

Pinze pneumatiche
Pneumatic grippers

Pinze ad espansione
Air hands

Attuatori lineari
Linear actuators

Guide lineari
Linear guidances

Unità rotanti
Rotary units



Pinza pneumatica autocentrante integrata con slitta (serie ZX)

- PZX-265: pinza parallela a 2 griffe con slitta.
- AZX-265: pinza angolare a 2 griffe con slitta.
- RZX-265: pinza radiale a 2 griffe con slitta.
- Azionamento a doppio effetto.
- Rapporto qualità/prezzo molto favorevole.
- Basso peso ottenuto utilizzando leghe leggere e polimeri.
- Sensori magnetici opzionali.
- Facile applicazione.
- Grande rigidità.
- Lunga durata e affidabilità.
- Compatibile con il sistema di manipolazione Gimapick.

Self-centering pneumatic gripper with slide (series ZX)

- PZX-265: 2 jaw parallel gripper with slide.
- AZX-265: 2 jaw angular gripper with slide.
- RZX-265: 2 jaw radial gripper with slide.
- Double acting.
- Very high performances / cost ratio.
- Lightweight, as light alloy and plastic resin had been utilized.
- Optional magnetic sensors.
- Easy application.
- High rigidity.
- Reliability and long life time.
- Compatibility with Gimapick "Pick and Place" system.



PZX-265



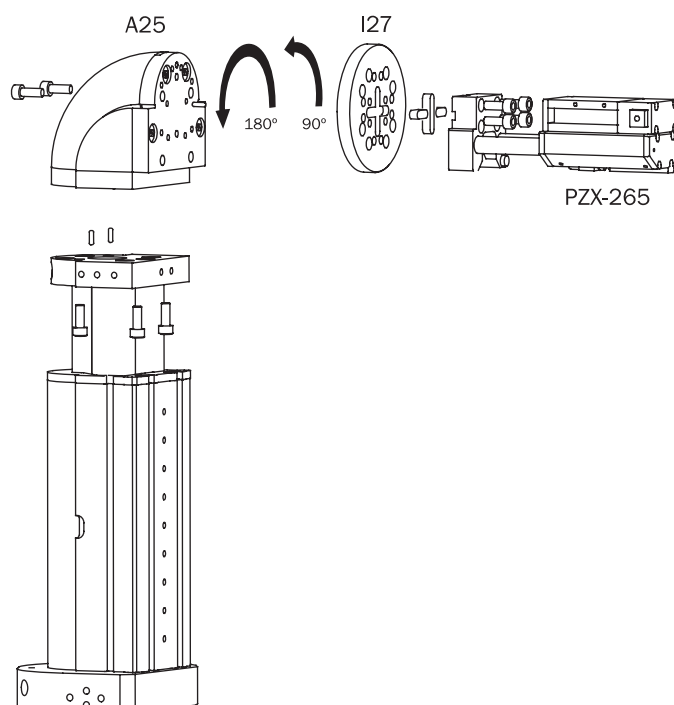
AZX-265



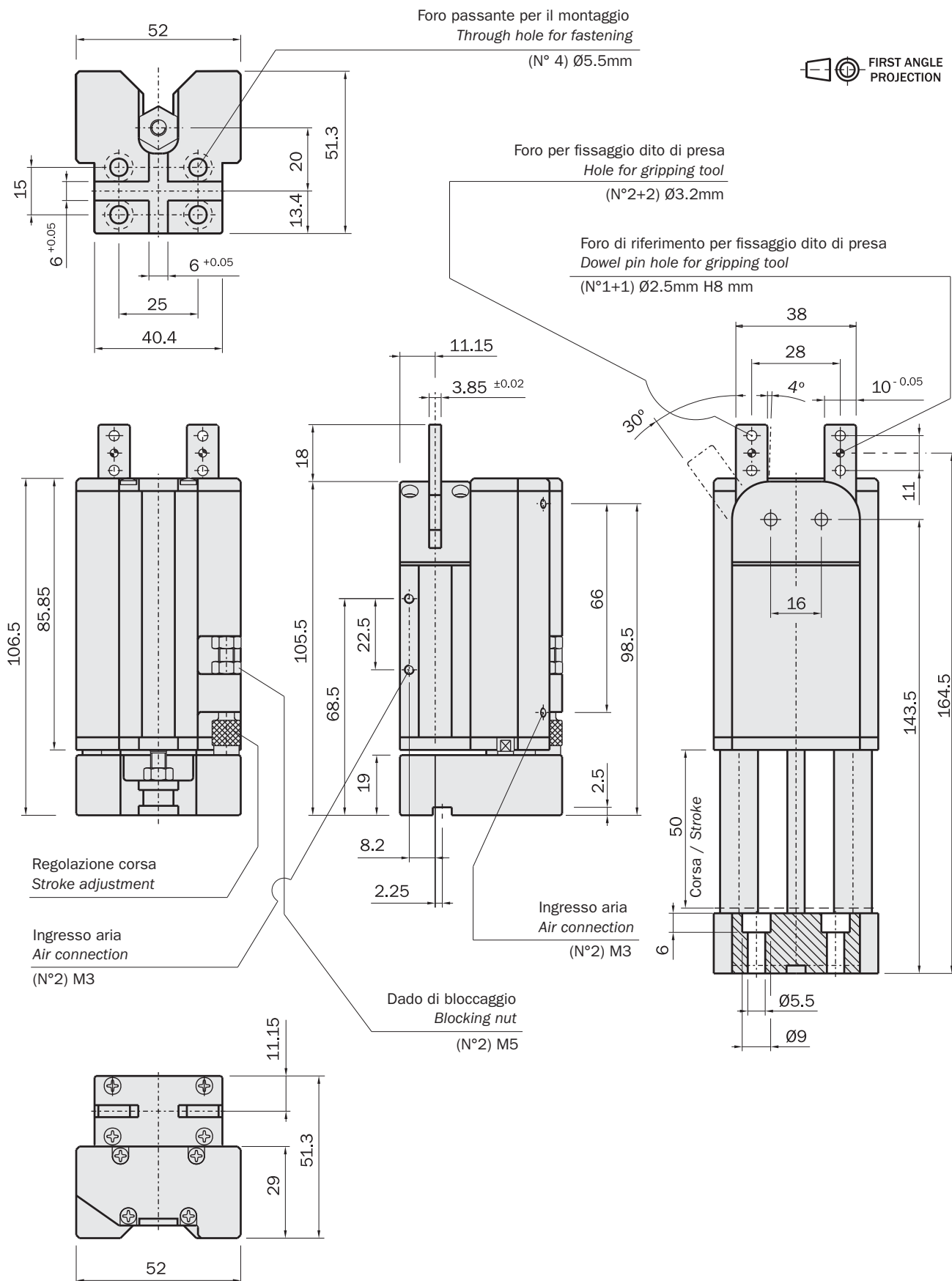
RZX-265

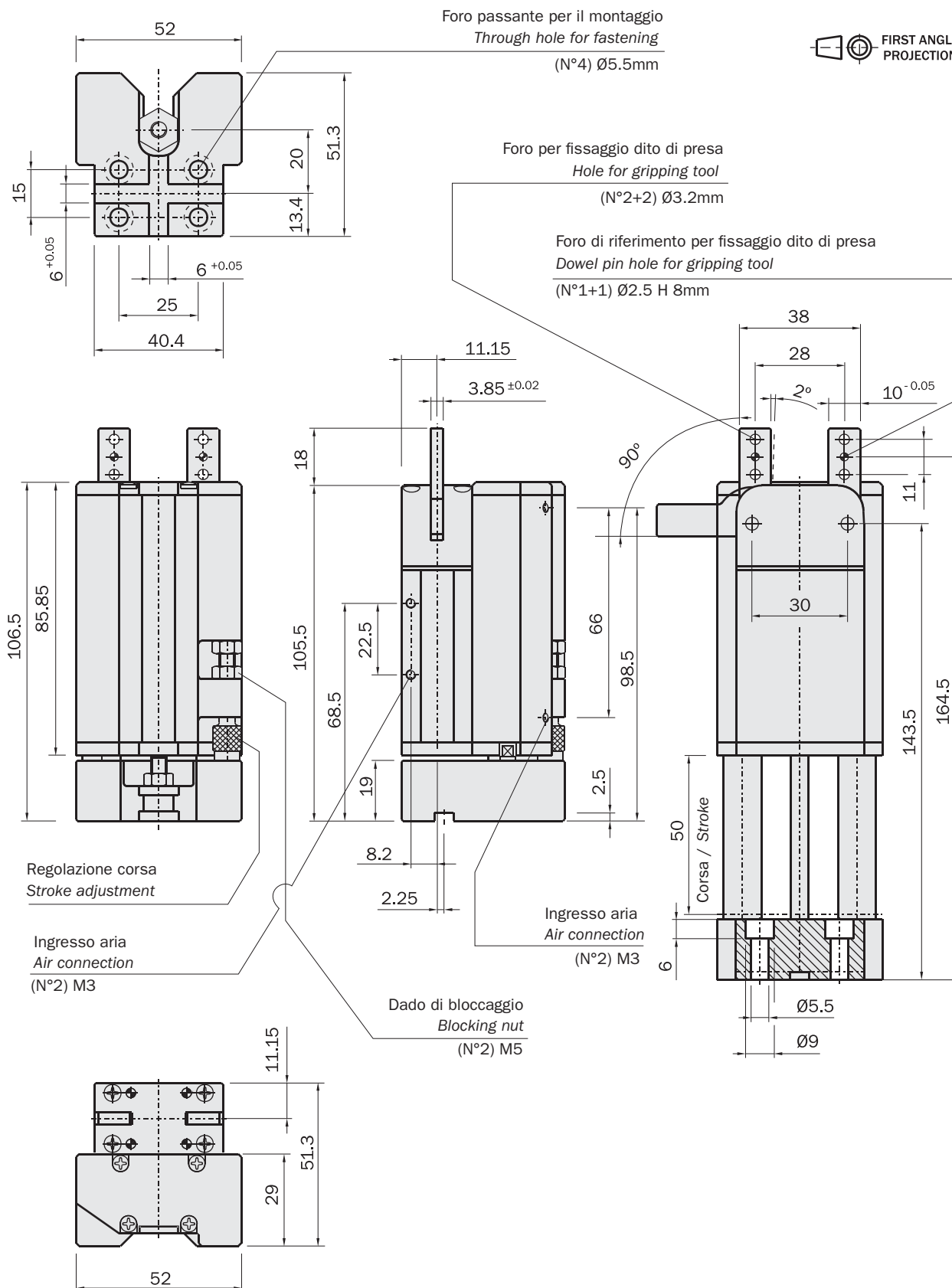
	PZX-265	AZX-265	RZX-265
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>		
Pressione di esercizio <i>Pressure range</i>	2.5 ÷ 8 bar		
Temperatura di esercizio <i>Temperature range</i>	5° ÷ 60°C.		
Forza di serraggio per griffa in chiusura a 6 bar <i>Closing gripping force at 6 bar each jaw</i>	55 N	25 Ncm	Max 90 Ncm
Forza di serraggio totale in chiusura a 6 bar <i>Closing total gripping force at 6 bar</i>	110 N	50 Ncm	Max 180 Ncm
Forza di serraggio per griffa in apertura a 6 bar <i>Opening gripping force at 6 bar each jaw</i>	65 N	28 Ncm	Max 100 Ncm
Forza di serraggio totale in apertura a 6 bar <i>Opening total gripping force at 6 bar</i>	130 N	56 Ncm	Max 200 Ncm
Forza della slitta in ritrazione a 6 bar <i>Slide retraction force at 6 bar</i>	93 N	93 N	93 N
Forza della slitta in estensione a 6 bar <i>Slide extension force at 6 bar</i>	105 N	105 N	105 N
Corsa della pinza <i>Gripper stroke</i>	8 mm (± 0.3)	34° (± 2°)	92° (± 2°)
Corsa della slitta <i>Slide stroke</i>	8 ÷ 50 mm	8 ÷ 50 mm	8 ÷ 50 mm
Consumo d'aria per ciclo della pinza <i>Gripper air consumption per cycle</i>	2.3 cm³	1.6 cm³	6.7 cm³
Consumo d'aria per ciclo della slitta <i>Slide air consumption per cycle</i>	19.7 cm³	19.7 cm³	19.7 cm³
Tempo di chiusura della pinza senza carico <i>Gripper closing time without load</i>	0.02 s	0.02 s	0.08 s
Tempo di chiusura della slitta senza carico <i>Slide closing time without load</i>	0.1 s	0.1 s	0.1 s
Frequenza max funzionamento <i>Maximum working frequency</i>	2 Hz	2 Hz	1 Hz
Tolleranza max ripetibilità della pinza <i>Gripper maximum repeatability tolerance</i>	0.02 mm	0.04°	0.06°
Tolleranza max ripetibilità della slitta <i>Slide maximum repeatability tolerance</i>	0.2 mm	0.2 mm	0.2 mm
Peso <i>Weight</i>	640 g	615 g	625 g

Montaggio su Gimapick / Mounting on Gimapick







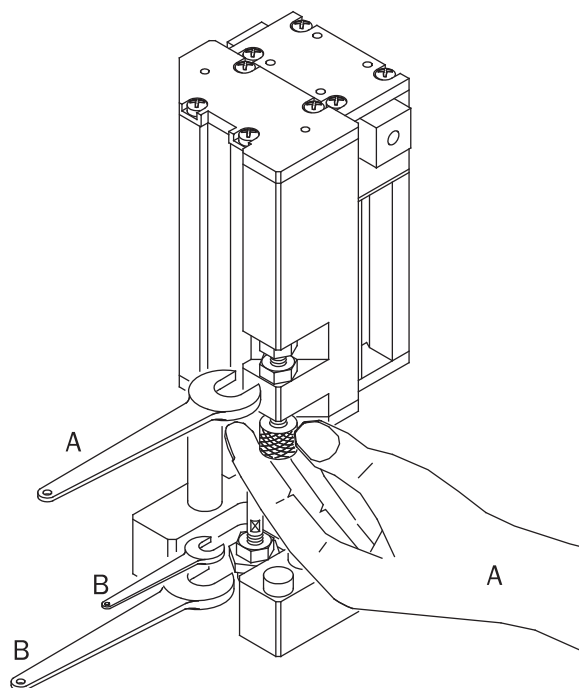


Regolazione della corsa

- A - Regolazione della corsa di chiusura della slitta.
- B - Regolazione della corsa di apertura della slitta.

Stroke adjustment

- A - Slide retraction stroke adjustment.
- B - Slide extension stroke adjustment.

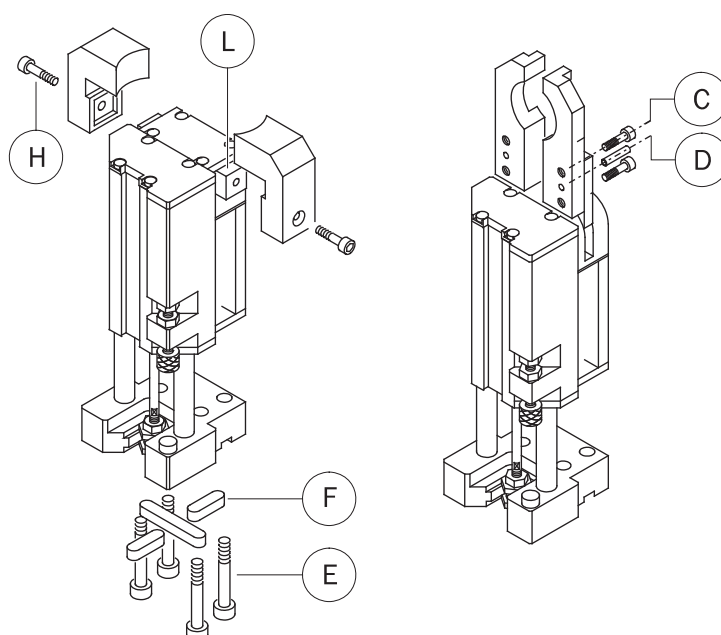


Fissaggio

Costruire le dita di presa il più possibile corte e leggere.
Sulla PZX-265 si fissano con un'unica vite (H) calzandole sulla sagoma quadrata calibrata (L) della griffa.
Sulla AZX-265 e RZX-265 si fissano inserendo due viti nei fori passanti (C) ed una spina nel foro calibrato (D).
L'unità si fissa con quattro viti (E) e si centra con le linguette (F).

Fastening

The gripping tools must be as short and light as possible.
On the PZX-265 they must be attached using an only screw (H) and centered on the square calibrated jaw profile (L).
On AZX-265 and RZX-265 they must be attached on the jaw using two screws in the through holes (C) and one dowel pin in the hole (D).
The unit must be fastened using four screws (E) and centered by the key-slots (F).

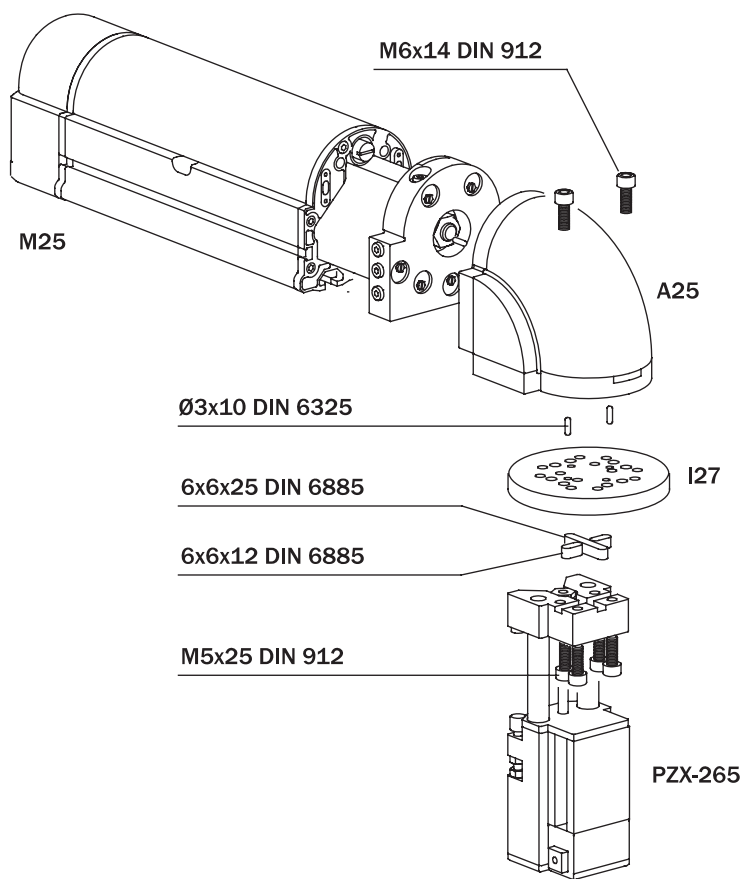


Esempi di applicazioni

Manipolazione su due assi ortogonali con pinza parallela.

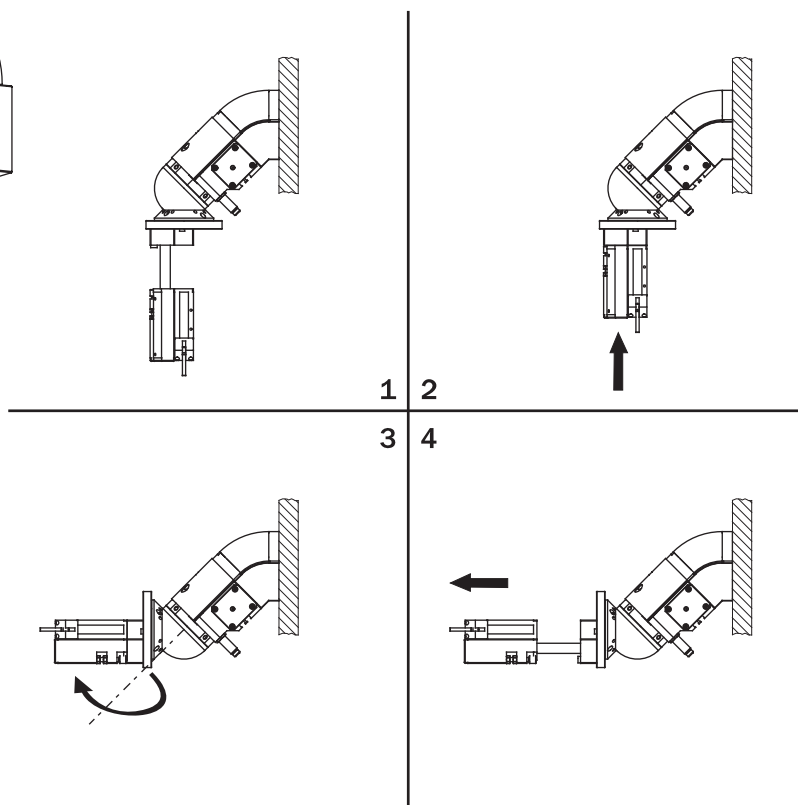
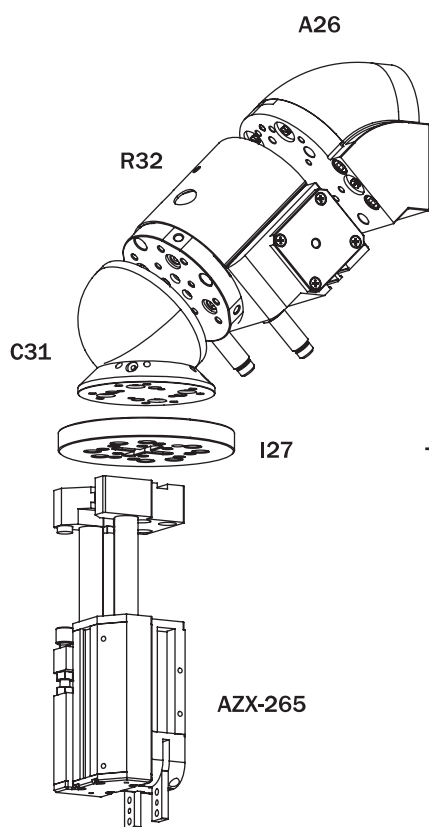
Application examples

Handling with two perpendicular axis by a parallel gripper.



Manipolazione con pinza angolare con presa da un piano orizzontale e deposito su un piano verticale.

Handling by angular gripper picking the load from horizontal plane and placing on vertical plane.



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Interfaccia di connessione con Gimapick.

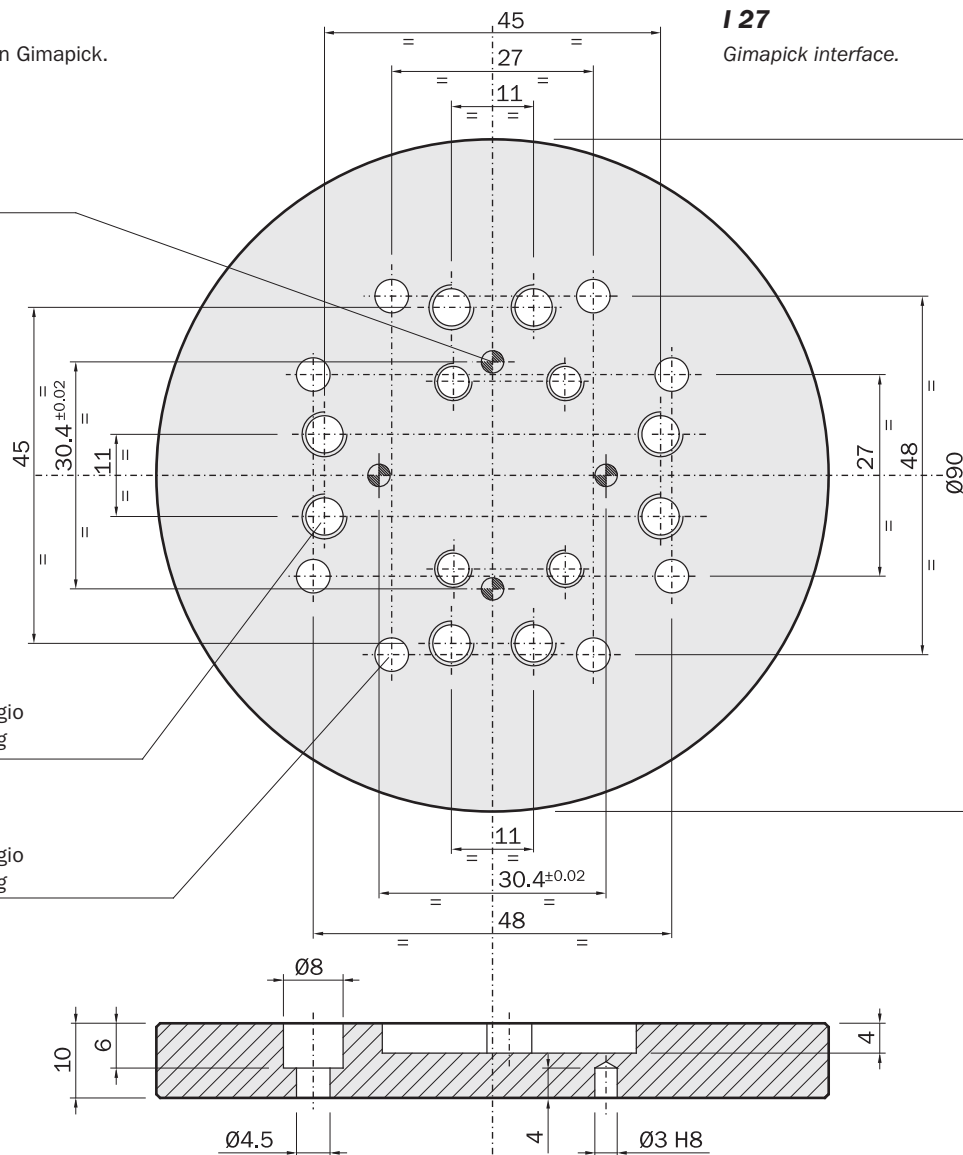
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Gimapick interface.

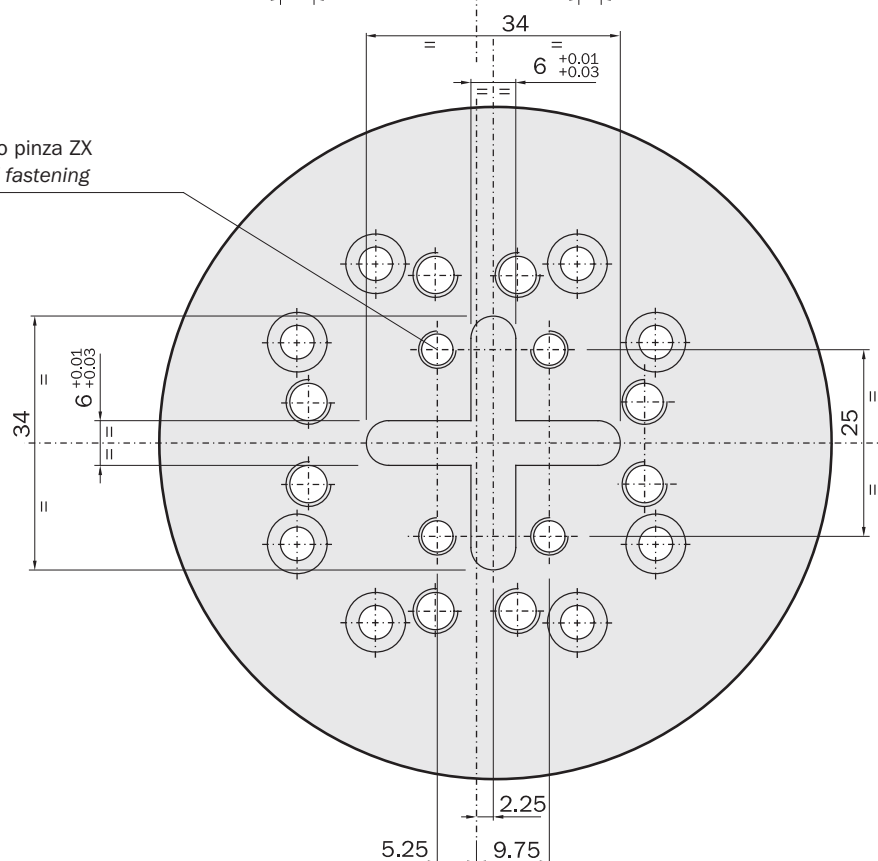
Foro di riferimento
Dowel pin hole
(N°4) Ø3 H8

Foro passante per fissaggio
Through hole for fastening
(N°8) M6

Foro passante per fissaggio
Through hole for fastening
(N°8) Ø4.5



Foro passante per fissaggio pinza ZX
Through hole for gripper ZX fastening
(N°4) M5



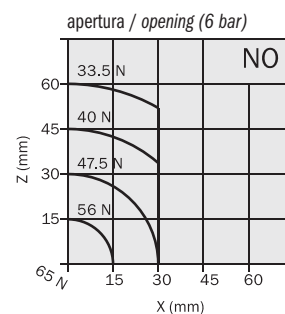
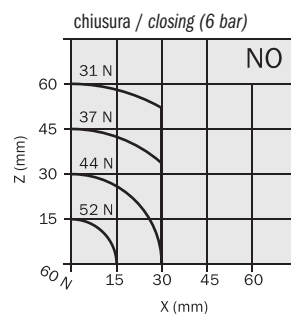
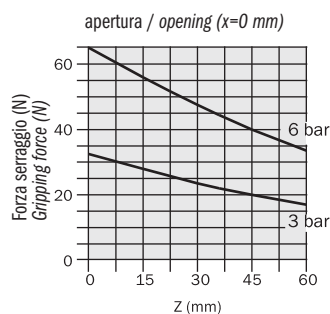
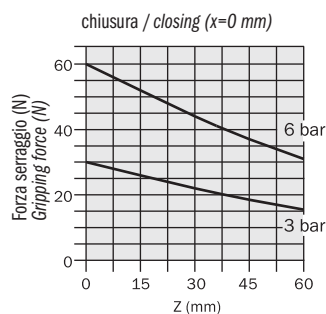
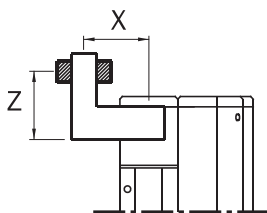
FIRST ANGLE
PROJECTION

Forza di serraggio

PZX-265 I grafici mostrano la forza per griffa espressa dalla pinza in funzione della pressione, del braccio di leva Z e del disassamento del punto di presa X.

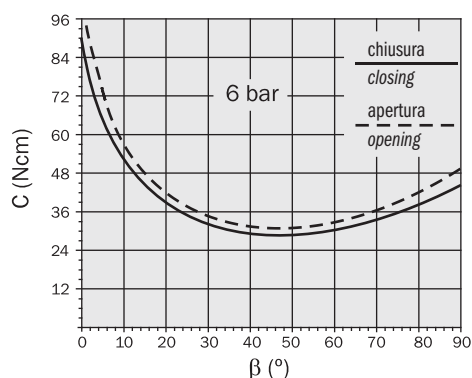
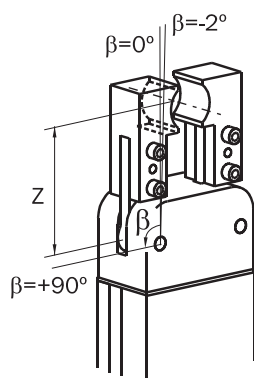
Gripping force

PZX-265 The graphs show the gripping force on each jaw, as function of the operating pressure, of the gripping tool length Z and overhanging X.



RZX-265 Il grafico mostra la coppia per griffa espressa dalla pinza in funzione della posizione angolare β della griffa.

RZX-265 The graph shows the gripping torque on each jaw, as function of the angular position β of the jaw.



Forza serraggio
Gripping force $F = \frac{C}{Z}$

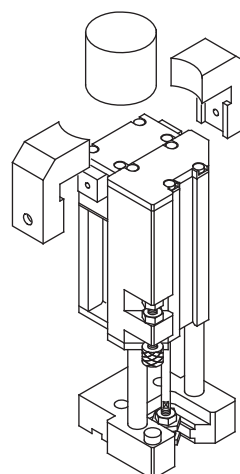
Carico trasportabile dalla slitta

La tabella seguente riporta il valore massimo ammissibile della massa [g] trasportabile (carico più dita) in funzione della corsa [mm] effettuata dalla slitta e del tempo impiegato [s].

Tempo / Time	Corsa / Stroke		
	50 mm	30 mm	10 mm
0.04 s	-	-	51 g
0.06 s	-	-	137 g
0.08 s	-	76 g	257 g
0.10 s	-	174 g	411 g
0.12 s	88 g	294 g	600 g
0.14 s	192 g	436 g	823 g
0.16 s	312 g	600 g	1080 g
0.18 s	448 g	785 g	-
0.20 s	600 g	993 g	-
0.22 s	768 g	-	-
0.24 s	952 g	-	-
0.26 s	1152 g	-	-

Maximum permitted load on the slide

The following table shows the maximum permitted mass [g] value (pay-load plus gripping tools) as function of stroke [mm] and time [s].



Carichi di sicurezza

Consultare la tabella per i carichi massimi ammissibili. Forze e coppie eccessive possono danneggiare l'unità e causare difficoltà di funzionamento compromettendo la sicurezza dell'operatore.

$F_x s$, $F_y s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$, sono i carichi massimi ammissibili in condizioni statiche, cioè con le griffe ferme.

$F_x d$, $F_y d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$, sono i carichi massimi ammissibili in condizioni dinamiche, cioè con le griffe in movimento.

m sono le masse ammissibili per ogni dito di presa in funzione del tempo di apertura o chiusura.

I grafici indicano il momento di inerzia massimo ammissibile per ogni dito di presa (J), in funzione del tempo di apertura o chiusura delle griffe (t).

Usare i regolatori di flusso (non forniti) per ottenere la velocità desiderata.

Safety loads

Check the table for maximum permitted loads.

Excessive forces or torques can damage the unit, cause functioning troubles and endanger the safety of the operator.

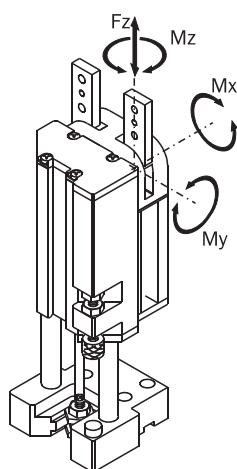
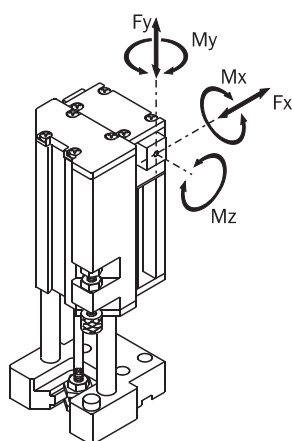
$F_x s$, $F_y s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$, are maximum permitted static loads. Static means with motionless jaws.

$F_x d$, $F_y d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$, are maximum permitted dynamic loads. Dynamic means with running jaws.

m are the maximum loads on each gripping tool as function of closing or opening time.

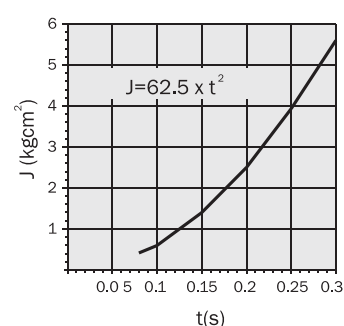
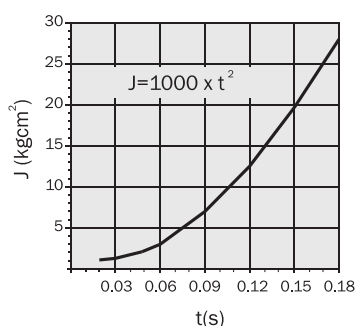
The graphs show the maximum permitted moment of inertia on each gripping tool (J), as factor of the opening or closing time (t).

Use flow controllers (not supplied) to get the proper speed.



	PZX-265
$F_x s$	80 N
$F_y s$	60 N
$M_x s$	3.0 Nm
$M_y s$	2.0 Nm
$M_z s$	2.0 Nm
$F_x d$	1 N
$F_y d$	1 N
$M_x d$	3.0 Ncm
$M_y d$	2.0 Ncm
$M_z d$	2.0 Ncm
m 0.1s	80 g
m 0.05s	60 g
m 0.02s	50 g

	AZX-265	RZX-265
$F_z s$	60 N	80 N
$M_x s$	1.4 Nm	2.0 Nm
$M_y s$	1.4 Nm	1.4 Nm
$M_z s$	1.4 Nm	2.0 Nm
J	$1000 \times t^2$	$62.5 \times t^2$



Sensori

Il rilevamento della posizione di lavoro è affidato a uno o più sensori magnetici di prossimità (opzionali), che rilevano la posizione dei magneti inseriti nei pistoni. Quindi, per un corretto funzionamento, è da evitare la vicinanza di forti campi magnetici o di grosse masse di materiale ferromagnetico.

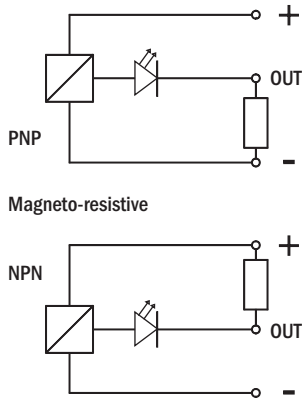
I sensori utilizzabili sono:



Sensors

The operating position is detected by magnetic proximity sensors (optional) through magnets placed on the pistons. The use of magnetic proximity sensors is therefore to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

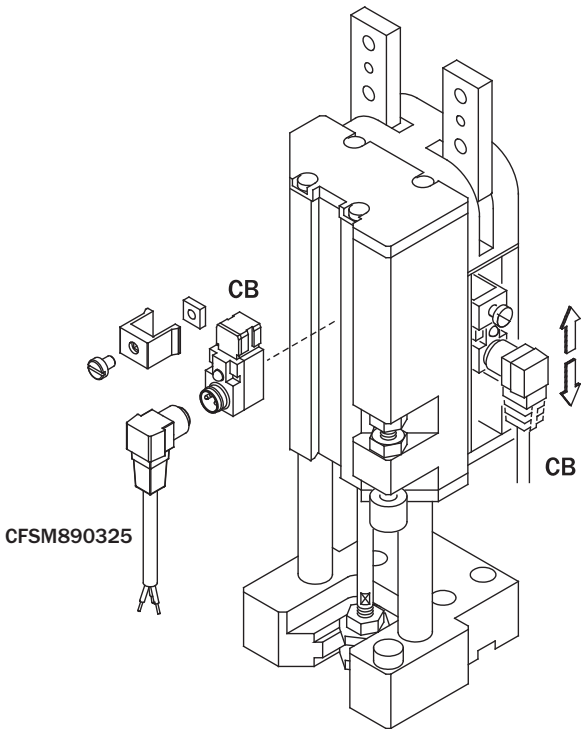
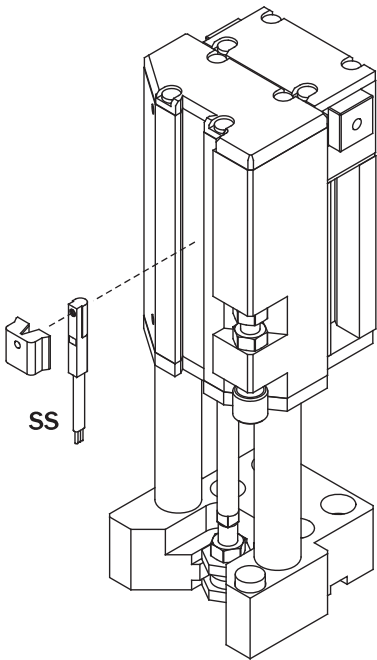
The sensors that can be used are:



			PZX-265	AZX-265	RZX-265
CB3N2-G	PNP	Connettore snap / Snap connector	✓	✓	✓
CB3M2-G	NPN	Connettore snap / Snap connector	✓	✓	✓
SS4N225-G	PNP	cavo 2.5m / 2.5m cable	✓ (1)	✓ (1)	✓ (1)
SS4M225-G	NPN	cavo 2.5m / 2.5m cable	✓ (1)	✓ (1)	✓ (1)
SS3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓ (1)	✓ (1)	✓ (1)
SS3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓ (1)	✓ (1)	✓ (1)

(1)
Utilizzando l'adattatore (SS.007.000) fornito nella confezione K-SENS.

(1)
By the adapter (SS.007.000) provided with the pack K-SENS.



Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità dell'unità.

Per nessun motivo, persone od oggetti estranei devono entrare nel suo raggio d'azione.

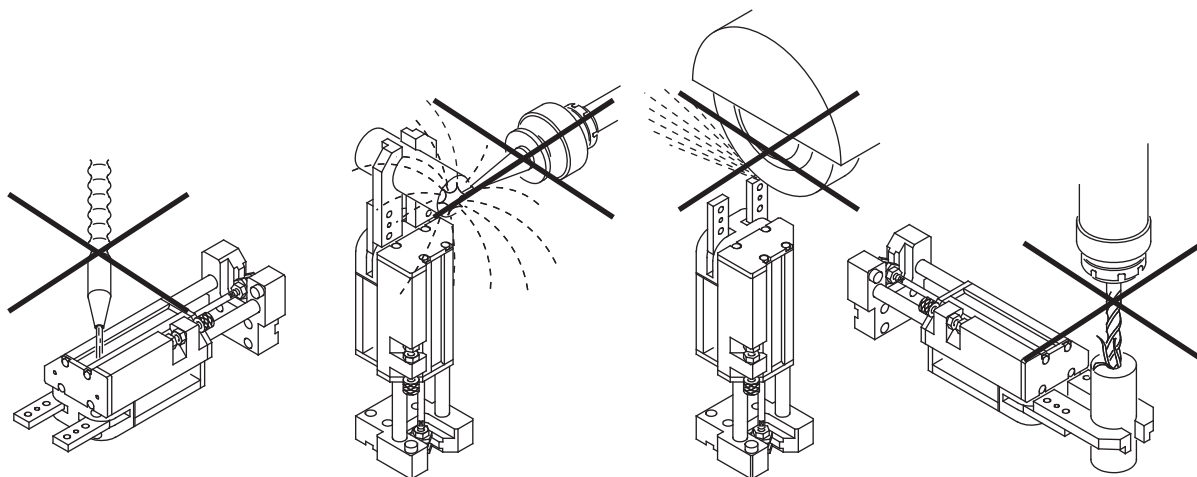
L'unità non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Cautions

Never let the unit come into contact with corrosive substances, soldering splashes or abrasive powders as they may damage the unit.

Never let non-authorized persons or objects stand within the operating range of the unit.

Never operate the unit if the machine on which it is fitted does not comply with safety laws and standards of your country.



Manutenzione

L'unità va ingrassata ogni 10 milioni di cicli con:

- Molykote DX (parti metalliche).
- Molykote PG75 (guarnizioni).

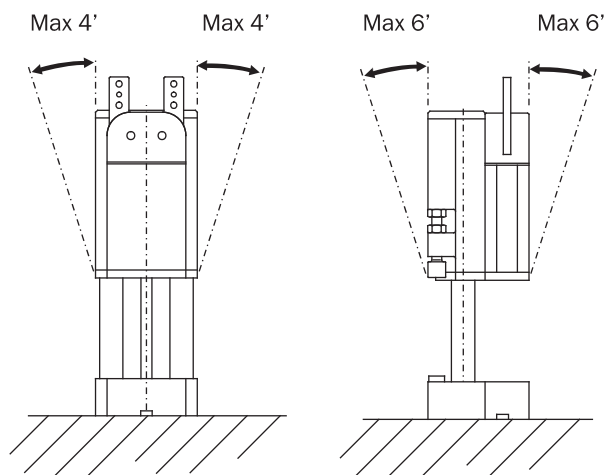
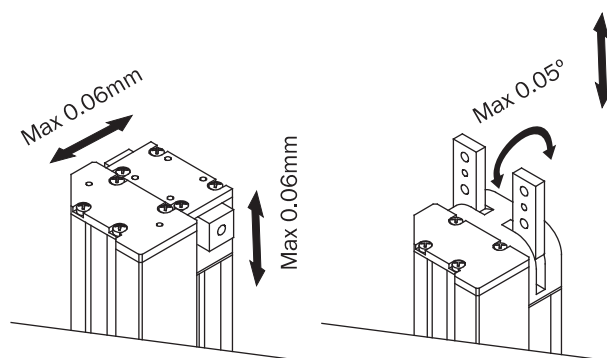
La pinza e la slitta in massima estensione hanno giochi inferiori a quelli qui indicati.

Maintenance

Grease the unit after 10 million cycles with:

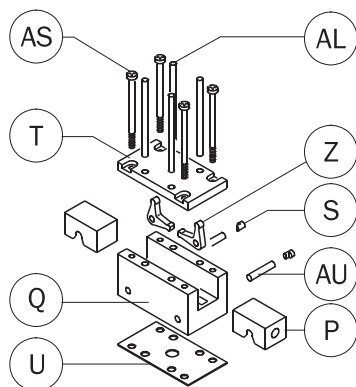
- Molykote DX (metal on metal).
- Molykote PG75 (gaskets).

For the gripper and the slide on maximum extension the backlashes are lower than those here indicated.

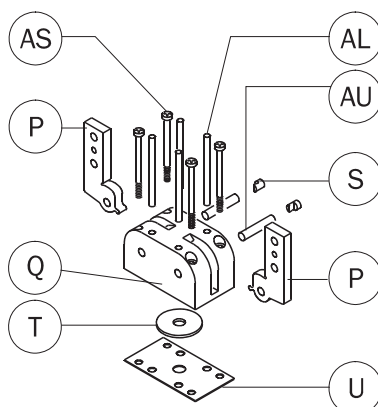


Elenco delle parti / Parts

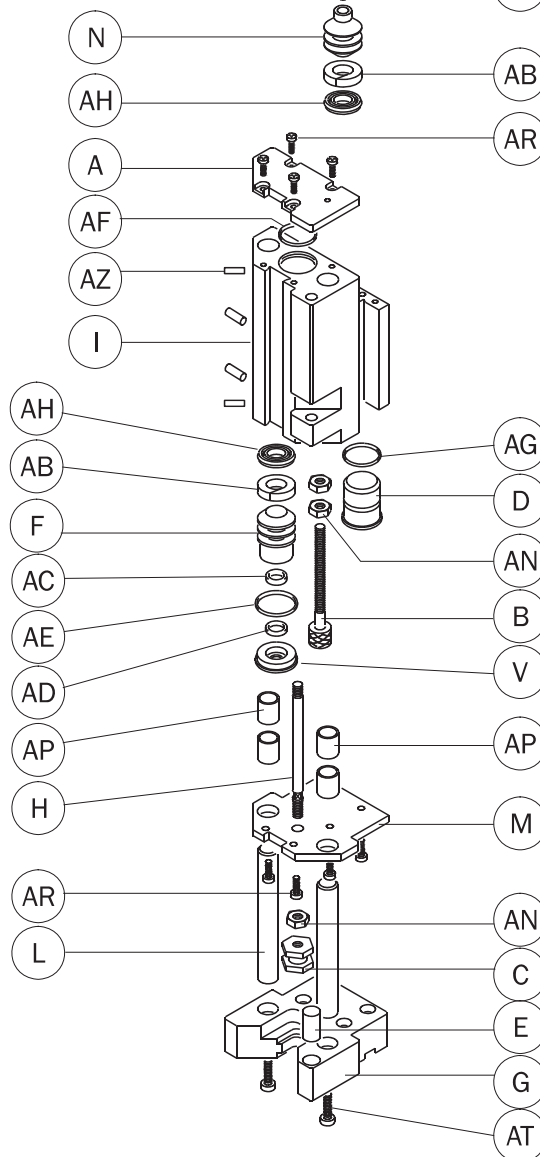
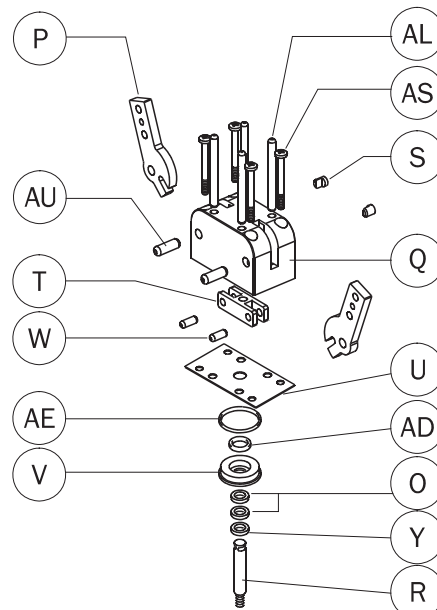
PZX-265



AZX-265



RZX-265



	PZX-265	AZX-265	RZX-265
A	GZX-165-1		
B	GZX-165-2		
C	GZX-165-3		
D	GZX-165-4	GZX-165-4	RZX-265-1
E	GZX-165-5		
F	GZX-165-7		
G	GZX-165-8		
H	GZX-165-9		
I	GZX-165-10		
L	ZX-165-4		
M	GZX-165-11		
N	XP-16-2	XP-16-2	RZX-265-2
O	XA-20-3	(2x) XA-20-3	-
P	XP-20-4	XA-20-1	XR-20-4
Q	XP-16-8	XR-16-2	XR-20-5
R	XP-16-7	XA-20-2	RZX-265-3
S	XP-16-11	XR-16-4	XR-16-4
T	XP-16-5	XR-16-5	XR-20-3
U	XP-16-10	XP-16-10	XP-16-10
V	XP-16-12	XP-16-12	XP-16-12
W	-	-	Ø3x8mm DIN 6325
Z	XP-16-6	-	-
Y	XP-16-3	XP-16-3	-
AB	PS-0016-P09		
AC	O-ring "PARKER" cod. 2-202 Viton		
AD	O-ring "PARKER" cod. 2-009		
AE	O-ring "PARKER" cod. 2-015		
AF	O-ring "PARKER" cod. 2-016		
AG	O-ring "PARKER" cod. 2-014		
AH	"PARKER" cod. PZ-1605 N3571		
AL	Ø3x33.5mm DIN 6325		
AN	INOX A2 M5 DIN 934		
AP	IGUS cod. JSM-12-14-15		
AR	INOX A2 M2.5x8mm DIN 7985		
AS	M2.5x30mm	INOX A2 M2.5x25mm DIN 7985	
AT	INOX A2 M4x16mm DIN 7985		
AU	Ø3x12mm DIN 6325	Ø4x12mm DIN 6325	Ø4x12mm DIN 6325
AZ	PAR-10-15B		

ConneSSIONE pneumatica

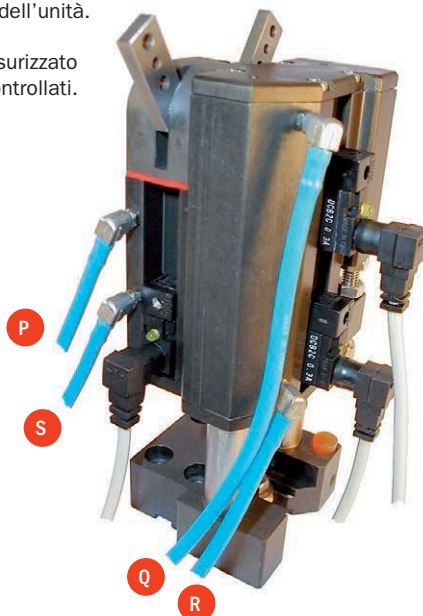
La pinza e la slitta si alimentano con aria compressa dai fori laterali montandovi i raccordi dell'aria M3 ed i relativi tubi (non forniti).

Aria compressa in S: apertura della pinza.
Aria compressa in P: chiusura della pinza.
Aria compressa in Q: estensione della slitta.
Aria compressa in R: ritrazione della slitta.

L'unità è azionata con aria compressa filtrata (5÷40 µm) non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita dell'unità.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.



Compressed air feeding

The gripper and the slide are fed with compressed air through the side air ports with fittings M3 and relevant hoses (not supplied).

Compressed air in S: gripper opening.
Compressed air in P: gripper closing.
Compressed air in Q: extension of the slide.
Compressed air in R: retraction of the slide.

The compressed air, must be filtered from 5 to 40 µm. Maintain the medium selected at the start, lubricated or not, for the complete service life of the unit.

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

Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione.
- 2- Riempimento all'avvio.
- 3- Improvvisa mancanza di pressione.
- 4- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (A).
- 2- Valvola di avviamento progressivo (B).
- 3- Valvole di sicurezza (C).
- 4- Regolatori di flusso (D).

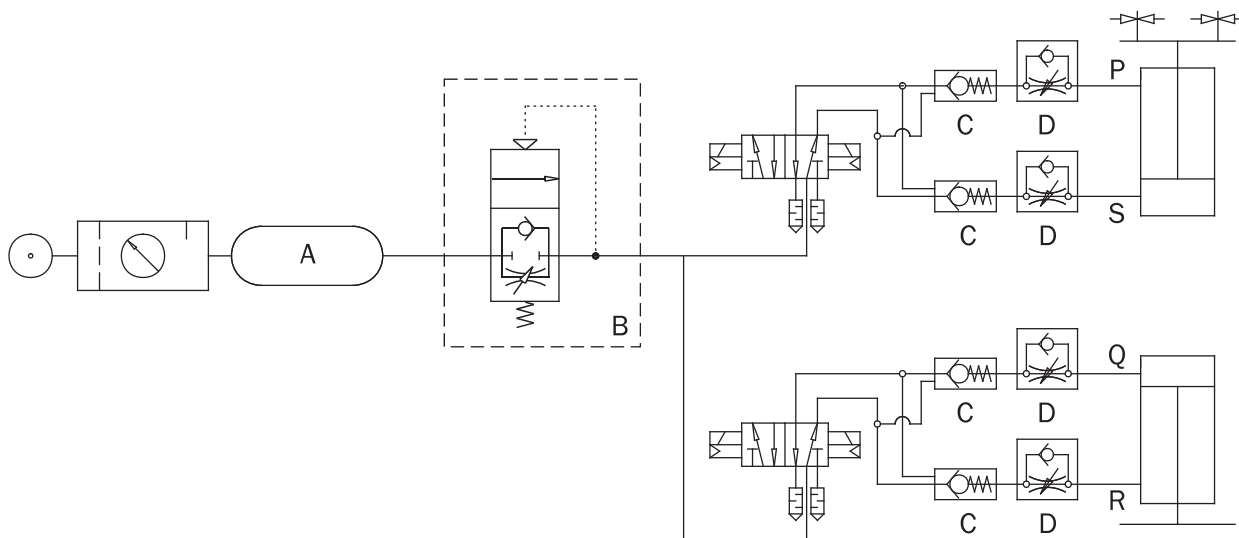
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation.
- 2- Pressurizing.
- 3- Sudden pressure black-out.
- 4- Excessive actuating speed.

