NMO

OIML CERTIFICATE OF CONFORMITY

Issuing authority:	**NMO**
Person responsible:	**Mannie Panesar – Head of Technical Services**
Applicant:	**Tecnicas de Electronica y Automatismos, S.A.** **C\Espronceda 176 - 180** **E-08018 Barcelona** **Spain**
Manufacturer:	**The applicant**
Identification of the certified pattern:	**SWIFT family of indicators**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

OIML R 76 - Edition 2006(E) for accuracy class: III or IIII

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: 21 June 2017

G Stones
Technical Manager
For and on behalf of the Head of Technical Services

UKAS
PRODUCT
CERTIFICATION
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NMO is part of the Regulatory Delivery directorate within the Department for Business, Energy & Industrial Strategy

The conformity was established by testing and examinations described in the associated Evaluation Report P02004 which includes 14 pages.

Characteristics of the instrument:

This SWIFT device, comprises a digital indicator type SWIFT RAIL, SWIFT PANEL and SWIFT COM models, is designed to be used as part of a single range, Class III or IIII, non-automatic weighing instrument. The SWIFT RAIL and SWIFT PANEL are self-indicating and DC-powered. The SWIFT COM does not have an integral display or keypad and is DC-powered.

The instrument is not designed for direct sales to the public.

Main features:

- Plastic enclosure (SWIFT PANEL) or stainless steel enclosure (SWIFT RAIL and SWIFT COM)
- LED display for SWIFT RAIL and SWIFT PANEL
- Operator keypad with 5 navigation and function keys for SWIFT RAIL and SWIFT PANEL
- LED enunciators for SWIFT RAIL and SWIFT PANEL
- SWIFT COM indicator does not include integral display or function keys but is fitted with LED enunciators for power, communication, errors of load cell connection and/or fieldbus status..

Devices:

- Initial zero setting device on power up ($\leq$ 20% Max)
- Semi-automatic zero setting ($\leq$ 4% Max)
- Zero tracking (optional) ($\leq$ 4% Max)
- Semi-automatic subtractive tare balancing (T = - Max)
- Net enunciator
- Preset tare
- Zero enunciator
- Indication of stable equilibrium

Interfaces:

- Load cell connection
- RS232/485
- Analog output (optional)
- ProfiBus/ProfiNet (optional)
- EtherNet/IP (optional)

Technical data:

Power supply	10 - 28 VDC
Maximum number of scale intervals	6,000 (Class III)
Operating temperature range	- 10 °C to + 40 °C
Maximum Tare value	- Max
Load cell excitation voltage	5 VDC
Minimum load cell impedance	43 Ω
Maximum load cell impedance	1000 Ω
Minimum input voltage per verification scale interval	0.5 μV
Measuring range maximum voltage	+25 mV
Measuring range minimum voltage	-25 mV
Fraction of maximum permissible error	P_i = 0.5
Load cell cable (from indicator to load cell junction box) - Maximum length	Connect directly without junction box (4-wire configuration) 2232 m/mm^2 (6-wire configuration)

Software:

The software is held in firmware on the circuit board, and has the identification number "V1.xxxx", with xxxx reflecting non-legally relevant changes. The software version number is displayed at power-up for SWIFT RAIL and SWIFT PANEL. Alternatively the version number can be checked via the serial port, using additional software tools (all models).

Download of software and access to the legally relevant parameters is prevented by the switch located on the left-hand side of the indicator (SWIFT RAIL and SWIFT PANEL).

Software sealing may be used as an alternative (SWIFT RAIL, SWIFT PANEL and SWIFT COM): a non-editable counter designated CAL-COUNTER increments every time software is downloaded or a legally relevant parameter is changed. The value of the counter is displayed at power-up (SWIFT RAIL and SWIFT PANEL). Alternatively the value of the counter can be checked via the serial port, using additional software tools (all models).

Sealing:

Access to the electronics is prevented by sealing the housing. This can be done by sealing the switch located on the front face, or if software sealing is used by sealing the enclosure.

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-17.05	21 June 2017	Certificate first issued.
-	-	No revisions have been issued.