

## Anemometer Thies Compact

S12100H



### Anemometer Thies Compact

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**Order number**

S12100H

**Availability**

Usually on stock

Opto-electronic wind speed sensor

## Description

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Ammonit's standard is heated version. It can be used for both heated and non-heated system.

- Opto-electronic wind speed sensor
- "Low Power" – Frequency output signal
- Range 0.5 ... 50 m/s
- Resolution < 0.1 m/s

## Specifications

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### Anemometer Thies Compact

#### General Information

Order Number S12100H

#### Measurement Principle

Opto-electronic (slotted disc)

#### Accuracy

Accuracy  $\pm 3\%$  of meas. value, however  $\geq 0.5$  m/s

Resolution  $< 0.1$  m/s

Starting Velocity  $0.5$  m/s

#### Operating Range

Measurement Range  $0 \dots 50$  m/s

Survival Wind Speed max.  $80$  m/s (30 min)

Ambient Temperature  $-40 \dots +70$  °C

#### Electrical Data

Electrical Supply  $9 \dots 30$  V DC

Electrical Supply for Heating  $24$  V AC/DC @  $20$  W

#### General

Connection 7-pole plug-connection

Mounting For example, onto mast tube with receptable thread Pg21 or boring  $\varnothing 29$  mm

Dimensions  $155 \times \varnothing 134$  mm

Weight approx.  $0.7$  kg

Material Housing: Aluminium  
Cup star: Synthetic with fibre glass

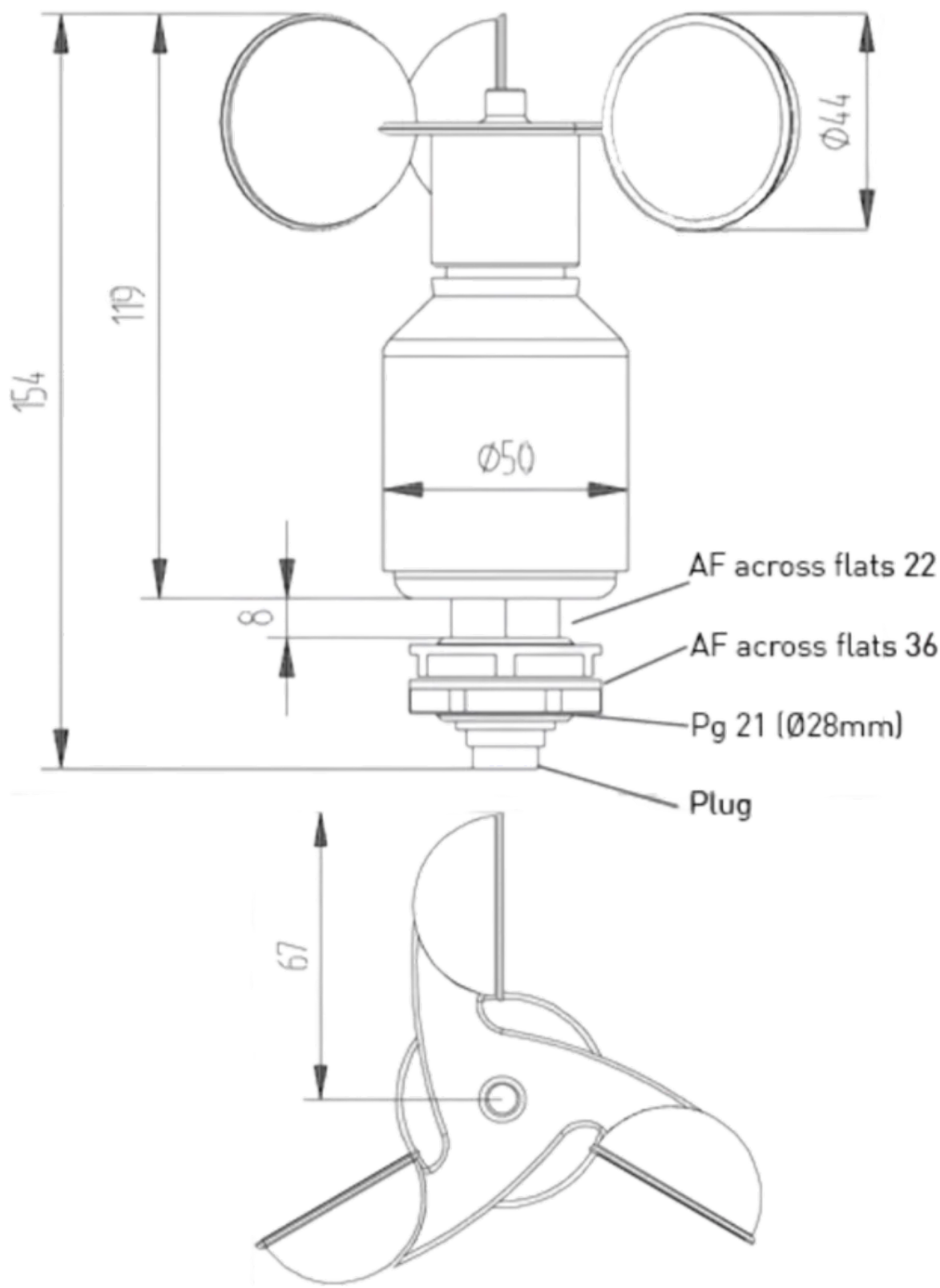
Type of Ball Bearings Metallic ball bearings

