

# TWIN-ROD CYLINDER SERIES TWNC

Anti-rotation cylinders with axial dimensions to ISO 15552.

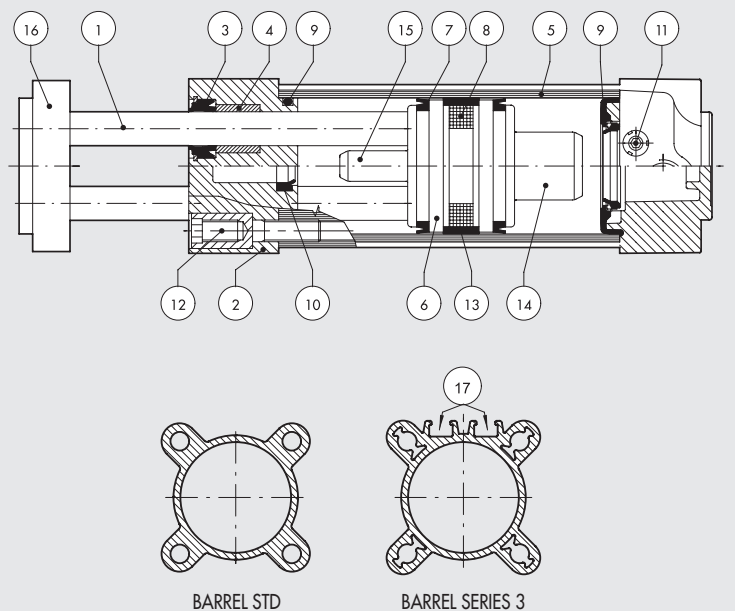
- standard configuration with magnet
- double-acting cushioned
- twinner rods, twinner rods and single through-rod
- rods in C45 steel or stainless steel, thick chromed
- available with STD or series 3 barrel.



TECHNICAL DATA	
Max operating pressure	bar 10 MPa 1 psi 145
Temperature range	°C -10 to +80
Fluid	Filtered, unlubricated air. Lubrication, if used, must be continuous.
Bores	mm 32; 40; 50; 63; 80; 100
Strokes $\dagger$	mm from 25 to 500
Design	Extruded profile
Esecution	Magnetic standard cushioned
Forces generated at 6 bar thrust/retraction	N Ø 32: 434/350 Ø 40: 678/597 Ø 50: 1060/940 Ø 63: 1683/1471 Ø 80: 2714/2295 Ø 100: 4241/3812
Weight	See cylinder "General technical data" at the beginning of the chapter.
Notes	$\dagger$ Maximum recommended strokes. Higher values can create operating problems.

## COMPONENTS

- PISTON ROD: C45 steel or stainless steel, thick chromed
- HEAD: aluminium alloy
- PISTON ROD GASKET: polyurethane
- GUIDE BUSHING: sintered bronze
- BARREL: drawn anodized aluminium alloy
- PISTON: aluminium alloy
- PISTON GASKET: polyurethane (Ø 32 to 63), NBR (Ø 80 - 100)
- MAGNET: plastoferrite
- BUFFER+STATIC O-rings: NBR
- CUSHIONING GASKET: front NBR, rear polyurethane
- NEEDLE: OT 58 brass
- SCREWS: Tap Tite for fixing and assembly
- GUIDE RING: special technopolymer
- REAR CUSHIONING CONE: OT58 brass
- FRONT CUSHIONING CONE: aluminium
- FLANGE: zinc-plated steel
- GROVES FOR SQUARE AND OVAL SENSORS

