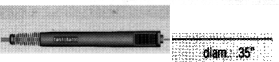






















Air probes	Illustration	Meas. range	Accuracy	Sec.	Conn.	Part no.
<b>NTC probes</b>						
Highly accurate air probe for air and gas temperature measurements with bare, mechanically protected sensor	 diam.: .35"	-40... +260 °F	To UNI curve	60 s	Fixed cable	0610 9714
<b>RTD probes</b>						
Standard air probe	 6" diam.: .1" diam.: .35"	-330... +1100 °F	Class A	75 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9773
Precision air probe	 6" diam.: .35"	-100... +750 °F	1/10 Class B (0 to 100°C); 1/5 Class B (rem. range) to EN 60751	75 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0017
<b>Type K t/c probes</b>						
Fast action immersion/penetration probe for measurements in gases and liquids with a low-mass tip	 78" diam.: .1"	-330... +1100 °F	Class 1	1 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9794 0614 9794
Thermocouple, made of fibre-glass insulated thermal pipes, pack of 5 Insulation: twin conductor, flat, oval, opposed and covered with fibre-glass, both conductors are wrapped together with fibre-glass and soaked with lacquer, please order adapter 0600 1693	 78" diam.: .1"	-330... +750 °F	Class 1	5 s	Please order adapter 0600 1693	0644 1109
Adapter to connect Type K thermocouples and probes with open wire ends					Fixed cable	0600 1693
<b>Surface probes</b>						
<b>NiCr-Ni probes</b>						
Quick-action surface probe with sprung thermocouple strip, measuring range short-term to +900°F	 dia. .39"	-330... +570 °F	Class 2	3 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0194 0614 0194
Fast action surface probe, probe tip at 90° angle, with sprung thermocouple strip	 dia. .39"	-330... +570 °F	Class 2	3 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0994
Rugged surface probe	 dia. .16" dia. .16"	-330... +1100 °F	Class 1	25 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9993 0614 9993
Rugged surface probe, (90° angle)	 dia. .16" dia. .16"	-330... +1100 °F	Class 1	25 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9893 0614 9893
Rugged surface probe with sprung thermocouple strip for temperatures up to +1300°F	 dia. .6"	-330... +12900 °F	Class 2	3 s	Fixed cable, coiled	0600 0394
Roller surface probe for measurements on moving items speed range: 59 - 1312"/min	 dia. 1.30"	-60... +470 °F	Class 2		Fixed cable, coiled	0600 5093
Magnetic probe, adhesive force approx. 4 lbs., for measurements on metal surfaces	 dia. .8"	-60... +340 °F	Class 2		Fixed cable	0600 4793
Magnetic probe, adhesive force approx. 2 lbs., for higher temperatures, on metal surfaces	 dia. .8"	-60... +750 °F	Class 2		Fixed cable	0600 4893
Miniature surface probe for measurements on electronic components, small motors...	 dia. .25"	-330... +750 °F	Class 2	3 s	Fixed cable	0600 1494
Adhesive thermocouple, pack of 2, carrier material: aluminum foil Is fixed at the measuring point using conventional adhesives or silicone heat paste 0554 0004	 Diameter extension 2 x Ø 01"	-330... +400 °F	Class 1		Please order adapter 0600 1693	0644 1607
Adapter to connect Type K thermocouples and probes with open wire ends					Fixed cable	0600 1693
<b>RTD probes</b>						
Rugged surface probe	 dia. .16" dia. .35"	-60... +750 °F	Class B	40 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9973 0628 0018
<b>Infrared probes</b>						
Infrared surface probe for fast non-contact temperature measurement on live, inaccessible and rotating parts		-0.4... +500 °F	±2% of rdg. (+150... +500 °F) ±2 °F (-0.4... +150 °F)	2 s	Fixed cable coiled	0600 0750
<b>Accessories</b>						
Silicone heat paste (5 oz.), Tmax = +500°F Improves heat transfer in surface probes						0554 0004

\*with EEPROM:


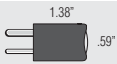
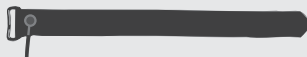
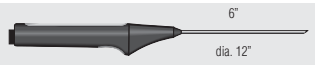
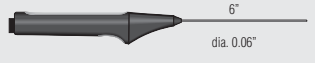




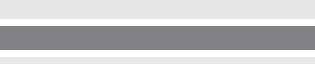






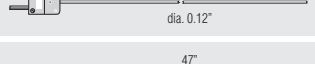

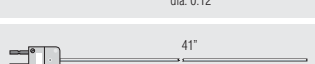
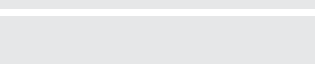
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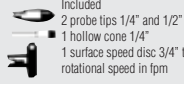


