



GENERAL DATA

GRINNELL MECHANICAL PRODUCTS

GRINNELL, a premium brand of Johnson Controls International, delivers reliable and cost-effective piping solutions for a full range of mechanical, HVAC, mining, commercial, industrial, institutional, and governmental applications. Available products offer contractors, engineers, and distributors faster, more cost effective tools for joining pipe over traditional welding methods. Innovative GRINNELL products include grooved couplings, fittings, mechanical tees, valves, and accessories as well as complete systems for joining stainless steel. All-inclusive, competitively priced engineering and planning support services provide labor and cost savings. All GRINNELL products are backed by an industry-leading 10-year limited warranty. For more information, visit www.grinnell.com.



MAKING CONNECTIONS...

North America Headquarters

Lansdale, Pennsylvania, USA

Research and Development

Cranston, Rhode Island, USA

REGIONAL HEADQUARTERS

North Asia

Shanghai, China

South Asia

Singapore

Australia

Sunshine, Victoria

Middle East

Dubai, United Arab Emirates

Europe

Enschede, The Netherlands

Paris, France

Manchester, U.K.

Rodgau, Germany

Budapest, Hungary

Milan, Italy

Wien, Austria

Mechelen, Belgium

Madrid, Spain

Lørenskog, Norway

Lammhult, Sweden

Mexico

Tlalnepantla, Mexico

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BUILDING SOLUTIONS



Why Grooved?

Efficient and Cost-Effective

- 30% installation cost savings compared to traditional methods, such as welding
- Helps minimize labor costs, while optimizing project time schedules
- Faster and easier installation, removing the need for special tool



Safe Pipe Joining Method

- No hot works; no welding, threading, cutting oils, fumes or flames
- Ideal method for joining pipe in enclosed, flammable or hazardous environments



For Reliable System Connections

- Durable connections with rapid assembly
- Helps maintain high pressure at connection points, without sacrificing quality and reliability



Flexible Retrofits and Repairs

- Ease of Use. Does not require special tools or skilled workers
- Removes the need for training on site
- Helps assist trouble free retrofitting
- Helps assist pipe expansion support
- Allows for fabrication on site and troubleshoots complex problems and obstacles



Why GRINNELL?

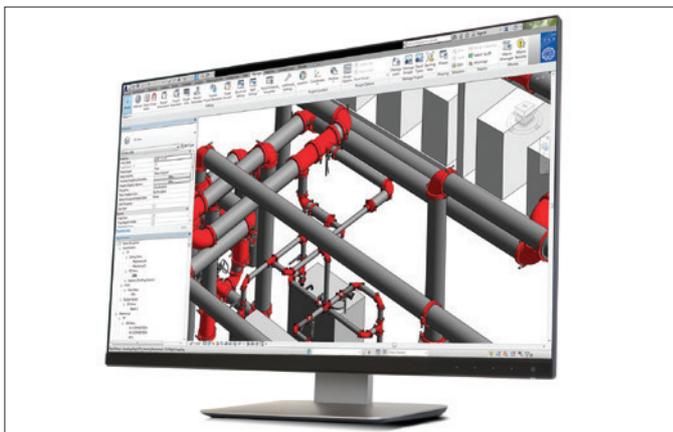
General
Data



10
YEAR
LIMITED
WARRANTY

Best Warranty in the Industry

- 10 – Year Limited Warranty
- 160 Year reputation for quality, backed by GRINNELL's established global brand
- Full range of products to provide sustainable pipe joining solutions



Technical Services

- Dedicated Engineering team that provides technical support service and solutions for our customers



Green Solutions

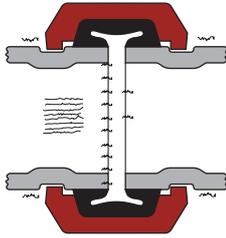
- Committed to the environment through sustainable manufacturing practices
- All waste paper, used cardboard, scrap wood, and EPDM waste from our plants are recycled



Global Presence / Local Service

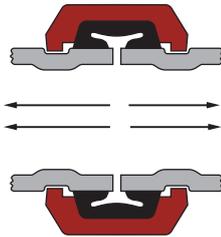
- Your committed partner and advisor from design to build
- Strategic global locations improve service to our customers
- Committed to meet our customer needs and focus on your requirements

Product Features and Benefits



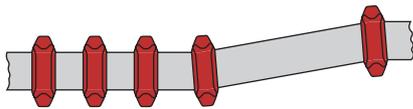
NOISE AND VIBRATION

GRINNELL Grooved Couplings provide excellent noise and vibration dampening. The engineered design of these couplings and gaskets offers pipe end gapping that helps to dissipate, isolate, and minimise noise and vibration transmission throughout the piping system.



DEPENDABILITY

The coupling housings are designed to engage into the grooves and provide a secure joint. The pipe ends are sealed by a pressure responsive gasket which is encapsulated by the ductile iron housing.



