

Direct drive digital position indicators



• Base and case

High-resistance polyamide based (PA) technopolymer.
Resistant to solvents, oils, greases and other chemical agents.
Black base.

Case in the following colours:

- **C2**: RAL 2004 orange, glossy finish.
- **C3**: RAL 7035 grey, glossy finish.

On request and for a quantity of at least 10 pieces, it is available in RAL 7021 (C1) grey-black.

The ultrasonically welding between the base and the case prevents separation and avoids dust penetration.

• Window

Transparent polyamide based (PA-T) technopolymer, moulded over the case and with a perfect seal. Resistant to solvents, oils, greases and other chemical agents (avoid contact with alcohol during cleaning operations).

• Display

It indicates the displacement of the mechanism controlled by the spindle from the start position (0).

Numeratore a rulli a quattro cifre (tre rulli neri ed uno rosso o due rulli neri e due rossi o quattro rulli neri). Le cifre dei rulli rossi indicano i decimali. L'ultima cifra decimale è inoltre affiancata da una scala graduata per una ulteriore accuratezza della lettura.

The display can be in different positions (see "Table of the possible combinations").

- **AN**: inclined display, counter in upper position.
- **AR**: inclined display, counter in lower position.
- **FN**: front display, counter in upper position.
- **FR**: front display, counter in lower position.

• Internal gasket

O-ring front sealing in NBR synthetic rubber, between the case and the bushing.

• Rear gasket

Foam polyethylene, supplied.

• Standard executions

Bushing with $\varnothing 14$ mm H7 reamed hole, fitting to shaft by means of a supplied grub screw with hexagon socket and cup end UNI 5929-85.

- **DD51**: black-oxide steel boss.
- **DD51-SST**: AISI 303 stainless steel boss.

• Direction of rotation

- **D**: clockwise. Increasing values with clockwise rotation of the bushing.
- **S**: anti-clockwise. Increasing values with anti-clockwise rotation of the bushing.

• Weight

65 grams.

Special executions on request

- Special readings after one revolution.
- Case in different colours.
- Completely sealed digital position indicators with IP 67 protection class, see table IEC 529 obtained by means of a brass bushing with double seal ring inside the rear cavity of the base.

Features and applications

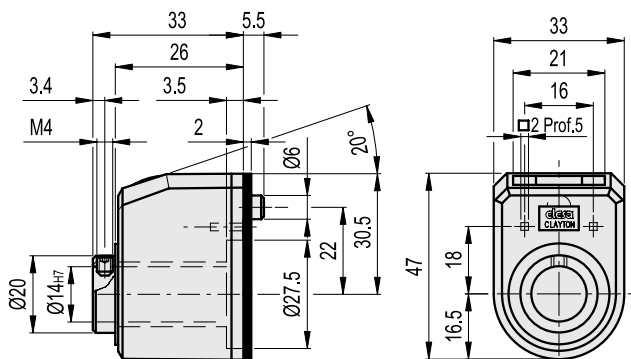
Direct drive digital position indicators can be assembled on passing through spindles in any position to give direct reading of the positioning of a machine component. They are suitable also for motor driven applications (see below "Table of the possible combinations").

Ergonomy and design

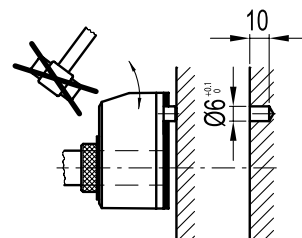
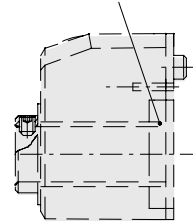
Compact roller counter, ergonomically designed digits for rapid reading. The readability of the counter is increased by the magnifying window.