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Pipe wrap probes	Illustration	Meas. range	Accuracy	Sec	Conn.	Part no.
<b>NTC probes</b>						
Pipe wrap probe for pipes with diameter of up to 2", for flow/return temperature measurement in hydronic systems		-80... +270 °F	Class 2	5 s	Fixed cable	0600 4593
Spare meas. head for pipe wrap probe		-80... +270 °F	Class 2	5 s		0602 0092
<b>Pt100 probes</b>						
Velcro probe for pipes with diameter of max. 4"		-60... +300 °F	Class B	40 s	Fixed cable	0628 0019
<b>Immers./penetr. probes</b>						
<b>type k t/c probes</b>						
Fast response immersion/penetration probe		-330... +750 °F	Class 1	3 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0293 0614 0293
Fast quick-action immersion/penetration probe for liquids		-330... +750 °F	Class 1	1 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0493 0614 0493
Fast quick-action immersion/penetration probe for high temperatures		-330... +2000 °F	Class 1	1 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0593 0614 0593
Fast quick-action immersion/penetration probe for measurements in gases and liquids with a low-mass tip		-330... +1100 °F	Class 1	1 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 9794 0614 9794
Stainless steel immersion/penetration probe, waterproof and heat proof, (ideal for food industry)		-330... +750 °F	Class 1	3 s	Fixed cable	0600 2593
Smelting probe for measurements in non-ferrous melting baths, with exchangeable measuring tips		-330... +2300 °F	Class 1	60 s	Fixed cable	0600 5993
Spare measuring tip for smelting probe		-330... +2300 °F	Class 1	60 s		0363 1712
<b>RTD probes</b>						
Standard immersion/penetration probe		-330... +750 °F	Class A	20 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0273
Standard immersion/penetration probe		-330... +1100 °F	Class A	20 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0604 0274
NEW Highly accurate immersion/penetration probe incl. certificate		-150... +750 °F		30 s	Plug-in head, connection cable 0410 0143 or 0430 0145 required	0614 0240
Highly accurate immersion/penetration probe		-150... +750 °F		30 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0015
Flexible precision immersion probe, cable heat-proof up to +500°F		-150... +500 °F		80 s	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0016
Robust immersion/penetration probe with sharpened measuring tip, waterproof and oven-proof		-330... +750 °F	Class A	30 s	Fixed cable	0604 2573
<b>Plug-in measuring tips</b>						
Plug-in measuring tip, 30" long, flexible, for high temperatures, outer casing: stainless steel 1.4541		-330... +1650 °F	Class 1	4 s	Please order handle with Part no. 0600 5593	0600 5393
Plug-in measuring tip, 47" long, flexible, for high temperatures, outer casing: stainless steel 1.4541		-330... +1650 °F	Class 1	4 s	Please order handle with Part no. 0600 5593	0600 5493
Plug-in measuring tip, 22" long, flexible, for high temperatures, outer casing: Inconel 2.4816		-330... +2000 °F	Class 1	4 s	Please order handle with Part no. 0600 5593	0600 5793
Plug-in measuring tip, 40" long, flexible, for high temperatures, outer casing: Inconel 2.4816		-330... +2000 °F	Class 1	4 s	Please order handle with Part no. 0600 5593	0600 5893
Handle for plug-in measuring tip						0600 5593

