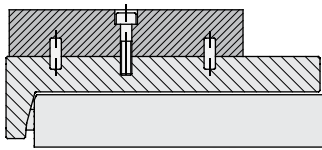


PNEUMATIC SLIDES (SERIES ZA)

- Bore 2x6, 2x8, 2x12, 2x16 or 2x20 mm.
- Stroke from 10 mm to 150mm.
- Optional end of stroke adjustments using shock absorbers, rubber bumpers, (FGD) or grub screw, (FPD).
- Optional magnetic sensors.



Dowel pin holes for mounting the load onto the carrier

Patented re-circulating ball cartridges



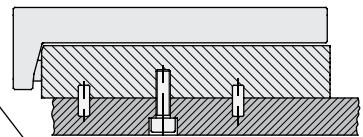
Single-block carrier molded in Zamak



Hardened guide rod with ground races

Preloading adjustment screws

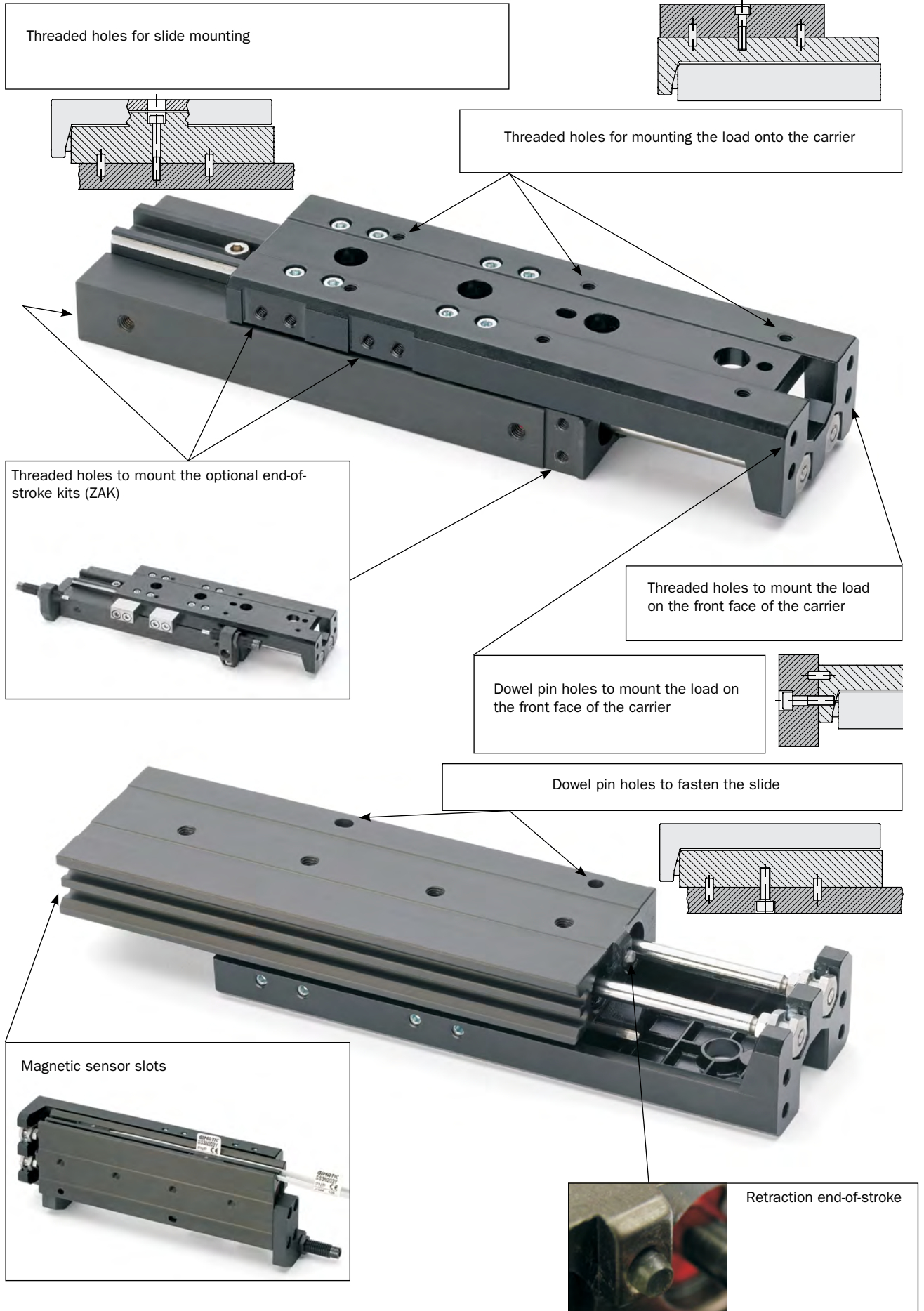
Threaded holes to mount the slide



Air port for slide retraction

Air port for slide extension

PNEUMATIC SLIDES (SERIES ZA)

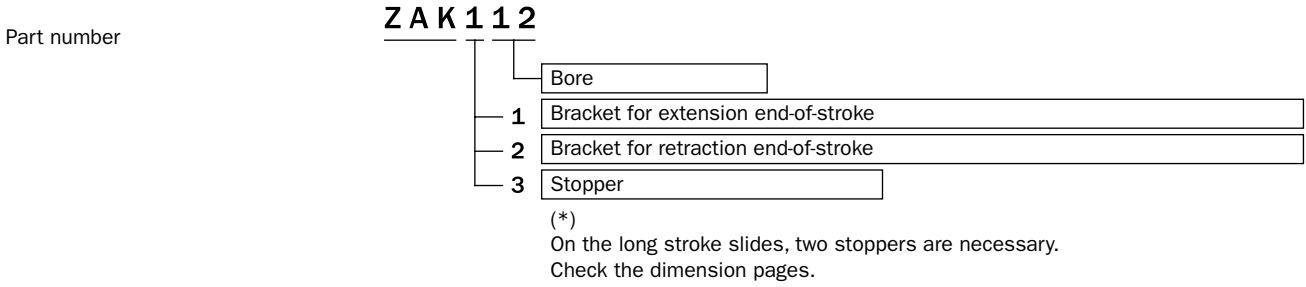


LINEAR ACTUATORS

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ACCESSORIES

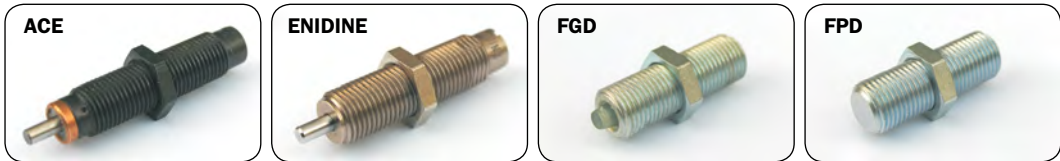
The stroke can be adjusted with hydraulic shock absorbers, rubber bumpers (FGD), or grub screws (FPD), depending on the kinetic energy the slide develops. To use them, (ZAK) accessories must be used.



The correct mounting bolts are supplied with each (ZAK) accessory kit. Because the slide may develop some vibration, it is recommended that a thread locking glue, such as Loctite be used.

The table shows the part numbers of the suitable shock absorbers. The optional end-of-strokes, FGD and FDP, are made by Gimatic.

Hydraulic shock absorbers



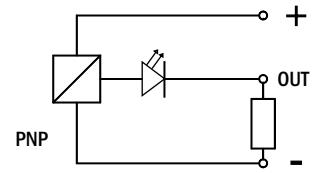
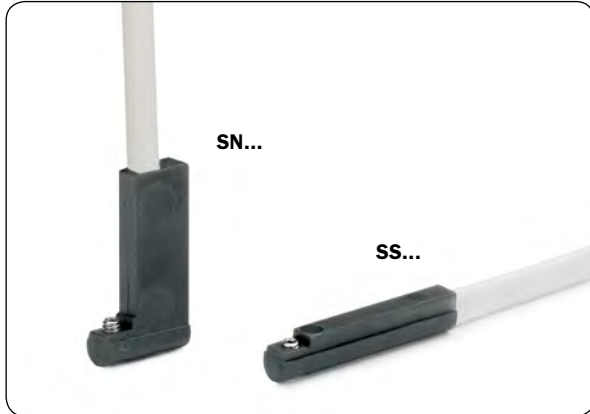
ZA06	M6x0.5	MC9M1	TKSM2	FGD0620 (L=20 mm)	FPD0620 (L=20 mm)
ZA08	M6x0.5	MC9M1	TKSM2	FGD0620 (L=20 mm)	FPD0620 (L=20 mm)
ZA12	M8x1	MC10ML	PMX8MC-3	FGD0830 (L=30 mm)	FPD0830 (L=30 mm)
ZA16	M10x1	MC25M-NB	TK10M-4	FGD1030 (L=30 mm)	FPD1030 (L=30 mm)
ZA20	M12x1	MC75M3-NB	PM15MF-2	FGD1235 (L=35 mm)	FPD1235 (L=35 mm)

SENSORS

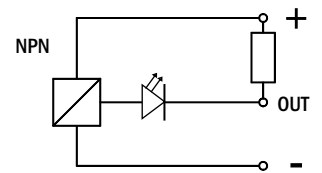
The operating position is detected by one or more magnetic proximity sensors (optional) through a magnet placed on the piston.

Magnetic proximity sensors should not be used in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems and jeopardize proper operation.

The sensors that can be used are:



Magneto-resistive



				ZA06	ZA08	ZA12	ZA16	ZA20
SN4N225G	PNP	2.5m cable	\$26.14	☑	☑	☑	☑	☑
SN4M225G	NPN	2.5m cable	\$26.14	☑	☑	☑	☑	☑
SN3N203G	PNP	M8 snap plug connector	\$29.96	☑	☑	☑	☑	☑
SN3M203G	NPN	M8 snap plug connector	\$29.96	☑	☑	☑	☑	☑
SS4N225Y	PNP	2.5m cable	\$26.14	☑	☑	☑	☑	☑
SS4M225Y	NPN	2.5m cable	\$26.14	☑	☑	☑	☑	☑
SS3N203Y	PNP	M8 snap plug connector	\$29.96	☑	☑	☑	☑	☑
SS3M203Y	NPN	M8 snap plug connector	\$29.96	☑	☑	☑	☑	☑

They are all provided with a flat three-wire cable and a LED.



