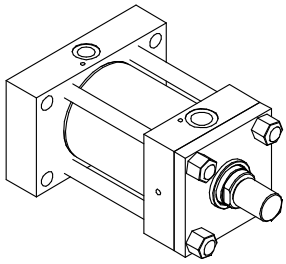
Bore	AA	BB	DD	EE	E	F	G	J	PJ	TG	WH	Y	ZJ
25	40	19	M5x0,8	G 1/4	40	10	40	25	53	28,3	15	50	114
32	47	24	M6x1	G 1/4	45	10	40	25	56	33,2	25	60	128
40	59	35	M8x1	G 3/8	63	10	45	38	73	41,7	25	62	153
50	74	46	M12x1,25	G 1/2	75	16	45	38	74	52,3	25	67	159
63	91	46	M12x1,25	G 1/2	90	16	45	38	80	64,3	32	71	168
80	117	59	M16x1,5	G 3/4	115	20	50	45	93	82,7	31	77	190
100	137	59	M16x1,5	G 3/4	130	22	50	45	101	96,9	35	82	203
125	178	81	M22x1,5	G 1	165	22	58	58	117	125,9	35	86	232
160	219	92	M27x2	G 1	205	25	58	58	130	154,9	32	86	245
200	269	115	M30x2	G 1 1/4	245	25	76	76	165	190,2	32	98	299

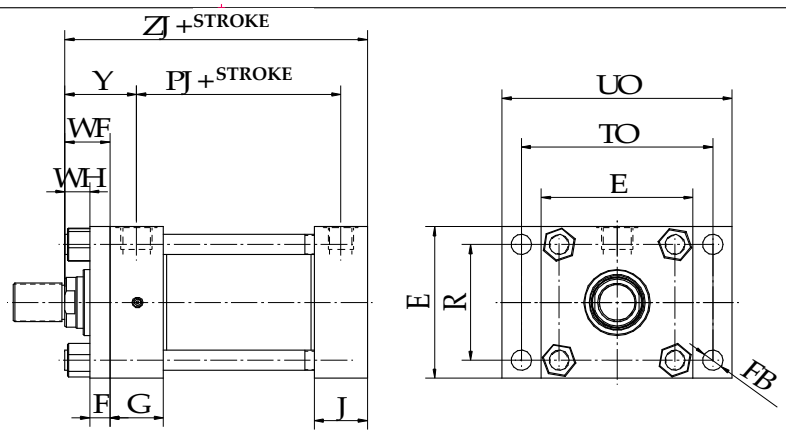
TIPO C - ISO tipo ME5



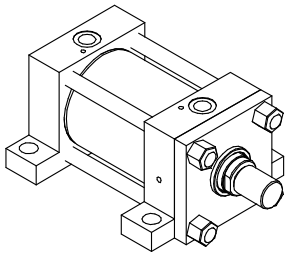


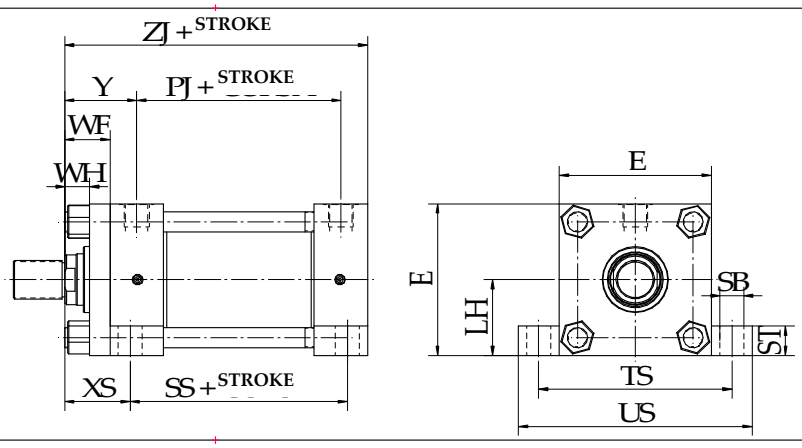
TIPO D - ISO tipo ME6





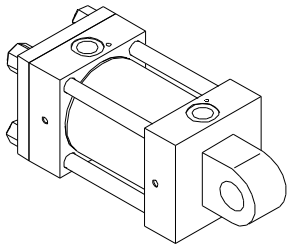
TIPO E - ISO tipo MS2

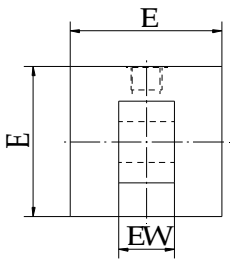


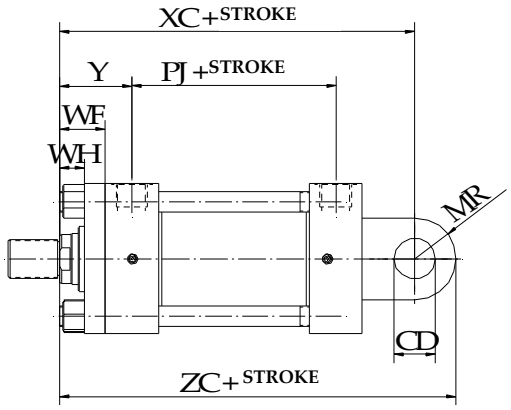


Bore	EE	FB	LH	PJ	R	SB	SS	ST	TO	TS	UO	US	XS	Y	ZJ
25	G 1/4	5,5	19	53	27	6,6	73	8,5	51	54	65	72	33	50	114
32	G 1/4	6,6	22	56	33	9	73	12,5	58	63	70	84	45	60	128
40	G 3/8	11	31	73	41	11	98	12,5	87	83	110	103	45	62	153
50	G 1/2	14	37	74	52	14	92	19	105	102	130	127	54	67	159
63	G 1/2	14	44	80	65	18	86	26	117	124	145	161	65	71	168
80	G 3/4	18	57	93	83	18	105	26	149	149	180	186	68	77	190
100	G 3/4	18	63	101	97	26	102	32	162	172	200	216	79	82	203
125	G 1	22	82	117	126	26	131	32	208	210	250	254	79	86	232
160	G 1	26	101	130	155	33	130	38	253	260	300	318	86	86	245
200	G 1 1/4	33	122	165	190	39	172	44	300	311	360	381	92	98	299