Possible solutions:

- 1- Compressed air storage (A).
- 2- Start-up valve (B).
- 3- Safety valve (C).
- 4- Flow controller (D).



Slitte pneumatiche (serie Z)

- Alesaggio 2x8mm, 2x16mm oppure 2x20mm .
- Corsa 25mm, 50mm, 100mm, 150mm e 200mm .
- Con o senza deceleratori.
- Azionamento a doppio effetto.
- Rapporto qualità / prezzo molto favorevole.
- Sensori magnetici opzionali.

Pneumatic slides (series Z)

- Bore 2x8mm, 2x16 or 2x20mm .
- Stroke 25mm, 50mm, 100mm, 150mm and 200mm .
- With or without shock-absorbers.
- Double acting.
- Very favorable performance/price ratio.
- Optional magnetic sensors.



Guida di scorrimento a ricircolo di sfere registrabile

- Struttura in estruso di alluminio quindi peso ridotto.
- Grande rigidità dovuta alle guide in acciaio temprato inserite nella struttura.
- Guida a ricircolo di sfere a bassa usura e lunga durata di vita.
- Possibilità di registrazione del precarico sulla guida con recupero dei possibili giochi.

Adjustable recirculating ball-bearing system

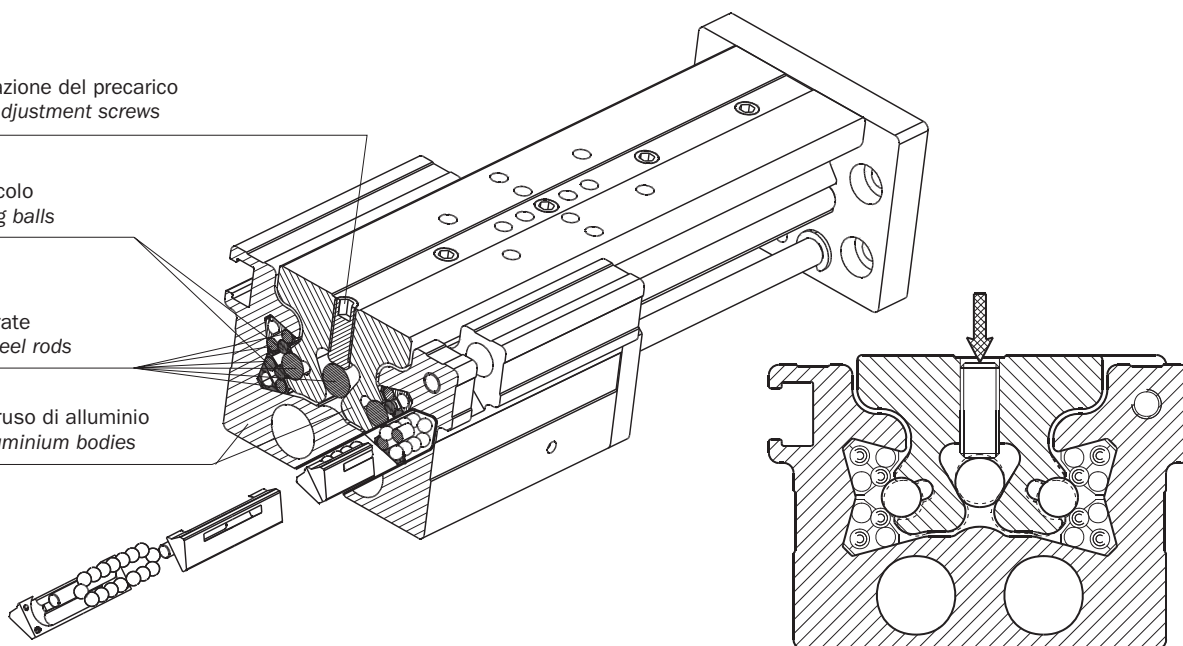
- Low weight as made from extruded aluminium profile.
- High stiffness thanks to the inserted hardened steel rods for guidance.
- Recirculating ball-bearing system provides wear resistance and extended performances.
- Possible adjustment of the preloading and taking up slack.

Viti di regolazione del precarico
Preloading adjustment screws

Sfere a ricircolo
Recirculating balls

Spine tembrate
Hardened steel rods

Corpi in estruso di alluminio
Extruded aluminium bodies



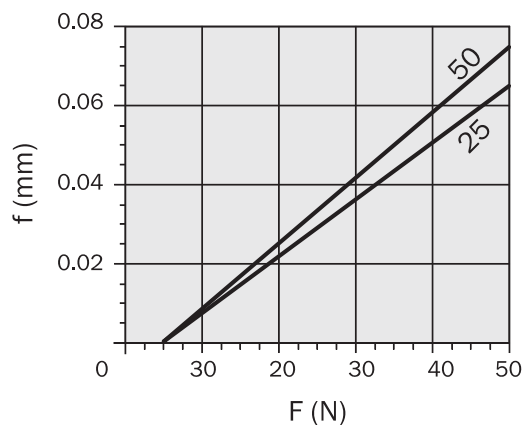
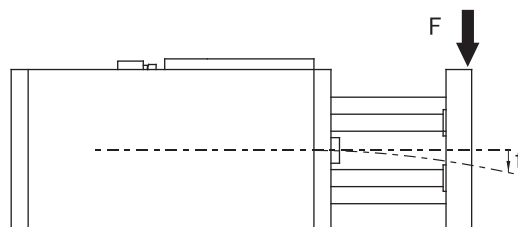
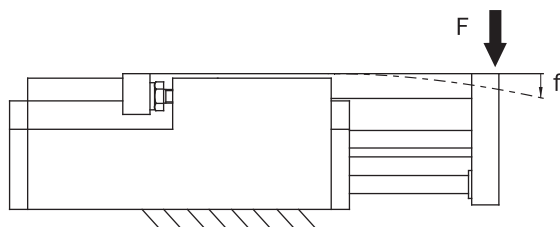
	Z-0825	Z-0825-D	Z-0850	Z-0850-D
Peso <i>Weight</i>	230 g	270 g	320 g	360 g
Ripetibilità <i>Repetition accuracy</i>	0.2 mm	0.02 mm	0.2 mm	0.02 mm
Tempo di azionamento minimo <i>Minimum actuating time</i>	0.054 s	0.100 s	0.080 s	0.130 s
Frequenza massima di lavoro <i>Maximum working frequency</i>	2 Hz	1 Hz	2 Hz	1 Hz
Consumo d'aria per ciclo <i>Air consumption per cycle</i>	6 cm³		11 cm³	
Corsa totale massima <i>Maximun total stroke</i>	25 mm		50 mm	
Forza di apertura a 6 bar <i>Extension force at 6 bar</i>	50 N			
Forza di chiusura a 6 bar <i>Retraction force at 6 bar</i>	37 N			
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>			
Pressione di esercizio <i>Pressure range</i>	2 ÷ 8 bar			
Temperatura di esercizio <i>Temperature range</i>	5 ÷ 60°C.			

Flessione

Il grafico mostra la flessione f (mm) nei due sensi indicati, in funzione della forza F (N) e della corsa della slitta.

Deflection

The graph shows the deflection f (mm) in two showed directions, as function of the force F (N) and the stroke of the slide.



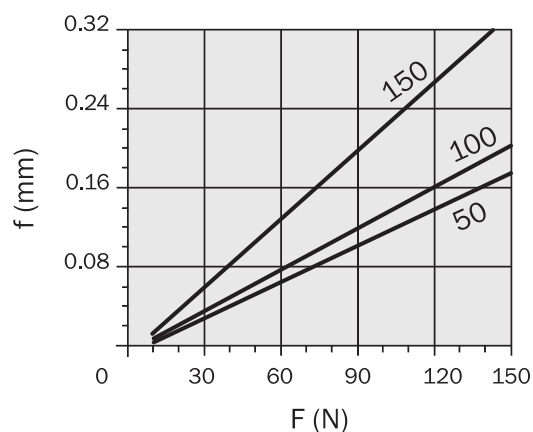
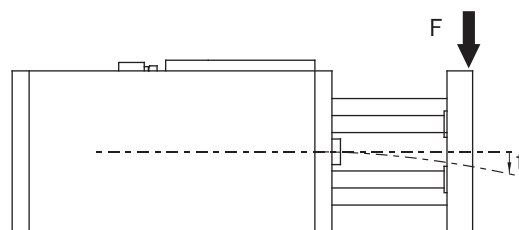
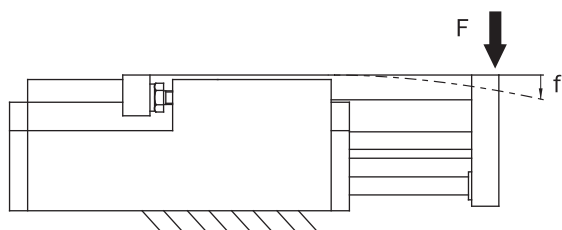
	Z-1650	Z-1650-D	Z-16100	Z-16100-D	Z-16150	Z-16150-D
Peso <i>Weight</i>	620 g	730 g	1010 g	1120 g	1340 g	1450 g
Ripetibilità <i>Repetition accuracy</i>	0.2 mm	0.02 mm	0.2 mm	0.02 mm	0.2 mm	0.02 mm
Tempo di azionamento minimo <i>Minimum actuating time</i>	0.080 s	0.100 s	0.120 s	0.150 s	0.220 s	0.230 s
Frequenza massima di lavoro <i>Maximum working frequency</i>	2 Hz	1 Hz	2 Hz	1 Hz	1 Hz	1 Hz
Consumo d'aria per ciclo <i>Air consumption per cycle</i>	44 cm³		95 cm³		141 cm³	
Corsa totale massima <i>Maximun total stroke</i>	50 mm		100 mm		150 mm	
Forza di apertura a 6 bar <i>Extension force at 6 bar</i>	200 N					
Forza di chiusura a 6 bar <i>Retraction force at 6 bar</i>	170 N					
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>					
Pressione di esercizio <i>Pressure range</i>	2 ÷ 8 bar					
Temperatura di esercizio <i>Temperature range</i>	5 ÷ 60°C.					

Flessione

Il grafico mostra la flessione f (mm) nei due sensi indicati, in funzione della forza F (N) e della corsa della slitta.

Deflection

The graph shows the deflection f (mm) in two showed directions, as function of the force F (N) and the stroke of the slide.



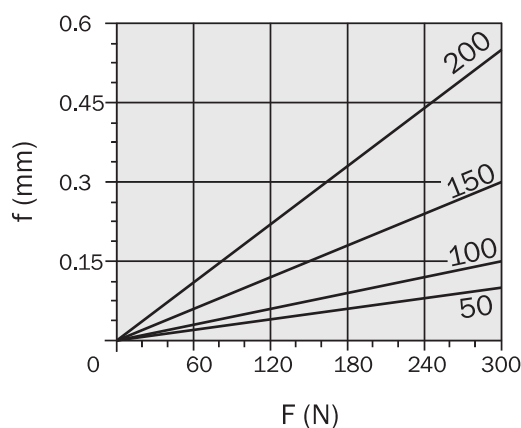
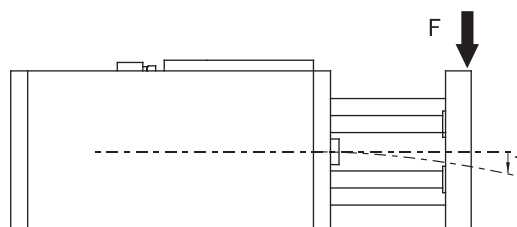
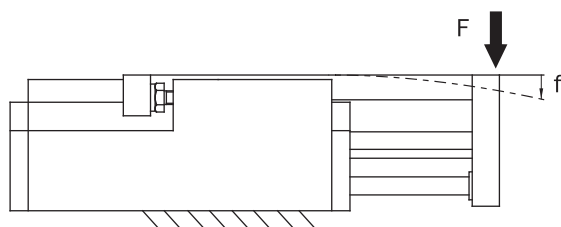
	Z-2050-D	Z-20100-D	Z-20150-D	Z-20200-D
Peso <i>Weight</i>	1300 g	1950 g	2500 g	3100 g
Ripetibilità <i>Repetition accuracy</i>	0.02 mm	0.02 mm	0.02 mm	0.02 mm
Tempo di azionamento minimo <i>Minimum actuating time</i>	0.12 s	0.19 s	0.26 s	0.31 s
Frequenza massima di lavoro <i>Maximum working frequency</i>	1 Hz	1 Hz	1 Hz	1 Hz
Consumo d'aria per ciclo <i>Air consumption per cycle</i>	76 cm ³	155 cm ³	227 cm ³	310 cm ³
Corsa totale massima <i>Maximum total stroke</i>	50 mm	100 mm	150 mm	200 mm
Forza di apertura a 6 bar <i>Extension force at 6 bar</i>	330 N			
Forza di chiusura a 6 bar <i>Retraction force at 6 bar</i>	300 N			
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>			
Pressione di esercizio <i>Pressure range</i>	2 ÷ 8 bar			
Temperatura di esercizio <i>Temperature range</i>	5 ÷ 60°C.			

Flessione

Il grafico mostra la flessione f (mm) nei due sensi indicati, in funzione della forza F (N) e della corsa della slitta.

Deflection

The graph shows the deflection f (mm) in two showed directions, as function of the force F (N) and the stroke of the slide.



Carichi di sicurezza

Controllare le tabelle sottostanti.

Carichi eccessivi possono danneggiare la slitta, causare difficoltà di funzionamento e compromettere la sicurezza dell'operatore.

$F_x s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$ sono i carichi statici massimi ammissibili.

$F_x d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$ sono i massimi carichi dinamici ammissibili.

È indicato il minimo tempo di azionamento t in funzione della massa trasportata m .

(*) Quando il tempo e la massa comportano un'eccessiva energia cinetica si deve diminuire la velocità con regolatori di flusso (non forniti).

Safety loads

Check the tables below.

Excessive loads can damage the slide, cause functioning troubles and endanger the safety of the operator.

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

It is also indicated the minimum actuating time t as a factor of the pay-load m .

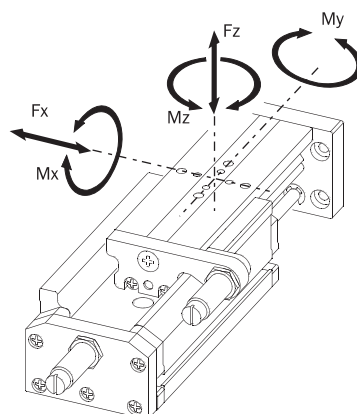
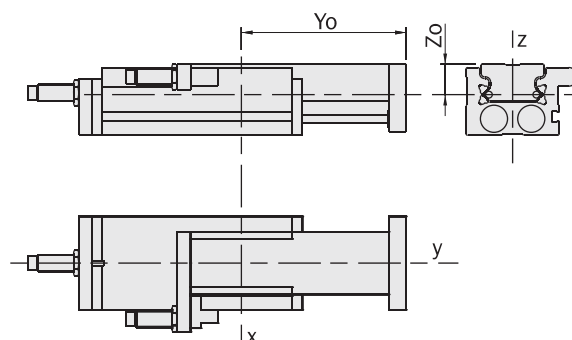
(*) When the actuating time and the pay-load produce an excessive kinetic energy you must reduce the speed by flow controllers (not supplied).

	Z-0825 Z-0825-D	Z-0850 Z-0850-D	Z-1650 Z-1650-D	Z-16100 Z-16100-D	Z-16150 Z-16150-D	Z-2050-D	Z-20100-D	Z-20150-D	Z-20200-D
Z_o	14.5 mm	14.5 mm	18 mm	18 mm	18 mm	24 mm	24 mm	24 mm	24 mm
Y_o	57 mm	87 mm	97 mm	157 mm	217 mm	102 mm	167 mm	227 mm	295 mm
$F_x s$	60 N	60 N	200 N	250 N	250 N	250 N	350 N	350 N	450 N
$F_z s$	60 N	60 N	200 N	250 N	250 N	250 N	350 N	350 N	450 N
$M_x s$	3 Nm	6 Nm	12 Nm	24 Nm	30 Nm	15 Nm	36 Nm	45 Nm	66 Nm
$M_y s$	3 Nm	3 Nm	15 Nm	24 Nm	24 Nm	24 Nm	36 Nm	36 Nm	48 Nm
$M_z s$	3 Nm	6 Nm	12 Nm	24 Nm	30 Nm	15 Nm	36 Nm	45 Nm	66 Nm
$F_x d$	10 N	10 N	40 N	50 N	50 N	50 N	70 N	70 N	80 N
$F_z d$	10 N	10 N	40 N	50 N	50 N	50 N	70 N	70 N	80 N
$M_x d$	0.5 Nm	1 Nm	2 Nm	4 Nm	5 Nm	2.5 Nm	6 Nm	7.5 Nm	11 Nm
$M_y d$	0.5 Nm	0.5 Nm	2.5 Nm	4 Nm	4 Nm	4 Nm	6 Nm	6 Nm	8 Nm
$M_z d$	0.5 Nm	1 Nm	2 Nm	4 Nm	5 Nm	2.5 Nm	6 Nm	7.5 Nm	11 Nm
$m \text{ max}$	1 kg	1 kg	4 kg	5 kg	5 kg	5 kg	7 kg	7 kg	8 kg

m	t Z-0825	t Z-0825-D	t Z-0850	t Z-0850-D
0.1 kg	0.054 s	0.180 s	0.113 s (*)	0.140 s
0.2 kg	0.066 s (*)	0.170 s	0.135 s (*)	0.137 s
0.3 kg	0.075 s (*)	0.160 s	0.155 s (*)	0.135 s
0.4 kg	0.084 s (*)	0.150 s	0.172 s (*)	0.133 s
0.5 kg	0.092 s (*)	0.140 s	0.187 s (*)	0.130 s
0.6 kg	0.099 s (*)	0.130 s	0.201 s (*)	0.136 s (*)
0.7 kg	0.106 s (*)	0.120 s	0.215 s (*)	0.142 s (*)
0.8 kg	0.112 s (*)	0.110 s	0.227 s (*)	0.147 s (*)
0.9 kg	0.118 s (*)	0.100 s	0.239 s (*)	0.152 s (*)
1 kg	0.124 s (*)	0.103 s (*)	0.250 s (*)	0.157 s (*)

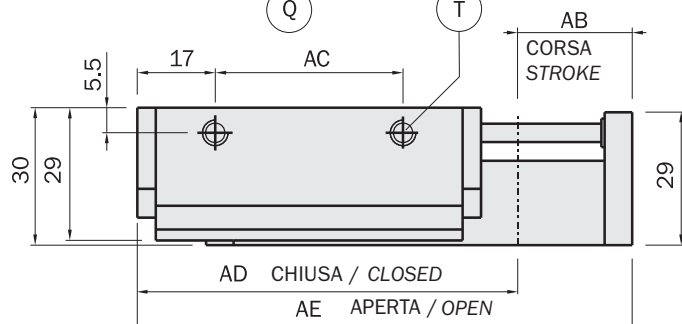
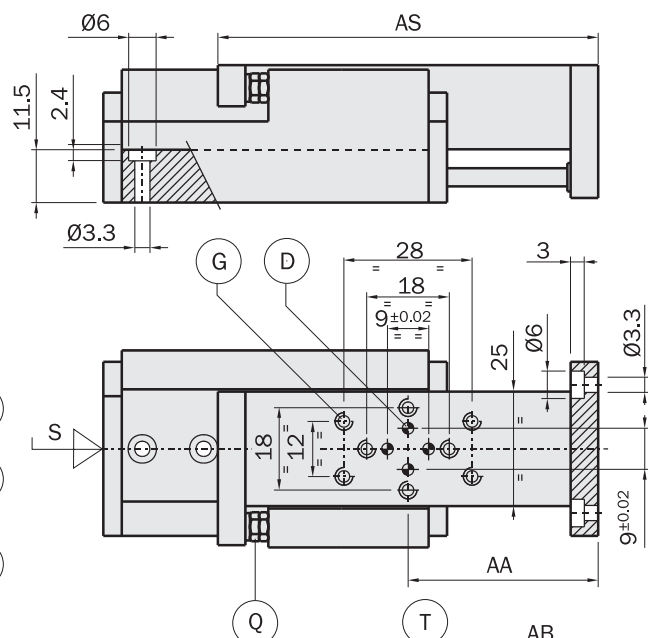
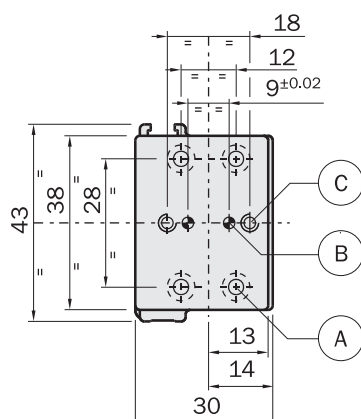
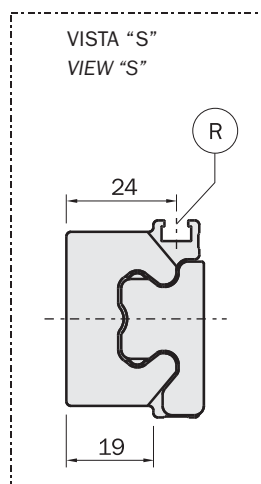
m	t Z-1650	t Z-1650-D	t Z-16100	t Z-16100-D	t Z-16150	t Z-16150-D
0.1 kg	0.080 s	0.120 s	0.163 s (*)	0.160	0.274 s (*)	0.240 s
0.5 kg	0.108 s (*)	0.115 s	0.231 s (*)	0.155	0.367 s (*)	0.230 s
1 kg	0.141 s (*)	0.110 s	0.294 s (*)	0.180 (*)	0.458 s (*)	0.264 s (*)
1.5 kg	0.168 s (*)	0.116 s (*)	0.346 s (*)	0.207 (*)	0.534 s (*)	0.303 s (*)
2 kg	0.191 s (*)	0.128 s (*)	0.392 s (*)	0.230 (*)	0.600 s (*)	0.336 s (*)
2.5 kg	0.212 s (*)	0.138 s (*)	0.432 s (*)	0.251 (*)	0.659 s (*)	0.367 s (*)
3 kg	0.231 s (*)	0.148 s (*)	0.469 s (*)	0.270 (*)	0.714 s (*)	0.395 s (*)
3.5 kg	0.248 s (*)	0.157 s (*)	0.503 s (*)	0.287 (*)	0.765 s (*)	0.421 s (*)
4 kg	0.265 s (*)	0.165 s (*)	0.535 s (*)	0.303 (*)	0.812 s (*)	0.445 s (*)
4.5 kg	-	-	0.566 s (*)	0.319 s (*)	0.857 s (*)	0.468 s (*)
5 kg	-	-	0.594 s (*)	0.334 s (*)	0.900 s (*)	0.490 s (*)

m	t Z-2050-D	t Z-20100-D	t Z-20150-D	t Z-20200-D
1 kg	0.135 s	0.200 s	0.265 s	0.310 s
2 kg	0.130 s	0.195 s	0.260 s	0.319 s (*)
3 kg	0.125 s	0.190 s	0.270 s (*)	0.357 s (*)
4 kg	0.120 s	0.207 s (*)	0.296 s (*)	0.391 s (*)
5 kg	0.129 s (*)	0.224 s (*)	0.320 s (*)	0.422 s (*)
6 kg	-	0.239 s (*)	0.342 s (*)	0.451 s (*)
7 kg	-	0.252 s (*)	0.363 s (*)	0.478 s (*)
8 kg	-	-	-	0.503 s (*)

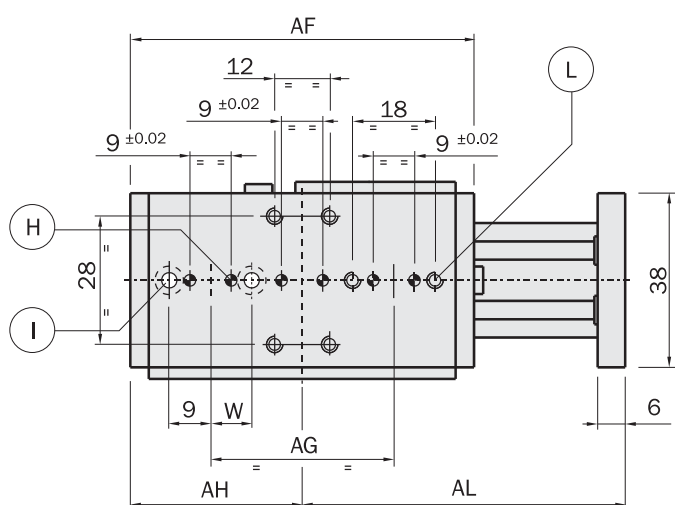


Dimensioni (mm) / Dimensions (mm)

	AA	AB	AC	AD	AE	AF	AG	AH	AL	W	AS
Z-0825	41.5	25	41	83	108	75	40	37.5	70.5	-	83
Z-0850	59	50	76	118	168	110	50	55	113	9	118



A	Foro passante per fissaggio Through hole for fastening	Ø3.3 mm
B	Foro di riferimento Dowel pin hole	Ø2.5H8x4.5 mm
C	Foro filettato per fissaggio Threaded hole for fastening	M3x6 mm
D	Foro di riferimento Dowel pin hole	Ø2.5H8x5 mm
G	Foro filettato per fissaggio Threaded hole for fastening	M3x5 mm
H	Foro di riferimento Dowel pin hole	Ø2.5H8x6 mm
I	Foro passante per fissaggio Through hole for fastening	Ø3.3 mm
L	Foro filettato per fissaggio Threaded hole for fastening	M3x6 mm
N	Regolazione corsa in chiusura Retraction stroke adjustment	
P	Regolazione corsa in apertura Extension stroke adjustment	
R	Sede per sensori Gimatic Gimatic sensor slot	
T	Ingresso aria Air connection	M5



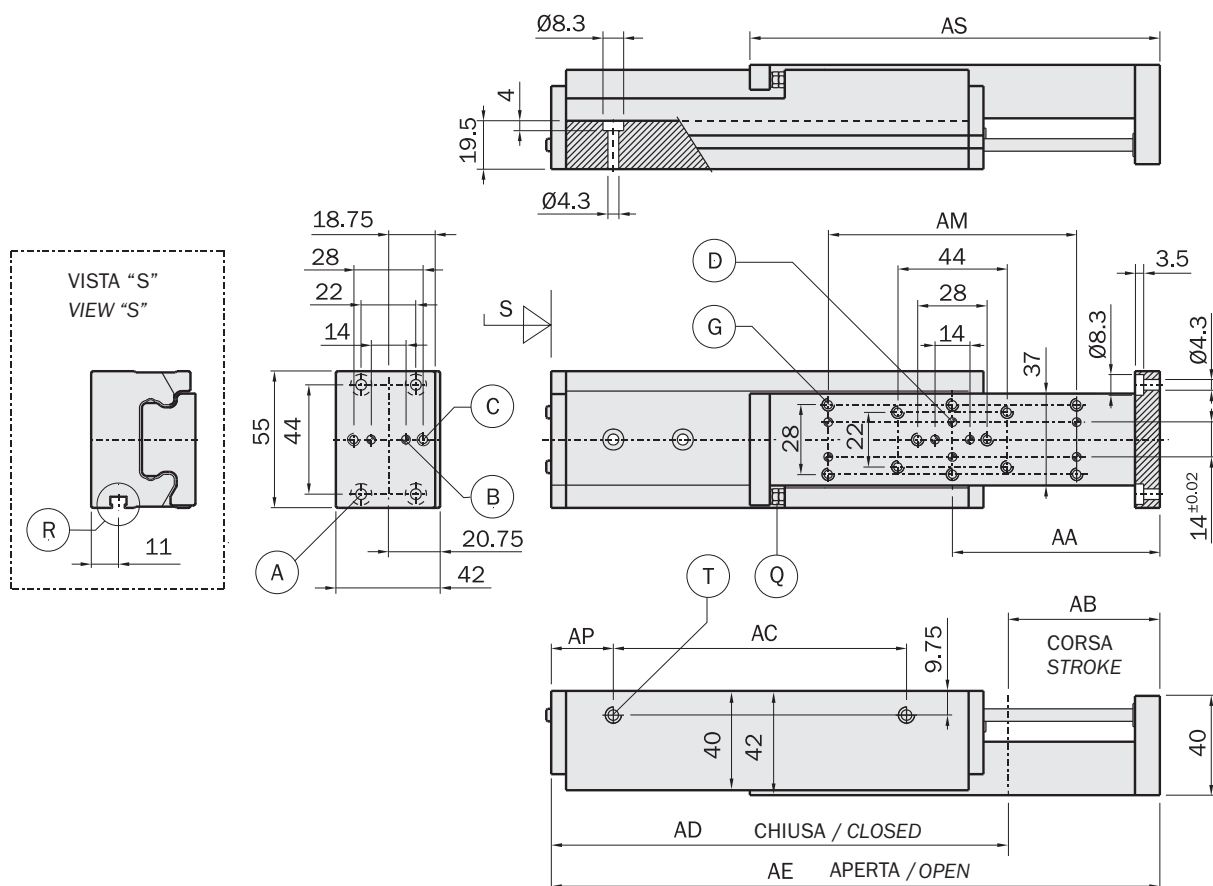
FIRST ANGLE
PROJECTION

	AA	AB	AC	AD	AE	AF	AG	AH	AL	W	AS
Z-0825-D	41.5	25	41	88	113	80	40	42.5	70.5	-	83
Z-0850-D	59	50	76	123	173	115	50	60	113	9	118

03/2015

Dimensioni (mm) / Dimensions (mm)

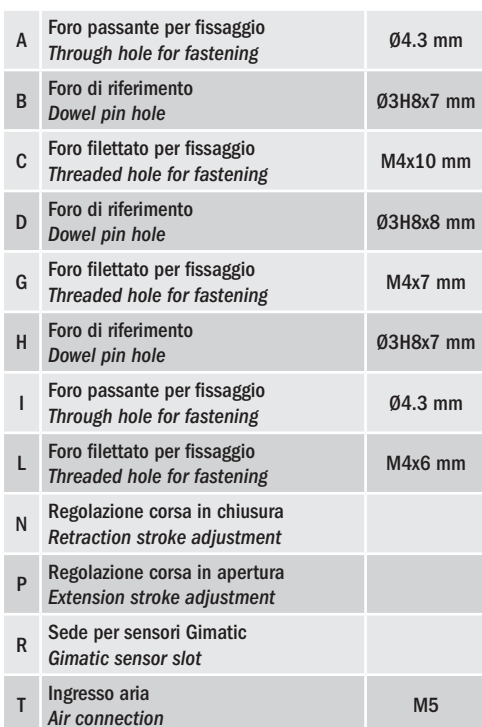
	AA	AB	AC	AD	AE	AF	AG	AH	AL	AM	AN	W	AS
Z-1650	68.5	50	82	135	185	124	62	62	123	-	-	21	135
Z-16100	103.5	100	144	205	305	194	100	97	208	120	-	25	205
Z-16150	138.5	150	204	275	425	264	160	132	293	140	28	30	275



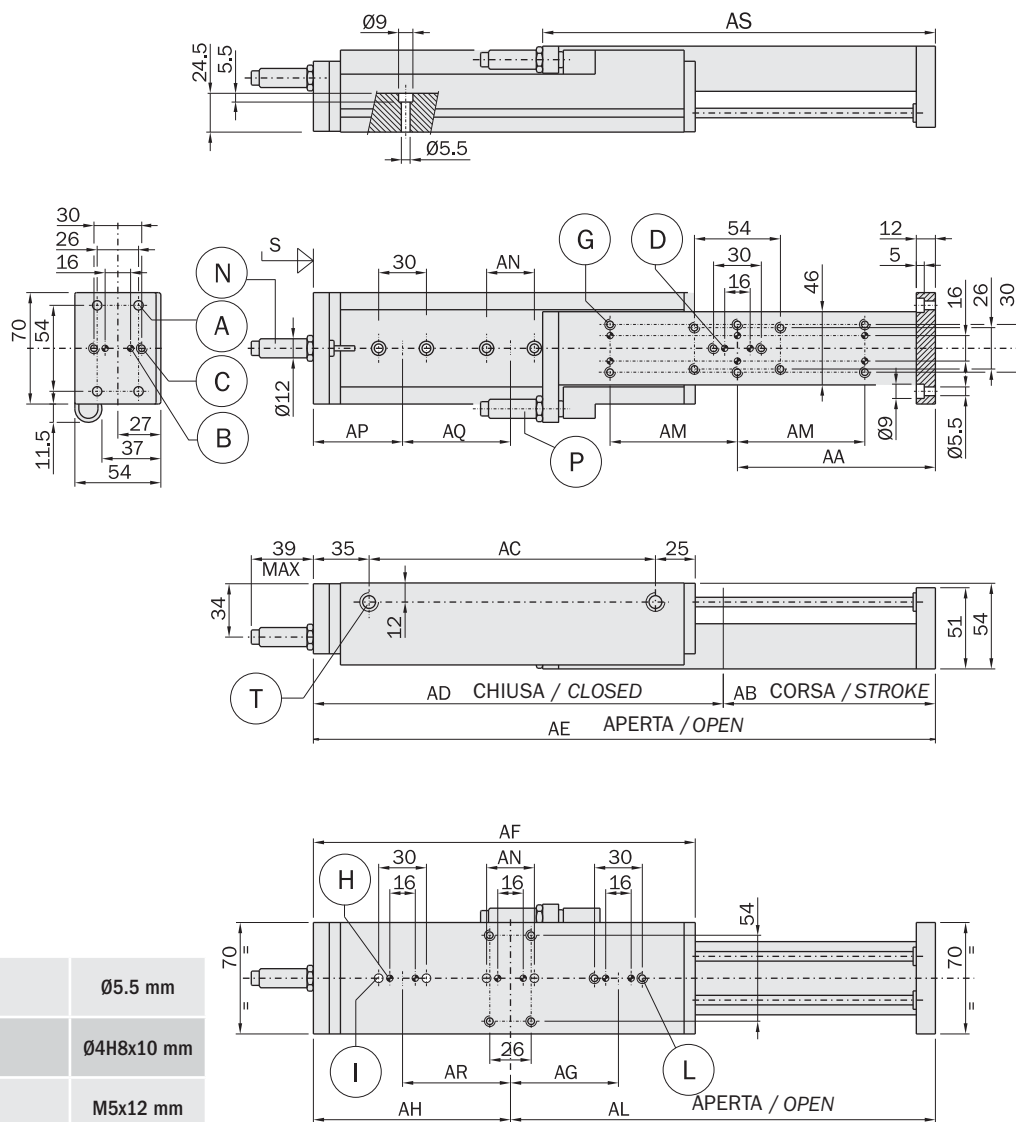
A	Foro passante per fissaggio Through hole for fastening	Ø4.3 mm
B	Foro di riferimento Dowel pin hole	Ø3H8x7 mm
C	Foro filettato per fissaggio Threaded hole for fastening	M4x10 mm
D	Foro di riferimento Dowel pin hole	Ø3H8x8 mm
G	Foro filettato per fissaggio Threaded hole for fastening	M4x7 mm
H	Foro di riferimento Dowel pin hole	Ø3H8x7 mm
I	Foro passante per fissaggio Through hole for fastening	Ø4.3 mm
L	Foro filettato per fissaggio Threaded hole for fastening	M4x6 mm
Q	Regolazione corsa in apertura Extension stroke adjustment	
R	Sede per sensori Gimatic Gimatic sensor slot	
T	Ingresso aria Air connection	M5

FIRST ANGLE PROJECTION

	AA	AB	AC	AD	AE	AF	AG	AH	AL	AM	AN	AP	AS
Z-1650-D	68.5	50	82	143	193	132	62	70	123	-	-	29	135
Z-16100-D	103.5	100	144	213	313	202	100	105	208	120	-	33	205
Z-16150-D	138.5	150	204	283	433	272	160	140	293	140	28	38	275



	AA	AB	AC	AD	AE	AF	AG	AH	AL	AM	AN	AP	AQ	AR	AS
Z-2050-D	72	50	80	155	205	140	32	75	130	-	-	43	-	32	142
Z-20100-D	112	100	160	235	335	220	35	115	220	-	-	80	-	35	222
Z-20150-D	147	150	230	305	455	290	80	143	312	80	30	63	80	80	292
Z-20200-D	190	200	316	391	591	376	120	193	398	118	30	-	-	-	378



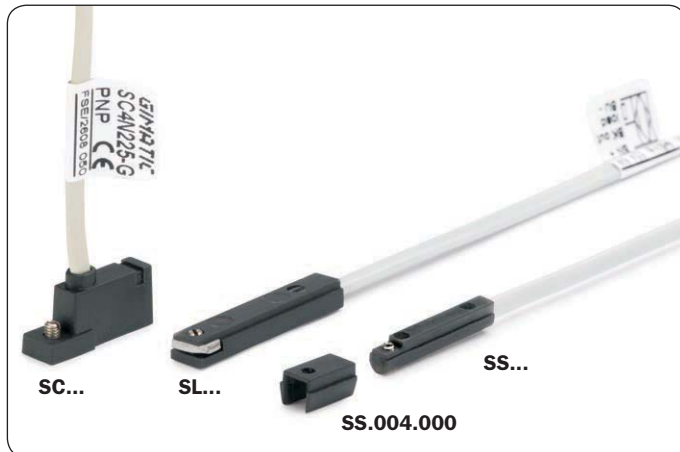
A	Foro passante per fissaggio <i>Through hole for fastening</i>	Ø5.5 mm
B	Foro di riferimento <i>Dowel pin hole</i>	Ø4H8x10 mm
C	Foro filettato per fissaggio <i>Threaded hole for fastening</i>	M5x12 mm
D	Foro di riferimento <i>Dowel pin hole</i>	Ø4H8x10 mm
G	Foro filettato per fissaggio <i>Threaded hole for fastening</i>	M5x8 mm
H	Foro di riferimento <i>Dowel pin hole</i>	Ø4H8x8 mm
I	Foro passante per fissaggio <i>Through hole for fastening</i>	Ø5.5 mm
L	Foro filettato per fissaggio <i>Threaded hole for fastening</i>	M5x10 mm
N	Regolazione corsa in chiusura <i>Retraction stroke adjustment</i>	
P	Regolazione corsa in apertura <i>Extension stroke adjustment</i>	
R	Sede per sensori Gimatic <i>Gimatic sensor slot</i>	
T	Ingresso aria <i>Air connection</i>	1/8" Gas



Sensori

Il rilevamento della posizione è affidato a uno o due sensori magnetici di prossimità (opzionali), che rilevano la posizione attraverso il magnete interno. Quindi, per un corretto funzionamento, è da evitare l'impiego in presenza di forti campi magnetici od in prossimità di grosse masse di materiale ferromagnetico.

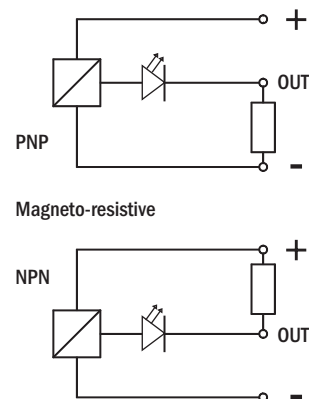
I sensori utilizzabili sono:



Sensors

The operating position is detected by magnetic proximity sensors (optional) through the internal magnet. The use of magnetic proximity sensors is therefore to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



			Z-08...	Z-16...	Z-20...
SC4N225Y	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓
SC3N203Y	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓
SL4N225-G	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓
SL4M225-G	NPN	cavo 2.5m / 2.5m cable	✓	✓	✓
SL3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓
SL3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓	✓	✓
SS4N225-G	PNP	cavo 2.5m / 2.5m cable	✓ (1)	✓ (1)	✓ (1)
SS4M225-G	NPN	cavo 2.5m / 2.5m cable	✓ (1)	✓ (1)	✓ (1)
SS3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓ (1)	✓ (1)	✓ (1)
SS3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓ (1)	✓ (1)	✓ (1)

(1)
Utilizzando l'adattatore (SS.004.000) fornito nella confezione K-SENS.

(1)
By the adapter (SS.004.000) provided with the pack K-SENS.



Regolazione della corsa

Si può limitare la corsa della slitta agendo sui deceleratori (N) e (P), o sulla vite di registro (Q). Ognuno può ridurre la corsa di circa 13mm (Z-08) o 20mm (Z-16) o 26mm (Z-20).

- N: deceleratore che limita la corsa di chiusura.
- P: deceleratore che limita la corsa di apertura.

Stroke adjustment

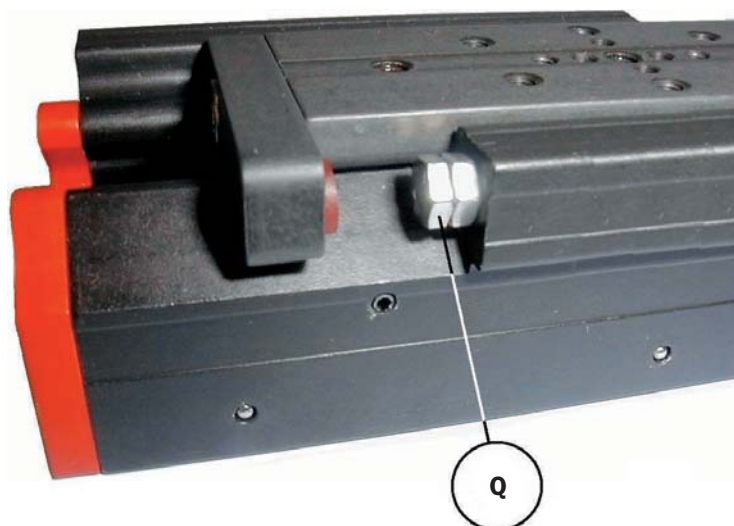
The stroke of the slide can be reduced by shock-absorbers (N) and (P) or screw (Q) as well, with a 13mm (Z-08) or 20mm (Z-16) or 26mm (Z-20) setting range each.

- N: the shock-absorber N reduces the retraction stroke.
- P: the shock-absorber P reduces the extension stroke.



- Q: vite che limita la corsa di apertura.

- Q: the screw Q reduces the extension stroke.



CORSA / STROKE

		N	P	Q
Z-0825	12÷25 mm	-	-	M3
Z-0825-D	0÷25 mm	M8x1	M8x1	-
Z-0850	37÷50 mm	-	-	M3
Z-0850-D	24÷50 mm	M8x1	M8x1	-
Z-1650	30÷50 mm	-	-	M4
Z-1650-D	10÷50 mm	M10x1	M10x1	-
Z-16100	80÷100 mm	-	-	M4
Z-16100-D	60÷100 mm	M10x1	M10x1	-
Z-16150	130÷150 mm	-	-	M4
Z-16150-D	110÷150 mm	M10x1	M10x1	-
Z-2050-D	0÷50 mm	M12x1	M12x1	-
Z-20100-D	48÷100 mm	M12x1	M12x1	-
Z-20150-D	98÷150 mm	M12x1	M12x1	-
Z-20200-D	148÷200 mm	M12x1	M12x1	-

Fissaggio

La slitta può essere fissata utilizzando:

- Fori passanti I e fori spina H (1).
- Fori filettati K e fori spina J (2).
- Fori filettati L e fori spina M (2).

Il carico può essere fissato utilizzando:

- Fori passanti A e fori spina B (5).
- Fori filettati C e fori spina B (4).
- Fori filettati E e fori spina D (3).
- Fori filettati F e fori spina D (3).
- Fori filettati G e fori spina D (3).

La slitta può essere montata in posizione fissa, oppure su parti in movimento: in questo caso va considerata la forza d'inerzia cui la slitta ed il suo carico sono sottoposti.

È possibile assemblare due slitte, della stessa taglia, senza nessuna interfaccia.

Fastening

The slide can be fastened by using:

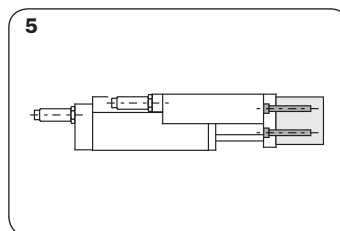
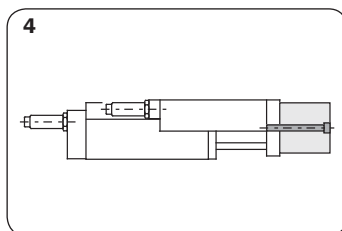
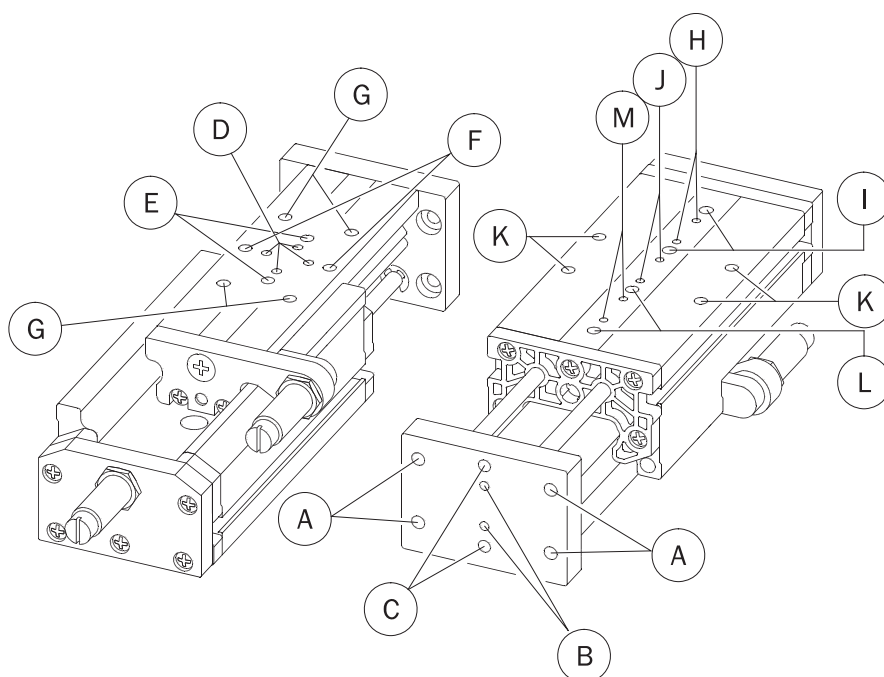
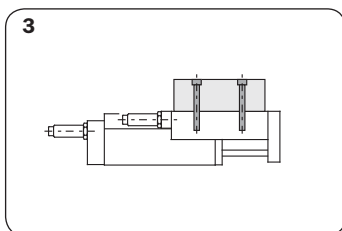
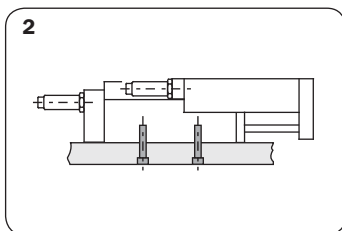
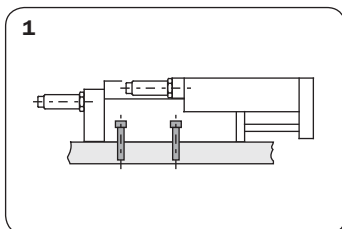
- Through holes I and dowel pin holes H (1).
- Threaded holes K and dowel pin holes J (2).
- Threaded holes L and dowel pin holes M (2).

The load can be fastened by using:

- Through holes A and dowel pin holes B (5).
- Threaded holes C and dowel pin holes B (4).
- Threaded holes E and dowel pin holes D (3).
- Threaded holes F and dowel pin holes D (3).
- Threaded holes G and dowel pin holes D (3).

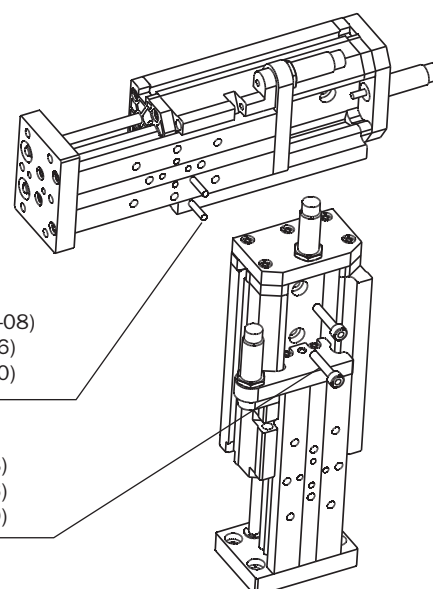
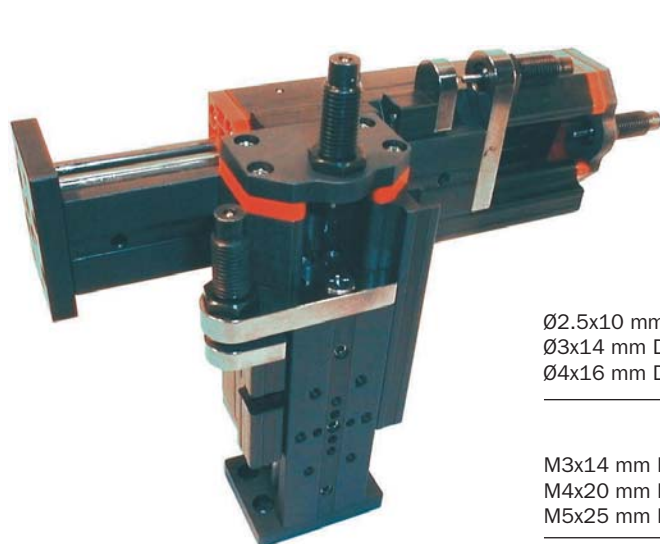
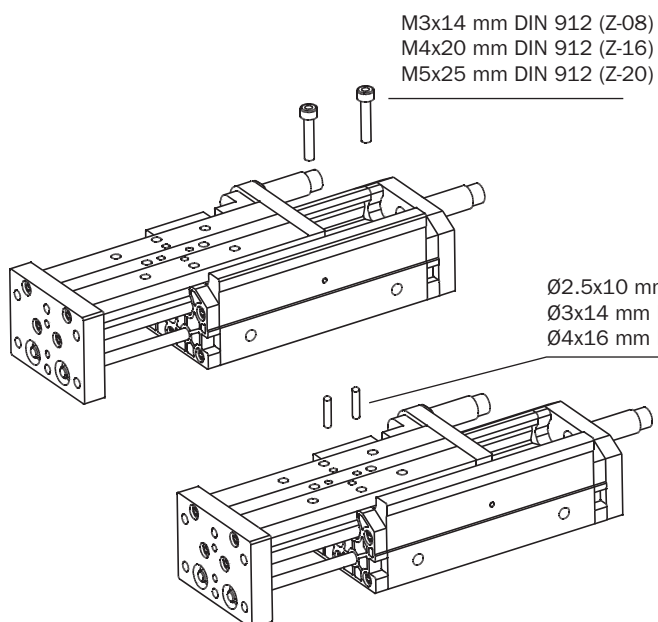
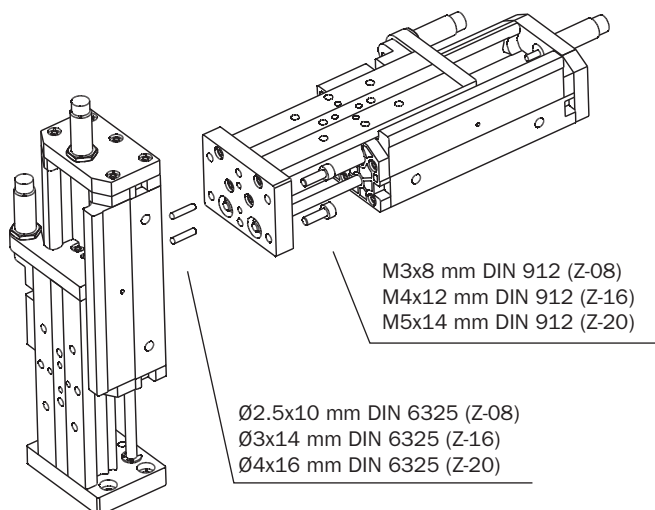
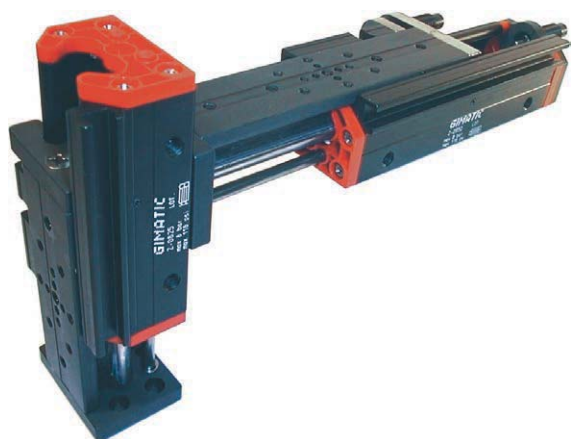
The slide can be fastened to a static or moving part. When on a moving part, you must pay attention to the forces created by inertia over the slide and its load.

It is possible to assemble two slides, of the same size, without any interface.