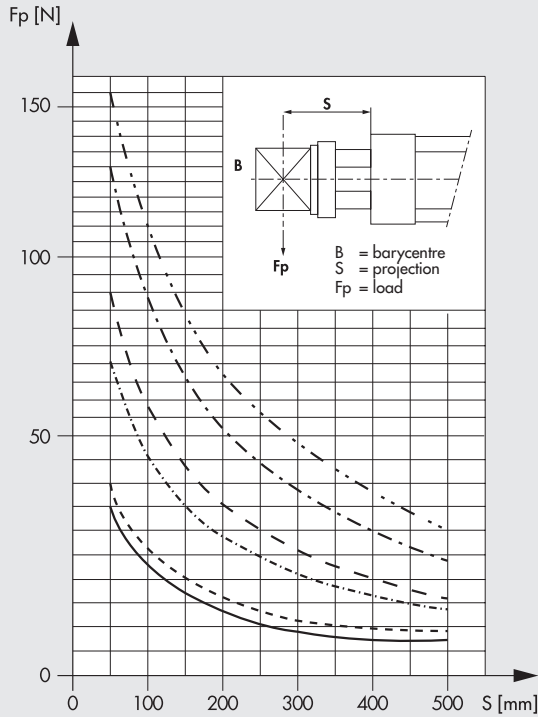


BARREL STD

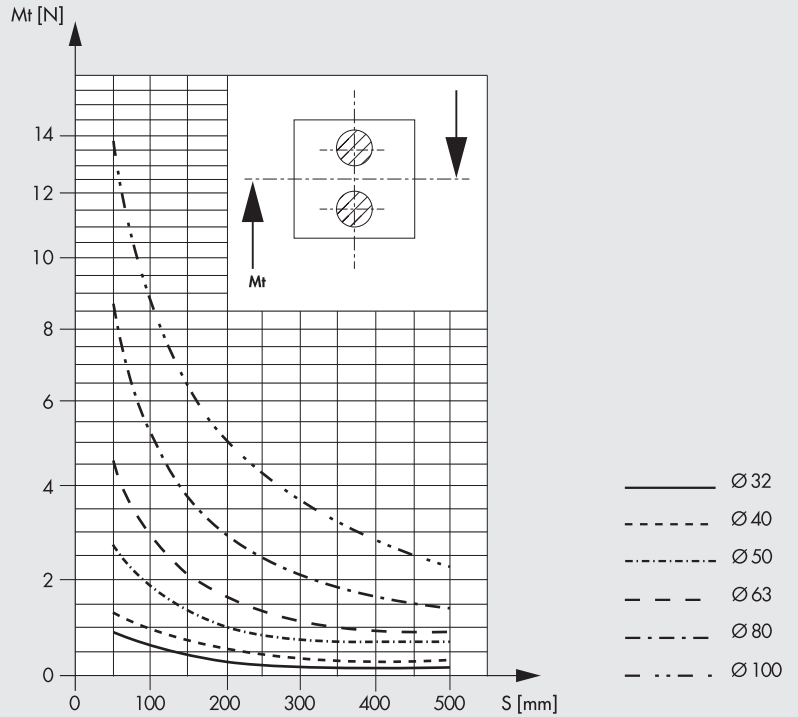
BARREL SERIES 3

**PERMISSIBLE LOADS**

**FLEXION LOADS**

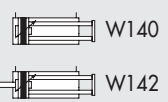
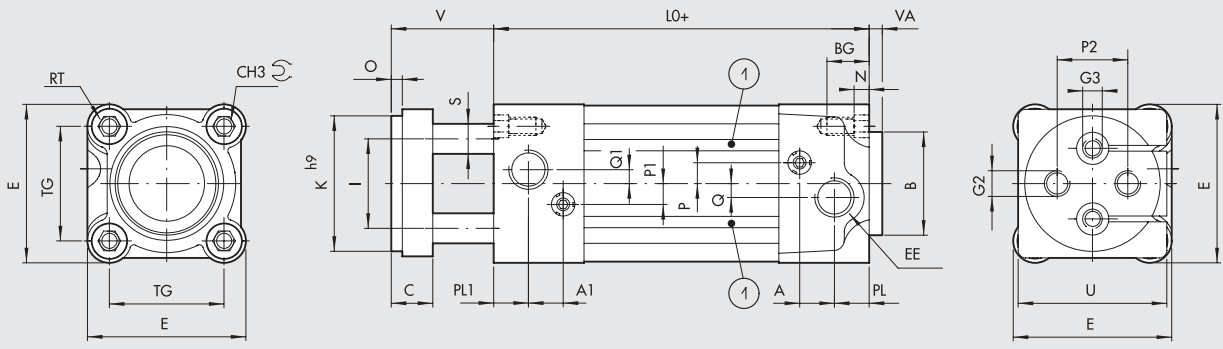


**TWISTING MOMENTS**

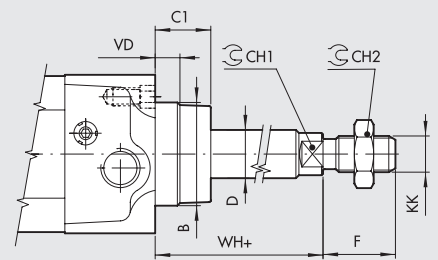


**DIMENSIONS**

**TWIN ROD VERSION (W140)**



**SINGLE THROUGH-ROD VERSION (W142)**



+ = ADD THE STROKE  
 1 = GROVES FOR SQUARE AND OVAL SENSORS (only for series 3)

$\varnothing$	PL	PL1	A	A1	B	CH1	CH2	CH3	TG	VA	EE	RT	E	L0	BG	N	P	P1	P2	Q	QC	C1	D	F	I	K <sup>h9</sup>	KK	S	O	V	VD	U	G2	G3	WH	
32	10	13	10	10.5	30	10	17	6	32.5	4	G1/8	M6	46	100	14.5	4.5	6	8	19	4	-	15	16	12	22	18	32	M10x1.25	10	4	40	6.5	45	M6	-	26
40	12	12	10	10	35	13	19	6	38	4	G1/4	M6	54	100	14.5	4.5	6	6	22	4	4	15	20	16	24	22	40	M12x1.25	10	4	40	8	49	M8	-	30
50	14	14	10	10	40	17	24	8	46.5	4	G1/4	M8	64.5	106	17.5	5.5	6	6	30	6	6	18	25	20	32	30	50	M16x1.5	12	5	43	13	54	M8	M8	37
63	16	16	10	10	45	17	24	8	56.5	4	G3/8	M8	75.5	116	17.5	5.5	6	6	38	6	6	22	25	20	32	38	63	M16x1.5	16	5	47	14	69	M10	M10	37
80	18	18	12	12	45	22	30	10	72	4	G3/8	M10	94	131	21.5	5.5	10	10	50	7	7	25	33	25	40	48	80	M20x1.5	22	5	50	12	89	M12	M12	46
100	20	20	12	12	55	22	30	10	89	4	G1/2	M10	111	138	21.5	5.5	10	10	70	7	7	25	38	25	40	60	100	M20x1.5	22	5	50	14	109	M12	M12	51

KEY TO CODES VERSION STD

CYL	W 1 4 0 TYPE	0 3 2 BORES	0 0 2 5 STROKE	► X MATERIAL
	<b>W140</b> Double-acting, magnetic, cushioned	032	+ 0025 to 0500 mm	X Piston rod AISI 303
	<b>W142</b> Double-acting, magnetic, cushioned single through-rod	040		
		050		
		063		
		080		
		100		

- + Maximum recommended strokes. Higher values can create operating problems.
- Letter to be added only for the Stainless steel piston rod version

KEY TO CODES VERSION 3 SERIES

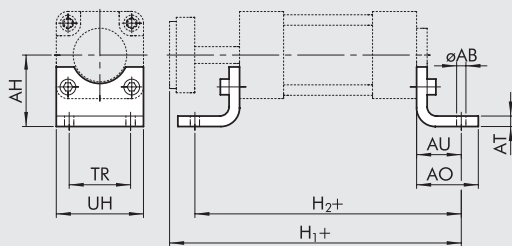
CYL	W 1 4 0 TYPE	3 EXECUTION	3 2 BORE	0 0 2 5 STROKE	► X MATERIAL
	<b>W140</b> Double-acting, magnetic, cushioned	3 Series 3	32	+ 0025 to 0500 mm	X Piston rod AISI 303
	<b>W142</b> Double-acting, magnetic, cushioned single through-rod		40		
			50		
			63		
			80		
			A1 = 100		

- + Maximum recommended strokes. Higher values can create operating problems.
- Letter to be added only for the Stainless steel piston rod version

