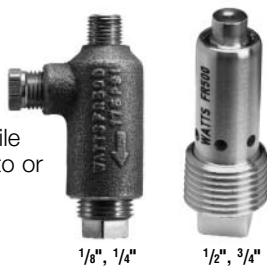


Watts Regulator FR 500

Thermostatic Freeze Relief Kit

The FR500 Thermostatically measures the water temperature and will open at 35°F, and close at 40°F. This design keeps the water from freezing in the backflow preventer, while avoiding discharges based on the air temperature dropping to or below freezing.



Installation:

The FR500 should be installed where freezing is of concern based on exposed piping. When the valve is used in conjunction with a backflow preventer the FR500 should be located down stream of the assembly. Please note that additional FR500s can be located upstream if desired.

The valve can be installed at any orientation to the centerline of the pipeline. However, whenever possible the valve should be vertical down to horizontal. This will allow the water to drain out of the FR500's outlet and avoid the potential of an ice dam impairing the function of the valve.

Care should be given to ensure that discharged water will be adequately piped away from areas where slipping on ice could be a danger, like roadways and pathways. Do not insulate the FR500 or install it where it will be exposed to a heatsource.

Materials

Springs	Stainless Steel
Body	Bronze
Internals	DZR Brass

Pressure - Temperature

Working Temperature:	35°F (1.6°C)
Maximum Pressure:	175psi (12.06 bar)

Approvals

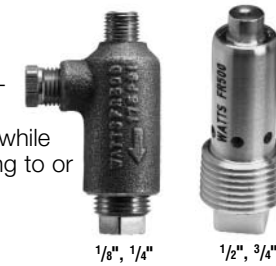


WATTS®

Watts Regulator FR 500

Thermostatic Freeze Relief Kit

The FR500 Thermostatically measures the water temperature and will open at 35 °F, and close at 40°F. This design keeps the water from freezing in the backflow preventer, while avoiding discharges based on the air temperature dropping to or below freezing.



Installation:

The FR500 should be installed where freezing is of concern based on exposed piping. When the valve is used in conjunction with a backflow preventer the FR500 should be located down stream of the assembly. Please note that additional FR500s can be located upstream if desired.

The valve can be installed at any orientation to the centerline of the pipeline. However, whenever possible the valve should be vertical down to horizontal. This will allow the water to drain out of the FR500's outlet and avoid the potential of an ice dam impairing the function of the valve.

Care should be given to ensure that discharged water will be adequately piped away from areas where slipping on ice could be a danger, like roadways and pathways. Do not insulate the FR500 or install it where it will be exposed to a heatsource.

Materials

Springs	Stainless Steel
Body	Bronze
Internals	DZR Brass

Pressure - Temperature

Working Temperature:	35°F (1.6°C)
Maximum Pressure:	175psi (12.06 bar)

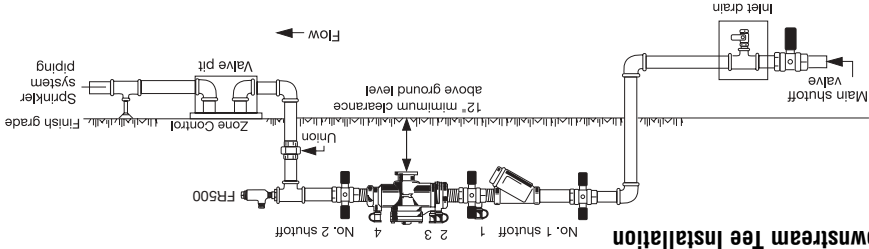
Approvals



WATTS®

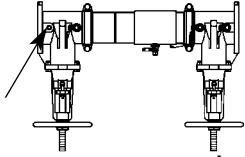
- 1/8" & 1/4" install FR 500 via downstream tee
- 1/2" & 3/4" install FR 500 via downstream tee or with additional shuttuff tap

Downstream Tee Installation



Note: That when insulating piping, freeze relief should be insulated to guarantee that this is the coldest section.

Additional Shuttuff Tap Installation



Remove plug and install FR 500

Limited Warranty: Watts Regulator Company warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling aged or foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Any implied warranties that are imposed by law are limited in duration to one year.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights.

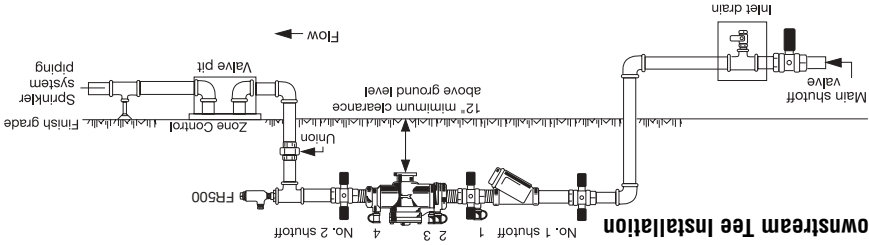


CALIFORNIA PROPOSITION 65 WARNING
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
 (California law requires this warning to be given to customers in the State of California.)
 For more information: www.watts.com/prop65

USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.wattsreg.com
 Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca
 EDP# 1915920 ©Watts Regulator Company, 2005

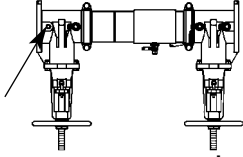
- 1/8" & 1/4" install FR 500 via downstream tee
- 1/2" & 3/4" install FR 500 via downstream tee or with additional shuttuff tap

Downstream Tee Installation



Note: That when insulating piping, freeze relief should be insulated to guarantee that this is the coldest section.

Additional Shuttuff Tap Installation



Remove plug and install FR 500

Limited Warranty: Watts Regulator Company warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling aged or foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Any implied warranties that are imposed by law are limited in duration to one year.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights.



CALIFORNIA PROPOSITION 65 WARNING
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
 (California law requires this warning to be given to customers in the State of California.)
 For more information: www.watts.com/prop65

USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.wattsreg.com
 Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca
 EDP# 1915920 ©Watts Regulator Company, 2005