9960ABTC

DZR Lead Free Thermostatic Balancing Valve With Check Valve

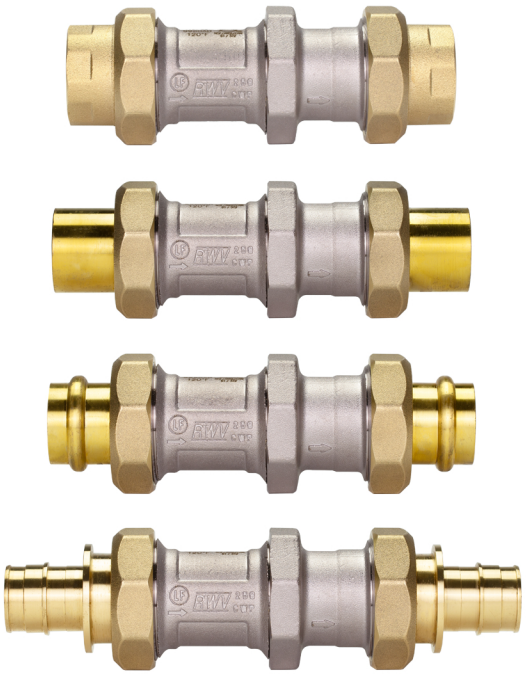
Feature

Designed for domestic hot water recirculation
DZR lead free brass body / Sn/Ni galvanically plated
for the TBV and the union body with check valve
Temperature activated internal flow cartridge
Cartridge shutter will reach the open position 8°F below
the fully closed temperature
Wide range of temperature settings
Double union body with integral check valve
for easy installation and maintenance
Union body with PPO/GF spring loaded check valve
FNPT, Solder, EzPress and PEX F-1960 available for tailpieces
- FNPT: ANSI/ASME B1.20.1
- Solder: ANSI B16.22
- EzPress: ASTM B88
- PEX: ASTM F1960
AB1953, NSF/ANSI/CAN 61 & 372

ALS C US NSF/ANSI/CAN 61 / 372

DZR Dezincification Resistant

Certified LEAD FREE



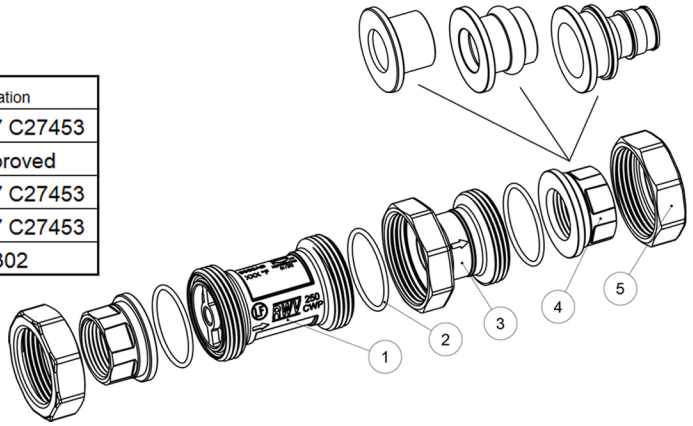
Meets BAA requirement

250 CWP valve body rating

Working conditions
Water: 32°F - 200°F

Material

	Part	Material	Specification
1	Body	DZR Lead Free Brass Sn/Ni Plated	ASTM B927 C27453
2	O-ring	EPDM Perox	NSF Approved
3	Union With Check Valve	DZR Lead Free Brass Sn/Ni Plated	ASTM B927 C27453
4	Tailpiece	DZR Lead Free Brass	ASTM B927 C27453
5	Cartridge	Stainless Steel	AISI 302

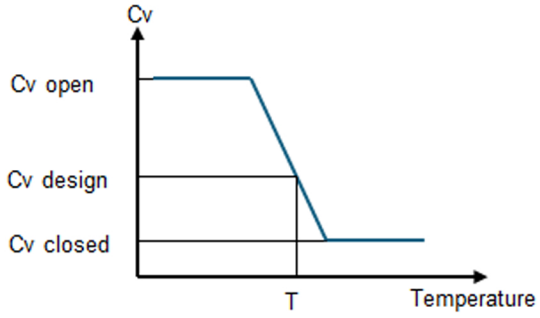


Temperature Setting

Factory Preset Temperature									
100 F°	105 F°	110 F°	115 F°	120 F°	125 F°	130 F°	135 F°	140 F°	150 F°
* Cartridge fully opens at 8° F below set temperature									

Valve Regulation Data

Valves are available in different ranges of setting temperatures.The Cv value of the valve changes with the temperature variation according to the following graph and table.