LINEAR ACTUATORS

	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
Price	Call EMI				
Medium	Filtered compressed air, lubricated or non-lubricated				
Pressure range	44-116 psi				
Temperature range	41-140 °F				
Opening force at 87 psi	6.5 lbf				
Closing force at 87 psi	4.9 lbf				
Maximum total stroke	0.393" (10 mm)	0.787" (20 mm)	1.181" (30 mm)	1.574" (40 mm)	1.968" (50 mm)
Minimum actuating time	0.03 s	0.04 s	0.05 s	0.06 s	0.08 s
Air consumption per cycle	0.06 in ³	0.12 in ³	0.18 in ³	0.3 in ³	0.36 in ³
Weight	0.22 lb (100g)	0.26 lb (120g)	0.29 lb (135g)	0.37 lb (170g)	0.45 lb (205g)



	ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875
Price	Call EMI					
Medium	Filtered compressed air, lubricated or non-lubricated					
Pressure range	36-116 psi					
Temperature range	41-140 °F					
Opening force at 87 psi	11.5 lbf					
Closing force at 87 psi	8.5 lbf					
Maximum total stroke	0.393" (10 mm)	0.787" (20 mm)	1.181" (30 mm)	1.574" (40 mm)	1.968" (50 mm)	2.953" (75 mm)
Minimum actuating time	0.03 s	0.05 s	0.08 s	0.11 s	0.15 s	0.2 s
Air consumption per cycle	0.18 in ³	0.24 in ³	0.36 in ³	0.48 in ³	0.67 in ³	0.97 in ³
Weight	0.37 lb (170g)	0.41 lb (185g)	0.47 lb (215g)	0.59 lb (270g)	0.68 lb (310g)	0.99 lb (450g)



LINEAR ACTUATORS

01/2017

	ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100
Price	Call EMI						
Medium	Filtered compressed air, lubricated or non-lubricated						
Pressure range	15-116 psi						
Temperature range	41-140 °F						
Opening force at 87 psi	27.4 lbf						
Closing force at 87 psi	22.7 lbf						
Maximum total stroke	0.393" (10 mm)	0.787" (20 mm)	1.181" (30 mm)	1.574" (40 mm)	1.968" (50 mm)	2.953" (75 mm)	3.937" (100 mm)
Minimum actuating time	0.02 s	0.04 s	0.06 s	0.09 s	0.11 s	0.14 s	0.19 s
Air consumption per cycle	0.55 in ³	0.67 in ³	0.79 in ³	1.03 in ³	1.4 in ³	2.3 in ³	3.35 in ³
Weight	0.86 lb (390g)	0.86 lb (390g)	0.87 lb (395g)	0.97 lb (440g)	1.18 lb (535g)	1.57 lb (715g)	2.1 lb (955g)

LINEAR ACTUATORS



	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
Price	Call EMI							
Medium	Filtered compressed air, lubricated or non-lubricated							
Pressure range	15-116 psi							
Temperature range	41-140 °F							
Opening force at 87 psi	48.8 lbf							
Closing force at 87 psi	44.1 lbf							
Maximum total stroke	0.393" (10 mm)	0.787" (20 mm)	1.181" (30 mm)	1.574" (40 mm)	1.968" (50 mm)	2.953" (75 mm)	3.937" (100 mm)	4.921" (125 mm)
Minimum actuating time	0.03 s	0.04 s	0.05 s	0.06 s	0.06 s	0.07 s	0.09 s	0.11 s
Air consumption per cycle	0.97 in ³	1.16 in ³	1.40 in ³	1.89 in ³	2.44 in ³	4.21 in ³	5.98 in ³	7.75 in ³
Weight	1.42 lb (645g)	1.42 lb (645g)	1.43 lb (650g)	1.56 lb (710g)	1.81 lb (820g)	2.53 lb (1150g)	3.25 lb (1475g)	3.97 lb (1800g)

ZA1610



ZA1620



ZA1630



ZA1640



ZA1650



ZA1675



ZA16100



ZA16125



LINEAR ACTUATORS

	ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150
Price	Call EMI								
Medium	Filtered compressed air, lubricated or non-lubricated								
Pressure range	15-116 psi								
Temperature range	41-140 °F								
Opening force at 87 psi	76.2 lbf								
Closing force at 87 psi	69.5 lbf								
Maximum total stroke	0.393" (10 mm)	0.787" (20 mm)	1.181" (30 mm)	1.574" (40 mm)	1.968" (50 mm)	2.953" (75 mm)	3.937" (100 mm)	4.921" (125 mm)	5.905" (150 mm)
Minimum actuating time	0.03 s	0.04 s	0.05 s	0.06 s	0.07 s	0.09 s	0.11 s	0.13 s	0.16 s
Air consumption per cycle	1.58 in ³	1.95 in ³	2.32 in ³	3.11 in ³	4.03 in ³	6.28 in ³	8.66 in ³	11.47 in ³	13.48 in ³
Weight	2.43 lb (1100g)	2.45 lb (1110g)	2.45 lb (1110g)	2.66 lb (1210g)	3 lb (1360g)	3.85 lb (1745g)	5.12 lb (2320g)	6.27 lb (2845g)	7.43 lb (3370g)

ZA2010



ZA2020



ZA2030



ZA2040



ZA2050



ZA2075



ZA20100



ZA20125



ZA20150



KINETIC ENERGY

The energy the slide has to dissipate at each end-of-stroke is:

$$E = \frac{m_{WP} \times s^2}{t^2}$$

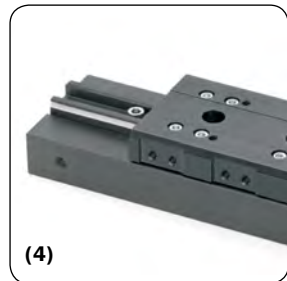
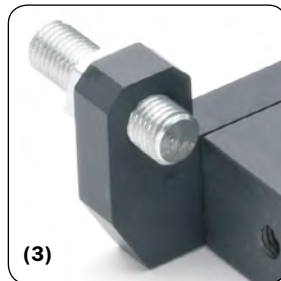
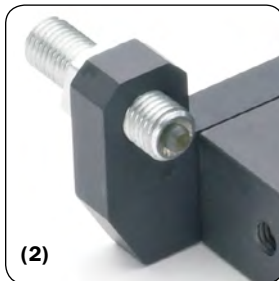
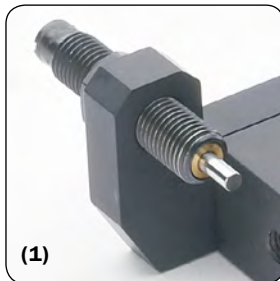
where:

- m_{WP} is the weight of the transported piece [kg];
- s is the stroke [m];
- t is the travel time [s].

The maximum permitted values of E are listed in the kinetic energy table below.

Permitted kinetic energy

		ZA06	ZA08	ZA12	ZA16	ZA20
With shock absorber	(1)	0.03 J	0.04 J	0.14 J	0.28 J	0.48 J
With rubber bumper	(2)	0.02 J	0.03 J	0.08 J	0.14 J	0.24 J
With dowel pin	(3)	0.01 J	0.02 J	0.03 J	0.05 J	0.08 J
Without stroke adjusters	(4)	0.01 J	0.02 J	0.03 J	0.05 J	0.08 J



REPETITION ACCURACY

The accessories used for the end-of-stroke adjustment affect the slide repeatability accuracy. Use the shock absorber option or the grub screw option when a precise end-of-stroke positioning (+/-0.02mm) is required.

SAFETY LOADS

Check the tables for maximum permitted loads.
Excessive loads can damage the slide and cause malfunctions.

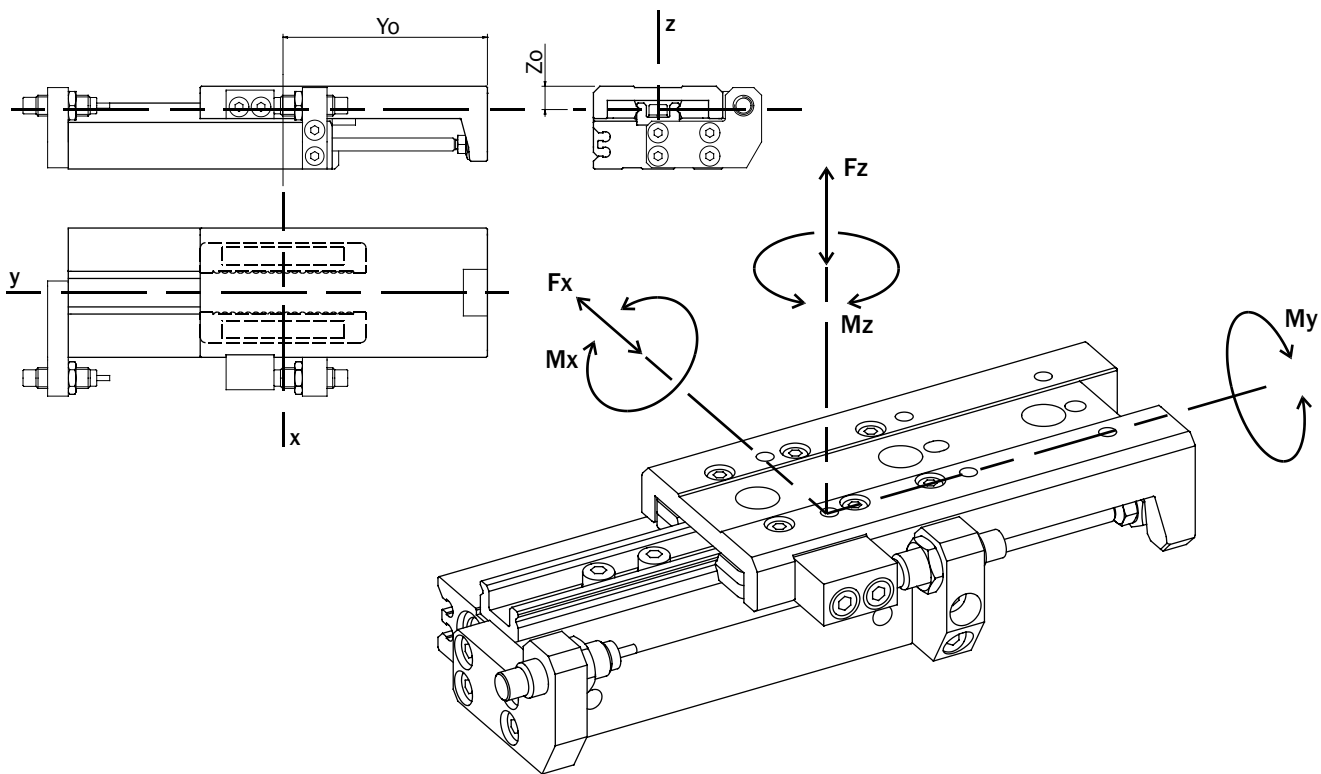
The dimensions Y_0 and Z_0 identify the linear bearing center position.

$F_x s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$ are the maximum permitted static loads.

$F_x d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$ are the maximum permitted dynamic loads.

The static loads can be applied when the carrier is motionless, the dynamic loads when the carrier is running.

In the tables you can also find the maximum payload (m max).



