
DD-03

Load Cells and Force Transducers

FEATURES

- Nominal capacity: 20, 50, 100, 200, 500, 1000 kN
- Small dimensions: ideal for space-saving applications
- High accuracy and long service reliability
- Sealed strain gauge area
- Very high strength steel measuring spring with hard chrome-plated dome
- Accuracy class 0.3%
- Protection IP 66



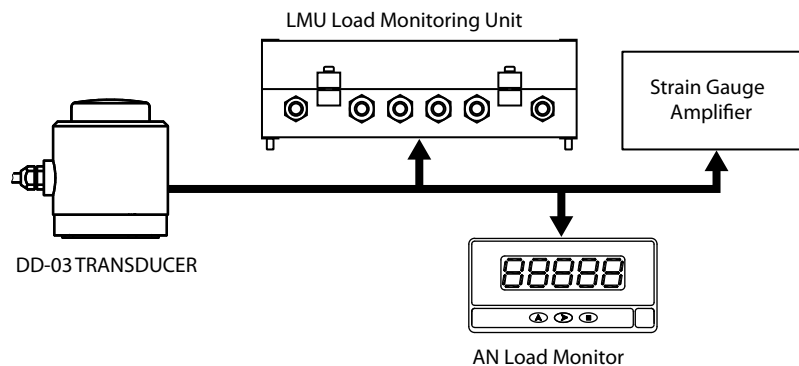
DESCRIPTION

Magtrol's DD-03 Force Transducers are designed for measuring static and dynamic compression loads. Using strain gauge technology, a deformation of the sensing element provides an electrical signal proportional to the load or force being measured.

APPLICATIONS

The DD-03 Force Transducer can be used to measure very large force ranges. When connected to a signal conditioner, this high-accuracy transducer is ideally suited for weight measurement applications in hoppers/silos, platforms and ski lifts.

SYSTEM CONFIGURATION



ORDERING INFORMATION

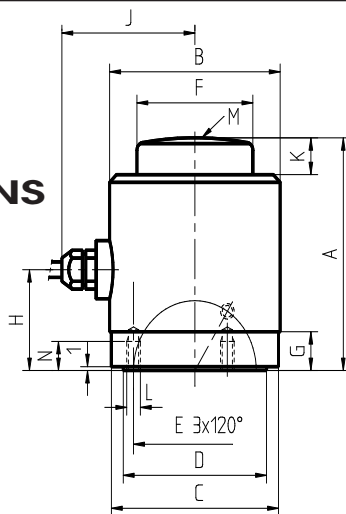
PART NUMBER (P/N)	DD-03-
• Nominal Force :	
(kN) 20, 50, 100, 200, 500, 1000	

TECHNICAL RATINGS

		DD-03	
MECHANICAL CHARACTERISTICS			
Nominal load	20 kN, 50 kN, 100 kN	200 kN, 500 kN, 1000 kN	
Accuracy class	0,3 %		
Overload Limit	150 %		
Overload at Rupture	> 400 %		
Nominal deflection	~ 0.1 mm	~ 0.5 mm	
Weight	~ 1.4 kg	~ 5 kg	
ELECTRICAL CHARACTERISTICS			
Nominal output (output signal at nominal capacity)	2 mV/V \pm 0.3 %		
Input Impedance	260 Ω		
Output Impedance	240 $\Omega \pm 2$		
Insulation resistance	> 10 ⁹ Ω		
Supply voltage	≤ 20 V		
Combined error (non-linearity and hysteresis)	< ± 0.25 %		
ENVIRONMENTAL CHARACTERISTICS			
Reference temperature	23 °C		
Operating temperature (compensated)	-10 °C to +60 °C		
Usable temperature range	-40 °C to +80 °C		
Temperature influence : on zero	< ± 0.01 %/K		
Temperature influence : on sensitivity	$\leq \pm 0.03$ %/K		
Protection Class	IP 66		
CONNECTION CABLE			
Cable length	3 m		

DIMENSIONS

Shielded connection cable 3 m long.
The shielding is not attached to the transducer body.



Dimensions (mm)	Nominal load (kN)	
	20, 50, 100, 200	500, 1000
A	70 \pm 0.5	120 \pm 0.5
B	64	100
C	62	98
D	50	84
E	42	72
F	30	67
G	7	20
H	31	52
J	68	86
K	4	19
L	M6	M8
M	R = 60	R = 200
N	10	15

PIN CONNECTIONS

PIN	COLOR CODE
+ Supply	Brown
- Supply	White
+ Signal	Yellow
- Signal	Green

Due to the continual development of our products, we reserve the right to modify specifications without forewarning.



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