

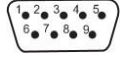


General Characteristics:

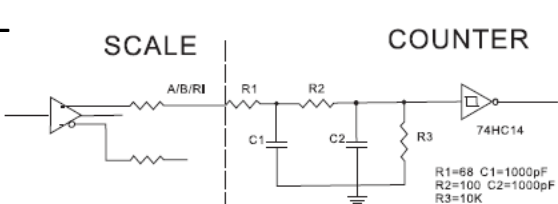
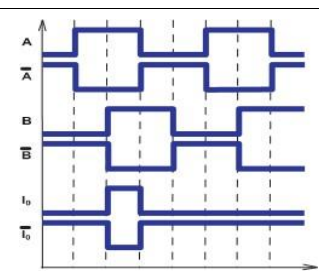
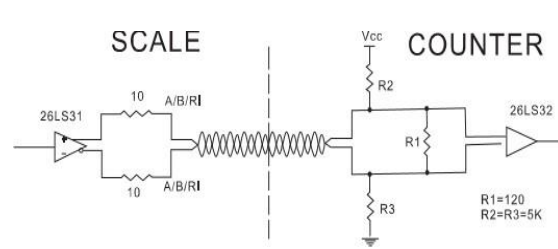
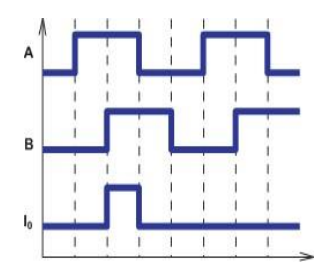
- Resolutions up to 1 μ m
- Cross Size 22 x 52.8 mm²
- Max Measuring Length: 1070mm



