

A Tyco International Company

GRINNELL Mechanical Products Grooved Copper System

Ideal For:

- Commercial
- HVAC
- Industrial
- Plumbing

Products Available

GRINNELL Products offers a complete line of copper grooved products that includes Figure 672 Rigid Couplings, Figure 61 Flange Adapters, Model B680 Butterfly Valves, Model 1066 Groover Mini-Mites, and Copper Grooved Fittings. The Copper Grooved System provides a fast and trouble-free direct CTS roll grooved copper connection method.

Additional Features

- Proven solution for a variety of applications
- Grooved copper fittings are UL, ULC Listed, and UPC and NSF-61 Approved
- Backed by the industry's best 10-Year Limited Warranty



Figure 672 Copper Rigid Coupling

The Figure 672 Rigid Coupling provides a rigid joint that firmly grips the entire circumference of the tube. This coupling is a proven, dependable method of joining copper tubing and an economical alternative to soldering (sweating) joints. The Figure 672 Coupling is capable of handling pressures up to 300 psi (20,7 bar). This coupling is UL Listed for grounding and bonding, and is suitable for bonding systems with a maximum service entrance capacity of 200 amps.

Technical Data

Size

2 to 8 inches (DN50 to DN200)

Housina

Ductile iron conforming to ASTM A 536, Grade 65-45-12

Track Head Bolts

- ANSI conforming to ASTM A 183, zinc plated;
 Minimum Tensile Strength 110,000 psi (758,422 kPA)
- Metric conforming to ASTM F 568M

Gasket Materials

 Tri-Seal Grade "EN" EPDM NSF-61 Approved compound, Copper color code, for potable water up to 180°F (82°C)

Refer to **Technical Data Sheet G510** on the Figure 672 Coupling for information on technical data, ordering procedures, installation and assembly instructions, and our limited warranty.





Figure 61 Flange Adapter

The Figure 61 Flange Adapter allows a direct transition from flanged components to GRINNELL grooved copper components. Flange bolt patterns conform to ANSI Class 125 and 150 standards.

Technical Data

Sizes

2 to 6 inches (DN50 to DN150)

Housing

Ductile iron conforming to ASTM A 536, Grade 65-45-12

Protective Coatings

Copper Acrylic Enamel

Gasket Materials

 Grade "EN" EPDM NSF-61 Approved compound, Copper color code, for potable water up to 180°F (82°C)

Refer to **Technical Data Sheet G515** on the Figure 61 Flange Adapter for information on technical data, ordering procedures, installation and assembly instructions, and our limited warranty.



Model 680 Butterfly Valve

The Model 680 Butterfly Valve is designed for use with grooved copper tube (CTS) piping systems. This valve provides for efficient control of fluid in piping systems and has a 10 position-locking lever handle. Flow may come from either direction, and the valve may be positioned in any orientation. The Model 680 Valve features a bronze body and a disc that is fully encapsulated with EPDM rubber for potable water service.

Technical Data

Sizes

2 to 6 inches

Maximum Pressure

Up to 300 psi (20,7 bar), based on roll grooved Type K, ASTM B 88 copper tubing.

Construction Materials

- Body Bronze per ASTM B 584 (UNS C90500)
- Disc EPDM encapsulated ductile iron, per ASTM A 536, Grade 65-45-12
- Upper and Lower Shafts Stainless steel Type 416 per ASTM A 582
- Operator Lever with locking device

Refer to **Technical Data Sheet G530** on the Model 680 Butterfly Valve for information on technical data, ordering procedures, installation and assembly instructions, and our limited warranty.

Copper Grooved Fittings

Sizes

2 to 8 inches (DN50 to DN200)

Materials

- Figures 610, 601, 619, 660, 650 and 621, Cast copper alloy conforming to CDA C89833
- Figures 618 and 652, wrot copper alloy conforming to ASTM B75, C12200; Wall thickness per ASTM B88, Type L; Fabricated: ASTM B88 Type L

Figure 601 45° Elbow



Figure 610 90° Elbow



Figure 618
Reducing Tee



Figure 619



Figure 621
Reducing Tee



Figure 650
Concentric Reducer



Figure 652
Concentric Reducer



Figure 660 Endcap







Refer to **Technical Data Sheet G520** on the Grooved Copper Fittings for information on technical data, ordering procedures, installation and assembly instructions, and our limited warranty.

Model 1039-66 Mini-Mite Roll Groover

The Model 1066 Mini-Mite Roll Groover handles anything on the job site. It is a hardy, portable job site tool that can save hours of waiting for pipe to return from the shop. The design has roller bearing front and back on the main shaft.

Features

- Sizes 2 to 8 inches
- For use with the Rigid Model 300 or #1039-66 Rachet Hand Crank
- Capacity of 2 to 8 inches Copper Tube K, L, M, and DWW







GRINNELL Case File

Tiara Condominium Singer Island, Florida

Market

Plumbing

Distributor

Gainesville Windustrial

Contractor

P.C.A.

Specifications

4 inch Figure 672 Couplings Copper Fittings

Model B680 Butterfly Valves









GRINNELL Solution

Tiara is a 30-year-old condo that sustained substantial damage during Hurricane Wilma in 2006. The owners decided to completely retrofit all of the mechanical piping and equipment in the building. The GRINNELL Copper System easily accommodated the tight spaces and dimensional challenges created by the low ceilings and design angles of the building.



800-558-5236/+1-401-781-8220 www.grinnell.com mechserv@grinnell.com



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