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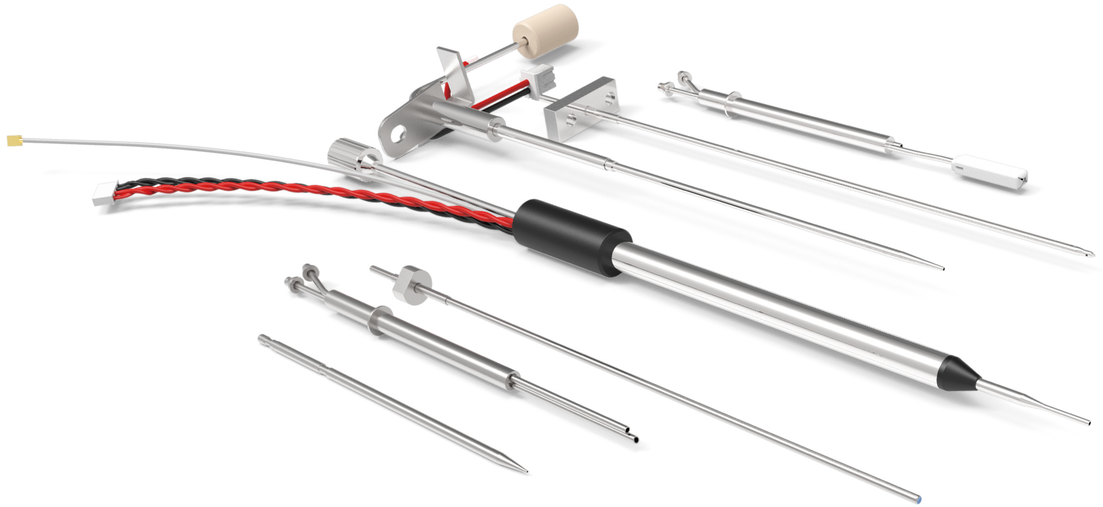

Medical Motion Module Solutions

2026

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Medical Motion Module Solutions

Company Profile

Wontec integrates motion and transmission components for medical devices and industrial automation, offering cost-effective products and one-stop support for component selection during development.

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Medical Sampling Probes

Wash, piercing, heated dispensing, dispensing, open sampling, aspirate dispense, specimen and ultrasonic probes.

Product Advantages

Wontec supplies sampling and cleaning probes for chemiluminescence, hematology, clinical chemistry and urinalysis analyzers. Materials include 304 stainless steel, 316L stainless steel and commercially pure titanium. Fluid polishing can produce a mirror finish inside the bore. Reduced-diameter tips help minimize liquid carryover. Wontec also provides bore polishing, bending and rotary forming for stainless steel tubing in a range of sizes.



Element	ASTM A276/A276M-2024a 316L requirement (%)	Measured (%)
C	≤0.030	0.0291
S	≤0.030	0.0011
Si	≤1.00	0.375
Mn	≤2.00	0.981
P	≤0.045	<0.0400
Cr	16.0–18.0	17.18
Ni	12.0–15.0	12.06
Mo	2.00–3.00	2.09

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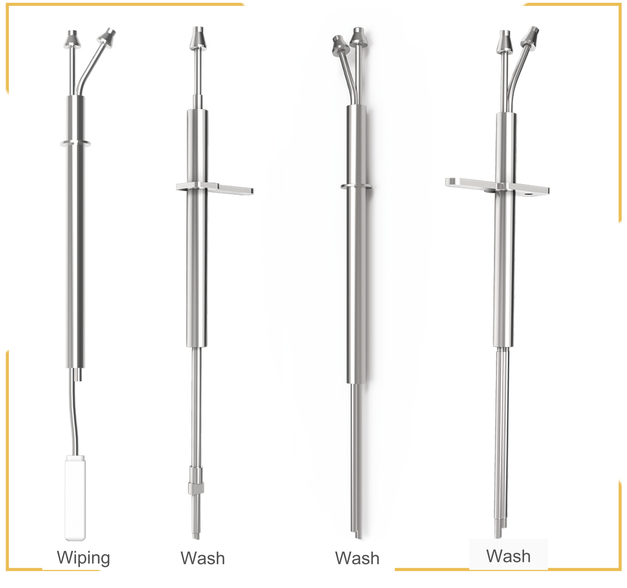
Imported 316L Stainless Steel Tubing Specifications (mm)

No.	Material	OD × ID	OD tol.	ID tol.	Stock length	No.	Material	OD × ID	OD tol.	ID tol.	Stock length
1	316L SS tube	0.3*0.1	+/-0.01	(+0.03，0)	1000	62	316L SS tube	1.7*1.3	+/-0.015	(+0.03，0)	1000
2	316L SS tube	0.7*0.4	+/-0.01	(+0.03，0)	1000	63	316L SS tube	1.7*1.35	+/-0.015	(+0.03，0)	1000
3	316L SS tube	0.8*0.16	+/-0.01	(+0.01，-0.01)	1000	64	316L SS tube	1.7*1.37	+/-0.015	(+0.03，0)	1000
4	316L SS tube	0.8*0.6	+/-0.01	(+0.03，0)	1000	65	316L SS tube	1.7*1.4	+/-0.015	(+0.03，0)	1000
5	316L SS tube	0.81*0.4	+/-0.01	(+0.01，-0.01)	1000	66	316L SS tube	1.7*1.5	+/-0.015	(+0.03，0)	1000
6	316L SS tube	0.81*0.51	+/-0.01	(+0.01，-0.01)	1000	67	316L SS tube	1.74*1.3	+/-0.015	(+0.03，0)	1000
7	316L SS tube	1*0.2	+/-0.01	(+0.03，0)	1000	68	316L SS tube	1.75*1	+/-0.015	(+0.03，0)	1000
8	316L SS tube	1*0.3	+/-0.01	(+0.03，0)	1000	69	316L SS tube	1.75*1.4	+/-0.015	(+0.03，0)	1000
9	316L SS tube	1*0.6	+/-0.01	(+0.03，0)	1000	70	316L SS tube	1.75*1.5	+/-0.015	(+0.03，0)	1000
10	316L SS tube	1*0.7	+/-0.01	(+0.03，0)	1000	71	316L SS tube	1.8*0.6	+/-0.015	(+0.03，0)	1000
11	316L SS tube	1.02*0.3	+/-0.01	(+0.03，0)	1000	72	316L SS tube	1.8*0.8	+/-0.015	(+0.03，0)	1000
12	316L SS tube	1.09*0.58	+/-0.015	(+0.03，0)	1000	73	316L SS tube	1.8*1	+/-0.015	(+0.03，0)	1000
13	316L SS tube	1.1*0.68	+/-0.015	(+0.03，0)	1000	74	316L SS tube	1.8*1.2	+/-0.015	(+0.03，0)	1000
14	316L SS tube	1.1*0.7	+/-0.015	(+0.03，0)	1000	75	316L SS tube	1.8*1.3	+/-0.015	(+0.03，0)	1000
15	316L SS tube	1.1*0.8	+/-0.015	(+0.03，0)	1000	76	316L SS tube	1.8*1.4	+/-0.015	(+0.03，0)	1000
16	316L SS tube	1.1*0.9	+/-0.015	(+0.03，0)	1000	77	316L SS tube	1.8*1.5	+/-0.015	(+0.03，0)	1000
17	316L SS tube	1.2*0.3	+/-0.015	(+0.03，0)	1000	78	316L SS tube	1.81*1.47	+/-0.015	(+0.02，-0.02)	1000
18	316L SS tube	1.2*0.4	+/-0.015	(+0.03，0)	1000	79	316L SS tube	1.85*1.4	+/-0.015	(+0.03，0)	1000
19	316L SS tube	1.2*0.5	+/-0.015	(+0.03，0)	1000	80	316L SS tube	1.85*1.6	+/-0.015	(+0.03，0)	1000
20	316L SS tube	1.2*0.6	+/-0.015	(+0.03，0)	1000	81	316L SS tube	1.9*1.4	+/-0.015	(+0.03，0)	1000
21	316L SS tube	1.2*0.8	+/-0.015	(+0.03，0)	1000	82	316L SS tube	1.9*1.5	+/-0.015	(+0.03，0)	1000
22	316L SS tube	1.2*0.9	+/-0.015	(+0.03，0)	1000	83	316L SS tube	1.9*1.6	+/-0.015	(+0.03，0)	1000
23	316L SS tube	1.26*0.9	+/-0.015	(+0.03，0)	1000	84	316L SS tube	1.99*1.6	+/-0.015	(+0.03，0)	1000
24	316L SS tube	1.3*0.58	+/-0.015	(+0.03，0)	1000	85	316L SS tube	2*0.3	+/-0.015	(+0.03，0)	1000
25	316L SS tube	1.3*0.65	+/-0.015	(+0.03，0)	1000	86	316L SS tube	2*0.5	+/-0.015	(+0.03，0)	1000
26	316L SS tube	1.3*0.75	+/-0.015	(+0.03，0)	1000	87	316L SS tube	2*0.61	+/-0.015	(+0.03，0)	1000
27	316L SS tube	1.3*0.8	+/-0.015	(+0.03，0)	1000	88	316L SS tube	2*0.81	+/-0.015	(+0.03，0)	1000
28	316L SS tube	1.3*0.9	+/-0.015	(+0.03，0)	1000	89	316L SS tube	2*1	+/-0.015	(+0.03，0)	1000
29	316L SS tube	1.36*0.7	+/-0.015	(+0.03，0)	1000	90	316L SS tube	2*1.2	+/-0.015	(+0.03，0)	1000
30	316L SS tube	1.39*0.7	+/-0.015	(+0.03，0)	1000	91	316L SS tube	2*1.37	+/-0.015	(+0.03，0)	1000
31	316L SS tube	1.4*0.8	+/-0.015	(+0.03，0)	1000	92	316L SS tube	2*1.4	+/-0.015	(+0.03，0)	1000
32	316L SS tube	1.4*0.97	+/-0.015	(+0.03，0)	1000	93	316L SS tube	2*1.5	+/-0.015	(+0.03，0)	1000
33	316L SS tube	1.4*1	+/-0.015	(+0.03，0)	1000	94	316L SS tube	2*1.6	+/-0.015	(+0.03，0)	1000
34	316L SS tube	1.46*1.12	+/-0.015	(+0.03，0)	1000	95	316L SS tube	2*1.7	+/-0.015	(+0.03，0)	1000
35	316L SS tube	1.5*0.3	+/-0.015	(+0.03，0)	1000	96	316L SS tube	2*1.75	+/-0.015	(+0.03，0)	1000
36	316L SS tube	1.5*0.4	+/-0.015	(+0.03，0)	1000	97	316L SS tube	2.05*0.3	+/-0.02	(+0.03，0)	1000
37	316L SS tube	1.5*0.58	+/-0.015	(+0.03，0)	1000	98	316L SS tube	2.1*1.6	+/-0.02	(+0.03，0)	1000
38	316L SS tube	1.5*0.6	+/-0.015	(+0.03，0)	1000	99	316L SS tube	2.1*1.8	+/-0.02	(+0.03，0)	1000
39	316L SS tube	1.5*0.7	+/-0.015	(+0.03，0)	1000	100	316L SS tube	2.2*1.6	+/-0.02	(+0.03，0)	1000
40	316L SS tube	1.5*0.8	+/-0.015	(+0.03，0)	1000	101	316L SS tube	2.3*1.9	+/-0.02	(+0.03，0)	1000
41	316L SS tube	1.5*1	+/-0.015	(+0.03，0)	1000	102	316L SS tube	2.3*2	+/-0.02	(+0.03，0)	1000
42	316L SS tube	1.5*1.12	+/-0.015	(+0.03，0)	1000	103	316L SS tube	2.4*1.5	+/-0.02	(+0.03，0)	1000
43	316L SS tube	1.5*1.21	+/-0.015	(+0.03，0)	1000	104	316L SS tube	2.4*1.8	+/-0.02	(+0.03，0)	1000
44	316L SS tube	1.56*1	+/-0.015	(+0.03，0)	1000	105	316L SS tube	2.4*2	+/-0.02	(+0.03，0)	1000
45	316L SS tube	1.6*0.13	+/-0.015	(+0.03，0)	1000	106	316L SS tube	2.4*2.1	+/-0.02	(+0.03，0)	1000
46	316L SS tube	1.6*0.3	+/-0.015	(+0.03，0)	1000	107	316L SS tube	2.5*1.5	+/-0.02	(+0.03，0)	1000
47	316L SS tube	1.6*0.5	+/-0.015	(+0.03，0)	1000	108	316L SS tube	2.5*1.9	+/-0.02	(+0.03，0)	1000
48	316L SS tube	1.6*0.56	+/-0.015	(+0.03，0)	1000	109	316L SS tube	2.5*2	+/-0.02	(+0.03，0)	1000
49	316L SS tube	1.6*0.60	+/-0.015	(+0.03，0)	1000	110	316L SS tube	2.53*0.65	+/-0.02	(+0.03，0)	1000
50	316L SS tube	1.6*0.76	+/-0.015	(+0.03，0)	1000	111	316L SS tube	2.53*1.45	+/-0.02	(+0.03，0)	1000
51	316L SS tube	1.6*0.79	+/-0.015	(+0.03，0)	1000	112	316L SS tube	2.6*2	+/-0.02	(+0.03，0)	1000
52	316L SS tube	1.6*0.95	+/-0.015	(+0.03，0)	1000	113	316L SS tube	2.6*2.2	+/-0.02	(+0.03，0)	1000
53	316L SS tube	1.6*1	+/-0.015	(+0.03，0)	1000	114	316L SS tube	2.7*1.5	+/-0.02	(+0.03，0)	1000
54	316L SS tube	1.6*1.1	+/-0.015	(+0.03，0)	1000	115	316L SS tube	2.7*2.2	+/-0.02	(+0.03，0)	1000
55	316L SS tube	1.6*1.2	+/-0.015	(+0.03，0)	1000	116	316L SS tube	2.7*2.4	+/-0.02	(+0.03，0)	1000
56	316L SS tube	1.6*1.3	+/-0.015	(+0.03，0)	1000	117	316L SS tube	2.8*2.2	+/-0.02	(+0.03，0)	1000
57	316L SS tube	1.6*1.4	+/-0.015	(+0.03，0)	1000	118	316L SS tube	2.9*2	+/-0.02	(+0.03，0)	1000
58	316L SS tube	1.62*1.3	+/-0.015	(+0.03，0)	1000	119	316L SS tube	3*1.5	+/-0.02	(+0.03，0)	1000
59	316L SS tube	1.65*1.2	+/-0.015	(+0.03，0)	1000	120	316L SS tube	3*2	+/-0.02	(+0.03，0)	1000
60	316L SS tube	1.65*1.3	+/-0.015	(+0.03，0)	1000	121	316L SS tube	3*2.4	+/-0.02	(+0.03，0)	1000
61	316L SS tube	1.7*0.61	+/-0.015	(+0.03，0)	1000	122	316L SS tube	3*2.6	+/-0.02	(+0.03，0)	1000

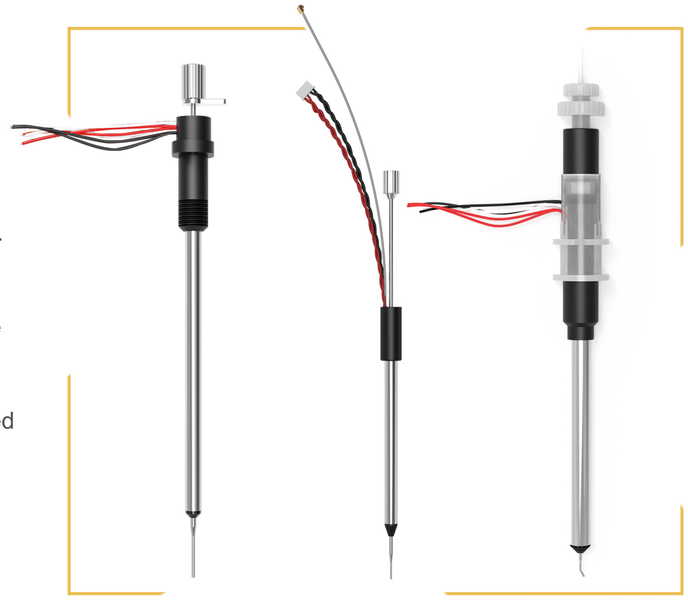


Wash Probes

Wiping, washing and drying probes for clinical chemistry analyzers. Imported 316L tubing with a fluid-polished bore. Available roughness ranges from Ra 0.02 to Ra 0.4. Laser-welded construction provides a clean finish.

