Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

# Supplementary Certificate of Approval

# NMI S385

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.

Revere Model BSP Load Cell

submitted by Thermo Gamma-Metrics Pty Ltd
T/A Thermo Fisher Scientific
18 Butler Blvd
Burbridge Business Park SA 5950

**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 **1/04/21**, and then every 5 years thereafter.

DOCUMENT HISTORY

| Rev | Reason/Details | Date |
|---|---|---|
| 0 | Pattern & variant 1 approved – interim certificate issued | 2/03/01 |
| 1 | Pattern & variant 1 – certificate issued | 15/05/01 |
| 2 | Pattern & variant 1 reviewed & amended – notification of change issued | 13/09/06 |
| 3 | Pattern & variant 1 reviewed & updated – certificate issued | 24/11/11 |
| 4 | Pattern & variant 1 reviewed – certificate issued | 29/04/16 |
| | | |

# CONDITIONS OF APPROVAL

## General

Instruments purporting to comply with this approval shall be marked with pattern approval number ‘NMI S385’ and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked ‘NMI S385’ in addition to the approval number of the instrument.

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 their powers under Regulation 60 of the *National Measurement Regulations 1999*.

**Dr A Rawlinson**

TECHNICAL SCHEDULE No S385

## 1. Description of Pattern **approved on 2/03/01**

A Revere model BSP load cell of 250 kg maximum capacity (Figure 1 and Table 1) approved for use with up to 3000 verification intervals.

May also be known as Vishay Revere load cells of the same model.

### 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 | Revere Transducers (#) |
| Model number | …….. |
| Maximum capacity, $E_{max}$ | …….. kg (or t) |
| Serial number | …….. |
| Pattern approval mark | NMI (or NSC) S385 |

(#) May alternatively be marked as 'Vishay Revere', 'Revere Transducers Europe', or similar.

### 1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

## 2. Description of Variant 1 **approved on 2/03/01**

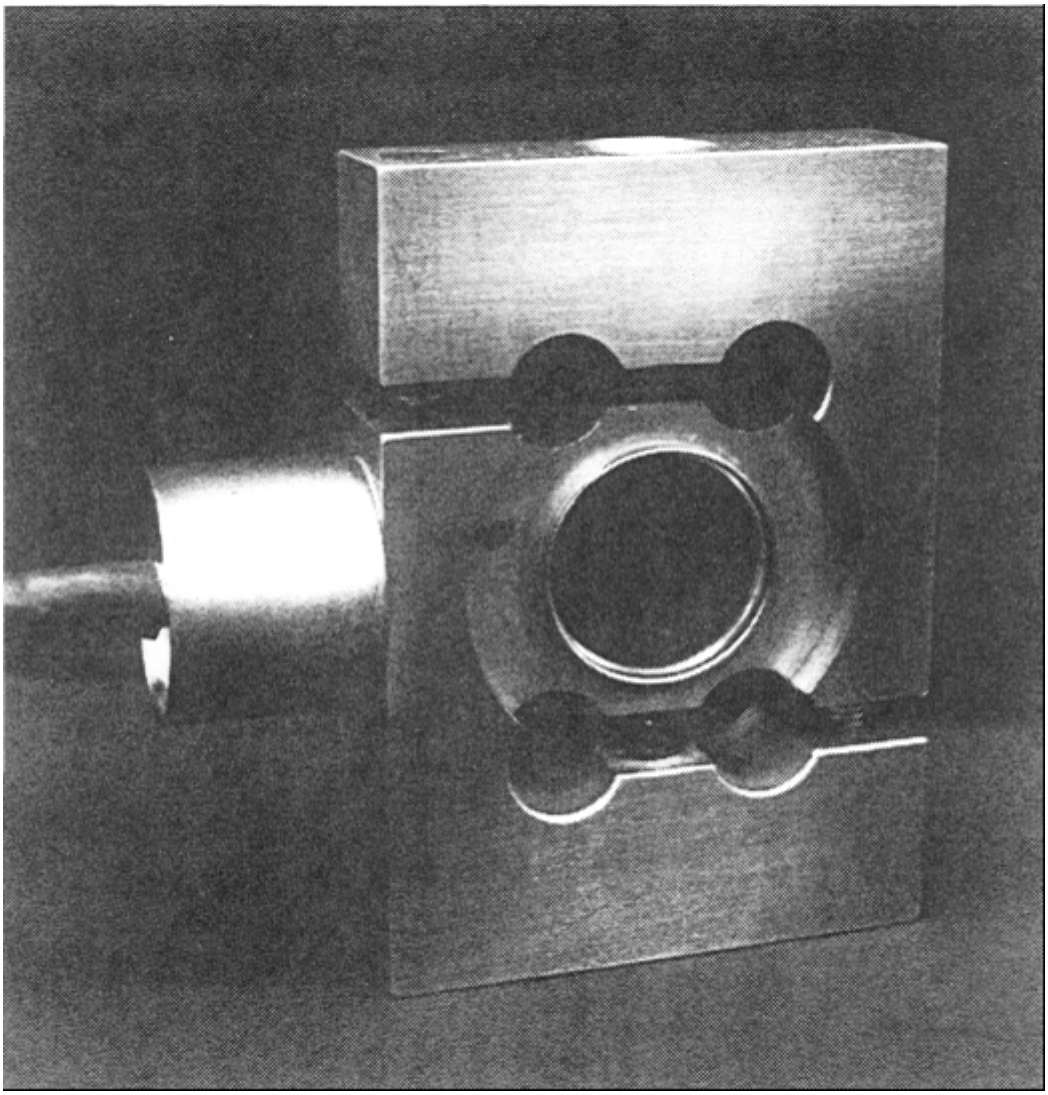
Certain other capacities as listed in Table 1.