Protection IP 55

Manufacturer Thies

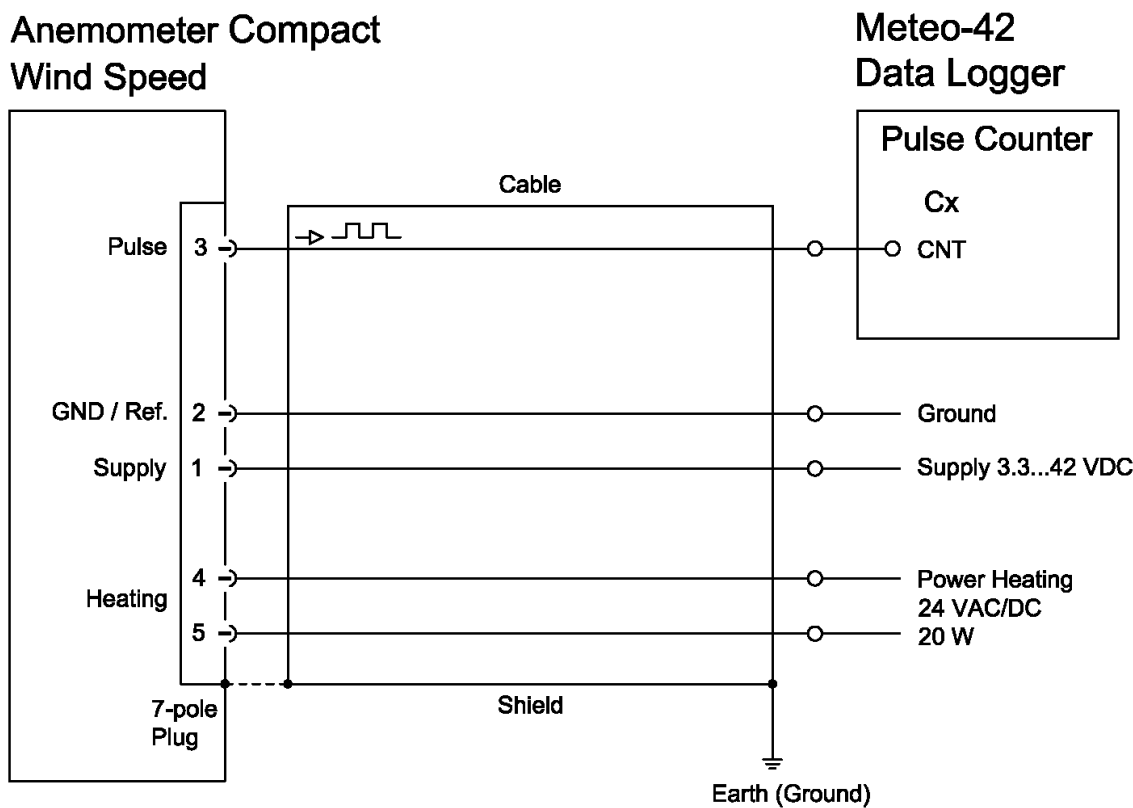
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Dimensional drawing

