

Effective Date: May 25, 2011
Rev. 1



Grinnell
A Tyco International Company

South Asia List Prices

for

Grooved G-FIRE and Fire Protection Products

Prices are in U.S. Dollars



Terms and Conditions of Sale

Definition

Where the context permits:

Agreement means the agreement between the Vendor and the Customer for the supply of Goods by the Vendor to the Customer and shall be constituted by these Terms and if any, the Vendor's quotation, Credit Arrangement and Guarantee.

Contract means the contract for the sale and purchase of the Goods as provided in clause 3.

Credit Arrangement means the credit terms available to the Customer pursuant to an application by the Customer for the provision of Goods on credit submitted to the Vendor using the Vendor's standard credit application form and accepted in writing by the Vendor.

Customer means the person with whom the Vendor has agreed to supply Goods pursuant to the Agreement.

Goods means the goods and services agreed to be supplied by the Vendor and purchased by the Customer pursuant to the Agreement.

GST means goods and services tax, value added tax or any other similar tax, if any, in the Territory.

Guarantee means the guarantee document provided by the Customer or the Customer's directors, shareholders or principals to the Vendor to guarantee the performance of the Agreement by the Customer.

Proprietary Information means any and all information and intellectual property relating to the Goods or the installation or operation of the Goods including but not limited to patents, designs, drawings, instruction booklets, specifications, circuit drawings, componentry, trade secrets, trade marks and copyright in such information and intellectual property.

Return of Goods Policy means the policy document setting out the procedures on return of any Goods to the Vendor, as updated by the Vendor from time to time, a current copy of which is annexed to these Terms as Schedule 1 hereto.

Terms means these general terms and conditions of sale and any further or other conditions of sale amending or adding to those conditions as agreed in writing by the Vendor.

Territory means Singapore.

Vendor means Tyco Fire & Building Products Asia Pte Ltd.

Quotations and Purchase Orders

1. Quotations from the Vendor are valid for a period of thirty (30) days from the date of issue or otherwise specified in the quotation. Prices given in any quotation by the Vendor are applicable to that quotation only and will not apply in any other instances. A quotation from the Vendor is not an offer to sell.
2. In order to purchase the Goods, the Customer must place with the Vendor a written purchase order setting out an order number, the Vendor's quotation number (if applicable), full description of the Goods to be purchased, the delivery date, delivery point and any other information required by the Vendor. The purchase order may be accepted or rejected by Vendor.
3. A Contract shall be formed by and upon the Vendor accepting in writing a purchase order from the Customer pursuant to clause 2 and each Contract shall be governed by the Agreement.
4. The Agreement shall take precedence over any other oral or written representations, agreements, arrangements or understandings relating to the Goods and any matters in connection therewith.
5. Any conditions or terms of purchase submitted by the Customer deviating from or inconsistent with the Agreement will not bind the Vendor notwithstanding any statement by the Customer in its purchase order that its terms and conditions prevail over the Agreement.

6. The Vendor may at its discretion, as a condition of acceptance of a purchase order require the Customer to provide to the Vendor cash deposit, Guarantee, bank guarantee or enter into a Credit Arrangement prior to delivery of the Goods.

Payment of purchase price

7. Purchase orders are accepted by the Vendor subject to the condition that the Customer shall pay promptly the purchase price set out in the Vendor's current price list for the Goods as of the date the order is accepted by the Vendor, or as otherwise quoted by the Vendor in writing.
8. Copies of the Vendor's current price list are available on request. All prices are subject to alteration without notice.
9. The purchase price, unless otherwise expressly stated, does not include any delivery charges, packaging, freight, assembly costs, installation costs, costs and charges of third party suppliers such as electricians, insurance or any statutory sales, excise, GST, goods and services, or other taxes, duties or imposts, all of which may be added to the purchase price or otherwise will be paid by the Customer or reimbursed by the Customer to the Vendor, as the Vendor may elect.
10. Payment of the purchase price must be made in full within 30 days after the date of the invoice or otherwise in accordance with the Customer's Credit Arrangement (if any) as amended in writing by the Vendor from time to time.
11. The Customer must not set off any money owing or alleged to be owing by the Vendor against money due by the Customer to the Vendor.
12. The Customer acknowledges that the Vendor is a member of a group of companies which have as their ultimate parent Tyco International Ltd. (Tyco Group). The Customer agrees that the Vendor and/or any other Tyco Group company is entitled to exercise a right of set off to the extent the Customer is indebted to the Vendor or to any Tyco Group company against any money due by the Vendor or any Tyco Group company to the Customer on this or any other account
13. If the Customer does not pay to the Vendor all money by the due date for payment, without prejudice to any other rights which it may have against the Customer, the Vendor may require the Customer to pay upon demand interest at 6% per annum calculated from the due date on daily balances of amounts unpaid.
14. If GST is payable on a supply pursuant to the Agreement, the Customer must also pay to the Vendor an additional amount equal to the GST payable. This clause does not apply to the extent that the purchase price is expressly stated to be GST inclusive. The Customer must pay the GST amount at the same time as the Customer must pay the purchase price.

Cancellation of orders

15. Purchase orders may not be altered or cancelled without the written consent of the Vendor. If the Vendor agrees to alter or cancel the purchase order, the Customer will indemnify the Vendor against any loss, damage and expense incurred by the Vendor in relation to the cancellation or alteration of that purchase order including the cost of return freight, return shipping to factory of origin, items purchased from third parties for inclusion in the Goods and all labour and engineering costs incurred by the Vendor in the execution or part execution of the Goods and including compensation payable to any supplier of the Vendor and loss of profit.

Return of Goods and credits

- 16. The Customer is deemed to have accepted the Goods unless it has made a claim in accordance with clause 17.
- 17. The Customer may reject any Goods which are wrongly supplied or oversupplied by notifying the Vendor of the claim and providing full particulars of the claim in writing within two (2) business days of receipt of those Goods. The Vendor may dispute any such claim.
- 18. Any Goods returned by the Customer must comply with the Return of Goods Policy.
- 19. The Customer must not return any Goods to the Vendor unless it has complied with clauses 17 and 18 and has done all things necessary to permit the Vendor to examine the Goods to the Vendor's satisfaction.

Delivery and storage

- 20. All quoted delivery or consignment dates are estimates only. The Vendor is not obliged to meet such dates and will not be liable to the Customer by reason of delays caused by any reason whatsoever.
- 21. The Vendor is deemed to have delivered the Goods when the Goods are made available to the Customer for physical collection by or on behalf of the Customer at the Vendor's nominated delivery point (**Delivery**). Any unloading or loading shall be the Customer's responsibility, unless otherwise agreed in writing by the Vendor.
- 22. The Vendor may deliver the Goods by instalments (where in the Vendor's opinion this is reasonable to do so) and issue interim invoices to the Customer.
- 23. Without limiting any other provisions in the Agreement, failure by the Customer to pay any instalment, or any other amount when due, will entitle the Vendor to withhold or delay delivery of any remaining Goods ordered.
- 24. If the Customer is unable to collect the Goods at the Vendor's nominated delivery point on the delivery day, the Vendor may (at its option and without limiting its other rights and remedies) arrange suitable storage of the Goods, whether at its premises or elsewhere and the Customer must pay or reimburse all costs and expenses of storage, insurance, demurrage, handling and other charges associated with such storage. Delivery shall be deemed to have occurred notwithstanding the Customer's inability to collect the Goods.

Title and risk

- 25. Title to the Goods shall remain with the Vendor until all monies owing to the Vendor by the Customer has been paid in full (whether such monies are payable under a specific contract or any other account whatsoever).
- 26. Until such time that the Customer has paid in full all monies owing to the Vendor, the Customer shall (subject to its right to deal with the Goods in the ordinary course of the Customer's business):
 - (a) keep the Goods stored separately and marked so that they are clearly and easily identifiable as the Vendor's property and inform the Vendor of the location of the Goods, if requested; and
 - (b) indemnify the Vendor against any claim arising out of the possession, use or disposal of the Goods by the Customer or repossession or attempted repossession by the Vendor.
- 27. If:
 - (a) a payment is not made in accordance with the invoice; or
 - (b) the Customer commits any other breach of this Agreement; or

- (c) the Customer becomes bankrupt or has an administrator, a receiver or a receiver and manager appointed or goes into liquidation, whether voluntarily or otherwise, or is wound up or dissolved or declared insolvent, and in the case of paragraphs (a) and (b), such breach is not remedied within fourteen (14) days after receiving written notice from the Vendor requiring the Customer to do so, then the Vendor may at any time, without notice to the Customer and without prejudice to any other rights which it may have against the Customer:
 - (d) terminate this Agreement and the Contract; and/or
 - (e) suspend some or all its obligations under any Contract with the Customer; and/or
 - (f) enter upon any premises owned or occupied by the Customer where the Vendor reasonably believes the Goods may be stored and repossess the Goods without being liable for any damages caused.
- 28. If the Customer sells the Goods before payment in full to the Vendor, or uses the Goods in a manufacturing or construction process of its own or some third party, the Customer holds the proceeds from the sale on trust for the Vendor in respect of those Goods, and must keep such proceeds in a separate account until the liability to the Vendor is discharged and must immediately pay that amount to the Vendor.
- 29. The risk in the Goods passes to the Customer at the time of Delivery.

Insurance

- 30. The Customer must insure and keep the Goods insured against all risks for goods of that kind from the time the risk in the Goods passes to the Customer until the time the property in the Goods passes to the Customer. The Customer holds the proceeds of that insurance on trust for the Vendor up to the amount it owes the Vendor in respect of those Goods, and must keep such proceeds in a separate account until the liability to the Vendor is discharged and must immediately pay that amount to the Vendor.

Limitation of liability for Goods

- 31. Except as set forth below and to the maximum extent permitted by law, the Vendor makes no warranties or representations to the Customer except to the extent set out in the Agreement.
- 32. **Limited Warranty with respect to Products Manufactured by GRINNELL Products.** Products manufactured by Tyco International (Tyco) under the GRINNELL brand are warranted solely to the original Buyer for ten (10) years from date of shipment by Tyco against defects in material and workmanship when paid for and properly installed and maintained under normal use and service, except for the G-MINE line of products, which are warranted solely to the original Buyer for six (6) months from date of shipment by Tyco against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. No warranty is given for products or components manufactured by companies not affiliated by ownership with Tyco or for products and components which have been subject to misuse, improper installation or maintenance, corrosion, or other external sources of damage. Materials found by Tyco to be defective shall be either repaired or replaced, at Tyco's sole option. Tyco neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. Tyco shall not be responsible for system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.



In no event shall Tyco be liable, in contract, tort, strict liability or under any other legal theory, for incidental, indirect, special or **consequential** damages, including but not limited to labor charges, regardless of whether Tyco was informed about the possibility of such damages, and in no event shall Tyco's liability exceed an amount equal to the sales price.

The foregoing warranty is made in lieu of any and all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

This limited warranty sets forth the exclusive remedy for claims based on failure of or defect in products, materials or components, whether the claim is made in contract, tort, strict liability or any other legal theory.

This warranty will apply to the full extent permitted by law. The invalidity, in whole or part, of any portion of this warranty will not affect the remainder.

- 33. Except as set forth above, the Vendor warrants the relevant Goods to be free from defects in workmanship and materials under normal use and service for a period of 12 months from date of Delivery (**Warranty Period**). This warranty does not cover costs of recovery of the Goods from the site or damage, fault, failure or malfunction due to external causes including accident, abuse, misuse, mechanical or electrical overload, abrasion, corrosion, incorrect installation by the Customer or a third party, failure to perform required preventative maintenance or normal wear and tear.
- 33. During the Warranty Period, to the extent permitted by law, the Customer's sole remedy with respect to breach of warranties set out in clause 32 will be repair or replacement by the Vendor (as the Vendor may elect) of any such defective Goods at the Vendor's expense. The replacement or repaired Goods shall be covered by the unexpired portion of the Warranty Period in respect of the original Goods or for a period of ninety (90) days, whichever is the greater.
- 34. For equipment forming part of the Goods which is not manufactured by the Vendor, the original manufacturer's warranty will apply. The Vendor's liability for such equipment shall not exceed the liability of the original manufacturer.
- 35. The liability of the Vendor under the Agreement will be reduced by the amount of any contributory loss and/or damage to the extent caused by the act and/or omission of the Customer.
- 36. To the maximum extent permitted by law and notwithstanding any provision to the contrary in this Agreement, the Vendor's total liability under each Contract (whether that liability arises under contract, tort, equity, statute or otherwise) for any loss, damage or expense arising out of or in connection with its performance of the Contract, shall be limited to the purchase price paid by the Customer to the Vendor for the Goods covered by that Contract and in no event shall the Vendor be liable for loss (whether direct or indirect) of profits, opportunity, revenue, goodwill, use, production, contracts, business or anticipated savings, corruption or destruction of data or for any special or consequential loss or damage whatsoever.

Proprietary Information

- 37. The Customer acknowledges that all Proprietary Information and all right title and interest therein are the sole property of or licensed by the Vendor and the Customer shall gain no rights, title or interest in the Proprietary Information whatsoever. The Customer specifically acknowledges the Vendor's exclusive rights to ownership of any modification, translation or adaptation of the Proprietary Information and any other improvement or development based thereon whether developed, supplied, installed or paid for by or on behalf of the Customer or any buyer of the Customer or otherwise.
- 38. The Customer must not and must not permit any person reasonably within the Customer's control to:

modify any of the Goods; and/or copy, clone, reverse engineer any hardware Goods; and/or

copy, decompile, disassemble or reverse engineer any software Goods; and/or

copy, modify or decompile any documents accompanying the Goods, without the Vendor's prior written consent, and in the event the Customer breaches its obligations under this clause, the Vendor may immediately terminate this Agreement and the Contract and the Customer shall indemnify and hold harmless the Vendor against any and all losses or damages related to such breach of the Agreement.

Re-export

- 39. The Goods supplied are intended for use only in the Territory. If any Goods are re-exported by the Customer, it is the Customer's responsibility to ensure that such Goods and the use to which they are put will comply with all applicable laws of that country.

Restriction on Use

- 40. The Customer acknowledges that the Goods purchased by the Customer may not be sold, leased or otherwise transferred to or utilised by, an end-user engaged in activities related to weapons of mass destruction including but not limited to activities related to design, development, production or use of nuclear materials, nuclear facilities or nuclear weapons, missiles or support of missiles projects or chemical or biological weapons.

Compliance

- 41. In advertising, marketing, promoting, sales and installation of the Goods and in carrying on the Customer's business, each of the Customer, its owners, officers, directors, employees or agents (collectively and individually in this clause, **Customer**) must comply with its, his or her obligations under any applicable law including without limitation, the Customer must:
 - 41.1 not make any untrue or misleading statement relating to the Vendor, its goods and services including the Goods, its business or its practices;
 - 41.2 comply with all applicable export and import laws and regulations, including associated embargo and sanction regulations and unless authorized by applicable governmental license or regulation, not directly or indirectly export or re-export any technical information or software subject to this Agreement (including direct products of such technical information or software) to any prohibited destination or country (including release to nationals, wherever they may be located, of any prohibited country) as specified in such applicable export regulations;
 - 41.3 not violate any health, safety or environmental protection law, regulation, order or safety standard affecting the conduct of its business or practices.
- 42. Third Party Compliance

42.1 **No Improper Means of Obtaining Business.** Vendor and the Customer intend that no payments or transfers of value shall be made which have the purpose or effect of public or commercial bribery, acceptance of or acquiescence in extortion or kickbacks, or other unlawful or improper means of obtaining business.

42.2 **No Bribes.** Customer will not, directly or indirectly, pay, offer, authorize or promise any monies or anything of value (such as gift, contributions, travel, or entertainment) to any person or organization (including any employee or official of any governmental authority, government owned or controlled entity, public international organization or political party; any candidate for political office; or any employee of any of the

Customer's or Vendor's customers) for the purpose of improperly influencing their acts or decisions in violation of any anti-bribery or anti-corruption laws, including the United States International Corrupt Practices Act, laws under the OECD Anti-Bribery Convention and local anti-corruption law (collectively, "Anti-Corruption Laws"). Customer will take appropriate actions to ensure that any person representing or acting under its instruction or control ("Customer's Agents") will also comply with this Clause 42.

- 42.3 **No Kickbacks.** No part of the payment of any amounts payable under this Agreement will be distributed to Vendor, its affiliates or customers, or any of its employees or their family members.
- 42.4 **No Conflicts.** Except as disclosed in writing to Vendor (in a questionnaire response or otherwise), Customer represents that it does not have any reason to believe that there are any potential conflicts of interest regarding its relationship with Vendor, such as family members who could potentially benefit from the commercial relationship established by this Agreement; and neither Customer, nor any of the Customer's Agents, have any family members who are government officials or political party candidates in a position to influence the Customer's commercial relationship with Vendor.
- 42.5 **Accurate Books and Records.** Customer will maintain complete and accurate books and records in accordance with generally accepted accounting principles in Customer's jurisdiction, consistently applied, properly and accurately recording all payments made by the Customer or Customer's Agents in performance of this Agreement or related to it, and any commission, compensation, reimbursement, or other payment made by or on behalf of Vendor to the Customer or Customer's Agents. Customer will maintain a system of internal accounting controls reasonably designed to ensure that it maintains no off-the-book accounts and that its assets are used only in accordance with its management directives.
- 42.6 **Notification.** Customer will notify Vendor promptly if (a) Customer or any of the Customer's Agents have reason to believe that a breach of this Clause 42 has occurred or is likely to occur; or (b) if any conflicts of interest arise after the signing of this Agreement, including if any of the Customer's Agents or their family members become a government official or political party candidate in a position to influence Customer's commercial relationship with Vendor. Customer will send all such notices to **TycoPolicy@tyco.com** or to such other location as Vendor may designate in writing.
- 42.7 **Compliance Certification.** Customer will, when and as may be requested by Vendor from time to time, provide to Vendor a written certification in form and substance satisfactory to Vendor that Customer is in compliance with this Clause 42.
- 42.8 **No Payments for Improper Activities.** Vendor will not be required under any circumstances to take any action or make any payments that Vendor believes, in good faith, would cause it or its affiliated companies to be in violation of any Anti-Corruption Laws. If Vendor at any time believes, in good faith, that a breach of any of the representations and warranties in this Clause 42 has occurred or may occur, Vendor may withhold any commission, compensation, reimbursement, or other payment until such time as Vendor has received confirmation to its reasonable satisfaction that no breach has occurred or will occur. Vendor shall not be liable to Customer for any claim, losses, or damages whatsoever related to Vendor's decision to withhold any commission, compensation, reimbursement, or other payment under this provision.
- 42.9 **Audit Rights.** If Vendor at any time believes, in good faith, that Customer has breached the warranties, representations or agreements in this Clause 42, then Vendor will have the right to audit Customer's books and records related to this Agreement

in order to verify Customer's compliance with the provisions of this Clause 42. The audit will be performed by individuals selected by Vendor. However, upon request by Customer, Vendor will select in its sole discretion an independent third party to conduct an audit in order to certify to Vendor that no breach has occurred or will occur. Customer will fully cooperate in any audit conducted by or on behalf of Vendor.

- 42.10 **Termination Rights.** Any breach of the warranties, representations or agreements in Clauses 41 or 42 will constitute grounds for immediate termination of this Agreement for cause by Vendor and no commission, compensation, reimbursement or other payment will be due to Customer. Customer will indemnify and hold Vendor harmless against any actions, legal claims, demands, proceedings, losses, damages, costs, expenses and other liabilities of whatever nature resulting from Customer's breach of the representations, warranties and agreements contained in Clauses 41 or 42.
- 42.11 **Data Privacy.** Customer consents to the collection, processing and international transfer of data and information related to the business relationship between it and Vendor, including the transfer of personally identifiable data to and between Vendor and its affiliates wherever they may be located, for the purposes of allowing Vendor and its affiliates to evaluate its experience and qualifications and implement any business relationship that may now or subsequently exist between it and Vendor. Customer shall have the right to: (a) request reasonable access to this data; (b) rectify or cancel any inaccurate or expired data; and (c) object to any processing that is not in conformity with the purposes described herein. In this regard, Customer may exercise its rights by writing to Vendor at **TycoPolicy@tyco.com** or to such other location as Vendor may make available from time to time
- 42.12 This Clause 42 will not be affected by expiration or termination of this Agreement for any reason.
- 43. The Customer must at its sole cost apply for and maintain during the term of the Agreement all necessary licences, permits and other consents or approval required by any relevant authority in the Territory relevant to the sale and installation of the Goods and if the Goods are installed by the Customer, they shall be installed in strict compliance with any applicable or appropriate standard and/or regulation in the Territory.

Termination

- 44. Either party may terminate this Agreement and the Contract by giving notice to the other party of its intention to terminate in any of the following circumstances:
 - 44.1 the other Party commits any breach of the provisions of this Agreement and has not remedied that breach within fourteen (14) days after receiving written notice from the party requiring it to do so;
 - 44.2 the other party has an administrator, a receiver or a receiver and manager appointed or goes into liquidation, whether voluntarily or otherwise, or is wound up or dissolved or declared insolvent; or
 - 44.3 either party ceases to carry on business or any licence or authorisation it requires to carry on business is suspended or revoked.
- 45. The Vendor may terminate this Agreement and the Contract at any time without cause on giving one (1) month's notice in writing to the Customer.

Introduction
Couplings & Fittings
Mechanical Tees
Valves
Plain End Systems
Gaskets & Spare Parts
Preparation Equipment
Miscellaneous
Indices



Miscellaneous

46. The fact that the Vendor fails to do, or delays in doing, something it is entitled to do under the Agreement, does not amount to a waiver of its right to do it. Any waiver must be agreed in writing by the Vendor.
47. If a clause or part of a clause can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from these Terms, but the rest of the Agreement is not affected.
48. The Vendor shall not be liable for any failure to fulfil or any delay in fulfilling any obligation arising from the Agreement if the failure or delay has been caused directly or indirectly by any act of God, war or other civil commotion, terrorism, strikes, lockouts, stoppages and restraints of labour, breakdown of machinery, inability to obtain raw materials or fuel, fire or explosion, any government action or any other cause beyond the reasonable control of the Vendor and not a consequence of the Vendor's negligence.
49. Any notice to be given to a party under the Agreement must be in writing and must be sent by post, facsimile or email to the address of that party shown in the quotation, purchase order or order acknowledgment. Notice is deemed to have been given at the time it would have been received in the normal course of post if sent by post, or if otherwise given at the time it was actually received.
50. The Agreement is governed by and must be interpreted in accordance with the laws of the Territory. The Customer unconditionally submits to the non-exclusive jurisdiction of the courts of the Territory. The Agreement is not governed by the United Nations Convention on documents for the International Sale of Goods.
51. If the Agreement is translated into another language and there is any diversion between this English version and the translated version, then this English version shall prevail.
52. Where there is more than one Customer, then the liability of each shall be joint and several.
53. The rights and remedies provided in the Agreement will not affect any other rights or remedies available to the Vendor.
54. The Agreement cannot be assigned by the Customer without the prior written consent of the Vendor.
55. Each person signing the Agreement as an authorised officer, agent or attorney of any party by so doing warrants to the other party that, as at the date of signing, he or she has full authority to execute the Agreement on behalf of that party.

SCHEDULE 1

RETURN OF GOODS POLICY

No Goods will be accepted by the Vendor for return, exchange or credit unless all the following terms and conditions have been complied with by the Customer:

1. Subject to the terms and conditions of this Agreement and after a return authorisation and return authorisation number has been obtained from the Vendor, at the Vendor's discretion, the following Goods may be accepted for return by the Customer:
 - (a) Goods alleged to be defective in material and/or workmanship; and
 - (b) incorrect type or quantity of Goods contained in each Delivery provided the Customer is within the time limit set out in clause 17 of these Terms.
2. Freight charges for all returns must be prepaid by the Customer at its expense. Cash on Delivery/C.O.D. packages will not be accepted by the Vendor.
3. The Goods must be returned by the Customer to the Vendor's warehouses as directed by the Vendor.
4. Only Goods purchased directly from the Vendor will be accepted for return.
5. The returned Goods are accompanied by a dispatch note stating the return authorisation number, the Vendor's original invoice number, the reason for the return and any other information as may be required by the Vendor.
6. Goods returned by the Customer for other than warranty purposes shall be subject to a restocking charge of twenty-five percent (25%) of the relevant price for the Goods. If the Goods are received by the Vendor in a condition which the Vendor reasonably believes will affect the price or ability to resell, then additional restocking charges may be levied or a credit may be completely denied. *Terms and Conditions of Sale Tyco Singapore-Proforma Terms and Conditions of Sales (3PP)(Clean) 071209 – Terms & Conditions of Sales 20100517 1*

Table of Contents

Section 1 – Introduction

Terms and Conditions	2 - 6
Table of Contents	7 - 8
GRINNELL Gasket Styles, Grades and Recommendations	9
Agency Listings and Approvals	10

Section 2 – Couplings and Fittings

#577 – G-FIRE Rigid Coupling with Grade “E” Type “A” Pre Lube Gasket	11
#577 – G-FIRE Rigid Coupling with Grade “E” EPDM Tri-Seal Gasket	11
#705 – Flexible Coupling with Grade “E” Type “A” Pre Lube Gasket	12
#705 – Flexible Coupling with Grade “E” EPDM Tri-Seal Gasket	12
#707 – Heavy-Duty Flexible Coupling with Grade “E” EPDM Gasket	13
#707 – Heavy-Duty Flexible Coupling with Grade “E” EPDM Tri-Seal Gasket	13
#716 – Reducing Coupling with Grade “E” EPDM Gasket	14
#770 – High Pressure Rigid Coupling with Grade “E” EPDM	14
#702 – Outlet Coupling Grade “E” Gasket, Female BSP Threaded End, Painted	15
#702 – Outlet Coupling Grade “E” Gasket, Male BSP Threaded End, Painted	16
#702 – Outlet Coupling Grade “E” Gasket, Grooved End, Painted	16
#71 – Grooved Flange Adaptor PN16 with Grade “E” EPDM Type “A” Fire Protection Gasket	17
#71 – Grooved Flange Adaptor PN10 with Grade “E” EPDM Type “A” Fire Protection Gasket	17
#71 – Grooved Flange Adaptor - ANSI Class 150 with Grade “E” EPDM Type “A” Fire Protection Gasket	17
#510S – G-FIRE Short Pattern Cast Grooved 90° Elbow	18
#510 – G-FIRE Standard Pattern Grooved 90° Elbow	18
#501 – G-FIRE Standard Pattern Grooved 45° Elbow	19
#212 and #312 – Grooved 22½° Elbow	19
#211 and #311 – Grooved 11¼° Elbow	20
#510DE – G-FIRE 90° Elbow with 25mm Outlet	20
#519S – G-FIRE Short Pattern Grooved Tee	21
#519 – G-FIRE Standard Pattern Grooved Tee	21
#320 Groove x Male BSP Thread – Tee	22
#508 – Standpipe Tee	22
#507/#50L – Bullhead Tee	22
#323 – Reducing Tee with BSP Threaded Branch	23
#221 and #321 – Grooved Reducing Tee	24
#250 and #350 – Grooved Concentric Reducer	26
#372 Groove x Male BSP Thread – Reducer	27
#391 Groove x Male BSP Thread – Adaptor Nipple	28
#392 Groove x Groove – Adaptor Nipple	28
#393 Groove x Plain – Adaptor Nipple	29
#227 and #327 – Grooved Cross	29
#560 – G-FIRE Grooved Cap	30
#560 – Grooved Cap with 15mm Tap	30
#560 – Grooved Cap with 25mm Tap	30
#343 – Grooved x Flanged Adaptor – PN16	31
#341 – Grooved x Flanged Adaptor 150 Lbs. – Schedule 40	31
#342 – Grooved x Flanged Adaptor 300 Lbs. – Schedule 40	31
#750 – ADACAP, NPT Threads	32
#522 – G-FIRE Sprinkler Outlet, BSP Threaded with Grade “E” Type “A” Gasket	32

Section 3 – Mechanical Tees

#730 – Mechanical Tee with Grade “E” EPDM Gasket, BSP Threaded Outlet	33
#730 – Mechanical Tee with Grade “E” EPDM Gasket, Grooved Outlet	34
#730 – Mechanical Cross with Grade “E” EPDM Gasket, BSP Threaded Outlet	35
#730 – Mechanical Cross with Grade “E” EPDM Gasket, Grooved Outlet	36

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices



Table of Contents

Section 4 – Valves

#CV-1F – G-FIRE Grooved Check Valve	37
#CV-1FR – G-FIRE Grooved Shotgun Riser Check Valve	37
Model 1161 – Double Door Wafer Check Valve	37
Model BFV-N G-FIRE Butterfly Valves - Groove x Groove, 300 psi	38
Model BFV-N G-FIRE Butterfly Valves - Wafer Style, 250 psi	38
Model BFV-N G-FIRE Butterfly Valves - Lug Style, 250 psi	39
Model #TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Flange, ANSI Class #125, PN10 & PN16	40
Model #TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Groove	40
Model #TMR – Shut Off Valve, Gate Valve, OS&Y, Groove x Groove	40
Model #TMC – Shut Off Valve, Gate Valve, NRS, Flange x Flange, ANSI Class #125, PN10 & PN16	41
Model #TMC – Shut Off Valve, Gate Valve, NRS, Flange x Groove	41
Model #TMC – Shut Off Valve, Gate Valve, NRS, Groove x Groove	41
Model #TMCXP – Shut Off Valve, Gate Valve, NRS, Flange x Flange, ANSI Class #125, PN10 & PN16	42
Model #POST-IND – Indicator Post, Adjustable, TMCXP	42
Model #WALL-IND – Indicator Post Wall Type	42

Section 5 – Plain-End Systems

#909 Plain End Coupling with Grade “E” EPDM Gasket	43
#910 Plain End 90° Elbow	44
#901 Plain End 45° Elbow	44
#919 Plain End Tee	45
#927 Plain End Cross	45
#924 Plain End True Wye	46
#960 Plain End Cap (Bull Plug)	46
#914 Plain End Lateral	47
#999 Plain End Swaged Nipple	48
#991 Adaptor Nipple Plain x BSP Thread	49
#992 Adaptor Nipple Plain x Grooved	49
#993 Adaptor Nipple Plain x Plain	49
#921 Reducing Tee Plain End	50

Section 6 – Gaskets & Spare Parts

Replacement Gaskets EPDM “E” Gaskets For #716 Reducing Coupling	51
#71 Flange Adaptor – Nut, Bolt, and Gasket Kit & Metal Washer	51
#702 – Outlet Coupling Replacement Grade “E” EPDM Gaskets	52
#730 Replacement “E” EPDM Gasket	53
Replacement Gaskets EPDM “E” Gaskets For #909 Plain End Coupling	54
Coupling Nut and Bolt Kit	54
GRINNELL Gasket Lubricant	55
GRINNELL Silicone Gasket Lubricant	55
Pipe Tape Chrome Plated with GRINNELL Logo	55

Section 7 – Preparation Equipment

Roll Grooving Machine Selection Chart	56
Accessories	56
Roll Selection Chart	57

Section 8 – Miscellaneous

Grooved Couplings – Pieces Per Carton/Pallet	58
Grooved Short Pattern Fittings – Pieces Per Carton/Pallet	59
Grooved Fittings – Pieces Per Carton/Pallet	59 - 61
Mechanical Tees – Pieces Per Carton/Pallet	62
CV-1 – Pieces Per Carton/Pallet	63
Replacement Gaskets – Pieces Per Carton/Pallet	64

Section 9 – Indexes

Part Number Index	65 – 70
Model Number Index	71

GRINNELL Gasket Styles, Grades and Recommendations

Standard

The standard style gasket, with a “C” shape configuration, is the most commonly used. It is provided as the standard gasket in the Figure 577, 705, 707, 770, 772, 405, and 472 GRINNELL Couplings. The gasket is available in Grade “E” and “EN” EPDM Grade “T” Nitrile, Grade “L” Silicone, and Grade “O” Fluoroelastomer.



