ELGO ELECTRONIC

Series
FOW / FLW

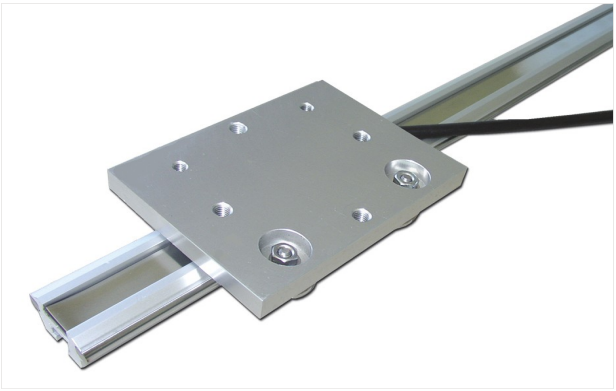
Linear Units with integrated Encoder System

Series *FOW/FLW* Linear Units with integrated Encoder System

General: These complete mechanical Linear Units solutions are equipped, with an integrated Linear Encoder system. Four different resolutions are deliverable: 0.1 mm / 0.025 mm / 0.01 mm).
The translator circuit, which converts the sensed sine waves into 90° phase shifted square waves, is integrated in the 9 pin D-SUB connector of the encode system (irrelevant for systems equipped with IZ16E indicator). Please see the Type designation (last page) for the different variants. The wear-free sensor head (protected by IP67) is already integrated in the carriage and guarantees the correct distance between sensor and magnetic tape
A further variant with a battery powered IZ16E Position Indicator (Resolution 0.1 mm) is available.
These can be fastened directly on the guide carriage by a mounting angle (accessories) or built into a panel.

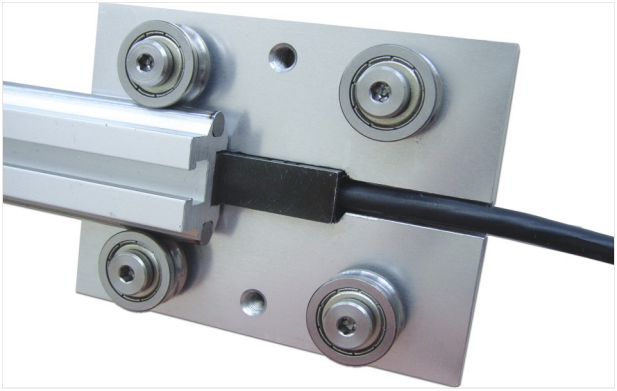
Product features:

- Resolution (0.1mm / 0.025 mm / 0.01 mm) deliverable
- Housing of 9– pin SUB-D connector integrated
- IP67 protected sensor head is integrated direct and propotional to the magnetic tape in the guide carriage



Open carriage

Closed Carriage



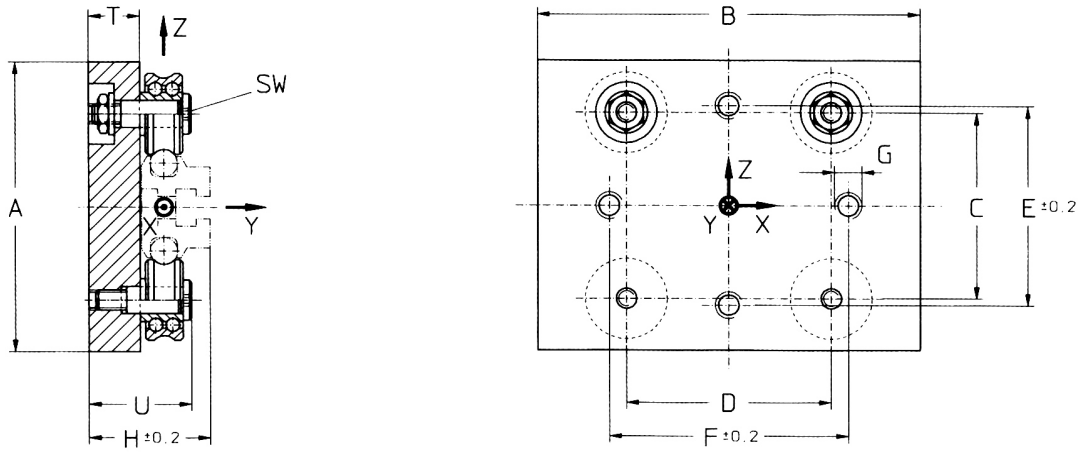
Location of the sensor (bottom side)

A further variant with a battery powered IZ16E Position Indicator (Resolution 0.1 mm) is available. These can be fastened directly on the guide carriage by a mounting angle (accessories) or built into a panel.

Mounting bracket (adjustable angle)

Mechanics of FOW-25-0200-1(4):

The carriage version represents a simplified variant to the closed one (below). In order to allow an adjustment, free from play of the guidance, the 4 castors are installed on 2 concentric and also on 2 eccentric axes.

