

General Data

GRINNELL PRODUCTS

GRINNELL, a premium brand of Tyco International, delivers quality piping solutions for a full range of fire applications. Available products offer contractors, engineers, and distributors faster, more cost-effective tools for joining pipe over traditional welding methods. Innovative GRINNELL products include couplings, fittings, mechanical tees, valves, and accessories. Comprehensive, 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.tfpemea.com.



-  Regional Headquarters
-  Corporate Headquarters
-  Research and Development
-  APAC Sales and Distribution Centres

MAKING CONNECTIONS...

Global 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

South America, Central America, and Caribbean

Pompano, Florida, USA

Mexico

Tlalneptantla, Mexico

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

Asia-Pacific Sales and Distribution Centres

Hong Kong

Mumbai, India

Beijing, China

Chengdu, China

Guangzhou, China

Mount Waverley, Victoria, Australia

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BUILDING SOLUTIONS



43 Stocking Warehouses



24 Manufacturing Locations



**4,100 Employees in
34 Countries**



**Presence in 185 Countries
and 43 Languages**

Why Grooved?

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Reduced Installation Time and Cost

Methods such as threading and soldering are labor intensive and can be very expensive in high-cost regions. Pipe grooving reduces installation cost by up to 30%, allowing contractors to slash labor costs and remain within budget.



Flexible Retrofits and Repairs

When an owner cannot afford to shut down a facility for important retrofits, GRINNELL Products solves the problem. GRINNELL Couplings and Fittings allow an installer to fabricate on-site and around complex problems and obstacles. Fire permits are not required and building residents do not have to evacuate due to welding fumes.



Pipe Expansion Support

GRINNELL Flexible Couplings absorb linear and angular movements of pipe work due to temperature changes, eliminating or minimizing the use of expansion joints. Tyco Technical Services offers customers assistance with designing flexible couplings into thermal expansion projects.



No Special Tools

Grooved Products are assembled onto a standard groove. No special tools or additional training to complete the job are required.



Compatibility With Hazardous Environments

Grooved Pipe does not require welding, threading, or cutting, eliminating cutting oils, fumes, and flames. It is the ideal method for joining pipe in enclosed, flammable, or hazardous sites like tunnels and mines. And it doesn't require burn or hot-works permits.



Connection Consistency

When construction calls for tough piping applications, GRINNELL Grooved Products maintain high pressures at each connection without sacrificing quality and reliability. GRINNELL Grooved Systems allow for quick assembly that is simple and consistent from one worker to the next. Projects are completed on time, and crews can readily move on to their next installations.



Why GRINNELL?



The Best Warranty in the Industry

GRINNELL Products are backed by a 10-year limited warranty. Our customers are proud to work with products manufactured by a market leader with an established brand name and a consistent history.

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Industry Pioneer

GRINNELL Products has been in the pipe-joining business for over 160 years. We have strategic stocking locations throughout the world to serve our customers. We have the best channel partners who are focused, as we are, on innovation and growth.



Green Solutions

All GRINNELL Products cast are manufactured with 90% recycled metal that would otherwise contribute to our nation's solid waste stream. All waste paper, used cardboard, scrap wood, and EPDM waste from our plants is recycled.



Global Presence

You can find our products in buildings and installations all over the world. We provide global solutions that flexibly address the challenges our customers face, including design in one country for construction in another.



Great Service

At Tyco Technical Services, the customer always comes first. We pride ourselves on providing knowledgeable sales support, timely technical service, and quality customer care to all global customers.

Tyco Technical Services

Tyco Technical Services

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P.O. Box 198, 7500 AD Enschede,
The Netherlands
Tel: +31 (0)53 428 4444
Fax: +31 (0)53 428 3377
Email: info-NL@tyco-bspd.com

Agency Listings and Approvals

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

General Data

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 OFFICIALS AND CODE ADMINISTRATORS (BOCA)

BUREAU VERITAS (BV)



CERTIFICATION TO EUROPEAN PRESSURE EQUIPMENT DIRECTIVE



CNBOP

Centrum Naukowo-Badawcze Ochrony Przeciwpozarowej

CNPP APSAD

National Centre for Prevention and Protection (FR)

COAST GUARD

Approved each vessel individually

CORPS OF ENGINEERS (COE)

GENS 15000

CRN

Canadian Registration Number

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



INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)



ICC-ES

National Evaluation Service, Inc.