Tri-Seal

The tri-seal gasket is designed to close off the gap or gasket cavity. This is accomplished by positioning the center “rib” of the gasket over the gap between the pipes. The tri-seal gasket has two tapered sealing edges in addition to the center rib for additional strength and sealing.



The Tri-Seal gasket can be used with the Figure 577, 705, 707, 770, 772, 405, and 472 GRINNELL Couplings. It is recommended for use in low temperature and vacuum services (greater than 10” Hg) applications and potable water systems. Note only a petroleum-free silicone based lubricant is recommended for low temperature applications. The gasket is available in Grade “E”, “EN” EPDM and Grade “T” Nitrile.

Note: Rigid couplings are recommended for vacuum and low temperature applications

Reducing Coupling

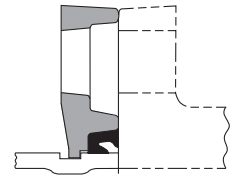
The reducing gasket is provided with ribs used to position the larger pipe so that the sealing lip is located on the sealing surface of the pipe. This gasket is used only with the Figure 716 GRINNELL Reducing Coupling and is available in Grade “E” EPDM and Grade “T” Nitrile.



Note: Reducing couplings are not recommended for low temperature applications.

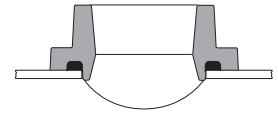
Flange Adaptor

This gasket is specifically designed for use with the Figure 71 Flange Adaptor. The gasket has an optimal amount of rubber to provide a dependable seal between both the pipe and mating surface. The gasket is available in Grade “E” EPDM and Grade “T” Nitrile.



Mechanical Tee and Strap

The gasket provides a compression type seal, which is designed to conform to the exterior curve (OD) of the pipe. This design is unique to both the Figure 730 Mechanical Tee (threaded and grooved) and Figure 40-5 Strap. The gasket is available in Grade “E” EPDM and Grade “T” Nitrile.



Note: When used in low temperature applications, use a petroleum-free silicone based lubricant, otherwise no lubricant is required on Mechanical Tee and Strap gaskets

Plain End Coupling

This gasket is designed for use with the Figure 909 Plain End Coupling.



GRINNELL gaskets are designed exclusively for use with GRINNELL manufactured coupling housings. The mixing of other manufacturer’s gaskets or housings with GRINNELL gaskets or housings may result in pipe joint leakage or failure and will void the Tyco Fire Protection Products limited warranty.

The Gasket Recommendation Table has been developed to maximize service life. The table was developed from information supplied by the elastomer material manufacturers, reference technical literature, and testing conducted by GRINNELL Products.

In evaluating the gasket grade for intended service, consider the following: system operating temperature, fluid or solution concentration, and duration of service.

All gasket recommendations are based on a temperature of 21°C (70°F) unless otherwise noted.

When considering combinations of service solutions, consult Technical Services and Mechanical Services.

GRINNELL Products for recommendations for services not listed.

Gasket recommendations apply to GRINNELL gaskets and valves only.

Grade	Temperature Range	Compound	Color Code	General Service Application
“E”	-34°C to 110°C (-30°F to 230°F)	EPDM	Green	Hot water, dilute acids, alkalis, oil free air, and many chemical services not involving petroleum products. Excellent oxidation resistance. NOT FOR USE WITH HYDROCARBONS. NOT RECOMMENDED FOR STEAM SERVICE.
“E” Type A	-34°C to 66°C (-30°F to 150°F)	EPDM	Violet Stripe	Applicable for wet and dry (oil-free air) sprinkler services only. For dry/freezer services, GRINNELL recommends the use of Tri-Seal gaskets. NOT RECOMMENDED FOR HOT WATER SERVICES.
“E” Tri-Seal	-34°C to 110°C (-30°F to 230°F)	EPDM	Green	Hot water, dilute acids, alkalis, and many chemical services not involving petroleum products. Excellent oxidation resistance. NOT FOR USE WITH HYDROCARBONS. Recommended for low temperature and vacuum services.
“T” and “T” Tri-Seal	-29°C to 82°C (-20°F to 180°F)	Nitrile	Orange	Petroleum products, vegetable oils, mineral oils and air with oils. High-End oil vapor temperature, decrease to 150°F (66°C). Not Recommended for Hot Water Systems. Not Recommended for Hot Dry Air Systems.
“O”	-7°C to 149°C (+20°F to 300°F)	Fluoroelastomer	Blue	Oxidizing acids, petroleum products, hydraulic fluids, lubricants, halogenated hydrocarbons.
“L”	-34°C to 177°C (-30°F to 350°F)	Silicone *	Red Gasket	Air without hydrocarbons, dry heat.
“EN” and “EN” Tri-Seal IPS Pipe	Cold and Hot Potable Water up to 82°C (180°F)	EPDM	Green/Yellow Stripe	IPS Sizes Only, NSF 61 Approved for potable water. NOT RECOMMENDED FOR HYDROCARBONS.

* To prevent gasket from deteriorating, NEVER use silicone-based lubricants with Grade “L” Silicone gaskets.



Agency Listings and Approvals

Our products bear the seal of approval from the following agencies, associations and laboratories.

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

ACS	
ACTIVFIRE Active Fire Protection Product Certification	
AP SAD	
AMERICAN BUREAU OF SHIPPING (ABS)	
AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)	
AMERICAN WATER WORKS ASSOCIATION (AWWA)	
AMERICAN PETROLEUM INSTITUTE (API) API Std. 5L, Sect. 7.5	
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	
ARPA	
BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA)	
BUREAU VERITAS (BV)	
CNBOP Centrum Naukowo-Badawcze Ochrony Przeciwpozarowej	
COAST GUARD Approved each vessel individually	
CORPS OF ENGINEERS (COE) GEGS 15000	
CRN Canadian Registration Number	
CSTB	
DNV Det Norske Veritas	


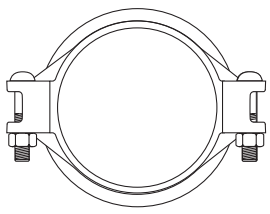
DVGW Deutscher Verein des Gas-und Wasserfaches e.V.	
FACTORY MUTUAL ENGINEERING CORP. (FM) Approved for Fire Protection Services	
FEDERAL AVIATION ADMINISTRATION (FAA) HVAC, Plumbing and Fire Protection	
FEDERAL HOUSING ADMINISTRATION (FHA)	
GENERAL SERVICES ADMINISTRATION (GSA) 15000 Series	
GERMANISCHER LLOYD	
ICC-ES International Association of Plumbing and Mechanical Officials (IAPMO)	
IPC Association Connecting Electronics Industries	
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 Procedure	
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)	

NATIONAL SANITATION FOUNDATION (NSF) The Public Health and Safety Company	
PAVUS	
PCT	
PRESSURE EQUIPMENT DIRECTIVE	
RINA Registro Italiano Navale	
T/S/U	
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 SACHVERSICHERER E.V. (VDS) Approved for Fire Protective Service	
VETERANS AFFAIRS (VA) 15000 Series	
WATERMARK Pending Approved for Potable Water Service (AU)	
WRAS Water Regulations Advisory Scheme (UK)	
WSD Pending Approved for Potable Water Service (HK)	
97/23/EC	

See technical data sheets for specific approvals, listings, and design parameters.
POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.
www.grinnell.com


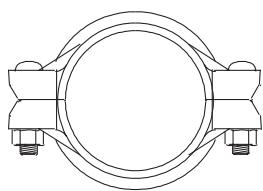
**#577 – G-FIRE Rigid Coupling
with Grade “E” Type “A” Pre Lube Gasket**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	577MA00341	POA	577MA00342	POA
	1 1/4"	42.4mm	577MA00421	\$26.75	577MA00422	\$32.50
	1 1/2"	48.3mm	577MA00481	\$27.25	577MA00482	\$33.25
	2"	60.3mm	577MA00601	\$39.50	577MA00602	\$36.75
	2 1/2"	73.0mm	577MA00731	\$41.00	577MA00732	\$42.75
	76.1mm	76.1mm	577MA00761	\$40.50	577MA00762	\$47.25
	3"	88.9mm	577MA00891	\$41.00	577MA00892	\$49.75
	4"	114.3mm	577MA01141	\$65.25	577MA01142	\$69.75
	139.7mm	139.7mm	577MA01391	\$94.75	577MA01392	\$104.00
	5"	141.3mm	577MA01411	\$85.75	577MA01412	\$104.00
	165.1mm	165.1mm	577MA01651	\$99.00	577MA01652	\$120.25
	6"	168.3mm	577MA01681	\$99.00	577MA01682	\$120.25
	8"	219.1mm	577MA02191	\$193.25	577MA02192	\$201.75
	10"	273.0mm	577MA02731	\$355.25	577MA02732	\$475.00
12"	323.9mm	577MA03241	\$397.25	577MA03242	\$532.50	
Metric bolts are supplied as standard.						
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: TFP1854						

**#577 – G-FIRE Rigid Coupling
with Grade “E” EPDM Tri-Seal Gasket Recommended for
Dry Pipe Systems and Freezer Applications – Use Silicone Lubricant**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	577AT00341	POA	577AT00342	POA
	1 1/4"	42.4mm	577AT00421	\$40.75	577AT00422	\$45.75
	1 1/2"	48.3mm	577AT00481	\$43.25	577AT00482	\$50.25
	2"	60.3mm	577AT00601	\$46.25	577AT00602	\$54.25
	2 1/2"	73.0mm	577AT00731	\$55.25	577AT00732	\$64.25
	76.1mm	76.1mm	577AT00761	\$55.25	577AT00762	\$64.25
	3"	88.9mm	577AT00891	\$59.75	577AT00892	\$69.75
	4"	114.3mm	577AT01141	\$84.00	577AT01142	\$97.75
	139.7mm	139.7mm	577AT01391	\$142.45	577AT01392	\$164.25
	5"	141.3mm	577AT01411	\$142.25	577AT01412	\$164.25
	165.1mm	165.1mm	577AT01651	\$157.25	577AT01652	\$183.50
	6"	168.3mm	577AT01681	\$157.25	577AT01682	\$183.50
	8"	219.1mm	577AT02191	\$254.75	577AT02192	\$295.50
	10"	273.0mm	577AT02731	\$427.50	577AT02732	\$543.75
12"	323.9mm	577AT03241	\$486.25	577AT03242	\$626.00	
Metric bolts are supplied as standard.						
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: TFP1854						

**#705 – Flexible Coupling
 with Grade “E” Type “A” Pre Lube Gasket**


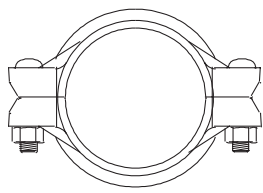
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	705MA00341	\$28.25	705MA00342	\$35.00
	1 1/4"	42.4mm	705MA00421	\$29.00	705MA00422	\$37.50
	1 1/2"	48.3mm	705MA00481	\$35.00	705MA00482	\$44.00
	2"	60.3mm	705MA00601	\$35.75	705MA00602	\$45.25
	2 1/2"	73.0mm	705MA00731	\$41.25	705MA00732	\$52.25
	76.1mm	76.1mm	705MA00761	\$41.25	705MA00762	\$52.25
	3"	88.9mm	705MA00891	\$48.25	705MA00892	\$60.50
	4"	114.3mm	705MA01141	\$67.25	705MA01142	\$87.50
	139.7mm	139.7mm	705MA01391	\$96.50	705MA01392	\$125.25
	5"	141.3mm	705MA01411	\$96.50	705MA01412	\$125.25
	165.1mm	165.1mm	705MA01651	\$115.50	705MA01652	\$150.50
	6"	168.3mm	705MA01681	\$115.50	705MA01682	\$150.50
	216.3mm	216.3mm	705MA02161	\$181.00	705MA02162	\$241.50
	8"	219.1mm	705MA02191	\$181.00	705MA02192	\$241.50
	10"	273.0mm	705MA02731	\$386.75	705MA02732	\$555.00
12"	323.9mm	705MA03241	\$440.50	705MA03242	\$630.75	

Metric bolts are supplied as standard.

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1854

**#705 – Flexible Coupling
 with Grade “E” EPDM Tri-Seal Gasket Recommended for
 Dry Pipe Systems and Freezer Applications – Use Silicone Lubricant**


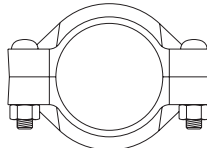
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	705MT00341	\$45.25	705034G3E	\$53.50
	1 1/4"	42.4mm	705MT00421	\$47.75	705042G3E	\$56.75
	1 1/2"	48.3mm	705MT00481	\$52.25	705048G3E	\$62.25
	2"	60.3mm	705MT00601	\$53.75	705060G3E	\$63.75
	2 1/2"	73.0mm	705MT00731	\$63.75	705073G3E	\$75.75
	76.1mm	76.1mm	705MT00761	\$63.75	705076G3E	\$75.75
	3"	88.9mm	705MT00891	\$67.75	705089G3E	\$81.75
	4"	114.3mm	705MT01141	\$96.75	705114G3E	\$118.50
	139.7mm	139.7mm	705MT01391	\$165.50	705139G3E	\$198.00
	5"	141.3mm	705MT01411	\$165.50	705141G3E	\$198.00
	165.1mm	165.1mm	705MT01651	\$183.00	705165G3E	\$222.00
	6"	168.3mm	705MT01681	\$183.00	705168G3E	\$222.00
	216.3mm	216.3mm	705MT02161	\$236.00	705216G3E	\$300.00
	8"	219.1mm	705MT02191	\$236.00	705219G3E	\$300.00
	10"	273.0mm	705MT02731	\$459.50	705273G3E	\$618.00
12"	323.9mm	705MT03241	\$539.75	705324G3E	\$710.75	

Metric bolts are supplied as standard.

Orders for items in shaded areas *cannot* be cancelled or returned.


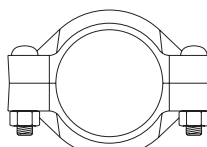
Technical Data Sheet: TFP1854

**#707 Heavy-Duty Flexible Coupling
with Grade “E” EPDM Gasket**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	707034ME	\$27.50	707034GE	\$37.50
	1 1/4"	42.4mm	707042ME	\$36.50	707042GE	\$49.25
	1 1/2"	48.3mm	707048ME	\$40.00	707048GE	\$52.50
	2"	60.3mm	707060ME	\$42.50	707060GE	\$56.50
	2 1/2"	73.0mm	707073ME	\$49.75	707073GE	\$69.75
	76.1mm	76.1mm	707076ME	\$49.75	707076GE	\$69.75
	3"	88.9mm	707089ME	\$55.25	707089GE	\$77.00
	4"	114.3mm	707114ME	\$80.00	707114GE	\$113.00
	139.7mm	139.7mm	707139ME	\$143.75	707139GE	\$175.00
	5"	141.3mm	707141ME	\$143.75	707141GE	\$175.00
	165.1mm	165.1mm	707165ME	\$143.75	707165GE	\$206.75
	6"	168.3mm	707168ME	\$143.75	707168GE	\$206.75
	8"	219.1mm	707219ME	\$233.75	707219GE	\$348.50
	10"	273.0mm	707273ME	\$386.75	707273GE	\$555.00
12"	323.9mm	707324ME	\$440.50	707324GE	\$630.75	

Technical Data Sheet: TFP1840

**#707 Heavy-Duty Flexible Coupling
with Grade “E” EPDM Tri-Seal Gasket Recommended for
Dry Pipe Systems and Freezer Applications – Use Silicone Lubricant**


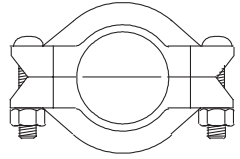
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	707034M3E	\$44.00	707034G3E	\$54.25
	1 1/4"	42.4mm	707042M3E	\$54.25	707042G3E	\$67.50
	1 1/2"	48.3mm	707048M3E	\$56.50	707048G3E	\$70.50
	2"	60.3mm	707060M3E	\$59.50	707060G3E	\$74.50
	2 1/2"	73.0mm	707073M3E	\$72.50	707073G3E	\$92.50
	76.1mm	76.1mm	707076M3E	\$72.50	707076G3E	\$92.50
	3"	88.9mm	707089M3E	\$75.25	707089G3E	\$97.50
	4"	114.3mm	707114M3E	\$108.50	707114G3E	\$142.75
	139.7mm	139.7mm	707139M3E	\$191.25	707139G3E	\$248.25
	5"	141.3mm	707141M3E	\$191.25	707141G3E	\$248.25
	165.1mm	165.1mm	707165M3E	\$211.25	707165G3E	\$277.50
	6"	168.3mm	707168M3E	\$211.25	707168G3E	\$277.50
	8"	219.1mm	707219M3E	\$286.00	707219G3E	\$392.25
	10"	273.0mm	707273M3E	\$459.50	707273G3E	\$618.00
12"	323.9mm	707324M3E	\$539.75	707324G3E	\$710.75	

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1840

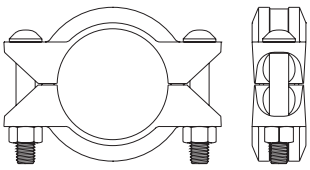


#716 – Reducing Coupling with Grade “E” EPDM Gasket

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 1"	60.3 x 33.4mm	716060034ME	\$74.50	716060034GE	\$89.25
	2" x 1 1/2"	60.3 x 48.3mm	716060048ME	\$59.75	716060048GE	\$92.25
	2 1/2" x 2"	73.0 x 60.3mm	716073060ME	\$77.75	716073060GE	\$97.50
	76.1mm x 2"	76.1 x 60.3mm	716076060ME	\$77.75	716076060GE	\$97.50
	3" x 2"	88.9 x 60.3mm	716089060ME	\$88.75	716089060GE	\$112.25
	3" x 2 1/2"	88.9 x 73.0mm	716089073ME	\$76.25	716089073GE	\$97.50
	3" x 76.1mm	88.9 x 76.1mm	716089076ME	\$76.25	716089076GE	\$97.50
	4" x 2"	114.3 x 60.3mm	716114060ME	\$140.25	716114060GE	\$177.75
	4" x 2 1/2"	114.3 x 73.0mm	716114073ME	\$126.00	716114073GE	\$165.75
	4" x 76.1mm	114.3 x 76.1mm	716114076ME	\$126.00	716114076GE	\$165.75
	4" x 3"	114.3 x 88.9mm	716114089ME	\$118.00	716114089GE	\$152.25
	139.7mm x 4"	139.7 x 114.3mm	716139114ME	\$158.75	716139114GE	\$209.00
	5" x 4"	141.3 x 114.3mm	716141114ME	\$158.75	716141114GE	\$209.00
	165.1mm x 4"	165.1 x 114.3mm	716165114ME	\$239.50	716165114GE	\$302.25
	6" x 4"	168.3 x 114.3mm	716168114ME	\$239.50	716168114GE	\$302.25
	6" x 5"	168.3 x 141.3mm	716168141ME	\$209.50	716168141GE	\$272.00
8" x 6"	219.1 x 168.3mm	716219168ME	\$358.75	716219168GE	\$454.75	
10" x 8"	273.0 x 219.1mm	716273219ME	\$460.25	716273219GE	\$583.75	

Technical Data Sheet: TFP1830

#770 High Pressure Rigid Coupling with Grade “E” EPDM

	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Grade “E” EPDM	List Price	Grade “E” EPDM	List Price
	2"	60.3mm	770060ME	\$52.25	770060GE	\$70.50
	2 1/2"	73.0mm	770073ME	\$62.50	770073GE	\$80.25
	76.1mm	76.1mm	770076ME	\$62.50	770076GE	\$80.25
	3"	88.9mm	770089ME	\$66.00	770089GE	\$89.75
	4"	114.3mm	770114ME	\$96.75	770114GE	\$137.70
	139.7mm	139.7mm	770139ME	POA	770139GE	POA
	5"	141.3mm	770141ME	POA	770141GE	POA
	165.1mm	165.1mm	770165ME	\$174.50	770165GE	\$252.00
	6"	168.3mm	770168ME	\$174.50	770168GE	\$252.00
	8"	219.1mm	770219ME	\$280.25	770219GE	\$402.50
	10"	273.0mm	770273ME	\$518.25	770273GE	\$709.50
	12"	323.9mm	770324ME	\$755.50	770324GE	\$1,011.25

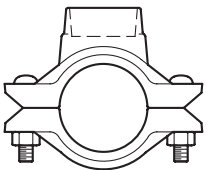
Notes

Orders for items in shaded areas *cannot* be cancelled or returned.

For price and availability for the #770 High Pressure Rigid Coupling with Grade “E” EPDM Tri-Seal, Grade “T” Nitrile Tri-Seal, Grade “L” Silicone, or Grade “O” Fluoroelastomer Gasket, contact GRINNELL Products.

Technical Data Sheet: G138

#702 – Outlet Coupling
Grade “E” Gasket, Female BSP Threaded End, Painted*

	<i>Pipe Size</i>		<i>Part Number</i>	<i>List Price</i>
	<i>Nominal Size</i>	<i>Outside Diameter</i>		
	1½" x ½"	48.3 x 21.3mm	702T048021FES	\$76.00
	1½" x ¾"	48.3 x 26.7mm	702T048027FES	\$76.00
	1½" x 1"	48.3 x 33.4mm	702T048034FES	\$76.00
	2" x ½"	60.3 x 21.3mm	702T060021FES	\$77.75
	2" x ¾"	60.3 x 26.7mm	702T060027FES	\$77.75
	2" x 1"	60.3 x 33.4mm	702T060034FES	\$77.75
	2½" x ½"	73.0 x 21.3mm	702T073021FES	\$120.00
	2½" x ¾"	73.0 x 26.7mm	702T073027FES	\$120.00
	2½" x 1"	73.0 x 33.4mm	702T073034FES	\$120.00
	2½" x 1¼"	73.0 x 42.4mm	702T073042FES	\$135.50
	2½" x 1½"	73.0 x 48.3mm	702T073048FES	\$153.00
	3" x ¾"	88.9 x 26.7mm	702T089027FES	\$116.00
	3" x 1"	88.9 x 33.4mm	702T089034FES	\$153.00
	3" x 1¼"	88.9 x 42.4mm	702T089042FES	\$176.00
	3" x 1½"	88.9 x 48.3mm	702T089048FES	\$176.00
	4" x ¾"	114.3 x 26.7mm	702T114027FES	\$170.25
	4" x 1"	114.3 x 33.4mm	702T114034FES	\$170.25
	4" x 1½"	114.3 x 48.3mm	702T114048FES	\$241.50
	4" x 2"	114.3 x 60.3mm	702T114060FES	\$241.50
	6" x 1"	168.3 x 33.4mm	702T168034FES	\$341.75
	6" x 1½"	168.3 x 48.3mm	702T168048FES	\$341.75
6" x 2"	168.3 x 60.3mm	702T168060FES	\$341.75	

* Galvanised available upon request.

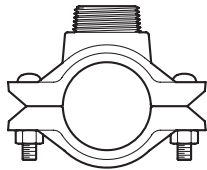
NPT threads available on request, contact GRINNELL Products.

Orders for items in shaded areas **cannot** be cancelled or returned.

Introduction
 Couplings & Fittings
 Mechanical Tees
 Valves
 Plain End Systems
 Gaskets & Spare Parts
 Preparation Equipment
 Miscellaneous
 Indices



#702 – Outlet Coupling Grade “E” Gasket, Male BSP Threaded End, Painted*



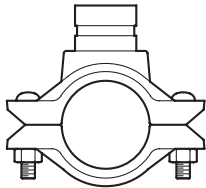
	Pipe Size		Part Number	List Price
	Nominal Size	Outside Diameter		
	2" x 1"	60.3 x 33.4mm	702T060034MES	\$93.00
	2½" x 1¼"	73.0 x 42.4mm	702T073042MES	\$161.50
	2½" x 1½"	73.0 x 48.3mm	702T073048MES	\$182.50
	3" x 1"	88.9 x 33.4mm	702T089034MES	\$182.50
	3" x 1½"	88.9 x 48.3mm	702T089048MES	\$209.50
	4" x 1½"	114.3 x 48.3mm	702T114048MES	\$287.50
	4" x 2"	114.3 x 60.3mm	702T114060MES	\$287.50
	6" x 1½"	168.3 x 48.3mm	702T168048MES	\$406.50
	6" x 2"	168.3 x 60.3mm	702T168060MES	\$406.50

* Galvanised available upon request.

