

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



# JW40

## Welded Flange Type 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.

When choosing a sheath, users need to pay attention to two important considerations, one is the type of process interface, and the other is the basic manufacturing method. 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 packaged jacket is made of pipe and ends are sealed by solid welding. The integral sheath is machined from bar material.

The JW40 series assembled flange 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  
High corrosion resistance coating  
With reinforcement tube  
Type JW40: Fast response design

### Product application

Petrochemical industry  
Land/ocean platform  
Equipment construction  
Suitable for heavy load applications



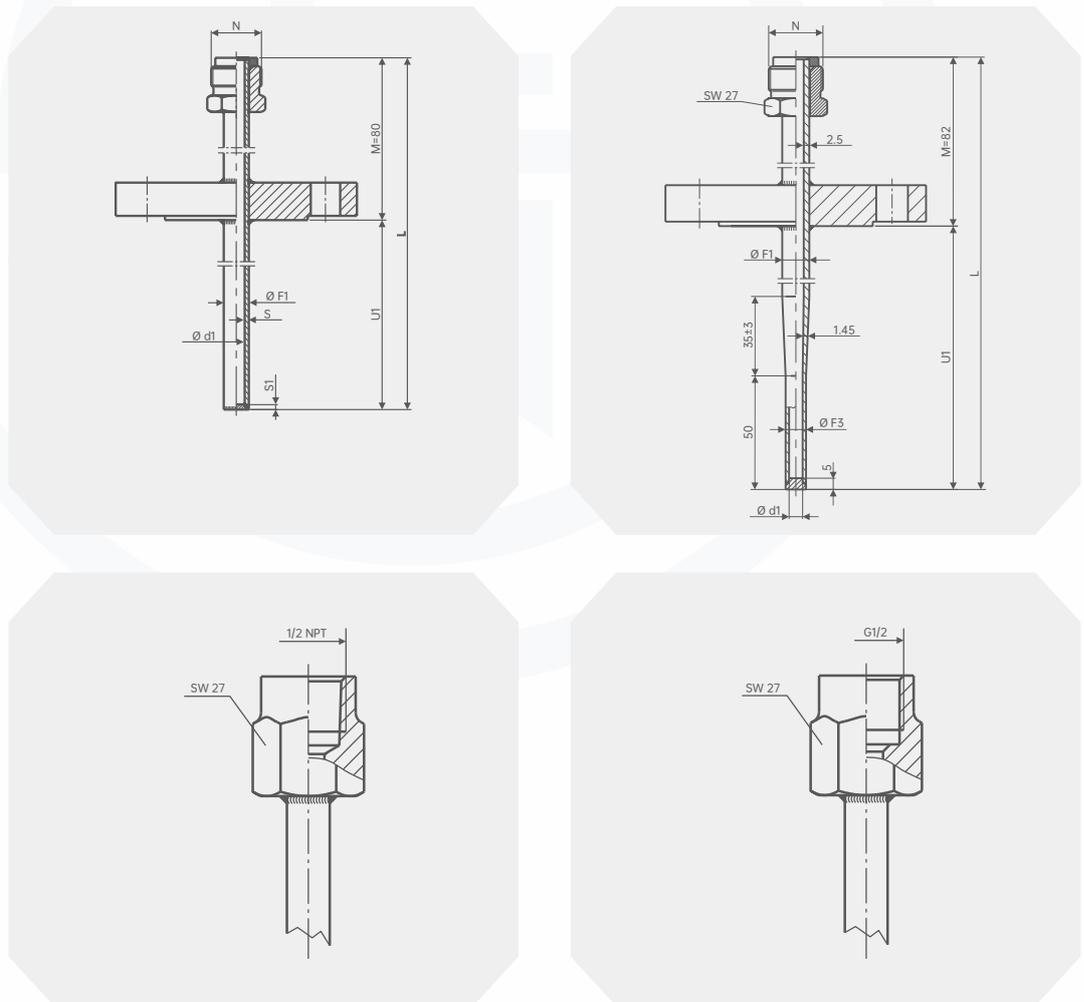
### Technical parameter

Sheath material	1.4571 Stainless steel	
Process connection	Flanges comply with national or international standards such as EN 1092-1, DIN 2527 and ASME B 16.5	
Thermometer connection	M24 x 1.5 external thread or G 1/2, 1/2NPT internal thread	
Aperture	Ø6.1mm, Ø7mm, Ø9mm, Ø11mm	
Insertion length U1	Can be customized according to customer needs	
Connection length H	PFA [Coating thickness standard minimum 0.4mm or optional minimum 0.6mm]	
Coating	ECTFE [(Halar®) Coating thickness min. 0.6mm]	
Maximum process temperature and pressure basis		
■ Load diagram DIN 43772	Sheath design	dimension
		Materials
		coating
■ Process condition	Process condition	Flow rate
		Dielectric density
Options	Other sizes and materials	

