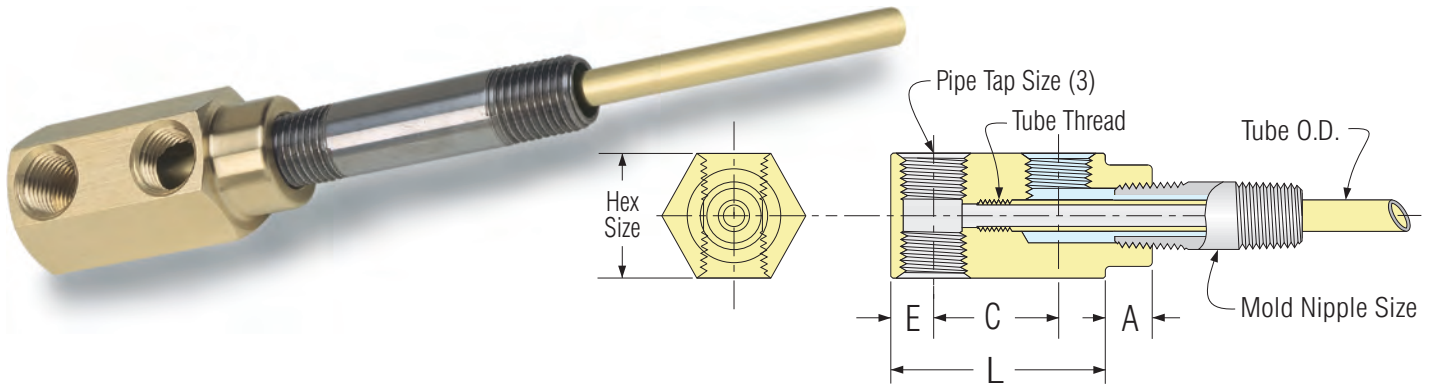


# Nipple Type Cascade Assemblies



- Assemblies include brass head, 12" Brass Tube, 2" long galvanized pipe nipple, and brass pipe plug.
- Solid brass heads are precision machined for accurate assembly.
- Cascade Assemblies are available in special pipe tap and tube combinations.

Catalog Number	Mold Nipple (NPT)	Pipe Tap Size (NPT)	Tube O.D.	Brass Tube Included	Hex Size	E	C	A	L	Stock Item
16N	1/8	1/16			3/4	7/32	1/2	9/32	15/16	•
186N	1/8	1/8	3/16	187T-12	7/8	2 1/64	1 1/16	9/32	1 1 1/32	•
181N	1/8	1/8			7/8	2 1/64	1	9/32	1 2 1/32	•
146N	1/4	1/8			1	2 1/64	1 1/16	7/32	1 1 1/32	•
146N-4	1/4	1/4	1/4	250T-12	1	2 1/64	1 1/16	7/32	1 1 1/32	•
141N	1/4	1/8			1	2 1/64	1	7/16	1 2 1/32	•
141N-4	1/4	1/4			1	2 1/64	1	7/16	1 2 1/32	•
381N	3/8	1/8			1	1 1/32	1	13/32	1 1 1/16	•
381N-4	3/8	1/4	5/16	312T-12	1	1 1/32	1	13/32	1 1 1/16	•
121N-4	1/2	1/4	7/16	437T-12	1 1/4	13/32	1	9/16	1 13/16	•
341N-4	3/4	3/8	5/8	625T-12	1 1/2	1/2	1 1/4	3/4	2 1/4	•

# Nipple Type Heads (for Brass Tubes)

- For use with Standard Brass Tubes**
- All dimensions same as above for corresponding catalog number.
- Use Brass Tubes on Page 7.



Catalog Number	Tube Thread Size	Use Tube Number	Stock Item
16H			•
186H	10-32	187T-	•
181H			•
146H			•
146H-4	1/4-28	250T-	•
141H			•
141H-4			•
381H	5/16-24	312T-	•
381H-4			•
121H-4	7/16-20	437T-	•
341H-4	5/8-18	625T-	•

Order tubes for these heads on page 7.

# Nipple Type Heads (for High Flow Tubes)

- Nipple Type Heads for use with HIGH FLOW STAINLESS TUBES**



Increase Flow up to 60%



- All dimensions same as above except for tube thread size.
- Use High Flow Stainless Tubes on Page 7.