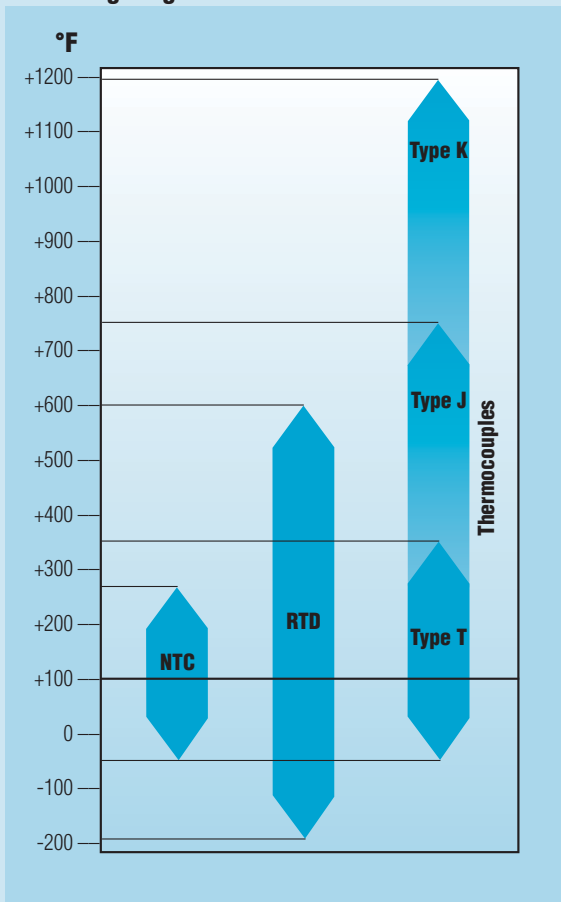
Other temperature probes	Illustration	Meas. range	Accuracy	Conn.	Part no.
Globe thermometer to measure radiant heat	 dia.: 6"	32... +250 °F	±0.9 °F (32... +122 °F) ±1.8 °F (+122... +250 °F)	Fixed cable	0554 0670
<b>More probes</b>					
CO probe to measure CO level in ambient air	 7.5" dia.: 98"	0... +500 ppm CO	±5% of mv (+100.1... +500 ppm CO) ±5 ppm CO (0... +100 ppm CO)	Fixed cable	0632 1247
CO2 probe measures indoor air quality and monitors the workplace. With plug-in head, connection cable 0430 0143 or 0430 0145 required		0... +1 Vol. % CO2 0... +10000 ppm CO2	±(50 ppm CO2 ±2% of mv) (0... +5000 ppm CO2) ±(100 ppm CO2 ±3% of mv) (+5001... +10000 ppm CO2)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0632 1240
Mechanical rpm probe with plug-in head		+20... +20000 rpm	± 1 digit	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0640 0340
Included 2 probe tips 1/4" and 1/2" 1 hollow cone 1/4" 1 surface speed disc 3/4" to measure rotational speed: rpm = rotational speed in fpm					
Current/voltage cable (±1 V, ±10 V, 20 mA)		0... +1000 mV 0... +10 V 0... +20 mA	±1 mV (0... +1000 mV) ±0.01 V (0... +10 V) ±0.04 mA (0... +20 mA)		0554 0007
<b>NEW</b> 4 to 20 mA-interface for the connection of and intermittent supply to transmitters (scalin via hand-held instrument), in robust metal housing with impact protection, incl. magnet for fast attachment		0/4 to 20 mA	±0.04 mA	Plug-in head connection cable 0430 0143 or 0430 0145 required	0554 0528

Accessories for temperature probes	Part no.
Cable, 5 ft. long, connects probe with plug-in head to meas. instrument PUR coating material	0430 0143
Cable, 16 ft. long, connects probe with plug-in head to measuring instrument PUR coating material	0430 0145
Extension cable, 16 ft. long, between plug-in head cable and instrument PUR coating material	0409 0063

Accessories for temperature probes	Part no.
Telescopic handle, max. 3 ft., for probe with plug-in head Cable: 8 ft. long, PUR coating material	0430 0144
Glass pipe for immersion/penetration probe to protect from corrosive agents For probes with Part nos. 0604 0273 and 0628 0015	0554 7072

## Selecting the right temperature sensor

### Measuring range



### Accuracy

Select the sensor with the accuracy required for your application from the diagram or table.


























Sensor	Temp. range	Class	Maximum tolerances	
			Fixed value	Referred to temperature
<b>Thermocouple</b>	-40...+2000 °F	2	±4.5 °F	±0,0075 x Itl
Type K	-40...+1830 °F	1	±2.7 °F	±0,004 x Itl
Type T	-40...+660 °F	1	±0.9 °F	±0,001 x Itl
Type J	-40...+1400 °F	1	±2.7 °F	±0,004 x Itl
<b>Pt100</b>	-100...+400 °F	B	± (0,3 + 0,005 • Itl)	
	-330...+1112 °F	A	± (0,15 + 0,002 • Itl)	
<b>NTC (Standard)</b>	-60...-13 °F	-	±0.7 °F	
	-4...+165 °F		±0.4 °F	
	+165...+300 °F		±0.5 % of reading	
<b>NTC (High temp.)</b>	-13...-4 °F	-	±1.8 °F	
	-4...32 °F		±1 °F	
	+32...+165 °F		±0.9 °F	
	+170...+525 °F	- °F	±0.9 °F ±0.5 % of reading	

Itl=Measuring temperature

Data for thermocouples to EN 60584-1 (formerly IEC 584-1). Two values are given. One fixed value in °F and a formula. The larger value always applies. Data for Pt100 to EN 60751 (formerly IEC 751). There is no standardization for NTC sensors.

In the case thermocouples, Accuracy Class 1 applies to the measurement range -40 to 1832 °F. In the range -330 to -40 °F Class 3 applies corresponding to ± 4.5 °F or 0,015 • Itl.



