Instruction Manual for Model No. 18318

Installing and replacing the battery (or Power Cable)

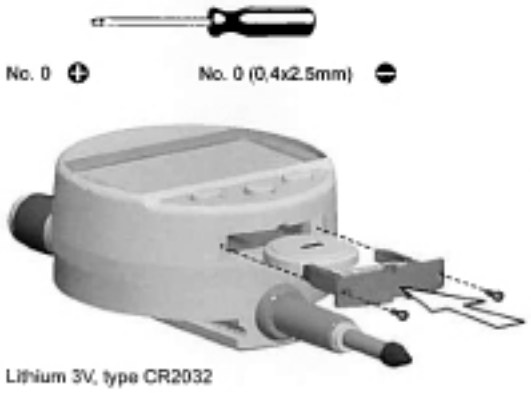
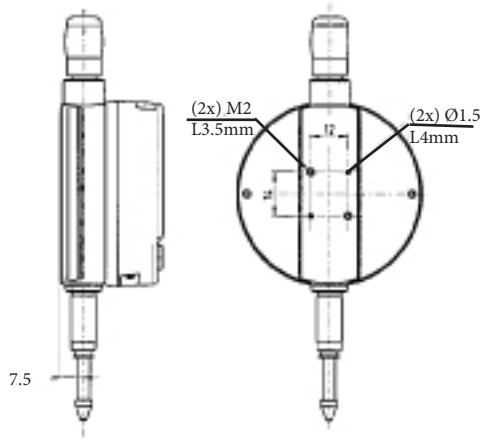
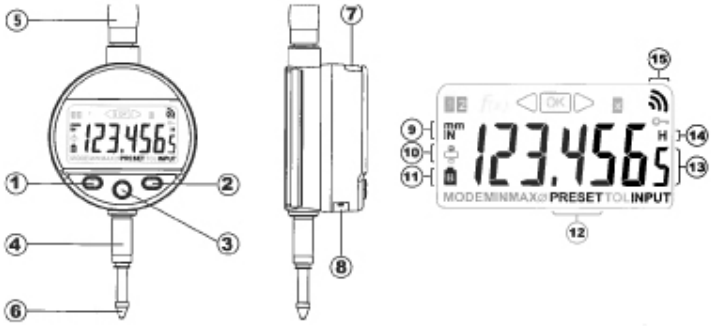


Diagram for rear fittings





1 Mode Button
2 Set Button
3 "Favorite" Button
4 Clamping Shaft
5 Lifting Cap
6 Contact Point Ø2/M2.5
7 Slot for Proximity Cable
8 Slot for battery or Power Cable
9 Measurement units (mm/INCH)
10 +/- Sign
11 Low Battery
12 Preset Mode
13 0.00005" display
14 Hold measured value
15 Send data

1. Operating features of the instrument

- (MODE) gives access to the functions (units, preset and direction of measurement)
- The "favorite" key gives you direct access to the function used most often (see chapter 4)
- (SET) Sets a Preset value, verifies a selection, and controls switching off the instrument. By default, SIS mode enables automatic switch-off with no loss of origin (see chapter 5)

- Personalising the functions

It is possible to activate or de-activate certain functions of the instrument via RS232 (see chapter 7)

- RS232 commands

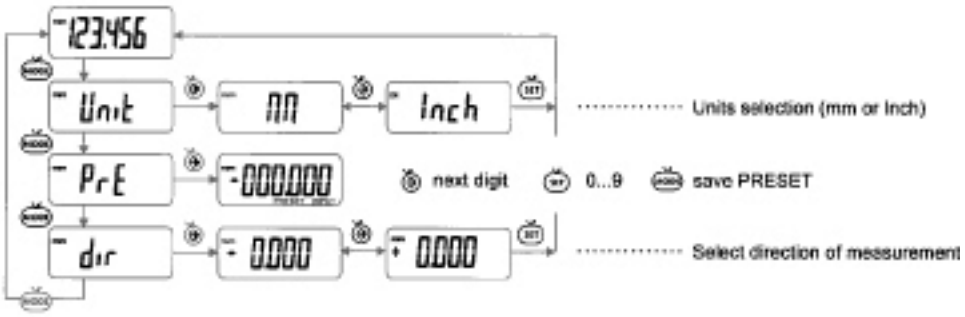
Direct RS232 to 4800 Baud connection, 7 bits, even parity, 2 stops bits

2. Start

Press a button. When used for the first time, the instrument requests selection of the measurement unit required (MM or Inch). Choose .....then measure.

