

## 4 Technical Data

### 4.1 General Specifications BPS 37

#### Optical Data

Light source	Laser diode 650nm
Scanning rate	1000scans/sec.

#### Measurement data

Reproducible accuracy	±1 (2) mm
Integration time	16 (8) ms
Measurement value output	500 values/sec.
Refresh time	
Scanning depth	60 ... 140 mm

#### Electrical data

Interface type	SSI (RS422) electrically isolated 16 ... 32 data bits 800 kHz max. clock frequency output of positive and negative position values binary or Gray encoded
Service interface	RS232 with fixed data format, 9600Bd, 8 data bits, no parity, 1 stop bit
Ports	1 switching output, 1 switching input
LED green	device ready (Power On)
Operating voltage	10 ... 30V
Power consumption	3.2 W

#### Mechanical data

Protection class	IP 65
Weight	400 g
Dimensions (W x H x D)	120 x 90 x 43mm
Housing	diecast aluminium

#### Environmental data

Operation without optics heating	0°C ... +40°C
Operation with optics heating	-30°C ... +40°C
Storage	-20°C ... +60°C
Air humidity	max. 90% rel. humidity, non-condensing
Vibration	IEC 68.2.6 IEC 68.2.27 (shock) IEC 801
Electromagnetic compatibility	acc. to IEC 60947-5-2

**Barcode band**

Max. length (measurement length)	10000m
Ambient temperature	-40°C ... +120°C
Mech. properties	scratch and wipe resistant UV resistant moisture resistant partly chemical resistant

Table 4.1: General Specifications

**4.2 LED indicators**

An internal LED indicates in the reading window whether or not the supply voltage is present.