Probes	Illustration	Meas. range	Accuracy	Sec. Conn.	Part no.	
<b>Air probes</b>						
Standard indoor air quality probe up to +160°F		0... +100 %RH -4... +160 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (-14... +122 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+122... +160 °F)	12 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 9740	
Duct humidity/temperature probe can be connected to telescopic handle <small>Telescopic handle (H) J 9715, see Ordering data for Accessories</small>		0... +100 %RH -4... +160 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (-14... +122 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+122... +160 °F)	12 s Fixed cable		
Thin humidity probe incl. 4 attachable protection caps for ambient air measurements, measuring as robust as duct and equilibrium moisture measurements		0... +100 %RH -4... +160 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (-14... +122 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+122... +160 °F)	15 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 2130	
Highly accurate reference humidity/temp. probe Calibration certificate included		0... +100 %RH -4... +160 °F	±1 %RH (+10... +90 %RH)* ±2 %RH (0... +9.9 %RH) ±2 %RH (+90.1... +100 %RH) ±0.7 °F (-14... +122 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+122... +160 °F)	12 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 974	
Humidity/temperature probe		0... +100 %RH -4... +160 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (+32... +122 °F) ±0.9 °F (-20... 32 °F) ±0.9 °F (+122... +140 °F)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 9742	
<b>Process humidity</b>						
Standard pressure dew point probe for measurements in compressed air systems		0... +100 %RH -20... +120 °F tpd	±1.6 °F tpd (+32... +122 °F tpd) ±1.8 °F tpd (-23... 32 °F tpd) ±3.6 °F tpd (14... 23 °F tpd) ±5.4 °F tpd (-4... 14 °F tpd) ±7.2 °F tpd (-22... -4 °F tpd)	300 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 9840	
Precision pressure dew point probe for measurements in compressed air systems incl. cert. with test point -40°F tpd		0... +100 %RH -80... +120 °F tpd	±1.6 °F tpd (23... +120 °F tpd) ±1.8 °F tpd (14... 10 °F tpd) ±3.6 °F tpd (-4... 14 °F tpd) ±5.4 °F tpd (-22... -4 °F tpd) ±7.2 °F tpd (-40... -22 °F tpd)	300 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 984	
NEW High humidity level probe heated sensor element, no condensation on sensor.		0... +100 %RH -110... +250 °F	±2.5 %RH (0... +100 %RH) ±0.7 °F (-13... 120 °F) ±0.9 °F (-13... -13 °F) ±0.9 °F (+120... +185 °F)	30 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0014	
Rugged high temperature/humidity probe up to +360°F		0... +100 %RH -4... +360 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (+32... +120 °F) ±0.9 °F (-4... 32 °F) ±0.9 °F (+120... +360 °F)	30 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0021	
Flexible humidity probe (does not retain shape) for measurements in inaccessible places		0... +100 %RH -4... +360 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (+32... +120 °F) ±0.9 °F (-4... 32 °F) ±0.9 °F (+120... +360 °F)	30 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0022	
<b>Material and equilibrium moisture</b>						
Flexible humidity probe with mini module sensor, cable length 60" probe tip 2" x 0.75" x 0.3"		0... +100 %RH -4... +250 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (14... +120 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+120... +250 °F)	20 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0628 0013	
Sword probe for measuring humidity and temperature in stacked material		0... +100 %RH -4... +160 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (14... +120 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+120... +160 °F)	12 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 0340	
Rugged humidity probe for high temperature applications up to 250°F		0... +100 %RH -4... +250 °F	±2 %RH (+2... +98 %RH) ±0.7 °F (14... +120 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (120... +250 °F)	30 s Plug-in head, connection cable 0430 0143 or 0430 0145 required	0636 2140	
Material moisture probe				Free scaling, reference measurement, no water level	0636 0365	
Material/building moisture cable		0 to 100 k Ohm 100 to 0 %		Displayed values in instrument mean: 100 to 66 wet; 0 to 1 very dry	0636 0565	
<b>aw value</b>						
Water Activity Set, pressure-tight precision humidity probe with certificate, measurement chamber and 5 sample bowls (plastic)		0... +1 aW 0... +100 %RH	±0.01 aW (+0.1+0.9 aW) ±0.02 aW (+0.9... +1 aW) ±0.7 °F (14... +120 °F) ±0.9 °F (-4... 14 °F) ±0.9 °F (+120... +160 °F)	Reproducibility of aw value ±0.003	0628 0024	
<b>Pressure probes</b>						
NEW Precision pressure probe in metal housing with magnet for fast attachment		Differential pressure probe	0 to +40" H <sub>2</sub> O	±(0.12" H <sub>2</sub> O Pa ±0.5% of mv) (0 to +40" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1347
NEW Precision pressure probe, in metal housing with magnet for fast attachment		Differential pressure probe	0 to +4" H <sub>2</sub> O	±0.012" H <sub>2</sub> O hPa (0 to +4" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 144
NEW Precision pressure probe, in metal housing with magnet for fast attachment		Differential pressure probe	0 to +40" H <sub>2</sub> O	±0.5% of mv (+8 to 40" H <sub>2</sub> O) ±0.04" H <sub>2</sub> O (0 to 8" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 154
NEW Precision pressure probe, in metal housing with quick-closing coupling magnet for fast attachment		Differential pressure probe	0 to +400" H <sub>2</sub> O	±0.04" H <sub>2</sub> O (0 to 80" H <sub>2</sub> O) (80 to 400" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1647
NEW Precision pressure probe, in metal housing with quick-closing coupling magnet for fast attachment		Differential pressure probe	0 to +800" H <sub>2</sub> O	±0.8" H <sub>2</sub> O (0 to 160" H <sub>2</sub> O) (160 to 800" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 1747
NEW Precision pressure probe, in metal housing with quick-closing coupling magnet for fast attachment		Absolute pressure probe	0 to +800" H <sub>2</sub> O	±2" H <sub>2</sub> O (0 to 800" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required	0638 184
Low pressure probe, refrigerant-proof stainless steel, without cable		Screw-in thread 7/16" UNF	Low pressure probe	-15 to 150 psi Overload -480 psi (-15 to 150psi)	Plug-in head, connection cable 0409 0202 required	0638 1741
High pressure probe, refrigerant-proof stainless steel, without cable		Screw-in thread 7/16" UNF	High pressure probe	0 to 450 psi Overload 1000 psi (0 to 450 psi)	Plug-in head, connection cable 0409 0202 required	0638 1841
High pressure probe, refrigerant-proof st. steel, up to 600 psi, with cable		Screw-in thread 7/16" UNF	High pressure probe	0 to 600 psi Overload 1000 psi (0 to 600 psi)	Plug-in head, connection cable 0409 0202 required	0638 194