	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
Z_0	5.5 mm	5.5 mm	5.5 mm	5.5 mm	5.5 mm
Y_0	28 mm	38 mm	48 mm	65 mm	77 mm
$F_x s$	15 N	15 N	15 N	18 N	18 N
$F_z s$	15 N	15 N	15 N	18 N	18 N
$M_x s$	1 Nm	1 Nm	1 Nm	2 Nm	2 Nm
$M_y s$	1 Nm	1 Nm	1 Nm	1.5 Nm	1.5 Nm
$M_z s$	1 Nm	1 Nm	1 Nm	2 Nm	2 Nm
$F_x d$	6 N	6 N	6 N	7 N	7 N
$F_z d$	6 N	6 N	6 N	7 N	7 N
$M_x d$	0.2 Nm	0.2 Nm	0.2 Nm	0.4 Nm	0.4 Nm
$M_y d$	0.2 Nm	0.2 Nm	0.2 Nm	0.3 Nm	0.3 Nm
$M_z d$	0.2 Nm	0.2 Nm	0.2 Nm	0.4 Nm	0.4 Nm
m max	0.6 kg	0.6 kg	0.6 kg	0.7 kg	0.7 kg

	ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875
Zo	7.5 mm	7.5 mm	7.5 mm	7.5 mm	7.5 mm	7.5 mm
Yo	36 mm	41 mm	52 mm	66 mm	77 mm	115 mm
Fx s	30 N	30 N	30 N	30 N	30 N	60 N
Fz s	30 N	30 N	30 N	30 N	30 N	60 N
Mx s	1.5 Nm	1.5 Nm	1.5 Nm	2 Nm	4 Nm	6 Nm
My s	2 Nm	2 Nm	2 Nm	3 Nm	2 Nm	4 Nm
Mz s	1.5 Nm	1.5 Nm	1.5 Nm	2 Nm	4 Nm	6 Nm
Fx d	10 N	10 N	10 N	10 N	10 N	20 N
Fz d	10 N	10 N	10 N	10 N	10 N	20 N
Mx d	0.3 Nm	0.3 Nm	0.3 Nm	0.4 Nm	0.8 Nm	1.2 Nm
My d	0.4 Nm	0.4 Nm	0.4 Nm	0.6 Nm	0.4 Nm	0.8 Nm
Mz d	0.3 Nm	0.3 Nm	0.3 Nm	0.4 Nm	0.8 Nm	1.2 Nm
m max	1 kg	1 kg	1 kg	1 kg	1 kg	2 kg

	ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100
Zo	9 mm	9 mm	9 mm	9 mm	9 mm	9 mm	9 mm
Yo	53 mm	53 mm	53 mm	65 mm	83 mm	115 mm	154 mm
Fx s	60 N	60 N	60 N	60 N	90 N	90 N	120 N
Fz s	60 N	60 N	60 N	60 N	90 N	90 N	120 N
Mx s	4 Nm	4 Nm	4 Nm	4 Nm	7 Nm	10 Nm	15 Nm
My s	6 Nm	6 Nm	6 Nm	6 Nm	8 Nm	8 Nm	10 Nm
Mz s	4 Nm	4 Nm	4 Nm	4 Nm	7 Nm	10 Nm	15 Nm
Fx d	20 N	20 N	20 N	20 N	30 N	30 N	40 N
Fz d	20 N	20 N	20 N	20 N	30 N	30 N	40 N
Mx d	0.8 Nm	0.8 Nm	0.8 Nm	0.8 Nm	1.4 Nm	2 Nm	3 Nm
My d	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm	1.6 Nm	1.6 Nm	2 Nm
Mz d	0.8 Nm	0.8 Nm	0.8 Nm	0.8 Nm	1.4 Nm	2 Nm	3 Nm
m max	2 kg	2 kg	2 kg	2 kg	3 kg	3 kg	4 kg

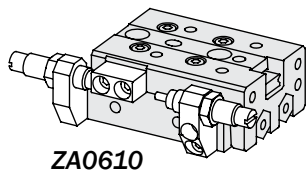
	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
Zo	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm
Yo	60 mm	60 mm	60 mm	68 mm	79 mm	118 mm	155 mm	192 mm
Fx s	100 N	100 N	100 N	100 N	120 N	120 N	180 N	250 N
Fz s	100 N	100 N	100 N	100 N	120 N	120 N	180 N	250 N
Mx s	6 Nm	6 Nm	6 Nm	6 Nm	7 Nm	15 Nm	25 Nm	46 Nm
My s	8 Nm	8 Nm	8 Nm	8 Nm	11 Nm	10 Nm	16 Nm	22 Nm
Mz s	6 Nm	6 Nm	6 Nm	6 Nm	7 Nm	15 Nm	25 Nm	46 Nm
Fx d	30 N	30 N	30 N	30 N	40 N	40 N	50 N	60 N
Fz d	30 N	30 N	30 N	30 N	40 N	40 N	50 N	60 N
Mx d	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm	1.4 Nm	3 Nm	5 Nm	9.2 Nm
My d	1.6 Nm	1.6 Nm	1.6 Nm	1.6 Nm	2.2 Nm	2 Nm	3.2 Nm	4.4 Nm
Mz d	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm	1.4 Nm	3 Nm	5 Nm	9.2 Nm
m max	3 kg	3 kg	3 kg	3 kg	4 kg	4 kg	5 kg	6 kg

	ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150
Zo	13.5 mm	13.5 mm	13.5 mm	13.5 mm	13.5 mm	13.5 mm	13.5 mm	13.5 mm	13.5 mm
Yo	64 mm	64 mm	64 mm	74 mm	84 mm	117 mm	157 mm	194 mm	235 mm
Fx s	180 N	180 N	180 N	180 N	180 N	180 N	270 N	370 N	260 N
Fz s	180 N	180 N	180 N	180 N	180 N	180 N	270 N	370 N	260 N
Mx s	10 Nm	10 Nm	10 Nm	10 Nm	10 Nm	13 Nm	30 Nm	48 Nm	48 Nm
My s	17 Nm	17 Nm	17 Nm	17 Nm	17 Nm	17 Nm	25 Nm	35 Nm	25 Nm
Mz s	10 Nm	10 Nm	10 Nm	10 Nm	10 Nm	13 Nm	30 Nm	48 Nm	48 Nm
Fx d	40 N	40 N	40 N	40 N	40 N	40 N	60 N	70 N	50 N
Fz d	40 N	40 N	40 N	40 N	40 N	40 N	60 N	70 N	50 N
Mx d	2 Nm	2 Nm	2 Nm	2 Nm	2 Nm	2.6 Nm	6 Nm	9.6 Nm	9.6 Nm
My d	3.4 Nm	3.4 Nm	3.4 Nm	3.4 Nm	3.4 Nm	3.4 Nm	5 Nm	7 Nm	5 Nm
Mz d	2 Nm	2 Nm	2 Nm	2 Nm	2 Nm	2.6 Nm	6 Nm	9.6 Nm	9.6 Nm
m max	4 kg	4 kg	4 kg	4 kg	4 kg	4 kg	6 kg	7 kg	5 kg

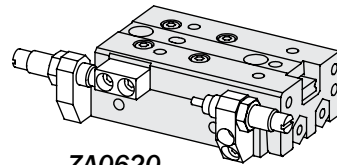
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DIMENSIONS (mm)

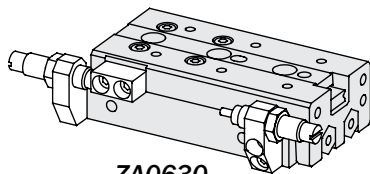
	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
A	20	30	20	28	38
B	-	-	20	28	38
D	19	29	40	61	76
E	8.5	8.5	7.5	8.5	9.5
H	6	6	11	13	17
I	25	35	20	30	24
J	-	-	40	60	48
K	-	-	-	-	72
O	11	21	31	43	41
P	20	20	20	30	48
Q	47	57	67	89	105
R	41.5	51.5	61.5	83.5	99.5
S	48	58	68	90	106
T	5.5	5.5	5.5	11.5	14.5
V	5.5	5.5	5.5	11.5	14.5



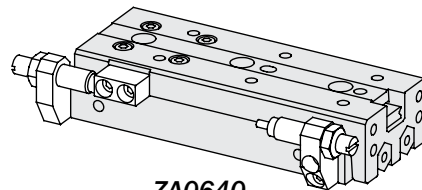
ZA0610



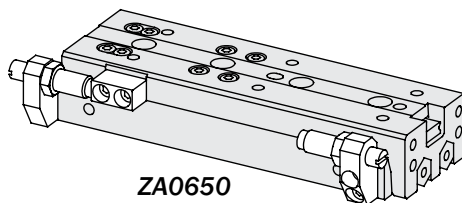
ZA0620



ZA0630



ZA0640



ZA0650

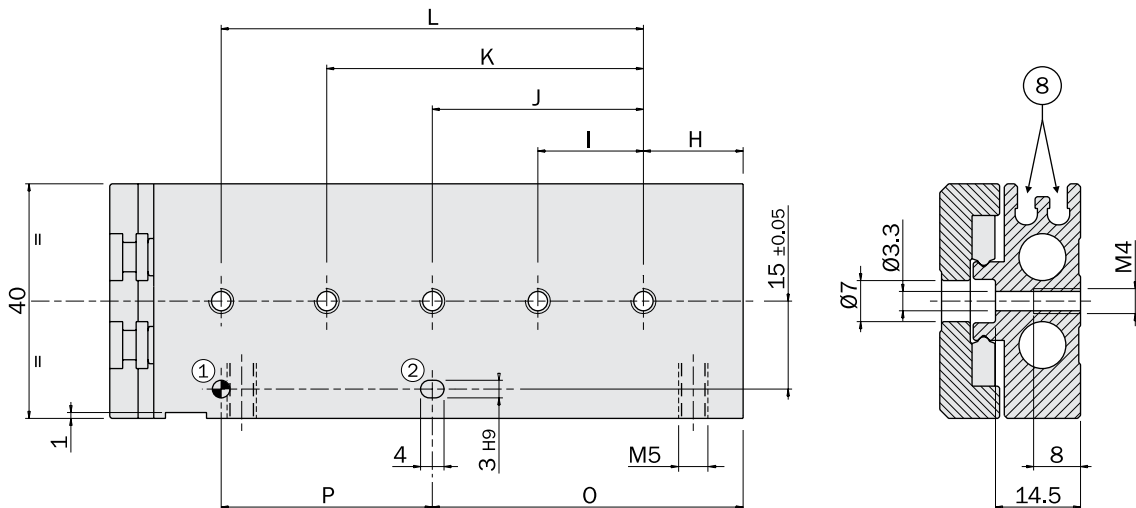
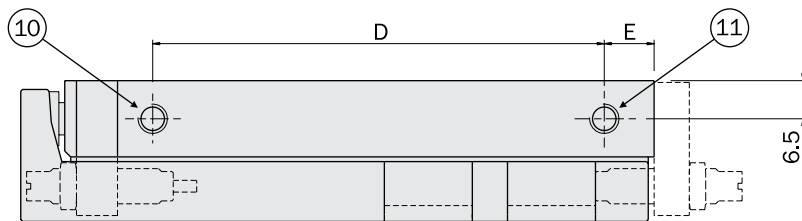
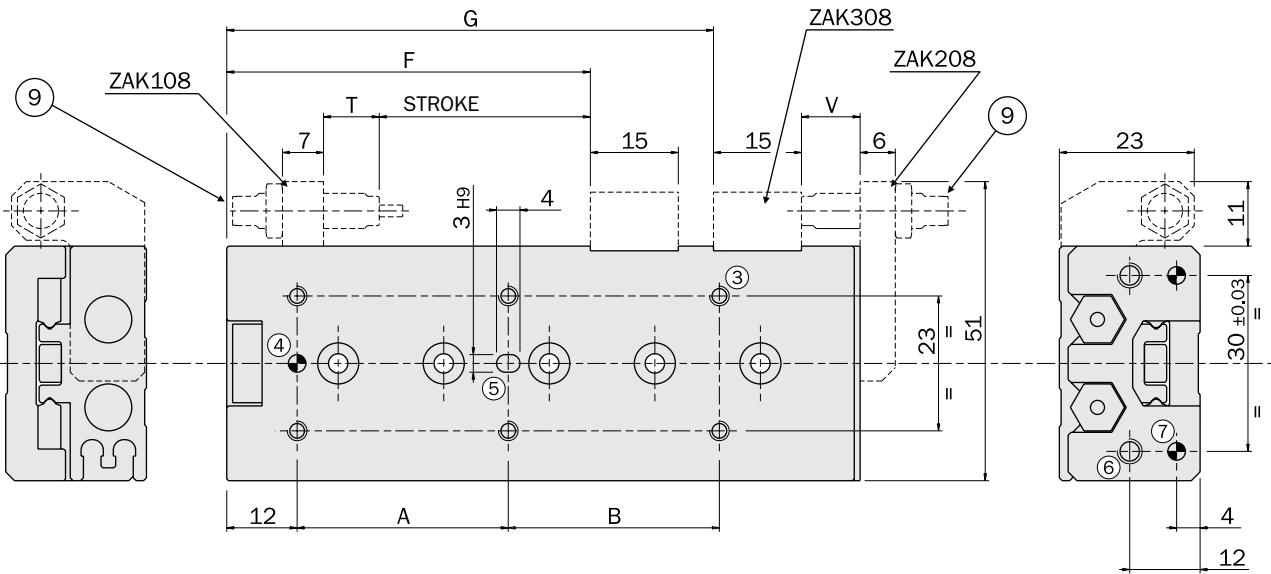
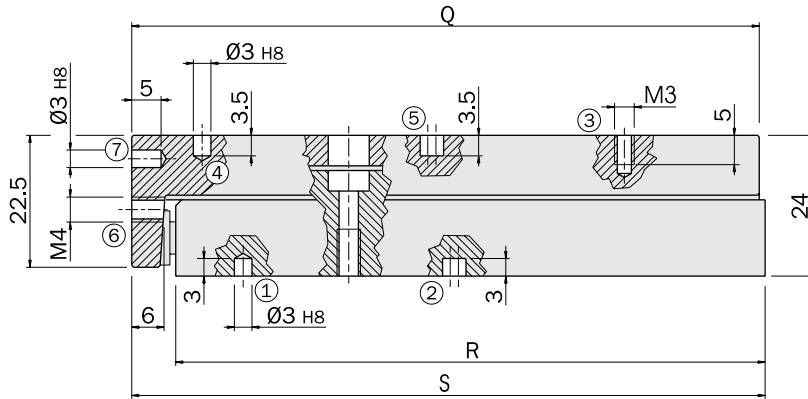
LINEAR ACTUATORS