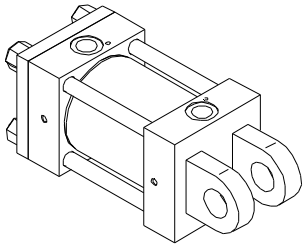
TIPO F - ISO tipo MP3

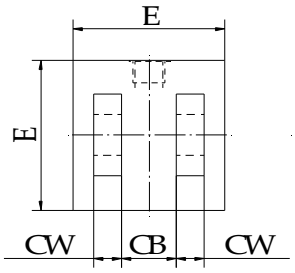


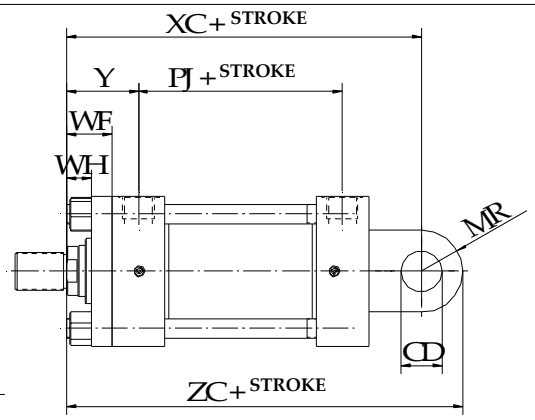




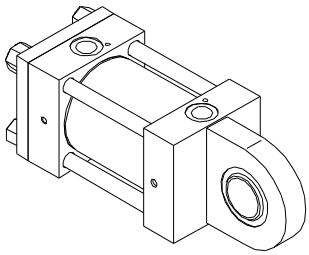
TIPO G - ISO tipo MP1

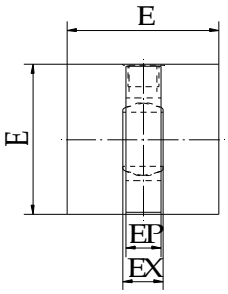


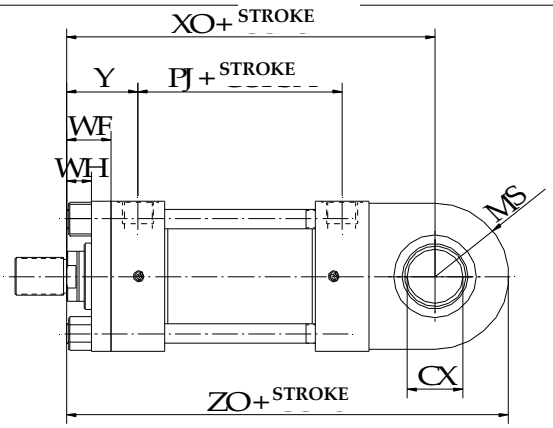




TIPO H - ISO tipo MP5

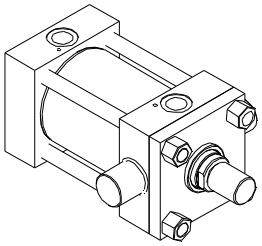


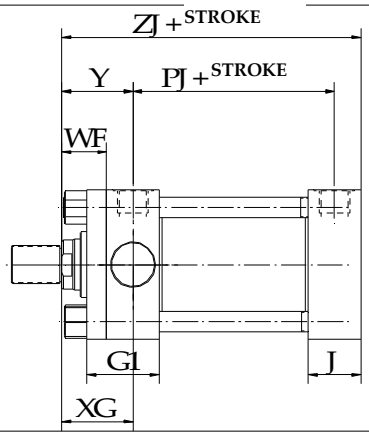


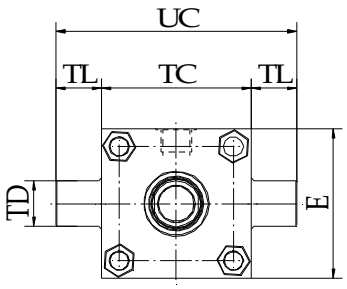


Bore	CB	CD	CW	CX	EP	EW	EX	MR	MS	PJ	XC	XO	Y	ZC	ZO
25	12	10	6	12 -0,008	8	12	10 -0,12	12	20	53	127	130	50	139	150
32	16	12	8	16 -0,008	11	16	14 -0,12	17	22	56	147	148	60	164	170
40	20	14	10	20 -0,012	13	20	16 -0,12	17	29	73	172	178	62	189	207
50	30	20	15	25 -0,012	17	30	20 -0,12	29	33	74	191	190	67	220	223
63	30	20	15	30 -0,012	19	30	22 -0,12	29	40	80	200	206	71	229	246
80	40	28	20	40 -0,012	23	40	28 -0,12	34	50	93	229	238	77	263	288
100	50	36	25	50 -0,012	30	50	35 -0,12	50	62	101	257	261	82	307	323
125	60	45	30	60 -0,015	38	60	44 -0,15	53	80	117	289	304	86	342	384
160	70	56	35	80 -0,015	47	70	55 -0,15	59	100	130	308	337	86	367	437
200	80	70	40	100 -0,02	57	80	70 -0,20	78	120	165	381	415	98	459	535

