

Direct drive digital position indicator



• 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 cinque cifre (quattro rulli neri ed uno rosso o tre rulli neri e due rossi o cinque 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

Black-oxide steel with $\varnothing 20$ mm H7 reamed hole, fitting to shaft by means of a supplied grub screw with hexagon socket and cup end UNI 5929-85.

- **DD52R:** black-oxide steel boss.
- **DD52R-SST:** INOX 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

96 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

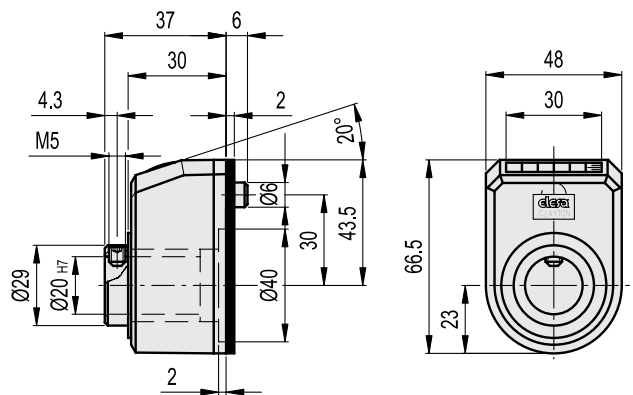
Direct drive digital position indicators can be assembled on passing through spindles in any position to give direct reading of the positioning of a machine component. They are suitable also for motor driven applications (see below "Table of the possible combinations").

Ergonomy and design

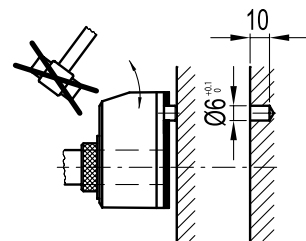
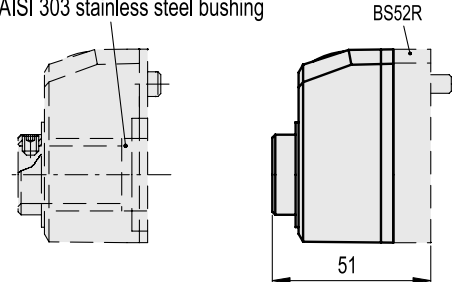
Compact roller counter, ergonomically designed digits for rapid reading. The readability of the counter is increased by the magnifying window.

Assembly instructions

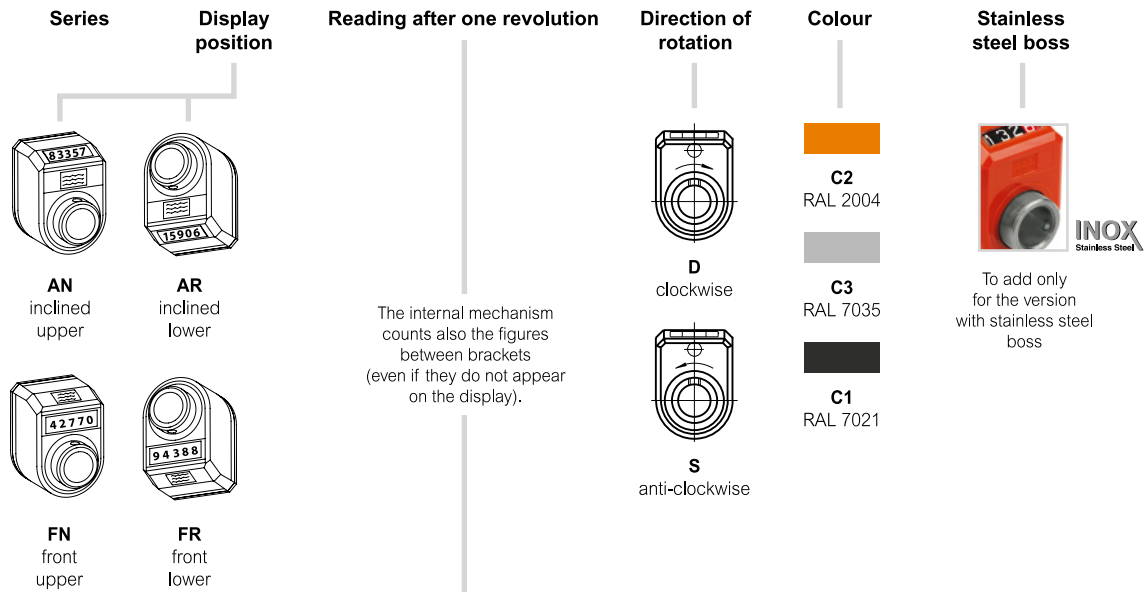
1. Drill a $\varnothing 6$ mm by 10 mm hole in the body of the machine with a 30 mm centre distance from the spindle to fit the rear referring pin.
2. Set the spindle to the start or referring position.
3. Fit the indicator with the zeroed roller counter onto the spindle and make sure that the referring 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