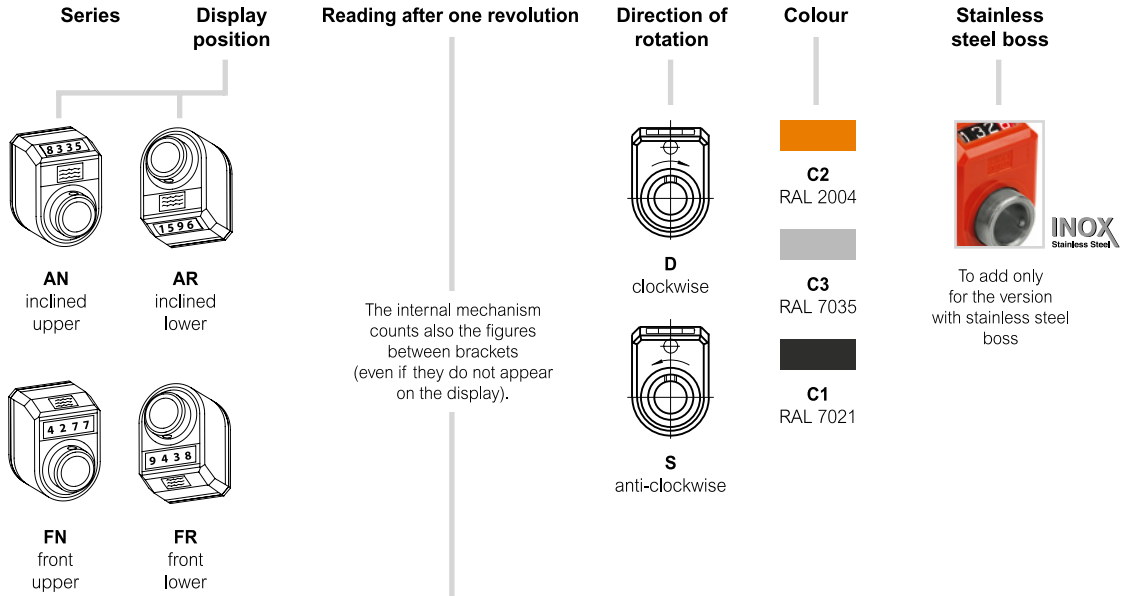
Assembly instructions

1. Drill a $\varnothing 6$ mm by 10 mm hole in the body of the machine with a 22 mm centre distance from the spindle to fit the rear referring pin.
2. Set the spindle to the start or referring position.
3. Fit the indicator with the zeroed roller counter onto the spindle and make sure that the referring pin fit the hole.
4. Clamp the bushing to the spindle by tightening the grub screw with hexagon socket and cup end, according to UNI 5929-85.



special execution with
AISI 303 stainless steel bushing





0010	0050	0050	Pitch	Speed (rpm) *
001.0	00.10	0010	1.0	1500
001.2(5)	00.12(5)	0012(5)	1.25	1500
001.5	00.15	0015	1.5	1500
001.5(7)	00.15(7)	0015(7)	1.57	1500
001.7(5)	00.17(5)	0017(5)	1.75	1420
002.0	00.20	0020	2.0	1250
002.0(83)	00.20(83)	0020(83)	2.083	1200
002.5	00.25	0025	2.5	1000
003.0	00.30	0030	3.0	830
004.0	00.40	0040	4.0	625
004.4	00.44	0044	4.4	550
005.0	00.50	0050	5.0	500
005.7	00.57	0057	5.7	435
006.0	00.60	0060	6.0	415
006.5(5)	00.65(5)	0065(5)	6.55	370
007.5	00.75	0075	7.5	330
008.0	00.80	0080	8.0	315
008.3(3)	00.83(3)	0083(3)	8.33	300
010.0	01.00	0100	10.0	250
012.0	01.20	0120	12.0	205
012.5	01.25	0125	12.5	200
015.7	01.57	0157	15.7	150
020.0	02.00	0200	20.0	125

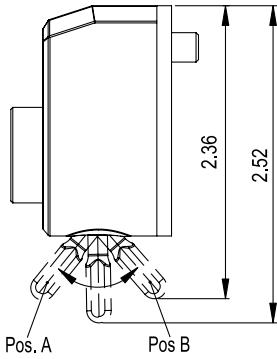
* The maximum rotation speed (rpm) of the spindle reported in the table corresponds to a maximum rotation speed of 25000 units per minute of the last roll on the right side of the counter. Rotational speed tests have been performed in our laboratory under standard operating conditions.

