



General

Continuing in our commitment to the development and implementation of technologically advanced, competitive products; we have introduced the 1230 series of technopolymer bodied microcylinders. This new cylinder complies with ISO6432 and has operational characteristics similar to the Mir (1280) series cylinder with rolled end caps.

One of the main features of this cylinder is the material of construction.

In fact, the end covers and barrel are made from a technopolymer reinforced with glass fiber, giving mechanical qualities similar to those of aluminium.

The use of technopolymer also allows the use of these cylinders in environments that are incompatible with aluminium.

Bores available : Ø12 - Ø16 - Ø20 - Ø25.

Products types:

- Basic
- Basic with magnetic piston

Options:

- Double acting
- Double acting with flat rear end cover
- Double acting through rod (Push/Pull)

Construction characteristic

End covers	Nylon 66 reinforced with glass fibres
Barrel	Nylon 66 reinforced with glass fibres
Piston rod	C43 Chromed (non magnetic piston version) Stainless steel AISI 303 chromed (magnetic piston version)
Piston seal	NBR oil-resistant rubber seal
Piston rod seal	Polyurethane self-lubricated mix
Mounting	Steel painted / stainless steel AISI 304
Forks	Zinc plated steel / stainless steel AISI 304

Technical characteristic

Fluid	Filtered air lubricated or non-lubricated
Maximum working pressure	8 bar
Working temperature	-5°C ÷ +50°C

Standard stroke

Ø 12 and Ø 16

15 - 25 - 50 - 75 - 80 - 100 - 125 - 150 mm

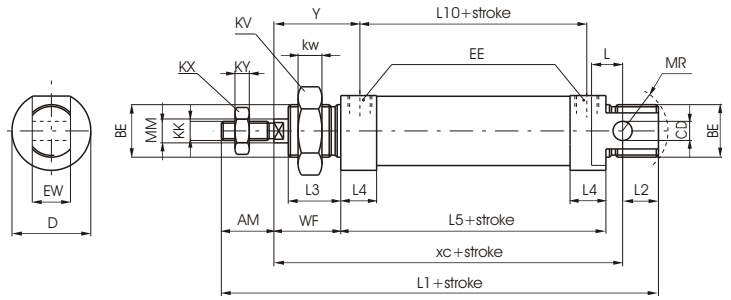
Ø 20 and Ø 25

15 - 25 - 50 - 75 - 80 - 100 - 125 - 150 - 160 - 200 - 250 - 300 mm

Maximum tightening torque for fittings

Bore	Thread	Maximum torque (Nm)
Ø 12	M5	1
Ø 16	M5	1
Ø 20	G 1/8"	4
Ø 25	G 1/8"	4

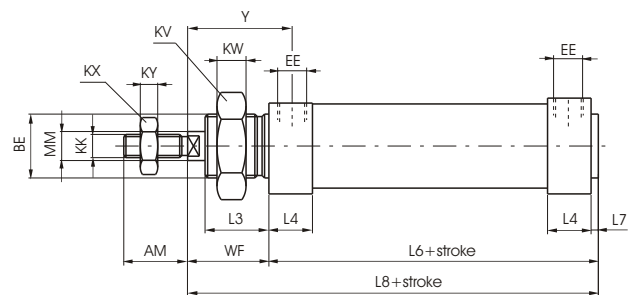
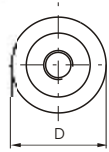
Basic version



Standard execution, fully complying with ISO standards. Can use all available mountings.

Ordering code	Description
1230.Ø.stroke	Basic version
1230.Ø.stroke.M	Magnetic basic version

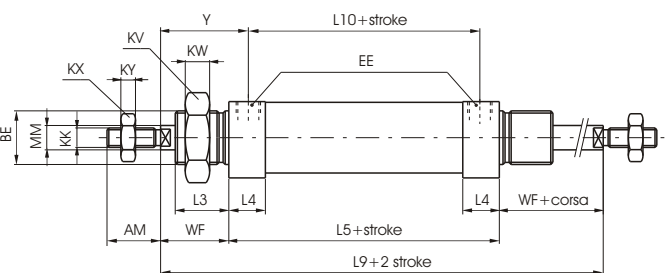
Without rear eye version



Version derived from standard execution 1230 and not included in ISO standard. Not having a rear eye it is shorter. The inlet connection is lateral on the rear cover (like on the front cover).

