Range

Analyze the application to make sure that the proper encoder will be selected for the machine.

To do this, bear in mind the following considerations

Linear

Installation

Consider the physical length of the installation and the space available for it.

These aspects are crucial to determine the type of linear encoder to use (type of profile).

Accuracy

Each linear encoder comes with a graph showing its accuracy along its measuring length.

Signal

Consider the following variables for selecting the type of signal: Resolution, cable length and compatibility.

Resolution

The resolution of the control of machine-tools depends on the linear encoder.

Cable length

The length of the cable depends on the type of signal.

Speed

The speed requirements for the application must be analyzed before choosing the linear encoder.

Shock and Vibration

Fagor linear encoders withstand vibrations of up to 20 g and shocks of up to 30 g.

Alarm signal

Models SW / SOW / SSW and GW / GOW /GSW offer the alarm signal AL.

Angular

Installation

This point considers the physical dimensions of the installation and the space available for it.

It is essential to determine its type of shaft: Hollow or solid.

Accuracy

Each encoder comes with a graph showing its accuracy along its measuring length.

Alarm signal

Models H-D200, H-D90, S-D170, S-1024-D90 and S-D90 offer the alarm signal AL.

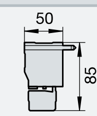
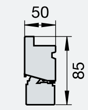
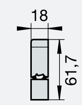
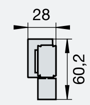
Rotary

Installation

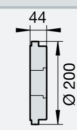
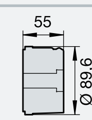
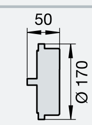
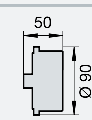
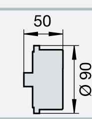
This point considers the physical dimensions of the installation and the space available for it.

It is essential to determine its type of shaft: Hollow or solid.

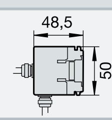
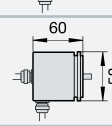
Linear

Series	Section	Measuring lengths
L Long	 50, 85	400 mm to 60 m
G Wide	 50, 85	140 mm to 3 040 mm
S Reduced	 18, 61,7	70 mm to 1 240 mm
SV Reduceds	 28, 60,2	70 mm to 2 040 mm

Angular

Series	Section	Type of shaft
H-D200	 44, Ø 200	Hollow shaft
H-D90	 55, Ø 89,6	Hollow shaft
S-D170	 50, Ø 170	Solid shaft
S-1024-D90	 50, Ø 90	Solid shaft
S-D90	 50, Ø 90	Solid shaft

Rotary

Series	Section	Type of shaft
H	 48,5, 50	Hollow shaft
S	 60, 58	Solid shaft

Accuracy	Signals	Pitch Resolution up to	Model	Page
± 5 µm	∿ 1 Vpp	0.1 µm	LP / LOP	38 and 39
	⊔⊓ TTL	1 µm	LX / LOX	
± 5 µm and ± 3 µm	∿ 1 Vpp	0.1 µm	GP / GOP / GSP	40 and 41
	⊔⊓ TTL	1 µm	GX / GOX / GSX	
	⊔⊓ TTL	0.5 µm	GY / GOY / GSY	
	⊔⊓ TTL	0.1 µm	GW / GOW / GSW	
	⊔⊓ TTL	0.05 µm	GZ / GOZ / GSZ	
± 5 µm and ± 3 µm	∿ 1 Vpp	0.1 µm	SP / SOP / SSP	42 and 43
	⊔⊓ TTL	1 µm	SX / SOX / SSX	
	⊔⊓ TTL	0.5 µm	SY / SOY / SSY	
	⊔⊓ TTL	0.1 µm	SW / SOW / SSW	
	⊔⊓ TTL	0.05 µm	SZ / SOZ / SSZ	
± 5 µm and ± 3 µm	∿ 1 Vpp	0.1 µm	SVP / SVOP / SVSP	44 and 45
	⊔⊓ TTL	1 µm	SVX / SVOX / SVSX	
	⊔⊓ TTL	0.5 µm	SVY / SVOY / SVSY	
	⊔⊓ TTL	0.1 µm	SVW / SVOW / SVSW	
	⊔⊓ TTL	0.05 µm	SVZ / SVOZ / SVSZ	

Accuracy	Signals	Model	Page
± 2” (arc-seconds)	∿ 1 Vpp	HP-D200 / HOP-D200	46
	⊔⊓ TTL	H-D200 / HO-D200	
± 5”, ± 2,5” (arc-seconds)	∿ 1 Vpp	HP-D90 / HOP-D90	47
	⊔⊓ TTL	H-D90 / HO-D90	
± 2” (arc-seconds)	∿ 1 Vpp	SP-D170 / SOP-D170	48
	⊔⊓ TTL	S-D170 / SO-D170	
± 5” (arc-seconds)	∿ 1 Vpp (dual feedback)	SP/SOP 18000-1024-D90	49
	⊔⊓ TTL (dual feedback)	S/SO 18000-1024-D90 S/SO 90000-1024-D90	
± 5”, ± 2,5” (arc-seconds)	∿ 1 Vpp	SP-D90 / SOP-D90	50
	⊔⊓ TTL	S-D90 / SO-D90	

Accuracy	Signals	Model	Page
± 1/10 of the pitch	∿ 1 Vpp	HP	52 and 53
	⊔⊓ TTL	H / HA	
± 1/10 of the pitch	∿ 1 Vpp	SP	52 and 53
	⊔⊓ TTL	S	