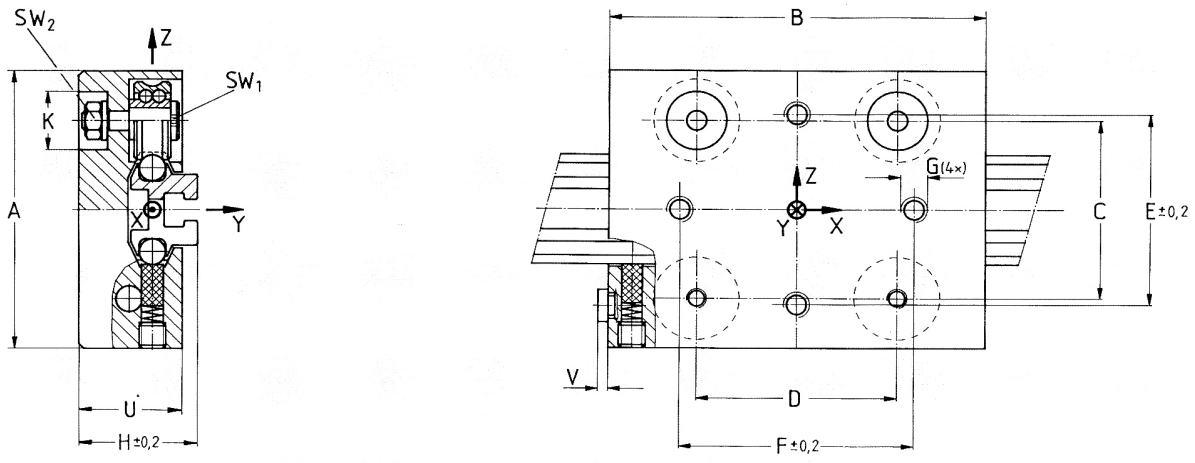


Type designation	H	A	B	T	U	C	D	E	F	G	SW
FOW-25-000-0	25	65	85	8.4	20.4	42	45	50	60	M5	3

Maximum Loads (in N)				Momenta in Nm					
$F_{y.zul}$	$F_{oy.zul}$	$F_{z.zul}$	$F_{oz.zul}$	$M_{x.zul}$	$M_{ox.zul}$	$M_{y.zul}$	$M_{oy.zul}$	$M_{z.zul}$	$M_{oz.zul}$
400	650	700	700	4,4	7,2	19	19	11	18

Mechanics of FLW-25-000-0:

The closed carriage variant is characterized by its compact, closed design and an optimized arrangement of the precision castors. The application-conformal guidance play respective a slight initial tension is sleeplessly adjustable. The mounting is not subject to any restrictions.
Elements for lubrication and also wipers are already integrated when ordering the mechanical variant "4" (see type designation). The castors are generally maintenance-free.



Type designation	H	A	B	C	D	K	U	V	E	F	G	SW_1	SW_2	Weight (kg) without encoder system
FLW-25-000-0 (resp. 4)	25.0	65	95	42	54	14	21	3	50	60	M 5x9	3	7	0,26

Maximum Loads (in N)				Momenta in Nm					
$F_{y, zul}$	$F_{oy, zul}$	$F_{z, zul}$	$F_{oz, zul}$	$M_{x, zul}$	$M_{ox, zul}$	$M_{y, zul}$	$M_{oy, zul}$	$M_{z, zul}$	$M_{oz, zul}$
400	650	700	700	4.4	7.2	19	19	11	18

Order reference:

For orders, please use the following order code:

FOW
FLW - ___ - __ - _ - _ - __ - __ . _ - _
AAA - BB - C - D - EE - FF.F - G

A Version
- 000 *ELGO* standard
- 001 First special version
- 009 Adressable version (4m/s)

B High
25 mm for standard rail

C Mechanic
- 0 without Stripper
- 4 with Stripper (FLW)

D Resolution x4 Flanken
- Z 0.1 mm with battery-operated indication IZ16E
- 1 0.025 mm (LMIX)
- 2 0.01 mm (EMIX)
- 3 0.1 mm with battery-operated indication (IZ15E)
- 7 0.001 mm (EMIX23)

E Supply / Signal
- 00 10-30 V DC/10-30 V DC
- 01 10-30 V DC/5V-TTL line driver
- 11 5V DC/5V-TTL line driver

F Cable length
in XX.X m with max. 20 m (IZ16E max. 1 m)

G Additional Measuring indicator (battery-operated)
- 0 without Measuring indicator
- 1 with IZ16E for external installation
- 2 with IZ16E of carriage mounted
- 3 with IZ15E for external installation

For Example:

FOW
FLW - 000 - 25 - 0 - Z - 00 - 01.0 - 0
AAA - BB - C - D - EE - FF.F - G

FOW/FLW ELGO standard, with 25 mm high, without stripper, 0.01 mm resolution with battery-operated indicator IZ16E, cable length 1 m and without measuring indicator.

Accessories:

FS25
- Guiding rail with/without magnetic tape
- Max. 3000 mm
- Plan-shaped joints

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