NPT threads available on request, contact GRINNELL Products.

Orders for items in shaded areas **cannot** be cancelled or returned.

#702 – Outlet Coupling Grade “E” Gasket, Grooved End, Painted*




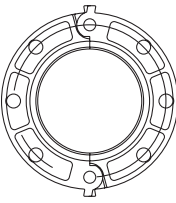
	Pipe Size		Part Number	List Price
	Nominal Size	Outside Diameter		
	2" x 1"	60.3 x 33.4mm	702060034GES	\$93.00
	2½" x 1¼"	73.0 x 42.4mm	702073042GES	\$161.50
	2½" x 1½"	73.0 x 48.3mm	702073048GES	\$182.50
	3" x 1"	88.9 x 33.4mm	702089034GES	\$182.50
	3" x 1½"	88.9 x 48.3mm	702089048GES	\$209.50
	4" x ¾"	114.3 x 26.7mm	702114027GES	POA
	4" x 1"	114.3 x 33.4mm	702114034GES	POA
	4" x 1½"	114.3 x 48.3mm	702114048GES	\$287.50
	4" x 2"	114.3 x 60.3mm	702114060GES	\$287.50
	6" x 1"	168.3 x 33.4mm	702168034GES	POA
	6" x 1¼"	168.3 x 42.4mm	702168042GES	POA
	6" x 1½"	168.3 x 48.3mm	702168048GES	\$406.50
	6" x 2"	168.3 x 60.3mm	702168060GES	\$406.50

Metric sizes available upon request.

* Galvanised available upon request.

Orders for items in shaded areas **cannot** be cancelled or returned.


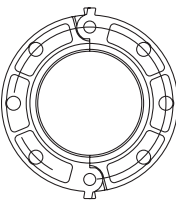
**#71 – Grooved Flange Adaptor PN16
with Grade “E” EPDM Type “A” Fire Protection Gasket**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		2"	60.3mm	71DAA00601	\$126.75	71DAA00602
2½"		73.0mm	71DAA00731	\$148.25	71DAA00732	\$176.55
76.1mm		76.1mm	71DAA00761	\$148.25	71DAA00762	\$176.55
3"		88.9mm	71DAA00891	\$167.00	71DAA00892	\$200.75
4"		114.3mm	71DAA01141	\$217.50	71DAA01142	\$265.25
139.7mm		139.7mm	71DAA01391	\$262.00	71DAA01392	\$318.75
165.1mm		165.1mm	71DAA01651	\$285.25	71DAA01652	\$347.25
6"		168.3mm	71DAA01681	\$285.25	71DAA01682	\$347.25
8"		219.1mm	71DAA02191	\$358.75	71DAA02192	\$448.75
10"		273.0mm	71DAA02731	\$692.25	71DAA02732	\$879.75
12"		323.9mm	71DAA03241	\$906.00	71DAA03242	\$1,164.25

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1880


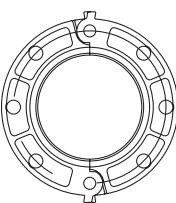
**#71 – Grooved Flange Adaptor PN10
with Grade “E” EPDM Type “A” Fire Protection Gasket**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		139.7mm	139.7mm	71DMA81391	\$262.00	71DMA81392
165.1mm		165.1mm	71DMA81651	\$285.25	71DMA81652	\$347.25
6"		168.3mm	71DMA81681	\$285.25	71DMA81682	\$347.25
8"		219.1mm	71DMA82191	\$358.75	71DMA82192	\$448.75
10"		273.0mm	71DMA82731	\$692.25	71DMA82732	\$879.75
12"		323.9mm	71DMA83241	\$906.00	71DMA83242	\$1,164.25

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1880

**#71 – Grooved Flange Adaptor - ANSI Class 125
with Grade “E” EPDM Type “A” Fire Protection Gasket**


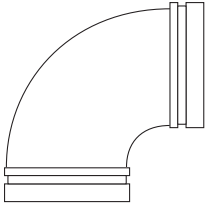
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		2"	60.3mm	71BMA00601	\$126.75	71BMA00602
2½"		73.0mm	71BMA00731	\$148.25	71BMA00732	\$176.25
3"		88.9mm	71BMA00891	\$167.00	71BMA00892	\$200.75
4"		114.3mm	71BMA01141	\$217.50	71BMA01142	\$265.25
139.7mm		139.7mm	71BMA01391	\$262.00	71BMA01392	\$318.75
5"		141.3mm	71BMA01411	\$262.00	71BMA01412	\$318.75
165.1mm		165.1mm	71BMA01651	\$285.25	71BMA01652	\$347.25
6"		168.3mm	71BMA01681	\$285.25	71BMA01682	\$347.25
8"		219.1mm	71BMA02191	\$358.75	71BMA02192	\$448.75
10"		273.0mm	71BMA02731	\$692.25	71BMA02732	\$879.75
12"		323.9mm	71BMA03241	\$906.00	71BMA03242	\$1,164.25

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1880



#510S – G-FIRE Short Pattern Cast Grooved 90° Elbow


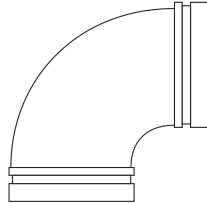
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2"	60.3mm	510SA00601	\$29.00	510SA00602	\$34.50
	2 1/2"	73.0mm	510SA00731	\$41.25	510SA00732	\$48.75
	76.1mm	76.1mm	510SA00761	\$39.25	510SA00762	\$48.75
	3"	88.9mm	510SA00891	\$47.75	510SA00892	\$63.50
	4"	114.3mm	510SA01141	\$80.50	510SA01142	\$95.50
	139.7mm	139.7mm	510SA01391	\$304.75	510SA01392	\$215.00
	5"	141.3mm	510SA01411	\$304.75	510SA01412	\$215.00
	165.1mm	165.1mm	510SA01651	\$220.50	510SA01652	\$264.25
	6"	168.3mm	510SA01681	\$220.50	510SA01682	\$264.25
8"	219.1mm	510SA02191	\$426.75	510SA02192	\$535.00	

All elbows are cast fittings.

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1810


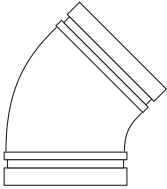
#510 – G-FIRE Standard Pattern Grooved 90° Elbow

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	510A000341	\$51.00	510A000342	\$67.75
	1 1/4"	42.4mm	510A000421	\$51.00	510A000422	\$67.75
	1 1/2"	48.3mm	510A000481	\$51.00	510A000482	\$67.75
	2"	60.3mm	510A000601	\$51.00	510A000602	\$67.75
	2 1/2"	73.0mm	510A000731	\$51.00	510A000732	\$67.75
	76.1mm	76.1mm	210M000761	\$55.75	210076G	\$67.75
	3"	88.9mm	510A000891	\$90.25	510A000892	\$113.00
	4"	114.3mm	510A001141	\$98.50	510A001142	\$137.75
	139.7mm	139.7mm	210M001391	\$236.00	210139G	\$305.25
	5"	141.3mm	510A001411	\$236.00	510A001412	\$305.25
	165.1mm	165.1mm	210M001651	\$277.25	210165G	\$367.50
	6"	168.3mm	510A001681	\$277.25	510A001682	\$367.50
	216.3mm	216.3mm	210M002161	\$579.00	210216G	\$763.25
	8"	219.1mm	510A002191	\$579.00	510A002192	\$763.25
	10"	273.0mm	510A002731	\$1,052.00	510A002732	\$1,343.75
12"	323.9mm	510A003241	\$1,604.75	510A003242	\$2,174.00	

All elbows are cast fittings.

Technical Data Sheet: TFP1810


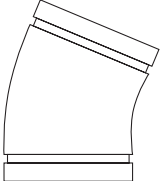
#501 – G-FIRE Standard Pattern Grooved 45° Elbow

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	501M000341	\$51.00	501M000342	\$64.25
	1 ¹ / ₄ "	42.4mm	501M000421	\$51.00	501M000422	\$64.25
	1 ¹ / ₂ "	48.3mm	501M000481	\$51.00	501M000482	\$64.25
	2"	60.3mm	501M000601	\$51.00	501M000602	\$64.25
	2 ¹ / ₂ "	73.0mm	501M000731	\$51.00	501M000732	\$64.25
	76.1mm	76.1mm	201M000761	\$51.00	201076G	\$64.25
	3"	88.9mm	501M000891	\$90.25	501M000892	\$106.75
	4"	114.3mm	501M001141	\$104.75	501M001142	\$137.25
	139.7mm	139.7mm	201M001391	\$236.00	201139G	\$292.75
	5"	141.3mm	501M001411	\$236.00	501M001412	\$292.75
	165.1mm	165.1mm	201M001651	\$277.25	201165G	\$350.25
	6"	168.3mm	501M001681	\$277.25	501M001682	\$350.25
	216.3mm	216.3mm	201M002161	\$579.00	201216G	\$726.75
	8"	219.1mm	501M002191	\$579.00	501M002192	\$726.75
10"	273.0mm	501M002731	\$1,052.00	501M002732	\$1,148.00	
12"	323.9mm	501M003241	\$1,604.75	501M003242	\$1,964.25	

All elbows are cast fittings.
Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810


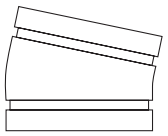
#212 and #312 – Grooved 22¹/₂° Elbow

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	312034M	\$325.00	312034G	\$336.75
	1 ¹ / ₄ " *	42.4mm	212042M	\$55.25	212042G	\$70.50
	1 ¹ / ₂ " *	48.3mm	212048M	\$55.25	212048G	\$70.50
	2" *	60.3mm	212060M	\$55.25	212060G	\$70.50
	2 ¹ / ₂ " *	73.0mm	212073M	\$55.25	212073G	\$70.50
	76.1mm *	76.1mm	212076M	\$55.25	212076G	\$70.50
	3" *	88.9mm	212089M	\$80.00	212089G	\$101.25
	4" *	114.3mm	212114M	\$106.50	212114G	\$138.00
	139.7mm *	139.7mm	212139M	\$328.00	212139G	\$395.75
	5" *	141.3mm	212141M	\$328.00	212141G	\$395.75
	6" *	168.3mm	212168M	\$299.75	212168G	\$382.00
	8" *	219.1mm	212219M	\$625.25	212219G	\$776.75
	10"	273.0mm	312273M	\$857.00	312273G	\$1,113.00
	12"	323.9mm	312324M	\$1,158.50	312324G	\$1,436.50

Elbow is segmentally welded except where a * indicates it is available as a cast fitting.
Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810


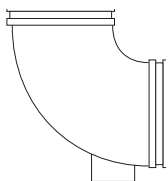
#211 and #311 – Grooved 11¹/₄° Elbow

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	311034M	\$129.50	311034G	\$151.00
	1 ¹ / ₄ " *	42.4mm	211042M	\$55.25	211042G	\$70.50
	1 ¹ / ₂ " *	48.3mm	211048M	\$55.25	211048G	\$70.50
	2" *	60.3mm	211060M	\$129.00	211060G	\$151.00
	2 ¹ / ₂ " *	73.0mm	211073M	\$129.00	211073G	\$151.00
	76.1mm *	76.1mm	211076M	\$129.00	211076G	\$151.00
	3" *	88.9mm	211089M	\$80.00	211089G	\$99.75
	4" *	114.3mm	211114M	\$98.50	211114G	\$131.00
	139.7mm *	139.7mm	211139M	\$328.00	211139G	\$385.75
	5" *	141.3mm	211141M	\$328.00	211141G	\$385.75
	165.1mm *	165.1mm	211165M	\$299.75	211165G	\$362.25
	6" *	168.3mm	211168M	\$299.75	211168G	\$362.25
	8" *	219.1mm	211219M	\$534.25	211219G	\$635.00
	10"	273.0mm	311273M	\$800.00	311273G	\$955.00
12"	323.9mm	311324M	\$1,158.50	311324G	\$1,403.25	

Elbow is segmentally welded except where a * indicates it is available as a cast fitting.

 Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810
#510DE – G-FIRE 90° Elbow with 25mm Outlet


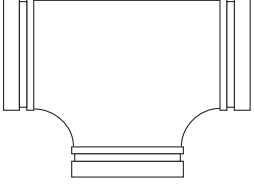
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2"	60.3mm	510DE0601	\$120.00	510DE0602	\$154.75
	2 ¹ / ₂ " *	73.0mm	510DE0731	\$120.00	510DE0732	\$154.75
	3" *	88.9mm	510DE0891	\$153.50	510DE0892	\$183.75
	4" *	114.3mm	510DE1141	\$156.25	510DE1142	\$212.50
	6" *	168.3mm	510DE1681	\$275.00	510DE1682	\$391.00
	8"	219.1mm	510DE2191	POA	510DE2192	POA

Elbow is segmentally welded except where a * indicates it is available as a cast fitting.


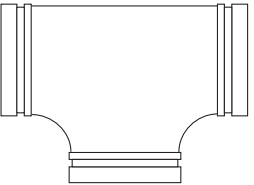
 Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810


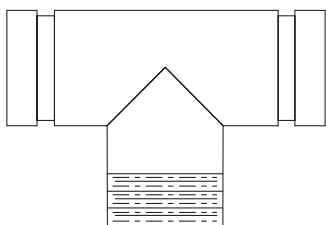
#519S – G-FIRE Short Pattern Grooved Tee

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		2"	60.3mm	519SA00601	\$44.25	519SA00602
2½"		73.0mm	519SA00731	\$61.25	519SA00732	\$70.00
76.1mm		76.1mm	519SA00761	\$61.25	519SA00762	\$70.00
3"		88.9mm	519SA00891	\$76.00	519SA00892	\$98.00
4"		114.3mm	519SA01141	\$115.25	519SA01142	\$151.25
139.7mm		139.7mm	519SA01391	\$453.25	519SA01392	\$337.25
5"		141.3mm	519SA01411	\$453.25	519SA01412	\$337.25
165.1mm		165.1mm	519SA01651	\$386.25	519SA01652	\$405.00
6"		168.3mm	519SA01681	\$386.25	519SA01682	\$405.00
8"	219.1mm	519SA02191	\$659.75	519SA02192	\$872.00	
All tees are cast fittings.						
Orders for items in shaded areas cannot be cancelled or returned.						
Technical Data Sheet: TFP1810						

#519 – G-FIRE Standard Pattern Grooved Tee

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		1"	33.4mm	519A000341	\$78.75	519A000342
1¼"		42.4mm	519A000421	\$78.75	519A000422	\$103.50
1½"		48.3mm	519A000481	\$78.75	519A000482	\$103.50
2"		60.3mm	519A000601	\$78.75	519A000602	\$103.50
2½"		73.0mm	519A000731	\$78.75	519A000732	\$103.50
76.1mm		76.1mm	219M000761	\$78.75	219076G	\$103.50
3"		88.9mm	519A000891	\$109.25	519A000892	\$150.00
4"		114.3mm	519A001141	\$166.50	519A001142	\$226.50
139.7mm		139.7mm	219M001391	\$389.75	219139G	\$494.50
5"		141.3mm	519A001411	\$389.75	519A001412	\$494.50
165.1mm		165.1mm	219M001651	\$449.75	219165G	\$613.75
6"		168.3mm	519A001681	\$449.75	519A001682	\$613.75
216.3mm		216.3mm	219M002161	\$986.00	219216G	\$1,294.75
8"		219.1mm	519A002191	\$986.00	519A002192	\$1,294.75
10"		273.0mm	519A002731	\$2,048.75	519A002732	\$2,653.00
12"	323.9mm	519A003241	\$2,855.50	519A003242	\$3,647.50	
All tees are cast fittings.						
Orders for items in shaded areas cannot be cancelled or returned.						
Technical Data Sheet: TFP1810						

#320 Groove x Male BSP Thread – Tee

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	O.D. Size	Part Number	List Price	Part Number	List Price
	1"	33.4mm	320T034M	POA	320T034G	POA
	1 ¹ / ₄ "	42.4mm	320T042M	\$166.75	320T042G	\$196.75
	1 ¹ / ₂ "	48.3mm	320T048M	\$261.00	320T048G	\$307.50
	2"	60.3mm	320T060M	\$166.75	320T060G	\$196.75
	2 ¹ / ₂ "	73.0mm	320T073M	POA	320T073G	POA
	76.1mm	76.1mm	320T076M	POA	320T076G	POA
	3"	88.9mm	320T089M	\$222.25	320T089G	\$266.00
	4"	114.3mm	320T114M	\$346.50	320T114G	\$476.75
	139.7mm	139.7mm	320T139M	\$778.00	320T139G	POA
	5"	141.3mm	320T141M	\$778.00	320T141G	POA
	165.1mm	165.1mm	320T165M	\$890.50	320T165G	\$1,048.50
	6"	168.3mm	320T168M	\$890.50	320T168G	\$1,048.50
	8"	219.1mm	320T219M	POA	320T219G	POA
	10"	273.0mm	320T273M	POA	320T273G	POA
12"	323.9mm	320T324M	POA	320T324G	POA	

Tee is segmentally welded.

Also available with NPT threads, contact GRINNELL Products for details.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#508 – Standpipe Tee

Pipe Size		Painted		Galvanised	
Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
4" x 4" x 2 ¹ / ₂ "	114.3 x 114.3 x 73.0mm	50842251	\$245.00	50842252	\$299.25
6" x 6" x 2 ¹ / ₂ "	168.3 x 168.3 x 73.0mm	50863251	\$500.00	50863252	\$435.75


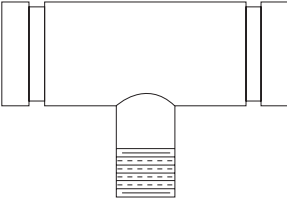
Orders for items in shaded areas **cannot** be cancelled or returned.

#507/#50L – Bullhead Tee

Pipe Size		Painted		Galvanised	
Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
5" x 5" x 8"	141.3 x 141.3 x 219.1mm	50753801	\$1,264.25	50753802	\$1,593.25
6" x 6" x 8"	168.3 x 168.3 x 219.1mm	50763801	\$1,446.00	50763802	\$1,787.75

Orders for items in shaded areas **cannot** be cancelled or returned.

#323 – Reducing Tee with BSP Threaded Branch

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 3/4"	60.3 x 26.7mm	323T060027M	\$195.50	323T060027G	\$230.00
	2" x 1"	60.3 x 33.4mm	323T060034M	\$178.25	323T060034G	\$210.00
	2" x 1 1/4"	60.3 x 42.4mm	323T060042M	\$300.00	323T060042G	\$320.25
	2" x 1 1/2"	60.3 x 48.3mm	323T060048M	\$178.25	323T060048G	\$211.25
	2 1/2" x 3/4"	73.0 x 26.7mm	323T073027M	\$350.00	323T073027G	\$361.50
	2 1/2" x 1"	73.0 x 33.4mm	323T073034M	\$178.25	323T073034G	\$210.00
	2 1/2" x 1 1/4"	73.0 x 42.4mm	323T073042M	\$390.25	323T073042G	\$400.75
	2 1/2" x 1 1/2"	73.0 x 48.3mm	323T073048M	\$178.25	323T073048G	\$211.25
	2 1/2" x 2"	73.0 x 60.3mm	323T073060M	\$178.25	323T073060G	\$213.25
	3" x 3/4"	88.9 x 26.7mm	323T089027M	\$327.25	323T089027G	\$347.50
	3" x 1"	88.9 x 33.4mm	323T089034M	\$178.25	323T089034G	\$222.75
	3" x 1 1/4"	88.9 x 42.4mm	323T089042M	\$440.25	323T089042G	\$468.75
	3" x 1 1/2"	88.9 x 48.3mm	323T089048M	\$178.25	323T089048G	\$224.25
	3" x 2"	88.9 x 60.3mm	323T089060M	\$178.25	323T089060G	\$224.25
	3" x 2 1/2"	88.9 x 73.0mm	323T089073M	\$430.00	323T089073G	\$466.00
	4" x 3/4"	114.3 x 26.7mm	323T114027M	\$475.25	323T114027G	\$585.25
	4" x 1"	114.3 x 33.4mm	323T114034M	\$222.50	323T114034G	\$275.25
	4" x 1 1/4"	114.3 x 42.4mm	323T114042M	\$458.50	323T114042G	\$494.00
	4" x 1 1/2"	114.3 x 48.3mm	323T114048M	\$222.50	323T114048G	\$279.50
	4" x 2"	114.3 x 60.3mm	323T114060M	\$222.50	323T114060G	\$279.50
	4" x 2 1/2"	114.3 x 73.0mm	323T114073M	\$222.50	323T114073G	\$287.25
	4" x 3"	114.3 x 88.9mm	323T114089M	\$222.50	323T114089G	\$288.50
	5" x 2"	141.3 x 60.3mm	323T141060M	\$477.00	323T141060G	\$520.75
	5" x 2 1/2"	141.3 x 73.0mm	323T141073M	\$429.25	323T141073G	\$543.50
	5" x 3"	141.3 x 88.9mm	323T141089M	\$396.75	323T141089G	\$499.75
	5" x 4"	141.3 x 114.3mm	323T141114M	\$429.25	323T141114G	\$585.25
	6" x 1"	168.3 x 33.4mm	323T168034M	\$652.00	323T168034G	\$757.50
	6" x 1 1/2"	168.3 x 48.3mm	323T168048M	\$596.50	323T168048G	\$725.25
	6" x 2"	168.3 x 60.3mm	323T168060M	\$557.25	323T168060G	\$992.00
	6" x 2 1/2"	168.3 x 73.0mm	323T168073M	\$557.25	323T168073G	\$992.00
	6" x 3"	168.3 x 88.9mm	323T168089M	\$557.25	323T168089G	\$992.00
	6" x 4"	168.3 x 114.3mm	323T168114M	\$704.25	323T168114G	\$757.50
	6" x 5"	168.3 x 141.3mm	323T168141M	\$557.25	323T168141G	\$992.00
	8" x 2"	219.1 x 60.3mm	323T219060M	\$682.25	323T219060G	\$941.50
	8" x 3"	219.1 x 88.9mm	323T219089M	\$941.50	323T219089G	\$1,220.75
	8" x 4"	219.1 x 114.3mm	323T219114M	\$986.00	323T219114G	\$1,274.75
	8" x 5"	219.1 x 141.3mm	323T219141M	\$986.00	323T219141G	\$1,282.50
	8" x 165.1mm	219.1 x 165.1mm	323T219165M	\$1,091.00	323T219165G	\$1,500.00
	8" x 6"	219.1 x 168.3mm	323T219168M	\$1,091.00	323T219168G	\$1,500.00
	10" x 2"	273.0 x 60.3mm	323T273060M	\$1,188.50	323T273060G	\$1,736.50
10" x 3"	273.0 x 88.9mm	323T273089M	\$1,188.50	323T273089G	\$1,474.00	
10" x 4"	273.0 x 114.3mm	323T273114M	\$1,242.25	323T273114G	\$1,588.00	
10" x 5"	273.0 x 141.3mm	323T273141M	\$1,092.50	323T273141G	\$1,621.50	
10" x 6"	273.0 x 168.3mm	323T273168M	\$1,270.00	323T273168G	\$1,642.25	
10" x 8"	273.0 x 219.1mm	323T273219M	\$1,713.00	323T273219G	\$1,915.50	
12" x 3"	323.9 x 88.9mm	323T324089M	\$1,600.00	323T324089G	\$2,066.00	
12" x 4"	323.9 x 114.3mm	323T324114M	\$1,714.50	323T324114G	\$2,202.25	
12" x 5"	323.9 x 141.3mm	323T324141M	\$1,813.00	323T324141G	\$2,354.75	
12" x 6"	323.9 x 168.3mm	323T324168M	\$1,834.50	323T324168G	\$2,399.50	
12" x 8"	323.9 x 219.1mm	323T324219M	\$1,856.00	323T324219G	\$2,431.75	
12" x 10"	323.9 x 273.0mm	323T324273M	\$1,973.25	323T324273G	\$2,435.00	


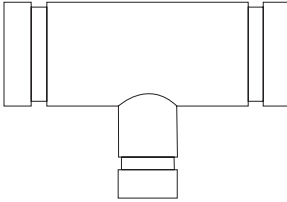
All tees are segmentally welded.

NPT threads available on request, contact GRINNELL Products.

Orders for items in shaded areas **cannot** be cancelled or returned.




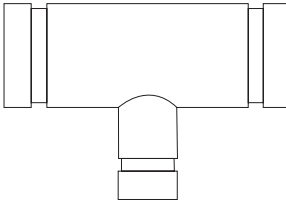
#221 and #321 – Grooved Reducing Tee

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1" x 3/4"	33.4 x 26.7mm	321034027M	POA	321034027G	POA
	1 1/4" x 1"	42.4 x 33.4mm	321042034M	POA	321042034G	POA
	1 1/2" x 3/4"	48.3 x 26.7mm	321048027M	POA	321048027G	POA
	1 1/2" x 1"	48.3 x 33.4mm	321048034M	\$196.25	321048034G	\$201.75
	1 1/2" x 1 1/4"	48.3 x 42.4mm	321048042M	\$148.25	321048042G	\$164.25
	2" x 3/4"	60.3 x 26.7mm	321060027M	\$185.00	321060027G	\$217.50
	2" x 1"	60.3 x 33.4mm	321060034M	\$168.50	321060034G	\$278.00
	2" x 1 1/4"	60.3 x 42.4mm	321060042M	\$210.50	321060042G	\$221.00
	* 2" x 1 1/2"	60.3 x 48.3mm	221060048M	\$168.50	221060048G	\$181.50
	2 1/2" x 3/4"	73.0 x 26.7mm	321073027M	\$227.75	321073027G	\$246.50
	2 1/2" x 1"	73.0 x 33.4mm	321073034M	\$168.50	321073034G	\$198.00
	2 1/2" x 1 1/4"	73.0 x 42.4mm	321073042M	\$254.25	321073042G	\$299.75
	2 1/2" x 1 1/2"	73.0 x 48.3mm	321073048M	\$168.50	321073048G	\$181.50
	* 2 1/2" x 2"	73.0 x 60.3mm	221073060M	\$168.50	221073060G	\$200.75
	76.1mm x 1 1/2"	76.1 x 48.3mm	321076048M	\$168.50	321076048G	\$181.50
	* 76.1mm x 2"	76.1 x 60.3mm	221076060M	\$168.50	221076060G	\$200.75
	3" x 3/4"	88.9 x 26.7mm	321089027M	\$263.00	321089027G	\$274.00
	* 3" x 1"	88.9 x 33.4mm	221089034M	\$148.75	221089034G	\$190.50
	3" x 1 1/4"	88.9 x 42.4mm	321089042M	\$209.25	321089042G	\$276.00
	* 3" x 1 1/2"	88.9 x 48.3mm	221089048M	\$148.75	221089048G	\$173.25
	* 3" x 2"	88.9 x 60.3mm	221089060M	\$148.75	221089060G	\$191.75
	* 3" x 2 1/2"	88.9 x 73.0mm	221089073M	\$148.75	221089073G	\$191.75
	* 3" x 76.1mm	88.9 x 76.1mm	221089076M	\$148.75	221089076G	\$191.75
	4" x 3/4"	114.3 x 26.7mm	321114027M	\$336.00	321114027G	\$358.75
	4" x 1"	114.3 x 33.4mm	321114034M	\$200.75	321114034G	\$250.50
	4" x 1 1/4"	114.3 x 42.4mm	321114042M	\$496.75	321114042G	\$460.75
	4" x 1 1/2"	114.3 x 48.3mm	321114048M	\$211.75	321114048G	\$226.75
	* 4" x 2"	114.3 x 60.3mm	221114060M	\$200.75	221114060G	\$264.00
	* 4" x 2 1/2"	114.3 x 73.0mm	221114073M	\$200.75	221114073G	\$264.00
	* 4" x 76.1mm	114.3 x 76.1mm	221114076M	\$200.75	221114076G	\$264.00
	* 4" x 3"	114.3 x 88.9mm	221114089M	\$200.75	221114089G	\$264.00
	* 139.7mm x 3"	139.7 x 88.9mm	221139089M	\$396.75	221139089G	\$499.75
	* 139.7mm x 4"	139.7 x 114.3mm	221139114M	\$429.50	221139114G	\$543.25
	5" x 1"	141.3 x 33.4mm	321141034M	\$442.75	321141034G	\$545.25
	5" x 1 1/2"	141.3 x 48.3mm	321141048M	\$562.75	321141048G	\$609.50
	5" x 2"	141.3 x 60.3mm	321141060M	\$487.50	321141060G	\$602.00
	* 5" x 2 1/2"	141.3 x 73.0mm	221141073M	\$396.75	221141073G	\$452.25
	* 5" x 3"	141.3 x 88.9mm	221141089M	\$396.75	221141089G	\$499.75
	* 5" x 4"	141.3 x 114.3mm	221141114M	\$429.50	221141114G	\$543.25
	* 165.1mm x 3"	165.1 x 88.9mm	221165089M	\$473.25	221165089G	\$621.50
	* 165.1mm x 4"	165.1 x 114.3mm	221165114M	\$473.25	221165114G	\$621.50

See technical data sheets for specific approvals, listings, and design parameters.
 POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.

