

PNEUMATIC CYLINDERS TYPE CLC

Series Φ 32-125 mm
Single and double-acting

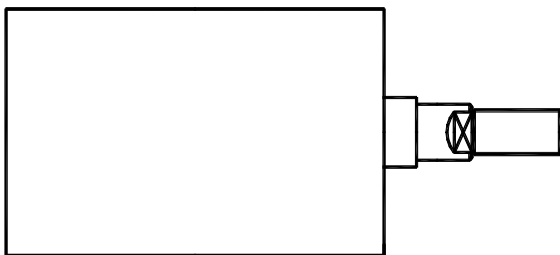


TECHNICAL CHARACTERISTICS

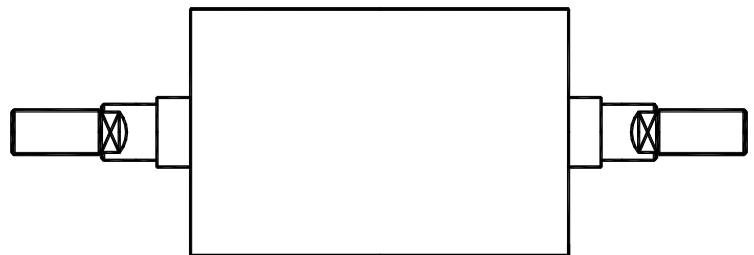
Medium :	compressed air, filtered (lubricated or unlubricated)
Temperature range :	-10°C +40°C
Solid matter :	Particle size up to 25 μ m
Max. content of solid particles :	10 mg/m ³
Max. working pressure :	10 bar
Min. working pressure :	1 bar
Stroke :	see table
Materials :	
- body of cylinder :	aluminum alloy, brass, SST
- piston rod :	SS
- end - blocks :	aluminum alloy
- Seals :	Perbunan
Construction :	compact
Ambient conditions :	
Humidity at 20°C :	65%
Temperature range :	-10°C+40°C

Piston diameter	Φ 32	Φ 40	Φ 50	Φ 63	Φ 80	Φ 100	Φ 125
Connection	G 1/8 "	G 1/8 "	G 1/8 "	G 1/8 "	G1/4"	G1/4"	G1/4"
Thrust at 6 bar [N]	450	710	1130	1800	2900	4550	7360
Return force at 6 bar [N]	380	590	940	1610	2610	4520	6880
Standard stroke length [mm] * , **	50 ; 100 ; 160 ; 200 ; 300 ; 400 ; 500						

