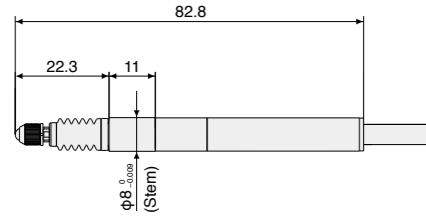


DK DK805S

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

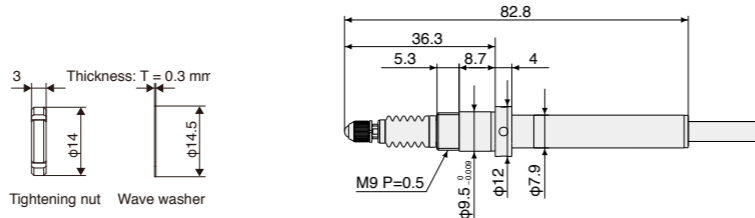
* DK805SAR/DK805SAR5/DK805SBR/DK805SBR5

DK805SAR/DK805SAR5
DK805SBR/DK805SBR5

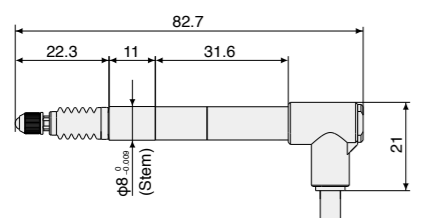


* Upon installation, clamp the stem.

DK805SAFR/DK805SAFR5
DK805SBFR/DK805SBFR5

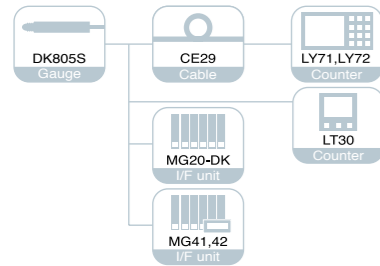
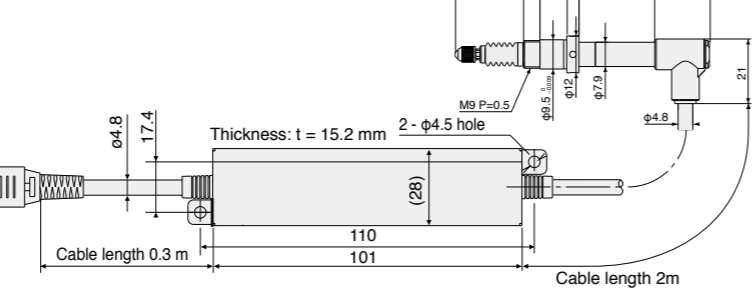


DK805SALR/DK805SALR5
DK805SBLR/DK805SBLR5



* Upon installation, clamp the stem.

DK805SAFLR/DK805SAFLR5
DK805SBFLR/DK805SBFLR5



Unit: mm

| Specifications | | High-resolution models | | General-purpose resolution models | |
|--------------------------------|--|---|--|--|--|
| Model | | DK805SAR, DK805SALR DK805SAFR, DK805SAFLR | DK805SBR, DK805SBLR DK805SBFR, DK805SBFLR | DK805SAR5, DK805SALR5 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 ¹⁾ | | Straight model: IP66/IP67, right-angle model: IP64 (IP67 ²⁾) | | | |
| 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 ³⁾ | | 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 | | | |

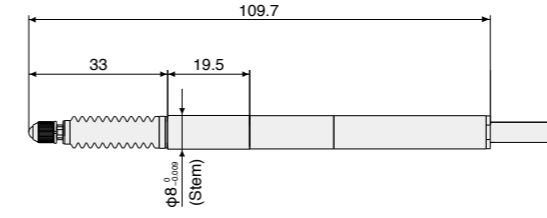
¹⁾ Excluding the interpolation box and connector ²⁾ When φ4 mm tube is connected for right-angle model ³⁾ Excluding cable section and interpolation box
Magnescale reserves the right to change product specifications without prior notice.

DK DK812S

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

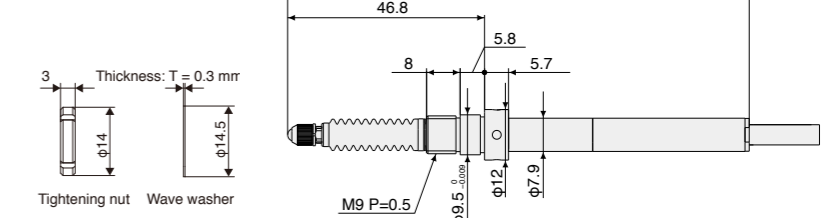
* DK812SAR/DK812SAR5/DK812SBR/DK812SBR5

DK812SAR/DK812SAR5
DK812SBR/DK812SBR5

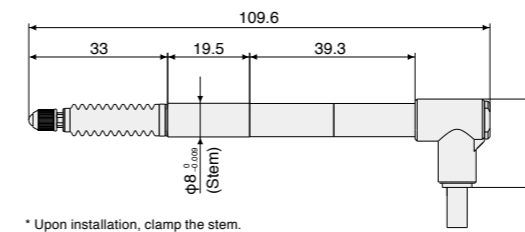


* Upon installation, clamp the stem.

DK812SAFR/DK812SAFR5
DK812SBFR/DK812SBFR5

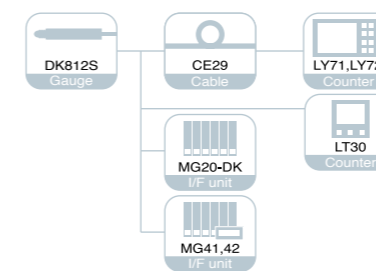
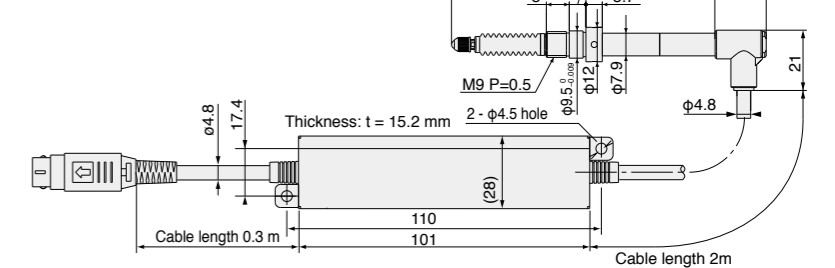


DK812SALR/DK812SALR5
DK812SBLR/DK812SBLR5



* Upon installation, clamp the stem.

DK812SAFLR/DK812SAFLR5
DK812SBFLR/DK812SBFLR5



Unit: mm

| Specifications | | High-resolution models | | General-purpose resolution models | |
|--------------------------------|--|---|---|---|--|
| Model | | 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) | |
| Protection grade ¹⁾ | | Straight model: IP66/IP67, right-angle model: IP64 (IP67 ²⁾) | | | |
| 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 ³⁾ | | 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 | | | |

¹⁾ Excluding the interpolation box and connector ²⁾ When φ4 mm tube is connected for right-angle model ³⁾ Excluding cable section and interpolation box
Magnescale reserves the right to change product specifications without prior notice.