

OPTICAL LINEAR ENCODER

"Thick Body, Long Distance Measurement"

ALS-6



- Optical measurement
- Measuring lengths from 50 mm to 3200 mm
- High resolution up to 1 μm
- ±10µm accuracy
- 5 ball bearing system
- Single seal protection
- 5 VDCTTLguadrature or 1vpp sinusoidal output signal
- Easy mounting
- 60 m/min traveling speed

ALS series optical linear encoder systems are protected from factors such as dust, shavings, dirt and coolant with its compact design. ALS6 series, which has optical measuring principle with glass ruler, can measure between 50 and 3200mm.

APPLICATIONS

Manuel Benches

Press Brakes and Bending Machines

Robotic / Material Packaging

Linear Bearing Systems

Automation and Robotic Applications

Textile Machinery

Transfer Machines Turning, Milling

Woodworking machines etc.

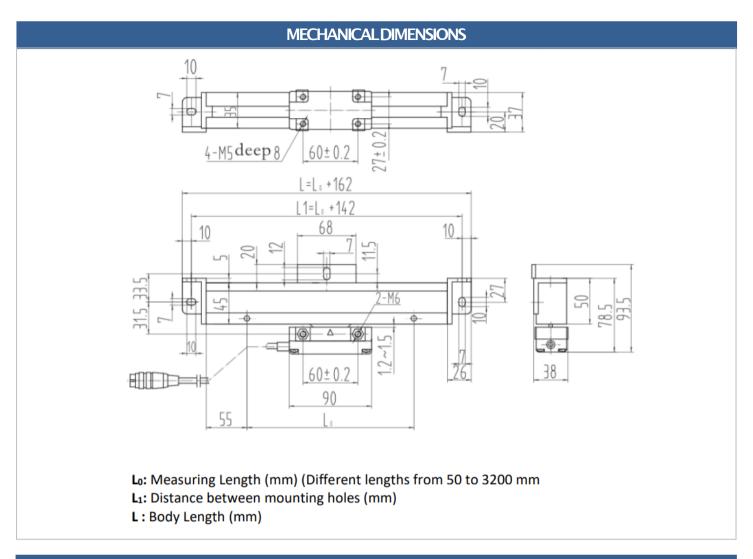
TECHNICAL FEATURES				
Measuring Type	Optical	Reference Mark	1 reference mark at every 50 mm	
Measuring Lengths	Different lengths from 50 mm to 3200 mm	Body Material	Aluminum	
Resolution	1μm, 5μm or 1Vpp sinusoidal	Operating Temperature	0°C50°C	
Signal Period	20 μm	Storage Temperature	−20°C70°C	
Accuracy	±10 μm	Protection Class	IP54	
Repeatability	±1 pulse		Spiral cable and socket (For TTL	
Max traveling speed	60m/min	Electrical Connection Signal:D–SUB 9 pin male socket / Find Signal: M16/8 pin female socket /		
Supply Voltage	5 VDC		-	
Output Type	5VTTL or 1Vpp Sinusoidal	Max cable length	50-500mm(3m armoured cable) 600-2000mm(5m armoured cable)	

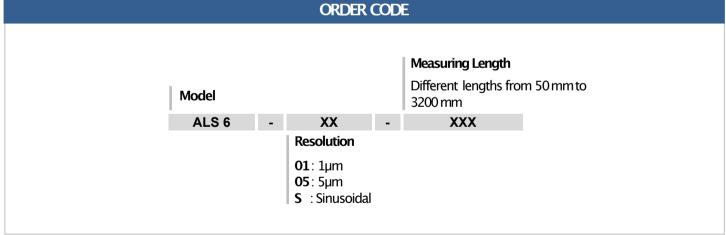
ELECTRICAL CONNECTIONS

		D-SUB9 PIN SOCKET	M16/8 PIN FEMALE SOCKET
		1 2 3 4 5 6 7 8 9 9	$ \begin{pmatrix} 6 \circ 7 \circ 2 \\ 0 \circ 0 \circ 0 \\ 5 \circ 4 \circ 3 \end{pmatrix} $
PIN NO	CABLE COLOR	TTLSIGNAL	SINUS SIGNAL
1	WHITE	Α	0°
2	BROWN	/B	180°
3	RED	+5VDC	+5VDC
4	BLACK	0V-GND	0V-GND
5	BLUE	/A	90°
6	GREEN	В	270°
7	YELLOW	/Z	Z
8	GREY	Z	N/C

In the table, the cable colors of sensors output signals are given. If the control circuit is suitable, in the line driver sensors, the not signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.

DS-ALS.005 Rev No:2





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