LB - locking device

The DD51-LB position indicators are designed to lock the spindle on which they are mounted to avoid the risk of accidental adjustment alterations due to vibrations. To lock or unlock the spindle rotation, simply move the lever, in pos. A equivalent to unlocked spindle, in pos. B equivalent to locked spindle.

Following repeated locking cycles, the special device is highly wear resistant and functions perfectly over time.

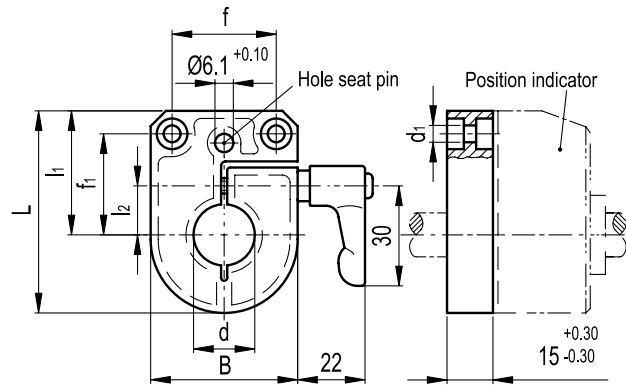
To order the indicator with spindle locking add the -LB index after the code and description (e.g. CE.84101-LB DD51-AN-00.50-D-C3-LB).



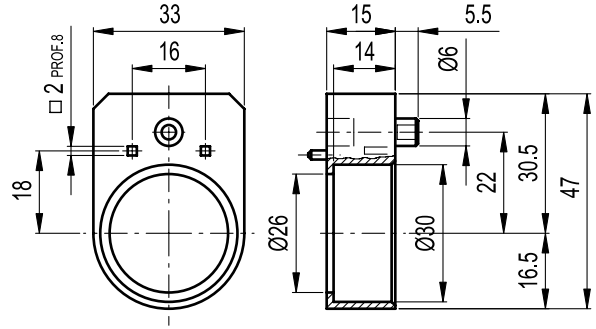
DD51-LB - with locking device

Accessories on request (to be ordered separately)

BSA51: zinc die-cast bases for spindle locking, epoxy resin coating, black colour, matte finish (see table). Type GN 302 adjustable handle. BSA51 locking bases allow an easy and quick locking of the spindles after their positioning. They are equipped with a $\varnothing 6.1$ mm hole to fit the referring pin of the indicator. They can be assembled with the handle either on the right or on the left and can be fitted to the machine by means of two M4 cylindrical-head screws (not included in the supply).



BS51: glass-fibre reinforced polyamide based (PA) technopolymer spacer plate (code CE.85900).

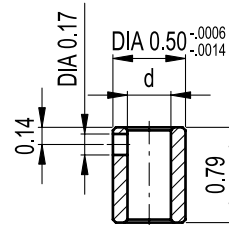


MD51: polyamide based (PA) technopolymer fluted grip control knob.



RB51: black-oxide steel reduction sleeves (see table).

RB51-SST: AISI 303 stainless steel reduction sleeves (see table).



RB51

Code	Description	dH7
CE.85940	RB51-6	6
CE.85950	RB51-8	8
CE.85955	RB51-10	10
CE.85960	RB51-12	12

RB51-SST-AISI 303

Code	Description	dH7
CE.95940	RB51-6-SST	6
CE.95950	RB51-8-SST	8
CE.95955	RB51-10-SST	10
CE.95960	RB51-12-SST	12

RB51-SST-AISI 304

Code	Description	dH7
CE.95941	RB51-6-SST	6
CE.95951	RB51-8-SST	8
CE.95956	RB51-10-SST	10
CE.95961	RB51-12-SST	12