

## wylerCLINO Frame 10° 160 mm

### Features

#### Alignment and measurement of horizontal and vertical machine parts

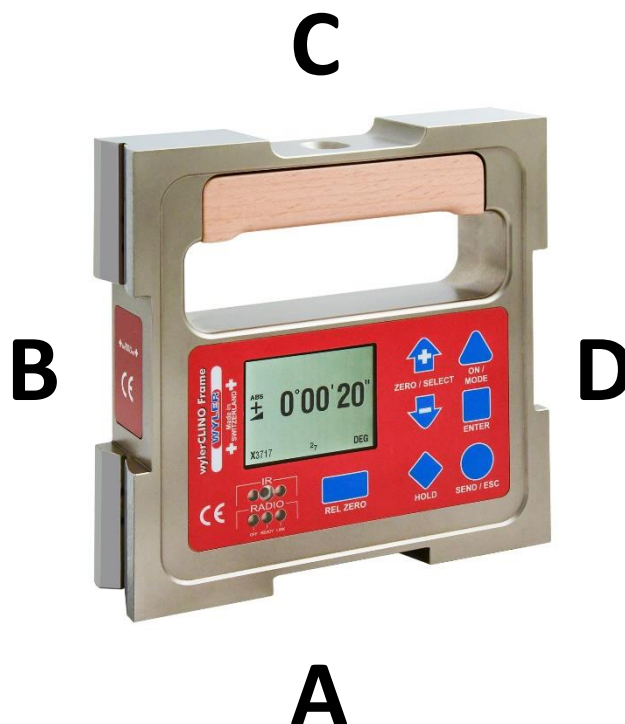
The wylerCLINO Frame 10° can be used in the way as all the measuring instruments from the BlueSYSTEM product range.

#### Squareness-measurement

The wylerCLINO Frame 10° meets the accuracy of an angular BlueLEVEL with the advantage of a solid housing, which improves the stability of vertical measurements.

#### Comparison of vertical guideways facing opposite to each other

The comparison of a left and a right vertical guideway is possible with the wylerCLINO Frame 10°



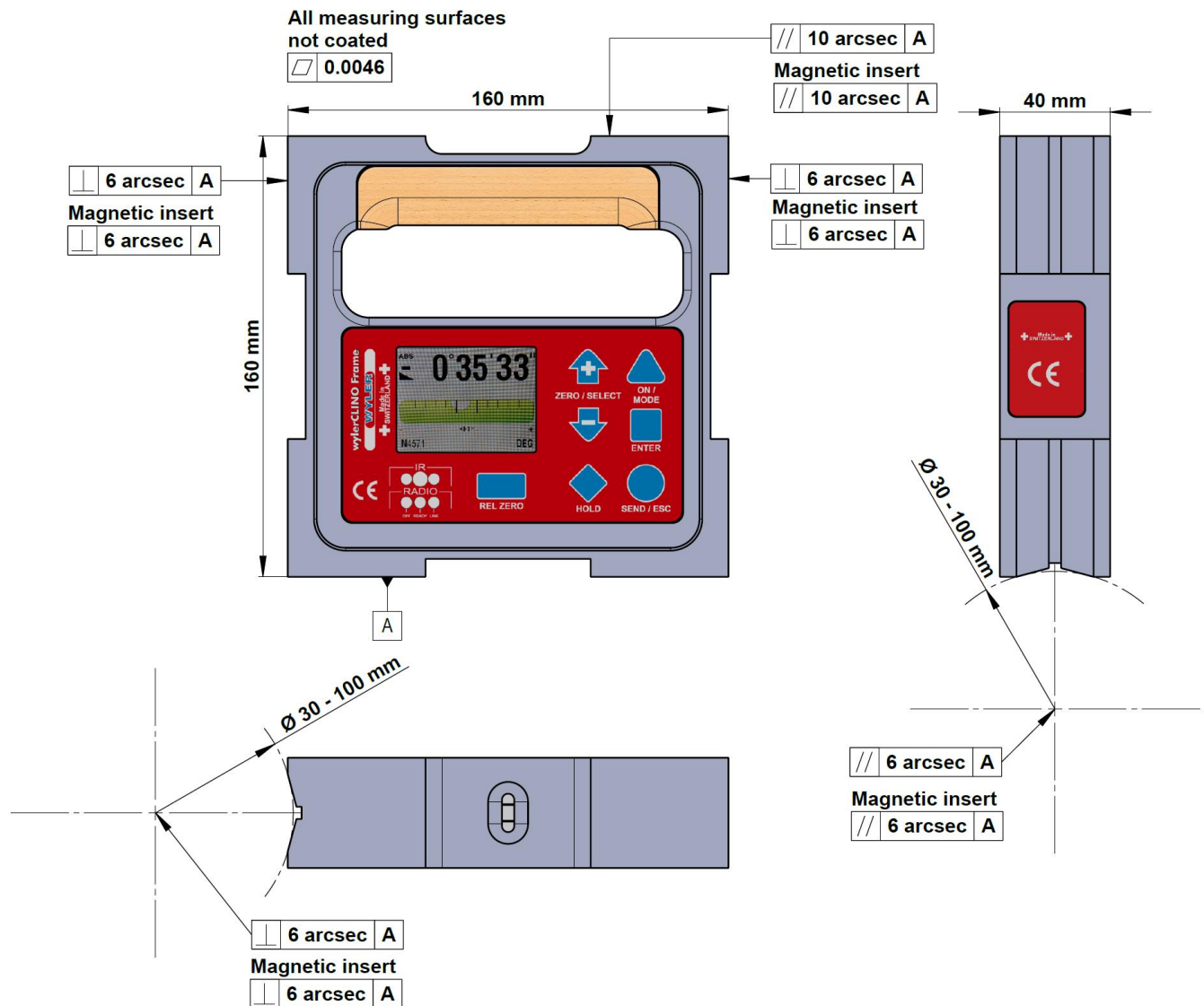
#### Definition of naming the 4 bases in the further context:

Starting with A at the main reference, the horizontal bottom base.  
The other bases are named B, C and D in clockwise direction.

Measuring faces: xF → flat  
xP → prismatic  
→ e.g. AF → horizontal flat measuring face

|                                                |                                       |               |
|------------------------------------------------|---------------------------------------|---------------|
| WYLER AG, Im Hölderli 13<br>CH-8405 Winterthur | Datasheet wylerCLINO Frame 10° 160 mm | 949-DB-0015   |
|                                                |                                       | Revision: 6.0 |
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**Dimensions:**



**Specifications and applicable standards**

| Housing                      | Standard                                                          | Option           |
|------------------------------|-------------------------------------------------------------------|------------------|
| <b>Material</b>              | Cast iron - nickel plated                                         |                  |
| <b>Dimension L x W x H</b>   | 160 x 40 x 160 mm                                                 |                  |
| <b>Base A</b>                | Prismatic - scraped                                               | Magnetic inserts |
| <b>Base B</b>                | Prismatic - scraped                                               | Magnetic inserts |
| <b>Base C</b>                | Flat - grinded                                                    | Magnetic inserts |
| <b>Base D</b>                | Flat - grinded                                                    | Magnetic inserts |
| <b>Operating temperature</b> | 0 ... 40°C                                                        |                  |
| <b>Storage temperature</b>   | -30 ... 70°C                                                      |                  |
| <b>Standards</b>             | WYLER specification                                               |                  |
| <b>Relative humidity</b>     | Max. 80 % RH up to 31 °C, decreasing linearly to 50 % RH at 40 °C |                  |
| <b>Weight with batteries</b> | 3.60 kg                                                           |                  |

|                                                |                                              |                      |
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|                                                |                                              | <b>Revision: 6.0</b> |
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| Specification                                                                                    |                                      |
|--------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Sensitivity</b>                                                                               | 2 arcsec                             |
| <b>Range</b>                                                                                     | $\pm 10^\circ$                       |
| <b>Limits of error within 12 months *</b><br>$T_A = 20^\circ\text{C}$<br>(WYLER specification)   | $\leq 4 \text{ arcsec} + 0.06\% M_W$ |
| <b>Temperature error / °C (<math>\emptyset 10^\circ\text{C}</math>)</b><br>(WYLER specification) | $< 0.03\% M_W$                       |
| <b>Response time</b>                                                                             | $< 5 \text{ sec}$                    |

