# **Risers and Transitions:** Transition Fittings Overview

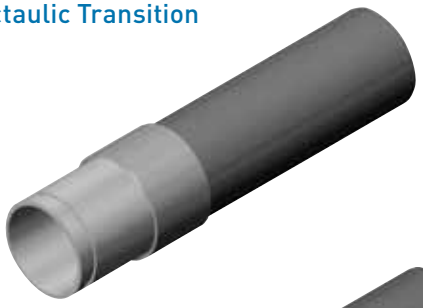
The time-tested Georg Fischer Central Plastics Transition Fitting design eliminates human error in the plastic-to-seal connection by providing a tamper proof and gas tight ASTM D2513 Category 1 mechanical joint that exceeds the hydrostatic burst pressure and tensile strength of the polyethylene pipe. The simplicity and reliability of which is now making the Georg Fischer Central Plastics Transition Fitting the transition fitting of choice in a growing number of industrial applications.

Georg Fischer Central Plastics continues to maintain a standard of excellence backed up by the most extensive research and development, quality assurance and in-house testing programs available to the industry.

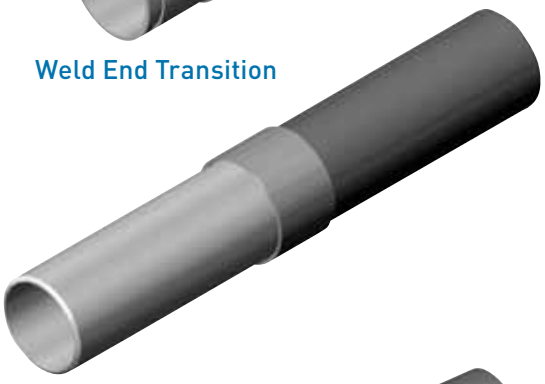
## Features and Benefits

- All products are protected with an electrostatically-applied fusion-bonded epoxy powder coating specifically designed for the exterior of gas petroleum pipelines.
- One-piece design eliminates loose parts
- PE-to-steel transition joint is stronger than the PE pipe.
- Transition joint design effectively resists pullout.
- The transition design utilizes a double o-ring design for added protection.
- All gas carrying welds on steel transitions are 100% air tested.
- Minimum shear points

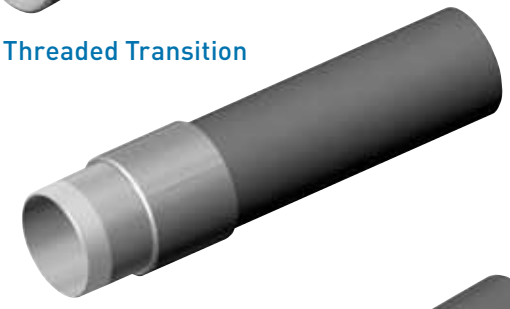
Victaulic Transition



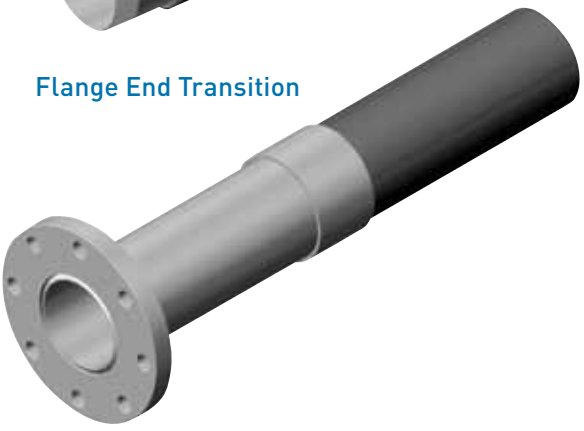
Weld End Transition



Threaded Transition



Flange End Transition



# **Risers and Transitions:** Transition Fittings

## Available Types and Options

Transition Types

- Steel thread end epoxy coated (½"–8")
- Steel threaded internal coated (½"–8")
- Steel weld end epoxy coated (½"–24")
- Steel flange end epoxy coated (2"–24")
- Steel victaulic end epoxy coated (2"–24")

Options

- Tracer wire connector
- Special designs and custom specifications available
- Protective sleeves
- Available in Schedule 40 and Schedule 80

## Testing and Compliance

All Georg Fischer Central Plastics Risers meet or exceed the following applicable standards and are subjected to an extensive testing program to ensure consistent performance in the field that is safe, robust and reliable.

- DOT Code of Federal Regulations,Title 49, Part 192
- ASTM D2513 - Standard Specification for Thermoplastic gas pressure pipe, tubing, and fittings qualified Category 1 requirements
  - ASTM D1598 - Test Method for Time to Failure of plastic pipe under constant internal pressure (Sustained Pressure Test)
  - ASTM D1599 - Test Method for resistance to short term hydraulic pressure of plastic pipe, tubing and fittings (Quick Burst)
  - ASTM D638 - Test Method for Tensile Testing
- ASTM F1973 - Standard Specification for Factory Assembled Anodeless Risers and Transition Fittings.
  - ASTM E515 - Test Method for Leak Testing
  - ASTM D638 - Test Method for Tensile Testing
  - ASTM F1588 - Test Method Constance Tensile Load Test
  - ASTM F1973, 7.4 - Test Method for Temperature Cycling Test
- Complies with CSA B137.4
- Listed with IAPMO/UPC (where applicable)

