Compact Mounts for Ring-Torsion Load Cells

- **Complete compact mount with integrated bumber check and hold-down**
- **Legal-for-trade**
- **Simple, rugged and flat design**
- **Dynamic load damping properties**
- **Insensitivity to inclined position of the connecting structure up to 0,6°= 10mm/m**
- **High resistance to environmental influences and chemicals**
- **Maintenance-free**
- **Roughly aligned in factory**

Application

The compact mounts are designed for load input to Schenck ring-torsion load cells optimized with regard to the measurement.

They are used as a mounting unit with integrated bumper check and hold-
down in all kinds of industrial scales, e.g. hopper and silo scales, container and mixer scales.

Construction

The compact mount consists of the load input section, the bumper check, and the hold-down.

Positioning of the compact mount is realized by shifting it in the receiving structure.

The play of the bumper check and the hold-down can be adjusted with set screws.

Play can easily be set and checked even if the local situation is tight.

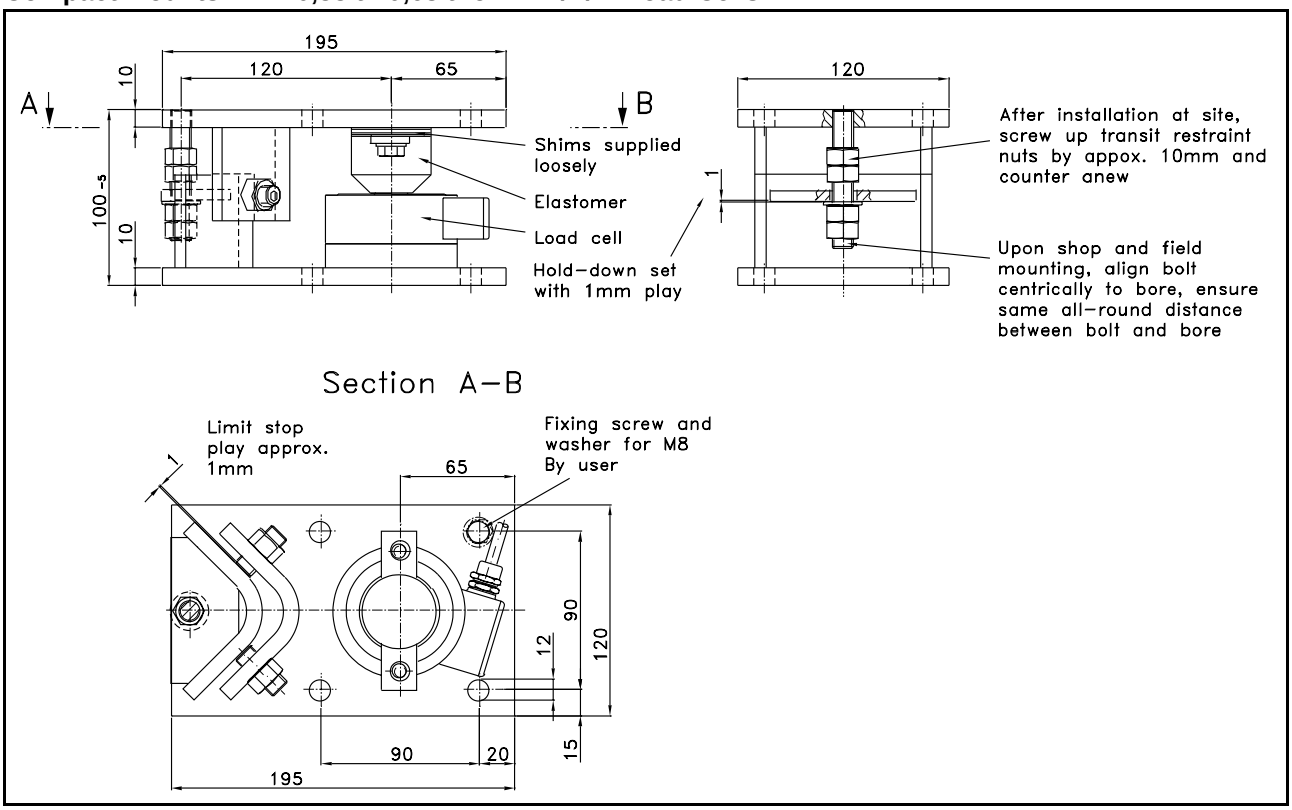
The height is adapted by using shims (max. 5 mm). For fixing the mount, it is either screwed or fastened to the structure.

