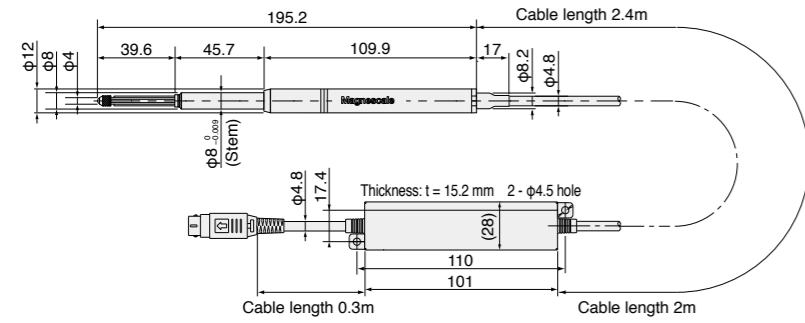


# DK DK830S

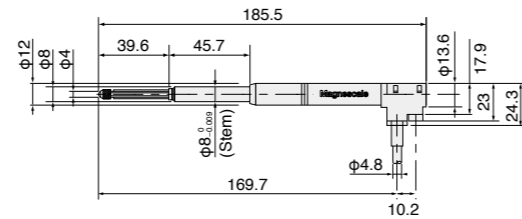
Resolution **0.1 μm** Stem **φ8** Stroke **30mm** Output **A/B phase**

DK830SR



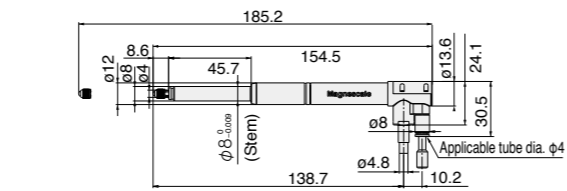
\* Upon installation, clamp the stem.

DK830SLR



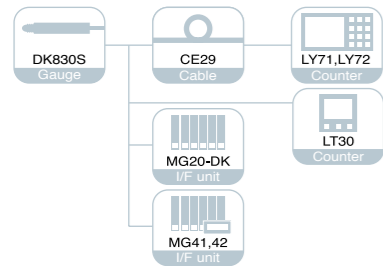
\* Upon installation, clamp the stem.

DK830SVR



\* Upon installation, clamp the stem.

Unit: mm



## Specifications

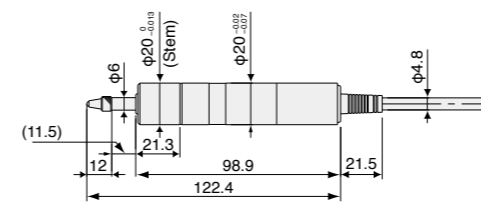
Model	Straight model		Right angle model	Pneumatic push type	
	DK830SR		DK830SLR	DK830SVR	
Measuring range	30 mm				
Maximum resolution	0.1 μm (0.5 μm resolution can also be selectable as special specifications.)				
Accuracy (at 20°C/68°F)	1.3 μm			1.7 μm	
Measuring force (at 20°C/68°F)	Upward: 0.5±0.35 N Horizontal: 0.6±0.35 N Downward: 0.7±0.35 N			Upward: 0.5±0.35 N Horizontal: 0.6±0.35 N Downward: 0.7±0.35 N	
Maximum response speed	80 m/min				
Reference point	Position at spindle movement of 1mm				
Reference-point response speed	Same as the noted maximum response speed				
Output	A/B/reference point Voltage-differential line driver output (conforming to EIA-422)				
Spindle drive system	Spring push			Pneumatic push	
Protection grade <sup>1</sup>	IP53		IP53/IP67 <sup>2</sup>		
Vibration resistance	20 to 2000 Hz 100 m/s <sup>2</sup>				
Impact resistance	1000 m/s <sup>2</sup> 11 ms				
Operating temperature	0 °C to 50 °C				
Storage temperature	-20 °C to 60 °C				
Power supply	5 VDC±5 %				
Power consumption	1 W				
Mass <sup>3</sup>	Approx. 70 g		Approx. 80 g		
Output cable length	2.4 m				
Feeler	Carbide ball tip, Mounting screw M2.5				
Accessories	Instruction Manual, +P M4 × 5 screw (2pc)				

<sup>1</sup> Excluding the interpolation box and connector <sup>2</sup> When the bellows set (optional accuracy) is mounted <sup>3</sup> Excluding cable section and interpolation box  
Magnascale reserves the right to change product specifications without prior notice.

