

TWIN CYLINDER SERIES S10

There are two sliding systems available:

- on bushes
- on ball recirculating bearings

The frame is made up of two paired cylinders with a common anodized aluminium body containing slots for retracting sensors.

There are 5 bores available:

2 x Ø12, 2 x Ø16, 2 x Ø20, 2 x Ø25 and 2 x Ø30



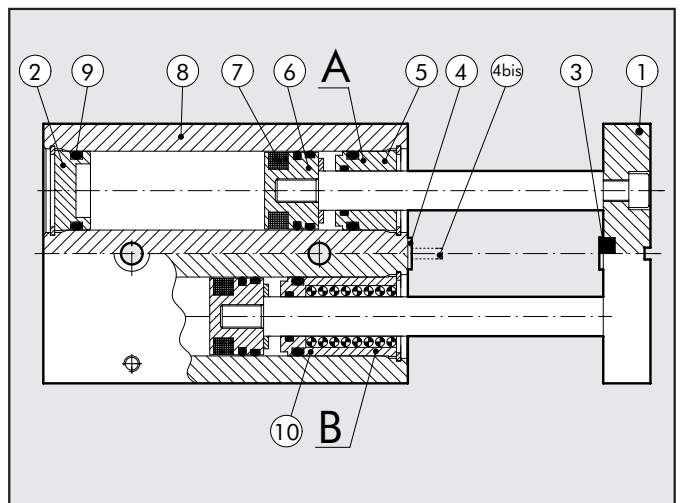
TECHNICAL FEATURES		S10-12	S10-16	S10-20	S10-25	S10-30
Pressure range	bar	3 to 7				
Temperature range	°C	5 to +60				
Fluid		20µm dried or lubricated filtered air. Lubrication, if used, must be continuous.				
Piston speed	mm/s	30 to 100 mm/s				
Versions		System with sliding bushes / System with ball bushes available with stop screw or hydraulic decelerator				
Sizes		12	16	20	25	30
Bores	mm	2 x 12	2 x 16	2 x 20	2 x 25	2 x 30
Piston rod diameter	mm	6	8	10	12	16
Strokes	mm	15	15	25	25	25
	mm	25	25	50	50	50
	mm	50	50	75	75	75
	mm	-	75	100	100	100
		-	-	-	125	125
Weight (C=stroke)						
Sliding version	Kg	0.12 + (0.002 x C)	0.24 + (0.0025 x C)	0.51 + (0.005 x C)	0.76 + (0.006 x C)	1.3 + (0.009 x C)
Ball bearing version	Kg	0.21 + (0.002 x C)	0.48 + (0.0025 x C)	0.77 + (0.005 x C)	0.18 + (0.006 x C)	1.92 + (0.009 x C)
Theoretical thrust		Multiply the value shown by the pressure in bar				
Thrust force (ΔP = pressure in bar)	da N	2.26 x ΔP	4 x ΔP	6.28 x ΔP	9.8 x ΔP	14.1 x ΔP
Pull force	da N	1.69 x ΔP	3 x ΔP	4.11 x ΔP	7.5 x ΔP	10.1 x ΔP
Max. loads		(The values shown refer to the min. and max. strokes)				
Sliding version	N	3 to 1.5	6 to 3	10 to 3.5	12 to 5.6	20 to 7
Ball bearing version	N	6 to 4	11 to 6	20 to 7	26 to 8	36 to 11

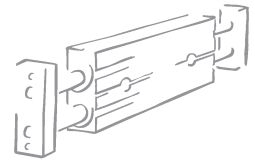
COMPONENTS

- ① FLANGE: anodized aluminium
- ② REAR BASE: anodized aluminium
- ③ BUFFER: rubber
- ④ ADJUSTABLE STRIKER PLATE. Zinc-plated steel
- ④ bis. HYDRAULIC DECELERATOR
- ⑤ FRONT BASE: brass
- ⑥ PISTON: brass
- ⑦ MAGNET: Plastroferrite
- ⑧ CYLINDER BODY: anodized aluminium
- ⑨ STATIC O-RING: NBR
- ⑩ BALL RE-CIRCULATION BUSH

VERSIONS:

