

Load Cell Type M2428-14

- 25 to 30'000kg
- 4...20mA, 2-Wire Technics
- 24VDC Power Supply
- Programmable

IP67



Technical description

The M2428-14 is a low-cost load cell to measure weights or forces in the range of 25kg (~250N) to 30'000kg (~300'000N).

The bending beam consists of a strain gage sensor with integrated electronics to convert the force or weight to a 4...20mA signal.

There is no need to use external, sensitive strain gage amplifiers or signal conditioning devices.

A cell connects directly to any 2-wire sensor input of process control computers or other control equipment and displays.

The load cell conforms to the protection class IP67 and is delivered with open cable ends.

Any range within the measuring range can be programmed.
E.g. 45 to 420kg = 4 to 20mA within a calibrated range of 0 to 500kg.

Technical Data:

Characteristics :

- Low profile
- Integrated, programmable cable amplifier
- Standard signal output 4...20mA for any range
- 2-Wire-technics, supply 24VDC
- Direct interface to process control computers
- Resolution of 4096 digits for the range
- Protection class IP67
- 25kg to 30'000kg, all in-between values adjustable
- Customer tailored cable length

Steel:

Nickel plated tool steel, others on request

Measuring range:

Customer specified, 25kg to 30'000kg

Signal output:

4...20mA for any given range

Overload

min. 1.5 x load without damage, breaking load 3 x range

Measuring principle:

Metallic strain gage, full bridge

Zero point:

<0.08% @ 25°C

Zero stability:

<0.008% per °C

Accuracy:

<0.08% @ 25°C

Stability:

<0.0024% per °C

Creep after 30':

<0.5%

Reproducibility:

<0.1%

Linearity:

<0.05%

Rise time:

<50ms for 99% load change

Hysteresis:

<0.3%

Max. load, 24V:

<500

Max. supply:

<35VDC

Min. supply:

>22VDC

Connection:

Cable ends: Rred = +24VDC, black = 4...20mA and shield

Insulation resistance:

>5000M @ 50VDC

Operating temperature:

-10 to 40°C

Max. working temperature:

-25 to 65°C

Storage temperature:

-40 to 85°C

Cable length:

Standard = 6m, others on request

Max. cable length:

300m

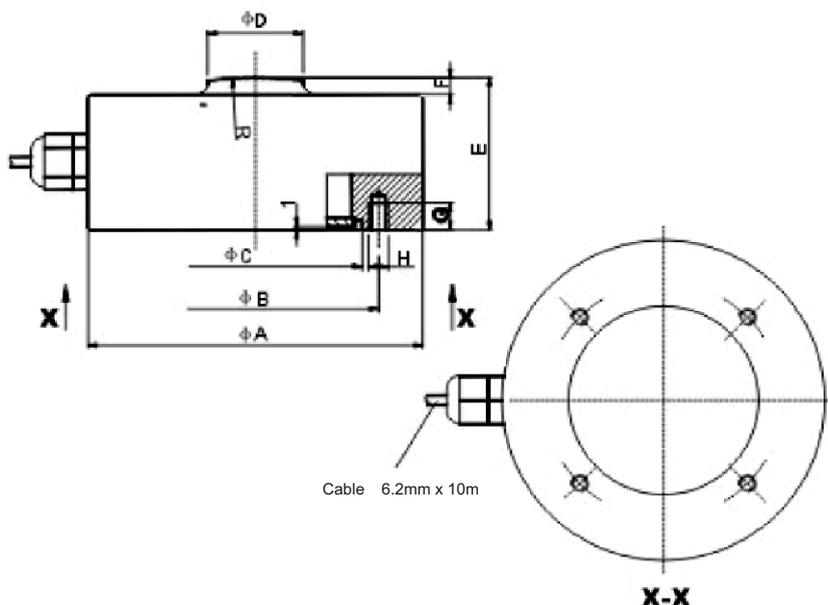
Ordering example:

M2428-14, 0...2'000kg = 4...20mA

Options:

On request

Dimensions in mm:



Max. Cap	ΦA	ΦB	ΦC	ΦD	E	F	G	H	R
25kg...2t	62	55	36	12	22	4	6	M5	50
5t	98	72	62.4	20	40	5	13	M6	150
10t	98	72	62.4	20	45	5	13	M6	150
20t	118	90	62.4	20	50	5	15	M8	250
30t	138	115	62.4	20	73	8	15	M10	250

Programming:



Programming with laptop and M2428 interface



Programming software

M2428-14 / V1.03

MOSTEC