### Size mm

Legend:

- H Connection length
- U Insertion length
- N Connect to thermometer
- ØB Hole size
- ØQ Root diameter
- ØV End diameter
- ØBd Top diameter
- Tt End thickness (6.5mm)



## Size mm

Size mm					weight kg
					Francois DN25 PN16...40
Ø d1	Ø F1	S	S1	N	U1=225 mm
7	9	1	3	M24 x 1.5, G 1/2, 1/2 NPT	1.39
7	11	2	3	M24 x 1.5, G 1/2, 1/2 NPT	1.55
7	12	2.5	3.5	M24 x 1.5, G 1/2, 1/2 NPT	1.64
9	14	2.5	3.5	M24 x 1.5, G 1/2, 1/2 NPT	1.71
6.1	12	2.5	5	M24 x 1.5, G 1/2, 1/2 NPT	1.64
11	15	2	3	M24 x 1.5, G 1/2, 1/2 NPT	1.41

Additional weight for other flanges		
DN40	PN 16 ... 40	+0.76 kg
DN50	PN 16 ... 40	+1.63 kg
1"	150 lbs	-0.46 kg
1"	300 lbs	+0.04 kg
1"	600 lbs	+0.22 kg
1 1/2"	150 lbs	+0.22 kg
1 1/2"	300 lbs	+1.34 kg
1 1/2"	600 lbs	+1.85 kg

## Length of applicable probe rod for mechanical pointer thermometers

Connection type	Rod length $l_1$
S, 4, 5	$L1 = L-10\text{mm}$ or $L1=U1+M-10\text{mm}$
	$L1 = L-10\text{mm}$ or $L1=U1+M-10\text{mm}$

## Roughness of sealing surface

Flange standard		AARH ( $\mu\text{inch}$ )	Ra ( $\mu\text{m}$ )	Rz ( $\mu\text{m}$ )
ASME B16.5	finishing	125 ... 250	3.2 ... 6.3	-
	Degree of finish	< 125	< 3.2	-
	Annular groove surface	< 63	< 1.6	-
	groove	< 125	< 3.2	-
EN 1092-1	B1 type	-	3.2 ... 12.5	12.5 ... 50
	Type B2	-	0.8 ... 3.2	3.2 ... 12.5
DIN 2527	Type C	-	-	40 ... 160
	E type	-	-	< 16



## JW40-Selection composition

Selection example **JW40** **S** **A** **G** **N** **U**

1      2      3      4      5

1.Material	<b>S</b>	304SS
	<b>L</b>	316L
	<b>T( )</b>	Other materials
2.Instrument interface specification	<b>A</b>	G1/2 Internal thread
	<b>B</b>	1/2NPT Internal thread
	<b>C</b>	M20*1.5 Internal thread
	<b>D</b>	M27*1.5 Internal thread
	<b>T( )</b>	Other thread specifications
3.Field connection specification	<b>G</b>	DN25
	<b>H</b>	DN40
	<b>I</b>	DN80
	<b>J</b>	DN50
	<b>K</b>	DN100
	<b>L</b>	ANSI 1"
	<b>M</b>	ANSI 2"
	<b>T( )</b>	Other flange specifications
4.Insertion length mm	<b>N</b>	100
	<b>O</b>	200
	<b>P</b>	300
	<b>Q</b>	400
	<b>R</b>	500
	<b>T( )</b>	Other size
5.Sheath diameter mm	<b>U</b>	10 (Suitable for 8MM probe rod)
	<b>V</b>	12 (Suitable for 10MM probe rod)
	<b>W</b>	14 (Suitable for 12MM probe rod)
	<b>T( )</b>	Other inner diameter dimensions

### Instructions:

It indicates that the JW40 flanged sleeve is made of 304 stainless steel, the interface with the instrument is G1/2 internal thread, and the field connection is flange DN25, the insertion length is 100mm, and the inner diameter of the sheath is 10mm.

## Product certification

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