

Digital gauge DF805S / DF812S series

Main specification								
Model name	DF805SR	DF805SFR	DF805SLR	DF805SFLR	DF812SR	DF812SFR	DF812SLR	DF812SFLR
Measuring range	5 mm				12 mm			
Resolution	0.1 μm							
Accuracy (at 20°C)	1 μm							
Protective structure	IP67	When a φ4mm tube is connected: IP67			IP67	When a φ4mm tube is connected: IP67		

Connection cable CE34 series (CE34 cable is necessary when connecting DF805S/812S series to MF10 series)

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

Digital Gauge DT series

Main specification												
Model name	Standard model		Protected type model		Standard model		Protected type model		Standard model		Protected type model	
	DT512N	DT512N-T10	DT512P	DT512P-T10	DT12N	DT12P	DT32N	DT32NV	DT32P	DT32PV		
Measuring range	12 mm						32 mm					
Resolution	1 μm						5 μm					
Accuracy (at 20°C)	6 μm	3 μm	6 μm	3 μm	10 μm							
Protective structure	-		IP64 or equivalent		-		IP64 or equivalent		-		IP64 or equivalent	

Interpolator for DT series MT20 series (MT20 interpolator is necessary when connecting DT series to MF10 series)

Main specification	
Model name	MT20-01 (For DT512 series)
Resolution	Resolution 1 μm
Model name	MT20-05 (For DT12/32 series)
Resolution	Resolution 5 μm

Digital tolerance indicator / Counter module MF10 series

Main specification			
Model name	Digital tolerance indicator		Counter module
	MF10-P1	MF10-P2	MF10-CM
Function	NPN output (current sink)	PNP output (current source)	Counter module for MG50
I/O	Number of Go/No Go judgement output 2, Number of external inputs 1		-
Minimum display unit	0.1 μm		
Cable length	input/output, power cable 2 m		
Mounting method	35 mm DIN rail mounting		
Power supply voltage	+10-30V DC including ripple (p-p) 10%		
Power consumption / Consumption current	2.1 W or less / 85 A or less		
Mass	75 g		

Interface unit MG50 series

Main specification			
Model name	Main module		Distribution module
	MG50-EC	MG50-CL	MG51
Communication protocol	EtherCAT	CC-Link	Data transferred to main module by dedicated protocol
Baud rate	100 Mbps	Maximum downlink speed of 10 Mbps	-
Node address setting method	Set with decimal rotary switches or software	Set with decimal rotary switches	-
Node address range	000-192	Max. 64	-
Maximum connectable counter modules	30	16	10
Maximum connectable distribution modules	8		
Maximum cable length	Maximum cable length between main module and distribution module: 30 m		
Mounting method	35 mm DIN rail mounting		
Power supply voltage	DC24V (20.4-26.4V)		
Power consumption / Consumption current / Current consumption	2.4 W or less	100 mA or less	2W or less 80 mA or less

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NEW gauging system

**Magnescale**

SPEED X PRECISION



Magnescale Co., Ltd.

# 「Speed」 × 「High Rigidity」

NEW

Fieldbus interface unit

**EtherCAT**  **CC-Link V2**

A new network interface compatible with our Tough Sensor lineup. Data output and Go/No Go judgement functions are available. Output data can be calculated and controlled by PLC via open network.



**Main module MG50**  
Maximum connectable counter modules  
**EtherCAT MG50-EC Maximum 30**  
**CC-Link MG50-CL Maximum 16**

**Distribution module MG51**  
Maximum connectable distribution modules per main module  
**Maximum 8**

**Wire-saving**

**Total extension 30m**

2 wire power 2 output line RS485 wiring



Maximum connectable counter modules per distribution module

**Maximum 10**



**Counter module MF10**

**Slim body and space saving design**

10mm

8 types of functional calculations  
**Function block**

8 types of calculation functions are provided by the Function Block. Calculation functions can be executed easily by PLC programming.

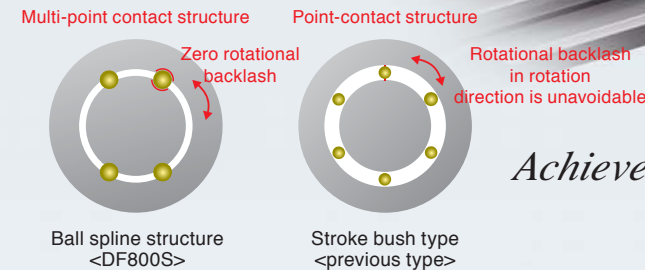
	Maximum	Minimum	Average
	Flatness	Gap	Torsion
	Warpage	Thickness	

Our function block is compatible with NJ series (OMRON), and Q and L series (Mitsubishi) (Our function block does not support some versions. For more details, please contact our sales staff.)

High resistance to shock and vibration

**Ball spline structure**

The new ball spline construction provides approximately 5 times the radial load resistance and zero rotational backlash compared to the previous model which utilized Point-contact structure.



Achieved numbers of strokes: **170 million**  
(full stroke sliding test 4 years passed as of December, 2016)

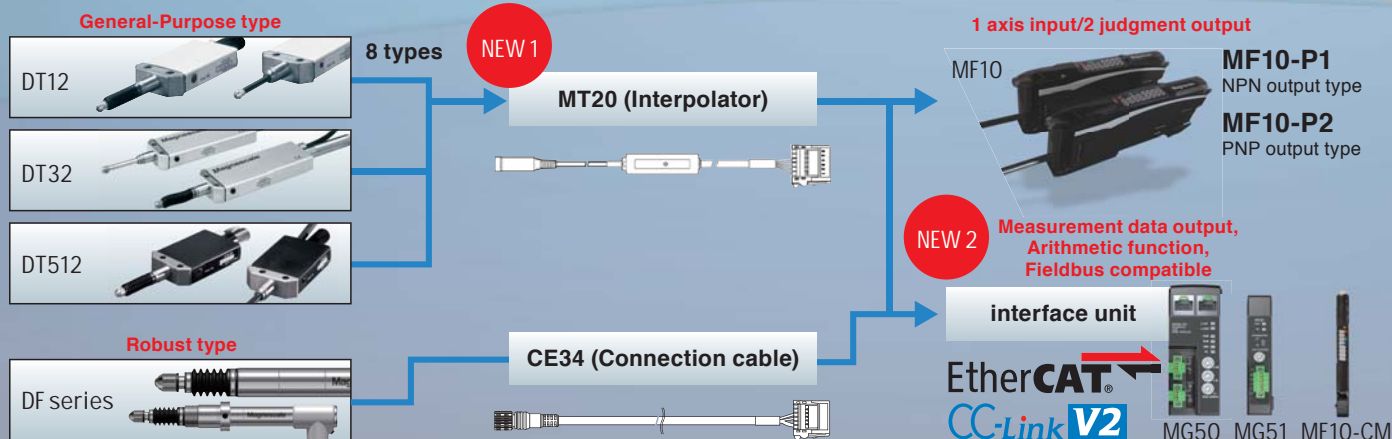
Resistant to the effects of water and condensation

**IP67\*1**

Magnescale utilizes a magnetic detection principle that is resistant to the effects of oil, water and condensation. This principle allows for high positioning accuracy even in harsh environments. The spindle can be easily air-driven (on right-angle models), and the system has completed a 72 hour underwater test that exceeds IP67.



\*1. When air hose is connected for right angle type.



**DF800S Series**  
**Slim & Compact**

The compact 8mm body is suitable for all types of measurement applications. Our broad lineup, including flange-mount and right-angle models, make it easy to integrate into machines.

