

ISO 6432 MINI-CYLINDER SERIES STD

Mini-cylinders to ISO 6432 with a chamfered stainless steel barrel.

Can be used with different types of sensors.

Available in various versions with a wide range of accessories:

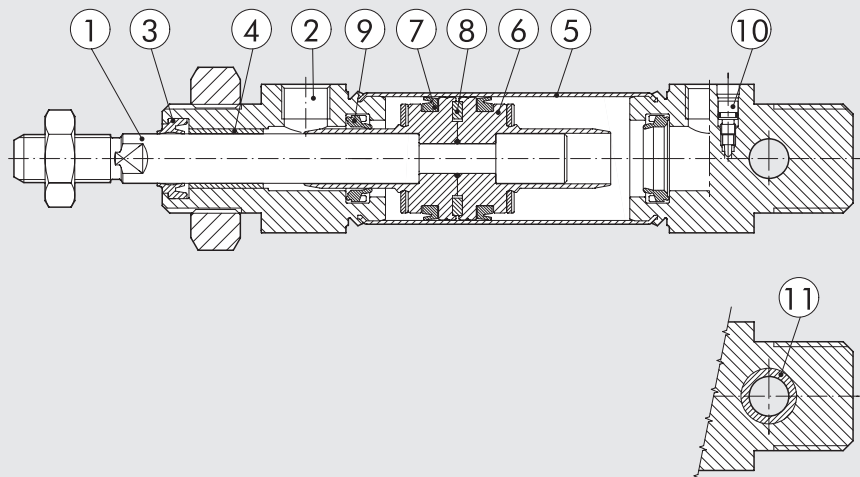
- with or without magnet
- single acting extended, retracted or through piston rod
- double acting, single or through piston rod
- with pneumatic cushioning (Ø 16-20-25)
- gaskets made of NBR, POLYURETHANE, and FKM/FPM (for high temperatures), and low-temperature gaskets
- special executions on request
- fixing accessories, guide units and mechanical rod lock.



TECHNICAL DATA		Ø8	Ø10	Ø12	Ø16	Ø20	Ø25	
Max operating pressure	bar						10	
	MPa						1	
	psi						145	
Temperature range	POLYURETHANE	°C		-20 to +80				
		°C		-10 to +80				
	FKM/FPM	°C		-10 to +150 (non-magnetic cylinder)				
		Low temperature °C		-35 to +80				
Design	Chamfered stainless steel barrel							
Fluid	Unlubricated air. Lubrication, if used, must be continuous							
Standard strokes \dagger	double-acting	mm	1 to 100	1 to 100	1 to 200	1 to 200	1 to 500	1 to 500
	double-acting, cushioned	mm	-	-	-	1 to 300	1 to 500	1 to 500
	double-acting with spring extended or retracted piston rod	mm	-	-	-	1 to 100	1 to 100	1 to 100
	single-acting extended or retracted piston rod	mm	1 to 50	1 to 50	1 to 50	1 to 100	1 to 100	1 to 100
Versions	Double-acting, Double-acting cushioned, Double-acting with spring extended or retracted piston rod, Single-acting extended or retracted rod, Through-rod, Through-rod cushioned, Version suitable for rod lock, No stick-slip							
Magnet for sensors	All versions come complete with magnet. Supplied without magnet on request.							
Inrush pressure	single piston rod	bar	0.8		0.6			
		through-rod	bar	1		0.8		
Forces generated at 6 bar thrust/retraction	See cylinder "General technical data" at the beginning of the chapter							
Weights	See cylinder "General technical data" at the beginning of the chapter							
Notes	For speeds lower than 0.2 m/s to prevent surging, use the version No stick-slip and non-lubricated air.							
	\dagger Maximum recommended strokes. Higher values can create operating problems							

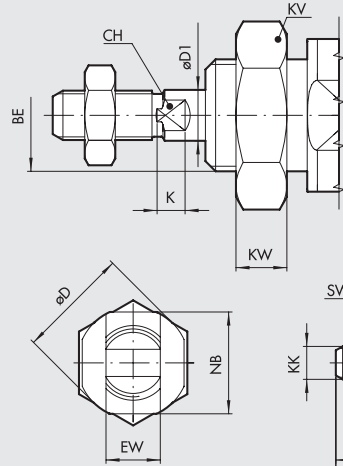
COMPONENTS

- PISTON ROD: C45 steel or stainless steel, thick chromed
- HEAD: anodized aluminium alloy
- PISTON ROD GASKET: polyurethane, NBR or FKM/FPM
- GUIDE BUSHING: steel strip with bronze and PTFE insert
- BARREL: AISI 304 steel
- HALF-PISTON: acetal resin
- PISTON GASKET: polyurethane, NBR or FKM/FPM
- MAGNET: plasteodymium
- CUSHIONING GASKET: NBR or FKM/FPM
- NEEDLE: OT 58 with needle out movement safety system even when fully open
- BUSHING (optional): self-lubricating bronze

