

Operating Instructions

MiniAir 6

Typ: 642/64

The MiniAir6 is a quality product, calibrated to specifications in the wind tunnel.

Features:

streamline measuring head

wind tunnel streamlined shape, insensitive to minor misalignment to air flow direction (up to ± 25 degrees)

covered vane bearings

precision bearings (most-wearing components) are covered.

exchangeable measuring head

thanks to the snap-on system, a measuring head is replaced within seconds

linear analog voltage output

automatically compensates onset speed loss

hook-up

via connectors

compact, rugged, built for long life

Specifications

General:

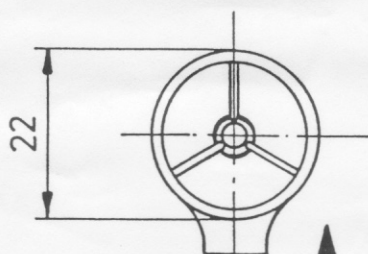
- power supply 6 - 26 V / 1mA
- temp. range -10 to +80°C
- head diameter 22mm - access opening 35mm
- lead length 1,5m

Air velocity measurement:

- measuring ranges
 - 20 m/s voltage output corresponding to air velocity in m/s (2.0 V = 20 m/s)
 - 40 m/s output signal corresponding to half of air velocity in m/s (2.0 V = 40 m/s)
- onset speed loss of voltage is compensated by approx. 30 mV offset voltage
- output signal 0.03 - 2.0 V ($R_1 = 100 \text{ ohms}$)
- accuracy $\pm 1.5 \%$ of reading, plus 0.5 % of full scale
- alignment tolerance approx. 25 degrees

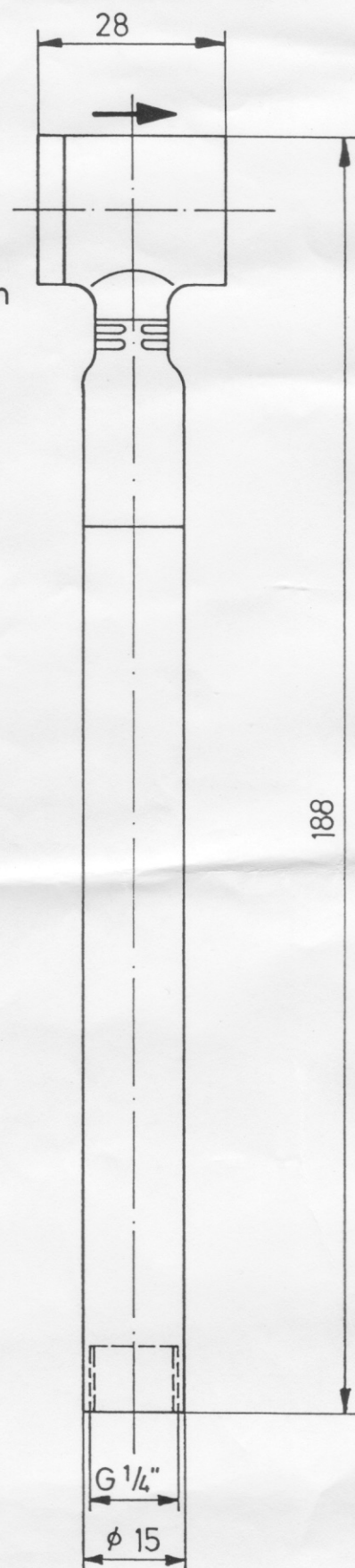
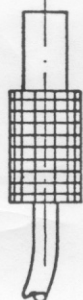
Temperature measurement:

- range 0 - 80°C
- output signal 10 mV / °C
- accuracy $\pm 0.5^\circ\text{C}$ at 25°C
 $\pm 0.85^\circ\text{C}$ at range limits



demontage kopfteil:
 schnappverschluss
 in achsrichtung ziehen
 achtung:
 nicht verdrehen

