

The selection is detailed on page 5



JW50

Integral Drilled Flange 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 packaged jacket is made of pipe and ends are sealed by solid welding. The integral sheath is machined from bar material.

The JW50 series assembled flange sheathing is suitable for a wide range of electronic and mechanical thermometers manufactured by Rodwig. This series of sheathing not only meets international standards, but also uses a heavy load design, making it the first choice for chemical and petrochemical industries and equipment manufacturing applications.

Functional characteristics

Various welding sizes meet international standards

For high corrosion resistance coatings

Available jacket styles:

- Type A: Taper
- Type B: Straight
- Step - "Quill Tip" type:
(with open end)

Various thread standards, wall thickness, length optional

Product application

Petrochemical industry

Land/ocean platform

Equipment construction

Suitable for large process load applications



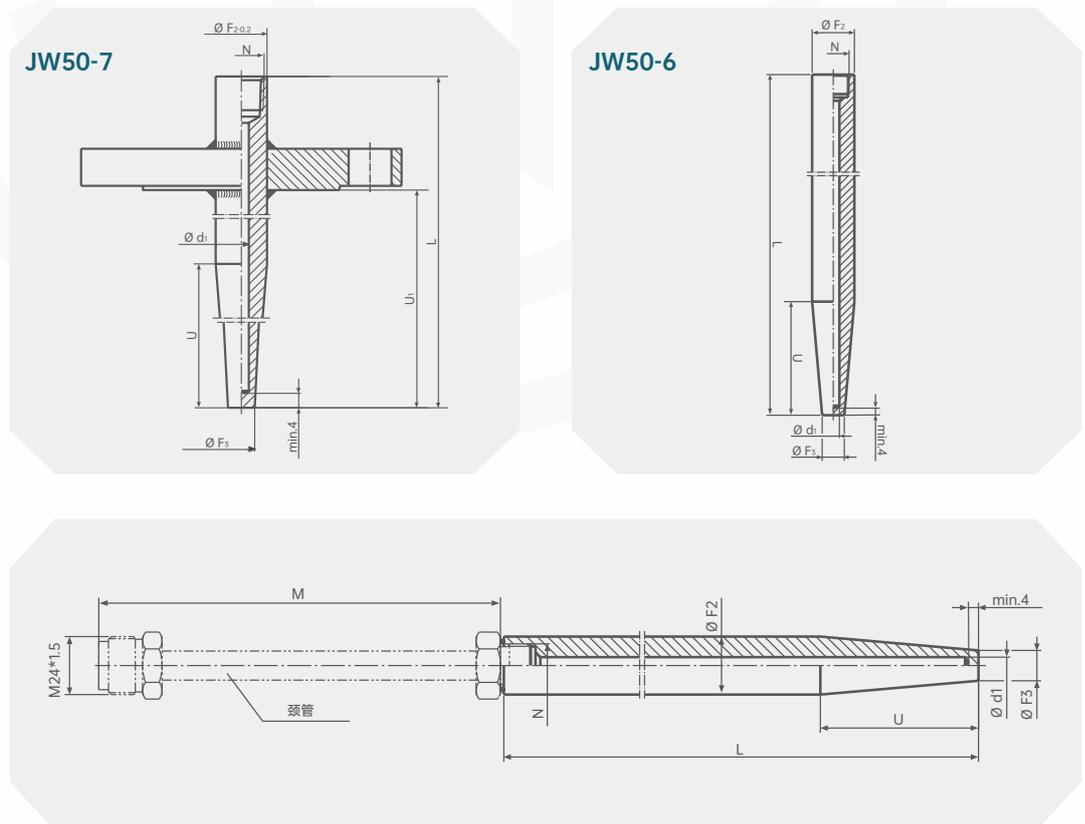
Technical parameter

Sheath material	Stainless steel 1.4571, 316/316L	
	Steel 1.0460, 1.5415, 1.7335, 1.7380	
Process connection	The outer diameter of the hot tube (head diameter) is $\varnothing 18$ mm, $\varnothing 24$ mm, $\varnothing 26$ mm, $\varnothing 32$ mm	
	Flanges comply with valid national or international standards, such as EN 1092-1, DIN 2527, ASME	
Thermometer connection	M14 x 1.5, M18 x 1.5, G1/2, G3/4 internal thread	
Aperture	$\varnothing 3.5$ mm, $\varnothing 7$ mm, $\varnothing 9$ mm, $\varnothing 11$ mm	
Insertion length U1	See table on page 3	
Cone length U		
Overall length L		
Coating	PFA [Coating thickness standard minimum 0.4mm or optional minimum 0.6mm]	
	ECTFE (Halar®) [Coating thickness min. 0.6mm]	
Maximum process temperature and pressure basis	Load diagram DIN 43772	