Functions

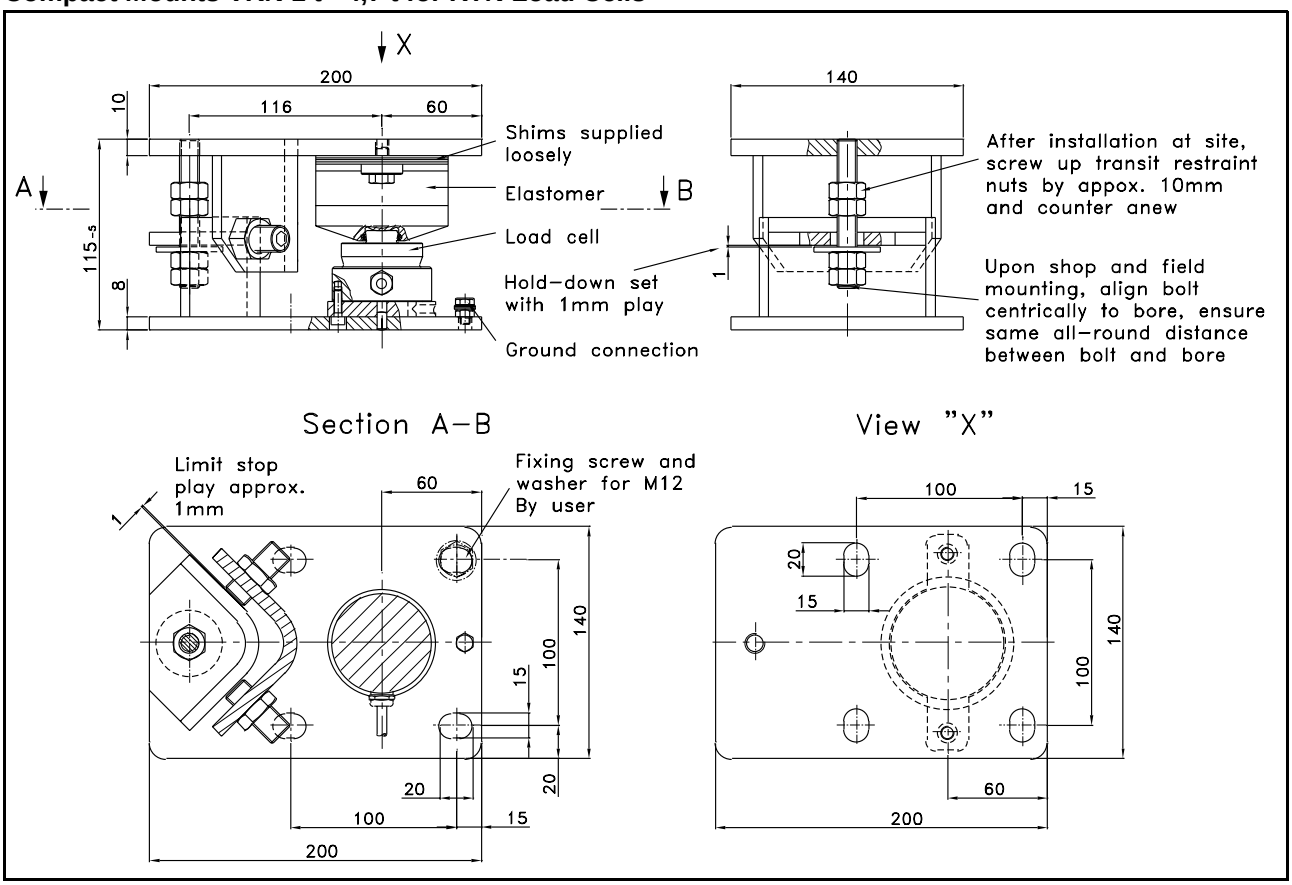
The weight to be measured is applied to the load cell via a contact plate. Due to the special design, the vertical deflection is extremely low and proportional to the load. Occurring side forces deform the elastomer in a parallel direction. The mount centers automatically when relieved of these side forces.

The bumper check limits the play, the hold-down prevents lift-off. A tie-rod is not required.