ACCESSORIES: FIXINGS

FOOT - MODEL A/S

+ = ADD THE STROKE

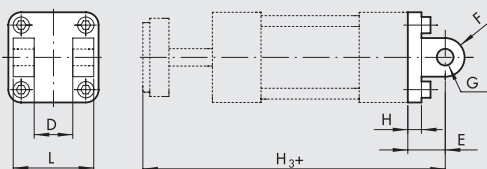


Code	Ø	AB	AH	AO	AT	AU	TR	UH	H <sub>1</sub>	H <sub>2</sub>	Weight [g]
W0950323001	32	7	32	35	4	24	32	45	164	148	76
W0950403001	40	9	36	43	4	28	36	52	168	156	98
W0950503001	50	9	45	47	4	32	45	65	181	170	156
W0950633001	63	9	50	47	6	32	50	75	195	180	246
W0950803001	80	12	63	61	6	41	63	95	222	213	406
W0951003001	100	14	71	66	6	41	75	115	229	220	540

Note: Individually packed with 2 screws  
For fixing the leg to the supporting surface, it is advisable to use a DIN 7984 sunk-headed screw

FEMALE HINGE - MODEL B

+ = ADD THE STROKE

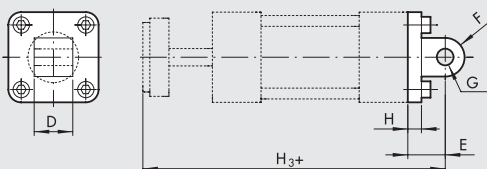


Code	Ø	D	E	F	G	H	H <sub>3</sub>	L	Weight [g]
W0950322003	32	26	22	11	10	10	162	45	116
W0950402003	40	28	25	13	12	10	165	52	160
W0950502003	50	32	27	13	12	12	176	60	252
W0950632003	63	40	32	17	16	12	195	70	394
W0950802003	80	50	36	17	16	16	217	90	670
W0951002003	100	60	41	21	20	16	229	110	1085

Note: Supplied with 4 screws, 4 washers, 2 snap-rings and 1 pin

MALE HINGE - MODEL BA

+ = ADD THE STROKE

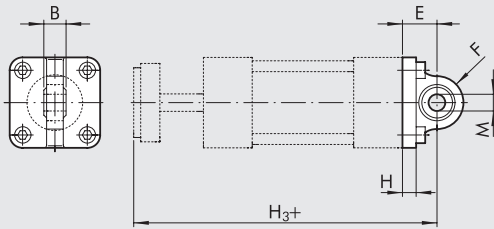


Code	Ø	D	E	F	G	H	H <sub>3</sub>	Weight [g]
W0950322004	32	26	22	11	10	10	162	94
W0950402004	40	28	25	13	12	10	165	124
W0950502004	50	32	27	13	12	12	176	220
W0950632004	63	40	32	17	16	12	195	316
W0950802004	80	50	36	17	16	16	217	578
W0951002004	100	60	41	21	20	16	229	850

Note: Supplied with 4 screws.

**ARTICULATED MALE HINGE - MODEL BAS**

+ = ADD THE STROKE

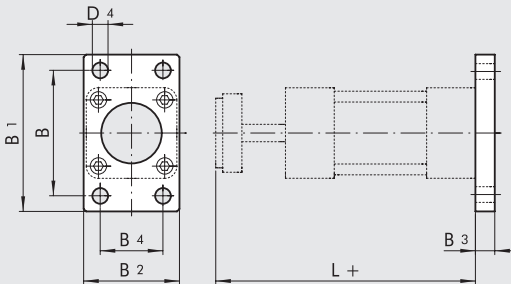


Code	Ø	B	E	F	H	H <sub>3</sub>	M	Weight [g]
W0950322006	32	14	22	16	10	162	10	106
W0950402006	40	16	25	18	10	165	12	142
W0950502006	50	16	27	21	12	176	12	236
W0950632006	63	21	32	23	12	195	16	336
W0950802006	80	21	36	28	16	217	16	572
W0951002006	100	25	41	30	16	229	20	840

Note: Supplied with 4 screws, 4 washers.

