Mixing Valves

Inlet Outlet

Certified for use in potable water applications.

Powers—Feature paraffin-based, advanced thermal actuation design to sense and adjust outlet temperature for precise temperature

Flow

Body

■ LEONARD®

Inlet/

control. Virtual shutoff if supply pressure fails. Vandal-resistant locking mechanism. Rotatable union triple-duty checkstops.

Max. pressure: 125 psi

■ Temp. range: 90° to 160°F

POWERS" **Watts**—Uses a double throttling design to • Max. pressure: control both the cold and hot water supply 150 psi to the mixed outlet. Includes an adjustment - Temp. range:

cap with locking feature.

Mfr.

Mfr

80° to 120°F



Outlet Typ Material Rate **Brand** Size Model 3/4 LFMM431-1 42 gpm 64 gpm 57 gpm at 45 psi Brass Brass Powers Powers 15W07/ 3/4 x 1 LFMM432-1 LFSH1432 W/TP GAUGE Lead-Free Brass NP. Powers 26X132 Brass Brass Powers Powers 1 1/4 in 1 ½ in NPT 127 gpm at 45 psi Lead-Free Brass ASSF 1017 CSA B125 Powers LFSH1434 W/TP GAUGI 26X133 ASSE 1017, USA B125 ASSE 1016-96, ASSE 1017ASSE 1069 & ASSE 1070CSA B125 Certified ASSE 1017, CSA B125 ASSE 1017, CSA B125 1 in PEX 20 gpm at 125 psi Brass Watts 1 LF MMV-PEX 5DMF9 1 in FNPT NPT 208 gpm Brass 201 gpm at 45 psi Lead-Free Brass 2 LFMM435-1 LFSH1435 W/TP GAUGE 15W078 26X134 2 in

Steam and Water **Mixing Valves**

- Max. pressure: 80 psi
- Temp. range: 65° to 140°F

Lead free thermostatic mixing to maintain output water temperature for industrial steam mixing applications. FNPT connections.

Inlet Size	Outlet Size	Rate	Model	No.
	Lead Free Bronze			
3/4 in	3/4 in	27 gpm	TMS-25-CP	15Z016
3/4 in	1 in	30 gpm	TMS-50-CP	15Z018
1 in	1 1/4 in	32 gpm	TMS-80-CP	15Z020
1 1/4 in	1 ½ in	60 gpm	TMS-150-CP	15Z022
Lead Free Roug	h Bronze			
3/4 in	3/4 in	27 gpm	TMS-25-RF	15Z017
3/4 in	1 in	30 gpm	TMS-50-RF	15Z019
1 in	1 1/4 in	32 gpm	TMS-80-RF	15Z021
1 1/4 in	1 ½ in	60 gpm	TMS-150-RF	15Z023

Flow



Lead Free Hot Water Distribution Systems ≥ LEONARD®

TM Series (29JA78): Single valve is highly responsive to temp. changes. Bi-metal thermostat.

XL Series: Single valve for high and low water flows. Wax thermostats with ball valve and dial thermometer. LV Series: Single valve master

mixing valve. Wax thermostat. TM Hi-Lo System Series (29JA79 to 29JA84): 2 valve system for low and high water demands. Bi-metal thermostat.

All models are ideal for industrial and commercial applications. Certified for use in potable water applications and meet ASSE 1017.

For Use With	Model	No.	
Rebuild Kits			
29JA68		KIT R/XL32	20RH45
29JA69		KIT R/XL82	20RH46
29JA70	Element Holder, O-Rings, Retaining	KIT R/XL150	
29JA71	Ring, Return, Shuttle, Spacer,	KIT R/XL200	20RH48
40PR85	Spring, Thermostatic Elements	KIT R/LV981	20RH49
29JA73		KIT R/LV982	20RH50
29JA74, 29JA75		KIT R/LV984	
29JA76		KIT R/LV985	20RH52
29JA77	Cover Gasket, Thermostatic	KIT R/M20	20RH53
29JA78	Control Assembly	KIT R/28	20RH54
TM-50-AT-LF, TM-80-AT-LF	Coil Sleeve, Flange, Nut, O-Ring,	KIT R/50	20RH55
TM-125-AT-LF, TM-150-AT-LF	Pointer Rod, Port Sleeve	KIT R/125	20RH56
29JA84		KIT R/200/N	20RH57
TA-300	Base Stud, Cover Gasket, Port Sleeve Assembly and O-Rings, Port Sleeve Nut, Stem O-ring, Thermostatic Group	R/TA/M	34CU42
TM-800	Coil Sleeve Stud, Flange Packing, Pointer Rod With Gear, Port Sleeve Assembly and Thermostatic Group, Port Sleeve Nut Assembly, Rod O-Rings	R/50M	34CU43

