

Accessori Accessories



- ✓ Snodi sferici per tarature in trazione e compressione.
- ✓ Snodi sferici per la taratura di macchine prova materiali attrezzate con pinze per afferraggio tondini.
- ✓ Ball joints for calibration in tension and compression.
- ✓ Ball joints for the calibration of testing machines equipped with clamps grip rods.



Certificato di Taratura ACCREDIA  
**A RICHIESTA**

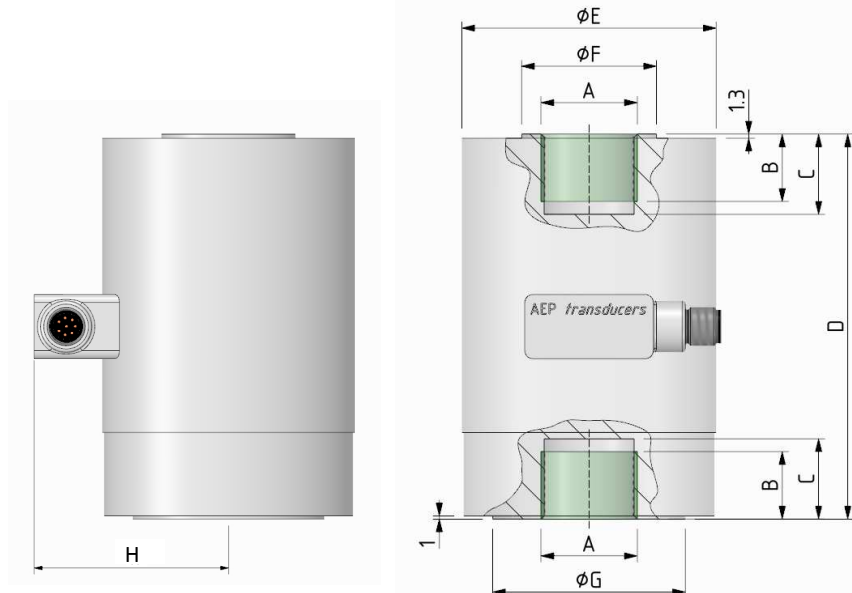
LAT N° 093  
**Calibration Centre**  
The products are NOT covered by accreditation

ACCREDIA Calibration Certificate  
**ON REQUEST**



Dimensioni Dimensions

[mm]



| CODE (Class 00)            | CODE (Class 0.5)          | CODE (Class 1) | LOAD          | A       | B  | C    | D   | E   | F  | G  | H  |
|----------------------------|---------------------------|----------------|---------------|---------|----|------|-----|-----|----|----|----|
| CLB30KNI00                 | CLB30KNI0                 | CLB30KNI1      | <b>30 kN</b>  | M20x1.5 | 19 | 23   | 120 | 79  | 42 | 60 | 60 |
| CLB50KNI00                 | CLB50KNI0                 | CLB50KNI1      | <b>50 kN</b>  | M30x2   | 21 | 25   | 120 | 79  | 42 | 60 | 60 |
| <sup>(1)</sup> CLB100KNI00 | <sup>(1)</sup> CLB100KNI0 | CLB100KNI1     | <b>100 kN</b> | M42x3   | 30 | 32   | 150 | 102 | 60 | 70 | 72 |
| <sup>(1)</sup> CLB200KNI00 | <sup>(1)</sup> CLB200KNI0 | CLB200KNI1     | <b>200 kN</b> | M42x3   | 32 | 37   | 200 | 102 | 60 | 80 | 72 |
| <sup>(1)</sup> CLB300KNI00 | <sup>(1)</sup> CLB300KNI0 | CLB300KNI1     | <b>300 kN</b> | M56x3   | 35 | 40.5 | 200 | 102 | 70 | 80 | 72 |

<sup>(1)</sup> La taratura ACCREDIA NON può essere eseguita dal Centro LAT N° 093, a richiesta può essere commissionata ad altri Centri di taratura accreditati.  
ACCREDIA certification can NOT be performed by LAT n° 93 Laboratory, on request it can be ordered to other Accredited Laboratories.