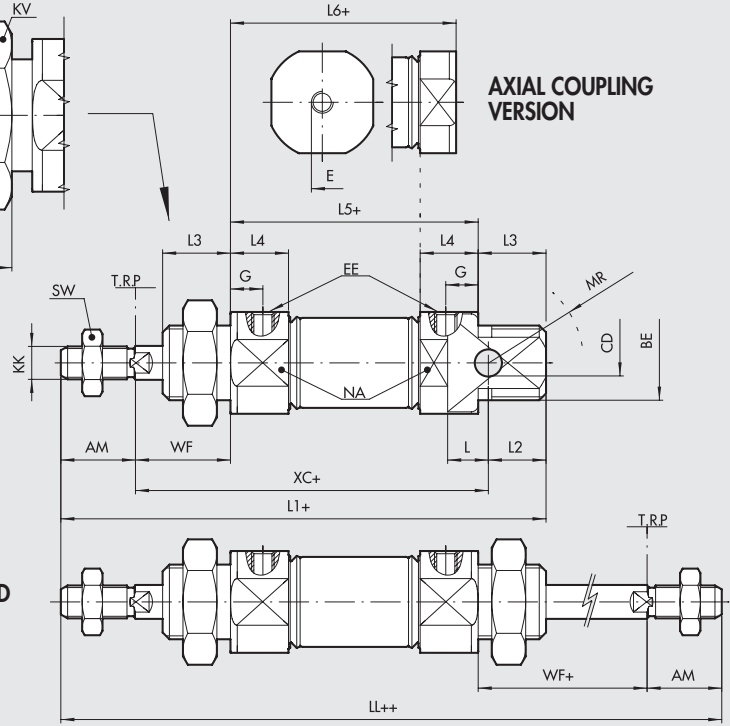


DIMENSIONS OF DOUBLE-ACTING VERSIONS

SINGLE PISTON ROD VERSION



AXIAL COUPLING VERSION



THROUGH-ROD VERSION

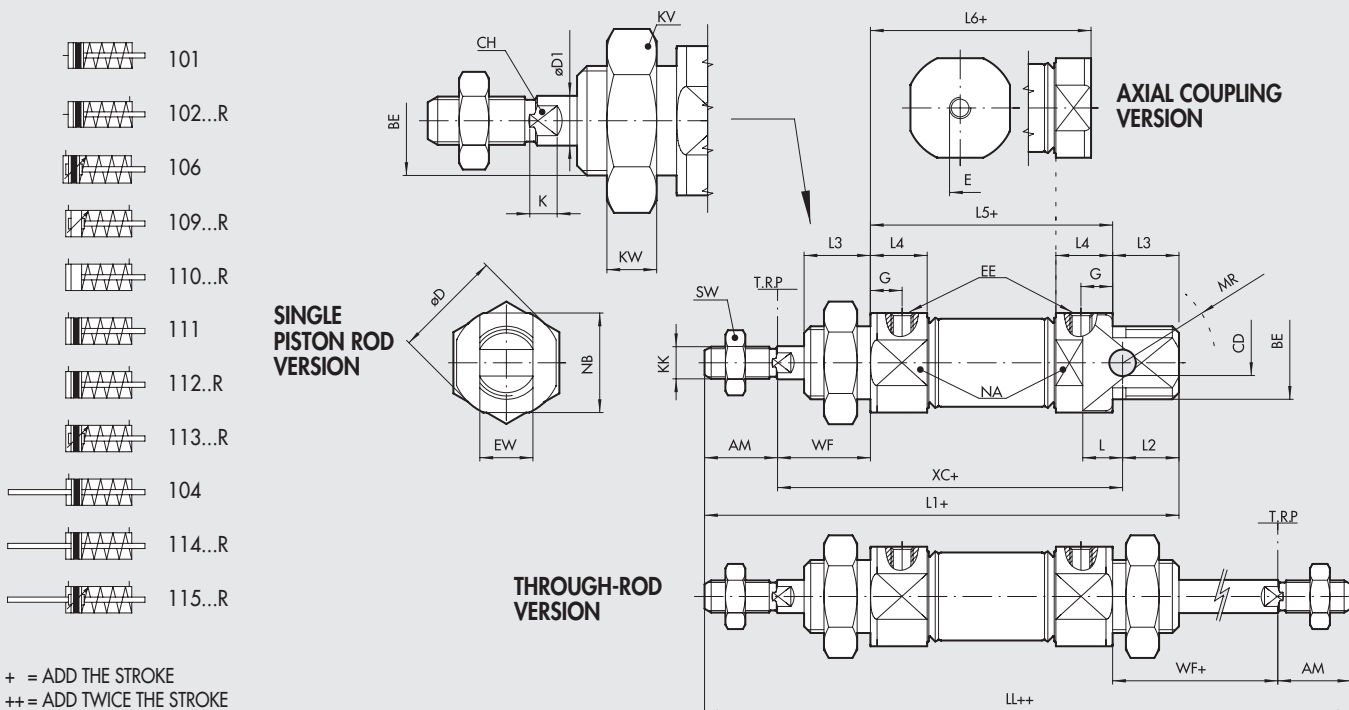
- 102
- 109
- 110
- 112
- 113
- 114
- 115

+ = ADD THE STROKE
 ++ = ADD TWICE THE STROKE

Ø	AM ⁺⁰ ₋₂	BE	øCD ^{H9}	øD	øD1	E	G	EE	EW ^{d13}	L	LL	L1	L2	L3	L4	L5	L6	KK	XC ⁺¹	WF ^{+1,2}	KW	KV	MR	NA	NB	SW	CH	K
8	12	M12x1.25	4	16.7	4	M5	6	M5	8	6.5	102	86	10	12	10	46	46	M4	64	16	7	19	12	15	15	7	3	3
10	12	M12x1.25	4	16.7	4	M5	6	M5	8	6.5	102	86	10	12	10	46	46	M4	64	16	7	19	12	15	15	7	3	3
12	16	M16x1.5	6	19	6	M5	6	M5	12	9	125	104	13	17	10	49	47	M6	75	22	8	24	16	17	17	10	5	3.5
16	16	M16x1.5	6	19.7	6	1/8	6	M5	12	9	132	111	13	17	10	56	53	M6	82	22	8	24	16	18	18	10	5	3.5
20	20	M22x1.5	8	27.9	8	1/8	8	G 1/8	16	12	156	129	14	17	15.5	68	61	M8	95	24	7	32	18	24	24	13	7	4.6
25	22	M22x1.5	8	33	10	1/8	9	G 1/8	16	12	173	143	17	20	17.1	73	66.5	M10x1.25	104	28	7	32	21	30	30	17	8	5

NOTES

DIMENSIONS OF DOUBLE-ACTING WITH SPRING, RETRACTED PISTON ROD VERSIONS
DIMENSIONS OF SINGLE-ACTING WITH SPRING, RETRACTED PISTON ROD VERSIONS



VERSION 101... / 104... / 106... / 111... (Stroke 0-50)

Ø	AM ^{±2}	BE	øCD ^{H9}	øD	øD1	E	G	EE	EW ^{#13}	L	LL	L1	L2	L3	L4	L5	L6	KK	XC ^{±1}	WF ^{±1,2}	KW	KV	MR	NA	NB	SW	CH	K
8	12	M12x1.25	4	16.7	4	M5	6	M5	8	6.5	102	86	10	12	10	46	46	M4	64	16	7	19	12	15	15	7	3	3
10	12	M12x1.25	4	16.7	4	M5	6	M5	8	6.5	102	86	10	12	10	46	46	M4	64	16	7	19	12	15	15	7	3	3
12	16	M16x1.5	6	19	6	M5	6	M5	12	9	125	104	13	17	10	49	47	M6	75	22	8	24	16	17	17	10	5	3.5
16	16	M16x1.5	6	19.7	6	M5	6	M5	12	9	132	111	13	17	10	56	53	M6	82	22	8	24	16	18	18	10	5	3.5
20	20	M22x1.5	8	27.9	8	1/8	8	G 1/8	16	12	156	129	14	17	15.5	68	61	M8	95	24	7	32	18	24	24	13	7	4.6
25	22	M22x1.5	8	33	10	1/8	9	G 1/8	16	12	173	143	17	20	17.1	73	66.5	M10x1.25	104	28	7	32	21	30	30	17	8	5

VERSION 101... (single-acting retracted piston rod)

Ø	Dimension	Stroke	
		51-75	76-100
16	L6	101.8	126.2
	L6	111.8	137.2
	L6	118.5	144.5

VERSION 102...R (double-acting retracted piston rod)

Ø	Dimension	Stroke			
		0-25	26-50	51-75	76-100
16	L6	63.4	83.4	107.8	132.2
	L6	72.4	93.4	118.8	144.2
	L6	77.6	100.5	126.5	152.5

VERSION 104... (single-acting through-rod)

Ø	Dimension	Stroke	
		51-75	76-100
16	LL	180.8	205.2
	L5	104.8	129.2
	LL	206.8	232.2
20	L5	118.8	144.2
	LL	225	251
25	L5	125	151

VERSION 106... (single-acting cushioned, retracted piston rod)

Ø	Dimension	Stroke	
		51-75	76-100
16	L1	159.8	184.2
	L5	104.8	129.2
	XC ^{±1}	130.8	155.2
20	L1	179.8	205.2
	L5	118.8	144.2
	XC ^{±1}	145.8	171.2
25	L1	195	221
	L5	125	151
	XC ^{±1}	156	182

VERSION 109...R / 113...R (double-acting cushioned, with spring, retracted piston rod)

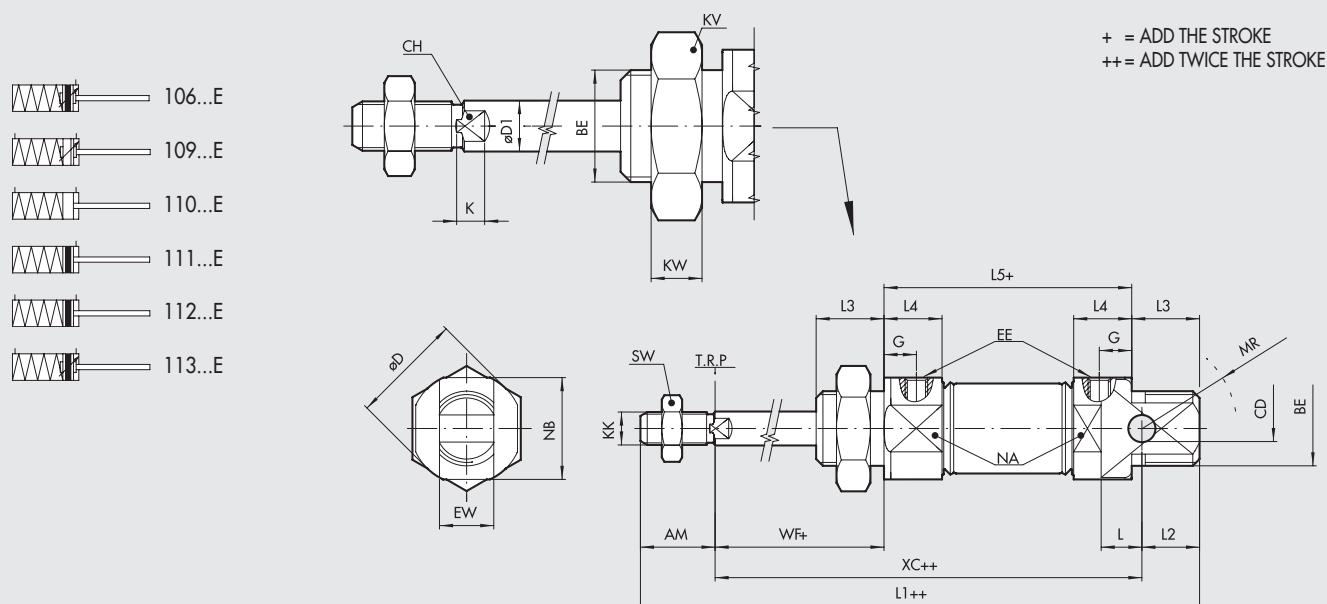
Ø	Dimension	Stroke			
		0-25	26-50	51-75	76-100
16	L1	121.4	141.4	165.8	190.2
	L5	66.4	86.4	110.8	135.2
	XC ^{±1}	92.4	112.4	136.8	161.2
20	L1	140.4	161.4	186.8	212.2
	L5	79.4	100.4	125.8	151.2
	XC ^{±1}	106.4	127.4	152.8	178.2
25	L1	154.1	177	203	229
	L5	84.1	107	133	159
	XC ^{±1}	115.1	138	164	190

