



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

No S639

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.

Precia-Molen Model CSP-M-25t-C3.5-SS Load Cell

submitted by Precia SA
 BP 106
 07000 Privas
 FRANCE

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 1/08/18, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – certificate issued	5/07/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S639' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S639' in addition to the approval number of the instrument, and only by persons authorised by the submittor.

It is the submitter'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 their powers under Regulation 60 of the *National Measurement Regulations 1999*.

A handwritten signature in black ink, appearing to read 'A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson

TECHNICAL SCHEDULE No S639

1. Description of Pattern

approved on 5/07/13

A Precia-Molen model CSP-M-25t-C3.5-SS load cell of 30 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 3500 verification scale intervals.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figures 2 to 7.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Precia-Molen France
Model number
Maximum capacity, E_{max} kg (or t)
Serial number
Pattern approval mark	NMI S639

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1

approved on 5/07/13

Certain other capacities of the Precia-Molen model CSP-M-#t-C3.5-SS (*) series load cells with characteristics as listed in Table 1.

- (*) Precia Molen CSP-M-#-C3.5-SS series as listed below, where # in the model number represents the capacity (E_{max}) in tonnes, e.g. the pattern model CSP-M-25t-C3.5-SS is of 25 t (25 000 kg) capacity.

3. Description of Variant 1

approved on 5/07/13

Certain other capacities of the Precia-Molen CSP-M-#t-C3.5-MB-SS (*) series load cells with characteristics as listed in Table 1.

- (*) Precia Molen CSP-M-#-C3.5-SS or CSP-M-#t-C3.5-MB-SS series as listed below, where # in the model number represents the capacity (E_{max}) in tonnes, e.g. the pattern model CSP-M-25t-C3.5-SS is of 25 t (25 000 kg) capacity.

TABLE 1

Precia-Molen Model CSP-M Series Load Cells

Model: (*)	CSP-M-#-C3.5-SS		CSP-M-#-C3.5-MB-SS	
Maximum capacity, E_{max} (kg)	25 000	40 000	25 000	40 000
Accuracy class - Classification	C			
Maximum number of verification intervals	3500			
Minimum value of verification interval, V_{min} (kg)	2.14	3.43	1.07	1.71
Minimum dead load output return value, (DR) (kg)	3.57	5.71	1.77	2.84
Output rating (nominal (mV/V))	2			
Input impedance (Ω)	450			
Supply voltage (DC) V	5 - 20			
Cable length (± 0.1 m) m	up to 19.8 m			
Communication	4-wire			

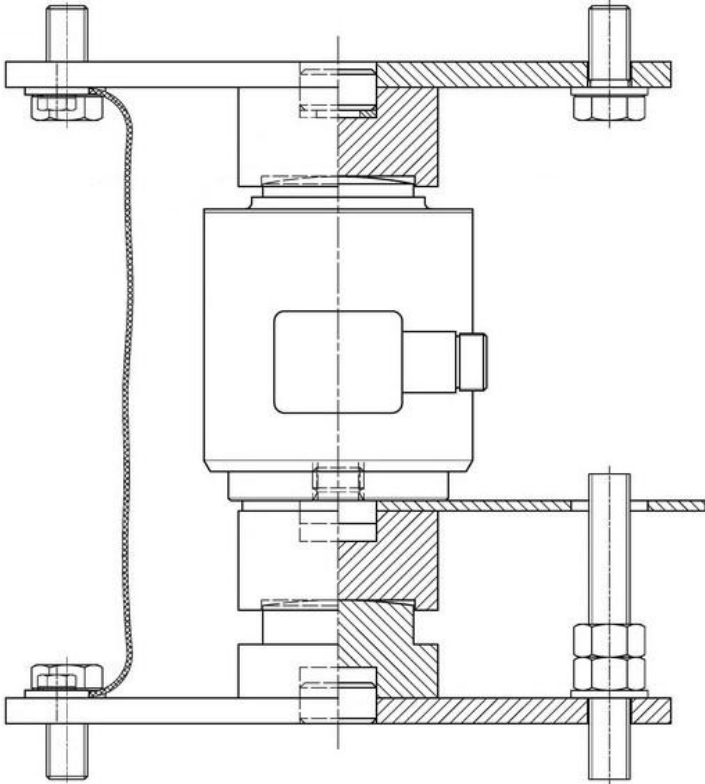
(*) Precia Molen CSP-M-#-C3.5-** series as listed above, where # in the model number represents the capacity (E_{max}) in tonnes.