#221 and #321 – Grooved Reducing Tee

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised		
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price	
 <p>(Continued from Previous Page)</p>	6" x 1"	168.3 x 33.4mm	321168034M	\$534.25	321168034G	\$654.75	
	6" x 1 1/2"	168.3 x 48.3mm	321168048M	\$551.75	321168048G	\$756.50	
	* 6" x 2"	168.3 x 60.3mm	221168060M	\$473.25	221168060G	\$621.50	
	* 6" x 2 1/2"	168.3 x 73.0mm	221168073M	\$473.25	221168073G	\$621.50	
	* 6" x 76.1mm	168.3 x 76.1mm	221168076M	\$473.25	221168076G	\$621.50	
	* 6" x 3"	168.3 x 88.9mm	221168089M	\$473.25	221168089G	\$621.50	
	* 6" x 4"	168.3 x 114.3mm	221168114M	\$473.25	221168114G	\$621.50	
	6" x 139.7mm	168.3 x 139.7mm	321168139M	\$473.25	321168139G	\$565.75	
	6" x 5"	168.3 x 141.3mm	321168141M	\$473.25	321168141G	\$565.75	
	8" x 1 1/2"	219.1 x 48.3mm	321219048M	\$682.25	321219048G	\$830.00	
	8" x 2"	219.1 x 60.3mm	321219060M	\$1,028.75	321219060G	\$861.50	
	8" x 2 1/2"	219.1 x 73.0mm	321219073M	\$1,108.25	321219073G	\$861.50	
	8" x 3"	219.1 x 88.9mm	321219089M	\$682.25	321219089G	\$878.50	
	* 8" x 4"	219.1 x 114.3mm	221219114M	\$986.00	221219114G	\$1,274.75	
	8" x 139.7mm	219.1 x 139.7mm	321219139M	\$986.00	321219139G	\$1,283.50	
	8" x 5"	219.1 x 141.3mm	321219141M	\$986.00	321219141G	\$1,283.50	
	* 8" x 165.1mm	219.1 x 165.1mm	221219165M	\$986.00	221219165G	\$1,289.00	
	* 8" x 6"	219.1 x 168.3mm	221219168M	\$986.00	221219168G	\$1,289.00	
	* 216.3 x 165.1mm	216.3 x 165.1mm	221216165M	\$986.00	221216165G	\$1,289.00	
	10" x 1 1/2"	273.0 x 48.3mm	321273048M	POA	321273048G	POA	
	10" x 2"	273.0 x 60.3mm	321273060M	\$1,188.75	321273060G	\$1,804.50	
	10" x 2 1/2"	273.0 x 73.0mm	321273073M	\$1,188.75	321273073G	\$1,498.00	
	10" x 3"	273.0 x 88.9mm	321273089M	\$1,188.75	321273089G	\$1,891.25	
	* 10" x 4"	273.0 x 114.3mm	221273114M	\$1,242.25	221273114G	\$1,588.25	
	10" x 5"	273.0 x 141.3mm	321273141M	\$1,269.50	321273141G	POA	
	* 10" x 6"	273.0 x 168.3mm	221273168M	\$1,269.50	221273168G	\$2,062.25	
	* 10" x 8"	273.0 x 219.1mm	221273219M	\$1,293.00	221273219G	\$2,073.00	
	12" x 1"	323.9 x 33.4mm	321324034M	POA	321324034G	POA	
	12" x 2"	323.9 x 60.3mm	321324060M	POA	321324060G	POA	
	12" x 2 1/2"	323.9 x 73.0mm	321324073M	POA	321324073G	POA	
	12" x 3"	323.9 x 88.9mm	321324089M	\$1,600.00	321324089G	\$2,065.75	
	12" x 4"	323.9 x 114.3mm	321324114M	\$1,714.50	321324114G	\$2,412.25	
	12" x 5"	323.9 x 141.3mm	321324141M	POA	321324141G	POA	
	12" x 6"	323.9 x 168.3mm	321324168M	\$1,834.50	321324168G	\$2,691.75	
	12" x 8"	323.9 x 219.1mm	321324219M	\$1,885.75	321324219G	\$2,751.75	
	12" x 10"	323.9 x 273.0mm	321324273M	\$1,973.25	321324273G	\$3,069.25	
	Tee is segmentally welded except where a * indicates it is available as a cast fitting.						
	Orders for items in shaded areas cannot be cancelled or returned.						
	Technical Data Sheet: TFP1810						

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts


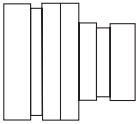
Preparation Equipment

Miscellaneous

Indices




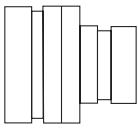
#250 and #350 – Grooved Concentric Reducer

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1 1/4" x 3/4"	42.4 x 26.7mm	350042027M	\$232.00	350042027G	\$254.25
	1 1/4" x 1"	42.4 x 33.4mm	350042034M	\$242.50	350042034G	\$267.50
	1 1/2" x 3/4"	48.3 x 26.7mm	350048027M	\$273.50	350048027G	\$295.50
	1 1/2" x 1"	48.3 x 33.4mm	350048034M	\$60.00	350048034G	\$70.25
	1 1/2" x 1 1/4"	48.3 x 42.4mm	350048042M	\$60.00	350048042G	\$70.25
	2" x 3/4"	60.3 x 26.7mm	350060027M	\$60.00	350060027G	\$70.25
	2" x 1"	60.3 x 33.4mm	350060034M	\$60.00	350060034G	\$70.25
	2" x 1 1/4"	60.3 x 42.4mm	350060042M	\$65.50	350060042G	\$77.00
	2" x 1 1/2"	60.3 x 48.3mm	350060048M	\$60.00	350060048G	\$70.25
	2 1/2" x 3/4"	73.0 x 26.7mm	350073027M	\$476.00	350073027G	\$514.25
	2 1/2" x 1"	73.0 x 33.4mm	350073034M	\$374.00	350073034G	\$410.75
	* 2 1/2" x 1 1/4"	73.0 x 42.4mm	250073042M	\$60.00	250073042G	\$70.25
	* 2 1/2" x 1 1/2"	73.0 x 48.3mm	250073048M	\$60.00	250073048G	\$70.25
	* 2 1/2" x 2"	73.0 x 60.3mm	250073060M	\$60.00	250073060G	\$70.25
	* 76.1mm x 1 1/4"	76.1 x 42.4mm	250076042M	\$60.00	250076042G	\$70.25
	* 76.1mm x 1 1/2"	76.1 x 48.3mm	250076048M	\$60.00	250076048G	\$70.25
	* 76.1mm x 2"	76.1 x 60.3mm	250076060M	\$60.00	250076060G	\$70.25
	3" x 3/4"	88.9 x 26.7mm	350089027M	\$479.25	350089027G	\$536.00
	3" x 1"	88.9 x 33.4mm	350089034M	\$65.50	350089034G	\$79.75
	3" x 1 1/4"	88.9 x 42.4mm	350089042M	\$371.25	350089042G	\$416.75
	* 3" x 1 1/2"	88.9 x 48.3mm	250089048M	\$71.75	250089048G	\$88.00
	* 3" x 2"	88.9 x 60.3mm	250089060M	\$52.50	250089060G	\$64.50
	* 3" x 2 1/2"	88.9 x 73.0mm	250089073M	\$71.75	250089073G	\$87.00
	* 3" x 76.1mm	88.9 x 76.1mm	250089076M	\$71.75	250089076G	\$87.00
	4" x 1"	114.3 x 33.4mm	350114034M	\$78.75	350114034G	\$97.50
	4" x 1 1/4"	114.3 x 42.4mm	350114042M	\$613.25	350114042G	\$687.00
	4" x 1 1/2"	114.3 x 48.3mm	350114048M	\$469.25	350114048G	\$513.50
	* 4" x 2"	114.3 x 60.3mm	250114060M	\$70.00	250114060G	\$86.25
	* 4" x 2 1/2"	114.3 x 73.0mm	250114073M	\$87.00	250114073G	\$106.00
	* 4" x 76.1mm	114.3 x 76.1mm	250114076M	\$87.00	250114076G	\$106.00
	* 4" x 3"	114.3 x 88.9mm	250114089M	\$87.00	250114089G	\$106.00
	* 139.7mm x 3"	139.7 x 88.9mm	250139089M	\$101.25	250139089G	\$125.00
	* 139.7mm x 4"	139.7 x 114.3mm	250139114M	\$120.50	250139114G	\$151.00
	5" x 2"	141.3 x 60.3mm	350141060M	\$863.00	350141060G	\$953.00
	5" x 2 1/2"	141.3 x 73.0mm	350141073M	\$669.50	350141073G	\$726.50
	* 5" x 3"	141.3 x 88.9mm	250141089M	\$101.25	250141089G	\$125.00
	* 5" x 4"	141.3 x 114.3mm	250141114M	\$120.50	250141114G	\$151.00
	* 165.1mm x 3"	165.1 x 88.9mm	250165089M	\$159.75	250165089G	\$199.50
	* 165.1mm x 4"	165.1 x 114.3mm	250165114M	\$139.50	250165114G	\$181.00
	* 165.1 x 139.7mm	165.1 x 139.7mm	250165139M	\$206.25	250165139G	\$256.75
	* 6" x 1"	168.3 x 33.4mm	250168034M	\$159.75	250168034G	\$199.75
	* 6" x 1 1/2"	168.3 x 48.3mm	250168048M	POA	250168048G	POA
	* 6" x 2"	168.3 x 60.3mm	250168060M	\$159.75	250168060G	\$199.50
	* 6" x 2 1/2"	168.3 x 73.0mm	250168073M	\$178.25	250168073G	\$219.00
	* 6" x 76.1mm	168.3 x 76.1mm	250168076M	\$178.25	250168076G	\$219.00
	* 6" x 3"	168.3 x 88.9mm	250168089M	\$159.75	250168089G	\$199.50
	* 6" x 4"	168.3 x 114.3mm	250168114M	\$139.50	250168114G	\$181.00
	* 6" x 139.7mm	168.3 x 139.7mm	250168139M	\$206.25	250168139G	\$256.75
* 6" x 5"	168.3 x 141.3mm	250168141M	\$206.25	250168141G	\$256.75	
* 8" x 3"	219.1 x 88.9mm	250219089M	\$285.25	250219089G	\$355.50	
* 8" x 4"	219.1 x 114.3mm	250219114M	\$285.25	250219114G	\$357.75	
* 8" x 139.7mm	219.1 x 139.7mm	250219139M	\$285.25	250219139G	\$360.00	
* 8" x 5"	219.1 x 141.3mm	250219141M	\$285.25	250219141G	\$360.00	
* 8" x 165.1mm	219.1 x 165.1mm	250219165M	\$363.00	250219165G	\$454.75	
* 8" x 6"	219.1 x 168.3mm	250219168M	\$363.00	250219168G	\$454.75	

See technical data sheets for specific approvals, listings, and design parameters.
 POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.

#250 and #350 – Grooved Concentric Reducer


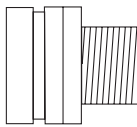
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
 (Continued from Previous Page)	10" x 4"	273.0 x 114.3mm	350273114M	\$676.25	350273114G	\$833.25
	10" x 5"	273.0 x 141.3mm	350273141M	\$1,489.75	350273141G	\$1,700.00
	* 10" x 165.1mm	273.0 x 165.1mm	250273165M	\$739.50	250273165G	\$923.00
	* 10" x 6"	273.0 x 168.3mm	250273168M	\$739.50	250273168G	\$923.00
	* 10" x 8"	273.0 x 219.1mm	250273219M	\$739.50	250273219G	\$938.00
	* 12" x 4"	323.9 x 114.3mm	250324114M	\$3,242.25	250324114G	\$3,858.75
	* 12" x 6"	323.9 x 168.3mm	250324168M	\$882.50	250324168G	\$1,090.75
	* 12" x 8"	323.9 x 219.1mm	250324219M	\$1,324.50	250324219G	\$1,564.25
	* 12" x 10"	323.9 x 273.0mm	250324273M	\$1,324.50	250324273G	\$1,640.50

Reducer is segmentally welded except where a * indicates it is available as a cast fitting.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#372 Groove x Male BSP Thread – Reducer

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1 1/2" x 1"	48.3 x 33.4mm	372T048034M	\$62.00	372T048034G	\$76.40
	1 1/2" x 1 1/4"	48.3 x 42.4mm	372T048042M	\$65.50	372T048042G	\$77.00
	2" x 3/4"	60.3 x 26.7mm	372T060027M	\$62.00	372T060027G	\$76.40
	2" x 1"	60.3 x 33.4mm	372T060034M	\$62.00	372T060034G	\$76.40
	2" x 1 1/4"	60.3 x 42.4mm	372T060042M	\$62.00	372T060042G	\$76.40
	2" x 1 1/2"	60.3 x 48.3mm	372T060048M	\$62.00	372T060048G	\$76.40
	2 1/2" x 1"	73.0 x 33.4mm	372T073034M	\$360.75	372T073034G	\$384.75
	2 1/2" x 1 1/4"	73.0 x 42.4mm	372T073042M	\$88.25	372T073042G	\$109.00
	2 1/2" x 1 1/2"	73.0 x 48.3mm	372T073048M	\$92.50	372T073048G	\$109.00
	2 1/2" x 2"	73.0 x 60.3mm	372T073060M	\$62.00	372T073060G	\$76.50
	3" x 3/4"	88.9 x 26.7mm	372T089027M	\$451.00	372T089027G	\$480.75
	3" x 1"	88.9 x 33.4mm	372T089034M	\$67.75	372T089034G	\$81.50
	3" x 1 1/2"	88.9 x 48.3mm	372T089048M	\$76.50	372T089048G	\$91.75
	3" x 2"	88.9 x 60.3mm	372T089060M	\$76.50	372T089060G	\$91.75
	3" x 2 1/2"	88.9 x 73.0mm	372T089073M	\$92.50	372T089073G	\$109.00
	4" x 1"	114.3 x 33.4mm	372T114034M	\$87.50	372T114034G	\$106.00
	4" x 1 1/2"	114.3 x 48.3mm	372T114048M	\$491.00	372T114048G	\$529.50
	4" x 2"	114.3 x 60.3mm	372T114060M	\$132.50	372T114060G	\$112.00
	4" x 2 1/2"	114.3 x 73.0mm	372T114073M	\$93.50	372T114073G	\$115.00
	4" x 3"	114.3 x 88.9mm	372T114089M	\$114.25	372T114089G	\$136.00
	5" x 4"	141.3 x 114.3mm	372T141114M	\$653.75	372T141114G	\$711.50
	6" x 1"	168.3 x 33.4mm	372T168034M	\$178.25	372T168034G	\$219.00
	6" x 2"	168.3 x 60.3mm	372T168060M	\$178.25	372T168060G	\$219.00
	6" x 2 1/2"	168.3 x 73.0mm	372T168073M	\$178.25	372T168073G	\$219.00
6" x 3"	168.3 x 88.9mm	372T168089M	\$178.25	372T168089G	\$219.00	
6" x 4"	168.3 x 114.3mm	372T168114M	\$1,074.25	372T168114G	\$1,190.00	
6" x 5"	168.3 x 141.3mm	372T168141M	POA	372T168141G	POA	

Reducer is segmentally welded.


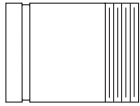
Available with NPT threads, contact GRINNELL Products for details.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810



#391 Groove x Male BSP Thread – Adaptor Nipple

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size			Painted		Galvanised	
	Nominal Size (O.D. x Length)	Outside Diameter	Length	Part Number	List Price	Part Number	List Price
	1" x 4"	33.4mm	101.6mm	391T034100M	POA	391T034100G	POA
	1 1/4" x 4"	42.4mm	101.6mm	391T042100M	\$30.00	391T042100G	POA
	1 1/2" x 4"	48.3mm	101.6mm	391T048100M	\$30.00	391T048100G	POA
	2" x 4"	60.3mm	101.6mm	391T060100M	\$30.00	391T060100G	POA
	2" x 6"	60.3mm	152.4mm	391T060150M	\$48.00	391T060150G	POA
	2 1/2" x 4"	73.0mm	101.6mm	391T073100M	\$35.00	391T073100G	POA
	3" x 4"	88.9mm	101.6mm	391T089100M	\$45.00	391T089100G	POA
	3" x 6"	88.9mm	152.4mm	391T089150M	\$70.00	391T089150G	POA
	4" x 6"	114.3mm	152.4mm	391T114150M	\$71.00	391T114150G	POA
	5" x 6"	141.3mm	152.4mm	391T141150M	\$147.00	391T141150G	POA
	6" x 6"	168.3mm	152.4mm	391T168150M	POA	391T168150G	POA
	8" x 6"	219.1mm	152.4mm	391T219150M	POA	391T219150G	POA
10" x 8"	273.0mm	203.2mm	391T273200M	\$308.75	391T273200G	POA	
12" x 8"	323.9mm	203.2mm	391T324200M	\$387.25	391T324200G	POA	


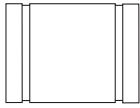
Adaptor Nipple is segmentally welded.

Available with NPT threads, contact GRINNELL Products for details.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#392 Groove x Groove – Adaptor Nipple


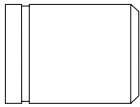
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size			Painted		Galvanised	
	Nominal Size (O.D. x Length)	Outside Diameter	Length	Part Number	List Price	Part Number	List Price
	1" x 4"	33.4mm	101.6mm	392034100M	POA	392034100G	POA
	1 1/4" x 4"	42.4mm	101.6mm	392042100M	\$30.00	392042100G	POA
	1 1/2" x 4"	48.3mm	101.6mm	392048100M	\$30.00	392048100G	POA
	2" x 4"	60.3mm	101.6mm	392060100M	\$30.00	392060100G	POA
	2 1/2" x 4"	73.0mm	101.6mm	392073100M	\$35.00	392073100G	POA
	3" x 4"	88.9mm	101.6mm	392089100M	\$45.00	392089100G	POA
	4" x 6"	114.3mm	152.4mm	392114150M	\$71.00	392114150G	POA
	5" x 6"	141.3mm	152.4mm	392141150M	\$147.00	392141150G	POA
	6" x 6"	168.3mm	152.4mm	392168150M	\$189.50	392168150G	POA
	8" x 6"	219.1mm	152.4mm	392219150M	\$212.50	392219150G	POA
	10" x 8"	273.0mm	203.2mm	392273200M	\$308.75	392273200G	POA
	12" x 8"	323.9mm	203.2mm	392324200M	\$387.25	392324200G	POA

Adaptor Nipple is segmentally welded.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#393 Groove x Plain – Adaptor Nipple


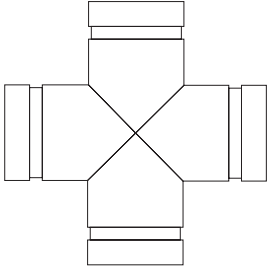
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size			Painted		Galvanised	
	Nominal Size (O.D. x Length)	Outside Diameter	Length	Part Number	List Price	Part Number	List Price
	1" x 4"	33.4mm	101.6mm	393034100M	POA	393034100G	POA
	1 1/4" x 4"	42.4mm	101.6mm	393042100M	\$30.00	393042100G	POA
	1 1/2" x 4"	48.3mm	101.6mm	393048100M	\$30.00	393048100G	POA
	2" x 4"	60.3mm	101.6mm	393060100M	\$30.00	393060100G	POA
	2 1/2" x 4"	73.0mm	101.6mm	393073100M	\$35.00	393073100G	POA
	3" x 4"	88.9mm	101.6mm	393089100M	\$45.00	393089100G	POA
	4" x 6"	114.3mm	152.4mm	393114150M	\$71.00	393114150G	POA
	5" x 6"	141.3mm	152.4mm	393141150M	\$147.00	393141150G	POA
	6" x 6"	168.3mm	152.4mm	393168150M	\$189.50	393168150G	POA
	8" x 6"	219.1mm	152.4mm	393219150M	\$212.50	393219150G	POA
	10" x 8"	273.0mm	203.2mm	393273200M	\$308.75	393273200G	POA
	12" x 8"	323.9mm	203.2mm	393324200M	\$387.25	393324200G	POA

Adaptor Nipple is segmentally welded.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#227 and #327 – Grooved Cross


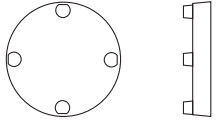
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	327034M	\$192.50	327034G	\$222.00
	1 1/4" *	42.4mm	227042M	\$232.00	227042G	\$270.25
	1 1/2" *	48.3mm	227048M	\$249.75	227048G	\$289.75
	2" *	60.3mm	227060M	\$142.25	227060G	\$169.75
	2 1/2" *	73.0mm	227073M	\$142.25	227073G	\$169.75
	76.1mm *	76.1mm	227076M	\$142.25	227076G	\$169.75
	3" *	88.9mm	227089M	\$253.75	227089G	\$311.00
	4" *	114.3mm	227114M	\$421.50	227114G	\$518.75
	139.7mm *	139.7mm	227139M	\$859.50	227139G	\$1,036.75
	5" *	141.3mm	227141M	\$859.50	227141G	\$1,036.75
	165.1mm *	165.1mm	227165M	\$1,104.75	227165G	\$1,340.50
	6" *	168.3mm	227168M	\$1,104.75	227168G	\$1,340.50
	216.3mm *	216.3mm	227216M	\$1,454.75	227216G	\$1,799.75
	8" *	219.1mm	227219M	\$1,454.75	227219G	\$1,799.75
	10" *	273.0mm	227273M	\$2,480.00	227273G	\$3,067.50
12" *	323.9mm	227324M	\$3,578.25	227324G	\$4,458.75	

Cross is segmentally welded except where a * indicates it is available as a cast fitting.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1810

#560/#260 and #360 – G-FIRE Grooved Cap


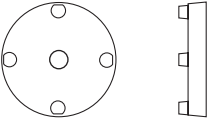
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	360M000341	\$42.75	360034G	\$51.75
	* 1 1/4"	42.4mm	260M000421	\$42.75	260042G	\$51.75
	* 1 1/2"	48.3mm	260M000481	\$42.75	260048G	\$51.75
	* 2"	60.3mm	260M000601	\$42.75	260060G	\$51.75
	* 2 1/2"	73.0mm	260M000731	\$42.75	260073G	\$51.75
	* 76.1mm	76.1mm	260M000761	\$42.75	260076G	\$51.75
	* 3"	88.9mm	260M000891	\$42.75	260089G	\$51.75
	* 4"	114.3mm	260M001141	\$46.25	260114G	\$60.75
	* 139.7mm	139.7mm	260M001391	\$109.00	260139G	\$146.25
	* 5"	141.3mm	260M001411	\$109.00	260141G	\$146.25
	* 165.1mm	165.1mm	260M001651	\$109.00	260165G	\$146.25
	* 6"	168.3mm	260M001681	\$109.00	260168G	\$146.25
	* 8"	219.1mm	260M002191	\$208.75	260219G	\$276.25
	* 10"	273.0mm	260M002731	\$440.00	260273G	\$573.00
	* 12"	323.9mm	260M003241	\$720.00	260324G	\$916.75

Cap is segmentally welded except where a * indicates it is available as a cast fitting.

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1810

#560/#260 – Grooved Cap with 15mm BSP Tap


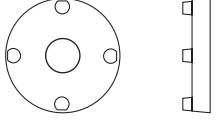
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2"	60.3mm	260M20051	\$149.00	260M20052	POA
	2 1/2"	73.0mm	260M25051	\$158.00	260M25052	POA
	76.1mm	76.1mm	260M26051	\$158.00	260M26052	POA
	3"	88.9mm	260M30051	\$181.50	260M30052	POA
	4"	114.3mm	260M42051	\$236.50	260M42052	POA
	139.7mm	139.7mm	260M52051	\$376.50	260M52052	POA
	5"	141.3mm	260M53051	\$376.50	260M53052	POA
	165.1mm	165.1mm	260M62051	\$425.50	260M62052	POA
	6"	168.3mm	260M63051	\$425.50	260M63052	POA
8"	219.1mm	260M80051	\$796.00	260M80052	POA	

All Caps are cast fittings.

Available with NPT threads, contact GRINNELL Products for details.

Technical Data Sheet: TFP1810

#560/#260 – Grooved Cap with 25mm BSP Tap


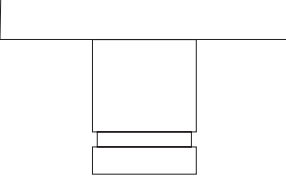
 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2"	60.3mm	260M20101	\$158.00	260M20102	POA
	2 1/2"	73.0mm	260M25101	\$168.00	260M25102	POA
	76.1mm	76.1mm	260M26101	\$168.00	260M26102	POA
	3"	88.9mm	260M30101	\$190.50	260M30102	POA
	4"	114.3mm	260M42101	\$248.00	260M42102	POA
	139.7mm	139.7mm	260M52101	\$384.00	260M52102	POA
	5"	141.3mm	260M53101	\$384.00	260M53102	POA
	165.1mm	165.1mm	260M62101	\$450.50	260M62102	POA
	6"	168.3mm	260M63101	\$450.50	260M63102	POA
8"	219.1mm	260M80101	\$846.00	260M80102	POA	

All Caps are cast fittings.


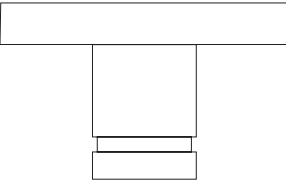
Available with NPT threads, contact GRINNELL Products for details.