7 8 9						
9	Inlet	Outlet	Inlet/	}	Mfr.	Item
Õ	Size	Size	Outlet Type	Temp. Range	Model	No.
1		3/4 in	Sweat	90° to 140°F	XL-32A-LF-BDT	29JA68
2		3/4 in	Sweat	90° to 135°F	TM-26-LF-RF	29JA78
1 2 3 4	3/4 in	3/4 in	Sweat	95° to 140°F	LV-981A-LF-RF	40PR85
4		1 in	NPT	60° to 200°F	TM-420B-LF-DT-RF	29JA79
5		1 in	NPT	60° to 200°F	TM-520B-LF-DT-RF	29JA80
อ		1 ½ in	NPT	95° to 135°F	XL-150-LF-BDT	29JA70
6	1 1/4 in		NPT	95° to 135°F	LV-984-LF-RF	29JA75
_		1 ½ in	NPT	60° to 200°F	TM-1520B-LF-DT-RF	
7	1 in	1 1/4 in	NPT	95° to 135°F	XL-82-LF-BDT	29JA69
_	1 111	1 1/4 in	NPT	90° to 140°F	LV-982-LF-RF	29JA73
2	1 1/4 in	1 1/4 in	NPT	95° to 135°F	LV-983-LF-RF	29JA74
	1 in	1 1/4 in	NPT	60° to 200°F	TM-820B-LF-DT-RF	29JA81
_	1 1/4 in	1 1/4 in	NPT	60° to 200°F	TM-920B-LF-DT-RF	29JA82
3		2 in	NPT	60° to 200°F	TM-2020B-LF-DT-RF	29JA84
J	2 in	2 in	Sweat	90° to 135°F	XL-200-SW-LF-BDT	29JA71
		2 in	Sweat	95° to 135°F	LV-985-SW-LF-RF	29JA76

LEONARD®

Hose Stations and Accessories

45K810 and 45K811 are specially designed for use with live steam and water, and have an automatic shutdown feature if cold water supply is interrupted. 45K812 and 45K813 feature a thermostatically controlled valve that helps to maintain a constant temperature. 45K816 and 45K823 are manually blended models that can handle both hot water or steam for blending. Hose stations are for use in dairy, food processing, manufacturing, and pharmaceutical plants and in other industrial washdown applications.

	Connec. Type	Max. Flow Rate	L	Н	Temp. Range		Finish	Mfr. Model	ltem No.
Hose	Station	IS			_				
				24 ½ ir		Bronze	Chrome	3800-VBD-CP	
				24 ½ ir	Ī	Bronze	Rough Bronze		
		6 anm		25 in		Lead Free Bronze		SW-75-EVBD-C	
3⁄4 in	FNPT x MGHT	6 gpm			60° to			SW-75-EVBD-R	
74 111	MGHT		14 in	36 in	^{200°} F	Lead Free Bronze	Chrome	CW-75-VBD	45K816
				25 in		Stainless Steel	Stainless Steel		45K823
		0 anm		28 in		Bronze		THS-25-VBD-CI	
				28 in		Bronze	Rough Bronze	THS-25-VBD-R	F 45K813
Adju	stable S	pray Hose		es					
16 in	FNPT		6 in	_	_60° to		_	N-2-SS	45K818
	FINE		6 in	_	180°F	Bronze Body/Rubber Cover	_	N-2	45K817
Hose									
	MNPT x		25 ft	_	-60° to	EPDM and Steel Body/Brass Couplings	· –	25 HDH	45K820
½ in	Swivel		50 ft	_	-120°F	EPDM and Steel Body/Brass Couplings EPDM and Steel Body/Brass Couplings EPDM and Steel Body/Brass Couplings	· —	50 HDH	45K821
/2 111	FGHT		75 ft	_	100 1	EPDM and Steel Body/Brass Couplings	· –	75 HDH	45K822



Float Valves

Automatically open or close when liquid reaches a predetermined level. Can be used for filling control (close on level rise) or drainage control (open on level rise), in an open or closed tank, storage tanks, cooling towers, and reservoirs. NPT connection. Float is 304 stainless steel construction.

Type 7—Suitable where tightclosing valves are required. Not for use with chemicals harmful to brass, iron, or neoprene. Max. temp.: 125°F,

KECKLEY

Type 27—Use for automatic control of liquid supply to an open tank, where dead-end closing is not essential and where valve pressures are normal. Max. temp.: 406°F.

Type 77—Suitable where tight-closing valves are required. Not for use with chemicals harmful to brass, iron, neoprene, or leather. Angle pattern will have a bottom inlet/side outlet. Max. temp.: 125°F.

