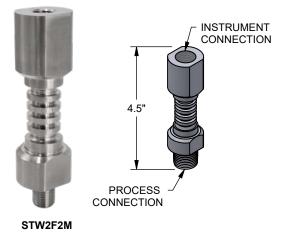
# **COOLING TOWERS**

Reotemp Cooling Towers protect pressure instruments from extremely hot process media without the pain and hassle of remote mounting the instrument. It is specifically designed to mount above a diaphragm seal or thread directly into the process. Reotemp's unique design can reduce the process temperature by up to 600°F!





## **SPECIFICATIONS**

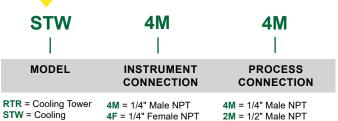
- Protects Pressure Instruments from High Process Temperatures
- Reduces Temperature while Maintaining a Direct Mount
- Fully Welded, 316 Stainless Steel Construction

### **Application Notes**

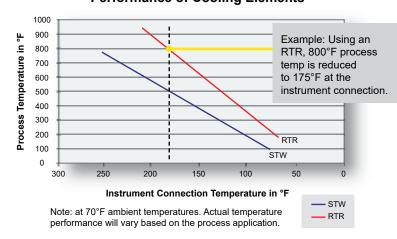
- Cooling towers may be threaded directly into process media in applications where the fluid viscosity is low enough to flow through a 3mm ID tube without clogging. For best performance, mount a cooling tower above a diaphragm seal.
- If mounting between a pressure instrument and diaphragm seal, use a 3-digit mounting code in the diaphragm seal part number (pg.84)
- Pigtail siphons (pg.232) or diaphragm seals should be used for steam service.

# **COOLING TOWERS**

HOW TO ORDER: Choose options to build a part number. For example: STW4M4M



## **Performance of Cooling Elements**



Maximum Working Fressure				
Temperature in Fahrenheit	RTR (psi)	STW (psi)		
100	6000	15000		
200	5160	12905		
300	4660	11655		
400	4280	10700		
500	3980	9955		
600	3755	9385		
650	3680	9200		
700	3620	9055		
750	3555	8890		
800	3515	8790		
850	3480	8705		
900	3455	8650		
950	3215	8045		
1000	3025	7575		
1050	2995	7500		
1100	2535	6350		
1150	1965	4925		
1200	1535	3850		
1250	1220	3055		
1300	970	2425		
1350	800	2000		
1400	625	1570		
1450	485	1225		
1500	340	865		

**Maximum Working Pressure** 

## INSTRUMENT MOUNTING CONFIGURATIONS

#### **DIRECT MOUNT**

Direct Mounting a pressure gauge, switch, or transmitter is the most common diaphragm seal assembly.



- · Allows Replaceability
- High Quality Thread Sealant
- · Inspector Seal



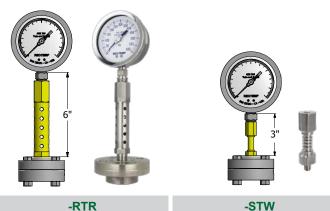
- Tamper Proof
- Rated for High Temps
- Leak Resistant

Code	Description	Max. Temp
-DTD	Threaded Instrument Connection	400°F
-DWD	Welded Instrument Connection	600°F

**Assembly Notes:** Welded connection recommended for pressure exceeding 1,500 psi for purposes of leak prevention.

### **COOLING ELEMENTS**

Used in either high temp or cold temp applications, Cooling Elements mounted above diaphragm seals quickly normalize fluid temperature toward ambient. This protects the pressure instrument while still maintaining the convenience of a direct mount.



Code	Description	Max. Temp
-RTR	6" Cooling Tower	750°F
-STW	3" Cooling Standoff	600°F

**Assembly Notes:** Cooling elements are welded to diaphragm seal. Instruments are threaded to cooling element unless specified. All lengths are nominal.

#### **REMOTE MOUNT**

Remote Mounting a pressure instrument using flexible capillary is a common mounting method when the point of measurement is in a hazardous or inconvenient location.

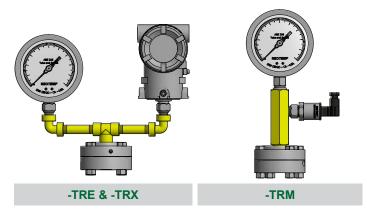


Code	Description
A	Armored, Threaded, 2mm
В	Amored, Welded, 2mm
W	PVC, Threaded, 2mm
P	PVC, Welded, 2mm
С	Armored, Threaded, 1mm
E	Armored, Welded, 1mm
F	PVC, Threaded, 1mm
G	PVC, Welded, 1mm
Н	Armored, Threaded, 0.55mm
J	Armored, Welded, 0.55mm
K	PVC, Threaded, 0.55mm
L	PVC, Welded, 0.55mm
Note: ?? = Length in feet (e.g. 05 = 5 feet)	

**Assembly Notes:** 2mm, 1mm, and .55mm are capillary inner diameter. Ambient temperature limit of PVC coated armor is 250°F. Process temperature limit of threaded connections is 400°F. Standard instrument connection is threaded (Smart Transmitters are welded), unless specified by customer.

### TREE ASSEMBLIES

Tree Assemblies offer the ability to mount two pressure instruments onto one diaphragm seal, allowing the user to gain both a local indication and a remote signal without adding an additional pipe insertion.



Code	Description	Max. Temp
-TRE	Goal Post, Low Pressure Assembly (Max. 150 psi)	400°F
-TRX	Goal Post, Heavy Duty (Max. 3,000 psi)	600°F
-TRM	Compact Tree Assembly (Max. 3,000 psi)	600°F

Assembly Notes: Threaded joints are fully welded for consistent instrument orientation. Instrument connections are threaded unless specified by customer. Diaphragm seal must displace enough fluid to drive both instruments.