acceleration, velocity, displacement and frequency converters
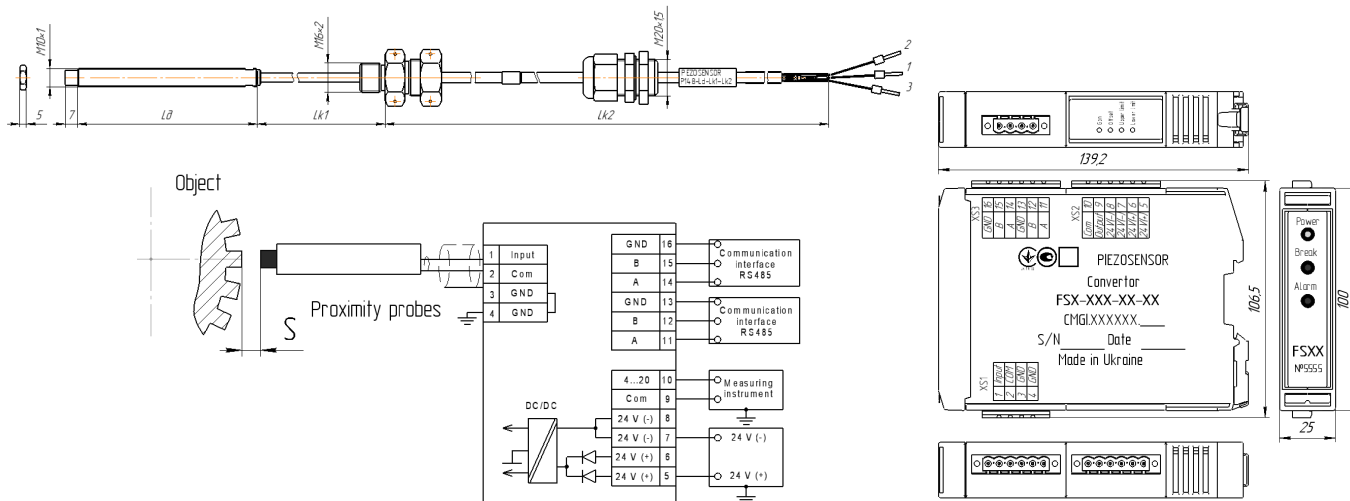
PIEZOSENSOR®

VELOCITY CONVERTERS

P/FST

UA.TR.001

Converters P/FST (Tachometers) are designed to convert displacement into a current signal and rotation frequency of shafts containing gears made of ferromagnetic materials into a current pulse signal.

Eddy-current converter P, shaper FST, functional diagram

Options	P148/FSTA167	P150/FSTA167	P185/FSTA167
Case Thread	M10 × 1	M16 × 1	M20 × 1
output "displacement "			
Measuring displacement, mm	0.4 to 2.4	1 to 6	0.4 to 2.4
Nominal value of the conversion factor proportional to static displacement, mA/mm	8	3.2	8
Output signal, mA	from 4 to 20		
Limits of permissible relative deviation of the actual value of the displacement conversion factor from the nominal, %	± 2.5		
Limits of the basic reduced error of displacement conversion, %	± 2.5		
Size FST, mm	150 x 118 x 45		
Case length, mm	50, 80, 100		
Total length cable, m	1.0 to 14 with a multiplicity of 0.5		
Cable length from proximeters to cable gland, m	0.5 to 5 with a multiplicity of 0.5		
Weight proximeters 100 mm long with 8 m cable in metal hose, kg	1.8		
Weight converters, kg	0.3		
output «impulse»			
Control surface	gear, groove, key		
Number of gear teeth, pcs	1 to 120		
Installation gap, mm	1.3 ± 0.3	3.5 ± 0.2	1.4 ± 0.2
Output signal, mA: - "0" - "1"	3.5 to 5.5 19 to 21		
Pulse frequency measurement range, Hz	1 to 4000		
Time for updating readings on a digital output, s	1		
Synchronization line function	Phase mark former		
Output resistance, Ohm	100 to 500		
Working temperature range, °C: - proximeters - converters	0 to 180 (-40 to 180) 0 to 70		
Supply voltage, V	24 ± 6		
Current consumption, mA	150		
Length of signal cable, m	250		
Basic reduced error of measurement of rotation frequency%, - imp/s (Hz),	± 0.1 ± 2.0		