VERSION 114...R (double-acting cushioned, with spring, through-rod)

Ø	Dimension	Stroke			
		0-25	26-50	51-75	76-100
16	LL	142.4	162.4	186.8	211.2
	L5	66.4	86.4	110.8	135.2
	LL	167.4	188.4	213.8	239.2
20	L5	79.4	100.4	125.8	151.2
	LL	184.1	207	233	259
	L5	84.1	107	133	159

VERSION 110...R / 112...R (double-acting with spring, retracted piston rod)

VERSION 115...R (double-acting with spring, through-rod)

DIMENSIONS OF DOUBLE-ACTING WITH SPRING, EXTENDED PISTON ROD VERSIONS
DIMENSIONS OF SINGLE-ACTING WITH SPRING, EXTENDED PISTON ROD VERSIONS


Ø	AM ⁺⁰ ₋₂	BE	øCD ^{H9}	øD	øD1	G	EE	EW ^{d13}	L	L2	L3	L4	KK	WF ^{+1,2}	KW	KV	MR	NA	NB	SW	CH	K
16	16	M16x1.5	6	19.7	6	6	M5	12	9	13	17	10	M6	22	8	24	16	18	18	10	5	3.5
20	20	M22x1.5	8	27.9	8	8	G 1/8	16	12	14	17	15.5	M8	24	7	32	18	24	24	13	7	4.6
25	22	M22x1.5	8	33	10	9	G 1/8	16	12	17	20	17.1	M10x1.25	28	7	32	21	30	30	17	8	5

VERSION 106...E (single-acting cushioned, extended piston rod)
VERSION 111...E (single-acting extended piston rod)

Ø	Dimension	Stroke			
		0-25	26-50	51-75	76-100
16	L1	115.4	135.4	159.8	184.2
	L5	60.4	80.4	104.8	129.2
	XC ⁺¹	86.4	106.4	130.8	155.2
20	L1	133.4	154.4	179.8	205.2
	L5	72.4	93.4	118.8	144.2
	XC ⁺¹	99.4	120.4	145.8	171.2
25	L1	146.1	169	195	221
	L5	76.1	99	125	151
	XC ⁺¹	107.1	130	156	182

VERSION 109...E / 113...E (double-acting cushioned, with spring, extended piston rod)
VERSION 110...E / 112...E (double-acting with spring, extended piston rod)

Ø	Dimension	Stroke			
		0-25	26-50	51-75	76-100
16	L1	121.4	141.4	165.8	190.2
	L5	66.4	86.4	110.8	135.2
	XC ⁺¹	92.4	112.4	136.8	161.2
20	L1	140.4	161.4	186.8	212.2
	L5	79.4	100.4	125.8	151.2
	XC ⁺¹	106.4	127.4	152.8	178.2
25	L1	154.1	177	203	229
	L5	84.1	107	133	159
	XC ⁺¹	115.1	138	164	190

NOTES

KEY TO CODES

CYL	1 1 2 TYPE	0 VERSION	16 BORE	0020 STROKE	C MATERIAL	P GASKETS	E
▷	101 SA axial coupling	0 Standard	▼ 08	For the	A C45 chrome piston rod, aluminium piston	P Polyurethane	▶ ■ E Single-acting extended rod or double-acting with spring, extended piston rod
▽	102 DAM axial coupling	+ U Bronze rear head bushing	▼ 10	maximum	C C45 chrome piston rod, technopolymer piston	N NBR	
◀▷	104 SA through-rod	V Without head nut	▼ 12	suppliable	□ Z Stainless steel piston rod and nut aluminium piston	● V FKM/FPM	
■△	106 SA cushioned	S Non-magnetic	16	strokes,	X Stainless steel piston rod and nut technopolymer piston	● B Low temperature	
■	109 DAC	▲ G No stick-slip	20	look at the			
■	110 DA		25	technical			
△	111 SA			data			
■	112 DAM						
■	113 DAMC						
*◇	114 DAM through-rod						
*◇■	115 DAMC through-rod						
◆▷	116 DAM suitable for rod lock						
■▷	117 DAMC suitable for rod lock						

DA: Double-acting (non-cushioned, not magnetic)
 DAM: Magnetic double-acting (non-cushioned)
 DAMC: Magnetic double-acting (cushioned)
 DAC: Cushioned double-acting (non-magnetic)
 SA: Single-acting (magnetic). The versions without the final "E" are to be considered with retracted piston rod.

- Only available for non-magnetic versions (S) and with aluminium piston (A or Z)
- ▲ For speeds lower than 0.2 m/s, to prevent surging. Use no-lubricated air only
- ▼ Stainless steel piston rod
- Available from Ø 16
- ◆ Available from Ø 12
- ▷ Not available for versions with final letter E or R
- △ Not available for versions with final letter R
- ▽ Not available for versions with final letter E
- ◇ Stainless steel piston rod. Not available for versions with final letter E
- * For Ø 16 to 25 aluminium piston, stainless steel piston rod
- ▶ Letter to be added only to the single acting extended rod version or double-acting with spring, extended piston rod
- ✱ Letter to be added only for the double-acting version with retracted piston rod spring
- + Not available for types 101, 102, 104, 114, 115
- ◀ For Ø 16 to 25 stroke from 51 to 100 aluminium piston
- For Ø 8 to 12 DEM, material Z is only available for nonmagnetic versions (S)

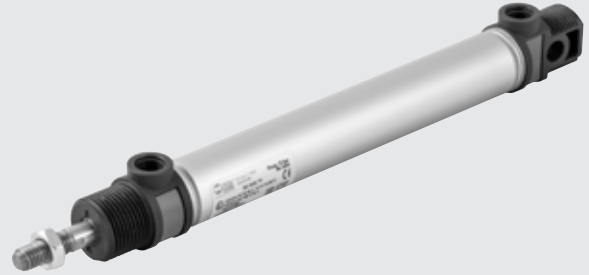


ISO 6432 MINI-CYLINDER SERIES TP



Minicylinders manufactured according to the ISO 6432 regulation having high resistance technopolymer heads and anodized aluminium liner. Available in various versions with a wide range of accessories:

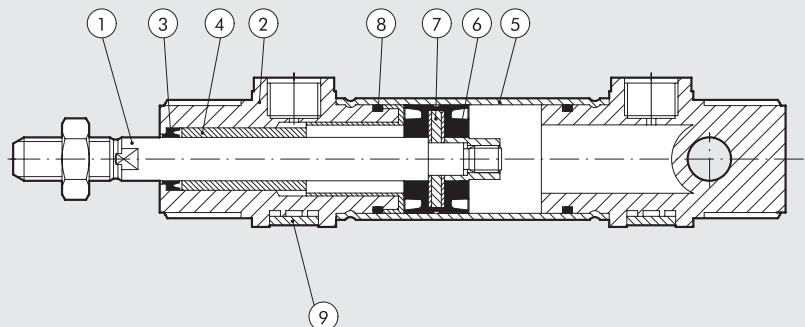
- with or without magnet
- double acting, single or through rod
- gaskets made of POLYURETHANE
- fixing accessories and guide units.



