



Australian Government
Department of Industry, Science,
Energy and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S784

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.

Queensland Timber Market Model QTMZSWF-DSS40 Digital Load Cell

submitted by Queensland Timber Market Pty Ltd
250 Bowhill Road
Willawong QLD 4110.

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.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variants 1 to 4 approved – certificate issued	04/02/20
1	Updated NMI logo – certificate issued	07/02/20
2	Table 1 amended (correction) – certificate issued	06/10/20

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S784' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S784' in addition to the approval number of the instrument, and only by persons authorised by the submitter.

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*.



Darryl Hines
Manager
Policy and Regulatory
Services

TECHNICAL SCHEDULE No S784

1. Description of Pattern

**approved on 04/02/20
amended on 06/10/20**

A Queensland Timber Market model QTMZSWF-DSS40 stainless steel compression digital load cell of 40 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 5 000 verification scale intervals.

These load cells shall only be used with indicators which are NMI-approved for use with compatible Queensland Timber Market digital load cells.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 4.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Queensland Timber Market Pty Ltd
Model number
Maximum capacity, E_{max} kg (or t)
Serial number
Pattern approval mark	NMI S784

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

TABLE 1

Model Number	QTMZSWF-D40 QTMZSWF-DSS40 QTMZSWFG-D40 QTMZSWFG-DSS40	QTMZSWF-D50 QTMZSWF-DSS50 QTMZSWFG-D50 QTMZSWFG-DSS50
Maximum capacity, E_{max} (kg)	40 000	50 000
Accuracy class - Classification	C	C
Maximum number of verification intervals, nLC	5000	5000
Minimum value of verification interval, v_{min} (kg)	4	5
Minimum dead load output return value, DR (kg)	4	5
Output rating (resolution)	100 000 counts at E_{max}	
Supply voltage (DC), (V)	10 - 18	
Cable length	up to 100 m (*) (**)	
Communication	RS485	
Apportionment factor, p _{LC}	0.8	
Digital indicator	Queensland Timber Market Model D2008 indicator	

- (*) The QTMZSWF-D/QTMZSWF-DSS series load cells are connected to a junction box and then to the indicator. These cables may be up to 100 metres in length.
- (**) The QTMZSWFG-D/QTMZSWFG-DSS load cells are provided with two communication ports into which connecting cables to other load cells and to the indicator are fitted (Figure 2). These cables may be up to 50 metres in length. The load cells are connected to an indicator in daisy chain fashion as shown in Figure 3. A termination device is used in the second port of the last load cell in the chain.

2. Description of Variant 1

approved on 04/02/20

Certain other capacities and characteristics of the Queensland Timber Market QTMZSWF-DSS series digital load cells (Figure 1) as listed in Table 1.

3. Description of Variant 2

approved on 04/02/20

Certain capacities and characteristics of the Queensland Timber Market QTMZSWF-D series alloy steel load cells (Figure 1) as listed in Table 1.

4. Description of Variant 3

approved on 04/02/20

Certain capacities and characteristics of the Queensland Timber Market QTMZSWFG-DSS series stainless steel digital load cells (Figure 2) as listed in Table 1.

The load cells are provided with two communication ports and are connected to an indicator in daisy chain fashion as shown in Figure 3. A termination device is used in the second port of the last load cell in the chain.

5. Description of Variant 4

approved on 04/02/20

Certain capacities and characteristics of the Queensland Timber Market QTMZSWFG-D series alloy steel load cells (Figure 2) as listed in Table 1.

The load cells are provided with two communication ports and are connected to an indicator in daisy chain fashion as shown in Figure 3. A termination device is used in the second port of the last load cell in the chain.

FIGURE S784 – 1



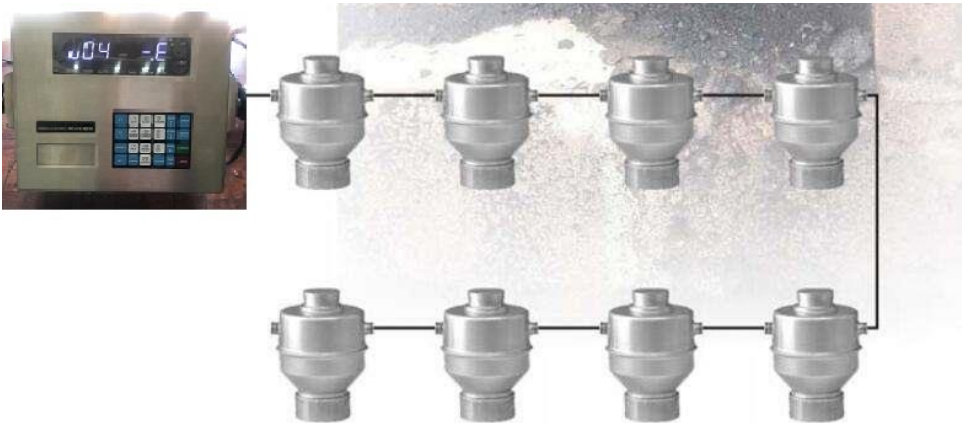
Queensland Timber Market Model QTMZSWF-D/QTMZSWF-DSS Series Load Cell

FIGURE S784 – 2



Queensland Timber Market Model QTMZSWFG-D/QTMZSWFG-DSS Series Load Cell

FIGURE S784 – 3



Queensland Timber Market Model QTMZSWFG-D/QTMZSWFG-DSS Series Daisy Chain Network

FIGURE S784 – 4



Typical Mounting Arrangement
Note: Use without the rubber boot is acceptable.

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