

TWIN CYLINDER SLIDE WITH FIXED BODY SERIES S11

METAL WORK[®]
P N E U M A T I C

There are two sliding systems available:

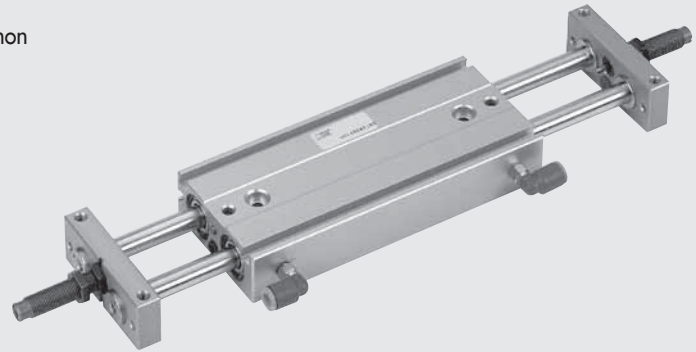
- on bushes
- on ball bearings

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

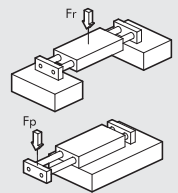
There are 5 bores available:

2 x Ø 12; 2 x Ø 16; 2 x Ø 20; 2 x Ø 25 and 2 x Ø 30.

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



TECHNICAL DATA		S11-12	S11-16	S11-20	S11-25	S11-30
Fluid		20 µm filtered air				
Pressure range	bar	1.5 to 7				
	MPa	0.15 to 0.7				
	psi	43.5 to 101				
Temperature range	°C	-10 to +80				
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	50	50	50	50
		75	75	75	75	75
		-	100	100	100	100
		-	-	125	125	125
		-	-	-	150	150
Weight = X + (Y · C) where C = stroke	kg					
• Bushes version		X = 0.14	X = 0.25	X = 0.5	X = 0.7	X = 1.24
		Y = 0.002	Y = 0.0035	Y = 0.045	Y = 0.007	Y = 0.01
• Ball bearing version		X = 0.25	X = 0.37	X = 0.78	X = 1.04	X = 1.98
		Y = 0.002	Y = 0.0035	Y = 0.045	Y = 0.007	Y = 0.01
Theoretical thrust (P = relative pressure in bar)	N	16.9 x P	30 x P	47 x P	75 x P	101 x P
Max. loads		(The values shown refer to the min. and max. strokes)				
• Bushes version	N	Fr: 13 to 5 Fp: 6 to 3	Fr: 35 to 6.5 Fp: 11 to 3	Fr: 58 to 7 Fp: 18 to 5	Fr: 80 to 8 Fp: 23 to 6	Fr: 130 to 18 Fp: 50 to 8
	N	Fr: 7 to 3 Fp: 4 to 1.5	Fr: 20 to 4 Fp: 4 to 1.5	Fr: 35 to 4.5 Fp: 12 to 3	Fr: 50 to 5.4 Fp: 15 to 3.5	Fr: 80 to 12 Fp: 20 to 4.5
• Ball bearing version	N	Fr: 7 to 3 Fp: 4 to 1.5	Fr: 20 to 4 Fp: 4 to 1.5	Fr: 35 to 4.5 Fp: 12 to 3	Fr: 50 to 5.4 Fp: 15 to 3.5	Fr: 80 to 12 Fp: 20 to 4.5