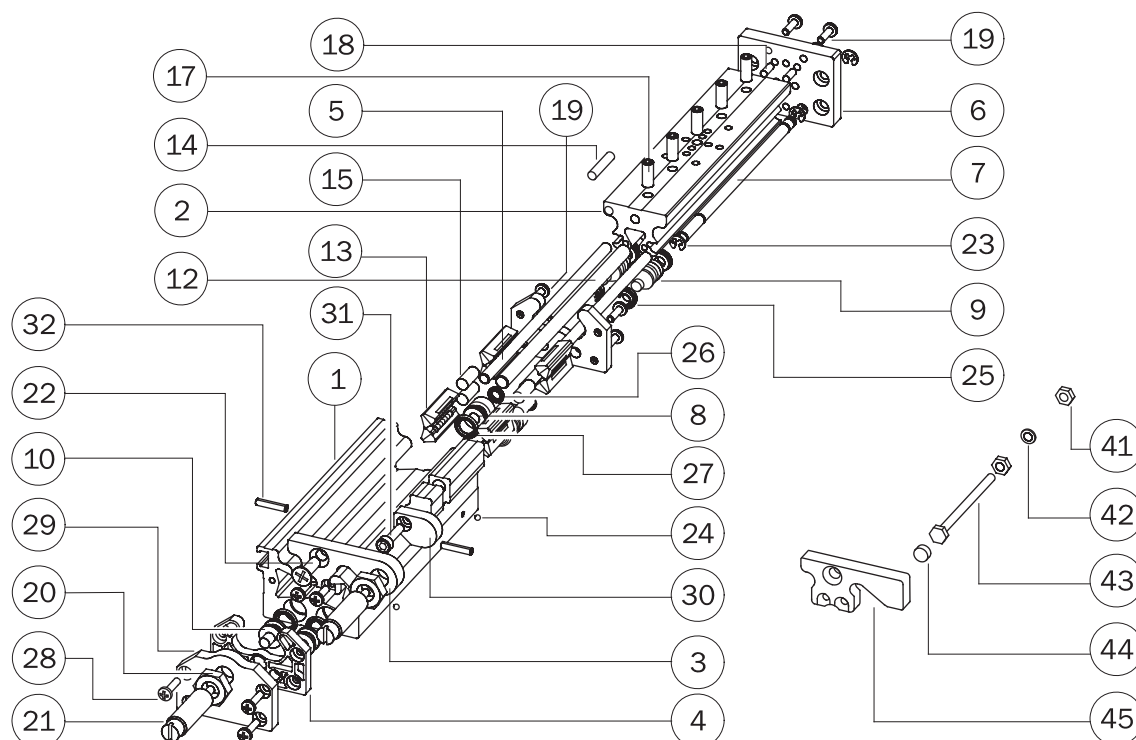


	Z-08	Z-16	Z-20
A	Ø3.3 mm	Ø4.3 mm	Ø5.5 mm
B	Ø2.5H8x4.5 mm	Ø3H8x7 mm	Ø4H8x10 mm
C	M3x6 mm	M4x10 mm	M5x12 mm
D	Ø2.5H8x5 mm	Ø3H8x7 mm	Ø4H8x10 mm
E	M3x5 mm	M4x7 mm	M5x9 mm
F	M3x5 mm	M4x7 mm	M5x8 mm
G	M3x5 mm	M4x7 mm	M5x9 mm
H	Ø2.5H8x6 mm	Ø3H8x7 mm	Ø4H8x8 mm
I	Ø3.3 mm	Ø4.3 mm	Ø5.5 mm
J	Ø2.5H8x6 mm	Ø3H8x7 mm	Ø4H8x8 mm
K	M3x6 mm	M4x6 mm	M5x8 mm
L	M3x6 mm	M4x6 mm	M5x8 mm
M	Ø2.5H8x6 mm	Ø3H8x7 mm	Ø4H8x8 mm

Esempi di applicazione / Application examples

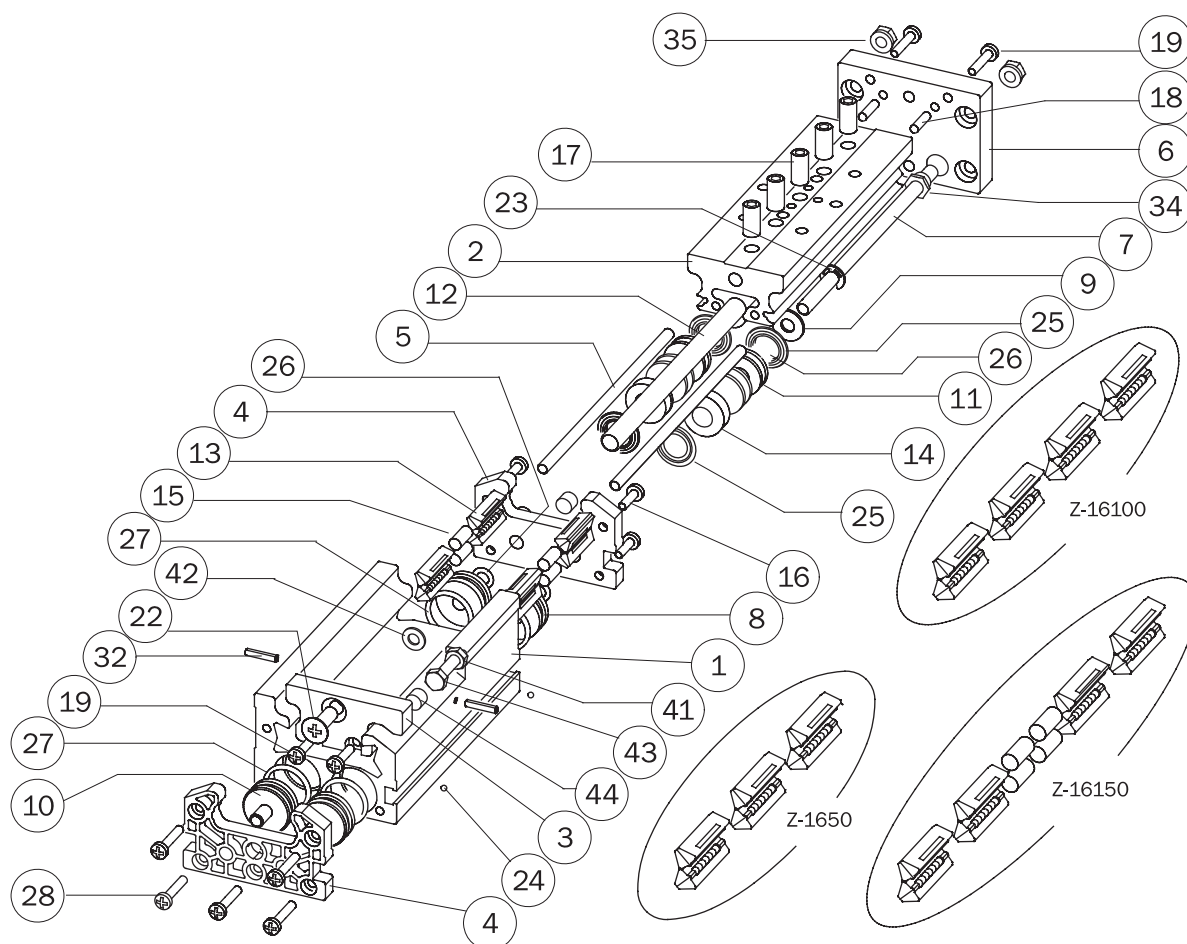


Elenco delle parti / Part list



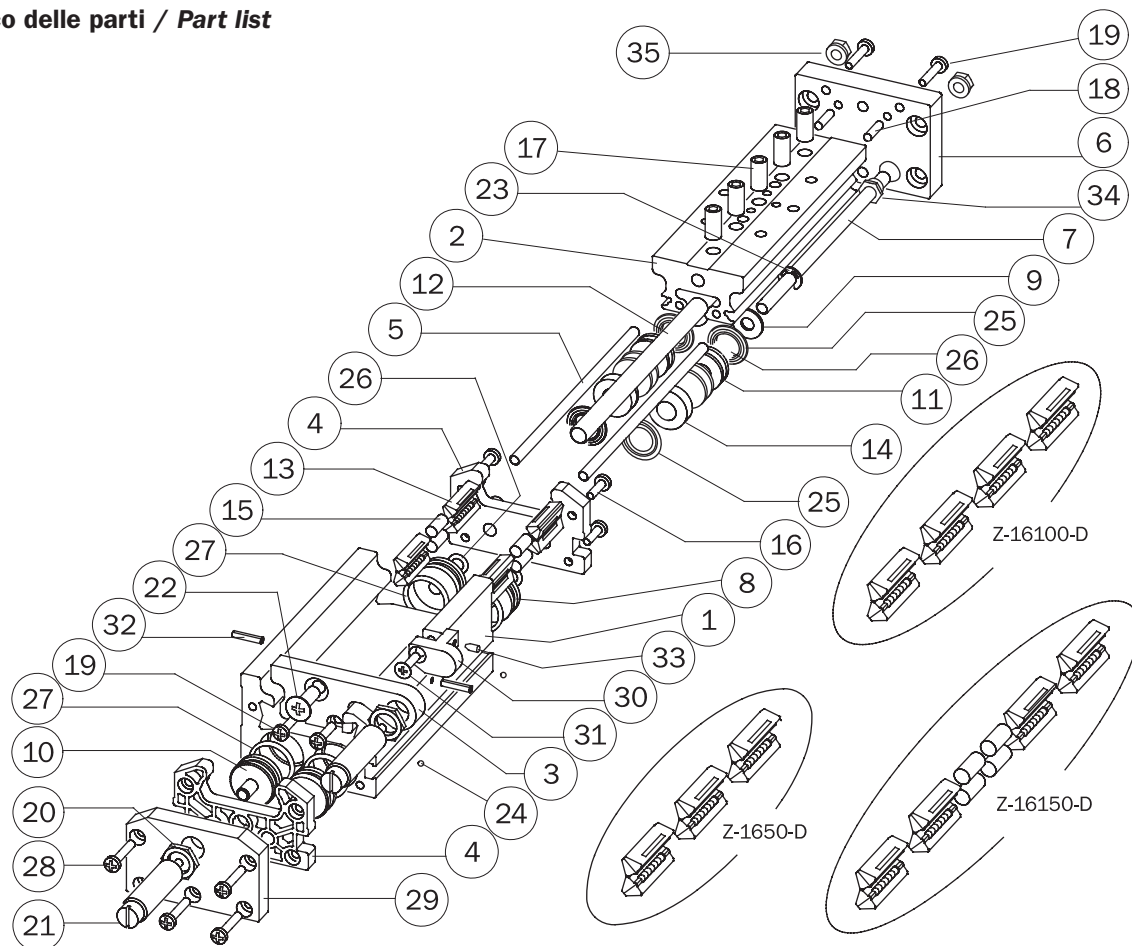
		Z-825	Z-825-D	Z-850	Z-850-D		
1	Corpo inferiore	Z-825-1		Z-850-1		Lower housing	1
2	Corpo superiore	Z-825-2		Z-850-2		Upper housing	2
3	Supporto	-	Z-850-15	-	Z-850-15	Support	3
4	Testata	Z-850-4				Head	4
5	Colonna	Ø4x70 mm DIN 6325		Z-850-5		Column	5
6	Base	Z-850-6				Base	6
7	Stelo	Z-825-4		Z-850-7		Rod	7
8	Flangia anteriore	Z-850-8				Front flange	8
9	Pistone	Z-850-18				Piston	9
10	Flangia posteriore	Z-850-10				Rear flange	10
12	Albero	Z-825-5		Z-850-12		Shaft	12
13	Cartuccia a circolo di sfere	C-216				Ball bushing	13
14	Magnete	K-020-13				Magnet	14
15	Distanziale	-		Z-850-16		Spacer	15
17	Vite senza testa	M4x10 mm DIN 913				Grub screw	17
18	Spina	Ø2.5x7.8 mm DIN 5402				Dowel pin	18
19	Vite	M2.5x8 mm DIN 7985 INOX A2				Screw	19
20	Dado	-	M8x1	-	M8x1	Nut	20
21	Deceleratore	-	ACE MC10MH	-	ACE MC10MH	Shock-absorber	21
22	Vite	M4x12 mm DIN 965A INOX A2				Screw	22
23	Seeger	Ø2.3 DIN 6799				Seeger	23
24	Sfera	Ø2 mm AA DIN 5401A				Sphere	24
25	Guarnizione	8x4.8x2.7 (GUAR-048)				Gasket	25
26	O-Ring	Ø1.78x3.69 (GUAR-044)				O-Ring	26
27	O-Ring	Ø1.78x6.07 (GUAR-039)				O-Ring	27
28	Vite DIN 7985 INOX A2	M2.5x8 mm	M2.5x12 mm	M2.5x8 mm	M2.5x12 mm	Screw	28
29	Supporto	-	Z-850-13	-	Z-850-13	Support	29
30	Battuta	-	Z-850-14	-	Z-850-14	Stopper	30
31	Vite DIN 912 INOX A2	-	M3x12 mm	-	M3x12 mm	Screw	31
32	Spina elastica	Ø2x8 mm DIN 1481 INOX A2				Elastic pin	32
41	Dado DIN 934 INOX A2	M3	-	M3	-	Nut	41
42	Rondella DIN125B INOX A2	Ø3.2xØ6 mm	-	Ø3.2xØ6 mm	-	Washer	42
43	Vite DIN 933 INOX A2	M3x30 mm	-	M3x30 mm	-	Screw	43
44	Elastomero	Z-850-11	-	Z-850-11	-	Elastomer	44
45	Battuta	Z-850-3	-	Z-850-3	-	Stopper	45

Elenco delle parti / Part list



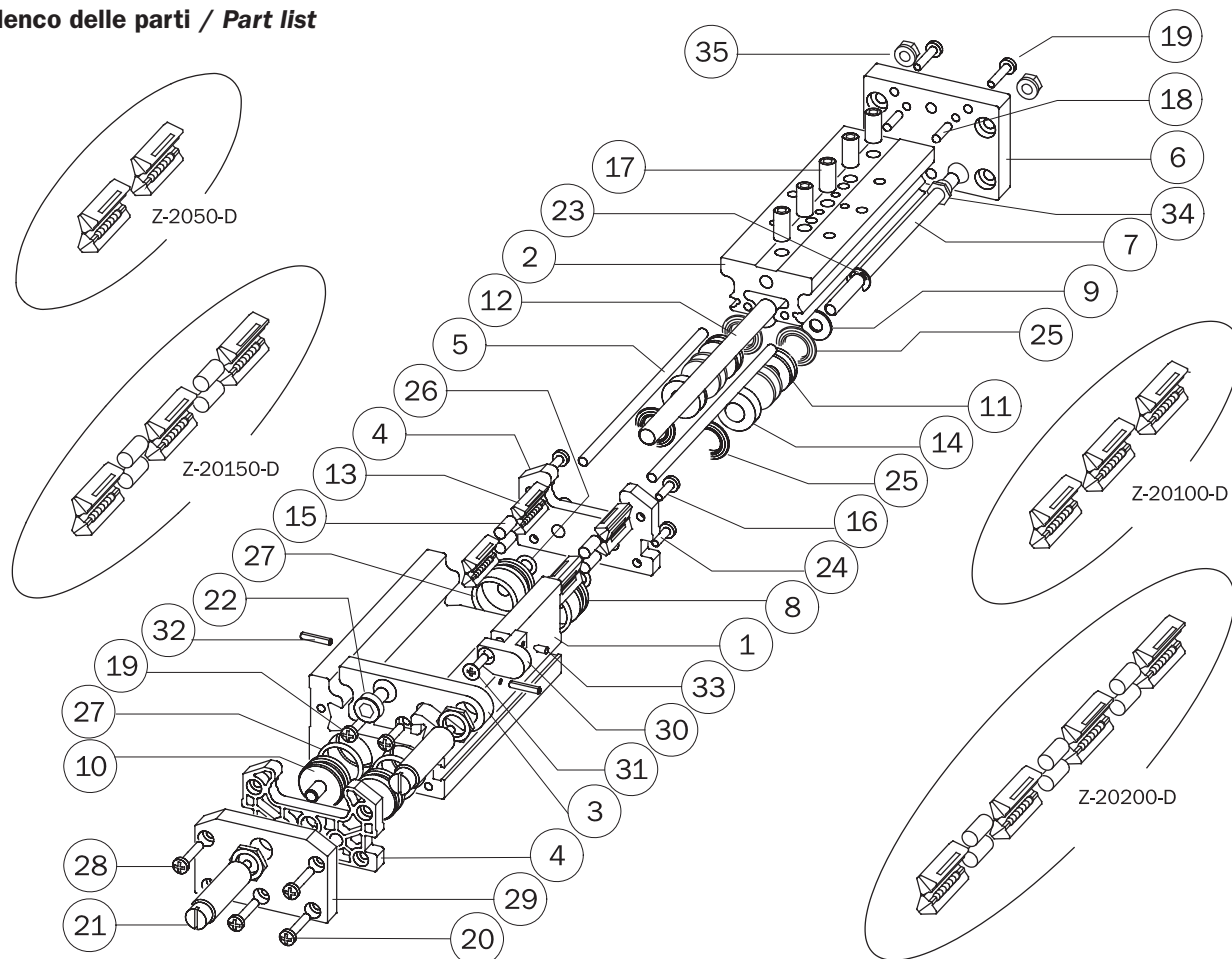
		Z-1650	Z-16100	Z-16150		
1	Corpo inferiore	Z-1650-1	Z-16100-1	Z-16150-1	Lower housing	1
2	Corpo superiore	Z-1650-2	Z-16100-2	Z-16150-2	Upper housing	2
3	Supporto		Z-1650-3		Support	3
4	Testata		Z-1650-4		Head	4
5	Colonna	Z-1650-5	Z-16100-3	Z-16150-3	Column	5
6	Base		Z-1650-6		Base	6
7	Stelo	Z-1650-7	Z-1600-4	Z-16150-4	Rod	7
8	Flangia anteriore		Z-1650-8		Front flange	8
9	Rondella		Ø5.3xØ9.5 mm DIN 125B INOX		Washer	9
10	Flangia posteriore		Z-1650-10		Rear flange	10
11	Pistone		Z-1650-17		Piston	11
12	Albero	Z-1650-12	Z-16100-5	Z-16150-5	Shaft	12
13	Cartuccia a circolo di sfere		C-216		Ball bushing	13
14	Magnete		PS-0016-P09		Magnet	14
15	Distanziale	-	-	Z-850-16	Spacer	15
16	Vite		M3x10 mm DIN 7985 INOX A2		Screw	16
17	Vite senza testa		M6x12 mm DIN 913 INOX A2		Grub screw	17
18	Spina		Ø3x12 mm DIN 6325		Dowel pin	18
19	Vite		M3x14 mm DIN 7985 INOX A2		Screw	19
22	Vite		M5x16 mm DIN 965A INOX A2		Screw	22
23	Seeger		Ø4 mm DIN 6799		Seeger	23
24	Sfera		Ø2 mm AA DIN 5401A		Sphere	24
25	Guarnizione		16.5x9.8x2.55 (GUAR-119)		Gasket	25
26	O-Ring		Ø1.78x4.48 (GUAR-029)		O-Ring	26
27	O-Ring		Ø1.78x14 (GUAR-007)		O-Ring	27
28	Vite		M3x10 mm DIN 7985 INOX A2		Screw	28
32	Spina elastica		Ø2x10 mm DIN 1481 INOX A2		Elastic pin	32
34	Flangia		Z-1650-16		Flange	34
35	Dado		SERPRESS M4		Nut	35
41	Dado		M4 DIN 439B INOX A2		Nut	41
42	Rondella		Ø4.3xØ8 mm DIN 125B		Washer	42
43	Vite		M4x40 DIN 933 INOX A2		Screw	43
44	Elastomero		Z-850-11		Elastomer	44

Elenco delle parti / Part list



		Z-1650-D	Z-16100-D	Z-16150-D		
1	Corpo inferiore	Z-1650-1	Z-16100-1	Z-16150-1	Lower housing	1
2	Corpo superiore	Z-1650-2	Z-16100-2	Z-16150-2	Upper housing	2
3	Supporto		Z-1650-15		Support	3
4	Testata		Z-1650-4		Head	4
5	Colonna	Z-1650-5	Z-16100-3	Z-16150-3	Column	5
6	Base		Z-1650-6		Base	6
7	Stelo	Z-1650-7	Z-16100-4	Z-16150-4	Rod	7
8	Flangia anteriore		Z-1650-8		Front flange	8
9	Rondella		Ø5.3xØ9.5 mm DIN 125B INOX		Washer	9
10	Flangia posteriore		Z-1650-10		Rear flange	10
11	Pistone		Z-1650-17		Piston	11
12	Albero	Z-1650-12	Z-16100-5	Z-16150-5	Shaft	12
13	Cartuccia a circolo di sfere		C-216		Ball bushing	13
14	Magnete		PS-0016-P09		Magnet	14
15	Distanziale	-	-	Z-850-16	Spacer	15
16	Vite		M3x10 mm DIN 7985 INOX A2		Screw	16
17	Vite senza testa		M6x12 mm DIN 913 INOX A2		Grub screw	17
18	Spina		Ø3x12 mm DIN 6325		Dowel pin	18
19	Vite		M3x14 mm DIN 7985 INOX A2		Screw	19
20	Dado		M10x1		Nut	20
21	Deceleratore		ACE MC25M-NB		Shock-absorber	21
22	Vite		M5x16 mm DIN 965A INOX A2		Screw	22
23	Seeger		Ø4 mm DIN 6799		Seeger	23
24	Sfera		Ø2 mm AA DIN 5401A		Sphere	24
25	Guarnizione		16.5x9.8x2.55 (GUAR-119)		Gasket	25
26	O-Ring		Ø1.78x4.48 (GUAR-029)		O-Ring	26
27	O-Ring		Ø1.78x14 (GUAR-007)		O-Ring	27
28	Vite		M3x16 mm DIN 7985 INOX A2		Screw	28
29	Supporto		Z-1650-13		Support	29
30	Battuta		Z-1650-14		Stopper	30
31	Vite		M4x16 mm DIN 965A INOX A2		Screw	31
32	Spina elastica		Ø2x10 mm DIN 1481 INOX A2		Elastic pin	32
33	Vite senza testa		M4x8 mm DIN 914		Grub screw	33
34	Flangia		Z-1650-16		Flange	34
35	Dado		M4 SERPRESS		Nut	35

Elenco delle parti / Part list



		Z-2050-D	Z-20100-D	Z-20150-D	Z-20200-D		
1	Corpo inferiore	Z-2050-1	Z-20100-1	Z-20150-1	Z-20200-1	Lower housing	1
2	Corpo superiore	Z-2050-2	Z-20100-2	Z-20150-2	Z-20200-2	Upper housing	2
3	Supporto	Z-2050-15	Z-20100-15	Z-20150-15	Z-20200-15	Support	3
4	Testata	Z-2050-4				Head	4
5	Colonna	Z-2050-5	Z-20100-3	Z-20150-3	Z-20200-3	Column	5
6	Base	Z-2050-6				Base	6
7	Stelo	Z-2050-7	Z-20100-4	Z-20150-4	Z-20200-4	Rod	7
8	Flangia anteriore	Z-2050-8				Front flange	8
9	Rondella DIN 125B	Ø6.4xØ12 mm DIN 125B				Washer	9
10	Flangia posteriore	Z-2050-10				Rear flange	10
11	Pistone	Z-2050-11				Piston	11
12	Albero	Z-2050-12	Z-20100-5	Z-20150-5	Z-20200-5	Shaft	12
13	Cartuccia a circolo di sfere	C-2521				Ball bushing	13
14	Magnete	XP-20-5				Magnet	14
15	Distanziale	-	-	Z-850-16		Spacer	15
16	Vite	M4x12 mm DIN 7985 INOX A2				Screw	16
17	Vite senza testa	M8x16 mm DIN 913				Grub screw	17
18	Spina	Ø4x16 mm DIN 6325				Dowel pin	18
19	Vite	M4x16 mm DIN 7985 INOX A2				Screw	19
20	Vite	M3x20 mm DIN 7985 INOX A2				Screw	20
21	Deceleratore	ACE MC75M3-NB				Shock-absorber	21
22	Vite	M6x14 mm DIN 912 INOX A2				Screw	22
23	Seeger	Ø6 DIN 6799				Seeger	23
24	Vite	M3x10 mm DIN 7985 INOX A2				Screw	24
25	Guarnizione	20x14x3 (GUAR-058)				Gasket	25
26	Guarnizione	10x6x3.5 (GUAR-093)				Gasket	26
27	O-Ring	Ø1.78x18.77 (GUAR-077)				O-Ring	27
28	Vite	M4x20 mm DIN 7985 INOX A2				Screw	28
29	Supporto	Z-2050-13				Support	29
30	Battuta	Z-2050-14				Stopper	30
31	Vite	M5x20 mm DIN 965A INOX A2				Screw	31
32	Spina elastica	Ø3x12 mm DIN 1481 INOX A2				Elastic pin	32
33	Vite senza testa	M4x8 mm DIN 914				Grub screw	33
34	Flangia	Z-2050-9				Flange	34
35	Dado	M5 DIN 6927				Nut	35

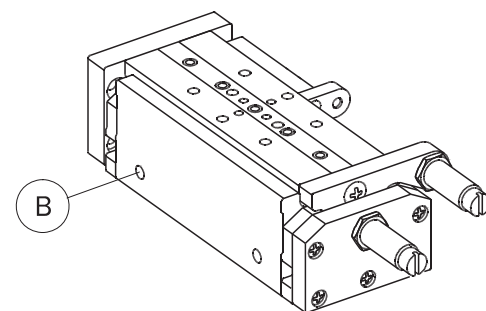
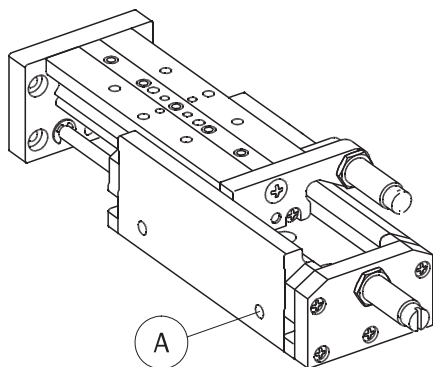
Connessione pneumatica

La slitta si alimenta con aria compressa dai fori laterali montandovi i raccordi dell'aria M5 ed i relativi tubi (non forniti).

Aria compressa in A: apertura.
Aria compressa in B: chiusura.

L'unità è azionata con l'aria compressa filtrata ($5\div 40\text{ }\mu\text{m}$) non necessariamente lubrificata. La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita dell'unità.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.



Compressed air feeding

The slide is driven by compressed air supplied through the side air ports with fittings M5 and relevant hoses (not supplied).

Compressed air in A: extension stroke.
Compressed air in B: retraction stroke.

The compressed air, must be filtered from 5 to 40 μm .
Maintain the medium selected at the start, lubricated or not, for the complete service life of the unit.

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

Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione.
- 2- Riempimento all'avvio.
- 3- Improvvisa mancanza di pressione.
- 4- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (E).
- 2- Valvola di avviamento progressivo (G).
- 3- Valvole di sicurezza (C).
- 4- Regolatori di flusso (D).

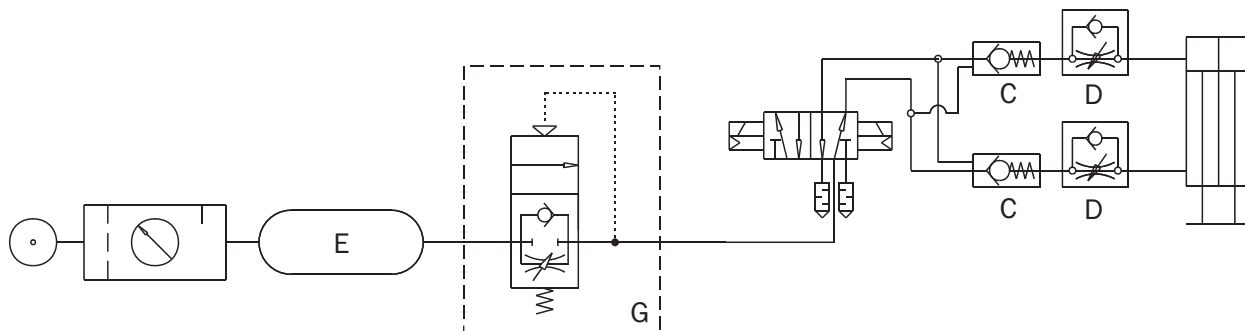
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation.
- 2- Pressurizing.
- 3- Sudden pressure black-out.
- 4- Excessive actuating speed.

Possible solutions:

- 1- Compressed air storage (E).
- 2- Start-up valve (G).
- 3- Safety valve (C).
- 4- Flow controller (D).



Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della slitta.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della slitta.

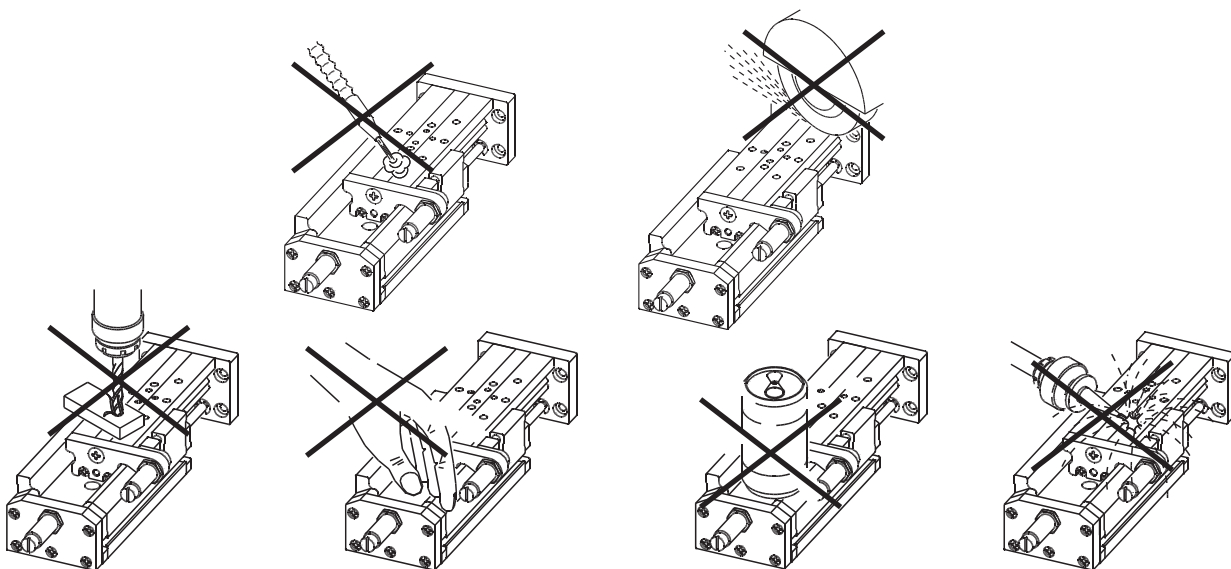
La slitta non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Cautions

Never let the slide come into contact with corrosive substances, soldering splashes or abrasive powders as they may damage the slide.

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

Never operate the slide if the machine on which it is fitted does not comply with safety laws and standards of your country.



Manutenzione

Il precarico dei cuscinetti è regolato in fabbrica.
NON UTILIZZARE MAI LE VITI DI REGOLAZIONE PER MODIFICARLO.

Controllare periodicamente le colonne di guida e lubrificarle quando sono secche.

L'apposito grasso è disponibile in tubetti da 90 grammi.
Codice di ordinazione: GLP500-90.

Dopo i primi 10 milioni può essere revisionata in fabbrica per ripristinare il corretto precarico dei cuscinetti ed effettuare l'ingrassaggio con:

- Molykote DX (parti metalliche);
- Molykote PG75 (guarnizioni).

Maintenance

The preload of the bearings is set in factory.

NEVER USE THE ADJUSTING SCREWS TO MODIFY IT.

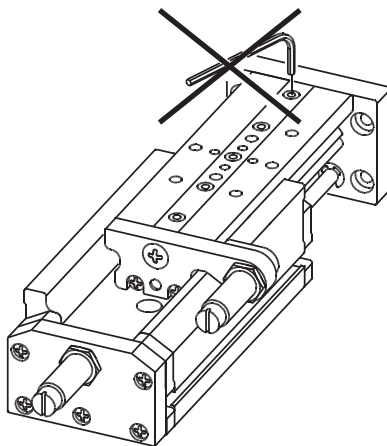
Periodically check the steel bars and lubricate when dry.

The suitable grease is available in 90 grams tubes.

Ordering code: GLP500-90.

After 10 million cycles it can be serviced in factory to restore the correct preload of the bearings and grease again the inner parts by:

- Molykote DX (metal on metal);
- Molykote PG75 (gaskets).

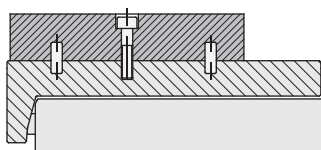


Slitte pneumatiche (serie ZA)

- Alesaggio 2x6, 2x8, 2x12, 2x16 oppure 2x20 mm.
- Corsa da 10 mm a 150mm.
- Fine corsa opzionali regolabili con deceleratore, elastomero (FGD) o vite (FPD).
- Sensori magnetici opzionali.

Pneumatic slides (series ZA)

- Piston bore: 2x6, 2x8, 2x12, 2x16 or 2x20 mm.
- Stroke from 10 to 150 mm.
- Optional end stroke adjusters with shock-absorber, rubber bumper (FGD) or grub screw (FPD).
- Optional proximity magnetic sensors.



Fori di centraggio calibrati per il fissaggio del carico sul carrello
Dowel pin holes for work piece positioning on the top of the carrier

Cartucce a ricircolo di sfere brevettate
Patented recirculating ball-bearings

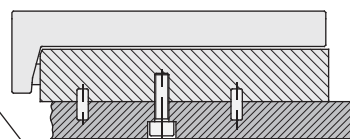
Carrello monoblocco stampato in zama
One-block carrier moulded in zamak



Guida temprata con piste rettificate
Hardened guideway with overgrinded raceways

Viti di regolazione del precarico
Preload adjustment screws

Fori filettati per il fissaggio della slitta
Threaded holes for slide mounting

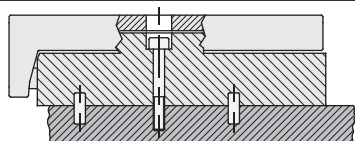
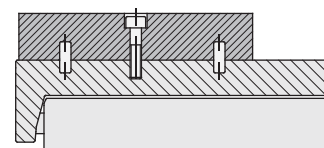


Ingresso aria per chiusura slitta
Air port for slide retraction

Ingresso aria per apertura slitta
Air port for slide extension

Slitte pneumatiche (serie ZA) / Pneumatic slides (series ZA)

Fori per l'introduzione di viti passanti nel corpo per il fissaggio della slitta
 Passing holes for slide fastening by through screws



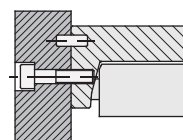
Fori filettati per il fissaggio del carico sul carrello
 Threaded holes for work piece mounting on the carrier top

Fori filettati per il montaggio dei kit (ZAK) per fine corsa opzionali
 Mounting threaded holes for optional end stroke (ZAK)

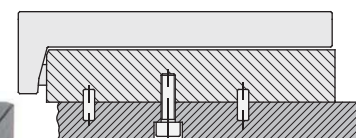


Fori filettati per il fissaggio anteriore del carico
 Threaded holes for work piece mounting on the front face of the carrier

Fori di centraggio calibrati per il fissaggio anteriore del carico
 Dowel pin holes for work piece positioning on the front face of the carrier



Fori di centraggio calibrati per il fissaggio della slitta
 Dowel pin holes for slide positioning



Sedi per sensori magnetici
 Magnetic sensor slots



Fine corsa in chiusura
 Retraction end stroke



Accessori

Per la regolazione della corsa si possono utilizzare deceleratori idraulici, ammortizzatori di gomma (FGD) o grani (FPD), a seconda dell'energia cinetica che l'unità deve sopportare. Per l'utilizzo di questi si devono montare sulla slitta gli accessori di fissaggio (ZAK).

Accessories

The stroke can be adjusted by shock-absorbers, rubber bumpers (FGD), or grub screws (FPD), according with the kinetic energy the slide has to bear. The bracket and stoppers (ZAK) are necessary to mount the adjusters.



Codice di ordinazione / Ordering code: **ZAK112**

	Alesaggio / Bore
1	Supporto per fine corsa di apertura / Bracket for extension adjustment
2	Supporto per fine corsa di chiusura / Bracket for retraction adjustment
3	Battuta / Stopper (*)

(*)
Sulle slitte a corsa lunga ne sono necessari due; verificare alla pagina delle dimensioni.
On the long stroke slides, two stoppers are necessary; check on the dimensions page.

Tutti gli accessori di fissaggio (ZAK) includono le viti per il fissaggio alla slitta.
Il filetto di queste viti deve essere incollato con frena filetti a media resistenza, per evitare lo svitamento dovuto alle vibrazioni.

The ZAK accessories are provided with the necessary screws. These ones must be glued by an anaerobic adhesive (medium resistance), to avoid unscrewing due to vibrations.

La tabella mostra i codici dei deceleratori idonei.
I fine corsa opzionali FGD e FPD sono prodotti Gimatic.

The table shows the codes of the suitable shock-absorbers.
The optional FGD and FPD are Gimatic products.

Deceleratori idraulici / Hydraulic shock-absorbers

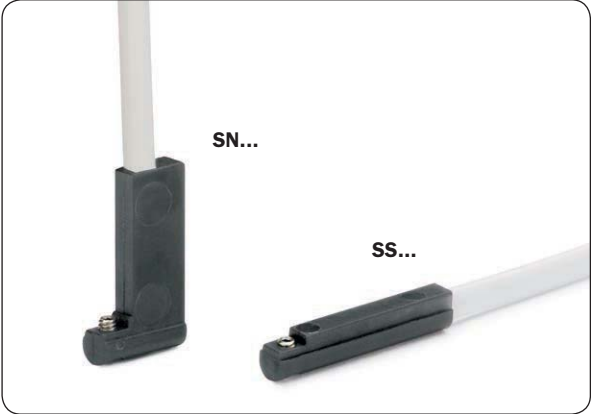


ZA06	M6x0.5	MC9M1	TKSM2	FGD0620 (L=20 mm)	FPD0620 (L=20 mm)
ZA08	M6x0.5	MC9M1	TKSM2	FGD0620 (L=20 mm)	FPD0620 (L=20 mm)
ZA12	M8x1	MC10ML	PMX8MC-3	FGD0830 (L=30 mm)	FPD0830 (L=30 mm)
ZA16	M10x1	MC25M-NB	TK10M-4	FGD1030 (L=30 mm)	FPD1030 (L=30 mm)
ZA20	M12x1	MC75M3-NB	EC015MF-2	FGD1235 (L=35 mm)	FPD1235 (L=35 mm)

Sensori

Il rilevamento della posizione di lavoro è affidato a uno o più sensori magnetici di prossimità (opzionali), che rilevano la posizione attraverso il magnete sul pistone. Quindi, per un corretto funzionamento, è da evitare l'impiego in presenza di forti campi magnetici od in prossimità di grosse masse di materiale ferromagnetico.

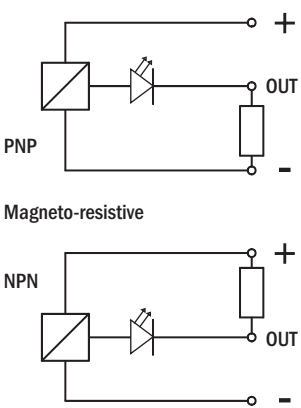
I sensori utilizzabili sono:



Sensors

The operating position is detected by magnetic proximity sensors (optional) through a magnet placed on the piston. The use of magnetic proximity sensors is therefore to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



			ZA06	ZA08	ZA12	ZA16	ZA20
SN4N225-G	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓	✓	✓
SN4M225-G	NPN	cavo 2.5m / 2.5m cable	✓	✓	✓	✓	✓
SN3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓	✓	✓
SN3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓	✓	✓	✓	✓
SS4N225-G	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓	✓	✓
SS4M225-G	NPN	cavo 2.5m / 2.5m cable	✓	✓	✓	✓	✓
SS3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓	✓	✓
SS3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓	✓	✓	✓	✓

Sono tutti dotati di un cavo piatto a tre fili e di un led.

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



	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air				
Pressione di esercizio Pressure range	3 ÷ 8 bar				
Temperatura di esercizio Temperature range	5° ÷ 60°C.				
Forza di apertura a 6 bar Extension force at 6 bar	29 N				
Forza di chiusura a 6 bar Retraction force at 6 bar	22 N				
Corsa totale massima Maximum total stroke	10 mm	20 mm	30 mm	40 mm	50 mm
Tempo di azionamento minimo Minimum actuating time	0.03 s	0.04 s	0.05 s	0.06 s	0.08 s
Consumo d'aria per ciclo Cycle air consumption	1 cm ³	2 cm ³	3 cm ³	5 cm ³	6 cm ³
Peso Weight	100 g	120 g	135 g	170 g	205 g

ZA0610



ZA0620



ZA0630



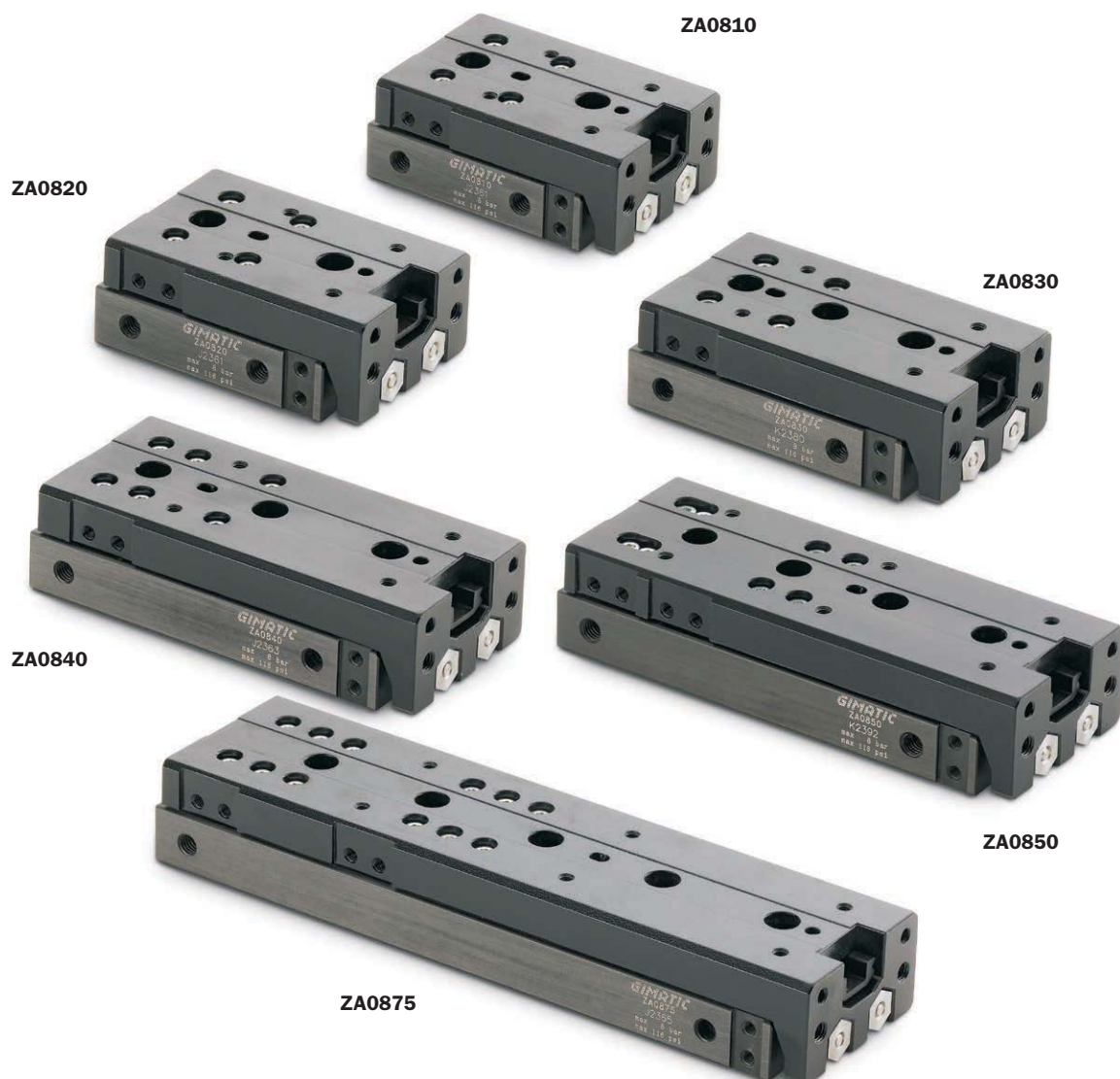
ZA0640



ZA0650



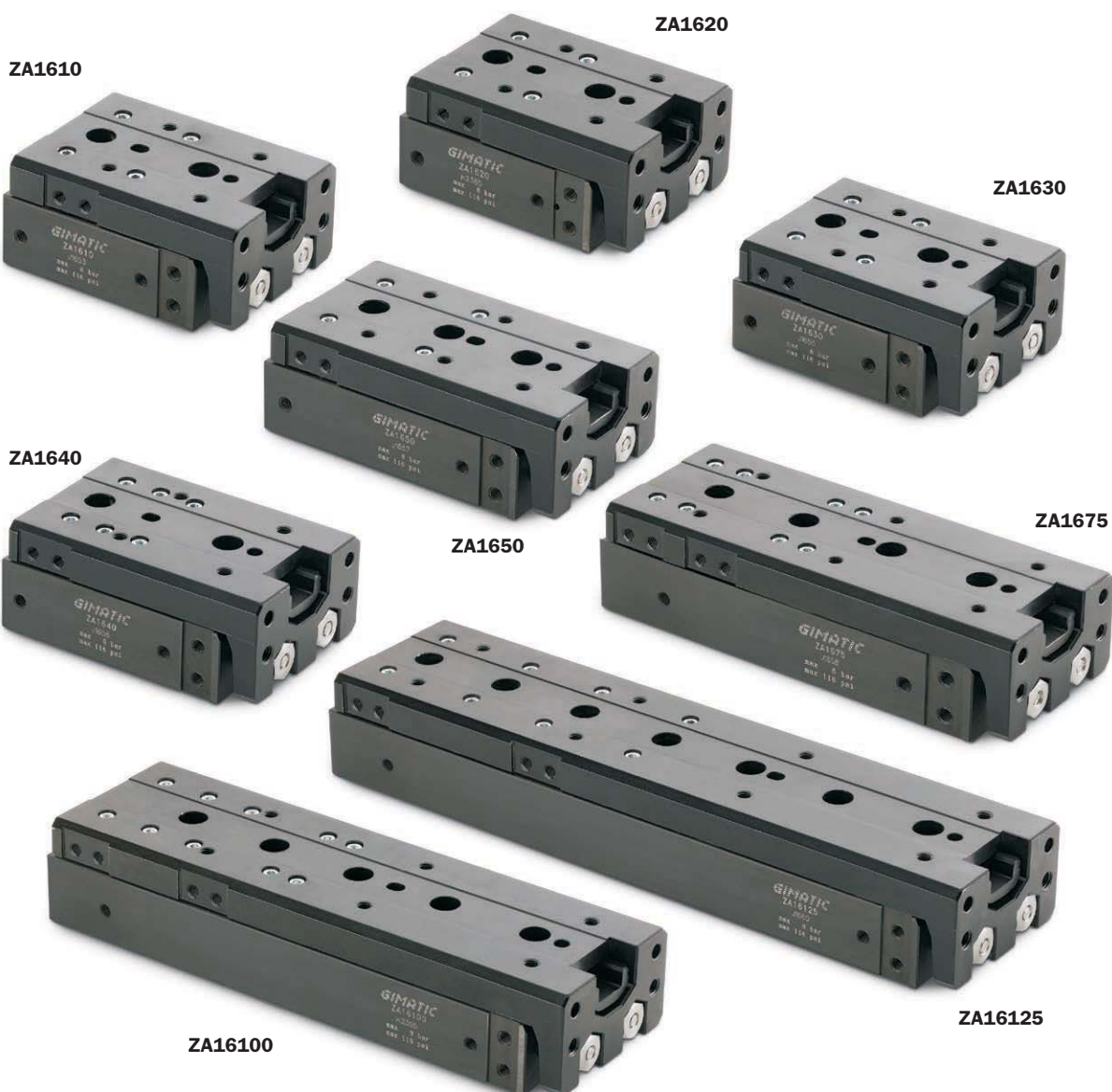
	ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>					
Pressione di esercizio <i>Pressure range</i>	2.5 ÷ 8 bar					
Temperatura di esercizio <i>Temperature range</i>	5° ÷ 60°C.					
Forza di apertura a 6 bar <i>Extension force at 6 bar</i>	51 N					
Forza di chiusura a 6 bar <i>Retraction force at 6 bar</i>	38 N					
Corsa totale massima <i>Maximum total stroke</i>	10 mm	20 mm	30 mm	40 mm	50 mm	75 mm
Tempo di azionamento minimo <i>Minimum actuating time</i>	0.03 s	0.05 s	0.08 s	0.11 s	0.15 s	0.2 s
Consumo d'aria per ciclo <i>Cycle air consumption</i>	3 cm ³	4 cm ³	6 cm ³	8 cm ³	11 cm ³	16 cm ³
Peso <i>Weight</i>	170 g	185 g	215 g	270 g	310 g	450 g



	ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air						
Pressione di esercizio Pressure range	1 ÷ 8 bar						
Temperatura di esercizio Temperature range	5° ÷ 60°C.						
Forza di apertura a 6 bar Extension force at 6 bar	122 N						
Forza di chiusura a 6 bar Retraction force at 6 bar	101 N						
Corsa totale massima Maximum total stroke	10 mm	20 mm	30 mm	40 mm	50 mm	75 mm	100 mm
Tempo di azionamento minimo Minimum actuating time	0.02 s	0.04 s	0.06 s	0.09 s	0.11 s	0.14 s	0.19 s
Consumo d'aria per ciclo Cycle air consumption	9 cm ³	11 cm ³	13 cm ³	17 cm ³	23 cm ³	38 cm ³	55 cm ³
Peso Weight	390 g	390 g	395 g	440 g	535 g	715 g	955 g



	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
Fluido <i>Medium</i>	Aria compressa filtrata, lubrificata / non lubrificata <i>Filtered, lubricated / non lubricated compressed air</i>							
Pressione di esercizio <i>Pressure range</i>	1 ÷ 8 bar							
Temperatura di esercizio <i>Temperature range</i>	5° ÷ 60°C.							
Forza di apertura a 6 bar <i>Extension force at 6 bar</i>	217 N							
Forza di chiusura a 6 bar <i>Retraction force at 6 bar</i>	196 N							
Corsa totale massima <i>Maximum total stroke</i>	10 mm	20 mm	30 mm	40 mm	50 mm	75 mm	100 mm	125 mm
Tempo di azionamento minimo <i>Minimum actuating time</i>	0.03 s	0.04 s	0.05 s	0.06 s	0.06 s	0.07 s	0.09 s	0.11 s
Consumo d'aria per ciclo <i>Cycle air consumption</i>	16 cm ³	19 cm ³	23 cm ³	31 cm ³	40 cm ³	69 cm ³	98 cm ³	127 cm ³
Peso <i>Weight</i>	645 g	645 g	650 g	710 g	820 g	1150 g	1475 g	1800 g



	ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air								
Pressione di esercizio Pressure range	1 ÷ 8 bar								
Temperatura di esercizio Temperature range	5° ÷ 60°C.								
Forza di apertura a 6 bar Extension force at 6 bar	339 N								
Forza di chiusura a 6 bar Retraction force at 6 bar	309 N								
Corsa totale massima Maximum total stroke	10 mm	20 mm	30 mm	40 mm	50 mm	75 mm	100 mm	125 mm	150 mm
Tempo di azionamento minimo 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
Consumo d'aria per ciclo Cycle air consumption	26 cm ³	32 cm ³	38 cm ³	51 cm ³	66 cm ³	103 cm ³	142 cm ³	188 cm ³	221 cm ³
Peso Weight	1100 g	1110 g	1110 g	1210 g	1360 g	1745 g	2320 g	2845 g	3370 g



Energia cinetica

L'energia che la slitta deve dissipare ad ogni fine corsa è:

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

dove:

m_{WP} è la massa trasportata [kg];
 s è la corsa [m];
 t è il tempo di traslazione [s].

I valori ammessi di E sono riportati nella tabella dell'energia cinetica sottostante.

Kinetic energy

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

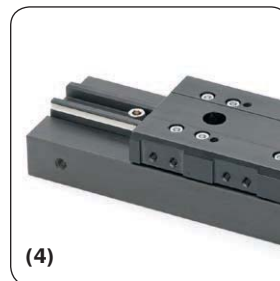
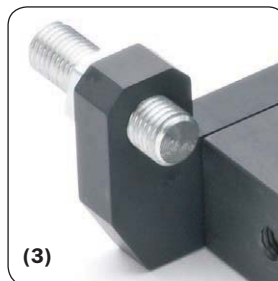
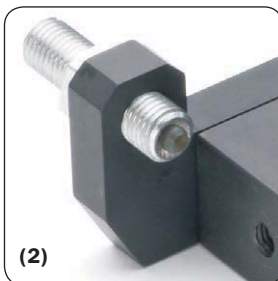
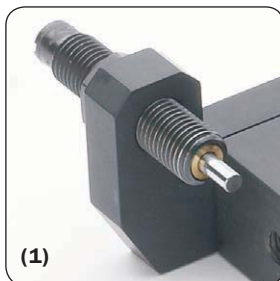
where:

m_{WP} is the work piece mass [kg];
 s is the travel stroke [m];
 t is the travel time [s].

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

Energia cinetica ammessa / Permitted kinetic energy

		ZA06	ZA08	ZA12	ZA16	ZA20
Con deceleratore With shock-absorber	(1)	0.03 J	0.04 J	0.14 J	0.28 J	0.48 J
Con gommino With rubber bumper	(2)	0.02 J	0.03 J	0.08 J	0.14 J	0.24 J
Con Grano With grub screw	(3)	0.01 J	0.02 J	0.03 J	0.05 J	0.08 J
Senza regolatori di corsa Without stroke adjusters	(4)	0.01 J	0.02 J	0.03 J	0.05 J	0.08 J



Ripetibilità

Gli accessori usati per la regolazione del fine corsa influenzano la ripetibilità.

