

TWIN CYLINDER SLIDE WITH FIXED BODY SERIES S11

There are two sliding systems available:

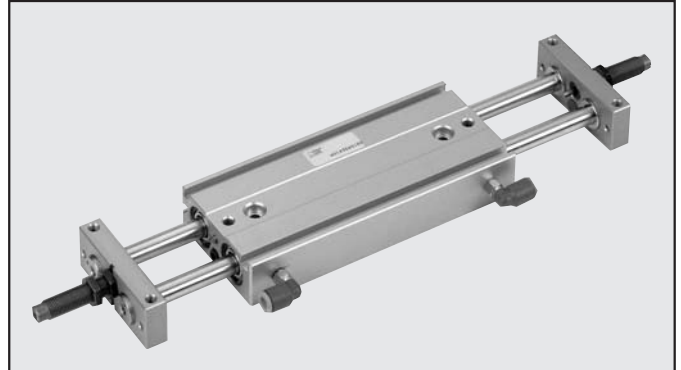
- on bushes
- on ball bearings

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

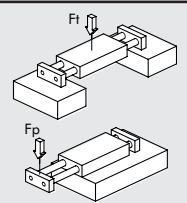
There are 5 bores available:

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

The piston rods are united by means of a plate on which mechanical stops or hydraulic shock absorbers can be mounted.



TECHNICAL FEATURES		20µ filtered air				
Fluid		20µ filtered air				
Pressure range		1.5 to 7 bar (0.15 to 0.7 MPa)				
Temperature range	°C	5 to +60				
Piston speed	mm/s	30 to 200				
Versions		With sliding bushes / With ball bearing bushes / With stop screw / With hydraulic shock absorbers				
Bores	mm	12	16	20	25	30
Piston rod diameter	mm	6	8	10	12	16
Strokes	mm	25	25	25	25	25
		50	60	50	50	50
		75	75	75	75	75
		-	100	100	100	100
		-	-	125	125	125
		-	-	-	150	150
Weight = X + (Y · C)	kg					
C = stroke						
Sliding version		X = 0.14 Y = 0.002	X = 0.25 Y = 0.0035	X = 0.5 Y = 0.045	X = 0.7 Y = 0.007	X = 1.24 Y = 0.01
Ball bearing version		X = 0.25 Y = 0.002	X = 0.37 Y = 0.0035	X = 0.78 Y = 0.045	X = 1.04 Y = 0.007	X = 1.98 Y = 0.01
Theoretical thrust (P = relative pressure in bar)		16.9xP	30xP	47xP	75xP	101xP
Max. loads						
Loads with sliding version	N	Ft: 7÷3 Fp: 4÷1.5	Ft: 20÷4 Fp: 4÷1.5	Ft: 35÷4.5 Fp: 12÷3	Ft: 50÷5.4 Fp: 15÷3.5	Ft: 80÷12 Fp: 20÷4.5
Loads with ball bearing version	N	Ft: 13÷5 Fp: 6÷3	Ft: 35÷6.5 Fp: 11÷3	Ft: 58÷7 Fp: 18÷5	Ft: 80÷8 Fp: 23÷6	Ft: 130÷18 Fp: 50÷8