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<b>NEW</b> High pressure probe, refrigerant-proof stainless steel, up to 1450 psi		Screw-in thread 7/16" UNF	Relative pressure probe	-14 to +1450 psi	±1% of f.v. (-14 to +1450 psi) Overload 3626 psi	Plug-in head, connection cable 0400 0202 required	0638 2041
<b>NEW</b> High pressure probe, refrigerant-proof stainless steel, up to 5800 psi		Screw-in thread 7/16" UNF	Relative pressure probe	-14 to +5800 psi	±1% of f.v. (-14 to +5800 psi) Overload 8700 psi	Plug-in head, connection cable 0400 0202 required	0638 2141

Caps for humidity probes (0.5" and 0.8")	Illustration	For humidity probes:	Part no.
Metal protection cage, 0.8" diam. for humidity probes, material: 316 stainless steel. Quick adjustment time, robust and temperature-proof. Used when measuring velocities of less than 2000 fpm.		All humidity probes with 0.8" diam.	0554 0655
Metal protection cage, 0.5" diam. for humidity probes, material: 316 stainless steel. Quick adjustment time, robust and temperature-proof. Used when measuring velocities of less than 2000 fpm.		0636 9740, 0636 9715	0554 0755
Wire mesh filter, 0.8" diam., insertable filter for metal protection cage and plastic cap. Material: 316 stainless steel, quick adjustment time, protects from dirt and damage. Applications: meteorology, splashwater, condensation.		All humidity probes with 0.8" diam.	0554 0667
Cap with wire mesh filter, 0.5" diam.		All humidity probes with 0.5" diam.	0554 0757
Teflon sintered filter, 0.8" diam., PTFE. Not affected by condensation, water-repellent, resistant to corrosive substances. Applications: compressed air measurements, high humidity range (continuous measurements), high velocities.		All humidity probes with 0.8" diam.	0554 0666
Teflon sintered filter, 0.5" diam., PTFE. Not affected by condensation, water-repellent, resistant to corrosive substances. Applications: compressed air measurements, high humidity range (continuous measurements), high velocities.		0636 9769, 0636 9740, 0636 9715	0554 0756
Stainless steel sintered cap, 0.8" diam., made of stainless steel V2A. Highly rugged, suitable for penetration, clean with compressed air, mechanical protection of sensor. Applications: high mechanical loads, high velocity speeds.		All humidity probes 0.8" diam.	0554 0640
Stainless steel (V2A) sintered cap, 0.5" diameter. Highly rugged, suitable for penetration, should be cleaned with compressed air, mechanical protection of sensor. Applications: high mechanical loads, high velocity speeds, Teflon cap, a 5mm, attachable, PTFE material, (Soft). Applications: dust protection, high humidity level measurements, high velocities.		0636 9740, 0636 9715	0554 0647

Accessories for humidity probes/sensors	Part no.
Probe connection cable - 5 ft. PUR coating material	0430 0143
Probe connection cable - 16 ft. PUR coating material	0430 0145
16 ft. probe extension cable PUR coating material	0409 0063
Telescopic handle, max. 3 ft., for probe with plug-in head. Cable: 8 ft. long, PUR coating material	0430 0144
Telescopic handle, 13" to 31" long	0430 9715
Adapter for surface humidity measuring on 0.5" diameter humidity probes to locate damp spots on walls	0628 0012
Cap for bore holes, for humidity probe with 0.5" diameter. Measures equilibrium moisture in bore-holes	0554 2140
Humidity Calibration Kit (11.3% & 75.3%RH) incl. adapter for probes	0554 0660
33% RH salt solution for calibration and/or storage of humidity probes	0554 0636

