

FC Series

Grating Scales



Feature:

- Slider design, economical and durable.
- Repeatability up to 1um
- Resolution up to 0.5um, 1um, 5um optional
- Standard measuring stroke up to 3000mm,
- Output signal: 5V TTL/ differential, 24V open collector

Details:

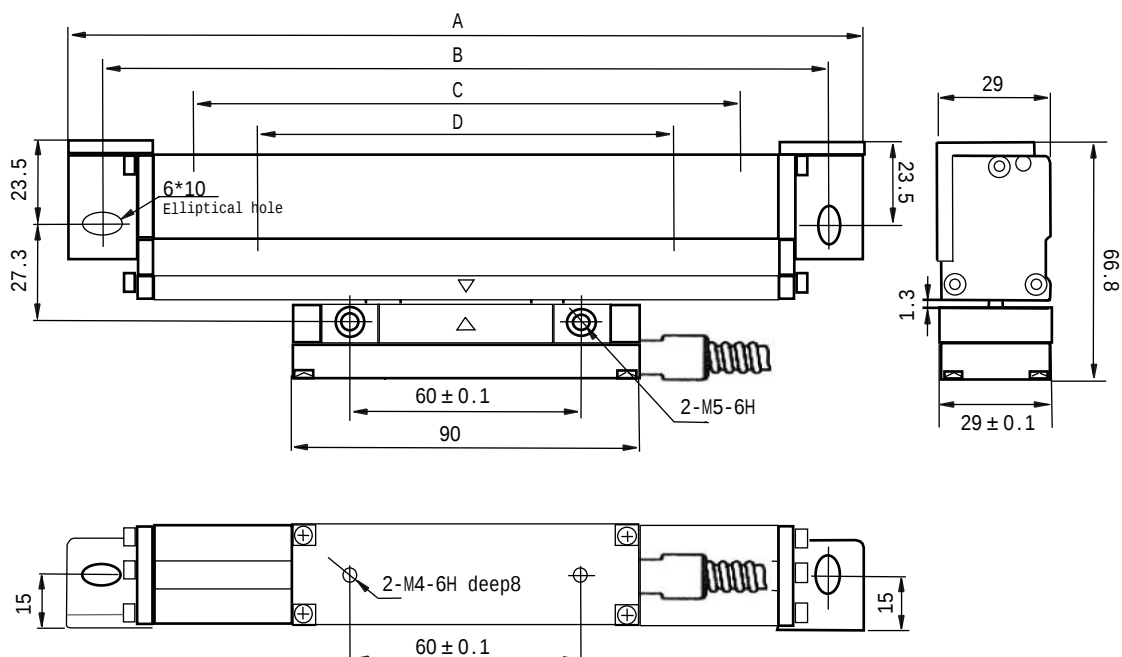
- Anodized aluminum outer shell,
- Core material glass grating plate, internal bearing sliding
- Counting method electronic subdivision technology and 4x frequency processing.
- Square wave signal increment A, B, 5V square wave pulse
- The electrical connection is standard with 3.5m metal bellows with DB9 male head

Usage:

- Robotics, laboratory measurement
- Medical, film testing
- Precision modern processing equipment

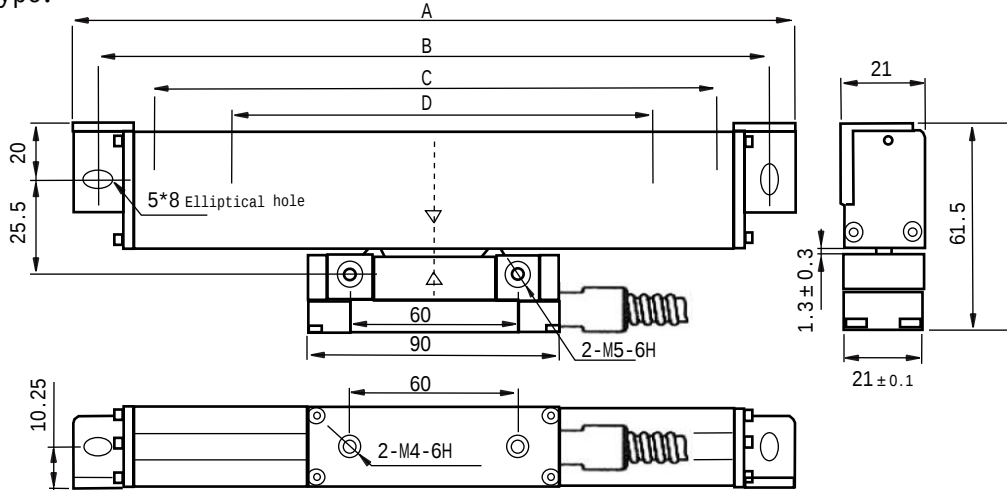
Dimensions:

FC1 type:



Dimensions:

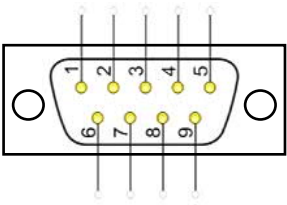
FC2 type:



Size\Type	FC1		FC2	
Housing total length A	A=D+154	range≤900mm	A =D+149	range≤900mm
	A=D+174	range>900mm	A =D+169	range>900mm
Mounting hole spacing B	B=D+136	range≤900mm	B =D+132	range≤900mm
	B=D+156	range>900mm	B =D+152	range>900mm
Max Range C	C=D+30	range≤900mm	C =D+30	range≤900mm
	C=D+50	range>900mm	C =D+50	range>900mm
Range D	50...3000	50mm per level	50...1000	50mm per level
Cable length	3.5M、5M、10M		Optinal	

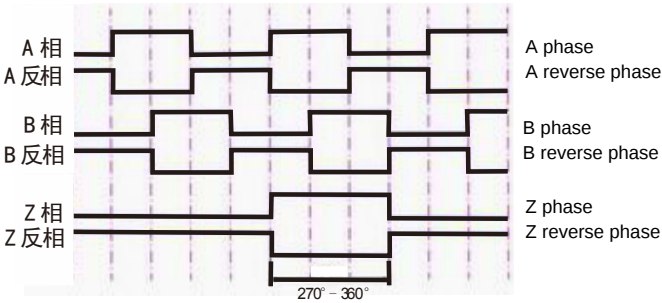
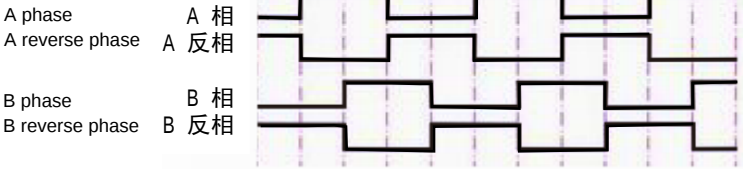
Wiring:

pin no	signal	cable color
针脚号	信号	线缆颜色
1	+5V /24V	红色 red
2	0V	黑色 black
3	A	棕色 brown
4	B	黄色 yellow
5	RI	橙色 orange
6	RI	绿色 green
7	A	紫色 purple
8	B	蓝色 blue



Note: 9 pin knit mesh, with the shell connection can improve anti-interference ability

Output:



光栅
位移传感器

Parameters:

Options	UNIT	Detials
Range	mm	50...1000/3000
Output signal		5 V TTL, 5V/24V differential signal(RS422), 24V open-collector output
Resolution	um	0.5, 1, 5,
Accuracy	um	±3, ±5, ±10
Repeatability	um	±1 unit of resolution
Test speed	m/s	Max 1
Working temperatue	°C	-10 ~ + 50
Output TTL voltage	%	TTL: H =4.5V 4 mA, RS422:20 mA ,
Working voltage	V	5 / 24 VDC (±5%) (<300mA)
Power consumption	W	<0.2
Strike index	g	50 (Single shock) / IEC standard 68-2-27
Vibration	g	5g / 10-2000HZ/IEC standard 68-2-26
Protection Level		IP 53 Install the device by referring to the installation manual
Working humidity		90% (relative humidity) no condensation
Drive force		<5 N
Position of reference point		One at an interval of 50mm or so about the middle point of the ruler

光栅

位移传感器

Instructions:

