

HI1006-18 • HI1006-38 • HI1006-48 • HI1006-68
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pH and Temperature Industrial Smart Probes

HI510 and HI520 Universal Process Controller compatible

These industrial pH probes are intended for industrial process control when paired with the HI510 or HI520 Universal Process Controller.

- HI1006-18 and HI1016-18 series, designed for low conductivity or low-temperature process environments
- HI1006-38 and HI1016-38 series, designed for extended pH range or high-temperature process environments
- HI1006-48 and HI1016-48 series, designed for process environments where hydrofluoric acid is present
- HI1006-68 and HI1016-68 series, designed for high temperature process environments where hydrofluoric acid is present

An integral temperature sensor measures water temperature and adjusts the probe signal over the specified temperature range.

The PVDF body material is easy to clean and disinfect, and resistant to most chemicals (e.g. solvents, sodium hypochlorite), ultraviolet light, and fungal growth.

Suitable for continuous measurement of pH required in applications such as urban wastewater treatment, industrial effluent treatment, and surface water monitoring, the probe (and accessories) can be installed directly in-line, immersed in a tank, or in a flow cell.

The probe is available with an integral connector that permits connections after installation.

Patch cables may be purchased separately to connect between the probe and controller up to 50 meters (164 ft).

- Rugged, chemically-resistant PVDF body
- Specialized glass sensor for fast stabilization and accurate results
- 3/4" NPT external thread for mounting
- Built-in temperature sensor for measurement and compensation
- Matching pin helps avoid typical problems caused by grounding loop current
- Digital probe stores model, firmware, serial number, and calibration information



Specifications

HI1006-18zz - example

pH	Range	0.00 to 12.00 pH
	Resolution	0.1 pH or 0.01 pH
	Accuracy	±0.02 pH
	Calibration	Up to three-points (option to select from five standard buffers)
Temperature	Range	-5.0 to 80.0 °C (23.0 to 176.0 °F)
	Resolution	0.1 °C; 0.1 °F
	Accuracy	±0.5 °C; ±1.0 °F
	Calibration	Single point offset (controller setting)
Temperature Compensation	Automatic	0.0 to 80.0 °C (32.0 to 176.0 °F)
Temperature Source	Automatic (from Probe) Manual	
Probe Body	PVDF	
Reference Junction	PTFE	
Probe	pH sensor	LT glass
	Tip shape	flat, self-cleaning
Maximum Pressure	6 bar (87 psi) at 25 °C (77 °F)	
Threaded Connection	3/4" NPT external thread for mounting	
Wetted Parts	Probe body	PVDF
	Sensor	Glass
	O-ring	NBR
	Junction	PTFE
Protection Rating	IP68	
Cable Length	zz, see Ordering Information	

PTFE junction: Minimizing the potential for clogging and chemically resistant, PTFE is ideal for samples with high content of suspended solids or for high-pressure installations.

Ceramic junction: Porous chemically resistant plug that connects the reference electrode to the process electrically.

LT glass: Fast stabilization and accurate results at lower temperatures or lower ion content.

HT glass: Fast stabilization and accurate results at higher temperatures and over a larger pH range.

HF glass: Fast stabilization and accurate results for aggressive applications that have fluoride ions ($F^- < 2$ g/L, temperature < 60 °C, pH > 2).

Ordering Information

Each probe is supplied with quick reference guide with probe quality certificate.

HI10 x x - y 8 z z

Choose your configuration:

xx	06	PTFE junction
	16	Ceramic junction
y	1	Low Temperature (LT) glass sensor, titanium matching pin -5.0 to 80.0 °C (23.0 to 176.0 °F) 0.00 to 12.00 pH
	3	High Temperature (HT) glass sensor, titanium matching pin 0.0 to 100.0 °C (32.0 to 212.0 °F) 0.00 to 14.00 pH
	4	Fluoride-resistant (HF) glass sensor, titanium matching pin, -5.0 to 60.0 °C (23.0 to 140.0 °F) 0.00 to 10.00 pH
	6	Fluoride-resistant (HF), High Temperature (HT) glass sensor, platinum matching pin, -5.0 to 100 °C (23.0 to 212.0 °F) 0.00 to 10.00 pH
8	Smart probe, with RS485 connection	
zz	00 supplied with DIN connector (without cable). See Accessories section for patch cable ordering codes.	
	05, 10, 15, 25, 50 fixed cable length (in meters)	
Accessories	HI76510-05	Patch cable, 5 m (16'5")
	HI76510-10	Patch cable, 10 m (32'9")
	HI76510-15	Patch cable, 15 m (49'2")
	HI76510-25	Patch cable, 25 m (82')
	HI76510-50	Patch cable, 50 m (164')

Dimensions