DIMENSIONS (mm)

ZA08



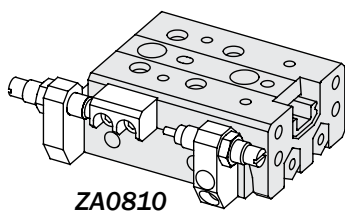
- 8 SS- and SN-series sensor slot
- 9 Stroke adjuster
- 10 Air port for slide retraction
- 11 Air port for slide extension



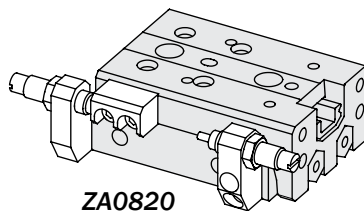
LINEAR ACTUATORS

DIMENSIONS (mm)

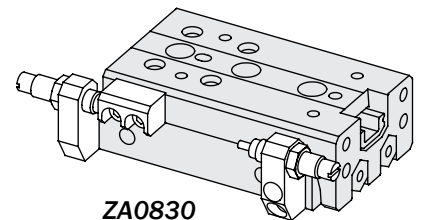
	ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875
A	25	25	40	50	38	50
B	-	-	-	-	38	50
D	21	30	41	59	77	127
E	12.5	8.5	8.5	8.5	8.5	8.5
F	34	41	52	66	71	98
G	-	-	-	-	89	137
H	9	12	13	15	20	27
I	28	30	20	28	23	28
J	-	-	40	56	46	56
K	-	-	-	-	69	84
L	-	-	-	-	-	112
O	17	12	33	43	43	83
P	20	30	20	28	46	56
Q	55	60	71	89	107	157
R	48.5	53.5	64.5	82.5	100.5	150.5
S	56	61	72	90	108	158
T	7.5	4.5	5.5	9.5	4.5	6.5
V	7	5	5	9	4	6



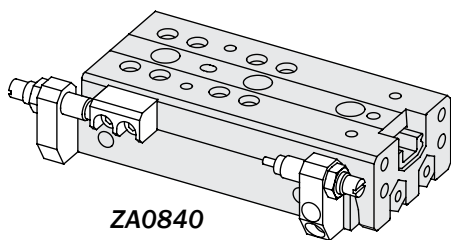
ZA0810



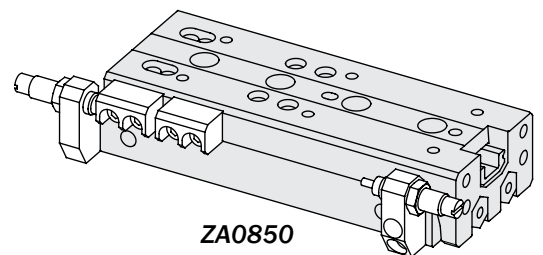
ZA0820



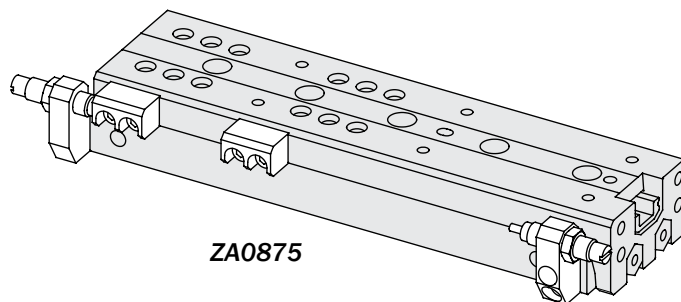
ZA0830



ZA0840



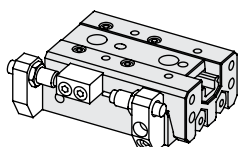
ZA0850



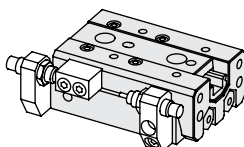
ZA0875

DIMENSIONS (mm)

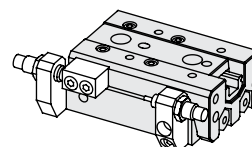
	ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100
A	35	35	35	50	35	55	65
B	-	-	-	-	35	55	65
D	41.5	41.5	41.5	53	73	114	168
E	9.5	9.5	9.5	10	10	15	15
F	46.5	51.5	56.5	67.5	82.5	102.5	130
G	-	-	-	-	-	133.5	185
H	15	15	15	17	15	25	35
I	40	40	40	25	36	36	38
J	-	-	-	50	72	72	76
K	-	-	-	-	-	108	114
L	-	-	-	-	-	-	152
O	15	15	15	42	51	61	111
P	40	40	40	25	36	72	76
Q	79	79	79	91	111	157	211
R	70	70	70	82	102	148	202
S	80	80	80	92	112	158	212
T	15	10	5	6	11	6	8.5
V	15	9.5	5	6	11	6	8.5



