



WST

Technical Data

| | |
|---|---|
| Measuring range | 0-40m/s, 0-50m/s or 0,75m/s |
| Accuracy | +/- 0,5m/s |
| Measuring principle | non-contact, magnetic scanner |
| Start-up speed | 0,4m/s |
| Resolution | <0,1m/s |
| Strength | for wind speed of 80m/s (max 30min) |
| Signal availability | max 2,5s (from voltage-free state) |
| Permissible rel.humidity | 0-100%rH |
| Signal output | 4-20mA, limited to 20,5mA |
| Load resistor =cable plus load resistor | Rload <(Umin-9)/0,02ohm Umin=min.supply voltage |
| Power Supply | 24Vdc +50/-25% reverse-polarity protection |
| Type of connection | 5-pin plug (M12) or cable 5x0,7mm ² , 3m long |
| Ambient temperature range | -40°C...+70°C |
| Heating Supply voltage | Automatic heater control 30Vac/dc ±20%, max 20VA |
| Protection class Mounting | IP64 for vertical mounting Steel tube mast 48mm Ø min 37mm Ø interior |
| Tube mounting | 2pcs wing screws |
| Material Housing Vane | aluminium aluminium |
| Corrosion resistance | seawater-resistant |
| Dimensions | 60 x 115mm |
| Weight | Approx. 0,5kg |
| Air and creepage distnaces | Insulation group C according EN60664-1/ VDE0110 |

Features

- Robust and reliable industrial design
- 0-40m/s, 0-50m/s or 0-75m/s measurement
- Cable or Plug-in connection
- Low starting torques at high load capacity
- Outstanding precision
- Wear-free recording of measuring data
- Storm - and weather-proof
- Optimised power requirement through electronic heater control
- Simple installation, as no tools required for mounting
- Extended temperature range
- Overvoltage protection
- Impact and vibration-resistant
- UL/CSA approval
- Maintenance free

Application

Wind speed transmitters are used for demanding recording of wind speed:

- crane installations
- ski lifts and cableways
- building management systems
- blind protection
- weather station
- scientific and research purposes
- wind power installations
- green house control
- in hydrology

Ordering Codes

| | |
|---------------------|---|
| WST 420P/040 | Wind speed transmitter for mast or bracket, plug-in connection 0-40m/s |
| WST 420C/040 | Wind speed transmitter for mast or bracket, cable connection 0-40m/s |
| WST 420P/050 | Wind speed transmitter for mast or bracket, plug-in connection 0-50m/s |
| WST 420P/075 | Wind speed transmitter for mast or bracket, plug-in connection 0-75m/s |
| WHT | Heat Transformer |
| WPS | Power Supply |
| LPH | Lightning protection - Heater |
| LPO | Lightning protection - Output 20mA |
| BPM | Basic part for mounting a lightning protection module |



Wind Speed 4-20mA Heating Integrated

WST 420

Jan.09

Function

The WST 420 vane anemometer records the current wind speed and converts it without contacting it into a linear output signal 4-20mA.

The sensor is designed to withstand storms and weather.

The installed, automatic heater control means it can be used down to -40C.

Evaluation is then performed separately over a measuring device, a display instrument or in the building engineering.

The unit can be mounted to the mast by the wing screws included.

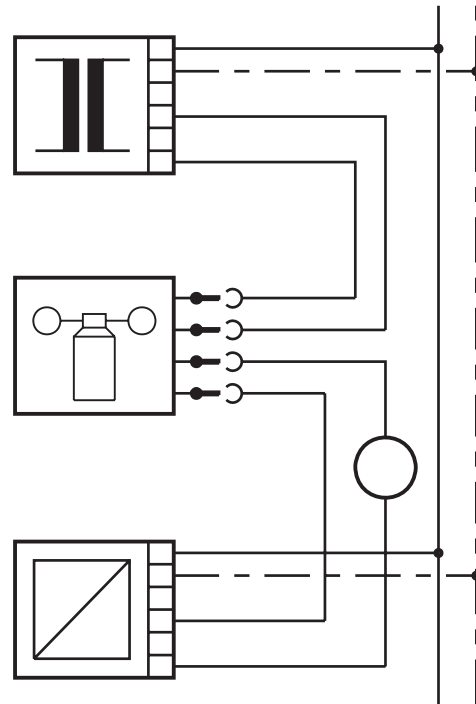
Note

Electrical connection to be conducted by skilled personal only.

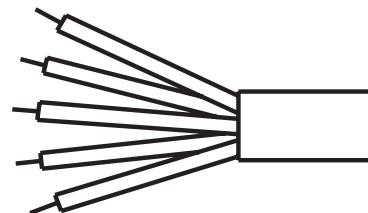
All valid standards for connecting electrical equipment must be observed.

To avoid any consequential damage or operation failure, through direct or indirect excitation in the event of lightning strikes, we recommend that a separate lightning protection device be fitted by the customer.

Connection Diagram



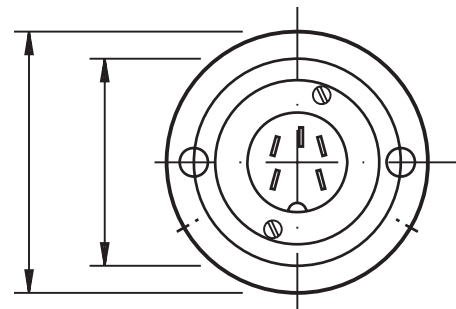
Cable



Heating Transformer



Plug-In



Technical Data

| | |
|-------------------------|-----------------------------|
| Power supply | 230Vac +/-10% 50VA |
| Output voltage | 30Vac 30VA |
| Protection class | IP54 |
| Dimension | 125 x 125 x75mm |
| Weight | approx.1,3kg (max 30min) |