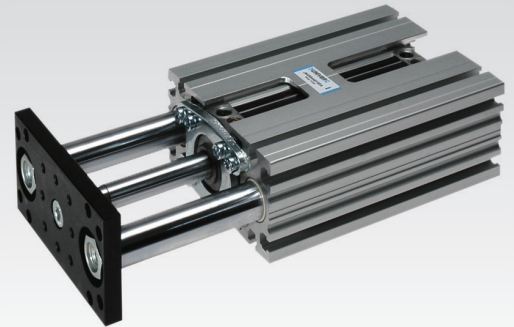


# J

## Slide Units for pneumatic cylinders

Slide units suitable for:

- ISO 6432 cylinders M series Ø 16÷25 and ISO 15552 cylinders K/KD/KE series Ø 32÷100
- Rodless cylinders S1 series Ø 25÷50
- STRONG compact cylinders RS series Ø 32÷100
- 2 stage telescopic cylinders RT2 series Ø 32÷63



### TECHNICAL CHARACTERISTICS

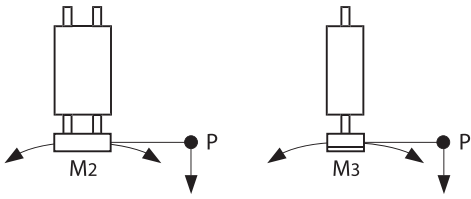
<b>Ambient temperature</b>	-20 ÷ 80 °C			
<b>Fluid</b>	filtered air, with or without lubrication			
	<b>M - K - KD - KE</b>	<b>S1</b>	<b>RS</b>	<b>RT2</b>
<b>Working pressure</b>	2 ÷ 10 bar	3 ÷ 10 bar	2 ÷ 10 bar	2 ÷ 10 bar
<b>Size</b>	16 ÷ 100	40 ÷ 80	32 ÷ 63	32 ÷ 63
<b>Standard strokes</b>	25 ÷ 1000 mm	Max 800 mm	15 ÷ 800 mm	120 ÷ 1200 mm

**For min. and max. strokes refer to related codification key**

### CONSTRUCTIVE CHARACTERISTICS

<b>Body</b>	extruded anodized aluminium
<b>Shafts</b>	hollow, chromium-plated steel
<b>Guide bush for shafts</b>	self-lubricating in special steel
<b>Shaft scraper seals</b>	polyurethane
<b>Flange</b>	steel
<b>Accident prevention stopping space</b>	25 mm for all models (according to European standards EN 349)

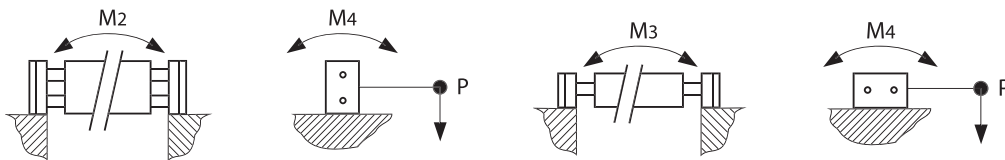
Maximum moment of resistance (Nm)



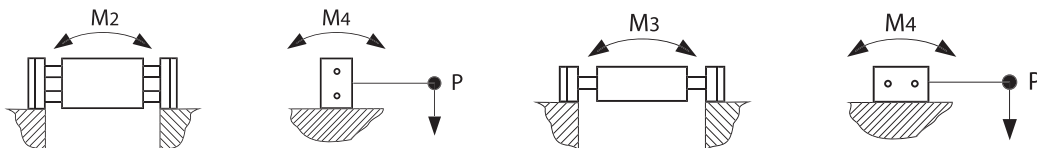
Size	J10	J11	J12	J14	J16	J64
	M2 = M3					
16	3,2	6,4	11	7,4	11	-
25	6	13,2	23,6	17,8	23,6	-
32	12,2	27,2	49	37,4	49	37,4
40	17,8	36,8	73,6	51	73,6	51
50	24,8	56	107,8	78	107,8	78
63	35,2	85,6	156,8	114	156,8	114
80	52	136	248	173,2	248	173,2
100	52	160	298	173,2	298	173,2



Size	J16		J18		J19		J16 = J18 - J19
	M2	M3	M2	M3	M2	M3	M4
16	12,8	8,8	10,4	4,4	12,8	8,8	9,4
25	28	19	22,2	8,6	28	19	20,4
32	55,6	38,8	45,2	17	55,6	38,8	39,8
40	80	59,4	58,5	22,6	80	59,4	53,8
50	121	75,2	92	33,4	121	75,2	85,6
63	173,6	122,6	135,2	52	173,6	122,6	123,4
80	270,2	196	204,2	84	270,2	196	186
100	318,6	245,6	230,8	109,2	318,6	245,6	203,2



Size	J17 = J67														J17 = J67
	M2							M3							M4
	Stroke (mm)														Stroke (mm)
	100	200	300	400	500	750	1000	100	200	300	400	500	750	1000	100 ÷ 1000
16	30,4	48,4	58	84,8	103	148,8	194,8	29	47,4	70	84,2	102,6	148,6	194,6	9,4
25	56,8	114	114	143,2	172,4	246	320	53	82,6	112	141,8	171,4	245,4	320	20,4
32	89,4	133	178	222	270	386	502	80	126,8	173,6	220	267,2	384	500	39,8
40	117	169,2	223,6	279	334,4	474,8	616	104	160,6	217,4	274	330	472	614	53,8
50	161,4	230	301,4	373,2	446	630	816	138	212,8	287,2	361,6	436	622	808	85,6
63	228	312	402	493	586	818	1102	192,8	288	383	478	573	810	1048	123,4
80	328,6	434	550,4	668	788,8	1091,2	1398	270	394	518	642	766	1076	1386	186
100	349,6	456	570	687	806	1108,6	1414	284	408	532	656	780	1090	1400	203,2

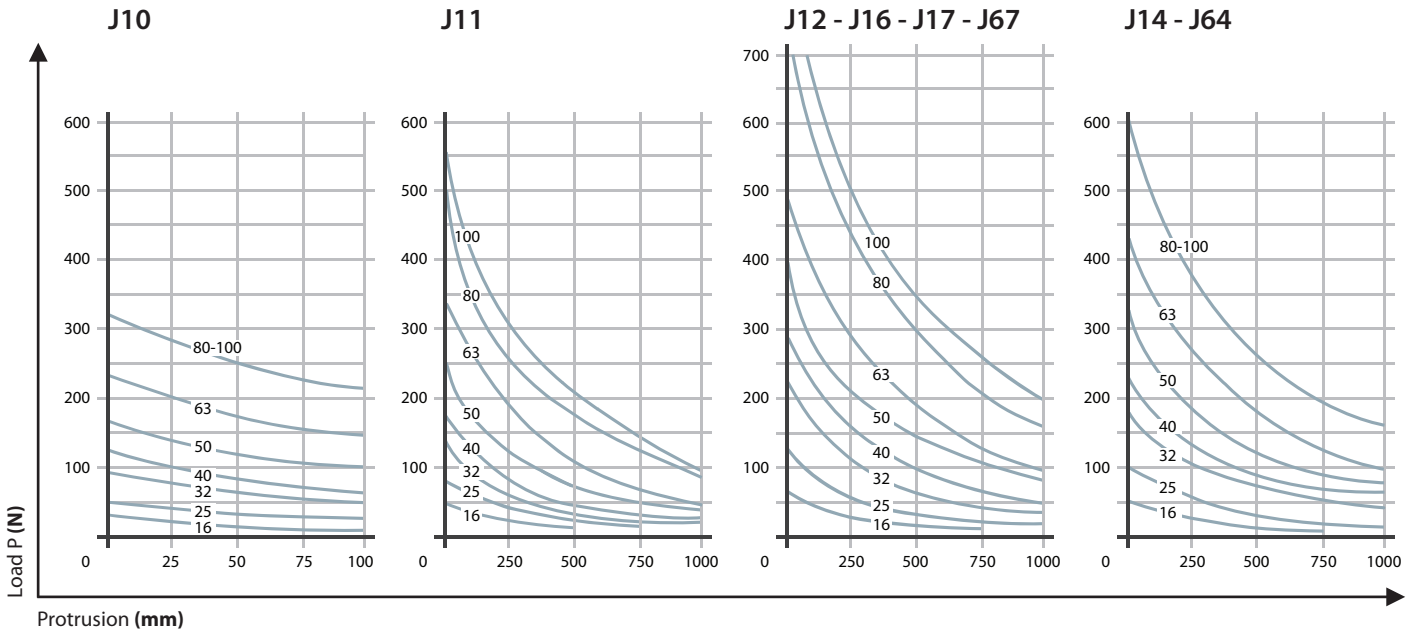
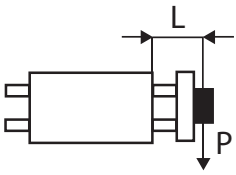


Size	Ø	Rodless Cylinders Nm				Rodless Cylinders Nm	
		Standard carriage J30		Long carriage J31		Standard carriage J30 / Long carriage J31	
		M2	M3	M2	M3	M4	
40	25	68,4	42,4	110,2	96,2	53,8	
50	32	118,4	81,8	198	178,6	85,6	
63	40	192,2	147,2	315	289,8	123,4	
80	50	298,2	233,2	516	481,2	186	

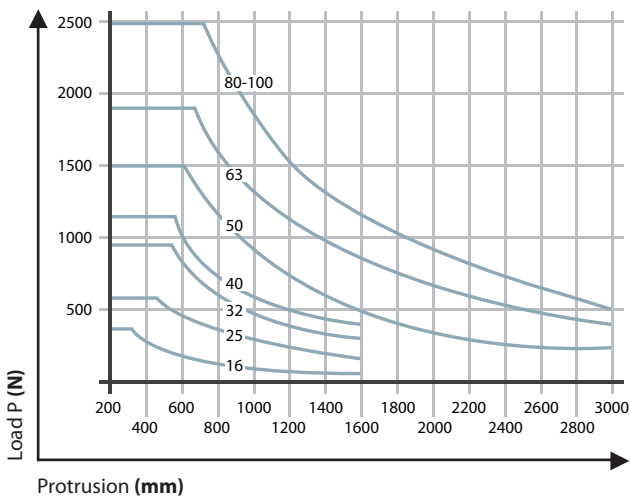
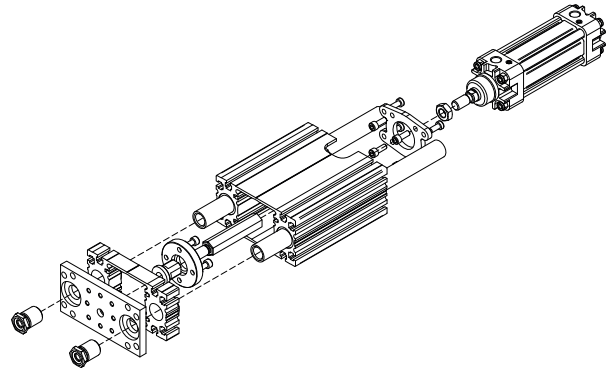
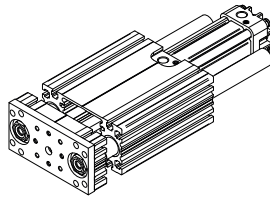
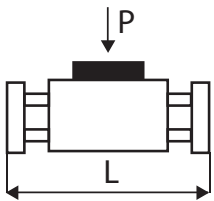
1

Payload diagrams based on slide unit length

In case there are protruding loads generating torque, the load and maximum torque values have to be reduced to 75%.



