Anemometer Thies Compact

Opto-electronic wind speed sensor

Description

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

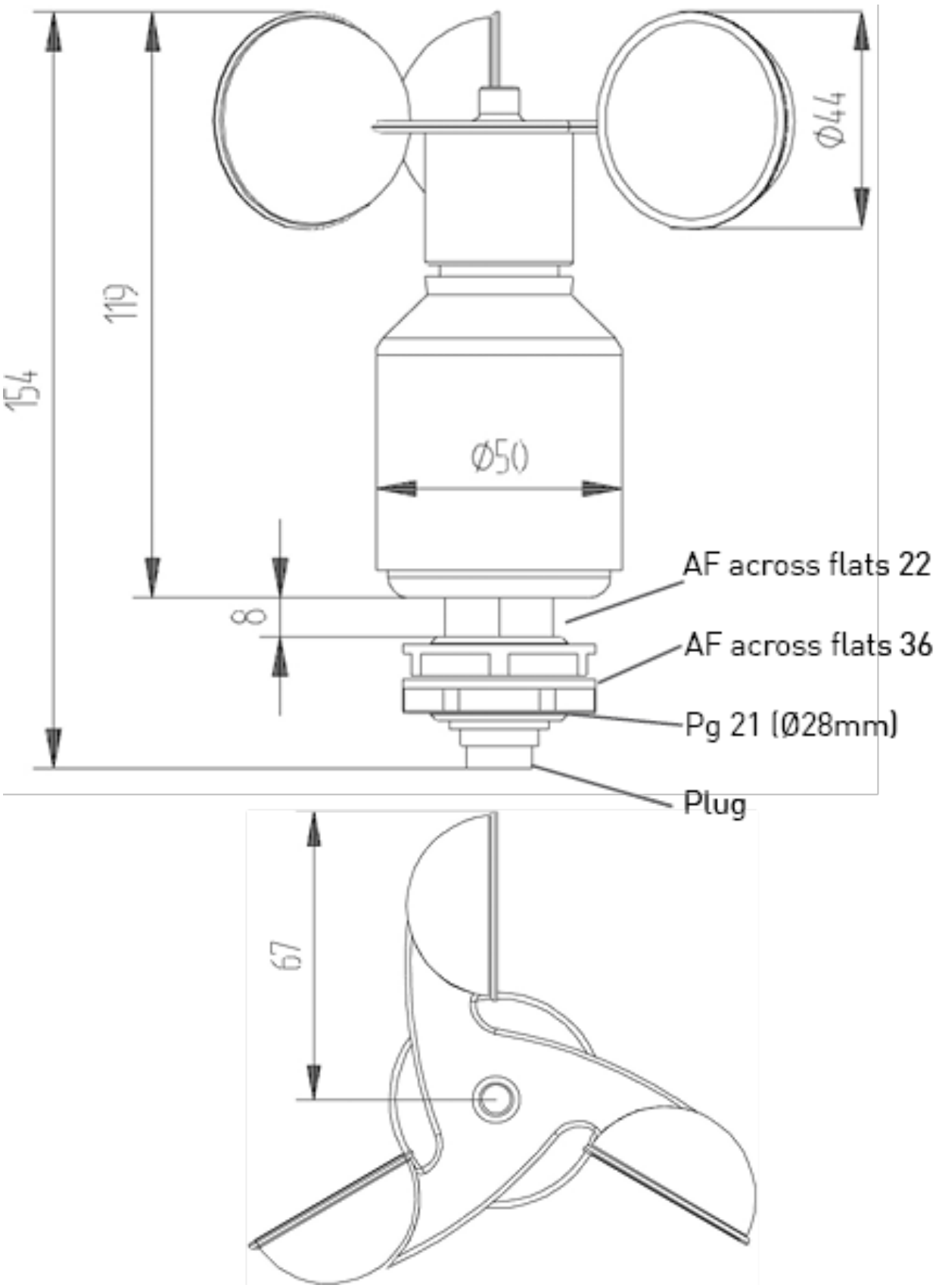
- Opto-electronic wind speed sensor
- “Low Power” - Frequency output signal
- Range 0.5 ... 50 m/s
- Resolution < 0.1 m/s