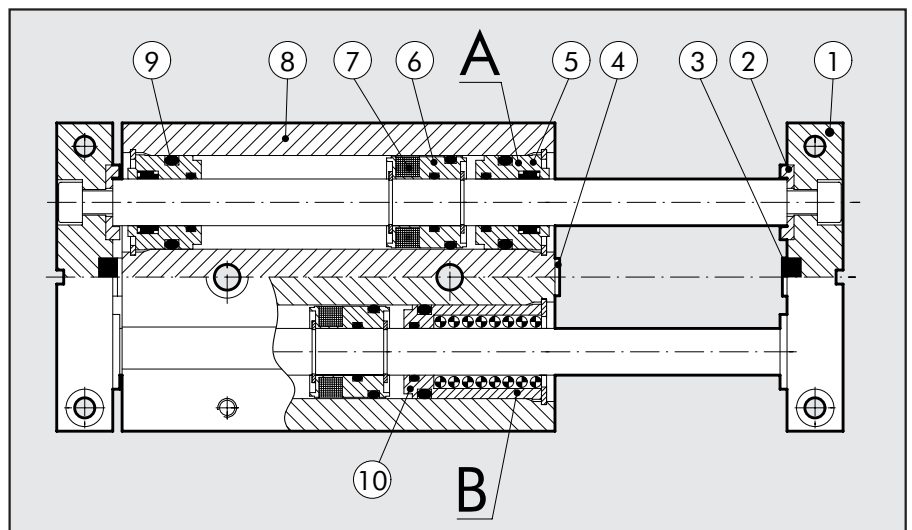


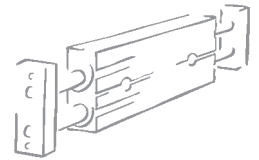
COMPONENTS

- ① FLANGE: anodized aluminium
- ② WASHER: steel
- ③ BUFFER: rubber
- ④ ADJUSTABLE STRIKER PLATE: Zinc-plated steel
- ⑤ BASE: brass
- ⑥ PISTON: brass
- ⑦ MAGNET: plastoferrite
- ⑧ CYLINDER BODY: anodized aluminium
- ⑨ STATIC O-RINGS: NBR
- ⑩ BUSH: ball bearing