Ordering code	Description
1231.Ø.stroke	Basic version
1231.Ø.stroke.M	Magnetic basic version

Push/Pull rod version



Through rod model, dimensions as per the 1230 (except the rod).

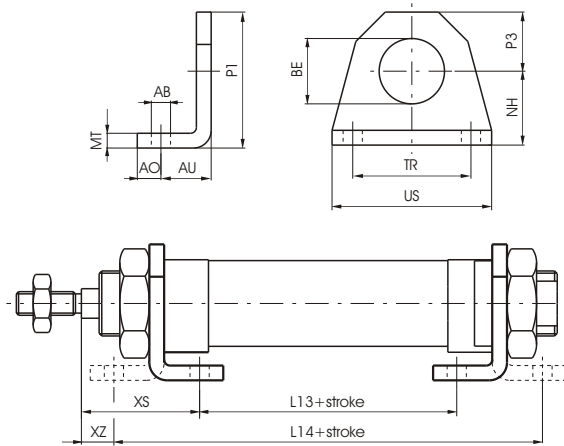
Ordering code	Description
1232.Ø.stroke	Basic version
1232.Ø.stroke.M	Magnetic basic version



Table of dimensions

	Bore			
	12	16	20	25
AM (-0,2)	16	16	20	22
BE	M16X1,5	M16X1,5	M22X1,5	M22X1,5
CD (H9)	6	6	8	8
D (h11)	19	23	28,5	31,5
EE	M5	M5	G1/8"	G1/8"
EW (d13)	12	12	16	16
KK (6g)	M6X1	M6X1	M8X1,25	M10X1,25
KV	22	22	30	30
KW	6	6	7	7
KX	10	10	13	17
KY	4	4	5	6
L	9	9	12	14
L1(±1) *	105	111	130	140
L2	14	13	15	14
L3	17	17	18	22
L4	13,5	14,5	20,5	20
L5 (±1) *	50	56	68	68
L6 *	52	58	70,5	70,5
L7	2	2	2,5	2,5
L8 *	74	80	94,5	98,5
L9 (±1,2) *	94	100	116	124
L10 (±1) *	41	45	52	52
MM (f7)	6	6	8	10
WF (±1,2)	22	22	24	28
XC (±1) *	75	82	95	104
Y (±1)	26,5	27,5	32	36

Foot



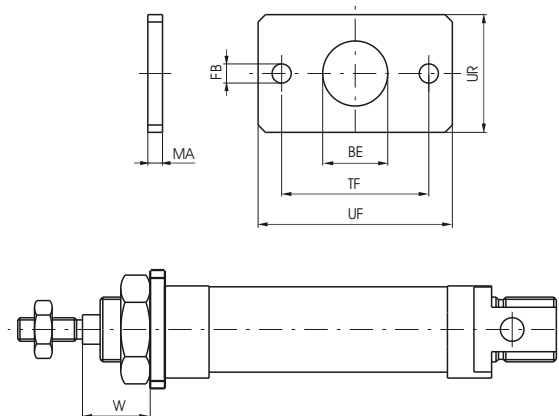
Used to mount the cylinder parallel to the mounting plane with the rod parallel to said plane. Use one for short strokes and two for long strokes. Manufactured in stamped steel, anti-corrosion cataphoreses treated. Attached to the end plates by means of nuts (or lock nuts) 05.

Bore	12	16	20	25
AB (H13)	5,5	5,5	6,5	6,5
AO	6	6	8	8
AU	14	14	17	17
BE	16	16	22	22
L13 (±1) *	30	36	44	45
L14 (±1) *	78	84	102	103
MT	4	4	5	5
NH (±0,3)	20	20	25	25
P1	33	33	45	45
P3	13	13	20	20
TR (JS14)	32	32	40	40
US	42	42	54	54
XS	32	32	36	40
XZ (±1,4)	8	8	7	11
Weight gr.	45	45	90	90

Ordering code

1200.Ø.01

Flange



Used to mount the microcylinder at a right angle to the mounting plane. Attached to the front (or rear) endcap by a nut (or lock nut) 05. Manufactured in stamped steel, anti-corrosion cataphoreses treated.