DN	$C_{v\ open}$ (GPM/psi $^{0.5}$)	$C_{v\ design}$ (GPM/psi $^{0.5}$)	$C_{v\ closed}$ [1] (GPM/psi $^{0.5}$)
1/2"	1.50	0.58	0.13
3/4"	2.00	0.81	0.18
1"	3.80	1.50	0.28

[1]Valve never fully closes. There will always be a bypass flow to avoid pump deadheading and to guarantee correct thermal actuator sensitivity.

T setting: 100, 105, 110, 115, 120, 125, 130, 135, 140, 150 °F (laser marked on the body)

WARNING: This product can expose you to chemicals including lead, which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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The drinking Water Act has defined lead free as having the average wetted surface ratio of the fixture to contain less than .25% of lead per volume.

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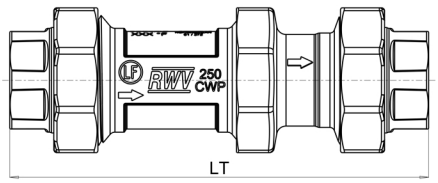
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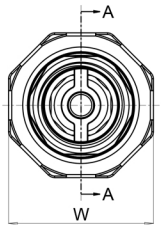
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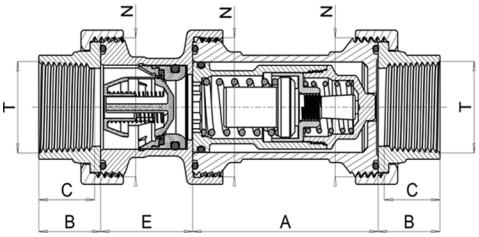
Dimension, Weight

9960ABTC-FF

	T	C (in)	LT (in)	A (in)	B (in)	E (in)	W (in)	N	Weight (lb)
1/2"	1/2-14 NPT	0.63	4.82	2.24	0.79	1.00	1.46	1-11.5 NPSM	1.08
3/4"	3/4-14 NPT	0.73	5.24	2.42	0.81	1.20	1.81	1 1/4-11.5 NPSM	1.61
1"	1-11.5 NPT	0.75	5.96	2.48	0.99	1.50	2.05	1 1/2-11.5NPSM	2.22

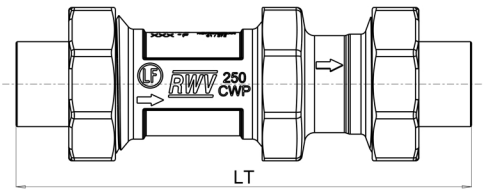


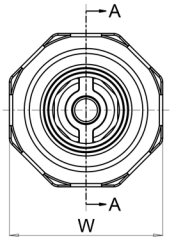


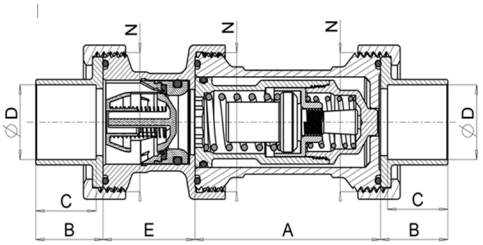


9960ABTC-SS

	D (in)	C (in)	LT (in)	A (in)	B (in)	E (in)	W (in)	N	Weight (lb)
1/2"	0.627-0.631	0.51	4.45	2.24	0.60	1.00	1.46	1-11.5 NPSM	0.97
3/4"	0.877-0.881	0.79	5.38	2.42	0.88	1.20	1.81	1 1/4-11.5 NPSM	1.50
1"	1.128-1.131	0.93	6.42	2.48	1.22	1.50	2.05	1 1/2-11.5NPSM	2.14