Catalog Number	Tube Thread Size	Use Tube Number	Stock Item
16H-HFT			•
186H-HFT	1/4-28	HF187T-	•
181H-HFT			•
146H-HFT			•
146H-4-HFT	5/16-24	HF250T-	•
141H-HFT			•
141H-4-HFT			•
381H-HFT	3/8-24	HF312T-	•
381H-4-HFT			•
121H-4-HFT	1/2-20	HF437T-	•

Order tubes for these heads on page 7.

# High Flow Stainless Tubes



*Increase Flow  
up to 300% !!*

- All stainless construction for high strength and durability.
- Cut to exact lengths at no charge.
- We stock over 150 sizes of thin wall stainless tube.
- We build stepped tube assemblies and custom threaded tubes to your print.

Catalog Number	Thread Size	Thread Length	Tube O.D.	Tube I.D.	Overall Length "L"			
					12"	18"	24"	36"
HF093T- JHF093T-	5-44 10-32	1/8 3/16	.090	.076	•	•	•	•
HF125T- JHF125T-	10-32 1/4-28	3/16 1/4	.125	.109	•	•	•	•
HF187T- JHF187T-	1/4-28 5/16-24	1/4 5/16	.187	.167	•	•	•	•
HF250T- JHF250T-	5/16-24 3/8-24	5/16 3/8	.250	.230	•	•	•	•
HF312T- JHF312T-	3/8-24 7/16-20	3/8 7/16	.312	.288	•	•	•	•
HF375T- JHF375T-	7/16-20 1/2-20	7/16 1/2	.365	.340	•	•	•	•
HF437T-	1/2-20	1/2	.427	.397	•	•	•	•

STOCK ITEM

To order, specify Catalog Number and Overall Length. Example: HF250T-18

# Standard Brass Tubes



- Tubes 18" and longer have both ends threaded
- Half-hard temper for reliable performance.
- Also available in Stainless Steel.
- Bulk tube available.

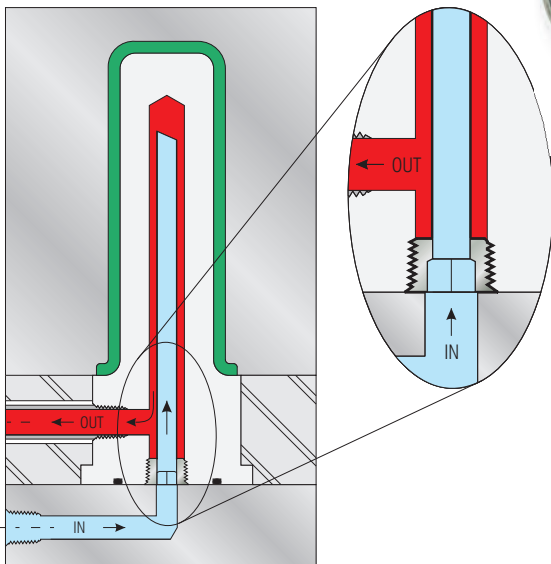
Catalog Number	Tube O.D.	Tube I.D.	Thread Size	Thread Length	Overall Length "L"			
					12"	18"	24"	36"
125T-	.125	.061	5-44	3/16	•	•	•	•
187T-	.187	.123	10-32	3/16	•	•	•	•
250T-	.250	.170	1/4-28	1/4	•	•	•	•
312T-	.312	.210	5/16-24	5/16	•	•	•	•
375T-	.375	.273	3/8-24	3/8	•	•	•	•
437T-	.437	.307	7/16-20	7/16	•	•	•	•
625T-	.625	.495	5/8-18	5/8	•	•	•	•

STOCK ITEM

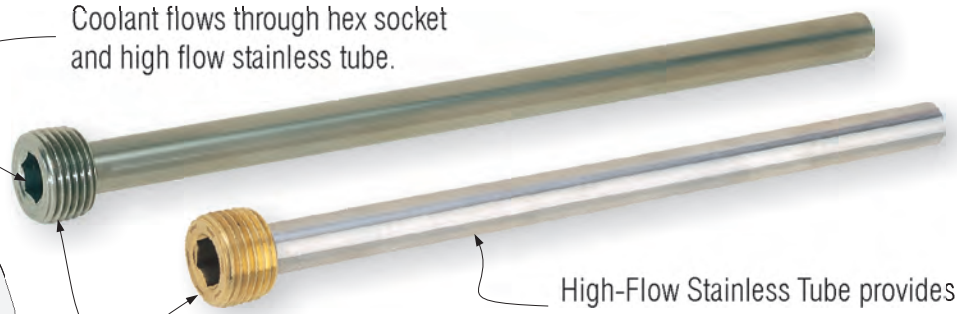
To order, specify Catalog Number and Overall Length. Example: 250T-18

# Piston Tubes

- All stainless steel construction provides high strength and reliable performance.
- Flow thru pipe plug available in custom sizes and materials.



