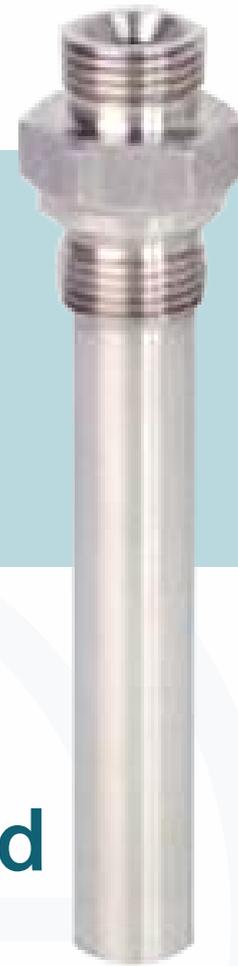


[The selection is detailed on page 4](#)



# JW45

## Integral Drilled Threaded Guard Casing

### 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 JW45 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, the series is suitable for heavy load applications in the chemical industry, process technology and equipment manufacturing.

### Product application

Chemical industry  
Process technology  
Instrument making  
Suitable for large process load applications

### Functional characteristics

According to DIN 43772  
Various thread standards, wall thickness, length optional



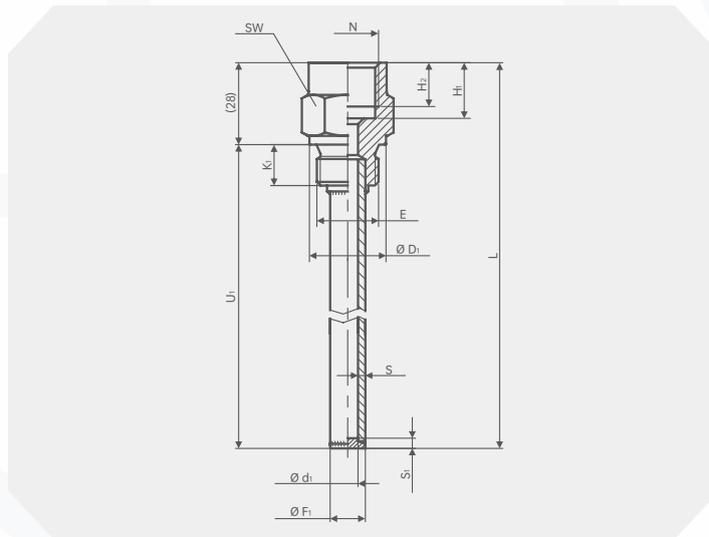
Technical parameter

Hot sleeve material	Stainless steel 1.4571 or copper alloy		
Process connection	External thread G1/2B, G 3/4 B male thread		
Thermometer connection	G1/2, G3/4 female thread		
Hole size	According to DIN 43772 version: Ø7mm, Ø9mm, Ø11mm		
	The design is similar to DIN 43772, but with fast response: Ø6.2 mm, Ø8.2 mm, Ø8.5 mm, Ø10.2 mm		
Insertion length U1	82, 142, 182, 232, 382 mm		
Overall length	The installation length is U1+28mm		
Maximum process temperature, process pressure depends	Load diagram DIN 43772		
	Protective casing design	dimension	
		Materials	
	Process condition	Velocity of flow	
Dielectric density			
Options	Other sizes and materials		

Size mm

legend:

- E Process connection
- H1 Hole depth of internal thread
- H2 Length of internal thread
- K1 Length of external thread
- L Overall length
- N Connected thermometer
- S Wall thickness
- S1 Thickness of soldering iron head
- SW plane
- U1 Insertion length
- Ø d1 Hole size
- Ø D1 Seal ring diameter
- Ø F1 Thermometer tube outer diameter



