

SUBMITTAL SHEET

JOB NAME	ITEM TAG
JOB LOCATION	PART NUMBER
CONTRACTOR	DATE
ENGINEER APPROVAL	DATE

THERMOSTATIC MIXING VALVE

T-45NL

Designed to prevent scalding and thermal shock in domestic or commercial potable water distribution systems.

The temperature-actuated, three-way thermostatic mixing design permits precise water temperature control to individual or multiple fixtures and gang showers.

Durable poly-resin piston is self-lubricating and dramatically reduces corrosion and scale accumulation, resulting in a longer service life.

Positive lock-down setting knob prevents accidental adjustment. Each valve comes with an adjustment tool.

Available in nominal sizes 3/8", 1/2" and 3/4" in male NPT, copper tubing compression, tubing press-fit (VUS pattern), tubing push-fit Insta-Loc II™, PEX barb (F1807 barb) and tubing sweat.*

*Copper sweat connections do not include the integral check valves.

Working Pressure, Non Shock (PSI)

Cold working pressure (CWP): 145 psi

Saturated steam (WSP): Not suitable for steam service

Minimum flow rate: 0.5 gpm* @ 0.8 psi

Maximum flow rate: 15 gpm* @ 125 psi

Temperature adjustment range: 86°F to 120°F

Cold water supply temperature range: 41°F to 68°F

Hot water supply temperature range: 132.8°F to 149°F

Accuracy of mixed water temperature: +/- 3.8°F

Minimum temperature differential between hot supply and MIX outlet: 21.6°F

Supply pressure:

Static: 145 psi

Dynamic: 72.5 psi

Maximum allowable imbalance: 2:1 ratio

**Should not be used for valve selection or system sizing. The Cv valve listed on this product submittal sheet should be used for valve selection.*

Note: See IOM sheet for complete installation, operation and adjustment procedures.

Certifications/Listings:

Third-party certified.

ANSI/NSF 61: Drinking water system components health effects.

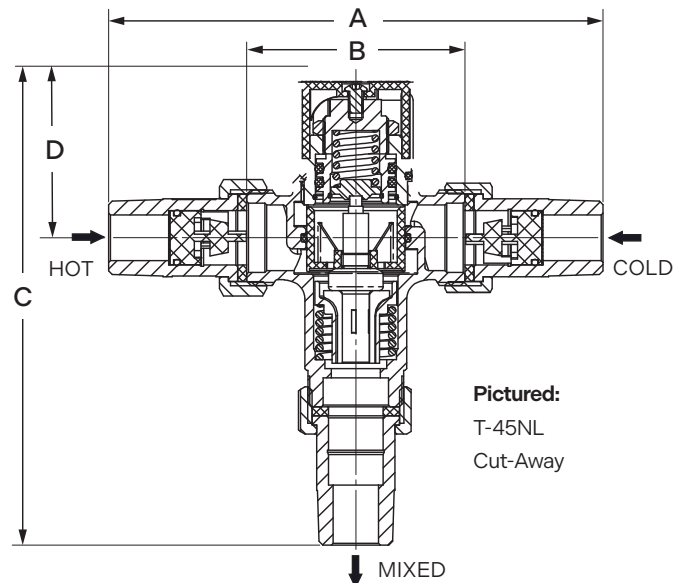
ASSE 1017: Performance requirements for temperature actuated mixing valves for hot water distribution systems.

ASSE 1069: Performance requirements for automatic temperature control mixing valves.

ASSE 1070: Performance requirements for water temperature limiting devices.



Pictured:
T-45NL



MATERIAL SPECIFICATIONS

Part	Material
1 Body	Lead-Free Forged Brass, Chrome Plated
2 Spring	304 Stainless Steel
3 Flow Diverter	Polysulfone (PSU) Resin
4 Thermostatic Sensor	Copper-Encased Paraffin Wax
5 O-Ring	EPDM Elastomer
6 Closure Piston	Polysulfone (PSU) Resin
7 Retainer Circlip	304 Stainless Steel
8 Stem Spring Base	Lead-Free Forged Brass
9 Stem Spring	304 Stainless Steel
10 Stem O-Ring (2)	EPDM Elastomer
11 Stem	Lead-Free Forged Brass
12 Bonnet O-Ring	EPDM Elastomer
13 Stem Retainer Circlip	304 Stainless Steel
14 Bonnet	Lead-Free Forged DZR Brass
15 Locknut	Forged Brass
16 Setting Knob	ABS Resin
17 Knob Retainer Pin	ABS-Polycarbonate Blend
18 End Adapter Gasket	EPDM Elastomer
19 End Adapter Check Module	Body & Piston: Polyacetal Resin Spring: 304 Stainless Steel Seat: EPDM
20 End Adapter Check Strainer Screen	304 Stainless Steel
21 End Adapter Body	Lead-Free Forged Brass, Chrome Plated
22 End Adapter Union Nut	Forged Brass, Chrome Plated