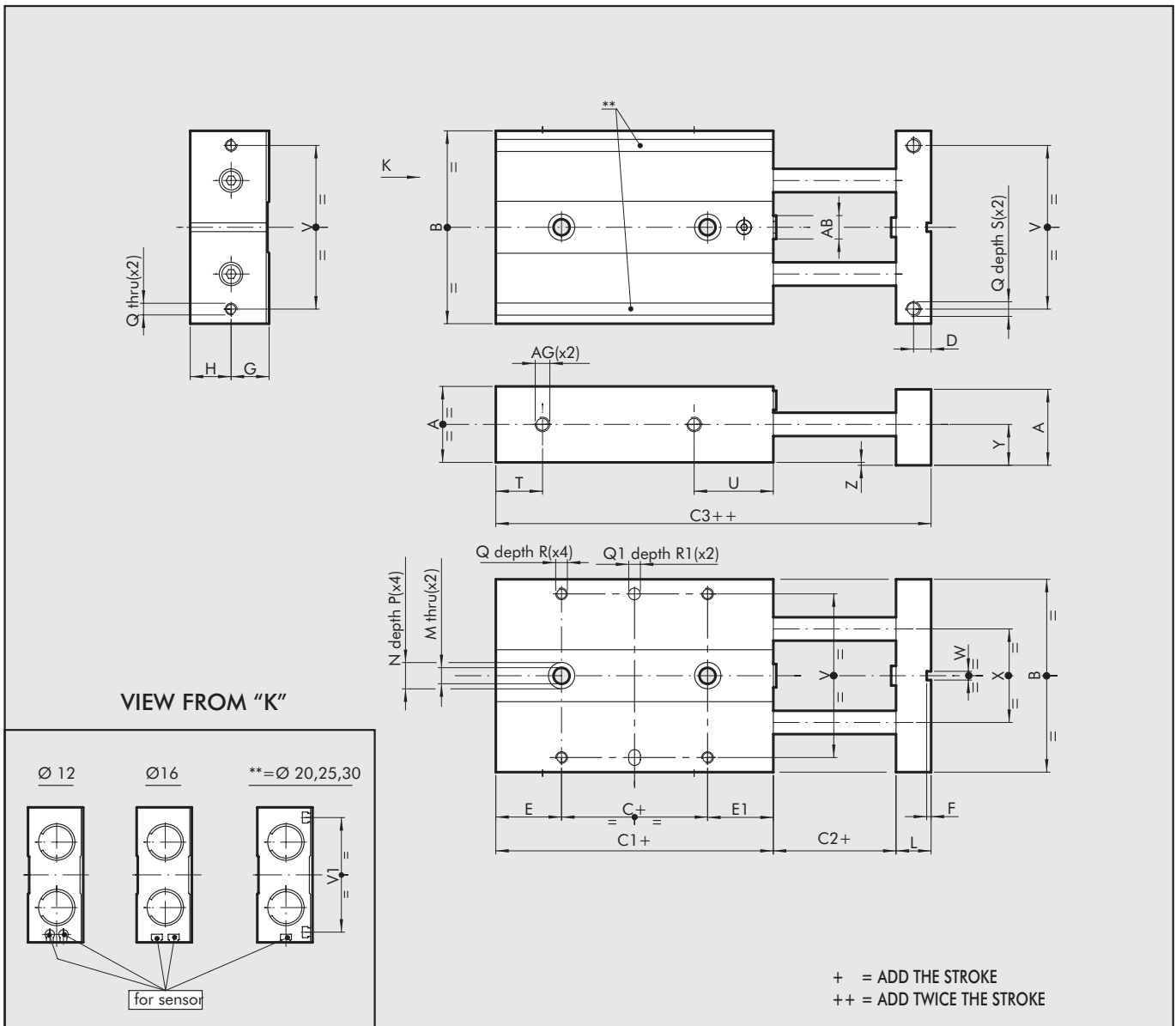
- Ⓐ With sliding bushes
- Ⓑ With ball bushes





