

Thermowells

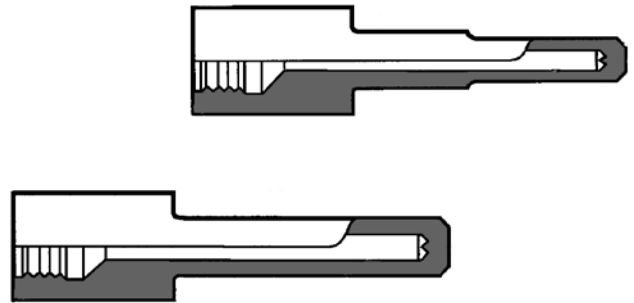
Type TW.SW/TW20

WIKA Datasheet TW.SW/TW20

Application

Thermowells for temperature instruments are recommended for all process systems where pressure, velocity or viscous, abrasive and corrosive materials are present individually or in combination. A properly selected thermowell will protect the temperature instrument from possible damage resulting from these process variables.

Furthermore, a thermowell permits removal of the temperature instrument for replacement, repair or testing without effecting the process media or the system.



Socket Weld Configuration

Standard Features

Process connections

$\frac{3}{4}$ " & 1" nominal pipe size

Instrument connection

$\frac{1}{2}$ " NPSM Standard

Bore diameter

.260", .385"

Materials

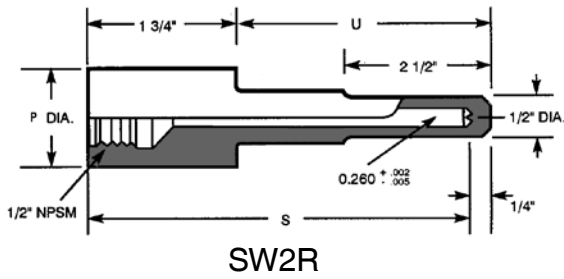
304 SS, 316 SS, Carbon steel
(Other materials available on application)

Surface finish

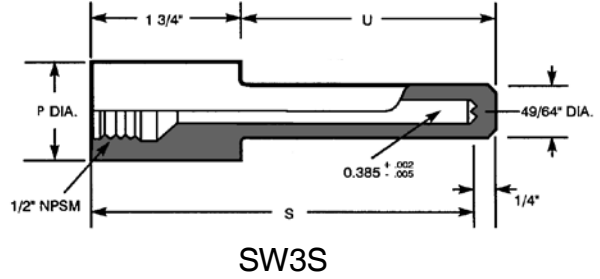
AISI 304 & AISI 316: 16-32 Ra

Ordering Information

See current WIKA Catalog or WIKA Price List for ordering information.



SW2R



SW3S

Pipe size P	Stem length S	Insertion length U
3/4" 1.050 Diameter	4"	2 1/2"
	6"	4 1/2"
	9"	7 1/2"
	12"	10 1/2"
	15"	13 1/2"
	18"	16 1/2"
1" 1.315 Diameter	4"	2 1/2"
	6"	4 1/2"
	9"	7 1/2"
	12"	10 1/2"
	15"	13 1/2"
	18"	16 1/2"
24"	22 1/2"	

Pressure- Temperature Rating							
Material	Temperature - °F.						
	70°	200°	400°	600°	800°	1000°	1200°
Brass	5,000	4,200	1,000				
Carbon steel	5,200	5,000	4,800	4,600	3,500	1,500	
A.I.S.I. - 304	7,000	6,200	5,600	5,400	5,200	4,500	1,650
A.I.S.I. - 316	7,000	7,000	6,400	6,200	6,100	5,100	2,500
Monel®	6,500	6,000	5,400	5,300	5,200	1,500	

Maximum Fluid Velocity - Feet Per Second									
Well type	B Shank diameter	Material	Insertion length - U						
			2 1/2	4 1/2	7 1/2	10 1/2	13 1/2	16 1/2	22 1/2
3/4" SW2R	3/4"	Carbon steel	290 (106)	123 (71.2)	44.9 (42.7)	22.8	13.8	9.3	4.9
		A.I.S.I. - 304 & 316	300 (148)	128 (99.3)	46.4	23.6	14.3	9.6	5.1
1" SW2R	7/8"	Carbon steel	290 (106)	143 (84.3)	51.6 (50.6)	26.2	15.9	10.6	5.7
		A.I.S.I. - 304 & 316	300 (148)	148 (117)	53.5	27.2	16.5	11.0	5.9
3/4" SW3S and 1" SW3S	49/64"	Carbon steel	426 (260)	192 (144)	69.5	35.4	20.5	14.3	7.7
		A.I.S.I. - 304 & 316	449 (360)	199	71.9	36.6	21.2	14.8	8.0

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - Thermowell style	
Code	
A	Tapered
B	Straight
C	Stepped

2 - Unit of measure	
I	Imperial
M	Metric

3 - Welding diameter (P)	
2	1.050" (for 3/4" pipe)
3	1.315" (for 1" pipe)
4	1.900" (for 1 1/2" pipe)
2	26.7 mm (for 3/4" pipe)
3	33.4 mm (for 1" pipe)
4	48.3 mm (for 1 1/2" pipe)

4 - Instrument connection	
GF	1/2 NPSM
TD	G 1/2 female
UD	2 NPT female

5 - Insertion length (U)	
****	Please specify; maximum 62" (1575 mm) (e.g. 8.5" = 08500) (e.g. 240 mm = 00240)

6 - Head length (H)	
01750	1.75"
00045	45 mm
****	Please specify (e.g. 1.5" = 01500) (e.g. 48 mm = 00048)

7 - Material	
G3	316/316L SS
G1	304/304L SS
F1	Carbon steel A105
G5	310 SS
G6	321 SS
G8	347 SS
G4	316H SS
G2	304H SS
H1	Carbon steel F11
H2	Carbon steel F22
H3	Carbon steel F5
H4	Carbon steel F9
H5	Carbon steel F91
B1	Inconel® 600
B2	Inconel® 601
B3	Inconel® 625
C1	Incoloy 800H/HT
C2	Incoloy 825
A5	Titanium Grade II
D1	Monel® 400
E1	Nickel 200
E2	Nickel 201
A2	Hastelloy® C-276
A1	Hastelloy® B-2
A3	Hastelloy® C-4
I1	410 SS
I2	446 SS
A4	Hastelloy® C-22
L6	Duplex 1.4462 SS
L5	1.4571 SS
L1	Carbon steel 1.7335 (13CrMo44)
L4	Carbon steel 1.5415 (15Mo3/16Mo3)
L2	Carbon steel 1.7380 (10CrMo910)
L3	Carbon steel 1.0460 (C22.8)

8 - Bore size (B)	
A	0.260" (6.6 mm)
M	0.335" (8.5 mm)
B	0.385" (9.8 mm)

9 - Pressure Rating	
3	3,000 psi
6	6,000 psi

10 - Root diameter (Q)	
0500	0.500"
0750	0.750"
1000	1.000"
1250	1.250"
1500	1.500"
0127	12.7 mm
0190	19 mm
0250	25 mm
0320	32 mm
0380	38 mm
****	Please specify (e.g. 1.5" = 1500) (e.g. 24 mm = 0240)

11 - Tip diameter (V)	
0500	0.500"
0625	0.625"
0750	0.750"
0127	12.7 mm
0160	16 mm
0190	19 mm
****	Please specify (e.g. 0.625" = 0625) (e.g. 24 mm = 0240)

12- RTD / TC / Thermometer assembly	
1A	TR10 Industrial RTD assembly
IB	TC10 Industrial TC assembly
IC	TR15 Remote RTD assembly
ID	TC15 Remote TC assembly
1F	Please specify (e.g. 0.875" = 0875) (e.g. 15 mm = 0150)
YY	Dial thermometer (Bimetal / Gas actuated)
ZZ	Without

13 - Certificates	
1	Quality certificates
Z	Without

14 - Additional order details	
T	Additional text
Z	Without