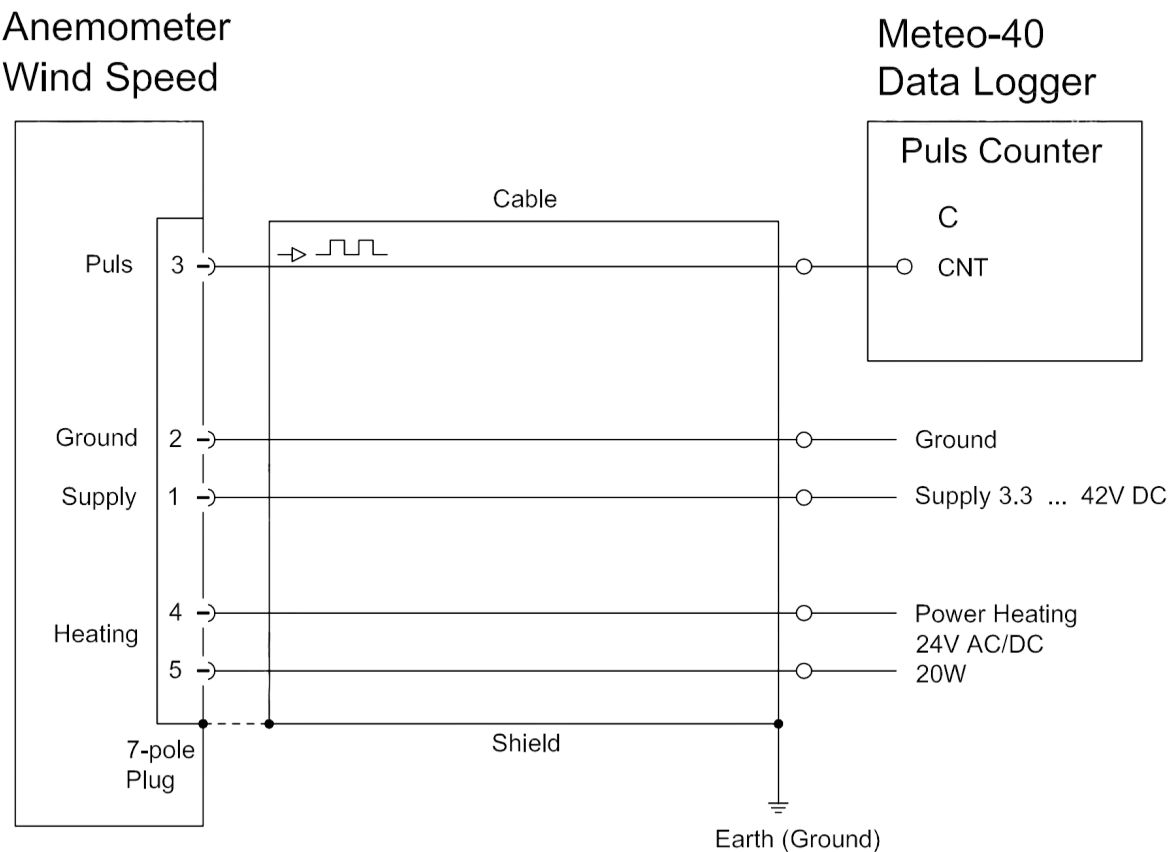


Sensor connection diagram

Sensor connection diagram to Ammonit Meteo-42 Data Logger



Sensor connection diagram to Ammonit Meteo-40 Data Logger



| Sensor                  | Plug Pin No. | Ammonit Cable Wire Colour | Meteo-40 | Supply Sensor |
|-------------------------|--------------|---------------------------|----------|---------------|
| Wind speed Pulse output | 3            | white                     | CNT      |               |
| Supply                  | 1            | red                       |          | 9 ... 36 V*   |
| Ground                  | 2            | black                     |          | Main Ground   |
| Heating                 | 4            | orange, orange            |          | 24 V AC/DC    |
|                         | 5            | violet, violet            |          |               |