Technical Data Sheet: TFP1810


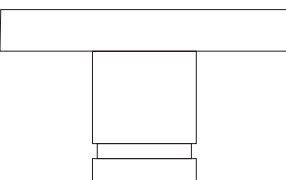
#343 – Grooved x Flanged Adaptor – PN16

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		1"	33.4mm	343034M	POA	343034G
	1 1/4"	42.4mm	343042M	POA	343042G	POA
	1 1/2"	48.3mm	343048M	\$217.50	343048G	\$343.75
	2"	60.3mm	343060M	\$217.50	343060G	\$343.75
	2 1/2"	73.0mm	343073M	\$435.25	343073G	\$512.75
	76.1mm	76.1mm	343076M	\$435.25	343076G	\$512.75
	3"	88.9mm	343089M	\$445.75	343089G	\$530.00
	4"	114.3mm	343114M	\$508.25	343114G	\$741.25
	139.7mm	139.7mm	343139M	\$703.50	343139G	\$716.25
	5"	141.3mm	343141M	\$703.50	343141G	\$716.25
	165.1mm	165.1mm	343165M	\$716.25	343165G	\$716.25
	6"	168.3mm	343168M	\$716.25	343168G	\$716.25
	8"	219.1mm	343219M	\$886.50	343219G	\$1,466.00
	10"	273.0mm	343273M	\$1,391.75	343273G	\$1,887.00
	12"	323.9mm	343324M	\$1,905.50	343324G	\$2,832.25
All Adaptors are segmentally welded.						
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: TFP1810						

#341 – Grooved x Flanged Adaptor 150 Lbs. – Schedule 40


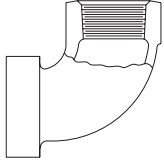
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		1"	33.4mm	341034M	POA	341034G
	1 1/4"	42.4mm	341042M	POA	341042G	POA
	1 1/2"	48.3mm	341048M	\$217.50	341048G	\$343.75
	2"	60.3mm	341060M	\$217.50	341060G	\$343.75
	2 1/2"	73.0mm	341073M	\$435.25	341073G	\$512.75
	3"	88.9mm	341089M	\$445.75	341089G	\$530.00
	4"	114.3mm	341114M	\$508.25	341114G	\$741.25
	5"	141.3mm	341141M	\$703.50	341141G	\$716.25
	6"	168.3mm	341168M	\$716.25	341168G	\$716.25
	8"	219.1mm	341219M	\$886.50	341219G	\$1,466.00
	10"	273.0mm	341273M	\$1,391.75	341273G	\$1,887.00
	12"	323.9mm	341324M	\$1,905.50	341324G	\$2,832.25
All Adaptors are segmentally welded.						
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: TFP1810						

#342 – Grooved x Flanged Adaptor 300 Lbs. – Schedule 40

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
		1"	33.4mm	342034M	POA	342034G
	1 1/4"	42.4mm	342042M	POA	342042G	POA
	1 1/2"	48.3mm	342048M	\$250.25	342048G	POA
	2"	60.3mm	342060M	\$267.50	342060G	\$314.25
	2 1/2"	73.0mm	342073M	\$267.50	342073G	\$314.25
	3"	88.9mm	342089M	\$371.00	342089G	\$469.50
	4"	114.3mm	342114M	\$699.75	342114G	\$800.25
	5"	141.3mm	342141M	\$716.25	342141G	POA
	6"	168.3mm	342168M	\$716.25	342168G	\$1,082.25
	8"	219.1mm	342219M	\$1,466.00	342219G	\$1,743.75
	10"	273.0mm	342273M	\$1,887.00	342273G	POA
	12"	323.9mm	342324M	\$2,832.25	342324G	POA
All Adaptors are segmentally welded.						
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: TFP1810						




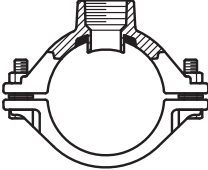
#750 – ADACAP, NPT Threads

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Part Number	List Price
	Nominal Size	Outside Diameter		
	1 1/2" x 1/2"	48.3 x 21.3mm	ADA15051	\$47.75
	1 1/2" x 3/4"	48.3 x 26.7mm	ADA15071	\$47.75
	1 1/2" x 1"	48.3 x 33.4mm	ADA15101	\$47.75
	2" x 1/2"	60.3 x 21.3mm	ADA20051	\$51.00
	2" x 3/4"	60.3 x 26.7mm	ADA20071	\$51.00
	2" x 1"	60.3 x 33.4mm	ADA20011	\$51.00
	2 1/2" x 1/2"	73.0 x 21.3mm	ADA25051	\$60.75
	2 1/2" x 3/4"	73.0 x 26.7mm	ADA25071	\$60.75
	2 1/2" x 1"	73.0 x 33.4mm	ADA25011	\$60.75

BSP threads available on request, contact GRINNELL Products.

Technical Data Sheet: TFP1810

#522 – G-FIRE Sprinkler Outlet, BSP Threaded with Grade "E" Type "A" Gasket


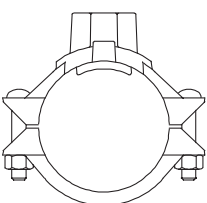
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Electro Plated	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1" x 1/2"	33.4 x 21.3mm	522F10051	POA	522F10052	POA
	1" x 3/4"	33.4 x 26.7mm	522F10071	POA	522F10072	POA
	1" x 1"	33.4 x 33.4mm	522F10101	POA	522F10102	POA
	1 1/4" x 1/2"	42.4 x 21.3mm	522F12051	\$9.75	522F12052	POA
	1 1/4" x 3/4"	42.4 x 26.7mm	522F12071	\$9.75	522F12072	POA
	1 1/4" x 1"	42.4 x 33.4mm	522F12101	\$10.00	522F12102	POA
	1 1/2" x 1/2"	48.3 x 21.3mm	522F15051	\$10.00	522F15052	POA
	1 1/2" x 3/4"	48.3 x 26.7mm	522F15071	\$10.00	522F15072	POA
	1 1/2" x 1"	48.3 x 33.4mm	522F15101	\$10.00	522F15102	POA
	2" x 1/2"	60.3 x 21.3mm	522F20051	\$10.00	522F20052	POA
	2" x 3/4"	60.3 x 26.7mm	522F20071	\$10.00	522F20072	POA
	2" x 1"	60.3 x 33.4mm	522F20101	\$10.25	522F20102	POA
	76.1mm x 1/2"	76.1 x 21.3mm	522F26051	\$12.00	522F26052	POA
	76.1mm x 3/4"	76.1 x 26.7mm	522F26071	\$12.00	522F26072	POA
	76.1mm x 1"	76.1 x 33.4mm	522F26101	\$12.00	522F26102	POA

Metric bolts are supplied as standard.

NPT threads available on request, contact GRINNELL Products.

Orders for items in shaded areas **cannot** be cancelled or returned.

**#730 – Mechanical Tee
with Grade “E” EPDM Gasket, BSP Threaded Outlet**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 1/2"	60.3 x 21.3mm	730AT20051	\$47.25	730T060021GE	\$59.50
	2" x 3/4"	60.3 x 26.7mm	730AT20071	\$47.25	730T060027GE	\$59.50
	2" x 1"	60.3 x 33.4mm	730AT20101	\$47.25	730T060034GE	\$59.50
	2" x 1 1/4"	60.3 x 42.4mm	730AT20121	\$54.50	730T060042GE	\$68.00
	2" x 1 1/2"	60.3 x 48.3mm	730AT20151	\$54.50	730T060048GE	\$68.00
	2 1/2" x 1/2"	73.0 x 21.3mm	730AT25051	\$47.25	730T073021GE	\$59.50
	2 1/2" x 3/4"	73.0 x 26.7mm	730AT25071	\$47.25	730T073027GE	\$59.50
	2 1/2" x 1"	73.0 x 33.4mm	730AT25101	\$47.25	730T073034GE	\$59.50
	2 1/2" x 1 1/4"	73.0 x 42.4mm	730AT25121	\$66.75	730T073042GE	\$81.50
	2 1/2" x 1 1/2"	73.0 x 48.3mm	730AT25151	\$66.75	730T073048GE	\$81.50
	2 1/2" x 2"	73.0 x 60.3mm	730MT25201	POA	730T073060GE	POA
	76.1mm x 1/2"	76.1 x 21.3mm	730AT26051	\$47.25	730T076021GE	\$59.50
	76.1mm x 3/4"	76.1 x 26.7mm	730AT26071	\$47.25	730T076027GE	\$59.50
	76.1mm x 1"	76.1 x 33.4mm	730AT26101	\$47.25	730T076034GE	\$59.50
	76.1mm x 1 1/4"	76.1 x 42.4mm	730MT26121	\$66.75	730T076042GE	\$59.50
	76.1mm x 1 1/2"	76.1 x 48.3mm	730MT26151	\$66.75	730T076048GE	\$81.50
	76.1mm x 2"	76.1 x 60.3mm	730MT26201	POA	730T076060GE	POA
	3" x 1/2"	88.9 x 21.3mm	730MT30051	\$54.50	730T089021GE	\$66.50
	3" x 3/4"	88.9 x 26.7mm	730MT30071	\$54.50	730T089027GE	\$66.50
	3" x 1"	88.9 x 33.4mm	730MT30101	\$54.50	730T089034GE	\$66.50
	3" x 1 1/4"	88.9 x 42.4mm	730MT30121	\$69.50	730T089042GE	\$87.25
	3" x 1 1/2"	88.9 x 48.3mm	730MT30151	\$69.50	730T089048GE	\$87.25
	3" x 2"	88.9 x 60.3mm	730MT30201	\$80.00	730T089060GE	\$99.75
	4" x 1/2"	114.3 x 21.3mm	730MT42051	\$69.00	730T114021GE	\$82.50
	4" x 3/4"	114.3 x 26.7mm	730MT42071	\$69.00	730T114027GE	\$82.50
	4" x 1"	114.3 x 33.4mm	730MT42101	\$69.00	730T114034GE	\$82.50
	4" x 1 1/4"	114.3 x 42.4mm	730MT42121	\$81.25	730T114042GE	\$95.50
	4" x 1 1/2"	114.3 x 48.3mm	730MT42151	\$84.50	730T114048GE	\$106.50
	4" x 2"	114.3 x 60.3mm	730MT42201	\$84.50	730T114060GE	\$107.25
	4" x 76.1mm	114.3 x 76.1mm	730MT42261	\$88.00	730T114076GE	\$114.75
	4" x 3"	114.3 x 88.9mm	730MT42301	\$94.00	730T114089GE	\$121.00
	5" x 2"	141.3 x 60.3mm	730MT53201	\$103.25	730T141060GE	\$131.25
	5" x 2 1/2"	141.3 x 73.0mm	730MT53251	\$109.00	730T141073GE	\$139.25
	5" x 76.1mm	141.3 x 76.1mm	730MT53261	\$109.00	730T141076GE	\$139.25
	5" x 3"	141.3 x 88.9mm	730MT53301	\$116.25	730T141089GE	\$150.00
	165.1mm x 1 1/4"	165.1 x 42.4mm	730MT62121	POA	730T165042GE	POA
	165.1mm x 1 1/2"	165.1 x 48.3mm	730AT62151	\$105.75	730T165048GE	\$136.00
	165.1mm x 2"	165.1 x 60.3mm	730AT62201	\$105.75	730T165060GE	\$136.00
	165.1 x 76.1mm	165.1 x 76.1mm	730AT62261	\$114.25	730T165076GE	\$147.75
	165.1mm x 3"	165.1 x 88.9mm	730AT62301	\$121.50	730T165089GE	\$156.50
6" x 1 1/4"	168.3 x 42.4mm	730MT63121	POA	730T168042GE	POA	
6" x 1 1/2"	168.3 x 48.3mm	730AT63151	\$105.75	730T168048GE	\$136.00	
6" x 2"	168.3 x 60.3mm	730AT63201	\$105.75	730T168060GE	\$136.00	
6" x 76.1mm	168.3 x 76.1mm	730AT63261	\$114.25	730T168076GE	\$147.75	
6" x 3"	168.3 x 88.9mm	730AT63301	\$121.50	730T168089GE	\$156.50	
8" x 2"	219.1 x 60.3mm	730AT80201	\$185.75	730T219060GE	\$235.00	
8" x 76.1mm	219.1 x 76.1mm	730AT80261	\$185.75	730T219076GE	\$235.00	
8" x 3"	219.1 x 88.9mm	730AT80301	\$196.50	730T219089GE	\$249.00	

Metric bolts are supplied as standard.


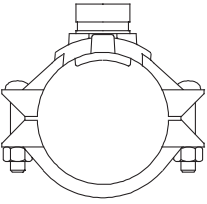
Orders for items in shaded areas **cannot** be cancelled or returned.

NPT threads available on request, contact GRINNELL Products.

Technical Data Sheet: TFP1860



#730 – Mechanical Tee with Grade “E” EPDM Gasket, Grooved Outlet


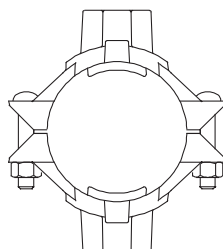
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 1 1/4"	60.3 x 42.4mm	730AG20121	\$54.50	730R060042GE	\$68.00
	2" x 1 1/2"	60.3 x 48.3mm	730AG20151	\$54.50	730R060048GE	\$68.00
	2 1/2" x 1 1/4"	73.0 x 42.4mm	730AG25121	\$66.75	730R073042GE	\$81.50
	2 1/2" x 1 1/2"	73.0 x 48.3mm	730AG25151	\$66.75	730R073048GE	\$81.50
	2 1/2" x 2"	73.0 x 60.3mm	730MG25201	POA	730R073060GE	POA
	76.1mm x 1 1/4"	76.1 x 42.4mm	730MG26121	\$66.75	730R076042GE	\$81.50
	76.1mm x 1 1/2"	76.1 x 48.3mm	730MG26151	\$66.75	730R076048GE	\$81.50
	76.1mm x 2"	76.1 x 60.3mm	730MG26201	POA	730R076060GE	POA
	3" x 1 1/4"	88.9 x 42.4mm	730MG30121	\$69.50	730R089042GE	\$87.25
	3" x 1 1/2"	88.9 x 48.3mm	730MG30151	\$69.50	730R089048GE	\$87.25
	3" x 2"	88.9 x 60.3mm	730MG30201	\$80.00	730R089060GE	\$99.75
	4" x 1 1/4"	114.3 x 42.4mm	730AG42121	\$81.25	730R114042GE	\$95.50
	4" x 1 1/2"	114.3 x 48.3mm	730AG42151	\$84.50	730R114048GE	\$106.50
	4" x 2"	114.3 x 60.3mm	730MG42201	\$84.50	730R114060GE	\$107.25
	4" x 2 1/2"	114.3 x 73.0mm	730MG42251	\$88.00	730R114073GE	\$114.75
	4" x 76.1mm	114.3 x 76.1mm	730MG42261	\$88.00	730R114076GE	\$114.75
	4" x 3"	114.3 x 88.9mm	730MG42301	\$94.00	730R114089GE	\$121.00
	5" x 1 1/2"	141.3 x 48.3mm	730MG53151	\$103.25	730R141048GE	POA
	5" x 2"	141.3 x 60.3mm	730MG53201	\$103.25	730R141060GE	POA
	5" x 2 1/2"	141.3 x 73.0mm	730MG53251	\$109.00	730R141073GE	POA
	5" x 76.1mm	141.3 x 76.1mm	730MG53261	\$109.00	730R141076GE	POA
	5" x 3"	141.3 x 88.9mm	730MG53301	\$116.25	730R141089GE	POA
	165.1mm x 1 1/4"	165.1 x 42.4mm	730MG62121	\$105.75	730R165042GE	\$136.00
	165.1mm x 1 1/2"	165.1 x 48.3mm	730AG62151	\$105.75	730R165048GE	\$136.00
	165.1mm x 2"	165.1 x 60.3mm	730AG62201	\$105.75	730R165060GE	\$136.00
	165.1mm x 2 1/2"	165.1 x 73.0mm	730AG62251	\$116.25	730R165073GE	\$147.75
	165.1 x 76.1mm	165.1 x 76.1mm	730AG62261	\$116.25	730R165076GE	\$147.75
	165.1mm x 3"	165.1 x 88.9mm	730AG62301	\$121.50	730R165089GE	\$156.50
	165.1mm x 4"	165.1 x 114.3mm	730AG62421	\$134.75	730R165114GE	\$175.25
	6" x 1 1/4"	168.3 x 42.4mm	730MG63121	\$105.75	730R168042GE	\$136.00
	6" x 1 1/2"	168.3 x 48.3mm	730AG63151	\$105.75	730R168048GE	\$136.00
	6" x 2"	168.3 x 60.3mm	730AG63201	\$105.75	730R168060GE	\$136.00
6" x 2 1/2"	168.3 x 73.0mm	730AG63251	\$116.25	730R168073GE	\$147.75	
6" x 76.1mm	168.3 x 76.1mm	730AG63261	\$116.25	730R168076GE	\$147.75	
6" x 3"	168.3 x 88.9mm	730AG63301	\$121.50	730R168089GE	\$156.50	
6" x 4"	168.3 x 114.3mm	730AG63421	\$134.75	730R168114GE	\$175.25	
8" x 2"	219.1 x 60.3mm	730AG80201	POA	730R219060GE	POA	
8" x 2 1/2"	219.1 x 73.0mm	730AG80251	\$185.75	730R219073GE	\$235.00	
8" x 76.1mm	219.1 x 76.1mm	730AG80261	\$185.75	730R219076GE	\$235.00	
8" x 3"	219.1 x 88.9mm	730AG80301	\$196.50	730R219089GE	\$249.00	
8" x 4"	219.1 x 114.3mm	730AG80421	\$202.25	730R219114GE	\$261.75	

Metric bolts are supplied as standard.

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1860

**#730 – Mechanical Cross
with Grade “E” EPDM Gasket, BSP Threaded Outlet**

 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 1/2"	60.3 x 21.3mm	730TX20051	POA	730XT060021GE	POA
	2" x 3/4"	60.3 x 26.7mm	730TX20071	POA	730XT060027GE	POA
	2" x 1"	60.3 x 33.4mm	730TX20101	\$78.75	730XT060034GE	\$101.50
	2" x 1 1/4"	60.3 x 42.4mm	730TX20121	\$90.25	730XT060042GE	\$117.00
	2" x 1 1/2"	60.3 x 48.3mm	730TX20151	\$90.25	730XT060048GE	\$117.00
	2 1/2" x 1/2"	73.0 x 21.3mm	730TX25051	POA	730XT073021GE	POA
	2 1/2" x 3/4"	73.0 x 26.7mm	730TX25071	POA	730XT073027GE	POA
	2 1/2" x 1"	73.0 x 33.4mm	730TX25101	\$78.75	730XT073034GE	\$101.50
	2 1/2" x 1 1/4"	73.0 x 42.4mm	730TX25121	\$109.00	730XT073042GE	\$140.75
	2 1/2" x 1 1/2"	73.0 x 48.3mm	730TX25151	\$109.00	730XT073048GE	\$140.75
	3" x 1/2"	88.9 x 21.3mm	730TX30051	POA	730XT089021GE	POA
	3" x 3/4"	88.9 x 26.7mm	730TX30071	\$88.75	730XT089027GE	\$114.50
	3" x 1"	88.9 x 33.4mm	730TX30101	\$88.75	730XT089034GE	\$114.50
	3" x 1 1/4"	88.9 x 42.4mm	730TX30121	\$109.00	730XT089042GE	\$136.50
	3" x 1 1/2"	88.9 x 48.3mm	730TX30151	\$109.00	730XT089048GE	\$136.50
	3" x 2"	88.9 x 60.3mm	730TX30201	\$126.00	730XT089060GE	\$156.75
	4" x 1/2"	114.3 x 21.3mm	730TX42051	POA	730XT114021GE	POA
	4" x 3/4"	114.3 x 26.7mm	730TX42071	POA	730XT114027GE	POA
	4" x 1"	114.3 x 33.4mm	730TX42101	\$109.25	730XT114034GE	\$141.75
	4" x 1 1/4"	114.3 x 42.4mm	730TX42121	\$132.50	730XT114042GE	\$166.50
	4" x 1 1/2"	114.3 x 48.3mm	730TX42151	\$132.50	730XT114048GE	\$166.50
	4" x 2"	114.3 x 60.3mm	730TX42201	\$141.75	730XT114060GE	\$168.00
	4" x 2 1/2"	114.3 x 73.0mm	730TX42251	\$141.75	730XT114073GE	\$180.25
	4" x 76.1mm	114.3 x 76.1mm	730TX42261	\$141.75	730XT114076GE	\$180.25
	4" x 3"	114.3 x 88.9mm	730TX42301	\$148.25	730XT114089GE	\$191.25
	5" x 1/2"	141.3 x 48.3mm	730TX53151	\$162.00	730XT141048GE	\$206.50
	5" x 2"	141.3 x 60.3mm	730TX53201	\$171.00	730XT141060GE	\$206.50
	5" x 2 1/2"	141.3 x 73.0mm	730TX53251	\$171.00	730XT141073GE	\$219.00
	5" x 3"	141.3 x 88.9mm	730TX53301	\$183.00	730XT141089GE	\$235.50
	165.1mm x 1 1/4"	165.1 x 42.4mm	730TX62121	POA	730XT165042GE	POA
	165.1mm x 1 1/2"	165.1 x 48.3mm	730TX62151	POA	730XT165048GE	POA
	165.1mm x 2"	165.1 x 60.3mm	730TX62201	POA	730XT165060GE	POA
	165.1 x 76.1mm	165.1 x 76.1mm	730TX62261	\$179.25	730XT165076GE	\$231.00
	6" x 1 1/4"	168.3 x 42.4mm	730TX63121	POA	730XT168042GE	POA
	6" x 1 1/2"	168.3 x 48.3mm	730TX63151	POA	730XT168048GE	POA
	6" x 2"	168.3 x 60.3mm	730TX63201	POA	730XT168060GE	POA
	6" x 2 1/2"	168.3 x 73.0mm	730TX63251	\$179.25	730XT168073GE	\$231.00
	6" x 3"	168.3 x 88.9mm	730TX63301	\$190.50	730XT168089GE	\$245.50
	6" x 4"	168.3 x 114.3mm	730TX63421	\$210.75	730XT168114GE	\$275.25
	8" x 2"	219.1 x 60.3mm	730TX80201	\$292.25	730XT219060GE	\$369.50
8" x 2 1/2"	219.1 x 73.0mm	730TX80251	\$292.25	730XT219073GE	\$369.50	
8" x 3"	219.1 x 88.9mm	730TX80301	\$308.25	730XT219089GE	\$392.00	
8" x 4"	219.1 x 114.3mm	730TX80421	\$318.25	730XT219114GE	\$411.75	

Metric bolts are supplied as standard.

Orders for items in shaded areas **cannot** be cancelled or returned.


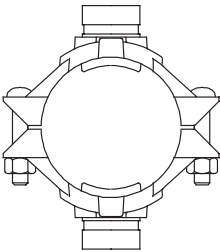
NPT threads available on request, contact GRINNELL Products.

Technical Data Sheet: TFP1860

Introduction
Couplings & Fittings
Mechanical Tees
Valves
Plain End Systems
Gaskets & Spare Parts
Preparation Equipment
Miscellaneous
Indides



#730 – Mechanical Cross with Grade “E” EPDM Gasket, Grooved Outlet


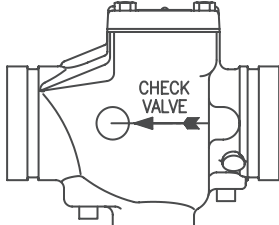
 <small>For additional listings or approvals, visit our website at www.grinnell.com</small>	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	2" x 1/2"	60.3 x 21.3mm	730GX20051	POA	730XR060021GE	POA
	2" x 3/4"	60.3 x 26.7mm	730GX20071	POA	730XR060027GE	POA
	2" x 1"	60.3 x 33.4mm	730GX20101	\$78.75	730XR060034GE	\$101.50
	2" x 1 1/4"	60.3 x 42.4mm	730GX20121	\$90.25	730XR060042GE	\$117.00
	2" x 1 1/2"	60.3 x 48.3mm	730GX20151	\$90.25	730XR060048GE	\$117.00
	2 1/2" x 1/2"	73.0 x 21.3mm	730GX25051	POA	730XR073021GE	POA
	2 1/2" x 3/4"	73.0 x 26.7mm	730GX25071	POA	730XR073027GE	POA
	2 1/2" x 1"	73.0 x 33.4mm	730GX25101	\$78.75	730XR073034GE	\$101.50
	2 1/2" x 1 1/4"	73.0 x 42.4mm	730GX25121	\$109.00	730XR073042GE	\$140.75
	2 1/2" x 1 1/2"	73.0 x 48.3mm	730GX25151	\$109.00	730XR073048GE	\$140.75
	3" x 1/2"	88.9 x 21.3mm	730GX30051	POA	730XR089021GE	POA
	3" x 3/4"	88.9 x 26.7mm	730GX30071	\$88.75	730XR089027GE	\$114.50
	3" x 1"	88.9 x 33.4mm	730GX30101	\$88.75	730XR089034GE	\$114.50
	3" x 1 1/4"	88.9 x 42.4mm	730GX30121	\$109.00	730XR089042GE	\$136.50
	3" x 1 1/2"	88.9 x 48.3mm	730GX30151	\$109.00	730XR089048GE	\$136.50
	3" x 2"	88.9 x 60.3mm	730GX30201	\$126.00	730XR089060GE	\$156.75
	4" x 1/2"	114.3 x 21.3mm	730GX42051	POA	730XR114021GE	POA
	4" x 3/4"	114.3 x 26.7mm	730GX42071	POA	730XR114027GE	POA
	4" x 1"	114.3 x 33.4mm	730GX42101	\$109.25	730XR114034GE	\$141.75
	4" x 1 1/4"	114.3 x 42.4mm	730GX42121	\$132.50	730XR114042GE	\$166.50
	4" x 1 1/2"	114.3 x 48.3mm	730GX42151	\$132.50	730XR114048GE	\$166.50
	4" x 2"	114.3 x 60.3mm	730GX42201	\$141.75	730XR114060GE	\$168.00
	4" x 2 1/2"	114.3 x 73.0mm	730GX42251	\$141.75	730XR114073GE	\$180.25
	4" x 76.1mm	114.3 x 76.1mm	730GX42261	\$141.75	730XR114076GE	\$180.25
	4" x 3"	114.3 x 88.9mm	730GX42301	\$148.25	730XR114089GE	\$191.25
	5" x 1 1/2"	141.3 x 48.3mm	730GX53151	\$162.00	730XR141048GE	\$206.50
	5" x 2"	141.3 x 60.3mm	730GX53201	\$171.00	730XR141060GE	\$206.50
	5" x 2 1/2"	141.3 x 73.0mm	730GX53251	\$171.00	730XR141073GE	\$219.00
	5" x 3"	141.3 x 88.9mm	730GX53301	\$183.00	730XR141089GE	\$235.50
	165.1mm x 1 1/4"	165.1 x 42.4mm	730GX62121	POA	730XR165042GE	POA
	6" x 1 1/4"	168.3 x 42.4mm	730GX63121	POA	730XR168042GE	POA
	6" x 1 1/2"	168.3 x 48.3mm	730GX63151	POA	730XR168048GE	POA
	6" x 2"	168.3 x 60.3mm	730GX63201	POA	730XR168060GE	POA
	6" x 2 1/2"	168.3 x 73.0mm	730GX63251	\$179.25	730XR168073GE	\$231.00
	6" x 3"	168.3 x 88.9mm	730GX63301	\$190.50	730XR168089GE	\$245.50
	6" x 4"	168.3 x 114.3mm	730GX63421	\$210.75	730XR168114GE	\$275.25
	8" x 2"	219.1 x 60.3mm	730GX80201	\$292.25	730XR219060GE	\$369.50
	8" x 2 1/2"	219.1 x 73.0mm	730GX80251	\$292.25	730XR219073GE	\$369.50
	8" x 3"	219.1 x 88.9mm	730GX80301	\$308.25	730XR219089GE	\$392.00
	8" x 4"	219.1 x 114.3mm	730GX80421	\$318.25	730XR219114GE	\$411.75

Metric bolts are supplied as standard.