**4.3 Dimensioned and Connection Drawings**

*BPS 37*

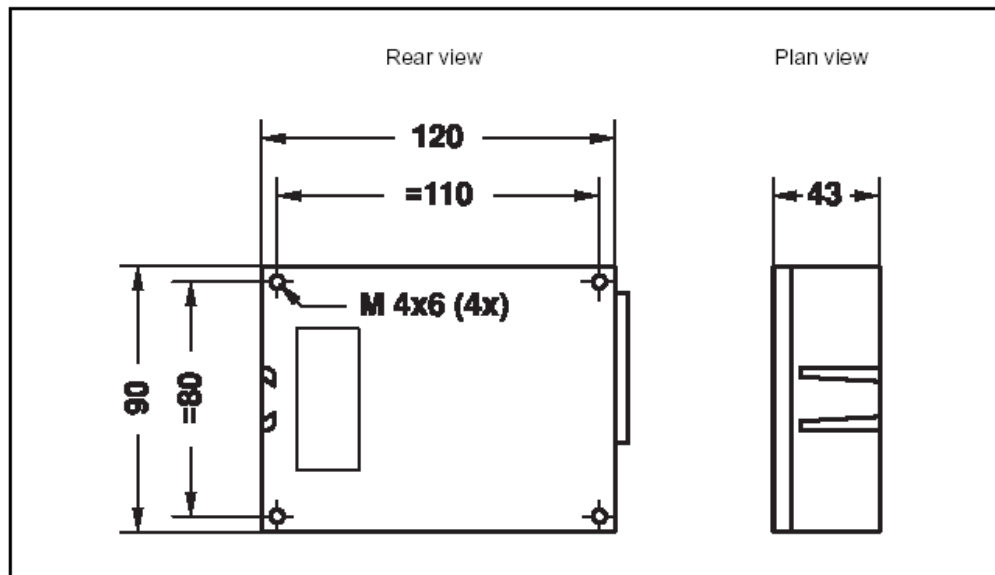


Figure 4.1: Dimensioned drawing BPS 37

Scanning curve BPS 37

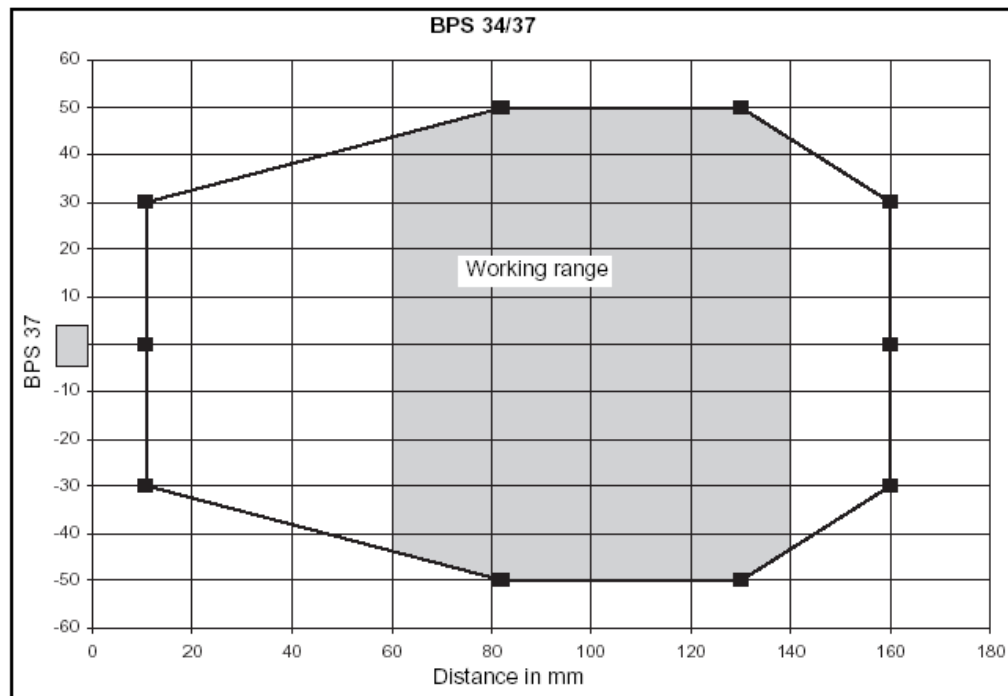


Figure 4.2: Scanning curve BPS 37

## 5 Accessories / Order Designation

### 5.1 Accessories



**Notice!**

*Products from Leuze electronic GmbH + Co. can be ordered from any of the sales and service offices listed on the back page of this operating manual.*

Symbol	Order No.	Short Description
MA 4.7	500 37324	Connection unit for BPS 37 with parameter memory
MA 4D.7	500 37325	Connection unit for BPS 37 with parameter memory and display
BT 56	500 27375	Mounting bracket with dovetail for rod
KB 031-3000	500 35355	Connection cable between BPS and MA, length: 3m
BPSCfg	500 60298	Programming software

Table 5.1: Accessories / Order Designation

#### 5.1.1 Connection units



**Notice!**

*The connection units are described here in brief only. For further information regarding the connection units please refer to the relevant data sheets*

**Connection unit MA 4.7/MA 4D.7**

The connection units MA 4.7/MA 4D.7 are used to simplify the electrical installation of the BPS 37. They have the following advantages compared to the installation of the BPS 37 as a standalone device:

- Terminals for switching inputs and outputs, including supply voltage
- 9-pin sub-D plug for service interface
- Operating mode switch: service operation/standard operation
- Code types - changeover switches binary/Gray
- Rotary switch for setting the resolution
- Parameter memory for the BPS - the BPS can be exchanged without the need for reconfiguration.
- Display (MA 4D.7 only)