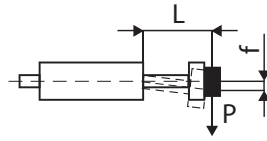
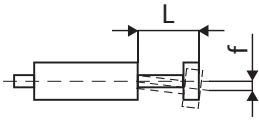
J16 - J18 - J19 - J67



P = Payload center of gravity

L = Protrusion

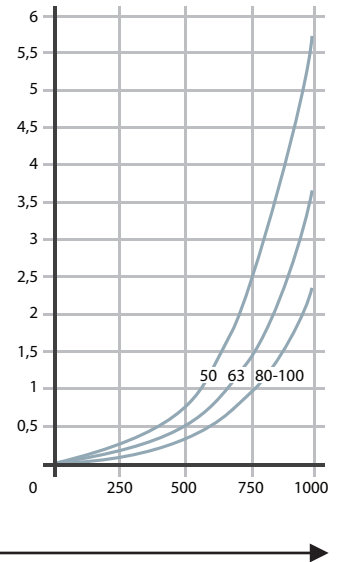
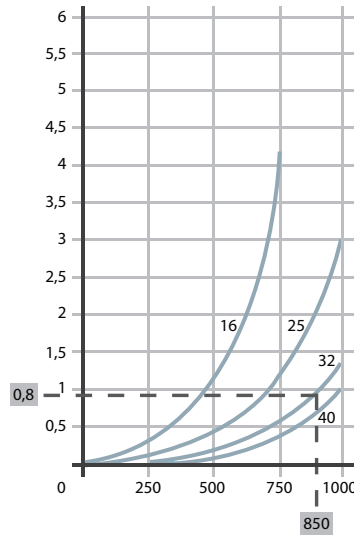
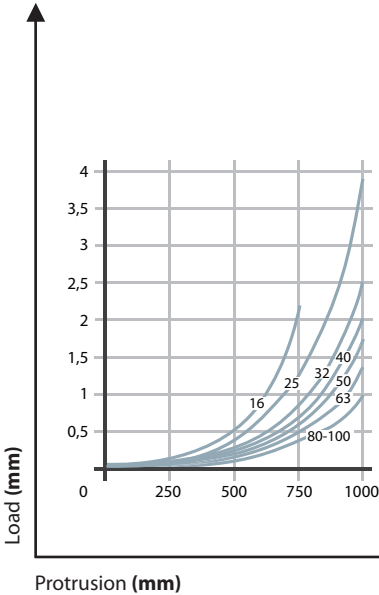
Payload diagram based on slide unit length  
**J10 - J11 - J12 - J14 - J16 - J17 - J64**



Deflection under its own weight

Deflection with 10 N load

Deflection with 100 N load



## Examples of application

### How to calculate deflection

The total deflection of the slide units is calculated by summing deflection under its own weight to deflection caused by the load.  
 For loads other than 10 or 100 N (as stated in the charts) deflection is calculated by multiplying the figure of chart (K) by the following formula:

$$f = K \cdot \frac{Q \text{ (applied load)}}{10 \text{ N o } 100 \text{ N}}$$

**Example:** slide unit size 32, length L 850 mm and load Q of 25 N.  
 On the chart showing deflection with 10 N load, we get coefficient 0,8 (marked with negative print) then:

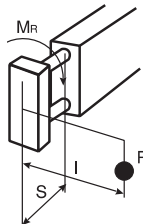
$$f = 0,8 \cdot \frac{25}{10} = 2 \text{ mm}$$

The figure obtained must be added to the corresponding figure of the slide unit deflection under the unit's own weight.

### Example:

Slide unit Ø 63 Mod. J11  
 S = 500 mm (load protrusion)  
 Max allowed load =  $100 \cdot 0,75 = 75 \text{ N}$   
 Max allowed torque =  $61,7 \cdot 0,75 = 46,3 \text{ Nm}$

### Max moment of resistance MR



Ø	MR	Ø	MR
	Nm		Nm
16	4,7	50	42,8
25	10,2	63	61,7
32	19,9	80	93
40	26,9	100	101,6

### How to calculate torque

To calculate torque MR the load P(N) must be multiplied by the arm I (mm)

$$MR = P \cdot I$$

The figure obtained must be within MR values, as stated above: should it exceed these values, a slide unit of a bigger size must be used.

Slide units with M - K cylinder

Slide unit mass J10..A, J11..A, J12..A, J12..B, J16..A, J16..B, J18..A, J19..A

Slide unit	Cylinder	Mass at 0 stroke g								
Size	Ø	Slide unit								Increase
		J10..A	J11..A	J12..A	J12..B	J16..A	J16..B	J18..A	J19..A	mm
16	16	501	593	658	-	758	-	709	773	1,53
25	25	828	958	1108	1500	1230	1566	1112	1252	3,07
32	32	1570	1810	2112	3033	2495	3406	2195	2478	4,87
40	40	2270	2610	3100	4078	3222	4198	2920	3415	6,05
50	50	3670	4220	4985	6725	5030	6760	4650	5415	8,46
63	63	5350	6630	8220	10127	8510	10779	7070	8560	10,48
80	80	8140	9420	11010	14988	11300	15618	9965	11350	14,16
100	100	10000	11300	12890	19605	13170	20240	11830	13215	15,92

Slide unit mass J14..A, J14..B, J17..A, J17..B

Slide unit	Cylinder	Mass at 0 stroke g				
Size	Ø	Slide unit				Increase
		J14..A	J14..B	J17..A	J17..B	mm
16	16	693	-	788	-	4,13
25	25	1155	1809	1451	2012	7,07
32	32	2090	3496	2435	4031	10,87
40	40	2940	4703	3004	5043	13,05
50	50	4690	6696	4600	7720	19,46
63	63	6820	11089	7730	10569	24,08
80	80	9610	15928	10530	15413	32,16
100	100	11520	20540	12420	20155	35,92

Slide units with KE cylinder

Slide unit mass J10..C, J11..C, J12..C, J12..D, J16..C, J16..D, J18..C, J19..C

Slide unit	Cylinder	Mass at 0 stroke g								
Size	Ø	Slide unit								Increase
		J10..C	J11..C	J12..C	J12..D	J16..C	J16..D	J18..C	J19..C	mm
32	32	1563	1798	2100	3021	2483	3394	2183	2466	4,57
40	40	2268	2602	3092	4070	3214	4190	2912	3407	5,87
50	50	3657	4199	4964	6704	5009	6739	4629	5394	7,99
63	63	5318	6588	8178	10085	8468	10737	7028	8518	9,61
80	80	8074	9341	10931	14909	11221	15539	9886	11271	12,72
100	100	9875	11161	12751	19466	13031	20101	11691	13076	13,52

Slide unit mass J14..C, J14..D, J17..C, J17..D

Slide unit	Cylinder	Mass at 0 stroke g				
Size	Ø	Slide unit				Increase
		J14..C	J14..D	J17..C	J17..D	mm
32	32	2078	3484	2423	4019	10,57
40	40	2932	4695	2996	5035	12,87
50	50	4669	6675	4579	7699	18,99
63	63	6778	11047	7688	10527	23,21
80	80	9531	15849	10451	15334	30,72
100	100	11381	20401	12281	20016	33,52

## Slide Units with KD cylinder

### Slide units mass J10..E, J11..E, J12..E, J12..F, J16..E, J16..F, J18..E, J19..E

Slide unit	Cylinder	Mass at 0 stroke g								
Size	Ø	Slide unit								Increase
		J10..E	J11..E	J12..E	J12..F	J16..E	J16..F	J18..E	J19..E	mm
32	32	1595	1830	2132	3053	2515	3426	2215	2498	5,32
40	40	2307	2640	3130	4108	3252	4228	2950	3445	6,81
50	50	3740	4280	5045	6785	5090	6820	4710	5475	9,71
63	63	5381	6650	8240	10147	8530	10799	7090	8580	10,90
80	80	8276	9540	11130	15108	11420	15738	10085	11470	16,32
100	100	10189	11470	13060	19775	13340	20410	12000	13385	18,92

### Slide units mass J14..E, J14..F, J17..E, J17..F

Slide unit	Cylinder	Mass at 0 stroke g				
Size	Ø	Slide unit				Increase
		J14..E	J14..F	J17..E	J17..F	mm
32	32	2110	3516	2455	4051	11,32
40	40	2970	4733	3034	5073	13,81
50	50	4750	6756	4660	7780	20,71
63	63	6840	11109	7750	10589	24,50
80	80	9730	16048	10650	15533	34,32
100	100	11690	20710	12590	20325	38,92

## 1 Slide Units with STRONG cylinder

### Slide units mass J64/65, J64B, J67/66, J67B

Slide unit	Cylinder	Mass at 0 stroke g				
Size	Ø	Slide unit				Increase
		J64/65	J64B	J66/67	J67B	mm
32	32	1327	3274	1395	3525	11,17
40	40	1808	4261	1911	4548	13,81
50	50	2898	6734	3003	7142	20,31
63	63	4152	10043	4286	10590	24,85

## Slide Units with Telescopic cylinder

### Slide unit mass J64RT

Slide unit	Cylinder	Mass at 0 stroke g	
Size	Ø	Slide unit	Increase*
		J64RT	mm 1/2 stroke
32	32	1227	11,53
40	40	1665	13,56
50	50	2573	19,92
63	63	3885	24,62

\* = If stroke is 1000 mm, consider 500 mm

## Slide Units with Rodless cylinder

### Slide unit mass J30A, J31A

Slide unit	Cylinder	Mass at 0 stroke g		
Size	Ø	Slide unit		Increase
		J30A	J31A	mm
32	32	3640	4660	4,91
40	40	6123	4336	6,96
50	50	9140	11820	10,25
63	63	15825	21650	15,07

Slide Units for M, KE/K, KD series cylinders

J1



CODIFICATION KEY

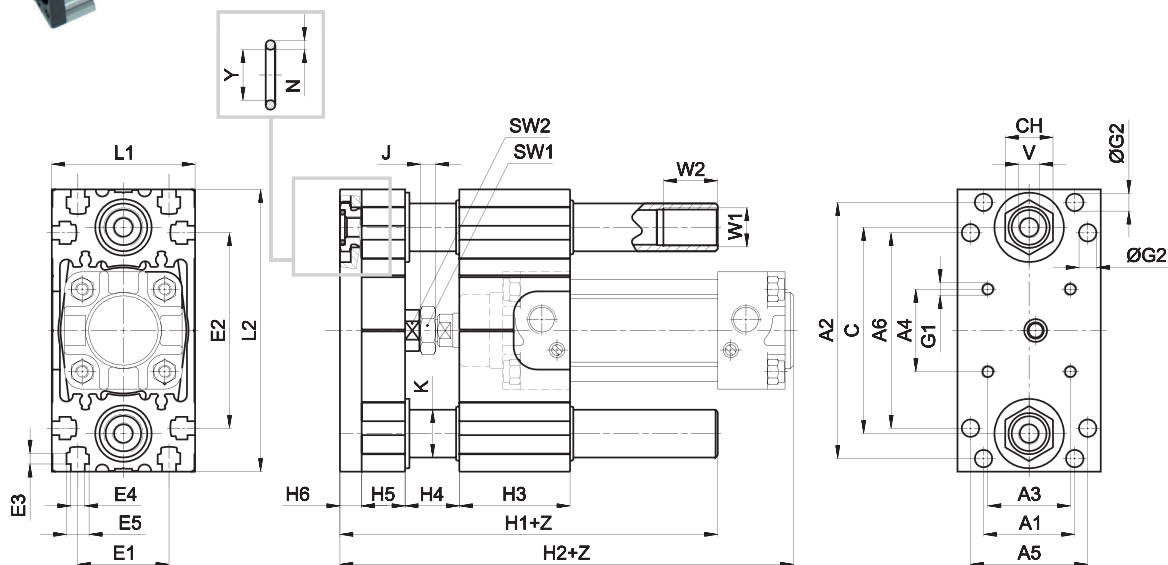
J	1	0	A	5	5	0	0	5	0	A
1	2	3	4	5	6				7	

1 Series	2 Type	3 Accessories	
J = Slide Unit	10 = Protruding shafts and short housing (recommended for strokes up to 50 mm) 11 = Protruding shafts and medium housing 12 = Protruding shafts and long housing 14 = Fully protected cylinder 16 = Central mounting (semi-external cylinder) 17 = Central mounting (fully protected cylinder) 18 = Medium moving housing (external cylinder) 19 = Long moving housing (external cylinder)	A = Shaft scrapers standard supplied	
4 Slide unit size	5 Cylinder bore (mm)	6 Cylinder stroke (mm)	7 Cylinder option
0 = 16 for Ø16 cylinders 2 = 25 for Ø25 cylinders 3 = 32 for Ø32 cylinders 4 = 40 for Ø40 cylinders 5 = 50 for Ø50 cylinders 6 = 63 for Ø63 cylinders 7 = 80 for Ø80 cylinders 8 = 100 for Ø100 cylinders	0 = Ø16 2 = Ø25 3 = Ø32 4 = Ø40 5 = Ø50 6 = Ø63 7 = Ø80 8 = Ø100	M 0025 - 0030 - 0040 - 0050 - 0075 0100 - 0125 - 0150 - 0160 - 0175 0200 - 0250 - 0300 - 0400 - 0500  KE/K - KD 0025 - 0050 - 0075 - 0080 - 0100 0125 - 0150 - 0160 - 0175 - 0200 0250 - 0300 - 0320 - 0400 - 0450 0500 - 0600 - 0700 - 0800 - 0900 1000	A = M150 series Ø16÷25 microcylinders K200 series Ø32÷100 cylinders B = M250 series Ø16÷25 microcylinders with locking unit K200 series Ø32÷100 cylinders with locking unit (only for J12, J14, J16, J17) C = KE200 series Ø 32÷100 cylinders D = KE200 series Ø 32÷100 cylinders with locking unit (only for J12, J14, J16, J17) E = KD200 series Ø32÷100 cylinders F = KD200 series Ø32÷100 cylinders with locking unit (only for J12, J14 and J16)

The slide units are supplied with safety distance (+25 mm) for accident prevention according to the European EN 349 specifications. Slide units are supplied with cushioned cylinders, which in the case of J10/J11/J12/J18/J19 are magnetic.