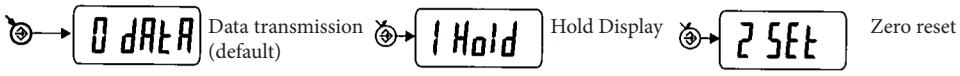
3. Instrument Functions:

Each short press on (MODE) gives direct access to the functions:



4. Favorite Key

The "favorite" key gives direct access to a predefined function, and can be configured according to the needs of the user. In order to assign a function to the "favorite" key, give a prolonged press on , and then select the required function:



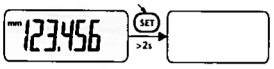
Validation of selection: By a prolonged press on or a shore press on or

Note: a function can also be assigned via RS232 using the command <FCT + Function No.>
example: Hold display = **<FCT1>**

5. Switching Off

The dial guage goes automatically into stand-by if not used for 20 minutes.

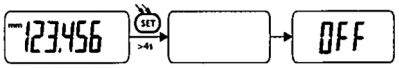
Stand-by mode can be forced by a prolonged press (> 2 sec) on :



In stand-by mode, the value of the origin is retained by the sensor (SIS mode), and the instrument automatically restarts with any movement of the measurement probe.

The instrument can be switched off completely for a long period of non-use, but this will necessitate a zero reset on restart (the origin will be lost):

- Prolonged press (>4 sec) on :



6. Re-initialising the instrument

The initial instrument settings can be restored at any time by a prolonged press (>4sec) simultaneously on and until the message `CLEAr` is displayed.
Nevertheless the instrument retains the unit setting.

7. Personalising the instrument

Access to the functions of your instrument can be personalized using the free S_Dial WORK Demo. This program enables you to: - de-activate or active the required functions

8. Connecting the instrument

The instrument can be connected to a peripheral via a Proximity (RS or USB), or Power-RS (Power-USB) cable.

Measured values can be transmitted and the instrument driven using predefined retro-commands (See bullet 9 for a list of the main retro-commands)

9. List of the main retro-commands
Selection and configuration

CHA+/CHA-	Change Measurement direction
FCTO …9…A…F	Assign "favorite" function
MM/IN	Change measurement unit
PRE [+/-] xxx.xxx	Modify preset value
STO1/STO0	Activate/de-activate HOLD
LCAL dd.mm.yy	Modify last calibration date
NCAL dd.mm.yy	Modify next calibration date
UNI1/UNI0	Activate/de-activate change of units
OUT1/OUT0	Activate/de-activate contin. data transmission
PRE ON/PRE OFF	Activate/de-activate Preset function
PRE	Recall Preset
SET	Zero reset
RES2/RES3	Change of resolution

Interrogation

CHA?	Measurement sense?
FCT?	"favorite" function active?
UNI?	Measurement unit active?
KEY?	Keypad locked?
PRE?	Preset value?
STO?	Status of HOLD function?
LCAL?	Date of last calibration?
NCAL?	Date of next calibration?
?	Current value?
SET?	Main instrument parameters?
ID?	Instrument identification code?

Maintenance functions

BAT?	Battery status (BAT1 = OK, BAT0 = low battery)
OFF	Switch-off (wake up using a button or RS)
RST	Re-initialisation of the instrument
SBY	Put instrument in stand-by (SIS)
VER?	Version No. and date of firmware

10. Specifications

Measurement Range	12.5mm	25mm	50mm	100mm	150mm	
Max error (0.01mm scale)	10µm	10µm	20µm	20µm	20µm	(±1 digit)
Max error (0.001mm scale)	4µm	5µm	7µm	8µm	10µm	
Repeatabilty:	2µm					
Weight:	90g	94g	175g	220g	280g	
Measurement force (standard):	0.65-0.9N	0.65-1.15N	1.25-2.7N	1.6-3.5N	2.2-5.7N	
Max. speed of travel:	1.7m/s					
No. of measurements/sec.	measurement: 10 mes/s			MIN/MAX mode: 20 mes/s		
Measurement unit:	metric/english (Inch)					
Maximum Preset (0.01mm scale):	±9999.99 mm/ ±399.9995 IN					
Maximum Preset (0.001mm scale):	±9999.99 mm/ ±399.9995 IN					
Measurement system:	Sylvac inductive system (patented)					
Power:	1 x 3V lithium battery, type CR2032, 220mAh					
Average consumption:	73µA					
Average battery life:	8000 hours					
Data Output:	RS232 compatible					
Working temperature (storage):	+5 à +40°C (-10 à +60°C)					
Electromagnetic compatibilty:	as per EN 61326-1					
IP rating (in accordance with IEC60529):	IP 51/IP 67 (depending on model)					
Fixing and space envelope:	ø8, h6, interchangeable M2.5 probe (as per DIN 878)					