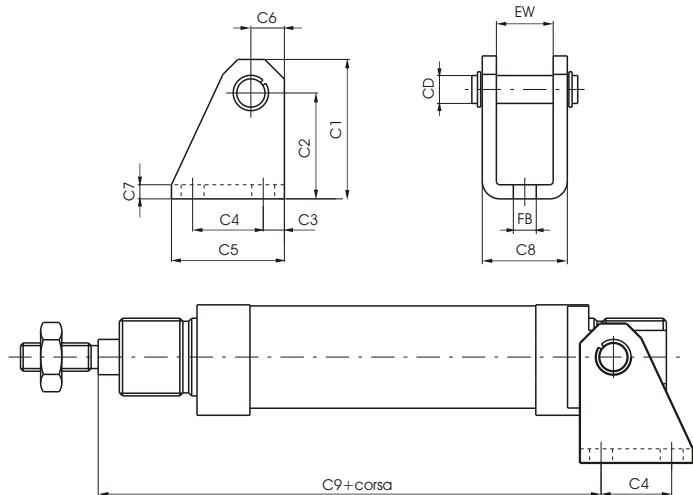
Bore	12	16	20	25
BE	16	16	22	22
FB (H13)	5,5	5,5	6,5	6,5
UF	53	53	66	66
UR	30	30	40	40
MA	4	4	5	5
TF (JS14)	40	40	50	50
W (±1,4)	18	18	19	23
Weight gr.	40	40	85	85

Ordering code

1200.Ø.02



Rear eye

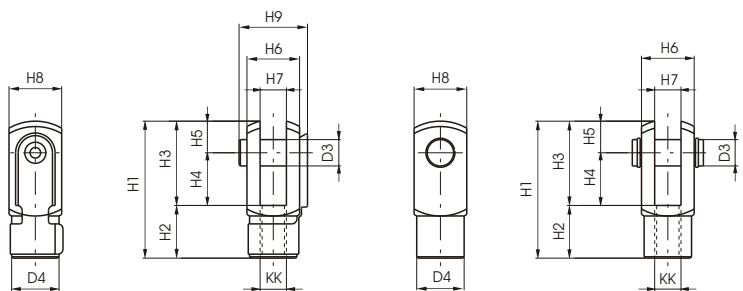


Recommended for use when the rod is subject to lateral forces during travel. Allows the cylinder to oscillate and self-align with the linked element to the rod. Manufactured in stamped steel, anti-corrosion cataphoreses treated.

Bore	12	16	20	25
CD	6	6	8	8
C1	33,5	33,5	39,5	39,5
C2 (±0,3)	27	27	30	30
C3	5	5	6	6
C4	15	15	20	20
C5	25	25	32	32
C6	6,5	6,5	9,5	9,5
C7	3	3	4	4
C8	18	18	24	24
C9 (±0,4)★	73,5	80,5	91,5	100,5
EW	12,1	12,1	16,1	16,1
FB (H13)	5,5	5,5	6,5	6,5
Weight gr.	35	35	75	75

Ordering code	
1200.Ø.03	

Cylinder rod forks



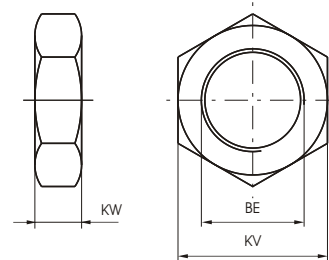
Similar to hinge 03, mounted on the rod thread, assures a regular operation even in the presence of significant forces to the linked element. Made of zinc plated steel.

Bore	12	16	20	25
D3	6	6	8	10
D4	10	10	14	18
H1	31	31	42	52
H2	12	12	16	20
H3	19	19	26	32
H4	12	12	16	20
H5	7	7	10	12
H6	12	12	16	20
H7 (B12)	6	6	8	10
H8	12	12	16	20
H9	15	15	22	26
KK	M6x1	M6x1	M8x1.25	M10x1,25
Weight gr.	20	20	45	90

Ordering code	
1200.Ø.04 (with pin)	
1200.Ø.04/1 (with clips)	