VERSATILITY

GRINNELL flexible couplings will accommodate misalignments. The maximum deflection information per coupling can be found in this catalogue.



SUPERIOR QUALITY

GRINNELL Piping Products are manufactured according to the ISO 9001:2008 Quality Assurance standard.



LONGEVITY AND PERFORMANCE

GRINNELL Piping Products are designed to last the lifetime of the pipeline and have been tested and approved by prominent approval agencies. Rolled grooving does not remove any metal from the pipe, therefore pipe integrity is fully maintained when grooved systems are used to join pipe.



CLEAN

Unlike with welding, GRINNELL Piping Products do not lead to the release of hazardous fumes or to the possible introduction of foreign materials in the pipeline.

Agency Listings and Approvals

Our products are associated with the following agencies, associations and laboratories. contact GRINNELL for specific listings, approvals and certifications.

General Code Groups, Associations, Laboratories, Government Agencies, and Approval Bodies

ACTIVFIRE

Active Fire Protection 
Product Certification

AMERICAN BUREAU OF SHIPPING (ABS)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
AMERICAN WATER WORKS ASSOCIATION (AWWA) AWWA C-606
AMERICAN PETROLEUM INSTITUTE (API) API Std. 5L
AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE)
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

- Power Piping, B-31.1
- Chemical Plant and Petroleum Refinery Piping, B-31.3
- Refrigeration Piping, B-31.5
- Building Services Piping, B31.9
- Elevator, Escalator, A17.1

ASTM

American Society of Testing Materials.
F-1476 Couplings,
F-1548 Fittings

BUILDING CONFIDENCE
Empowered by Achilles

BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA)
BUREAU VERITAS (BV)

CERTIFICATION TO EUROPEAN PRESSURE EQUIPMENT DIRECTIVE

CNBOP

Centrum Naukowo-Badawcze Ochrony Przeciwpowazarowe  CNBOP

CNPP APSAD

National Centre for Prevention and Protection (FR) 

COAST GUARD

Approved each vessel individually

CORPS OF ENGINEERS (COE)

GECS 15000

CRN

Canadian Registration Number

CSTB

French Scientific and Technical Centre for Building


DNV

Det Norske Veritas


DVGW

Deutscher Verein des Gas-und Wasserfaches e.V.


FACTORY MUTUAL ENGINEERING CORP. (FM)

Approved for Fire Protection Services


FEDERAL AVIATION ADMINISTRATION (FAA)

HVAC, Plumbing and Fire Protection

FEDERAL HOUSING ADMINISTRATION (FHA)
GENERAL SERVICES ADMINISTRATION (GSA) 15000 Series
GERMANISCHER LLOYD

Germanischer Lloyd 

INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

ICC-ES

National Evaluation Service, Inc.

LLOYD'S

Lloyd's Register of Shipping 

(LPCB) LOSS PREVENTION CERTIFICATION BOARD

Approved for Fire Protection Services


MATERIAL EQUIPMENT AND ACCEPTANCE (MEA)
MILITARY SPECIFICATIONS (MIL)

- MIL-P – 10388 Fittings
- MIL-C – 10387 Couplings
- MIL-P – 11087A (CE) Steel Pipe
- Grooved MIL-I – 45208 Inspection

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
NATIONAL INSTITUTE OF HEALTH (NIH) Department of Health – 5000 Series
NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC) NFGS 15000 Series
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
NSF INTERNATIONAL
The Public Health and Safety Company

PRESSURE EQUIPMENT DIRECTIVE (PED)
RINA

Registro Italiano Navale 

SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL (SBCCI) Standard Plumbing
UNDERWRITERS LABORATORIES, INC. (UL) Listed for Fire Protection Services

UNDERWRITERS LABORATORIES OF CANADA (ULC) Listed for Fire Protection Services

UNIFORM PLUMBING CODE (UPC)

VERBAND DER SACHVERSICHERE E.V. (VDS) Approved for Fire Protective Service
VETERANS AFFAIRS (VA) 15000 Series
WATERMARK Standards Australia Limited

WRAS

Water Regulations Advisory Scheme (UK) 

WSD

Pending Approved for Potable Water Service (HK)

ISO 9001:2008 Certified

LPCB®

www.redbooklive.com

Certificate of Management System Registration

Certificate Number: 570

Issue: 08

Tyco Fire & Building Products

having complied with the requirements of:

ISO 9001:2008

Quality Management Systems – Requirements

are authorised to use the LPCB Certification Mark on stationery and publications related to the following products and/or services:

Tyco Fire & Building Products

Research & Development Centre
1467 Elmwood Avenue
Cranston
RI 02910
USA

Scope:

Research, design, development and manufacturing support for the fire protection equipment, pipe couplings, fittings, related piping system components and CPVC pipe and fitting manufactures of Tyco Fire and Building Products.

