

Description

The LCM series of Diaphragm Load Cells have been designed for use in a wide selection of different applications, particularly where there are low height constraints, for load cell installation.

The flexibility in the design of the DIA series enables the customer to virtually design the load cell to suit their installation exactly. Our engineers are on hand to assist you with this. Some of the standard variations that we offer include: male or female centre threads, clear centre holes etc.

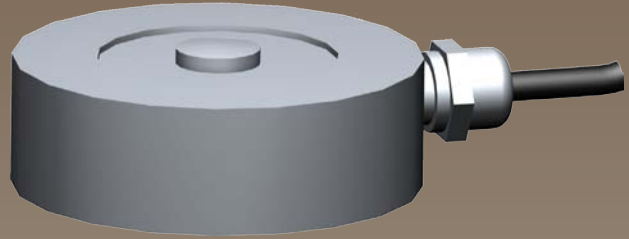
The DIA series can be supplied as shown in this datasheet or can be modified to meet a particular application requirement. We are always pleased to discuss any special requirements that can be accommodated.

The DIA series can be supplied on it's own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

Typical Applications

- Process Measurement & Control
- Automotive Testing
- Low profile weighing systems

DIA Diaphragm Load Cell



Features

- Ranges 10 kg to 2000 kg
- Stainless steel construction
- Environmentally sealed to IP65
- (IP67 can also be offered)
- Special sizes and ranges available
- Different mounting options available
- Integral connector versions available

TYPE: DIA

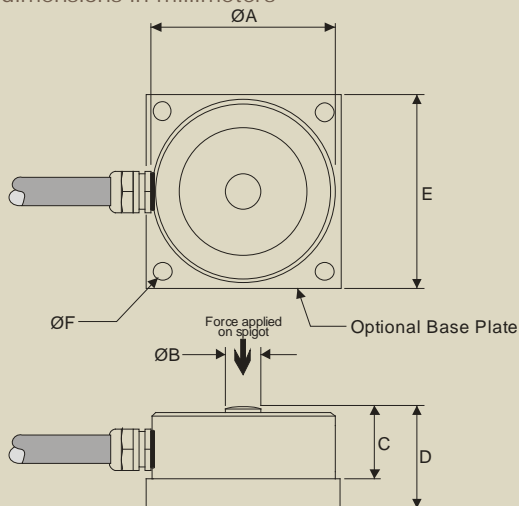
Diaphragm Load Cell

Specification

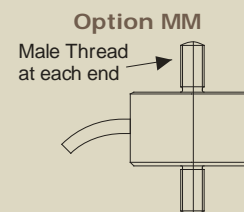
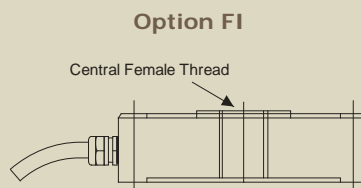
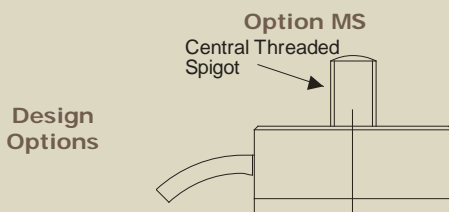
Rated Load (kgf):	10, 25, 50, 150, 250, 500, 1000, 2000		
Proof Load:	150% of Rated Load		
Ultimate Breaking Load:	>300% of Rated Load		
Output:	1.5 mV/V at Rated Load (nominal)		
Non-Linearity:	< ±0.25% of Rated Load (typically)		
Non-Repeatability:	< ±0.10% of Rated Load		
Excitation Voltage:	10vdc recommended, 15vdc maximum		
Bridge Resistance:	350Ω		
Insulation Resistance:	>500MΩ @ 500vdc		
Operating Temperature Range:	-20 to +70°C		
Compensated Temperature Range:	-10 to +50°C		
Zero Temperature Coefficient:	< ±0.010% of Rated Load/°C		
Span Temperature Coefficient:	< ±0.010% of Rated Load/°C		
Environmental Protection Level:	IP65 (IP67 optional)		
Connection Type:	2 meters 4-core screened PUR cable		
Wiring Connections:	Red +ve supply	Blue -ve supply	
	Green +ve signal	Yellow -ve signal	
Options Available	Special ranges and sizes available Special mounting options Special electrical connections		

Mechanical Dimensions

All dimensions in millimeters



	Part Number/Range							
	DIA-10 10 kg	DIA-25 25 kg	DIA-50 50kg	DIA-150 150 kg	DIA-250 250 kg	DIA-500 500 kg	DIA-1000 1000 kg	DIA-2000 2000 kg
ØA	38	38	38	50	50	63	63	63
ØB	6	6	6	12	12	13	13	13
C	15	15	15	25	25	35	35	35
D	18	18	18	31	31	41	41	41
E	40	40	40	50	50	64	64	64
ØF	3.5	3.5	3.5	4.5	4.5	5.5	5.5	5.5



Due to continual product development, LCM Systems Ltd. reserves the right to alter product specifications without prior notice.

Issue Date: 24/9/2008

Unit 15, Newport Business Park
Barry Way, Newport, Isle of Wight, PO30 5GY
United Kingdom
Tel: +44 (0) 1983 249264
Fax: +44 (0) 1983 249266
Email: sales@lcmsystems.com

LCM
SYSTEMS

TYPE: DIA

www.lcmsystems.com