**REAR FLANGE - MODEL C**

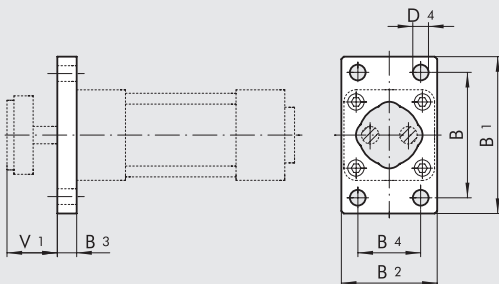
+ = ADD THE STROKE



Code	Ø	B	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	D <sub>4</sub>	L	Weight [g]
W0950322002	32	64	80	50	10	32	7	140	246
W0950402002	40	72	90	55	10	36	9	140	290
W0950502002	50	90	110	65	12	45	9	149	522
W0950632002	63	100	120	75	12	50	9	163	670
W0950802002	80	126	153	95	16	63	12	181	1420
W0951002002	100	150	178	115	16	75	14	188	2040

Note: Supplied with 4 screws.

**FRONT FLANGE - MODEL C/S**



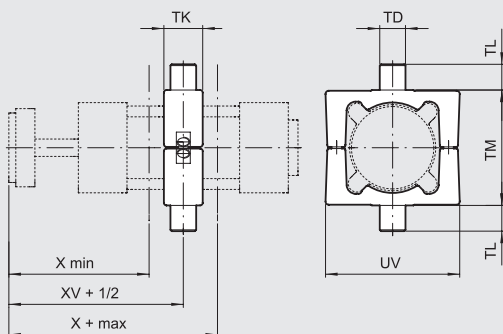
Code	Ø	B	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	D <sub>4</sub>	V <sub>1</sub>	Weight [g]
W0950323002	32	64	80	50	10	32	7	30	228
W0950403002	40	72	90	55	10	36	9	30	288
W0950503002	50	90	110	65	12	45	9	31	486
W0950633002	63	100	120	75	12	50	9	35	569
W0950803002	80	126	153	95	16	63	12	34	1145
W0951003002	100	150	178	115	16	75	14	34	1760

Note: Supplied with 4 screws.

**INTERMEDIATE HINGE - MODEL EN, FOR SERIES STD**

+ = ADD THE STROKE

+1/2 = ADD HALF THE STROKE



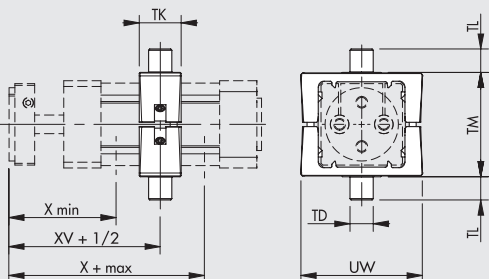
Code	Ø	TM	TL	TD <sub>e9</sub>	TK	UW	X <sub>(min)</sub>	XV	X <sub>(max)</sub>	Weight [g]	T [Nm] ♦
0950322007	32	50	12	12	22	65	79	91	103	282	5
0950402007	40	63	16	16	28	75	82	90	98	582	10
0950502007	50	75	16	16	32	95	91.5	97.5	103.5	870	15
0950632007	63	90	20	20	35	105	95.5	104.5	113.5	1192	20
0950802007	80	110	20	20	40	130	108	115.5	123	1950	20
0951002007	100	132	25	25	45	145	110.5	119	127.5	2690	25

Note: Supplied with 4 screws, 2 pin

♦ Recommended tightening torque of grub screws

**INTERMEDIATE HINGE - MODEL EN, FOR SERIES 3**

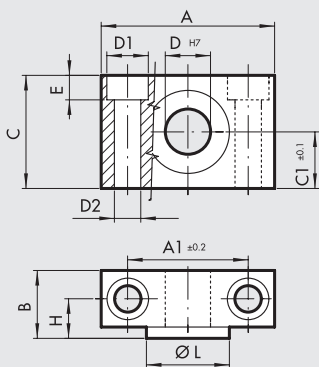
+ = ADD THE STROKE  
 + 1/2 = ADD HALF THE STROKE