Slide units with protruding shafts

J10... with short housing (recommended for strokes up to 50 mm - 1 bearing)  
 J11... with medium housing (2 bearings)



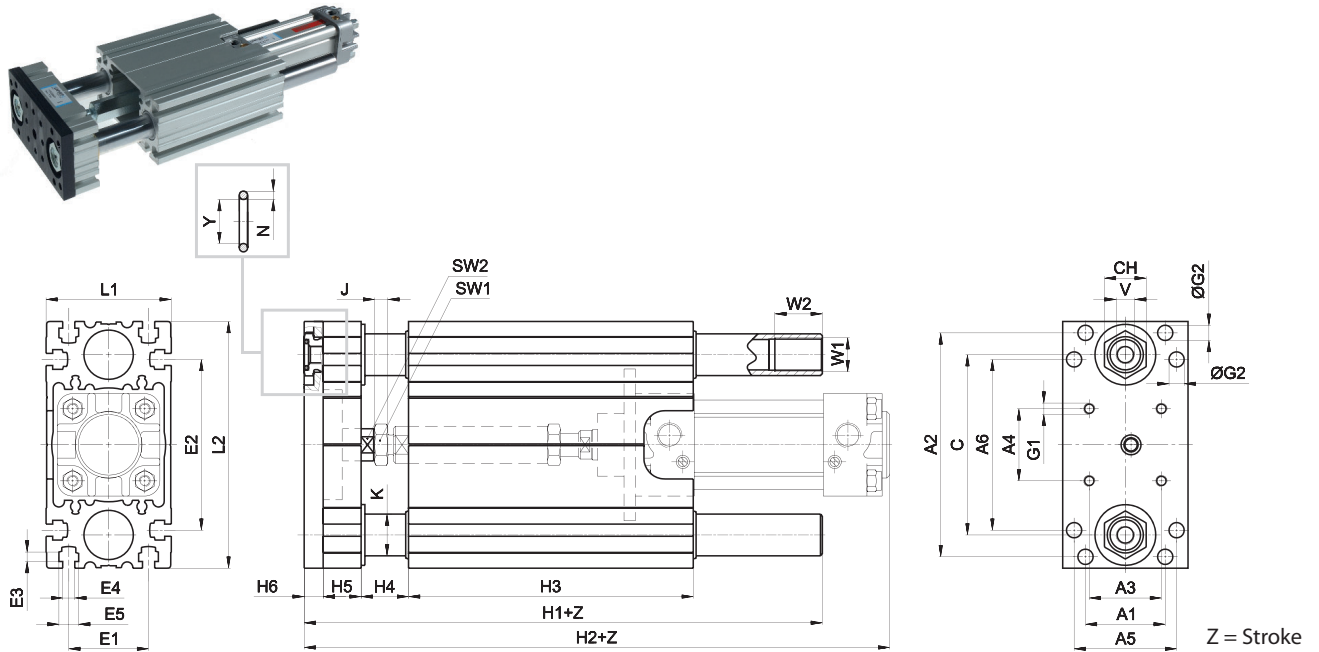
Z = Stroke

Slide unit	Cylinder	J10...						J11...					
Size	Ø	H1	H2	H3	H4	H5	H6	H1	H2	H3	H4	H5	H6
16	16	124	141	32	25	18	8	147	168	55	25	18	8
25	25	130	164	38	25	18	8	157	192	65	25	18	8
32	32	141	168	43	25	20	10	176	203	78	25	20	10
40	40	149	184	51	25	20	10	183	218,5	85	25	20	10
50	50	165	196	57	25	25	10	203	234,5	95	25	25	10
63	63	171,5	213	62,5	25	25	12	219,5	260,5	110	25	25	12
80	80	198,5	242	78,5	25	30	12	249,5	293,5	130	25	30	12
100	100	205,5	246	85	25	30	12	269,5	321	150	25	30	12

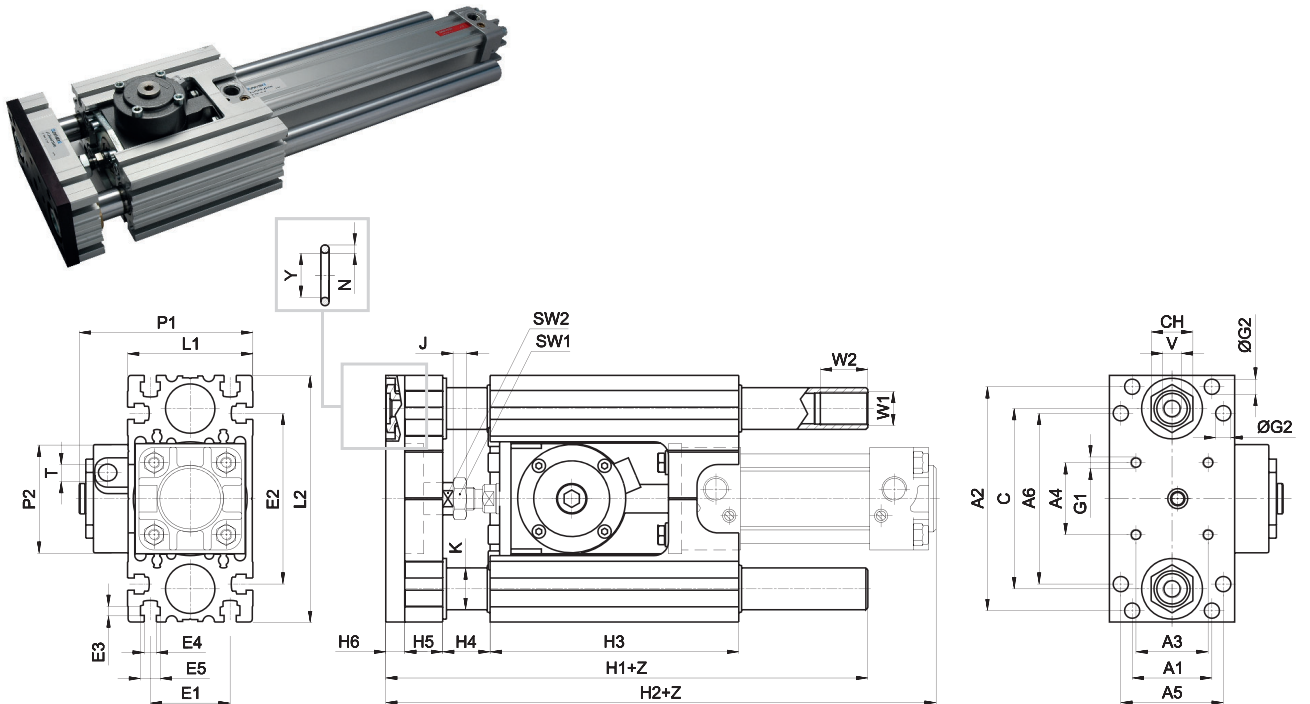
For missing standard dimensions look at the table at page 13



Slide units with protruding shafts  
J12...with long housing (2 bearings)



Slide units with protruding shafts  
J12...B with long housing, 2 bearings, with locking unit

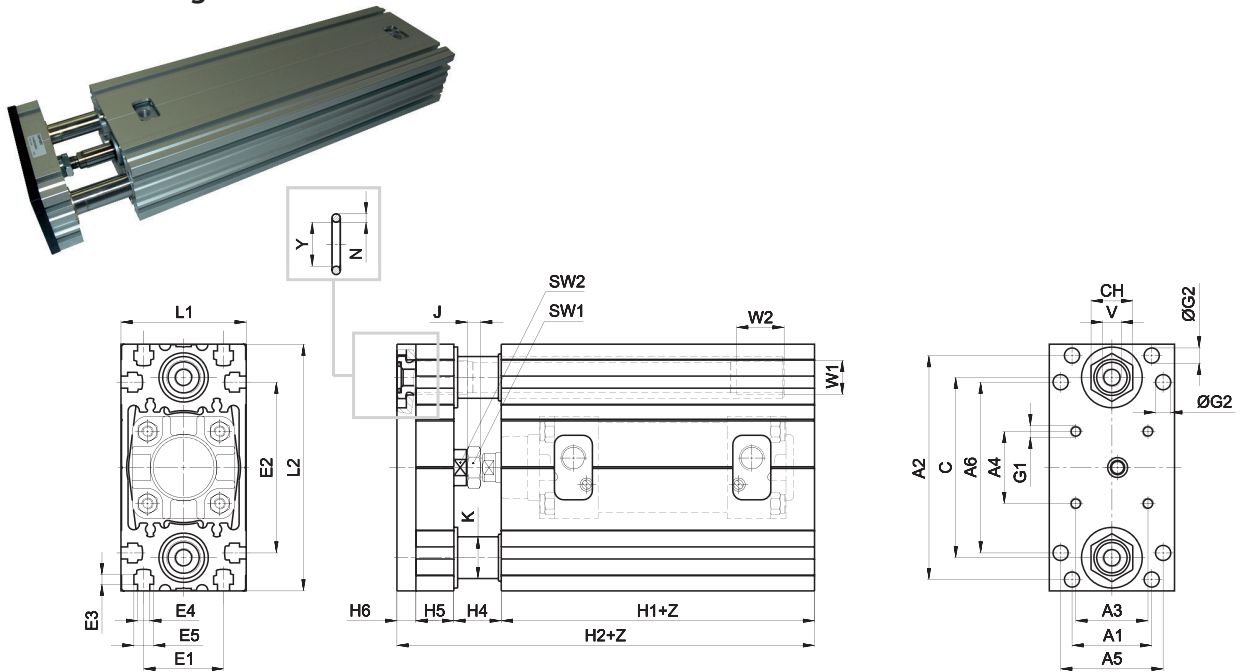


Slide unit	Cylinder	J12...						J12...B								
Size	Ø	H1	H2	H3	H4	H5	H6	H1	H2	H3	H4	H5	H6	P1	P2	T
16	16	172	193	80	25	18	8	-	-	-	-	-	-	-	-	-
25	25	192	227	100	25	18	8	186	220	94	25	18	8	77,5	40	G1/8
32	32	223	250	125	25	20	10	220	247	122	25	20	10	83,5	50	G1/8
40	40	248	283,5	150	25	20	10	229	265	131	25	20	10	91,5	58	G1/8
50	50	273	304,5	165	25	25	10	252	283	144	25	25	10	106,5	70	G1/8
63	63	294,5	329,5	185	25	25	12	271,5	313,5	163	25	25	12	129	85	G1/8
80	80	339,5	383,5	220	25	30	12	299,5	343	180	25	30	12	150	100	G1/8
100	100	379,5	431	260	25	30	12	339,5	385	220	25	30	12	185,5	116	G1/8