A = Version with sliding bushes

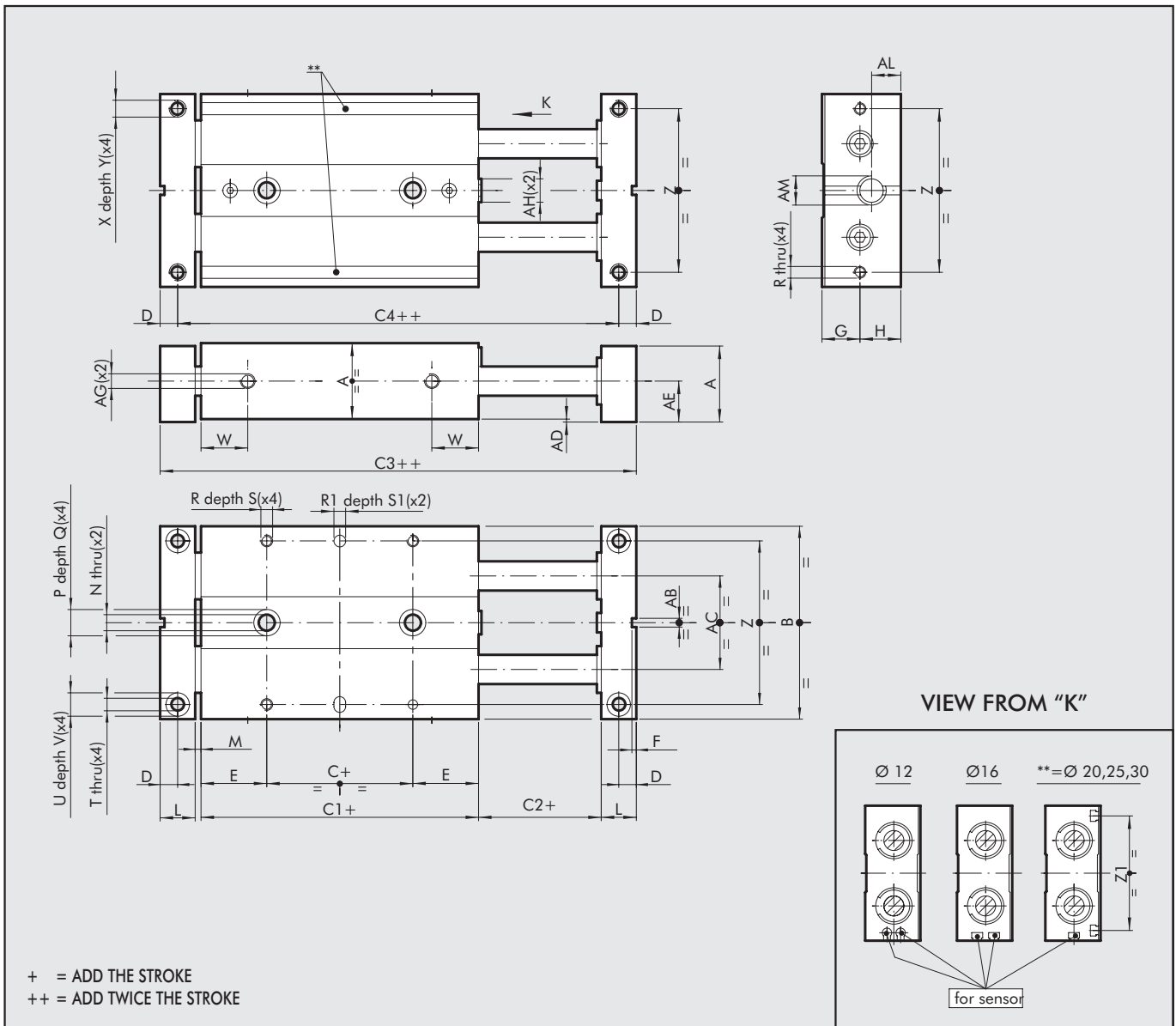
B = Version with ball bearing bushes





DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS SERIES S11 - Ø 12-30

1



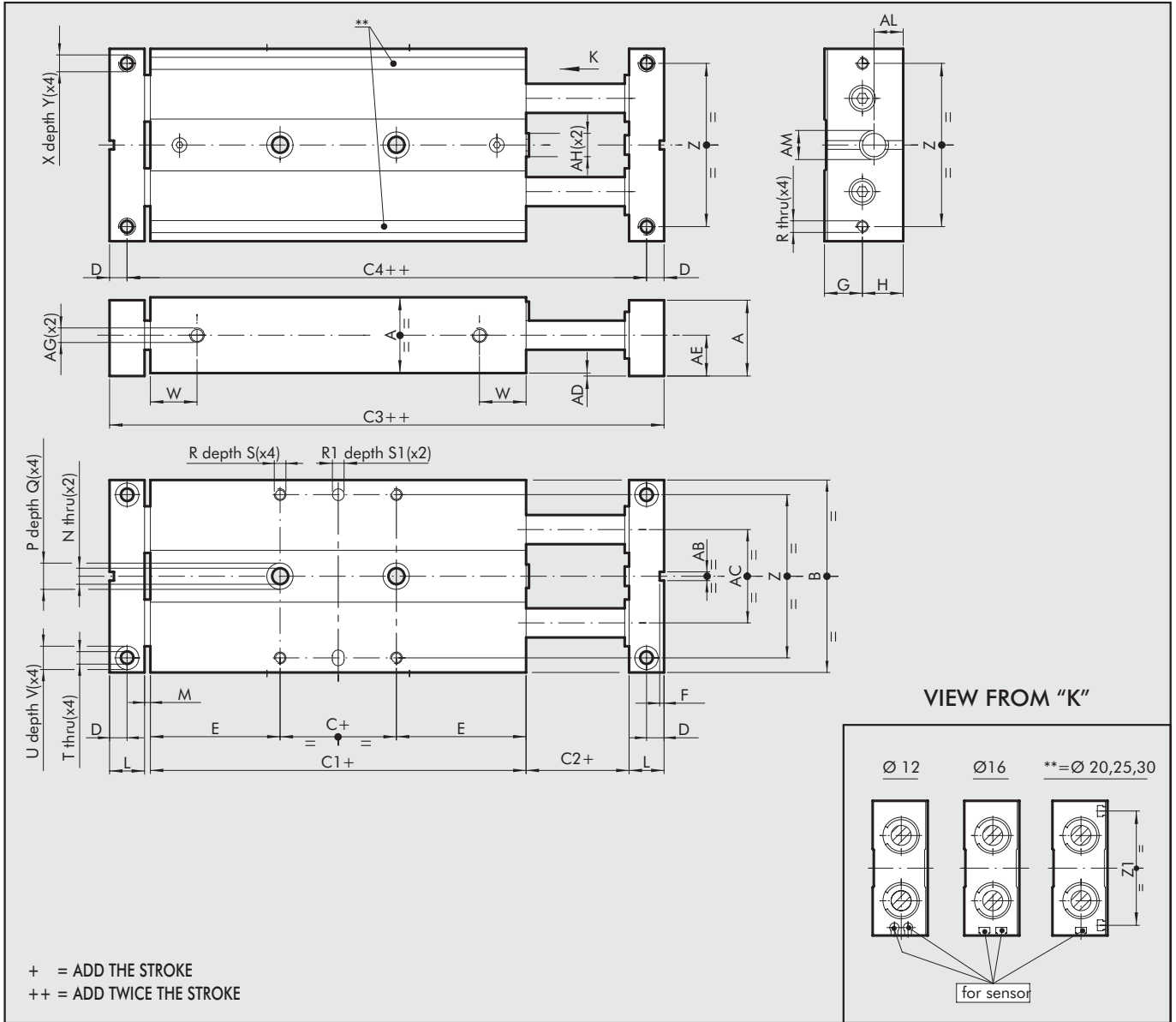
Codes	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450122...*	12	18	46	5	45	2	65	57	4	20	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450162...*	16	22	56	10	50	2	74	64	5	20	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450202...*	20	26	66	10	55	2	83	71	6	22.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450252...*	25	32	78	10	60	2	92	78	7	25	2.5	16	17	14	2	6.5	10.5	6	M5	4	7	3	5.2
W1450302...*	30	36	98	10	70	2	106	90	8	30	2.5	18	19	16	2	8.5	14	8	M6	6	8	5	5.2