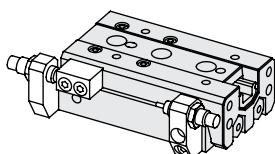
ZA1210



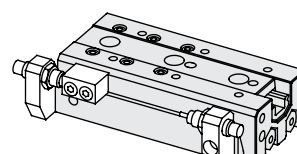
ZA1220



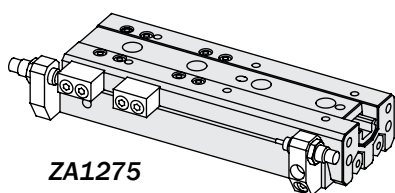
ZA1230



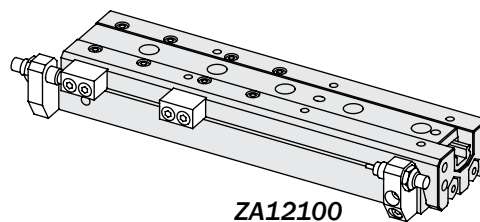
ZA1240



ZA1250



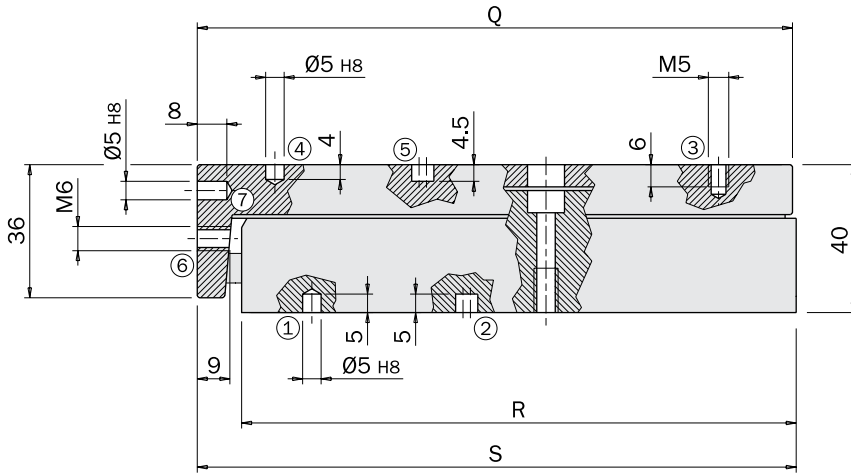
ZA1275



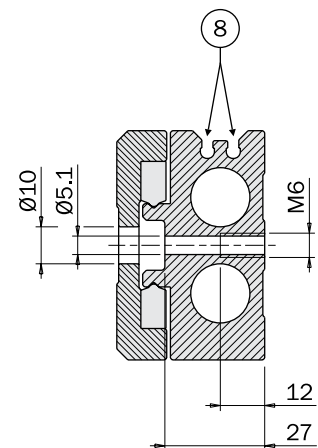
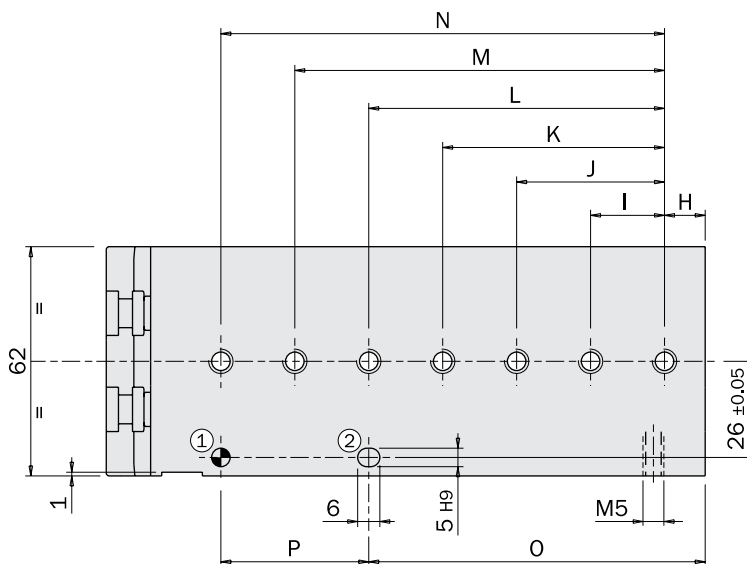
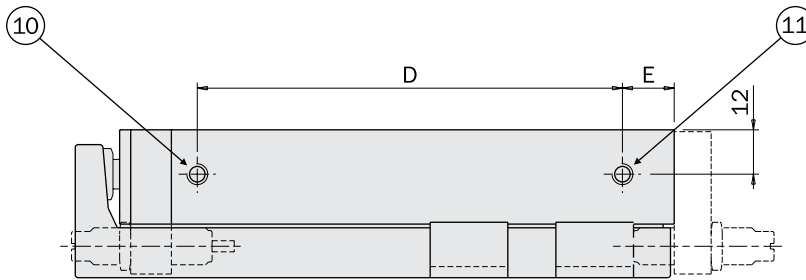
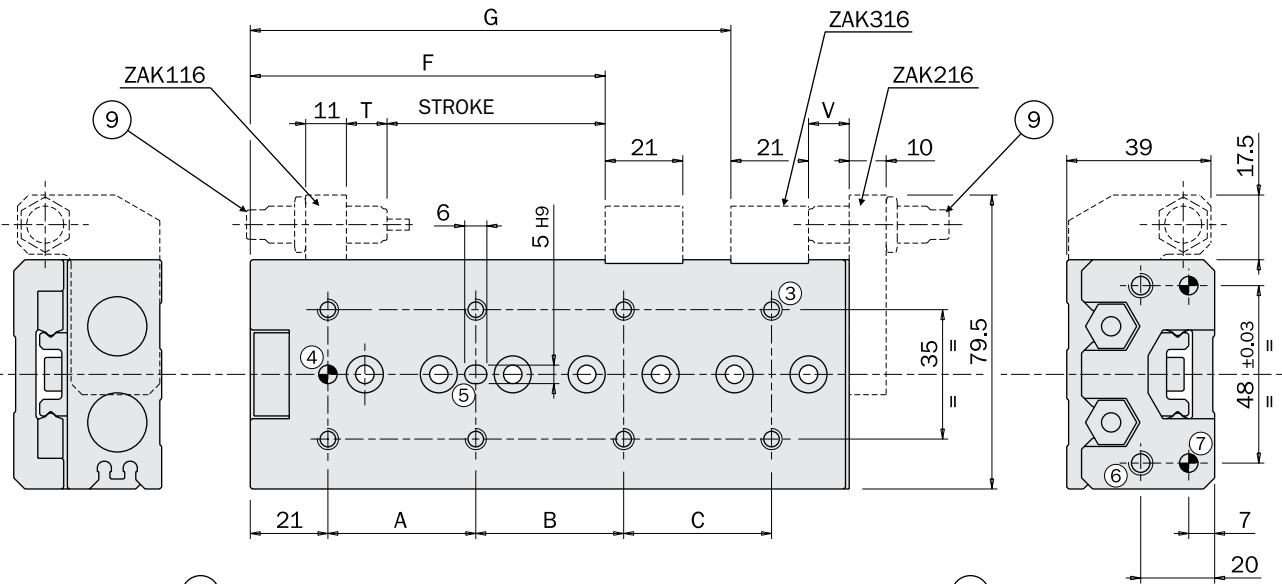
ZA12100

DIMENSIONS (mm)

ZA16

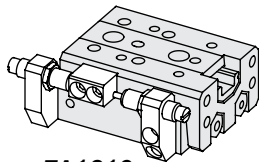


- 8 SS- and SN-series sensor slot
- 9 Stroke adjuster
- 10 Air port for slide retraction
- 11 Air port for slide extension

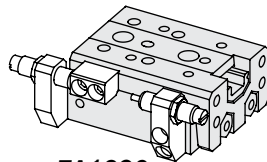


DIMENSIONS (mm)

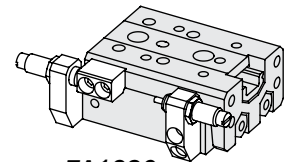
	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
A	35	35	35	40	30	55	65	70
B	-	-	-	-	30	55	65	70
C	-	-	-	-	-	-	-	70
D	46.5	46.5	46.5	56.5	70	115	150	200
E	7.5	7.5	7.5	7.5	9	14	27	27
F	51	56	61	71	83.5	106	132	157
G	-	-	-	-	-	136	183	233
H	16	16	16	16	21	26	39	19
I	40	40	40	50	30	35	35	35
J	-	-	-	-	60	70	70	70
K	-	-	-	-	-	105	105	105
L	-	-	-	-	-	-	140	140
M	-	-	-	-	-	-	-	175
N	-	-	-	-	-	-	-	210
O	16	16	16	16	51	61	109	159
P	40	40	40	50	30	70	70	70
Q	86	86	86	96	111	161	209	259
R	75	75	75	85	100	150	198	248
S	87	87	87	97	112	162	210	260
T	15	10	5	5	7.5	5	6	6
V	15	10	5	5	7.5	5	6	6



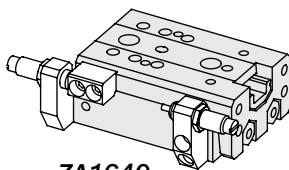
ZA1610



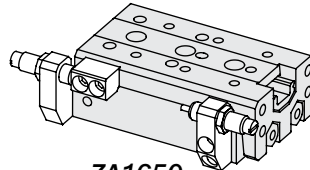
ZA1620



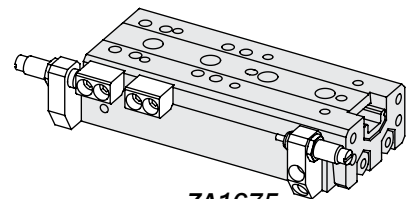
ZA1630



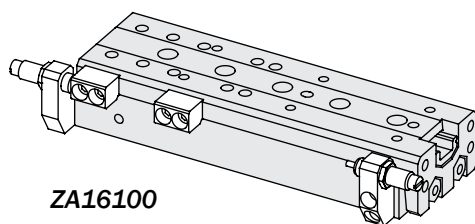
ZA1640



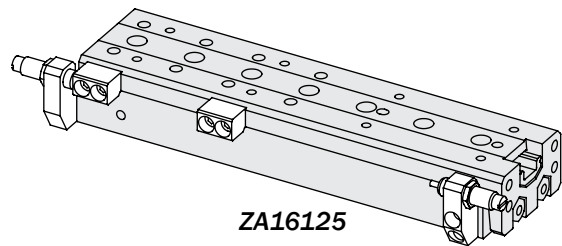
ZA1650



ZA1675



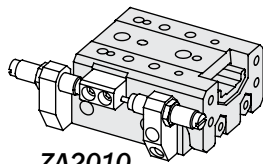
ZA16100



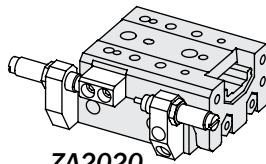
ZA16125

DIMENSIONS (mm)

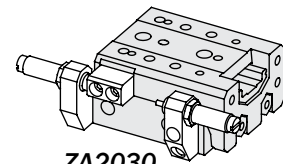
	ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150
A	50	50	50	60	35	60	70	70	80
B	-	-	-	-	35	60	70	70	80
C	-	-	-	-	-	-	-	70	80
D	44.5	44.5	44.5	54.5	69.5	108.5	161.5	215	267.5
F	57	62	67	77	89.5	121.5	140	165	190
G	-	-	-	-	-	-	181	235	287
H	15	15	15	15	15	19	37	41	19
I	45	45	45	55	35	35	35	38	44
J	-	-	-	-	70	70	70	76	88
K	-	-	-	-	-	105	105	114	132
L	-	-	-	-	-	-	140	152	176
M	-	-	-	-	-	-	-	190	220
N	-	-	-	-	-	-	-	-	264
O	25	25	25	35	50	54	107	155	195
P	35	35	35	35	35	70	70	76	88
Q	96	96	96	106	121	160	213	267	319
R	81.5	81.5	81.5	91.5	106.5	145.5	198.5	252.5	304.5
S	97	97	97	107	122	161	214	268	320
T	14.5	9.5	4.5	4.5	7	14	7.5	7.5	7.5
V	15	10	5	5	7.5	14.5	8	8	8
W	40	40	40	50	35	60	70	70	80