For missing standard dimensions look at the table at page 13

Slide unit with fully protected cylinder

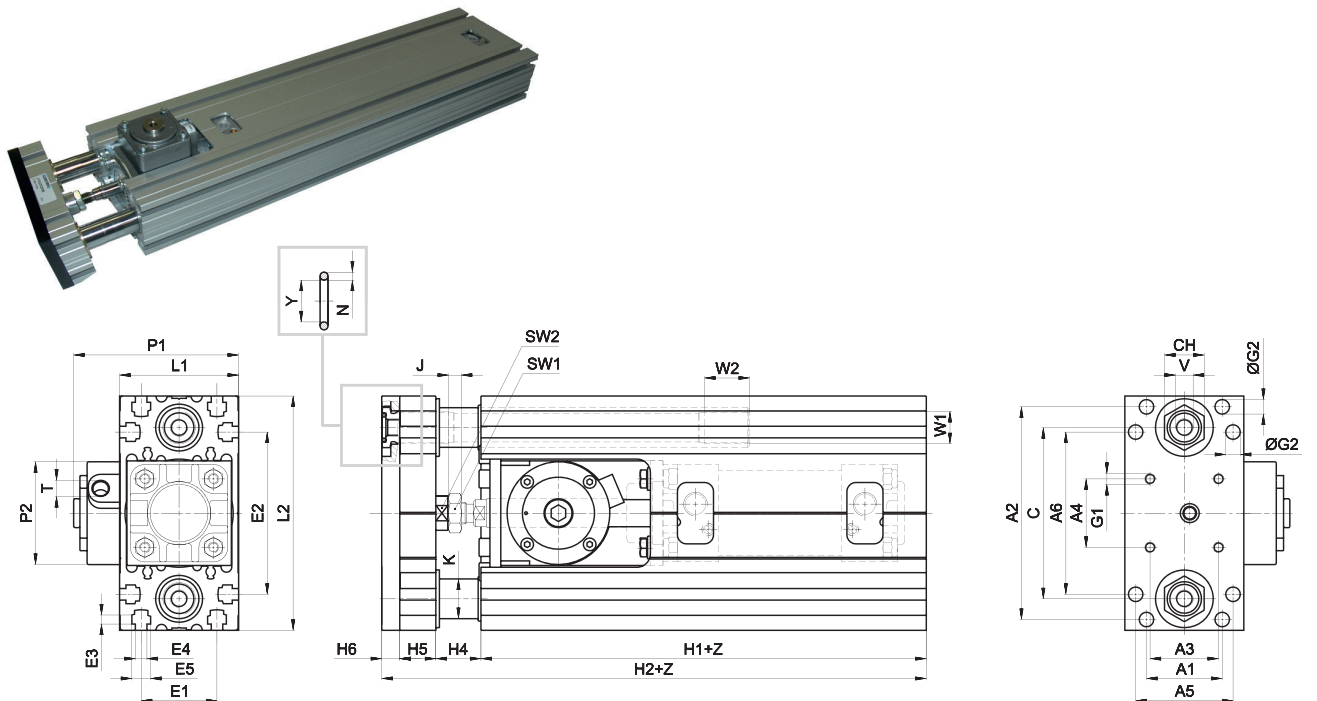
J14... 2 bearings



Z = Stroke

Slide unit with fully protected cylinder

J14...B 2 bearings with locking unit



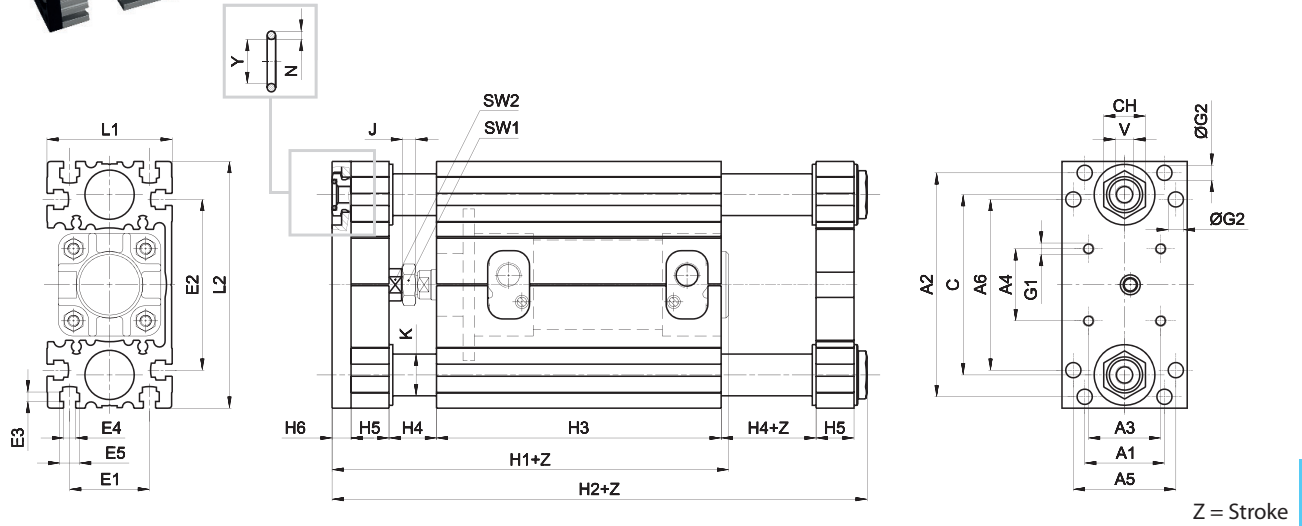
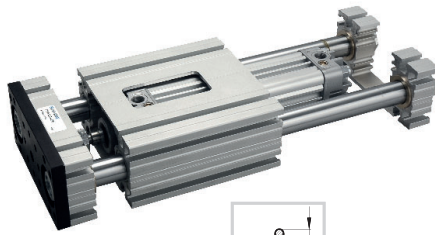
Z = Stroke

Slide unit	Cylinder	J14...						J14...B						
		H1	H2	H4	H5	H6	H1	H2	H4	H5	H6	P1	P2	T
16	16	100	151	25	18	8	-	-	-	-	-	-	-	-
25	25	120	171	25	18	8	179	230	25	18	8	77,5	40	G1/8
32	32	130	185	25	20	10	209	264	25	20	10	83,5	50	G1/8
40	40	140	195	25	20	10	222	277	25	20	10	91,5	58	G1/8
50	50	150	210	25	25	10	236	296	25	25	10	106,5	70	G1/8
63	63	165	227	25	25	12	250	312	25	25	12	129	85	G1/8
80	80	180	247	25	30	12	285	352	25	30	12	150	100	G1/8
100	100	195	262	25	30	12	335	402	25	30	12	185,5	116	G1/8

For missing standard dimensions look at the table at page 13

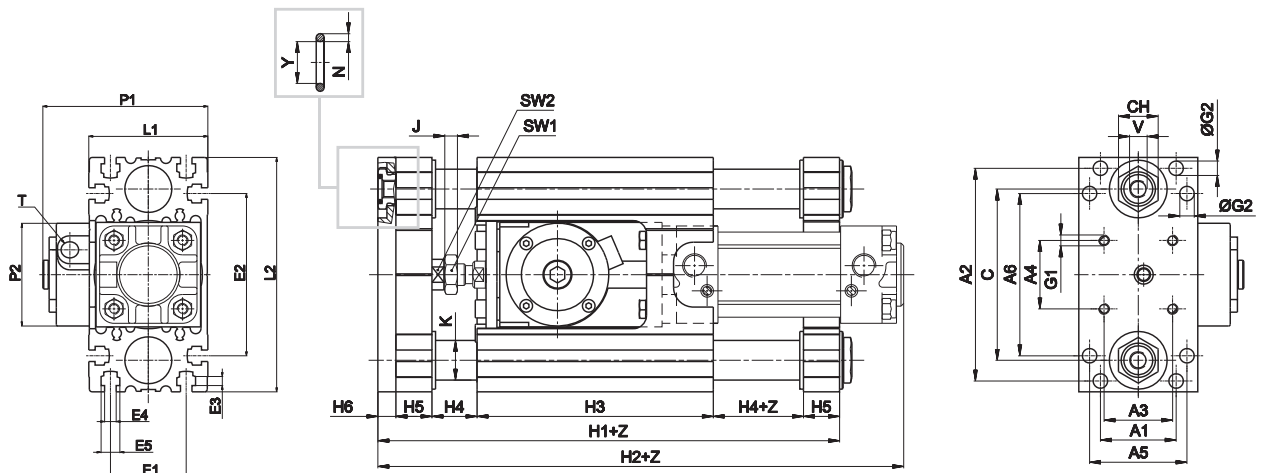
Slide unit with central mounting, semi-external cylinder

J16... 2 bearings



Slide unit with central mounting, semi-external cylinder

J16...B 2 bearings with locking unit

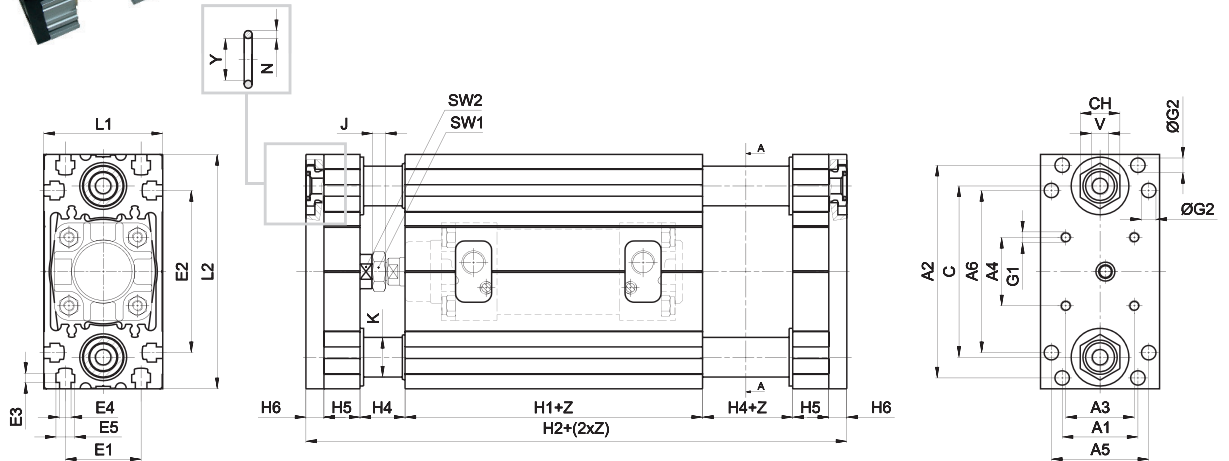
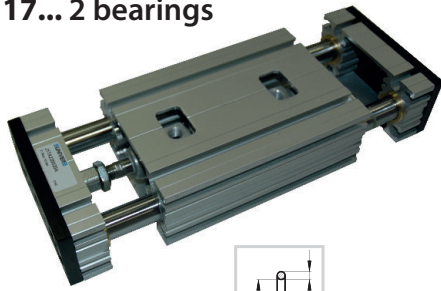


Slide unit	Cylinder	J16...						J16...B								
		H1	H2	H3	H4	H5	H6	H1	H2	H3	H4	H5	H6	P1	P2	T
16	16	137	182	80	25	18	8	-	-	-	-	-	-	-	-	-
25	25	156	202	100	25	18	8	188	220	94	25	18	8	77,5	40	G1/8
32	32	168	235	125	25	20	10	222	247	122	25	20	10	83,5	50	G1/8
40	40	184	260	150	25	20	10	231	265	131	25	20	10	91,5	58	G1/8
50	50	195	285	165	25	25	10	254	283	144	25	25	10	106,5	70	G1/8
63	63	213	309	185	25	25	12	275	313,5	163	25	25	12	129	85	G1/8
80	80	244	354	220	25	30	12	302	343	180	25	30	12	150	100	G1/8
100	100	256	394	260	25	30	12	342	385	220	25	30	12	185,5	116	G1/8

For missing standard dimensions look at the table at page 13

Slide unit with central mounting, fully protected cylinder

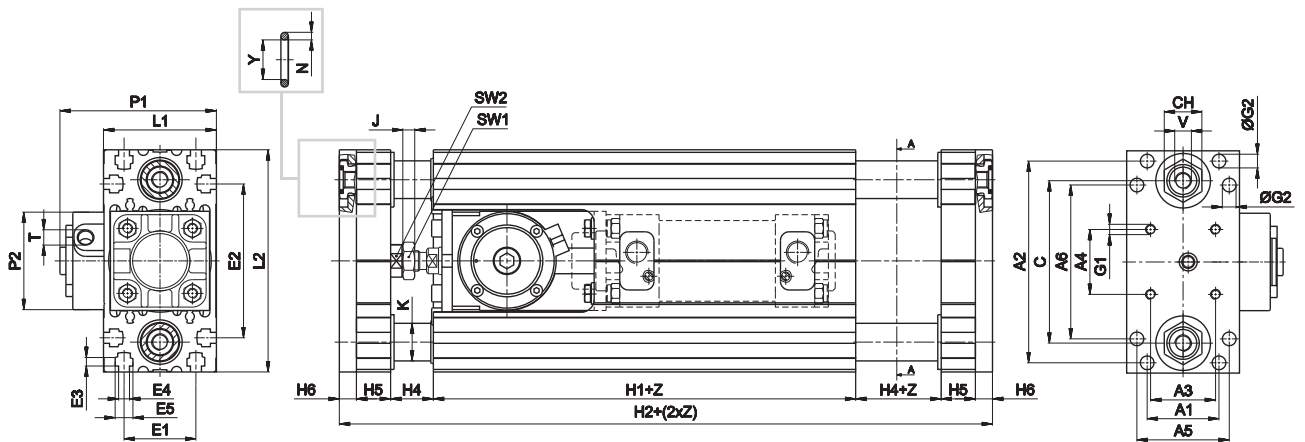
J17... 2 bearings



Z = Stroke

Slide unit with central mounting, fully protected cylinder

J17...B 2 bearings with locking unit



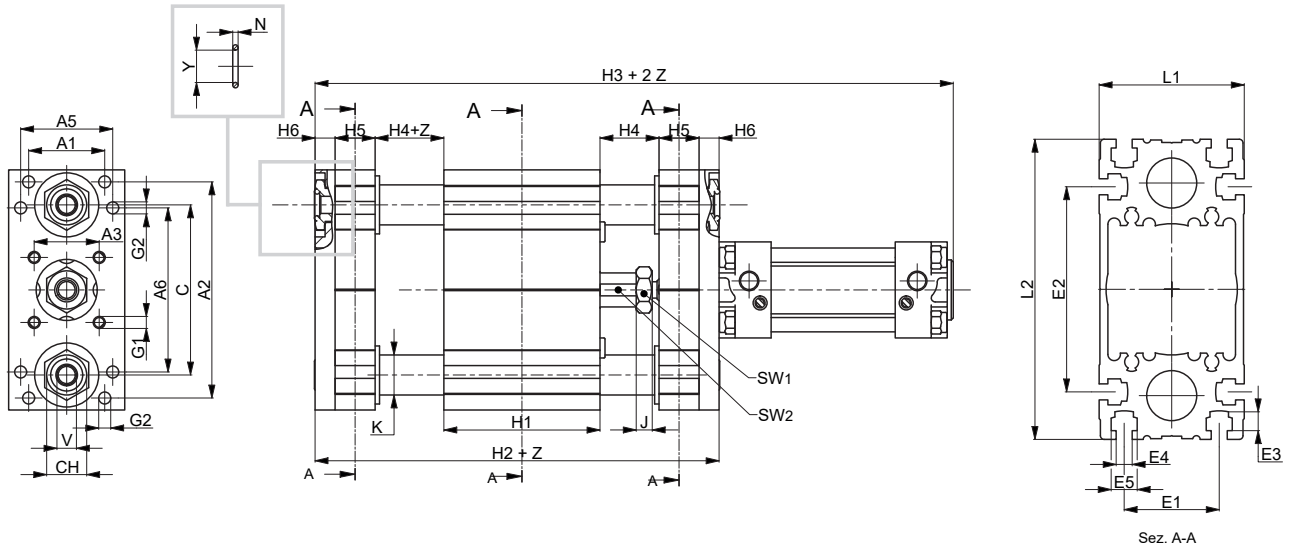
Z = Stroke

Slide unit	Cylinder	J17...						J17...B						
		H1	H2	H4	H5	H6	H1	H2	H4	H5	H6	P1	P2	T
16	16	100	202	25	18	8	-	-	-	-	-	-	-	-
25	25	120	222	25	18	8	179	281	25	18	8	77,5	40	G1/8
32	32	130	240	25	20	10	209	319	25	20	10	83,5	50	G1/8
40	40	140	250	25	20	10	222	332	25	20	10	91,5	58	G1/8
50	50	150	270	25	25	10	236	356	25	25	10	106,5	70	G1/8
63	63	165	289	25	25	12	250	374	25	25	12	129	85	G1/8
80	80	180	314	25	30	12	285	419	25	30	12	150	100	G1/8
100	100	195	329	25	30	12	335	469	25	30	12	185,5	116	G1/8