	Sheath design	dimension
		Materials
		French pressure rating
		coating
Process condition	Flow rate	
	Dielectric density	
Options	Other sizes and materials	

Size mm

legend:

- H Connection length
- U Insertion length
- N Connect to thermometer
- $\varnothing B$ Hole size
- $\varnothing Q$ Root diameter
- $\varnothing V$ End diameter
- $\varnothing Bd$ Top diameter
- Tt End thickness(6.5 mm)



Size mm

Standard length model JW50-6

Size mm		Weight kg
L	U	
110	65	0.24
110	73	0.23
140	65	0.34
170	133	0.34
200	65	0.54
200	125	0.45
260	125	0.65
410 ²⁾	275	0.92

1) Without inner diameter $\varnothing d1 = 3.5\text{mm}$

2) Standard length of neck tube $M = 165\text{mm}$

Standard length model JW50-7

Size mm			Weight kg	
L	U	U1	DN25,PN40	DN50,PN40
200	65	130	1.9	1.9
260	125	190	2.1	2.1
410 ¹⁾	275	340	2.3	2.3

Standard length model JW50-7

Size mm					
N	$\varnothing d1$	$\varnothing F2$	$\varnothing F3$	H1	H2
M14×1.5	3.5	18	9	16	13
M18×1.5	7	24	12.5	16	13
G1/2	7	26	12.5	19	15
G1/2	9	26	15	19	15
G3/4	11	32	17	22	17

Applicable sounding rod length

Dial type thermometer

Connection type	Rod length L1	
	Siphoness	Bore pipe
S, 4, 5	L1 = L-10mm	-
2	L1 = L-30mm	-
3	-	L1 = L+M-10mm ³⁾

Mechanical glass thermometer

Connection type	Rod length L1	
	Siphoness	Bore pipe
E	L1 = L-10mm	-
3	-	L1 = L+M-10mm ³⁾

3) Standard length of the neck tube $M = 165\text{mm}$

Versions combine insert length U1, cone length U, and total length L, in mm

Protection tube	Insertion length	Cone length	Overall length
Model number	U1	U	L
JW50-6 (Weld-in mold)	-	65, 73, 125, 133, 275	110, 140, 170, 200, 260, 410
JW50-7 (Flange type)	130, 190, 340	65, 125, 275	200, 260, 410

Roughness of sealing surface

Flange standard		AARH (μinch)	Ra (μm)	Rz (μm)
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



