

# NATIONAL STANDARDS COMMISSION

#### NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

#### **REGULATION 9**

### SUPPLEMENTARY CERTIFICATE OF APPROVAL NO S176

This is to certify that an approval for use for trade has been granted in respect of the pattern and variants of the

Avery Model 8708 Load Cell

submitted by Avery Australia Limited 3 Birmingham Avenue Villawood NSW 2163.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/7/89. This approval expires in respect of new instruments on 1/7/90.

Instruments incorporating a load cell purporting to comply with this approval shall be marked NSC No S176 in addition to the approval number of the instrument.

This approval may be withdrawn if load cells are constructed other than in accordance with the drawings and specifications lodged with the Commission.

The load cells shall be subject to regular certification by the Commission.

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 7/6/84

- Avery model 8708 load cell of 1500 kg capacity.

Technical Schedule No S176 describes the pattern.

Variant: approved 30/9/86

1. Of 3000 kg capacity.

Technical Schedule No S175 Variation No 1 describes variant 1.

Variant: approved 13/8/87

2. Of 7000 kg capacity.

Technical Schedule No S175 Variation No 2 describes variant 2.

Supplementary Certificate of Approval No S176 Page 2

### Filing Advice

Supplementary Certificate of Approval No S176 dated 1/12/86 is superseded by this Certificate, and may be destroyed. Table 1 dated 1/12/86 is replaced by the Table included herein (which includes amended values for the pattern and variant 1).

"... the methods shown in Figures 2 to 5".

The documentation for this approval now comprises:

Supplementary Certificate of Approval No S176 dated 9/12/87 Technical Schedule No S176 dated 10/7/84 Technical Schedule No S176 Variation No 1 dated 1/12/86 Technical Schedule No S176 Variation No 2 dated 9/12/87 Table 1 dated 9/12/87 Figures 1 and 2 dated 10/7/84 Figures 3 and 4 dated 1/12/86 Figure 5 dated 9/12/87

Note: Clause <u>1.1 Method of Mounting</u> in Technical Schedule No S176 dated 10/7/84, should be amended to read, in part:



# NATIONAL STANDARDS COMMISSION TECHNICAL SCHEDULE No \$176

Pattern: Avery Model 8708 Load Cell

Submittor: Avery Australia Limited 3-5 Birmingham Avenue Villawood NSW 2163

# 1. Description of Pattern

The pattern is an Avery model 8708 load cell of 1500 kg capacity (refer Figure 1 and Table 1) assembled in a Commission-approved basework.

# 1.1 Method of Mounting

Mounting is to be in accordance with one of the methods shown in Figure 2.

## 1.2 Marking

The following is the minimum data required to be marked on the load cell:

Manufacturer's name or mark Model number Serial number Maximum rated capacity Approval number

NSC No S176

#### TABLE 1

Type: Avery	8708
Maximum capacity	1500 kg
Maximum number of verification scale intervals	1000
Minimum dead load	75 kg
Minimum value of verification scale interval	0.5 kg
Imput impedance (nominal)	<b>418</b> Ω
Output rating (nominal)	1.75 mV/V
Supply voltage (AC or DC)	10 to 17 V
Cable length (±0.1 m)	1.1 m
Number of leads	4*
*Plus shield	



# NATIONAL STANDARDS COMMISSION

# TECHNICAL SCHEDULE No S176

### VARIATION No 1

Pattern: Avery Model 8708 Load Cell.

Submittor: Avery Australia Limited 3 Birmingham Avenue Villawood NSW 2163.

## 1. Description of Variant 1

An Avery model 8708 load cell of 3000 kg capacity (refer Table 1).

### TABLE 1

Type: Avery 8708 Maximum capacity		1500	1-0		2000	1
Maximum number of verification	(a)	2500	ĸg	(a)	2500	кg
scale intervals	(b)	2500		(b)	2500	
Minimum value of verification	(a)	0.18	kg	(a)	0.36	kg
scale interval	(b)	0.20	kg	(b)	0.50	kg
Output rating (nominal) Input impedance (nominal) Supply voltage (AC or DC)		1.75 390	mV/V ohms v		1.75 390	mV/V ohms
Cable length ( <u>+</u> 0.1 m) Number of leads (plus shield)		3 4	m		10-17 3 4	v m

(a) Instruments with or without automatic zero track - multi cell applications (b) Instruments with or without automatic zero track - single cell applications



# NATIONAL STANDARDS COMMISSION

#### TECHNICAL SCHEDULE No S176

#### VARIATION No 2

Pattern: Avery Model 8708 Load Cell

<u>Submittor</u>: Avery Australia Limited 3 Birmingham Avenue Villawood NSW 2163

1. Description of Variant 2

An Avery model 8708 load cell of 7000 kg capacity (refer Table 1).

The Table below replaces Table 1 included in Technical Schedule No S176 dated 1/12/86.

#### TABLE 1

Type:	Avery 8708									
Maximum	capacity		1500	kg		3000	kg		7000	kg
Maximum veri	number of fication	(a)	2500		(a)	2500		(a)	3000	
scal	le intervals	(b)	2500		(b)	2500		(b)	3000	
Minimum veri	value of fication	(a)	0.18	kg	(a)	0.36	kg	(a)	0.70	kg
scal	le interval	(b)	0.18	kg	(b)	0.36	kg	(b)	1.39	kg
Output 1	rating (nominal)		1.75	mV/V		1.75	mV/V		1.75	mV/V
Input in	npedance (nominal)		390	ohms		390	ohms		410	ohms
Supply v	voltage (AC or DC)		10-17	v		10-17	v		10-17	v
Cable 1	ength ( <u>+</u> 0.1 m)		3	m		3	m		15	m
Number o	of leads (including	shield)	5			5			7	

(a) Instruments with automatic zero track

(b) Instruments without automatic zero track

s176 9/12/87



FIGURE S176 - 1

Avery Model 8708 Load Cell

FIGURE S176 - 2





Typical Mounting Methods

FIGURE S176 - 3



**Overhead Track Scale** 

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Low Profile Platform Scale

FIGURE S176 - 4







