

# DLS-S series



## General Characteristics:

- Resolutions up to 0.5um
- Cross Size 19 x 39 mm<sup>2</sup>
- Max Measure Length: 450mm



## Mechanical and Electrical Features

Grating Pitch	20um		<table border="1"> <thead> <tr> <th>pin</th> <th>PP signal</th> <th>EIA422 signal</th> </tr> </thead> <tbody> <tr><td>1</td><td>—</td><td><math>\bar{A}</math></td></tr> <tr><td>2</td><td>OV</td><td>OV</td></tr> <tr><td>3</td><td>—</td><td><math>\bar{B}</math></td></tr> <tr><td>4</td><td>GND</td><td>GND</td></tr> <tr><td>5</td><td>—</td><td><math>\bar{R}</math></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	PP signal	EIA422 signal	1	—	$\bar{A}$	2	OV	OV	3	—	$\bar{B}$	4	GND	GND	5	—	$\bar{R}$	6	A	A	7	5V	5V	8	B	B	9	R	R
pin	PP signal			EIA422 signal																													
1	—			$\bar{A}$																													
2	OV			OV																													
3	—			$\bar{B}$																													
4	GND			GND																													
5	—			$\bar{R}$																													
6	A			A																													
7	5V			5V																													
8	B			B																													
9	R			R																													
Thermal Expansion	$10.6 \times 10^{-6}$																																
Resolution	0.5 - 1 - 5 um																																
Repeatability	$\pm 1$ increment																																
Max Speed m/min	60(5um); 20(1um)																																
Output type	TTL / EIA422A																																
Max. Acceleration	20 m/S <sup>2</sup>																																
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	
<b>TTL</b>	<p>R1=68 C1=1000pF R2=100 C2=1000pF R3=10K</p>		
<b>EIA422A</b>	<p>R1=120 R2=R3=5K</p>		

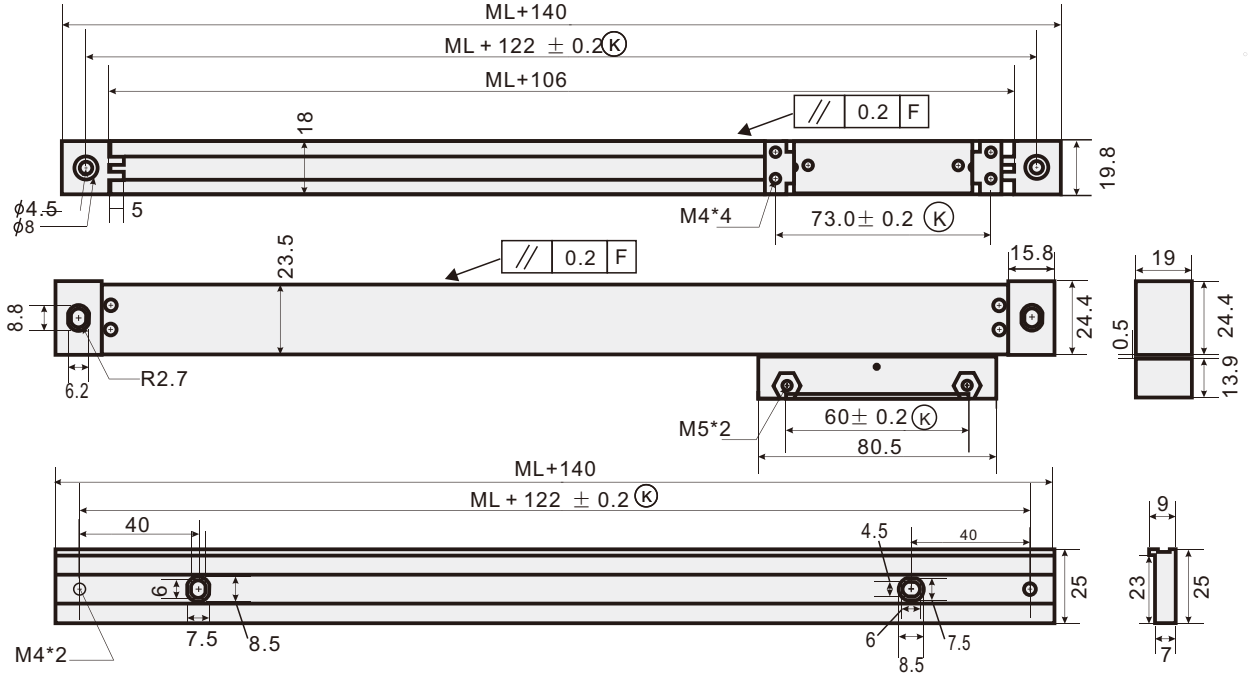
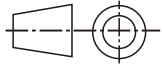
# DLS-S series



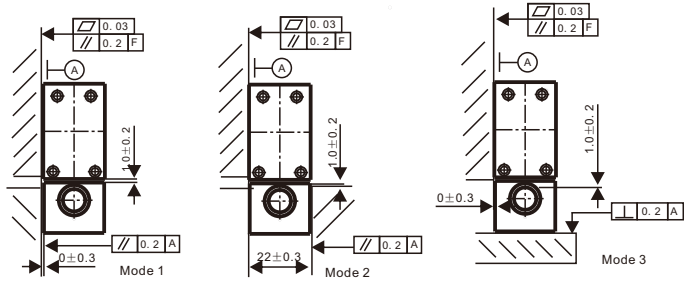
## Dimensions and Mounting Tolerances

Delos Linear Scale  
**DLS-S**

Unit: mm  
Tolerancing ISO8015  
ISO 2768 -mH  
< 6 mm ±0.2mm



Measure Length: (mm)  
50, 100, 150, 200, 250, 300, 350,  
400, 450 (Max ML)



Note: F = Machine guideway;  
(K) = Required mating dimensions

### Ordering Code

TYPE	RESOLUTION	MEASURE LENGTH	CABLE LENGTH	VOLTAGE	OUTPUT MODE	MARK POINT	OEM LOGO
DLS-S	5R	xxx	Cxx	Vxx		Mxx	
DLS-S	5R = 5um 1R = 1um	470 = 470mm	C35 = 3.5meter	V05 = 5 V V24 = 24V	TTL EIA422	M0 = Center Point M1 = Left Point M2 = Right Point M3 = 50mm point	

**Example: DLS-S05R470**