Usare il deceleratore o il grano, quando è necessario un posizionamento preciso (+/-0.02mm) a fine corsa.

Repeatability

The accessories used for the end-stroke adjustment affect the slide repeatability.

Use the shock-absorber option or the grub screw option, when a precise end-stroke positioning (+/-0.02mm) is needed.

Carichi di sicurezza

Consultare le tabelle dei carichi ammissibili.
Carichi eccessivi possono danneggiare la slitta e comprometterne il funzionamento.

Le quote Y_o e Z_o identificano il centro del cuscinetto lineare.

$F_x s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$ sono i carichi statici massimi ammissibili.

$F_x d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$ sono i carichi dinamici massimi ammissibili.

I carichi statici sono quelli applicabili alla slitta quando il carrello é fermo, i carichi dinamici sono quelli applicabili durante il movimento.

Nelle tabelle è riportato anche il massimo peso trasportabile (m_{max}).

Safety loads

Check the tables below.

Excessive loads can damage the slide and cause functioning troubles.

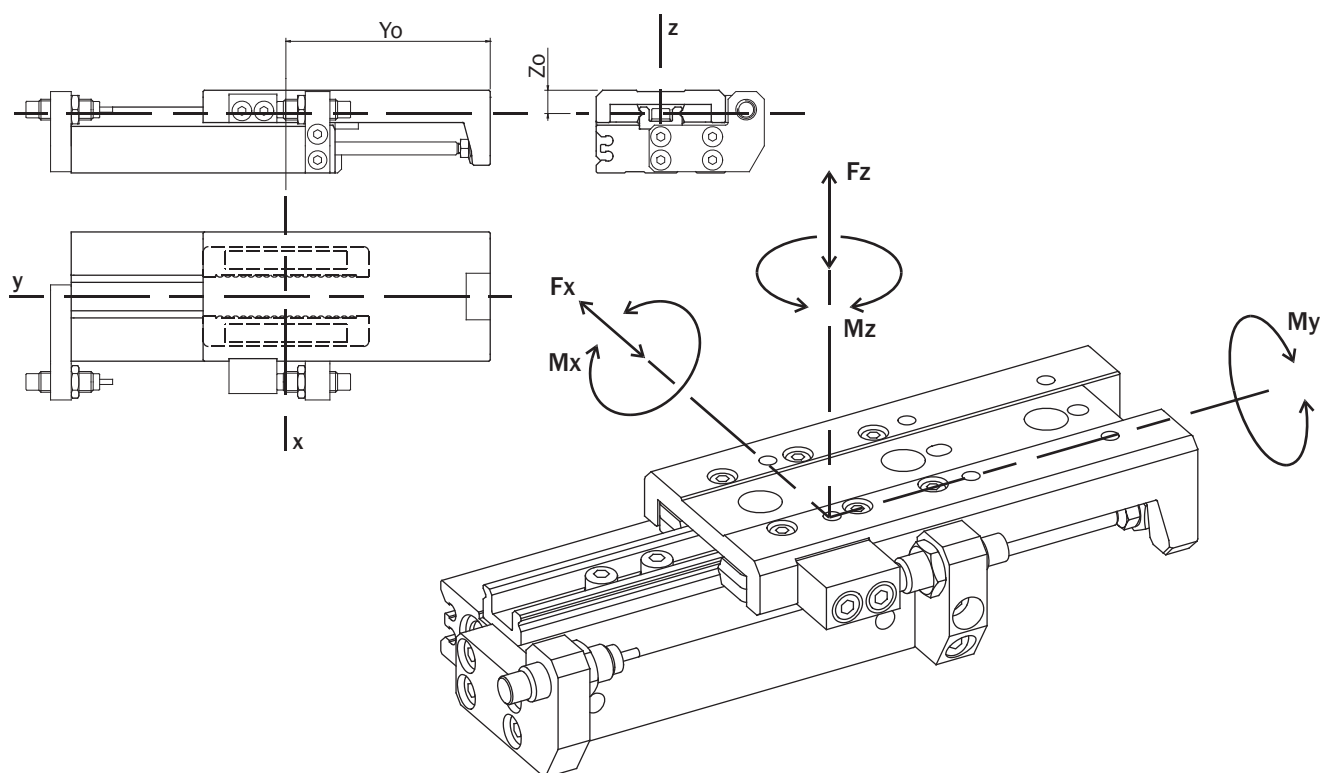
The dimensions Y_o and Z_o identify the linear bearing center position.

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

$F_x d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$ are 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}).



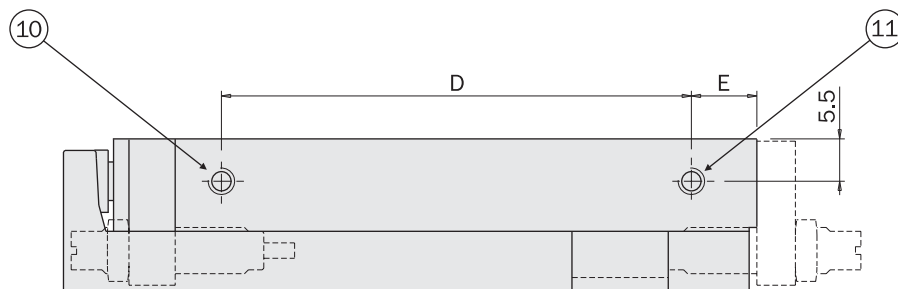
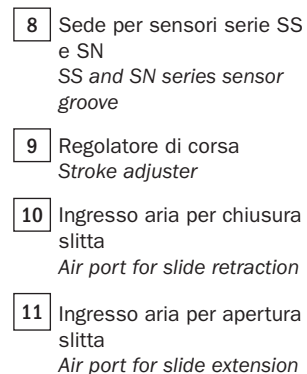
	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
Z_o	5.5 mm	5.5 mm	5.5 mm	5.5 mm	5.5 mm
Y_o	28 mm	38 mm	48 mm	65 mm	77 mm
$F_x s$	15 N	15 N	15 N	18 N	18 N
$F_z s$	15 N	15 N	15 N	18 N	18 N
$M_x s$	1 Nm	1 Nm	1 Nm	2 Nm	2 Nm
$M_y s$	1 Nm	1 Nm	1 Nm	1.5 Nm	1.5 Nm
$M_z s$	1 Nm	1 Nm	1 Nm	2 Nm	2 Nm
$F_x d$	6 N	6 N	6 N	7 N	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

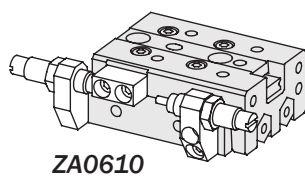
	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
Zo	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm
Yo	60 mm	60 mm	60 mm	68 mm	79 mm	118 mm	155 mm	192 mm
Fx s	100 N	100 N	100 N	100 N	120 N	120 N	180 N	250 N
Fz s	100 N	100 N	100 N	100 N	120 N	120 N	180 N	250 N
Mx s	6 Nm	6 Nm	6 Nm	6 Nm	7 Nm	15 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

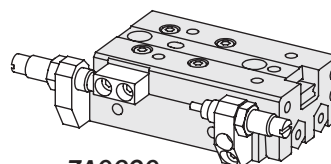


Dimensioni (mm) / Dimensions (mm)

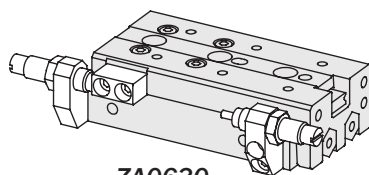
	ZA0610	ZA0620	ZA0630	ZA0640	ZA0650
A	20	30	20	28	38
B	-	-	20	28	38
D	19	29	40	61	76
E	8.5	8.5	7.5	8.5	9.5
H	6	6	11	13	17
I	25	35	20	30	24
J	-	-	40	60	48
K	-	-	-	-	72
O	11	21	31	43	41
P	20	20	20	30	48
Q	47	57	67	89	105
R	41.5	51.5	61.5	83.5	99.5
S	48	58	68	90	106
T	5.5	5.5	5.5	11.5	14.5
V	5.5	5.5	5.5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



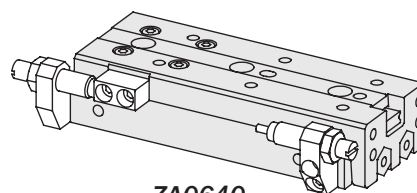
ZA0610



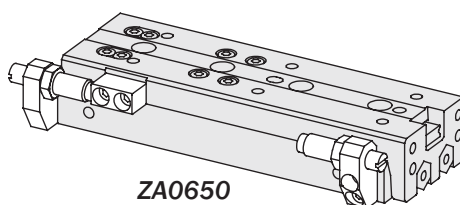
ZA0620



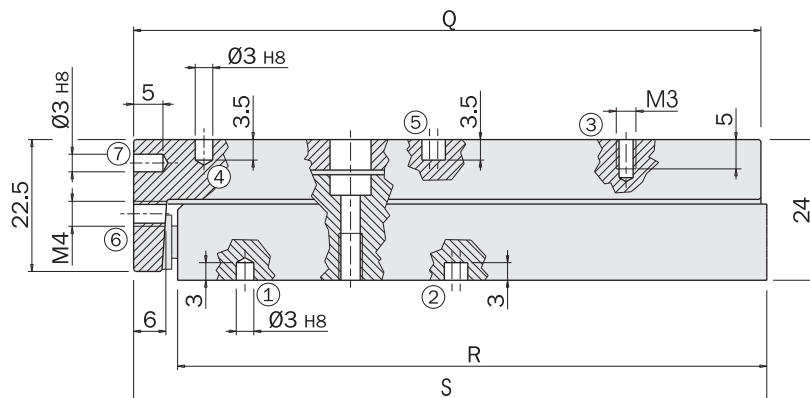
ZA0630



ZA0640



ZA0650

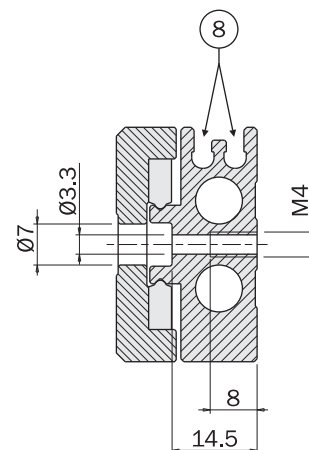
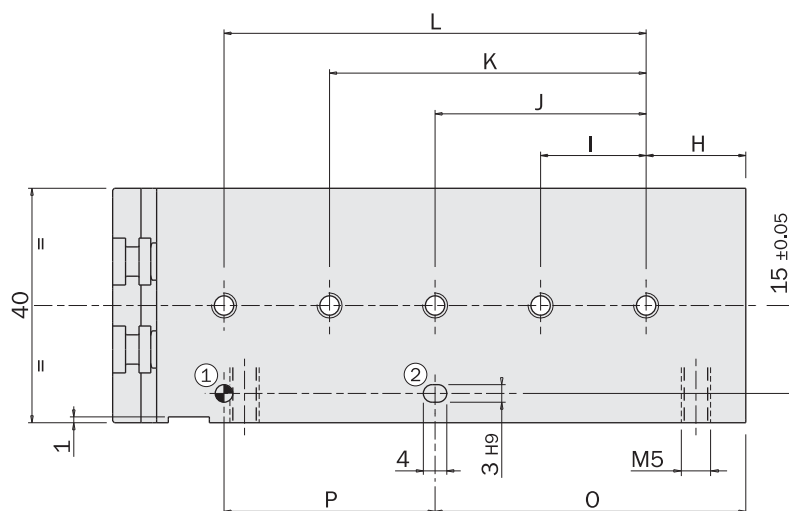
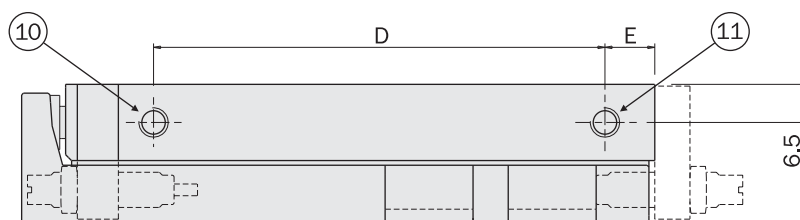
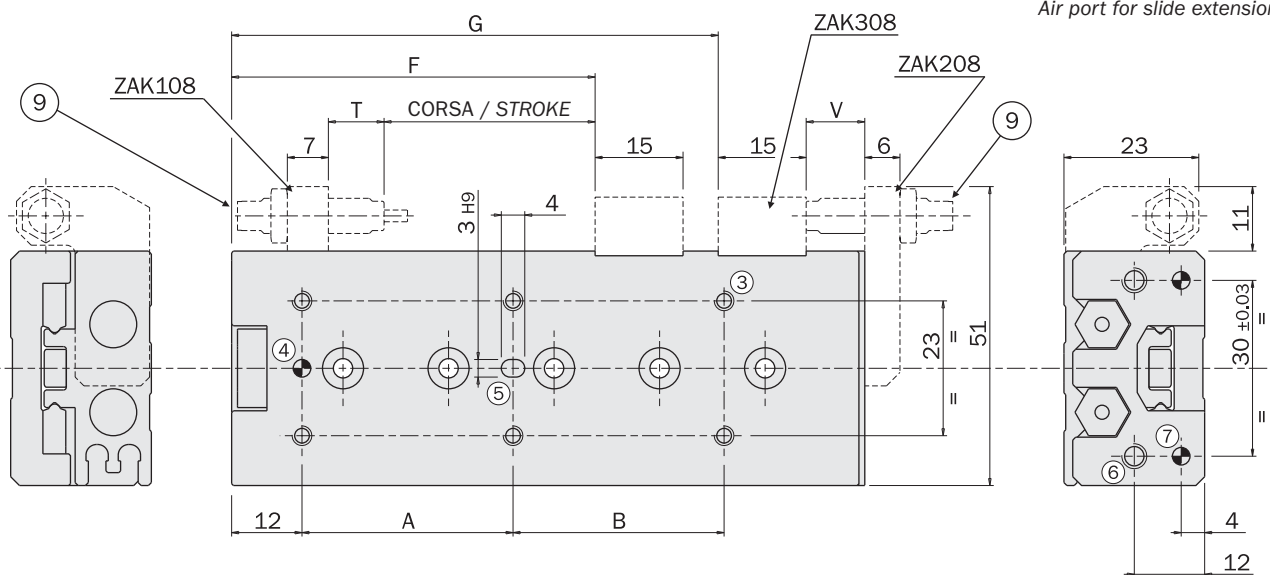


8 Sede per sensori serie SS e SN
SS and SN series sensor groove

9 Regolatore di corsa
Stroke adjuster

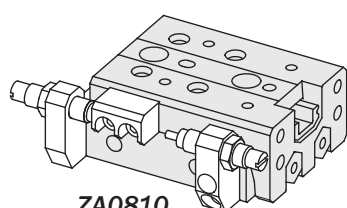
10 Ingresso aria per chiusura slitta
Air port for slide retraction

11 Ingresso aria per apertura slitta
Air port for slide extension

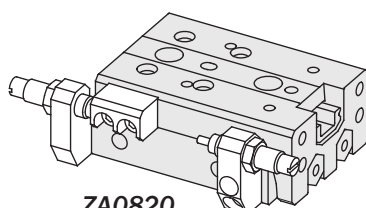


Dimensioni (mm) / Dimensions (mm)

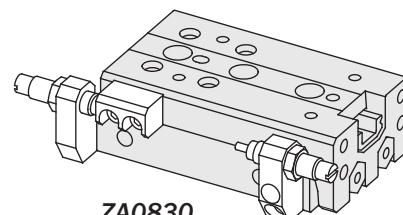
	ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875
A	25	25	40	50	38	50
B	-	-	-	-	38	50
D	21	30	41	59	77	127
E	12.5	8.5	8.5	8.5	8.5	8.5
F	34	41	52	66	71	98
G	-	-	-	-	89	137
H	9	12	13	15	20	27
I	28	30	20	28	23	28
J	-	-	40	56	46	56
K	-	-	-	-	69	84
L	-	-	-	-	-	112
O	17	12	33	43	43	83
P	20	30	20	28	46	56
Q	55	60	71	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



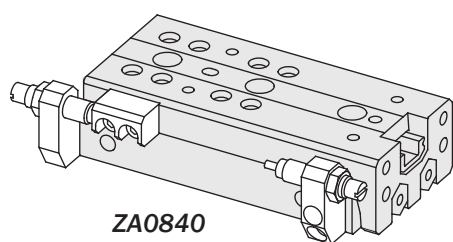
ZA0810



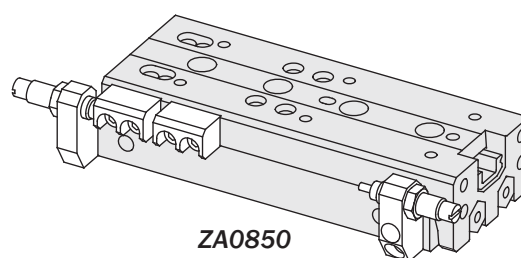
ZA0820



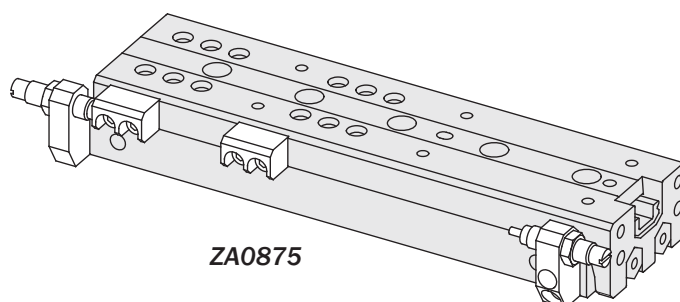
ZA0830



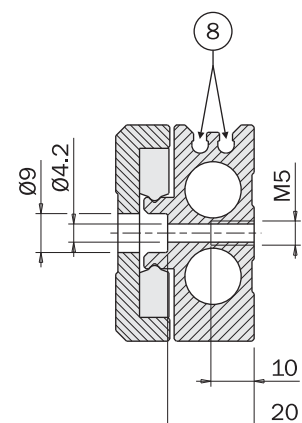
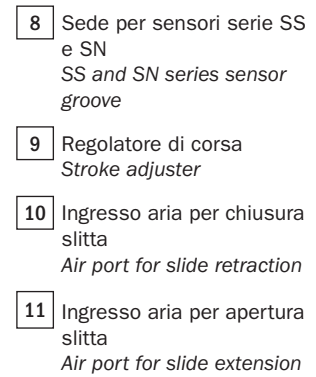
ZA0840



ZA0850

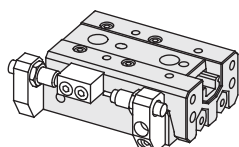
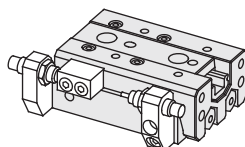
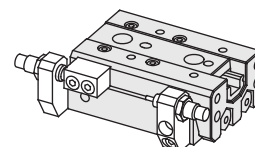
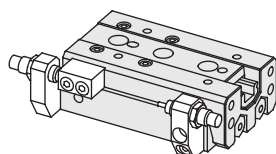
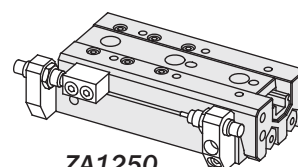
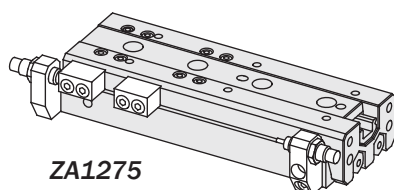
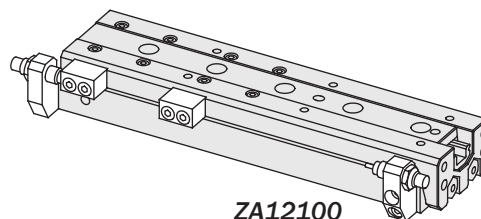


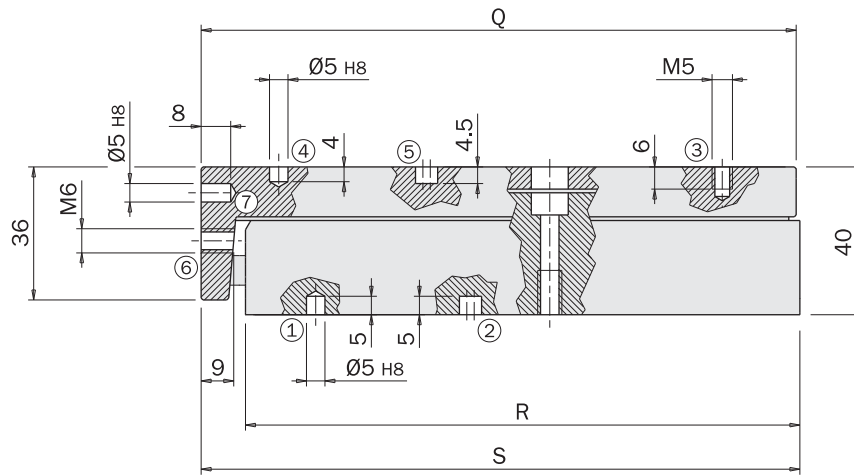
ZA0875



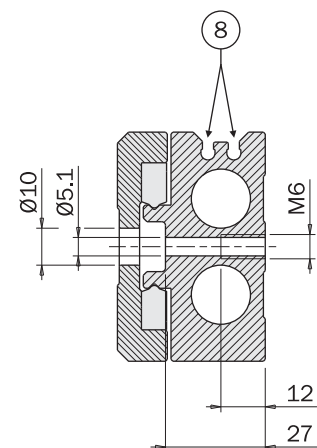
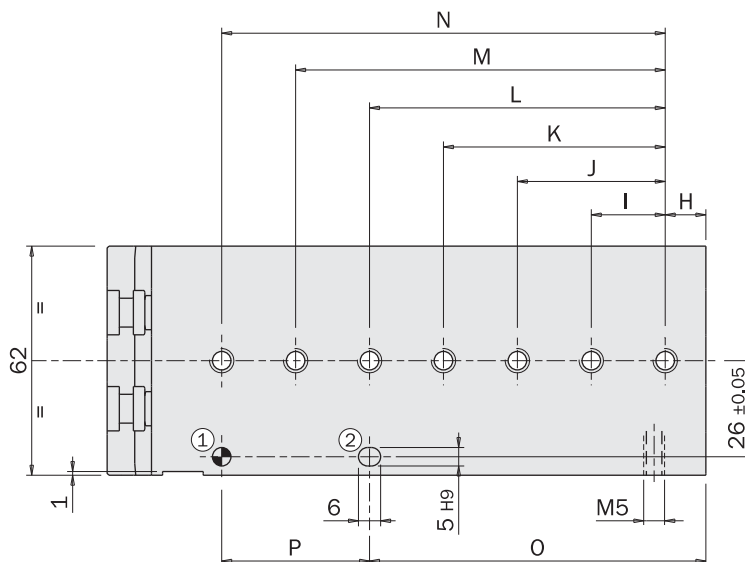
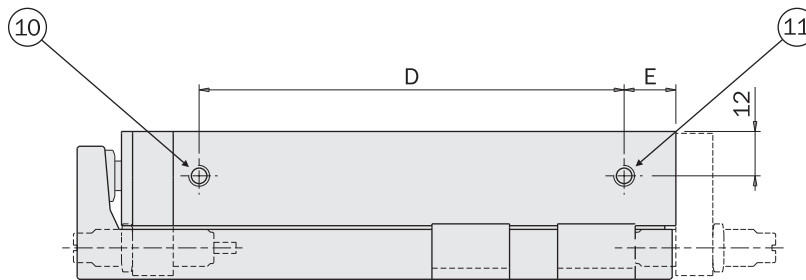
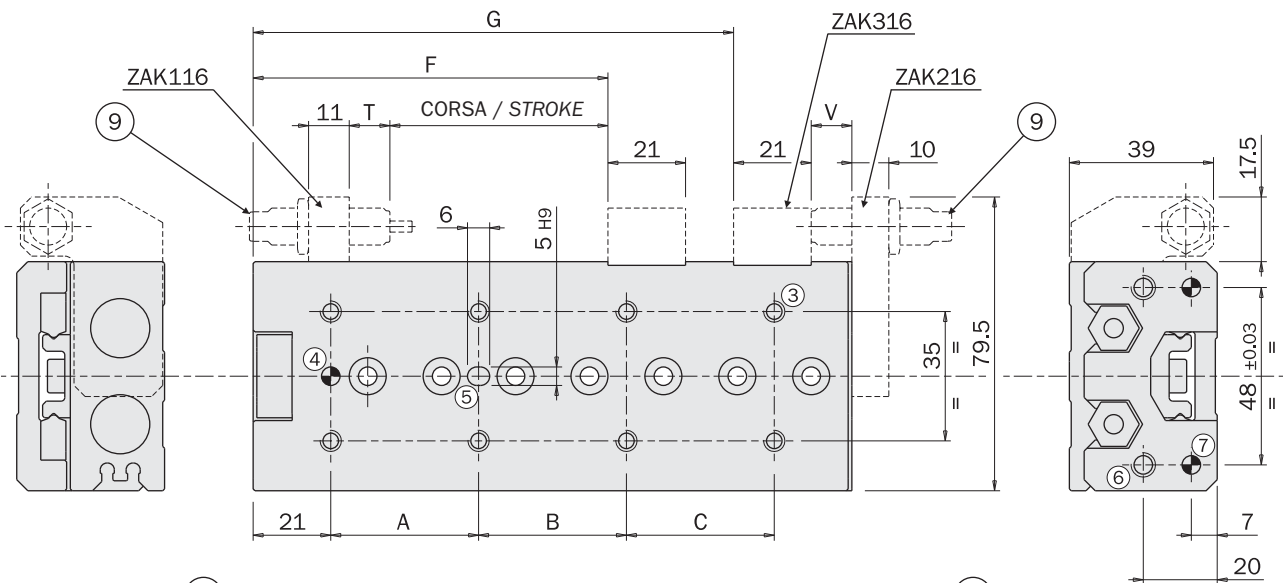
Dimensioni (mm) / Dimensions (mm)

	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

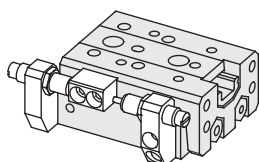


- 8 Sede per sensori serie SS e SN
SS and SN series sensor groove
- 9 Regolatore di corsa
Stroke adjuster
- 10 Ingresso aria per chiusura slitta
Air port for slide retraction
- 11 Ingresso aria per apertura slitta
Air port for slide extension

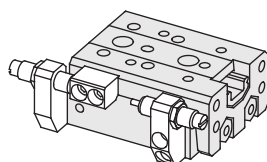


Dimensioni (mm) / Dimensions (mm)

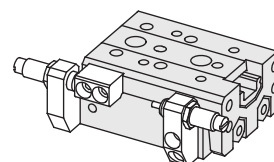
	ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125
A	35	35	35	40	30	55	65	70
B	-	-	-	-	30	55	65	70
C	-	-	-	-	-	-	-	70
D	46.5	46.5	46.5	56.5	70	115	150	200
E	7.5	7.5	7.5	7.5	9	14	27	27
F	51	56	61	71	83.5	106	132	157
G	-	-	-	-	-	136	183	233
H	16	16	16	16	21	26	39	19
I	40	40	40	50	30	35	35	35
J	-	-	-	-	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



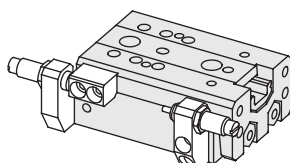
ZA1610



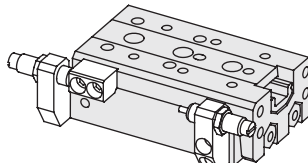
ZA1620



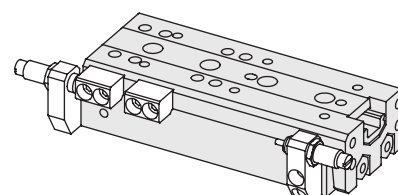
ZA1630



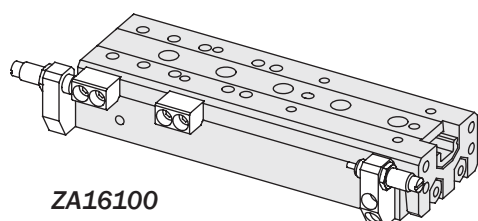
ZA1640



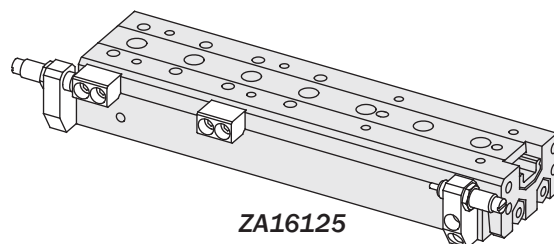
ZA1650



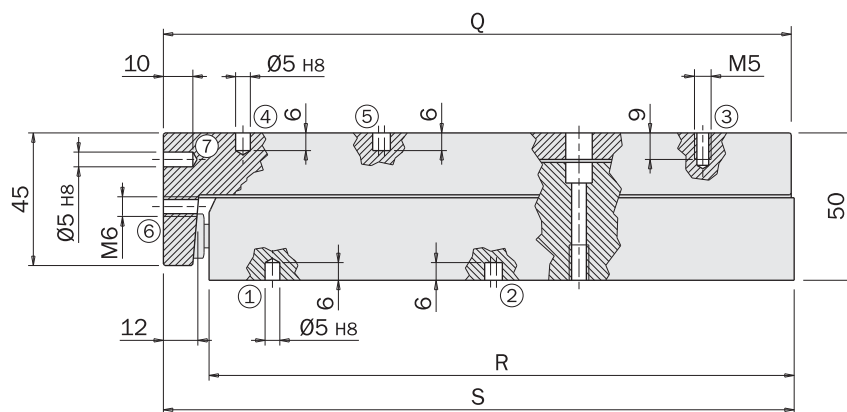
ZA1675



ZA16100



ZA16125

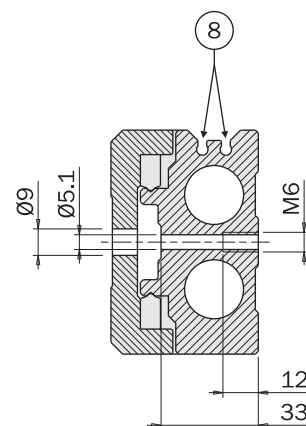
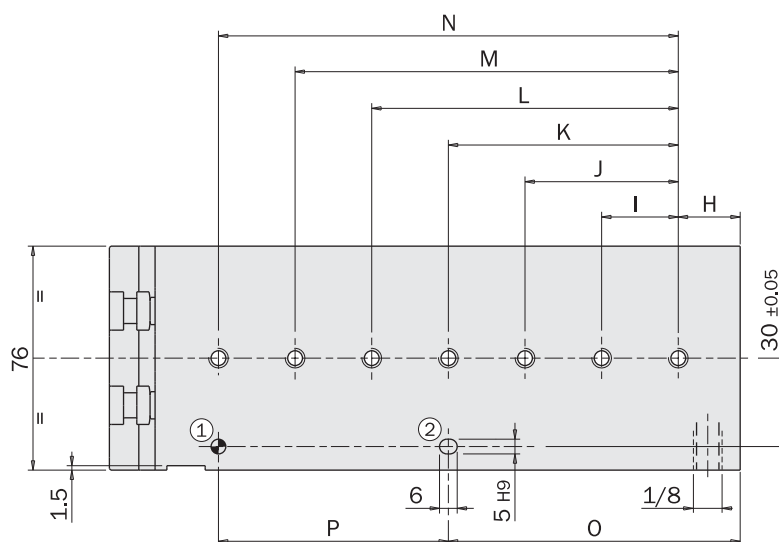
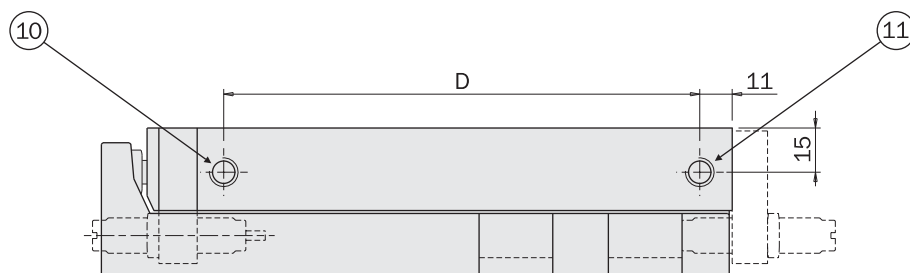
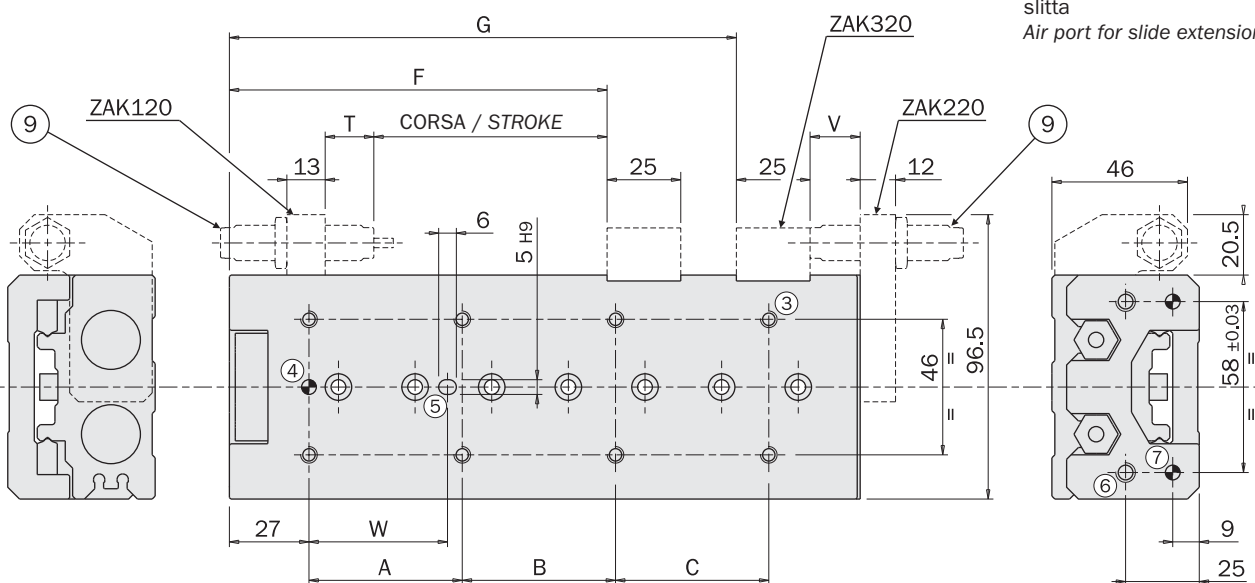


8 Sede per sensori serie SS e SN
SS and SN series sensor groove

9 Regolatore di corsa
Stroke adjuster

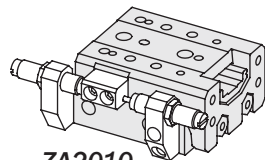
10 Ingresso aria per chiusura slitta
Air port for slide retraction

11 Ingresso aria per apertura slitta
Air port for slide extension

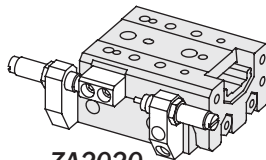


Dimensioni (mm) / Dimensions (mm)

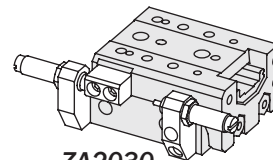
	ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150
A	50	50	50	60	35	60	70	70	80
B	-	-	-	-	35	60	70	70	80
C	-	-	-	-	-	-	-	70	80
D	44.5	44.5	44.5	54.5	69.5	108.5	161.5	215	267.5
F	57	62	67	77	89.5	121.5	140	165	190
G	-	-	-	-	-	-	181	235	287
H	15	15	15	15	15	19	37	41	19
I	45	45	45	55	35	35	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



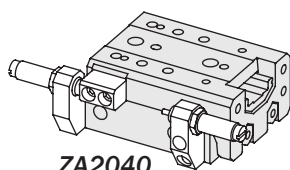
ZA2010



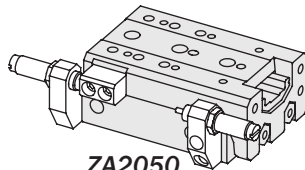
ZA2020



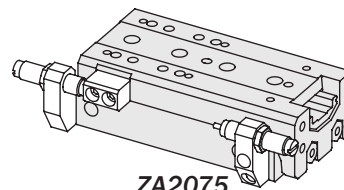
ZA2030



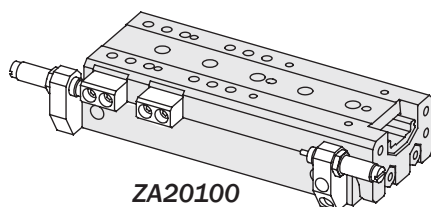
ZA2040



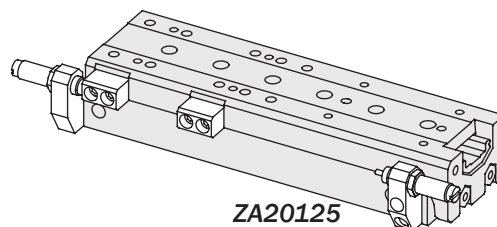
ZA2050



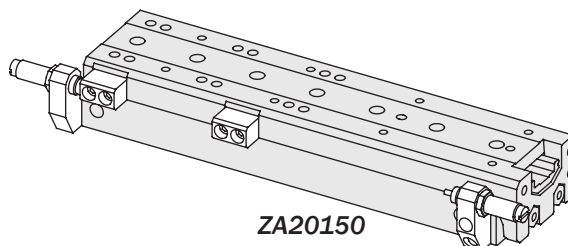
ZA2075



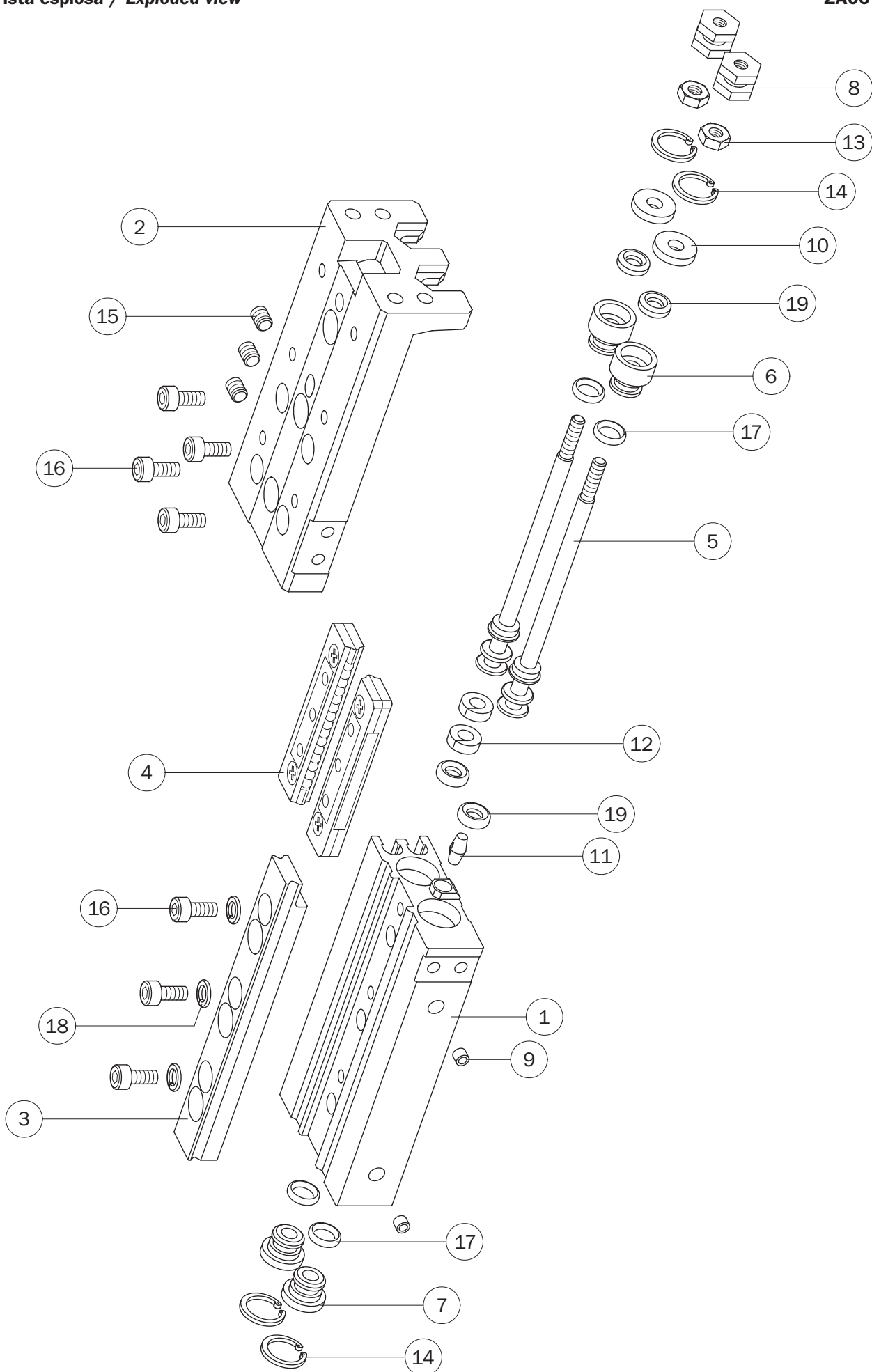
ZA20100



ZA20125

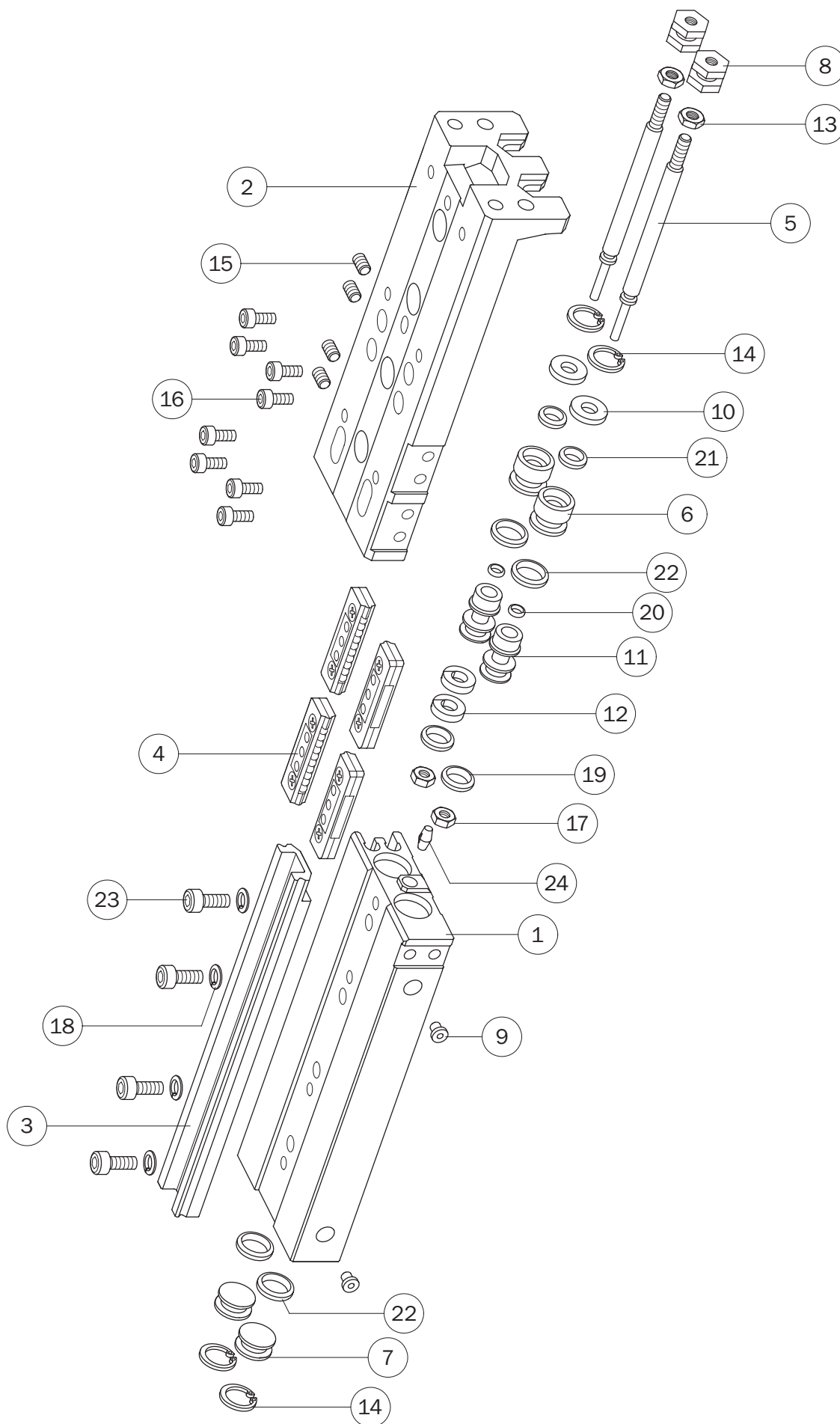


ZA20150



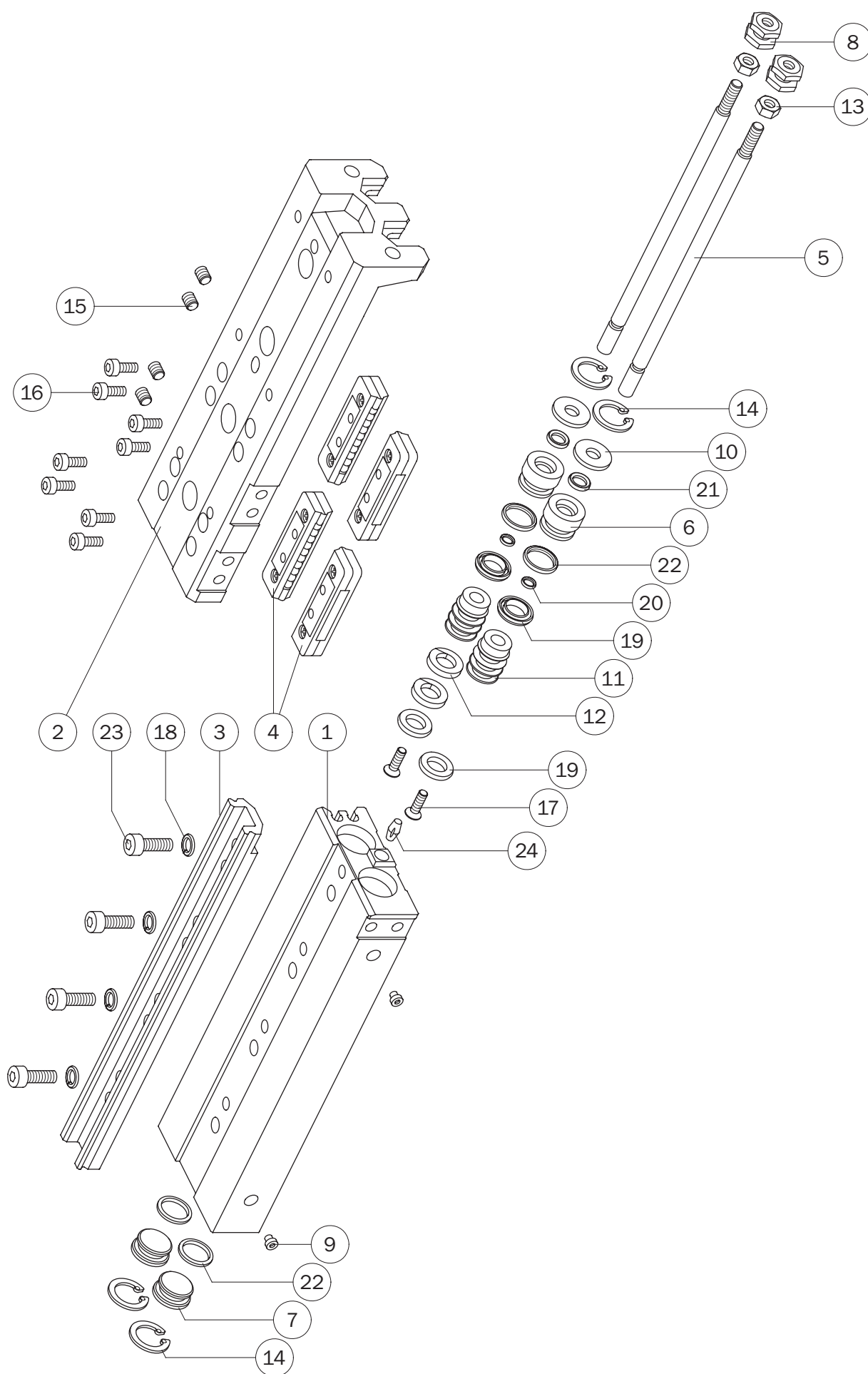
Elenco delle parti / *Part list*

		ZA0610	ZA0620	ZA0630	ZA0640	ZA0650		
1	Corpo slitta	ZA0610-01	ZA0620-01	ZA0630-01	ZA0640-01	ZA0650-01	Slide housing	1
2	Carrello	ZA0610-02	ZA0620-02	ZA0630-02	ZA0640-02	ZA0650-02	Carrier	2
3	Guida	ZA0610-03	ZA0620-03	ZA0630-05	ZA0640-03	ZA0650-03	Guideway	3
4	Cartuccia ricircolo di sfere	CZ236 (x2)			CZ244 (x2)	CZ226 (x4)	Ball bushing	4
5	Pistone Ø12	ZA0610-04	ZA0620-04	ZA0630-04	ZA0640-04	ZA0650-04	Piston	5
6	Flangia anteriore	ZE0630-03					Front flange	6
7	Flangia posteriore	ZE0630-04					Rear flange	7
8	Giunto	ZA0630-03					Bolt	8
9	Riduzione Ø1	PAR-10-15B					Air restrictor	9
10	Disco flangia anteriore	ZE0630-05					Front flange plate	10
11	Gommino	Ø3 AM-001					Rubber bumper	11
12	Magnete	ZE0630-11					Magnet	12
13	Dado	M2.5 DIN 934 INOX					Nut	13
14	Anello elastico	Ø8 DIN 472 INOX					Snap-ring	14
15	Grano	M3x4 DIN 913					Grub screw	15
16	Vite	M2.5x6 DIN 912					Screw	16
17	O-Ring	Ø1x4 (GUAR-091)					O-Ring	17
18	Rosetta elastica	Ø2.7 UNI 1751-B					Elastic washer	18
19	O-Ring	Ø1.78x2.90 (GUAR-057V)					O-Ring	19



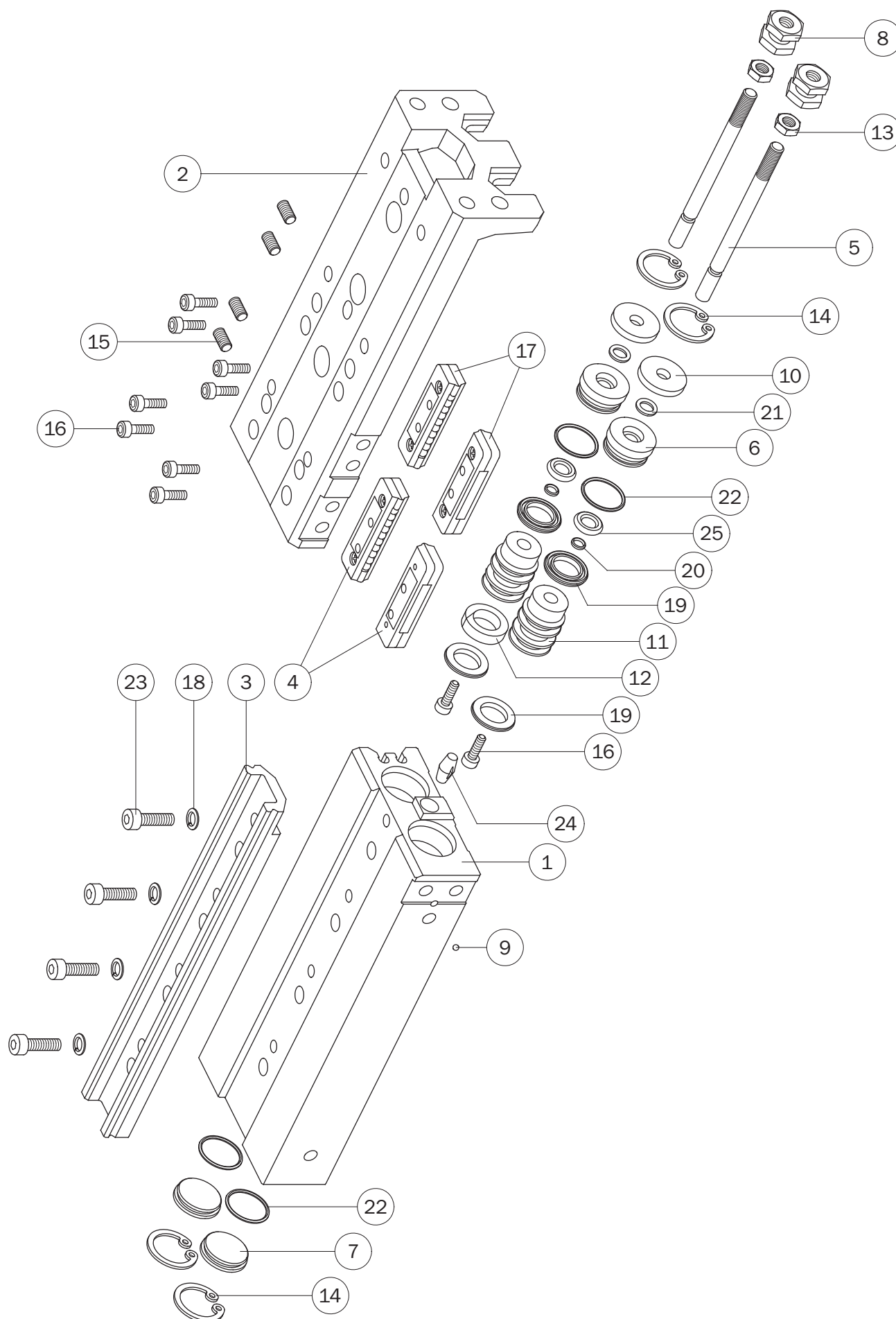
Elenco delle parti / *Part list*

		ZA0810	ZA0820	ZA0830	ZA0840	ZA0850	ZA0875		
1	Corpo slitta	ZA0810-01	ZA0820-01	ZA0830-01	ZA0840-01	ZA0850-01	ZA0875-01	Slide housing	1
2	Carrello	ZA0810-02	ZA0820-02	ZA0830-02	ZA0840-02	ZA0850-02	ZA0875-02	Carrier	2
3	Guida	ZA0810-03	ZA0820-03	ZA0830-03	ZA0840-03	ZA0850-03	ZA0875-03	Guideway	3
4	Cartuccia ricircolo di sfere	CZ236 (x2)			CZ244 (x2)	CZ226 (x4)	CZ236 (x4)	Ball bushing	4
5	Stelo	ZA0810-04	ZA0820-10	ZA0830-04	ZA0840-04	ZA0850-04	ZA0875-04	Piston rod	5
6	Flangia anteriore	Z-0850-8						Front flange	6
7	Flangia posteriore	ZA0820-06						Rear flange	7
8	Giunto	ZA0820-11						Bolt	8
9	Riduzione Ø1	EPP20-05						Air restrictor	9
10	Disco flangia anteriore	ZA0820-05						Front flange plate	10
11	Pistone Ø12	ZA0820-04						Piston	11
12	Magnete	ZA0820-12						Magnet	12
13	Dado	M3 DIN 439B INOX						Nut	13
14	Anello elastico	Ø9 DIN 472						Snap-ring	14
15	Grano	M3x5 DIN 913						Grub screw	15
16	Vite	M2.5x6 DIN 912						Screw	16
17	Dado	M2 UNI 5587 INOX						Nut	17
18	Rosetta elastica	Ø3.2 UNI 1751-B						Elastic washer	18
19	O-Ring	Ø1.78x4.48 (GUAR-029)						O-Ring	19
20	O-Ring	Ø1x2 (GUAR-130)						O-Ring	20
21	O-Ring	Ø1.78x3.69 (GUAR-044)						O-Ring	21
22	O-Ring	Ø1.78x6.07 (GUAR-039)						O-Ring	22
23	Vite	M3x8 DIN 912						Screw	23
24	Gommino	Ø3 AM-001						Rubber bumper	24