**\* Supply voltage for usage with Meteo-40 data loggers.**

**Cable type without heating wires:** LiYCY 3 x 0.25 mm<sup>2</sup>

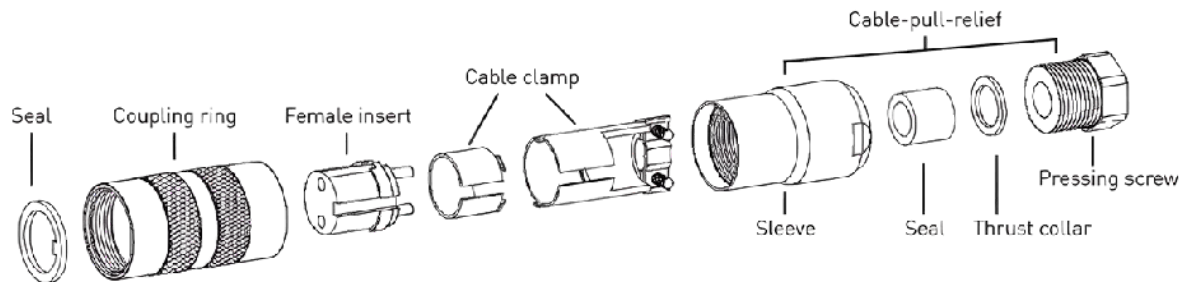
**Cable type with heating wires:** LiYCY 7 x 0.25 mm<sup>2</sup>

**Connect the shield logger-sided to Ground (GND)**

## Instructions

### Coupling socket, Type: Binder, Serial 423, EMC with cable clamp

#### Exploded View



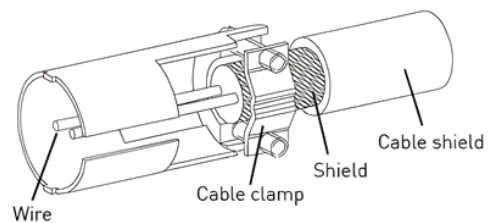
#### Cable Connection: WITH Cable Shield

##### Steps:

1. Stringing parts on cable according to plan above.
2. Stripping cable sheath 20 mm  
Cutting uncovered shield 15 mm  
Stripping wire 5 mm

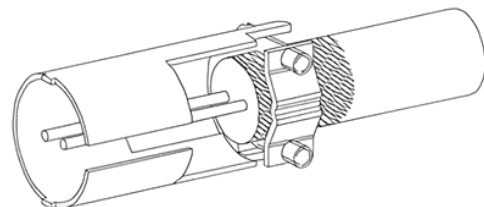
**A)** Putting shrink hose or insulation tape between wire and shield.

A)



**B)** If cable diameter permits, put the shield backward on the cable sheath.

B)



3. Soldering wire to the insert, positioning shield in cable clamp.
4. Screwing-on cable clamp.
5. Assembling remaining parts according to plan above.
6. Tightening pull-relief of cable by screw-wrench (SW 16 and 17).

#### Cable Connection: WITHOUT Cable Shield

## Coupling socket, Type: Binder, Serial 423, EMC with cable clamp

### Steps:

1. Stringing parts on cable according to plan above.
2. Stripping cable sheath 20 mm
3. Cutting uncovered shield 20 mm
4. Stripping wire 5 mm
5. Soldering wire to the insert
6. Positioning shield in cable clamp
7. Screwing-on cable clamp
8. Assembling remaining parts according to plan above
9. Tightening pull-relief of cable by screw-wrench (SW 16 and 17)