TABLE 1 – Specifications

Type: Revere (aka Vishay Revere) model BSP

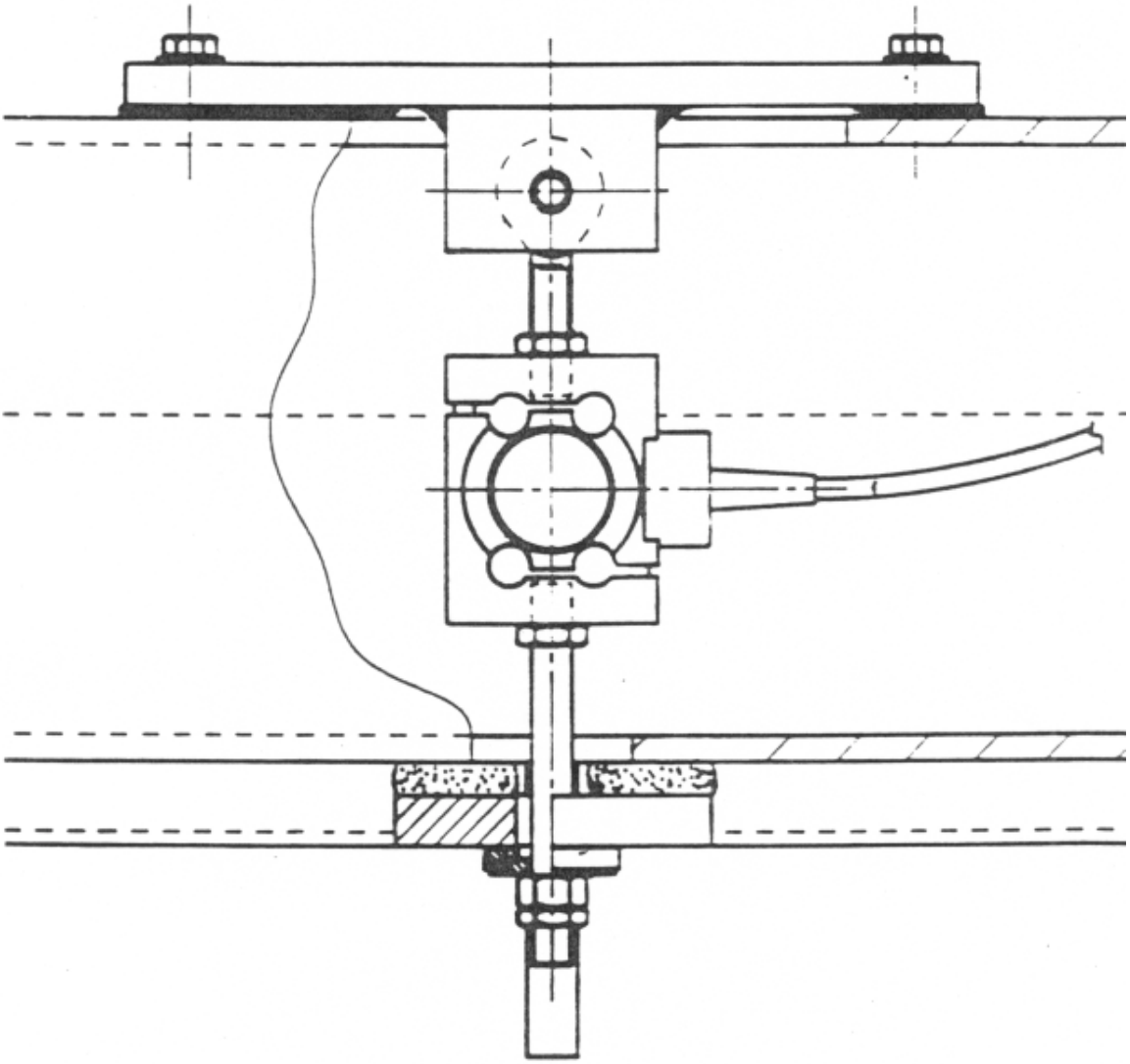
| | | | | |
|---|---|---|---|---|
| Maximum capacity, $E_{max}$ | kg | 250 | 500 | 1250 |
| Classification | | C3 | C3 | C3 |
| Maximum number of verification intervals | | 3000 | 3000 | 3000 |
| Minimum value of verification interval, $v_{min}$ | kg | 0.035 | 0.07 | 0.175 |
| Minimum dead load output return value (DR) | kg | 0.025 | 0.05 | 0.125 |
| Output rating (nominal) | mV/V | 3 | 3 | 3 |
| Input impedance (nominal) | Ω | 350 | 350 | 350 |
| Supply voltage (AC or DC) | V | 10 - 15 | 10 - 15 | 10 - 15 |
| Cable length (±0.1 m) | m | 10 | 10 | 10 |
| Number of leads (plus shield) | | 4 | 4 | 4 |

FIGURE S385 – 1



Revere (aka Vishay Revere) Model BSP Load Cell

FIGURE S385 – 2



Mounting Method

~ End of Document ~