



## 3115F-12390

## REFERENCE FORCE TRANSDUCER

Standard reference force transducer specially designed for checking concrete testing machines according to the norms EN 12390-4 and DIN 51302-2

- Allows checking the homogeneity of the repartition of the forces generated by verifying: o self-alignment and restraint on movement of the upper platen o alignment of the component parts of the machine
- Normalized dimensions
- Full scale: 2 MN
- 4 independent full bridges @ 90°
- Protection: IP65
- Material: Nickel plated alloy steel
- Options:
  - o Digital output RS-232C, RS-485 or USB o Class 1 and 05 following ISO376



Model 3115F-12390

| TECHNICAL DATA                                      |                          |           |
|---|--------------------------|-----------|
| Hysteresis  |                          | ≤ ± 0.30  |
| Repeatability with rotation (reproducibility)       |                          | ≤ ± 0.20  |
| Repeatability without rotation (repeatability)      | % RO <sup>(1)</sup>      | ≤ ± 0.10  |
| Creep (over 30 minutes)                             |                          | ≤± 0.10   |
| Return to zero                                      |                          | ≤ ± 0.05  |
| Reference temperature                               |                          | 20        |
| Compensated temperature range                       | °C                       | -10 +45   |
| Service temperature range                           |                          | -30 +70   |
| Storage temperature range                           |                          | -50 +85   |
| Temperature coefficient on sensitivity              | % R0 / °C                | ≤ ± 0.035 |
| Temperature coefficient on zero                     | % FS <sup>(2)</sup> / °C | ≤ ± 0.03  |
| Sensitivity   | mV/V                     | 1.5       |
| Time of stabilization after power excitation supply | s                        | 200600    |
| Input resistance                                    | Ohm                      | 350 ± 3   |
| Output resistance                                   | Ohm                      | 350 ± 2   |
| Insulation resistance                               | MOhm                     | > 5000    |
| Nominal excitation voltage                          | V                        | 10        |
| Maximum excitation voltage                          | V                        | 15        |
| Service load  |                          | 100       |
| Limit load  | %FS                      | 110       |
| Breaking load                                       |                          | > 300     |

(1) RO is the rated output (i.e.: measured value). The mentioned values are only valid if RO <sup>3</sup> 20% of full scale).

(2) FS is the full scale of the force transducer.