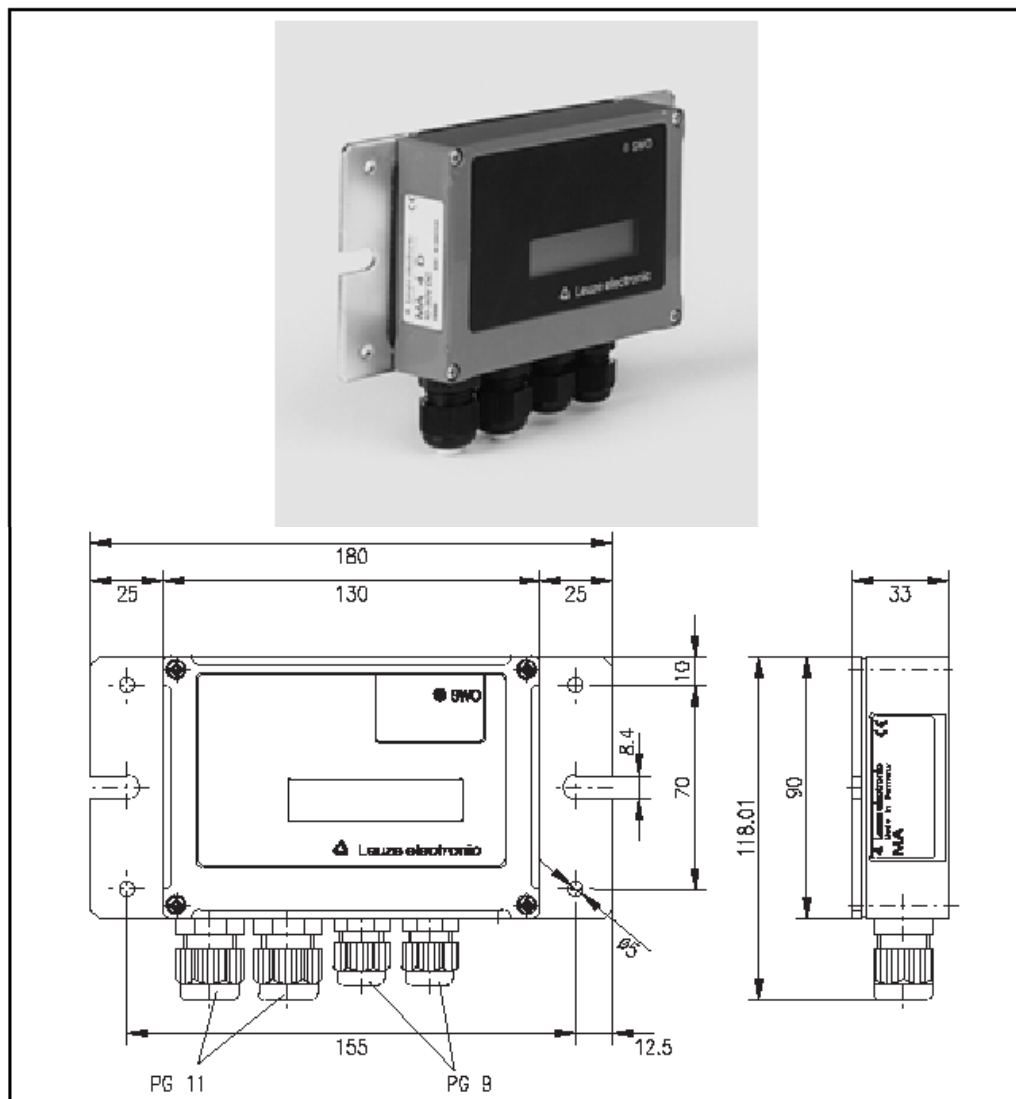


Figure 5.1: Connection unit MA 4.7/MA 4D.7 / dimensioned drawing

### 5.1.2 Fastening Accessories

The mounting unit BT 56 is available for mounting the BPS 37. It is designed for rod installation.

#### *Mounting device BT 56*

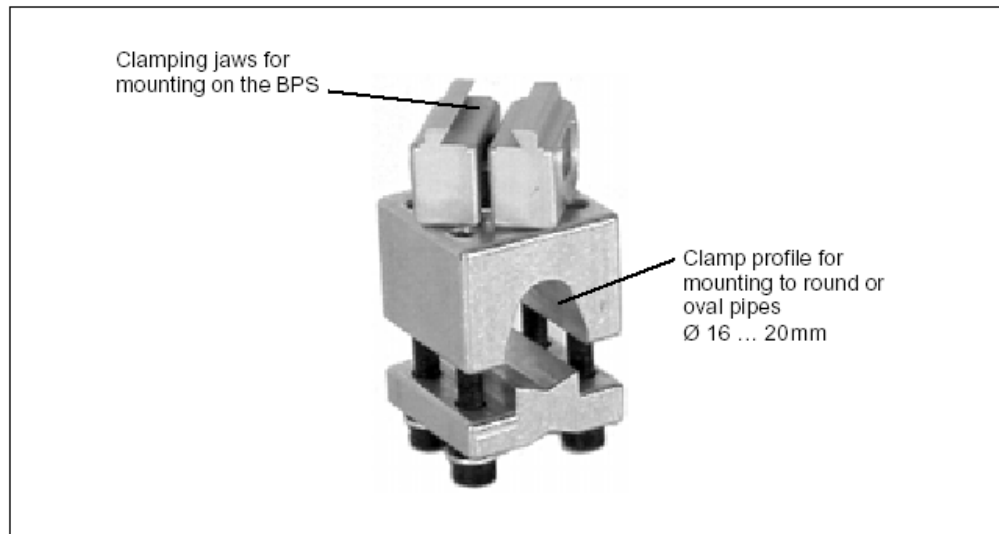


Figure 5.2: Mounting device BT 56

### 5.1.3 Connection cable

A special connection cable is available for the connection between BPS and connection units. This connection cable may be used for the connection units MA 4.7 as well as for MA 4D.7.