Code	Ø	X <sub>(min)</sub>	XV	X <sub>(max)</sub>	TM	TL	TD <sub>e9</sub>	TK	UW	Weight [g]	T [Nm] ◆
0950322207	32	79	91	103	50	12	12	22	65	212	3
0950402207	40	82	90	98	63	16	16	28	75	440	8
0950502207	50	91.5	97.5	103.5	75	16	16	28	95	644	15
0950632207	63	95.5	104.5	113.5	90	20	20	36	105	1080	15
0950802207	80	108	115.5	123	110	20	20	36	130	1654	15
0951002207	100	110.5	119	127.5	132	25	25	45	145	2550	20

Note: Supplied with 4 grub screws, 2 pins  
 ◆ Recommended tightening torque of grub screws

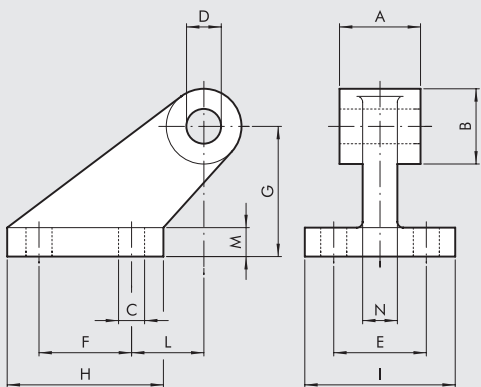
**COUNTER-HINGE FOR MODEL EN - MODEL EL**



Code	Ø	A	A <sub>1</sub>	B	C	C <sub>1</sub>	D <sub>1</sub>	D <sub>2</sub>	D	E	H	ØL	Weight [g]
W0950322009	32	46	32	18	30	15	11	7	12	6.5	10.5	22	162
W0950402009	40	55	36	21	36	18	15	9	16	8.5	12	28	278
W0950402009	50	55	36	21	36	18	15	9	16	8.5	12	28	278
W0950632009	63	65	42	23	40	20	18	11	20	10.5	13	35	414
W0950632009	80	65	42	23	40	20	18	11	20	10.5	13	35	414
W0951002009	100	75	50	28.5	50	25	20	13	25	12.5	16	40	715

Note: 2-pieces pack with 4 screws

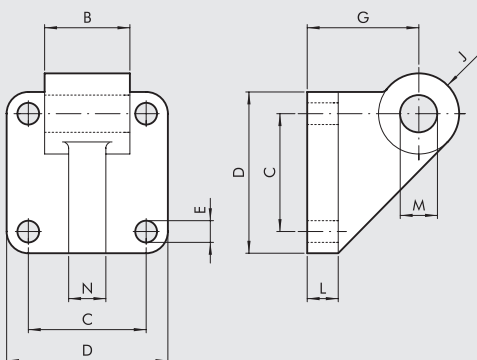
**COUNTER-HINGE CETOP FOR MODEL B - MODEL GL**



Code	Ø	A	B	C	D	E	F	G	H	I	L	M	N	Weight [g]
W0950322008	32	26	19	7	10	25	20	32	37	41	18	8	10	96
W0950402008	40	28	26	9	12	32	32	45	54	52	25	10	12	216
W0950502008	50	32	26	9	12	32	32	45	54	52	25	10	12	212
W0950632008	63	40	33	11	16	40	50	63	75	63	32	12	15	440
W0950802008	80	50	33	11	16	40	50	63	75	63	32	12	15	464
W0951002008	100	60	44	14	20	50	70	90	103	80	40	16	22	985

Note: Supplied with 4 screws, 4 washers

**COUNTER-HINGE FOR MODEL B - MODEL GS**



Code	Ø	B	C	D	E	G	J	L	M	N	Weight [g]
W0950322108	32	26	32.5	45	7	32	11	10	10	10	106
W0950402108	40	28	38	52	7	36	13	10	12	12	138
W0950502108	50	32	46.5	65	9	45	13	12	12	12	252
W0950632108	63	40	56.5	75	9	50	17	12	16	15	350
W0950802108	80	50	72	95	11	63	17	16	16	15	655
W0951002108	100	60	89	115	11	73	21	20	20	22	980