Heated Probes

Custom capacities across 100–300 µL. The compact assembly uses a stable heating element and JIS-grade 316L stainless steel. Inner and outer surface roughness is below Ra 0.05. A 102 °C thermal fuse and a PB7-43-01 NTC thermistor are specified. Recommended heater resistances are 12 Ω and 24 Ω.



Dispensing Probes

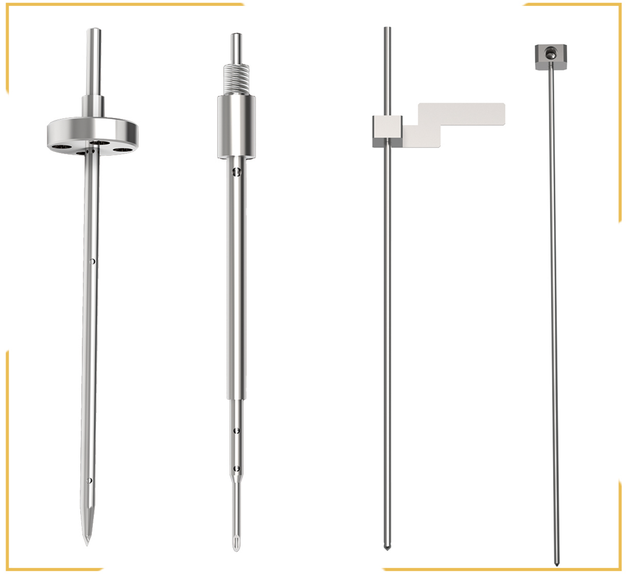
Designed for chemiluminescence analyzers. Imported 316L tubing with a PEEK fitting and fluid-polished bore, Ra 0.01 to Ra 0.1. The reduced-diameter V-shaped tip is formed without welding and is available in different angles. A liquid-level sensing lead is included. Superhydrophobic treatment is available for both inner and outer surfaces.





Open Sampling Probes

Imported 316L tubing with a fluid-polished bore, Ra 0.06 to Ra 0.4. An optional PTFE coating improves wear and chemical resistance and extends service life. Mirror-finish electrical discharge machining produces burr-free side ports.



Piercing Probes

Sampling probes with a sidewall pressure-relief groove. Imported 316L tubing with a fluid-polished bore, Ra 0.02 to Ra 0.4. Laser-welded construction provides a clean finish.

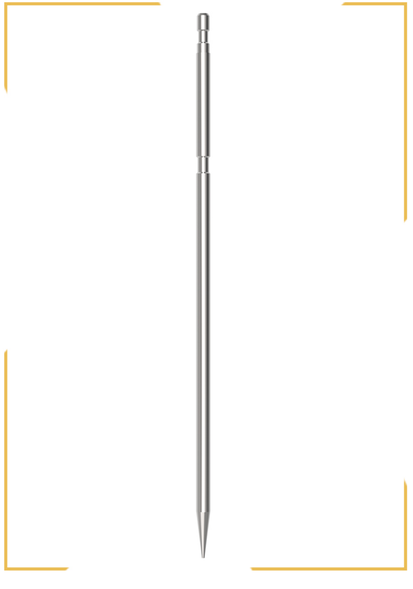
Aspirate Dispense Probes

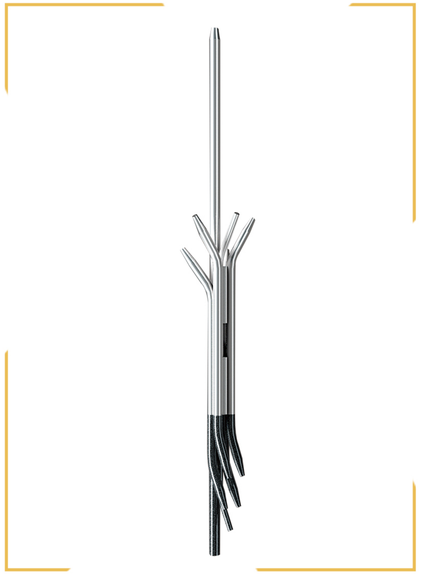
Designed for clinical chemistry analyzers. Imported 316L tubing with a fluid-polished bore, Ra 0.04 to Ra 0.4. The stepped hose-barb fitting is laser welded for strength and a clean finish. Superhydrophobic treatment is available for inner and outer surfaces.



Specimen Probes

Designed for hematology analyzers. Imported 316L tubing with a fluid-polished bore, Ra 0.06 to Ra 0.4. Stock sizes are 2 × 0.3 and 1.2 × 0.3. The precision-ground tip produces a coaxial, unsplit dispensing jet.





Staining Probes

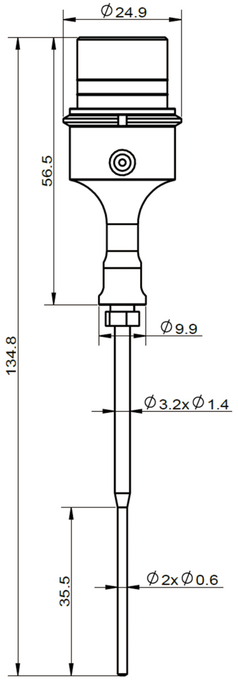
Imported 316L tubing with an optional wear- and chemical-resistant PTFE coating. One-piece and welded tip constructions are available. Mirror-finish electrical discharge machining produces burr-free side ports.

Product Overview

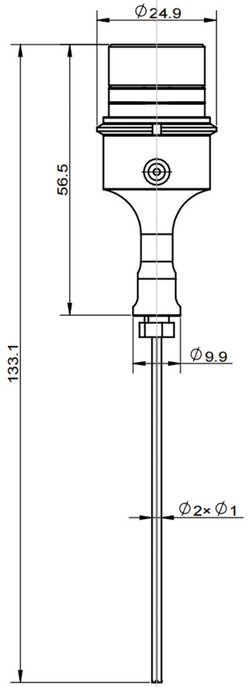
An in-house ultrasonic transducer drives a specially designed horn and probe. When the probe contacts the liquid, high-frequency ultrasound generates mechanical vibration and cavitation. These effects support dispersion, homogenization, agitation and disruption of solutions, emulsions and suspensions. Fluid ports on the horn and probe connect to standard diagnostic fluid lines for aspiration and transfer within existing instruments.

Dimensional Drawings





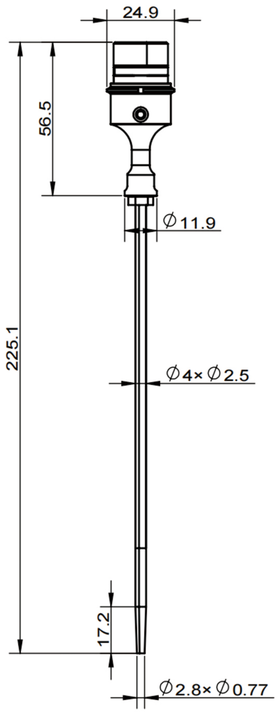




Applications

Mixing inside and outside the probe
Probe cleaning and residue removal
Conductive and nonconductive liquid-level detection
Hardness and viscosity measurement
Probe collision monitoring
Metered directional atomization
Cell-wall disruption
Cleaning internal or concealed surfaces on precision parts







Product Overview

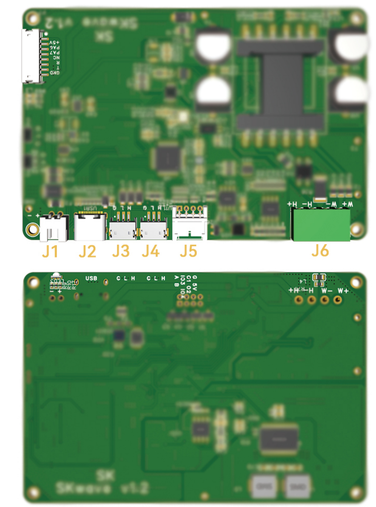
Interchangeable tool heads adapt Wontec's ultrasonic transducer for noncontact mixing and sample processing. The design reduces direct exposure to environmental contamination. Depending on the application, ultrasound can support mixing while preserving cell integrity and activity, or disrupt cell walls to release intracellular constituents.