TYPICAL VERSIONS

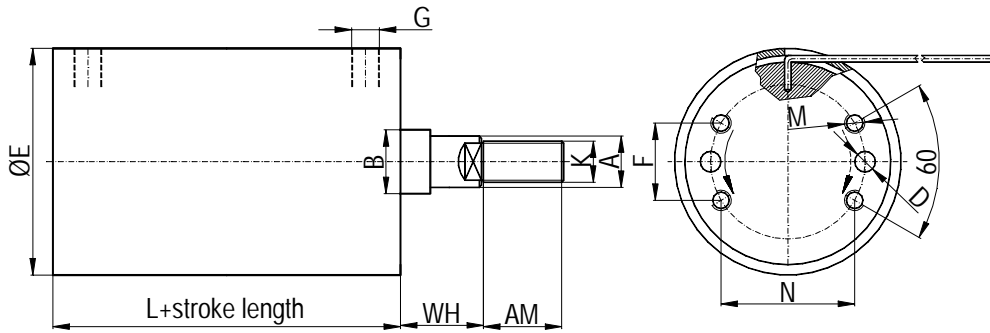


SINGLE - ENDED PISTON ROD CYLINDER

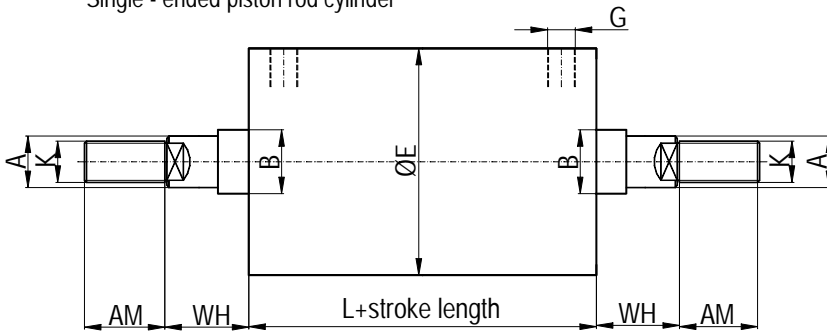


DOUBLE - ENDED PISTON ROD CYLINDER

OVERALL AND MOUNTING DIMENSIONS



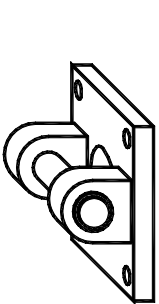
Single - ended piston rod cylinder



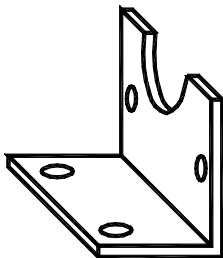
Double - ended piston rod cylinder

Ø	ØE	A	B	K	N	AM	F	G	L	M	WH
32	36	12	26	M10x1,25	28.5	22	16.5	G1/8	85	M4	15
40	46	12	26	M10x1,25	28.5	22	16.5	G1/8	88	M4	15
50	56	16	35	M12x1,5	35,3	24	21	G1/8	88	M4	15
63	70	16	55	M12x1,5	40,5	24	24	G1/8	85	M6	15
80	90	20	40	M20x1,5	55.4	40	32	G1/4	92	M8	15
100	110	20	40	M20x1,5	65	40	37.5	G1/4	95	M10	15
125	137	20	40	M20x2	65	40	37.5	G1/4	95	M10	15

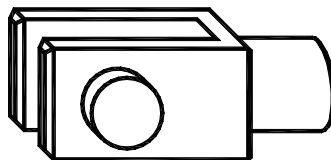
ACCESSORIES FOR MOUNTING



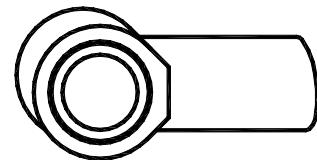
Rear flange
MP2



Foot front-rear
MS1



Rod cleaves
RP102P



Rod eye with spherical bearing
RP103P

CODING (HOW TO ORDER)

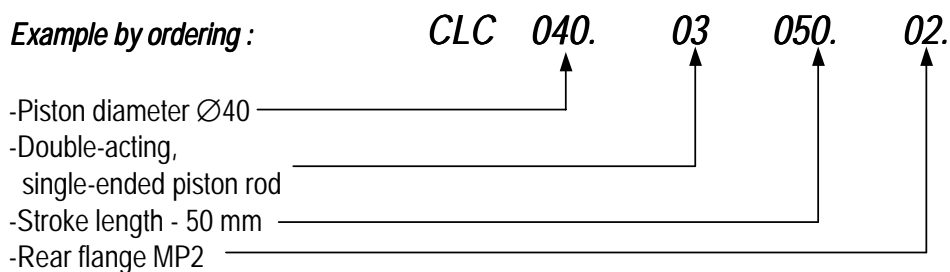
CLC	XXX	XX	XXX	XX	X	DENOMINATION	
	a	b	c	d	e		
						a) Piston diameter	
	032					Ø32	
	040					Ø40	
	050					Ø50	
	063					Ø63	
	080					Ø80	
	100					Ø100	
	125					Ø125	
						b) Version *	Symbol
	01					single-acting, with return spring – in pause piston rod is retired	
	02					single-acting, with return spring - in pause piston rod is extensive	
	03					double-acting, single-ended piston rod	
	20					double-acting, double-ended piston rod	
						c) Stroke length [mm] **	
	050					50	
	100					100	
	160					160	
	200					200	
	250					250	
	300					300	
	400					400	
	500					500	
						d) Overview piston rod adapters	
	00					without accessories	
	01					foot front-rear MS1	
	02					rear flange MP2	
	03					rod eye with spherical bearing RP103P	
	04					rod cleaves RP102P	
					***	e) Other requirement	

* For the single-acting cylinders version 01; 02 - the stroke length: maxim 100 mm