## Dati Tecnici

## Technical Data



| Classe di precisione: ISO 376  | Accuracy class: ISO 376  | 00   | 0.5  | 1  |
|--|--|--|--|--|
| CARICO NOMINALE  | NOMINAL LOAD   | 30- 50 - 100 - 200 - 300 - 500 - 600 kN  |  |  |
| ERRORI RELATIVI (al valore letto)<br>a) ripetibilità 0°-120°-240° (b)<br>b) interpolazione (fc)<br>c) reversibilità (u)<br>d) zero (fo)  | RELATIVE ERRORS (at reading)<br>a) repeatability 0°-120°-240° (b)<br>b) interpolation (fc)<br>c) reversivity (u)<br>d) zero (fo)   | ≤ ±0.050% <sup>(1)</sup><br>≤ ±0.020% <sup>(1)</sup><br>≤ ±0.070% <sup>(1)</sup><br>≤ ±0.010% F.S. | ≤ ±0.085% <sup>(1)</sup><br>≤ ±0.040% <sup>(1)</sup><br>≤ ±0.135% <sup>(1)</sup><br>≤ ±0.020% F.S. | ≤ ±0.150% <sup>(1)</sup><br>≤ ±0.055% <sup>(1)</sup><br>≤ ±0.250% <sup>(1)</sup><br>≤ ±0.020% F.S. |
| LINEARITA'<br>ISTERESI   | LINEARITY<br>HYSTERESIS  | ≤ ±0.03% F.S.<br>≤ ±0.03% F.S.   |  |  |
| EFFETTO DELLA TEMPERATURA (10°C)<br>a) sullo zero<br>b) sulla sensibilità  | TEMPERATURE EFFECT (10°C)<br>a) on zero<br>b) on sensitivity   | ≤ ±0.030% F.S.<br>≤ ±0.011% F.S.   |  |  |
| SENSIBILITA' NOMINALE<br>TOLLERANZA DI CALIBRAZIONE  | NOMINAL SENSITIVITY<br>SENSIVITY TOLERANCE   | 2 mV/V<br>≤ ±0.1% F.S.   |  |  |
| RESISTENZA DI INGRESSO<br>RESISTENZA DI USCITA<br>RESISTENZA DI ISOLAMENTO<br>BILANCIAMENTO DI ZERO<br>ALIMENTAZIONE DI RIFERIMENTO<br>ALIMENTAZIONE NOMINALE<br>ALIMENTAZIONE MAX.  | INPUT RESISTANCE<br>OUTPUT RESISTANCE<br>INSULATION RESISTANCE<br>ZERO BALANCE<br>RECOMENDED SUPPLY VOLTAGE<br>NOMINAL SUPPLY VOLTAGE<br>MAXIMUM SUPPLY VOLTAGE  | 420 ± 20Ω<br>352 ± 2Ω<br>> 5 GΩ<br>≤ ± 1% F.S.<br>10 V<br>1-15 V<br>18 V                           |  |  |
| VALORI MECCANICI LIMITE RIFERITI AL<br>CARICO NOMINALE :<br>a) carico di servizio<br>b) carico limite<br>c) carico di rottura<br>d) massimo carico trasversale<br>e) carico dinamico limite<br>FRECCIA MAX. AL CARICO NOMINALE | MECHANICAL LIMIT VALUES<br>REFERRED TO NOMINAL LOAD :<br>a) service load<br>b) max permissible load<br>c) breaking load<br>d) max transverse load<br>e) max permissible dynamic load<br>DISPLACEMENT AT NOMINAL LOAD | 120%<br>150%<br>> 300%<br>50%<br>50%<br>~ 0.3 mm   |  |  |
| TEMPERATURA DI RIFERIMENTO<br>CAMPO NOMINALE DI TEMPERATURA<br>TEMPERATURA DI ESERCIZIO<br>TEMPERATURA DI STOCCAGGIO   | REFERENCE TEMPERATURE<br>TEMPERATURE NOMINAL RANGE<br>SERVICE TEMPERATURE<br>STORAGE TEMPERATURE   | +23°C<br>-10 / +40 °C<br>-10 / +70 °C<br>-20 / +80 °C  |  |  |
| PESO<br>CLASSE DI PROTEZIONE (EN 60529)<br>MATERIALE DINAMOMETRO<br>USCITA CONNETTORE  | WEIGHT<br>PROTECTION CLASS (EN 60529)<br>EXECUTION MATERIAL<br>CONNECTOR OUTPUT  | ~2.4kg ~4.6kg ~8.2kg<br>IP67<br>Acciaio Inox / Stainless Steel<br>M12 8 Poles Male connector       |  |  |
| TESTE A SNODO SFERICO CONSIGLIATE  | RECOMMENDED KUNCKLE JOINTS   | DURBAL EM20 - EM30 - EM42  |  |  |

<sup>(1)</sup> Errori percentuali calcolati al valore letto, min. 1/10 del carico nominale / Percentual errors referred to reading, min. 1/10 of nominal load.  
A richiesta classificazioni secondo ASTM E74 / Classifications according ASTM E74 on request.