DIMENSIONS OF TWIN CYLINDER SERIES S10

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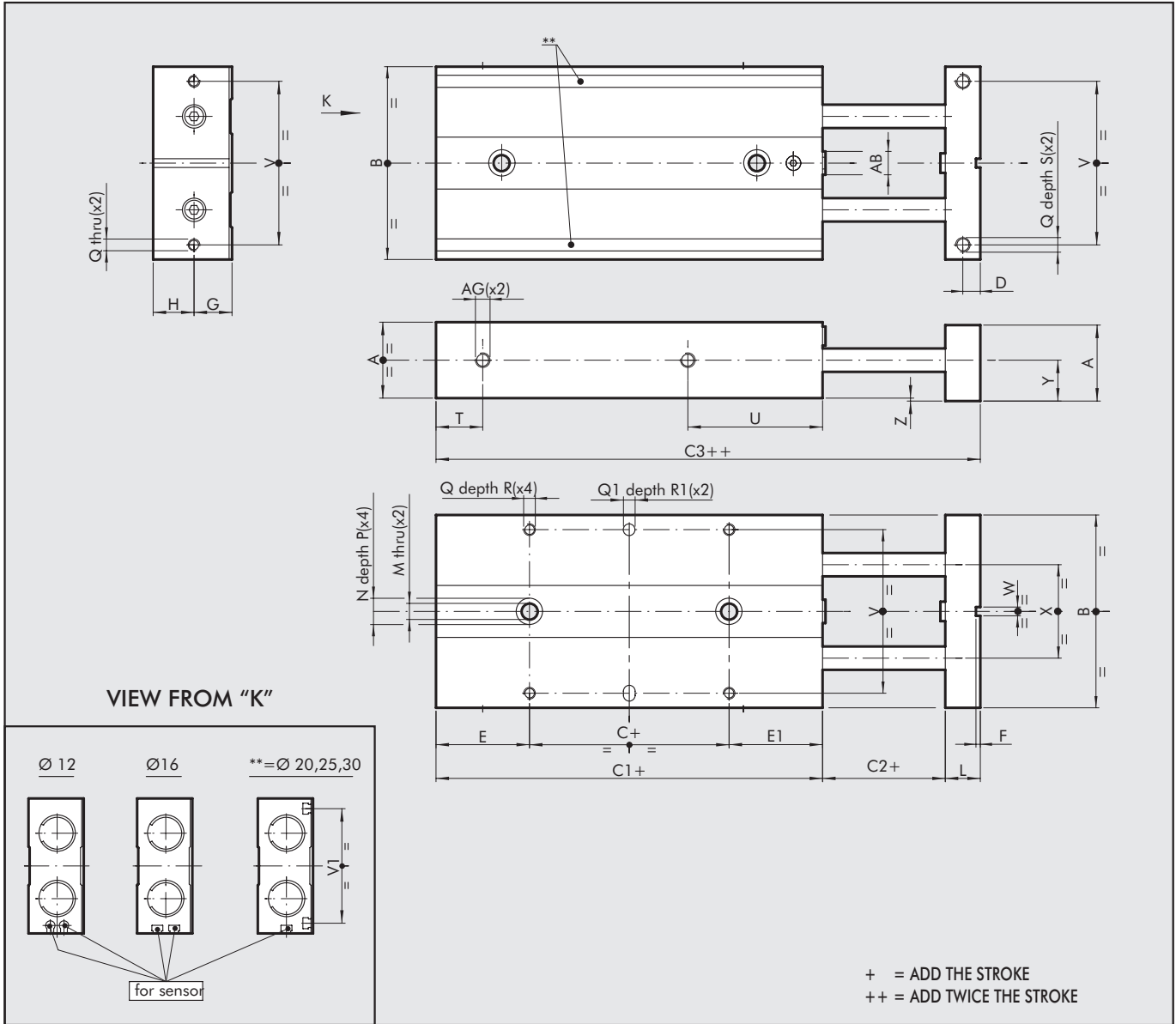
Code	Ø	A	B	C	C1	C2	C3	D	E	E1	F	G	H	L	M	N	P	Q	Q1 ^{H7}	R	R1	S	T
W1440122...*	12	18	46	10	50	2	60	4	20	20	1.5	9	10	8	4.3	8	4	M3	4	5	3	8	9
W1440162...*	16	22	56	16	62	2	74	5	26	20	1.5	11	12	10	4.3	8	4	M4	4	6	3	8	10
W1440202...*	20	26	66	10	68	2	82	6	29	29	1.5	13	14	12	5.5	9	5	M4	4	7	3	10	11
W1440252...*	25	32	78	10	74	2	90	7	32.5	31.5	2.5	16	17	14	6.5	10.5	6	M5	4	7	3	12	11
W1440302...*	30	36	98	10	87	2	105	8	37.5	39.5	2.5	18	19	16	8.5	14	8	M6	6	8	5	12	13

*Enter stroke in mm.