Product Advantages

The manufacturer describes aerosol-free, coupling-agent-free operation for aseptic workflows, support for microliter-scale samples under 5 mL, compatibility with microfluidic chips and standard vessels, bottom or side sonication, and integration into in vitro diagnostic instruments.

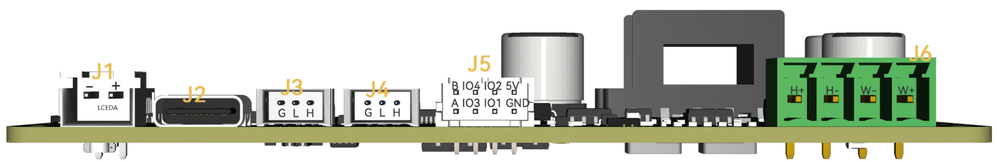
Applications

Applications include polymer breakdown, emulsion preparation, dissolution of poorly soluble materials, biomolecule processing, fungal cell disruption and extraction, chromatin immunoprecipitation, nucleic acid fragmentation and sample preparation for high-throughput sequencing, viral particle release, tuberculosis sputum lysis, and processing of membrane proteins, spores and cell membranes.



Product Advantages

The board uses a 32-bit ARM platform with digital control, LED indicators, a broad operating frequency range, automatic frequency tracking and isolated outputs. Interfaces include CAN, RS-485, USB and digital I/O.



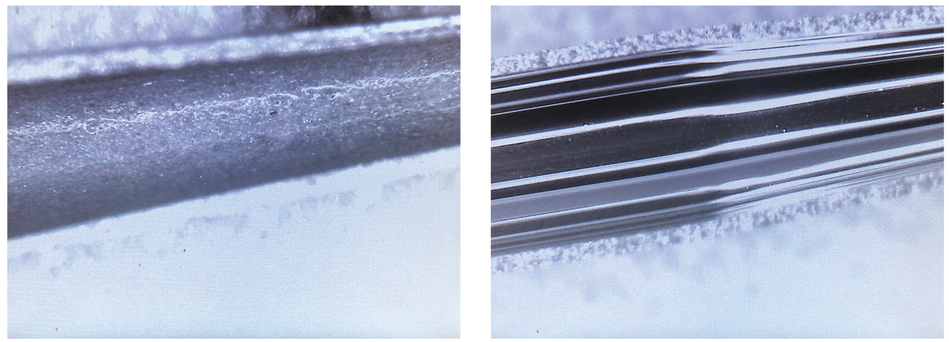
Connector	Pin	Signal	Function
J1 Power 电源接口J1	Pin1	+	12–24 V DC power
	Pin2	-	Power ground
J2 USB	Pin1	USB	USB communications
J3–J4 CAN CAN总线通信 接口J3-J4	Pin1	CAN-H	CAN bus high
	Pin2	CAN-L	CAN bus low
	Pin3	GND	CAN reference ground. Connect to reduce interference.
J5 RS-485 / I/O RS485总线 通信接口J5	Pin1	GND	Ground
	Pin2	5V	5 V output
	Pin3	IO1	Liquid-level / probe collision output
	Pin4	IO2	NC
	Pin5	IO3	NC
	Pin6	IO4	NC
	Pin7	A	RS-485 A
	Pin8	B	RS-485 B
J6 Ultrasonic probe 超声波针接口J6	Pin1	W+	Positive drive
	Pin2	W-	Negative drive
	Pin3	H-	NC
	Pin4	H+	NC

Mirror Polished Tubing

Analytical tubing requires a high level of cleanliness because contamination inside capillary bores is difficult to remove. Wontec controls the tube manufacturing stage and uses precision finishing to improve cleanliness and bore finish.

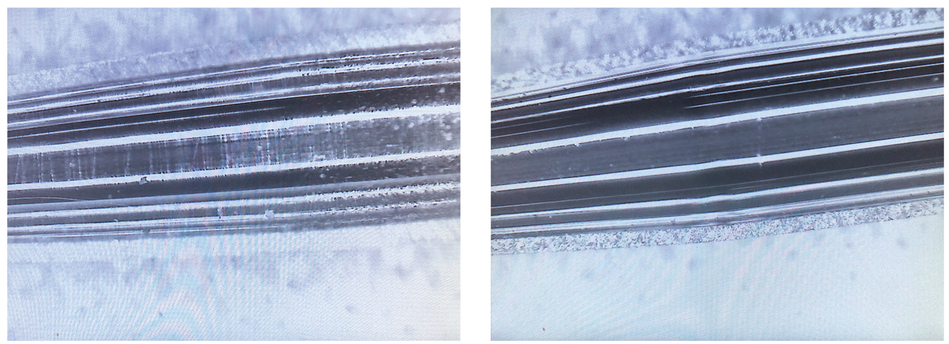
Under Shenzhen Science and Technology Innovation Commission project 2019N045 on high-precision sampling probes for advanced IVD equipment, Wontec developed capillary bore-polishing processes. The project passed its interim review in 2021. Wontec reports that its polishing performance exceeded the project target.

Bore Polishing Comparison



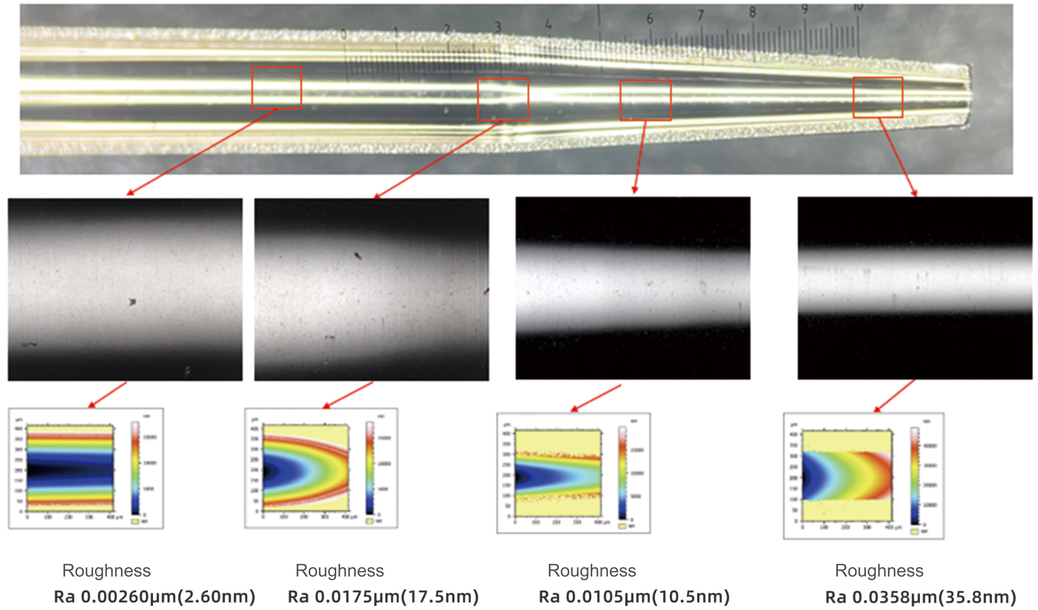
Original tubing (left) and tubing after bore polishing (right).