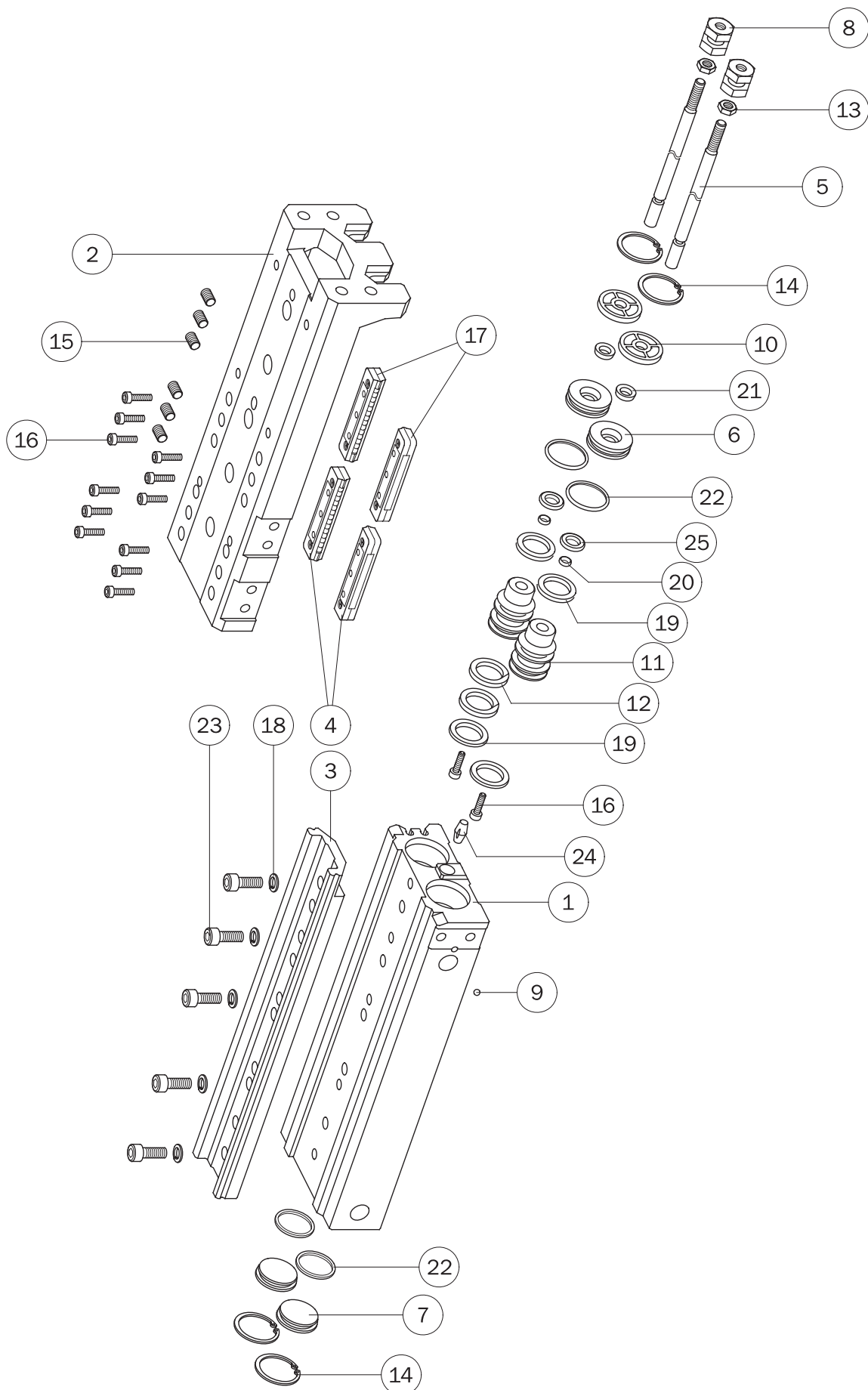
Elenco delle parti / *Part list*

		ZA1210	ZA1220	ZA1230	ZA1240	ZA1250	ZA1275	ZA12100		
1	Corpo slitta	ZA1210-01			ZA1240-01	ZA1250-01	ZA1275-01	ZA12100-01	Slide housing	1
2	Carrello	ZA1210-02	ZA1220-02	ZA1230-02	ZA1240-02	ZA1250-02	ZA1275-02	ZA12100-02	Carrier	2
3	Guida	ZA1210-04			ZA1240-04	ZA1250-11	ZA1275-04	ZA12100-04	Guideway	3
4	Cartuccia ricircolo di sfere	CZ334 (x2)				CZ342 (x2)	CZ326 (x4)	CZ334 (x4)	Ball bushing	4
5	Stelo	ZA1210-03	ZA1220-01	ZA1230-01	ZA1240-03	ZA1250-05	ZA1275-03	ZA12100-03	Piston rod	5
6	Flangia anteriore	ZA1250-06							Front flange	6
7	Flangia posteriore	ZA1250-07							Rear flange	7
8	Giunto	ZA1250-03							Bolt	8
9	Riduzione Ø1	ZA1250-12							Air restrictor	9
10	Disco flangia anteriore	ZA1250-13							Front flange plate	10
11	Pistone Ø12	ZA1250-04							Piston	11
12	Magnete	ZA1250-14							Magnet	12
13	Dado	M4 DIN 934 INOX A2							Nut	13
14	Anello elastico	Ø13 DIN 472							Snap-ring	14
15	Grano	M4x5 DIN 913							Grub screw	15
16	Vite	M3x8 DIN 912							Screw	16
17	Vite	M3x10 DIN 965A INOX A2							Screw	17
18	Rosetta elastica	Ø4.3 UNI 1751-B							Elastic washer	18
19	Guarnizione	12.5x6.8x2.55 (GUAR-118)							Gasket	19
20	O-Ring	Ø1x3 (GUAR-082)							O-Ring	20
21	O-Ring	Ø1.78x4.48 (GUAR-029)							O-Ring	21
22	O-Ring	Ø1.78x8.73 (GUAR-013)							O-Ring	22
23	Vite	M4x10 DIN 912							Screw	23
24	Gommino	Ø4 AM-002							Rubber bumper	24



Elenco delle parti / Part list

		ZA1610	ZA1620	ZA1630	ZA1640	ZA1650	ZA1675	ZA16100	ZA16125		
1	Corpo slitta	ZA1630-01			ZA1640-01	ZA1650-01	ZA1675-01	ZA16100-01	ZA16125-01	Slide housing	1
2	Carrello	ZA1610-02	ZA1630-02		ZA1640-02	ZA1650-02	ZA1675-02	ZA16100-02	ZA16125-02	Carrier	2
3	Guida	ZA1630-09			ZA1640-04	ZA1650-04	ZA1675-04	ZA16100-04	ZA16125-04	Guideway	3
4	Cartuccia ricircolo di sfere	CZ334 (x2)				CZ342	CZ326A (x2)	CZ342 (x2)		Ball bushing	4
5	Stelo	ZA1610-01	ZA1620-01	ZA1630-05	ZA1640-03	ZA1650-05	ZA1675-03	ZA16100-03	ZA16125-03	Piston rod	5
6	Flangia anteriore	ZE1630-03								Front flange	6
7	Flangia posteriore	GS-16-06R								Rear flange	7
8	Giunto	ZA1630-03								Bolt	8
9	Sfera	Ø2 AA DIN 5401 A								Ball	9
10	Disco flangia anteriore	ZE1630-05								Front flange plate	10
11	Pistone Ø12	ZA1630-04								Piston	11
12	Magnete	PS-0016-P09								Magnet	12
13	Dado	M5 DIN 439B INOX A2								Nut	13
14	Anello elastico	Ø17 DIN 472 INOX								Snap-ring	14
15	Grano	M4x8 DIN 913								Grub screw	15
16	Vite	M3x10 DIN 912								Screw	16
17	Cartuccia ricircolo di sfere	-	-	-	-	-	CZ326 (x2)	CZ326 (x2)	CZ342 (x2)	Ball bushing	17
18	Rosetta elastica	Ø4.3 UNI 1751-B								Elastic washer	18
19	Guarnizione	Ø16x10x3 (GUAR-051)								Gasket	19
20	O-Ring	Ø1x3 (GUAR-082)								O-Ring	20
21	O-Ring	Ø1.78x4.48 (GUAR-029)								O-Ring	21
22	O-Ring	Ø1x14 (GUAR-084)								O-Ring	22
23	Vite	M4x12 DIN 912								Screw	23
24	Gommino	Ø5 AM-003								Rubber bumper	24
25	O-Ring	Ø2.62x5.23 (GUAR-053S)								O-Ring	25



Elenco delle parti / Part list

		ZA2010	ZA2020	ZA2030	ZA2040	ZA2050	ZA2075	ZA20100	ZA20125	ZA20150		
1	Corpo slitta	ZA2030-01			ZA2040-01	ZA2050-01	ZA2075-01	ZA20100-01	ZA20125-01	ZA20150-01	Slide housing	1
2	Carrello	ZA2010-02	ZA2020-02	ZA2030-02	ZA2040-02	ZA2050-02	ZA2075-02	ZA20100-02	ZA20125-02	ZA20150-02	Carrier	2
3	Guida	ZA2030-09			ZA2040-04	ZA2050-04	ZA2075-04	ZA20100-04	ZA20125-04	ZA20150-04	Guideway	3
4	Cartuccia ricircolo di sfere	CZ342 (x2)				CZ348 (x2)	CZ326A (x2)	CZ334 (x2)	CZ334 (x2)	CZ326 (x6)	Ball bushing	4
5	Stelo	ZA2010-01	ZA2020-01	ZA2030-06	ZA2040-03	ZA2050-03	ZA2075-03	ZA20100-03	ZA20125-03	ZA20150-03	Piston rod	5
6	Flangia anteriore	Z-2050-8									Front flange	6
7	Flangia posteriore	GS-20-06R									Rear flange	7
8	Giunto	ZA2030-03									Bolt	8
9	Sfera	Ø3 AA DIN 5401A									Ball	9
10	Disco flangia anteriore	ZA2030-05									Front flange plate	10
11	Pistone Ø12	ZA2030-04									Piston	11
12	Magnete	PAR-20-10B									Magnet	12
13	Dado	M5 DIN 439B INOX A2									Nut	13
14	Anello elastico	Ø22 DIN 472 INOX									Snap-ring	14
15	Grano	M5x8 DIN 913									Grub screw	15
16	Vite	M3x12 DIN 912									Screw	16
17	Cartuccia ricircolo di sfere	-	-	-	-	-	CZ326A (x2)	CZ334 (x2)	CZ342 (x2)	-	Ball bushing	17
18	Rosetta elastica	Ø5 UNI 1751-B									Elastic washer	18
19	Guarnizione	20.7x13.75x2.55 (GUAR-120)									Gasket	19
20	O-Ring	Ø1.78x2.90 (GUAR-057)									O-Ring	20
21	Guarnizione	Ø10x6x3.5 (GUAR-093)									Gasket	21
22	O-Ring	Ø1.78x17.17 (GUAR-076)									O-Ring	22
23	Vite	M5x14 DIN 912									Screw	23
24	Gommino	Ø6 AM-004									Rubber bumper	24
25	O-Ring	Ø2.62x5.23 (GUAR-053S)									O-Ring	25

Connessione pneumatica

La slitta si alimenta con aria compressa dai fori laterali (A e B) montandovi i raccordi dell'aria ed i relativi tubi (non forniti).

Aria compressa in A: chiusura.

Aria compressa in B: apertura.

La slitta è azionata con aria compressa filtrata ($5\div 40\text{ }\mu\text{m}$) non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutto il periodo di servizio.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.

Compressed air feeding

The compressed air feeding must be accomplished on the lateral air ports (A and B) with fittings and hoses (not supplied).

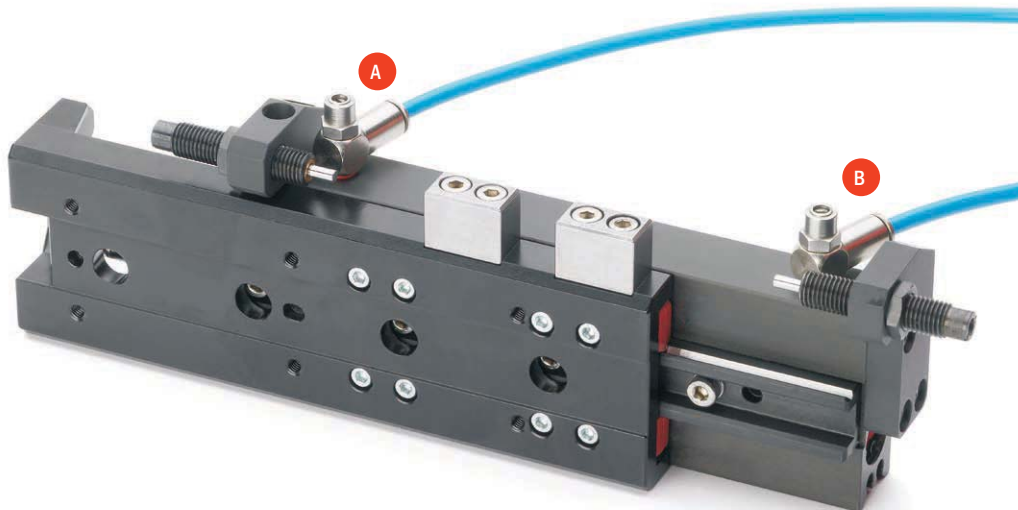
Compressed air in A: retraction stroke.

Compressed air in B: extension stroke.

The compressed air, must be filtered from 5 to 40 μm .

Maintain the medium selected at the start, lubricated or not, for the complete service life of the slide.

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



Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione.
- 2- Riempimento all'avvio.
- 3- Improvvisa mancanza di pressione.
- 4- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (E).
- 2- Valvola di avviamento progressivo (G).
- 3- Valvole di sicurezza (C).
- 4- Regolatori di flusso (D).

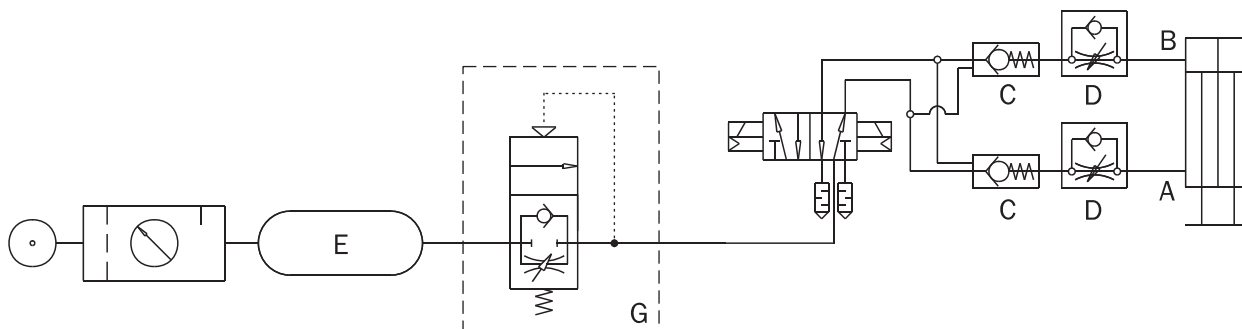
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation.
- 2- Pressurizing.
- 3- Sudden pressure black-out.
- 4- Excessive speed.

Possible solutions:

- 1- Compressed air storage (E).
- 2- Start-up valve (G).
- 3- Safety valve (C).
- 4- Flow controller (D).



Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della slitta.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della slitta.

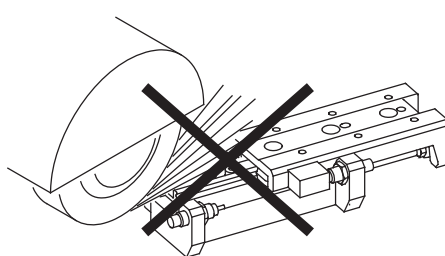
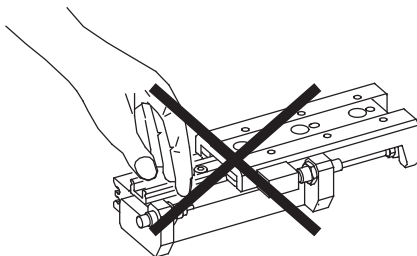
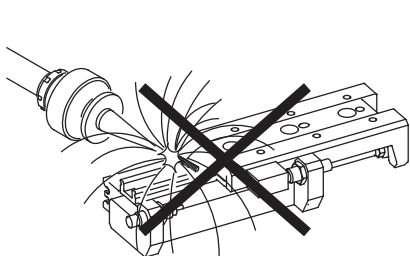
La slitta non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Caution

Never let the slide come into contact with corrosive substances, soldering splashes or abrasive powders as they may damage the slide.

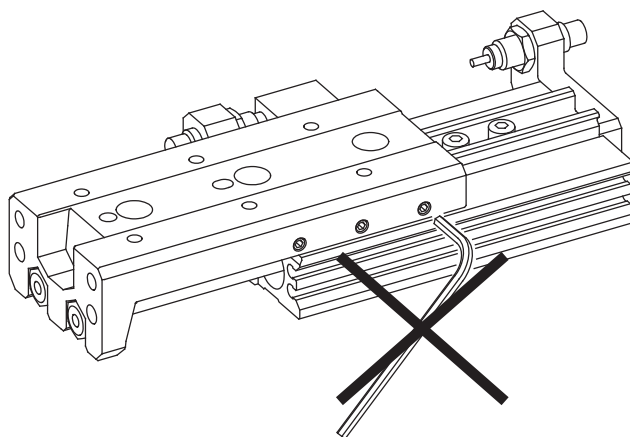
Never let non-authorized persons or objects stand within the operating range of the slide.

Never operate the slide if the machine on which it is fitted does not comply with safety laws and standards of your country.



Il precarico dei cuscinetti è regolato in fabbrica.
NON UTILIZZARE MAI LE VITI DI REGOLAZIONE PER MODIFICARLO.

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



In normali condizioni di utilizzo, in un ambiente pulito, la slitta non necessita di alcuna manutenzione per 10 milioni di cicli.

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

Controllare periodicamente le colonne di guida e lubrificarle quando sono secche.
L'apposito grasso è disponibile in tubetti da 90 grammi.
Codice di ordinazione: GLP500-90.

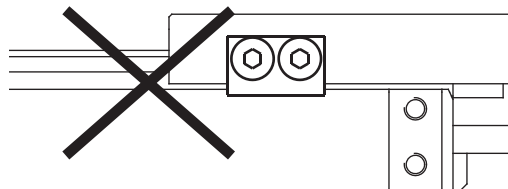
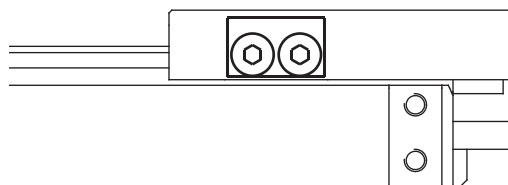
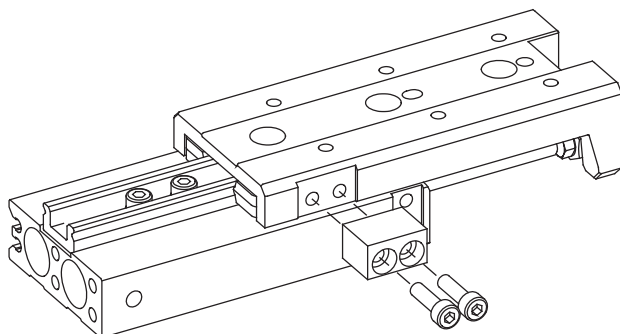
Periodically check the steel bars and lubricate when dry.
The suitable grease is available in 90 grams tubes.
Ordering code: GLP500-90.

Controllare periodicamente l'efficienza dei deceleratori e sostituirli subito se manifestano un decadimento delle loro prestazioni di smorzamento.

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

Quando si avvita la battuta, prestare attenzione al verso di montaggio. Se montata al contrario può interferire con il corpo della slitta e danneggiare i cuscinetti.

When mounting the stopper on the slide, be careful to position it properly. If wrongly assembled, the stopper can interfere with the slide body and damage the linear bearings.



Mini slitte pneumatiche serie ZE-P

- Alesaggio 6mm, 10mm oppure 16mm.
- Corsa 10mm, 20mm, 30mm.
- Varie possibilità di fissaggio.
- Azionamento a doppio effetto.
- Ammortizzatori elastici interni.
- Sensori magnetici opzionali.

Pneumatic mini-slides series ZE-P

- Piston bore 6mm, 10mm or 16mm.
- Stroke 10mm, 20mm, 30mm.
- Several fastening options.
- Double acting.
- Internal elastic bumpers.
- Optional magnetic sensors.



ZE0630P



ZE1030P



ZE1630P

Pur essendo perfettamente intercambiabile con la precedente serie ZE, la ZE-P può contare su alcuni plus esclusivi:

- 1- Cuscinetti lineari a sfere, con gabbia in poliossimetilene.
- 2- Guida su alberini temprati e rettificati.
- 3- Carrello monoblocco stampato in zama.

Even if it is completely interchangeable with the previous ZE series, the ZE-P is provided with some exclusive plus:

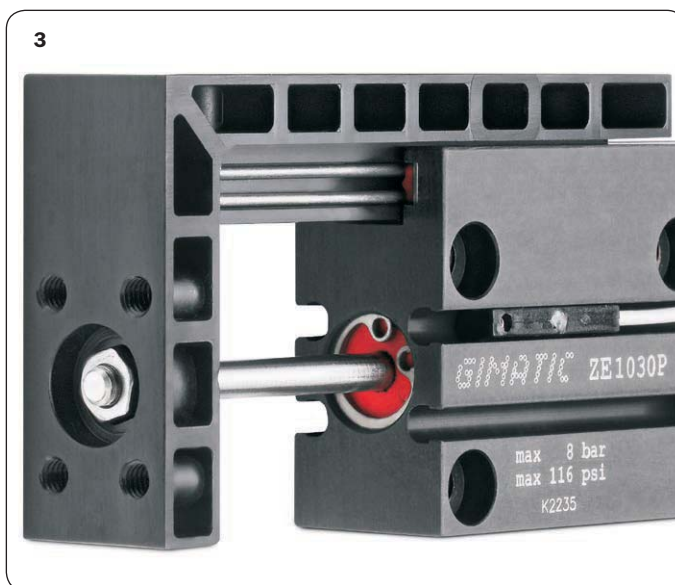
- 1- Linear ball bearings, with cage in polyoxymethylene.
- 2- Guide with built-in hardened and ground shafts.
- 3- One-block carrier moulded in zamak.



1



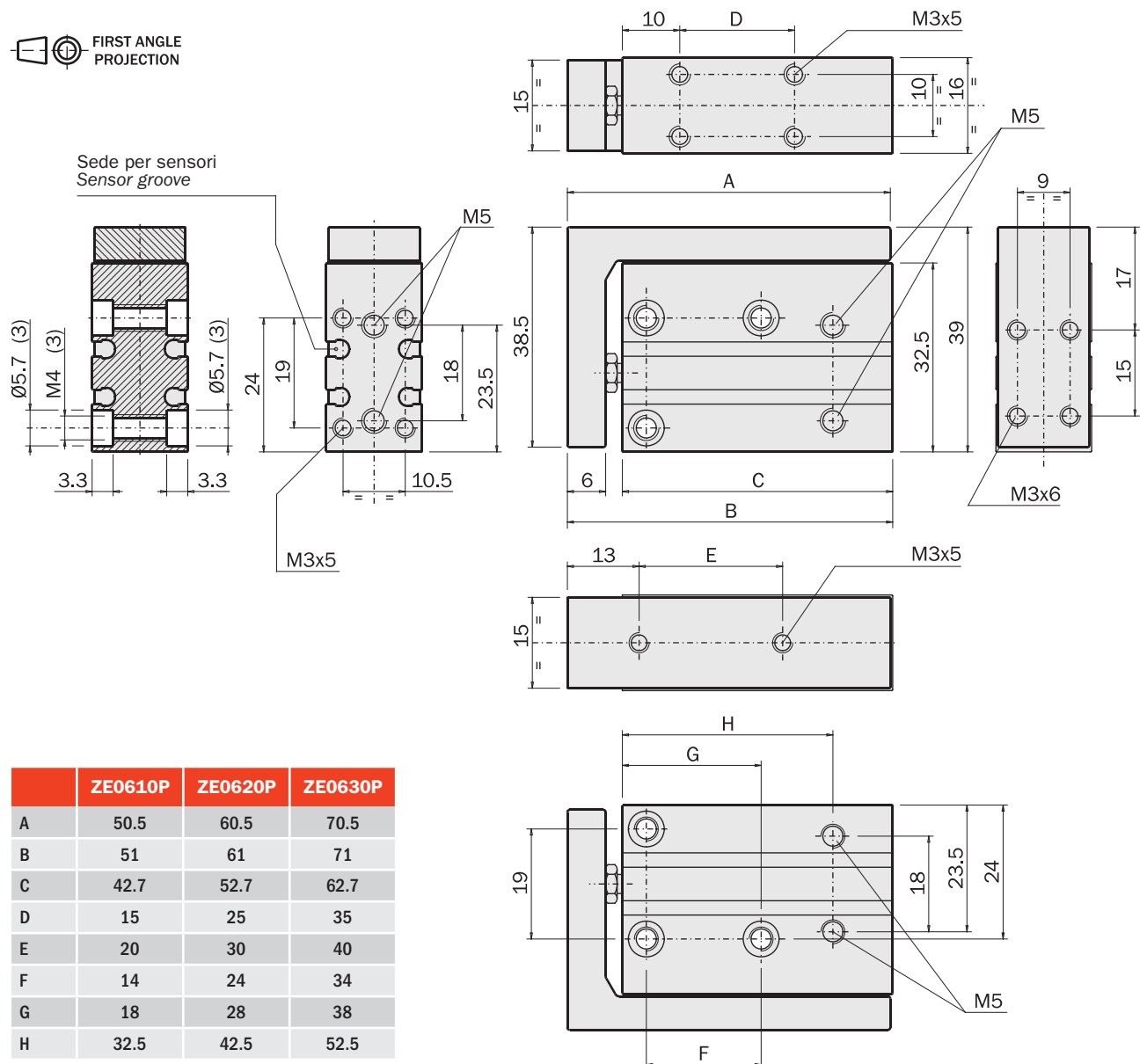
2



3

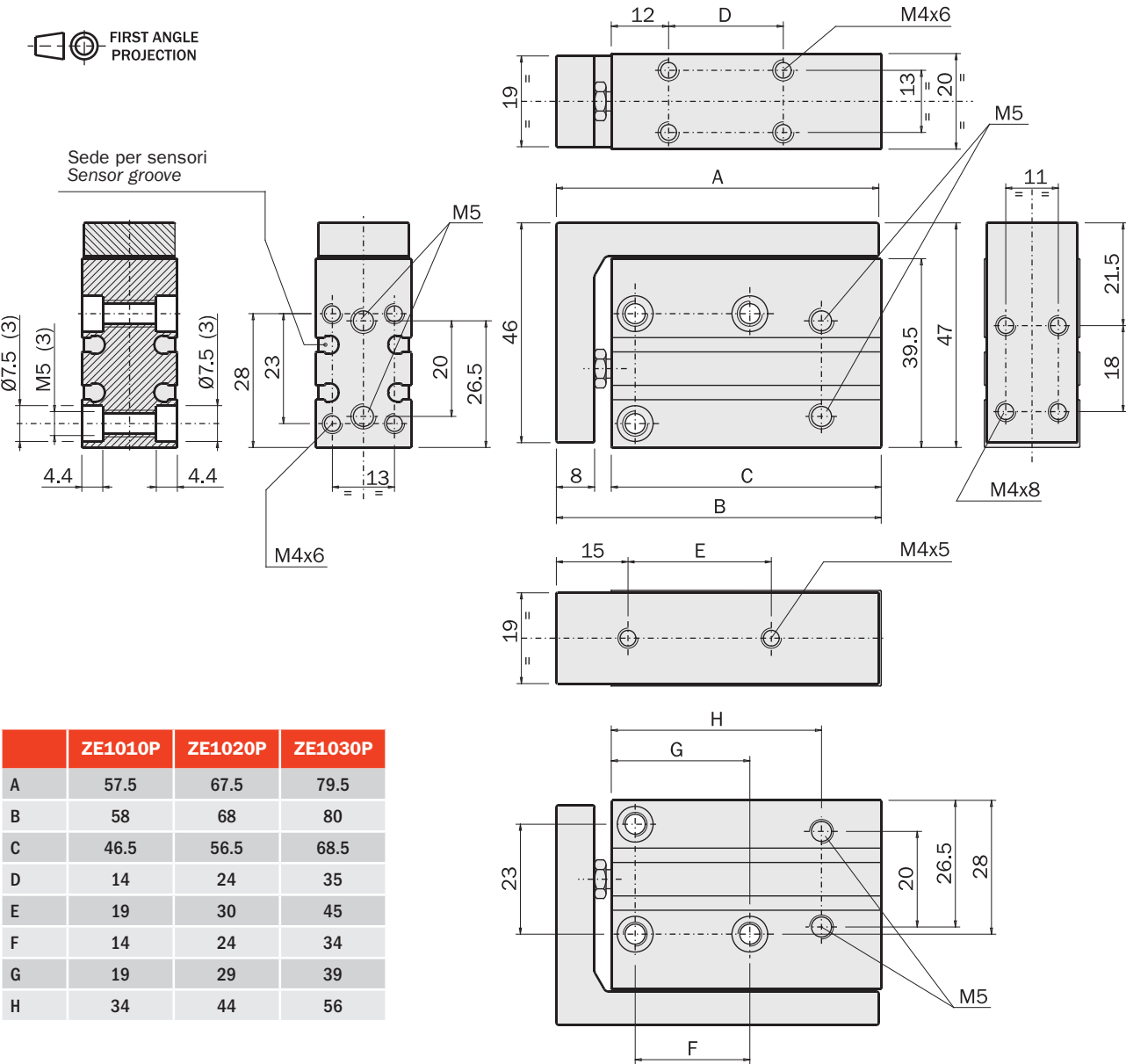
	ZE0610P	ZE0620P	ZE0630P
Peso Weight	90 g	105 g	120 g
Tempo di azionamento minimo Minimum actuating time	0.015 s	0.020 s	0.030 s
Frequenza massima di lavoro Maximum working frequency	3 Hz	3 Hz	3 Hz
Consumo d'aria per ciclo Air consumption per cycle	0.7 cm ³	1.3 cm ³	1.9 cm ³
Corsa Stroke (+1 mm)	10 mm	20 mm	30 mm
Forza di apertura a 6 bar Extension force at 6 bar	13 N		
Forza di chiusura a 6 bar Retraction force at 6 bar	10 N		
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air		
Pressione di esercizio Pressure range	2÷8 bar		
Temperatura di esercizio Temperature range	5÷60 °C		

Dimensioni (mm) / Dimensions (mm)



	ZE1010P	ZE1020P	ZE1030P
Peso Weight	150 g	175 g	200 g
Tempo di azionamento minimo Minimum actuating time	0.030 s	0.050 s	0.060 s
Frequenza massima di lavoro Maximum working frequency	3 Hz	3 Hz	3 Hz
Consumo d'aria per ciclo Air consumption per cycle	1.7 cm ³	3.3 cm ³	4.8 cm ³
Corsa (+1 mm) Stroke	10 mm	20 mm	30 mm
Forza di apertura a 6 bar Extension force at 6 bar	40 N		
Forza di chiusura a 6 bar Retraction force at 6 bar	33 N		
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air		
Pressione di esercizio Pressure range	2÷8 bar		
Temperatura di esercizio Temperature range	5÷60 °C		

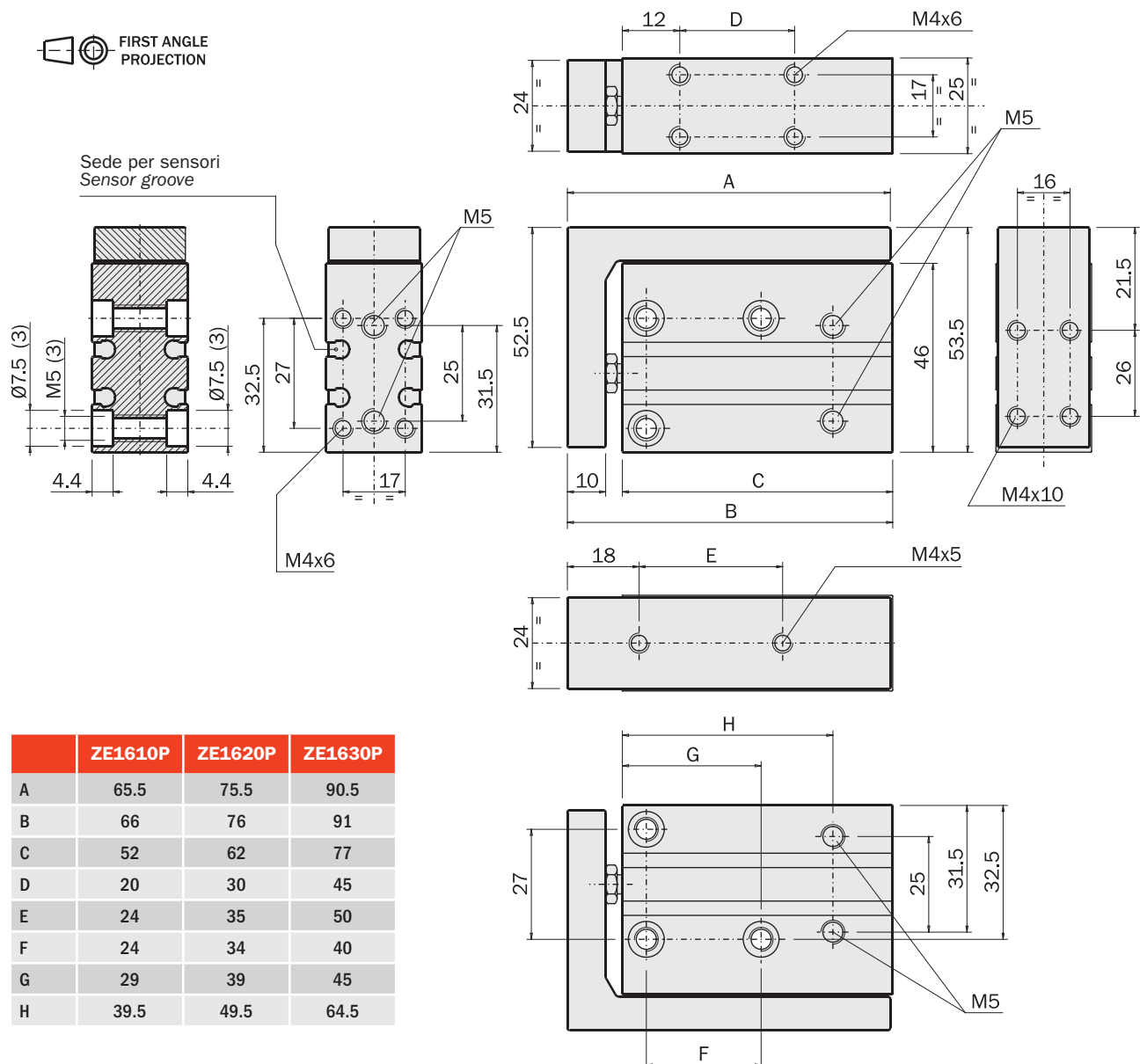
Dimensioni (mm) / Dimensions (mm)



ATTUATORI LINEARI
LINEAR ACTUATORS

	ZE1610P	ZE1620P	ZE1630P
Peso Weight	265 g	295 g	340 g
Tempo di azionamento minimo Minimum actuating time	0.050 s	0.070 s	0.090 s
Frequenza massima di lavoro Maximum working frequency	3 Hz	3 Hz	3 Hz
Consumo d'aria per ciclo Air consumption per cycle	4.4 cm ³	8.3 cm ³	12 cm ³
Corsa Stroke (+1 mm)	10 mm	20 mm	30 mm
Forza di apertura a 6 bar Extension force at 6 bar	110 N		
Forza di chiusura a 6 bar Retraction force at 6 bar	100 N		
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air		
Pressione di esercizio Pressure range	2÷8 bar		
Temperatura di esercizio Temperature range	5÷60 °C		

Dimensioni (mm) / Dimensions (mm)



Fissaggio

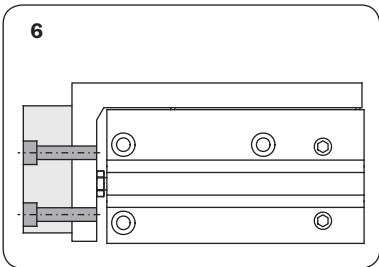
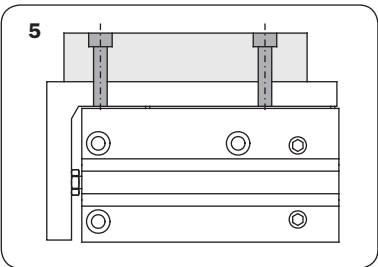
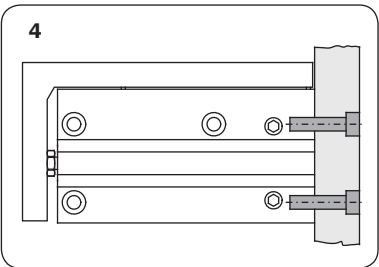
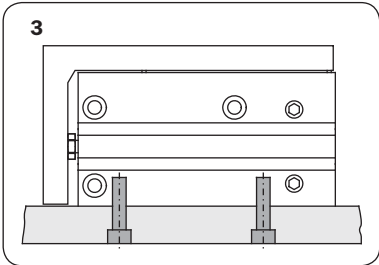
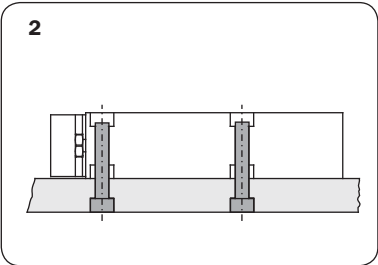
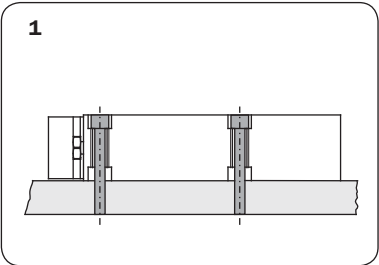
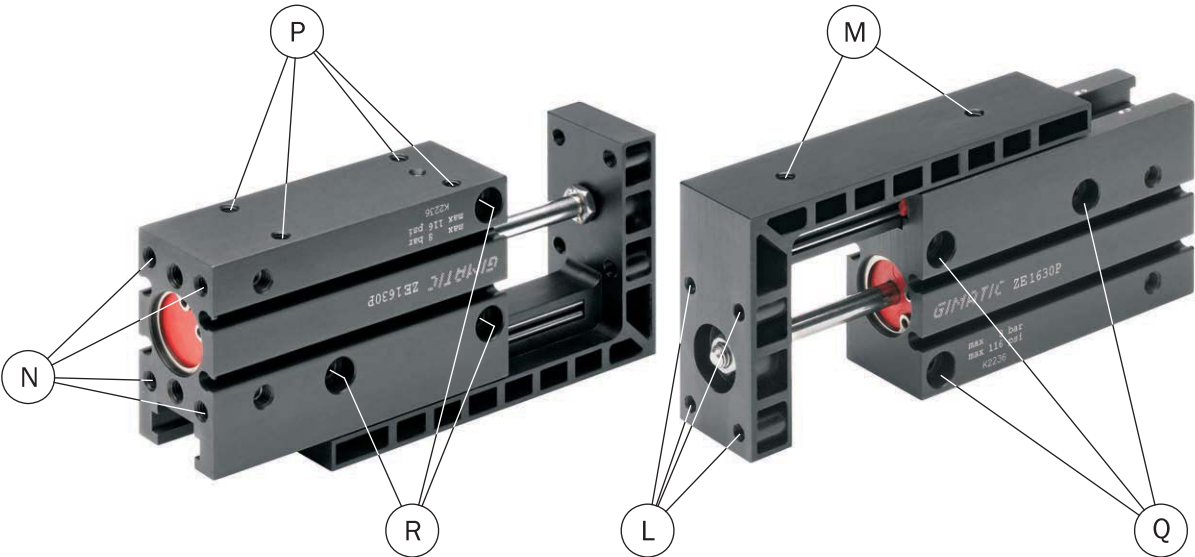
La slitta può essere montata in posizione fissa, oppure su parti in movimento: in questo caso va considerata la forza d'inerzia cui la slitta ed il suo carico sono sottoposti.

La slitta può essere fissata sulle quattro facce del corpo come schematizzato nelle figure 1-2-3-4.
Il carico può essere fissato sulle due facce del carrello come schematizzato nelle figure 5-6.

Fastening

The slide can be fastened to a static or moving part. When on a moving part, you must pay attention to the forces created by inertia over the slide and its load.

The slide housing can be fastened on four sides as shown in pictures 1-2-3-4.
The load can be fastened on two sides of the carrier as shown in pictures 5-6.

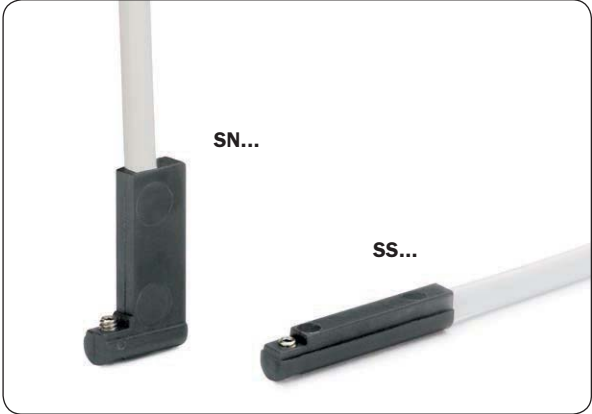


	ZE06...P	ZE10...P	ZE16...P
L	M3x6 mm	M4x8 mm	M4x10 mm
M	M3x5 mm	M4x5 mm	M4x5 mm
N	M3x5 mm	M4x6 mm	M4x6 mm
P	M3x5 mm	M4x6 mm	M4x6 mm
Q	Ø5.7x3.3 mm	Ø7.5x4.4 mm	Ø7.5x4.4 mm
R	M4	M5	M5

Sensori

Il rilevamento della posizione è affidato a uno o più sensori magnetici di prossimità (opzionali), che rilevano la posizione attraverso il magnete interno. Quindi, per un corretto funzionamento, è da evitare l'impiego in presenza di forti campi magnetici od in prossimità di grosse masse di materiale ferromagnetico.

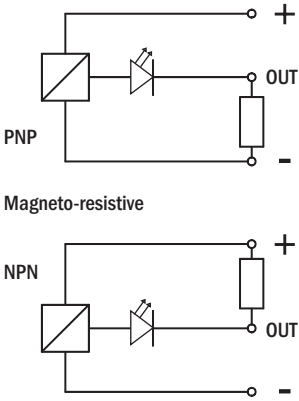
I sensori utilizzabili sono:



Sensors

The operating position is detected by magnetic proximity sensors (optional) through an internal magnet. The use of magnetic proximity sensors is therefore to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



			ZE06...P	ZE10...P	ZE16...P
SN4N225-G	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓
SN4M225-G	NPN	cavo 2.5m / 2.5m cable	✓	✓	✓
SN3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓
SN3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓	✓	✓
SS4N225-G	PNP	cavo 2.5m / 2.5m cable	✓	✓	✓
SS4M225-G	NPN	cavo 2.5m / 2.5m cable	✓	✓	✓
SS3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓	✓	✓
SS3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓	✓	✓

Sono tutti dotati di un cavo piatto a tre fili e di un led.

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



Carichi di sicurezza

Controllare le tabelle sottostanti.

Carichi eccessivi possono danneggiare la slitta, causare difficoltà di funzionamento e compromettere la sicurezza dell'operatore.

$F_x s$, $F_y s$, $M_x s$, $M_y s$, $M_z s$ sono i carichi statici massimi ammissibili.

$F_x d$, $F_y d$, $M_x d$, $M_y d$, $M_z d$ sono i massimi carichi dinamici ammissibili.

È indicato il minimo tempo di azionamento t in funzione della massa trasportata m .

(*) Quando il tempo e la massa comportano un'eccessiva energia cinetica si deve diminuire la velocità con regolatori di flusso (non forniti).

In ogni caso la massa trasportabile m è al massimo 100g (ZE06P), 250g (ZE10P), 500g (ZE16P).

Safety loads

Check the tables below.

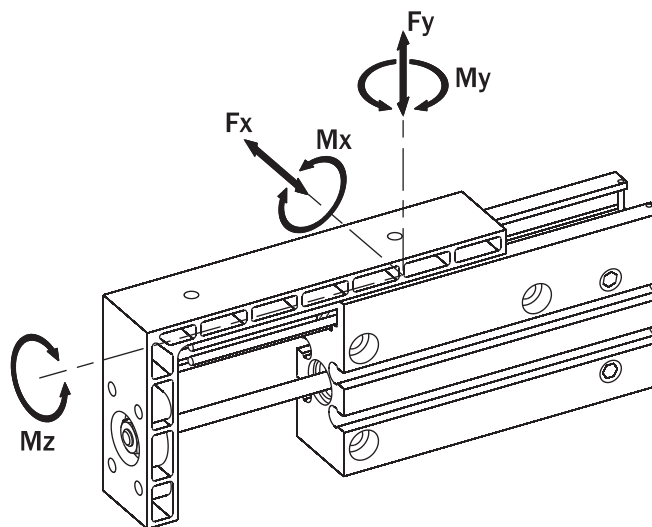
Excessive loads can damage the slide, cause functioning troubles and endanger the safety of the operator.

$F_x s$, $F_y s$, $M_x s$, $M_y s$, $M_z s$ are maximum permitted static loads. $F_x d$, $F_y d$, $M_x d$, $M_y d$, $M_z d$ are maximum permitted dynamic loads.

It is also indicated the minimum actuating time t as a factor of the pay-load m .

(*) When the actuating time and pay-load produce an excessive kinetic energy, the speed must be reduced by flow controllers (not supplied).

In any case the pay-load m is max. 100g (ZE06P), 250g (ZE10P), 500g (ZE16P).



	ZE06...P	ZE10...P	ZE16...P
$F_x s$	10 N	25 N	50 N
$F_y s$	10 N	25 N	50 N
$M_x s$	1 Nm	2 Nm	3 Nm
$M_y s$	1 Nm	2 Nm	3 Nm
$M_z s$	1 Nm	2 Nm	3 Nm
$F_x d$	1 N	2.5 N	5 N
$F_y d$	1 N	2.5 N	5 N
$M_x d$	0.2 Nm	0.4 Nm	0.6 Nm
$M_y d$	0.2 Nm	0.4 Nm	0.6 Nm
$M_z d$	0.2 Nm	0.4 Nm	0.6 Nm
m_{max}	100 g	250 g	500 g

m	t ZE0610P	t ZE0620P	t ZE0630P	t ZE1010P	t ZE1020P	t ZE1030P	t ZE1610P	t ZE1620P	t ZE1630P
10 g	15 ms	28 ms (*)	44 ms (*)	30 ms	50 ms	60 ms	50 ms	70 ms	90 ms
40 g	18 ms (*)	37 ms (*)	57 ms (*)	30 ms	50 ms	60 ms	50 ms	70 ms	90 ms
70 g	22 ms (*)	45 ms (*)	68 ms (*)	30 ms	50 ms	61 ms (*)	50 ms	70 ms	90 ms
100 g	25 ms (*)	51 ms (*)	77 ms (*)	30 ms	50 ms	68 ms (*)	50 ms	70 ms	90 ms
150 g	-	-	-	30 ms	51 ms (*)	78 ms (*)	50 ms	70 ms	90 ms
200 g	-	-	-	30 ms	58 ms (*)	87 ms (*)	50 ms	70 ms	90 ms
250 g	-	-	-	31 ms (*)	63 ms (*)	96 ms (*)	50 ms	70 ms	90 ms
300 g	-	-	-	-	-	-	50 ms	70 ms	94 ms (*)
400 g	-	-	-	-	-	-	50 ms	70 ms	105 ms (*)
500 g	-	-	-	-	-	-	50 ms	76 ms (*)	115 ms (*)

Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della slitta.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della slitta.

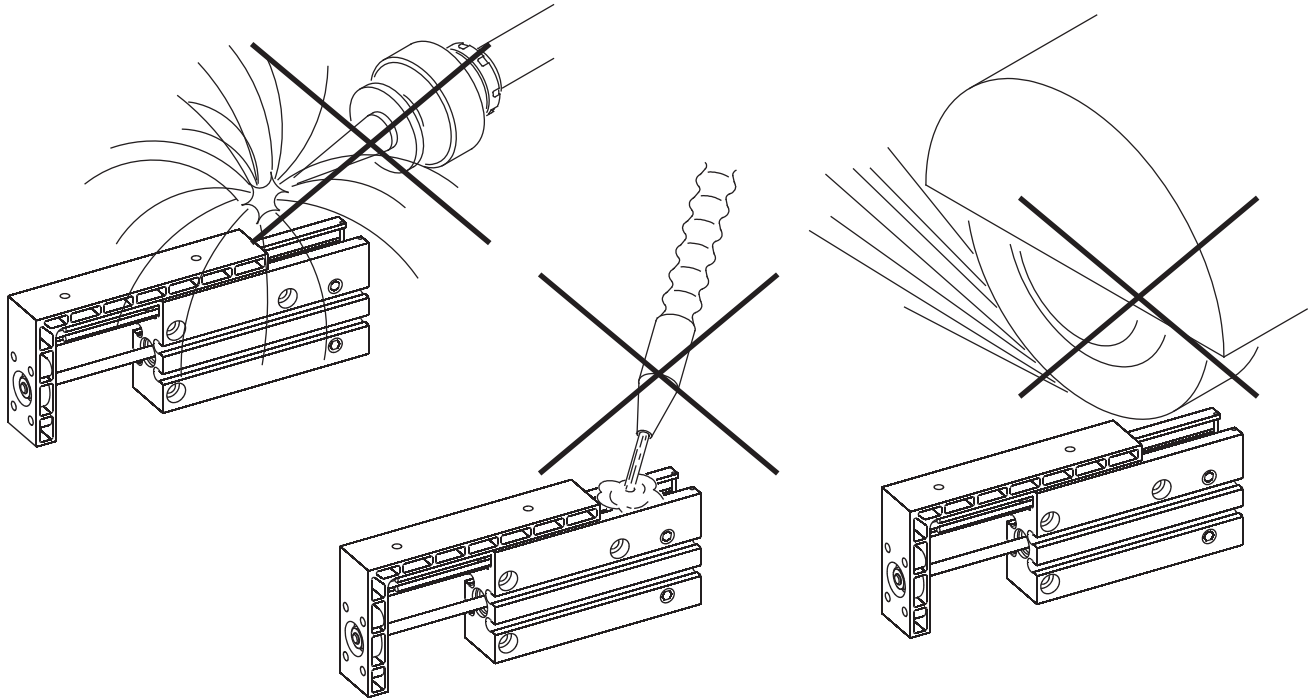
La slitta non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Cautions

Never let the slide come into contact with corrosive substances, soldering splashes or abrasive powders as they may damage the slide.

