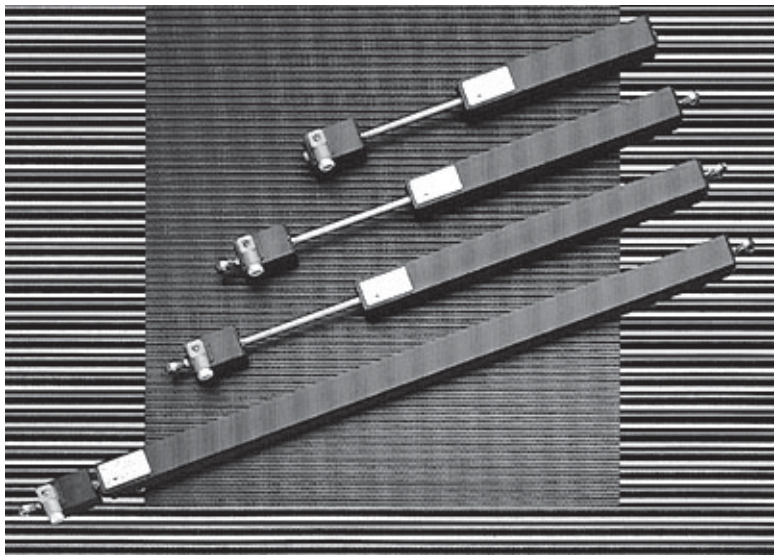
NORDIC TRANSDUCER

Serie PD 0.01... 0.005mm

elap Incremental Transducers



SERIE PD100 & PD500

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 CE standard.

Other stem types:
PE 200 + 200 micron = 0.1mm indication, max. 990mm, plastic 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 PD - INCREMENTAL LINEAR TRANSDUCER

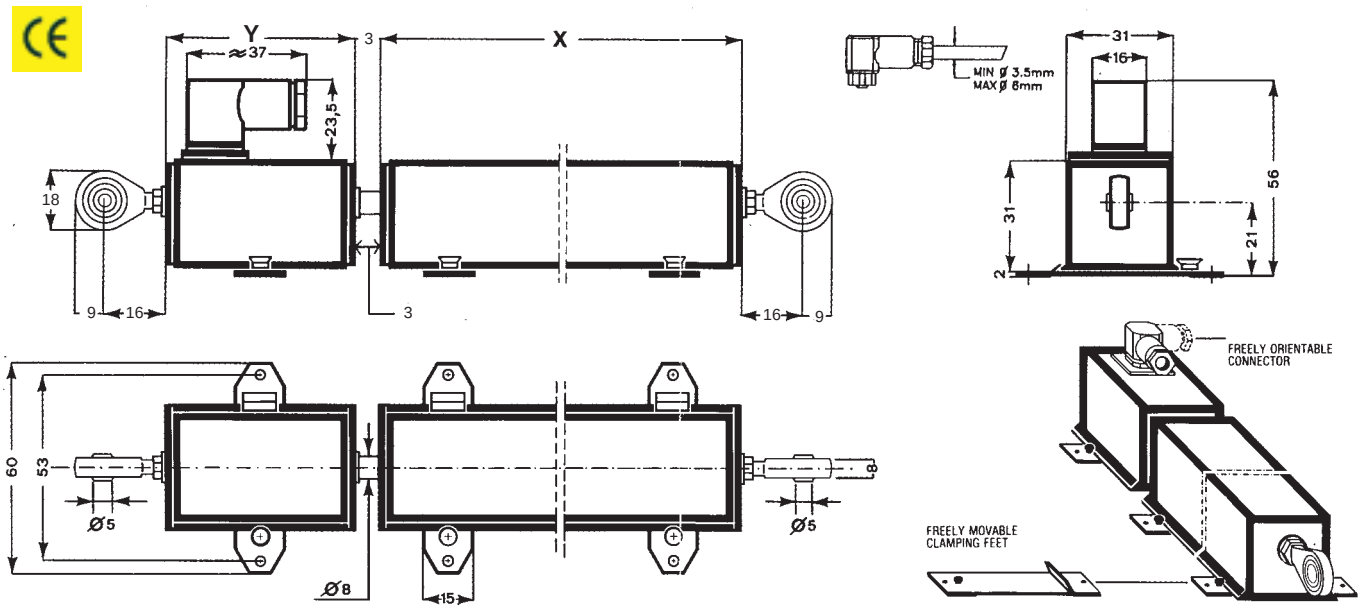
NORDIC TRANSDUCER

PD100 / 500 - GENERAL SPECIFICATIONS

Operating principle:	optoelectronic reading on floot glass scale
Grating pitch:	20 + 20 micron (PD500 10 + 10 micron)
Reading resolution:	PD100 = 0.01mm PD500 = 0.005mm after electronic quadrupling
Zero pulses (option)	Standard 1 at mid-stroke, or placed according to requirements with 1 or several points.
Thermal expansion of the glass measuring element:	$18x10^{6}$/°C
Lighting source:	LED
Supply:	10 - 24 VDC 5VDC for line driver output
Current consumption:	PD100 Max. 50mA, 90 mA for line driver PD500 Max. 125mA for line driver out
Output signal:	2 square waves 90 ± 15 electr. degree out of phase
Reference (zero) signal:	0.05mm wide.
Electronic output:	PD100 push-pull (max.50 mA), Open collector NPN (max. 50mA 30V) Line driver PD100 / 500 (26LS31)

PD - MECHANICAL SPECIFICATIONS

Protection degree:	IP65
Max. speed:	60m/min
Max. acceleration:	40m/sec^2
Zero pulse max. speed	12m/min
Progress strength:	1 - 3 N
Stem:	Stainless steel 8 mm
Case:	In Anodised aluminium
Fixing:	Metal clamping feet placed along the body / or possibilty to apply ball joints at both ends.
Operating Temperature:	0 -50°C



PD - CONNECTOR SIGNAL

Open collector / push pull output

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

PD - CONNECTOR SIGNAL

Line driver output

A signal A
B signal $\overline{A}$
C signal B
D signal $\overline{B}$
E signal Z
F signal $\overline{Z}$
G
H shield
J 0 V
K + V supply

Type 100 or 500	Stroke	X
PD 100 060 PP	60	153
PD 100 120 PP	120	213
PD 100 170 PP	280	263
PD 100 200 PP	200	293
PD 100 220 PP	220	313
PD 100 255 PP	255	348
PD 100 280 PP	280	372
PD 100 360 PP	360	512
PD 100 440 PP	440	592
PD 100 520 PP	520	673
PD 100 650 PP	650	813
PE 100 750 PP	750	913

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

Y dimension depending on type
PD 100 Y = 65mm
PD 500 Y = 82mm

Nordisk Transducer Teknik

Als Odde, DK-9560 Hadsund Denmark
Tel.: +45 98581444, Fax.: +45 98581866
E-mail: ntt@ntt.dk WEB: www.ntt.dk