Accessories for pressure probes	Part no.
Connection cable 8ft. long for pressure probes 0636 1740, 0638 1840, 0638 1940	0409 0202
Magnetic holder for pressure probes. For pressure probes 0638 1345/, 1445/, 1545/, 1645	0554 0225
Adapter for pressure probes, 1/2" outer thread, 1/4" inner thread	0699 3127
Connection hose, silicone 16ft. long. Max. load 280 psi	0554 0440
Connection hose set, 7x9ft., coiled, incl. 1/8" screw connection. Pressure-tight up to 290 psi, for probe 0638 1647/1747/1847	0554 0441

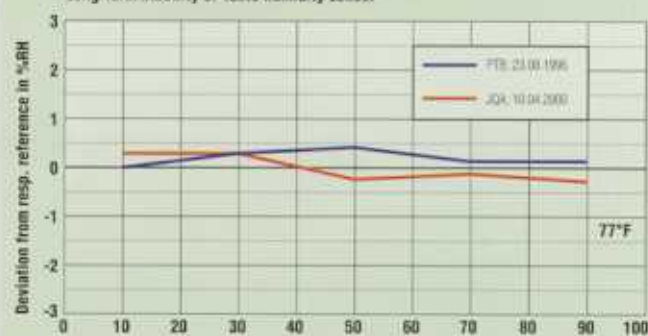
## Why you should choose humidity meas. instr. from Testo



### Inter-lab. tests

Three precision probes were subjected to extensive inter-laboratory tests at the PTB in Berlin, NIST in the USA, the French national institute CETIAT, the Italian institute IMGC, the English national institute NPL, the Spanish national institute INTA, JQA in Japan, KRIS in Korea, NRCOR in Peking and in Testo's DKD calibration laboratory. The results confirm an accuracy of ±1%RH for the probes, as indicated by Testo.

Long-term stability of Testo humidity sensor



### Reference humidity probes for highest precision

- Accuracy ±1%RH
- 2 year guaranteed long-term stability under normal conditions

Results of the worldwide inter-laboratory test on 3 precision humidity probes 1995-1997

Vane probes	Illustration	Probe type	Meas. range	Accuracy	Part no.
Vane probe, (diam. .5")		Vane	+120 to 4000 fpm Oper. temp. -22... +280 °F	±(40 fpm ±1% of mv) (+120 to 400 fpm)	0635 9443
Vane/temperature probe, (diam. 0.6")		Vane Type K (NiCr-Ni)	+80 to 1200 fpm -22... +280 °F	±(40 fpm ±1% of mv) (+80 to 1200 fpm)	0635 9540
Vane/temperature probe, (diam. 1")		Vane Type K (NiCr-Ni)	+80 to 8000 fpm -22... +280 °F	±(40 fpm to ±1% if mv) (+80 to 8000 fpm)	0635 9640
90° rotating head vane probe (diam. 2.5")		Vane	+50 to 4000 fpm Oper. temp. 32... +140 °F	±(20 fpm ±1.5% of mv) (+50 to 4000 fpm)	0635 9440
90° rotating head vane probe (diam. 4")		Vane	+40 to 3000 fpm Oper. temp. 32... +140 °F	±(20 fpm ±1.5% of mv) (+40 to 3000 fpm)	0635 9340
Vane probe, for stationary assembly, 9ft. cable (PVC)		Vane	+80... +1200 fpm	±(40 fpm ±1% of mv) (+80... +1200 fpm)	0628 0036
High temperature vane probe, (diam. 1"), with handle for continuous measurements up to +670°F		Vane Type K t/c	+120 to 4000 fpm -40... +660 °F	±(60 fpm ±1% of f.v.) (+120 to 4000 fpm)	0635 6045

Accessories/Vane probes	Part no.
Professional telescopic handle for plug-in vane probes, max: 3 ft. long, extension on request	0430 0941
Extension for telescopic handle, 6 ft. long Please also order the 0409 0063 extension cable	0430 0942
Handle for plug-in vane probes	0430 3545

Accessories/Vane probes	Part no.
Swan neck, flexible connection between probe and instrument	0430 0001
Magnetic probe holder for vane probes	0554 0430