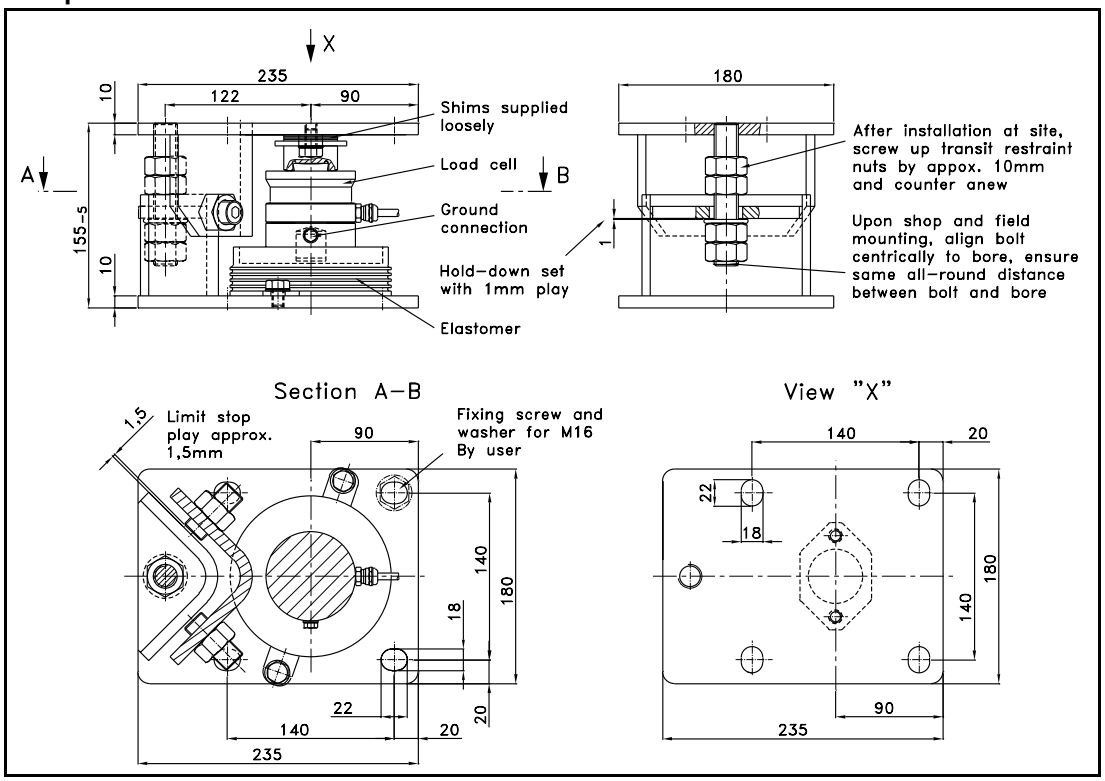
Compact Mounts DKM 0,33 t - 0,68 t for RTK/V/W Load Cells



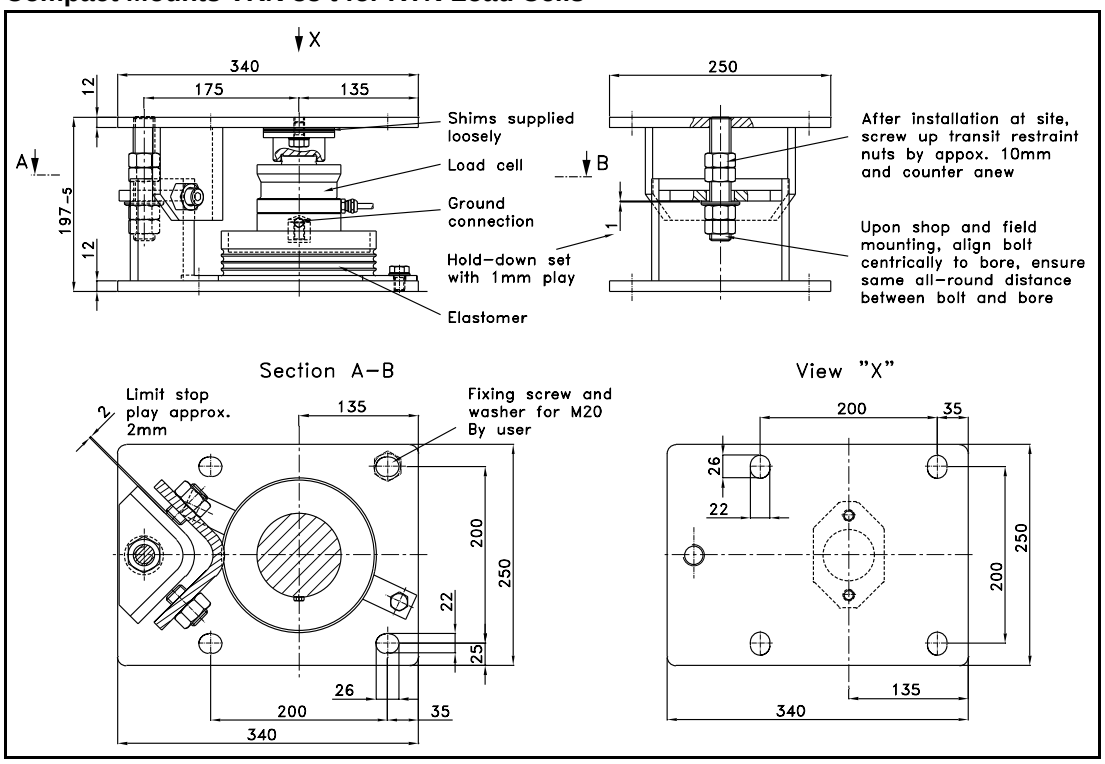
Compact Mounts VKN 1 t - 4,7 t for RTN Load Cells