Nut or lock nut for the endcaps

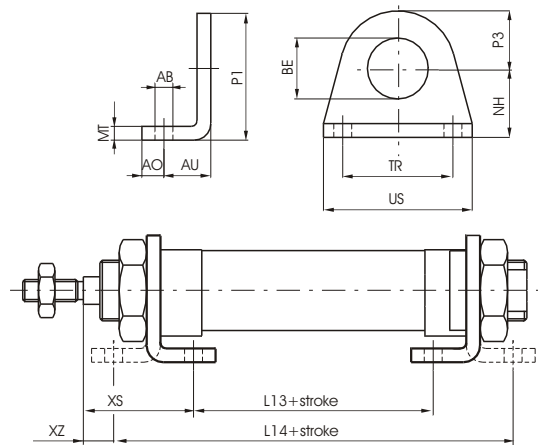


Used to fasten flanges or feet to the endcaps of the microcylinder. The nuts are mounted on diameters that go from 16 to 25. The nuts are supplied (one piece) with the microcylinders.

	Bore	12	16	20	25
	BE	M16x1,5	M16x1,5	M22x1,5	M22x1,5
	KV	22	22	30	30
	GF	-	-	-	-
Ordering code	KW	6	6	7	7
1200.Ø.05	Weight gr.	16	16	25	25



Foot

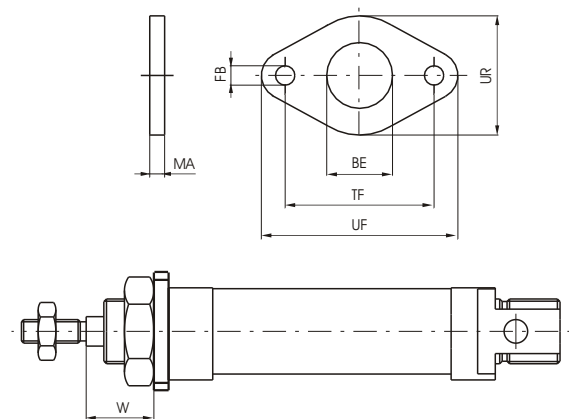


Used to mount the cylinder on the mounting plane with the rod parallel to said plane. Use one for short strokes and two for long strokes. It is made stamped stainless steel AISI 304. Attached to the end plates by means of nuts (or lock nuts) 05X.

Bore	12	16	20	25
AB (H13)	5,5	5,5	6,5	6,5
AO	6	6	8	8
AU	14	14	17	17
BE	16	16	22	22
L13 (±1)	36	36	44	44
L14 (±1)	84	84	102	102
MT	4	4	5	5
NH (±0,3)	20	20	25	25
P1	33	33	45	45
P3	13	13	20	20
TR (Js14)	32	32	40	40
US	42	42	54	54
XS (±1,4)	32	32	36	40
XZ (±1,4)	8	8	7	11
Weight gr.	45	45	90	90

Ordering code
1200.Ø.01X

Flangie

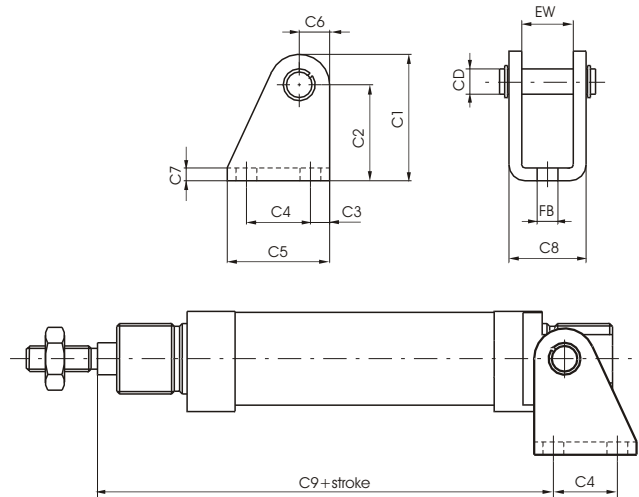


Use to mount the microcylinder at a right angle to the mounting plane. Attached to the front (or rear) endcap by a nut (or lock nut)05X. Made of stainless steel AISI 304.