** Other stroke length upon beneficiary request

*** Show explicit

Example by ordering :



PNEUMATIC CYLINDERS TYPE CPU

Series Φ 8-25 mm
Single and double-acting
(ISO 6432 Standard)

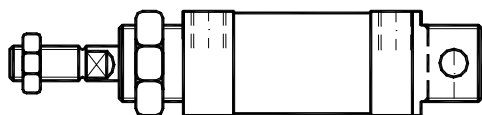


TECHNICAL CHARACTERISTICS

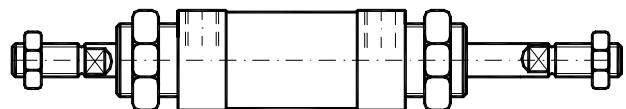
Medium :	compressed air, filtered (lubricated or unlubricated)
Temperature range :	-10°C +40°C
Solid matter :	Particle size up to 25 μ m
Max. content of solid particles :	10 mg/m ³
Max. working pressure :	10 bar
Min. working pressure :	1 bar
Stroke :	see table
Materials :	
- body of cylinder :	aluminum alloy, brass, SST
- piston rod :	SS
- end - blocks :	aluminum alloy
- Seals :	Perbunan
Construction :	compact, non-dismantling
Ambient conditions :	
Humidity at 20°C :	65%
Temperature range :	-10°C+40°C

Piston diameter	Φ 8	Φ 10	Φ 12	Φ 16	Φ 20	Φ 25
Connection	M5	M5	M5	M5	G1/8"	G1/8"
Thrust at 6 bar [N]	24	40	56	104	170	270
Return force at 6 bar [N]	16	32	38	87	140	220
Standard stroke length [mm] * ; **	20; 40; 50; 80; 100;					