For missing standard dimensions look at the table at page 13

Slide unit with moving housing

J18... 2 bearings with medium housing  
J19... 2 bearings with long housing



Z = Stroke

Slide unit	Cylinder	J18...						J19...					
Size	Ø	H1	H2	H3	H4	H5	H6	H1	H2	H3	H4	H5	H6
16	16	157	230	55	25	18	8	182	255	80	25	18	8
25	25	167	258	65	25	18	8	202	293	100	25	18	8
32	32	188	285	78	25	20	10	235	332	125	25	20	10
40	40	195	304	85	25	20	10	260	369	150	25	20	10
50	50	215	325	95	25	25	10	285	395	165	25	25	10
63	63	234	359	110	25	25	12	309	434	185	25	25	12
80	80	264	397	130	25	30	12	354	487	220	25	30	12
100	100	284	428	150	25	30	12	394	538	260	25	30	12

Plates of all slide units of size 63 - 80 - 100 have 4 chamfered sides (α).

Slide unit	α
Size	α
63	20°
80	35°
100	40°

> Common overall dimensions for slide unit series J10 - J11 - J12 - J12B - J14 - J14B - J16 - J16B - J17 - J17B - J18 - J19

Slide unit	Cylinder	A1	A2	A3	A4	A5	A6	C	CH	E1	E2	E3	E4	E5
16	16	19,9	70,6	24	30	-	-	51	13	20	46	3,5	4,4	7,4
25	25	32	85	27	27	36	62	69	14	32	62	5	5,4	8,4
32	32	38	108	32,5	32,5	46	82	85	22	38	82	5	6,4	10,4
40	40	42	118	38	38	54	90	95	22	42	90	5	6,4	10,4
50	50	48,1	140	46,5	46,5	69	110	115	27	48	110	6,5	8,4	13,4
63	63	56	157,5	56,5	56,5	79,5	120	130	30	56	120	7,5	10,5	17,5
80	80	65	178	72	72	95	142	150	32	65	142	8,5	10,5	18
100	100	72	194	89	89	113	156	164	32	72	156	8,5	10,5	18

Slide unit	Cylinder	G1	ØG2*	J	K	L1	L2	N	SW1	SW2	V	Y	W1	W2
16	16	M4	4	4	12	32	77	1,78	10	9	M5	5,28	M10	12
25	25	M5	6	6	16	47	96	1,78	17	12	M5	5,28	M12	12
32	32	M6	6	6	20	58	120	2,62	17	17	G1/8	10,78	M16x1,5	20
40	40	M6	8	7	22	66	130	2,62	19	17	G1/8	10,78	M18x1,5	20
50	50	M8	8	8	25	84	155	2,62	24	22	G1/8	10,78	M20x1,5	25
63	63	M8	8	8	28	98	176	2,62	24	22	G1/8	10,78	M22x1,5	25
80	80	M10	8	9	32	117	200	2,62	30	30	G1/8	10,78	M27x2	30
100	100	M10	8	9	32	133	214	2,62	30	30	G1/8	10,78	M27x2	30

\* = For use with locating pin tolerance M6

Slide Units for S1 series rodless cylinders

J3



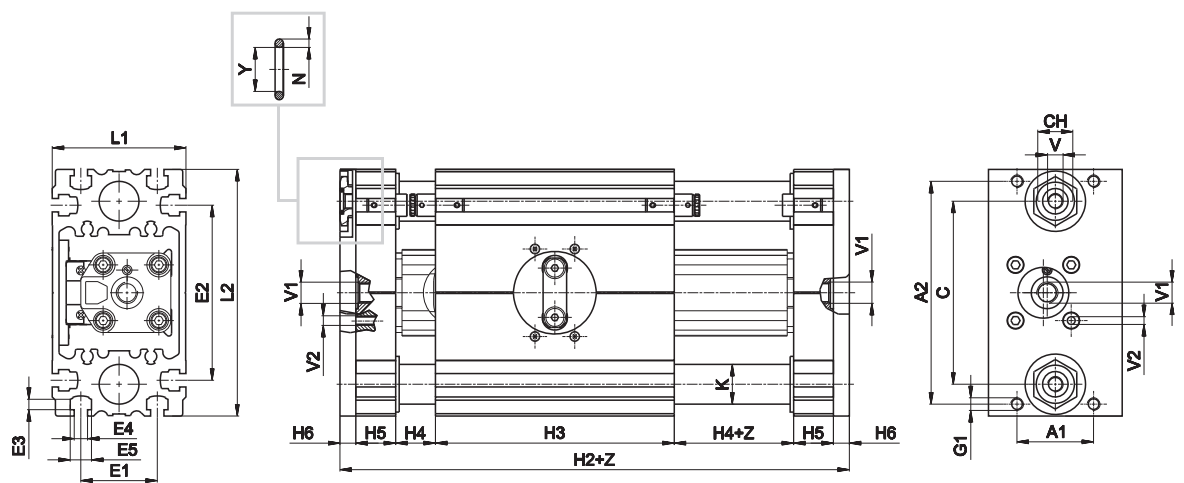
CODIFICATION KEY

J	3	0	A	5	3	0	1	0	0	A
1	2	3	4	5			6			7

<b>1 Series</b> J = Slide Unit	<b>2 Type</b> 30 = Fully protected cylinder (2 bearings - standard carriage) 31 = Fully protected cylinder (2 bearings - long carriage)	<b>3 Accessories</b> A = Shaft scrapers standard supplied
<b>4 Slide unit size</b> 4 = 40 for Ø25 cylinders 5 = 50 for Ø32 cylinders 6 = 63 for Ø40 cylinders 7 = 80 for Ø50 cylinders	<b>5 Cylinder bore (mm)</b> 2 = Ø25 3 = Ø32 4 = Ø40 5 = Ø50	<b>6 Slide unit stroke (mm)</b> Up to 0800
		<b>7 Supply port option</b> A = Supply ports on both end-caps B = Supply ports on the right end-cap only

1 The slide units are supplied with safety distance (+25 mm) for accident prevention according to the European EN 349 specifications.

Slide unit with fully protected cylinder  
**J30... 2 bearings with standard carriage**  
**J31... 2 bearings with long carriage**

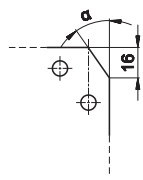


Z = Stroke

Slide unit	Cylinder											Carriage type				
		A1	A2	C	CH	E1	E2	E3	E4	E5	G1	H2	H3		H4	
40	40	42	118	95	22	42	90	5	6,4	10,4	M6	Standard	Long	Standard	Long	25
50	50	48,1	140	115	27	48	110	6,5	8,4	13,4	M8	220	315	110	205	25
63	63	56	157,5	130	30	56	120	7,5	10,5	17,5	M8	270	400	150	280	25
80	80	65	178	150	32	65	142	8,5	10,5	18	M10	324	474	200	350	25
												374	574	240	440	25

Slide unit	Cylinder										
		H5	H6	K	L1	L2	N	Y	V	V1	V2
40	40	20	10	22	66	130	2,62	10,78	M5	G1/8	G1/8
50	50	25	10	25	84	155	2,62	10,78	G1/8	G1/4	G1/4
63	63	25	12	28	98	176	2,62	10,78	G1/8	G3/8	G3/8
80	80	30	12	32	117	200	2,62	10,78	G1/8	G3/8	G3/8

Plates of all slide units of size 63 - 80 have 4 chamfered sides (α).



Slide unit	α
63	20°
80	35°

Slide Units for RS series STRONG compact cylinders

■ J64RS



CODIFICATION KEY

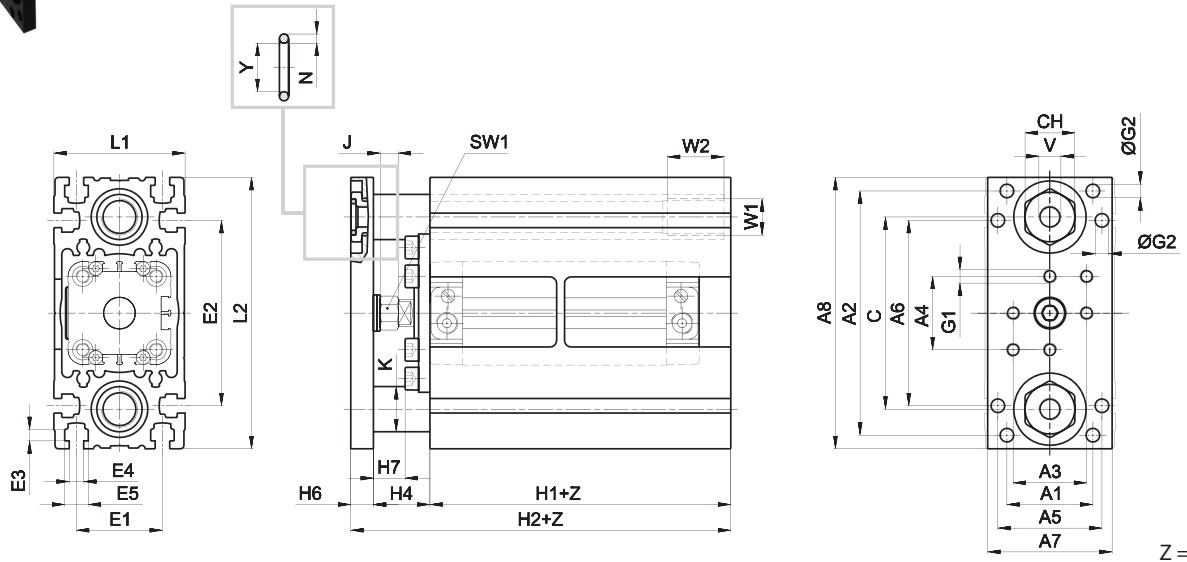
J	6	4	R	S	3	3	0	0	5	0	B
1	2	3	4	5	6				7		

<b>1 Series</b> J = Slide Unit	<b>2 Slide unit type</b> 64 = Fully protected cylinder (stroke longer than 50 mm) 65 = Fully protected cylinder, through opening 66 = Fully protected cylinder, through opening, two plates 67 = Fully protected cylinder, two plates (stroke longer than 50 mm) Shaft scrapers standard supplied	<b>3 Cylinder type</b> RS = STRONG cylinder (RS22J... series) with long piston and tube with sensor grooves on the same side as supply ports to allow mounting of magnetic sensors	
<b>4 Slide unit size</b> 3 = 32 for Ø32 cylinders 4 = 40 for Ø40 cylinders 5 = 50 for Ø50 cylinders 6 = 63 for Ø63 cylinders	<b>5 Cylinder bore (mm)</b> 3 = Ø32 4 = Ø40 5 = Ø50 6 = Ø63	<b>6 Slide unit stroke (mm)</b> 0015 ÷ 0800 mm	<b>7 Cylinder option</b> A = Cylinder with long piston B = Cylinder with long piston and locking unit

The slide units are supplied with safety distance (+25 mm) for accident prevention according to the European EN 349 specifications.