TECHNICAL DATA		Ø16	Ø20	Ø25
Max operating pressure	bar		10	
	MPa		1	
	psi		145	
Temperature range	POLYURETHANE °C		-10 to +60	
Design			Aluminium liner chamfered on the heads	
Fluid			Unlubricated air. Lubrication, if used, must be continuous	
Standard strokes †	mm	1 to 200		1 to 500
Versions			Double-acting, Double Through-rod	
Sensor magnet			Available magnetic and non-magnetic versions.	
Inrush pressure	single piston rod		0.6	
	through-rod		0.8	
Forces generated at 6 bar thrust/retraction			See cylinder "General technical data" at the beginning of the chapter	
Weights			See cylinder "General technical data" at the beginning of the chapter	
Notes			The standard version is lacking of the head nut. Use of fittings with a taper thread is NOT recommended. † Maximum recommended strokes. Higher values can create operating problems	

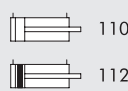
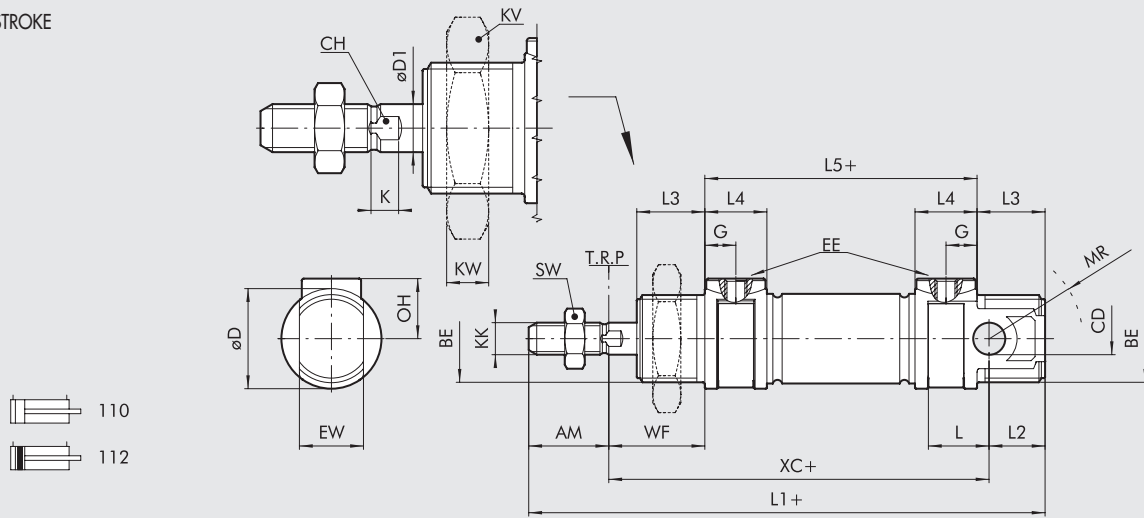
COMPONENTS

- ① PISTON ROD: C45 steel or stainless steel, thick chromed
- ② HEADS: high resistance technopolymer
- ③ PISTON ROD GASKET: polyurethane
- ④ GUIDE OPERATOR: technopolymer
- ⑤ BARREL: drawn anodized aluminium alloy
- ⑥ PISTON GASKET: polyurethane
- ⑦ MAGNET: neodymium
- ⑧ STATIC O-RINGS: NBR
- ⑨ COVER PLATE: technopolymer



DIMENSIONS OF STANDARD VERSIONS

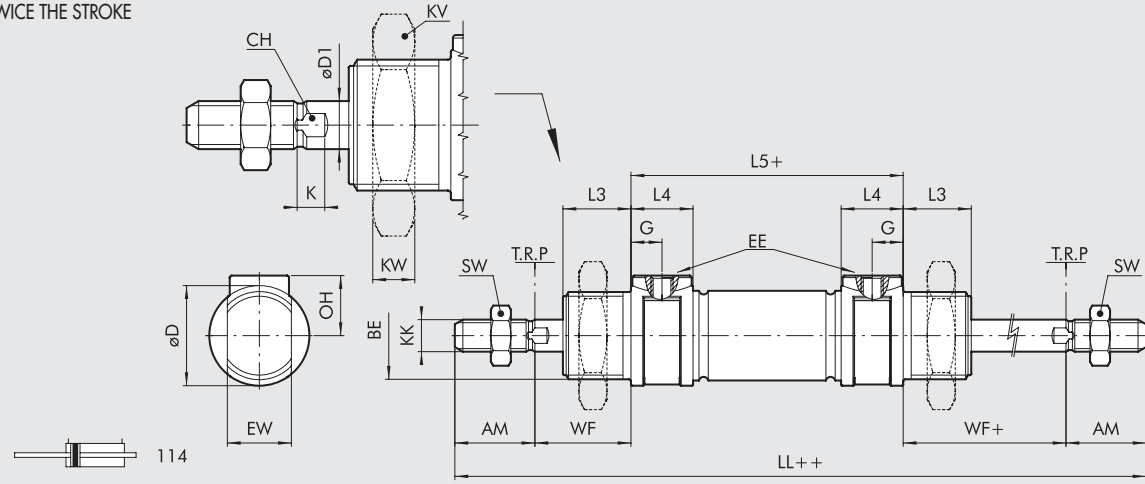
+ = ADD STROKE



																	MAX LOCKING TORQUE [Nm]										
Ø	AM	BE	CD (H9)	øD	øD1	G	EE	EW (d13)	OH	L	L1	L2	L3	L4	L5	KK	XC(±1)	WF	KW	KV	MR	SW	CH	K	Ø	BE (front/rear)	EE
16	16	M16x1.5	6	21	6	4.7	M5	12	12	11	111	13	17	9.5	56	M6	82	22	8	24	16	10	5	3.5	16	12/8	1.2
20	20	M22x1.5	8	25	8	7.7	1/8"	16	16	15	129	14	17	15.5	68	M8	95	24	7	32	18	13	7	4.6	20	22/15	3
25	22	M22x1.5	8	30	10	7.7	1/8"	16	17	15	143	17	20	15.5	73	M10x1.25	104	28	7	32	21	17	8	5.5	25	22/15	3

DIMENSIONS OF STANDARD VERSIONS WITH THROUGH-ROD

+ = ADD STROKE
 ++ = ADD TWICE THE STROKE



																	MAX LOCKING TORQUE [Nm]				
Ø	AM	BE	øD	øD1	G	EE	OH	LL	L3	L4	L5	KK	WF	KW	KV	SW	CH	K	Ø	BE	EE
16	16	M16x1.5	21	6	4.7	M5	12	132	17	9.5	56	M6	22	8	24	10	5	3.5	16	12	1.2
20	20	M22x1.5	25	8	7.7	1/8"	16	156	17	15.5	68	M8	24	7	32	13	7	4.6	20	22	3
25	22	M22x1.5	30	10	7.7	1/8"	17	173	20	15.5	73	M10x1.25	28	7	32	17	8	5.5	25	22	3

KEY TO CODES

CYL	110 TYPE	3 TP HEADS	16 BORE	0 STANDARD	020 STROKE	C MATERIAL	P GASKETS
110	DA non-magnetic minicylinder	● 3 TP heads (standard)	■ 16	0 Standard	For the maximum suppliable strokes, look at the technical data	C C45 chrome piston rod	P Polyurethane
112	DAM minicylinder	● 4 TP heads (standard) + head nut	■ 20	S Non-magnetic		X Stainless piston rod	
114	DAM through-rod minicylinder		■ 25				

DA: Double-acting (non-cushioned, not magnetic).
 DAM: Double action magnetic (unless otherwise specified) not cushioned.