Wontec mirror-polishes straight and reduced-diameter tubing. Ra 0.05 is achievable even on thin-wall tubing with a 0.1 mm bore.



Imported reduced-diameter sample (left) and Wontec sample (right).

316L Inner Probe Surface Test • C202500004301-01



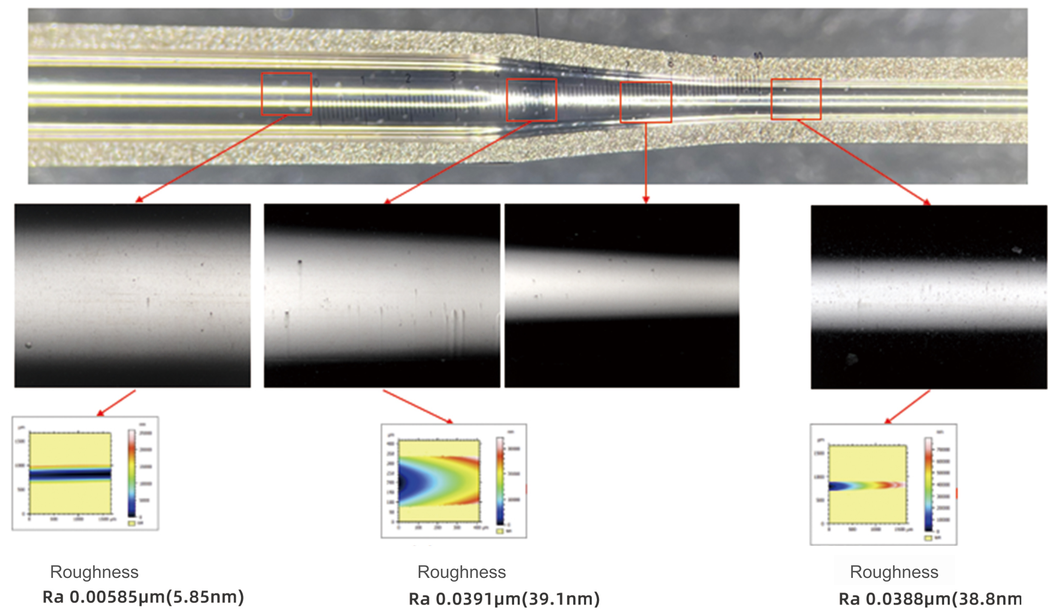
Roughness
Ra 0.00260μm(2.60nm)

Roughness
Ra 0.0175μm(17.5nm)

Roughness
Ra 0.0105μm(10.5nm)

Roughness
Ra 0.0358μm(35.8nm)

316L Inner Probe Surface Test • WT10001004



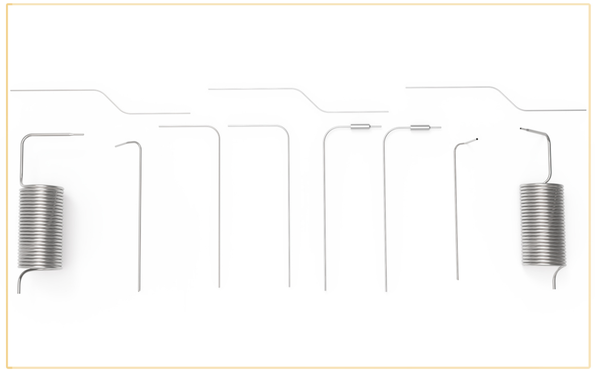
Roughness
Ra 0.00585μm(5.85nm)

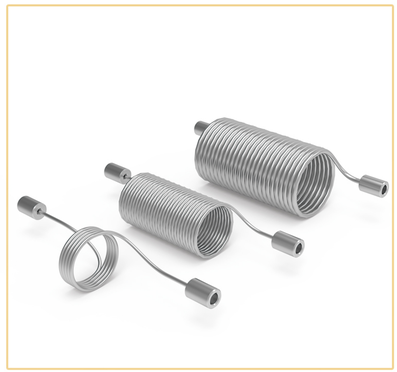
Roughness
Ra 0.0391μm(39.1nm)

Roughness
Ra 0.0388μm(38.8nm

Tube Bending

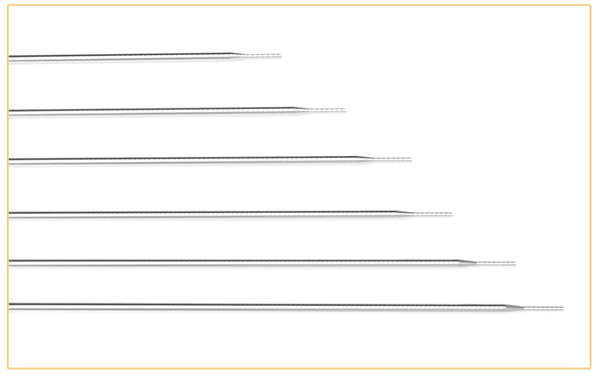
Flattening is kept below 10% to preserve fluid flow. Right-angle, wavy and coiled geometries are available. Tubing with polished bores can also be bent.

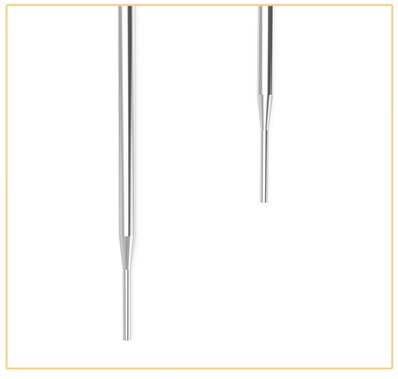




Diameter Reduction

Rotary forming reduces liquid adhesion at the tip and improves microvolume dispensing. Forming angles from 6° to 30° are available. With multiple passes, a 0.8 mm bore can be reduced to approximately 0.15 mm. Single-pass, two-pass and other stepped forming options are available, including custom angles. The process also supports tubing with polished bores.





Tip Forming

Piercing tips penetrate rubber vial closures to aspirate reagents. A closed tip helps prevent debris from blocking the probe opening. A one-piece closed tip is available to minimize weld-seam residue.



Groove Machining

A groove in the stainless steel shaft equalizes pressure across a plastic vial closure during piercing. Typical groove dimensions are approximately 0.3 mm wide × 0.3 mm deep. The groove depth must be at least 0.15 mm less than the wall thickness.





Surface Treatment

External PTFE or metallic coatings are available. Fluoropolymer treatment inside the bore increases hydrophobicity and helps reduce carryover. Metallic coatings increase surface hardness and corrosion resistance.

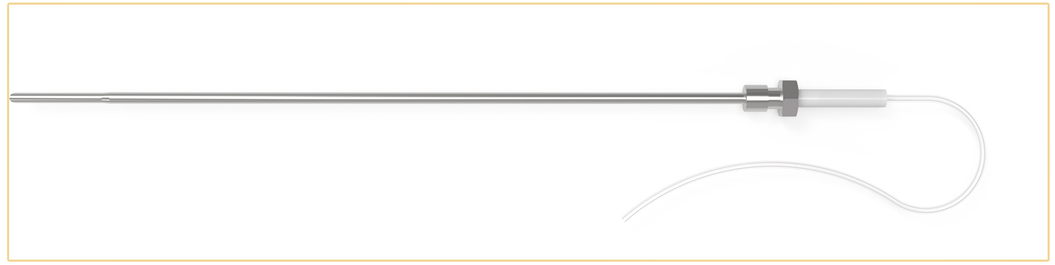
Black PTFE provides high adhesion and heat resistance. Green PTFE provides electrical insulation. PTFE coating thickness is 10–30 µm. Chromium or chromium nitride coatings are 400 nm to 5 µm thick, with 2–3 µm recommended.