## Collegamenti Elettrici Electrical Connections

Con CONNETTORE M12x1 femmina 8 poli dritto completo di CAVO schermato PVC 105°C, Ø 5.2mm a 6 conduttori Ø0.25mm<sup>2</sup> stagnati. Lunghezza: 5m

With female 8 poles straight M12x1 CONNECTOR complete of PVC 105°C shielded cable, Ø 5.2mm with 6 tinned Ø 0.25mm<sup>2</sup> conductors. Length: 5m.

| Transducer | OUTPUT  | CABLE  | M12 CONNECTOR   |   |   |   |   |   |   |   |   |
|------------|---|--|---|---|---|---|---|---|---|---|---|
|            | EXCITATION+<br>SENSE+<br>OUTPUT+<br>EXCITATION -<br>SENSE-<br>OUTPUT- | Red<br>Orange<br>White<br>Black<br>Blue<br>Yellow<br>Shield* | <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> </table> <p>Front view male receptacle</p> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1          | 2   |  |   |   |   |   |   |   |   |   |   |
| 3          | 4   |  |   |   |   |   |   |   |   |   |   |
| 5          | 6   |  |   |   |   |   |   |   |   |   |   |
| 7          | 8   |  |   |   |   |   |   |   |   |   |   |

\* Collegato al corpo del trasduttore. / Connected to the body of the transducer.

## Opzione Optional

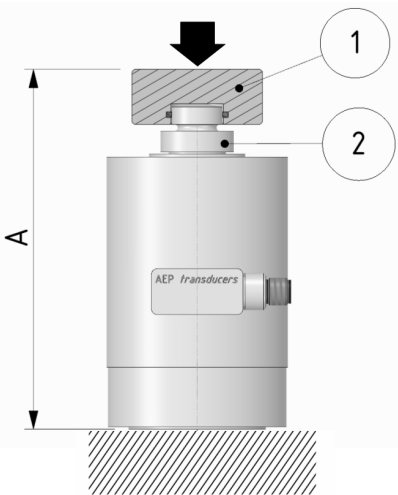
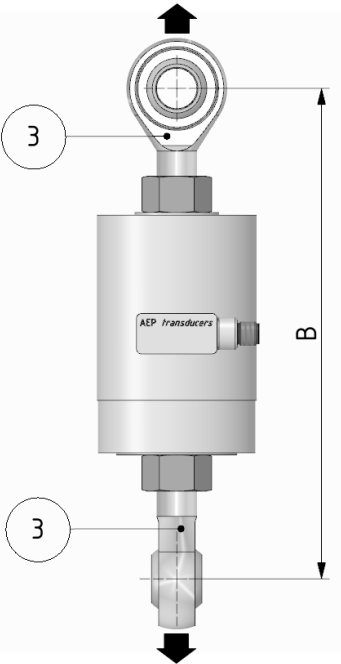
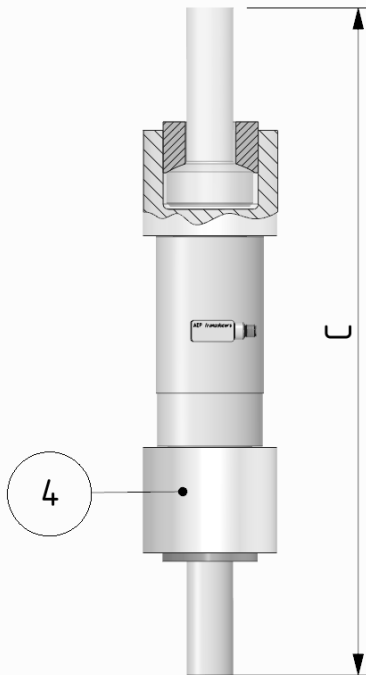
Cavo schermato PVC 105°C, Ø 5.2mm a 6 conduttori Ø 0.25mm<sup>2</sup> stagnati. Lunghezza: 5m

PVC 105°C shielded cable, Ø 5.2mm with 6 tinned Ø 0.25mm<sup>2</sup> conductors. Length: 5m.

| Transducer | OUTPUT  | CABLE  | CAVO  |
|------------|---|--|---|
|            | EXCITATION+<br>SENSE+<br>OUTPUT+<br>EXCITATION -<br>SENSE-<br>OUTPUT- | Red<br>Orange<br>White<br>Black<br>Blue<br>Yellow<br>Shield* | Rosso<br>Arancione<br>Bianco<br>Nero<br>Blu<br>Giallo<br>Schermo* |