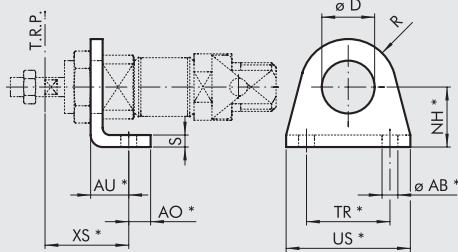
As standard the cylinders are already No stick-slip version.
 ● This version don't provide the nut on the head.
 ■ Ø 16 will be only in version with stainless rod (X).

ACCESSORIES FOR ISO 6432 MINI-CYLINDERS



FIXINGS

FOOT MODEL A

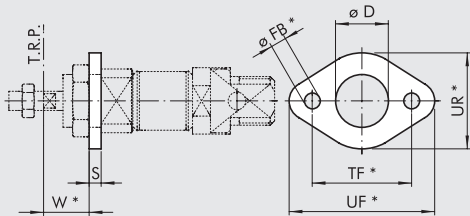


Code	Ø	ø D	XS ±1.4	AU	AO	NH ±0.3	TR J ^{s14}	US	ø AB H ¹³	R	S	Weight [g]
W0950080001	8	12	24	11	5	16	25	35	4.5	10	3	22
W0950080001	10	12	24	11	5	16	25	35	4.5	10	3	22
W0950120001	12	16	32	14	6	20	32	42	5.5	13	4	42
W0950120001	16	16	32	14	6	20	32	42	5.5	13	4	42
W0950200001	20	22	36	17	8	25	40	54	6.5	20	5	90
W0950200001	25	22	40	17	8	25	40	54	6.5	20	5	90

*ISO 6432 values

Note: Individually packed

FLANGE MODEL C

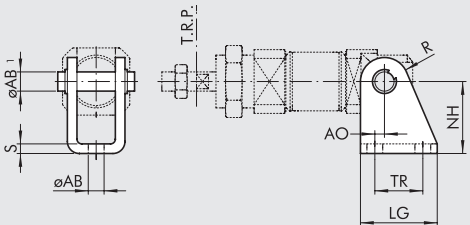


Code	Ø	ø D	W ±1.4	ø FB H ¹³	TF J ^{s14}	UF	UR	S	Weight [g]
W0950080002	8	12	13	4.5	30	40	22	3	10
W0950080002	10	12	13	4.5	30	40	22	3	10
W0950120002	12	16	18	5.5	40	52	30	4	26
W0950120002	16	16	18	5.5	40	52	30	4	26
W0950200002	20	22	19	6.5	50	66	40	5	52
W0950200002	25	22	23	6.5	50	66	40	5	52

*ISO 6432 values

Note: Individually packed

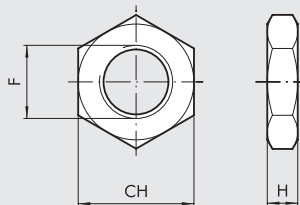
COUNTER-HINGE MODEL BC



Code	Ø	AO	LG	TR J ^{s13}	NH ±0.2	MO	ø AB1	ø AB H ¹³	R	S	Weight [g]
W0950080005	8	2.5	22	12.5	24	18	4	4.5	6	2.5	24
W0950080005	10	2.5	22	12.5	24	18	4	4.5	6	2.5	24
W0950120005	12	2	25	15	27	25	6	5.5	7	3	40
W0950120005	16	2	25	15	27	25	6	5.5	7	3	40
W0950200005	20	4	32	20	30	30	8	6.5	10	4	78
W0950200005	25	4	32	20	30	30	8	6.5	10	4	78

Note: Supplied complete with 1 pin and 2 snap rings

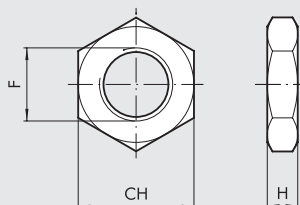
NUT FOR HEADS MODEL D



Code	Ø	F	CH	H	Weight [g]
0950080010	8	M12x1.25	19	7	12
0950080010	10	M12x1.25	19	7	12
0950120010	12	M16x1.5	24	8	20
0950120010	16	M16x1.5	24	8	20
0950200010	20	M22x1.5	32	7	44
0950200010	25	M22x1.5	32	7	44

Note: Individually packed

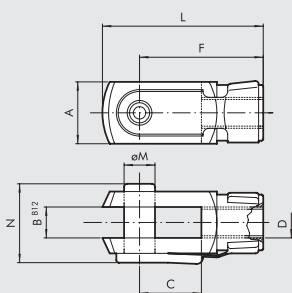
NUT FOR PISTON RODS MODEL DA



Code	Ø	F	CH	H	Weight [g]
0950080011	8	M4	7	3	0.6
0950080011	10	M4	7	3	0.6
0950120011	12	M6	10	4	1
0950120011	16	M6	10	4	1
0950200011	20	M8	13	5	3
0950322010	25	M10x1.25	17	6	7

Note: Individually packed

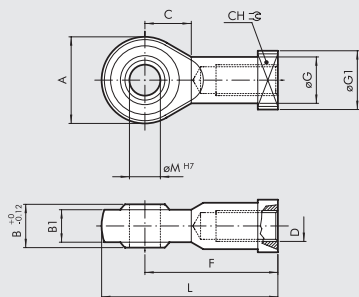
FORK MODEL GK-M



Code	∅	øM	C	B	A	L	F	D	N	Weight [g]
W0950080020	8	4	8	4	8	21	16	M4	11	8
W0950080020	10	4	8	4	8	21	16	M4	11	8
W0950120020	12	6	12	6	12	31	24	M6	16	20
W0950120020	16	6	12	6	12	31	24	M6	16	20
W0950200020	20	8	16	8	16	42	32	M8	22	48
W0950322020	25	10	20	10	20	52	40	M10x1.25	26	92

Note: Individually packed

ROD EYE MODEL GA-M



Code	∅	øM	C	B	B1	A	L	F	D	øG	øG1	CH	Weight [g]
W0950080025	8	5	10	8	6	18	36	27	M4	9	11	9	22
W0950080025	10	5	10	8	6	18	36	27	M4	9	11	9	22
W0950120025	12	6	11	9	6.75	20	40	30	M6	10	13	11	28
W0950120025	16	6	11	9	6.75	20	40	30	M6	10	13	11	28
W0950200025	20	8	13	12	9	24	48	36	M8	12.5	16	14	50
W0950322025	25	10	15	14	10.5	28	57	43	M10x1.25	15	19	17	78

Note: Individually packed

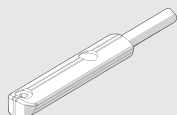
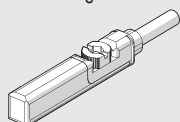
ACCESSORIES FOR ISO 6432 MINI-CYLINDERS: MAGNETIC SENSORS

(E) RETRACTABLE SENSOR

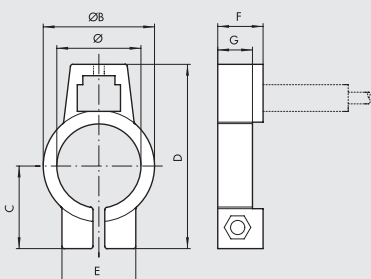
SENSOR, SQUARE TYPE
Latest generation,
secure fixing

SENSOR, OVAL TYPE
Traditional

For codes and technical data, see **chapter A6**.