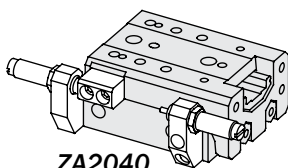
ZA2010



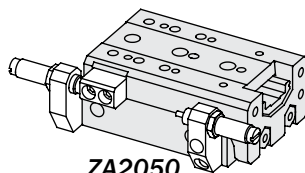
ZA2020



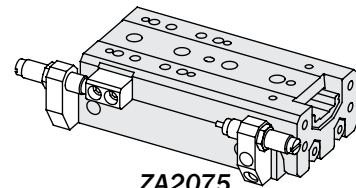
ZA2030



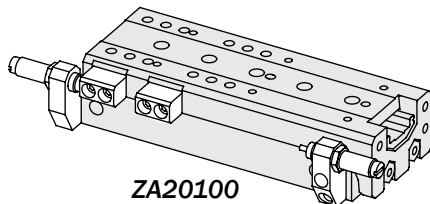
ZA2040



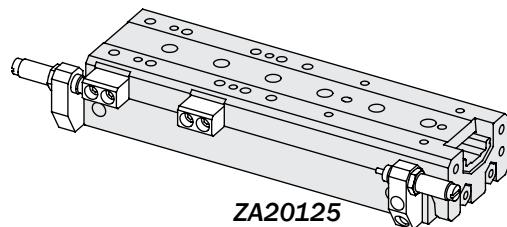
ZA2050



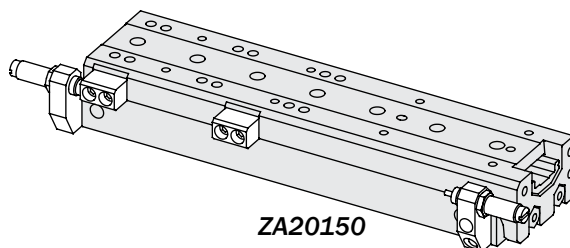
ZA2075



ZA20100



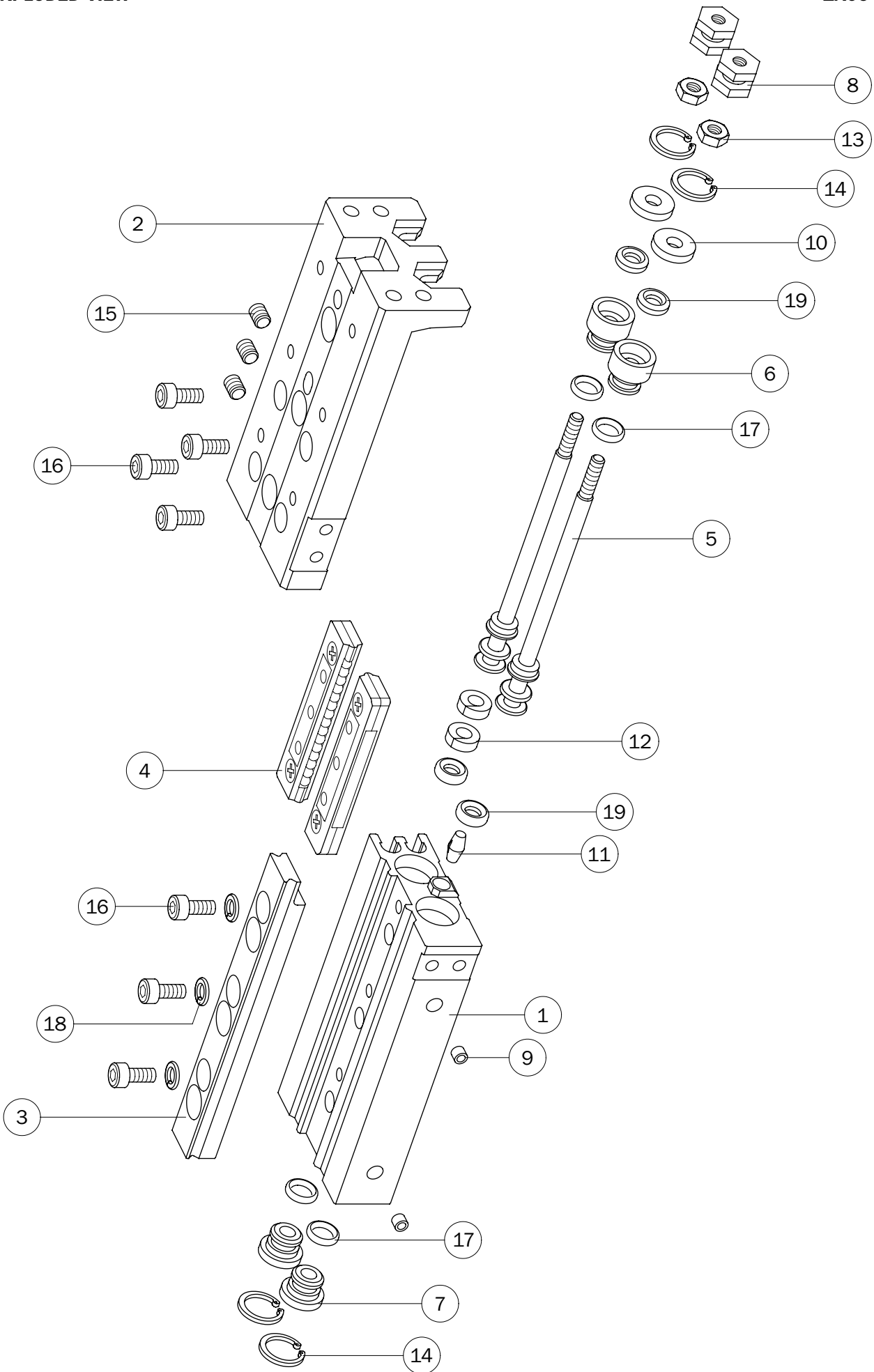
ZA20125



ZA20150

EXPLODED VIEW

ZA06

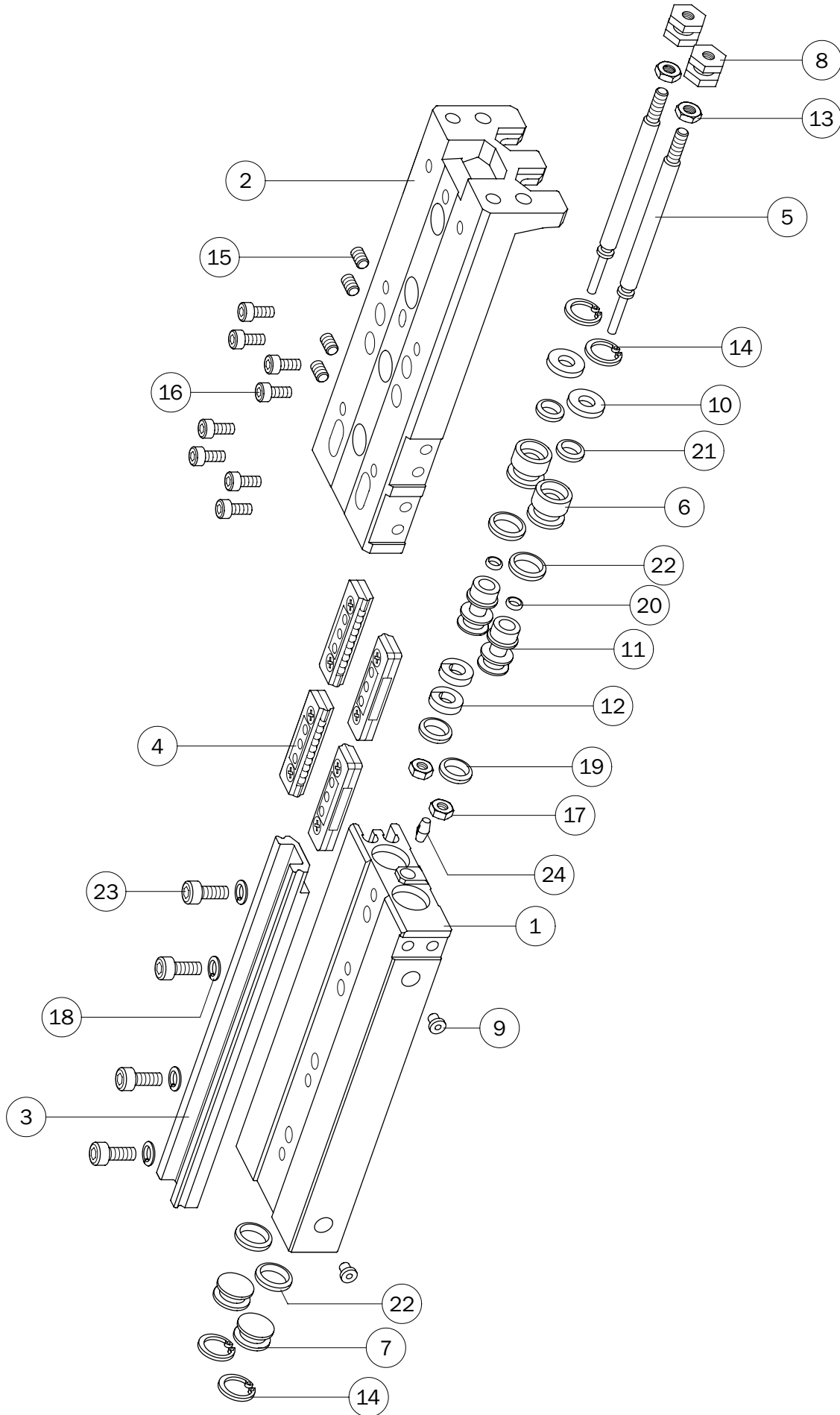


PARTS LIST

		ZA0610	ZA0620	ZA0630	ZA0640	ZA0650		
1	Slide body	ZA0610-01	ZA0620-01	ZA0630-01	ZA0640-01	ZA0650-01		1
2	Carrier	ZA0610-02	ZA0620-02	ZA0630-02	ZA0640-02	ZA0650-02		2
3	Guide	ZA0610-03	ZA0620-03	ZA0630-05	ZA0640-03	ZA0650-03		3
4	Recirculating ball bushing	CZ236 (x2)			CZ244 (x2)	CZ226 (x4)		4
5	Piston Ø12	ZA0610-04	ZA0620-04	ZA0630-04	ZA0640-04	ZA0650-04		5
6	Front flange	ZE0630-03						6
7	Rear flange	ZE0630-04						7
8	Coupling	ZA0630-03						8
9	Reduction Ø1	PAR-10-15B						9
10	Front flange plate	ZE0630-05						10
11	Rubber bumper	Ø3 AM-001						11
12	Magnet	ZE0630-11						12
13	Nut	M2.5 DIN 934 INOX						13
14	Snap ring	Ø8 DIN 472 INOX						14
15	Dowel pin	M3x4 DIN 913						15
16	Bolt	M2.5x6 DIN 912						16
17	O-Ring	Ø1x4 (GUAR-091)						17
18	Elastic washer	Ø2.7 UNI 1751-B						18
19	O-Ring	Ø1.78x2.90 (GUAR-057V)						19