TYPICAL VERSIONS



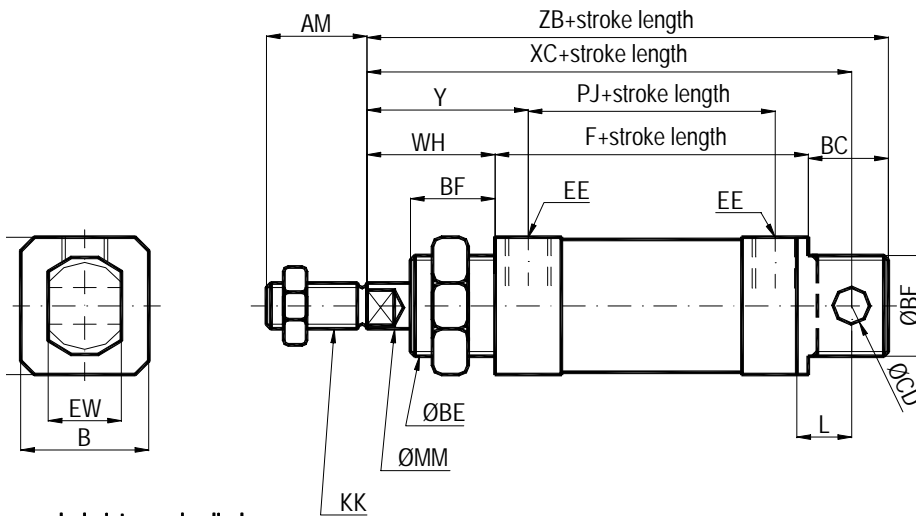
SINGLE - ENDED PISTON ROD CYLINDER



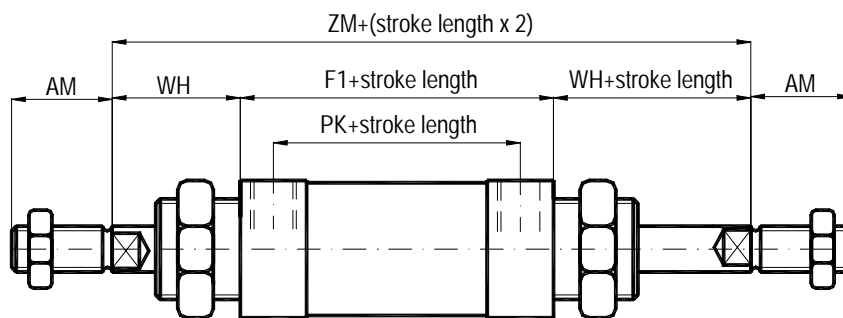
DOUBLE - ENDED PISTON ROD CYLINDER

OVERALL AND MOUNTING DIMENSIONS

Single - ended piston rod cylinder

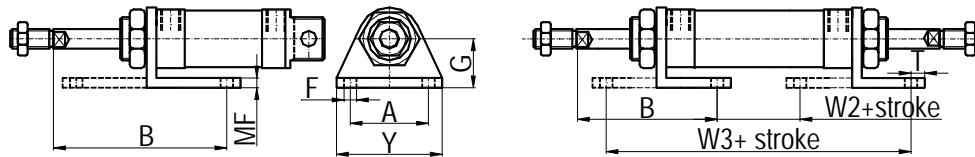


Double - ended piston rod cylinder

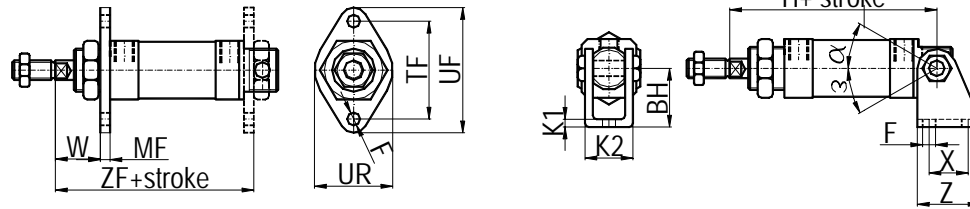


Ø piston dia.	AM	B	BC	ØBE	BF	ØCD	D	EE	F	F1	KK	L	EW	ØMM	PJ
8	12	12	12	M12x1,25	12	4 (H9)	18	M5	46	-	M4	6	8	4	31
10	12	12	12	M12x1,25	12	4 (H9)	18	M5	46	-	M4	6	8	4	31
12	16	16	14	M16x1,5	14	6 (H11)	20	M5	48	-	M6	9	12	6	34
16	16	20	14	M16x1,5	14	6 (H11)	21	M5	54,5	55,5	M6	9	12	6	40,5
20	20	24	17,5	M22x1,5	17,5	8 (H11)	29	G1/8	63,5	68	M8	12	16	10	46,5
25	22	29	17,5	M22x1,5	17,5	8 (H11)	30	G1/8	68,5	68,5	M10	12	16	10	51,5

Ø piston dia.	PK	WH	XC	Y	ZB	ZM	weights (kg)	
							1)	2)
8	-	16	64	23,5	74	-	0,050	0,020
10	-	16	64	23,5	74	-	0,070	0,040
12	-	22	75	29	84	-	0,160	0,090
16	41	22	81,5	29	90,5	99,5	0,200	0,100
20	51	24	95	32,5	105	116	0,330	0,160
25	51,5	28	104	36,5	114	124,5	0,400	0,200



Foot mounting , code SE



Flange mounting at front-rear, code BA

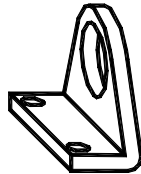
Clevis foot mounting, code AS

∅	A	B	F	MF	G	H	BH	K1	K2	T	Z	ZF	W	W2	W3	X	Y	TF	UR	a	e
8	25	24	45	3	16	627	24	25	13	5	20	65	13	32	66	125	35	30	25	160°	7°
10	25	24	45	3	16	627	24	25	13	5	20	65	13	32	66	125	35	30	25	160°	7°
12	32	32	55	4	20	725	27	3	18,5	6	25	74	18	28	76	16	44	40	32	180°	50°
16	32	32	55	4	20	79	27	3	18,5	6	25	80,5	18	34,5	82	16	44	40	32	180°	47°
20	40	36	66	5	25	91	30	4	24,5	7	32	92,5	19	39,5	97	20	54	50	40	180°	35°
25	40	40	66	5	25	100	30	4	24,5	7	32	101	23	44,5	102	20	54	50	40	180°	33°

