

Draw wire encoder



with shaft encoder type 58xx

Your benefit:

- directly length measurement
- wide measuring range: up to 6 m
- high repeatability
- easy to mount
- no guiding system necessary
- Cable guide with guide pulley
- Distance and angle measurement are standard tasks in machine-building and

engineering industries. Kübler wire-actuated transducers are an economical and easy to handle solution. Wire-actuated transducers transform linear movements into rotary motion by winding/unwinding a wire. The rotary motion is transmitted to an incremental or absolute encoder. Remote display units or controls can be used to display/process the measured values. Please ask about the Kübler range of displays and counters!

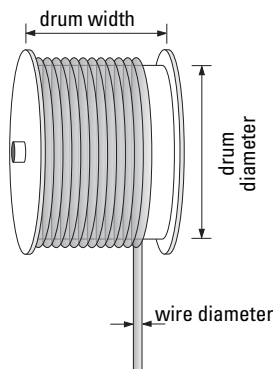
Mechanical characteristics of the wire-draw encoder:

Measuring range:	up to 6000 mm
Repeatability: (if position is always approached from same direction)	~ 0,05 mm
Resolution:	0,1 mm (standard encoder) with 2000 ppr.
Extension length 200 mm:	~ 1 encoder revolution
Travel speed:	max. 3000 mm/s
Required pull on spring:	min. 5 N (on wire)
Wire diameter:	para wire 2,6 m: 1,05 mm steel wire 6 m: 0,54mm
Weight:	appr. 1,050 kg

Note!

If the maximum extension length is exceeded, the wire and transducer will be damaged.

Construction



Structure:

Principal item of a draw wire encoder is a stored drum, on whose extent a rope is rolled up. Rolling up is made by a spring return mechanism.

Accuracy/measuring range:

It is guaranteed by the mechanical construction that the wire unwraps evenly on the drum. The dimension of the drum (diameter and width) and the diameter of the wire determine the maximum wire length. The measuring accuracy is only for the first rolled up situation accurately defined. The offered measuring range corresponds exactly to the maximum wire length, which can be rolled up on the first layer.

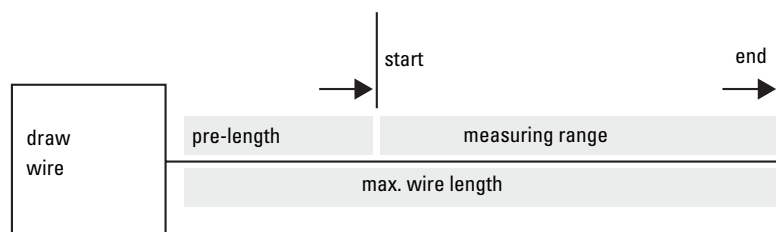
Wire:

There are two types of wires. They are different in dimension, material, surface and their physical characteristics. Para wire and steel wire.

Order information:

Choose for your application the suitable measuring range with the possible wire variants. Determine the necessary pre-length for your application. The sum of the measuring range and pre-length may not exceed the maximum length.

Definition of the terms 'measuring range' and 'pre-extension length'

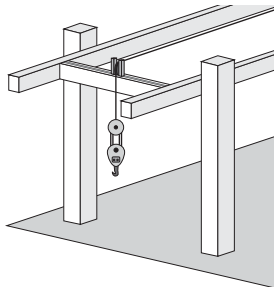
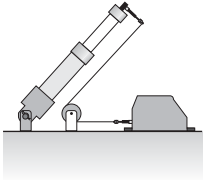


Draw wire encoder

Application examples:

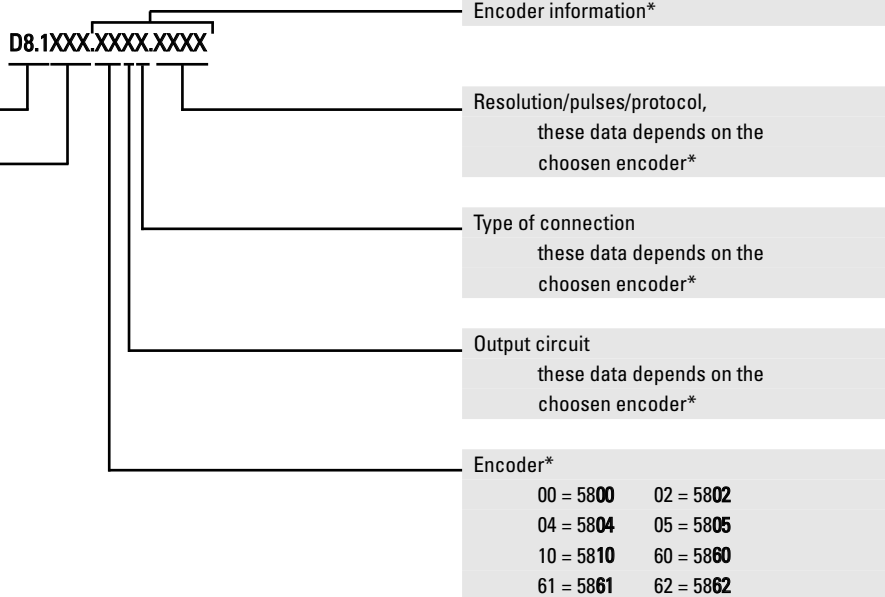
pneumatic/hydraulic application

cranes and material handling



Order code:

Draw wire actuator	
Wire	
106 =	steel wire, 6 m
2A1 =	para wire 2,8 m

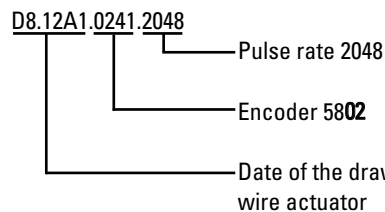


*The type of encoder and its features the are specified.
 The first two numbers describe the type of encoder e.g. 5802.
 The further characteristics of the encoder can be defined as per the actual encoder catalogue.

connection should be 1 m axial cable (PVC). The pulse rate will be 2048.

Stock types
D8.1106.0243.2000
D8.1106.0283.2000
D8.12A1.0243.2000
D8.12A1.0283.2000

Order code:



Order example:

Draw wire actuator with 2,8 m para wire. The encoder should be a 5802 with RS 422 (with inverting) and 5 V voltage supply. The

For the encoder order code , please refer to our chapter encoder.