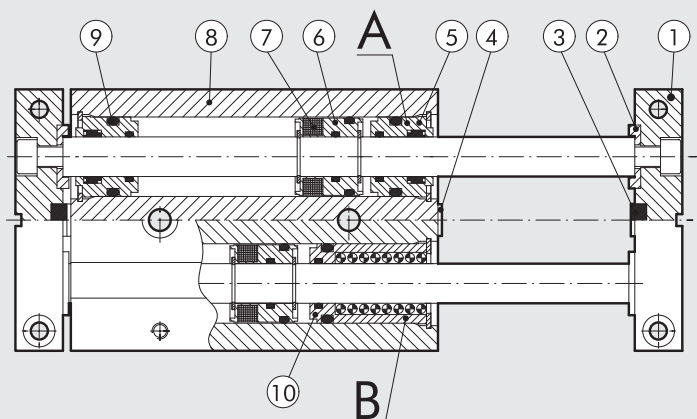


COMPONENTS

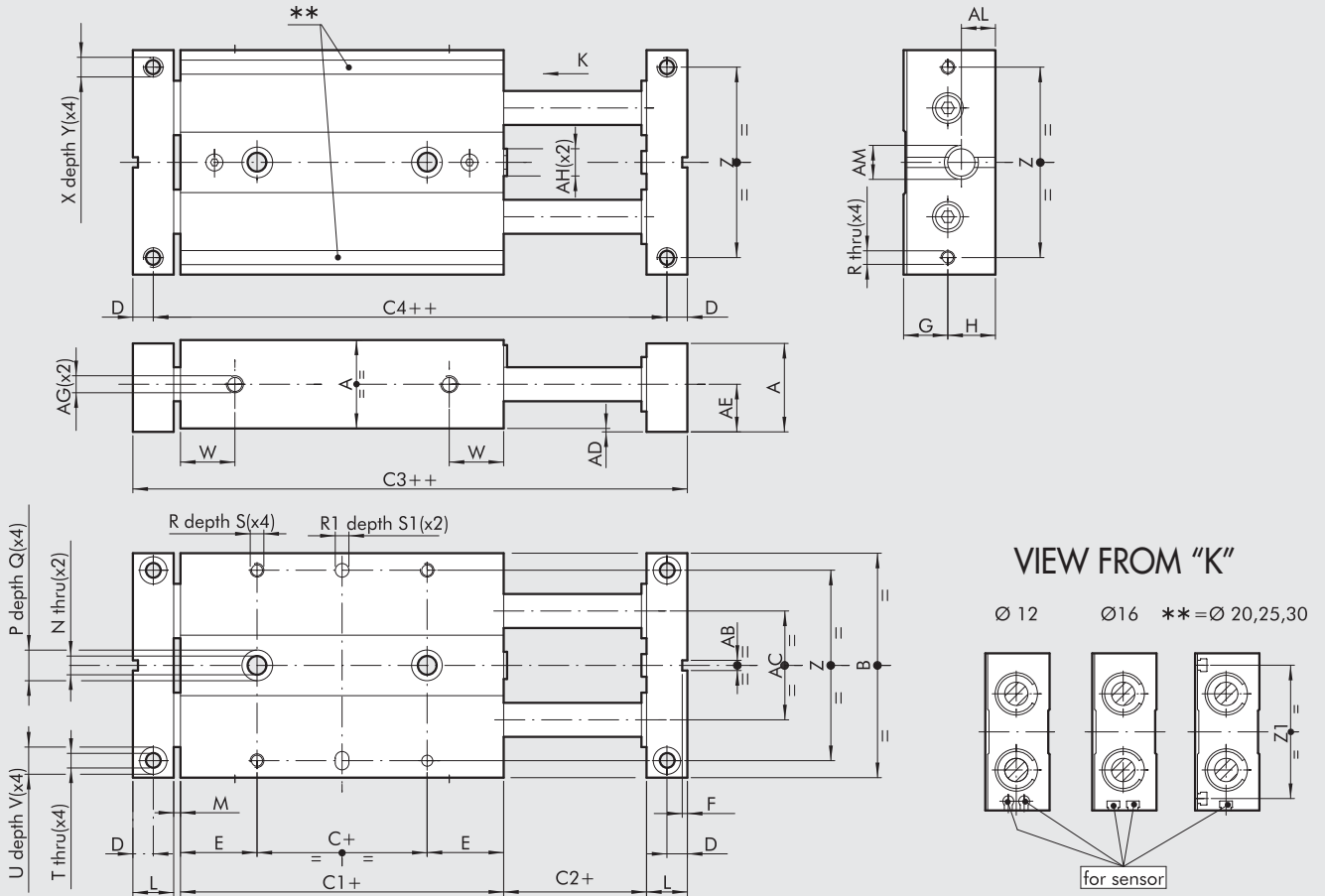
- ① FLANGE: anodized aluminium
- ② WASHER: steel
- ③ BUFFER: rubber
- ④ ADJUSTABLE STRIKER PLATE: Zinc-plated steel
- ⑤ BASE: brass
- ⑥ PISTON: brass
- ⑦ MAGNET: plastoferrite
- ⑧ CYLINDER BODY: anodized aluminium
- ⑨ STATIC O-RINGS: NBR
- ⑩ BUSH: ball bearing

