



Serie PE 0.1mm elap Incremental Transducers



SERIE PE

ELAP incremental transducers are based upon an optical reading system which ensures high reading resolutions.

Their stout mechanical case and the shaft sealing guarantee high protection degree to IP65. Fixing is obtained by means of clamping feet or by ball joints mounted at the ends.

PE can be employed as contact gauges to measure thickness all over in the industry of to day where accurate thickness or length measurements is asked for.

PE transducers maintain the original accuracy grade constant in the long term.

Coupling to pneumatic or hydraulic displacement systems also results successfully, as well as the application to cylinders which already use a ball joint fixing method.

ELAP product range includes different digital transducer versions for all types of applications and all complying with the complete standard.

Other stem types:

PD 100, 20 + 20 micron = 0.01mm indication, max. 750mm, glass graduated scale.

PD 500, 10 + 10 micron = 0.005mm indication, max. 750mm, glass graduated scale.

Other Digital linear types:

KP 10, 400 micron, = 0.1mm indication, max. 700mm, stainless steel element.

KP 100, 40 micron, = 0.01mm indication, max. 700mm, stainless steel element.

KP 200, 20 micron, = 0.005mm indication, max. 700mm, stainless steel element.

KD 10, 400 micron, = 0.1mm indication, max. 5.000mm, stainless steel element.

KD 100, 40 micron, = 0.01mm indication, max. 5.000mm, stainless steel element.

KD 200, 20 micron, = 0.005mm indication, max. 2.000mm, stainless steel element.

KD 1000, 40:10 micron, = 0.001mm indication, max. 1.500mm, stainless steel element.

ELAP complete instrument program is available for all these types !

+ PC software from Dasylab



ELAP PE - INCREMENTAL LINEAR TRANSDUCER

PE - GENERAL SPECIFICATIONS

Operating principle: op	toelectronic reading on graduated scale	
Grating pitch:	200 + 200 micron	
Reading resolution:	0.1mm after electronic quadrupling	
Zero pulses (option) Stan	dard 1 at mid-stroke, or placed according	
to requirements with 1 or several points.		
Thermal expansion of the plastic measuring element:18x106/°C		
Lighting source:	LED	
Supply:	10 - 24 VDC	
	5VDC for line driver output	
Current consumption:	Max. 50mA	
	Max. 90 mA for line driver output	
Output signal:	2 square waves 90 ± 15 electr.	
	degree out of phase	
Reference (zero) signal:	0.05mm wide.	
Electronic output:	push-pull (max.50 mA),	
·	Open collector NPN (max 50mA)	

Open collector NPN (max. 50mA) Line driver (26LS31)

PE - MECHANICAL SPECIFICATIONS

Protection degree	IP65
riblection degree.	11 00
Max. speed:	120m/min
Max. acceleration:	40m/sec ²
Zero pulse max. speed	l 24m/min
Progress strength:	1 - 3 N
Stem:	Stainless steel 8 mm
Case:	In Anodised aluminium
Fixing: Metal clamping	feet placed along the
body / or possibility to a	apply ball joints at both
ends.	
Operating Temperature	e: 0 -50°C

MIN Ø 3.5mm MAX Ø 8mm



PE - CONNECTOR SIGNAL

(H & B

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Line driver output

A signal A

B signal A

C signal B

D signal B

E signal Z

F signal Z

K + V supply

H shield

JOV

G



Stroke Х Type PE 050 060 PP 60 137 PE 050 120 PP 120 197 PE 050 200 PP 200 277 PE 050 280 PP 280 357 PE 050 360 PP 360 497 PE 050 440 PP 440 577 PE 050 520 PP 520 657 PE 050 580 PP 580 717 PE 050 750 PP 750 887 PE 050 990 PP 990 1127

Total length = X + 3mm + Y + 1 or 2 Rod end bearings

Y dimension depending on signal type

Open collector No zero pulse Y = 55mmOn All other combinations is Y = 65mm

PE - CONNECTOR SIGNAL

OC without zero pulse

1 signal A 2 signal B 3 0 V 4 + V supply



OC with zero pulse / push pull output

1 signal A 2 signal B 3 0 V 4 + V supply 5 shield 6 signal Z



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