Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S563

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Gedge Systems Model Titan-20 Load Cell

submitted by Gedge Systems Pty Ltd
27 Rhur Street
Dandenong South VIC 3175

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 60, *Metrological Regulation for Load Cells*, dated July 2004.

This approval becomes subject to review on 1/06/17, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variant 1 approved – certificate issued	31/05/12

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI S563’ and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked ‘NMI S563’ in addition to the approval number of the instrument, and only by persons authorised by the submittor.

It is the submittor’s responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

TECHNICAL SCHEDULE No S563

1. Description of Pattern **approved on 31/05/12**

A Gedge Systems model Titan-20 load cell of 20 t maximum capacity (Figure 1 and Table 1).

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 2.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Gedge Systems
Model number	……..
Maximum capacity, E_{max}	…….. t
Serial number	……..
Pattern approval mark	NMI No S563

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1 **approved on 31/05/12**

Certain other models of the Gedge Systems Titan series and with capacities and characteristics as listed in Table 1.

TABLE 1

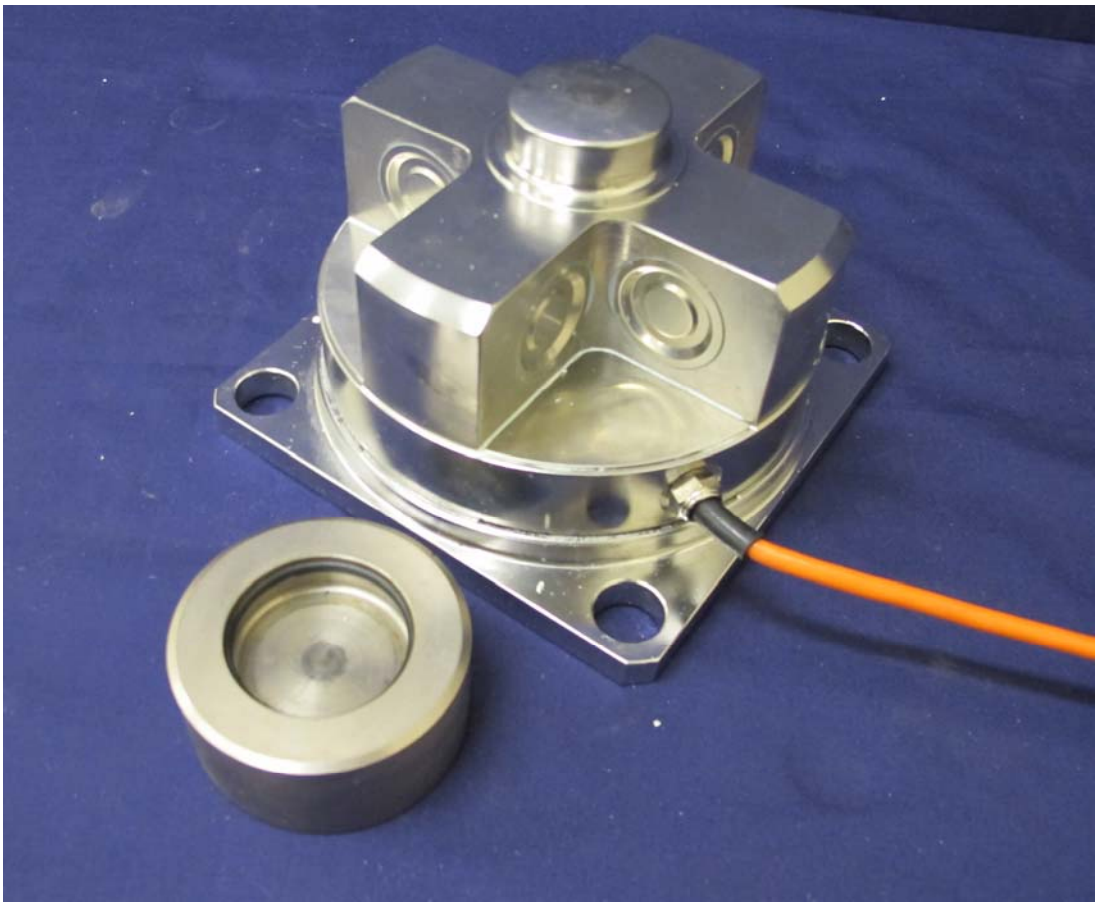
Type: Gedge Systems Titan-# series as listed below, where # in the model number represents the capacity (*Emax)* in tonnes, e.g. the pattern (model Titan-20) is of 20 t capacity.