*Enter required stroke

Ø	U	V	W	X	Y	Z	Z1	AB	AC	AD	AE	AF	AG	AH	AM	AL
12	6	3	14	M4	6	38	-	3	20	1	10	4	M5	M5	M8 x 1	7
16	8	4	15	M5	8	46	-	3	26	1	12	5	M5	M6	M10 x 1	8.5
20	8	4	16	M5	10	56	54	3	30	1	14	5	M5	M8	M10 x 1	9
25	9	5	19	M6	12	66	64	5	39	1	17	6	M5	M10	M12 x 1	10
30	9	5	21	M6	12	86	82	5	52	1	19	6	G 1/8	M12	M14 x 1.5	12

Strokes for bore 12 mm	25; 50; 75
Strokes for bore 16 mm	25; 50; 75; 100
Strokes for bore 20 mm	25; 50; 75; 100; 125
Strokes for bore 25 mm	25; 50; 75; 125; 150
Strokes for bore 30 mm	25; 50; 75; 125; 150

DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS SERIES S11 - Ø 12-30

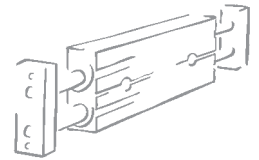


Codes	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450123...*	12	18	46	5	71	2	91	83	4	33	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450163...*	16	22	56	10	85	2	109	99	5	37.5	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450203...*	20	26	66	10	99	2	127	115	6	44.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450253...*	25	32	78	10	105	2	137	123	7	47.5	2.5	16	17	14	2	6.5	10.5	6	M5	4	7	3	5.2
W1450303...*	30	36	98	10	128	2	164	148	8	59	2.5	18	19	16	2	8.5	14	8	M6	6	8	5	5.2