# DK DK10/25

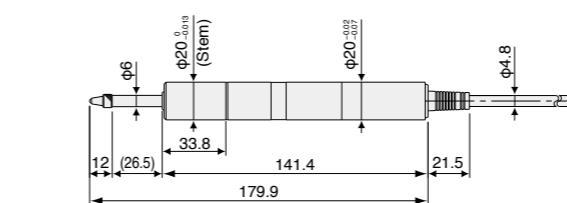
Resolution **0.5 μm** Stem **φ20** Stroke **10mm** Stroke **25mm** Output **A/B phase**

DK10NR5/PR5



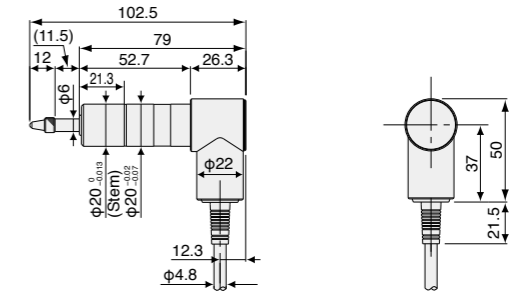
\* Upon installation, clamp the stem.

DK25NR5/PR5



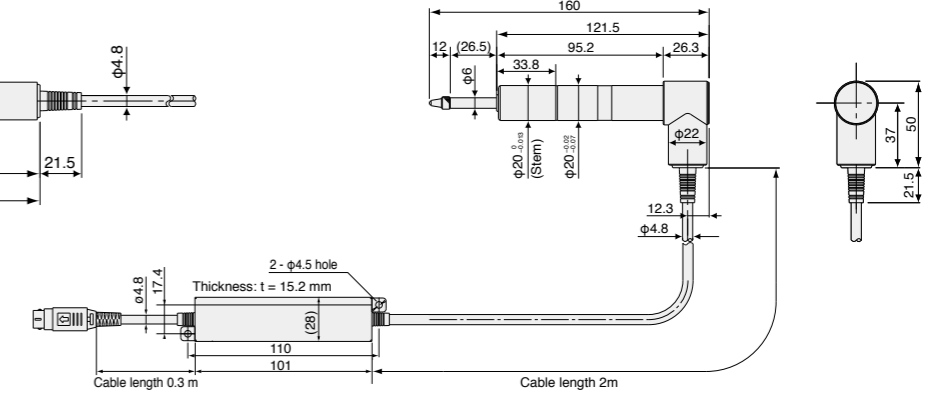
\* Upon installation, clamp the stem.

DK10PLR5



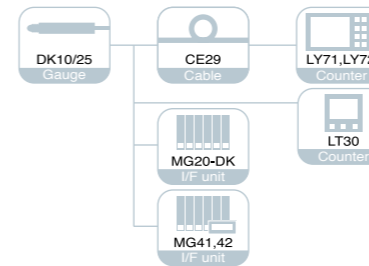
\* Upon installation, clamp the stem.

DK25NLR5/PLR5



\* Upon installation, clamp the stem.

Unit: mm



## Specifications

Model	Standard model		Protected type model		Standard model		Protected type model	
	DK10NR5		DK10PR5		DK10PLR5		DK25NR5	
Measuring range			10 mm				25 mm	
Maximum resolution	0.5 μm							
Accuracy (at 20°C/68°F)	2 μm							
Measuring force (at 20°C/68°F)	Upward: 0.3±0.25 N Horizontal: 0.6±0.3 N Downward: 0.8±0.35 N		4.9 N or less		Upward: 0.4±0.3 N Horizontal: 0.7±0.35 N Downward: 1±0.4 N		4.9 N or less	
Maximum response speed	250 m/min							
Reference point	Position at spindle movement of 1 mm							
Reference-point response speed	Same as the noted maximum response speed							
Output	A/B/reference point Voltage-differential line driver output (conforming to EIA-422)							
Spindle drive system	Spring push							
Protection grade <sup>1</sup>	IP50		IP64		IP50		IP64	
Vibration resistance	10 to 2000 Hz 150 m/s <sup>2</sup>							
Impact resistance	1500 m/s <sup>2</sup> 11 ms							
Operating temperature	0 to 50 °C							
Storage temperature	-20 to 60 °C							
Power supply	5 VDC±5 %							
Power consumption	1 W							
Mass <sup>2</sup>	Approx. 230 g				Approx. 300 g			
Output cable length	2.4 m							
Feeler	Carbide ball tip, Mounting screw M2.5							
Accessories	Instruction Manual, +P M4 × 5 screw (2pc)							

<sup>1</sup> Excluding the interpolation box and connector <sup>2</sup> Excluding cable section and interpolation box  
Magnascale reserves the right to change product specifications without prior notice.