ACCESSORIES FOR MOUNTING



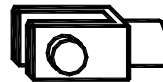
Flange front-rear BA



Foot SE



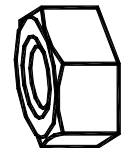
Clevis foot AS



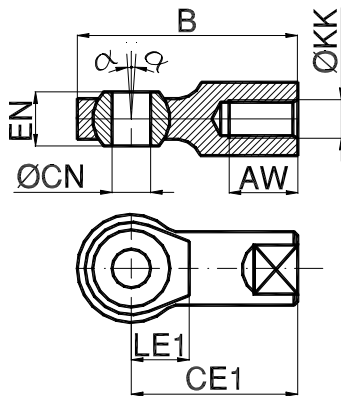
Clevis with pin RP 102P



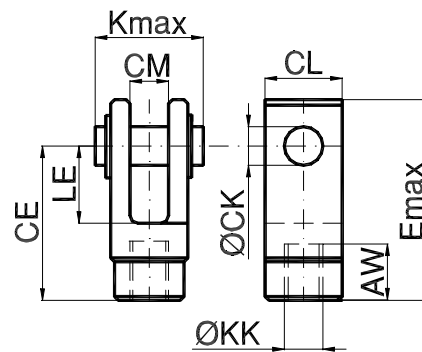
Rod eye with spherical bearing RP103P



Hexagon nut PC



Rod eye with spherical bearing RP103P



Rod clevis RP 102P

∅ piston dia.	AW	B	CE	CE1	∅CK	CL	CM	∅CN	E	EN	K	∅KK	KV	LE	LE1	α
8	10	36	16	27	5	8	4	5	22,5	8	11	M4	19	8	10	4°
10	10	36	16	27	5	8	4	5	22,5	8	11	M4	19	8	10	4°
12	12	40	24	30	6	12	6	6	33,5	9	16,5	M6	19	12	11	4°
16	12	40	24	30	6	12	6	6	33,5	9	16,5	M6	19	12	11	4°
20	16	48	32	36	8	16	8	8	45	12	22	M8	27	16	13	4°
25	20	57	40	43	10	20	10	10	56	14	26	M10x1,25	27	20	15	4°

CODING (HOW TO ORDER)

CPU	XXX	XX	XXX	XX	X	DENOMINATION	
	a	b	c	d	e		
						a) Piston diameter	
	008					Ø8	
	010					Ø10	
	012					Ø12	
	016					Ø16	
	020					Ø20	
	025					Ø25	
						b) Version *	Symbol
	01					single-acting, without spring return – return of piston rod by actuating from outside	
	02					single-acting, with return spring – in pause piston rod is retired	
	03					single-acting, with return spring - in pause piston rod is extensive	
	10					double-acting, single-ended piston rod without cushioning	
	11					double-acting, single-ended piston rod with elastic cushioning	
	20					double-acting, double-ended piston rod without cushioning	
	21					double-acting, double-ended piston rod with elastic cushioning	
						c) Stroke length [mm] **	
	020					20	
	040					40	
	050					50	
	080					80	
	100					100	
						d) Overview piston rod adapters	
	00					without accessories	
	01					foot SE	
	02					flange front-rear BA	
	03					clevis foot AS	
	04					rod clevis RP102 P	
	05					rod eye with bearings RP103 P	
					***	e) Other requirement	

* For the single-acting cylinders version 01; 02; 03 - the stroke length: maxim 50 mm

** Other stroke length upon beneficiary request

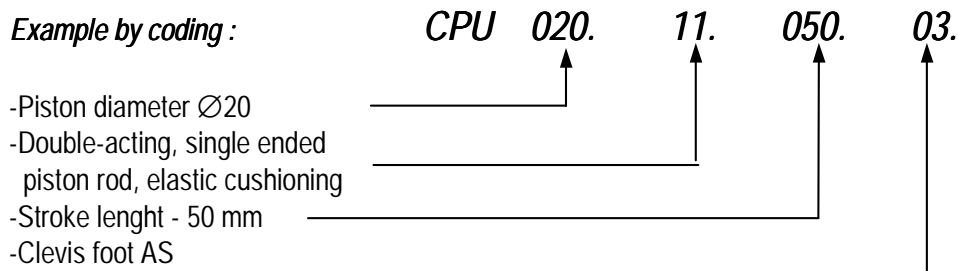
*** Show explicit

EXAMPLE OF ORDERING

* For the single - acting cylinders , versions : 01; 02; 03 the max. stroke is 50 mm.