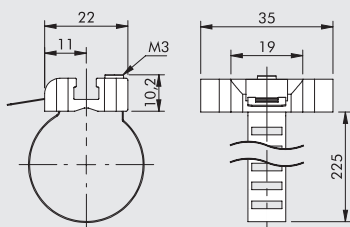
(F) SENSOR BRACKET MOD. DSW



Code	Bore	Model	∅	øB	C	D	E	F	G
W0950000608	8	BEF-KHZ-RT-08F23	9.3	12.3	11	24.7	12.2	10	-
W0950000610	10	BEF-KHZ-RT-10F23	11.3	14.3	12	26.7	12.2	10	-
W0950000612	12	BEF-KHZ-RT-12F23	13.3	16.3	13.3	29	12.2	10	-
W0950000616	16	BEF-KHZ-RT-16F23	17.7	20.5	15.5	33.2	12.2	10	7.8
W0950000620	20	BEF-KHZ-RT-20F23	21.7	24.5	17.6	37.3	12.2	10	7.5
W0950000625	25	BEF-KHZ-RT-25F23	26.7	29.5	20.2	42.4	12.2	10	7.5

Note: Individually packed

(G) UNIVERSAL SENSOR BRACKET

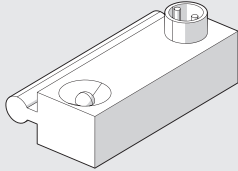


Code	Bore	Model
W0950001103	8 to 25	Sensor bracket 8 to 63

Note: Individually packed

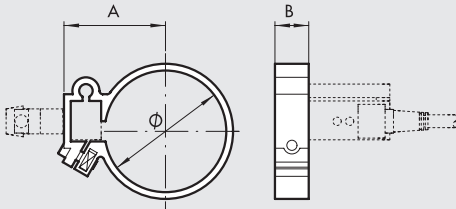
MATERIAL
Bracket: stainless steel
Sensor holder: zamak

A SENSOR SERIES DSM



For codes and technical data, see **chapter A6**.

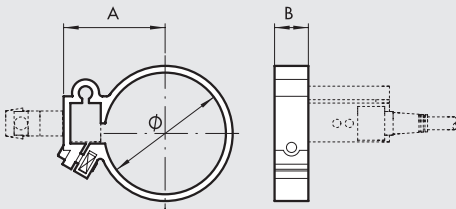
B SENSOR BRACKET MOD. DXF FOR STAINLESS STEEL BARREL



Code	Bore	Model	Ø	A	B
W0950000508	8	Bracket DXF - 09	9.3	15	10
W0950000510	10	Bracket DXF - 11	11.3	16.5	10
W0950000512	12	Bracket DXF - 13	13.3	17.5	10
W0950000516	16	Bracket DXF - 17	17.3	18.5	10
W0950000520	20	Bracket DXF - 21	21.3	21	10
W0950000525	25	Bracket DXF - 26	26.3	23.5	10

Note: Individually packed

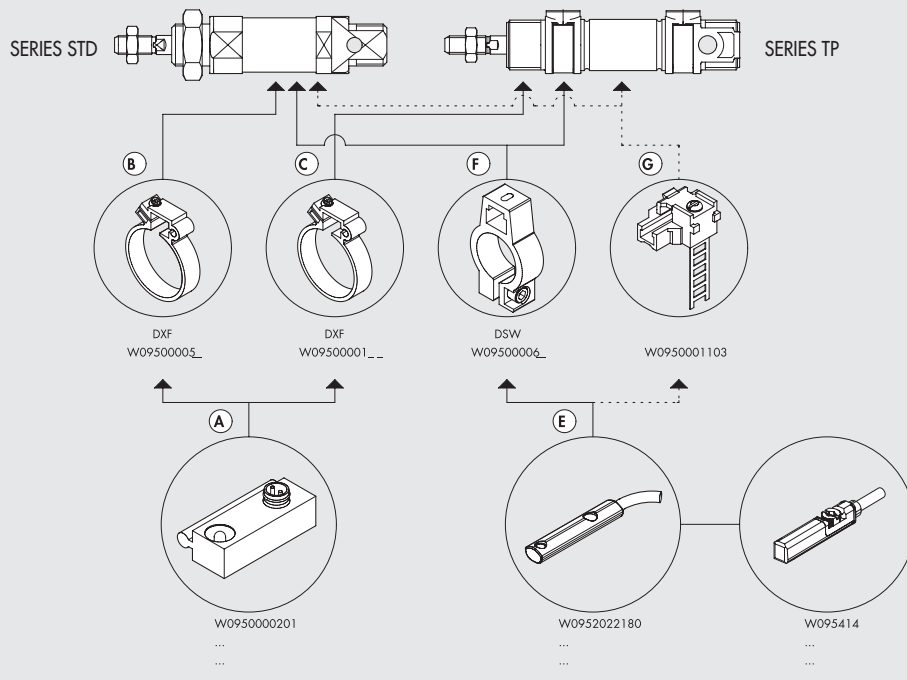
C SENSOR BRACKET MOD. DXF FOR ALUMINIUM BARREL



Code	Bore	Model	Ø	A	B
W0950000108	8	Bracket DXF 12- 8	12	17	10
W0950000110	10	Bracket DXF 14-10	14	18	10
W0950000112	12	Bracket DXF 16-12	16	19	10
W0950000116	16	Bracket DXF 20-16	20	21	10
W0950000120	20	Bracket DXF 24-20	24	23	10
W0950000125	25	Bracket DXF 29-25	29	28	10

Note: Individually packed. For the Ø16 in addition to the bracket 2 reduction rings, for the Ø20 and Ø25 1 reduction ring.

USE SENSORS



ACCESSORIES FOR ISO 6432 MINI-CYLINDERS: MECHANICAL ROD LOCK

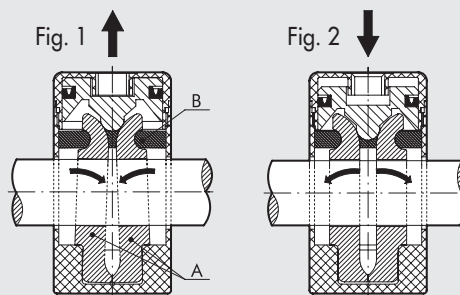
TECHNICAL DATA

Operating pressure	bar	3 to 6
	MPa	0.3 to 0.6
Temperature range	°C	-10 to +80
Installation		In any position
Mechanics		Double pad with mechanical locking Mechanical stick-slip
Operation		NC bidirectional
Fluid		Lubricated or unlubricated compressed air
Locking force		Ø 12-16: 180 N / Ø 20: 250 N Ø 25: 400 N
Pilot port		M5
MATERIALS		
body		Aluminium
pad		Brass
spring		NBR
piston		Synthetic, with added teflon®
gasket		NBR



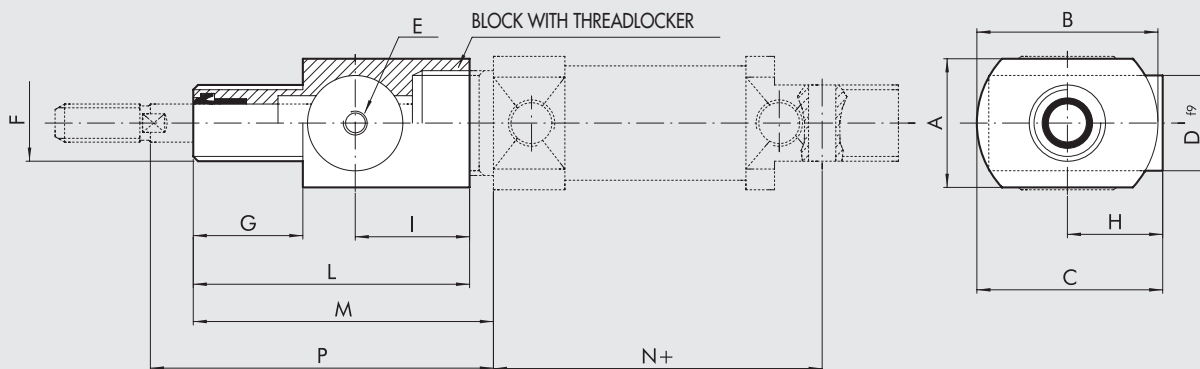
OPERATING PRINCIPLE

The mechanical rod lock is a normally-closed mechanism. In the absence of pneumatic piloting, the two pads (A) lock the cylinder rod in both directions (Fig. 1). With pneumatic piloting, the piston rod guide forces the pads to come right up to each other and overcome the counter spring (B) force and the piston rod can slide (Fig. 2). **It is important to remember that the mechanical rod lock is a static type, which means that it is necessary to stop the cylinder piston rod pneumatically before locking the part mechanically.**



DIMENSIONS

+ = ADD STROKE



Code	Ø	A	B	C	D	E	F	G	H	I	L	M	N	P(±1.2)	Weight [g]
W5010001099	12	∇ 25	∇ 25	31.5	20	M5	M16x1.5	12	19	23	47	52	53	57	100
W5010001099	16	∇ 25	∇ 25	31.5	20	M5	M16x1.5	12	19	23	47	52	60	57	100
W5010001100	20	27	38	40	20	M5	M22x1.5	23	21	24	58	65	71	72	100
W5010001101	25	27	38	40	20	M5	M22x1.5	23	21	24	58	68	76	76	100

ACCESSORIES FOR ISO 6432 MINI-CYLINDERS: GUIDE UNIT

Guide units series DS-DH-DM ensure optimal alignment and anti-rotation effect of the pneumatic cylinder connected to it. The guide units can be used separately or combined in order to get complete handling units: in which case the guide units can be coupled using the type A and C anchorage (foot and flange).