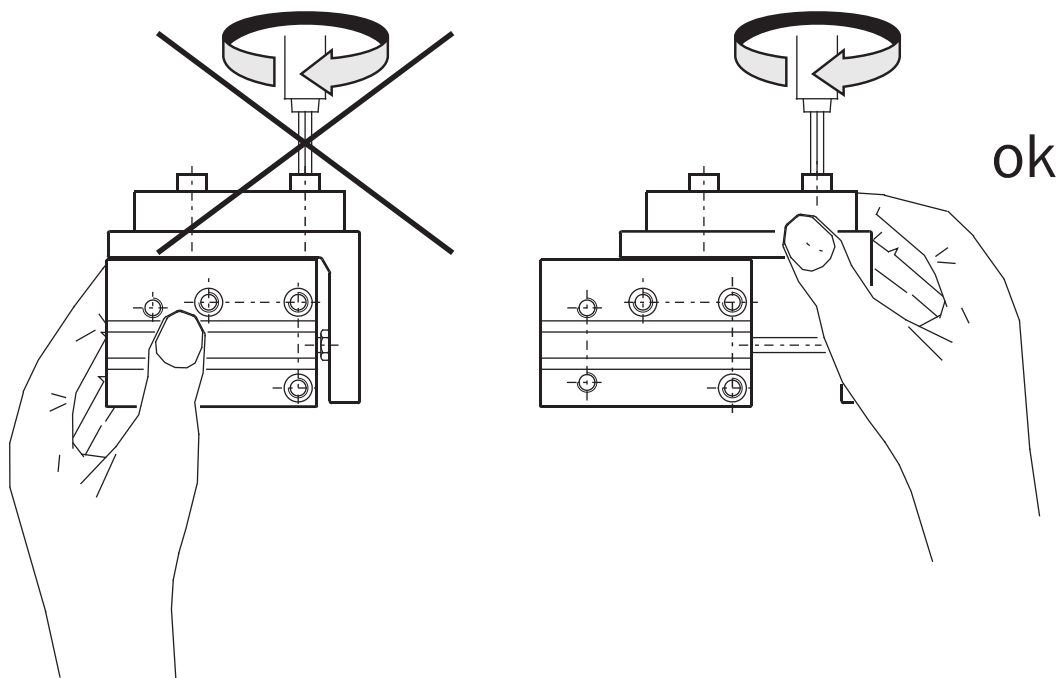
Never let non-authorized persons or objects stand within the operating range of the slide.

Never operate the slide if the machine on which it is fitted does not comply with safety laws and standards of your country.

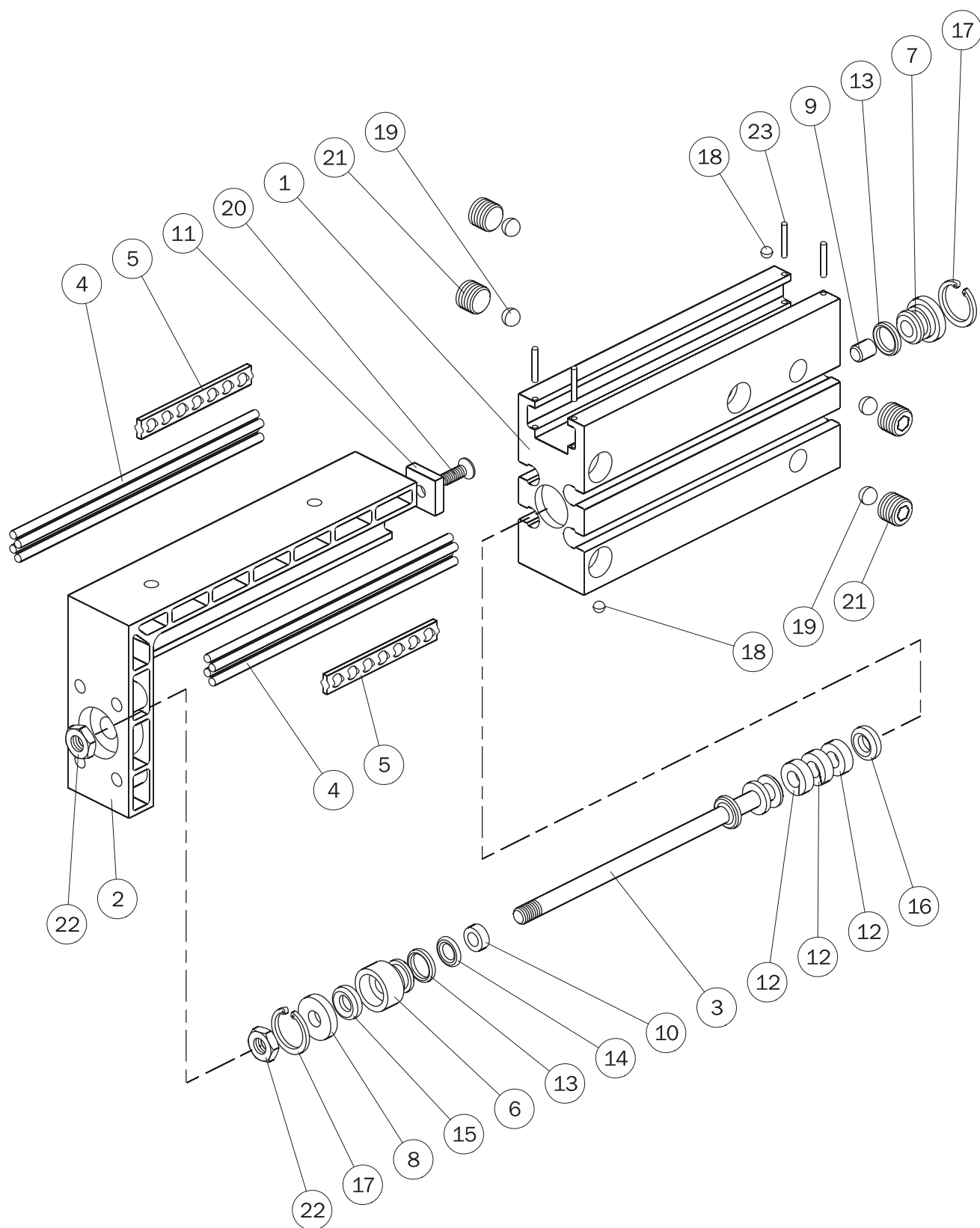


Non sollecitare la guida con carichi eccessivi durante il montaggio del carico.

Do not overload the guidance when mounting work pieces.



Vista esplosa / Exploded view



Elenco delle parti / Part list

		ZE0610P	ZE0620P	ZE0630P		
1	Corpo	ZE0610-14	ZE0620-14	ZE0630-14	Housing	1
2	Carrello	ZE0610-15	ZE0620-15	ZE0630-15	Carrier	2
3	Pistone	ZE0610-03	ZE0620-03	ZE0630-06	Piston	3
4	Alberino	Ø1.5x40 DIN 5402	Ø1.5x50 DIN 5402	Ø1.5x60 DIN 5402	Shaft	4
5	Cuscinetto lineare	C257			Linear ball-bearing	5
6	Flangia anteriore	ZE0630-03			Front flange	6
7	Flangia posteriore	ZE0630-04			Rear flange	7
8	Distanziale	ZE0630-05			Spacer	8
9	Battuta elastica	ZE0630-10			Rubber stopper	9
10	Distanziale	-			Spacer	10
11	Tappo	ZE0630-18			Plug	11
12	Magnete	ZE0630-11			Magnet	12
13	O-Ring	Ø1x4 (GUAR-091)			O-Ring	13
14	Battuta elastica	Ø1x3 (GUAR-082S)			Rubber stopper	14
15	O-Ring	Ø1.78x2.90 (GUAR-057)			O-Ring	15
16	Guarnizione	Ø1.78x2.90 (GUAR-057)			Gasket	16
17	Anello elastico (seeger)	Ø8 DIN 472 INOX			Snap-ring	17
18	Sfera	Ø2 mm AA			Ball	18
19	Sfera	1/8" NBR			Ball	19
20	Vite	M2x6 mm DIN 965A INOX A2			Screw	20
21	Vite senza testa	M5x4 mm DIN 913 INOX A2			Grub screw	21
22	Dado	M3 DIN 439B INOX			Nut	22
23	Spina	Ø1x6.8 mm DIN 5402			Pin	23

		ZE1010P	ZE1020P	ZE1030P		
1	Corpo	ZE1010-14	ZE1020-14	ZE1030-14	Housing	1
2	Carrello	ZE1010-15	ZE1020-15	ZE1030-15	Carrier	2
3	Pistone	ZE1010-03	ZE1020-03	ZE1030-03	Piston	3
4	Alberino	Ø1.5x40 DIN 5402	Ø1.5x50 DIN 5402	Ø1.5x60 DIN 5402	Shaft	4
5	Cuscinetto lineare	C257			Linear ball-bearing	5
6	Flangia anteriore	ZE1030-03			Front flange	6
7	Flangia posteriore	ZE1030-04			Rear flange	7
8	Distanziale	ZE1030-05			Spacer	8
9	Battuta elastica	ZE1030-08			Rubber stopper	9
10	Distanziale	-			Spacer	10
11	Tappo	ZE1030-18			Plug	11
12	Magnete	PN-010-2-4			Magnet	12
13	O-Ring	Ø1x8 (GUAR-085)			O-Ring	13
14	Battuta elastica	Ø2x4 (GUAR-097S)			Rubber stopper	14
15	O-Ring	Ø1.78x3.69 (GUAR-044)			O-Ring	15
16	Guarnizione	Ø1.78x6.75 (GUAR-012)			Gasket	16
17	Anello elastico (seeger)	Ø12 DIN 472 INOX			Snap-ring	17
18	Sfera	Ø2 mm AA			Ball	18
19	Sfera	1/8" NBR			Ball	19
20	Vite	M2x6 mm DIN 965A INOX A2			Screw	20
21	Vite senza testa	M5x4 mm DIN 913 INOX A2			Grub screw	21
22	Dado	M4 DIN 439B INOX			Nut	22
23	Spina	Ø1x6.8 mm DIN 5402			Pin	23

		ZE1610P	ZE1620P	ZE1630P		
1	Corpo	ZE1610-14	ZE1620-14	ZE1630-14	Housing	1
2	Carrello	ZE1610-15	ZE1620-15	ZE1630-15	Carrier	2
3	Pistone	ZE1610-03	ZE1620-03	ZE1630-06	Piston	3
4	Alberino	Ø1.5x40 DIN 5402	Ø1.5x50 DIN 5402	Ø1.5x60 DIN 5402	Shaft	4
5	Cuscinetto lineare	C257			Linear ball-bearing	5
6	Flangia anteriore	ZE1630-03			Front flange	6
7	Flangia posteriore	ZE1630-04			Rear flange	7
8	Distanziale	ZE1630-05			Spacer	8
9	Battuta elastica	ZE1630-10			Rubber stopper	9
10	Distanziale	ZE1630-13			Spacer	10
11	Tappo	ZE1630-18			Plug	11
12	Magnete	PS-0016-P09			Magnet	12
13	O-Ring	Ø1x14 (GUAR-084)			O-Ring	13
14	Battuta elastica	Ø2.62x5.23 (GUAR-053S)			Rubber stopper	14
15	O-Ring	Ø1.78x4.48 (GUAR-029)			O-Ring	15
16	Guarnizione	16x9x2.5 (GUAR-002P)			Gasket	16
17	Anello elastico (seeger)	Ø17 DIN 472 INOX			Snap-ring	17
18	Sfera	Ø2 mm AA			Ball	18
19	Sfera	1/8" NBR			Ball	19
20	Vite	M2x6 mm DIN 965A INOX A2			Screw	20
21	Vite senza testa	M5x4 mm DIN 913 INOX A2			Grub screw	21
22	Dado	M5 DIN 439B INOX			Nut	22
23	Spina	Ø1x6.8 mm DIN 5402			Pin	23

Connessione pneumatica

La slitta si alimenta con aria compressa dai fori laterali o posteriori montandovi i raccordi dell'aria M5 ed i relativi tubi (non forniti).

Aria compressa in S: apertura.

Aria compressa in T: chiusura.

I tre canali S ed i tre canali T sono comunicanti, quindi due su tre devono rimanere tappati con il grano e la sfera.

L'unità è azionata con l'aria compressa filtrata ($5 \div 40 \mu\text{m}$) non necessariamente lubrificata. La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita dell'unità.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.

Compressed air feeding

The slide is driven by compressed air through side or rear air ports with fittings M5 and relevant hoses (not supplied).

Compressed air in S: extension stroke.

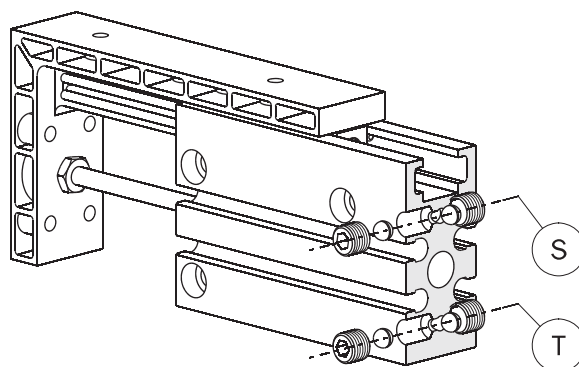
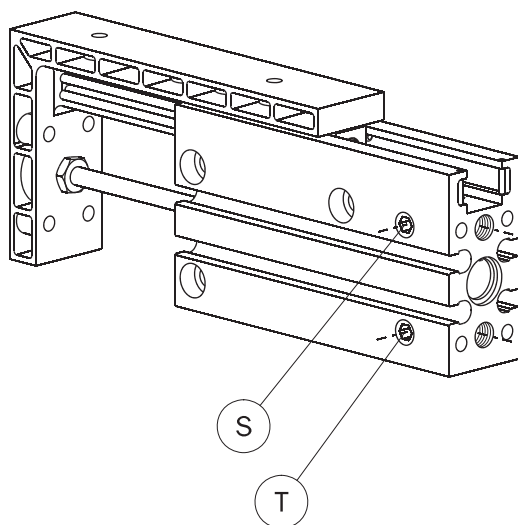
Compressed air in T: retraction stroke.

Three air ports S and three air ports T are communicating, so two of three have to be plugged by the grub screw and the sphere.

The compressed air, must be filtered from 5 to $40 \mu\text{m}$.

Maintain the medium selected at the start, lubricated or not, for the complete service life of the unit.

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



Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione.
- 2- Riempimento all'avvio.
- 3- Improvvisa mancanza di pressione.
- 4- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (E).
- 2- Valvola di avviamento progressivo (G).
- 3- Valvole di sicurezza (C).
- 4- Regolatori di flusso (D).

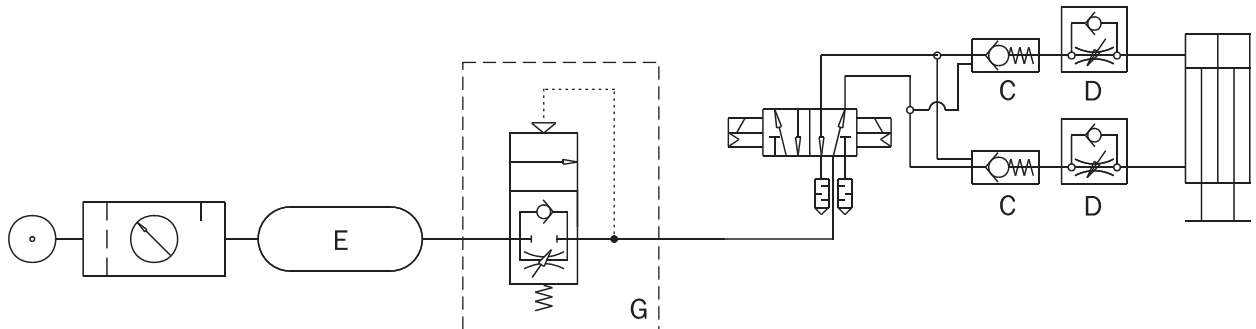
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation.
- 2- Pressurizing.
- 3- Sudden pressure black-out.
- 4- Excessive actuating speed.

Possible solutions:

- 1- Compressed air storage (E).
- 2- Start-up valve (G).
- 3- Safety valve (C).
- 4- Flow controller (D).



Manutenzione

Lubrificare ogni 5 milioni di cicli la guida.

L'apposito grasso è disponibile in tubetti da 90 grammi.
Codice di ordinazione: GLP500-90.

Maintenance

Lubricate the guidance after 5 million cycles.

The suitable grease is available in 90 grams tubes.
Ordering code: GLP500-90.

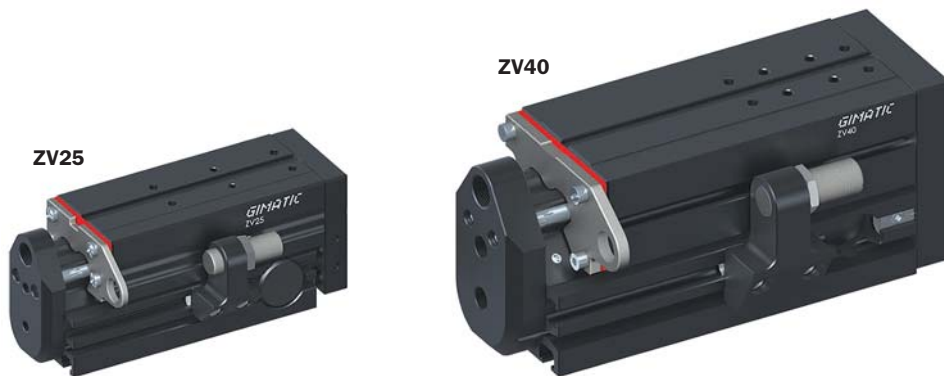


Slitte pneumatiche (serie ZV)

- Compatibile con il sistema G-mix (1).
- Disponibile con alesaggio 25 o 40.
- Guida di scorrimento a ricircolo di sfere registrabile (2).
- Azionamento a doppio effetto.
- Alimentazione posteriore (3).
- Fine corsa opzionali regolabili con deceleratore (4), elastomero o vite.
- Dispositivo per l'arresto d'emergenza (versione KP) (5).
- Attuatore opzionale per le fermate intermedie (6).
- Sensori magnetici opzionali (7).
- Varie opzioni per specchiare gli accessori (8).

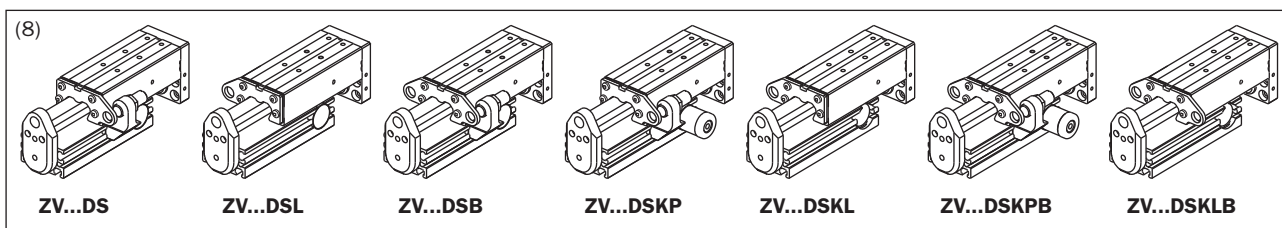
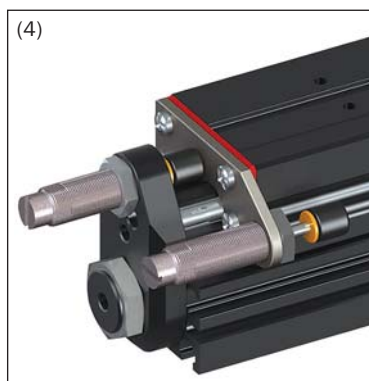
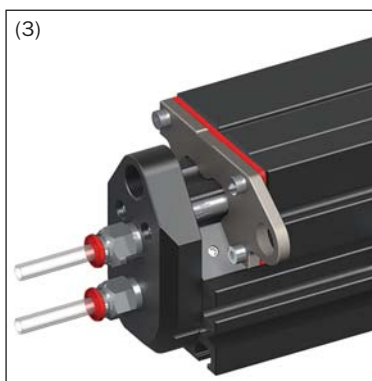
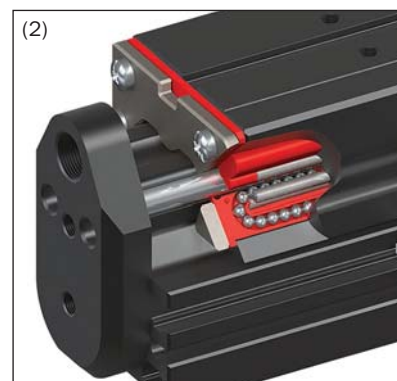
Pneumatic slides (series ZV)

- Compatible with the G-mix system (1).
- Available with piston bore 25 or 40.
- Adjustable recirculating ball bearing guide (2).
- Double acting.
- Rear air supply (3).
- Optional stroke end adjusters with shock-absorber (4), rubber bumper or grub screw.
- Emergency stopper (KP version) (5).
- Optional actuator for intermediate stops (6).
- Optional magnetic sensors (7).
- Several options for mirrored accessories (8).



	ZV25030DS ZV25030DSKP	ZV25060DS ZV25060DSKP	ZV25100DS ZV25100DSKP	ZV25150DS ZV25150DSKP	ZV25200DS ZV25200DSKP
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air				
Pressione di esercizio Operating pressure	1 ÷ 8 bar				
Temperatura di esercizio Operating temperature	5° ÷ 60°C.				
Forza di apertura a 6 bar Extension force at 6 bar	265 N				
Forza di chiusura a 6 bar Retraction force at 6 bar	238 N				
Corsa totale massima Maximum total stroke	30 mm	60 mm	100 mm	150 mm	200 mm
Tempo di azionamento minimo Minimum actuating time	0.06 s	0.11 s	0.21 s	0.30 s	0.43 s
Consumo d'aria per ciclo Cycle air consumption	33 cm³	61 cm³	113 cm³	174 cm³	235 cm³
Peso Weight	610 g 660 g	730 g 780 g	1000 g 1050 g	1320 g 1370 g	1635 g 1685 g

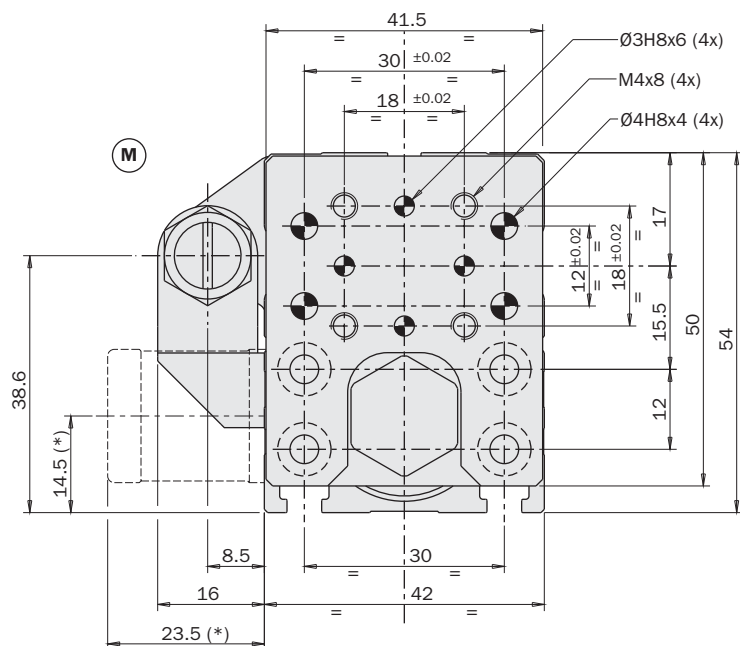
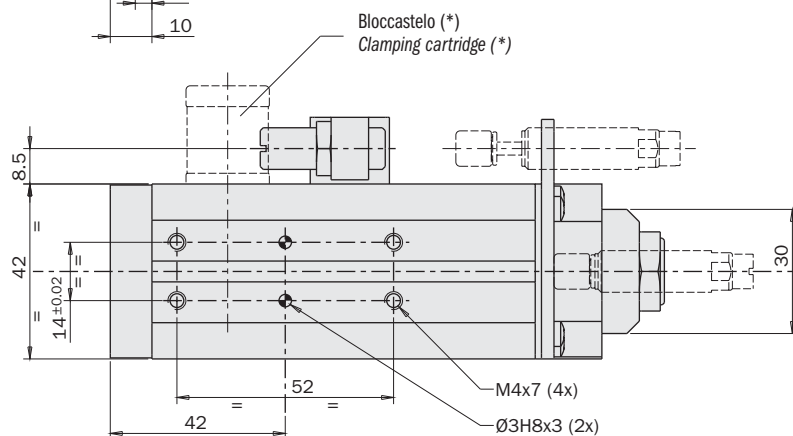
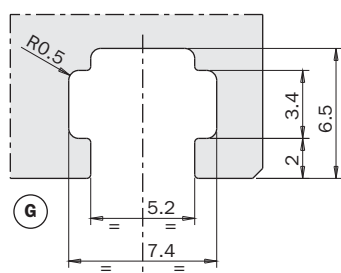
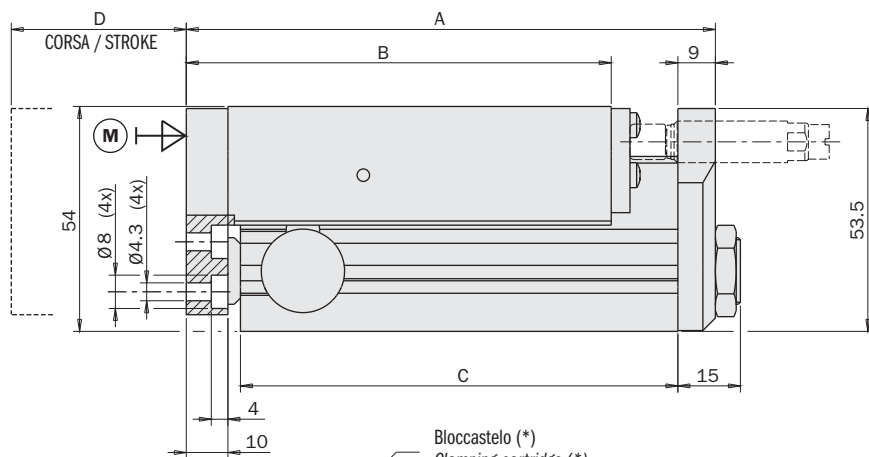
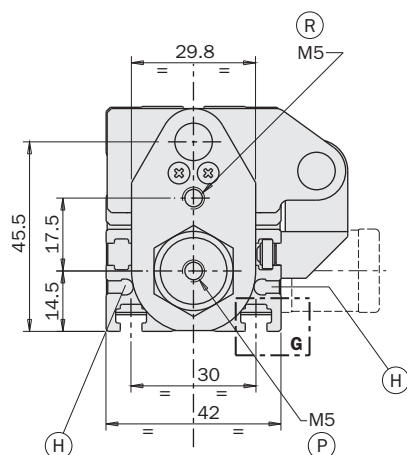
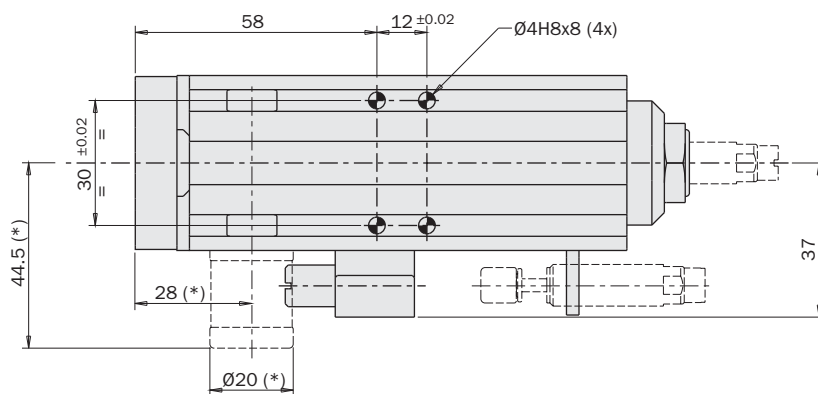
	NEW ZV40050DS ZV40050DSKP	NEW ZV40100DS ZV40100DSKP	NEW ZV40150DS ZV40150DSKP	NEW ZV40200DS ZV40200DSKP
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air			
Pressione di esercizio Operating pressure	1 ÷ 8 bar			
Temperatura di esercizio Operating temperature	5° ÷ 60°C.			
Forza di apertura a 6 bar Extension force at 6 bar	678 N			
Forza di chiusura a 6 bar Retraction force at 6 bar	617 N			
Corsa totale massima Maximum total stroke	50 mm	100 mm	150 mm	200 mm
Tempo di azionamento minimo Minimum actuating time	0.07 s	0.15 s	0.22 s	0.31 s
Consumo d'aria per ciclo Cycle air consumption	128 cm³	302 cm³	423 cm³	543 cm³
Peso Weight	1950 g 2000 g	2710 g 2760 g	3130 g 3180 g	3540 g 3590 g



(P) Ingresso aria
Air connection

(R) Ingresso aria
Air connection

(H) Sede per sensori
Sensor groove



	A	B	C	D
ZV25030DS ZV25030DSKP	127	102	105	30
ZV25060DS ZV25060DSKP	157	132	135	60
ZV25100DS ZV25100DSKP	226	201	204	100
ZV25150DS ZV25150DSKP	305	280	283	150
ZV25200DS ZV25200DSKP	384	359	362	200

(*)
Solo per la versione ...DSKP
Only ...DSKP version

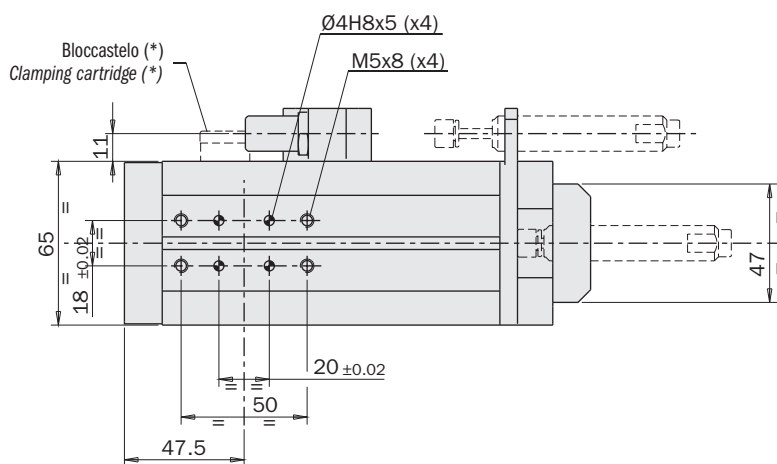
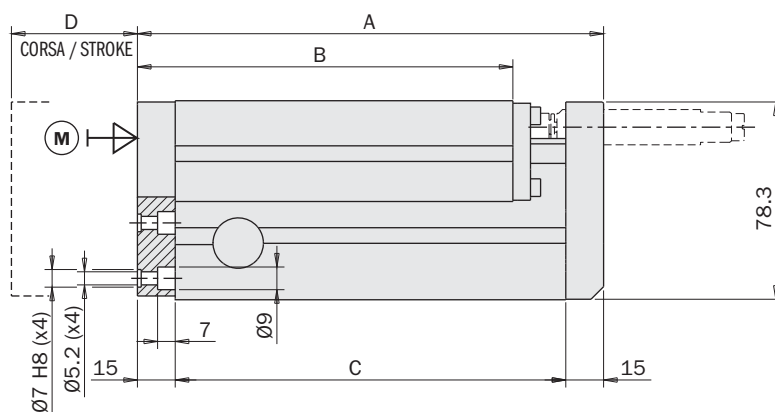
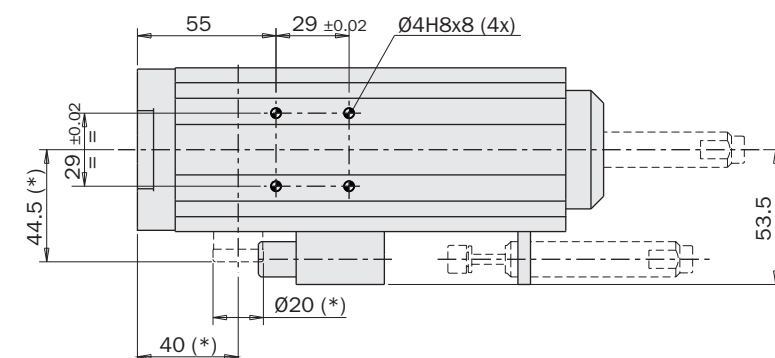
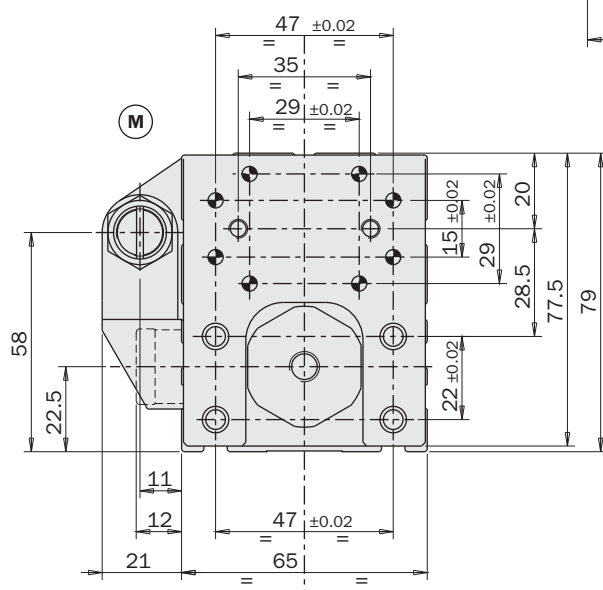
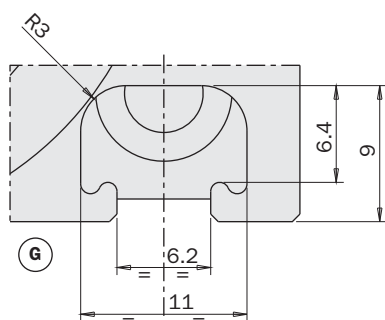
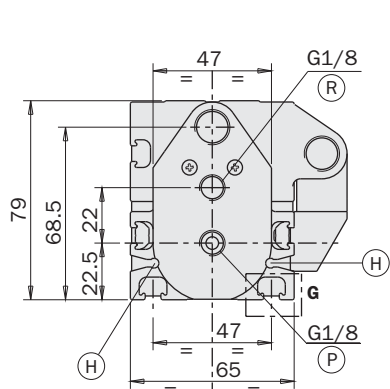
FIRST ANGLE
PROJECTION

Dimensioni (mm) / Dimensions (mm)

- Ⓟ Ingresso aria
Air connection

- Ⓡ Ingresso aria
Air connection

- Ⓜ Sede per sensori
Sensor groove



	A	B	C	D
ZV40050DS ZV40050DSKP	185	149	155	50
ZV40100DS ZV40100DSKP	277	241	247	100
ZV40150DS ZV40150DSKP	327	291	297	150
ZV40200DS ZV40200DSKP	377	341	347	200

(*)
Solo per la versione ...DSKP
Only ...DSKP version



Fine-corsa

Per la regolazione della corsa si possono utilizzare deceleratori idraulici Enidine, ammortizzatori di gomma (FGD) o grani (FPD), a seconda dell'energia cinetica che l'unità deve sopportare.

Stroke end

The stroke can be adjusted by Enidine shock-absorbers, rubber bumpers (FGD), or grub screws (FPD), according with the kinetic energy the slide has to bear.

L'energia che la slitta deve dissipare ad ogni fine corsa è:

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

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

dove:

m_{WP} è la massa trasportata [kg];
 s è la corsa [m];
 t è il tempo di traslazione [s].

where:

m_{WP} is the work piece mass [kg];
 s is the travel stroke [m];
 t is the travel time [s].

I valori ammessi di E sono riportati nella tabella dell'energia cinetica sottostante.

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



		ENIDINE	FGD	FPD
ZV25		TK10-3MB	FGD1030 (L=30 mm)	FPD1030 (L=30 mm)
	E	0.41 J	0.14 J	0.05 J
ZV40		PM25MC-2B-SP22039	FGD1440 (L=40 mm)	FPD1440 (L=40 mm)
	E	0.99 J	0.24 J	0.08 J



Ripetibilità

Gli accessori usati per la regolazione del fine corsa influenzano la ripetibilità.

Usare il deceleratore o il grano, quando è necessario un posizionamento preciso (+/-0.02mm) a fine corsa.

Repeatability

The accessories used for the stroke end adjustment affect the slide repeatability.

Use the shock-absorber option or the grub screw option, when a precise stroke end positioning (+/-0.02mm) is needed.

Fissaggio

La slitta può essere montata in posizione fissa, oppure su parti in movimento: in questo caso va considerata la forza d'inerzia cui la slitta ed il suo carico sono sottoposti.

Il corpo della slitta deve essere fissato usando le cave sul fondo (1). Usare i dadi:
MFM-058 (ZV25);
MFI-025 (ZV40).

Il carico può essere fissato sulla piastra frontale (2 o 3), oppure sul dorso del carrello (4).

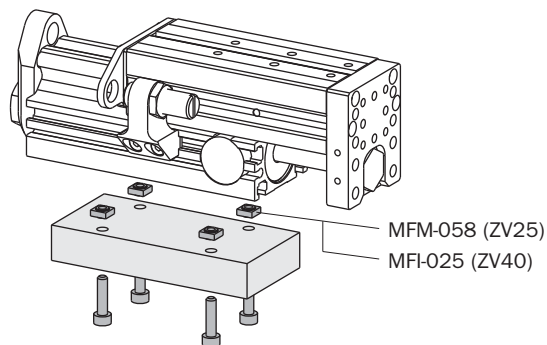
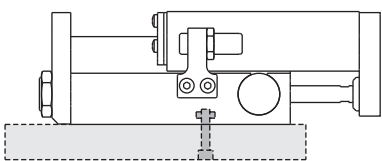
Fastening

The slide can be fastened to a static or moving part. When on a moving part, attention must be paid to the inertial force to which the slide and its load are subjected.

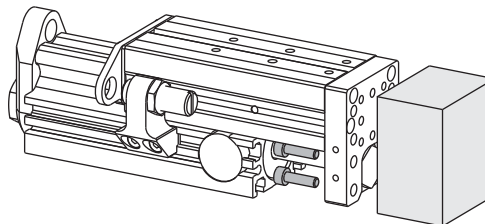
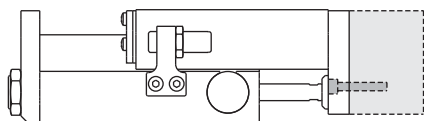
The slide body must be fastened by the slots on the bottom (1). Use the nuts:
MFM-058 (ZV25);
MFI-025 (ZV40).

The load can be fastened on the front plate (2 or 3), or on the top of the slider (4).

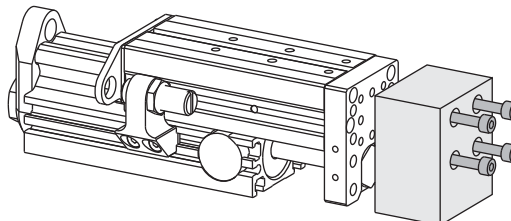
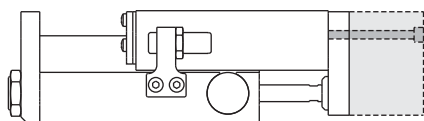
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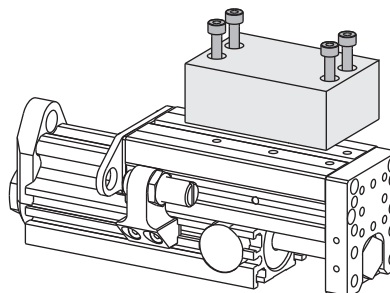
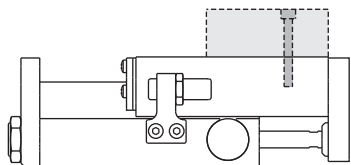
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③

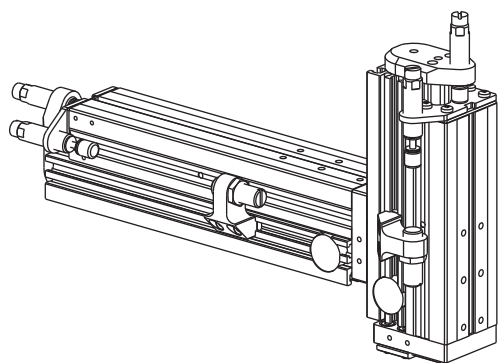


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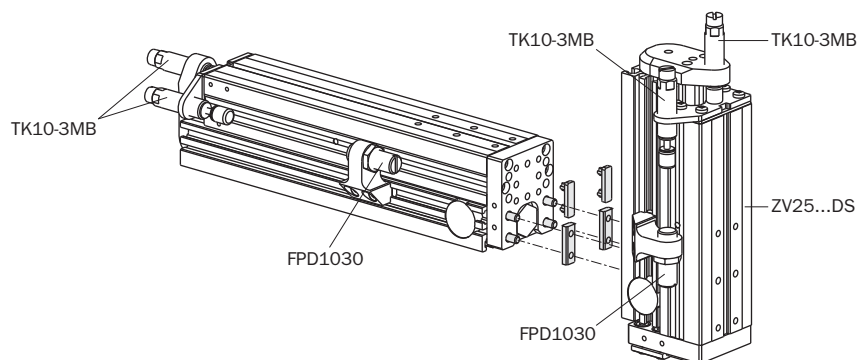
Esempio di applicazione con ZV25

Application example with ZV25



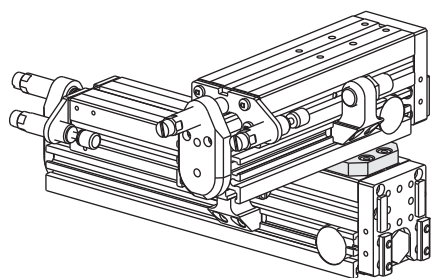
Nella confezione dell'attuatore sono forniti viti, spine, dadi e chiavette di centraggio per il fissaggio frontale di un altro attuatore.

The actuator's package comes with screws, dowel pins, nuts and centering keys for the front fastening of another actuator.



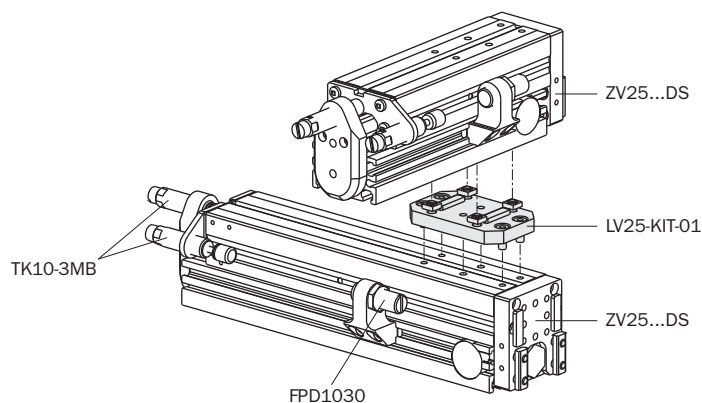
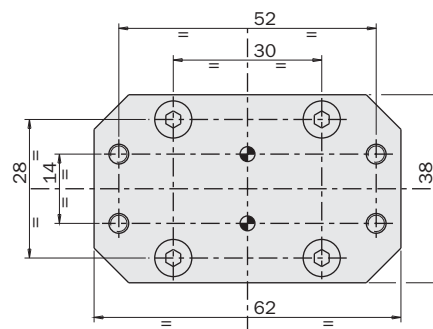
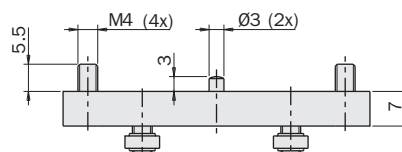
Esempio di applicazione con ZV25

Application example with ZV25



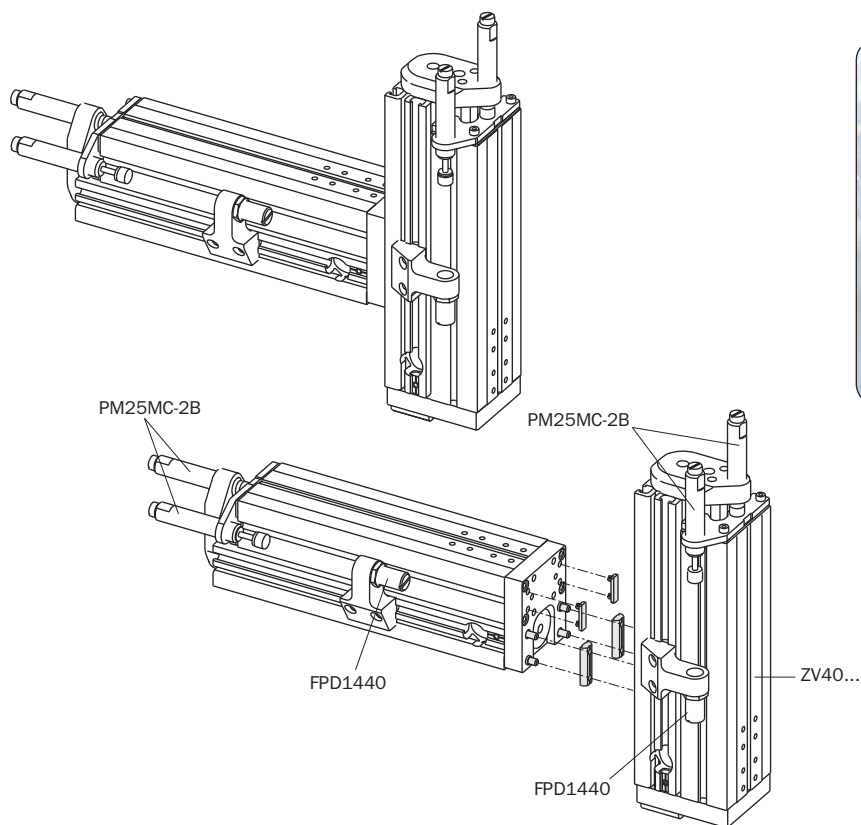
LV25-KIT-01

- Peso / Weight: 57g.



Esempio di applicazione con ZV40

Application example with ZV40

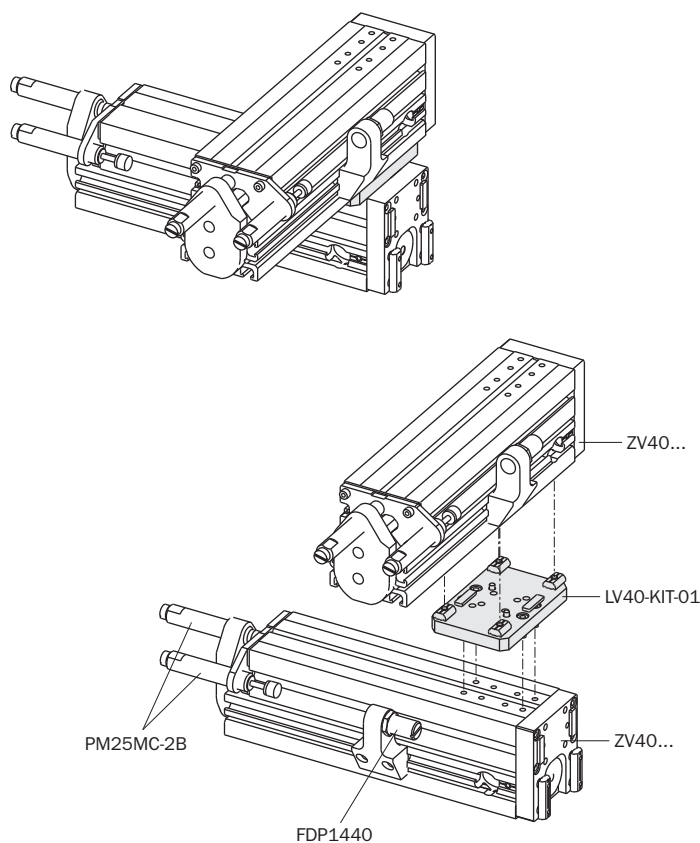


Nella confezione dell'attuatore sono forniti viti, boccole, dadi e chiavette di centraggio per il fissaggio frontale di un altro attuatore.

The actuator's package comes with screws, bushes, nuts and centering keys for the front fastening of another actuator.

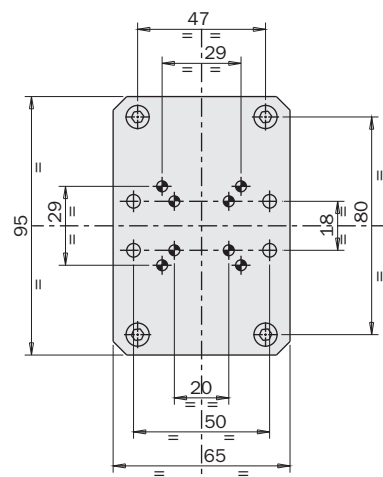
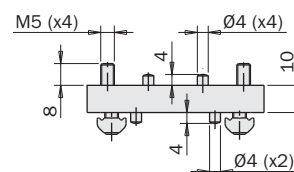
Esempio di applicazione con ZV40

Application example with ZV40



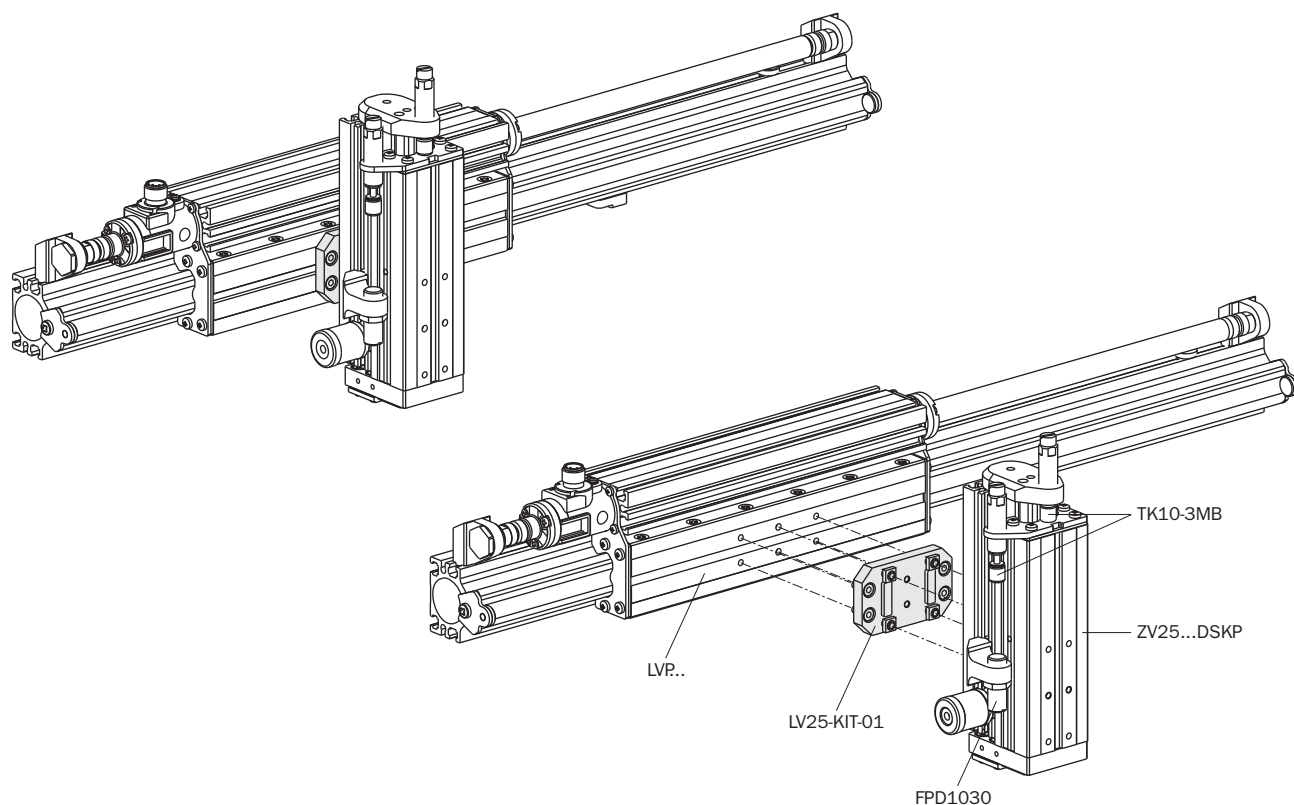
LV40-KIT-01

- Peso / Weight: 215g.