LINEAR ACTUATORS

01/2017



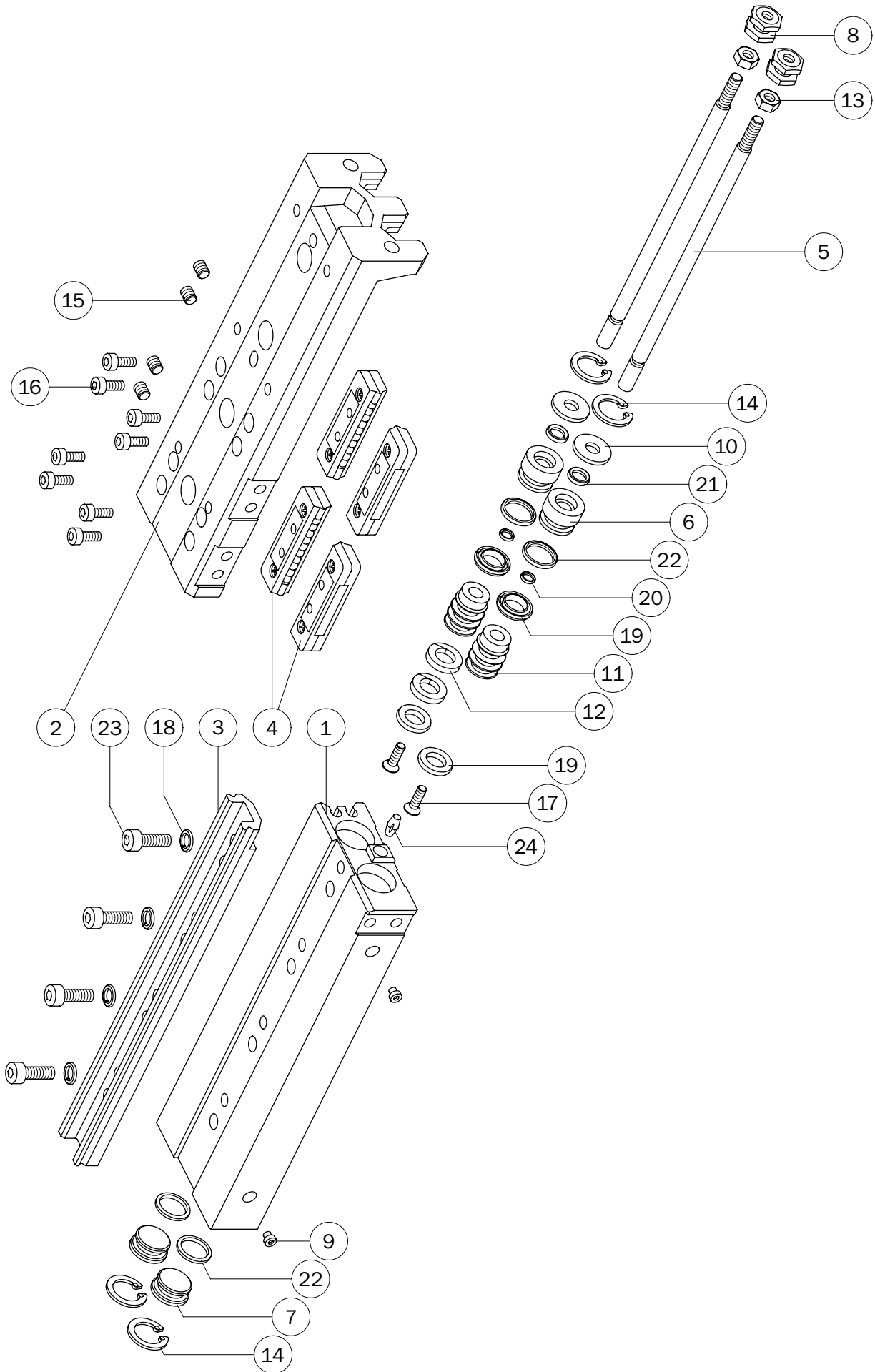
PARTS LIST

		ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875		
1	Slide body	ZA0810-01	ZA0820-01	ZA0830-01	ZA0840-01	ZA0850-01	ZA0875-01		1
2	Carrier	ZA0810-02	ZA0820-02	ZA0830-02	ZA0840-02	ZA0850-02	ZA0875-02		2
3	Guide	ZA0810-03	ZA0820-03	ZA0830-03	ZA0840-03	ZA0850-03	ZA0875-03		3
4	Recirculating ball bushing	CZ236 (x2)			CZ244 (x2)	CZ226 (x4)	CZ236 (x4)		4
5	Rod	ZA0810-04	ZA0820-10	ZA0830-04	ZA0840-04	ZA0850-04	ZA0875-04		5
6	Front flange	Z-0850-8							6
7	Rear flange	ZA0820-06							7
8	Coupling	ZA0820-11							8
9	Reduction Ø1	EPP20-05							9
10	Front flange plate	ZA0820-05							10
11	Piston Ø12	ZA0820-04							11
12	Magnet	ZA0820-12							12
13	Nut	M3 DIN 439B INOX							13
14	Snap ring	Ø9 DIN 472							14
15	Dowel pin	M3x5 DIN 913							15
16	Bolt	M2.5x6 DIN 912							16
17	Nut	M2 UNI 5587 INOX							17
18	Elastic washer	Ø3.2 UNI 1751-B							18
19	O-Ring	Ø1.78x4.48 (GUAR-029)							19
20	O-Ring	Ø1x2 (GUAR-130)							20
21	O-Ring	Ø1.78x3.69 (GUAR-044)							21
22	O-Ring	Ø1.78x6.07 (GUAR-039)							22
23	Bolt	M3x8 DIN 912							23
24	Rubber bumper	Ø3 AM-001							24

LINEAR ACTUATORS

EXPLODED VIEW

ZA12



LINEAR ACTUATORS

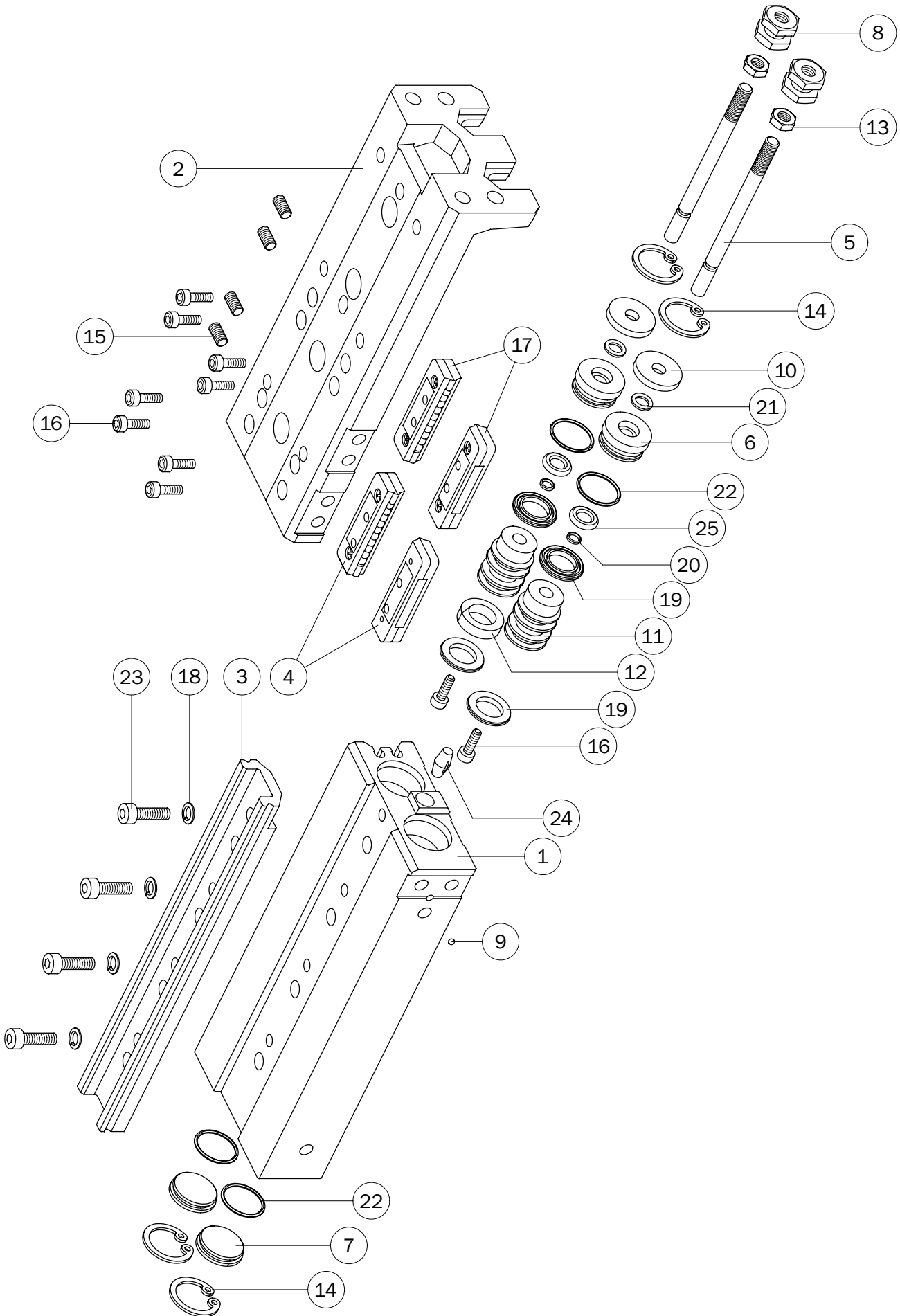
PARTS LIST

		ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100		
1	Slide body	ZA1210-01			ZA1240-01	ZA1250-01	ZA1275-01	ZA12100-01		1
2	Carrier	ZA1210-02	ZA1220-02	ZA1230-02	ZA1240-02	ZA1250-02	ZA1275-02	ZA12100-02		2
3	Guide	ZA1210-04			ZA1240-04	ZA1250-11	ZA1275-04	ZA12100-04		3
4	Recirculating ball bushing	CZ334 (x2)				CZ342 (x2)	CZ326 (x4)	CZ334 (x4)		4
5	Rod	ZA1210-03	ZA1220-01	ZA1230-01	ZA1240-03	ZA1250-05	ZA1275-03	ZA12100-03		5
6	Front flange					ZA1250-06				6
7	Rear flange					ZA1250-07				7
8	Coupling					ZA1250-03				8
9	Reduction Ø1					ZA1250-12				9
10	Front flange plate					ZA1250-13				10
11	Piston Ø12					ZA1250-04				11
12	Magnet					ZA1250-14				12
13	Nut					M4 DIN 934 INOX A2				13
14	Snap ring					Ø13 DIN 472				14
15	Dowel pin					M4x5 DIN 913				15
16	Bolt					M3x8 DIN 912				16
17	Bolt					M3x10 DIN 965A INOX A2				17
18	Elastic washer					Ø4.3 UNI 1751-B				18
19	Gasket					12.5x6.8x2.55 (GUAR-118)				19
20	O-Ring					Ø1x3 (GUAR-082)				20
21	O-Ring					Ø1.78x4.48 (GUAR-029)				21
22	O-Ring					Ø1.78x8.73 (GUAR-013)				22
23	Bolt					M4x10 DIN 912				23
24	Rubber bumper					Ø4 AM-002				24