Model Number	#=20t	#=30t	#=40t	#=50t	#=60t	#=70t	#=80t	#=90t	#=100t
E_{max} (t)	20	30	40	50	60	70	80	90	100
Class	C	C	C	C	C	C	C	C	C
nLC	3000	3000	3000	3000	3000	3000	3000	3000	3000
V_{min} (kg)	4	6	8	10	12	14	16	18	20
DR (kg)	2.33	3.50	4.67	5.84	7.00	8.17	9.34	10.50	11.67
mV/V	2								
Input imp (Ω)	380								
Voltage (V)	15								
Cable length (m)	15								
Number of leads (plus shield)	4								

Where:

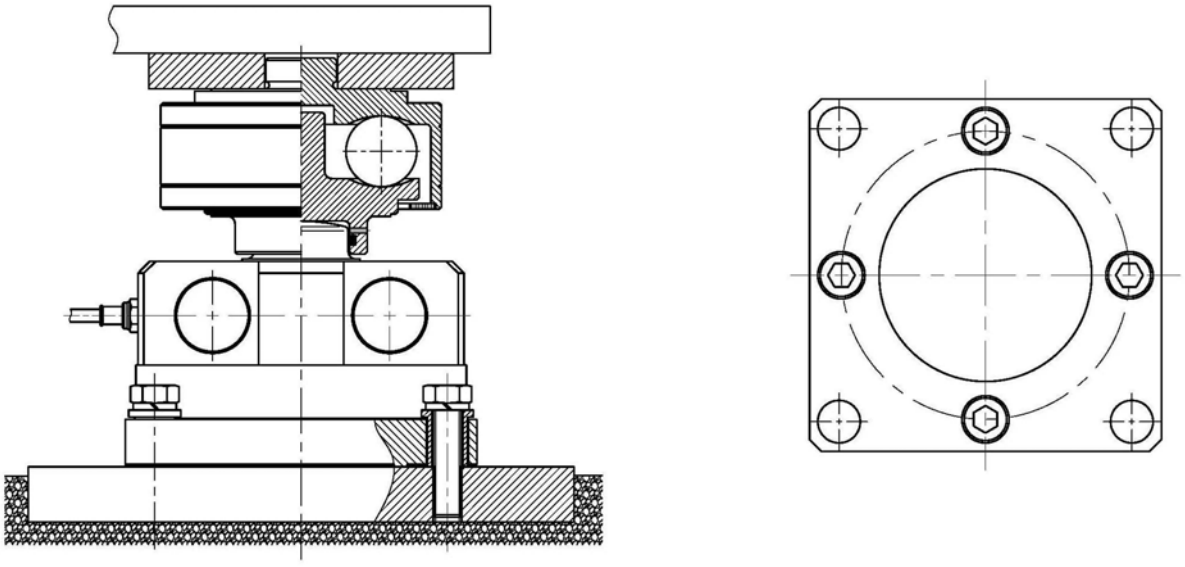
E_{max}	=	Maximum capacity
nLC	=	Maximum number of verification intervals
V_{min}	=	Minimum value of verification interval
DR	=	Minimum dead load output return value
mV/V	=	Output rating (nominal)
Input imp.	=	Input impedance (nominal)
Voltage	=	Maximum supply voltage (DC)

FIGURE S563 – 1

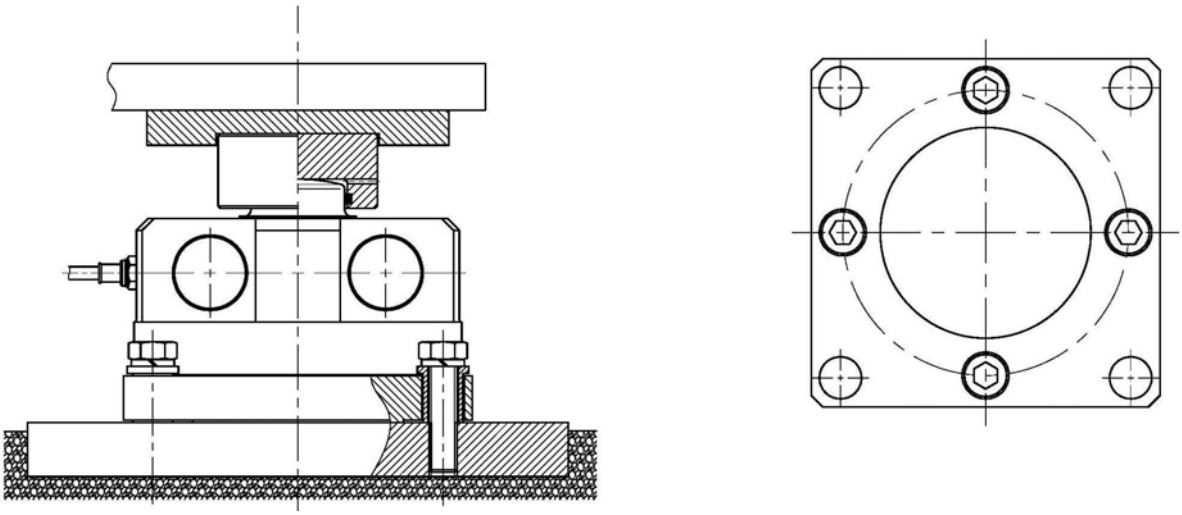


Gedge Systems Titan Series Load Cell with a Loading Cup

FIGURE S563 – 2



(a) Three Ball Head Method



(b) Fixed Load Head Method

Typical Mounting Arrangements – Titan Series Load Cells

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