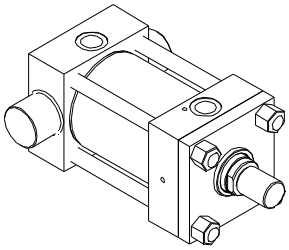
TIPO I - ISO tipo MT1

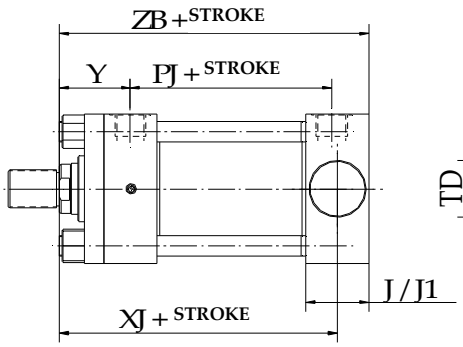


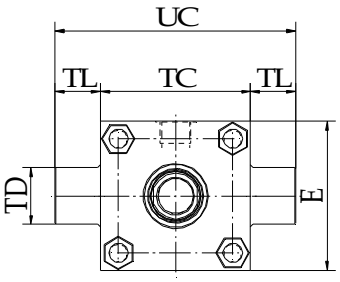




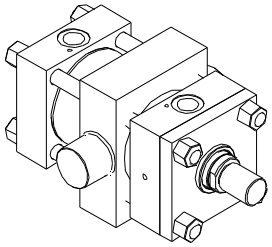
TIPO L - ISO tipo MT2

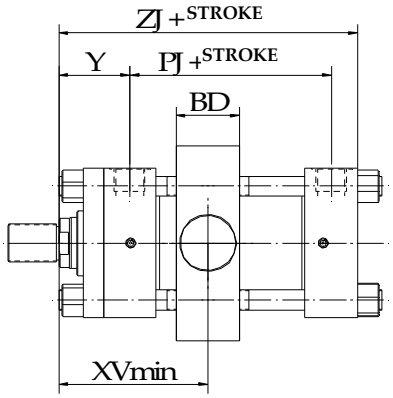


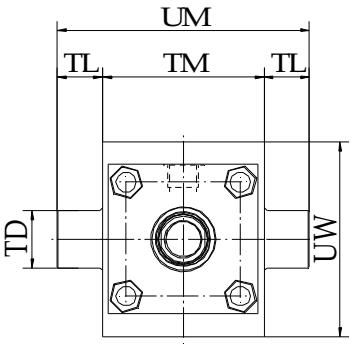




TIPO M - ISO tipo MT4

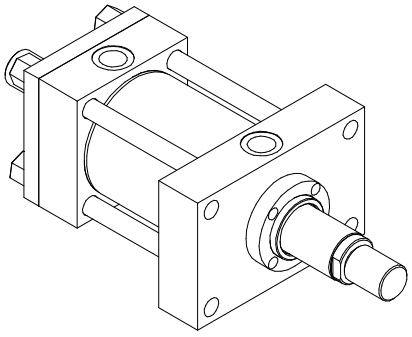


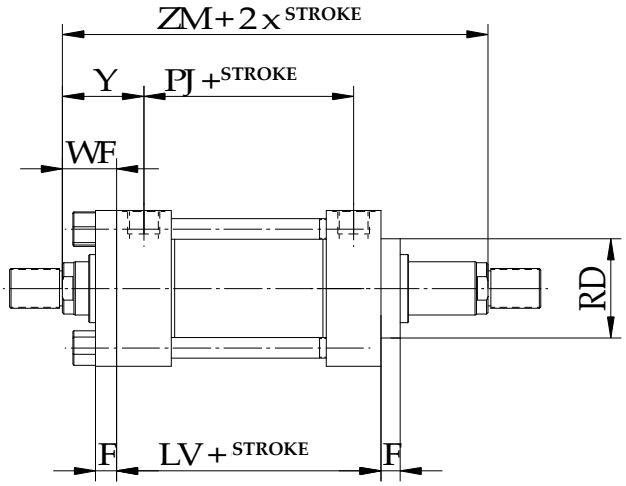


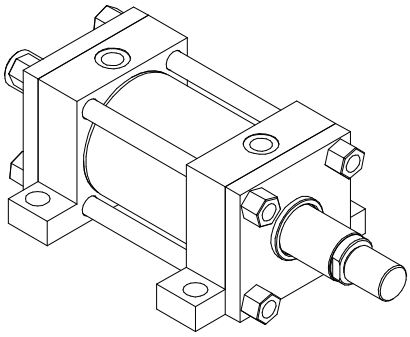


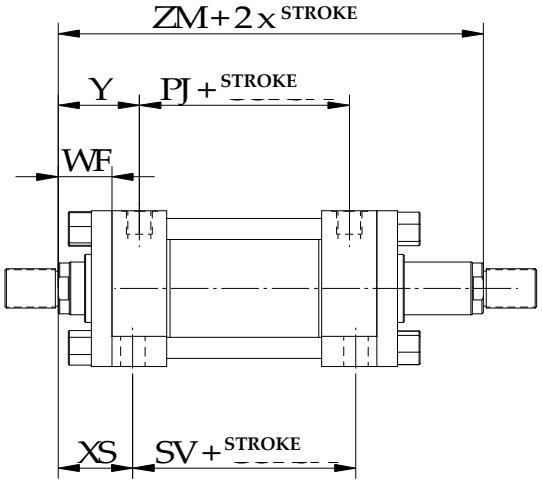
Bore	BD	F	G	G1	J	J1	PJ	TC	TD	TL	TM	UC	UM	UW	XG	XJ	XV	Y	ZB
25	20	10	40	-	25	-	53	38	12	10	48	58	68	63	44	101	82	50	121
32	25	10	40	-	25	-	56	44	16	12	55	68	79	75	54	115	96	60	137
40	30	10	45	-	38	-	73	63	20	16	76	95	108	92	57	134	107	62	166
50	40	16	45	-	38	-	74	76	25	20	89	116	129	112	64	140	117	67	176
63	40	16	45	-	38	-	80	89	32	25	100	139	150	126	70	149	132	71	185
80	50	20	50	-	45	50	93	114	40	32	127	178	191	160	76	168	147	77	212
100	60	22	50	72	45	58	101	127	50	40	140	207	220	180	71	187	158	82	225
125	73	22	58	80	58	71	117	165	63	50	178	265	278	215	75	209	180	86	260
160	90	25	58	88	58	88	130	203	80	63	215	329	341	260	75	230	198	86	279
200	110	25	76	108	76	108	165	241	100	80	279	401	439	355	85	276	226	98	336

DOUBLE ROD CYLINDERS









Bore	LV	XS	SV	Y	PJ	ZM
25	105	33	88	50	55	154
32	110	45	88	60	60	178
40	125	45	105	62	71	195
50	125	54	99	67	73	207
63	127	65	93	71	81	223
80	144	68	110	77	92	246
100	151	79	107	82	101	265
125	175	79	131	86	117	289
160	188	86	130	86	130	302
200	242	92	172	98	160	356

For double rod cylinders customer should indicate the desired mounting styles. Mounting style available are A, C, E, I, M.