Bore	12	16	20	25
BE	16	16	22	22
FB (H13)	5,5	5,5	6,5	6,5
UF	53	53	66	66
UR	30	30	40	40
MA	4	4	5	5
TF (Js14)	40	40	50	50
W (1,4)	18	18	19	23
Weight gr.	40	40	85	85

Ordering code
1200.Ø.02X

Rear eye

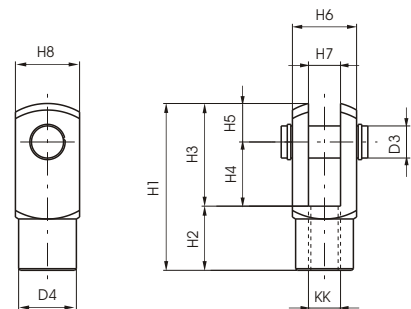


Used to mount by using the rear and cover to mount either parallel or at a right angle to the mounting plane. Allows the cylinder to oscillate and self-align with the linked element to the rod. Recommended for use when the rod is subject to lateral forces during travel. Made of stamped stainless steel AISI 304.

Bore	12	16	20	25
CD	6	6	8	8
C1	33,5	33,5	39,5	39,5
C2 (±0,3)	27	27	30	30
C3	5	5	6	6
C4	15	15	20	20
C5	25	25	32	32
C6	6,5	6,5	9,5	9,5
C7	3	3	4	4
C8	18	18	24	24
C9 (±0,4)	80,5	80,5	91,5	100,5
EW	12,1	12,1	16,1	16,1
FB (H13)	5,5	5,5	6,5	6,5
Weight gr.	35	35	75	75

Ordering code	
1200.Ø.03X	

Cylinder rod fork



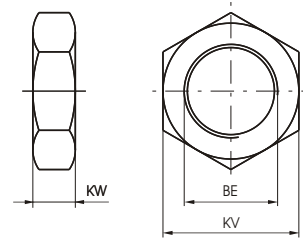
Similar to hinge 03X, mounted on the rod thread, assures a regular operation even in the presence of significant forces to the linked element. Made of stainless steel AISI 304.

Bore	12	16	20	25
D3	6	6	8	10
D4	10	10	14	18
H1	31	31	42	52
H2	12	12	16	20
H3	19	19	26	32
H4	12	12	16	20
H5	7	7	10	12
H6	12	12	16	20
H7 (B12)	6	6	8	10
H8	12	12	16	20
KK	M6x1	M6x1	M8x1,25	M10x1,25
Weight gr.	20	20	45	90

Ordering code	
1200.Ø.04X (with pin)	



Nut or lock nut for the endcaps

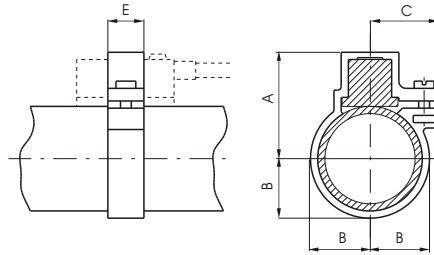


Used to fasten flanges or feet to the endcaps of the microcylinder. The nuts are mounted on diameters that go from 16 to 25. The nuts are supplied (one piece) with the microcylinders.

	Bore	12	16	20	25
	BE	M16x1,5	M16x1,5	M22x1,5	M30x1,5
	KV	22	22	30	-
	GF	-	-	-	42
Ordering code	KW	6	6	7	8
	1200.Ø.05X				
	Weight gr.	16	16	25	42

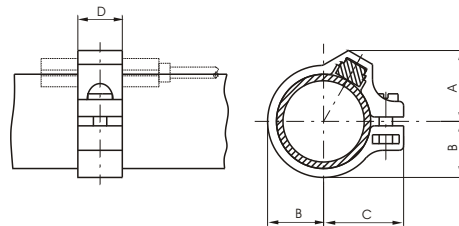


Sensor clamps for 1500 and RS Series



	Bore	12	16	20	25
	A	23	14,5	27	29,5
	B	10	10,5	14	16,5
	C	15	16	17,5	19
	D	10	10	10	10
Ordering code					
	1260.Ø.F				
	Weight gr.	2	3	5	7

Sensor clamps for miniaturized sensors



	Bore	12	16	20	25
	A	14	15,4	17,2	19,3
	B	10	12	14	16,5
	C	16	18	19,5	22
	D	10	10	10	10
Ordering code					
	1260.Ø.FS				
	Weight gr.	-	-	-	-

Sensor for microcylinders

For technical characteristics and ordering codes see CATALOGUE 4, page 7.0 and following