*Enter required stroke

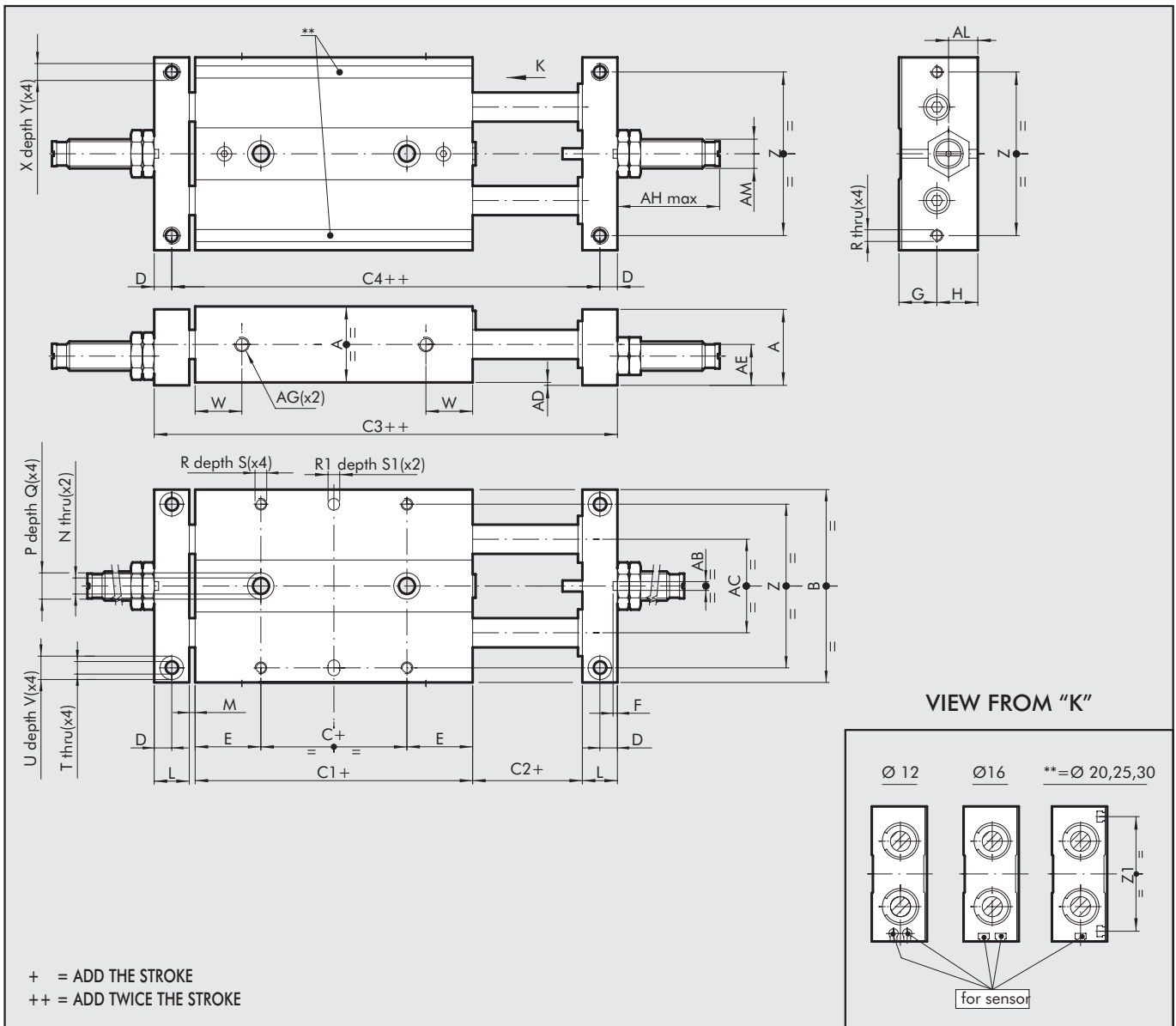
Ø	U	V	W	X	Y	Z	Z1	AB	AC	AD	AE	AF	AG	AH	AM	AL
12	6	3	28	M4	6	38	-	3	20	1	10	4	M5	M5	M8 x 1	7
16	8	4	33	M5	8	46	-	3	26	1	12	5	M5	M6	M10 x 1	8.5
20	8	4	40	M5	10	56	54	3	30	1	14	5	M5	M8	M10 x 1	9
25	9	5	42	M6	6	66	64	5	39	1	17	6	M5	M10	M12 x 1	10
30	9	5	50	M6	12	86	82	5	52	1	19	6	G 1/8	M12	M14 x 1.5	12

