



### Gas Filled Thermometer With Capillary

The Ningdian® gas filled thermometer with capillary is also suitable for the transmission of the measured value via capillary, due to its helium filling. Such a capillary has an outer diameter of only 2 mm and an inner diameter of 0.1 to 0.2 mm. In the reaction to a temperature change, both dial thermometer types function in accordance with the expansion principle. But the rotation of the helix in bimetal thermometers can only react directly and without “detour” on the indication.

#### Product Description

Ningdian® **Gas filled thermometer with capillary** made in China puts users in the position to be able to measure the process temperature, even at inaccessible points. By means of a contact bulb it can also be measured on the smallest pipelines. Another advantage is the bridging of greater distances. In this way, gas filled thermometers with capillary can be centrally integrated in an instrument panel, a switch cabinet or a control panel.

For the specification of a **gas filled thermometer with capillary**, the scale range, the length of the capillary and the type of probe connection must be known. With a capillary length of up to 60 m, ND guarantees the accuracy class 1 of the respective instrument (in accordance with EN 13190). The necessary filling pressure for a dial thermometer with capillary from ND varies between 25 bar (large span) and 180 bar (small span).

Such a measuring arrangement can be installed in a plant without any problems. However, users must observe a minimum bending radius to ensure that the capillary does not kink and the helium can expand. In addition, we recommend a stainless steel spiral protection from mechanical impacts.

The China Ningdian® gas filled thermometer with capillary can be used in heating, ventilating, air-conditioning, refrigeration systems, measuring liquid and gas temperature systems, measuring liquid and gas temperature directly, The remote reading, shock-proof requirements, refrigeration plants, marine machinery, etc.

Most of the refrigerator and cooling devices already have this model type installed in them for better reading and controlling of temperature. Take a look at the various model types and Buy gas filled capillary thermometer best suited for your specific purpose!



Gas Filled Thermometer with Capillary(Standard Features)	
Case:	304 Stainless steel case with snap-in 'u' ring gasketed clear lexan molded window.
Bulb:	304 Stainless steel
Capillary:	304 Stainless steel with stainless steel spring armor,or 316 stainless steel with stainless steel interlocking armor.
Pointer:	Adjustable ,balanced aluminum with matte black or red polish.
Temperature Range :	-40~60 °C, -20~60 °C, 0~120 °C, 0~150 °C, 0~200 °C, 0~300 °C, 0~400 °C, 0~500 °C, 50~300 °C/-40~160 °F, 0~100 °F, 0~220 °F, 20~240 °F, 25~125 °F, 50~400 °F, 50~500 °F, 50~600 °F, 50~750 °F
Accuracy:	±1.5%

Gas Filled Thermometers(bottom connection)						
Type	Size Diameter	A (mm)	B (mm)	D (mm)	G	d (mm)
BY301	3"/75mm	50	104	Φ84	1/2"NPT	Φ 6
BY302	4"/100mm	50	140	Φ110	3/4"NPT	Φ 8
BY303	6"/152mm	50	195	Φ160	1/2"BSP	Φ 10
					3/4"BSP	Φ 12
						Φ 14

The 'L' and 'l' can be made according to the customer's demands

Gas Filled Thermometers(back connection)						
Type	Size Diameter	A (mm)	B (mm)	D (mm)	G	d (mm)
BY	2.5"/63mm	31	67	Φ60	1/2"NPT	Φ 6
BY304	3"/75mm	50	20	Φ84	3/4"NPT	Φ 8
BY305	4"/100mm	50	20	Φ110	1/2"BSP	Φ 10



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BY306	6"/152mm	50	20	Φ160	3/4" BSP	Φ 12 Φ 14
The 'L' and 'l' can be made according to the customer's demands						