ASTECH
Angewandte Sensortechnik

PHSS4x
Protective housing for LDM4x

The housing PHSS4x is to protect the sensors of the LDM4x series from humidity and dirt. It is made of very robust stainless steel (1.4404) and it is perfectly suited to outdoor use. The window that has been adjusted to the laser's wavelength range can easily be cleaned.

The serial programming interface of the sensor is permanently available at an external port. Power supply and further signals are connected via cable lead-through at an internal terminal block.

The PHSS4x can be ordered in different versions. Then the case is equipped with externally available fieldbus connectors according to the suitable meters out of the LDM4x series. Additionally these versions of the housing contain an external connector for power suppy and other signals instead of the internal terminal block.

The sensor can be installed directly ex works. Customized, special versions are available upon request.
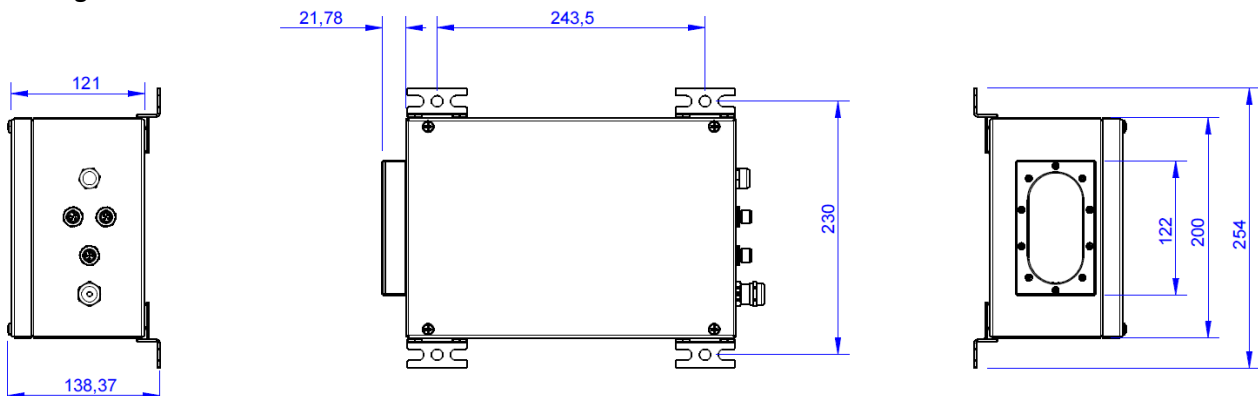
Technical Data

- **Protection class**
  IP 67 in accordance with the connection type
- **Dimensions**
  300 mm × 200 mm × 120 mm
  (W × H × D, without ports)
- **Mounting**
  4x M6, 260 mm × 220 mm
- **Weight**
  3500 g (without the built-in sensor)
- **Material**
  Stainless steel (1.4404)
- **Window material**
  Special glass anti reflex coating on both sides

Properties

- Protect the LDM42 from humidity and dirt
- Programming interface at an external port
- Suitable for all laser distance meters of the LDM4x series
- Fieldbus interfaces available via external connectors

Drawing

Versions

Part-Numbers	Name	Suitable device types
12-2003-00	PHSS4xA	LDM41A, LDM42A
12-2003-01	PHSS4xP	LDM41P, LDM42P
12-2003-13	PHSS4xE	LDM41E, LDM42E, LDM41PN, LDM42PN, LDM41EI, LDM42EI

PHSS4xA - Assignment of internal terminal

Terminal	Cable Color LDM4x A	Assignment	Pins at LDM4xA-Connector
1	White	Alarm	H
2	Green	TxD / RX+	A
3	Yellow	RxD / RX-	B
4	Grey	GND	J
5	Brown	TRIG	C
6	Orange	VCC	G
7	Blue	GND	L
8	Red	IOUT	D
9	Black	TX-	E
10	Purple	TX+	F
PE	-	Shield	-

PHSS4xP, PHSS4xE – Supply connector (M12, plug, A-coded, 5-pin)

Pin	Color internally	Assignment
1	Brown	VCC (10 – 30 V DC)
2	White	Q1 (digital output)
3	Blue	GND
4	Black	-
5	Grey	TRIG (trigger input)
PE	-	Shield

PHSS4xP – Connector Profibus IN (M12, plug, B-coded, 4-pin)

Pin	Color internally	Assignment
2	White	A
4	Black	B

PHSS4xP – Connector Profibus OUT (M12, socket, B-coded, 5-pin)

Pin	Color internally	Assignment
1	Brown	+5V
2	White	A
3	Blue	GND
4	Black	B

PHSS4xPN, PHSS4xE, PHSS4xEI – Connector Ethernet (M12, plug, D-coded, 4-pin)

Pin	Color internally	Assignment	
1	Yellow	TD+	RJ45: 1 = white/orange
2	White	RD+	RJ45: 3 = white/green
3	Orange	TD-	RJ45: 2 = orange
4	Blue	RD-	RJ45: 6 = green

All versions of PHSS4x - Connector RS232[1]) (M12, socket, A-coded, 5-pin)

Pin	Color intern	Assignment
1	Brown	RxD
2	White	TxD
3	Blue	GND

[1]) The connection interface is available only for sensors with RS232. The interface is protected with a cap against dirt. A programming cable can be ordered optionally.