FIGURE S639 – 1



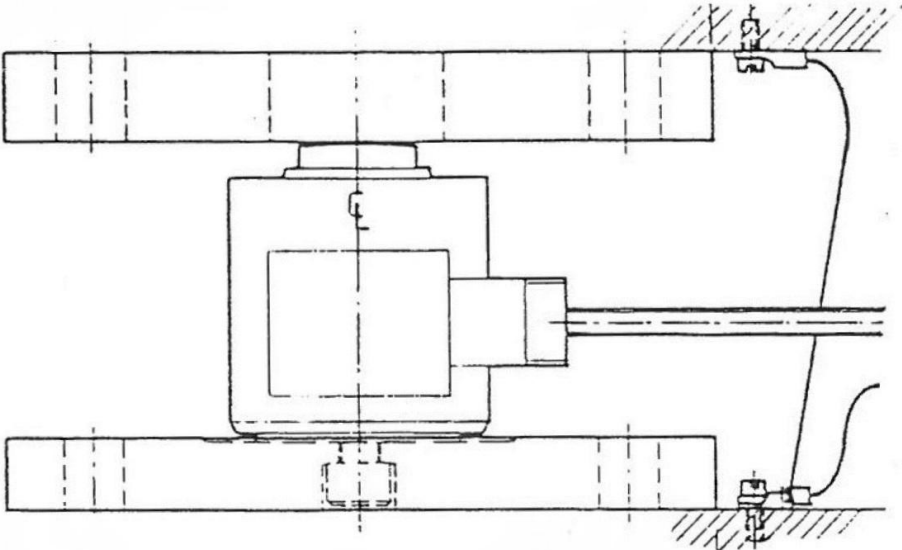
Precia-Molen Model CSP-M-25T-C3.5-SS Load Cell

FIGURE S639 – 2



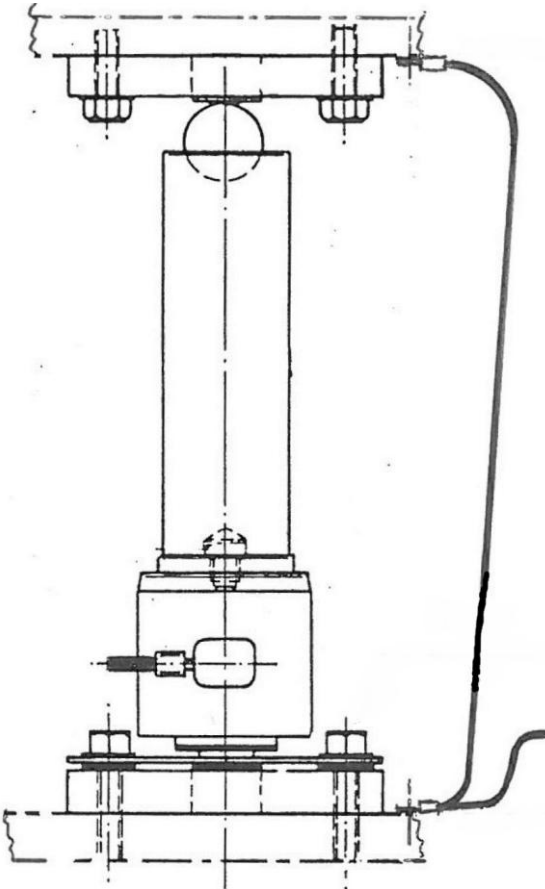
Typical Mounting Method – Pendulum Kit Arrangement

