

## GRINNELL G-FIRE Grooved Fittings, Ductile Iron

### General Description

GRINNELL G-FIRE Grooved Fittings provide an economical and efficient method of changing direction, adding an outlet, reducing, or capping piping systems. The G-FIRE grooved fittings are available in ductile iron or fabricated steel as indicated.

**Note:** Figure 510S and 519S fittings are special short radius fittings with smaller center to end dimensions than standard grooved fittings. Depending on the size and coupling used, there may be interferences at the bolt pads that require repositioning of the coupling orientation. The use of flange adapters is not recommended with Figures 510S and 519S fittings. Contact TYCO Fire Protection Products for details.

#### NOTICE

Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified to be compatible for the specific application. Always read and understand the installation instructions.

The GRINNELL G-FIRE Grooved Fittings described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the approval agency, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

The owner is responsible for maintaining their system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions

### Technical Data

#### Approvals

UL and ULC Listed  
FM Approved  
VdS Approved  
LPCB Certified

**Note:** LPCB Certification applies to Figures 211, 212, 221, 250, 260, 501, 510, 511, 512, 519, 550, 510S, and 519S.

#### Material

Cast: Ductile iron conforming to ASTM A536, Grade 65-45-12

#### Protective Coatings

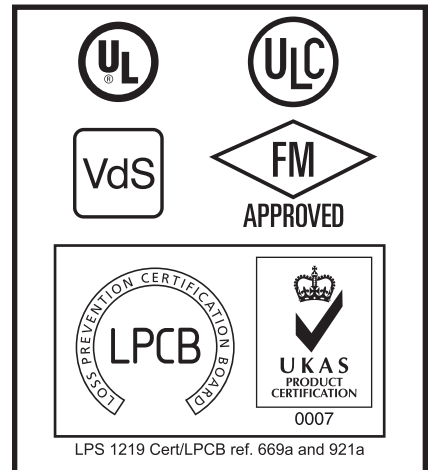
- Non-lead orange paint (USA)
- RAL red or non-lead paint (EMEA and APAC)
- Hot dipped galvanized conforming to ASTM A153

### Care and Maintenance

The following inspection procedure must be performed as indicated, in addition to any specific requirements of the NFPA. Any impairments must be immediately corrected.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this decision.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards

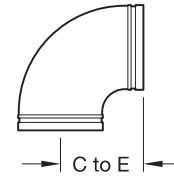


of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

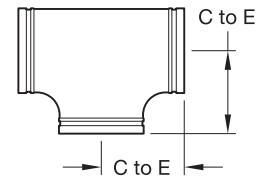
Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

Nominal Pipe Size		Figure 510S 90° Elbow		Figure 519S Tee	
ANSI Inches (DN)	O.D. Inches (mm)	Nominal C to E Inches (mm)	Approx. Weight Lbs. (kg)	Nominal C to E Inches (mm)	Approx. Weight Lbs. (kg)
2 (50)	2.4 (60,3)	2.8 (69,9)	1.5 (0,7)	2.8 (69,9)	2.6 (1,2)
2-1/2 (65)	2.9 (73,0)	3.0 (76,2)	2.1 (1,0)	3.0 (76,2)	4.4 (2,0)
76,1mm (65)	3.0 (76,1)	3.0 (76,2)	2.3 (1,0)	3.0 (76,2)	3.1 (1,4)
3 (80)	3.5 (88,9)	3.4 (85,9)	3.0 (1,4)	3.8 (85,9)	6.5 (3,0)
4 (100)	4.5 (114,3)	4.0 (101,6)	5.0 (2,3)	4.0 (101,6)	10.7 (4,9)
139mm (125)	5.5 (139,7)	4.9 (124,0)	8.7 (3,9)	4.9 (124,0)	10.9 (5,0)
5 (125)	5.6 (141,3)	4.8 (123,0)	9.4 (4,3)	4.8 (123,0)	11.6 (5,3)
165,1mm (150)	6.5 (165,1)	5.5 (139,7)	11.4 (5,2)	5.5 (139,7)	14.8 (6,7)
6 (150)	6.6 (168,3)	5.5 (139,7)	12.1 (5,5)	5.5 (139,7)	15.0 (6,8)
8 (200)	8.6 (219,1)	6.9 (174,8)	22.2 (10,1)	6.9 (174,8)	39.8 (18,1)



**FIGURE 510S  
90° ELBOW  
SHORT PATTERN**



**FIGURE 519S  
TEE  
SHORT PATTERN**

**FIGURE 4  
FIGURES 510S ELBOW AND FIGURE 519S TEE  
NOMINAL DIMENSIONS**