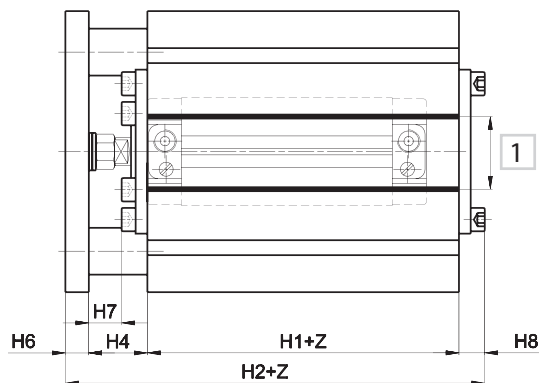
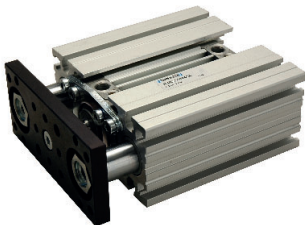
### Slide unit with fully protected cylinder

#### J64... bearings



### Slide unit with fully protected cylinder

#### J65... through opening



1 Through opening  
Z = Stroke

Slide unit	Cylinder	J64...					J65...					
Size	Ø	H1	H2	H4	H6	H7	H1	H2	H4	H6	H7	H8
32	32	78	113	25	10	14	78	124	25	10	14	11
40	40	82	117	25	10	13	82	129	25	10	13	12
50	50	91	128	25	12	11	91	142	25	12	11	14
63	63	98	135	25	12	11	98	149	25	12	11	14

H2 dimension of slide units with through opening will increase by the value of H8 dimensions.

Magnetic cylinder minimum stroke: for size 32 and 40 = 20 mm, for size 50 and 63 = 15 mm.

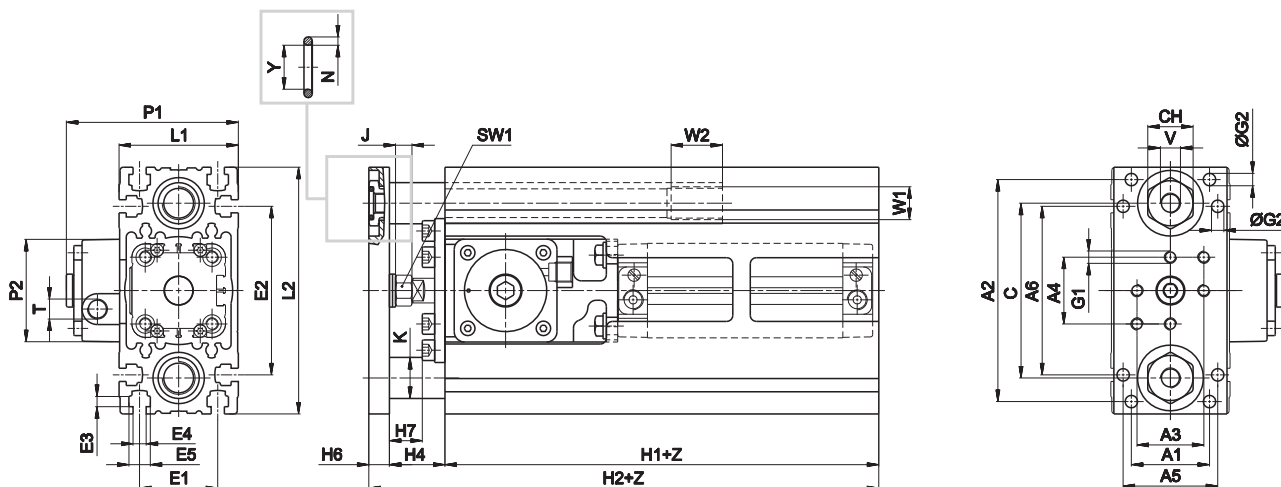
Upon request: strokes exceeding 50 mm slide units with through opening for placing the magnetic sensor in intermediate positions.

For all sizes up to 50 mm stroke the opening of the extrusion in accordance with the supply ports is of the through type.

For missing standard dimensions look at the table at page 24

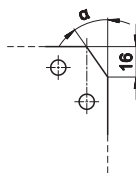


## Slide unit with fully protected cylinder J64...B 2 bearings with locking unit



Z = Stroke

Plates of all slide units of size 63 have 4 chamfered sides (a).



Slide unit	
Size	$\alpha$
63	20°

Slide unit	Cylinder	J64...B							
Size	Ø	H1	H2	H4	H6	H7	P1	P2	T
32	32	151	188	27	10	16	83,5	50	G1/8
40	40	158	194	26	10	14	91,5	58	G1/8
50	50	173	209	24	12	10	106,5	70	G1/8
63	63	187	223	24	12	10	129	85	G1/8

### > Common overall dimensions for slide unit series J64 - J65 - J64B

Slide unit	Cylinder														
Size	Ø	A1	A2	A3	A4	A5	A6	A7	A8	C	CH	E1	E2	E3	E4
32	32	38	108	32,5	32,5	46	82	55	120	85	22	38	82	5	6,4
40	40	42	118	38	38	54	90	65	130	95	22	42	90	5	6,4
50	50	48,1	140	46,5	46,5	69	110	80	155	115	27	48	110	6,5	8,4
63	63	56	157,5	56,5	56,5	79,5	120	95	175	130	30	56	120	7,5	10,5

Slide unit	Cylinder														
Size	Ø	E5	G1	ØG2 *	J	K	L1	L2	N	SW1	V	W1	W2	Y	
				H8											
32	32	10,4	M6	6	11	20	58	120	2,62	13	G1/8	M16x1,5	20	10,78	
40	40	10,4	M6	8	11	22	66	130	2,62	16	G1/8	M18x1,5	20	10,78	
50	50	13,4	M8	8	7	25	84	155	2,62	18	G1/8	M20x1,5	25	10,78	
63	63	17,5	M8	8	7	28	98	176	2,62	18	G1/8	M22x1,5	25	10,78	

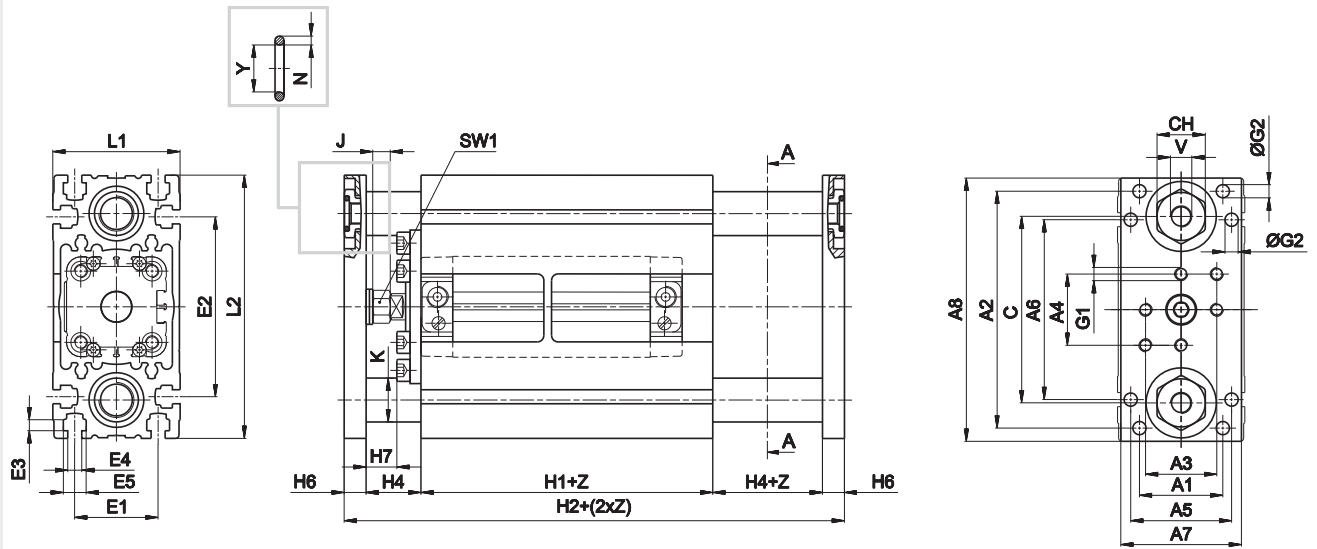
\* = For use with locating pin tolerance M6.

Magnetic cylinder minimum stroke: for size 32 and 40 = 20 mm, for size 50 and 63 = 15 mm.

Upon request: strokes exceeding 50 mm slide units with through opening for placing the magnetic sensor in intermediate positions.

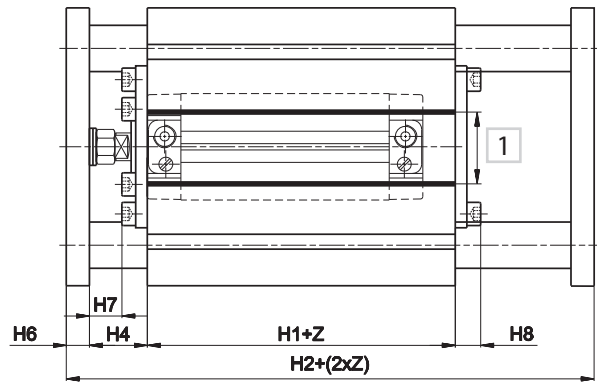
For all sizes up to 50 mm stroke the opening of the extrusion in accordance with the supply ports is of the through type.

**Slide unit with central mounting, fully protected cylinder  
J67... 2 bearings and 2 plates**



Z = Stroke

**Slide unit with central mounting, fully protected cylinder  
J66... through opening and 2 plates**



1 Through opening

Z = Stroke

Slide unit	Cylinder Ø	J67...					J66...					
		H1	H2	H4	H6	H7	H1	H2	H4	H6	H7	H8
32	32	78	148	25	10	14	78	159	25	10	14	11
40	40	82	152	25	10	13	82	164	25	10	13	12
50	50	91	165	25	12	11	91	179	25	12	11	14
63	63	98	172	25	12	11	98	186	25	12	11	14

H2 dimension of slide units with through opening will increase by the value of H8 dimensions.

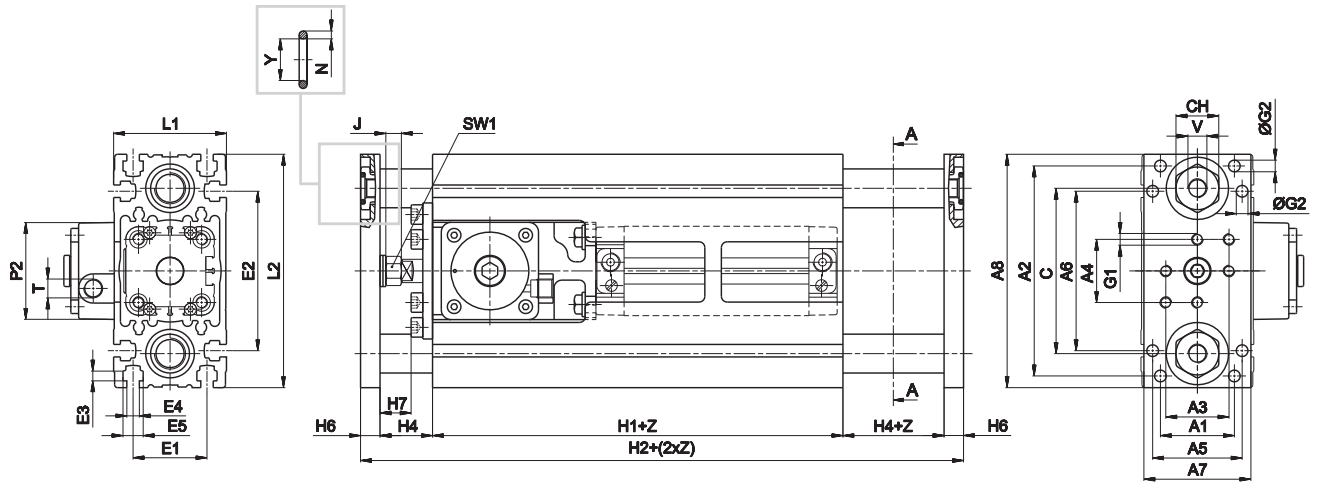
Magnetic cylinder minimum stroke: for size 32 and 40 = 20 mm, for size 50 and 63 = 15 mm.

Upon request: strokes exceeding 50 mm slide units with through opening for placing the magnetic sensor in intermediate positions.

For all sizes up to 50 mm stroke the opening of the extrusion in accordance with the supply ports is of the through type.

For missing standard dimensions look at the table at page 24

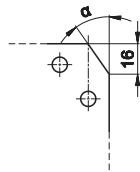
**Slide unit with central mounting, fully protected cylinder  
J67...B 2 bearings and 2 plates, with locking unit**



Z = Stroke

Slide unit	Cylinder	J64...B							
Size	Ø	H1	H2	H4	H6	H7	P1	P2	T
32	32	151	188	27	10	16	83,5	50	G1/8
40	40	158	194	26	10	14	91,5	58	G1/8
50	50	173	209	24	12	10	106,5	70	G1/8
63	63	187	223	24	12	10	129	85	G1/8

Plates of all slide units of size 63 have 4 chamfered sides (α).