Material	Size mm											Weight kg	
	E	N	Ø d1	Ø D1	Ø F1	H1	H2	K1	S	S1	SW	U1=82mm	U1=382mm
Stainless steel 1.4571	G1/2 B	G1/2	7	26	12	19	15	14	2.5	3.5	27	0.15	0.33
	G1/2 B	G1/2	9	26	14	19	15	14	2.5	3.5	27	0.15	0.36
	G1/2 B	G1/2	11	26	14	19	15	14	1.5	2.5	27	0.12	0.28
	G1/2 B	G1/2	6.2	26	8	19	15	14	0.9	1	27	0.12	0.18
	G1/2 B	G1/2	8.2	26	10	19	15	14	0.9	1	27	0.12	0.18
	G1/2 B	G1/2	10.2	26	12	19	15	14	0.9	1	27	0.12	0.19
	G3/4 B	G1/2	7	32	12	19	15	16	2.5	3.5	32	0.24	0.42
	G3/4 B	G1/2	9	32	14	19	15	16	2.5	3.5	32	0.24	0.45
	G3/4 B	G1/2	11	32	14	19	15	16	1.5	2.5	32	0.22	0.37
	G3/4 B	G1/2	6.2	32	8	19	15	16	0.9	1	32	0.21	0.27

## Size mm

Material	Size mm											Weight kg	
	E	N	Ø d1	Ø D1	Ø F1	H1	H2	K1	S	S1	SW	U1=82mm	U1=382mm
Stainless steel 1.4571	G3/4 B	G1/2	8.2	32	10	19	15	16	0.9	1	32	0.21	0.27
	G3/4 B	G1/2	10.2	32	12	19	15	16	0.9	1	32	0.21	0.28
	G3/4 B	G3/4	7	32	12	22	17	16	2.5	3.5	32	0.20	0.38
	G3/4 B	G3/4	9	32	14	22	17	16	2.5	3.5	32	0.20	0.41
	G3/4 B	G3/4	11	32	14	22	17	16	1.5	2.5	32	0.18	0.33
	G3/4 B	G3/4	6.2	32	8	22	17	16	0.9	1	32	0.17	0.23
	G3/4 B	G3/4	8.2	32	10	22	17	16	0.9	1	32	0.17	0.23
	G3/4 B	G3/4	10.2	32	12	22	17	16	0.9	1	32	0.17	0.24
Copper alloy	G1/2 B	G1/2	8.5	26	10	19	15	14	0.75	0.75	27	0.11	0.18
	G3/4 B	G1/2	8.5	32	10	19	15	16	0.75	0.75	32	0.23	0.29

## Appropriate insertion length - mechanical dial type thermometer

Connection type	Rod length $l_1$
S <sup>1)</sup> , 3, 4, 5	L1 = L-10mm or L1=U1+18mm
2	L1 = L-30mm or L1=U1-2mm

1) Not suitable for use thermometer protection tube inner diameter Ø6.2 mm (tube 8 x 0.9 mm), Ø8.2 mm (tube 10 x 0.9 mm) and 10.2 mm (tube 12 x 0.9 mm)

## Appropriate insertion length - mechanical glass thermometer

Connection type	Rod length $l_1$
E	L1 = L-10mm or L1=U1+18mm

## JW45-Selection composition

Selection example JW45

1	S	2	A	3	G	4	N	5	S
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1.Material	S	304SS	
	L	316L	
	T( )	Other materials	
2.Instrument interface specification	A	G1/2 Internal thread	
	B	1/2NPT Internal thread	
	C	M20*1.5 Internal thread	
	D	M27*1.5 Internal thread	
	T( )	Other thread specifications	
3.Field connection specification	G	G1/2	
	H	1/2NPT	
	I	M20*1.5	
	J	M27*1.5	
	M	Unthreaded	
	T( )	Other thread specifications	
4.Insertion length mm	N	100	
	O	200	
	P	300	
	Q	400	
	R	500	
	T( )	Other size	
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	

## Instructions:

It indicates that the material of JW45 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; Rodewieg temperature instruments meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;