

Bending Beam Type M2428-13

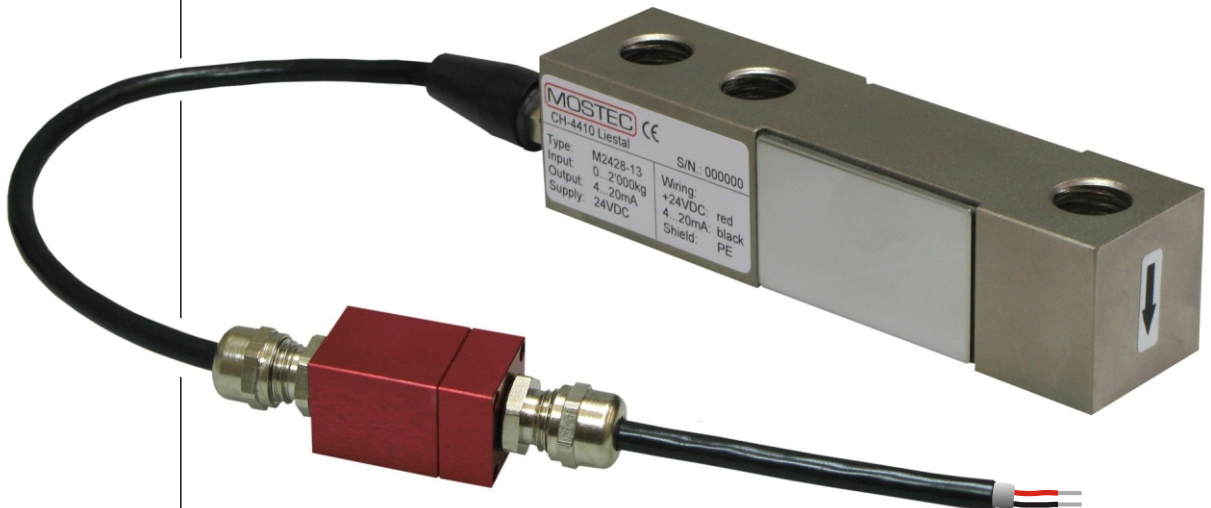
100 to 20'000kg

4...20mA, 2-Wire Technics

24VDC Power Supply

Programmable

IP66



Example: M2428-13, 0...2'000kg
L=130, W=32, H=32

Technical description

The M2428-13 is a low-cost bending beam to measure weights or forces in the range of 100kg (~1'000N) to 20'000kg (~200'000N).

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.

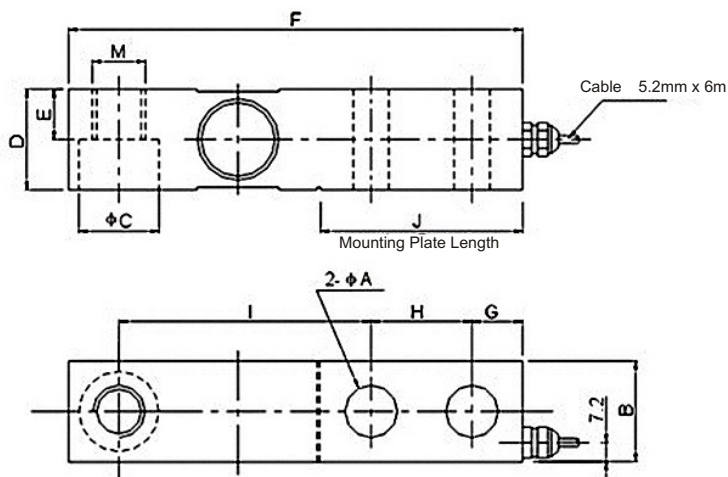
The bending beam conforms to the protection class IP66 and is delivered with open cable

Any range within the measuring range can be programmed.
E.g. 450 to 1'720kg = 4 to 20mA within a calibrated range of 0 to 2'000kg.

Technical Data:

Characteristics :	<ul style="list-style-type: none"> - 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 IP66 - 100kg to 20'000kg, all in-between values adjustable - Customer tailored cable length
Steel:	Nickel plated tool steel, others on request
Measuring range:	Customer specified, 100kg to 20'000kg
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':	<0.023%
Reproducibility:	<0.034%
Linearity:	<0.034%
Rise time:	<50ms for 99% load change
Hysteresis:	<0.034%
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:	M2428-13, 0...2'000kg = 4...20mA
Options:	On request

Dimensions in mm:

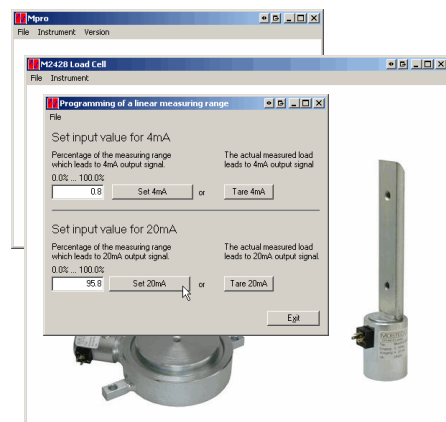


Max.Cap	A	B	C	D	E	F	G	H	I	J	M
100kg ...2t	13.5	31.8	20.6	31.8	15.2	130	15.8	25.4	76.2	57.2	M12x1.75
3.5t	19.8	38.1	30.2	38.1	19.1	171.5	19.1	38.1	95.3	76.2	M18X1.5
10t	26.2	50.8	46	50.8	25.4	222.3	25.4	50.8	120.7	101.6	M24X2
20t	30.2	58	50	58	33	241.5	27.5	55	132	110	M36X2

Programming:



Programming with laptop and M2428 interface



Programming software

MOSTEC

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