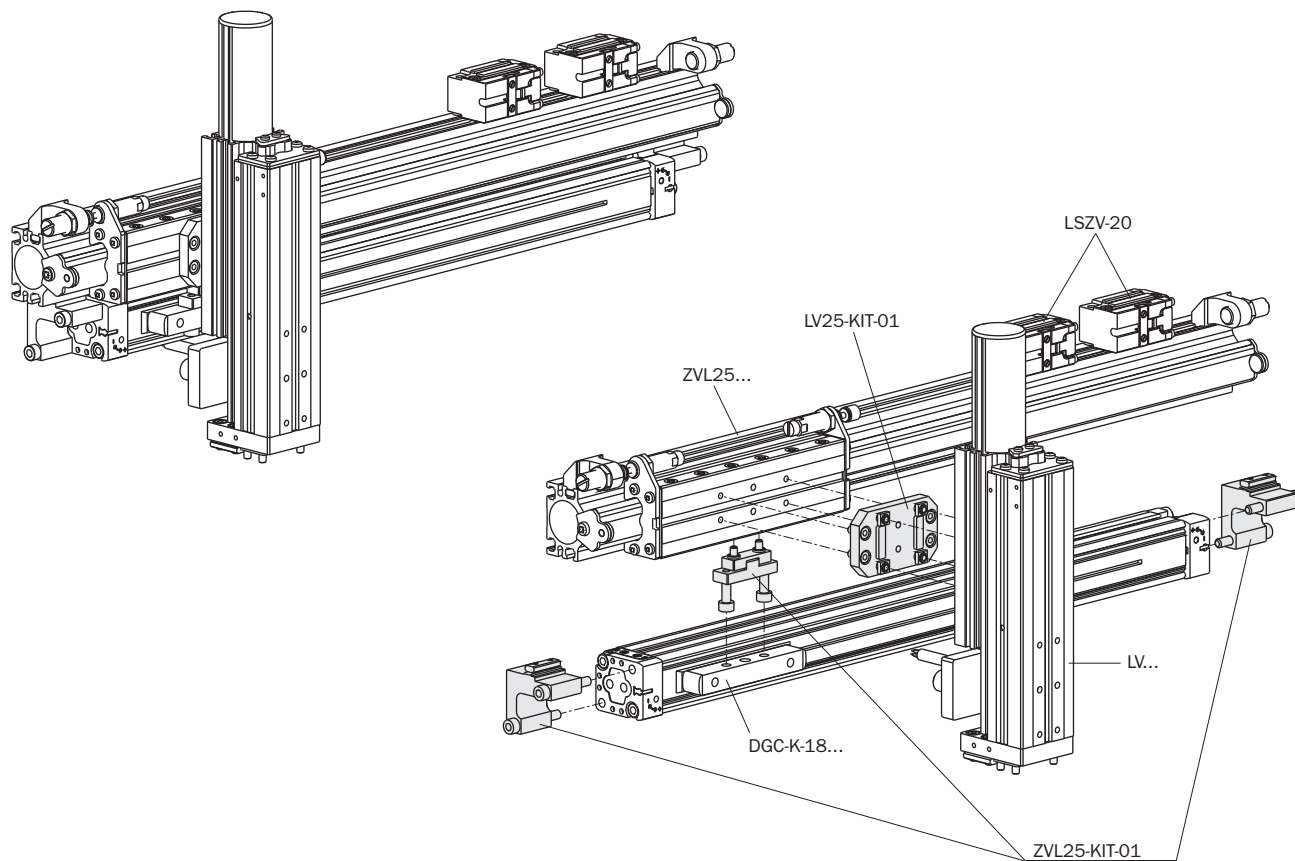
Esempio di applicazione con ZV25

Application example with ZV25



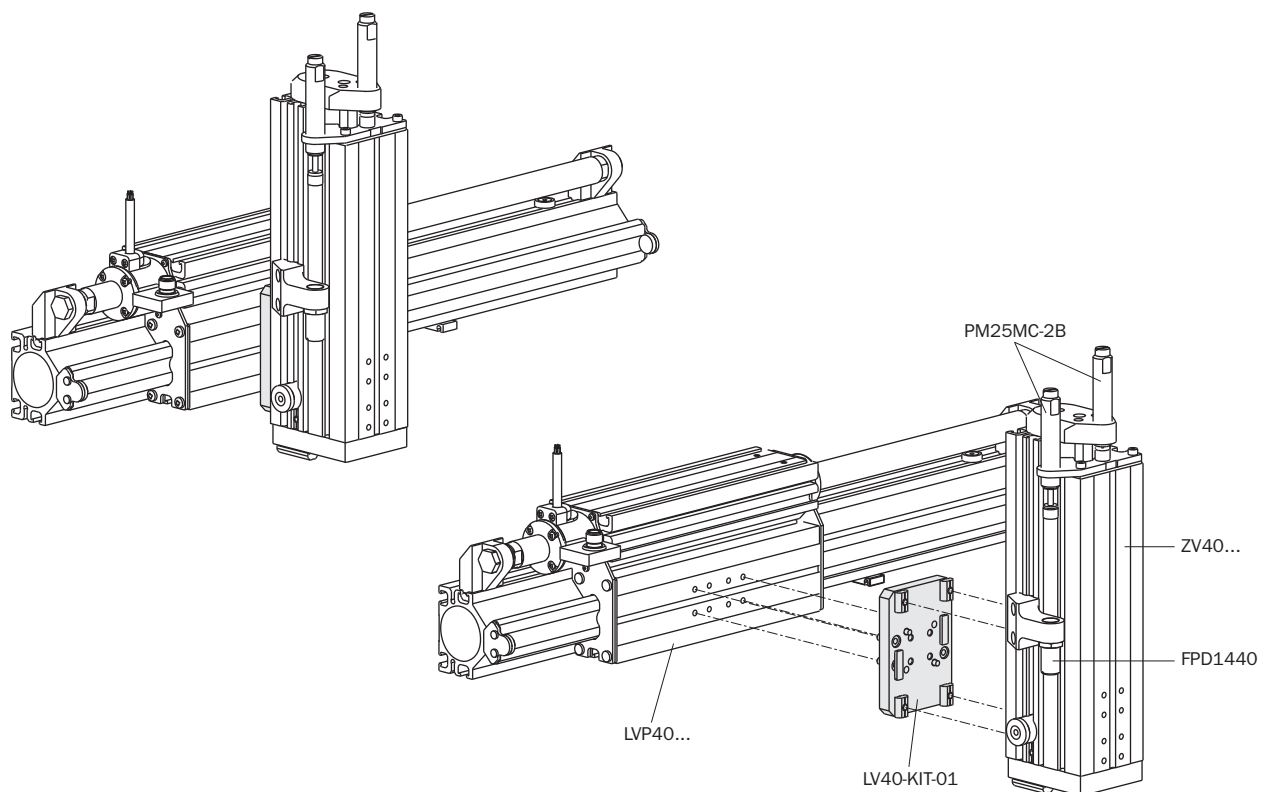
Esempio di applicazione con ZVL25

Application example with ZVL25



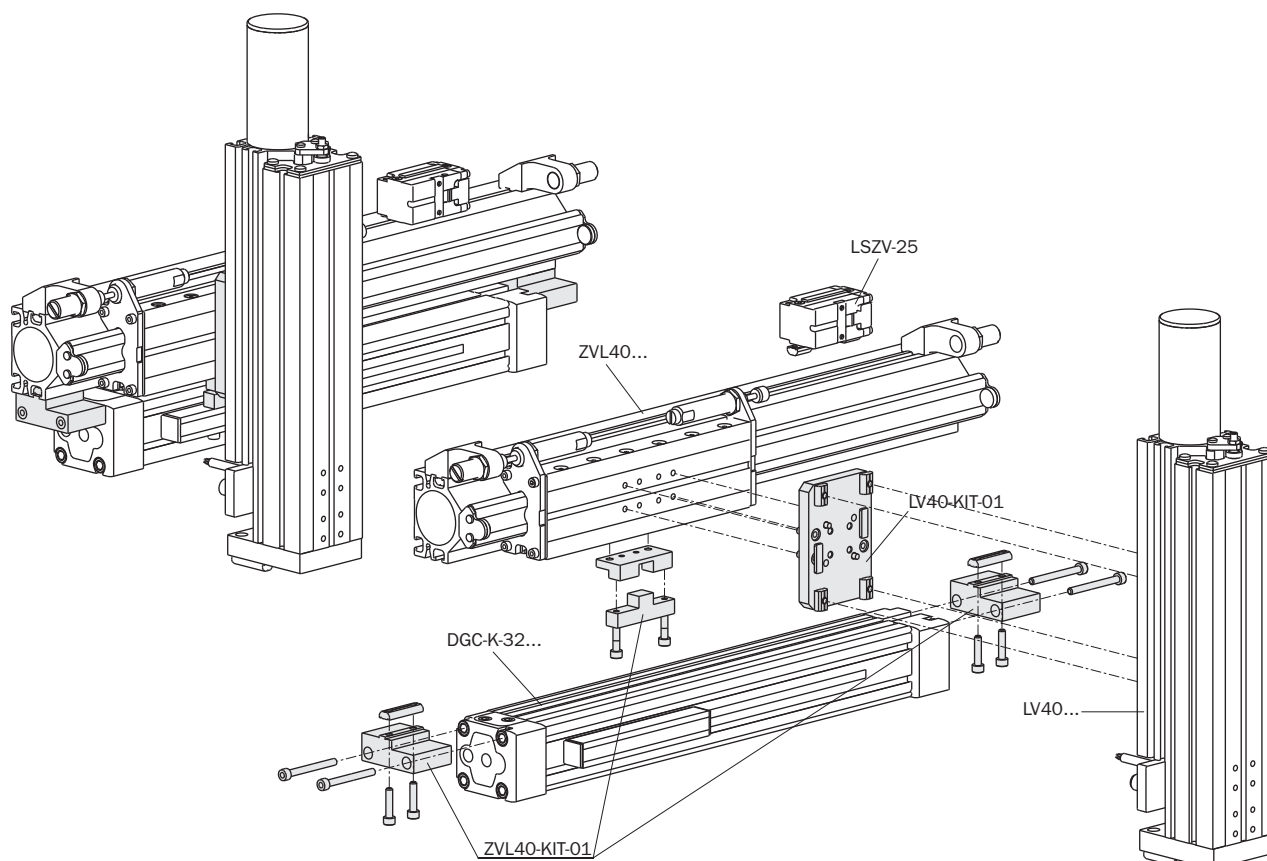
Esempio di applicazione con ZV40

Application example with ZV40



Esempio di applicazione con ZVL40

Application example with ZVL40

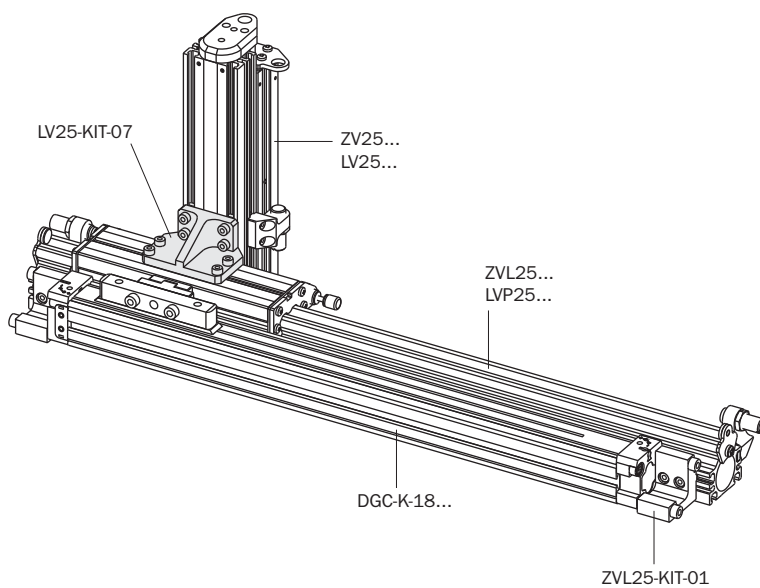
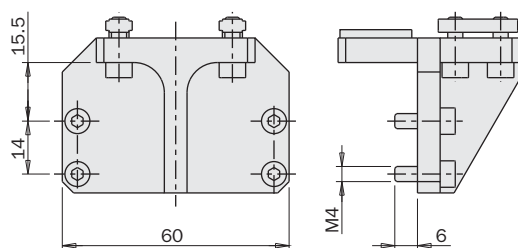
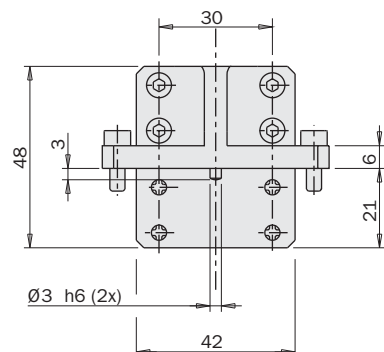


Esempio di applicazione con ZV25

Application example with ZV25

LV25-KIT-07

- Peso / Weight: 100g.

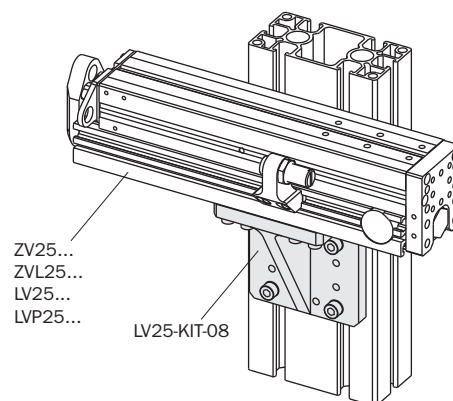
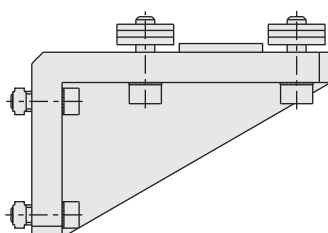
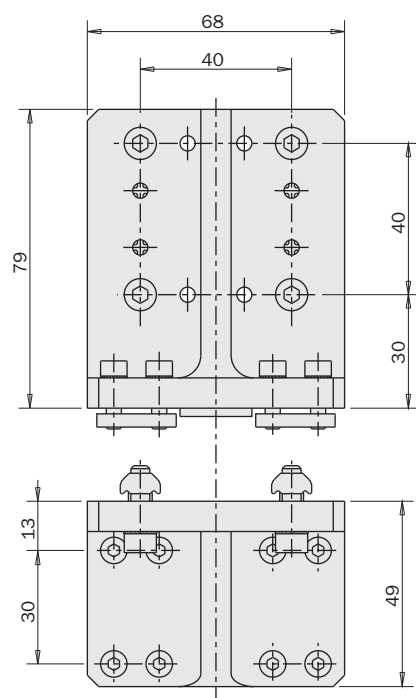


Esempio di applicazione con ZV25

Application example with ZV25

LV25-KIT-08

- Peso / Weight: 285g.

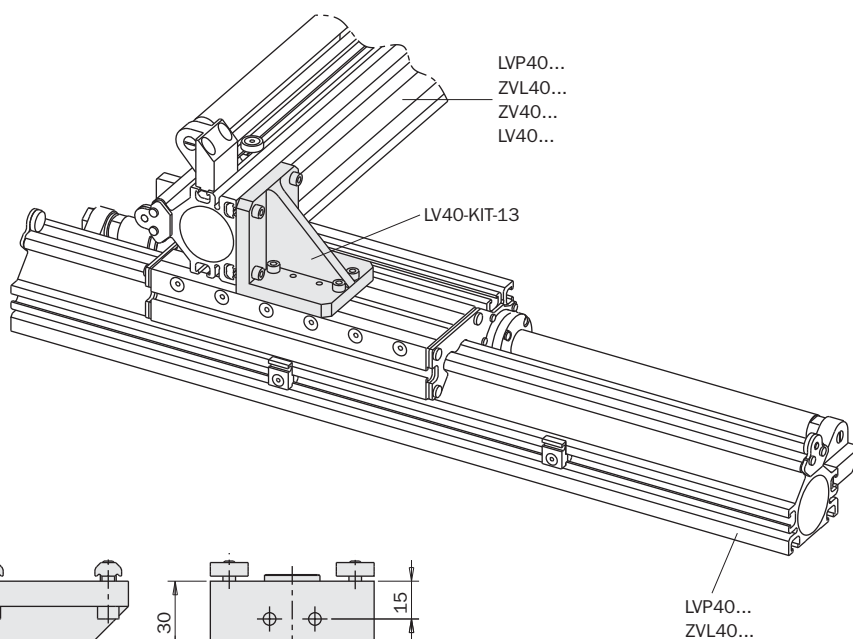
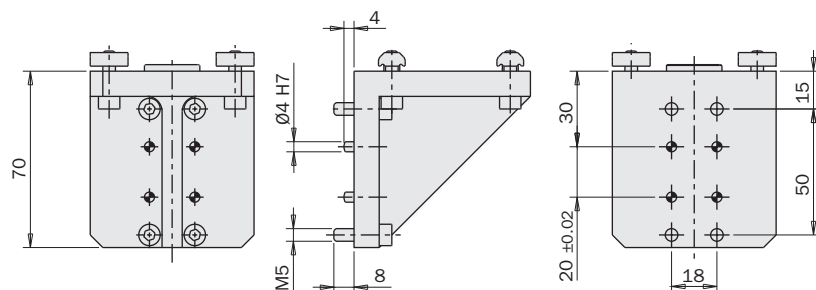
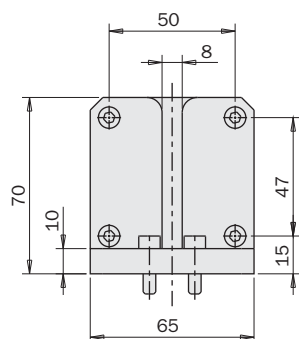


Esempio di applicazione con ZV40

Application example with ZV40

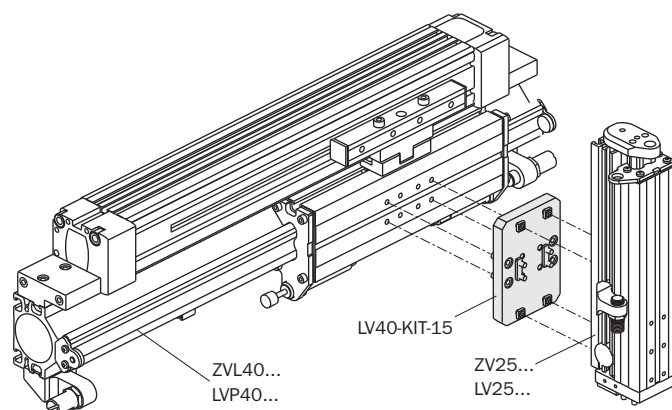
LV40-KIT-13

- Peso / Weight: 330g.



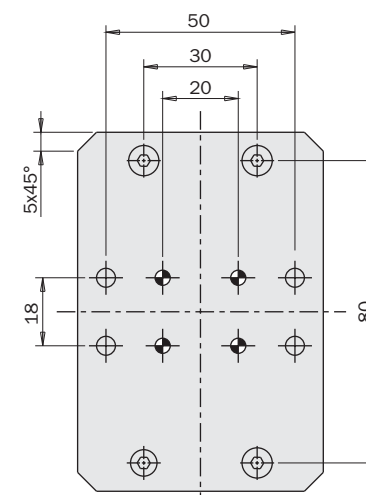
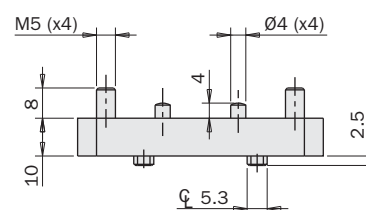
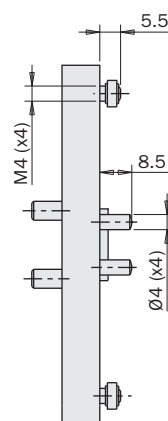
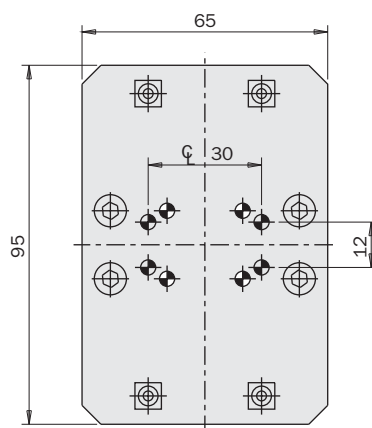
Esempio di applicazione con ZV40/ZV25

Application example with ZV40/ZV25



LV40-KIT-15

- Peso / Weight: 190g.

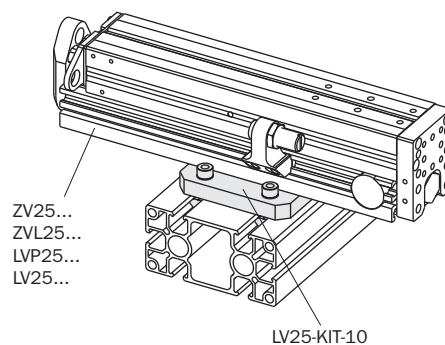
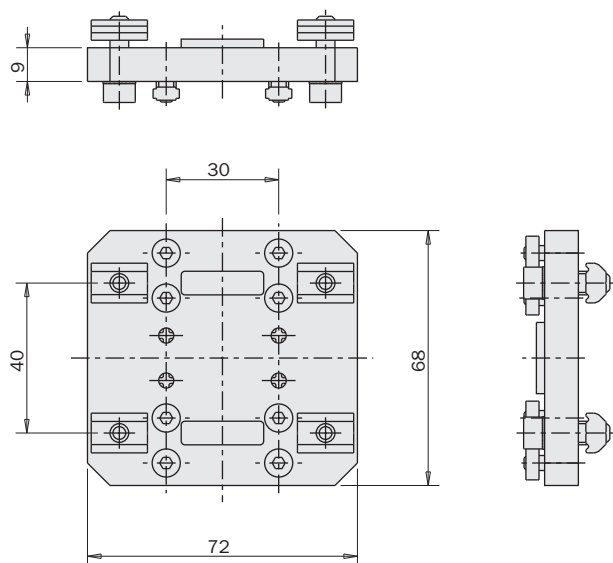


Esempio di applicazione con ZV25

Application example with ZV25

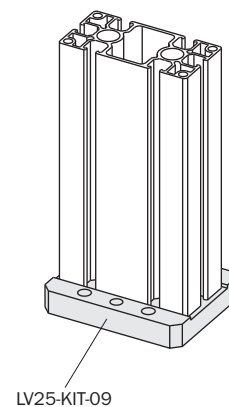
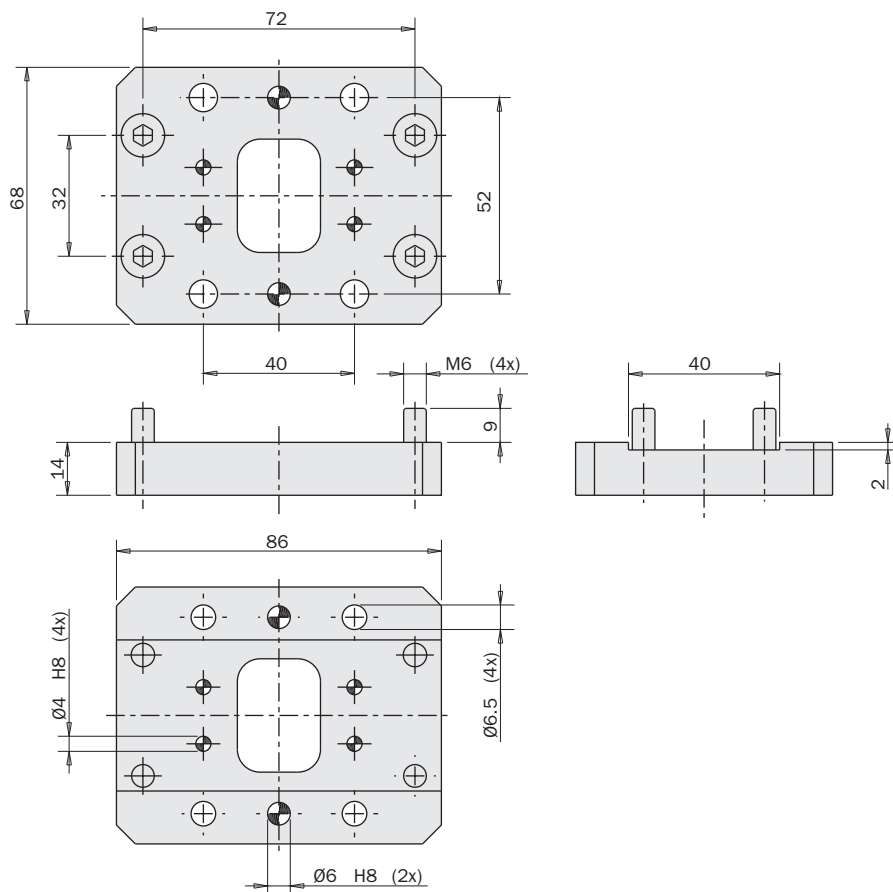
LV25-KIT-10

- Peso / Weight: 190g.



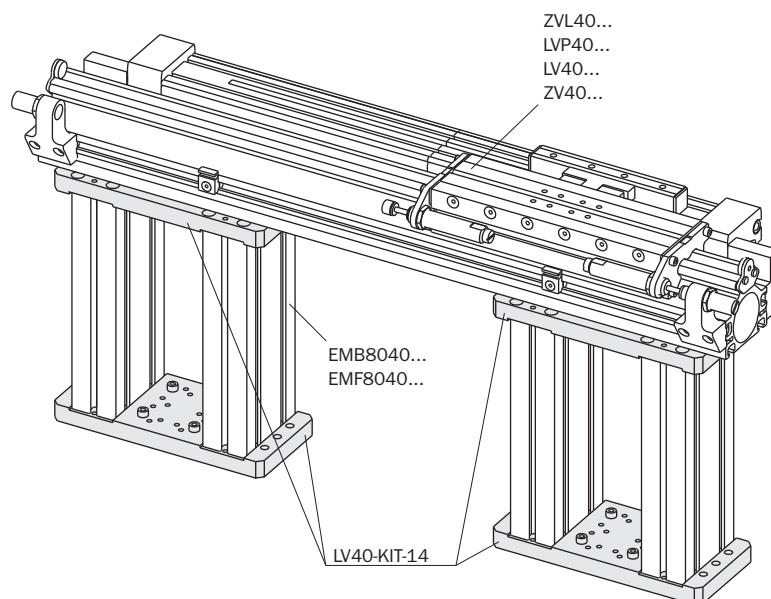
LV25-KIT-09

- Peso / Weight: 190g.

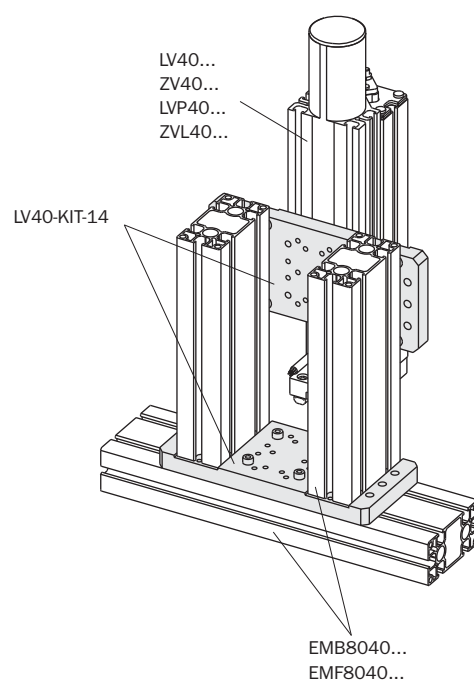
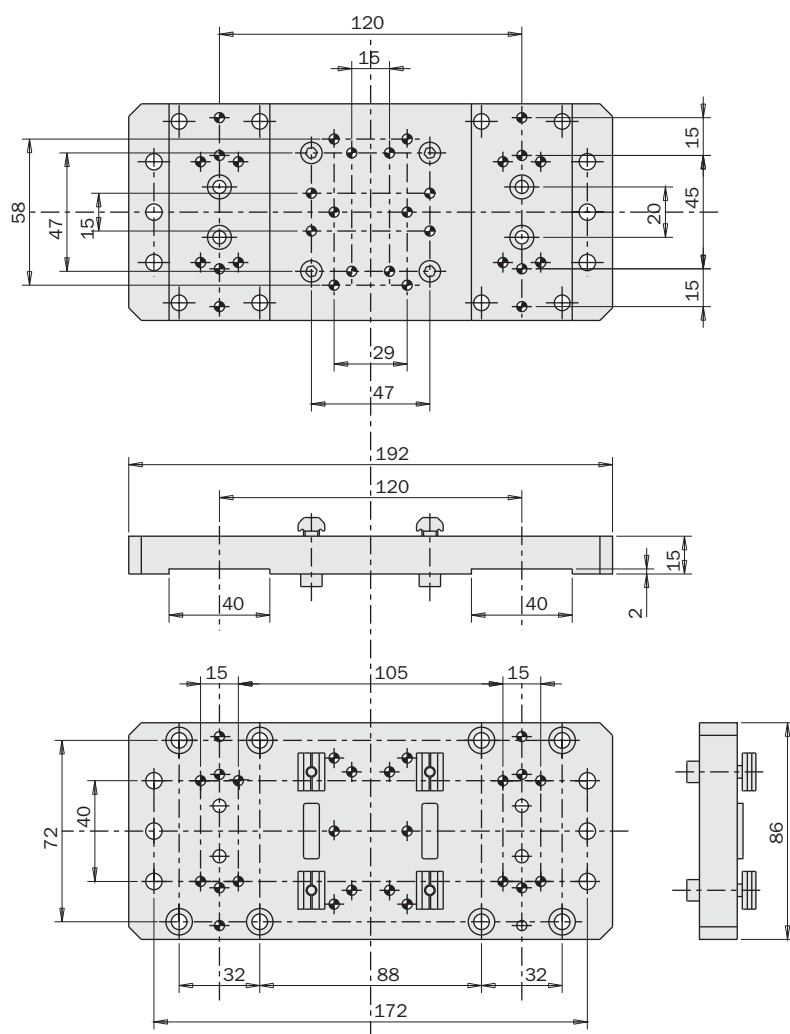


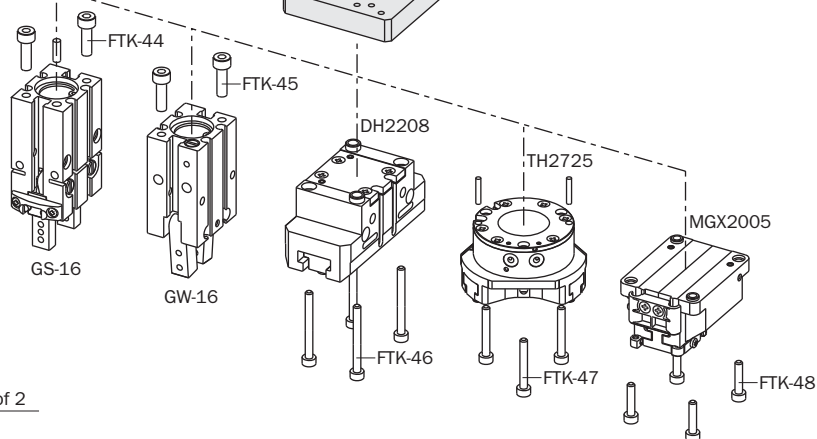
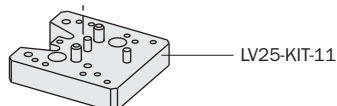
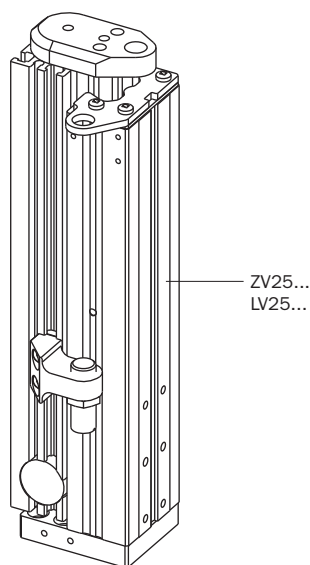
Esempio di applicazione con ZV40

Application example with ZV40

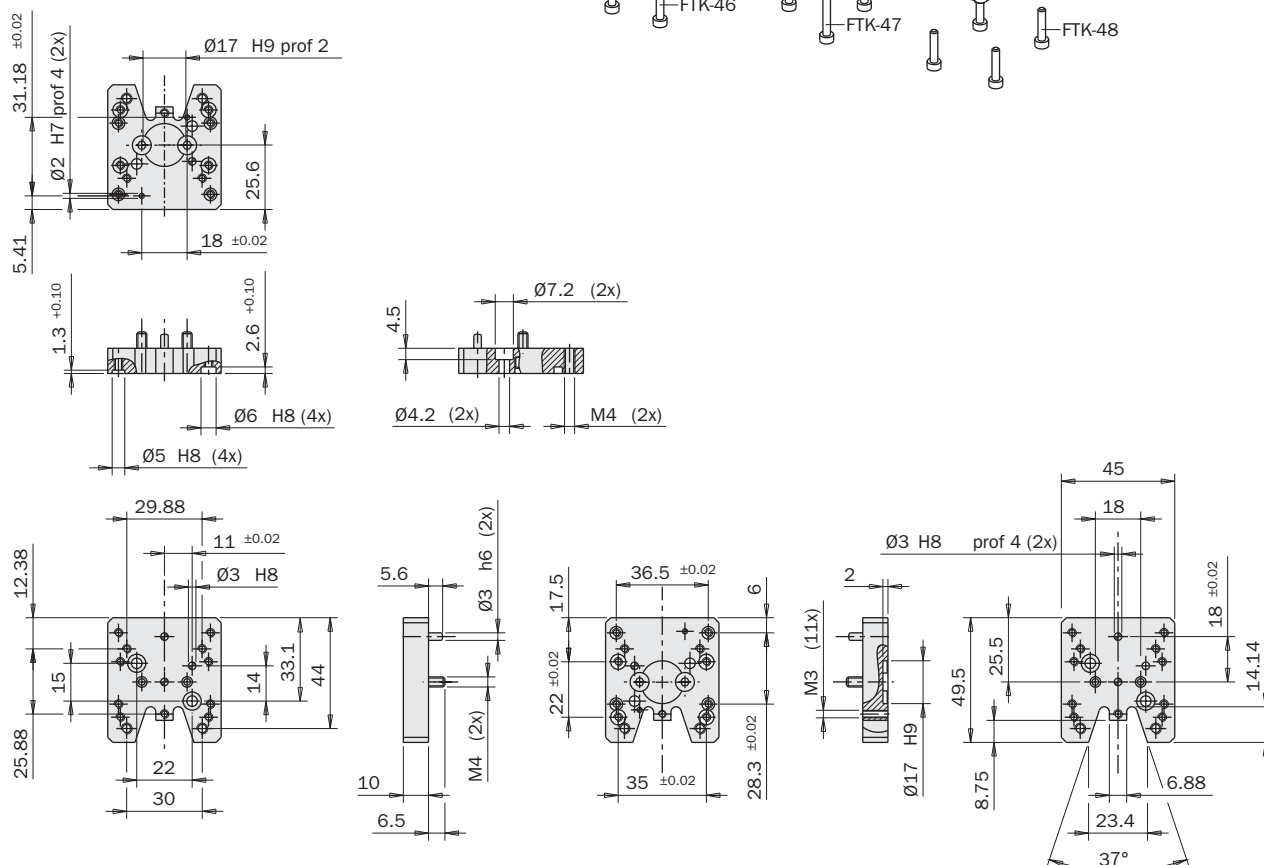
**LV40-KIT-14**

- Peso / Weight: 630g.



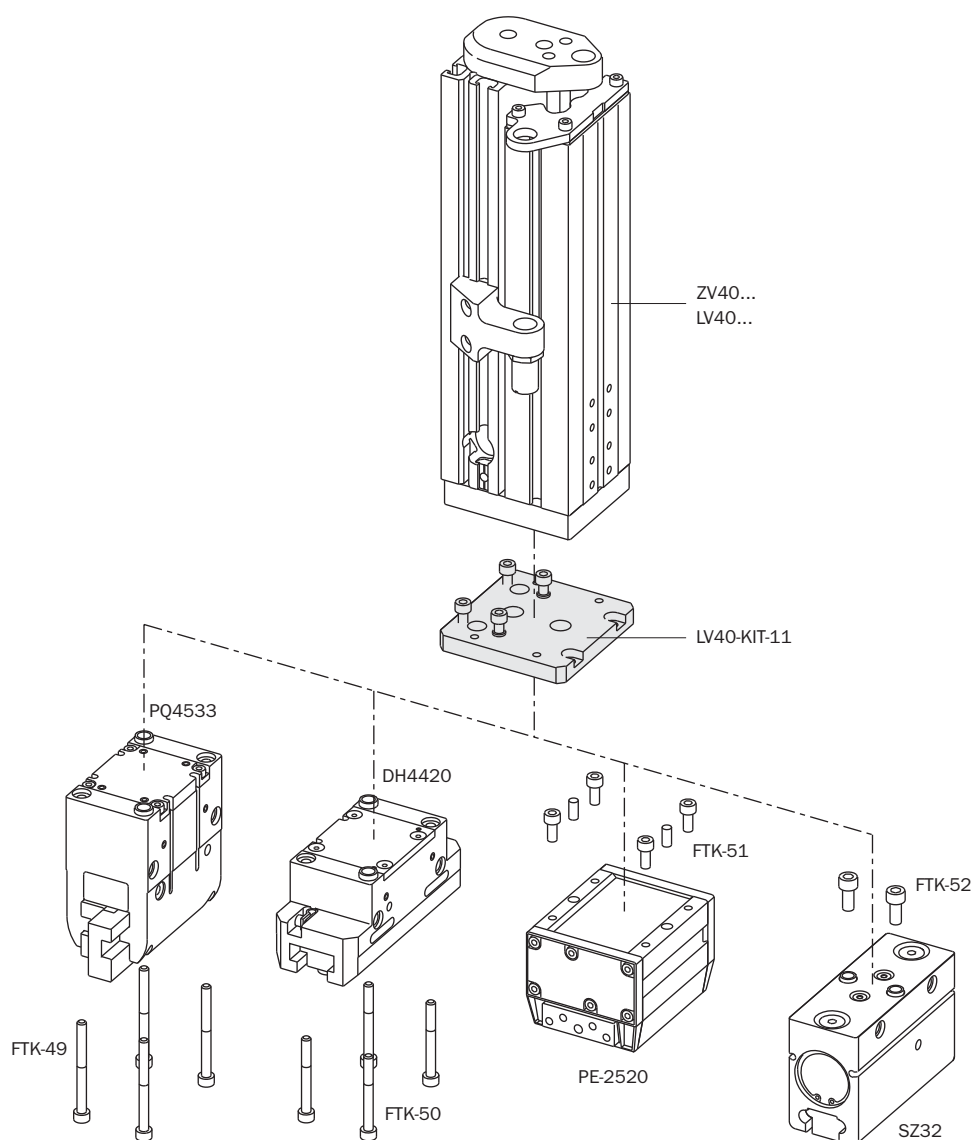
**LV25-KIT-11**

- Peso / Weight: 50g.



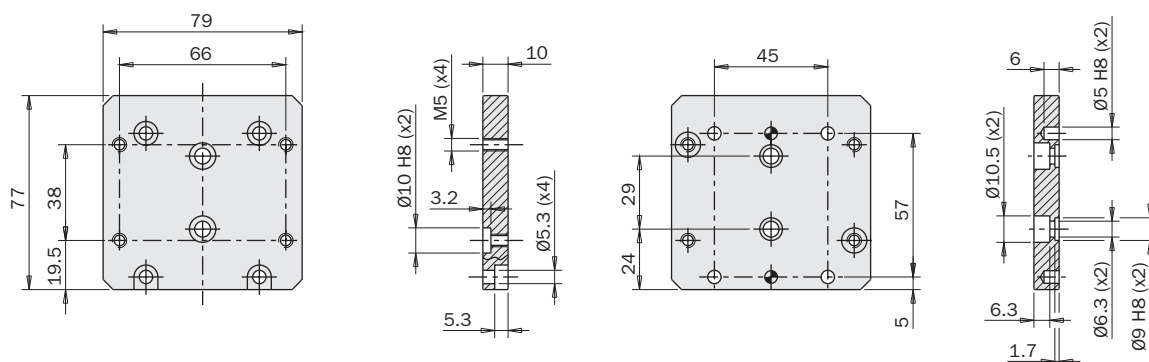
Esempio di applicazione con ZV40

Application example with ZV40



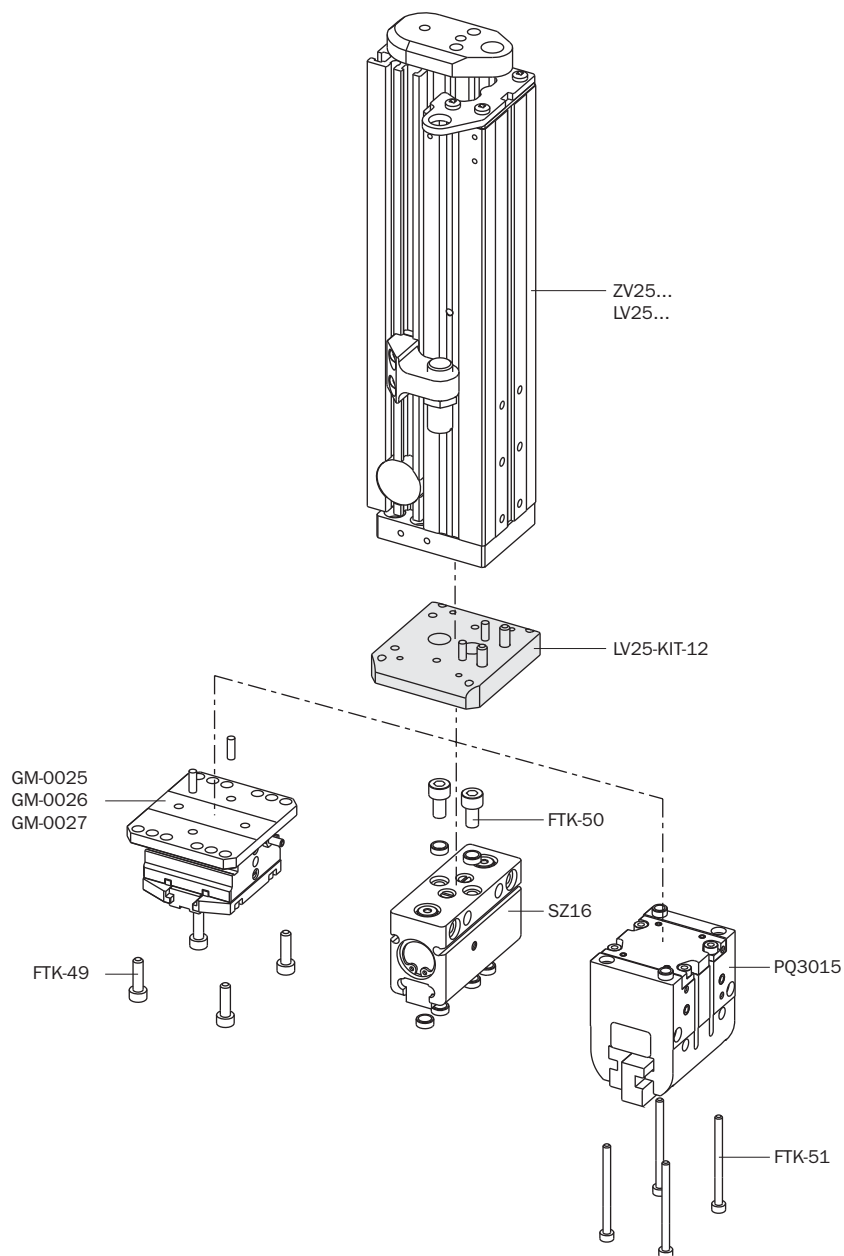
LV40-KIT-11

- Peso / Weight: 165g.

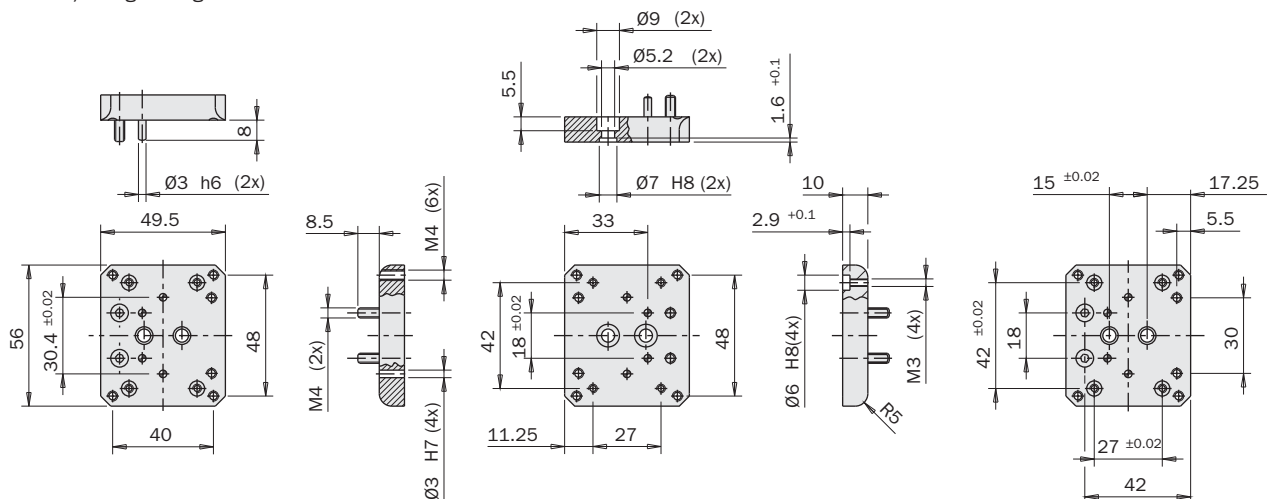


Esempio di applicazione con ZV25

Application example with ZV25

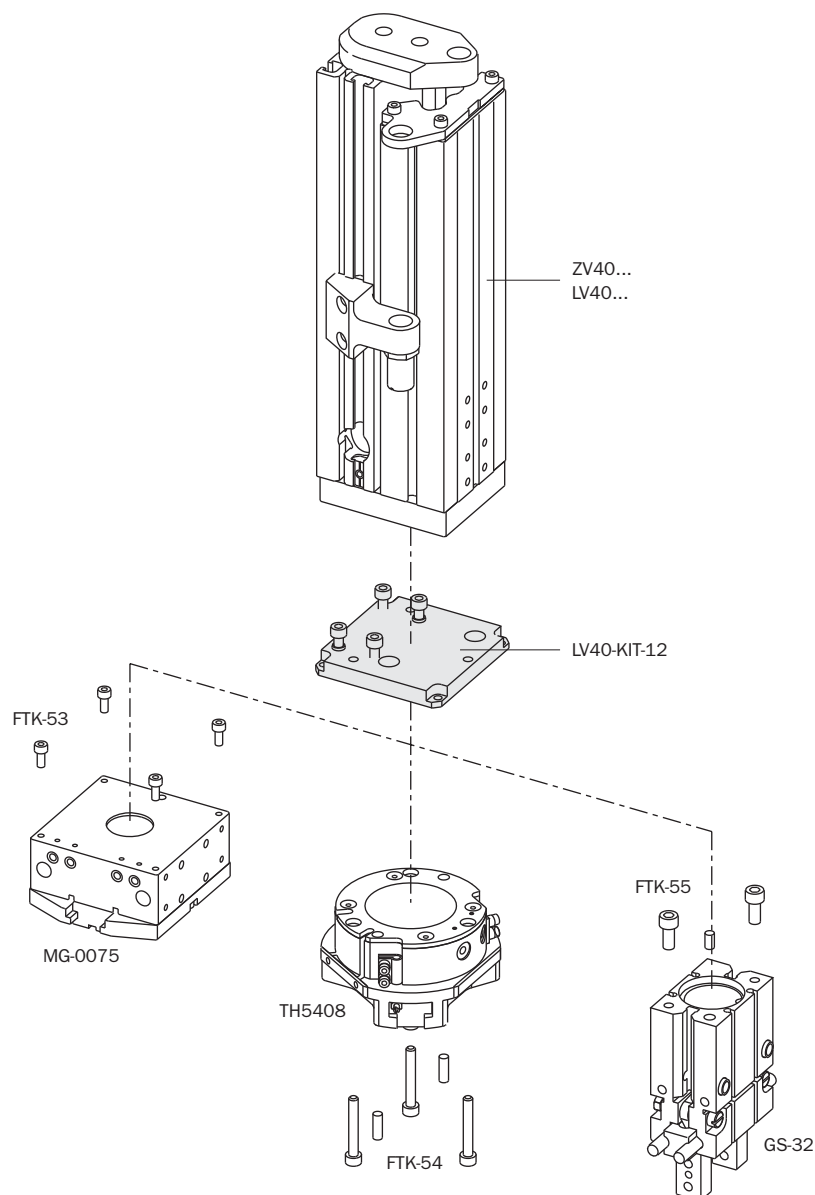
**LV25-KIT-12**

- Peso / Weight: 70g.

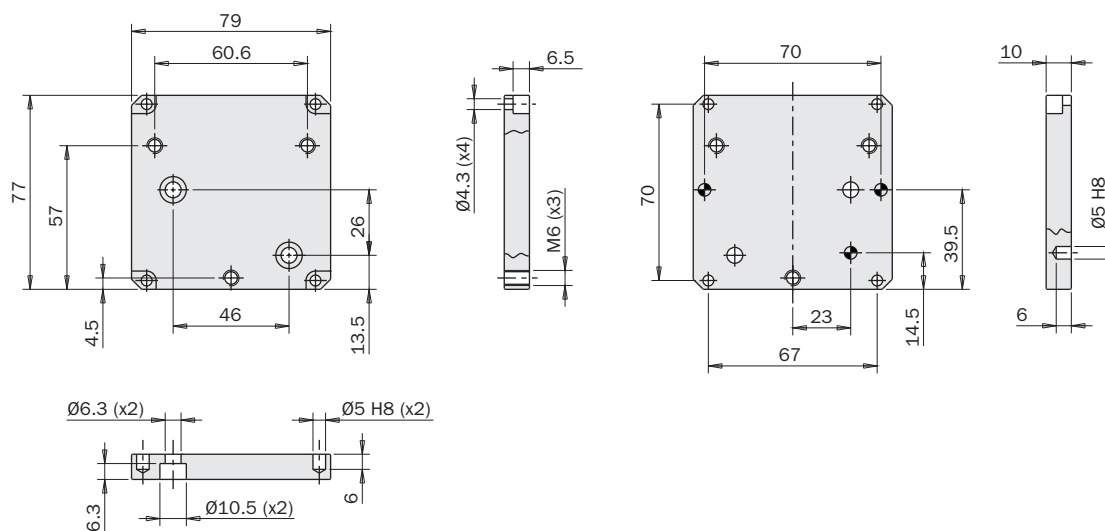


Esempio di applicazione con ZV40

Application example with ZV40

**LV40-KIT-12**

- Peso / Weight: 165g.

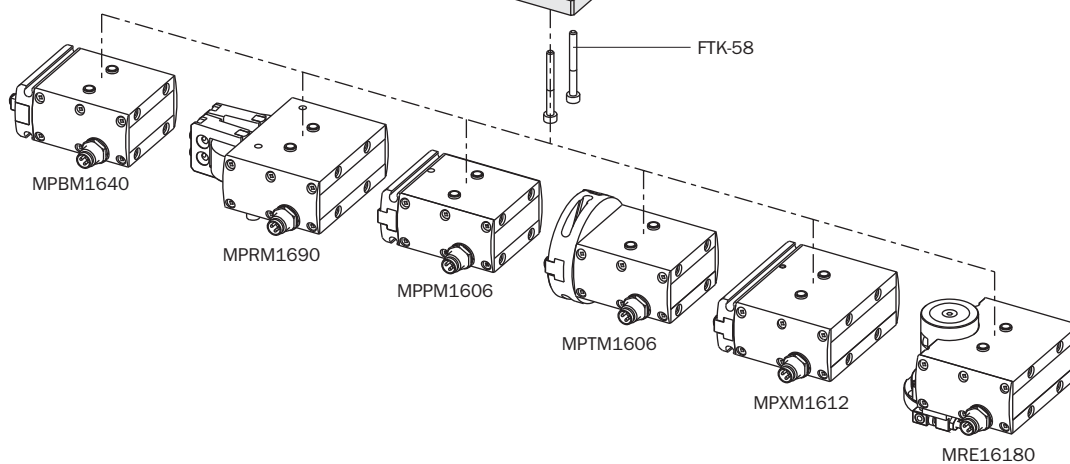
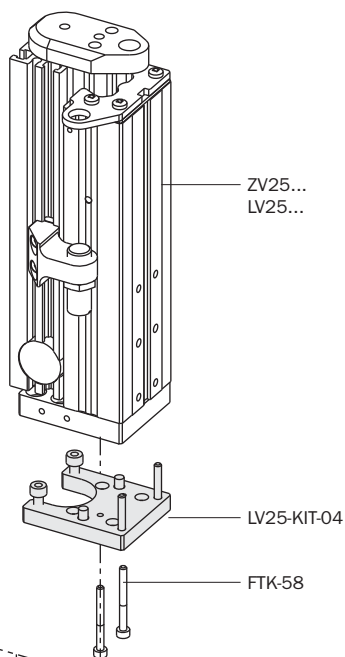
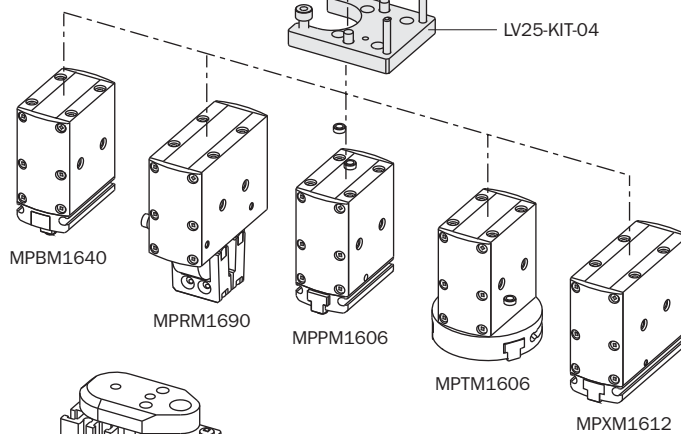
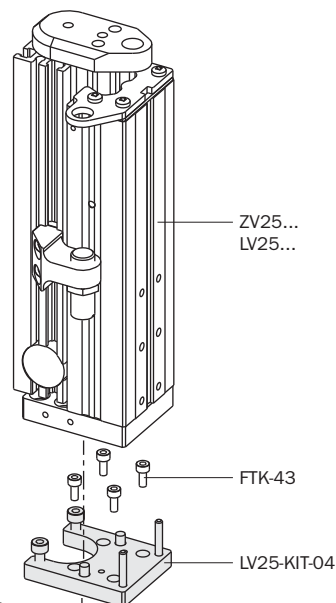
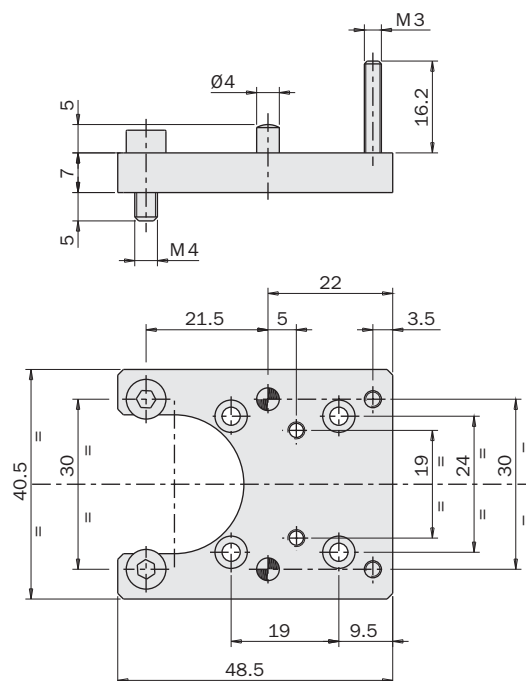


Esempio di applicazione con ZV25

Application example with ZV25

LV25-KIT-04

- Peso / Weight: 30g.