***) The permitted deviation of stroke length is max. 500 mm.

Example by coding :



PNEUMATIC CYLINDERS TYPE CPU

Series Φ 32-125 mm
Single and double-acting
(ISO 6431 Standard)



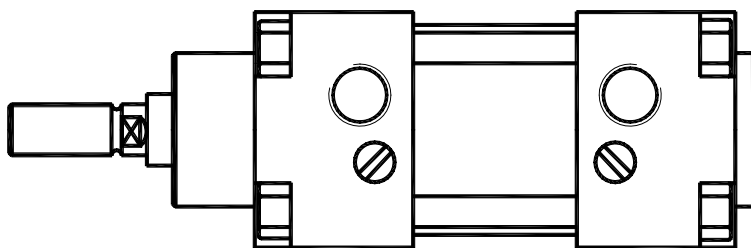
TECHNICAL CHARACTERISTICS

Medium :	compressed air, filtered (lubricated or unlubricated)
Temperature range :	-10°C +40°C
Solid matter :	Particle size up to 25 μ m
Max. content of solid particles :	10 mg/m ³
Max. working pressure :	10 bar
Min. working pressure :	1 bar
Stroke :	see table
Materials :	
- body of cylinder :	aluminum alloy, brass, SST
- piston rod :	SS
- end - blocks :	aluminum alloy
- Seals :	Perbunan
Construction :	dismantling
Ambient conditions :	
Humidity at 20°C :	65%
Temperature range :	-10°C+40°C

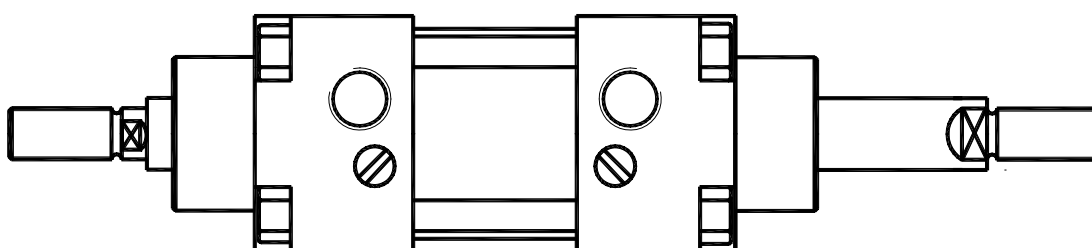
Piston diameter	Φ 32	Φ 40	Φ 50	Φ 63	Φ 80	Φ 100	Φ 125
Connection	G1/8"	G1/4"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"
Thrust at 6 bar [N]	450	710	1130	1800	2900	4550	7360
Return force at 6 bar [N]	380	590	940	1610	2610	4250	6880
Stroke length from braking [mm]	19	21	23	27	30	30	45
Standard stroke length [mm] * ; **	50; 100; 160; 200; 300; 400; 500						