This certificate is maintained and held in force through regular surveillance activities.



Signed for LPCB

Tracie Hunter
Technical Manager

16 August 2014
Date of This Issue

15 August 2017
Expiry Date

16 August 2002
Date of First Issue



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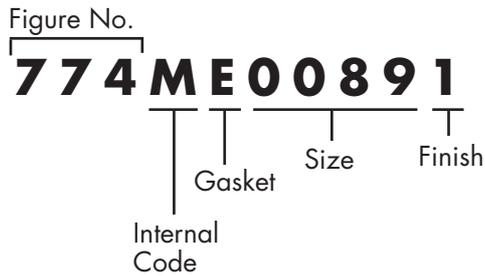
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bre

How to Build GRINNELL Part Numbers

General Data



Digits 01, 02, & 03: Figure number

Digit 04: Internal Code

Digit 05: Gasket: E for C-style EPDM (Grade E)

T for Tri-Seal EPDM (Grade E)

B for C-style Nitrile/Buna-N (Grade T)

D for C-style EPDM

(Grade EN, suitable for potable water applications)

V for C-style Fluoro Elastomer (Grade O)

S for C-style Silicone (Grade L)

Digits 06 thru 09: Size

Digit 10: Finish: 0 for Painted Orange

1 for Painted Red (RAL 3000)

2 for Galvanised

3 for Unpainted

4 for Stainless Steel 316

5 for Painted White (RAL 9010)

R for Rilsan

Outlet Fitting
DIGIT 05
T = BSP thread
N = NPT thread
G = Grooved

Pipe Size		Digits 06-07-08-09	
Nominal mm <i>Inches</i>	O.D. mm <i>Inches</i>	Sizes Codes for Outlet Fittings & Reducers Example: 4" x 2" 4220 (Biggest Size First)	Sizes Codes for Couplings & Fittings
15	21.3	05	n/a
1/2	0.840		
20	26.9	07	n/a
3/4	1.050		
25	33.7	10	0034
1	1.315		
32	42.4	12	0042
1 1/4	1.660		
40	48.3	15	0048
1 1/2	1.900		
50	60.3	20	0060
2	2.375		
65	73.0	25	0073
2 1/2	2.875		
65	76.1	26	0076
76.1mm	3.000		
80	88.9	30	0089
3	3.500		
100	108.0	41	0108
108.0mm	4.252		
100	114.3	42	0114
4	4.500		
125	133.0	51	0133
133.0mm	5.236		
125	139.7	52	0139
139.7mm	5.500		
125	141.3	53	0141
5	5.563		
150	159.0	61	0159
159.0mm	6.260		
150	165.1	62	0165
165.1mm	6.500		
150	168.3	63	0168
6	6.625		
200	219.1	80	0219
8	8.625		
250	273.0	11	0273
10	10.750		
300	323.9	13	0324
12	12.750		
350	355.6	14	0355
14	14.000		
400	406.4	16	0406
16	16.000		
450	457.2	18	0457
18	18.000		
500	508.0	21	0508
20	20.000		
600	609.6	24	0610
24	24.000		

Coupling Part Number Example:

774ME00891

Fig. Number Internal Code Gasket Size Finish



Figure Number: 774 · Rigid Standard Weight Coupling

Internal Code: M

Gasket: E · EPDM C-style

Size: 0089 · 88.9mm (3")

Finish: 1 · Painted Red

Outlet Fitting Part Number Example:

730AG63261

Fig. Number Internal Code Outlet Size Finish



Figure number: 730 · Mechanical Tee

Internal Code: A

Outlet: G · Grooved (T for BSP Thread; N for NPT Thread)

Size: 6326 - 168.3 x 76.1mm (6" x 2 1/2")

Finish: 1 · Painted Red

"All Mechanical Tees have standard EPDM Gaskets. Nitrile (Buna-N) optional"

GRINNELL Website

www.grinnell.com

To learn more about GRINNELL Mechanical Products, visit www.grinnell.com. Our Website provides a wide variety of tools and information at your fingertips. Please select the EMEA region on the map to see region specific information.

Browse These Website Features

Resources Tab

Useful for everyday operations, the Resources tab includes a conversion calculator to convert many units of measurement and a Product Cross Reference tool to search for GRINNELL Mechanical Product equivalents.

Literature Tab

The Literature tab showcases all marketing materials for viewing, downloading, or saving to your preferred location. Marketing literature includes catalogues, brochures, installation manuals, flyers, and price books.

Products Tab

The Products tab organises all product information such as pricing, technical data, and part summary sheets. All product information is available for printing and saving to your preferred location. Searching for any product by name or figure number and downloading custom submittal sheets are also available through this tab.

3D CAD Library

The CAD icon provides direct access to 3D CAD drawings and the GRINNELL Mechanical Suite for Revit. It also provides access to on-line registration for automatic e-mail updates.



GRINNELL Home Page