Ø	U	V	V1	W	X	Y	Z	AB	AG
12	28	38	-	3	20	10	1	M5	M5
16	33	46	-	3	26	12	1	M6	M5
20	40	56	54	3	30	14	1	M8	M5
25	42	66	64	5	39	17	1	M10	M5
30	51	86	82	5	52	19	1	M12	G 1/8"

Strokes for bore 12 mm 15; 25; 50;
 Strokes for bore 16 mm 15; 25; 50; 75;
 Strokes for bore 20 mm 25; 50; 75; 100;
 Strokes for bore 25 mm 25; 50; 75; 100; 125;
 Strokes for bore 30 mm 25; 50; 75; 100; 125;

DIMENSIONS OF TWIN CYLINDER SERIES S10, ON BALL BEARINGS

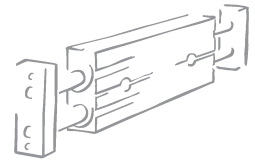


Code	Ø	A	B	C	C1	C2	C3	D	E	E1	F	G	H	L	M	N	P	Q	Q1 ^{H7}	R	R1	S	T
W1440123...*	12	18	46	10	69	2	79	4	29.5	29.5	1.5	9	10	8	4.3	8	4	M3	4	5	3	8	9
W1440163...*	16	22	56	10	90	2	98	5	42	38	1.5	11	12	10	4.3	8	4	M4	4	6	3	8	10
W1440203...*	20	26	66	10	100	2	111	6	46.5	43.5	1.5	13	14	12	5.5	9	5	M4	4	7	3	10	11
W1440253...*	25	32	78	10	108	2	120	7	51.5	46.5	2.5	16	17	14	6.5	10.5	6	M5	4	7	3	12	11
W1440303...*	30	36	98	10	124	2	142	8	56	58	2.5	18	19	16	8.5	14	8	M6	6	8	5	12	13

*Enter stroke in mm.

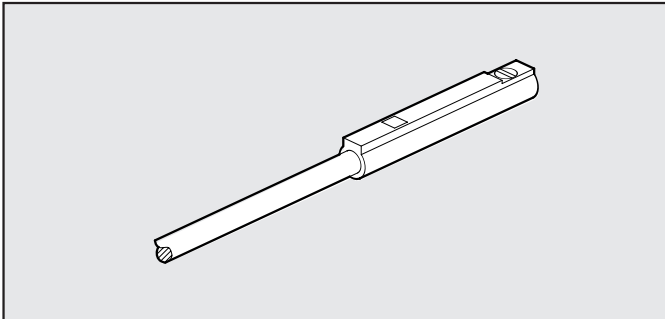
Ø	U	V	V1	W	X	Y	Z	AB	AG
12	47	38	-	3	20	10	1	M5	M5
16	57	46	-	3	26	12	1	M6	M5
20	69	56	54	3	30	14	1	M8	M5
25	72	66	64	5	39	17	1	M10	M5
30	88	86	82	5	52	19	1	M12	G 1/8"

- Strokes for bore 12 mm 15; 25; 50;
- Strokes for bore 16 mm 15; 25; 50; 75;
- Strokes for bore 20 mm 25; 50; 75; 100;
- Strokes for bore 25 mm 25; 50; 75; 100; 125;
- Strokes for bore 30 mm 25; 50; 75; 100; 125;



ACCESSORIES

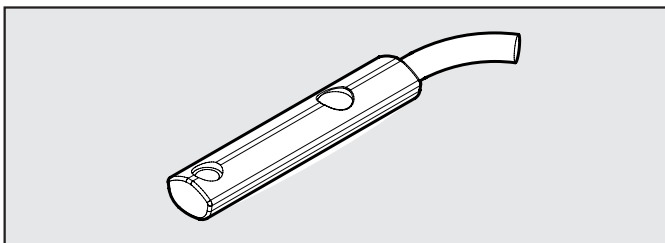
MAGNETIC SENSOR Ø 4, FOR SLIDE S10 Ø12



Code	Description
W0950044180	Sensor REED 2 wires 24 VDC 1m
W0950045390*	Sensor HALL 3 wires 24 VDC 2m