The guide unit can be coupled to ISO 6432 cylinders (Ø 12 - Ø 25).

The following versions are available:

U PROFILE (GDS)*: for limited loads and speeds

H PROFILE (GDH)*: for high loads

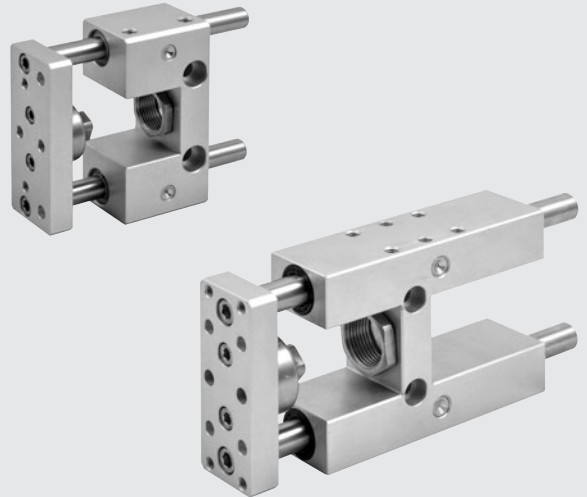
H PROFILE (GDM)**: for high speeds

* With bronze guide bushing

** With ball guide bushing

STANDARD STROKES: 50 - 100 - 150 - 200 - 250 - 320 - 400 - 500

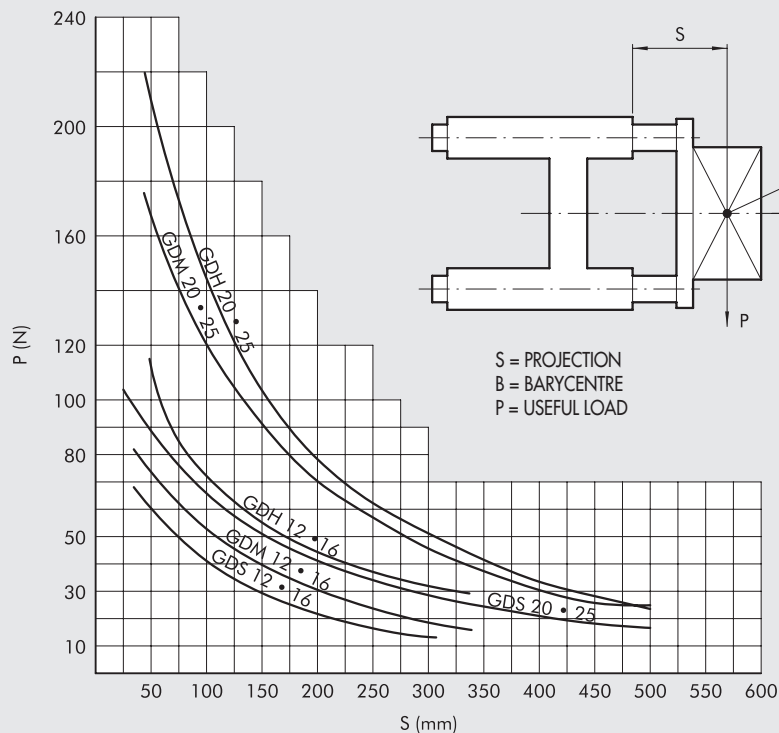
For weights, see cylinder "General technical data" at the beginning of the chapter.



GUIDE ELEMENTS

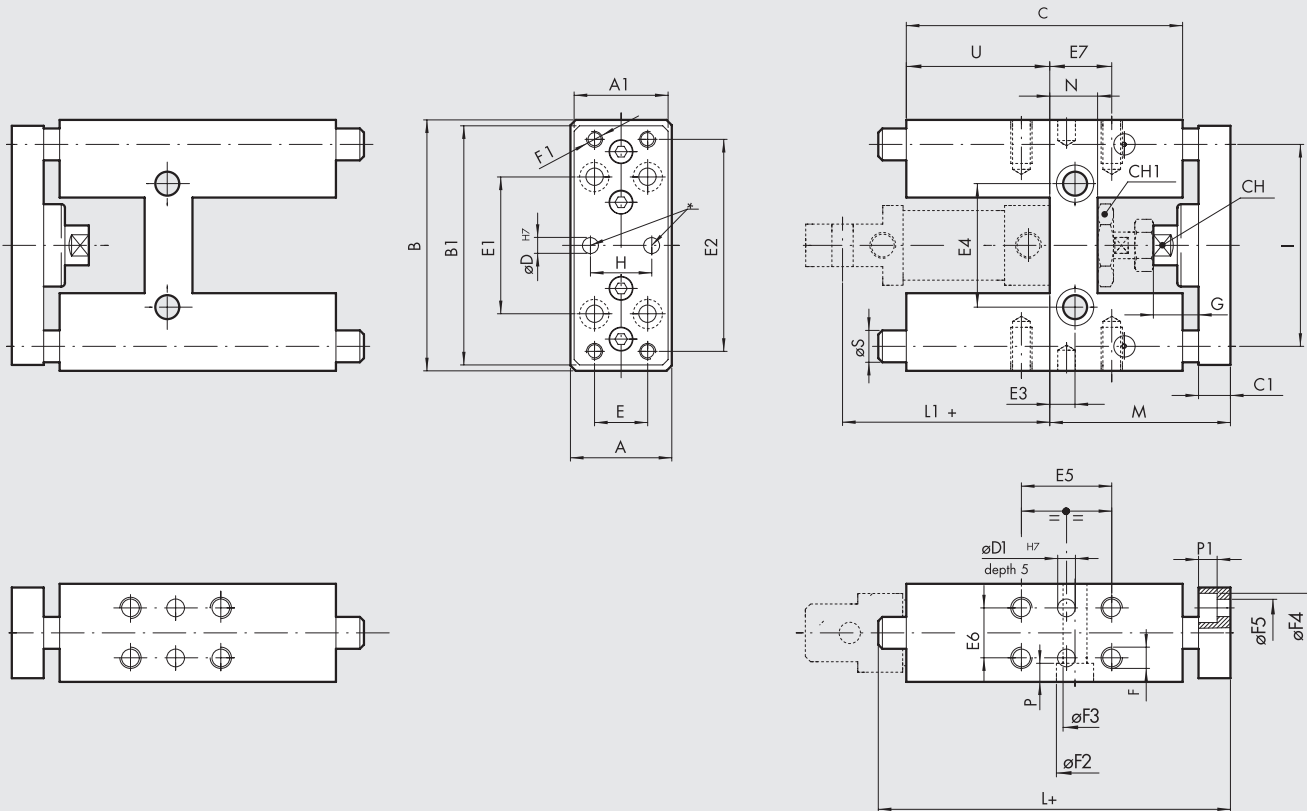
SERIES GDS-GDH	Body:	aluminium alloy
	Guide bushing:	self-lubricating sintered bronze and wiper rings
	Piston rod:	grinded chromed steel
SERIES GDM	Body:	aluminium alloy
	Guide bushing:	linear guide ball bearings and wiper rings
	Piston rod:	hardened, chromed and grinded steel

