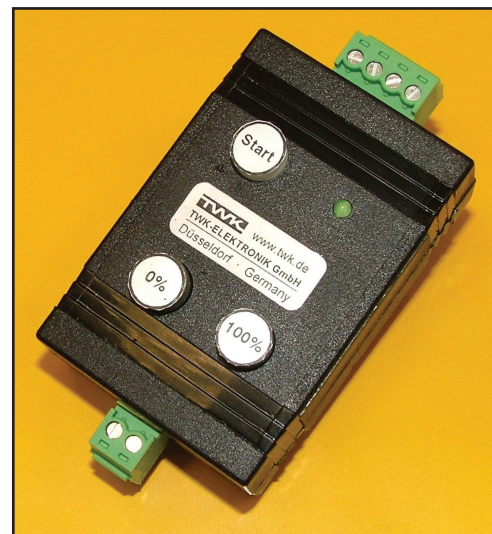


Function

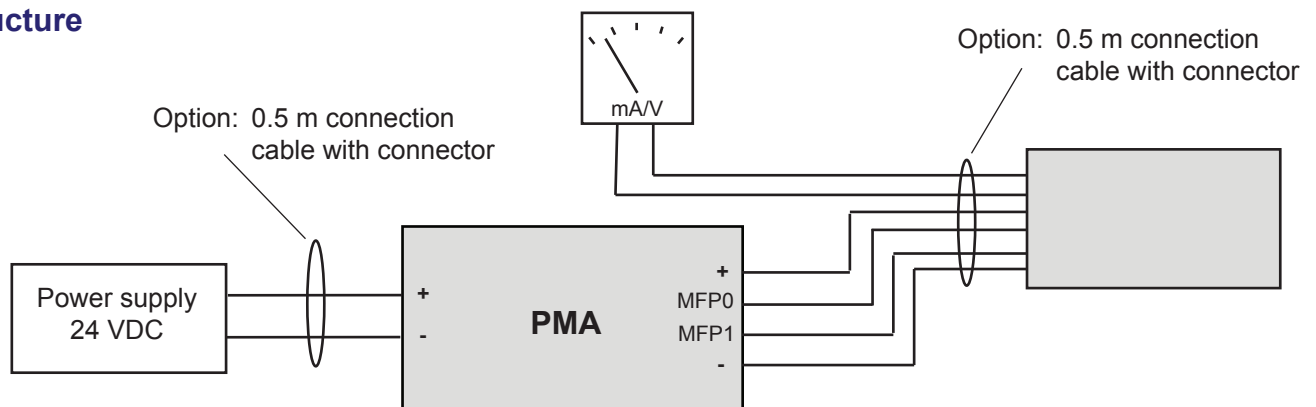
The analogue hand programming device is used for simple teach-in adjustment of TWK angle and linear transducers via its connection cables, even if the transducer is no longer directly accessible.

To achieve this, the transducer is simply set to the desired start point and the start of the measuring range is set with the 0% button. The end of the measuring range is set in the same way using the 100% button. The direction of measurement can also be set.

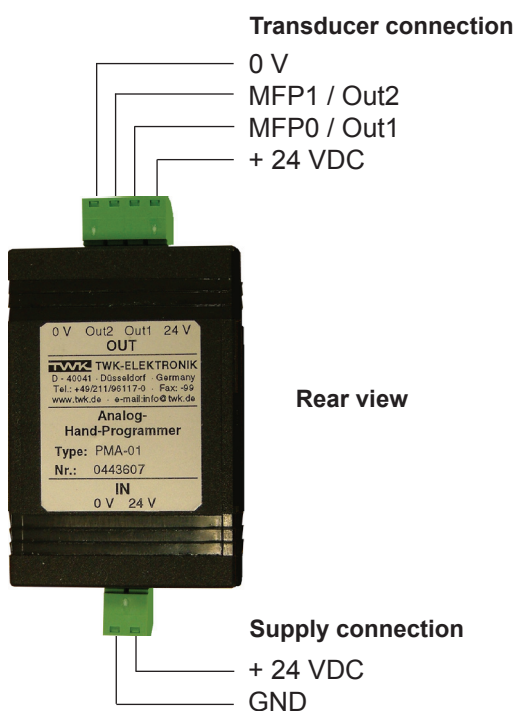
The following pages contain detailed instructions for setting model series TXA, IWP, MPA and MSA.



Structure



Electrical connection



Order code format

PMA - K8 - S8 - 01

01 = Programming device for * TMA, IWP, MPA, MSA

05 = Programming device for * TSA, TRA

Optional:

S8 = 0.5 m connection cable with connector M12x8 for power supply

Optional:

K6 = 0.5 m connection cable with M16x6 connector for linear transducer **MPA / MSA**

K8 = 0.5 m connection cable with Stecker M12x8 für M12x8 for angle transducer **TXA** or linear transducer **IWP**

Modell

* Only valid for standard version of the sensors (variant 01).