* For technical data of sensor see page 1.1/24

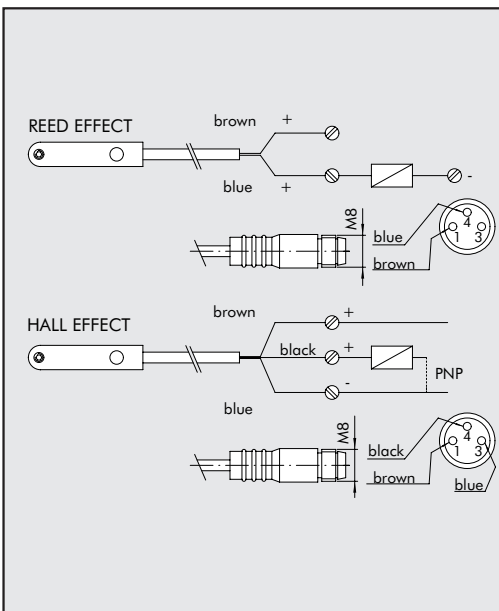
RETRACTABLE SENSOR WITH INSERTION FROM ABOVE, FOR SLIDE S10 Ø16÷30



Codice	Description
W0952025390	HALL N.O. SENSOR, VERTICAL INSERTION 2.5m
W0952029394	HALL N.O. SENSOR, VERTICAL INSERTION 300 mm M8
W0952022180	REED N.O. SENSOR, VERTICAL INSERTION 2.5m
W0952028184	REED N.O. SENSOR, VERTICAL INSERTION 300 mm M8
W0952125556	HALL N.O. SENSOR, VERTICAL INSERTION 2m ATEX

This type of sensor can be inserted in the slot of the sensor from above. This means the cylinder heads do not require a through opening.

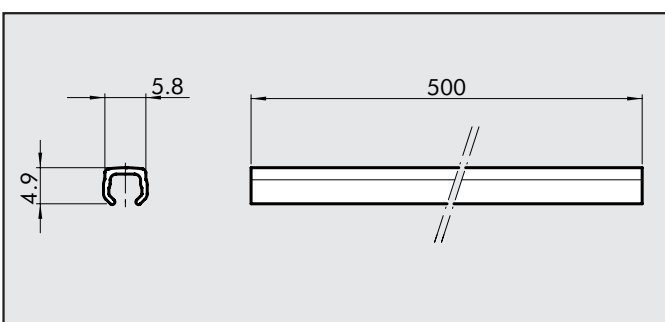
WIRING DIAGRAM



TECHNICAL DATA

	Reed	Effetto Hall	Effetto Hall
Type of contact	N.O.	N.O.	N.O.
Switch	-	PNP	PNP
Supply voltage (U _b)	V 10 ÷ 30 AC/DC	10 ÷ 30 DC	18 ÷ 30 DC
Power	W 3 (peak valve=6)	3	≤ 1.7
Voltage variation	-	≤ 10% di U _b	≤ 10% di U _b
Voltage drop	V -	≤ 2	≤ 2.2
Input current	mA -	≤ 10	≤ 10
Output current	mA ≤ 100	≤ 100	≤ 70
Switching frequency	Hz ≤ 400	≤ 5000	1000
Short-circuit protection	-	Yes	Yes
Over-voltage suppression	-	Yes	Yes
Polarity inversion protection	-	Yes	Yes
EMC	EN 60 947-5-2	EN 60 947-5-2	EN 60 947-5-2
LED display	Yellow	Yellow	Yellow
Magnetic sensitivity	2,8 mT ±25%	2,8 mT ±25%	2.6
Repeatability	≤ 0,1 mT	≤ 0,1 mT	≤ 0,1 (U _b and I _a fixed)
Degree of protection (EN 60529)	IP 67	IP 67	IP 68, IP 69K
Vibration and shock resistance	30 g, 11 ms, 10÷55 Hz, 1mm	30 g, 11 ms, 10÷55 Hz, 1mm	30 g, 11 ms, 10÷55 Hz, 1mm
Temperature range	°C -25 ÷ +75	-25 ÷ +75	-20 ÷ +45
Sensor capsule material	PA66 + PA6I/6T	PA66 + PA6I/6T	PA
2.5m/2m connecting cable	PVC; 2 x 0,12 mm ²	PVC; 3 x 0,14 mm ²	PVC; 3 x 0,12 mm ²
Connecting cable with M8x1	Polyurethane; 2 x 0,14 mm ²	Polyurethane; 3 x 0,14 mm ²	-
Wire NO.	2	3	3

BAR FOR GROOVING



Code	Description
W0950000160	BAR FOR GROOVING L=500 mm

Note: the code corresponds to 1 piece