

The role of the protective tube

For measuring media with corrosive, high temperature, high pressure, explosive, easy to burn and other risk factors, the thermometer can not be directly contacted, that is, first weld the threaded installation sleeve or flange installation sleeve in the pipeline or container, and then install the bimetal thermometer in it, then the role of the protective tube will appear. General bimetal thermometers are equipped with protective sleeves, in order to protect the temperature measuring element inside, but also for easy maintenance. It can effectively protect the normal work of bimetal thermometers, and can also be used for special occasions such as anti-corrosion, high pressure and high flow rate, and has a certain auxiliary role for the accuracy of measurement results.

Product description

The sheath is an important component in all temperature measurement applications, isolating the measurement process from the surrounding environment, not only to protect the environment and workers, but also to separate aggressive, high-pressure, high-flow media from the temperature sensor body, so that users can also change the thermometer during the work process. The sheath is available in a variety of designs and materials to meet all application requirements.

Interface type and basic manufacturing process are important design option elements. Under normal circumstances, we mainly divide the sheath into threaded type, welded in type and flange type. In addition, the sheath can also be divided into two types of assembly and integral. The assembled jacket is made of pipe and ends are welded with bottom components. The integral sheath is machined from bar material.

The JW35 series of assembled threaded or sold-in sheathing is suitable for a wide range of electronic and mechanical thermometers manufactured by Rodwig. Designed according to DIN 43772, this series of jackets is suitable for small to medium process load applications and is the first choice for applications in the chemical industry, process technology and equipment manufacturing.

Functional characteristics

According to DIN 43772 JW35-2 Type: Type 2 (straight) JW35-3 Type: Type 3 (cone) JW35-4 Type: Type 2G (straight) JW35-5: Type: Type 3G (cone)

Various thread standards, wall thickness,

length optional

JW35-3, JW35-5: Fast response design

Product application

Chemical industry
Process technology
Instrument making
Suitable for small to medium
process load applications





Technical parameter

Hot sleeve material	Stainless Steel 1	Stainless Steel 1.4571		
Process connection	External thread	External thread G1/2B, G1B, M20 x 1.5, 1/2NPT assembly/welded thread		
Thermometer connection	M24 x 1.5 Lock r	M24 x 1.5 Lock nut		
Hole size	Ø6.1 mm, Ø7 mr	Ø6.1 mm, Ø7 mm, Ø9 mm		
Insertion length U1	According to DI	According to DIN 43772 or customer requirements		
Overall length	JW35: Insert len	JW35: Insert length U1 + 147mm		
Maximum process temperature,	process pressure dep	ends		
■ Load diagram DIN 43772	Hot sleeve design	dimension		
		Materials		
	Process condition	Velocity of flow		
		Dielectric density		
Options	Other sizes and	Other sizes and materials		

Size mm

legend:

E Process connection
K1 Length of external thread

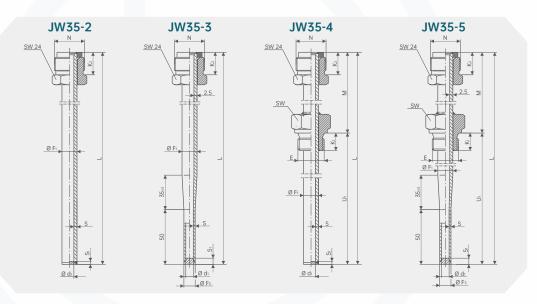
L Overall length M Neck length

(Min. 60mm)
U1 Insertion length
N C o n n e c t e d

thermometer Ø d1 Cylinder diameter Ø F1 Hot tube diameter

S Wall thickness S1 Thickness of

soldering iron head



Size mm		weight kg			
Ø d1	Ø F1	S	S1	N	L=305 mm
7	11	2	3	G1/2B, G1B, M20×1.5, 1/2NPT	0.23
7	12	2.5	3.5	G1/2B, G1B, M20×1.5, 1/2NPT	0.35
9	14	2.5	3.5	G1/2B, G1B, M20×1.5, 1/2NPT	0.23
6.1	12	2.5	5	G1/2B, G1B, M20×1.5, 1/2NPT	0.23

Length of applicable probe rod for mechanical pointer thermometers

Connection type	Rod length I ₁
S, 3, 4, 5	L1 = L-10mm or L1=U1+M-10mm
	L1 = L-30mm or L1=U1+M-30mm





JW35-Selection composition Selection example JW35 S A G N S

laterial	S	304	SS			
	L	316L	316L			
	T() Othe	er mater	ials		
2.Instrument interface A G1/2 Interna				Internal	l thread	1
specification		В	1/2NF	1/2NPT Internal thread		
				M20*1.5 Internal thread		
		D	M27*	M27*1.5 Internal thread		
		T()	Othe	Other thread specifications		
	3.Field c	onnectio	nnection G G1			
:	specification		Н			
				I M20*1.5		
			J	J M27*1.5		
4.lns			М	M Unthreaded		
			T()			
		1.Insertion	sertion length mm N		100	
				0	200	
				Р	300	
				Q	400	
				R 50		
				T()	Other	rsize
		5.9	5.Sheath diameter mm		S	10 (Suitable for 8MM probe rod)
					V	12 (Suitable for 10MM probe rod)
					U	14 (Suitable for 12MM probe rod)
					T()	Other inner diameter dimensions
ructions:						

Instructions:

It indicates that the material of JW35 threaded protective sleeve is 304 stainless steel, the instrument interface specification is G1/2 internal thread, the field connection specification is G1/2, the insertion length is 100mm, and the inner diameter of the sheath is 10mm.

Product certification

Compliance and approval; Rodeweig temperature instruments meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;