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1860


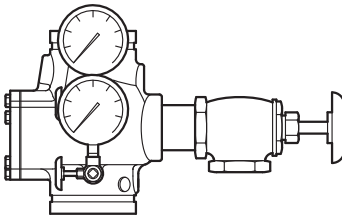
#CV-1F – G-FIRE Grooved Check Valve

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted	
	Nominal Size	Outside Diameter	Part Number	List Price
		2"	60.3mm	59-590-0-020
2½"		73.0mm	59-590-0-025	\$287.50
76.1mm		76.1mm	59-590-0-076	\$287.50
3"		88.9mm	59-590-0-030	\$287.50
4"		114.3mm	59-590-0-040	\$299.00
139.7mm		139.7mm	59-590-0-139	\$728.75
5"		141.3mm	59-590-0-050	\$728.75
165.1mm		165.1mm	59-590-0-165	\$746.75
6"		168.3mm	59-590-0-060	\$746.75
8"		219.1mm	59-590-0-080	\$1,298.00
10"		273.0mm	59-590-0-100	\$2,473.75
12"		323.9mm	59-590-0-120	\$3,227.50

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP1550


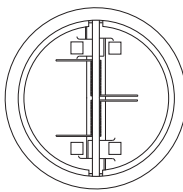
#CV-1FR – G-FIRE Grooved Shotgun Riser Check Valve

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Painted		
	Nominal Size	Outside Diameter	Part Number	List Price	
		2"	60.3mm	59-590-1-020	\$572.50
2½"		73.0mm	59-590-1-025	\$562.00	
76.1mm		76.1mm	59-590-1-076	\$562.00	
3"		88.9mm	59-590-1-030	\$572.50	
4"		114.3mm	59-590-1-040	\$572.50	
139.7mm		139.7mm	59-590-1-139	\$1,045.00	
5"		141.3mm	59-590-1-050	\$1,045.00	
165.1mm		165.1mm	59-590-1-165	\$1,063.00	
6"		168.3mm	59-590-1-060	\$1,063.00	
8"		219.1mm	59-590-1-080	\$1,923.00	
10"		273.0mm	59-590-1-100	POA	
12"		323.9mm	59-590-1-120	POA	
Trim Assemblies for Model CV-1FR G-FIRE Grooved Riser Check Valve (with gauges)					
2"		60.3mm	59-591-1-020	\$388.50	
2½ – 3"		73.0 thru 88.9mm	59-591-1-030	\$388.50	
4" thru 12"	114.3 thru 323.9mm	59-591-1-080	\$388.50		

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: TFP950

Model 1161 – Double Door Wafer Check Valve

 For additional listings or approvals, visit our website at www.grinnell.com	Pipe Size		Part Number	UL Listed	List Price
	Nominal Size	Outside Diameter			
		2"	60.3mm	DDCV1161050	–
2½"		73.0mm	DDCV1161065	–	\$280.00
3"		88.9mm	DDCV1161080	–	\$295.00
4"		114.3mm	DDCV1161U100	UL Listed	\$898.00
6"		168.3mm	DDCV1161U150	UL Listed	\$1,850.00
8"		219.1mm	DDCV1161U200	UL Listed	\$2,490.00
10"		273.0mm	DDCV1161U250	UL Listed	\$3,850.00
12"		323.9mm	DDCV1161U300	UL Listed	POA

Orders for items in shaded areas **cannot** be cancelled or returned.

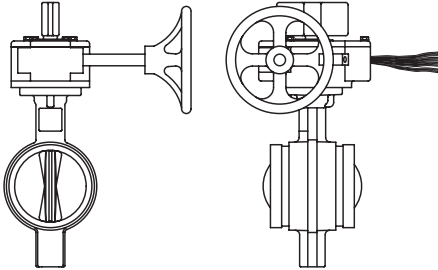
Introduction
Couplings & Fittings
Mechanical Tees
Valves
Plain End Systems
Gaskets & Spare Parts
Preparation Equipment
Miscellaneous
Indides



Model BFV-N – G-FIRE Butterfly Valves - Groove x Groove, 300 psi



For additional listings or approvals, visit our website at www.grinnell.com



Pipe Size		Gear Operated with Tamper Switches	
Nominal Size	Outside Diameter	Part Number	List Price
2"	60.3mm	59-300-F-020N	\$530.75
2 1/2"	73.0mm	59-300-F-025N	\$525.75
76.1mm	76.1mm	59-300-F-076N	POA
3"	88.9mm	59-300-F-030N	\$568.50
4"	114.3mm	59-300-F-040N	\$595.75
5"	141.3mm	59-300-F-050N	\$893.25
165.1mm	165.1mm	59-300-F-165N	POA
6"	168.3mm	59-300-F-060N	\$846.75
8"	219.1mm	59-300-F-080N	\$1,297.75
10"	273.0mm	59-300-F-100N	\$3,143.50
12"	323.9mm	59-300-F-120N	\$4,490.25

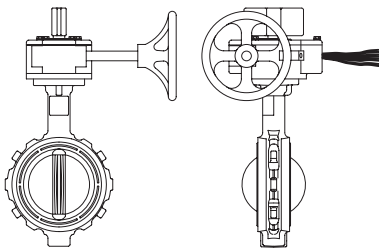
PIVA extensions are available on request.

Orders for items in shaded areas **cannot** be cancelled or returned.

Model BFV-N – G-FIRE Butterfly Valves - Wafer Style, 250 psi



For additional listings or approvals, visit our website at www.grinnell.com



Pipe Size	Gear Operated with Supervisory Switches	
Nominal Size	Part Number	List Price
2"	59-801-1-020N	\$725.50
2 1/2"	59-801-1-025N	\$766.00
76.1mm	59-801-1-076N	\$766.00
3"	59-801-1-030N	\$857.00
4"	59-801-1-040N	\$887.00
5"	59-801-1-050N	\$1,148.00
165.1mm	59-801-1-165N	\$1,148.00
6"	59-801-1-060N	\$1,148.00
8"	59-801-1-080N	\$1,700.00
10"	59-801-1-100N	\$2,323.00
12"	59-801-1-120N	\$2,823.00

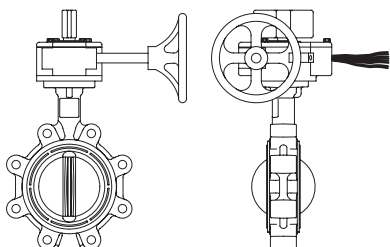
PIVA extensions are available on request.

Technical Data Sheet - TFP1515

Model BFV-N – G-FIRE Butterfly Valves - Lug Style, 250 psi



For additional listings or approvals,
 visit our website at www.grinnell.com



<i>Pipe Size</i>	<i>Gear Operated with Supervisory Switches</i>		
	<i>Nominal Size</i>	<i>Part Number</i>	<i>List Price</i>
2"		59-802-1-020N	\$835.50
2½"		59-802-1-025N	\$881.50
76.1mm		59-802-1-076N	\$881.50
3"		59-802-1-030N	\$905.50
4"		59-802-1-040N	\$971.50
5"		59-802-1-050N	\$1,269.00
165.1mm		59-802-1-165N	\$1,269.00
6"		59-802-1-060N	\$1,269.00
8"		59-802-1-080N	\$1,834.00
10"		59-802-1-100N	\$2,369.00
12"		59-802-1-120N	\$3,785.00

PIVA extensions are available on request.

Technical Data Sheet - TFP1520

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices

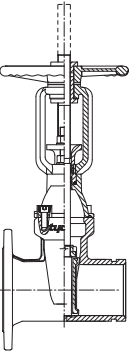


Model #TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Flange, ANSI Class #125, PN10 & PN16

	Pipe Size		ANSI Class #125		PN10		PN16	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price	Part Number	List Price
	2"	50 - 60.3mm	TMRX00605	POA	-	-	TMRX00608	POA
	2 1/2"	65 - 76.1mm	TMRX00765	\$662.00	-	-	TMRX00768	\$662.00
	3"	80 - 88.9mm	TMRX00895	\$860.00	-	-	TMRX00898	\$860.00
	4"	100 - 114.3mm	TMRX01145	\$1,013.00	-	-	TMRX01148	\$1,013.00
	5"	125 - 139.7mm	TMRX01395	POA	-	-	TMRX01398	POA
	6"	150 - 168.3mm	TMRX01685	\$1,357.25	-	-	TMRX01688	\$1,357.25
	8"	200 - 219.1mm	TMRX02195	\$2,128.75	TMRX02197	\$2,128.75	TMRX02198	\$2,128.75
	10"	250 - 273.0mm	TMRX02735	\$2,865.75	TMRX02737	\$2,865.75	TMRX02738	\$2,865.75
	12"	300 - 323.9mm	TMRX03245	\$4,471.25	TMRX03247	\$4,471.25	TMRX03248	\$4,471.25

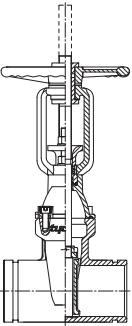
Orders for items in shaded areas **cannot** be cancelled or returned.

Model #TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Groove

	Pipe Size		PN16 x Groove	
	Nominal Size	Outside Diameter	Part Number	List Price
	2"	50 - 60.3mm	TMRT0060T	POA
	2 1/2"	65 - 76.1mm	TMRT0076T	\$662.00
	3"	80 - 88.9mm	TMRT0089T	\$860.00
	4"	100 - 114.3mm	TMRT0114T	\$1,013.00
	5"	125 - 139.7mm	TMRT0139T	POA
	6"	150 - 168.3mm	TMRT0168T	\$1,357.25
	8"	200 - 219.1mm	TMRT0219T	\$2,128.75
	10"	250 - 273.0mm	TMRT0273T	\$2,865.75
	12"	300 - 323.9mm	TMRT0324T	\$4,471.25

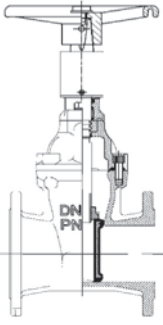
Orders for items in shaded areas **cannot** be cancelled or returned.

Model #TM – Shut Off Valve, Gate Valve, OS&Y, Groove x Groove

	Pipe Size		PN16 x Groove	
	Nominal Size	Outside Diameter	Part Number	List Price
	2"	50 - 60.3mm	TMRG0060G	POA
	2 1/2"	65 - 73.0mm	TMRG0076G	\$662.00
	76.1mm	65 - 76.1mm	TMRG0073G	\$662.00
	3"	80 - 88.9mm	TMRG0089G	\$860.00
	4"	100 - 114.3mm	TMRG0114G	\$1,013.00
	139.7mm	125 - 139.7mm	TMRG0139G	POA
	5"	125 - 141.3mm	TMRG0141G	POA
	165.1mm	150 - 165.1mm	TMRG0168G	\$1,357.25
	6"	150 - 168.3mm	TMRG0165G	\$1,357.25
	8"	200 - 219.1mm	TMRG0219G	\$2,128.75
	10"	250 - 273.0mm	TMRG0273G	\$2,865.75
	12"	300 - 323.9mm	TMRG0324G	\$4,471.25

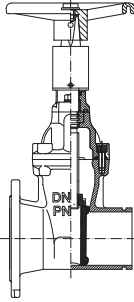
Orders for items in shaded areas **cannot** be cancelled or returned.

**Model #TMCX – Shut Off Valve, Gate Valve, NRS,
Flange x Flange, ANSI Class #125, PN10 & PN16**

	Pipe Size		ANSI Class #125		PN10		PN16	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price	Part Number	List Price
	2"	50 - 60.3mm	TMCX00605	POA	-	-	TMCX00608	POA
	2 1/2"	65 - 76.1mm	TMCX00765	\$612.50	-	-	TMCX00768	\$612.50
	3"	80 - 88.9mm	TMCX00895	\$823.00	-	-	TMCX00898	\$823.00
	4"	100 - 114.3mm	TMCX01145	\$980.75	-	-	TMCX01148	\$980.75
	5"	125 - 139.7mm	TMCX01395	POA	-	-	TMCX01398	POA
	6"	150 - 168.3mm	TMCX01685	\$1,257.75	-	-	TMCX01688	\$1,257.75
	8"	200 - 219.1mm	TMCX02195	\$1,858.00	TMCX02197	\$1,858.00	TMCX02198	\$1,858.00
	10"	250 - 273.0mm	TMCX02735	\$2,700.25	TMCX02737	\$2,700.25	TMCX02738	\$2,700.25
	12"	300 - 323.9mm	TMCX03245	\$3,778.75	TMCX03247	\$3,778.75	TMCX03248	\$3,778.75

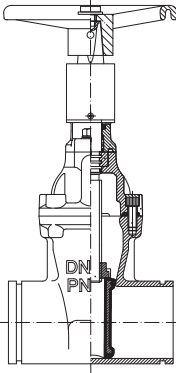
Orders for items in shaded areas **cannot** be cancelled or returned.

**Model #TMC – Shut Off Valve, Gate Valve, NRS,
Flange x Groove**

	Pipe Size		PN16 x Groove	
	Nominal Size	Outside Diameter	Part Number	List Price
	2"	50 - 60.3mm	TMCT0060T	POA
	2 1/2"	65 - 76.1mm	TMCT0076T	\$612.50
	3"	80 - 88.9mm	TMCT0089T	\$823.00
	4"	100 - 114.3mm	TMCT0114T	\$980.75
	5"	125 - 139.7mm	TMCT0139T	POA
	6"	150 - 168.3mm	TMCT0168T	\$1,257.75
	8"	200 - 219.1mm	TMCT0219T	\$1,858.00
	10"	250 - 273.0mm	TMCT0273T	\$2,700.25
	12"	300 - 323.9mm	TMCT0324T	\$3,778.75

Orders for items in shaded areas **cannot** be cancelled or returned.

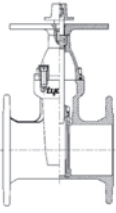
**Model #TMC – Shut Off Valve, Gate Valve, NRS,
Groove x Groove**

	Pipe Size		PN16 x Groove	
	Nominal Size	Outside Diameter	Part Number	List Price
	2"	50 - 60.3mm	TMCG0060G	POA
	2 1/2"	65 - 73.0mm	TMCG0076G	\$612.50
	76.1mm	65 - 76.1mm	TMCG0073G	\$612.50
	3"	80 - 88.9mm	TMCG0089G	\$823.00
	4"	100 - 114.3mm	TMCG0114G	\$980.75
	139.7mm	125 - 139.7mm	TMCG0139G	POA
	5"	125 - 141.3mm	TMCG0141G	POA
	165.1mm	150 - 165.1mm	TMCG0168G	\$1,257.75
	6"	150 - 168.3mm	TMCG0165G	\$1,257.75
	8"	200 - 219.1mm	TMCG0219G	\$1,858.00
	10"	250 - 273.0mm	TMCG0273G	\$2,700.25
	12"	300 - 323.9mm	TMCG0324G	\$3,778.75

Orders for items in shaded areas **cannot** be cancelled or returned.

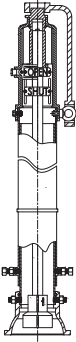


Model #TMCXP – Shut Off Valve, Gate Valve, NRS, Flange x Flange, ANSI Class #125, PN10 & PN16

	Pipe Size		ANSI Class #125		PN10		PN16	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price	Part Number	List Price
	4"	100mm	TMCXP1145	\$608.00	-	-	TMCXP1148	\$608.00
	5"	125mm	TMCXP1395	POA	-	-	TMCXP1398	POA
	6"	150mm	TMCXP1685	\$912.00	-	-	TMCXP1688	\$912.00
	8"	200mm	TMCXP2195	\$1,263.00	TMCXP2197	\$1,263.00	TMCXP2198	\$1,263.00
	10"	250mm	TMCXP2735	\$2,147.00	TMCXP2737	\$2,147.00	TMCXP2738	\$2,147.00
	12"	300mm	TMCXP3245	\$3,040.00	TMCXP3247	\$3,040.00	TMCXP3248	\$3,040.00

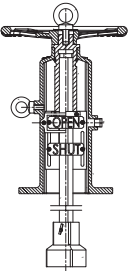
Orders for items in shaded areas **cannot** be cancelled or returned.

Model #POST-IND – Indicator Post, Adjustable, TMCXP

	Pipe Size		PN16 x Groove	
	Nominal Size	Adjustment Range	Part Number	List Price
	4" - 12"	403 - 1,043mm	POST-IND-A	\$1,425.00
	4" - 12"	995 - 1,635mm	POST-IND-B	\$1,465.00
	4" - 12"	1,545 - 2,185mm	POST-IND-C	\$1,515.25
	4" - 12"	2,100 - 2,740mm	POST-IND-D	\$1,565.25

Orders for items in shaded areas **cannot** be cancelled or returned.

Model #WALL-IND – Indicator Post Wall Type

	Pipe Size		PN16 x Groove	
	Nominal Size	Adjustment Range	Part Number	List Price
	4" - 12"	710mm	WALL-IND	\$774.25

Orders for items in shaded areas **cannot** be cancelled or returned.

**#909 Plain End Coupling
 with Grade "E" EPDM Gasket**

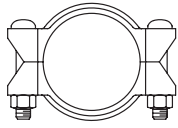


Fig. 909 – 1" thru 6"

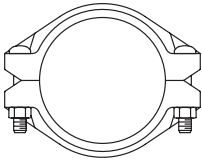


Fig. 909 – 8" thru 12"

<i>Pipe Size</i>		<i>Painted</i>		<i>Galvanised</i>	
<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Grade "E" EPDM Part No.</i>	<i>List Price</i>	<i>Grade "E" EPDM Part No.</i>	<i>List Price</i>
1"	33.4mm	909034ME	\$108.50	909034GE	\$140.75
1½"	48.3mm	909048ME	\$108.50	909048GE	\$140.75
2"	60.3mm	909060ME	\$108.50	909060GE	\$140.75
2½"	73.0mm	909073ME	\$108.50	909073GE	\$140.75
3"	88.9mm	909089ME	\$159.25	909089GE	\$209.00
4"	114.3mm	909114ME	\$184.75	909114GE	\$245.50
6"	168.3mm	909168ME	\$321.00	909168GE	\$436.50
8"	219.1mm	909219ME	\$567.00	909219GE	\$748.50
10"	273.0mm	909273ME	\$737.25	909273GE	\$989.50
12"	323.9mm	909324ME	\$925.00	909324GE	\$1,275.50

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G190

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

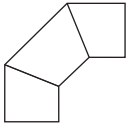
Preparation Equipment

Miscellaneous

Indices



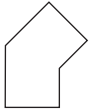
#910 Plain End 90° Elbow

	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	910034M	\$180.75	910034G	\$200.50
	1½"	48.3mm	910048M	\$214.25	910048G	\$234.50
	2"	60.3mm	910060M	\$319.50	910060G	\$352.50
	2½"	73.0mm	910073M	\$374.25	910073G	\$416.00
	3"	88.9mm	910089M	\$388.25	910089G	\$434.50
	4"	114.3mm	910114M	\$440.25	910114G	\$484.50
	5"	141.3mm	910141M	\$506.00	910141G	\$1,016.00
	6"	168.3mm	910168M	\$640.25	910168G	\$779.00
	8"	219.1mm	910219M	\$1,203.25	910219G	\$1,359.75
	10"	273.0mm	910273M	\$1,591.25	910273G	\$1,779.75
	12"	323.9mm	910324M	\$1,769.75	910324G	\$2,723.50

Orders for items in shaded areas **cannot** be cancelled or returned.


Technical Data Sheet: G192

#901 Plain End 45° Elbow

	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	901034M	\$107.75	901034G	\$123.75
	1½"	48.3mm	901048M	\$161.25	901048G	\$193.00
	2"	60.3mm	901060M	\$338.50	901060G	\$417.00
	2½"	73.0mm	901073M	\$338.50	901073G	\$417.00
	3"	88.9mm	901089M	\$388.25	901089G	\$437.75
	4"	114.3mm	901114M	\$404.75	901114G	\$448.25
	5"	141.3mm	901141M	\$506.00	901141G	\$595.25
	6"	168.3mm	901168M	\$580.00	901168G	\$681.25
	8"	219.1mm	901219M	\$680.00	901219G	\$960.50
	10"	273.0mm	901273M	\$729.25	901273G	\$912.50
	12"	323.9mm	901324M	\$1,319.75	901324G	\$1,554.00

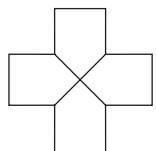
Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: G192

#919 Plain End Tee						
	<i>Pipe Size</i>		<i>Painted</i>		<i>Galvanised</i>	
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Part Number</i>	<i>List Price</i>	<i>Part Number</i>	<i>List Price</i>
	1"	33.4mm	919034M	\$202.25	919034G	\$238.25
	1½"	48.3mm	919048M	\$260.50	919048G	\$299.75
	2"	60.3mm	919060M	\$260.50	919060G	\$292.50
	2½"	73.0mm	919073M	\$339.75	919073G	\$385.75
	3"	88.9mm	919089M	\$523.00	919089G	\$598.25
	4"	114.3mm	919114M	\$749.75	919114G	\$937.50
	5"	141.3mm	919141M	\$1,026.00	919141G	\$1,025.00
	6"	168.3mm	919168M	\$893.00	919168G	POA
	8"	219.1mm	919219M	\$1,287.25	919219G	POA
	10"	273.0mm	919273M	POA	919273G	POA
	12"	323.9mm	919324M	\$2,450.00	919324G	POA

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G192

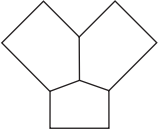
#927 Plain End Cross						
	<i>Pipe Size</i>		<i>Painted</i>		<i>Galvanised</i>	
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Part Number</i>	<i>List Price</i>	<i>Part Number</i>	<i>List Price</i>
	1"	33.4mm	927034M	POA	927034G	POA
	1½"	48.3mm	927048M	POA	927048G	POA
	2"	60.3mm	927060M	POA	927060G	POA
	2½"	73.0mm	927073M	POA	927073G	POA
	3"	88.9mm	927089M	POA	927089G	POA
	4"	114.3mm	927114M	POA	927114G	POA
	5"	141.3mm	927141M	POA	927141G	POA
	6"	168.3mm	927168M	POA	927168G	POA
	8"	219.1mm	927219M	POA	927219G	POA
	10"	273.0mm	927273M	POA	927273G	POA
	12"	323.9mm	927324M	POA	927324G	POA

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G192




#924 Plain End True Wye

	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	924034M	POA	924034G	POA
	1½"	48.3mm	924048M	POA	924048G	POA
	2"	60.3mm	924060M	POA	924060G	POA
	2½"	73.0mm	924073M	POA	924073G	POA
	3"	88.9mm	924089M	POA	924089G	POA
	4"	114.3mm	924114M	POA	924114G	POA
	5"	141.3mm	924141M	POA	924141G	POA
	6"	168.3mm	924168M	POA	924168G	POA
	8"	219.1mm	924219M	POA	924219G	POA
	10"	273.0mm	924273M	POA	924273G	POA
	12"	323.9mm	924324M	POA	924324G	POA

Orders for items in shaded areas **cannot** be cancelled or returned.

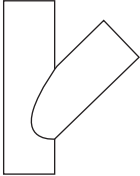
Technical Data Sheet: G192

#960 Plain End Cap (Bull Plug)

	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1"	33.4mm	960034M	POA	960034G	POA
	1½"	48.3mm	960048M	POA	960048G	\$182.00
	2"	60.3mm	960060M	POA	960060G	\$182.00
	2½"	73.0mm	960073M	POA	960073G	\$182.00
	3"	88.9mm	960089M	POA	960089G	\$266.25
	4"	114.3mm	960114M	POA	960114G	\$344.00
	5"	141.3mm	960141M	POA	960141G	\$606.00
	6"	168.3mm	960168M	POA	960168G	\$807.75
	8"	219.1mm	960219M	POA	960219G	\$1,518.00
	10"	273.0mm	960273M	POA	960273G	POA
	12"	323.9mm	960324M	POA	960324G	\$4,234.25

Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: G192

#914 Plain End Lateral						
	<i>Pipe Size</i>		<i>Painted</i>		<i>Galvanised</i>	
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Part Number</i>	<i>List Price</i>	<i>Part Number</i>	<i>List Price</i>
	1"	33.4mm	914034M	POA	914034G	POA
	1½"	48.3mm	914048M	\$308.50	914048G	\$363.25
	2"	60.3mm	914060M	\$352.50	914060G	\$428.00
	2½"	73.0mm	914073M	\$406.00	914073G	\$477.00
	3"	88.9mm	914089M	\$481.75	914089G	\$566.00
	4"	114.3mm	914114M	\$663.75	914114G	\$743.75
	5"	141.3mm	914141M	\$1,126.75	914141G	\$1,338.00
	6"	168.3mm	914168M	\$1,162.75	914168G	\$1,411.00
	8"	219.1mm	914219M	\$1,951.50	914219G	\$2,298.00
	10"	273.0mm	914273M	\$2,026.50	914273G	\$3,545.25
	12"	323.9mm	914324M	\$3,726.00	914324G	\$4,791.75
Orders for items in shaded areas <i>cannot</i> be cancelled or returned.						
Technical Data Sheet: G192						

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices

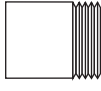



#999 Plain End Swaged Nipple


	Pipe Size		Painted		Galvanised	
	Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price
	1 1/2" x 1"	48.3 x 33.4mm	999048034M	POA	999048034G	POA
	2" x 1"	60.3 x 33.4mm	999060034M	POA	999060034G	POA
	2" x 1 1/2"	60.3 x 48.3mm	999060048M	POA	999060048G	POA
	2 1/2" x 1"	73.0 x 33.4mm	999073034M	POA	999073034G	POA
	2 1/2" x 1 1/2"	73.0 x 48.3mm	999073048M	POA	999073048G	POA
	2 1/2" x 2"	73.0 x 60.3mm	999073060M	POA	999073060G	POA
	3" x 1"	88.9 x 33.4mm	999089034M	POA	999089034G	POA
	3" x 1 1/2"	88.9 x 48.3mm	999089048M	POA	999089048G	POA
	3" x 2"	88.9 x 60.3mm	999089060M	POA	999089060G	POA
	3" x 2 1/2"	88.9 x 73.0mm	999089073M	POA	999089073G	POA
	4" x 1"	114.3 x 33.4mm	999114034M	POA	999114034G	POA
	4" x 1 1/2"	114.3 x 48.3mm	999114048M	POA	999114048G	POA
	4" x 2"	114.3 x 60.3mm	999114060M	POA	999114060G	POA
	4" x 2 1/2"	114.3 x 73.0mm	999114073M	POA	999114073G	POA
	4" x 3"	114.3 x 88.9mm	999114089M	POA	999114089G	POA
	5" x 2"	141.3 x 60.3mm	999141060M	POA	999141060G	POA
	5" x 3"	141.3 x 88.9mm	999141089M	POA	999141089G	POA
	5" x 4"	141.3 x 114.3mm	999141114M	POA	999141114G	POA
	6" x 1"	168.3 x 33.4mm	999168034M	POA	999168034G	POA
	6" x 1 1/2"	168.3 x 48.3mm	999168048M	POA	999168048G	POA
	6" x 2"	168.3 x 60.3mm	999168060M	POA	999168060G	POA
	6" x 2 1/2"	168.3 x 73.0mm	999168073M	POA	999168073G	POA
	6" x 3"	168.3 x 88.9mm	999168089M	POA	999168089G	POA
	6" x 4"	168.3 x 114.3mm	999168114M	POA	999168114G	POA
	6" x 5"	168.3 x 141.3mm	999168141M	POA	999168141G	POA
	8" x 3"	219.1 x 88.9mm	999219089M	POA	999219089G	POA
	8" x 4"	219.1 x 114.3mm	999219114M	POA	999219114G	POA
	8" x 5"	219.1 x 141.3mm	999219141M	POA	999219141G	POA
8" x 6"	219.1 x 168.3mm	999219168M	POA	999219168G	POA	

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G192

#991 Adaptor Nipple Plain x BSP Thread				
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Painted</i>	
			<i>Part Number</i>	<i>List Price</i>
				1"
	1½"	48.3mm	991048M	\$30.00
	2"	60.3mm	991060M	\$30.00
	2½"	73.0mm	991073M	\$35.00
	3"	88.9mm	991089M	\$43.00
	4"	114.3mm	991114M	\$71.00
	6"	168.3mm	991168M	\$189.50
Available with NPT threads, contact GRINNELL Products for details.				
Orders for items in shaded areas cannot be cancelled or returned.				
Technical Data Sheet: G192				

#992 Adaptor Nipple Plain x Grooved				
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Painted</i>	
			<i>Part Number</i>	<i>List Price</i>
				1"
	1½"	48.3mm	992048M	\$30.00
	2"	60.3mm	992060M	\$30.00
	2½"	73.0mm	992073M	\$35.00
	3"	88.9mm	992089M	\$43.00
	4"	114.3mm	992114M	\$71.00
	6"	168.3mm	992168M	\$189.50
Orders for items in shaded areas cannot be cancelled or returned.				
Technical Data Sheet: G192				

#993 Adaptor Nipple Plain x Plain				
	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Painted</i>	
			<i>Part Number</i>	<i>List Price</i>
				1"
	1½"	48.3mm	993048M	\$30.00
	2"	60.3mm	993060M	\$30.00
	2½"	73.0mm	993073M	\$35.00
	3"	88.9mm	993089M	\$43.00
	4"	114.3mm	993114M	\$71.00
	6"	168.3mm	993168M	\$189.50
Orders for items in shaded areas cannot be cancelled or returned.				
Technical Data Sheet: G192				

