

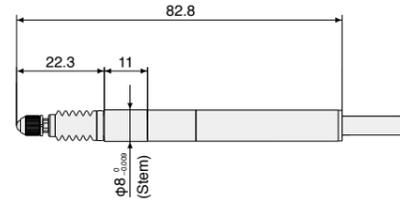
# DK DK805S

Resolution **0.1 μm** Resolution **0.5 μm** Stem **φ8** Stroke **5mm** Output **A/B phase**

\* DK805SAR/DK805SAR5/DK805SBR/DK805SBR5

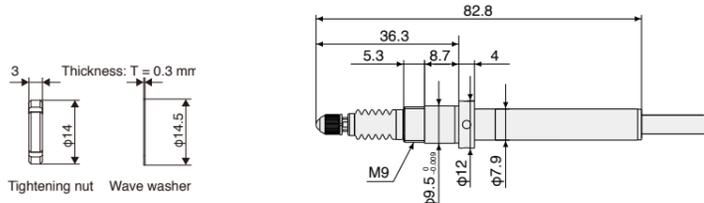


DK805SAR/DK805SAR5  
DK805SBR/DK805SBR5



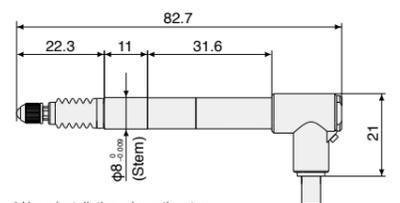
\* Upon installation, clamp the stem.

DK805SAFR/DK805SAFR5  
DK805SBFR/DK805SBFR5



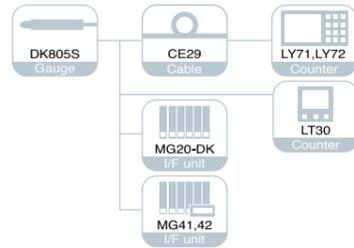
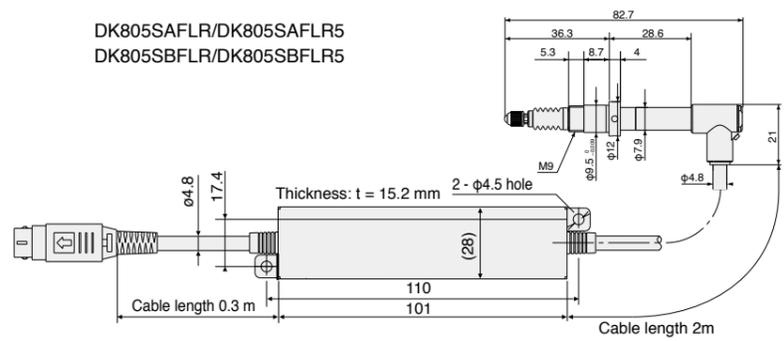
Tightening nut Wave washer

DK805SALR/DK805SALR5  
DK805SBLR/DK805SBLR5



\* Upon installation, clamp the stem.

DK805SAFLR/DK805SAFLR5  
DK805SBFLR/DK805SBFLR5



Unit: mm

Specifications	High-resolution models		General-purpose resolution models	
	DK805SAR, DK805SAR5 DK805SAFR, DK805SAFLR	DK805SBR, DK805SBLR DK805SBFR, DK805SBFLR	DK805SAR5, DK805SAR5 DK805SAFR5, DK805SAFLR5	DK805SBR5, DK805SBLR5 DK805SBFR5, DK805SBFLR5
Measuring range	5 mm			
Maximum resolution	0.1 μm		0.5 μm	
Accuracy (at 20°C/68°F)	1 μm		1.5 μm	
Measuring force (at 20°C/68°F)	Upward: 0.35±0.25 N Horizontal: 0.40±0.25 N Downward: 0.45±0.25 N			
Maximum response speed	80 m/min	42 m/min	250 m/min	100 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 Vacuum suction (DK805SALR/SAFLR/SBLR/SBFLR/SALR5/SAFLR5/SBLR5/SBFLR5)			
Protection grade <sup>1</sup>	Straight model: IP67, right-angle model: IP64 (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 to 50 °C			
Storage temperature	-20 to 60 °C			
Power supply	5 VDC±5 %			
Power consumption	1 W			
Mass <sup>3</sup>	Approx. 30 g			
Output cable length	2.4 m			
Feeler	Carbide ball tip, Mounting screw M2.5		Steel ball tip, Mounting screw M2.5	
Accessories	Instruction Manual, +P M4 × 5 screw (2pc), tightening nut, clamp spanner, wave washer, mounting pin 1 each (DK8**S*L** only), one spanner Hose elbow 1 pc (DK8**S*L** only), one spanner			

<sup>1</sup> Excluding the interpolation box and connector <sup>2</sup> When φ4 mm tube is connected for right-angle model <sup>3</sup> Excluding cable section and interpolation box