LLOYD'S

Lloyd's Register of Shipping

LOSS PREVENTION CERTIFICATION BOARD (LPCB)



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

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Certificate of Quality System Registration

TYCO FIRE & BUILDING PRODUCTS
Research & Development Centre, 1467 Elmwood Avenue,
Cranston, RI 02910, USA

has complied with the requirements of the following:

ISO 9001:2008

and is authorised to use the LPCB mark on stationery and publications related to the following products and/or services

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.

T A Hunter
T A Hunter
for and on behalf of LPCB

Certificate No: 570
Issue Number: 07
Date of Issue: 16 August 2011
Date of Expiry: 15 August 2014



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Certificate of Quality System Registration

TYCO FLOW CONTROL (M) SDN. BHD.
(TYCO FIRE SUPPRESSION & BUILDING PRODUCTS, MALAYSIA)
Lot 886, C1 & C2, Jalan Subang 9, Taman Perindustrian Subang,
47500 Subang, Selangor, Malaysia

has complied with the requirements of the following:

ISO 9001:2008

and is authorised to use the LPCB mark on stationery and publications related to the following products and/or services

Assembly of couplings and marketing of couplings and fittings.

T A Hunter
T A Hunter
for and on behalf of LPCB

Certificate No: 673
Issue Number: 03
Date of Issue: 03 December 2010
Date of Expiry: 02 December 2013



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Certificate of Quality System Registration

TYCO FIRE & BUILDING PRODUCTS
260 Central Castings Drive, Anniston, AL 36206 USA

has complied with the requirements of the following:

ISO 9001:2008

and is authorised to use the LPCB mark on stationery and publications related to the following products and/or services

Design and manufacture of pipe couplings, fittings, related piping systems components and castings.

T A Hunter
T A Hunter
for and on behalf of LPCB

Certificate No: 669
Issue Number: 04
Date of Issue: 01 March 2011
Date of Expiry: 28 February 2014



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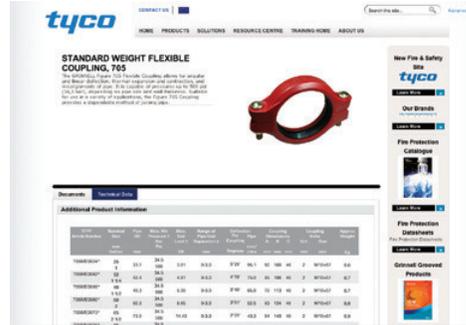
GRINNELL Website
www.tfppemea.com

To learn more about GRINNELL G-FIRE Products, visit www.tfppemea.com. Our Website provides a wide variety of tools and information at your fingertips.

General Data

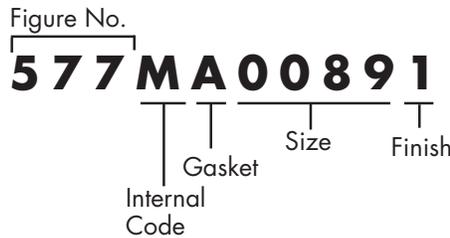


GRINNELL EMEA Homepage



GRINNELL EMEA Product Page

How to Build GRINNELL G-FIRE Part Numbers



Digits 01, 02, & 03: Figure number

Digit 04: Internal Code

Digit 05: Gasket - A for C-style EPDM (Grade A)
 T for Tri-Seal EPDM (Grade E)
 E for C-style EPDM (Grade E)
 D for C-style EPDM (Grade EN, approved for potable water applications)

Digits 06 thru 09: Size (See Table to Right)

Digit 10: Finish - 0 for Painted orange
 1 for Painted red
 2 for Galvanised
 3 for Unpainted
 5 for Painted White (RAL 9010)

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

Standard Figure Numbers

Outlet Fitting Example:

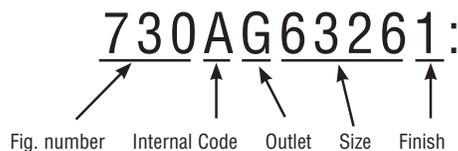


Figure number: 730 · Mechanical Tee

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") (Biggest Size First)

Finish: 1 · Painted Red

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

Pipe Size		Digits 06-07-08-09	
Nominal mm Inches	O.D. mm Inches	Sizes Codes for Outlet Fitting & 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		