

Magnescale

SPEED × PRECISION

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Tough Sensor

High Rigidity × High Operability = Tough Sensor

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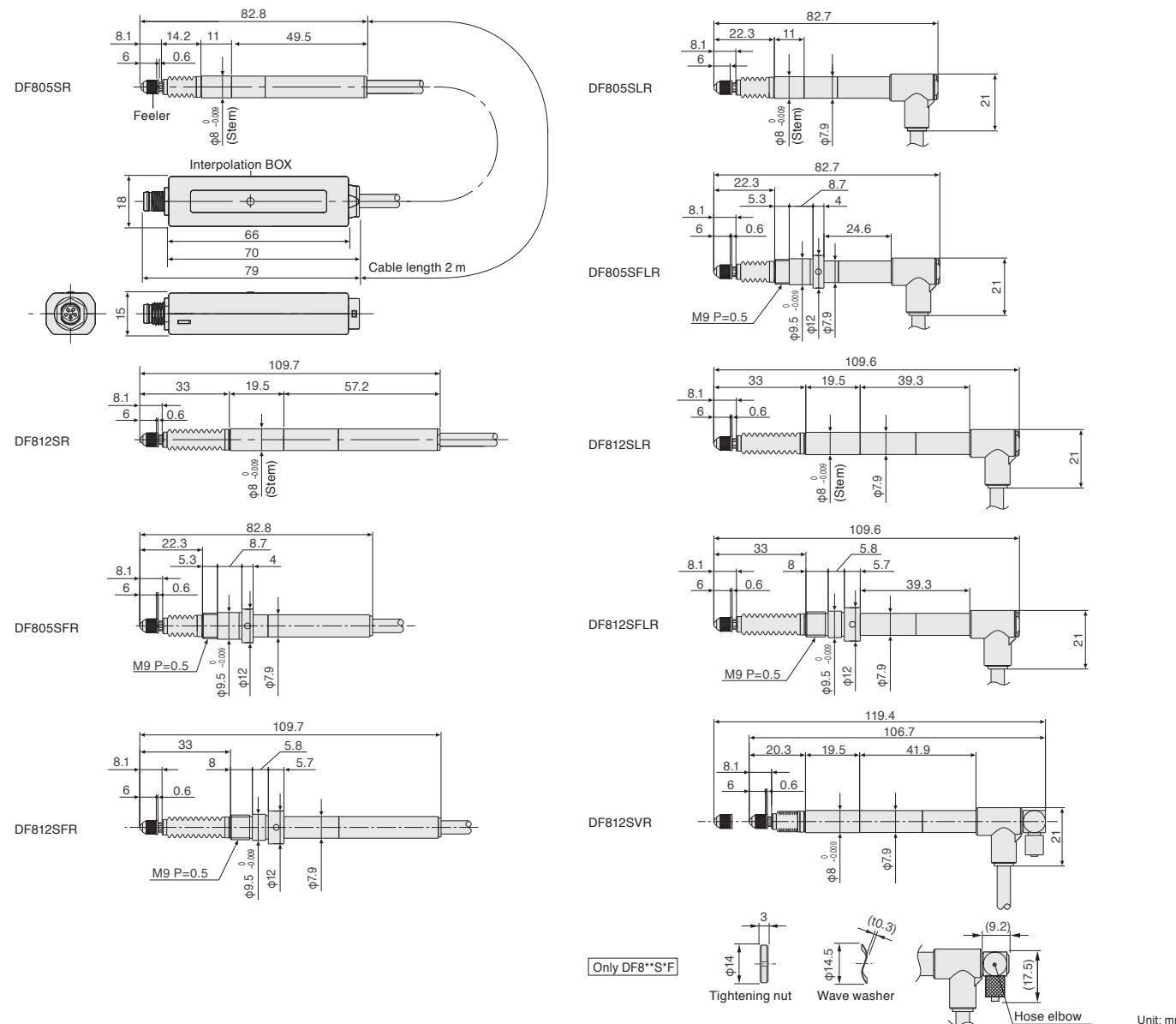
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Magnescale Co., Ltd.

Digital Gauge
DF805/DF812 Series

Main Specifications	
Model name	DF805SR DF805SFR DF805SLR DF805SFLR DF812SR DF812SFR DF812SLR DF812SFLR DF812SVR
Measuring range	5mm 12mm
Resolution	0.1μm
Accuracy (at 20°C/68°F)	1μm
Measuring force (at 20°C/68°F)	Upward : 0.35±0.25N Horizontal : 0.40±0.25N Downward : 0.45±0.25N Upward : 0.4±0.3N Horizontal : 0.5±0.3N Downward : 0.6±0.3N Upward : 0.6±0.5N Horizontal : 0.7±0.5N Downward : 0.8±0.5N Air pressure : 0.05MPa
Maximum response speed	80m/min
Reference point	at 1±0.5 mm position of spindle movement
Reference point response speed	80m/min
Output	Dedicated serial communication protocol
Spindle driving	Spring push Pneumatic push
Achieved number of strokes	60 million strokes (under specific test conditions defined by Magnescale Co., Ltd.)
Protective structure	IP66/IP67 When a ø4 mm tube is connected : IP67 IP54 When a ø4 mm tube is connected : IP67 IP66/IP67 IP54 When a ø4 mm tube is connected : IP67 IP66/IP67
Impact resistance	1000m/s ² (11ms)
Vibration resistance	100m/s ² (20-2000HZ)
Operating temperature	0-55°C
Storage temperature	-20-60°C
Power supply voltage	+10 to +30V DC including ripple (p-p) 10%
Power consumption	1.2 W or less
Mass	Approx. 30 g (not including cable parts and interpolation box)
Probe part cable length	2m
Output cable length	Max. 20 m (Use the optional CE34.)
Feeler	Provided with a carbide ball tip Mount screw M2.5
Accessories	Instruction Manual, 1 wrench, 1 hose elbow (only DF8**S*L**) Tightening nut, clamp wrench, wave washer, stop pin (1 each) (only DF8**S**F**)