$M_W$  = measured value  
 $T_A$  = ambient temperature  
 \* typical value

| Unit                               | Decimals | Value in Display | Unit in Display |
|------------------------------------|----------|------------------|-----------------|
| mm per m                           | 2        | xxxx.xx          | mm/m            |
| Inch per 10 Inch                   | 4        | xx.xxxx          | "/10"           |
| Inch per 12 Inch                   | 4        | xx.xxxx          | "/12"           |
| milli radian                       | 2        | xxxx.xx          | mRad            |
| mm per relative base               | 2        | xxx.xx           | mm/REL          |
| Inch per relative base             | 4        | xx.xxxx          | "/REL           |
| artillery per mill                 | 2        | xxx.xx           | A‰              |
| per mill                           | 2        | xxx.xx           | ‰               |
| percent                            | 3        | xxx.xxx          | %               |
| degree                             | 3        | xxx.xxx°         | DEG             |
| degree + arc minutes               |          | xx°xx'           | DEG             |
| degree + arc minutes + arc seconds |          | xx°xx'xx"        | DEG             |
| arc minutes + arc seconds          |          | xxxx'xx"         | DEG             |
| arc seconds                        |          | xxxxxx"          | DEG             |
| centesimal degree                  | 3        | xxx.xxx          | GON             |
| slope                              |          | 1/xxxx           | SLOPE           |

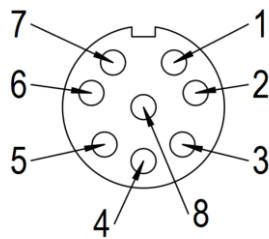
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| Electrical Characteristic                        |                                                                       |
|--------------------------------------------------|-----------------------------------------------------------------------|
| <b>External power supply</b>                     | 24 V DC / 5 V DC                                                      |
| <b>Current consumption</b>                       | 220 mA @ 5 V DC                                                       |
| <b>Batteries</b>                                 | 2x 1.5 V batteries, size C<br>2x 1.2 V rechargeable batteries, size C |
| <b>Rechargeable batteries charging in device</b> | Not supported                                                         |

| RS485 / RS232              |                                                                                                                                                                           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Value update rate</b>   | max. 3 values per second                                                                                                                                                  |
| <b>Temperature reading</b> | not supported                                                                                                                                                             |
| <b>Interfaces</b>          | wylerCONNECT, WYLER universal cable                                                                                                                                       |
| <b>Connectivity</b>        | wylerEXPLORER: v2.0.5.0 or higher<br>wylerSPEC: v2.0.5.0 or higher<br>wylerINSERT: v2.0.4.0 or higher<br>wylerDYNAM: v2.0.0.0 or higher<br>wylerCHART: v2.0.0.0 or higher |
| <b>Digital output</b>      | RS232 / RS485, asynchronous, 7 DataBits, 2 StopBits, no parity, 9600 bps                                                                                                  |

| Bluetooth                |                                                                                                                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Value update rate</b> | max. 3 values per second                                                                                                                                                                                         |
| <b>Interfaces</b>        | wylerCONNECT                                                                                                                                                                                                     |
| <b>Connectivity</b>      | wylerEXPLORER: v2.0.5.0 or higher<br>wylerSPEC: v2.0.5.0 or higher<br>wylerINSERT: v2.0.4.0 or higher<br>wylerDYNAM: v2.0.0.0 or higher<br>wylerCHART: v2.0.0.0 or higher<br>APP wylerUNIVERSAL for Android ONLY |
| <b>Range</b>             | ca. 10 meter                                                                                                                                                                                                     |

## Pinout Port



| Pin | Name     | Description                                  |
|-----|----------|----------------------------------------------|
| 1   | +24 V    | + 24 V DC power                              |
| 2   | GND      | Ground                                       |
| 3   | + 5 V    | +5 V DC power                                |
| 4   | RTA / TX | WYLER RS485 channel A or RS232 transmit line |
| 5   | RTB      | WYLER RS485 channel B                        |
| 6   | RX       | RS232 receive line                           |
| 7   | RTS      | RS232 request to send                        |
| 8   |          | Not used                                     |

### Please Note:

To lock the connectors, the threaded ring is tightened until it is 'finger-tight' (approx. 50 Ncm).