TYPICAL VERSIONS

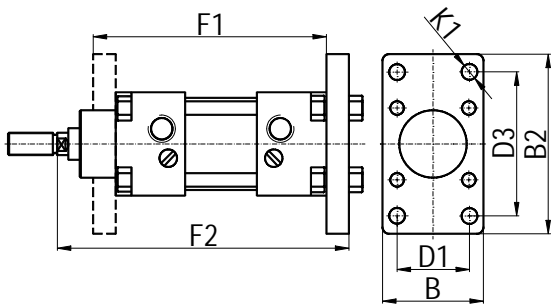
SINGLE - ENDED PISTON ROD CYLINDER



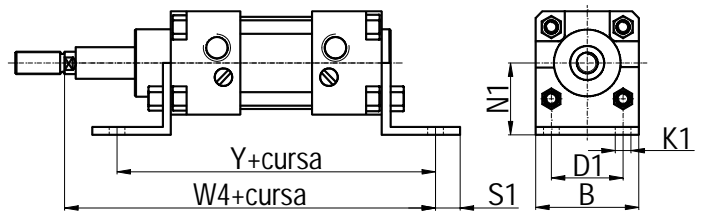
DOUBLE - ENDED PISTON ROD CYLINDER



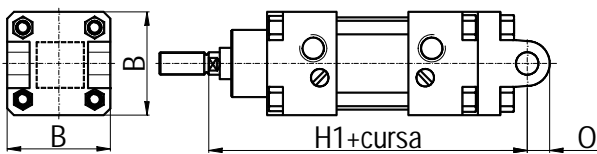
OVERALL AND MOUNTING DIMENSIONS



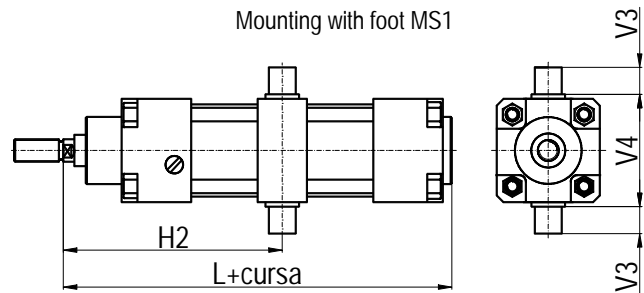
Mounting with flange MF1



Mounting with foot MS1



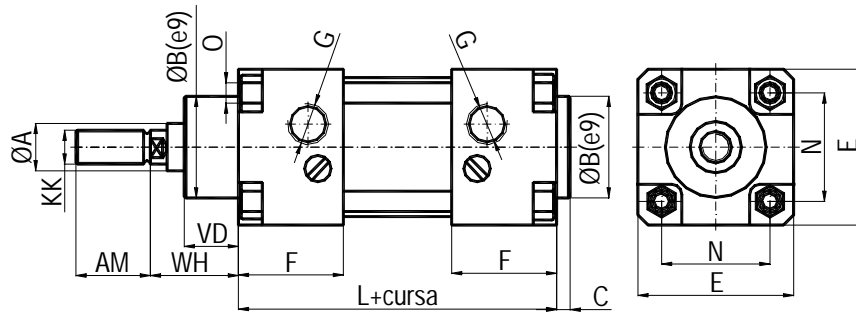
Mounting with rear flange MP2 sau MP4



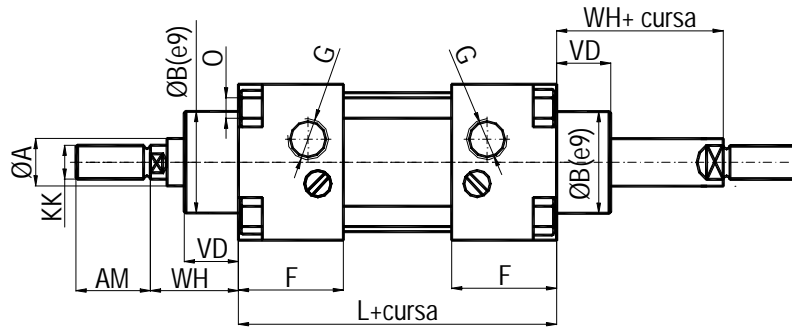
Mounting with central flange MT4

Ø	B	B2	D1	D3	F1	F2	H1	H2	K1	L	N1	S1	V3	V4	W4	Y	O
32	45	80	32	64	97	130	142	71	7	113	32	6,5	12	50	144	142	10
40	52	90	36	72	117	145	160	82,5	9	137	36	9	16	63	163	161	12
50	65	110	45	90	120	155	170	90	9	145	45	15	15	75	175	170	12
63	75	120	50	100	135	170	190	97,5	9	160	50	15	20	90	190	185	16
80	95	150	63	126	142	190	210	110	12	172	63	13	20	110	215	210	16
100	115	170	75	150	157	205	230	119,5	14	192	71	12	25	132	230	220	20
125	140	207	90	180	172,5	245	275	134,5	16	207	90	15	25	159	270	250	26

