

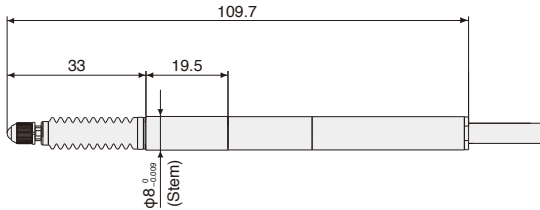
DK DK812S

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

* DK812SAR/DK812SAR5/DK812SBR/DK812SBR5

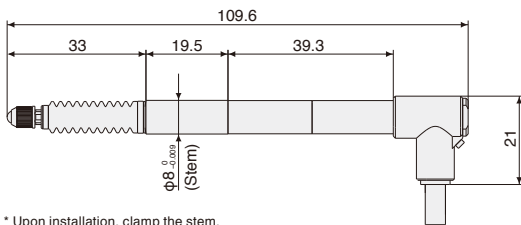


DK812SAR/DK812SAR5
DK812SBR/DK812SBR5

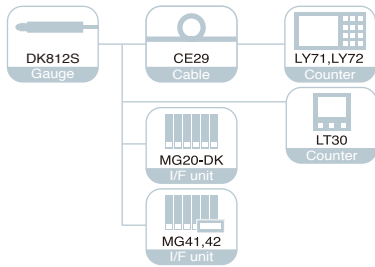


* Upon installation, clamp the stem.

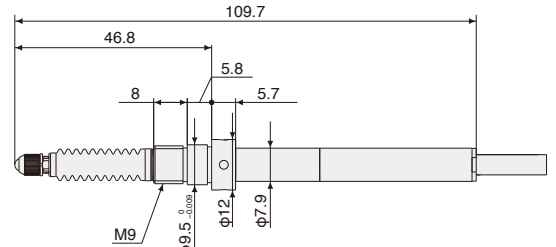
DK812SALR/DK812SALR5
DK812SBLR/DK812SBLR5



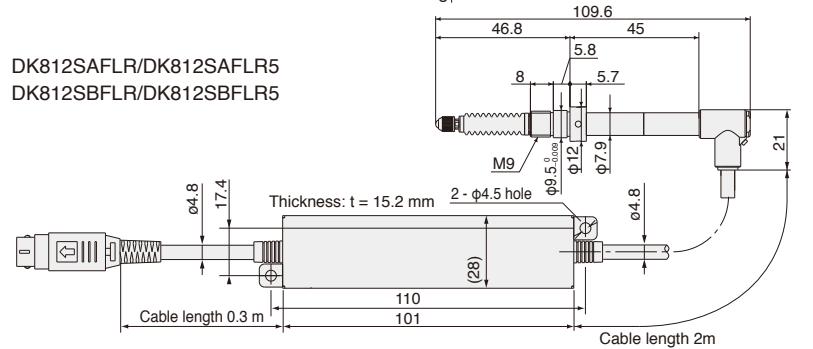
* Upon installation, clamp the stem.



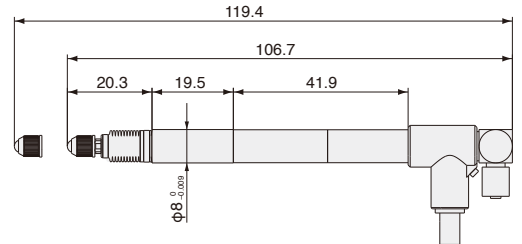
DK812SAFR/DK812SAFR5
DK812SBFR/DK812SBFR5



DK812SAFLR/DK812SAFLR5
DK812SBFLR/DK812SBFLR5



DK812SAVR/DK812SAVR5
DK812SBVR/DK812SBVR5
(Pneumatic push model)



* Upon installation, clamp the stem.

Unit: mm

Specifications

| Model | High-resolution models | | General-purpose resolution models | |
|--------------------------------|--|---|---|--|
| | DK812SAR, DK812SALR DK812SAFR, DK812SAFLR DK812SAVR | DK812SBR, DK812SBLR DK812SBFR, DK812SBFLR DK812SBVR | DK812SAR5, DK812SALR5 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) | |
| Number of strokes ¹ | 60 million | | | |
| Protection grade ² | Straight model: IP66, right-angle model: IP64 (IP67 ³) | | | |
| Vibration resistance | 20 to 2000 Hz 100 m/s ² | | | |
| Impact resistance | 1000 m/s ² 11 ms | | | |
| Operating temperature | 0 to 50 °C | | | |
| Storage temperature | -20 to 60 °C | | | |
| Power supply | 5 VDC±5 % | | | |
| Power consumption | 1 W | | | |
| Mass ⁴ | 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**F** only) Hose elbow 1 pc (DK8**S**L** only), one spanner | | | |

¹ Under specific test conditions defined by Magnescale Co., Ltd. Pneumatic push Model: 30 million time ² Excluding the interpolation box and connector

³ When φ4 mm tube is connected for right-angle model ⁴ Excluding cable section and interpolation box

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