Dimensional informations not included in this prospect can be provided from previous corresponding table (single rod cylinders).

PORTS TYPES

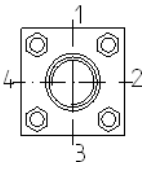
Comer System cylinders are supplied with BSP standard toreate ports, according to ISO 6020/2. If required, we can provide metric threaded ports, NPTF, SAE 3000.

Bore	BSP threated ports	Metric threated ports	NPTF ports	Ports with flange SAE 3000
25	G 1/4	M14x1,5	NPTF 1/4	-
32	G 1/4	M14x1,5	NPTF 1/4	-
40	G 3/8	M18x1,5	NPTF 3/8	-
50	G 1/2	M22x1,5	NPTF 1/2	SAE 3000 - 1/2
63	G 1/2	M22x1,5	NPTF 1/2	SAE 3000 - 1/2
80	G 3/4	M27x2	NPTF 3/4	SAE 3000 - 3/4
100	G 3/4	M27x2	NPTF 3/4	SAE 3000 - 3/4
125	G 1	M33x2	NPTF 1	SAE 3000 - 1
160	G 1	M33x2	NPTF 1	SAE 3000 - 1
200	G 1 1/4	M42x2	NPTF 1 1/4	SAE 3000 - 1 1/4

If required it is possible to provide cylinders with oversize ports. In these cases, cylinder dimensions can change. For more informations, customer should contact our tecnica department.

PORTS AND CUSHION ADJUSTMENT LOCATION

The table below shows standard positions of the ports and the cushion adjustment for Comer System cylinders. All cylinders are provided with air-bleeds.

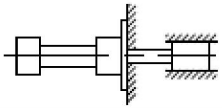
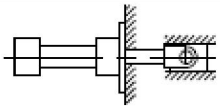
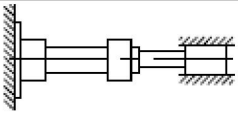
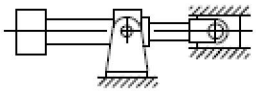
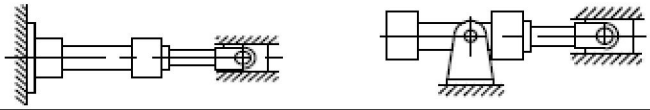
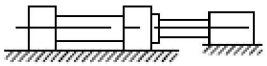
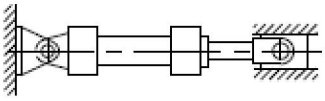
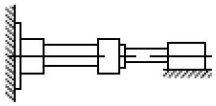
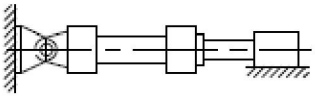


		Mounting style				
		A-B-AB-M	**C-D**	**E**	**F-G-H**	**I-L**
Head	Connection port	1	1	1	1	1
	Cushion, check valve, air bleed	2	3	2	2	3
Cap	Connection port	1	1	1	1	1
	Cushion, check valve, air bleed	2	3	2	2	3

If limit switch sensors are required, the locations indicate above can change, according to customer specifications.

ROD PISTON DIAMETER SELECTION

When the cylinder works in pushing it is suggested to verify if the peak load is adequate. To do this, the steps are the followings. The first thing is to determine the constant k, related to the mounting style that is required:

Type of Mounting	Stroke Factor
	0.5
	0.7
	1.0
	1.0
	1.5
	2.0
	2.0
	4.0
	4.0

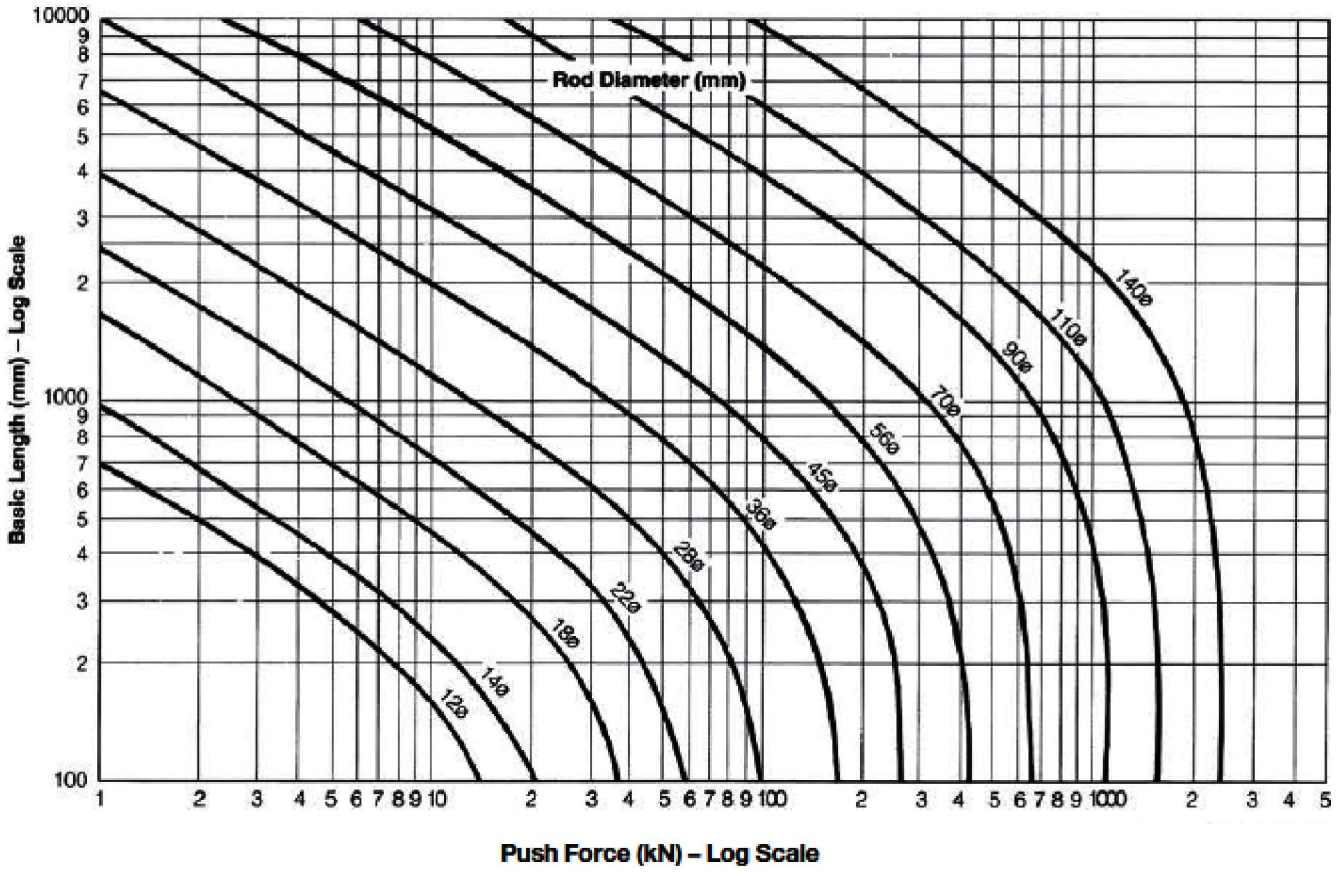
Calculate the basic length L:

$$L = k * \text{stroke}$$

Calculate the thrust by multiplying the bore area per the work pressure.

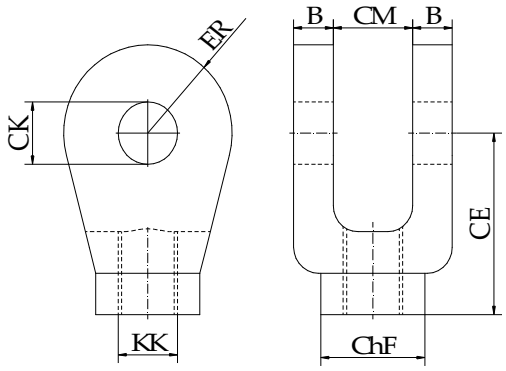
		Push force (kN)					
BORE (mm)	PUSH AREA (mm^2)	50 bar	75 bar	100 bar	125 bar	160 bar	210 bar
25	491	2,45	3,68	4,91	6,14	7,85	10,31
32	804	4,02	6,03	8,04	10,05	12,87	16,89
40	1257	6,28	9,42	12,57	15,71	20,11	26,39
50	1963	9,82	14,73	19,63	24,54	31,42	41,23
63	3117	15,59	23,38	31,17	38,97	49,88	65,46
80	5027	25,13	37,70	50,27	62,83	80,42	105,56
100	7854	39,27	58,90	78,54	98,17	125,66	164,93
125	12272	61,36	92,04	122,72	153,40	196,35	257,71
160	20106	100,53	150,80	201,06	251,33	321,70	422,23
200	31416	157,08	235,62	314,16	392,70	502,65	659,73

Interpolating L with the thrust calculate before, it's possible to define the point of intersection, from the following chart:

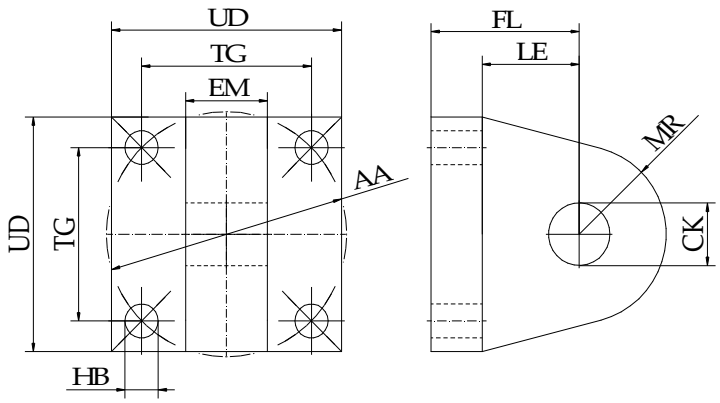


ACCESSORIES

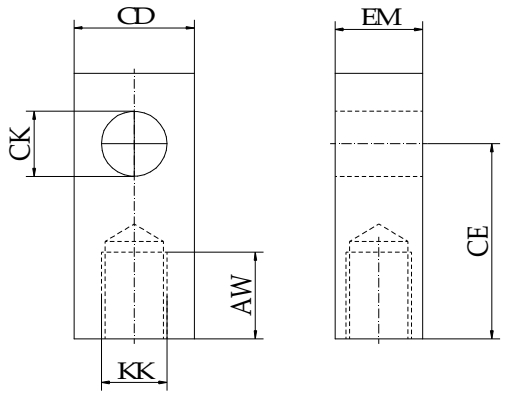
ROD CLEVIS



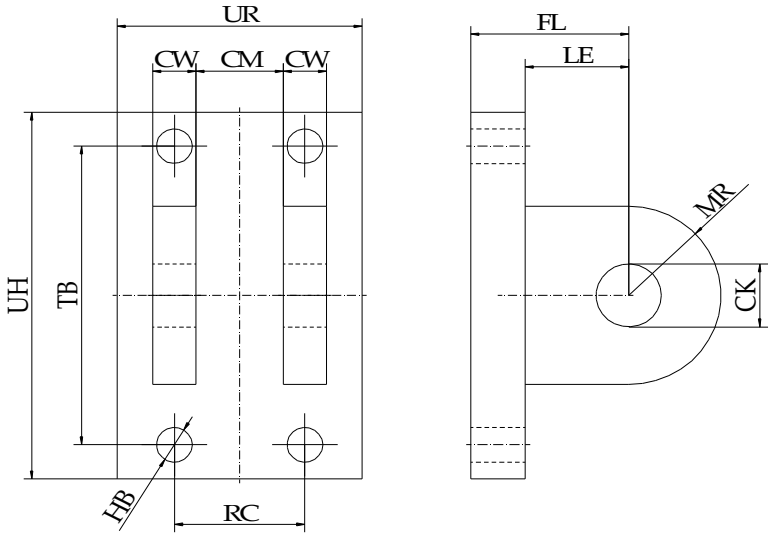
EYE BRACKET



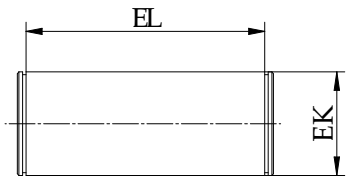
PLEIN ROD EYE



CLEVIS BRACKET



PIVOT PIN



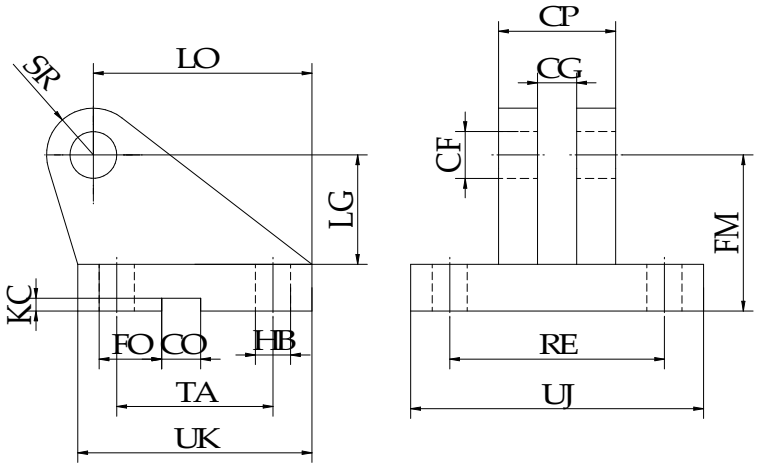
Thread KK	Rod clevis	Eye bracket (rod side)	Eye bracket (cap side)	Plein rod eye	Clevis bracket (rod side)	Clevis bracket (cap side)	Pivot pin
M 10x1,25	F 12	FLA 12	FLP 25	OF 12	ACA 12	ACP 25	P 12
M 12x1,25	F 14	FLA 14	FLP 32	OF 14	ACA 14	ACP 32	P 14
M 14x1,5	F 18	FLA 18	FLP 40	OF 18	ACA 18	ACP 40	P 18
M 16x1,5	F 22	FLA 22	FLP 50	OF 22	ACA 22	ACP 50	P 22
M 20x1,5	F 28	FLA 28	FLP 63	OF 28	ACA 28	ACP 63	P 28
M 27x2	F 36	FLA 36	FLP 80	OF 36	ACA 36	ACP 80	P 36
M 33x2	F 45	FLA 45	FLP 100	OF 45	ACA 45	ACP 100	P 45
M 42x2	F 56	FLA 56	FLP 125	OF 56	ACA 56	ACP 125	P 56
M 48x2	F 70	FLA 70	FLP 160	OF 70	ACA 70	ACP 160	P 70
M 64x3	F 90	FLA 90	FLP 200	OF 90	ACA 90	ACP 200	P 90

KK	AA	AW	B	CD	CE	ChF	CK H9	CM A16
M 10x1,25	40	14	6	18	32	19	10	12
M 12x1,25	47	16	8	22	36	21	12	16
M 14x1,5	59	18	10	25	38	21	14	20
M 16x1,5	74	22	15	35	54	32	20	30
M 20x1,5	91	28	15	40	60	32	20	30
M 27x2	117	36	20	50	75	40	28	40
M 33x2	137	45	25	70	99	55	36	50
M 42x2	178	56	30	100	113	56	45	60
M 48x2	219	63	35	112	126	75	56	70
M 64x3	269	85	40	140	168	95	70	80

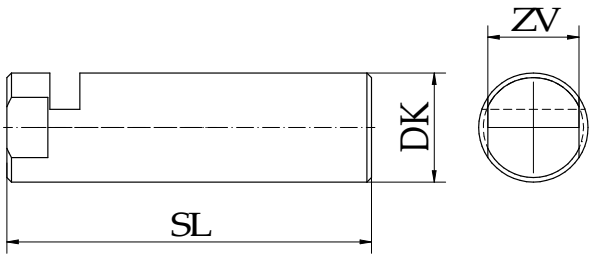
KK	CW	EK	EL	EM h13	ER	FL	HB	LE
M 10x1,25	10	10	34	12	12	23	5,5	13
M 12x1,25	16	12	43	16	17	29	6,5	19
M 14x1,5	16	14	51	20	17	29	9	19
M 16x1,5	25	20	73	30	29	48	13,5	32
M 20x1,5	25	20	73	30	29	48	13,5	32
M 27x2	36	28	95	40	34	59	17,5	39
M 33x2	36	36	117	50	50	79	17,5	54
M 42x2	50	45	139	60	53	87	26	57
M 48x2	50	56	161	70	59	103	30	63
M 64x3	63	70	181	80	78	132	33	82

KK	MR	RC	TB	TG	UD	UH	UR
M 10x1,25	12	9	47	28,3	40	56	28
M 12x1,25	17	11	57	33,2	45	74	37
M 14x1,5	17	13,5	68	41,7	65	80	39
M 16x1,5	29	15,5	102	52,3	80	98	48
M 20x1,5	29	17,5	102	64,3	90	120	62
M 27x2	34	22	135	82,7	120	148	72
M 33x2	50	30	167	96,9	130	190	90
M 42x2	53	39	183	125,9	165	225	108
M 48x2	59	45	242	154,9	200	295	140
M 64x3	78	48	300	190,2	245	335	150

MOUNTING BRACKET

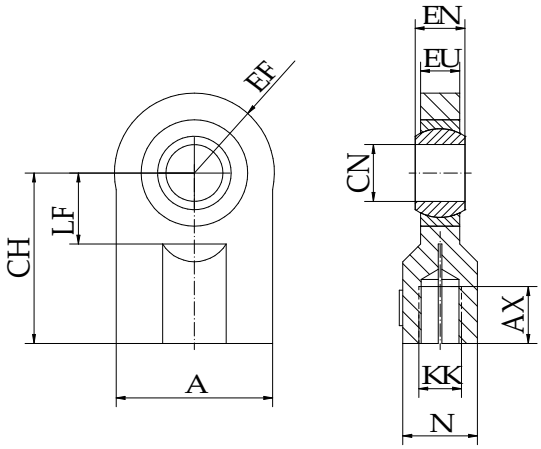


PIVOT PIN



Thread KK	Mounting bracket (rod side)	Mounting bracket (cap side)	Pivot pin	Rod eye with spherical bearing
M 10x1,25	SAA 12	SAP 25	SP 12	SS 12
M 12x1,25	SAA 14	SAP 32	SP 14	SS 14
M 14x1,5	SAA 18	SAP 40	SP 18	SS 18
M 16x1,5	SAA 22	SAP 50	SP 22	SS 22
M 20x1,5	SAA 28	SAP 63	SP 28	SS 28
M 27x2	SAA 36	SAP 80	SP 36	SS 36
M 33x2	SAA 45	SAP 100	SP 45	SS 45
M 42x2	SAA 56	SAP 125	SP 56	SS 56
M 48x2	SAA 70	SAP 160	SP 70	SS 70
M 64x3	SAA 90	SAP 200	SP 90	SS 90

