

DMGZ 300 Series Compression / Tension Load Cells

High overload protection

No recalibration required

20:1 force measuring range

Accuracy class 0.5%

Nominal forces from 67 - 11,000 lbs.

Sizes available for every application

Stainless steel, aluminum sleeve

Corrosion resistant, ultra durable



● **DMGZ 300 Series**

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 portion of the sensor. They can provide both compression or tension measurement. The integrated high overload protection is designed to protect against sensor damage as well as to reduce recalibration requirements.

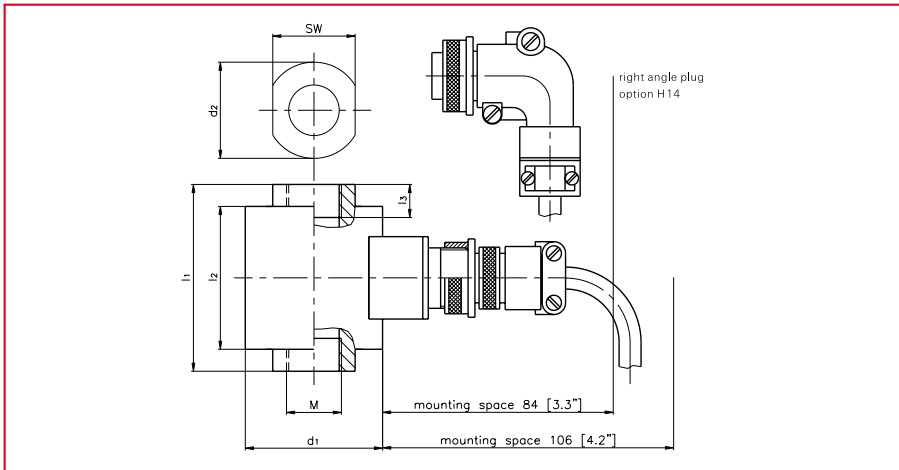
● **Functional Description**

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 for any processing environment.

● **Applications**

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

DMGZ Series ● Dimensions in mm [inch]



DMGZ Series ● Dimensions / Nominal Force

FMS Order code	Nominal force		Dimensions in mm [inch]							SW	Overload protection		Weight	
	kN	lbs	d1	d2	l1	l2	l3	M	pressure		tension	kg	lbs	
DMGZ323A.RF	0.3	67	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	10x	0.5	1.1	
DMGZ325A.RF	0.5	112	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	10x	0.5	1.1	
DMGZ331A.RF	1.0	225	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	10x	0.5	1.1	
DMGZ3325A.RF	2.5	562	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	10x	0.5	1.1	
DMGZ335A.RF	5	1,124	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	10x	0.5	1.1	
DMGZ341A.RF	10	2,248	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	6x	0.5	1.1	
DMGZ342A.RF	20	4,496	50 [1.97]	35 [1.38]	68 [2.68]	52 [2.05]	12 [0.47]	M20x1.5	30 [1.18]	10x	3x	0.5	1.1	
DMGZ345A.RF	50	11,240	60 [2.36]	45 [1.77]	76 [2.99]	60 [2.36]	15 [0.59]	M30x2	36 [1.42]	3x	3x	0.8	1.8	

DMGZ Series ● Technical Data

Sensitivity	1.8 mV/V
Tolerance of sensitivity	< ± 0.2 %
Accuracy class	± 0.5 %
Temperature coefficient	± 0.1 % / 10 K [± 0.0055 % / °F]
Temperature range	-10...+ 60 °C [14 °F...140 °F]
Input resistance	350 Ω
Supply voltage	1...12 VDC
Sensor material	Stainless steel
Sensor sleeve material	Anodized aluminum

Options:

- H14** = right angle plug
- H16** = Temperature range up to 150°C [300°F]
- H18** = straight waterproof plug
- H29** = modified wiring and sealing for use in aggressive media and high temperatures to 150°C [300°F]
- H30** = modified wiring and sealing for oil based environments

Order code:

DMGZ335A.H14

Option _____

Scope of delivery:

Straight connection plug

World Headquarters:

FMS Force Measuring Systems AG
 Aspstrasse 6
 8154 Oberglatt (Switzerland)
 Tel. + 41 44 852 80 80
 Fax + 41 44 850 60 06
 info@fms-technology.com

FMS USA, Inc.
 925 East Rand Road · Suite 207
 Arlington Heights, IL 60004
 Phone 847 392 7872
 Fax 847 392 7873
 fmsusa@fms-technology.com

FMS UK
 Highfield, Atch Lench Road
 Church Lench
 Evesham WR 11 4UG
 Phone + 44 1386 871023
 Fax + 44 1386 871021
 fmsuk@fms-technology.com

www.fms-technology.com