replacing vane head:
 pull off head straight
 and without twisting



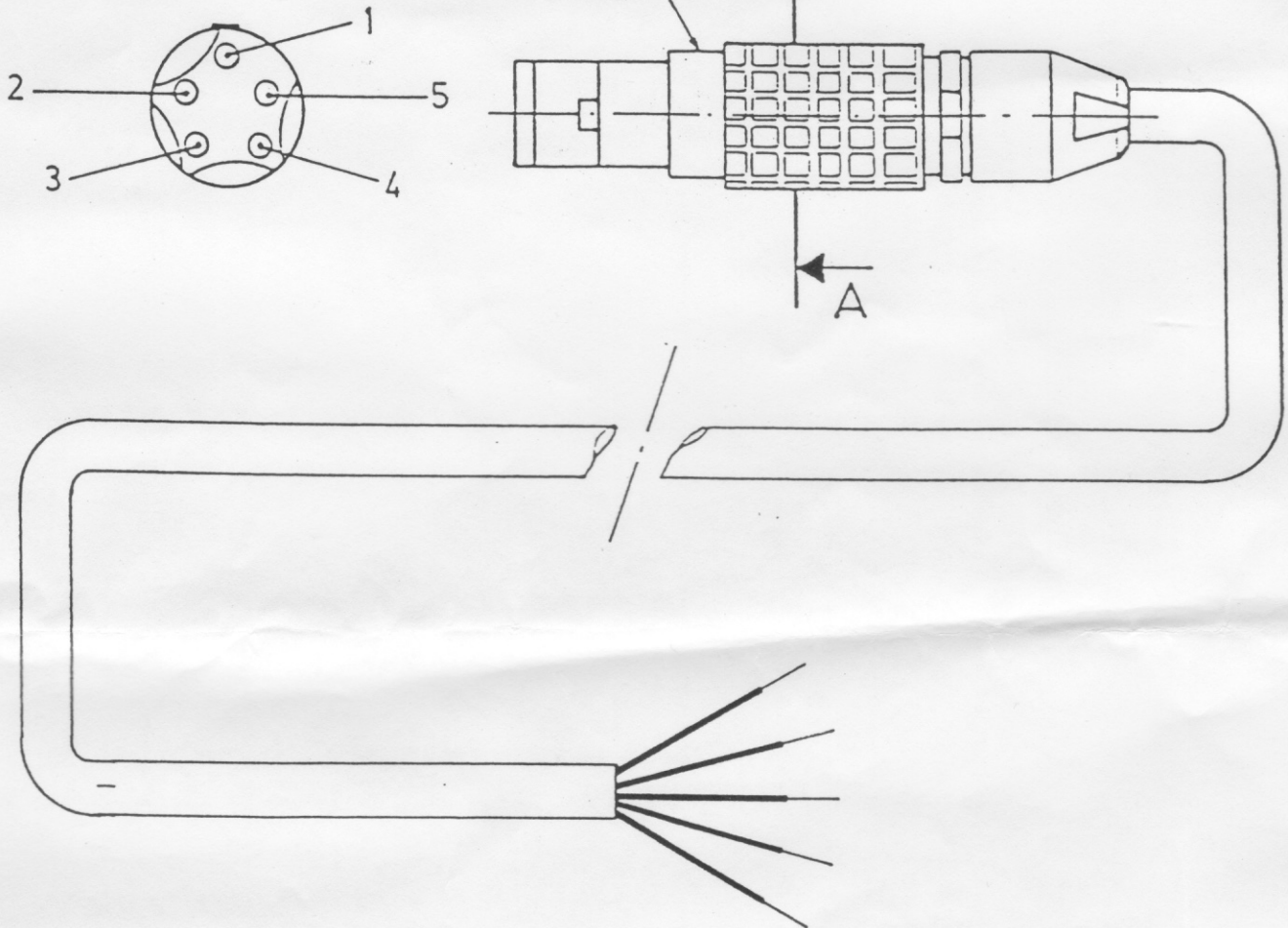
mini-air VI
 mit externer speisung

f 642/64-X

Probe Connector Fühlerstecker

Section View

Schnitt: A - A



Pin connections:

Power Supply :	4	red
Ground :	5	black
Velocity :	3	white
Temperature :	1	yellow
<u>Not Connected :</u>	<u>2</u>	blue

Pinbelegung :

Speisung :	4	rot
GND :	5	schwarz
Geschwindigkeit :	3	weiss
Temperatur :	1	gelb
<u>leer :</u>	<u>2</u>	blau

Erstellt	15.2.90 KRP	Aend.							Massstab	Bl. Fol.
Geprüft									2:1	Bl. Nr.
Schiltnecht Messtechnik AG CH-8525 Gossau		Probe Cable : Fühlerkabel : MiniAir 6							11.8754	

Typical Chart MiniAir6

Measurement-Protocol

Windtunnel m/s	Output V
0.30	0.04
0.50	0.06
0.70	0.07
1.00	0.10
2.00	0.20
3.00	0.30
4.00	0.39
5.00	0.49
6.00	0.59
7.00	0.69
9.00	0.89
12.00	1.19
14.00	1.40
16.00	1.60
18.00	1.80
20.00	2.01

