Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Supplementary Certificate of Approval

NMI S704

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.

PT Limited Model PT90-C3-10t-15 Load Cell

submitted by PT Limited
7 Marken Place
Glenfield Auckland 0632
NEW ZEALAND

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 1/03/21, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variant 1 & 2 – approved – certificate issued	5/02/16

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI S704’ and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked ‘NMI S704’ 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 their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No S704

1. Description of Pattern approved on 5/02/16

A PT Limited model PT90-C3-10t-15 stainless steel compression load cell of 10 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 3000 verification scale intervals.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figures 1 and 2.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	PT Limited
Model number	……..
Maximum capacity, E_{max}	…….. kg (or t)
Serial number	……..
Pattern approval mark	NMI S704

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1 approved on 5/02/16

Certain other capacities and characteristics of the PT90 C3 series as listed in Table 1.

Type: PT Limited PT90-C3-#-* series as listed below, where # in the model number represents the capacity (*Emax)* in tonnes and * represents the cable length in metres, e.g. the **pattern** model PT90-C3-10t-15 is of 10 000 kg capacity having a cable length of 15 metres.

TABLE 1 – Approved class C3 load cells

Model Number	**#=10t**	#=20t	#=30t	#=40t	#=50t
E_{max} (kg)	**10 000**	20 000	30 000	40 000	50 000
Class	**C**	C	C	C	C
nLC	**3000**	3000	3000	3000	3000
V_{min} (kg)	**1.14**	2.27	3.41	4.55	5.68
DR (kg)	**1.67**	3.33	5	6.67	8.33
mV/V	2				
Input imp (Ω)	700				
Voltage (V)	18				
Cable length (m)	Manufactured in various lengths between 0.5 and 60 metres; the cable length is a part of the model number, and so marked on the data plate.				
Number of leads	4 (plus shield)				

3. Description of Variant 2 approved on 5/02/16

Certain other capacities and characteristics of the PT90 C4 series as listed in Table 2.

Type: PT Limited PT90-C4-#-* series as listed below, where # in the model number represents the capacity (*Emax)* in tonnes and * represents the cable length in metres, e.g. the pattern model PT90-C4-10t-15 is of 10 000 kg capacity having a cable length of 15 metres.

TABLE 2 – Approved class C4 load cells

Model Number	#=10t	#=20t	#=30t	#=40t	#=50t
E_{max} (kg)	10 000	20 000	30 000	40 000	50 000
Class	C	C	C	C	C
nLC	4000	4000	4000	4000	4000
V_{min} (kg)	1.14	2.27	3.41	4.55	5.68
DR (kg)	1.25	2.5	3.75	5	6.25
mV/V	2				
Input imp (Ω)	700				
Voltage (V)	18				
Cable length (m)	Manufactured in various lengths between 0.5 and 60 metres; the cable length is a part of the model number, and so marked on the data plate.				
Number of leads (plus shield)	4				

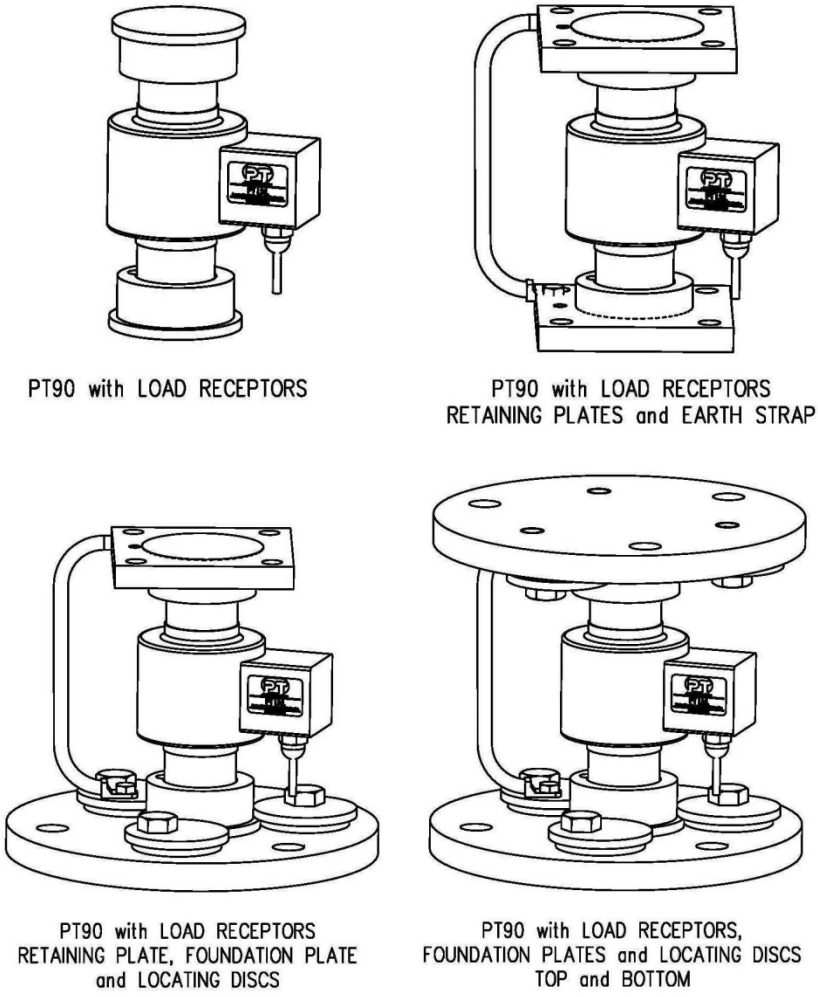
Where:

E_{max}	=	Maximum capacity
E_{min}	=	Minimum dead load
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 (AC/DC)

FIGURE S704 – 1

PT Limited Model PT90 Series Load Cell

FIGURE S704 – 2



Alternative Mounting Arrangements

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