## Applicazioni

## Applications

| COMPRESIONE<br>COMPRESSION  | TRAZIONE<br>TENSION  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
|---|--|------------|----------------|-----------------|-----------------|------------|------------|------------|------------|------------|---|-----------|------------|----------------|------------|------------|-------------|------------|-------------|------------|-------------|
|  <table border="1"> <tr><td>CLB 30 kN</td><td>A = 157mm</td></tr> <tr><td>CLB 50, 100 kN</td><td>A = 159mm</td></tr> <tr><td>CLB 200, 300 kN</td><td>A = 210 mm</td></tr> <tr><td>CLB 500 kN</td><td>A = 260 mm</td></tr> <tr><td>CLB 600 kN</td><td>A = 277 mm</td></tr> </table> | CLB 30 kN  | A = 157mm  | CLB 50, 100 kN | A = 159mm       | CLB 200, 300 kN | A = 210 mm | CLB 500 kN | A = 260 mm | CLB 600 kN | A = 277 mm |  <table border="1"> <tr><td>CLB 30 kN</td><td>B = -240mm</td></tr> <tr><td>CLB 50, 100 kN</td><td>B = -300mm</td></tr> <tr><td>CLB 200 kN</td><td>B = -420 mm</td></tr> <tr><td>CLB 300 kN</td><td>B = -500 mm</td></tr> <tr><td>CLB 500 kN</td><td>B = -600 mm</td></tr> </table> | CLB 30 kN | B = -240mm | CLB 50, 100 kN | B = -300mm | CLB 200 kN | B = -420 mm | CLB 300 kN | B = -500 mm | CLB 500 kN | B = -600 mm |
| CLB 30 kN   | A = 157mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 50, 100 kN  | A = 159mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 200, 300 kN   | A = 210 mm   |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 500 kN  | A = 260 mm   |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 600 kN  | A = 277 mm   |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 30 kN   | B = -240mm   |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 50, 100 kN  | B = -300mm   |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 200 kN  | B = -420 mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 300 kN  | B = -500 mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 500 kN  | B = -600 mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
|   |  <table border="1"> <tr><td>CLB 300 kN</td><td>C = -530 mm</td></tr> <tr><td>CLB 500, 600 kN</td><td>C = -630 mm</td></tr> </table> | CLB 300 kN | C = -530 mm    | CLB 500, 600 kN | C = -630 mm     |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 300 kN  | C = -530 mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |
| CLB 500, 600 kN   | C = -630 mm  |            |                |                 |                 |            |            |            |            |            |   |           |            |                |            |            |             |            |             |            |             |

## Accessori Accessories

**A**

|                 | CODE:        |   | ACCESSORIES (optionals): | ACCESSORI (opzionali):   |
|-----------------|--------------|---|--------------------------|--------------------------|
| CLB: 30 kN      | CTIC22       | ① | Loading head.            | Testa di carico          |
|                 | CTS25M20     | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CACCEM20     | ③ | Knuckle joints.          | Teste a snodo sferico    |
| CLB: 50, 100 kN | CTIC28       | ① | Loading head.            | Testa di carico          |
|                 | CTS45M30     | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CACCEM30     | ③ | Knuckle joints.          | Teste a snodo sferico    |
| CLB: 200 kN     | CTIC35       | ① | Loading head.            | Testa di carico          |
|                 | CTS62M42TCE  | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CACCEM42     | ③ | Knuckle joints.          | Teste a snodo sferico    |
| CLB: 300 kN     | CTIC35       | ① | Loading head.            | Testa di carico          |
|                 | CTS62M42TCE  | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CACCEM4230TB | ③ | Knuckle joints.          | Teste a snodo sferico    |
|                 | CAT3M42      | ④ | Knuckle joints.          | Teste a snodo sferico    |
| CLB: 500 kN     | CTIC35       | ① | Loading head.            | Testa di carico          |
|                 | CTS62M42TCE  | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CACCEM4250TB | ③ | Knuckle joints.          | Teste a snodo sferico    |
|                 | CAT5M42      | ④ | Knuckle joints.          | Teste a snodo sferico    |
| CLB: 600 kN     | CTIC60       | ① | Loading head.            | Testa di carico          |
|                 | CTS75M56     | ② | Spherical loading head.  | Testa di carico sferica. |
|                 | CAT6M56      | ④ | Knuckle joints.          | Teste a snodo sferico    |

**AEP transducers**

Dasa-Rägister  
EN ISO 9001:2008  
IQ-1100-01



ACCREDIA  
LENTE ITALIANO DI ACCREDITAMENTO

LAT N° 093  
Calibration Centre  
The products are NOT  
covered by accreditation

**ATEX**

Production Quality  
Assurance Certified n°  
TUV 06 ATEX 553793 Q

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In order to improve the technical performances of the product, the company reserves the right to make any change without notice.