Slide unit	
Size	α
63	20°

> Common overall dimensions for slide unit series J67 - J66 - J67B

Slide unit	Cylinder	A1	A2	A3	A4	A5	A6	A7	A8	C	CH	E1	E2	E3
32	32	38	108	32,5	32,5	46	82	55	120	85	22	38	82	5
40	40	42	118	38	38	54	90	65	130	95	22	42	90	5
50	50	48,1	140	46,5	46,5	69	110	80	155	115	27	48	110	6,5
63	63	56	157,5	56,5	56,5	79,5	120	95	175	130	30	56	120	7,5

Slide unit	Cylinder	E4	E5	G1	ØG2 *	J	K	L1	L2	N	SW1	V	Y
32	32	6,4	10,4	M6	6	11	20	58	120	2,62	13	G1/8	10,78
40	40	6,4	10,4	M6	8	11	22	66	130	2,62	16	G1/8	10,78
50	50	8,4	13,4	M8	8	7	25	84	155	2,62	18	G1/8	10,78
63	63	10,5	17,5	M8	8	7	28	98	176	2,62	18	G1/8	10,78

\* = For use with locating pin tolerance M6.

Magnetic cylinder minimum stroke: for size 32 and 40 = 20 mm, for size 50 and 63 = 15 mm.

Upon request: strokes exceeding 50 mm slide units with through opening for placing the magnetic sensor in intermediate positions.

For all sizes up to 50 mm stroke the opening of the extrusion in accordance with the supply ports is of the through type.

Slide Units for RT2 series telescopic cylinders

J64RT2



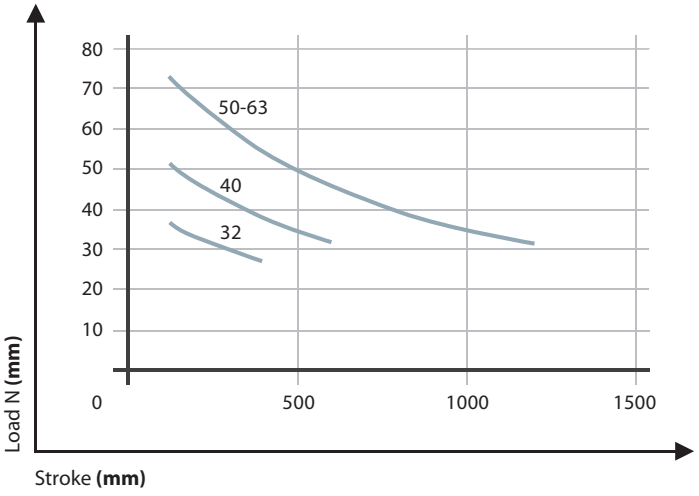
J	6	4	R	T	2	4	4	0	8	0	0	A
1	2	3	4	5	6	7						

<b>1 Series</b> J = Slide Unit - Shaft scrapers standard supplied	<b>2 Slide unit type</b> 64 = Fully protected telescopic cylinder Shaft scrapers standard supplied	<b>3 Cylinder type</b> RT2 = 2 stage telescopic cylinders
--	--	--

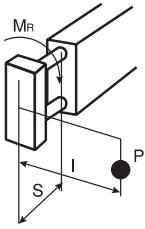
<b>4 Slide unit size</b> 3 = 32 for Ø32 cylinders 4 = 40 for Ø40 cylinders 5 = 50 for Ø50 cylinders 6 = 63 for Ø63 cylinders	<b>5 Cylinder bore (mm)</b> 3 = Ø32 4 = Ø40 5 = Ø50 6 = Ø63	<b>6 Slide unit stroke (mm)</b> Standard stroke 0120 - 0160 - 0180 - 0200 - 0300 - 0400 - 0500 0600 - 0700 - 0800 - 0900 - 1000 - 1100 - 1200  Min - Max stroke 0160 ÷ 0400 (Ø32) 0160 ÷ 0600 (Ø40) 0120 ÷ 0900 (Ø50) 0120 ÷ 1200 (Ø63)	<b>7 Cylinder option</b> A = 2 stage telescopic cylinders
--	---	--	--

The slide units are supplied with safety distance (+25 mm) for accident prevention according to the European EN 349 specifications. The cylinder is supplied with magnetic telescopic shaft.

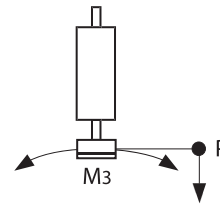
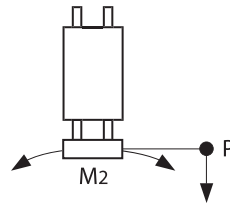
> Payload diagram based on slide unit length



### > Resistant moment values M2, M3 and torque MR



∅	MR Nm
32	4,7
40	7,8
50	10,2
63	10,2



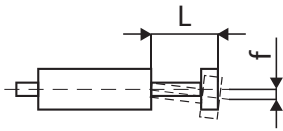
∅	M2 = M3 Nm
32	7,4
40	12
50	17,8
63	17,8

#### How to calculate torque MR

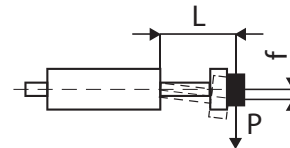
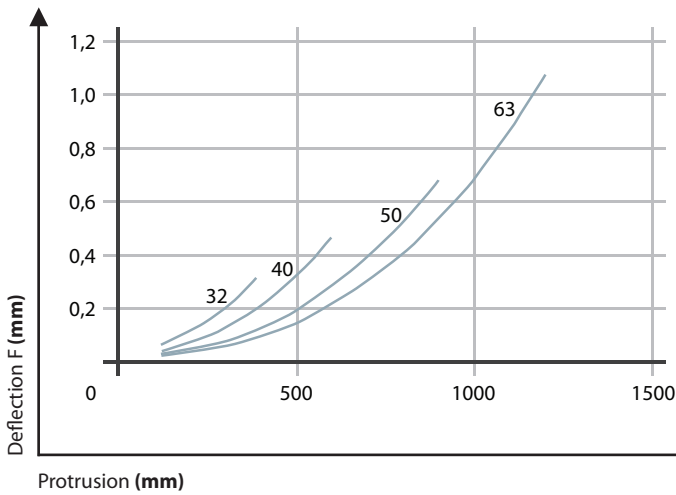
To calculate torque MR the load P(N) must be multiplied by the arm I (mm).

The figure obtained must be within MR values, as stated above: should it exceed these values, a slide unit of a bigger size must be used.

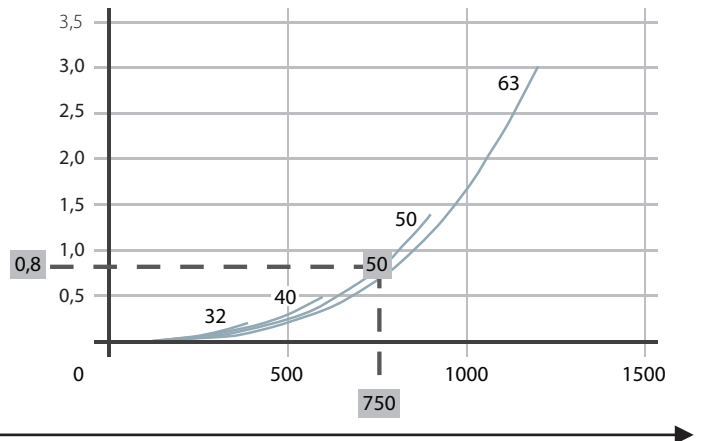
### > Diagram deflection per slide unit length J64RT2



Deflection under its own weight



Deflection with 10N load



### Examples of application

#### How to calculate deflection

The total deflection of the slide units is calculated by summing deflection under its own weight to deflection caused by the load.

For loads other than 10 N (as stated in the charts) deflection is calculated by multiplying the figure of chart (K) by the following formula:

$$f = K \cdot \frac{Q \text{ (applied load)}}{10 \text{ N}}$$

**Example:** slide unit size 50, length L 750 mm and load Q of 25 N.

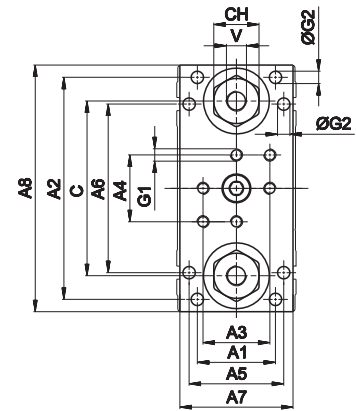
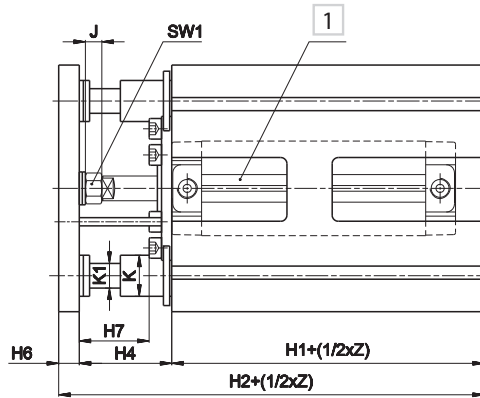
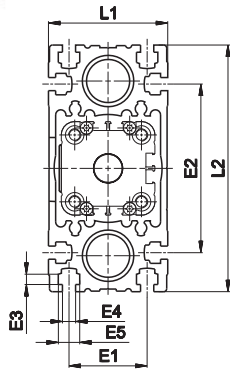
On the chart showing deflection with 10 N, we get coefficient 0,8 (marked with negative print) then:

$$f = 0,8 \cdot \frac{25}{10} = 2 \text{ mm}$$

The figure obtained must be added to the related figure of the slide unit deflection under the unit's own weight.

Slide unit with fully protected cylinder

J64RT2...



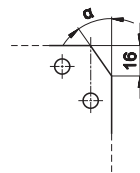
1 Groove for sensor

Z = Stroke

1

Slide unit	Cylinder	J64RT2...				
Size	Ø	H1	H2	H4	H6	H7
32	32	72	107	25	10	16
40	40	78	113	25	10	15
50	50	92	129	25	12	14
63	63	95	132	25	12	14

Plates of all slide units of size 63 have 4 chamfered sides ( $\alpha$ ).



Slide unit	
Size	$\alpha$
63	20°

Slide unit	Cylinder													
Size	Ø	A1	A2	A3	A4	A5	A6	A7	A8	C	CH	E1	E2	E3
32	32	38	108	32,5	32,5	46	82	55	120	85	22	38	82	5
40	40	42	118	38	38	54	90	65	130	95	22	42	90	5
50	50	48,1	140	46,5	46,5	69	110	80	155	115	27	48	110	6,5
63	63	56	157,5	56,5	56,5	79,5	120	95	175	130	30	56	120	7,5

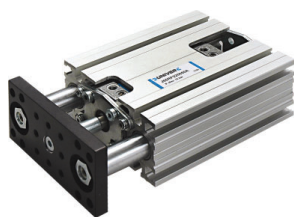
Slide unit	Cylinder													
Size	Ø	E4	E5	G1	ØG2*	J	K	K1	L1	L2	N	SW1	V	Y
32	32	6,4	10,4	M6	6	12	20	12	58	120	2,62	13	G1/8	10,78
40	40	6,4	10,4	M6	8	13	22	14	66	130	2,62	16	G1/8	10,78
50	50	8,4	13,4	M8	8	10	25	16	84	155	2,62	18	G1/8	10,78
63	63	10,5	17,5	M8	8	10	28	16	98	176	2,62	18	G1/8	10,78

\* = For use with locating pin tolerance M6.

Magnetic cylinder minimum stroke: for size 32 and 40 = 160 mm (80+80), for size 50 and 63 = 120 mm (60+60).

