



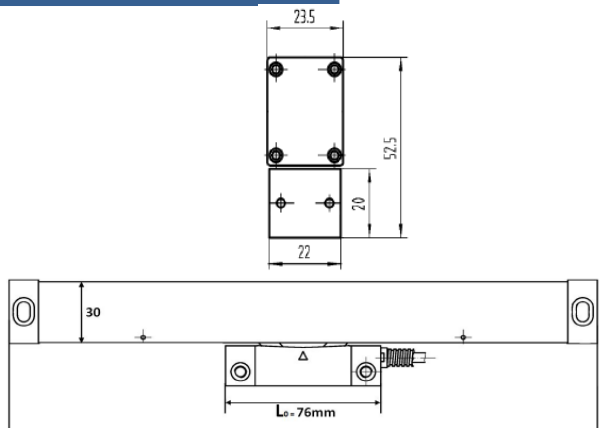
- Optical Measuring
- Glass Scale
- 5 ball bearing system
- Single or double gasket protection
- High resolution up to 1 µm
- 5 VDC TTL Quadrature or 1 Vpp Sinusoidal
- Easy mounting
- Measuring lengths 50 mm – 1000 mm
- 60 m/min movement speed

ALS series Optic Linear Encoder Systems are protected from dust, chips and splash fluids and are ideal for operation on machine tools.

ALS5 optically measuring with glass ruler can measure between 50 and 1000 mm.

Connection			
PIN NR	CABLE COLOUR	TTL SIGNAL	SINUS SIGNAL
1	WHITE	A	0°
2	BROWN	/B	180°
3	RED	+5VDC	+5VDC
4	BLACK	0V – GND	0V – GND
5	BLUE	/A	90°
6	GREEN	B	270°
7	YELLOW	/Z	Z
8	GREY	Z	VACANT
9	-	SHIELD	SHIELD

Technical Specifications	
Resolution	1µm, 5µm or 1Vpp Sinusoidal
Output	5VDC TTL Quadrature or 1Vpp Sinusoidal
Output Signals	TTL: A, /A, B, /B, Z, /Z
Grating pitch / Signal Period	20 µm
Supply Voltage	5 VDC
Accuracy	± 10 µm
Movement Speed	60 m/min
Repeatability	± 1 Pulse
Body Material	Aluminum
Reference Mark	1 Reference Mark Every 50 mm
Storage Temperature	-40 to +55°C
Operating Temperature	0 to +50°C
Protection Class	IP54
Cable Length	50 – 500 mm scale (3 meters armored cable) 600 – 2000 mm scale (5 meters armored cable)

Mechanical Dimensions	
	
$L = \text{Stroke} + L_0 + 128 [2 (50 + 14)]$	

Order Code	
Model	Measuring Stroke
	50 : 50 mm
	200 : 200 mm
	500 : 500 mm
	1000 : 1000 mm
ALS 4	Resolution
-	01 : 1µm
X	05 : 5µm
-	S : Sinusoidal
X	
X	
X	
Signal Output Type	
6 : A, /A, B, /B, Z, /Z	
Standard, 1 Z signal per 50 mm	
Optional one Z reference signal	