LINEAR ACTUATORS

EXPLODED VIEW

ZA16

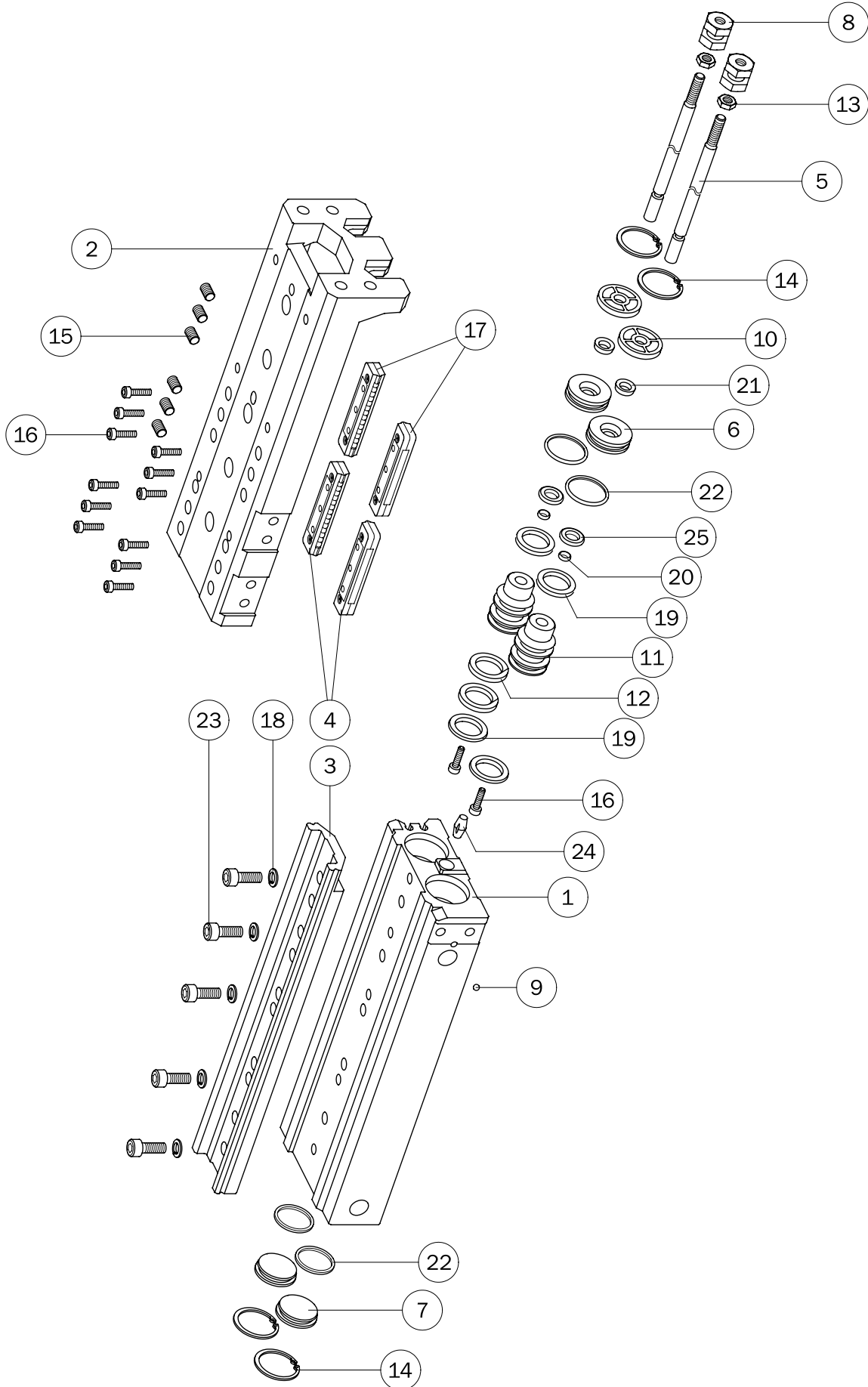


LINEAR ACTUATORS

PARTS LIST

		ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125		
1	Slide body	ZA1630-01			ZA1640-01	ZA1650-01	ZA1675-01	ZA16100-01	ZA16125-01	1	
2	Carrier	ZA1610-02	ZA1630-02		ZA1640-02	ZA1650-02	ZA1675-02	ZA16100-02	ZA16125-02	2	
3	Guide	ZA1630-09			ZA1640-04	ZA1650-04	ZA1675-04	ZA16100-04	ZA16125-04	3	
4	Recirculating ball bushing	CZ334 (x2)				CZ342	CZ326A (x2)	CZ342 (x2)		4	
5	Rod	ZA1610-01	ZA1620-01	ZA1630-05	ZA1640-03	ZA1650-05	ZA1675-03	ZA16100-03	ZA16125-03	5	
6	Front flange	ZE1630-03									6
7	Rear flange	GS-16-06R									7
8	Coupling	ZA1630-03									8
9	Ball	Ø2 AA DIN 5401 A									9
10	Front flange plate	ZE1630-05									10
11	Piston Ø12	ZA1630-04									11
12	Magnet	PS-0016-P09									12
13	Nut	M5 DIN 439B INOX A2									13
14	Snap ring	Ø17 DIN 472 INOX									14
15	Dowel pin	M4x8 DIN 913									15
16	Bolt	M3x10 DIN 912									16
17	Recirculating ball bushing	-	-	-	-	-	CZ326 (x2)	CZ326 (x2)	CZ342 (x2)	17	
18	Elastic washer	Ø4.3 UNI 1751-B									18
19	Gasket	Ø16x10x3 (GUAR-051)									19
20	O-Ring	Ø1x3 (GUAR-082)									20
21	O-Ring	Ø1.78x4.48 (GUAR-029)									21
22	O-Ring	Ø1x14 (GUAR-084)									22
23	Bolt	M4x12 DIN 912									23
24	Rubber bumper	Ø5 AM-003									24
25	O-Ring	Ø2.62x5.23 (GUAR-053S)									25

LINEAR ACTUATORS



PARTS LIST

		ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150		
1	Slide body	ZA2030-01			ZA2040-01	ZA2050-01	ZA2075-01	ZA20100-01	ZA20125-01	ZA20150-01		1
2	Carrier	ZA2010-02	ZA2020-02	ZA2030-02	ZA2040-02	ZA2050-02	ZA2075-02	ZA20100-02	ZA20125-02	ZA20150-02		2
3	Guide	ZA2030-09			ZA2040-04	ZA2050-04	ZA2075-04	ZA20100-04	ZA20125-04	ZA20150-04		3
4	Recirculating ball bushing	CZ342 (x2)				CZ348 (x2)	CZ326A (x2)	CZ334 (x2)	CZ334 (x2)	CZ326 (x6)		4
5	Rod	ZA2010-01	ZA2020-01	ZA2030-06	ZA2040-03	ZA2050-03	ZA2075-03	ZA20100-03	ZA20125-03	ZA20150-03		5
6	Front flange	Z-2050-8										6
7	Rear flange	GS-20-06R										7
8	Coupling	ZA2030-03										8
9	Ball	Ø3 AA DIN 5401A										9
10	Front flange plate	ZA2030-05										10
11	Piston Ø12	ZA2030-04										11
12	Magnet	PAR-20-10B										12
13	Nut	M5 DIN 439B INOX A2										13
14	Snap ring	Ø22 DIN 472 INOX										14
15	Dowel pin	M5x8 DIN 913										15
16	Bolt	M3x12 DIN 912										16
17	Recirculating ball bushing	-	-	-	-	-	CZ326A (x2)	CZ334 (x2)	CZ342 (x2)	-		17
18	Elastic washer	Ø5 UNI 1751-B										18
19	Gasket	20.7x13.75x2.55 (GUAR-120)										19
20	O-Ring	Ø1.78x2.90 (GUAR-057)										20
21	Gasket	Ø10x6x3.5 (GUAR-093)										21
22	O-Ring	Ø1.78x17.17 (GUAR-076)										22
23	Bolt	M5x14 DIN 912										23
24	Rubber bumper	Ø6 AM-004										24
25	O-Ring	Ø2.62x5.23 (GUAR-053S)										25

LINEAR ACTUATORS

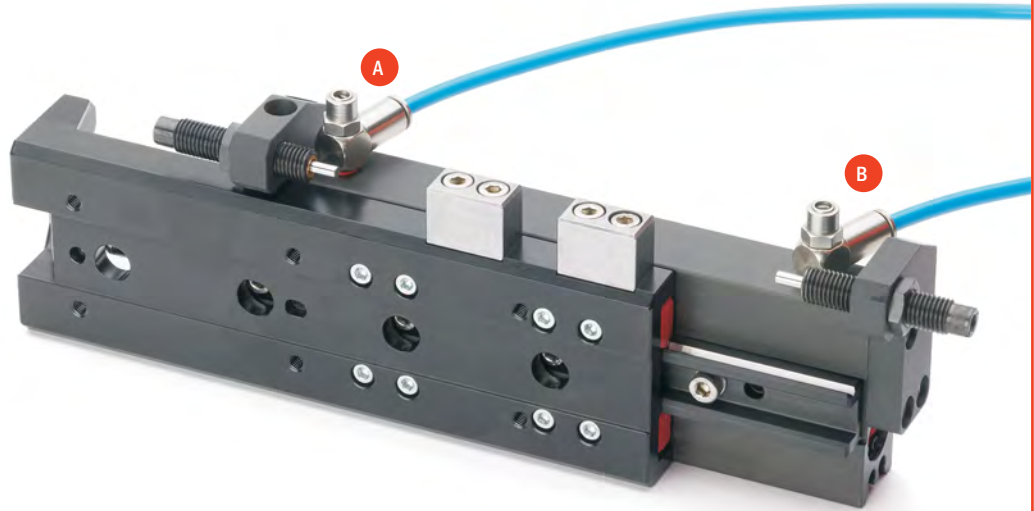
PIPING THE UNIT

The slide is pressurized from the side ports (A and B) using proper fittings and tubing (not supplied).

Compressed air in A: closing.
 Compressed air in B: opening.

The compressed air must be filtered using a 5 to 40 micron filter.
 The initial choice on air lubrication (lubricated or not) must be kept for the complete service life of the unit.

The pneumatic circuit must be pressurized progressively to avoid uncontrolled movements.



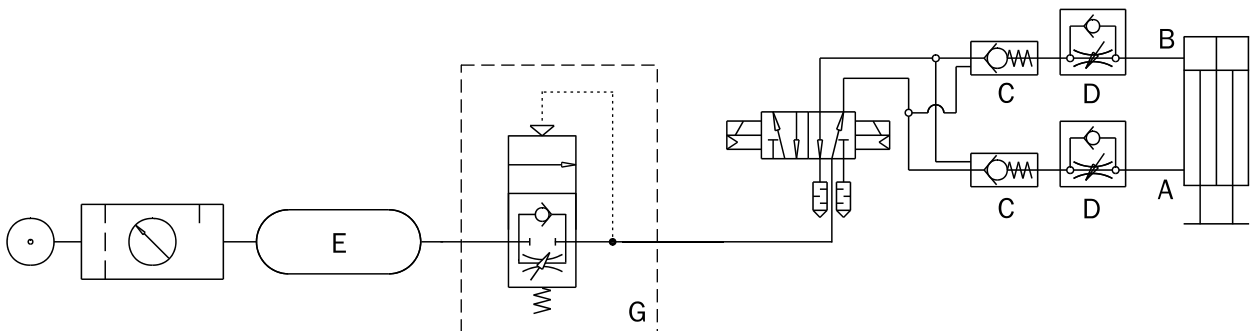
PNEUMATIC CIRCUIT

Possible problems on a compressed air circuit:

- 1- Pressure variations.
- 2- Pressurizing the unit at start-up.
- 3- Sudden lack of pressure.
- 4- Excessive drive speed.

Possible solutions to the above issues:

- 1- External compressed air storage (E).
- 2- Start-up valve (G).
- 3- Safety valves (C).
- 4- Flow controllers (D).

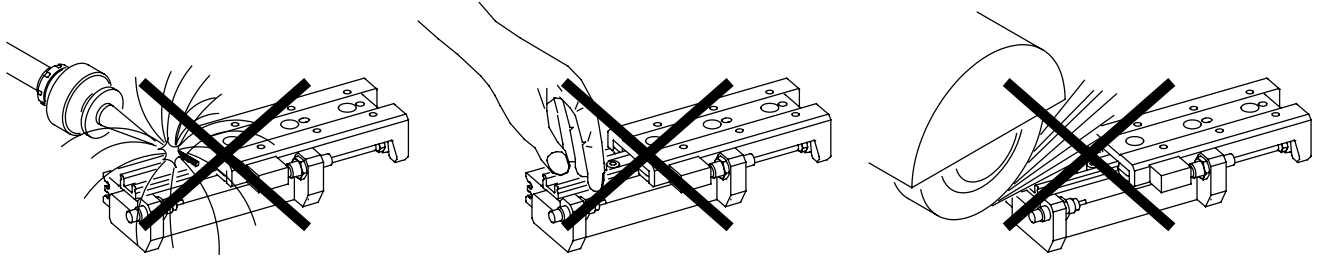


CAUTION

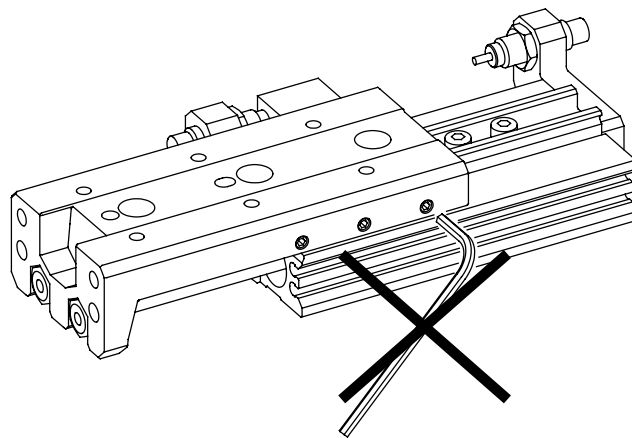
Never let the slide come into contact with corrosive substances, powders, or soldering or welding spatter as they will damage the slide.

Never let non-authorized persons or objects be within the operating range of the slide.

Never operate the slide on a machine that does not comply with the safety standards and laws of your country.



The preloading of the bearings is set in factory.
NEVER USE THE ADJUSTING SCREWS TO MODIFY IT.



If properly used, in a clean environment, the slide needs no maintenance for (10) million cycles.

Periodically check the guide columns and lubricate them when dry. The suitable grease is available in 90-gram tubes. Part # GLP500-90.

Periodically check the efficiency of the shock absorbers and replace them immediately if their damping performances decrease.

When mounting the stopper on the slide, be careful to position it in the right mounting direction. If assembled in the opposite direction, the stopper can interfere with the slide body and damage the bearings.