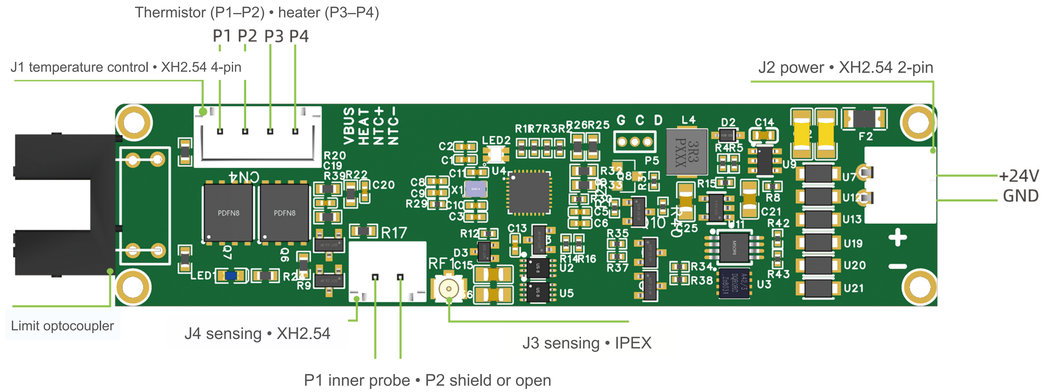


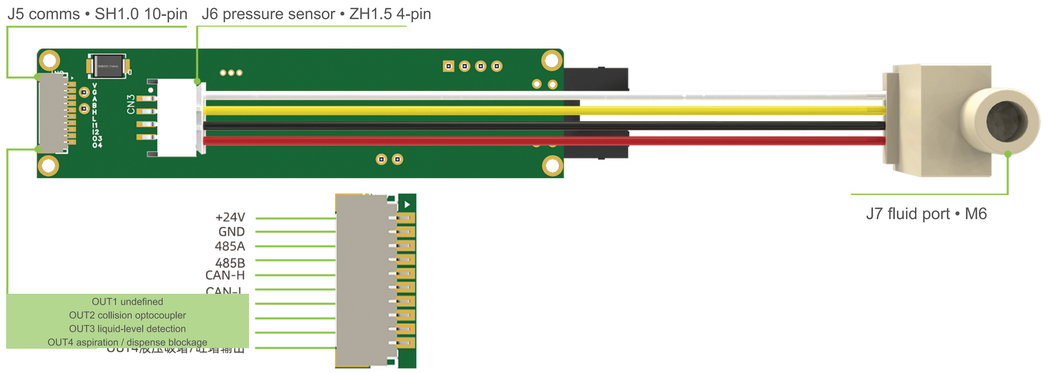
Metal coatings (left) • PTFE coatings (center) • PTFE-coated stirrers (right)

PTFE Liner Integration

A PTFE liner bonded inside metal tubing provides the surface properties of a PTFE-coated bore. Titanium sampling probes with a PTFE liner also support capacitive liquid-level detection. Rotary forming creates an interference fit and a gap-free, leak-resistant tip joint.







Specifications

24 V DC input. Supports high-precision liquid-level detection, probe temperature control to ±1 °C, adjustable aspiration and dispense blockage thresholds, and bottom-contact collision protection. Three digital outputs indicate liquid-level detection, probe bottom contact and fluid-path blockage. Operating temperature is −40 to 85 °C. Dimensions are 91.9 × 20.2 × 13.1 mm. Communications are via RS-485 or CAN.

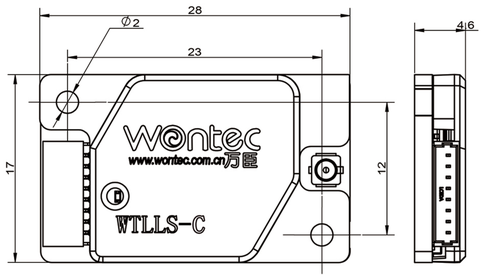


WTLLS-C • Feedback capacitive sensor

Product Advantages

Feedback capacitive sensing supports closed-loop control and automatic compensation for environmental baseline changes. Both models use 5 V DC, draw under 1 W and operate from −40 to 85 °C. The slim insulated enclosure measures 28 × 17 × 4.5 mm nominally. The mechanical drawing shows 4.6 mm. Both provide two liquid-level trigger outputs and RS-485/CAN communications for adjusting sensitivity and node address.
Detection down to 5 µL is stated under suitable medium conditions, with 20 µL stated for stable operation.

Dimensional Drawing

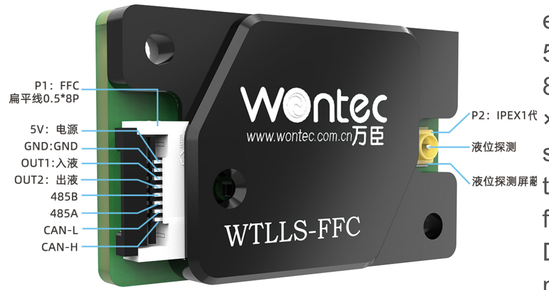




LED flashes once at power-up and once on liquid detection.

User Interface

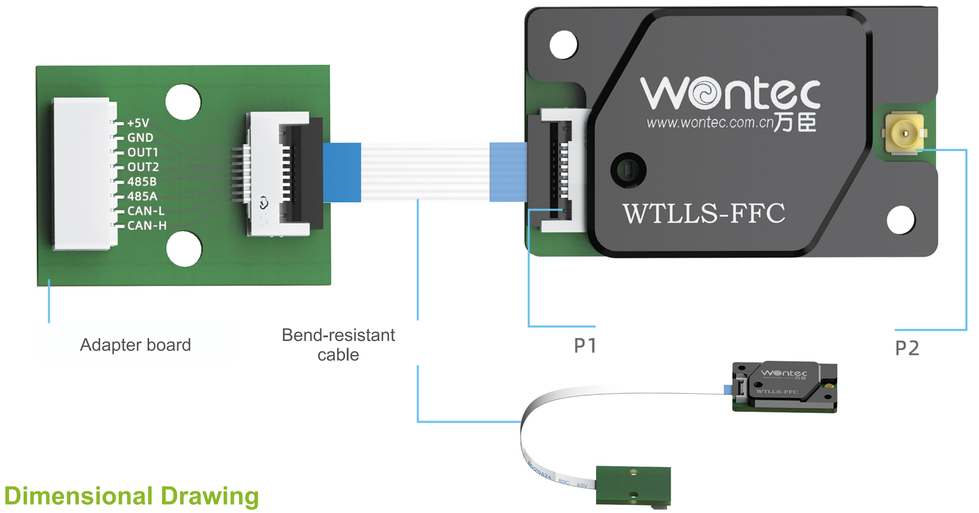
Connector	Pin	Function
P1 SH1.0-8P	Pin 1	5 V power
	Pin 2	GND
	Pin 3	OUT1 liquid entry
P1:SH1.0-8P	Pin 4	OUT2 liquid exit
	Pin 5	485B
	Pin 6	485A
	Pin 7	CAN-L
	Pin 8	CAN-H
IPEX Gen 1	Center	Liquid-level sensing conductor
P2:IPEX1代	Shell	Sensing shield ground



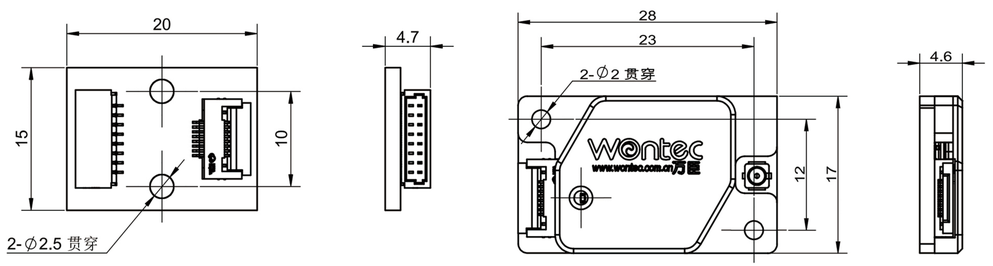
WTLLS-FFC • Feedback capacitive sensor

Product Advantages

Feedback capacitive sensing supports closed-loop control and automatic compensation for environmental baseline changes. Both models use 5 V DC, draw under 1 W and operate from −40 to 85 °C. The slim insulated enclosure measures 28 × 17 × 4.5 mm nominally. The mechanical drawing shows 4.6 mm. Both provide two liquid-level trigger outputs and RS-485/CAN communications for adjusting sensitivity and node address.
Detection down to 5 µL is stated under suitable medium conditions, with 20 µL stated for stable operation.
Eight-pin latch-type flexible flat cable with bend resistance.