## Technical Specifications

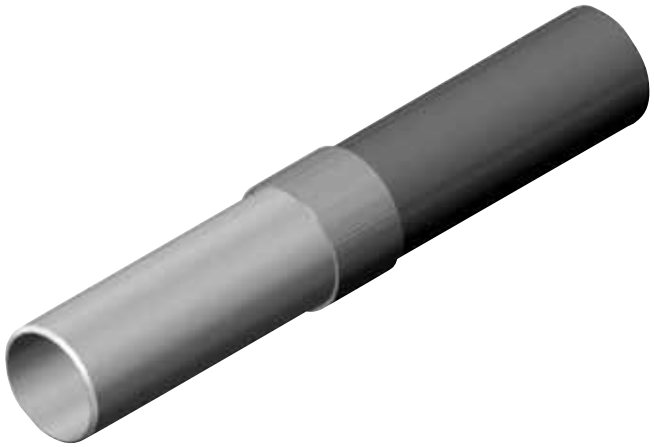
- Steel Gas Carrier - API 5L - ASTM A53
- Pipe Threads - ANSI B1.20.1
- PE Pipe per ASTM D2513
- Protective Coating Specs

All parts are protected with an electrostatically applied fusion-bonded epoxy powder coating specifically designed for the exterior of gas petroleum pipelines.

- 8 mil minimum thickness
- AGA 49 grey
- Cathodic disbondment testing per ASTM G8
- Salt spray testing per ASTM B117
- Impact resistance testing per ASTM G14

**Call about Specialty Transition design options and cost.**

# **Weld-End Transition Fittings:** with PE2406/PE2708 Gas Pipe



Protective sleeves are available on request.
Please call for sizes and prices.
For transition fittings larger than 12" call for availability and pricing.

**WELD END TRANSITIONS: w/PE2406/PE2708 GAS PIPE**

| Size | Description | Part Number | Wt. | Box / Pallet |
|---|---|---|---|---|
| ½" IPS × ½" IPS | DR9 YEL | 6500579 | 1.74 | 30 / 360 |
| ¾" IPS × ½" CTS | .090 YEL | 650756200000 | 1.52 | 40 / 640 |
| ¾" IPS × ¾" IPS | .090 YEL w/18" SLV | 6500583 | 2.07 | 30 / 360 |
| ¾" IPS × ½" IPS | DR9 YEL | 6501203 | 1.49 | 40 / 640 |
| ¾" IPS × ½" IPS | DR9 YEL w/18" SLV | 6500909 | 1.92 | 30 / 360 |
| ¾" IPS × ¾" IPS | DR11 YEL | 650757500000 | 1.53 | 40 / 640 |
| ¾" IPS × ¾" IPS | DR11 YEL w/12" SLV | 6500937 | 2.02 | 30 / 360 |
| 1" IPS × 1" CTS | .099 YEL | 650011100000 | 3.72 | 32 / 512 |
| 1" IPS × 1" CTS | .099 YEL w/12" SLV | 6500073 | 3.72 | 16 / 192 |
| 1" IPS × 1" IPS | DR11 YEL | 650010100000 | 2.26 | 35 / 512 |
| 1" IPS × 1" IPS | DR11 YEL w/12" SLV | 6500961 | 3.46 | 16 / 192 |
| 1¼" IPS × 1¼" IPS | DR10 YEL | 650121200000 | 3.29 | 15 / 240 |
| 1¼" IPS × 1¼" IPS | DR10 YEL w18" SLV | 6500066 | 3.32 | 16 / 192 |
| 1½" IPS × 1¼" IPS | DR11 YEL | 650151500000 | 4.36 | 25 / 300 |
| 2" IPS × 2" IPS | DR11 YEL | 650020200000 | 5.26 | 16 / 192 |
| 2" IPS × 2" IPS | DR11 YEL w/28" SLV | 6500112 | 6.87 | 9 / 108 |
| 3" IPS × 3" IPS | DR11.5 YEL | 650030300000 | 13.67 | 5 / 60 |
| 3" IPS × 3" IPS | DR11.5 YEL w/28" SLV | 6500586 | 17.57 | 4 / 48 |
| 4" IPS × 4" IPS | DR11 YEL | 6500891 | 18.87 | 4 / 48 |
| 4" IPS × 4" IPS | DR11 YEL w/30" SLV | 6500098 | 24.38 | 4 / 48 |
| 4" IPS × 4" IPS | DR11.5 YEL | 6500569 | 18.80 | 4 / 48 |
| 4" IPS × 4" IPS | DR11.5 YEL w/30"SLV | 6500587 | 19.44 | 4 / 32 |
| 4" IPS × 4" IPS | DR13.5 YEL | 6501129 | 23.93 | 4 / 48 |
| 4" IPS × 4" IPS | DR13.5 YEL w/30"SLV | 6501163 | 25.75 | 4 / 32 |
| 6" IPS × 6" IPS | DR11 YEL | 6500959 | 45.83 | 1 / 24 |
| 6" IPS × 6" IPS | DR11 YEL w/36" SLV | 6500960 | 67.50 | 1 / 9 |
| 6" IPS × 6" IPS | DR11.5 YEL | 6500570 | 46.36 | 1 / 24 |
| 6" IPS × 6" IPS | DR11.5 YEL w/36"SLV | 6500588 | 66.00 | 1 / 9 |
| 6" IPS × 6" IPS | DR13.5 YEL | 6500894 | 47.14 | 1 / 24 |
| 6" IPS × 6" IPS | DR13.5 YEL w/36"SLV | 6501040 | 78.00 | 1 / 9 |
| 8 IPS × 8" IPS | DR11.5 YEL | 650080800000 | 93.80 | 1 / 9 |
| 8 IPS × 8" IPS | DR11.5 YEL w/48"SLV | 6500589 | 127.50 | 1 / 9 |
| 10" IPS × 10" IPS | DR13.5 YEL | 6500011 | 170.00 | 1 / 3 |
| 12" IPS × 12" IPS | DR13.5 YEL | 6501024 | 241.60 | 1 / 2 |