- Strokes for bore 12 mm 25; 50; 75
- Strokes for bore 16 mm 25; 50; 75; 100
- Strokes for bore 20 mm 25; 50; 75; 100; 125
- Strokes for bore 25 mm 25; 50; 75; 125; 150
- Strokes for bore 30 mm 25; 50; 75; 125; 150



DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS WITH SHOCK ABSORBERS SERIES S11 - Ø 12-30

1



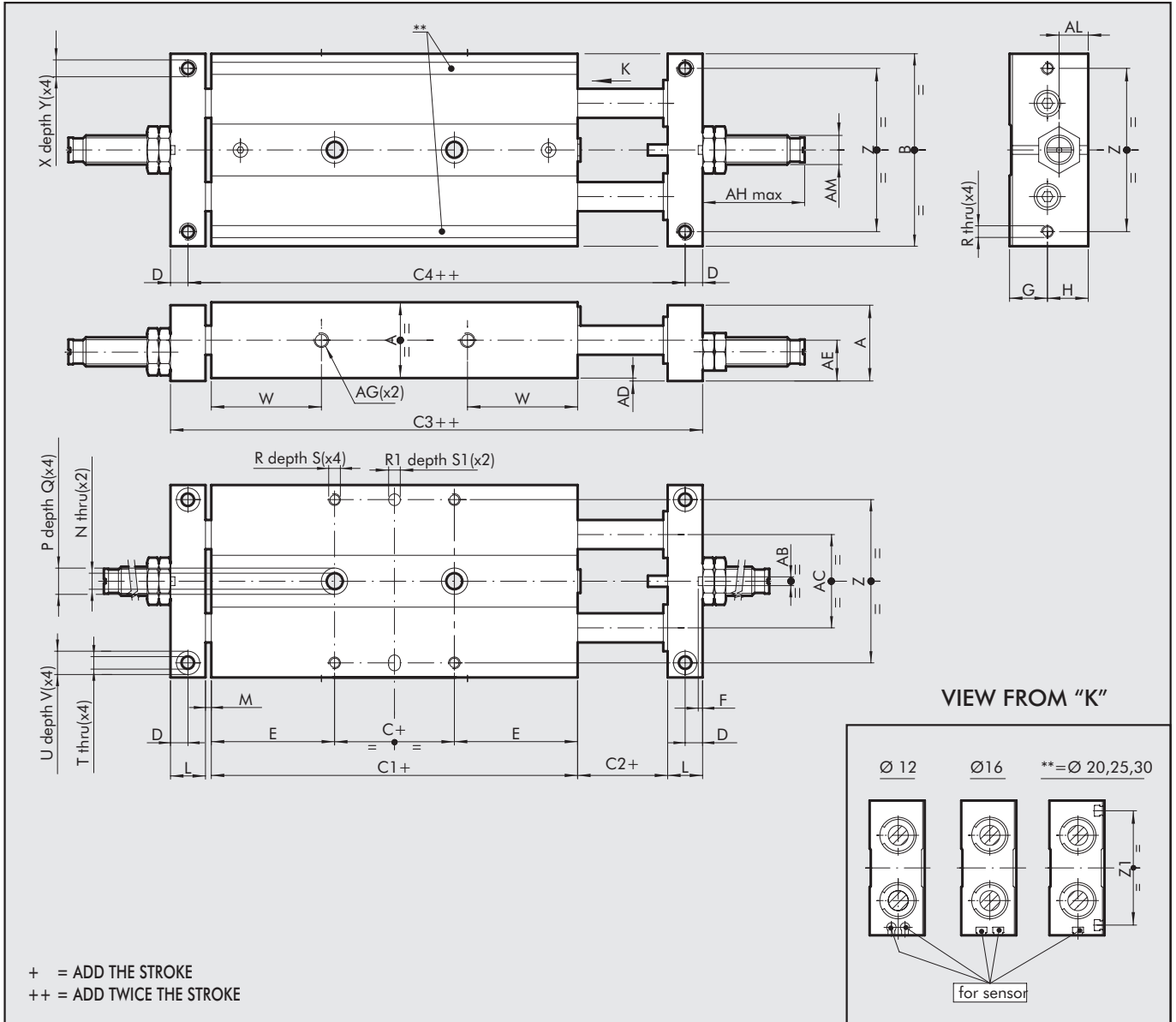
Codes	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450124...*	12	18	46	5	45	2	65	57	4	20	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450164...*	16	22	56	10	50	2	74	64	5	20	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450204...*	20	26	66	10	55	2	83	71	6	22.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450254...*	25	32	78	10	60	2	92	78	7	25	2.5	16	17	14	2	6.5	10.5	6	M5	4	7	3	5.2
W1450304...*	30	36	98	10	70	2	106	90	8	30	2.5	18	19	16	2	8.5	14	8	M6	6	8	5	5.2