ROD EYE WITH SPHERICAL BEARING



KK	CF K7	CG	CO	CP	FM	FO	GL	HB	KC	LG	LO	RE	SR	UJ	UK
M 10x1,25	12	10	10	30	40	16	40	9	3,3	28	56	55	12	75	60
M 12x1,25	16	14	16	40	50	18	55	11	4,3	37	74	70	16	95	80
M 14x1,5	20	16	16	50	55	20	58	13,5	4,3	39	80	85	20	120	90
M 16x1,5	25	20	25	60	65	22	70	15,5	5,4	48	98	100	25	140	110
M 20x1,5	30	22	25	70	85	24	90	17,5	5,4	62	120	115	30	160	135
M 27x2	40	28	36	80	100	24	120	22	8,4	72	148	135	40	190	170
M 33x2	50	35	36	100	125	35	145	30	8,4	90	190	170	50	240	215
M 42x2	60	44	50	120	150	35	185	39	11,4	108	225	200	60	270	260
M 48x2	80	55	50	160	190	35	260	45	11,4	140	295	240	80	320	340
M 64x3	100	70	63	200	210	35	300	48	12,4	150	335	300	100	400	400

KK	A	AX	CH	CN	DK	EF	EN	EU	LF	N	SL	ZV
M 10x1,25	40	15	42	12 -0,008	12	17,5	10 -0,12	8	16	17	40	10
M 12x1,25	45	17	48	16 -0,008	16	22,5	14 -0,12	11	20	21	50	13
M 14x1,5	55	19	58	20 -0,012	20	27,5	16 -0,12	13	28	25	62	17
M 16x1,5	62	23	68	25 -0,012	25	32,5	20 -0,12	17	31	30	72	22
M 20x1,5	77	29	85	30 -0,012	30	40	22 -0,12	19	35	36	85	24
M 27x2	90	37	105	40 -0,012	40	50	28 -0,12	23	45	45	100	32
M 33x2	105	46	130	50 -0,012	50	60	35 -0,12	30	58	55	122	41
M 42x2	134	57	150	60 -0,015	60	80	44 -0,15	38	68	68	145	50
M 48x2	156	64	185	80 -0,015	80	102,5	55 -0,15	47	82	90	190	70
M 64x3	190	86	240	100 -0,02	100	120	70 -0,20	55	116	110	235	90

TIE ROD NUTS TORQUE

For Comer System cylinder's tie rods, lock nuts of minimum strength grade 10 are used and the tightening torque applied are:

BORE	TIE ROD DIAMETER	TIGHTENING TORQUE (Nm)
25	5	3,92
32	6	7,85
40	8	26,48
50	12	68,65
63	12	68,65
80	16	156,91
100	16	156,91
125	22	294,21
160	27	588,42
200	30	882,63

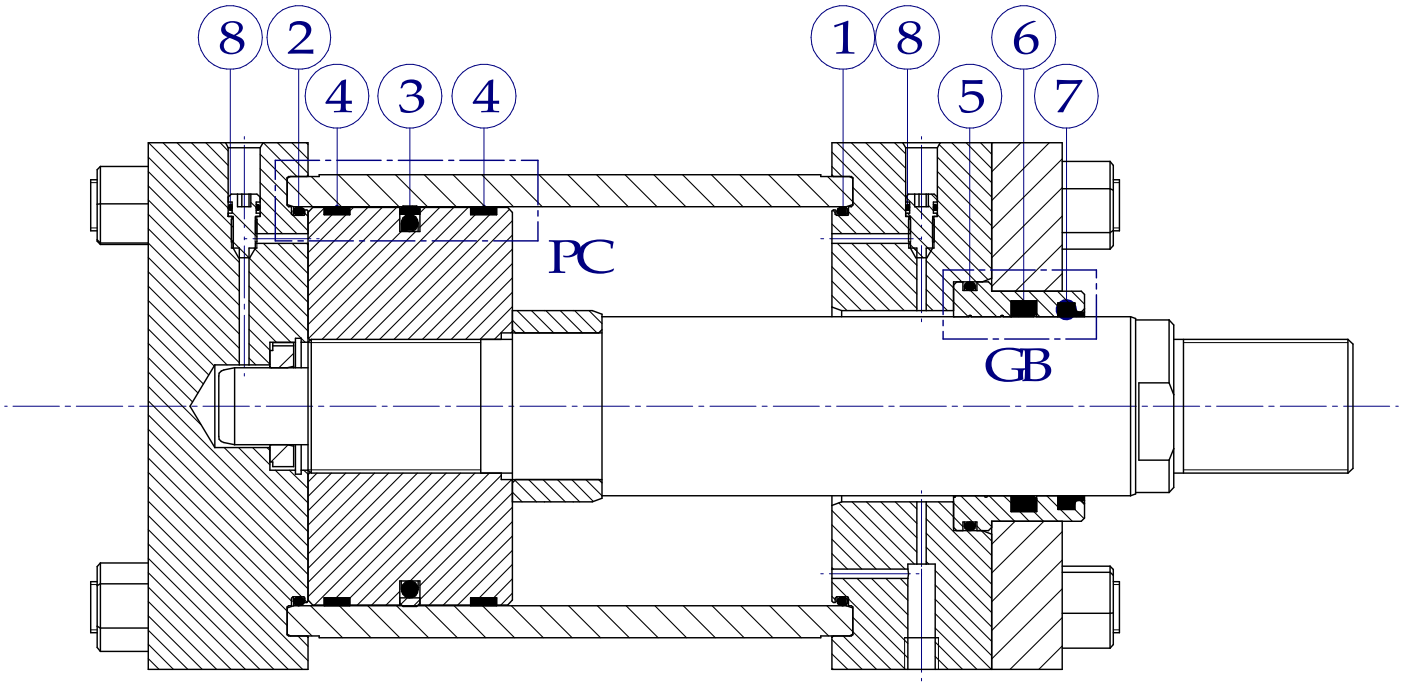
In case of long strokes, tie rod supports are provided. These help to minimize the curvature of the cylinder and the overextension of the tie rod.