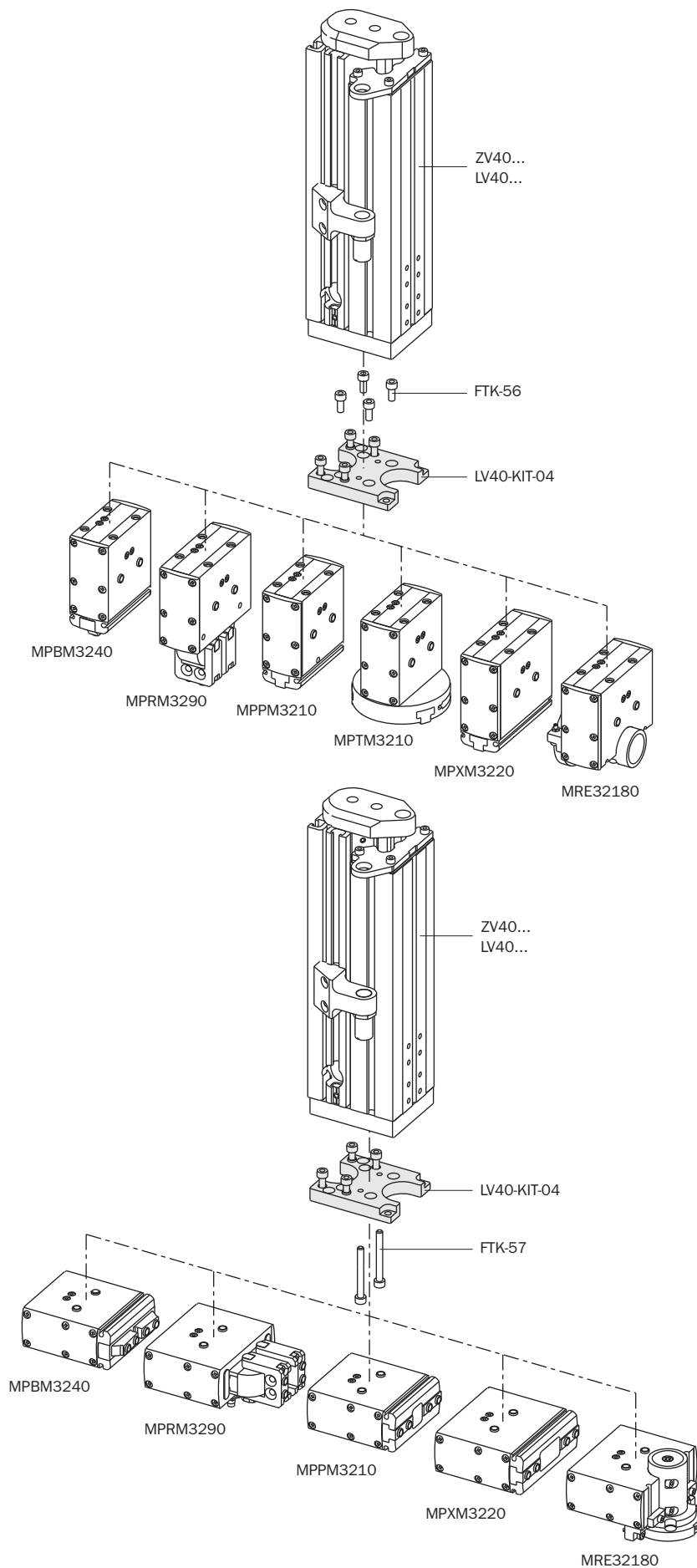
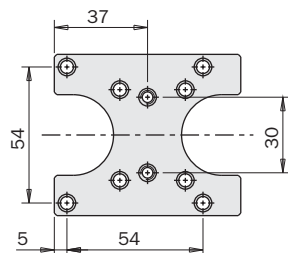
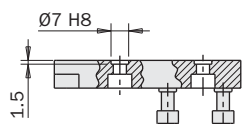
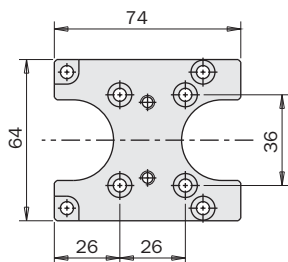
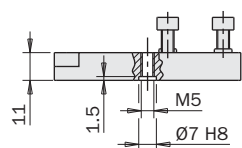


Esempio di applicazione con ZV40

Application example with ZV40

LV40-KIT-04

- Peso / Weight: 105g.



Versioni specchiate

Le versioni DS e DSKP hanno tutti gli accessori montati sul lato destro.

Ma se necessario, è facile spostare il grano (F) sull'altro lato e ruotare la piastra (N).

Su questa piastra va montato il dispositivo fine-corsa per l'apertura (deceleratore idraulico, ammortizzatore di gomma o grano).

Le versioni DSL e DSKL hanno tutti gli accessori montati sul lato sinistro e sono disponibili su richiesta.

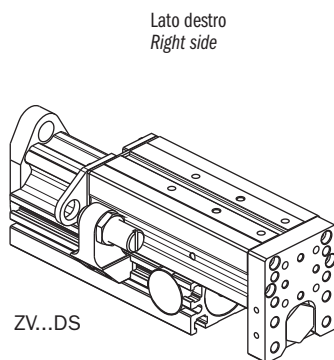
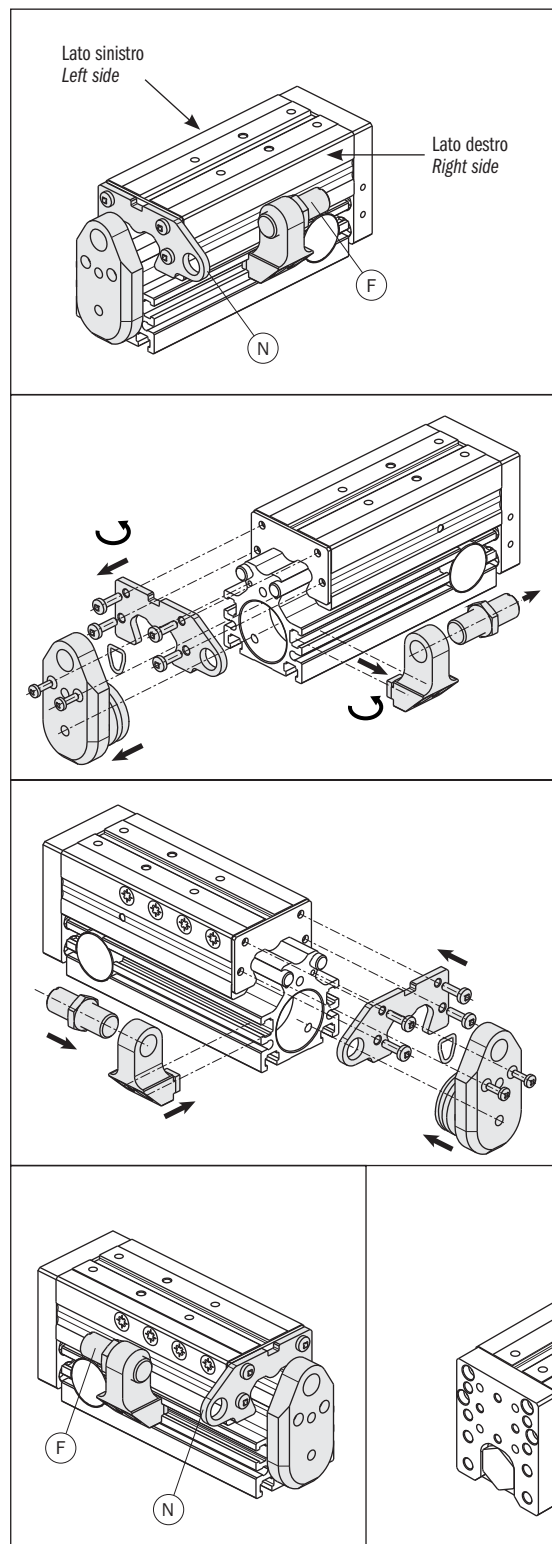
Mirrored versions

The DS and DSKP versions have all the accessories mounted on the right side.

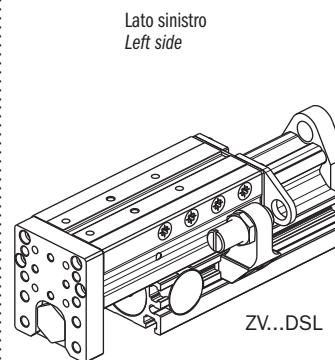
But if necessary, the grub screw (F) can easily be moved on the other side and the plate (N) be rotated.

On this plate the opening stroke end device must be mounted (hydraulic shock-absorber, rubber bumper or grub screw).

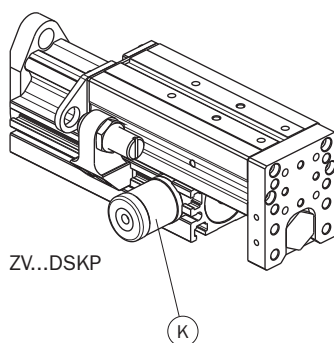
The DSL and DSKL versions have all the accessories mounted on the left side and they are available upon request.



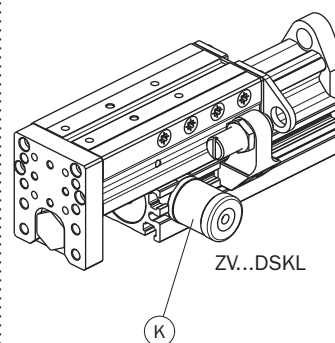
ZV...DS



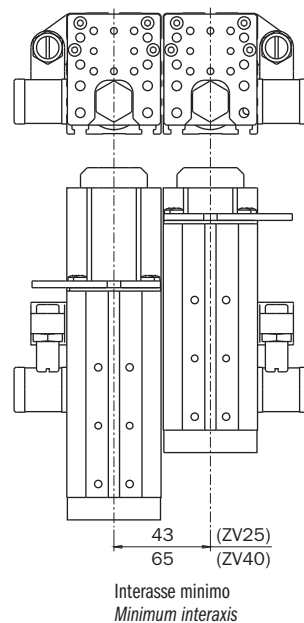
ZV...DSL



ZV...DSKP



ZV...DSKL



43 (ZV25)
65 (ZV40)

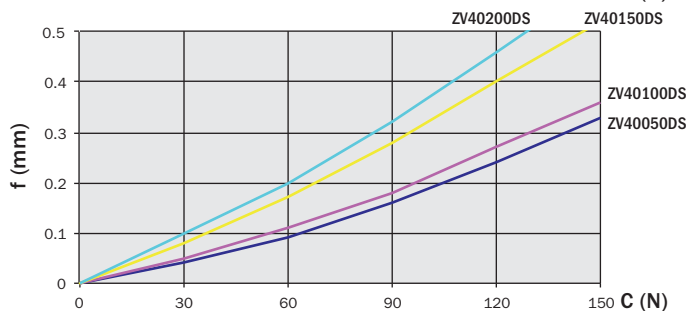
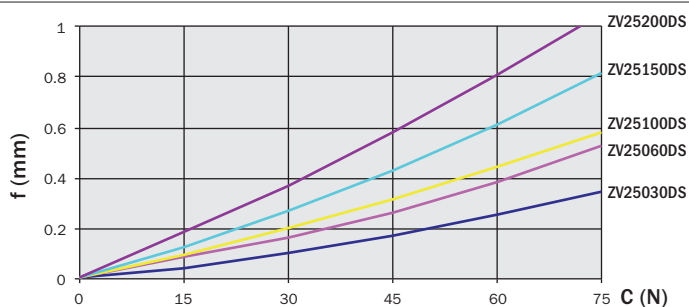
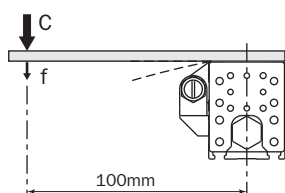
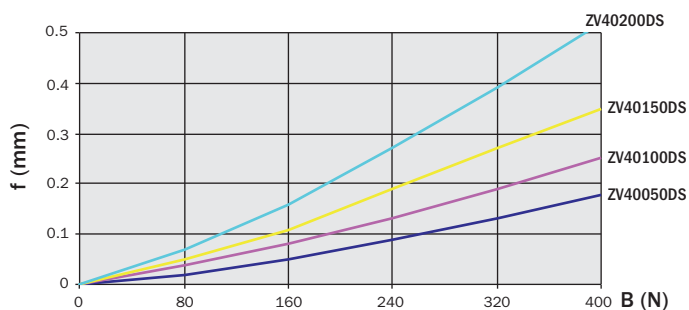
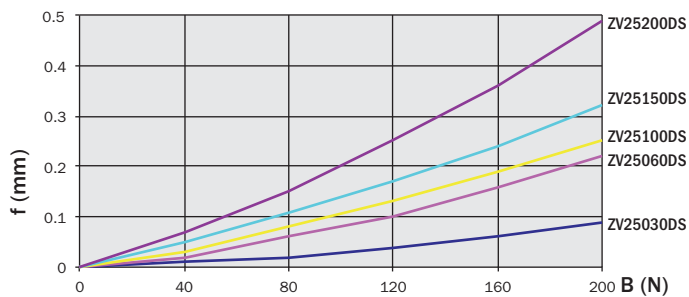
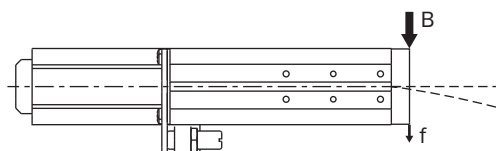
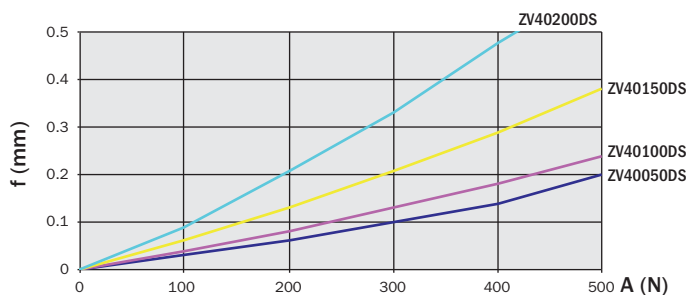
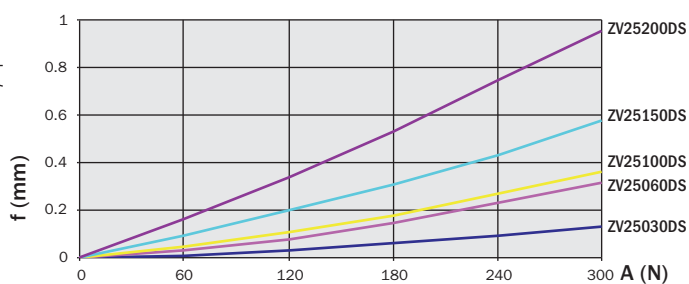
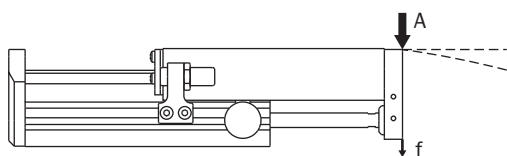
Interasse minimo
Minimum interaxis

Flessioni

I grafici mostrano la flessione f (mm) nei tre sensi indicati, in funzione delle forze A, B o C e della corsa della slitta.

Deflection

The graphs show the deflection f (mm) in the three directions shown, as a function of forces A, B or C and the stroke of the slide.



Carichi di sicurezza

Consultare le tabelle dei carichi ammissibili.
Carichi eccessivi possono danneggiare la slitta e comprometterne il funzionamento.

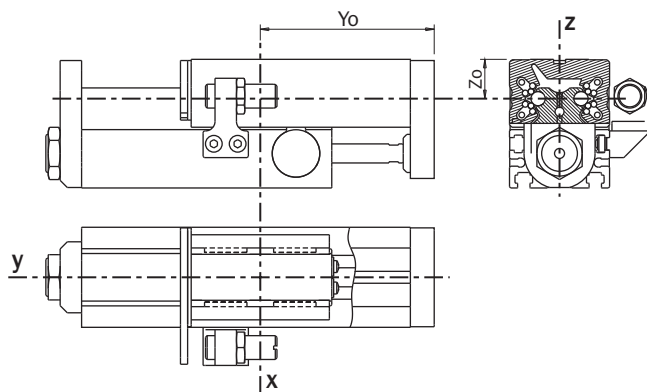
Le quote Y_o e Z_o identificano il centro del cuscinetto lineare.

$F_x s$, $F_z s$, $M_x s$, $M_y s$, $M_z s$ sono i carichi statici massimi ammissibili.

$F_x d$, $F_z d$, $M_x d$, $M_y d$, $M_z d$ sono i carichi dinamici massimi ammissibili.

I carichi statici sono quelli applicabili alla slitta quando il carrello è fermo, i carichi dinamici sono quelli applicabili durante il movimento.

Nelle tabelle è riportato anche il massimo peso trasportabile (m_{max}).



Safety loads

Check the tables below.

Excessive loads can damage the slide and cause functioning troubles.

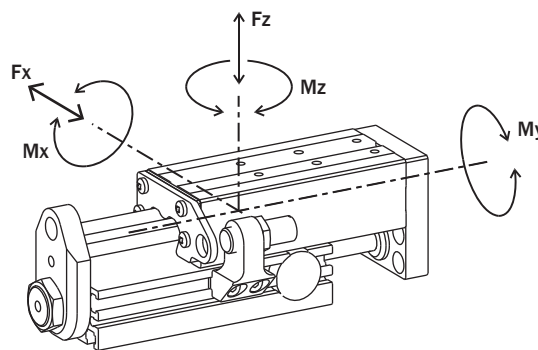
The dimensions Y_o and Z_o identify the linear bearing center position.

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

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

The static loads are those that can be applied to the slide when the carrier is motionless, the dynamic loads are those that can be applied when the carrier is running.

In the tables you can also find the maximum payload (m_{max}).



	ZV25030DS ZV25030DSKP	ZV25060DS ZV25060DSKP	ZV25100DS ZV25100DSKP	ZV25150DS ZV25150DSKP	ZV25200DS ZV25200DSKP
Z_o	16.5 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm
Y_o	73 mm	103 mm	157 mm	222 mm	287 mm
$F_x s$	80 N	80 N	120 N	160 N	200 N
$F_z s$	80 N	80 N	120 N	160 N	200 N
$M_x s$	9 Nm	9 Nm	20 Nm	32 Nm	40 Nm
$M_y s$	6 Nm	6 Nm	12 Nm	16 Nm	20 Nm
$M_z s$	9 Nm	9 Nm	20 Nm	32 Nm	40 Nm
$F_x d$	40 N	40 N	60 N	80 N	100 N
$F_z d$	40 N	40 N	60 N	80 N	100 N
$M_x d$	3 Nm	3 Nm	5 Nm	8 Nm	10 Nm
$M_y d$	2 Nm	2 Nm	3 Nm	4 Nm	5 Nm
$M_z d$	3 Nm	3 Nm	5 Nm	8 Nm	10 Nm
m_{max}	4 kg	4 kg	5 kg	5 kg	5 kg

	ZV40050DS ZV40050DSKP	ZV40100DS ZV40100DSKP	ZV40150DS ZV40150DSKP	ZV40200DS ZV40200DSKP
Z_o	21 mm	21 mm	21 mm	21 mm
Y_o	107 mm	178 mm	228 mm	278 mm
$F_x s$	160 N	250 N	250 N	250 N
$F_z s$	160 N	250 N	250 N	250 N
$M_x s$	24 Nm	56 Nm	56 Nm	56 Nm
$M_y s$	20 Nm	30 Nm	30 Nm	30 Nm
$M_z s$	24 Nm	56 Nm	56 Nm	56 Nm
$F_x d$	80 N	120 N	120 N	120 N
$F_z d$	80 N	120 N	120 N	120 N
$M_x d$	6 Nm	14 Nm	14 Nm	14 Nm
$M_y d$	5 Nm	8 Nm	8 Nm	8 Nm
$M_z d$	6 Nm	14 Nm	14 Nm	14 Nm
m_{max}	8 kg	10 kg	10 kg	10 kg

Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della slitta.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della slitta.

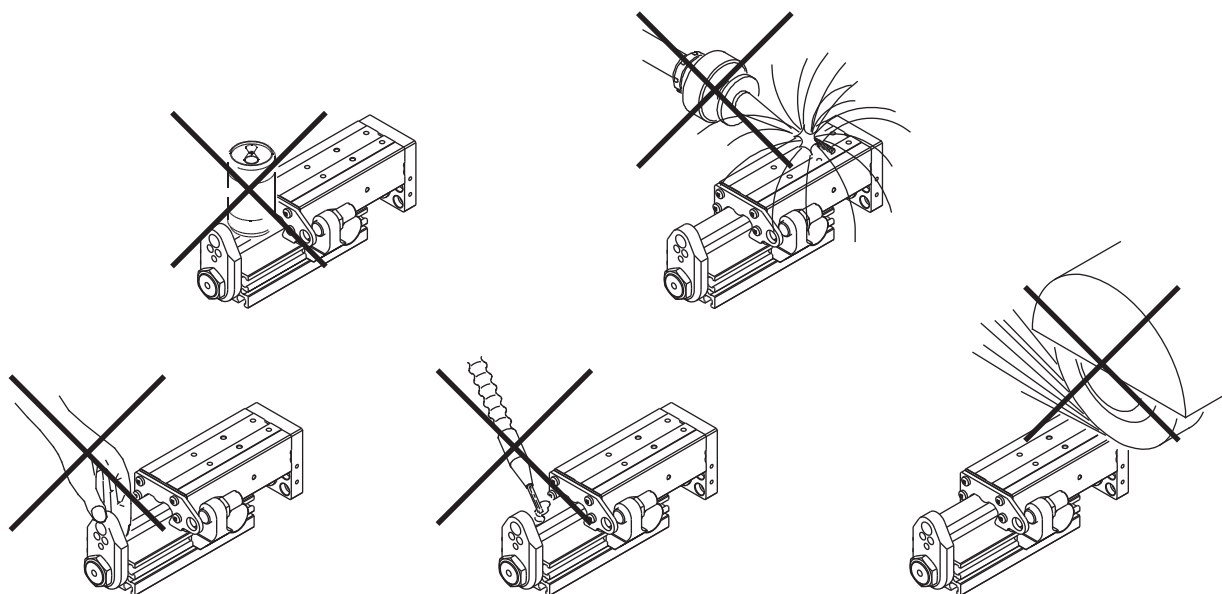
La slitta non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Cautions

Never let the slide come into contact with corrosive substances, soldering splashes or abrasive powders as they may damage the slide.

Never let non-authorised persons or objects stand 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.

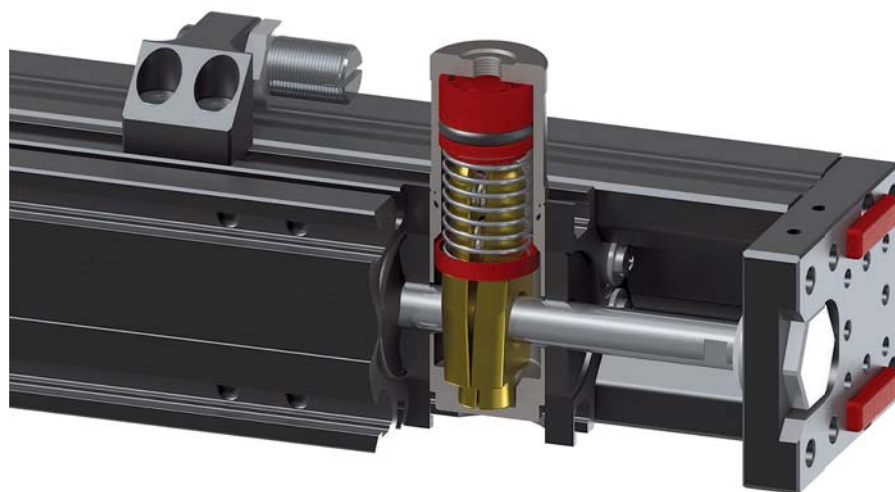


Bloccastelo

Le versioni KP/KL/KPB/KLB sono equipaggiate con un dispositivo per l'arresto d'emergenza: quando non è alimentato (minimo 3 bar), un freno blocca lo stelo.

Rod clamping device

The KP/KL/KPB/KLB versions are equipped with an emergency stopper device: when non pressurised (minimum 3 bar), a brake clamps the piston rod.



Connessione pneumatica

La slitta si alimenta con aria compressa dai fori posteriori (P e R) montandovi i raccordi dell'aria M5 ed i relativi tubi (non forniti).

Aria compressa in P: apertura.

Aria compressa in R: chiusura.

Aria compressa in S: sbloccaggio del blocco stelo.

Aria compressa in L: azionamento battuta meccanica dell'unità di arresto intermedio.

La slitta è azionata con aria compressa filtrata (5÷40 µm) non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita dell'unità.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.

Compressed air feeding

The slide is driven by compressed air supplied through the side air ports (P and R) with fittings M5 and relevant hoses (not supplied).

Compressed air in P: extension stroke.

Compressed air in R: retraction stroke.

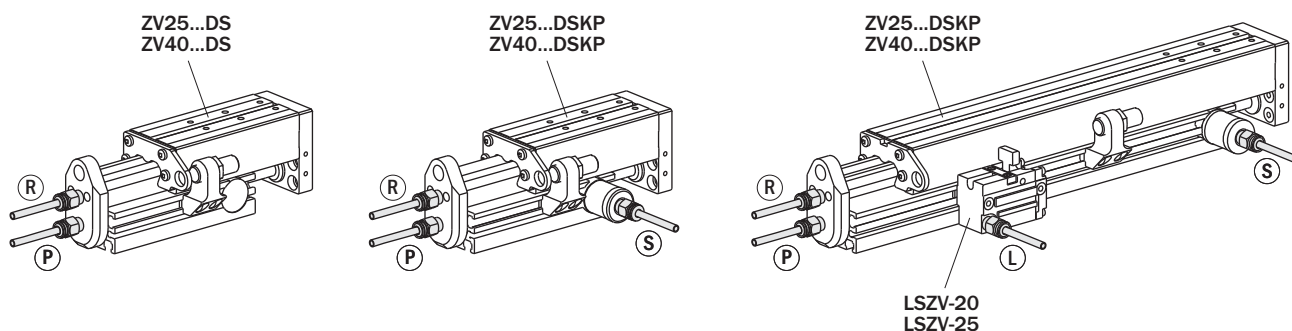
Compressed air in S: unclamping the rod clamping device.

Compressed air in L: actuation of the stroke end of the intermediate stopping unit.

The compressed air, must be filtered from 5 to 40 µm.

Maintain the medium selected at the start, lubricated or not, for the complete service life of the unit.

The pneumatic circuit must be pressurised progressively, to avoid uncontrolled movements.



Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione.
- 2- Riempimento all'avvio.
- 3- Improvvisa mancanza di pressione.
- 4- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (Q).
- 2- Valvola di avviamento progressivo (T).
- 3- Bloccastelo (K).
- 4- Regolatori di flusso (Z).

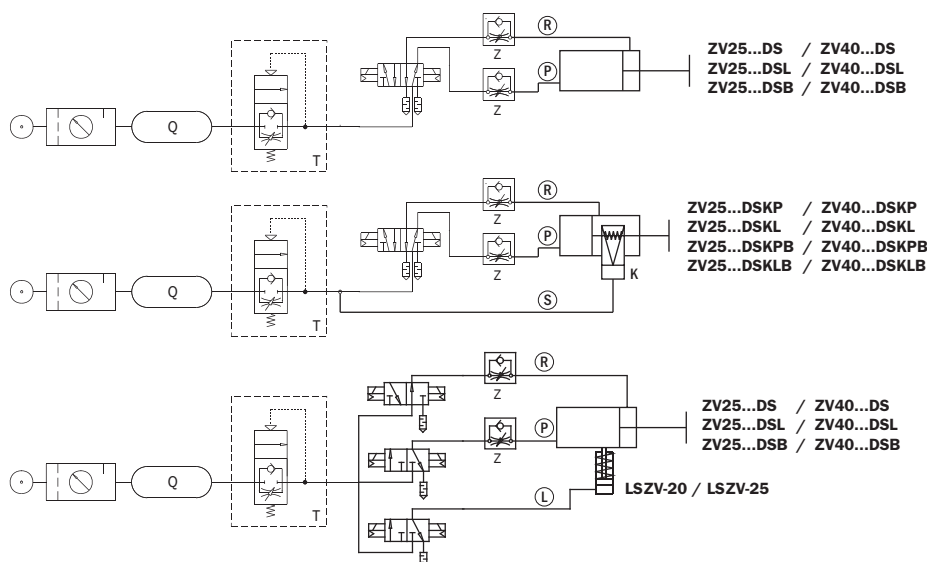
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variations.
- 2- Pressurising at start-up.
- 3- Sudden lack of pressure.
- 4- Excessive actuating speed.

Possible solutions:

- 1- Compressed air storage (Q).
- 2- Start-up valve (T).
- 3- Rod clamping device (K).
- 4- Flow controllers (Z).

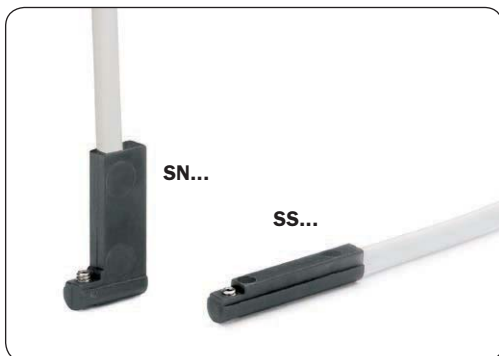


Sensori

Il rilevamento della posizione è affidato a uno o più sensori magnetici di prossimità (opzionali), che rilevano la posizione attraverso il magnete interno.

Quindi, per un corretto funzionamento, è da evitare l'impiego in presenza di forti campi magnetici od in prossimità di grosse masse di materiale ferromagnetico.

I sensori utilizzabili sono:



SN4N225-G	PNP	cavo 2.5m / 2.5m cable
SN4M225-G	NPN	cavo 2.5m / 2.5m cable
SN3N203-G	PNP	Connettore M8 / M8 connector
SN3M203-G	NPN	Connettore M8 / M8 connector
SS4N225-G	PNP	cavo 2.5m / 2.5m cable
SS4M225-G	NPN	cavo 2.5m / 2.5m cable
SS3N203-G	PNP	Connettore M8 / M8 connector
SS3M203-G	NPN	Connettore M8 / M8 connector

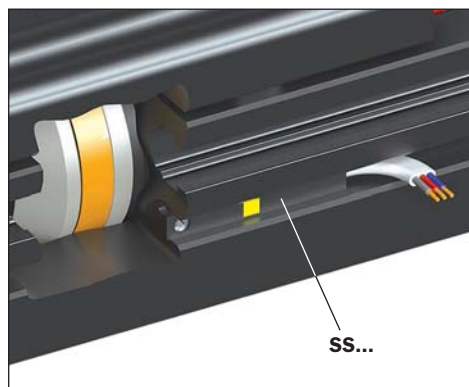
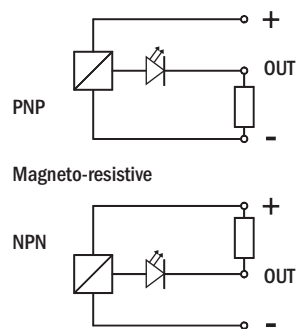
Sono tutti dotati di un cavo piatto a tre fili e di un led.

Sensors

The operating position is detected by magnetic proximity sensors (optional) through an internal magnet

The use of magnetic proximity sensors is therefore to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



Unità di arresto intermedio

Sono usate per arrestare con precisione assoluta, in posizioni intermedie, il carrello.

Un pistone, azionato pneumaticamente, fa sollevare una battuta meccanica, attraverso un leveraggio a ginocchiera, irreversibile.

Cessata l'alimentazione la battuta meccanica rientra in posizione di riposo mediante l'azione di una molla.

Un sensore induttivo (opzionale) rileva la posizione (9).

ZV25... + (1x) LSZV-20

ZV40... + (1x) LSZV-25

Una fermata intermedia

One intermediate stop



(1a)



(1b)



(1c)

Intermediate stopping units

They are used to stop the carrier, with high precision, in the intermediate positions.

One pneumatic piston lifts an irreversible mechanical stroke end by a toggle system.

Without pressure, the stroke end returns to the rest position by a reset spring.

An optional inductive sensor detects the position (9).

ZV25... + (2x) LSZV-20

ZV40... + (2x) LSZV-25

Due fermate intermedie

Two intermediate stops



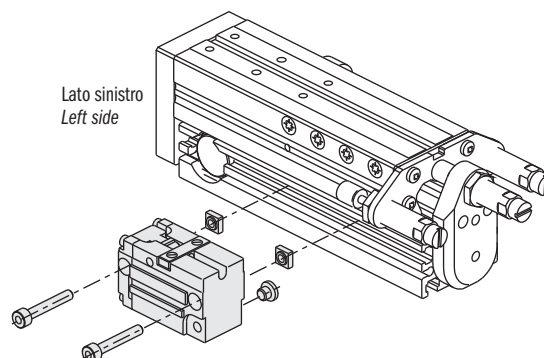
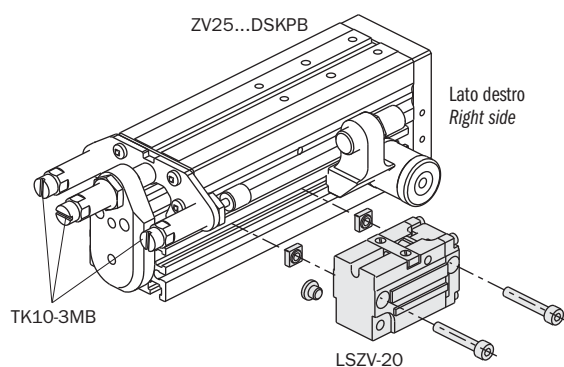
(2a)



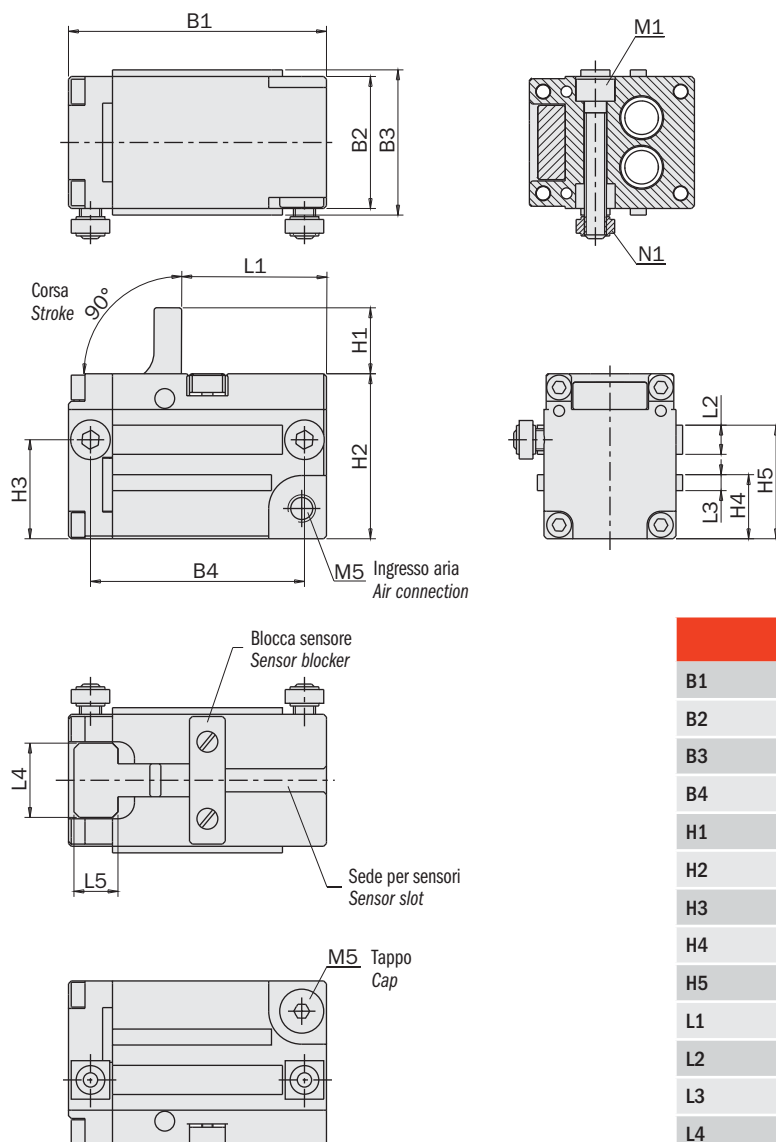
(2b)



(2c)

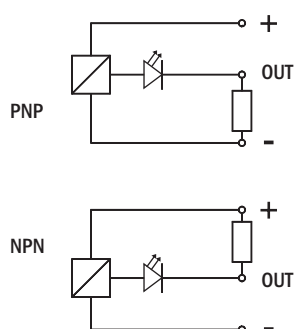


Dimensioni (mm) / Dimensions (mm)



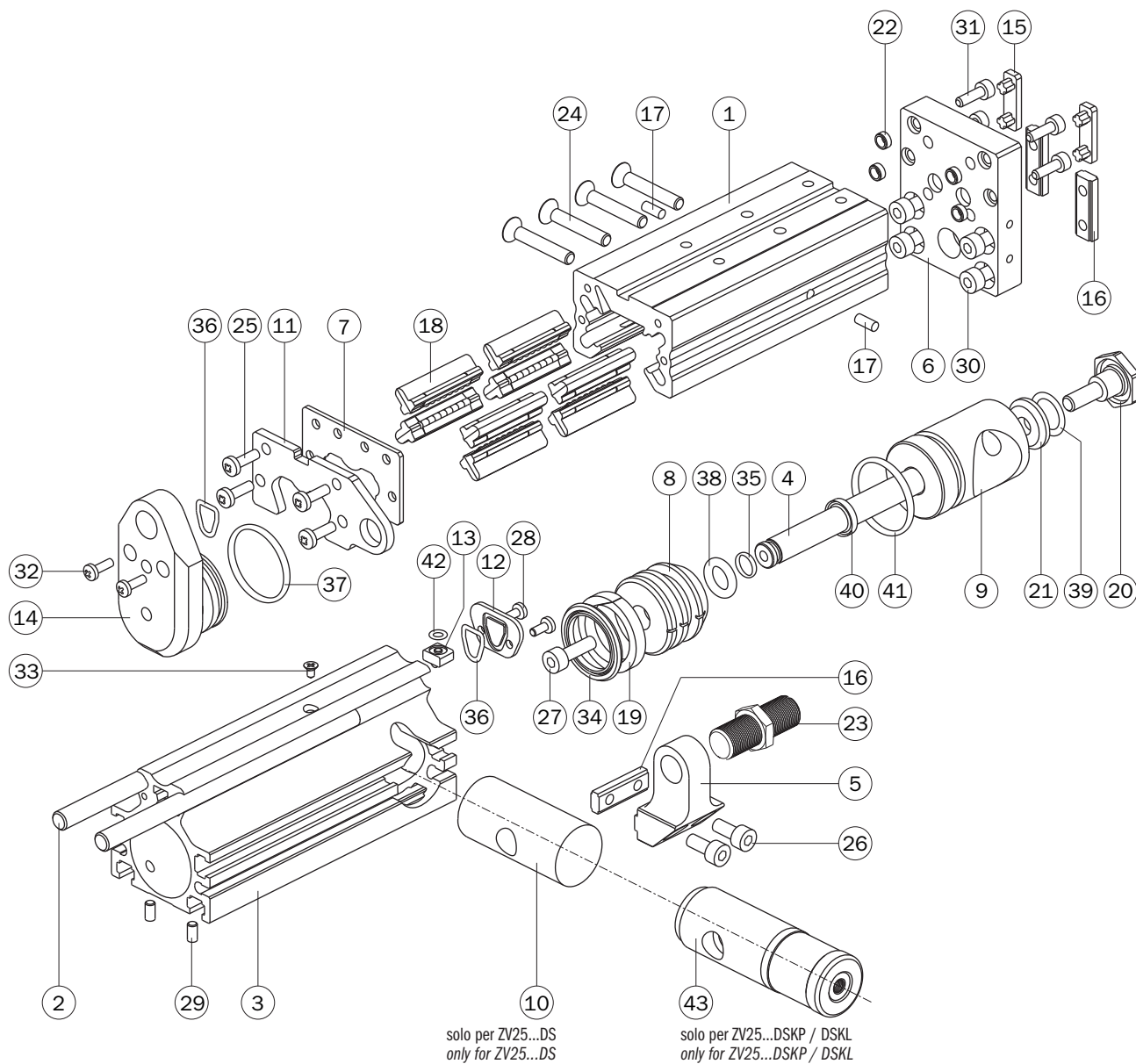
	LSZV-20	LSZV-25
B1	47	61
B2	24	31
B3	26.4	34
B4	38.9	51
H1	12	17.5
H2	30	37
H3	18	16.5
H4	11.65	-
H5	20.65	19.6
L1	26.3	34
L2	5.3	6.2
L3	2.9	-
L4	13.5	18.5
L5	8	11
M1	M4x25 (VITE-091)	M4x35 (VITE-117)
N1	MFM-058	MFI-177
per / for	ZV25	ZV40
Peso / Weight	100 g	230 g

SI4M225-G	NPN	Cavo 2.5m / 2.5m cable
SI4N225-G	PNP	Cavo 2.5m / 2.5m cable



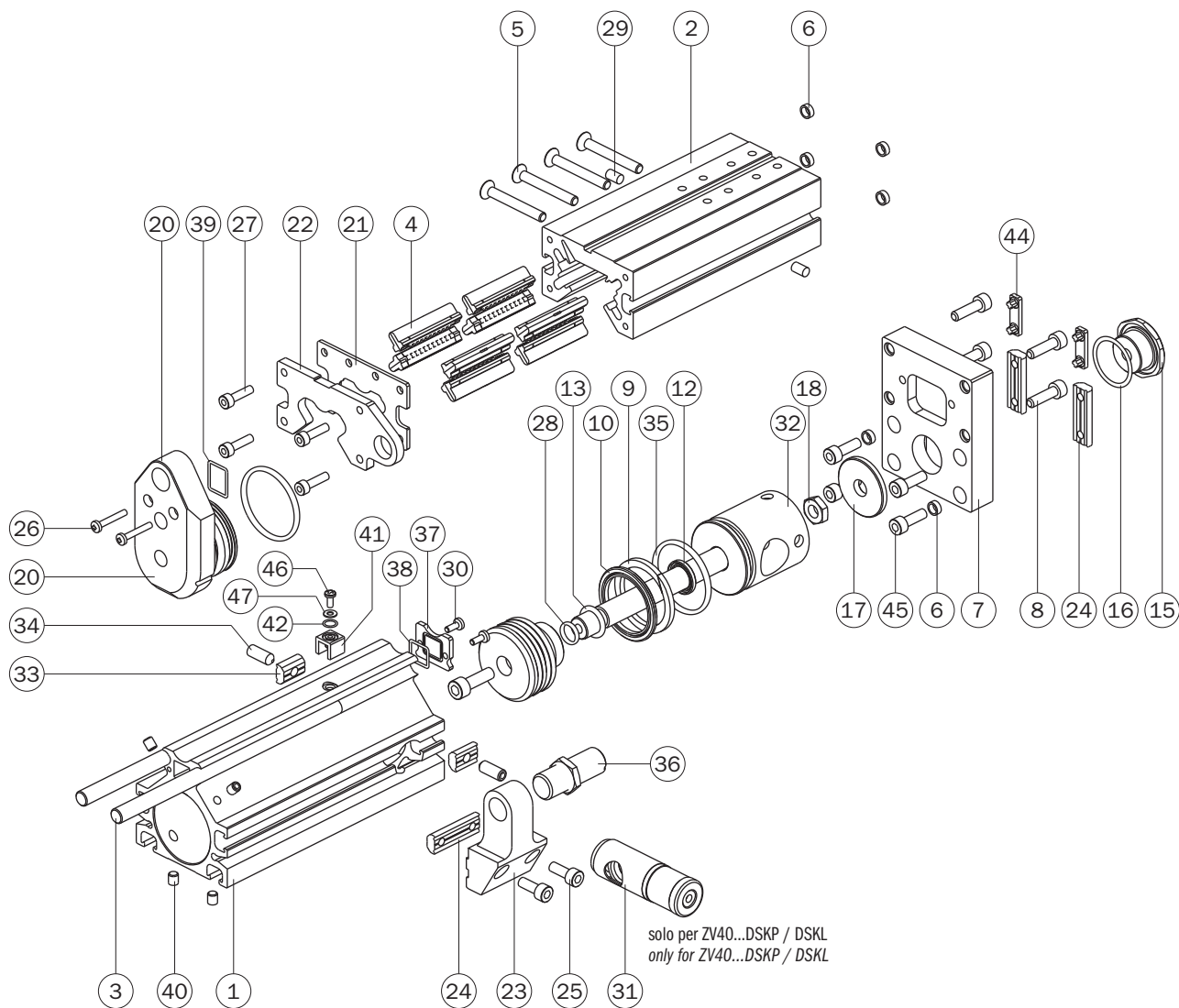
(9)





Elenco delle parti / Part list

		ZV25030DS ZV25030DSKP	ZV25060DS ZV25060DSKP	ZV25100DS ZV25100DSKP	ZV25150DS ZV25150DSKP	ZV25200DS ZV25200DSKP		
1	Carrello	ZV25030-02	ZV25060-02	ZV25100-02	ZV25150-02	ZV25200-02	Carrier	1
2	Colonna	ZV25030-03	ZV25060-03	ZV25100-03	ZV25150-03	ZV25200-03	Guide rod	2
3	Guida	ZV25030-19	ZV25060-09	ZV25100-09	ZV25150-09	ZV25200-09	Guide	3
4	Stelo	ZV25030-20	ZV25060-10	ZV25100-10	ZV25150-10	ZV25200-10	Rod	4
5	Supporto fine-corsa (M10x1)	ZV25030-11					Stroke end bracket (M10x1)	5
6	Testata carrello	ZV25030-10					Carrier end plate	6
7	Protezione carrello	ZV25030-06					Carrier position	7
8	Pistone Ø25	ZV25030-21					Piston Ø25	8
9	Flangia anteriore	ZV25030-22					Front flange	9
10	Tappo di bloccaggio	ZV25030-23					Locking plug	10
11	Portadeceleratore carrello	ZV25030-24					Shock-absorber holder carrier	11
12	Piastrina fermacolonne	ZV25030-25					Guide rod stopper	12
13	Clip passaggio aria	ZV25030-26					Air passage clip	13
14	Testata posteriore	ZV25030-27					Rear cap	14
15	Chiavetta di centraggio	ZV25030-30					Centering key	15
16	Dado M4	ZV25030-31					M4 nut	16
17	Spina	SPINA-090 (3x8 DIN 6325)					Pin	17
18	Cartuccia a ricircolo di sfere	C2521					Recirculating ball bearing	18
19	Magnete	PS-0025-P07					Magnet	19
20	Giunto	LP23-07					Joint	20
21	Rondella giunto	LP23-08					Joint washer	21
22	Boccola	ZBH-5 (354237)					Bush	22
23	Sottogruppo finecorsa	FPD1030-00					Stroke end subunit	23
24	Vite	VITE-092 (M4x25 DIN 965A INOX A2)					Screw	24
25	Vite	VITE-074 (M3x10 DIN 7985A INOX A2)					Screw	25
26	Vite	VITE-264 (M4x10 DIN 912 Z/B)					Screw	26
27	Vite	VITE-004 (M4x14 DIN 912 INOX A2)					Screw	27
28	Vite	VITE-444 (M2.5x6 DIN 7985A INOX A2)					Screw	28
29	Grano	VITE-024 (M3x6 DIN913 INOX A2)					Grub screw	29
30	Vite	VITE-286 (M4x12 DIN 912 Z/B)					Screw	30
31	Vite	VITE-302 (M3x10 DIN 912 Z/B)					Screw	31
32	Vite	VITE-008 (M2.5x8 DIN 7985A INOX A2)					Screw	32
33	Vite	VITE-292 (2.2x4.5 DIN 7982 Z/B)					Screw	33
34	Guarnizione	GUAR-003M (25x18x2.4)					Gasket	34
35	O-Ring	GUAR-098 (1x6)					O-Ring	35
36	O-Ring	GUAR-085 (1x8)					O-Ring	36
37	O-Ring	GUAR-025 (1.78x21.95)					O-Ring	37
38	O-Ring	GUAR-060 (2.62x7.6)					O-Ring	38
39	O-Ring	GUAR-080 (1.78x10.82)					O-Ring	39
40	Guarnizione	GUAR-228 (8x11.5x2.5)					Gasket	40
41	O-Ring	GUAR-025 (1.78x21.95)					O-Ring	41
42	O-Ring	GUAR-167 (1x3.5)					O-Ring	42
43	Bloccastelo	KP-08-350					Rod clamping device	43



Elenco delle parti / Part list

		ZV25060DS ZV25060DSKP	ZV25100DS ZV25100DSKP	ZV25150DS ZV25150DSKP	ZV25200DS ZV25200DSKP		
1	Corpo slitta	ZV40050-01	ZV40100-01	ZV40150-01	ZV40200-01	Slide Housing	1
2	Carrello	ZV40050-02	ZV40100-02	ZV40150-02	ZV40200-02	Carrier	2
3	Colonna	ZV40050-03	ZV40100-03	ZV40150-03	ZV40200-03	Guide rod	3
4	Cartuccia ricircolo di sfere	C-327				Recirculating ball bearing	4
5	Vite	VITE-272 (M5x40 DIN 7991 Z/B)				Screw	5
6	Boccola	ZBH-7 (390677)				Bush	6
7	Testata carrello	ZV40050-10				Carrier end plate	7
8	Vite	VITE-386 (M5x18 DIN912 Z/B)				Screw	8
9	Magnete	T40-10				Magnet	9
10	Guarnizione	GUAR-006P (40x31x3)				Gasket	10
11	Pistone Ø40	ZV40050-12				Piston Ø40	11
12	Guarnizione	GUAR-014 (18x12x3)				Gasket	12
13	O-Ring	GUAR-033 (2.62x11.91)				O-Ring	13
14	Stelo	ZV40050-04	ZV40100-04	ZV40150-04	ZV40200-04	Rod	14
15	Giunto	LL25-24				Joint	15
16	O-Ring	GUAR-008 (Ø1.78x23.52)				O-Ring	16
17	Rondella giunto	LL25-25				Joint washer	17
18	Dado	VITE-133 (M8 DIN 439B INOX A2)				Nut	18
19	Vite	VITE-011 (M6x20 DIN 912 INOX A2)				Screw	19
20	Testata posteriore	ZV40050-07				Rear cap	20
21	Coperchio carrello	ZV40050-06				Carrier cover	21
22	Supporto fine-corsa	ZV40050-24				Stroke end bracket	22
23	Supporto fine-corsa	ZV40050-32				Stroke end bracket	23
24	Dado M5 L=32	MFI-016				M5 nut L=32	24
25	Vite	VITE-048 (M5x14 DIN 912 INOX A2)				Screw	25
26	Vite	VITE-151 (M3x20 DIN 7985A INOX A2)				Screw	26
27	Vite	VITE-061 (M4x16 DIN 912 INOX A2)				Screw	27
28	O-Ring	GUAR-013 (1.78x8.73)				O-Ring	28
29	Spina	SPINA-048 (5x8 DIN 5402)				Pin	29
30	Vite	VITE-102 (M3x8 DIN 7985A INOX A2)				Screw	30
31	Bloccastelo	KP-12-600				Rod clamping device	31
32	Flangia anteriore	ZV40050-09				Front flange	32
33	Dado M6 L=15	MFI-178				M6 nut L=15	33
34	Grano	VITE-106 (M6x16 DIN 914)				Grub screw	34
35	O-Ring	GUAR-150 (2.62x29.82)				O-Ring	35
36	Fine-corsa	FPD1440-00				Stroke end	36
37	Piastrina fermacolonne	ZV40050-13				Guide rod stopper	37
38	O-Ring	GUAR-084 (1x14)				O-Ring	38
39	O-Ring	GUAR-073 (1x16)				O-Ring	39
40	Grano	VITE-373 (M5x6 DIN 913 Z/B)				Grub screw	40
41	Clip passaggio aria	ZV40050-14				Air passage clip	41
42	O-Ring	GUAR-098 (1x6)				O-Ring	42
43	O-Ring	GUAR-159 (Ø2.62x32.99)				O-Ring	43
44	Linguetta	ZV40050-30				Centering key	44
45	Vite	VITE-015 (M5x16 DIN 912 INOX A2)				Screw	45
46	Vite	VITE-479 (2.9x6.5 DIN7981F Z/B)				Screw	46
47	Rondella	VITE-161 (DIN 125B INOX)				Washer	47