*Enter required stroke

Ø	U	V	W	X	Y	Z	Z1	AB	AC	AD	AE	AF	AG	AH	AM	AL
12	6	3	14	M4	6	38	-	3	20	1	10	4	M5	30	M8 x 1	7
16	8	4	15	M5	8	46	-	3	26	1	12	5	M5	35	M10 x 1	8.5
20	8	4	16	M5	10	56	54	3	30	1	14	5	M5	35	M10 x 1	9
25	9	5	19	M6	12	66	69	5	39	1	17	6	M5	36	M12 x 1	10
30	9	5	21	M6	12	86	82	5	52	1	19	6	G 1/8	60	M14 x 1.5	12

Strokes for bore 12 mm	25; 50; 75
Strokes for bore 16 mm	25; 50; 75; 100
Strokes for bore 20 mm	25; 50; 75; 100; 125
Strokes for bore 25 mm	25; 50; 75; 125; 150
Strokes for bore 30 mm	25; 50; 75; 125; 150

DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS, BALL BEARING VERSION WITH SHOCK ABSORBERS SERIES S11 - Ø 12-30 mm



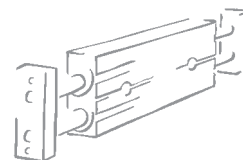
Codes	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450125...*	12	18	46	5	71	2	91	83	4	33	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450165...*	16	22	56	10	85	2	109	99	5	37.5	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450205...*	20	26	66	10	99	2	127	115	6	44.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450255...*	25	32	78	10	105	2	137	123	7	47.5	2.5	16	17	14	2	6.5	10.5	6	M5	4	7	3	5.2
W1450305...*	30	36	98	10	128	2	164	148	8	59	2.5	18	19	16	2	8.5	14	8	M6	6	8	5	5.2

*Enter required stroke

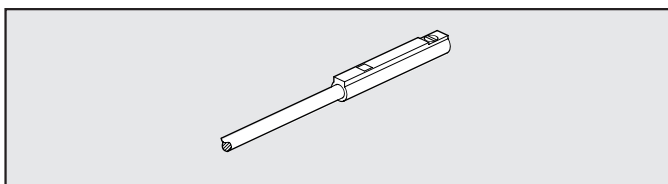
Ø	U	V	W	X	Y	Z	Z1	AB	AC	AD	AE	AF	AG	AH	AM	AL
12	6	3	28	M4	6	38	-	3	20	1	10	4	M5	30	M8 x 1	7
16	8	4	33	M5	8	46	-	3	26	1	12	5	M5	35	M10 x 1	8.5
20	8	4	40	M5	10	56	54	3	30	1	14	5	M5	35	M10 x 1	9
25	9	5	42	M6	6	66	64	5	39	1	17	6	M5	36	M12 x 1	10
30	9	5	50	M6	12	86	82	5	52	1	19	6	G 1/8	60	M14 x 1.5	12