Dimensional Drawing





WTLLS-C • Horizontal

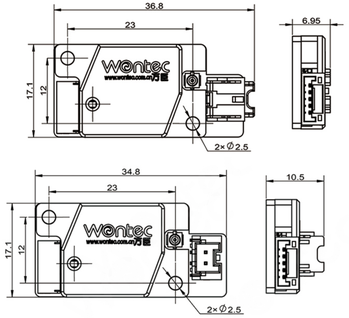


WTLLS-C • Vertical

Product Advantages

5 V DC, under 1 W, −40 to 85 °C. Feedback capacitive sensing with automatic baseline compensation. Slim insulated housing. Horizontal: 36.8 × 17 × 6.95 mm. Vertical: 34.8 × 17 × 10.5 mm. Two liquid-level trigger outputs stated. RS-485 / PA2.0. Adjustable detection sensitivity and node address. Down to 5 µL under suitable medium conditions. Stable detection at 20 µL.

Dimensional Drawing





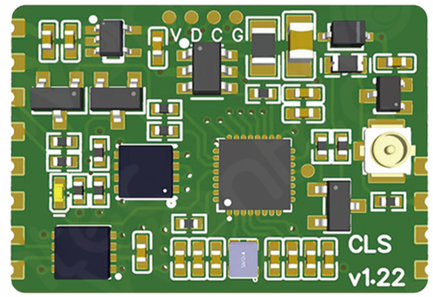
WTLLS-C 卧式 接口定义



WTLLS-C 立式 接口定义

User Interface

Connector	Pin	Function
P1 GH1.25-5P	Pin 1	5 V power
	Pin 2	GND
P1:GH1.25-5P	Pin 3	OUT1
	Pin 4	485B
	Pin 5	485A
IPEX Gen 1 **P2:IPEX1代**	Center	Liquid-level sensing conductor
	Shell	Sensing shield ground
P3 PA-2AB **P3：PA-2AB（卧式）**	Horizontal 1	IPEX
	Horizontal 2	GND
P3：PA-2AB（立式）	Vertical 1	IPEX
	Vertical 2	GND

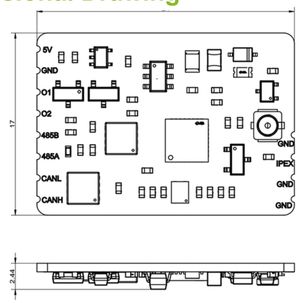


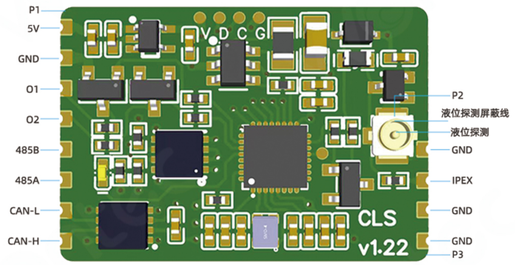
WTLLS-C • Surface mount

Product Advantages

5 V DC, under 1 W, −40 to 85 °C. Feedback capacitive sensing with automatic baseline compensation. 24 × 17 × 4.5 mm nominal. Customizable interface, two liquid-level trigger outputs, RS-485/CAN and adjustable sensitivity and node address. Down to 5 µL under suitable medium conditions. Stable use above 20 µL.

Dimensional Drawing





LED flashes once at power-up and once on liquid detection.

User Interface

Connector	Pin	Function
P1	Pin 1	5 V power
	Pin 2	GND
	Pin 3	O1
	Pin 4	O2
P1	Pin 5	485B
	Pin 6	485A
	Pin 7	CAN-L
	Pin 8	CAN-H
IPEX Gen 1 **P2:IPEX1代**	Center	Liquid-level sensing conductor
	Shell	Sensing shield ground
P3	1	GND
P3	2	IPEX
	3	GND
	4	GND

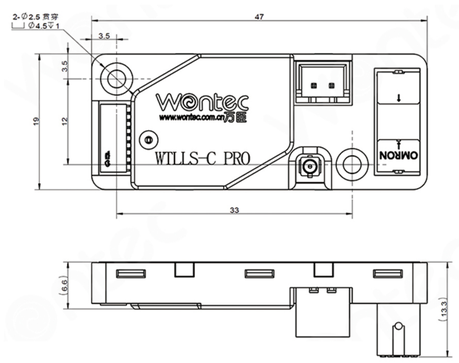


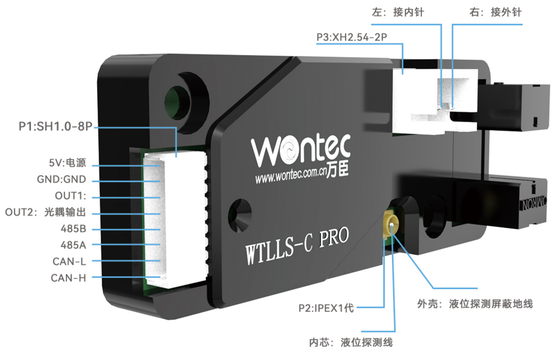
WTLLS-C PRO • Feedback capacitive sensor

Product Advantages

5 V DC, under 1 W, −40 to 85 °C. Insulated housing, 47 × 19 × 13.3 mm. Automatic baseline compensation. One level trigger output and one bottom-contact protection output. Down to 5 µL under suitable medium conditions. Stable detection at 20 µL. RS-485/CAN with adjustable sensitivity and node address. XH2.54 2-pin or IPEX sensing input.

Dimensional Drawing





LED flashes once at power-up and once on liquid detection.

User Interface

Connector	Pin	Function
P1 SH1.0-8P	Pin 1	5 V power
	Pin 2	GND
	Pin 3	OUT1
	Pin 4	OUT2 optocoupler output
P1：SH1.0-8P	Pin 5	485B
	Pin 6	485A
	Pin 7	CAN-L
	Pin 8	CAN-H
IPEX Gen 1	Center	Liquid-level sensing conductor
	Shell	Sensing shield ground
P3 XH2.54 2-pin	Left	Inner probe
	Right	Outer probe



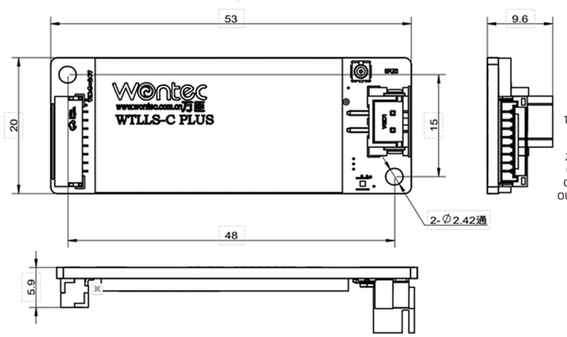
WTLLS-C PLUS • Feedback capacitive sensor

·反馈型电容式液面探测，闭环控制更可靠。

Product Advantages

5–24 V DC, under 1 W, −40 to 85 °C. Insulated housing, 53 × 20 × 15 mm nominal. Parallel multi-probe detection without interference. One liquid-entry and one liquid-exit output. Down to 5 µL under suitable medium conditions. Stable use above 20 µL. RS-485/CAN. XH2.54 2-pin or IPEX sensing input.