Specifications

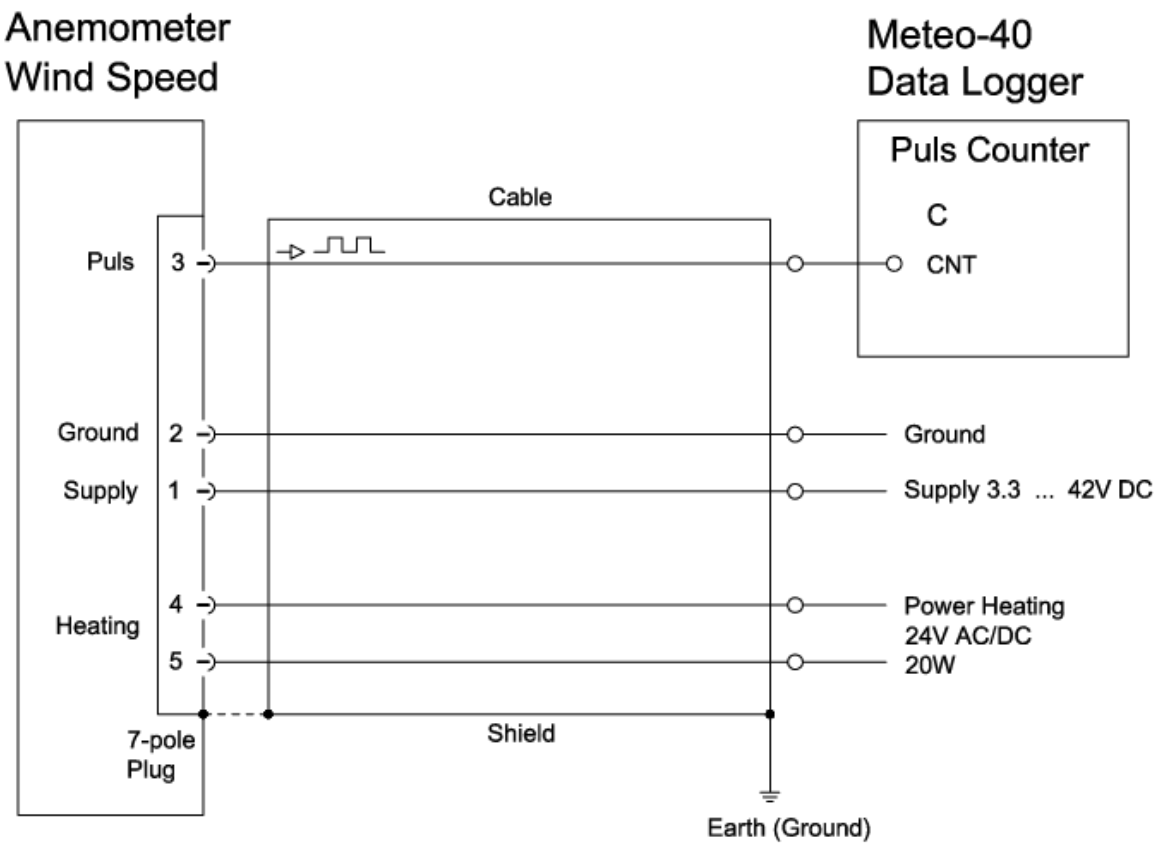
Characteristics	
Measurement principle	Opto-electronic (slotted disc)
Accuracy	
Accuracy	± 3 % of meas. value, however ≥ 0.5 m/s
Resolution	< 0.1 m/s
Starting velocity	0.5 m/s
Operating range	
Measurement range	0 ... 50 m/s
Survival wind speed	max. 80 m/s (30 min)
Ambient temperature	-40 ... +70 °C
Electrical data	
Electrical supply	9 ... 30V DC

Characteristics	
Electrical supply for heating	24V AC/DC @ 20W
General	
Connection	7-pole plug-connection
Mounting	For ex. onto mast tube with receptable thread Pg21 or boring Ø 29mm
Dimensions	155 x Ø 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

Dimensional drawing


154
119
Ø44
Ø50
8
AF across flats 22
AF across flats 36
Pg 21 (Ø28mm)
Plug
67

Sensor connection diagram



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.

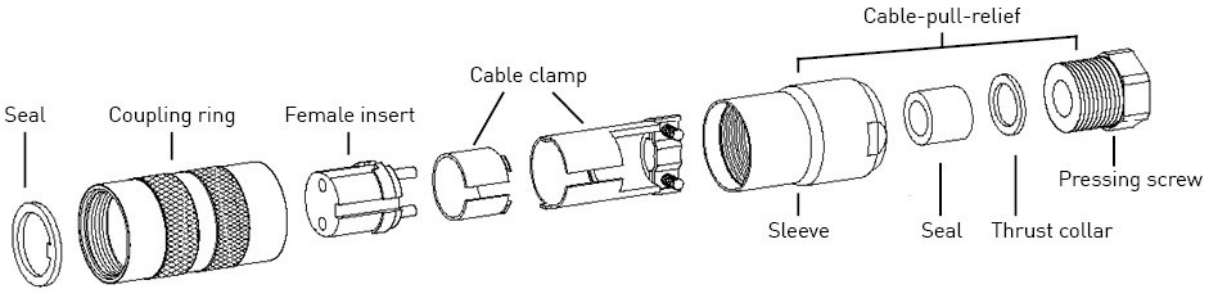
Cable type without heating: LiYCY 3 x 0.25 mm²

Cable type with heating wires: LiYCY 7 x 0.25 mm²

Instructions

Plug and cable assembly

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



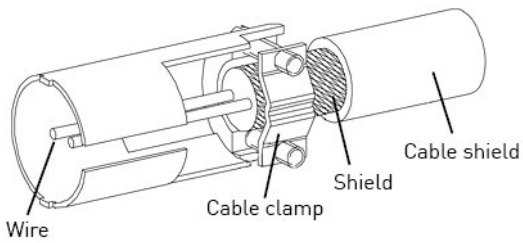
Cable connection: WITH cable shield

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

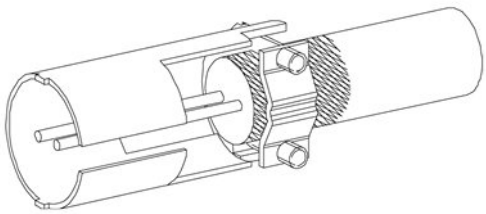
   A) Putting shrink hose or insolation tape between wire and shield

   B) If cable diameter permits, put the shield backward on the cable sheath.
3. Soldering wire to the insert, positioning shield in cable clamp.
4. Screwing-on cable clamp.
5. Assembling remaining parts acc. to plan above.
6. Tightening pull-relief of cable by screw-wrench (SW16 and 17).

A)



B)



Cable connection: WITHOUT cable shield

1. Stringing parts on cable acc. to plan given above.
2. Stringing 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 acc. to plan above.
9. Tightening pull-relief of cable by screw-wrench (SW 16 and 17).