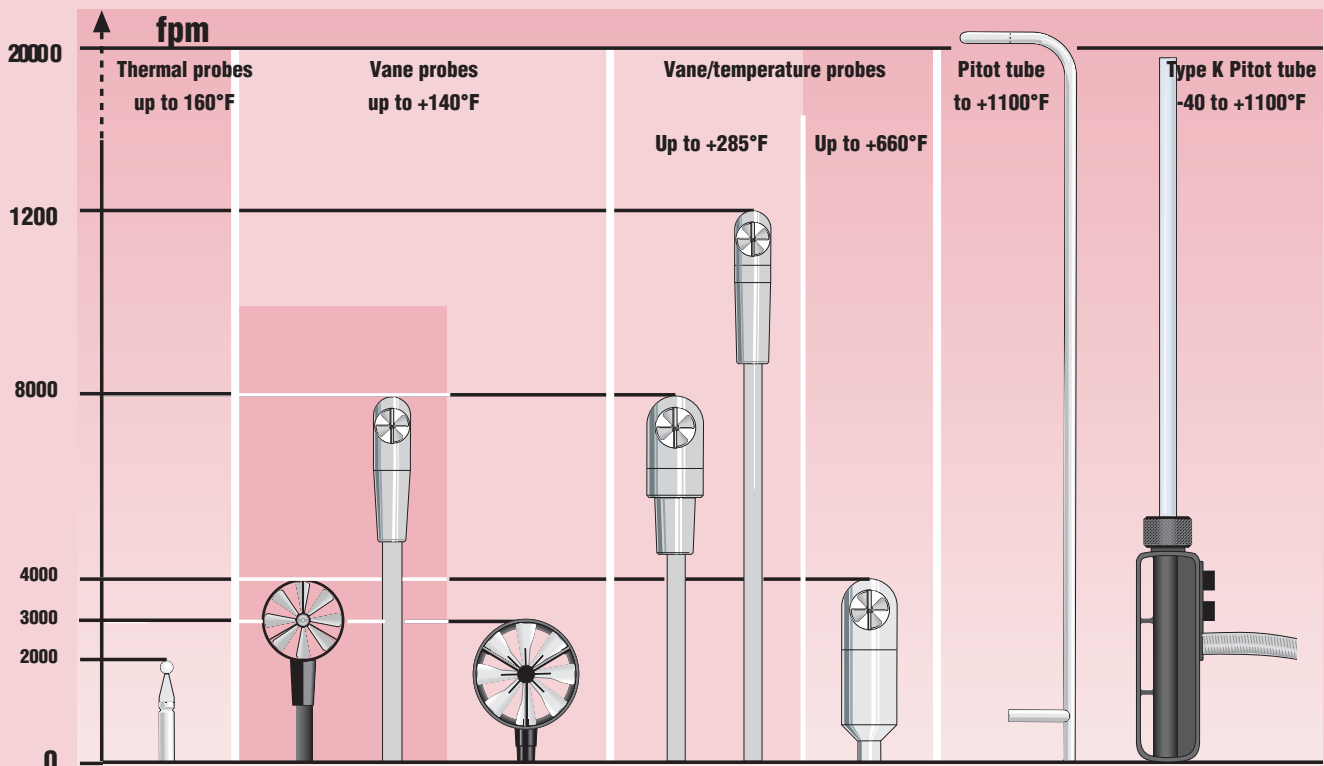
Thermal probes	Illustration	Probe type	Meas. range	Accuracy	Part no.
Hot bulb probe, for measurements in the lower velocity range, 6 ft. cable (PVC)			0 to 2000 fpm -4... +160 °F	±(6 fpm ±5% of mv) (0 to 2000 fpm)	0628 0035
Low cost rugged hot bulb probe, (diam. 12"), for measurements in the lower velocity range, with handle		Hot bulb NTC	0 to 2000 fpm -4... +160 °F	±(6 fpm ±5% of mv) (0... +2000 fpm)	0635 1549
Rugged hot bulb probe, (diam. 12"), with handle and telescopic handle for measurements in the lower velocity range		Hot bulb NTC	0 to 2000 fpm -4... +160 °F	±(6 fpm ±5% of mv) (0 to 2000 fpm)	0635 1049
Quick-action hot wire probe, (diam. .4"), with telescopic handle, for measurements in the lower velocity range with direction recognition		Hot wire NTC	0 to 4000 fpm -4... +160 °F	±(6 fpm ±4% of mv) (0 to 4000 fpm)	0635 1041
NEW Thermal anemometer, w. telescopic handle, measures air flow in lab fume cupboards to DIN EN 14175 (draft)		Hot wire NTC	0 to 1000 fpm 32 to +122 °F	±(6 fpm ±4% of mv) (0 to 1000 fpm)	0635 1047

Pitot tube measurement	Illustration	Probe type	Meas. range	Accuracy	Part no.
<b>Differential pressure probes</b>					
NEW Precision pressure probe, in metal housing with magnet for fast attachment		Differential pressure probe	0 to 40" H <sub>2</sub> O	(0.12" H <sub>2</sub> O ±0.5% of mv) 0 to 40" H <sub>2</sub> O	Plug-in head, connection cable 0430 0143 or 0430 0145 required 0638 1347
NEW Pressure probe, in metal housing with magnet for fast attachment		Differential pressure probe	0 to 40" H <sub>2</sub> O	0.12" H <sub>2</sub> O (0 to 4" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required 0638 1447
NEW Pressure probe, in metal housing with magnet for fast attachment		Differential pressure probe	0 to 40" H <sub>2</sub> O	±0.5% of mv (+8 to +40" H <sub>2</sub> O) ±0.04" H <sub>2</sub> O (0 to 8" H <sub>2</sub> O)	Plug-in head, connection cable 0430 0143 or 0430 0145 required 0638 1547

