



Compact and simple low-cost type
 Flexible stainless steel cable Ø 0,6 mm
 Strong spring mechanics
 Precision cable drum
 With Standard Incremental Encoder EE 58



Inkrementaler Weggeber PCE 180

Linear Motion Transducer with 20.000 and 30.000 mm range,
 with Standard Incremental Encoder EE 58

Used encoder

Used encoder

Standard Encoder EE 58

Type explanation

PCE 180-300-20/EE58-3-8192-30-P-RC07

Measuring range	200 = 20000 mm 300 = 30000 mm
Number of turns of the encoder shaft	20
Encoder type	Incremental
Number of channels	3 = A + B + M 6 = AA + BB + MM
Resolutions	xxxx = Impulse pro Umdrehung
Supply voltage	05 = 5 VDC ± 5% 30 = 10 ... 30 VDC
Output driver	D-RS422 P
Position of connection	R S
Connector	C07 = 7 pins Binder C12 = 12 pins M23 M10 = 10 pins MIL

Technical data

Mechanical data

Acceleration of cable	? 100 ms ⁻²
Side movement of cable	? 3°
Weight	? 4,9 kg (PCE180-200) ? 5,9 kg (PCE180-300)

Environmental conditions

Vibration	200 m/s ² (20 ... 2000 Hz)
Shock	500 m/s ² (12 msec)
Operating temperature	0 ... +80°C
Storage temperature	-40 ... +80°C
Atmospheric humidity	? 95% r.h.
Protection class	IP 40 (Mechanic of Linear Motion Transducer) IP 65 (Standard Encoder EE 58)

Electrical data

Scanning type	Optical, without contact
Transmitter, infrared	LED
Receiver	Photo-Array
Supply voltage	V _{cc} = 5 VDC ±5% V _{cc} = 10...30 VDC
Power consumption	200 mA max.
Output frequency	? 300 kHz (Output D) ? 160 kHz (Output P)
Signal level	High > V _{cc} -2 V Low < 0,5 V
Load capacity of the outputs	20 mA

Cable

Wire colour	Signal
Brown 0,5 mm ²	+Vcc
Blue	+Vcc Sense ¹⁾
White 0,5 mm ²	0 V GND
White	0 V Sense
Brown	Signal A+
Green	Signal A- ²⁾
Grey	Signal B+
Pink	Signal B- ²⁾
Red	Signal M+
Black	Signal M- ²⁾
Shield	N.C.

1) nur bei Vcc = 5 VDC TTL

2) nur bei 6 Ausgangskanälen

Connector 7 pins Binder

Connection	Signal
Pin 1	0 V GND
Pin 2	N.C.
Pin 3	Signal A
Pin 4	Signal B
Pin 5	+Vcc
Pin 6	Signal M
Pin 7	Shield

Connector 12 pins M23

Connection	Signal
Pin 1	Signal B- ¹⁾
Pin 2	+Vcc Sense ²⁾
Pin 3	Signal M+
Pin 4	Signal M- ¹⁾
Pin 5	Signal A+
Pin 6	Signal A- ¹⁾
Pin 7	N.C.
Pin 8	Signal M+
Pin 9	Shield
Pin 10	0 V GND
Pin 11	0 V Sense
Pin 12	+Vcc

1) nur bei 6 Ausgangskanälen

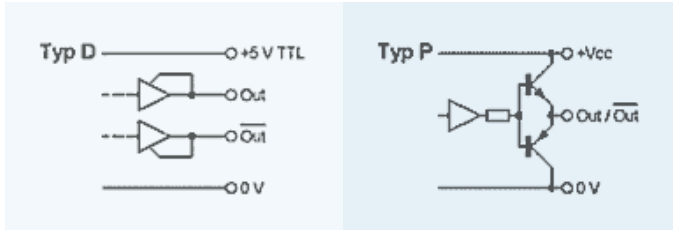
2) nur bei Vcc = 5 VDC TTL

Connector 10 pins MIL

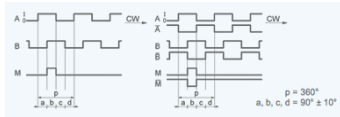
Connection	Signal
Pin A	Signal B+
Pin B	Signal A+
Pin C	Signal M+
Pin D	+Vcc
Pin E	+Vcc Sense
Pin F	0 V GND
Pin G	Shield
Pin H	Signal B- ¹⁾
Pin I	Signal A- ¹⁾
Pin J	Signal M- ¹⁾

1) nur bei 6 Ausgangskanälen

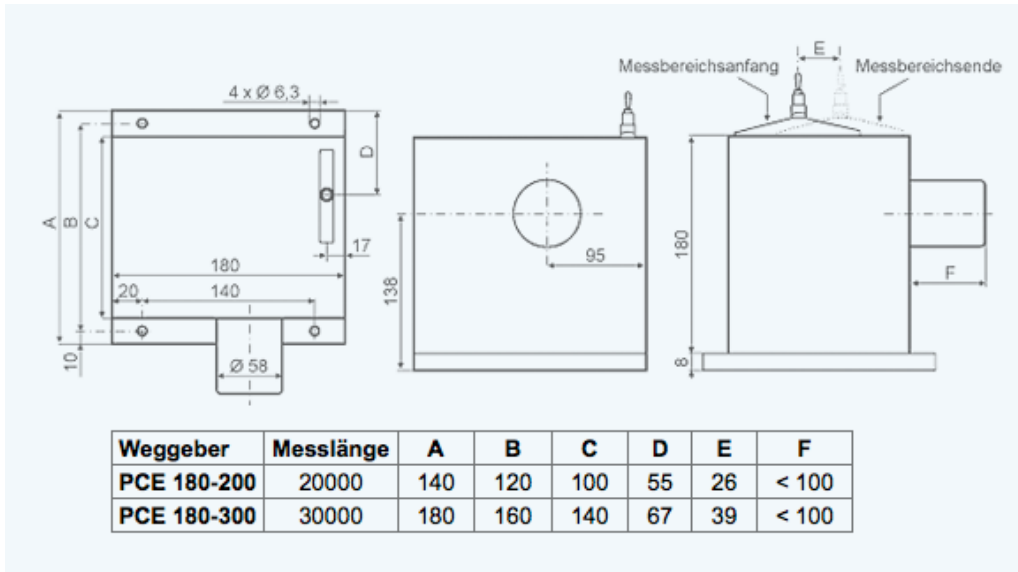
Output driver



Output channels / Output signals



Outline drawing



Version ZE 614-411 · Subject to change

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