VERSIONS:

- Ⓐ With sliding bushes
- Ⓑ With ball bearing bushes



DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS SERIES S11, ON BUSHES Ø 12 to 30



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

Code	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

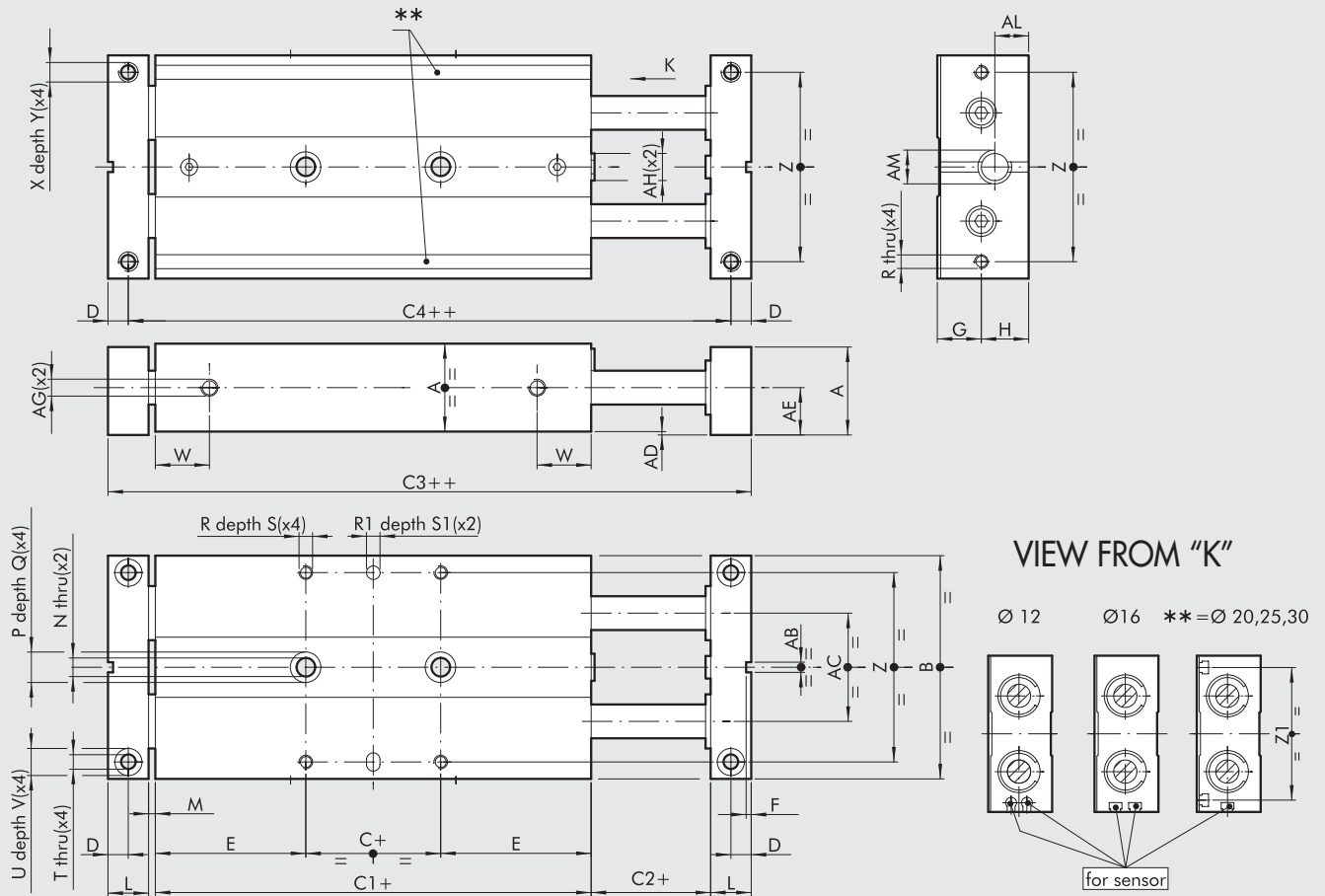
Ø	U	V	W	X	Y	Z	Z1	AB	AC	AD	AE	AF	AG	AM	AL
12	6	3	14	M4	6	38	-	3	20	1	10	4	M5	M8x1	7
16	8	4	15	M5	8	46	-	3	26	1	12	5	M5	M10x1	8.5
20	8	4	16	M5	10	56	54	3	30	1	14	5	M5	M10x1	9
25	9	5	19	M6	12	66	64	5	39	1	17	6	M5	M12x1	10
30	9	5	21	M6	12	86	82	5	52	1	19	6	G 1/8	M14x1.5	12

