



Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S497

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.

HBM Model Z6FC3 100KG Load Cell

submitted by Hottinger Baldwin Messtechnik GmbH
Im Tiefen See 45
D-64293 Darmstadt
Germany

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use as a legal measuring instrument 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 **1/08/17**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – certificate issued	4/07/07
1	Pattern & variant 1 reviewed & updated – variant 2 approved – certificate issued	20/09/12

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI (or NSC) S497' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI (or NSC) S497' 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.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the bottom.

TECHNICAL SCHEDULE No S497

1. Description of Pattern

approved on 4/07/07

An HBM model Z6FC3 100KG load cell of 100 kg 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	HBM
Model number
Maximum capacity kg (or t)
Serial number
Pattern approval mark	S497

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1

approved on 4/07/07

Certain other models and with characteristics as listed in Table 1.

3. Description of Variant 2

approved on 20/09/12

The models Z6FC3, Z6GF3, Z6FD1 and Z6GD1 may have a 'fold back arm' mounting arrangement in tension as shown in Figure 3

TABLE 1 – Approved Models and Configurations

Type: HBM Z6 series load cells as listed below. (The pattern is shown in **bold**.)

Model	E _{max} (kg)	Class	n _{LC}	V _{min} (kg)	DR (kg)	Notes
Z6FC3 10KG	10	C	3000	0.0009		
Z6FC3 20KG	20	C	3000	0.0018		
Z6FC3 50KG	50	C	3000	0.0045		
Z6FC3MI7.5 50KG	50	C	3000	0.0033	0.0033	
Z6FC3 100KG	100	C	3000	0.009		
Z6FC3MI7.5 100KG	100	C	3000	0.0066	0.0067	
Z6FC3 200KG	200	C	3000	0.018		
Z6FC3MI7.5 200KG	200	C	3000	0.0132	0.0133	
Z6FC3 500KG	500	C	3000	0.045		
Z6GC3 500KG	500	C	3000	0.045		(a)
Z6FC3 1T	1000	C	3000	0.09		(a)
Z6FC4 20KG	20	C	4000	0.0013		
Z6FC4 50KG	50	C	4000	0.0033		
Z6FC4 100KG	100	C	4000	0.0066		
Z6FC4 200KG	200	C	4000	0.0132		
Z6FC4 500KG	500	C	4000	0.033		
Z6GC4 500KG	500	C	4000	0.033		(a)
Z6FC6 50KG	50	C	6000	0.0033		
Z6FC6 100KG	100	C	6000	0.0066		
Z6FC6 200KG	200	C	6000	0.0132		
Z6FD1 5KG	5	D	1000	0.0018		(b)
Z6FD1 10KG	10	D	1000	0.0036		(b)
Z6FD1 20KG	20	D	1000	0.0072		(b)
Z6FD1 50KG	50	D	1000	0.018		(b)
Z6FD1 100KG	100	D	1000	0.036		(b)
Z6FD1 200KG	200	D	1000	0.072		(b)
Z6FD1 500KG	500	D	1000	0.18		(b)
Z6GD1 500KG	500	D	1000	0.18		(a), (b)
Z6FD1 1T	1000	D	1000	0.36		(a), (b)

In all cases	
mV/V	2 mV/V
Input imp. (ohms)	350
Voltage (V)	18 V max AC/DC
Cable length (m)	3
Number of leads	6 (plus shield)

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)

Notes:


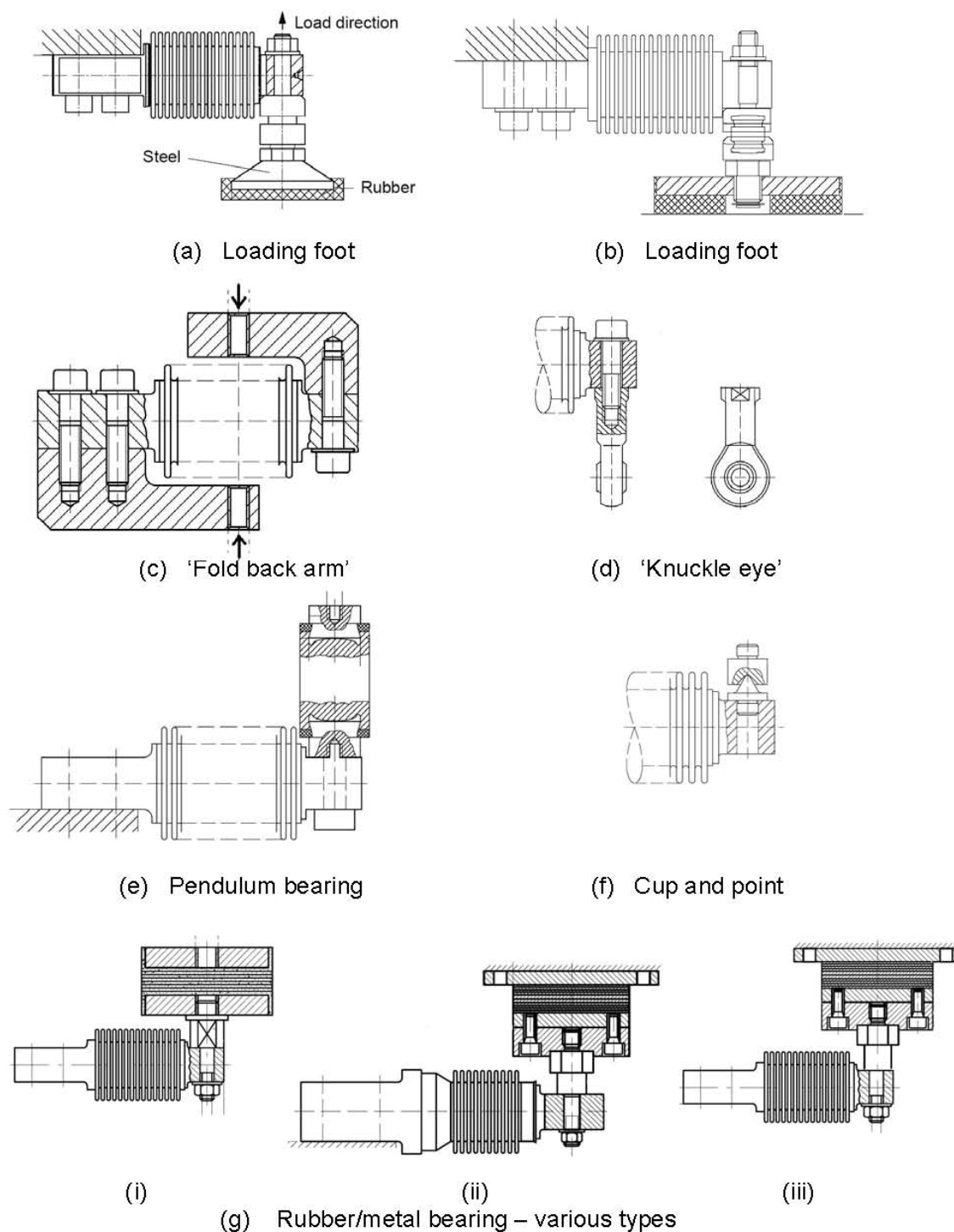
- (a) These models (model numbers commencing with 'Z6G' or ending in '1T') have a larger body (e.g. than the pattern, Figure 1) and have the profile as shown in Figure 2 (g) (ii).
- (b) Class D load cells may only be used in a Class 4 () weighing instrument.