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

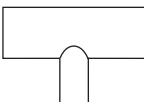
Preparation Equipment

Miscellaneous

Indices



#921 Reducing Tee Plain End

	Nominal Size	Outside Diameter	Painted		Galvanised	
			Part Number	List Price	Part Number	List Price
	1 1/2" x 1 1/2" x 1"	48.3 x 48.3 x 33.4mm	921048034M	POA	921048034G	POA
	2" x 2" x 1"	60.3 x 60.3 x 33.4mm	921060034M	POA	921060034G	POA
	2" x 2" x 1 1/2"	60.3 x 60.3 x 48.3mm	921060048M	POA	921060048G	POA
	3" x 3" x 1"	88.9 x 88.9 x 33.4mm	921089034M	POA	921089034G	POA
	3" x 3" x 1 1/2"	88.9 x 88.9 x 48.3mm	921089048M	POA	921089048G	POA
	3" x 3" x 2"	88.9 x 88.9 x 60.3mm	921089060M	POA	921089060G	POA
	4" x 4" x 1"	114.3 x 114.3 x 33.4mm	921114034M	POA	921114034G	POA
	4" x 4" x 1 1/2"	114.3 x 114.3 x 48.3mm	921114048M	POA	921114048G	POA
	4" x 4" x 2"	114.3 x 114.3 x 60.3mm	921114060M	POA	921114060G	POA
	4" x 4" x 2 1/2"	114.3 x 114.3 x 73.0mm	921114073M	POA	921114073G	POA
	4" x 4" x 3"	114.3 x 114.3 x 88.9mm	921114089M	POA	921114089G	POA
	6" x 6" x 2"	168.3 x 168.3 x 60.3mm	921168060M	POA	921168060G	POA
	6" x 6" x 3"	168.3 x 168.3 x 88.9mm	921168089M	POA	921168089G	POA
	6" x 6" x 4"	168.3 x 168.3 x 114.3mm	921168114M	POA	921168114G	POA
	8" x 8" x 2"	219.1 x 219.1 x 60.3mm	921219060M	POA	921219060G	POA
	8" x 8" x 3"	219.1 x 219.1 x 88.9mm	921219089M	POA	921219089G	POA
	8" x 8" x 4"	219.1 x 219.1 x 114.3mm	921219114M	POA	921219114G	POA
	8" x 8" x 5"	219.1 x 219.1 x 141.3mm	921219141M	POA	921219141G	POA
	8" x 8" x 6"	219.1 x 219.1 x 168.3mm	921219168M	POA	921219168G	POA
	10" x 10" x 4"	273.0 x 273.0 x 114.3mm	921273114M	POA	921273114G	POA
10" x 10" x 6"	273.0 x 273.0 x 168.3mm	921273168M	POA	921273168G	POA	
10" x 10" x 8"	273.0 x 273.0 x 219.1mm	921273219M	POA	921273219G	POA	
12" x 12" x 6"	323.9 x 323.9 x 168.3mm	921324168M	POA	921324168G	POA	
12" x 12" x 8"	323.9 x 323.9 x 219.1mm	921324219M	POA	921324219G	POA	
12" x 12" x 10"	323.9 x 323.9 x 273.0mm	921324273M	POA	921324273G	POA	

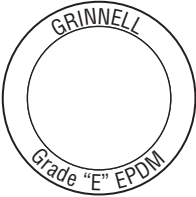
Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G192

Replacement Gaskets							
Pipe Size		Grade "A" Pre-Lube Fire Protection Gasket (for #577, #705, #707, #770)		Tri-Seal Grade "E" EPDM Gasket (for #577, #705, #707)		Grade "E" EPDM Gasket (for #71)	
Nominal Size	Outside Diameter	Part Number	List Price	Part Number	List Price	Part Number	List Price
1"	33.4mm	034EPDME	\$19.25	034EPDME3	\$37.75	-	-
1 1/4"	42.4mm	042EPDME	\$20.25	042EPDME3	\$39.75	-	-
1 1/2"	48.3mm	048EPDME	\$21.75	048EPDME3	\$40.00	-	-
2"	60.3mm	060EPDME	\$21.75	060EPDME3	\$40.50	71060EPDME	\$17.50
2 1/2"	73.0mm	073EPDME	\$26.00	073EPDME3	\$50.25	71073EPDME	\$20.50
76.1mm	76.1mm	076EPDME	\$26.00	076EPDME3	\$50.25	71076EPDME	\$20.50
3"	88.9mm	089EPDME	\$28.25	089EPDME3	\$50.25	71089EPDME	\$22.75
4"	114.3mm	114EPDME	\$35.00	114EPDME3	\$67.50	71114EPDME	\$29.00
139.7mm	139.7mm	139EPDME	\$45.50	139EPDME3	\$120.00	71139EPDME	\$35.25
5"	141.3mm	141EPDME	\$45.50	141EPDME3	\$120.00	71141EPDME	\$35.25
165.1mm	165.1mm	165EPDME	\$49.50	165EPDME3	\$122.00	71165EPDME	\$40.00
6"	168.3mm	168EPDME	\$49.50	168EPDME3	\$122.00	71168EPDME	\$40.00
8"	219.1mm	219EPDME	\$67.25	219EPDME3	\$127.25	71219EPDME	\$54.00
10"	273.0mm	273EPDME	\$85.50	273EPDME3	\$164.00	71273EPDME	\$69.25
12"	323.9mm	324EPDME	\$99.25	324EPDME3	\$195.25	71324EPDME	\$80.75

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: TFP1895

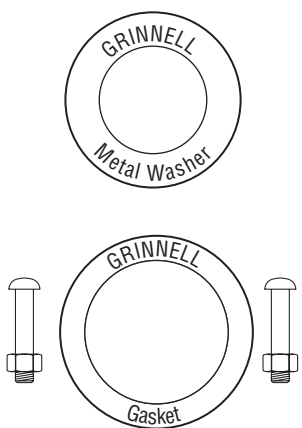
Replacement Gaskets EPDM "E" Gaskets For #716 Reducing Coupling				
	Nominal Size	Outside Diameter	Part No. "E" EPDM	List Price
	2" x 1"	60.3 x 33.4mm	716060034EPDME	\$20.25
	2" x 1 1/2"	60.3 x 48.3mm	716060048EPDME	\$20.25
	2 1/2" x 2"	73.0 x 60.3mm	716073060EPDME	\$26.25
	76.1mm x 2"	76.1 x 60.3mm	716076060EPDME	POA
	3" x 2"	88.9 x 60.3mm	716089060EPDME	\$30.50
	3" x 2 1/2"	88.9 x 73.0mm	716089073EPDME	\$30.50
	3" x 76.1mm	88.9 x 76.1mm	716089076EPDME	\$30.50
	4" x 2"	114.3 x 60.3mm	716114060EPDME	\$35.25
	4" x 2 1/2"	114.3 x 73.0mm	716114073EPDME	\$35.75
	4" x 76.1mm	114.3 x 76.1mm	716114076EPDME	\$35.75
	4" x 3"	114.3 x 88.9mm	716114089EPDME	\$37.50
	139.7mm x 4"	139.7 x 114.3mm	716139114EPDME	\$43.75
	5" x 4"	141.3 x 114.3mm	716141114EPDME	\$43.75
	165.1mm x 4"	165.1 x 114.3mm	716165114EPDME	\$49.75
	6" x 4"	168.3 x 114.3mm	716168114EPDME	\$49.75
6" x 5"	168.3 x 141.3mm	716168141EPDME	\$54.00	
8" x 6"	219.1 x 168.3mm	716219168EPDME	\$60.00	
10" x 8"	273.0 x 219.1mm	716273219EPDME	\$72.50	

Orders for items in shaded areas *cannot* be cancelled or returned.

Technical Data Sheet: G610

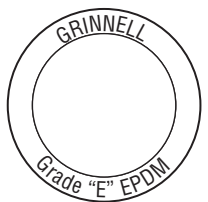


#71 Flange Adaptor – Nut, Bolt, and Gasket Kit & Metal Washer

	Pipe Size		Nut, Bolt, and Gasket Kit		Washer	
	Nominal Size	Outside Diameter	Part No.	List Price	Part No.	List Price
	2"	60.3mm	NBGK06071	POA	71060FWC	\$57.75
2½"	73.0mm	NBGK07371	POA	71073FWC	\$60.75	
76.1mm	76.1mm	NBGK07671	POA	71076FWC	\$60.75	
3"	88.9mm	NBGK08971	POA	71089FWC	\$71.25	
4"	114.3mm	NBGK11471	POA	71114FWC	\$82.75	
5"	141.3mm	NBGK14171	POA	71141FWC	\$100.75	
165.1mm	165.1mm	NBGK16571	POA	71165FWC	\$115.00	
6"	168.3mm	NBGK16871	POA	71168FWC	\$115.00	
8"	219.1mm	NBGK21971	POA	71219FWC	\$145.75	
10"	273.0mm	NBGK27371	POA	71273FWC	\$202.25	
12"	323.9mm	NBGK32471	POA	71324FWC	\$296.25	

Orders for items in shaded areas **cannot** be cancelled or returned.

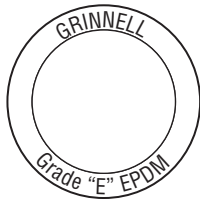
#702 – Outlet Coupling Replacement Grade "E" EPDM Gaskets

	Pipe Size		Grade "E" EPDM	
	Nominal Size	Outside Diameter	Part Number	List Price
	1½" x ½"	48.3 x 21.3mm	702048021EPDME	\$34.50
1½" x ¾"	48.3 x 26.7mm	702048027EPDME	\$34.50	
1½" x 1"	48.3 x 33.4mm	702048034EPDME	\$34.50	
2" x ½"	60.3 x 21.3mm	702060021EPDME	\$35.00	
2" x ¾"	60.3 x 26.7mm	702060027EPDME	\$35.00	
2" x 1"	60.3 x 33.4mm	702060034EPDME	\$35.00	
2½" x ½"	73.0 x 21.3mm	702073021EPDME	\$73.25	
2½" x ¾"	73.0 x 26.7mm	702073027EPDME	\$73.25	
2½" x 1"	73.0 x 33.4mm	702073034EPDME	\$73.25	
2½" x 1¼"	73.0 x 42.4mm	702073042EPDME	\$81.50	
2½" x 1½"	73.0 x 48.3mm	702073048EPDME	\$81.50	
3" x ¾"	88.9 x 26.7mm	702089027EPDME	\$59.50	
3" x 1"	88.9 x 33.4mm	702089034EPDME	\$84.50	
3" x 1¼"	88.9 x 42.4mm	702089042EPDME	\$84.50	
3" x 1½"	88.9 x 48.3mm	702089048EPDME	\$84.50	
4" x ¾"	114.3 x 26.7mm	702114027EPDME	\$84.50	
4" x 1"	114.3 x 33.4mm	702114034EPDME	\$84.50	
4" x 1¼"	114.3 x 42.4mm	702114042EPDME	\$84.50	
4" x 1½"	114.3 x 48.3mm	702114048EPDME	\$132.00	
4" x 2"	114.3 x 60.3mm	702114060EPDME	\$132.00	
6" x 1"	168.3 x 33.4mm	702168034EPDME	\$172.25	
6" x 1½"	168.3 x 48.3mm	702168048EPDME	\$172.25	
6" x 2"	168.3 x 60.3mm	702168060EPDME	\$172.25	



#730 Replacement "E" EPDM Gasket

	<i>Nominal Size</i>	<i>Outside Diameter</i>	<i>Part Number</i>	<i>List Price</i>
	2" x 1/2"	60.3 x 21.3mm	730060021EPDME	POA
	2" x 3/4"	60.3 x 26.7mm	730060027EPDME	POA
	2" x 1"	60.3 x 33.4mm	730060034EPDME	\$8.75
	2" x 1 1/4"	60.3 x 42.4mm	730060042EPDME	\$10.25
	2" x 1 1/2"	60.3 x 48.3mm	730060048EPDME	\$10.25
	2 1/2" x 1/2"	73.0 x 21.3mm	730073021EPDME	POA
	2 1/2" x 3/4"	73.0 x 26.7mm	730073027EPDME	POA
	2 1/2" x 1"	73.0 x 33.4mm	730073034EPDME	\$8.75
	2 1/2" x 1 1/4"	73.0 x 42.4mm	730073042EPDME	\$10.25
	2 1/2" x 1 1/2"	73.0 x 48.3mm	730073048EPDME	\$10.25
	76.1mm x 1/2"	76.1 x 21.3mm	730076021EPDME	POA
	76.1mm x 3/4"	76.1 x 26.7mm	730076027EPDME	POA
	76.1mm x 1"	76.1 x 33.4mm	730076034EPDME	\$8.75
	76.1mm x 1 1/4"	76.1 x 42.4mm	730076042EPDME	\$10.25
	76.1mm x 1 1/2"	76.1 x 48.3mm	730076048EPDME	\$10.25
	76.1mm x 2"	76.1 x 60.3mm	730076060EPDME	POA
	3" x 1/2"	88.9 x 21.3mm	730089021EPDME	POA
	3" x 3/4"	88.9 x 26.7mm	730089027EPDME	POA
	3" x 1"	88.9 x 33.4mm	730089034EPDME	\$8.75
	3" x 1 1/4"	88.9 x 42.4mm	730089042EPDME	\$10.25
	3" x 1 1/2"	88.9 x 48.3mm	730089048EPDME	\$10.25
	3" x 2"	88.9 x 60.3mm	730089060EPDME	\$10.25
	4" x 1/2"	114.3 x 21.3mm	730114021EPDME	POA
	4" x 3/4"	114.3 x 26.7mm	730114027EPDME	POA
	4" x 1"	114.3 x 33.4mm	730114034EPDME	\$8.75
	4" x 1 1/4"	114.3 x 42.4mm	730114042EPDME	\$10.25
	4" x 1 1/2"	114.3 x 48.3mm	730114048EPDME	\$10.25
	4" x 2"	114.3 x 60.3mm	730114060EPDME	\$10.25
	4" x 2 1/2"	114.3 x 73.0mm	730114073EPDME	\$12.00
	4" x 76.1mm	114.3 x 76.1mm	730114076EPDME	\$12.00
	4" x 3"	114.3 x 88.9mm	730114089EPDME	\$13.25
	5" x 1 1/2"	141.3 x 48.3mm	730141048EPDME	\$10.25
	5" x 2"	141.3 x 60.3mm	730141060EPDME	\$10.25
	5" x 2 1/2"	141.3 x 73.0mm	730141073EPDME	\$12.00
	5" x 76.1mm	141.3 x 76.1mm	730141076EPDME	\$12.00
	5" x 3"	141.3 x 88.9mm	730141089EPDME	\$13.25
	165.1mm x 1"	165.1 x 33.4mm	730165034EPDME	\$10.25
	165.1mm x 1 1/4"	165.1 x 42.4mm	730165042EPDME	\$10.25
	165.1mm x 1 1/2"	165.1 x 48.3mm	730165048EPDME	\$10.25
	165.1mm x 2"	165.1 x 60.3mm	730165060EPDME	\$12.00
	165.1mm x 2 1/2"	165.1 x 73.0mm	730165073EPDME	\$13.25
	165.1 x 76.1mm	165.1 x 76.1mm	730165076EPDME	\$13.25
	165.1mm x 3"	165.1 x 88.9mm	730165089EPDME	\$13.25
	165.1mm x 4"	165.1 x 114.3mm	730165114EPDME	\$18.25
	6" x 1 1/4"	168.3 x 42.4mm	730168042EPDME	\$10.25
	6" x 1 1/2"	168.3 x 48.3mm	730168048EPDME	\$10.25
	6" x 2"	168.3 x 60.3mm	730168060EPDME	\$10.25
	6" x 2 1/2"	168.3 x 73.0mm	730168073EPDME	\$12.00
	6" x 76.1mm	168.3 x 76.1mm	730168076EPDME	\$12.00
	6" x 3"	168.3 x 88.9mm	730168089EPDME	\$13.25
	6" x 4"	168.3 x 114.3mm	730168114EPDME	\$18.25
	8" x 2"	219.1 x 60.3mm	730219060EPDME	\$12.50
	8" x 2 1/2"	219.1 x 73.0mm	730219073EPDME	\$12.50
	8" x 76.1mm	219.1 x 76.1mm	730219076EPDME	\$12.50
	8" x 3"	219.1 x 88.9mm	730219089EPDME	\$13.25
	8" x 4"	219.1 x 114.3mm	730219114EPDME	\$18.25

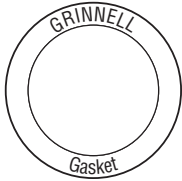


Orders for items in shaded areas **cannot** be cancelled or returned.

Technical Data Sheet: G610



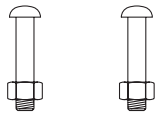
Replacement Gaskets EPDM "E" Gaskets For #909 Plain End Coupling

	Nominal Size	Outside Diameter	Grade "E" EPDM Part No.	List Price
	1"	33.4mm	909034EPDME	\$19.25
	1 1/2"	48.3mm	909048EPDME	\$21.75
	2"	60.3mm	909060EPDME	\$27.50
	2 1/2"	73.0mm	909073EPDME	\$29.25
	3"	88.9mm	909089EPDME	\$35.25
	4"	114.3mm	909114EPDME	\$46.75
	6"	168.3mm	909168EPDME	\$67.75
	8"	219.1mm	909219EPDME	\$88.75
	10"	273.0mm	909273EPDME	\$113.75
12"	323.9mm	909324EPDME	\$139.00	

Orders for items in shaded areas **cannot** be cancelled or returned.


Technical Data Sheet: G610

Coupling Nut and Bolt Kit

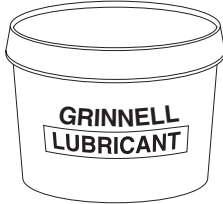
	Size	Qty/Kit	Part Number	List Price	
	3/8" x 2 1/8"	–	2	NB38-218	\$9.50
	3/8" x 2 1/4"	M10 x 57	2	NBM10-57	\$9.50
	1/2" x 2 3/8"	–	2	NB12-238	\$9.75
	1/2" x 3"	M12 x 89	2	NBM12-76	\$10.00
	5/8" x 2 3/4"	M16 x 70	2	NBM16-70	\$12.00
	5/8" x 3 1/4"	M16 x 83	2	NBM16-83	\$12.00
	5/8" x 3 1/2"	M16 x 89	2	NBM16-89	\$13.00
	3/4" x 4 1/4"	M20 x 108	2	NBM20-108	\$13.75
	3/4" x 4 3/4"	M20 x 121	2	NBM20-121	\$19.00
	7/8" x 5 1/2"	M22 x 140	2	NBM22-139	\$29.25
	7/8" x 6 1/2"	M22 x 165	2	NBM22-165	\$32.50
	1" x 5 1/2"	M24 x 140	3	NB100-512	\$32.50
	1" x 6 1/2"	M24 x 165	2	NBM24-165	\$34.00
	1 1/8" x 5 3/4"	–	4	NB118-534	\$44.00

Orders for items in shaded areas **cannot** be cancelled or returned.


All standard couplings can be provided with stainless steel nuts and bolts upon request.

GRINNELL Gasket Lubricant			
	<i>Nominal Size</i>	<i>Part Number</i>	<i>List Price</i>
		1 Quart	GRINQT

Orders for items in shaded areas *cannot* be cancelled or returned.

GRINNELL Silicone Gasket Lubricant Recommended for use with Tri-Seal Gasket Dow Corning* #DC No. 7			
	<i>Nominal Size</i>	<i>Part Number</i>	<i>List Price</i>
	5.3 oz Tube	GRINTUB	POA
	8 Lb. Can	GRINCAN	POA

Orders for items in shaded areas *cannot* be cancelled or returned.

Pipe Tape Chrome Plated with GRINNELL Logo			
	<i>Size</i>	<i>Part Number</i>	<i>List Price</i>
		1 Roll	GRNTAPE

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices

* Dow Corning is a trademark of Dow Corning Corporation.



Roll Grooving Machine Selection Chart

Machine Type	Pace Model	Size Range				Drive	Rolls Supplied		Part No.	List Price **
		Sch. 40	Sch. 10	Std. Wall	Copper		Size	Steel		
Portable with Electric Motor	1112	1" – 12"	–	–	2" – 8"	1PH, 220v 50Hz	1" – 12"	■	41048	\$8,655.50
	1023	1 1/4" – 12"	–	12" – 24"	2" – 8"	1PH, 220v 50Hz	1 1/4" – 12"	■	41029	\$12,800.50
							2" – 12"	■	41250	\$12,182.00
							1 1/4" – 24"	■	41251	\$14,260.00
2" – 24"	■	41252	\$13,636.00							
Portable for Rigid 300	1012	1" – 12"	–	–	2" – 8"	Rigid 300	1" – 12"	■	41041	\$4,803.50
	1022	1 1/4" – 12"	–	12" – 16"	2" – 8"	Rigid 300	1 1/4" – 16"	■	41027	\$10,812.50
Mini-Mites	1039	1 1/4" – 6"	–	–	2" – 8"	Rigid 300, Hand Crank	1 1/4" – 6" IPS	■	41017	\$1,326.00
	1034	1 1/4" – 6"	–	–	–	Rigid 300	1 1/4" – 6" IPS	■	41015	\$1,256.50
	1039-66	1 1/4" – 6"	–	–	2" – 8"	Rigid 300, Hand Crank	2" – 8" CTS		41047	\$1,256.50
Automated	2021	1 1/4" – 12"	–	12" – 24"	2" – 8"	3PH, 220v 50Hz	1 1/4" – 12"	■	41257	\$22,496.00
							2" – 12"	■	41258	\$21,878.50
							1 1/4" – 24"	■	41032	\$23,957.50
	2" – 24"	■	41259	\$23,275.00						
2010	1 1/2" – 6"	1 1/2" – 12"	–	–	1PH, 220v 50Hz	1 1/2" – 12"	■	41031	\$14,121.50	
Portable Cut Groover	1000	2" – 8"	–	–	–	1PH, 220v 50Hz	2" – 8"		41260	\$10,077.00
		2" – 12"	–	–	–		2" – 12"		41261	\$11,023.00

** Accessories not included, refer to Accessory Table Below.

Accessories

Item	Pace Model	Size Range	Capacity	Part No.	List Price
Pipe Stands	4031	1" – 4"	600 Lbs.	41037	\$514.00
	4000	2" – 8"	900 Lbs.	41038	\$635.00
	4033	2" – 14"	1,200 Lbs.	41039	\$795.00
	4040	12" – 24"	4,000 Lbs.	41040	\$2,017.00
Nipple Bracket	4037	Fits Model 1021 / 22 / 23 / 2021	–	41035	\$642.50
	4045	4" – 12" Fits Model 1012 / 1112	–	41512	\$534.50
Mounting Feet	4039	Fits Portable Roll Groovers and Model 1000	–	41034	\$162.00
	4046	PA Mounting Feet	–	41013	\$151.00
Porta-Bore	3013	Up to 4 1/4" Holes in Pipe 1 1/4" – 12"	–	41049	\$2,653.00

Roll Selection Chart										
Machine	Pipe	Size	Top		Size	Bottom		Parts	Part Number	List Price
			Part No.	List Price		Part No.	List Price			
1021, 1023, 2021	Sch. 40	1 1/4" – 1 1/2"	41262	\$360.00	1 1/4" – 1 1/2"	41281	\$261.00			
		2" – 3 1/2"	41263	\$314.00	2" – 3 1/2"	41282	\$242.00			
		4" – 6"	41264	\$279.00	4" – 6"	41283	\$366.00			
		8" – 12"	41265	\$279.00	8" – 12"	41284	\$437.00			
	Std. Wall	14" – 16"	41266	\$262.00	14" – 16"	41285	\$480.50			
		18" – 24"	41267	\$262.00	18" – 24"	41286	\$480.50			
	Copper Tube	2" – 8"	41268	\$314.00	2" – 8"	41287	\$242.00	Depth Gauge 4043	41509	\$36.00
1010, 2010	Sch. 10, Sch. 40	1 1/2" – 6"	41269	\$262.00	1 1/2"	41288	\$242.00			
			–	–	2" – 3 1/2"	41289	\$242.00			
			–	–	4" – 6"	41290	\$352.00			
	Sch. 10	8" – 12"	41270	\$262.00	8" – 12"	41291	\$352.00			
1040, 2040	Sch. 40	1" – 1 1/2"	41271	\$215.00	1" – 1 1/2"	41292	\$215.00			
		1" – 6"	41272	\$190.00	1" – 6"	41293	\$180.00			
		2" – 6"	41273	\$215.00	–	–	–			
	Sch. 10	8" – 12"	41274	\$190.00	8" – 12"	41294	\$297.00			
	Copper Tube	2" – 8"	41275	\$191.50	2" – 8"	41295	\$184.00	Depth Gauge 4021	41510	\$36.00
1012, 1112, 2112	Sch. 40	1" – 1 1/2"	41276	\$215.00	1" – 1 1/2"	41296	\$215.00			
		2" – 6"	41277	\$215.00	2" – 6"	41297	\$180.00			
		8" – 12"	41278	\$215.00	8" – 12"	41298	\$299.50			
	Copper Tube	2" – 8"	41506	\$215.00	2" – 8"	41507	\$184.00	Depth Gauge 4021	41510	\$36.00
1021, 1022, 1023, 2021	SS 10 Ga.				2" – 3 1/2"	41299	\$264.50			
					4" – 6"	41500	\$403.00			
					8" – 12"	41501	\$480.50			
					14" – 16"	41504	\$528.00			
					18" – 24"	41505	\$528.00			
1040, 1112, 2112	SS 10 Ga.				2" – 6"	41502	\$199.00			
					8" – 12"	41503	\$356.00			
1034, 1039	Sch. 40	1 1/4" – 6", with brg.	41279	\$50.50				1034 Drive Shaft 1 1/4" – 6"	41511	\$79.00
								1039 Drive Shaft 1 1/4" – 6"	41513	\$100.00
								Depth Gauge 4021	41510	\$36.00
1039-66	Copper Tube	2" – 8", with brg.	41280	\$67.00				Depth Gauge 4021	41510	\$36.00
1066	Copper Tube	2" – 8", with brg.	41508	\$67.00				Drive Shaft 2" – 8"	41514	\$79.00
								Depth Gauge 4021	41510	\$36.00

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices



Grooved Couplings – Pieces Per Carton/Pallet

Nominal Size	#577 Rigid Coupling		#705 Flexible Coupling				#707 HD Flexible Coupling			
	Primary Warehouse		Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
1	28	1008	28	1008	–	–	–	–	–	800
1¼	24	864	24	864	32	384	24	648	–	–
1½	20	720	20	720	32	384	–	–	–	480
2"	16	576	16	576	28	336	–	–	–	385
2½	–	741	12	432	20	240	–	–	–	315
76.1mm	–	728	–	637	–	350	–	–	–	315
3"	–	630	8	288	35	210	–	–	–	240
4"	–	377	–	324	–	175	–	–	–	150
139.7mm	–	240	–	198	–	–	–	198	–	–
5"	–	220	–	198	–	96	–	198	–	80
165.1mm	–	180	–	165	–	100	–	–	–	70
6"	–	180	–	165	–	100	–	–	–	64
8"	–	80	–	80	–	48	–	–	–	36
10"	–	–	–	40	–	24	–	–	–	24
12"	–	–	–	30	–	20	–	–	–	20

Grooved Couplings – Pieces Per Carton/Pallet

Nominal Size	#71 Flange Adaptor				#770 Heavy Duty Coupling		Nominal Size	#716 Reducing Coupling			
	Primary Warehouse		Secondary Warehouse		Primary Warehouse			Primary Warehouse		Secondary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet		Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
2"	–	–	–	210	–	385	2" x 1½"	–	–	20	240
2½"	–	–	–	210	–	315	2½" x 2"	9	324	20	240
76.1mm	–	–	–	156	–	–	3" x 2"	–	–	12	144
3"	–	–	–	124	–	240	3" x 2½"	–	–	12	144
4"	–	–	–	124	–	120	3" x 76.1mm	7	252	–	–
5"	1	176	–	30	–	–	4" x 2"	–	–	8	96
165.1mm	–	–	–	36	–	–	4" x 2½"	–	–	8	96
6"	–	–	–	30	–	60	4" x 76.1mm	5	180	–	–
8"	1	96	–	30	–	36	4" x 3"	–	–	8	96
10"	1	20	–	24	–	18	5" x 4"	3	108	–	80
12"	1	20	–	24	–	20					

See technical data sheets for specific approvals, listings, and design parameters.
 POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.