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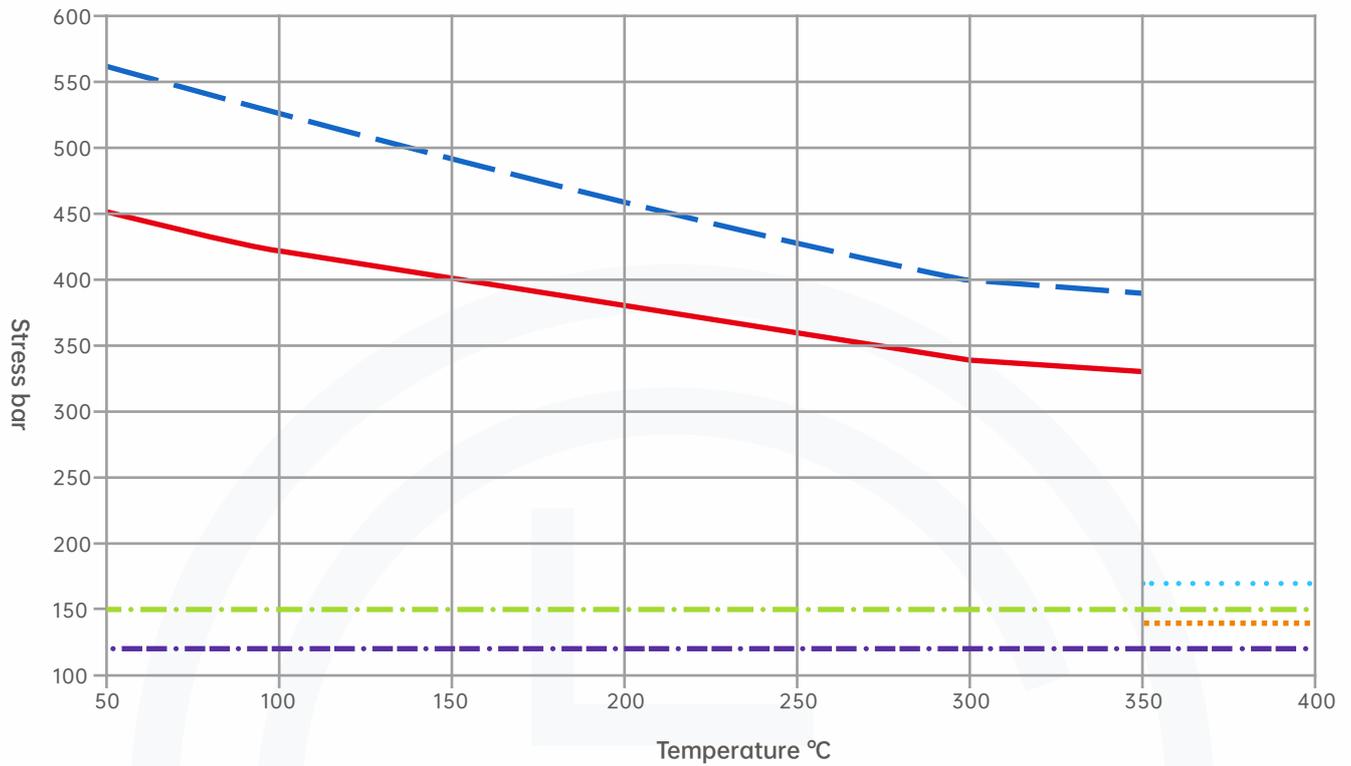
For more product information, please visit www.ludwig-schneider.com.cn



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INSTRUMENT

Pressure-temperature diagram

JW50 casing made of stainless steel 1.4571



Caption:

- water 3m/s U=65mm 内径 ID Ø 3.5mm
- water 3m/s U=125mm 内径 ID Ø 7mm
- · - air 60m/s U=65mm 内径 ID Ø 3.5mm
- · - air 60m/s U=125mm 内径 ID Ø 7mm
- · · steam 60m/s U=65mm 内径 ID Ø 3.5mm
- · · steam 60m/s U=125mm 内径 ID Ø 7mm

- 1) The rating depends on the following parameters:
- Process medium
 - Process pressure
 - Process temperature (depending on selected coating)
 - Traffic
 - Hot sleeve design (size, material)

JW50-Selection composition

Selection example JW50



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	DN25
	H	DN40
	I	DN80
	J	DN50
	K	DN100
	L	ANSI 1"
	M	ANSI 2"
	T()	Other flange specifications
4.Insertion length mm	N	100
	O	200
	P	300
	Q	400
	R	500
	T()	Other size
5.Sheath diameter mm	U	10 (Suitable for 8MM probe rod)
	V	12 (Suitable for 10MM probe rod)
	W	14 (Suitable for 12MM probe rod)
	T()	Other inner diameter dimensions

Instructions:

It indicates that the JW50 flanged protective 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; Rodewieg temperature instruments meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;