Compact Mounts VKN 10 t - 22 t for RTN Load Cells

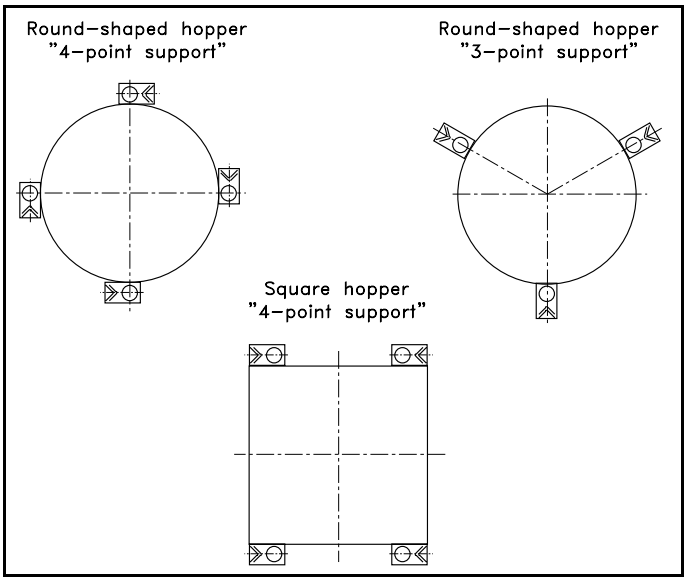


Compact Mounts VKN 33 t for RTN Load Cells



Important:
Lifting and lowering of the load application elements may cause a non-repeatable load to be applied to the load cell and produce errors in measurement. Therefore ensure that the load cell in the compact mount is never totally relieved. Select minimum preload such that load cell and contact plate, or base plate, are always positively tied in operation.

Compact Mounts DKM 0,33 t - 0,68 t and VKN 1 t - 33 t - Support Point Arragement



Please observe in all cases:

The present support point arrangements merely consider the weighing aspects. It is up to the user to ensure strength and solidity of the supporting structure.

Admissible loads per support point:

Max. horizontal force: 10 % x L_n

Max. vertical lift-off

(tensile) force: 15 % x L_n

L_n = Rated load per support point

If loads on horizontal limit stops and hold-down are excessive, take separate measures

Technical Data

Variant	DKM	VKN
Tated capacity	0,33 ... 0,68t	1 ... 33t
Weight: (including load cell)	DKM 0,33 - 0,68 8,5kg	VKN 1 - 4,7 12,3kg VKN 10 - 22 19kg VKN 33 42kg
Material - Elastomer Option (available on special request)	Neoprene (chlorine butadiene rubber) Viton (fluorinate rubber FKM), SBR (Styrene butadiene rubber), EPDM (ethylene propylene diene rubber)	
Height adjustment	5 mm	
Deflection	Approx.. 0,8 mm at rated capacity	
Nominal temperature range	-10°C bis +40°C	
Operating temperature range	-30°C bis +80°C	
Options	Heat insulting plates, protection from water jets, weld-on plates	

Stainless Steel Metal Parts

Variant	Ordering Number
DKM 0,33	D 709 713.01
DKM 0,47 / DKM 0,68	D 709 713.02
VKN 1 / VKN 2,2	D 731 186.01
VKN 4,7	D 731 186.02
VKN 10 - 22	D 731 353.01

Metal Parts St 37, Hot-Dip Galvanized

Variant	Ordering Number
VKN 10 - 22	D 725 879.02
VKN 33	D 731 415.01

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