FIGURE S497 – 1



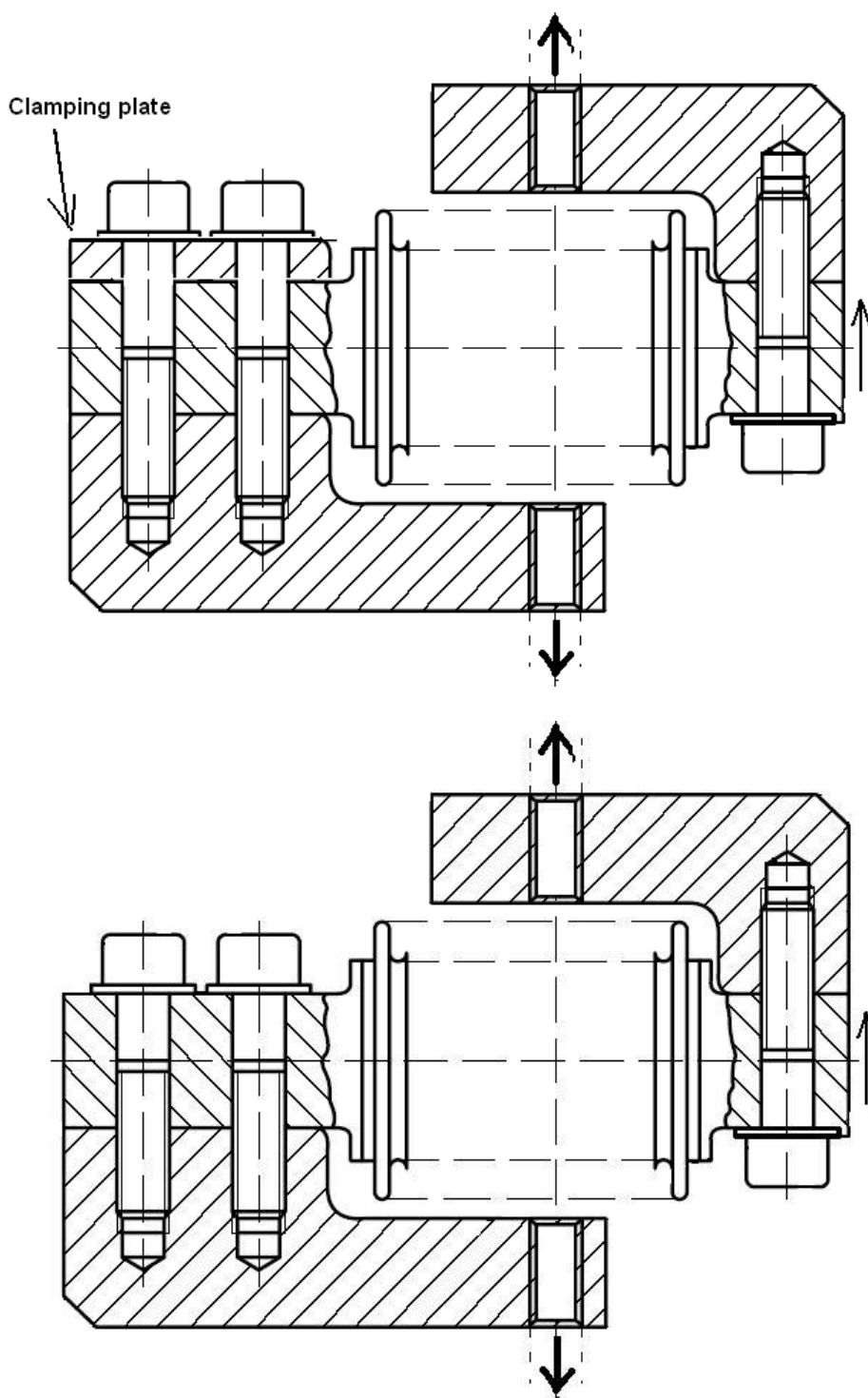
HBM Model Z6FC3 100KG Load Cell

FIGURE S497 – 2



Mounting Arrangements

FIGURE S497 – 3



Tension 'Fold back arm' Mounting Arrangements – Variant 2