Pitot tubes	Illustration	Probe type	Meas. range	Accuracy	Part no.
Pitot tube, 12" long, stainless steel, measures velocity in connection with pressure probes 0638 1345/.1445/.1545			Oper. temp. 32 to +1100 °F		0635 2245
Pitot tube, 14" long, stainless steel, measures velocity flow in connection with pressure probes 0638 1345/.1445/.1545			Oper. temp. 32 to +1100 °F		0635 2145
Pitot tube, 20" long, stainless steel, measures velocity in connection with pressure probes 0638 1345/.1445/.1545			Oper. temp. 32 to +1100 °F		0635 2045
Pitot tube, 40" long, stainless steel, measures velocity in connection with pressure probes 0638 1345/.1445/.1545			Oper. temp. 32 to +1100 °F		0635 2345

Pitot tube measurement		Illustration	Probe type	Meas. range	Accuracy	Part no.
<b>Straight Pitot tubes</b>						
Pitot tube, stainless steel, 14" long, measures velocity with temperature, for pressure probes 0638 1345/..1445/..1545		14" diam. .31"	Type K (t/c)	-40... +1100 °F		0635 2040
Pitot tube, stainless steel, 20" long, measures velocity with temperature, for pressure probes 0638 1345/..1445/..1545		20" diam. .31"	Type K (t/c)	-40... +1100 °F		0635 2140
Pitot tube, stainless steel, 40" long, measures velocity with temperature, for pressure probes 0638 1345/..1445/..1545		40" diam. .31"	Type K (t/c)	-40... +1100 °F		0635 2240
<b>Accessories for pressure probes</b>		<b>Part no.</b>	<b>Accessories for pressure probes</b>		<b>Part no.</b>	
Connection hose, silicone, 16 ft. long Silicone hose connects Pitot tube and pressure probe, 16 ft. long		0554 0440	Magnetic holder for pressure probes For pressure probes 0638 1345/..1445/..1545/..1645		0554 0225	
<b>Comfort level measurement</b>						
3-function probe for simultaneous measurement of temperature, humidity and velocity. With plug-in head, 0430 0143 connection cable required		11" diam. .83"	Hot bulb Testo humid. sensor, capacitive NTC	0... +2000 fpm 0... +100 %RH -4... +160 °F	±(6fpm ±5% of mv) (0 to 2000 fpm) ±2 %RH (+2...+98 %RH) ±0.9 °F (32 to 120 °F) ±0.7 °F (-4 to 32 °F) ±0.7 °F (-120 to 160 °F)	0635 1540
Comfort level probe for measuring turbulence levels, with telescope and stand. Fulfills DIN 1946 Part 2 or VDI 2080 requirements		35" diam. 3.5"	Hot wire NTC	0 to 1000 fpm 32 to +120 °F	±(6 fpm ±4% of mv) (0...+1000 fpm) ±0.5 °F (32...+120 °F)	0628 0009
NEW Wet Bulb Globe temperature probe to assess workplaces subjected to heat, in accordance with ISO 7243 or DIN 33403, incl. WBGT case.		35" diam. 3.5"	Hot wire NTC	0 to 1000 fpm 32 to +120 °F	In accordance with ISO 7243 or DIN 33403	0635 8888
<b>Accessories for 3-function probe</b>		<b>Part no.</b>	<b>Accessories for 3-function probe</b>		<b>Part no.</b>	
Adapter for humidity adjustment of 3-function probe 0635 1540 Order with adjustment set		0554 0661	Probe connection cable - 5ft. PUR coating material		0430 0143	
<b>Other</b>						
Shell anemometer, 10 ft. cable, for wind speed measurements			Vane	140 to 6000 fpm	±(60 fpm ±5% of mv) (+140 to 6000 fpm)	0635 9045

## Measuring and application ranges of velocity probes



The air velocity range between 0 to 20,000 fpm can be divided into three measuring areas:

- Low-speed velocity 0 to 1000 fpm
- Mid-speed velocity 1000 to 10,000 fpm
- High-speed velocities over 10,000 fpm

Thermal anemometers are best suited for low speed velocities, vane are utilized for the mid-speed range, while pitot tubes achieve maximum accuracy in high-speed air velocity. The appropriate choice of the right air velocity probe also

depends on the application temperature. Thermal anemometers, for example, have only a very limited operating range. Testo designs and manufacturers air velocity instruments utilizing all three measuring technologies. If the

measuring technology that best suits your application needs is not on display in this brochure, please call Testo today to obtain additional information.