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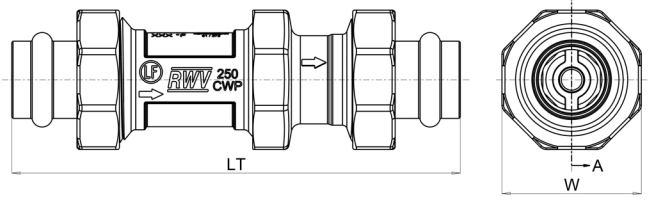
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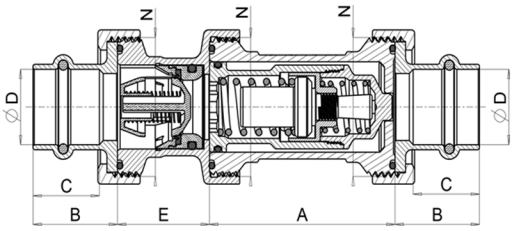
DZR Lead Free Thermostatic Balancing Valve With Check Valve

Dimension, Weight

9960ABTC-PP

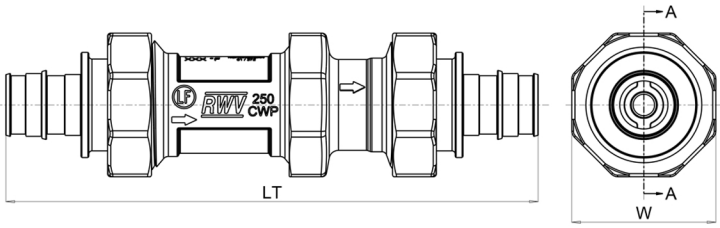
	D (in)	C (in)	LT (in)	A (in)	B (in)	E (in)	W (in)	N	Weight (lb)
1/2"	0.64	0.87	5.45	2.24	1.10	1.00	1.46	1-11.5 NPSM	1.03
3/4"	0.89	0.87	5.83	2.42	1.10	1.20	1.81	1 1/4-11.5 NPSM	1.56
1"	1.14	0.94	6.42	2.48	1.22	1.50	2.05	1 1/2-11.5NPSM	2.07

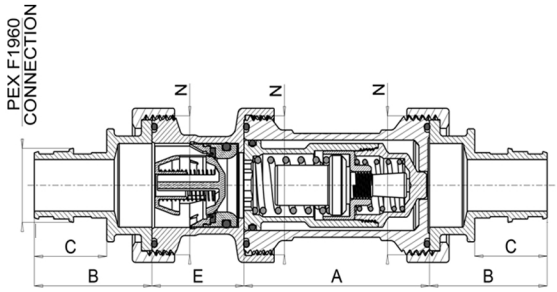




9960ABTC-EE

	PEX F-1960 Connection	C (in)	LT (in)	A (in)	B (in)	E (in)	W (in)	N	Weight (lb)
1/2"	1/2" PEX F1960	0.71	5.85	2.24	1.30	1.00	1.46	1-11.5 NPSM	1.07
3/4"	3/4" PEX F1960	0.94	6.69	2.42	1.54	1.20	1.81	1 1/4-11.5 NPSM	1.64
1"	1" PEX F1960	1.18	7.68	2.48	1.85	1.50	2.05	1 1/2-11.5NPSM	2.25

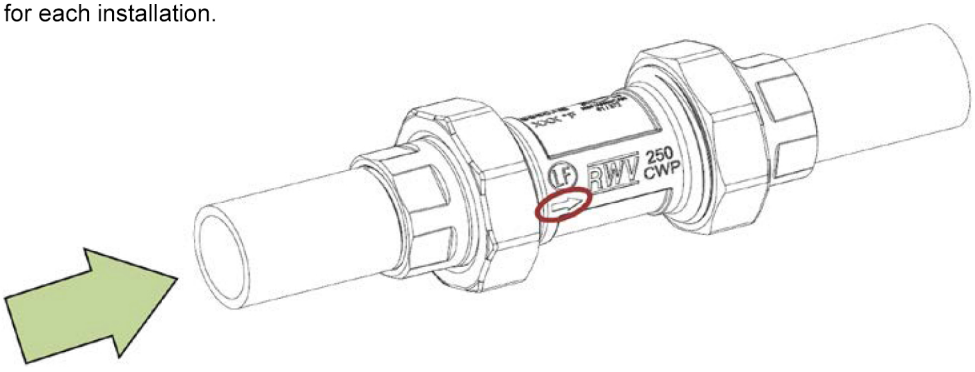




Note: Valve tailpieces will be identified on the packaging according to order type (FF, SS, PP, EE)

Installation

The valve must be installed with the flow matching the arrow marked on the valve body.
Use at least one strainer for each installation.



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