Dimensional Drawing



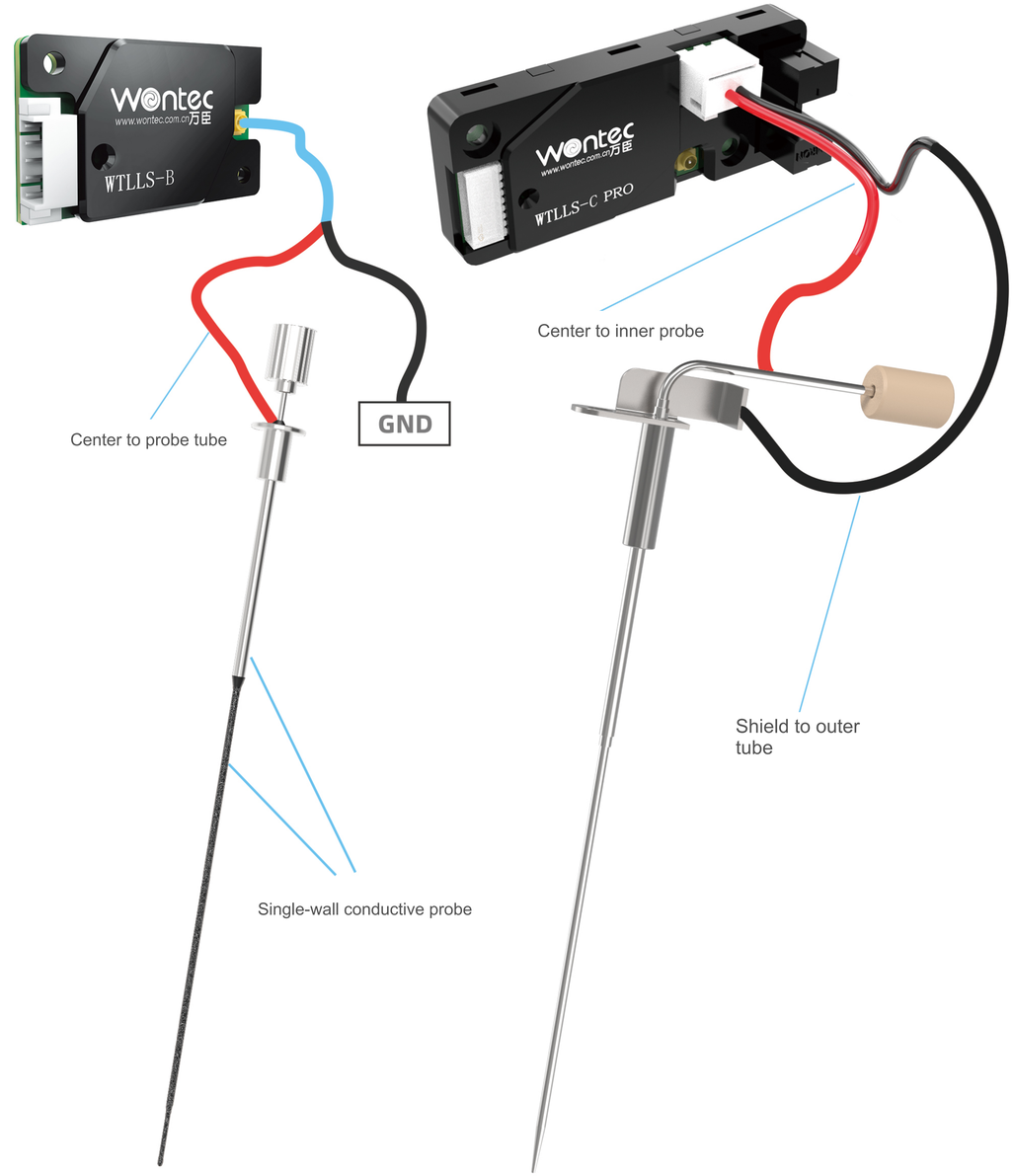


LED flashes once at power-up and once on liquid detection.

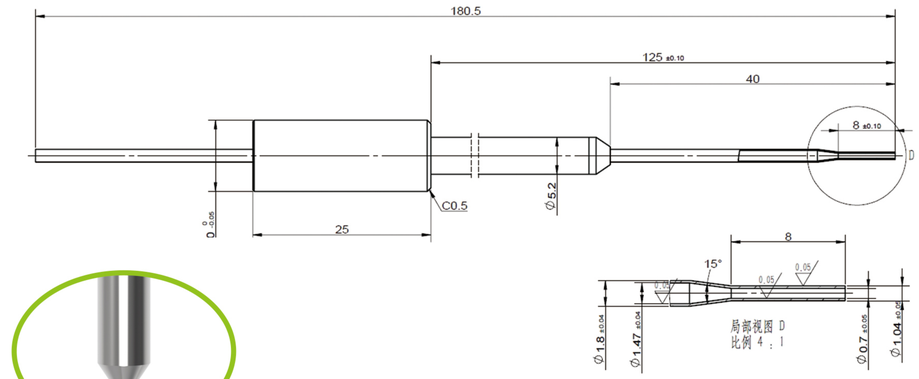
User Interface

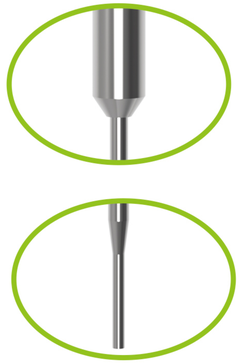
Connector	Pin	Function
P1 SH1.0-8P	Pin 1	5–24 V power
	Pin 2	GND
	Pin 3	OUT1 liquid entry
P1：SH1.0-8P	Pin 4	OUT2 liquid exit
	Pin 5	485B
	Pin 6	485A
	Pin 7	CAN-L
	Pin 8	CAN-H
IPEX Gen 1	Center	Liquid-level sensing conductor
P2：IPEX1代	Shell	Sensing shield ground
P3 XH2.54 2-pin	Pin 1	Outer probe or open
P3：XH2.54-2P	Pin 2	Inner probe

Typical Liquid Level Sensor Wiring



Featured Heated Probes





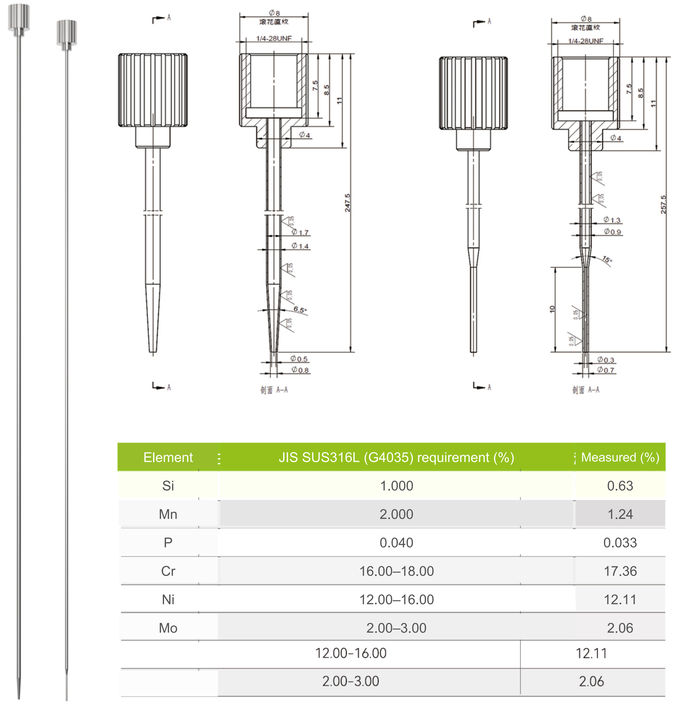
200 µL Heated Probe Assembly

The 200 µL assembly uses a 12 Ω heater with two yellow FF46-2 leads and a PB7-43-01 sensor with two white FF46-2 leads. A 102 °C non-resettable thermal fuse provides protection. For liquid-level sensing, connect the red lead to the inner sampling probe and the black lead to the outer tube. Catalog price is CNY 399.

¥399



Heated Inner Probe



Element	JIS SUS316L (G4035) requirement (%)	Measured (%)
Si	1.000	0.63
Mn	2.000	1.24
P	0.040	0.033
Cr	16.00–18.00	17.36
Ni	12.00–16.00	12.11
Mo	2.00–3.00	2.06
	12.00–16.00	12.11
	2.00–3.00	2.06

¥266

Technical Requirements

Remove burrs and oil and break sharp edges. Surfaces must be free of scratches, dents and other cosmetic defects. Polish both the bore and outer surface to Ra 0.05. Catalog price is CNY 266.