Grooved Fittings – Pieces Per Carton/Pallet												
Nominal Size	#510 90° Elbow				#501 45° Elbow				#212 22½° Elbow		#211 11¼° Elbow	
	Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse		Primary Warehouse		Primary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Crate	Pieces / Carton	Pieces / Crate
1"	81	2916	–	–	60	2160	–	–	–	–	–	–
1¼"	32	1152	40	480	56	2016	45	540	72	864	–	–
1½"	28	1008	36	432	42	1512	39	468	60	720	80	960
2"	15	540	18	216	24	864	24	288	38	456	48	576
2½"	8	288	12	144	12	432	15	180	24	288	24	288
76.1mm	8	288	6	72	12	432	10	120	–	–	–	–
3"	5	180	6	72	8	288	10	120	12	144	40	480
4"	–	120	–	56	–	210	–	96	–	112	–	198
139.7mm	–	65	–	–	–	96	–	–	–	–	–	–
5"	–	56	–	35	–	80	–	140	–	210	–	315
165.1mm	–	42	–	63	–	72	–	30	–	–	–	–
6"	–	40	–	24	–	54	–	90	–	–	–	72
8"	–	21	–	11	–	36	–	16	–	16	–	–
10"	–	10	–	7	–	16	–	9	–	–	–	–
12"	–	6	–	5	–	12	–	9	–	–	–	–

Grooved Short Pattern Fittings – Pieces Per Carton/Pallet									
Nominal Size	#510S Short Pattern 90° Elbow				#519S Short Pattern Tee				
	Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse		
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	
2"	18	648	18	216	14	504	15	180	
2½"	10	360	12	144	6	216	20	120	
76.1mm	10	360	–	–	6	216	–	–	
3"	8	288	10	120	5	180	7	84	
4"	–	168	–	70	–	102	–	60	
139.7mm	–	72	–	–	–	60	–	–	
5"	–	72	–	–	–	60	–	–	
165.1mm	–	48	–	–	–	37	–	–	
6"	–	44	–	28	–	37	–	15	
8"	–	22	–	11	–	18	–	24	



Grooved Fittings – Pieces Per Carton/Pallet											
Nominal Size	#519 Tee				#260 Cap				Nominal Size	#522 G-FIRE Sprinkler Outlet	
	Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse			Primary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet		Pieces / Carton	Pieces / Pallet
1"	50	1800	–	–	147	5292	–	–	1" x 1/2"	48	1728
1 1/4"	26	936	28	336	140	5040	294	3528	1" x 3/4"	36	1296
1 1/2"	18	648	28	336	105	3780	210	2520	1" x 1"	36	1296
2"	12	432	24	144	64	2304	140	1680	1 1/4 x 1/2"	32	1152
2 1/2"	5	180	8	96	42	1512	84	1008	1 1/4 x 3/4"	28	1008
76.1mm	5	180	3	36	42	1512	–	–	1 1/4 x 1"	24	864
3"	3	108	3	36	30	1080	63	756	1 1/2" x 1/2"	32	1152
4"	–	80	–	46	12	432	30	360	1 1/2" x 3/4"	24	864
139.7mm	–	46	–	–	6	216	–	–	1 1/2" x 1"	24	864
5"	–	33	–	36	6	216	–	392	2" x 1/2"	24	864
165.1mm	–	29	–	–	4	144	–	288	2" x 3/4"	20	720
6"	–	29	–	12	4	144	–	288	2" x 1"	20	720
8"	–	14	–	8	3	108	–	160	76.1 x 21.3mm	20	720
10"	–	7	–	10	–	70	–	96	76.1 x 26.7mm	16	576
12"	–	4	–	8	–	50	–	63	76.1 x 33.4mm	16	576
14"	–	–	–	–	–	–	–	–	–	–	–
16"	–	2	–	–	–	–	–	–	–	–	–

See technical data sheets for specific approvals, listings, and design parameters.
 POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.



Grooved Fittings – Pieces Per Carton/Pallet											
Nominal Size	#221 Reducing Tee				Nominal Size	#250 Concentric Reducer				#251 Eccentric Reducer	
	Primary Warehouse		Secondary Warehouse			Primary Warehouse		Secondary Warehouse		Primary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet		Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
2" x 2" x 1 1/2"	12	432	24	144	1 1/4" x 1"	100	3600	–	–	–	–
2 1/2" x 2 1/2" x 1 1/2"	5	180	–	–	1 1/2" x 1"	100	3600	–	–	–	–
2 1/2" x 2 1/2" x 2"	5	180	–	–	1 1/2" x 1 1/4"	–	–	90	1080	–	–
2 1/2" x 2 1/2" x 2 1/2"	5	180	–	–	2" x 1"	64	2304	–	–	–	–
3" x 3" x 1"	3	108	12	72	2" x 1 1/4"	64	2304	–	–	–	–
3" x 3" x 1 1/2"	–	–	4	48	2" x 1 1/2"	45	1620	–	–	–	–
3" x 3" x 2"	3	108	3	36	2 1/2" x 1 1/4"	36	1296	36	432	–	–
3" x 3" x 2 1/2"	3	108	3	36	2 1/2" x 1 1/2"	36	1296	36	432	–	–
4" x 4" x 2"	–	80	–	46	2 1/2" x 2"	27	972	36	432	–	–
4" x 4" x 2 1/2"	–	80	–	46	3" x 1 1/2"	–	–	45	270	–	–
4" x 4" x 3"	–	80	–	46	3" x 2"	29	1044	24	288	18	216
5" x 5" x 3"	–	46	–	75	3" x 2 1/2"	23	828	24	288	18	216
5" x 5" x 4"	–	46	–	36	4" x 2"	14	504	10	120	–	144
6" x 6" x 2"	–	30	–	12	4" x 2 1/2"	14	504	10	120	–	144
6" x 6" x 2 1/2"	–	30	–	48	4" x 3"	14	504	10	120	10	120
6" x 6" x 3"	–	30	–	48	5" x 3"	8	288	–	147	–	147
6" x 6" x 4"	–	29	–	48	5" x 4"	7	252	–	147	–	98
6" x 6" x 5"	–	29	–	–	6" x 2"	5	180	–	72	–	–
8" x 8" x 4"	–	–	–	8	6" x 2 1/2"	5	180	–	72	–	–
8" x 8" x 5"	–	15	–	–	6" x 3"	5	180	–	72	–	72
8" x 8" x 6"	–	15	–	6	6" x 4"	4	144	–	72	–	36
–	–	–	–	–	6" x 5"	4	144	–	216	–	144
–	–	–	–	–	8" x 3"	–	–	–	80	–	–
–	–	–	–	–	8" x 4"	–	–	–	80	–	–
–	–	–	–	–	8" x 5"	–	–	–	32	–	–
–	–	–	–	–	8" x 6"	–	–	–	32	–	–
–	–	–	–	–	10" x 6"	–	–	–	11	–	–
–	–	–	–	–	12" x 4"	–	–	–	9	–	–
–	–	–	–	–	12" x 8"	–	–	–	36	–	–
–	–	–	–	–	12" x 10"	–	–	–	36	–	–

Introduction
Couplings & Fittings
Mechanical Tees
Valves
Plain End Systems
Gaskets & Spare Parts
Preparation Equipment
Miscellaneous
Indices



Mechanical Tees – Pieces Per Carton/Pallet

Nominal Size	#730 Mechanical Tee - Grooved				#730 Mechanical Tee - Threaded			
	Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
2" x 1/2"	-	-	-	-	14	378	15	180
2" x 3/4"	-	-	-	-	14	378	15	180
2" x 1"	-	-	-	-	13	351	15	180
2" x 1 1/4"	15	405	15	180	15	405	15	180
2" x 1 1/2"	15	351	12	144	15	351	12	144
2 1/2" x 1 1/2"	-	-	-	-	13	351	14	168
2 1/2" x 3/4"	-	-	-	-	13	351	14	168
2 1/2" x 1"	-	-	-	-	13	351	14	168
2 1/2" x 1 1/4"	13	351	14	168	13	351	14	168
2 1/2" x 1 1/2"	13	351	14	168	13	351	14	168
2 1/2" x 2"	10	270	-	-	10	270	-	-
76.1 x 21.3mm	-	-	-	-	13	351	-	-
76.1 x 26.7mm	-	-	-	-	13	351	-	-
76.1 x 33.4mm	-	-	-	-	13	351	-	-
76.1 x 42.4mm	13	351	-	-	13	351	-	-
76.1 x 48.3mm	13	351	-	-	13	351	-	-
76.1 x 60.3mm	10	270	-	-	10	270	-	-
3" x 1/2"	-	-	-	-	10	270	11	132
3" x 3/4"	-	-	-	-	10	270	11	132
3" x 1"	-	-	-	-	10	270	11	132
3" x 1 1/4"	10	270	11	132	10	270	11	132
3" x 1 1/2"	9	243	11	132	9	243	11	132
3" x 2"	7	189	8	96	7	189	8	96
4" x 1/2"	-	-	-	-	7	189	8	96
4" x 3/4"	-	-	-	-	8	216	8	96
4" x 1"	-	-	-	-	8	216	8	96
4" x 1 1/4"	14	378	8	96	14	378	8	96
4" x 1 1/2"	14	378	8	96	14	378	8	96
4" x 2"	6	162	6	72	6	162	6	72
4" x 2 1/2"	6	162	5	60	6	162	5	60
4" x 76.1mm	6	162	-	-	6	162	-	-
4" x 3"	5	135	4	48	5	135	8	48
5" x 1 1/2"	4	108	-	-	4	108	-	-
5" x 2"	4	108	4	48	4	108	4	48
5" x 2 1/2"	4	108	8	96	4	108	8	96
5" x 76.1mm	4	108	-	-	4	108	-	-
5" x 3"	3	81	-	-	3	81	-	-
165.1 x 42.4mm	3	81	-	-	3	81	-	-
165.1 x 48.3mm	3	81	-	-	3	81	-	-
165.1 x 60.3mm	3	81	-	-	3	81	-	-
165.1 x 73.0mm	3	81	-	-	3	81	-	-
165.1 x 76.1mm	3	81	-	-	-	-	-	-
165.1 x 88.9mm	-	-	-	-	2	54	-	-
165.1 x 114.3mm	2	54	-	-	-	-	-	-

See technical data sheets for specific approvals, listings, and design parameters.
 POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.

Mechanical Tees – Pieces Per Carton/Pallet								
Nominal Size	#730 Mechanical Tee - Grooved				#730 Mechanical Tee - Threaded			
	Primary Warehouse		Secondary Warehouse		Primary Warehouse		Secondary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
6" x 1 ¹ / ₄ "	3	81	–	–	3	81	–	–
6" x 1 ¹ / ₂ "	3	81	8	48	3	81	8	48
6" x 2"	3	81	8	48	3	81	7	42
6" x 2 ¹ / ₂ "	3	81	7	42	3	81	7	42
6" x 76.1mm	3	81	–	–	–	–	–	–
6" x 3"	2	54	7	42	2	54	6	36
6" x 4"	2	54	6	36	–	–	6	36
8" x 2"	–	50	–	–	–	50	–	–
8" x 2 ¹ / ₂ "	–	50	4	24	–	50	4	24
8" x 76.1mm	–	50	–	–	–	–	–	–
8" x 3"	–	50	4	24	–	50	4	24
8" x 4"	–	50	4	24	–	–	4	24

CV-1 – Pieces Per Carton/Pallet		
Nominal Size	#CV-1F G-FIRE Grooved Check Valve	
	Primary Warehouse	
	Pieces / Carton	Pieces / Pallet
2"	–	45
2 ¹ / ₂ "	–	30
3"	–	30
4"	–	20
5"	–	18
6"	–	12
8"	–	8
10"	–	4

Introduction

Couplings & Fittings

Mechanical Tees

Valves

Plain End Systems

Gaskets & Spare Parts

Preparation Equipment

Miscellaneous

Indices



Replacement Gaskets – Pieces Per Carton/Pallet

Nominal Size	C-Style Gaskets		Tri-Seal Gaskets	
	Primary Warehouse		Primary Warehouse	
	Pieces / Carton	Pieces / Pallet	Pieces / Carton	Pieces / Pallet
1"	858	5148	858	5148
1 1/4"	567	3402	567	3402
1 1/2"	464	2784	464	2784
2"	329	1974	329	1974
2 1/2"	252	1512	252	1512
76.1mm	228	1368	228	1368
3"	171	1026	171	1026
4"	99	594	99	594
139.7mm	63	378	63	378
165.1mm	60	360	60	360
6"	60	360	60	360
8"	28	168	28	168
10"	20	120	20	120
12"	14	84	14	84
14"	12	72		
16"	10	60		
18"	10	60		
20"	12	72		

See technical data sheets for specific approvals, listings, and design parameters.
POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.



Table with 6 columns: Part No., Page, Part No., Page, Part No., Page, Part No., Page, Part No., Page. It lists various fire protection products and their corresponding part numbers and page references.

See technical data sheets for specific approvals, listings, and design parameters.
POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.



Table with 10 columns: Part No., Page, Part No., Page, Part No., Page, Part No., Page, Part No., Page. It lists various fire protection products and their corresponding page numbers in the price book.

See technical data sheets for specific approvals, listings, and design parameters. POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
910219M	44	921219089G	50	960168M	46	999219089M	48	TMCX00608	41
910273G	44	921219089M	50	960219G	46	999219114G	48	TMCX00765	41
910273M	44	921219114G	50	960219M	46	999219114M	48	TMCX00768	41
910324G	44	921219114M	50	960273G	46	999219141G	48	TMCX00895	41
910324M	44	921219141G	50	960273M	46	999219141M	48	TMCX00898	41
914034G	47	921219141M	50	960324G	46	999219168G	48	TMCX01145	41
914034M	47	921219168G	50	960324M	46	999219168M	48	TMCX01148	41
914048G	47	921219168M	50	991034M	49	ADA15051	32	TMCX01395	41
914048M	47	921273114G	50	991048M	49	ADA15071	32	TMCX01398	41
914060G	47	921273114M	50	991060M	49	ADA15101	32	TMCX01685	41
914060M	47	921273168G	50	991073M	49	ADA20011	32	TMCX01688	41
914073G	47	921273168M	50	991089M	49	ADA20051	32	TMCX02195	41
914073M	47	921273219G	50	991114M	49	ADA20071	32	TMCX02197	41
914089G	47	921273219M	50	991168M	49	ADA25011	32	TMCX02198	41
914089M	47	921324168G	50	992034M	49	ADA25051	32	TMCX02735	41
914114G	47	921324168M	50	992048M	49	ADA25071	32	TMCX02737	41
914114M	47	921324219G	50	992060M	49	DDCV1161050	37	TMCX02738	41
914141G	47	921324219M	50	992073M	49	DDCV1161065	37	TMCX03245	41
914141M	47	921324273G	50	992089M	49	DDCV1161080	37	TMCX03247	41
914168G	47	921324273M	50	992114M	49	DDCV1161U100	37	TMCX03248	41
914168M	47	924034G	46	992168M	49	DDCV1161U150	37	TMCX01145	42
914219G	47	924034M	46	993034M	49	DDCV1161U200	37	TMCX01148	42
914219M	47	924048G	46	993048M	49	DDCV1161U250	37	TMCX01395	42
914273G	47	924048M	46	993060M	49	DDCV1161U300	37	TMCX01398	42
914273M	47	924060G	46	993073M	49	GRINCAN	55	TMCX01685	42
914324G	47	924060M	46	993089M	49	GRINQT	55	TMCX01688	42
914324M	47	924073G	46	993114M	49	GRINTUB	55	TMCX02195	42
919034G	45	924073M	46	993168M	49	GRNTAPE	55	TMCX02197	42
919034M	45	924089G	46	999048034G	48	NB100-512	54	TMCX02198	42
919048G	45	924089M	46	999048034M	48	NB118-534	54	TMCX02735	42
919048M	45	924114G	46	999060034G	48	NB12-238	54	TMCX02737	42
919060G	45	924114M	46	999060034M	48	NB38-218	54	TMCX02738	42
919060M	45	924141G	46	999060048G	48	NBGK06071	52	TMCX03245	42
919073G	45	924141M	46	999060048M	48	NBGK07371	52	TMCX03247	42
919073M	45	924168G	46	999073034G	48	NBGK07671	52	TMCX03248	42
919089G	45	924168M	46	999073034M	48	NBGK08971	52	TMCX01145	42
919089M	45	924219G	46	999073048G	48	NBGK11471	52	TMCX01148	42
919114G	45	924219M	46	999073048M	48	NBGK14171	52	TMRG0060G	40
919114M	45	924273G	46	999073060G	48	NBGK16571	52	TMRG0073G	40
919141G	45	924273M	46	999073060M	48	NBGK16871	52	TMRG0076G	40
919141M	45	924324G	46	999089034G	48	NBGK21971	52	TMRG0089G	40
919168G	45	924324M	46	999089034M	48	NBGK27371	52	TMRG0114G	40
919168M	45	927034G	45	999089048G	48	NBGK32471	52	TMRG0139G	40
919219G	45	927034M	45	999089048M	48	NBM10-57	54	TMRG0141G	40
919219M	45	927048G	45	999089060G	48	NBM12-76	54	TMRG0165G	40
919273G	45	927048M	45	999089060M	48	NBM16-70	54	TMRG0168G	40
919273M	45	927060G	45	999089073G	48	NBM16-83	54	TMRG0219G	40
919324G	45	927060M	45	999089073M	48	NBM16-89	54	TMRG0273G	40
919324M	45	927073G	45	999114034G	48	NBM20-108	54	TMRT0060T	40
921048034G	50	927073M	45	999114034M	48	NBM20-121	54	TMRT0076T	40
921048034M	50	927089G	45	999114048G	48	NBM22-139	54	TMRT0089T	40
921060034G	50	927089M	45	999114048M	48	NBM22-165	54	TMRT0114T	40
921060034M	50	927114G	45	999114060G	48	NBM24-165	54	TMRT0139T	40
921060048G	50	927114M	45	999114060M	48	POST-IND-A	42	TMRT0168T	40
921060048M	50	927141G	45	999114073G	48	POST-IND-B	42	TMRT0219T	40
921089034G	50	927141M	45	999114073M	48	POST-IND-C	42	TMRT0273T	40
921089034M	50	927168G	45	999114089G	48	POST-IND-D	42	TMR0324T	40
921089048G	50	927168M	45	999114089M	48	TMCG0060G	41	TMRX00605	40
921089048M	50	927219G	45	999141060G	48	TMCG0073G	41	TMRX00608	40
921089060G	50	927219M	45	999141060M	48	TMCG0076G	41	TMRX00765	40
921089060M	50	927273G	45	999141089G	48	TMCG00768	41	TMRX00768	40
921114034G	50	927273M	45	999141089M	48	TMCG0089G	41	TMRX00895	40
921114034M	50	927324G	45	999141114G	48	TMCG0114G	41	TMRX00898	40
921114048G	50	927324M	45	999141114M	48	TMCG0139G	41	TMRX01145	40
921114048M	50	960034G	46	999168034G	48	TMCG0141G	41	TMRX01148	40
921114060G	50	960034M	46	999168034M	48	TMCG0165G	41	TMRX01395	40
921114060M	50	960048G	46	999168048G	48	TMCG0168G	41	TMRX01398	40
921114073G	50	960048M	46	999168048M	48	TMCG0219G	41	TMRX01685	40
921114073M	50	960060G	46	999168060G	48	TMCG0273G	41	TMRX01688	40
921114089G	50	960060M	46	999168060M	48	TMCG0324G	41	TMRX01688	40
921114089M	50	960073G	46	999168073G	48	TMCT0060T	41	TMRX02195	40
921168060G	50	960073M	46	999168073M	48	TMCT0076T	41	TMRX02197	40
921168060M	50	960089G	46	999168073M	48	TMCT0089T	41	TMRX02198	40
921168089G	50	960089M	46	999168089G	48	TMCT0114T	41	TMRX02735	40
921168089M	50	960114G	46	999168089M	48	TMCT0139T	41	TMRX02737	40
921168114G	50	960114M	46	999168114G	48	TMCT0168T	41	TMRX02738	40
921168114M	50	960141G	46	999168114M	48	TMCT0168T	41	TMRX03245	40
921219060G	50	960141M	46	999168141G	48	TMCT0219T	41	TMRX03247	40
921219060M	50	960168G	46	999219089G	48	TMCT0273T	41	TMRX03248	40
						TMCT0324T	41	WALL-IND	42
						TMCX00605	41		

See technical data sheets for specific approvals, listings, and design parameters.
POA = Price on availability. Prices subject to change without notice.

Refer to back cover for country-specific customer care numbers.

Model No.	Page	Model No.	Page
#71 – Grooved Flange Adaptor - ANSI Class 150 with Grade "E" EPDM Type "A" Fire Protection Gasket	17	#730 – Mechanical Tee with Grade "E" EPDM Gasket, BSP Threaded Outlet.	33
#71 – Grooved Flange Adaptor PN10 with Grade "E" EPDM Type "A" Fire Protection Gasket	17	#730 Replacement "E" EPDM Gasket	53
#71 – Grooved Flange Adaptor PN16 with Grade "E" EPDM Type "A" Fire Protection Gasket	17	#750 – ADACAP, NPT Threads	32
#71 Flange Adaptor – Nut, Bolt, and Gasket Kit & Metal Washer	51	#770 – High Pressure Rigid Coupling with Grade "E" EPDM	14
#211 and #311 – Grooved 11¼° Elbow	20	#901 Plain End 45° Elbow	44
#212 and #312 – Grooved 22½° Elbow	19	#909 Plain End Coupling with Grade "E" EPDM Gasket	43
#221 and #321 – Grooved Reducing Tee	24	#909 Plain End Coupling Replacement Gaskets	54
#227 and #327 – Grooved Cross	29	#910 Plain End 90° Elbow	44
#250 and #350 – Grooved Concentric Reducer	26	#914 Plain End Lateral	47
#320 Groove x Male BSP Thread – Tee	22	#919 Plain End Tee	45
#323 – Reducing Tee with BSP Threaded Branch	23	#921 Reducing Tee Plain End	50
#341 – Grooved x Flanged Adaptor 150 Lbs. – Schedule 40	31	#924 Plain End True Wye.	46
#342 – Grooved x Flanged Adaptor 300 Lbs. – Schedule 40	31	#927 Plain End Cross	45
#343 – Grooved x Flanged Adaptor – PN16	31	#960 Plain End Cap (Bull Plug)	46
#372 Groove x Male BSP Thread – Reducer	27	#991 Adaptor Nipple Plain x BSP Thread	49
#391 Groove x Male BSP Thread – Adaptor Nipple	28	#992 Adaptor Nipple Plain x Grooved	49
#392 Groove x Groove – Adaptor Nipple	28	#993 Adaptor Nipple Plain x Plain	49
#393 Groove x Plain – Adaptor Nipple	29	#999 Plain End Swaged Nipple	48
#501 – G-FIRE Standard Pattern Grooved 45° Elbow	19	#1161 – Double Door Wafer Check Valve	37
#507/#50L – Bullhead Tee	22	#BFV-N – G-FIRE Butterfly Valves - Groove x Groove, 300 psi	38
#508 – Standpipe Tee	22	#BFV-N – G-FIRE Butterfly Valves - Lug Style, 250 psi	39
#510 – G-FIRE Standard Pattern Grooved 90° Elbow	18	#BFV-N – G-FIRE Butterfly Valves - Wafer Style, 250 psi	38
#510DE – G-FIRE 90° Elbow with 25mm Outlet.	20	#CV-1F – Pieces Per Carton/Pallet	63
#510S – G-FIRE Short Pattern Cast Grooved 90° Elbow	18	#CV-1F – G-FIRE Grooved Check Valve	37
#519 – G-FIRE Standard Pattern Grooved Tee	21	#CV-1FR – G-FIRE Grooved Shotgun Riser Check Valve	37
#519S – G-FIRE Short Pattern Grooved Tee	21	#POST-IND – Indicator Post, Adjustable, TMCXP	42
#522 – G-FIRE Sprinkler Outlet, BSP Threaded with Grade "E" Type "A" Gasket	32	#TMC – Shut Off Valve, Gate Valve, NRS, Groove x Groove.	41
#560 – G-FIRE Grooved Cap.	30	#TMC – Shut Off Valve, Gate Valve, NRS, Flange x Groove	41
#560 – Grooved Cap with 15mm Tap	30	#TMC – Shut Off Valve, Gate Valve, NRS, Flange x Flange, ANSI Class #125, PN10 & PN16.	41
#560 – Grooved Cap with 25mm Tap	30	#TMCXP – Shut Off Valve, Gate Valve, NRS, Flange x Flange, ANSI Class #125, PN10 & PN16.	42
#577 – G-FIRE Rigid Coupling with Grade "E" EPDM Tri-Seal Gasket	11	#TMR – Shut Off Valve, Gate Valve, OS&Y, Groove x Groove.	40
#577 – G-FIRE Rigid Coupling with Grade "E" Type "A" Pre Lube Gasket	11	#TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Groove	40
#702 – Outlet Coupling Grade "E" Gasket, Female BSP Threaded End, Painted	15	#TMR – Shut Off Valve, Gate Valve, OS&Y, Flange x Flange, ANSI Class #125, PN10 & PN16.	40
#702 – Outlet Coupling Grade "E" Gasket, Grooved End, Painted. 16		#WALL-IND – Indicator Post Wall Type	42
#702 – Outlet Coupling Grade "E" Gasket, Male BSP Threaded End, Painted	16	Accessories	56
#702 – Outlet Coupling Replacement Grade "E" EPDM Gaskets.	52	Agency Listings and Approvals	10
#705 – Flexible Coupling with Grade "E" EPDM Tri-Seal Gasket	12	Coupling Nut and Bolt Kit	54
#705 – Flexible Coupling with Grade "E" Type "A" Pre Lube Gasket	12	GRINNELL Gasket Lubricant	55
#707 – Heavy-Duty Flexible Coupling with Grade "E" EPDM Gasket	13	GRINNELL Gasket Styles, Grades and Recommendations.	9
#707 – Heavy-Duty Flexible Coupling with Grade "E" EPDM Tri-Seal Gasket	13	GRINNELL Silicone Gasket Lubricant	55
#716 – Reducing Coupling with Grade "E" EPDM Gasket	14	Grooved Couplings – Pieces Per Carton/Pallet	58
#716 Reducing Coupling Replacement Gaskets	51	Grooved Fittings – Pieces Per Carton/Pallet	59 - 61
#730 – Mechanical Cross with Grade "E" EPDM Gasket, Grooved Outlet	36	Grooved Short Pattern Fittings – Pieces Per Carton/Pallet	59
#730 – Mechanical Cross with Grade "E" EPDM Gasket, BSP Threaded Outlet.	35	Mechanical Tees – Pieces Per Carton/Pallet	62
#730 – Mechanical Tee with Grade "E" EPDM Gasket, Grooved Outlet	34	Model Number Index	68 – 69
		Part Number Index.	65– 67
		Pipe Tape.	55
		Replacement Gaskets – Pieces Per Carton/Pallet.	64
		Roll Grooving Machine Selection Chart	56
		Roll Selection Chart	57
		Table of Contents	7 - 8
		Terms and Conditions	2 – 6

Introduction
Couplings & Fittings
Mechanical Tees
Valves
Plain End Systems
Gaskets & Spare Parts
Preparation Equipment
Miscellaneous
Indices



Grinnell

Singapore

2 Serangoon North Avenue 5,
#07-01 Fu Yu Building,
Singapore 554911
Tel: +65 6577 4360
Fax: +65 6481 8791
E-mail: sales-ap@tycofp.com

India

804, Windsor, Off CST Road,
Kalina, Santacruz (East), Mumbai – 400098, India
E-mail: Sales-India@tycofp.com

Hong Kong

Phase 1, 10/F, Goodman Shatin Logistics Centre
No.6 Wong Chuk Yeung Street
Fotan, Shatin
Hong Kong
E-mail: sales-china@tycofp.com

www.grinnell.com