GUIDE UNIT LOAD DIAGRAM



DIMENSIONS OF TYPE GDH-GDM

+ = ADD THE STROKE
 * = CENTERING PINHOLES



Ø	A	A ₁	B	B ₁	C	C ₁	Ch	Ch ₁	D	D ₁	E	E ₁	E ₂	E ₃	E ₄	E ₅	E ₆	E ₇	F	F ₁	F ₂	F ₃	F ₄	F ₅	G	H	I	L	L ₁	M	N	P	S	U
12	30	27	65	63	75	10	8	19	4	-	15	32	54	6.5	24	32.5	22	11	M4	M4	8.5	5.1	7.5	4.5	15	15	46	130	53	54	15	5.5	10	37
16	30	27	65	63	75	10	8	19	4	-	15	32	54	6.5	24	32.5	22	11	M4	M4	8.5	5.1	7.5	4.5	15	15	46	130	60	54	15	5.5	10	37
20	34	32	79	76	108	12	13	27	6	5	20	40	68	8.5	38	32.5	23	15	M6	M5	10.5	6.5	9	5.5	22	20	58	160	71	65	15	7	12	58
25	34	32	79	76	108	12	13	27	6	5	20	40	68	8.5	38	32.5	23	15	M6	M5	10.5	6.5	9	5.5	22	20	58	160	76	65	15	7	12	58

GDH (BRONZE GUIDE BUSHING)

Code	Bore	Type
W0700122...	12	UNIT MW DH 012
W0700162...	16	UNIT MW DH 016
W0700202...	20	UNIT MW DH 020
W0700252...	25	UNIT MW DH 025

...Enter the stroke in 3 digits (e.g. 50 = 050).
 Also available in V-Lock version (see **chapter A3**).

GDM (BALL GUIDE BUSHING)

Code	Bore	Type
W0700123...	12	UNIT MW DM 012
W0700163...	16	UNIT MW DM 016
W0700203...	20	UNIT MW DM 020
W0700253...	25	UNIT MW DM 025

...Enter the stroke in 3 digits (e.g. 50 = 050).
 Also available in V-Lock version (see **chapter A3**).

STROKE

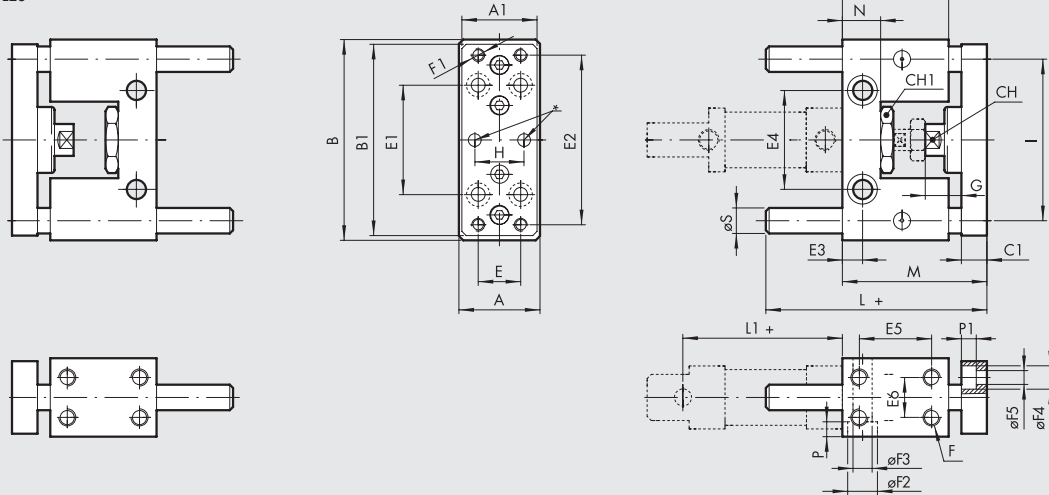
Cylinder stroke [mm]		Guide stroke [mm]
from	to	
0	75	50
75	125	100
125	175	150
175	225	200
225	275	250
275	345	320
345	425	400
425	525	500

Note:

Thanks to the dimensional features, it is possible to extend the use of GDH/GDM guides to cylinders with strokes up to 25 mm above the nominal guide stroke. The table here shows the stroke/cylinder range that can be used depending on the nominal stroke of the guide.

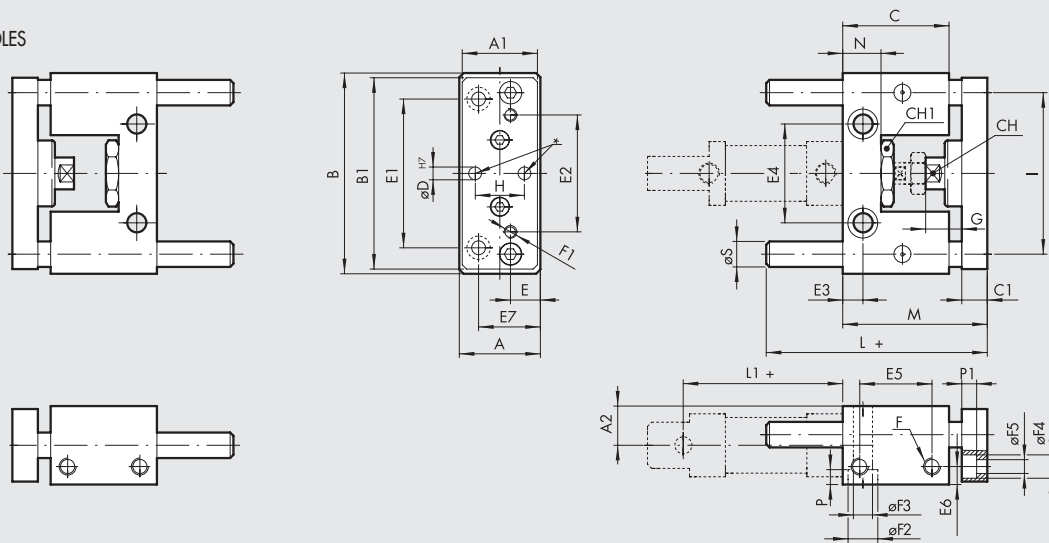
DIMENSIONS OF TYPE GDS

+ = ADD THE STROKE
 * = CENTERING PINHOLES



Ø	A	A ₁	B	B ₁	C	C ₁	Ch	Ch ₁	D	E	E ₁	E ₂	E ₃	E ₄	E ₅	E ₆	F	F ₁	F ₂	F ₃	F ₄	F ₅	G	H	I	L	L ₁	M	N	P	P ₁	S
12	30	27	65	63	38	10	8	19	4	15	32	54	6.5	24	25	22	M4	M4	8.5	5.1	7.5	4.5	15	15	46	70	53	54	13	5.5	4.5	10
16	30	27	65	63	38	10	8	19	4	15	32	54	6.5	24	25	22	M4	M4	8.5	5.1	7.5	4.5	15	15	46	70	60	54	13	5.5	4.5	10

+ = ADD THE STROKE
 * = CENTERING PINHOLES



Ø	A	A ₁	A ₂	B	B ₁	C	C ₁	Ch	Ch ₁	D	E	E ₁	E ₂	E ₃	E ₄	E ₅	E ₆	E ₇	F	F ₁	F ₂	F ₃	F ₄	F ₅	G	H	I	L	L ₁	M	N	P	P ₁	S
20	40	38	20	100	90	48	12	13	27	6	15	70	55	8.5	46.5	32	10	30	M8	M6	14	9	11	6.5	22	20	76	77	71	65	17	9	6.5	12
25	40	38	20	100	90	48	12	13	27	6	15	70	55	8.5	46.5	32	10	30	M8	M6	14	9	11	6.5	22	20	76	77	76	71	17	9	6.5	12

GDS (BRONZE GUIDE BUSHING)

Code	Bore	Type
W0700121...	12	UNIT MW DS 012
W0700161...	16	UNIT MW DS 016
W0700201...	20	UNIT MW DS 020
W0700251...	25	UNIT MW DS 025

...Enter the stroke in 3 digits (e.g. 50 = 050).

STROKE

Cylinder stroke [mm]		Guide stroke [mm]
from	to	
0	50	50
51	100	100
101	150	150
151	200	200
201	250	250

Note:

Thanks to the dimensional features, it is possible to use the range of strokes - cylinders, as shown in the table here, without the guide piston rods projecting beyond the cylinder fixing value (L1 +).