

## DMGZ 300 Series Compression / Tension Load Cells

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**10 times overload protection**

**No recalibration required**

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**20 : 1 force measuring range**

**Wide measuring capability**

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**Stainless steel sensor, aluminium sleeve**

**Corrosion resistant, ultra-durable**

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**Compact design**

**Easy mounting with minimal space required**

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### ● DMGZ 300

The DMGZ 300 Series load cells measure force in the direction of the center axis of the sensor. A force is applied via threaded shaft, or other means, to the measuring mechanism of the sensor. They can provide both compression or tension measurement. The integrated high overload protection protects the sensor against damage. Recalibration is not required.

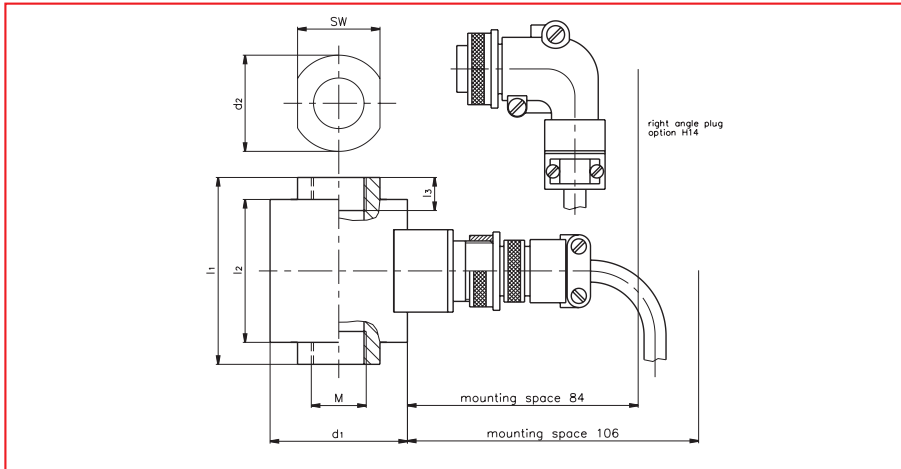
### ● Functional description

The FMS DMGZ 300 Series compression / tension load cells utilize four foil-type strain gauges in a full wheatstone bridge configuration mounted on the sensor sleeve. This accurate and robust measuring method is ideal to work in harsh environments.

### ● Applications

- Compression or tension force measurement
- Nip pressure measurement
- Punching forces

**DMGZ Series • Dimensions in mm**



**DMGZ Series • Nominal force / Dimensions in mm**

Sensor Type	Nominal force kN	Dimensions mm							Overload protection		Weight kg
		$d_1$	$d_2$	$l_1$	$l_2$	$l_3$	M	SW	Pressure	Tension	
DMGZ323A.RF	0.3	50	35	68	52	12	M 20 x 1.5	30	10 x	10 x	0.5
DMGZ325A.RF	0.5								10 x	10 x	
DMGZ331A.RF	1.0								10 x	10 x	
DMGZ332.5A.RF	2.5								10 x	10 x	
DMGZ335A.RF	5								10 x	6 x	
DMGZ341A.RF	10								10 x	3 x	
DMGZ342A.RF	20	60	45	76	60	15	M 30 x 2	36	3 x	3 x	0.8
DMGZ345A.RF	50								3 x	3 x	

**DMGZ Series • Technical data**

Sensitivity	1.8 mV/V
Tolerance of sensitivity	$< \pm 0.2\%$
Accuracy class	$\pm 0.5\%$ ( $F_{nominal}$ )
Temperature coefficient	$\pm 0.1\% / 10K$
Temperature range	-10... +60 °C (option H16: -10... +120 °C)
Input resistance	350 $\Omega$
Supply voltage	1...12 VDC
Sensor Material	Force sensor: stainless steel Sensor sleeve: anodized aluminium

**Options:**

- H14** = Right angle connector
- H16** = Temperature range up to 120 °C
- H18** = Straight waterproof connector
- H29** = Modified wiring and sealing for use in aggressive media (mostly acids)
- H30** = Modified wiring and sealing for use in hydrocarbon media (mostly oils and fuels)

**Order code (example):**



**Scope of delivery:**

Straight connector

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