

# 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:

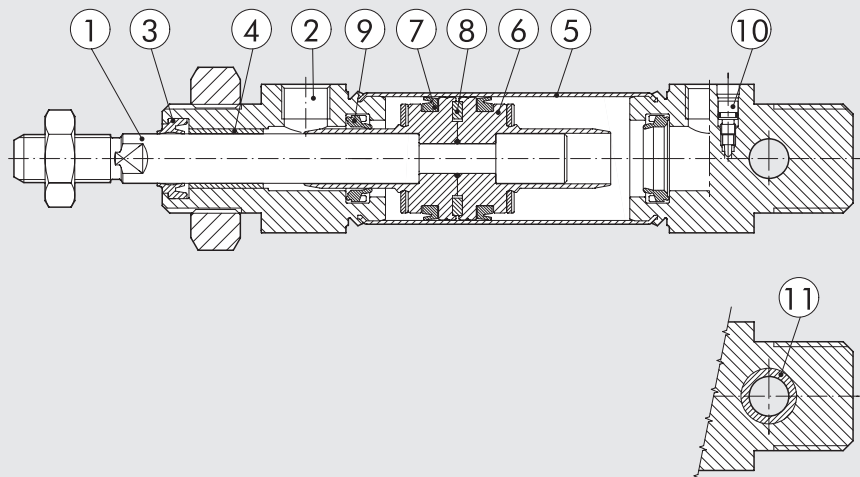
- with or without magnet
- single acting extended, retracted or through piston rod
- double acting, single or through piston rod
- with pneumatic cushioning (Ø 16-20-25)
- gaskets made of NBR, POLYURETHANE, and FKM/FPM (for high temperatures), and low-temperature gaskets
- special executions on request
- 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	<b>For speeds lower than 0.2 m/s to prevent surging, use the version No stick-slip and non-lubricated air.</b>							
	$\dagger$ 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





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)

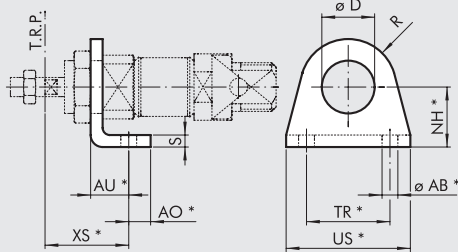


# ACCESSORIES FOR ISO 6432 MINI-CYLINDERS



## FIXINGS

### FOOT MODEL A

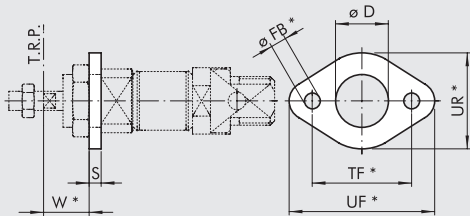


Code	Ø	ø D	XS ±1.4	AU	AO	NH ±0.3	TR J <sup>s14</sup>	US	ø AB H <sup>13</sup>	R	S	Weight [g]
W0950080001	8	12	24	11	5	16	25	35	4.5	10	3	22
W0950080001	10	12	24	11	5	16	25	35	4.5	10	3	22
W0950120001	12	16	32	14	6	20	32	42	5.5	13	4	42
W0950120001	16	16	32	14	6	20	32	42	5.5	13	4	42
W0950200001	20	22	36	17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

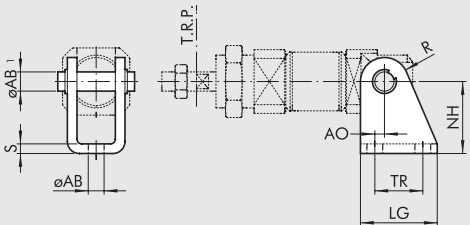


Code	Ø	ø D	W ±1.4	ø FB H <sup>13</sup>	TF J <sup>s14</sup>	UF	UR	S	Weight [g]
W0950080002	8	12	13	4.5	30	40	22	3	10
W0950080002	10	12	13	4.5	30	40	22	3	10
W0950120002	12	16	18	5.5	40	52	30	4	26
W0950120002	16	16	18	5.5	40	52	30	4	26
W0950200002	20	22	19	6.5	50	66	40	5	52
W0950200002	25	22	23	6.5	50	66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

