

Vaisala HMP45A/D humidity and temperature probe

Operating temperature range:	-40...+60 °C
Storage temperature range:	-40...+80 °C
Supply voltage:	7...35 VDC
Settling time:	500 ms

HUMIDITY (HMP45A & HMP45D)

Measurement range:	0.8...100 %RH
Output scale:	0...100 %RH equals 0-1 VDC
Accuracy at +20 °C (including non-linearity and hysteresis):	
against factory references	±1 %RH
field calibration against references	±2 %RH (0...90 %RH) ±3 %RH (90...100 %RH)
Typical long-term stability:	better than 1 %RH per year
Temperature dependence:	±0.05 %RH/°C
Response time (90%) at +20 °C:	15 s with membrane filter
Humidity sensor:	HUMICAP®180

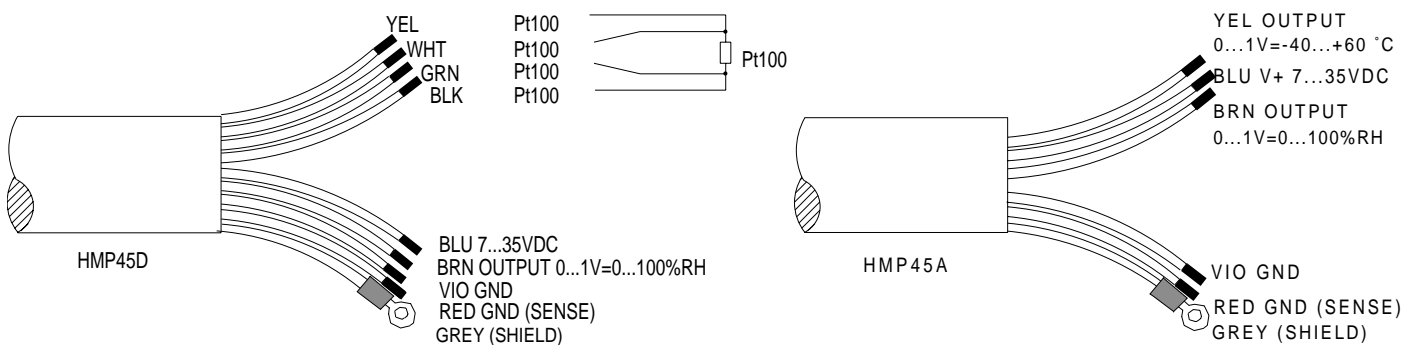
TEMPERATURE HMP45A

Measurement range:	-39.2...+60 °C
Output scale:	-40...+60 °C equals 0...1 VDC
Accuracy at 20°C:	±0.2 °C
Temperature sensor:	Pt 1000 IEC 751 1/3 Class B

TEMPERATURE HMP45D

Measurement range:	-40...+60 °C
Output signal:	resistive four wire connection
Temperature sensor:	Pt 100 IEC 751 1/3 Class B

Connections



SIGNAL GROUND is used for output signal in a differential measurement. With SIGNAL GROUND, the cable can be extended up to 100 metres without disturbing the measurement accuracy. When outputs are not measured against SIGNAL GROUND, connect GROUND and SIGNAL GROUND to the same point.