FIGURE S639 – 3



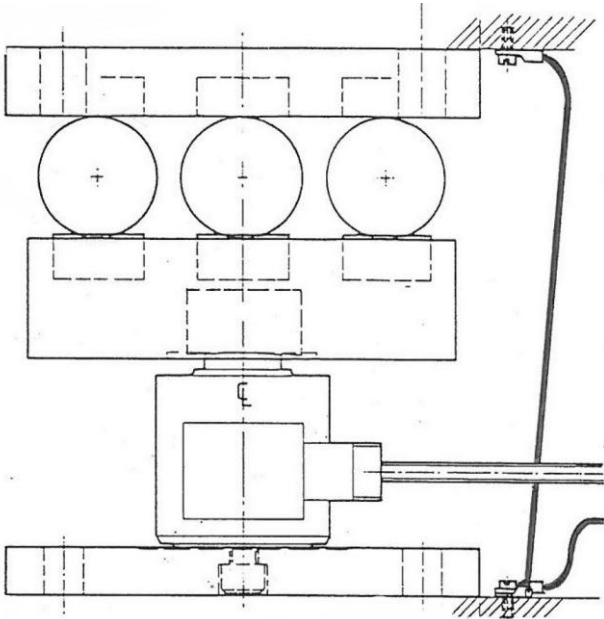
Typical Mounting Method – Half Pendulum Arrangement

FIGURE S639 – 4



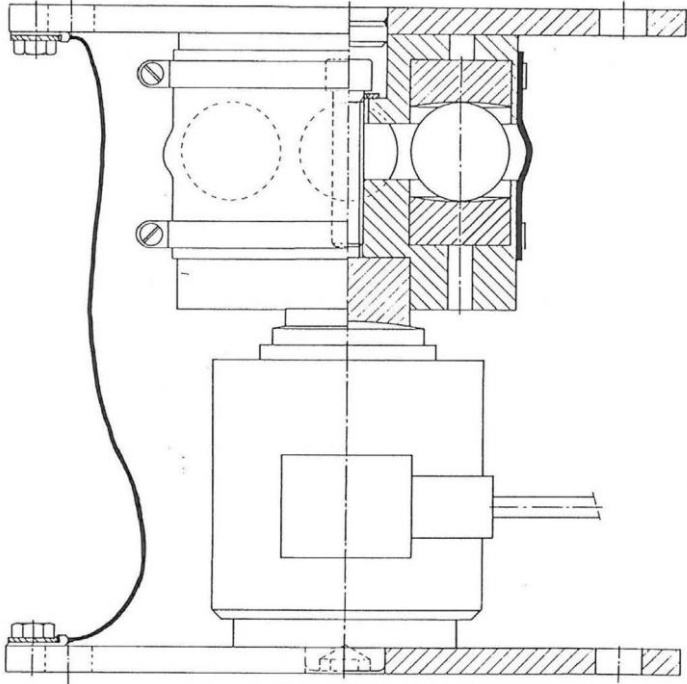
Typical Mounting Method – Pendulum With Single-Ball Bearing Construction

FIGURE S639 – 5



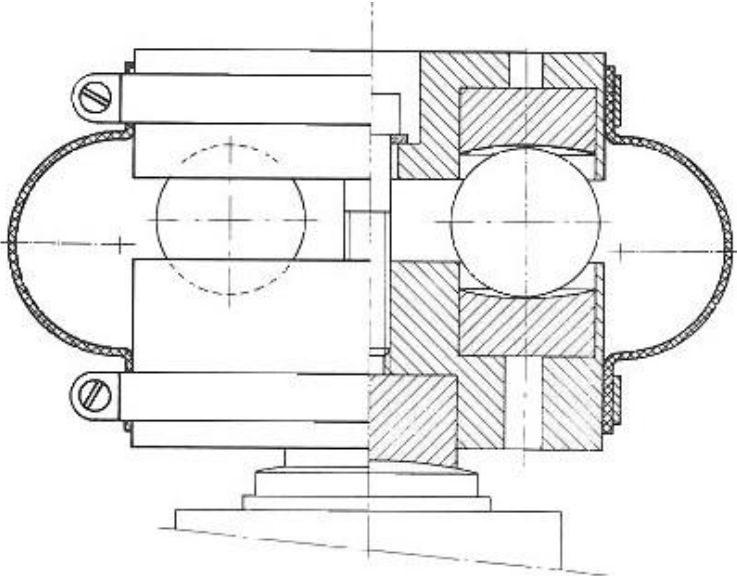
Typical Mounting Method – Three-Ball Bearing ('old' style) Arrangement

FIGURE S639 – 6



Typical Mounting Method – Three-Ball Bearing ('new' style) Arrangement

FIGURE S639 – 7



Alternative Three-Ball Bearing ('new' style) Construction

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