\*ISO 6432 values

Note: Individually packed

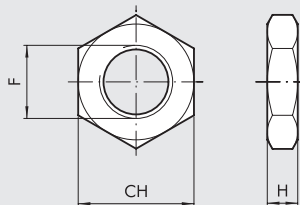
### COUNTER-HINGE MODEL BC



Code	Ø	AO	LG	TR J <sup>s13</sup>	NH ±0.2	MO	ø AB1	ø AB H <sup>13</sup>	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

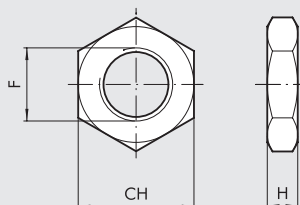
### NUT FOR HEADS MODEL D



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

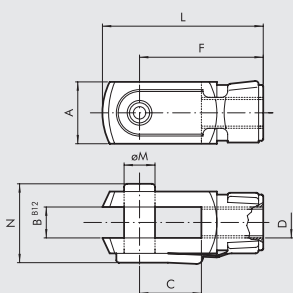
### NUT FOR PISTON RODS MODEL DA



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

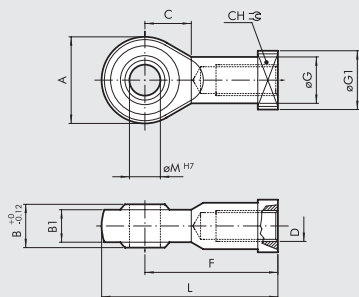
**FORK MODEL GK-M**



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

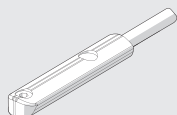
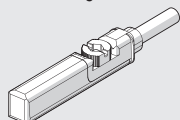
**ACCESSORIES FOR ISO 6432 MINI-CYLINDERS: MAGNETIC SENSORS**

**(E) RETRACTABLE SENSOR**

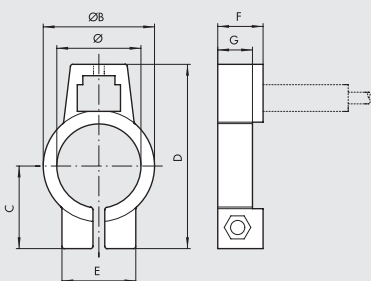
**SENSOR, SQUARE TYPE**  
Latest generation,  
secure fixing

**SENSOR, OVAL TYPE**  
Traditional

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



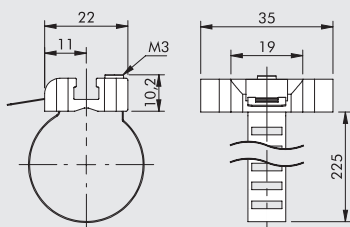
**(F) SENSOR BRACKET MOD. DSW**



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

KEY TO CODES

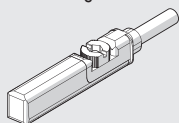
W 1 4 3	0 2 0	D	0 7 5
TYPE	DIAMETER	VERSION	STROKE
Compact guided cylinder	<b>016</b> 16 <b>020</b> 20 <b>025</b> 25 <b>032</b> 32 <b>040</b> 40 <b>050</b> 50 <b>063</b> 63 <b>080</b> 80	<b>A</b> Bronze bushings, silenced <b>B</b> Ball recirculating bearings, silenced <b>C</b> Bronze bushings with pneumatic cushioning <b>D</b> Ball recirculating bearings with pneumatic cushioning	<p><b>SILENCED VERSION</b> ◆</p> <p>Ø 16: 10, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250</p> <p>Ø 20 to 25: 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400</p> <p>Ø 32 to 80: 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400</p> <p><b>WITH PNEUMATIC CUSHIONING VERSION</b></p> <p>Ø 16: 25, 50, 75, 100, 125, 150, 175, 200, 250</p> <p>Ø 20 to 80: 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400</p> <p>◆ Other strokes on request but with the same cylinder dimensions as the standard stroke immediately above.</p>


ACCESSORIES

RETRACTABLE SENSOR

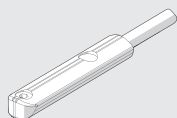
SENSOR, SQUARE TYPE 

Latest generation, secure fixing



SENSOR, OVAL TYPE 

Traditional



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

NOTES