Slide Units for RP series compact cylinders

■ J65

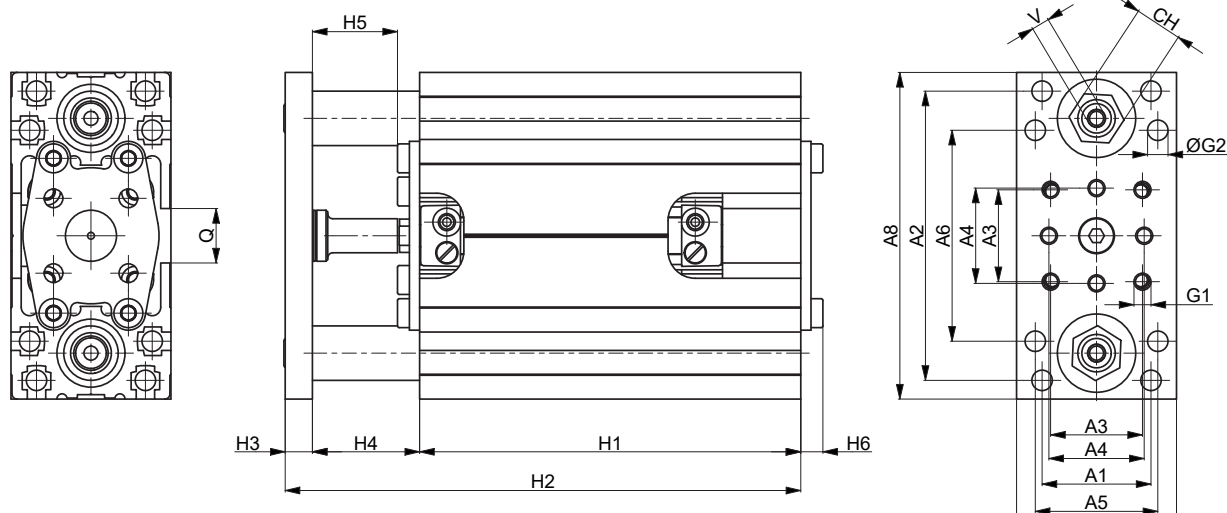


CODIFICATION KEY

J	6	5	R	P	2	2	0	0	5	0	A
1	2	3	4	5	6	7					

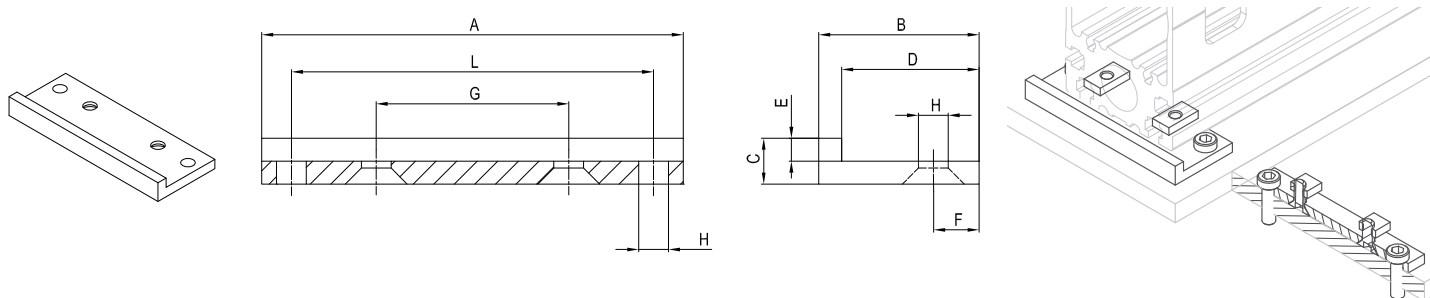
<b>1 Series</b> J = Slide Unit	<b>2 Slide unit type</b> 65 = Fully protected cylinder, through opening Shaft scrapers standard supplied	<b>3 Cylinder type</b> RP = UNITOP Ø25 mm compact cylinder	
<b>4 Slide unit size</b> 2 = 25 for Ø25 cylinders	<b>5 Cylinder bore (mm)</b> 2 = Ø25	<b>6 Slide unit stroke (mm)</b> 0050 ÷ 0200	<b>7 Cylinder option</b> A = Cylinder with long piston

Slide unit with fully protected cylinder  
J65RP... through opening



A1	A2	A3	A4	A5	A6	A7	A8	CH	G1	G2	H1	H2	H3	H4	H5	H6	Q	V
32	85	27	28	36	62	47	96	14	M5	6	112	151,5	8	31,5	25	6,5	16	M5

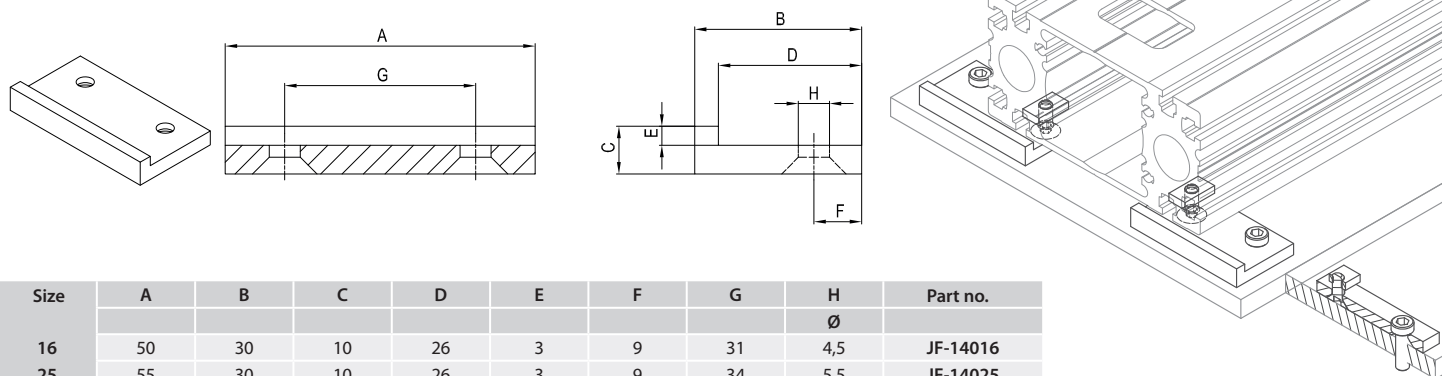
Aluminium foot brackets



Size	A	B	C	D	E	F	G	H	L	Part no.
16	52	30	10	26	4	9	20	4,5	43	JF-13016
25	70	30	10	26	4	9	32	5,5	57	JF-13025
32	85	35	10	30	5	10	38	6,5	72	JF-13032
40	92	35	10	30	5	10	42	6,5	79	JF-13040
50	118	40	15	35	5	12,5	48	8,5	102	JF-13050
63	135	45	15	40	5	15	56	10,5	112	JF-13063
80	160	45	15	40	5	15	65	10,5	135	JF-13080
100	175	45	15	40	5	15	72	10,5	151	JF-13100

Package consists of 2 pcs. including mounting accessories.

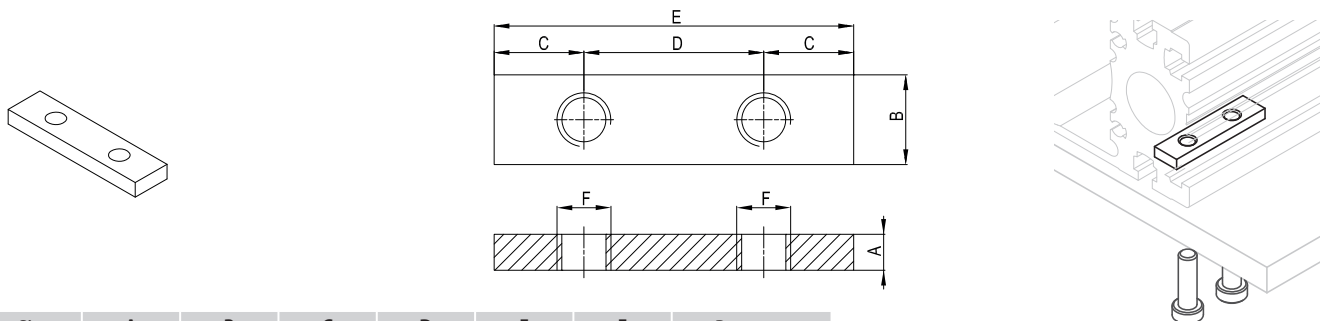
1



Size	A	B	C	D	E	F	G	H	Part no.
16	50	30	10	26	3	9	31	4,5	JF-14016
25	55	30	10	26	3	9	34	5,5	JF-14025
32	60	35	10	30	4	10	38	6,5	JF-14032
40	65	35	10	30	4	10	40	6,5	JF-14040
50	70	40	15	35	4	12,5	45	8,5	JF-14050
63	85	45	15	40	4	15	56	10,5	JF-14063
80 - 100	90	45	15	40	4	15	58	10,5	JF-14100

Package consists of 4 pcs. including mounting accessories.

Fixing plates in steel

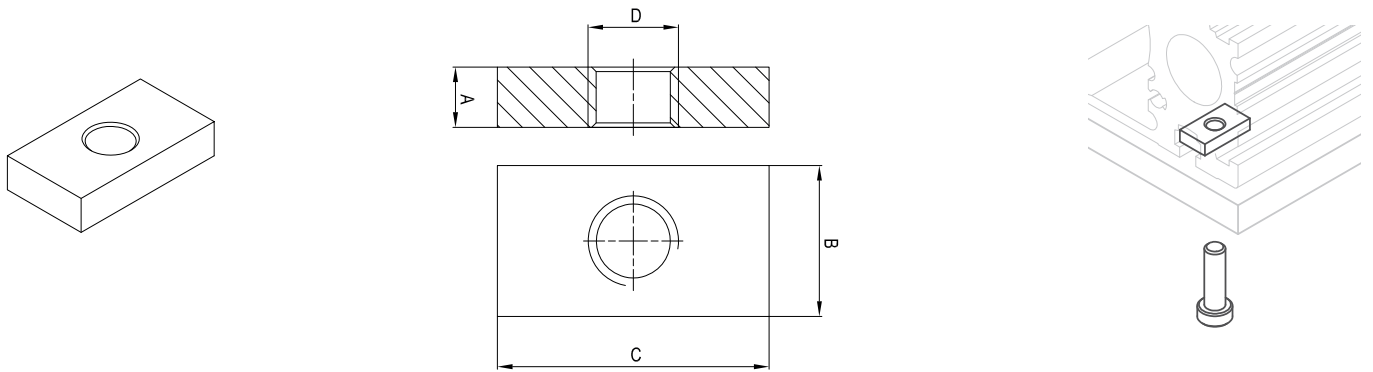


Size	A	B	C	D	E	F	Part no.
16	3	7	7,5	15	30	M4	JF-42016
25	4	8	10	15	35	M5	JF-42025
32 - 40	4	10	10	20	40	M6	JF-42040
50	6	13	10	30	50	M8	JF-42050
63	6	16	12,5	35	60	M10	JF-42063
80 - 100	8	16	15	40	70	M10	JF-42100

Package consists of 2 pcs. including mounting accessories.



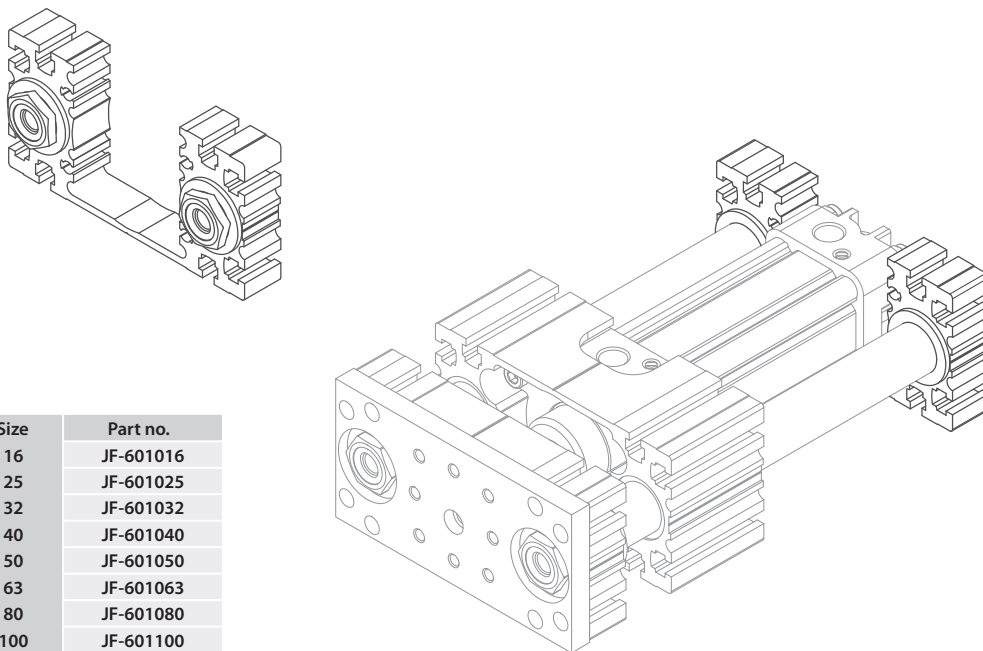
Aluminium foot brackets



Size	A	B	C	D	Part no.
16	3	7	16	M4	JF-43016
25	4	8	16	M5	JF-43025
32 - 40	4	10	18	M6	JF-43040
50	6	13	18	M8	JF-43050
63	6	16	22	M10	JF-43063
80 - 100	8	16	25	M10	JF-43100

Package consists of 2 pcs. including mounting accessories.

Shaft support for slide units J10/J11/J12 Series



Size	Part no.
16	JF-601016
25	JF-601025
32	JF-601032
40	JF-601040
50	JF-601050
63	JF-601063
80	JF-601080
100	JF-601100