SEALS

Seals should be chosen according to work conditions of the environment where the cylinder operates, paying particular attention to the fluid characteristics and the temperature. The table below shows the suggested material for the seals, according to the working conditions of the cylinder:

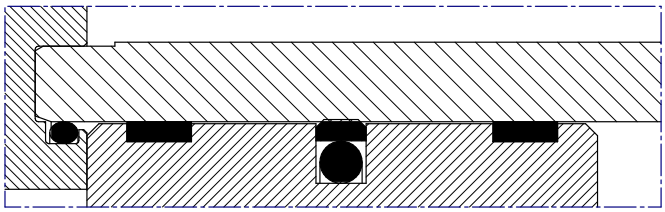
MATERIAL	CHARACTERISTICS	TEMPERATURE	FLUID
NBR + polyurethane	High performances in static/dynamic conditions	-30°C ÷ + 70°C	Mineral oil HH, HL, HLP, HLP-D, HM, HV
NBR + PTFE	Low friction	-30°C ÷ + 70°C	Mineral oil, HFA, HFC,
FPM + PTFE	Low friction - High temperature	-20°C ÷ + 120°C	Mineral oil, HFA, HFB, HFD-U, HFD-R

SEALS KITS



1 Head seal
2 Cap seal
3 Piston seal
4 PTFE wear ring
5 Gland O-ring
6 Lipseal
7 Wipeseal
8 Cushioning valve with O- ring

CORREDO PC : contains 1, 2, 3, 4

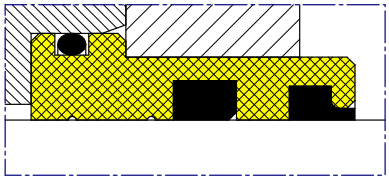


CORREDO PC

BORE	NBR + poliuretano	NBR + PTFE	FKM + PTFE
25	PC25	PC25S	PC25V
32	PC32	PC32S	PC32V
40	PC40	PC40S	PC40V
50	PC50	PC50S	PC50V
63	PC63	PC63S	PC63V
80	PC80	PC80S	PC80V
100	PC100	PC100S	PC100V
125	PC125	PC125S	PC125V
160	PC160	PC160S	PC160V
200	PC200	PC200S	PC200V

CORREDO GB: contains 5, 6, 7

CORREDO BS: contains 5, 6, 7, bronze rod gland



CORREDO GB

ROD PISTON	NBR + polyurethane		NBR		FPM	
12	GB12	BS12	GB12S	BS12S	GB12V	BS12V
14	GB14	BS14	GB14S	BS14S	GB14V	BS14V
18	GB18	BS18	GB18S	BS18S	GB18V	BS18V
22	GB22	BS22	GB22S	BS22S	GB22V	BS22V
28	GB28	BS28	GB28S	BS28S	GB28V	BS28V
36	GB36	BS36	GB36S	BS36S	GB36V	BS36V
45	GB45	BS45	GB45S	BS45S	GB45V	BS45V
56	GB56	BS56	GB56S	BS56S	GB56V	BS56V
70	GB70	BS70	GB70S	BS70S	GB70V	BS70V
90	GB90	BS90	GB90S	BS90S	GB90V	BS90V
110	GB110	BS110	GB110S	BS110S	GB110V	BS110V
140	GB140	BS140	GB140S	BS140S	GB140V	BS140V

HOW TO ORDER A COMER SYSTEM CYLINDER – IC SERIES (ISO 6020/2)

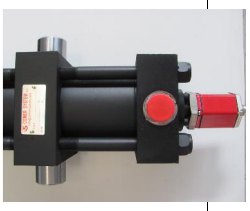
	SERIE IC	*...*	*...*	*...*	*...*	*Cf*	*...*	*Fa*	*Fp*	*S*
Bore	Indicate in mm									
Rod piston A **Rod thread**	Indicate Ø rod piston Male M or Female F									
Rod piston B **Rod thread**	Indicate Ø rod piston Male M o Female F									
Cylinder stroke	Indicate in mm									
Mounting style	A = tie rod extended head end (ISO MX3) B = tie rod extended cap head (ISO MX2) AB = tie rod extended both ends (ISO MX1) C = head rectangular flange (ISO ME3) D = cap rectangular flange (ISO ME6) E = side lugs (ISO MS2) F = cap fixed eye (ISO MP3) G = cap fixed clevis (ISO MP1) H = cap fixed eye with spherical bearing (ISO MP5) I = head trunnion (ISO MT1) L = back trunnion (ISO MT2) M = intermediate fixed trunnion (ISO MT4)									
Limited stroke										
Fa = head cushioning										
Fp = cap cuchioning										
S = special executions	Indicate the change from the standard execution (see dedicated section page 23)									

SPECIAL EXECUTIONS (indicate the requiered special executions)

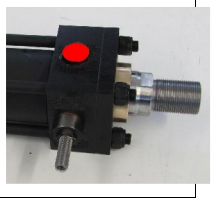
S = special executions

V	T	SA	SP	ST	C

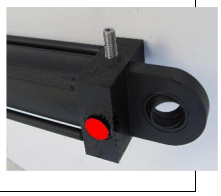
FMK seals



Linear transducer



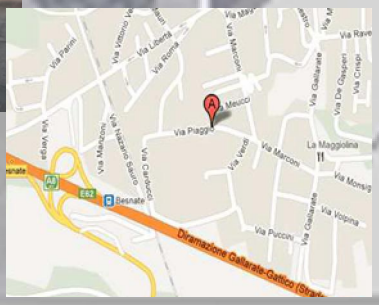
Head limit switch sensor



Cap limit switch sensor

Heat resistant bellow

Connection ports (if not standard)



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