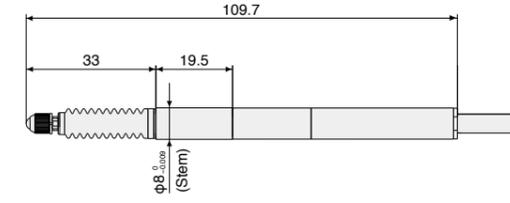
# DK DK812S

Resolution **0.1 μm** Resolution **0.5 μm** Stem **φ8** Stroke **12mm** Output **A/B phase**

\* DK812SAR/DK812SAR5/DK812SBR/DK812SBR5

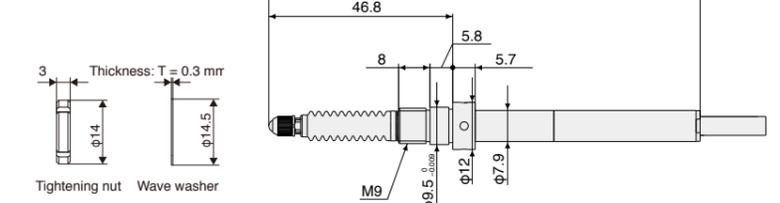


DK812SAR/DK812SAR5  
DK812SBR/DK812SBR5



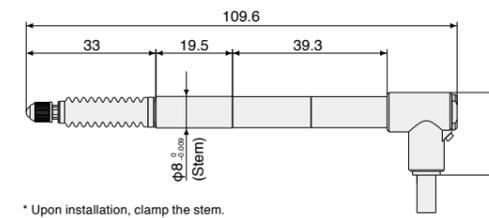
\* Upon installation, clamp the stem.

DK812SAFR/DK812SAFR5  
DK812SBFR/DK812SBFR5



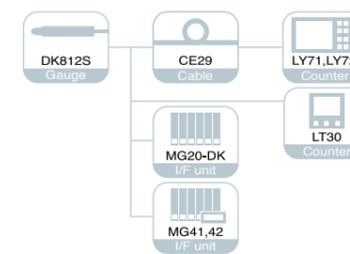
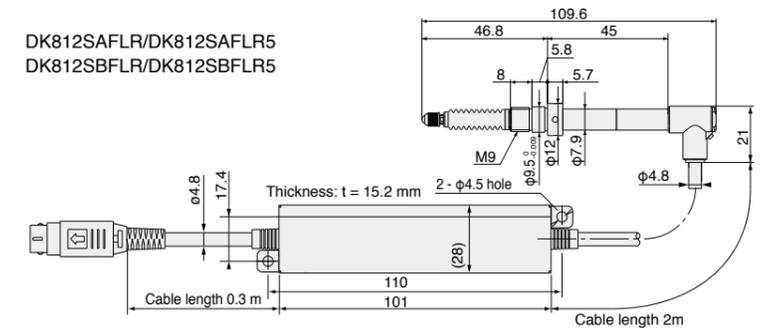
Tightening nut Wave washer

DK812SALR/DK812SALR5  
DK812SBLR/DK812SBLR5



\* Upon installation, clamp the stem.

DK812SAFLR/DK812SAFLR5  
DK812SBFLR/DK812SBFLR5



Unit: mm

Specifications	High-resolution models		General-purpose resolution models	
	DK812SAR, DK812SAR5 DK812SAFR, DK812SAFLR DK812SAVR	DK812SBR, DK812SBLR DK812SBFR, DK812SBFLR DK812SBVR	DK812SAR5, DK812SAR5 DK812SAFR5, DK812SAFLR5 DK812SAVR5	DK812SBR5, DK812SBLR5 DK812SBFR5, DK812SBFLR5 DK812SBVR5
Measuring range	12 mm			
Maximum resolution	0.1 μm		0.5 μm	
Accuracy (at 20°C/68°F)	1 μm		1.5 μm	
Measuring force (at 20°C/68°F)	Upward: 0.4±0.3 N Horizontal: 0.5±0.3 N Downward: 0.6±0.3 N		0.6±0.5 N (Pneumatic push type) 0.7±0.5 N (Pneumatic push type) 0.8±0.5 N (Pneumatic push type)	
Maximum response speed	80 m/min	42 m/min	250 m/min	100 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 (DK812SAVR/SBVR/SAVR5/SBVR5)	Vacuum suction (DK812SALR/SAFLR/SBLR/SBFLR/SALR5/SAFLR5/SBLR5/SBFLR5)	
Protection grade <sup>1</sup>	Straight model: IP67, right-angle model: IP64 (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 to 50 °C			
Storage temperature	-20 to 60 °C			
Power supply	5 VDC±5 %			
Power consumption	1 W			
Mass <sup>3</sup>	Approx. 30 g			
Output cable length	2.4 m			
Feeler	Carbide ball tip, Mounting screw M2.5		Steel ball tip, Mounting screw M2.5	
Accessories	Instruction Manual, +P M4 × 5 screw (2pc), tightening nut, clamp spanner, wave washer, mounting pin 1 each (DK8**S*L** only), one spanner Hose elbow 1 pc (DK8**S*L** only), one spanner			

<sup>1</sup> Excluding the interpolation box and connector <sup>2</sup> When φ4 mm tube is connected for right-angle model <sup>3</sup> Excluding cable section and interpolation box