Valve					Angle	Globe
Flow -	Max.			Body	Item	Item
Size Flow (1)					No.	No.
Type 7, Single	Seat, De	ad End	Serv	ice		
½ in 6.5 gpm	130 psi	16 in	7 in	Bronze	4PTV7	4PTV1
3/4 in 6.5 gpm	130 psi	16 in	7 in	Bronze	4PTV8	4PTV2
1 in 13 gpm	100 psi	16 in	7 in	Bronze	4PTV9	4PTV3
1 1/4 in 19 gpm	80 psi	16 in	7 in	Bronze	4PTW1	4PTV4
1 1/2 in 30 gpm	65 psi	16 in	7 in	Bronze	4PTW2	4PTV5
2 in 61 gpm	50 psi	16 in	7 in	Iron	4PTW3	4PTV6
Valve					Angle	Globe
Flow -	Max.	Rod	Float	Body	Item	Item
Size Flow (1)	Pressure	Rod Length	Float Size	Body Material		Item No.
Size Flow (1) Type 27, Doub	Pressure le Seat	Length	Size	Body Material	No.	No.
Size Flow (1) Type 27, Doub ½ in 1.5 gpm	Pressure le Seat	Length 16 in	7 in	Body Material Bronze	No.	No. 4PTW4
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm	Pressure le Seat 150 psi 150 psi	Length 16 in 16 in	7 in 7 in	Material	No. 4PTX3	No. 4PTW4 4PTW6
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm	Pressure le Seat 150 psi 150 psi 150 psi	16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in	Material Bronze	No. 4PTX3 — 4PTX4	No. 4PTW4
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm 1 in 9.1 gpm	Pressure le Seat 150 psi 150 psi 150 psi 150 psi	16 in 16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in 7 in	Material Bronze Bronze	No. 4PTX3 — 4PTX4 4PTX5	No. 4PTW4 4PTW6 4PTW5
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm 1 in 9.1 gpm 1 ¼ in 15 gpm	Pressure le Seat 150 psi 150 psi 150 psi 150 psi 120 psi	16 in 16 in 16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in 7 in 7 in	Bronze Bronze Bronze Bronze	No. 4PTX3 — 4PTX4 4PTX5 4PTX6	No. 4PTW4 4PTW6 4PTW5 — 4PTW7
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm 1 in 9.1 gpm 1 ¼ in 15 gpm 1 ½ in 22 gpm	Pressure le Seat 150 psi 150 psi 150 psi 150 psi 120 psi 100 psi	16 in 16 in 16 in 16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in 7 in 7 in 7 in	Bronze Bronze Bronze Bronze Bronze	No. 4PTX3 4PTX4 4PTX5 4PTX6 4PTX7	No. 4PTW4 4PTW6 4PTW5 — 4PTW7 4PTW8
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm 1 in 9.1 gpm 1 ¼ in 15 gpm 1 ½ in 22 gpm 2 in 53 gpm	Pressure le Seat 150 psi 150 psi 150 psi 150 psi 120 psi 100 psi 75 psi	16 in 16 in 16 in 16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in 7 in 7 in 7 in 7 in	Bronze Bronze Bronze Bronze Bronze Bronze Bronze Bronze Iron	No. 4PTX3 — 4PTX4 4PTX5 4PTX6 4PTX7 4PTX8	No. 4PTW4 4PTW6 4PTW5 — 4PTW7 4PTW8 4PTW8
Size Flow (1) Type 27, Doub ½ in 1.5 gpm ½ in 9.1 gpm ¾ in 5.7 gpm 1 in 9.1 gpm 1 ¼ in 15 gpm 1 ½ in 22 gpm	Pressure le Seat 150 psi 150 psi 150 psi 150 psi 120 psi 100 psi	16 in 16 in 16 in 16 in 16 in 16 in 16 in	7 in 7 in 7 in 7 in 7 in 7 in 7 in	Bronze Bronze Bronze Bronze Bronze Bronze Bronze	No. 4PTX3 4PTX4 4PTX5 4PTX6 4PTX7	No. 4PTW4 4PTW6 4PTW5 — 4PTW7 4PTW8



		Valve Flow - Flow (1)	Pressure	Length	Size	Body Material	Angle Item No.	Globe Item No.
۰	Type	77, Single	e Seat, D	ead End	d Serv	ice		
	2 in	61 gpm	250 psi	16 in	7 in	Iron	4PTY5	4PTY2
	2 ½ in	95 gpm	250 psi	18 in	8 in	Iron	4PTY6	4PTY3
۰	3 in	95 gpm	250 psi	18 in	8 in	Iron	4PTY7	_
	3 in	133 apm	250 psi	18 in	8 in	Iron	_	4PTY4