...Enter the stroke in mm (e.g. Ø 12 stroke 50 = W1450122050)

- 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; 100; 125; 150
- Strokes for bore 30 mm: 25; 50; 75; 100; 125; 150

DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS SERIES S11, ON BALL BEARINGS Ø 12 to 30

ACTUATORS
TWIN CYLINDER SLIDE WITH FIXED BODY SERIES S11



+ = ADD THE STROKE
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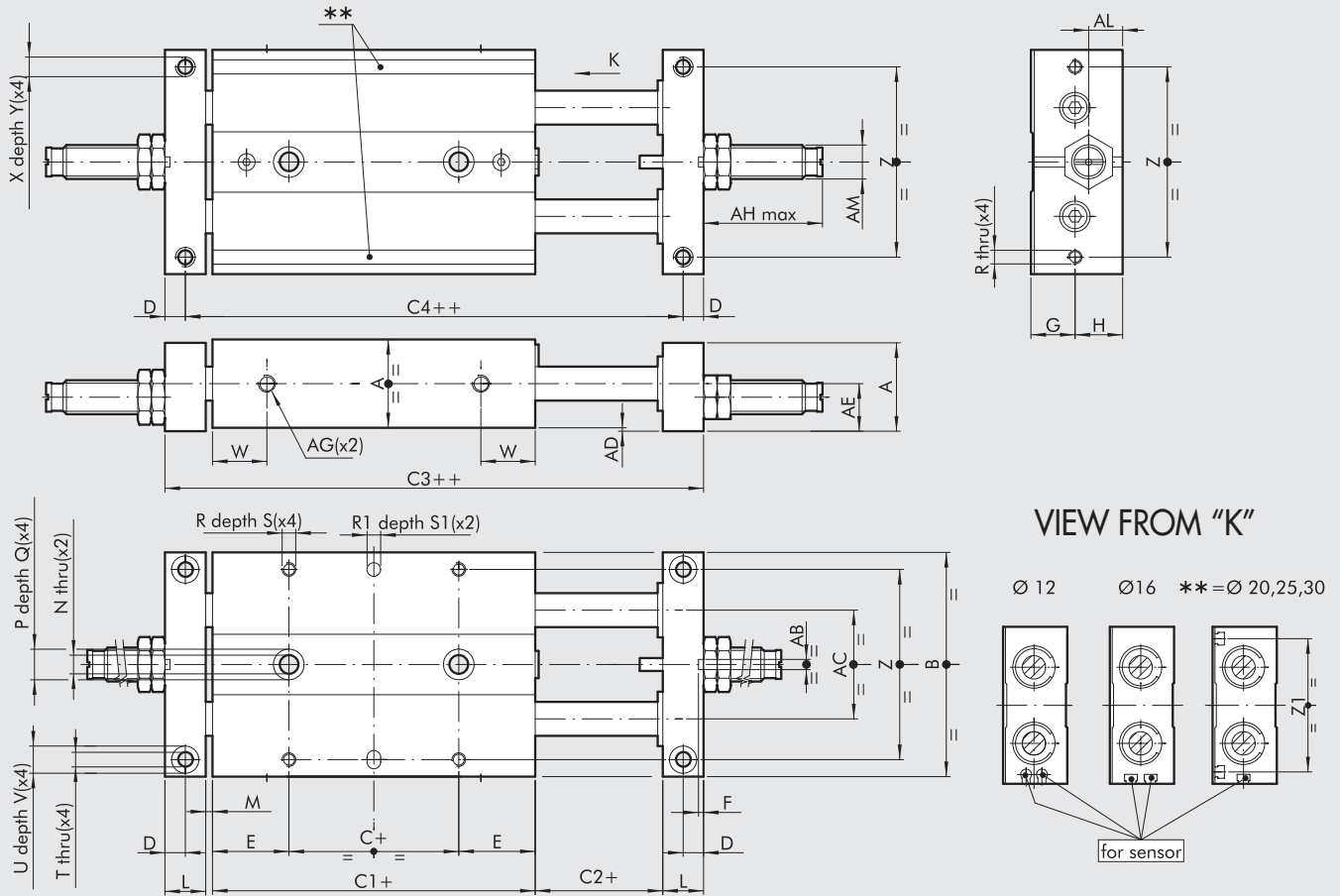
Code	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450123...	12	18	46	5	71	2	91	83	4	33	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450163...	16	22	56	10	85	2	109	99	5	37.5	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450203...	20	26	66	10	99	2	127	115	6	44.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450253...	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