Coolant flows through hex socket and high flow stainless tube.



High-Flow Stainless Tube provides maximum cooling rates.

Available all stainless steel, or stainless tube with brass pipe plug.

Catalog Number (Stain. Plug)	Catalog Number (Brass Plug)	Pipe Size (NPT)	Tube O.D.	Tube I.D.	Overall Length "L"			
					12"	24"	36"	48"
PT16-	PT16B-	1/16	.125	.109	•	•	•	•
PT18-	PT18B-	1/8	.187	.167	•	•	•	•
PT14-	PT14B-	1/4	.250	.230	•	•	•	•
PT38-	PT38B-	3/8	.365	.340	•	•	•	•
PT12-	PT12B-	1/2	.365	.340	•	•	•	•
PT34-	PT34B-	3/4	.427	.397	•	•	•	•

STOCK ITEM

To order, specify Catalog Number and Overall Length. Example: PT14-24

# Pipe Plugs

- Finest quality - Made In USA.
- Std qty. 100 pcs. on sizes 1/16 - 3/8. No additional charge for partial boxes.
- Standard plugs are flush type (7/8 taper). Oversize (3/4 taper) also available from stock.




Catalog Number	Pipe Plug Material	Thread Size (NPT)									
		1/16	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Plug Height H →		.250	.250	.406	.406	.531	.531	.656	.656	.656	.656
BF-	Brass	•	•	•	•	•	•	•	•	•	•
SF-	Alloy Steel	•	•	•	•	•	•	•	•	•	•
SSF-	Stainless	•	•	•	•	•	•	•	•	•	•

To order, specify Catalog Number and pipe size. Example: BF-1/4

Stock Item

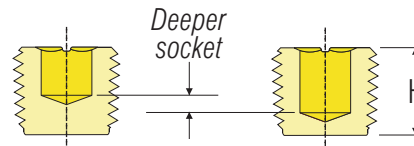
# Heavy Duty Pipe Plugs

With Patented  Technology....

- Standard brass flush seal plugs with  forming technology for maximum wrenching torque.
- Extra deep socket can't "round out" when plugs are installed or removed.
- Order in any quantity



Extra deep socket is stronger, and will not strip out.



Catalog Number	Pipe Plug Material	Thread Size (NPT)						
		1/16	1/8	1/4	3/8	1/2	3/4	
XTBF-	Brass	•	•	•	•	•	•	

To order, specify Catalog Number and pipe size. Example: XTBF-1/4

Pipe Size	Plug Ht. H
1/16	.296
1/8	.312
1/4	.421
3/8	.484
1/2	.625
3/4	.625

# BSP Pipe Plugs

- Fits BSPT and BSPP threaded holes.
- Features extra deep socket for strength.
- Order in any quantity

BSP Identification Ring



Catalog Number	Material	Thread Size (BSPT)						
		1/8 -28	1/4 -19	3/8 -19	1/2 -14	3/4 -14	1 -11	
MP-	Brass	•	•	•	•	•	•	

To order, specify Catalog Number and pipe size. Example: MP-1/4

Pipe Size	H (mm)
1/16	8
1/8	8
1/4	10
3/8	10
1/2	12
3/4	14
1	17

# Threadless Diverting Plugs

- Withstand pressures to 72 psi.
- Buna O-ring will seal rough or corroded holes.
- Available in sizes to fit standard or oversize cooling channels



Catalog Number	Drill Size	Nominal Pipe Size	Hex Size	Overall Length	Stock Item
BTP-10	11/32	1/8	5/64	.50	•
BTP-10-OS	23/64				•
BTP-20	7/16	1/4	1/8	.56	•
BTP-20-OS	29/64				•
BTP-40	9/16	3/8	1/8	.62	•
BTP-40-OS	37/64				•
BTP-60	11/16	1/2	1/8	.62	•
BTP-60-OS	45/64				•