DIMENSIONS - 3/8"

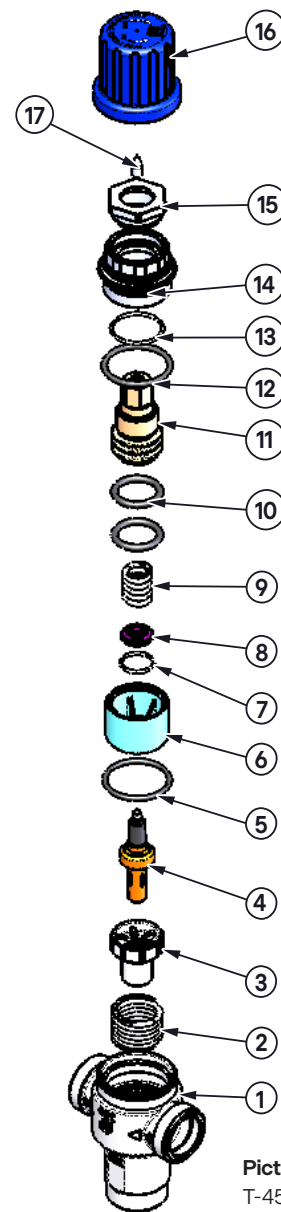
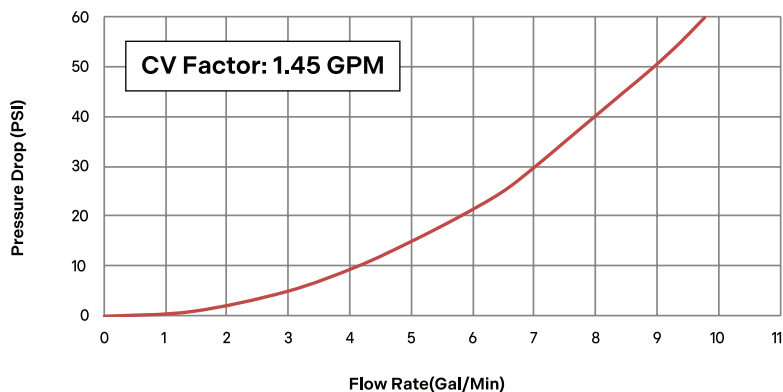
A		B		C		D	
MNPT:	5.24"	2.37"	MNPT:	5.35"	2.06"		
Sweat:	4.89"		Sweat:	5.17"			
Compression:	5.73"		Compression:	5.59"			
Push-To-Connect:	5.82"		Push-To-Connect:	5.65"			
Crimp PEX Barb:	5.47"		Crimp PEX Barb:	5.46"			
Expansion PEX Barb:	5.22"		Expansion PEX Barb:	5.50"			

DIMENSIONS - 1/2"

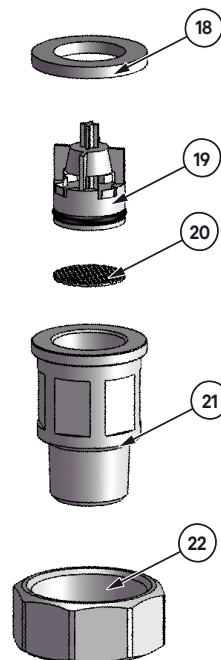
A		B		C		D	
MNPT:	5.38"	2.37"	MNPT:	5.41"	2.06"		
Sweat:	5.12"		Sweat:	5.28"			
Compression:	5.76"		Compression:	5.60"			
Press-To-Connect:	6.09"		Press-To-Connect:	5.78"			
Push-To-Connect:	5.97"		Push-To-Connect:	5.72"			
Crimp PEX Barb:	5.50"		Crimp PEX Barb:	5.48"			
Expansion PEX Barb:	5.22"		Expansion PEX Barb:	5.38"			

DIMENSIONS - 3/4"

A		B		C		D	
MNPT:	5.92"	2.48"	MNPT:	5.68"	2.10"		
Sweat:	5.57"		Sweat:	5.50"			
Compression:	6.26"		Compression:	5.84"			
Press-To-Connect:	6.58"		Press-To-Connect:	6.00"			
Push-To-Connect:	6.76"		Push-To-Connect:	6.10"			
Crimp PEX Barb:	5.93"		Crimp PEX Barb:	5.67"			
Expansion PEX Barb:	6.06"		Expansion PEX Barb:	5.99"			



Pictured:
T-45NL
Exploded View



Pictured:
T-45NL
End Adapter with Integral
Check Valve Exploded View