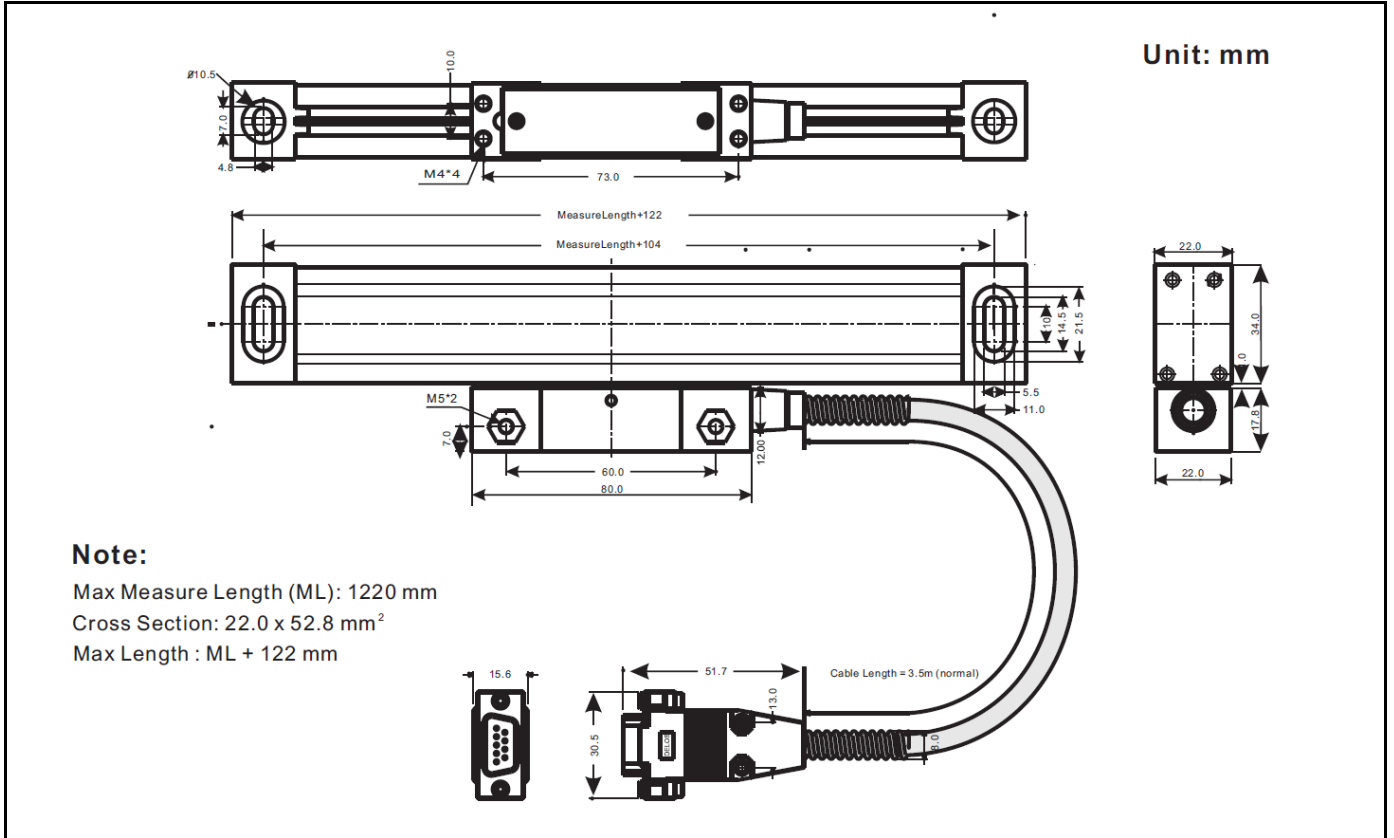
Mechanical and Electrical Features

Grating Pitch	20 μ m	DSUB-9  <table border="1"> <thead> <tr> <th>Pin</th> <th>TTL Signal</th> <th>EIA422 Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-</td> <td>\bar{A}</td> </tr> <tr> <td>2</td> <td>0V</td> <td>0V</td> </tr> <tr> <td>3</td> <td>-</td> <td>\bar{B}</td> </tr> <tr> <td>4</td> <td>GND</td> <td>GND</td> </tr> <tr> <td>5</td> <td>-</td> <td>\bar{R}</td> </tr> <tr> <td>6</td> <td>A</td> <td>A</td> </tr> <tr> <td>7</td> <td>5V</td> <td>5V</td> </tr> <tr> <td>8</td> <td>B</td> <td>B</td> </tr> <tr> <td>9</td> <td>R</td> <td>R</td> </tr> </tbody> </table>	Pin	TTL Signal	EIA422 Signal	1	-	\bar{A}	2	0V	0V	3	-	\bar{B}	4	GND	GND	5	-	\bar{R}	6	A	A	7	5V	5V	8	B	B	9	R	R
Pin	TTL Signal		EIA422 Signal																													
1	-		\bar{A}																													
2	0V		0V																													
3	-		\bar{B}																													
4	GND		GND																													
5	-		\bar{R}																													
6	A		A																													
7	5V		5V																													
8	B		B																													
9	R		R																													
Thermal Expansion	10.6 x 10																															
Resolution	1 - 5 μ m																															
Repeatability	± 1 increment																															
Max Speed m/min	60 (5 μ m); 20 (1 μ m)																															
Output type	TTL / EIA422A																															
Max. Acceleration	20 m/S																															
Protection	IP54																															
Power supply	60mA Max.																															
Phase displacement	90° \pm 5° electrical																															
Operating temperature	0° – 50°																															
Storage temperature	-20° – 80°																															
Humidity	100% not condensed																															

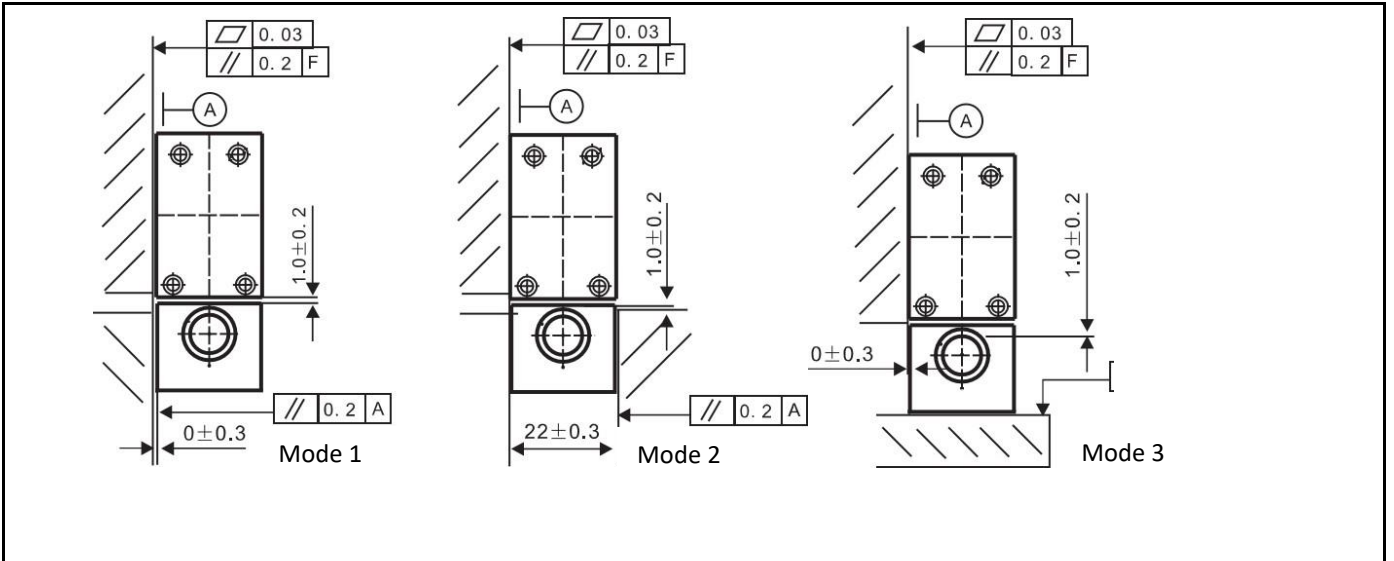
Interface Circuit and output signals

INTER FACE CIRCUIT	OUTPUT SIGNALS
<p>TTL</p>  <p>SCALE COUNTER</p> <p>A/B/R1 R1 R2 R3 74HC14</p> <p>C1 C2</p> <p>R1=68 C1=1000pF R2=100 C2=1000pF R3=10K</p>	 <p>A \bar{A} B \bar{B} I_a I_b</p> <p>90 180 270 360</p>
<p>EIA422A</p>  <p>SCALE COUNTER</p> <p>26LS31 Vcc R2 26LS32</p> <p>10 A/B/R1 R1 R3 </p> <p>10 A/B/R1</p> <p>R1=120 R2=R3=5K</p>	 <p>A B I_a I_b</p> <p>90 180 270 360</p>

Dimensions



Sensor Alignment Tolerances



Ordering Code

TYPE	MEASURING LENGTH	RESOLUTION	SIGNAL	No of CHANNEL	CABLE LENGTH	CONNECTOR TYPE
LGS230	XXXX	XX	XXX	X	XXX	SXX
	100 – 1070mm	05 = 5um 01 = 1um	TTL EIA422	3 6	3,0M (Standard)	S42 (Standard)

Example: LGS230-1000-05-TTL-3-3,0M-S42