DD52R - AN - 0 0 0 5 0 - D - C2 - SST



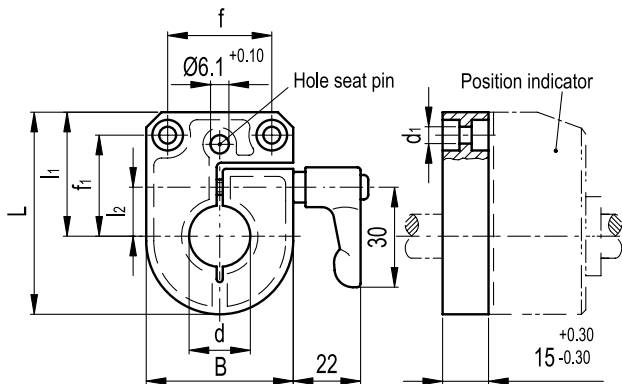
0 0 0 0 5	0 0 0 5 0	0 0 0 5 0	Pitch	Speed (rpm) *
0000.5	000.05	00005	0.5	1500
0000.9(6)	000.09(6)	00009(6)	0.9	1500
0001.0	000.10	00010	1.0	1500
0001.2(5)	000.12(5)	00012(5)	1.25	1500
0001.5	000.15	00015	1.5	1500
0001.5(8)	000.15(8)	00015(8)	1.58	1500
0001.6(07)	000.16(07)	00016(07)	1.607	1500
0001.7(5)	000.17(5)	00017(5)	1.75	1420
0002.0	000.20	00020	2.0	1250
0002.5	000.25	00025	2.5	1000
0002.5(4)	000.25(4)	00025(4)	2.54	980
0003.0	000.30	00030	3.0	830
0003.1(5)	000.31(5)	00031(5)	3.15	790
0003.1(75)	000.31(75)	00031(75)	3.175	780
0003.5	000.35	00035	3.5	710
0004.0	000.40	00040	4.0	625
0005.0	000.50	00050	5.0	500
0005.0(8)	000.50(8)	00050(8)	5.08	490
0005.2(94)	000.52(94)	00052(94)	5.294	470
0005.6(47)	000.56(47)	00056(47)	5.647	440
0006.0	000.60	00060	6.0	415
0006.2(5)	000.62(5)	00062(5)	6.25	400
0006.3(5)	000.63(5)	00063(5)	6.35	390
0007.0	000.70	00070	7.0	350
0007.5	000.75	00075	7.5	330
0008.0	000.80	00080	8.0	315
0009.0	000.90	00090	9.0	270
0010.0	001.00	00100	10.0	250
0010.5	001.05	00105	10.5	235
0011.9(05)	001.19(05)	00119(05)	11.905	210
0012.0	001.20	00120	12.0	200
0013.0	001.30	00130	13.0	190
0015.0	001.50	00150	15.0	160
0016.0	001.60	00160	16.0	150
0020.0	002.00	00200	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.



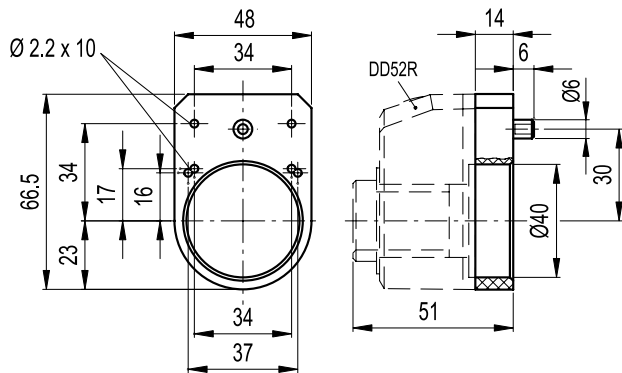
Accessories on request (to be ordered separately)

BSA52: zinc die-cast bases for spindle locking, epoxy resin coating, black colour, matte finish (see table). Type GN 302 adjustable handle. BSA52 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 M5 cylindrical-head screws (not included in the supply).



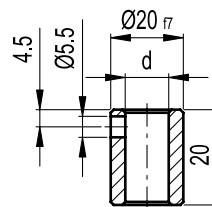
Code	Description	B	L	f	f ₁	l ₁	l ₂	d	d ₁	
CE.87901	BSA52-12	48	67	34	33.6	43.1	16	12	5.5	165
CE.87903	BSA52-14	48	67	34	33.6	43.1	16	14	5.5	164
CE.87904	BSA52-15	48	67	34	33.6	43.1	16	15	5.5	163
CE.87905	BSA52-16	48	67	34	33.6	43.1	16	16	5.5	162
CE.87909	BSA52-20	48	67	34	33.6	43.1	16	20	5.5	160

BS52R: glass-fibre reinforced polyamide based (PA) technopolymer spacer base (code CE.83950), designed with two pre-drilled holes for UNI 10227 self-tapping screws $\varnothing 2.2$ (not included in the supply).



RB52: black-oxide steel reduction sleeves (see table).

RB52-SST: AISI 303 stainless steel reduction sleeves (see table).



RB52

Code	Description	d _{H7}
CE.87940	RB52-12	12
CE.87950	RB52-14	14
CE.87955	RB52-15	15
CE.87960	RB52-16	16



RB52-SST

Code	Description	d _{H7}
CE.97940	RB52-12-SST	12
CE.97950	RB52-14-SST	14
CE.97955	RB52-15-SST	15
CE.97960	RB52-16-SST	16

PE.6-10: red technopolymer pin (code CE.83960).

