

Load cells for TRAM

Redesign of Siemens 7MH3105

In tram chassis multiple DMS-operating-load cells from the Siemens 7MH3105 product range have a measuring range of 2.8t and 6t and are also used to measure the load torque.
A fully deployable redesign of the original equipment is now available.

The redesign is composed of a hardened meter stamp whose front surface is formed with knolls, whose radii generate a restoring moment when tilted.

The meter stamp has four strain gauges as well as adjustment and compensation resistors in the three-part aluminium housing (anodized). The stamp extends from both sides of the housing.

One side of the stamp is fixed to the front side of the housing; the other side is placed in an O-ring seal.

The housing cover has a PG9 screw connection which will have a 4-pole 5 meter long protected rubber hose line.

The load cells implement the load as a proportional change in resistance, by altering the length of the stamp creating extension and compression.

The meter stamp has four strain gauges which are force fit to adhere to the structure.

The surface thrust force generated by loading the meter stamp will thus also be transferred to the strain gauges whose ohmic resistance will change accordingly.

The four strain gauges are wired as wheatstone bridges and also come with compensation and are expanded to a 4-pole network.

These sequences accrue in the resistance changes in the load on the meter stamp creating a general detuning of the bridge.

The redesign of the original load cells can be installed without any electrical adjustments, as a plug-and-play installation in the relevant application. The load cells are then delivered with a calibration protocol and CE certificate.

A high precision, hydraulic calibration stand with certified reference cells is optionally available.

The device can bear a load of up to 7.5 tons and has a precision of < 0.1% of the metered range.
Samples in stock.

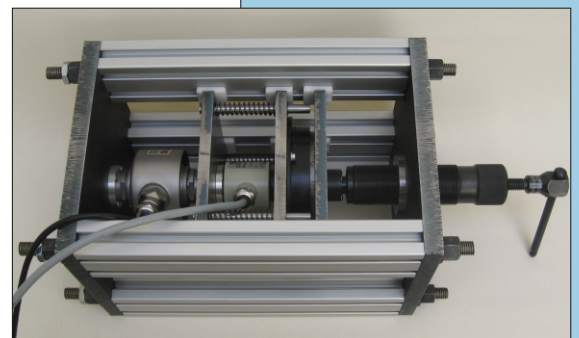
Redesign



ORIGINAL



REDESIGN



Calibration stand

Technical data:

	VEWA(V)3105-2,8t	VEWA(V)3105-6t	(A = Alu; V = VA)
Load cell type	: 2,8t	: 6t	
Nominal load	: 2,8t	: 6t	
Service load	: Press load	: Press load	
Clamp resistance	: $245\Omega \pm 0,25$: $245\Omega \pm 0,25$	
Bridge supply	: < 10V	: < 10V	
Nom. characteristic	: 1,5mV/V	: 1,5mV/V	
Degree of protection	: IP65	: IP65	



DIE ENTWICKLER

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