Single - ended piston rod cylinder

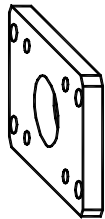


Double - ended piston rod cylinder

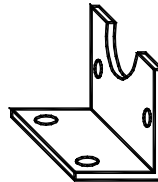


Φ	ΦA	KK	ΦB	N	AM	E	VD	G	L	F	C	O	WH
32	12	M10x1,25	30	32,5	22	46	16	G1/8	94	31	4	M6	26
40	16	M12x1,5	35	38	24	53	20	G1/4	105	35	4	M6	30
50	20	M16x1,5	40	46,5	32	64	25	G1/4	106	35,5	4	M8	32
63	20	M16x1,5	45	56,5	32	74	25	G3/8	121	40	4	M8	37
80	25	M20x1,5	45	72	40	94	32	G3/8	128	41,5	4	M10	46
100	25	M20x1,5	55	89	40	113	35	G1/2	138	44,5	4	M10	51
125	30	M24x2	55	110	48	140	20	G1/2	145	48	4	M12	62

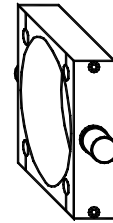
ACCESSORIES FOR MOUNTING



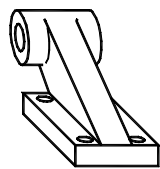
Rectangle flange front-rear MF1



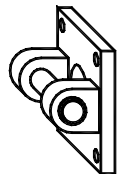
Foot front-rear MS1



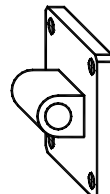
Central flange MT4



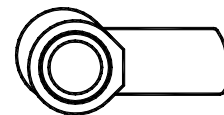
Clevis foot
RP107P



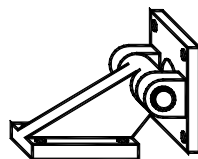
Rear flange
MP2



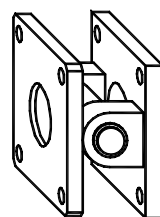
Rear flange
MP4



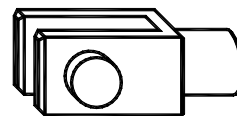
Rod eye with spherical bearing
RP103P



Swivel flange
RP107P+MP2



Swivel flange
MP2+MP4



Rod clevis
RP102P

CODING (HOW TO ORDER)

CPU	XXX	XX	XXX	XX	X	DENOMINATION	
a	b	c	d	e			
a) Piston diameter							
032					Ø32		
040					Ø40		
050					Ø50		
063					Ø63		
080					Ø80		
100					Ø100		
125					Ø125		
b) Version *						Symbol	
	01				single-acting, without spring return – return of piston rod by actuating from outside		
	02				single-acting, with return spring – in pause piston rod is retired		
	03				single-acting, with return spring - in pause piston rod is extensive		
	10				double-acting, single-ended piston rod without cushioning		
	11				double-acting, single-ended piston rod with elastic cushioning		
	12				double-acting, single ended piston rod with adjustable cushioning pneumatic		
	13				double-acting, single ended piston rod with adjustable cushioning pneumatic and adjustable speed at whole stroke		
	20				double-acting, double-ended piston rod without cushioning		
	21				double-acting, double-ended piston rod with elastic cushioning		
	22				double-acting, double ended piston rod with adjustable cushioning pneumatic		
	23				double-acting, double ended piston rod with adjustable cushioning pneumatic and adjustable speed at whole stroke		
c) Stroke length [mm] **							
	050				50		
	100				100		
	160				160		
	200				200		
	250				250		
	300				300		
	400				400		
	500				500		
d) Overview piston rod adapters							
	00				without accessories		
	01				foot front-rear MS1		
	02				rectangle flange front-rear MF 1		
	03				rear flange MP2		
	04				swivel flange RP107P + MP2		
	05				swivel flange MP2+MP4		
	06				rear flange MP4		
	07				central flange MT4		
	08				rod clevis RP102P		
	09				rod eye with spherical bearing RP103P		
				***	e) Other requirement		

* For the single-acting cylinders version 01; 02; 03 - the stroke length: maxim 50 mm

** Other stroke length upon beneficiary request

*** Show explicit