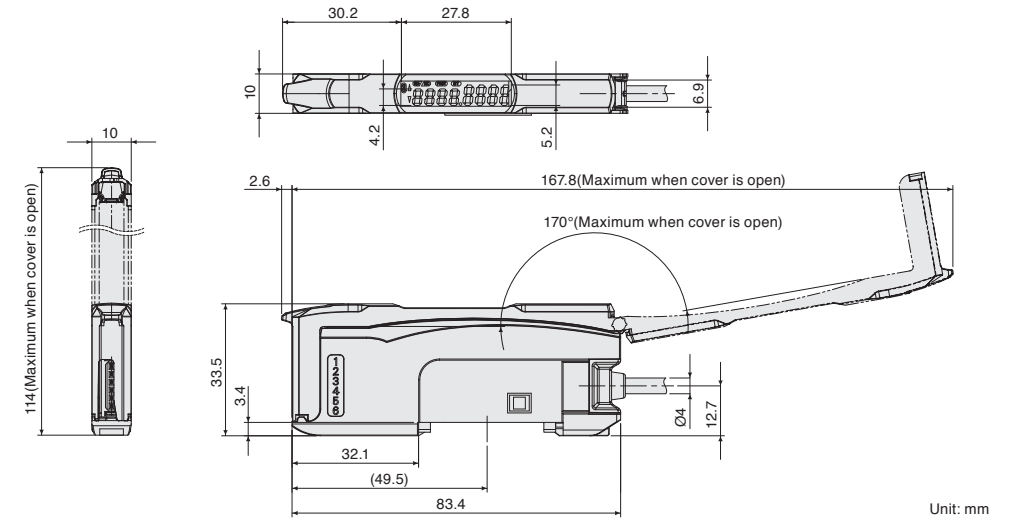


Digital Tolerance Indicator
MF10 Series

Main Specifications	
Model name	MF10-P1 MF10-P2
Type	NPN output (current sink) PNP output (current source)
I/O	Number of Go/NoGo judgment outputs: 2 Number of external inputs ⁴ : 1
Minimum display unit	0.1μm
Power supply voltage	+10 to +30V DC including ripple (p-p) 10%
Power consumption ¹	Power supply voltage 24 V normal mode: 2040 mW or less (Power consumption 85 mA or less) Power-saving ECO mode: 1920 mW or less (Current consumption 80 mA or less)
Go/NoGo judgment output ²	Load voltage: DC 30 V or less, open collector output type Load current: the total of the two outputs must be 100 mA or less (Residual voltage and load current less than 10 mA: 1 V or less) Load current 10 mA to 100 mA: 2 V or less Off-state current: 0.1 mA or less
Protection circuit	Power supply reverse connection protection, output short-circuit protection and output reverse connection protection
Number of banks	4 (Can be set 4 kinds of judgment value)
Ambient temperature range ³	Operating: When lining up 1 or 2 digital tolerance indicators: 0°C to +55°C Storage: -10°C to +60°C (with no icing or condensation)
Ambient humidity range	Operating and storage: 35% to 85% RH (with no condensation)
Mass (main unit)	Approx. 75 g
Cable length	2m

¹ At a power supply voltage of 10 to 30 V, Normal mode: 2250 mW or less (power supply voltage 30 V: power consumption 75 mA or less / power supply voltage 10 V: power consumption 155 mA or less), power-saving ECO mode: 2100 mW or less (power supply voltage 30 V: power consumption 70 mA or less / power supply voltage 10 V: power consumption 135 mA or less) ² When lining up 4 or more digital tolerance indicators, the 2 output total is 20 mA or less. ³ When used in a row, the operating ambient temperature range is 0°C to +50°C for 3 to 10 units, 0°C to +45°C for 11 to 16 units, and 0°C to +40°C for 17 to 30 units. ⁴ The input details are as follows.

	Contact input (relay or switch)	Non-contact input (transistor)	Input time
NPN Type	ON: Connection to 0 V (Outflow current: 1 mA or less) OFF: Open or short-circuited to Vcc	ON: 1.5 V or less (Outflow current: 1 mA or less) OFF: Vcc-1.5V to Vcc (Leakage current: 0.1 mA or less)	ON: 9ms or more OFF: 9ms or more
PNP Type	ON: Connection to Vcc (Sink current: 3 mA or less) OFF: Open or short-circuited to 0V	ON: Vcc-1.5V to Vcc (Sink current: 3 mA or less) OFF: 1.5V or less (Leakage current: 0.1 mA or less)	



Cable
CE34-

Main Specifications	
Model Name	CE34-005 CE34-02 CE34-05 CE34-10 CE34-15 CE34-20
Cable length	0.5m 2.0m 5.0m 10m 15m 20m