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	M8x1	7
16	8	4	33	M5	8	46	-	3	26	1	12	5	M5	M6	M10x1	8.5
20	8	4	40	M5	10	56	54	3	30	1	14	5	M5	M8	M10x1	9
25	9	5	42	M6	6	66	64	5	39	1	17	6	M5	M10	M12x1	10
30	9	5	50	M6	12	86	82	5	52	1	19	6	G 1/8	M12	M14x1.5	12

...Enter the stroke in mm (e.g. Ø 12 stroke 50 = W1450123050)

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

DIMENSIONS OF TWIN-CYLINDER GUIDE UNITS WITH SHOCK ABSORBERS SERIES S11, ON BUSHES Ø 12 to 30



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

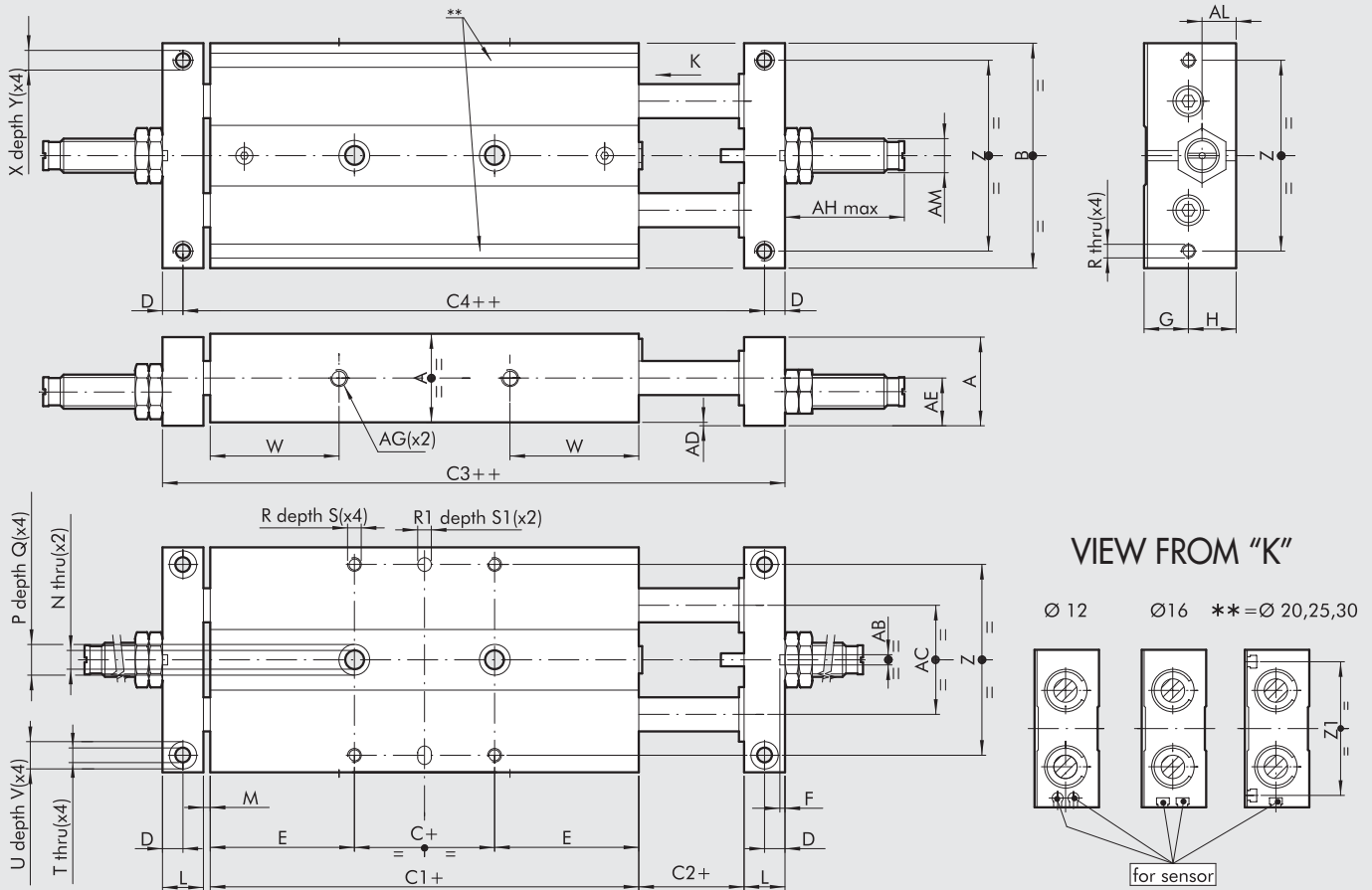
Code	Ø	A	B	C	C1	C2	C3	C4	D	E	F	G	H	L	M	N	P	Q	R	R1 ^{H7}	S	S1	T
W1450124...	12	18	46	5	45	2	65	57	4	20	1.5	9	10	8	2	4.3	8	4	M3	4	5	3	3.3
W1450164...	16	22	56	10	50	2	74	64	5	20	1.5	11	12	10	2	4.3	8	4	M4	4	6	3	4.3
W1450204...	20	26	66	10	55	2	83	71	6	22.5	1.5	13	14	12	2	5.5	9	5	M4	4	7	3	4.3
W1450254...	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