Programming instructions for electromagnetic angle transducer TMA, TSA and TRA

Attention: use Programming device PMA-01 (low active, input circuits E8 and E9) for encoder TMA and PMA-05 (high active, input circuit E1) for encoder TSA and TRA

Setting the measuring range:

1. Connecting the hand programming device

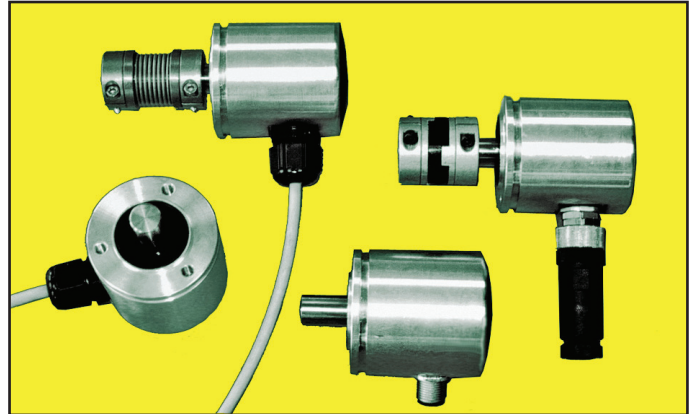
(See structure on first page)

2. Setting the start point

- Set angle transducer to start position
- Press 0 % button for min. 1.5 s

3. Setting the end point

- Set angle transducer to end position
- Press 100 % button for min. 1.5 s



Restoring the factory settings

- Press the 0 % and 100 % buttons simultaneously for min. 1.5 s

Changing the code curve:

- Without changing the shaft position, press the 0 % and 100 % buttons successively for min. 1.5 s

Set preset value (center position of measuring range)

Without changing the shaft position:

- Press 0 % button for min. 1.5 s
- After at least 0.5 s press 0 % button for min. 1.5 s

Programming instructions for inductive linear transducer IWP

Setting the measuring range:

1. Connecting the hand programming device

(See structure on first page)

2. Setting the zero point

- Set linear transducer to zero point position
- Press 0 % button for min. 1.5 s

3. Setting the end point

- Set linear transducer to end position
- Press 100 % button for min. 1.5 s



Restoring the factory settings

- Press the 0 % and 100 % buttons simultaneously for 1.5 s

Changing the measuring direction:

- Set linear transducer to zero point position
- Press 100 % button for min. 1.5 s

Programming instructions for magnetostrictive linear transducers MPA and MSA

Setting the measuring range:

1. Connecting the hand programming device

(See structure on first page)

2a. Activating setting mode

(until serial number 0535xxxx)

- Press start button
- Press 0 and 100 % buttons simultaneously within 2 sec.
- Green sensor LED flashes and indicates that setting mode is active



2b. Activating setting mode

(from serial number 0536xxxx)

- Press the start button and the 100 % button
- Release the start button and also the 100 % button (after min. 1 sec.).
- The green sensor LED flashes (programming mode reached)

3. Setting the start point

- Set position magnet to start position
- Press 0 % button

4. Setting the end point

- Set position magnet to end position
- Press 100 % button

5. Restoring normal function

- Press start button
- Re-connect sensor

Setting the measuring direction:

If the end point is set before the start point (viewed from the sensor head), a descending measuring signal is obtained.

Pin assignment for PMA-K8-01/05
 (mating connector for linear transducer / encoder)

Pin	Wire	Signal
1	red	+V _s (24 V)
2	blue	-V _s (0 V)
3	white	Analogue output (0(4) ... 20 mA, 0...10 V, -10...+10 V)
4	brown	Analogue GND
5	green	Multifunctional input 0 (MFP0)
6	yellow	Multifunctional input 1 (MFP1)
7	-	Not used
8	-	Not used

Pin assignment for PMA-K6-01
 (mating connector for Magnosens MPA/MSA linear transducer)

Pin	Wire	Signal
1	white	Analogue output 1 (0(4) ... 20 mA, 0...10 V, -10...+10 V)
2	-	Not used
3	brown	Analogue output 2 (0(4) ... 20 mA, 0...10 V, -10...+10 V)
4	-	Not used
5	red	+V _s (24 V)
6	blue	-V _s (0 V)

Pin assignment for PMA-K8-S8-01
 (mating connector for the power supply)

Pin	Wire	Signal
1	red	+V _s (24 V)
2	blue	-V _s (0 V)
3	-	Not used
4	-	Not used
5	-	Not used
6	-	Not used
7	-	Not used
8	-	Not used