

MAIN FEATURES

Incremental linear system based on optical or magnetic principle.
Easy mounting due to joint heads.

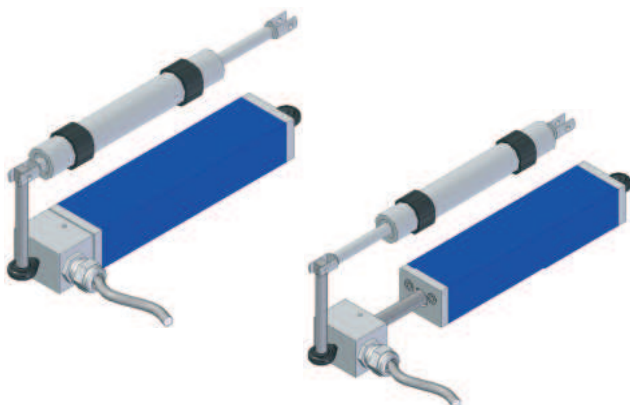
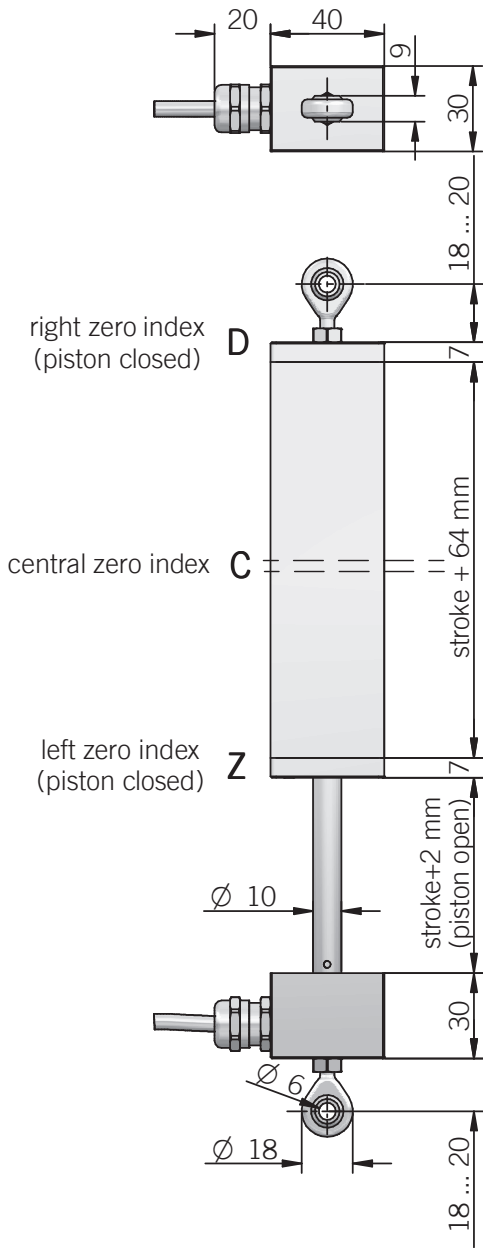
- 0,01 mm max resolution (after quad eval)
- Available with or without zero mark on left, right or central position
- Up to 1 m/s travel speed
- Working stroke up to 500 mm
- Cable output, connector available on cable end
- Mounting by joint heads



ORDERING CODE

ER	A	100	S	8/24	N	6	P	.XXX
SERIES								
incremental linear encoder ER								
RESOLUTION								
0,2 mm A								
0,1 mm B								
0,04 mm C								
1 mm D								
0,5 mm E								
0,2 mm F								
WORKING STROKE								
working stroke (mm) from 100 to 500								
ZERO PULSE								
without zero pulse S								
(mod. A) central zero index C								
(mod. A) right zero index (closed position) D								
(mod. A) left zero index (open position) Z								
POWER SUPPLY								
5 V DC 5								
8 ... 24 V DC 8/24								
ELECTRONIC INTERFACE								
(mod. A) NPN N								
(mod. A) NPN open collector C								
push-pull P								
line driver L								
FIXING HOLE DIAMETER								
mm 6								
OUTPUT TYPE								
radial cable (standard length 1,5 m) P								
VARIANT								
custom version XXX								

ERA/B/C/D/E/F



dimensions in mm

ELECTRICAL SPECIFICATIONS

Technology	optical mod. A magnetic mod. B / C / D / E / F
Resolution	1 mm (0,25 mm after quad eval) 0,5 mm (0,125 mm after quad eval) 0,2 mm (0,05 mm after quad eval) 0,1 mm (0,025 mm after quad eval) 0,04 mm (0,01 mm after quad eval)
Linearity error	± 0,05 mm max (mod. A / F) ± 0,025 mm max (mod. B) ± 0,01 mm max (mod. C) ± 0,125 mm max (mod. E) ± 0,25 mm max (mod. D)
Power supply	5 = 4,5 ... 5,5 V DC 8/24 = 7,6 ... 25,2 V DC
Current consumption without load	< 100 mA max
Max load current	50 mA / channel (NPN / NPN open) 20 mA / channel (push pull / line driver)
Output type*	NPN / NPN open collector / push-pull / line driver
Max output frequency	100 kHz
Counting direction	A leads B (piston open) mod. A B leads A (piston open) mod. B / C / D / E / F
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

*output levels according to power supply, for further details please see under Technical basics section

MECHANICAL SPECIFICATIONS

Working stroke	100 - 150 - 200 - 250 - 300 - 350 - 400 - 500 mm
Enclosure rating	IP 64 (IEC 60529)
Travel speed	1 m/s max
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Rod material	1.4305 / AISI 303 stainless steel
Housing material	painted aluminum
Fixing	2 joint heads with Ø 6 mm hole
Operating temperature	-10° ... +60°C (+14° ... +140°F)
Storage temperature	-25° ... +70°C (-13° ... +158°F)
Weight	400 ... 1000 g (14,11 ... 35,27 oz)

CONNECTIONS

Function	Cable output N / C / P	Cable output Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
⊥	shield	shield