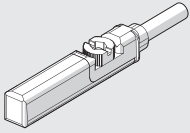
Note: Supplied with 4 screws, 4 washers

# ACCESSORIES FOR TWIN-ROD CYLINDERS: MAGNETIC SENSORS AND POSITION SENSOR

## RETRACTABLE SENSOR

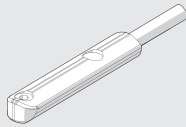
### SENSOR, SQUARE TYPE

Latest generation,  
secure fixing



### SENSOR, OVAL TYPE

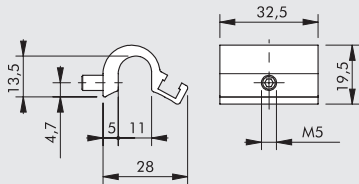
Traditional



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

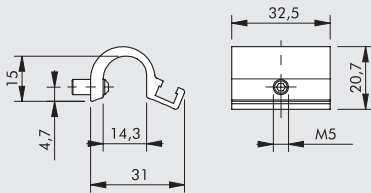
## SENSOR SUPPORT BRACKETS FOR SENSORS SQUARE TYPE AND OVAL TYPE

Ø 32 to 40



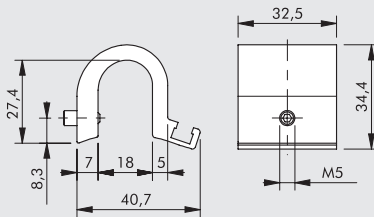
Code	Description
W0950001711	Bracket D.32-40

Ø 50 to 63



Code	Description
W0950001712	Bracket D.50-63

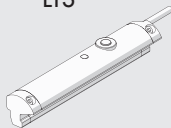
Ø 80 to 100



Code	Description
W0950001713	Bracket D.80-100-125

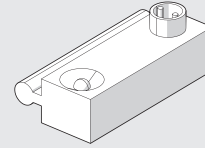
## POSITION SENSOR

LTS



For technical data and usage strokes see **chapter A6**.

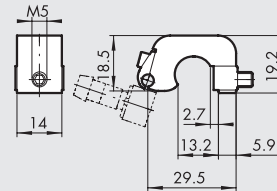
## SENSOR SERIES DSM



Can be used on ISO 15552 cylinders in the STD series and series 3.  
For codes and technical data, see **chapter A6**.

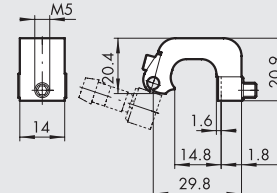
## SENSOR SUPPORT BRACKETS FOR SENSORS DSM

Ø 32 to 40



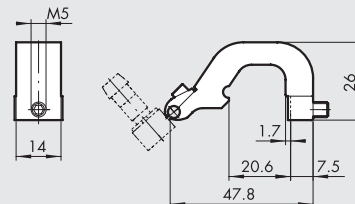
Code	Description
W0950000711	Bracket D.32-40 DST 80

Ø 50 to 63



Code	Description
W0950000712	Bracket D.50-63 DST 81

Ø 80 to 100

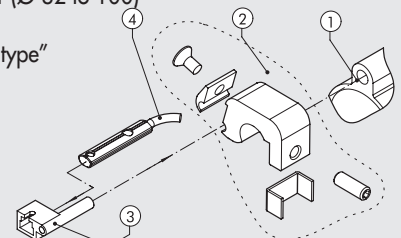


Code	Description
W0950000713	Bracket D.80-100-125 DST 82

## ADAPTER FOR OVAL TYPE RETRACTABLE SENSORS

### ASSEMBLY DIAGRAM

- 1 Twin-rod cylinder with serie STD or serie 3 barrel
- 2 Sensor bracket mod. DST (Ø 32 to 100)
- 3 Adaptor
- 4 Retractable sensor "oval type"



Code	Description
W0950001001	Adaptor DSS005 for DST/ST brackets