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	M8x1	7
16	8	4	15	M5	8	46	-	3	26	1	12	5	M5	35	M10x1	8.5
20	8	4	16	M5	10	56	54	3	30	1	14	5	M5	35	M10x1	9
25	9	5	19	M6	12	66	69	5	39	1	17	6	M5	36	M12x1	10
30	9	5	21	M6	12	86	82	5	52	1	19	6	G 1/8	60	M14x1.5	12

...Enter the stroke in mm (e.g. Ø 12 stroke 50 = W1450124050)

- 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; 100; 125; 150
- Strokes for bore 30 mm: 25; 50; 75; 100; 125; 150

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



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

Code	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

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	M8x1	7
16	8	4	33	M5	8	46	-	3	26	1	12	5	M5	35	M10x1	8.5
20	8	4	40	M5	10	56	54	3	30	1	14	5	M5	35	M10x1	9
25	9	5	42	M6	6	66	64	5	39	1	17	6	M5	36	M12x1	10
30	9	5	50	M6	12	86	82	5	52	1	19	6	G 1/8	60	M14x1.5	12

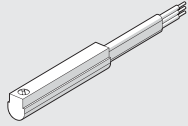
...Enter the stroke in mm (e.g. Ø 12 stroke 50 = W1450125050)

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

ACCESSORIES

SENSOR Ø 4, FOR SLIDE S11 Ø 12

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

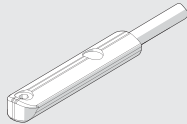
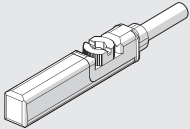


RETRACTABLE SENSOR, FOR SLIDE S11 Ø16 to 30

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

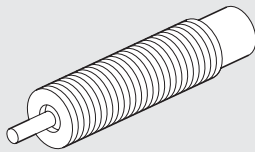
SENSOR, SQUARE TYPE
Latest generation,
secure fixing

SENSOR, OVAL TYPE
Traditional



SPARE PARTS

SHOCK ABSORBERS



Code	Ø	Description
0950004001	12	Shock absorbers ECO 8 MC2 + nut M8x1
0950004002	16 - 20	Shock absorbers ECO 10 MF2 + nut M10x1
0950004003	25	Shock absorbers ECO 15 MF1 + nut M12x1
0950004004	30	Shock absorbers ECO 25 MC2 + nut M14x1.5

NOTES