Strokes for bore 12 mm	25; 50; 75
Strokes for bore 16 mm	25; 50; 75; 100
Strokes for bore 20 mm	25; 50; 75; 100; 125
Strokes for bore 25 mm	25; 50; 75; 125; 150
Strokes for bore 30 mm	25; 50; 75; 125; 150

ACCESSORIES



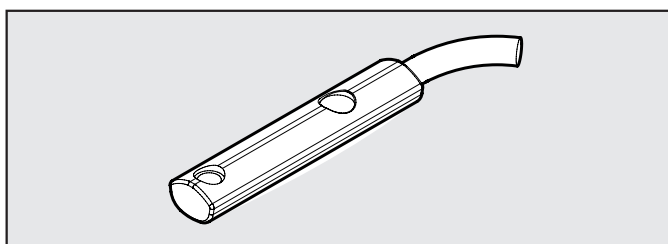
MAGNETIC SENSOR Ø 4, FOR SLIDE S11 Ø12



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

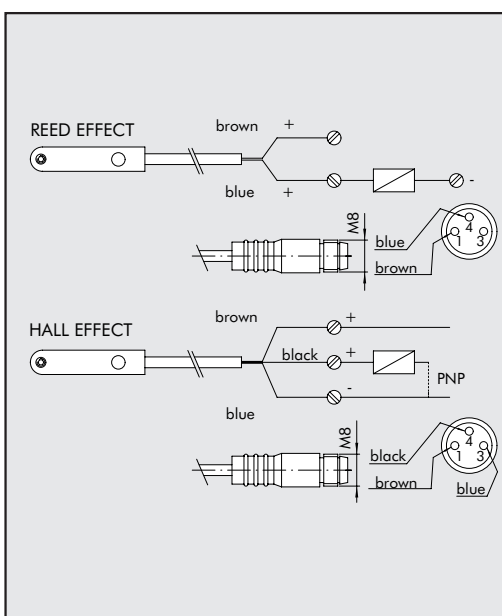
RETRACTABLE SENSOR WITH INSERTION FROM ABOVE, FOR SLIDE S11 Ø16÷30



Code	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.

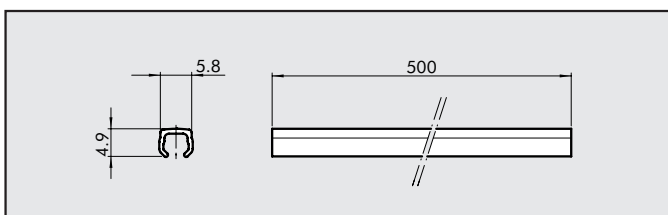
WIRING DIAGRAM



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	≤ 5	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 ta 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

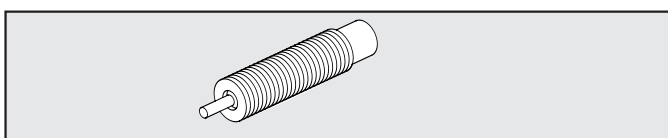
BAR FOR GROOVING



Code	Description
W0950000160	BAR FOR GROOVING L=500 mm

Note: the code corresponds to 1 piece

SHOCK ABSORBERS



Code	Ø	Description
0950004001	ø12	Shock absorbers PM8 MC2 + nut M8x1
0950004002	ø16-20	Shock absorbers PM10 MF2 + nut M10x1
0950004003	ø25	Shock absorbers PR015 MF1 + nut M12x1
0950004004	ø30	Shock absorbers PR025 MC2 + nut M14x1.5