

PRODUCT SPECIFICATION



PE4710 Fittings
For Water And Gas

SOCKET FUSION FITTINGS

1. FEATURES

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| Manufacturer | NUPIGECO SpA Via Stefano Ferrario , snc-Z.I. Sud-Ovest Loc. Sacconago-21052 Busto Arsizio (VA) - ITALY |
| Brand name | ELOFIT |
| Type of accessory | COUPLER, TEE, REDUCED TEE, REDUCER, CAP, 45°ELBOW, 90°ELBOW |
| Sizes | 3/4" to 2" IPS – SDR11 |
| Resin | PE3408 / PE4710 / PE100 BLACK VIRGIN HDPE HDB 1600 psi , 73°F (Ref.Std. ASTM D2837) Cell Classification 445574C (Ref.Std. ASTM D3350) NSF 61 Listed |
| Reference Standards | ASTM D2513 Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings. ASTM D2683 Standard Specification for Socket-Type Polyethylene Fittings for Outside Diameter- Controlled Polyethylene Pipe and Tubing. ASTM D3350 Standard Specification for Polyethylene Plastics Pipe and Fittings Materials. AWWA C901 AWWA Standard for Polyethylene (PE) Pressure Pipe and Tubing, 1/2 In. (13 mm) through 3 In. (76 mm), for Water Service. PPI TR-19 Chemical Resistance of Thermoplastics Piping Materials. |

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2. APPLICATION

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| Use | ON PRESSURE PIPE CONFORMING TO ASTM F714, D2513, D3035 |
| Compatibility | NATURAL GAS, WATER, CHEMICALS (Ref. PPI TR-19) |
| Operating temperature | MAX 140°F DERATING FACTORS FOR PRESSURE MUST BE CONSIDERED WHEN TEMPERATURE IS ABOVE 73°F |
| Pressure rating | DEPENDS ON FLUID, SDR, DESIGN FACTOR REFER TO TABLE |

| PRESSURE RATING (psi) at 73°F | | | | |
|-------------------------------|------------------|-----------------|----------------|---------------|
| SDR | Water (0.63 DSF) | Water (0.5 DSF) | Gas (0.32 DSF) | Gas (0.4 DSF) |
| 11 | 200 | 160 | 100 | 125 |
| 13.5 | 160 | 125 | 80 | 100 |
| 17 | 125 | 100 | 65 | 80 |



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3. INSTALLATION

The fittings referred in the present Product Specification are intended to be installed by the Socket Heat Fusion method. Refer to ASTM F2620 for installation. Fusion jointing must always be performed by qualified persons, through the use of equipment conforming to ASTM F1056. Pressure testing after installation must be executed according with ASTM F2164 or Company's procedures.

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| Weldability | SOCKET HEAT FUSION WITH PE RESINS CONFORMING TO ASTM D3350 |
| Fusion range | SDR11, SDR13.5, SDR17 |
| Installation conditions | AMBIENT TEMPERATURE: 23°F to 104°F |
| Reference Standards | <p>ASTM D2657 Standard Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings.</p> <p>ASTM F2620 Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings</p> <p>ASTM F1056 Standard Specification for Socket Fusion Tools for Use in Socket Fusion Joining Polyethylene Pipe or Tubing and Fittings.</p> <p>ASTM F2164 Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure</p> |

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4. PRODUCT TESTING

| CHARACTERISTIC | TEST METHOD | REQUIREMENT |
|-----------------------------|-------------------|---|
| Dimensions, aspect, marking | ASTM D2122 | Conformity with ASTM D2513 and D2683 |
| Hydrostatic strength | ASTM D1598 | Failure > 170 h, 80°C, 670 psi (hoop stress) Failure > 1000 h, 80°C, 580 psi (hoop stress) |
| Pressure burst test | ASTM D1599 | Failure after 60-70 s, 2520 psi (hoop stress) |

5. STORAGE AND WARRANTY

Store in a dry place, away from direct sun exposure and UV rays, with temperature in the range 0°F – 120°F. Avoid shocks and stresses, avoid contamination with water and chemicals. Remove the fitting from packaging immediately before installation. Fittings are guaranteed in stock for 10 years before installation, if stored properly.

THIS SPECIFICATION SUPERCEDES ALL PREVIOUS PRODUCT SPECIFICATIONS.

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| M001SF | 0 | Release | 10/29/12 | M. Rossi <u>TECHNICAL MANAGER</u> | R. Barbera <u>QUALITY MANAGER</u> | B. Wheeler <u>PRODUCT RESP.</u> |
| DOC. | REV. | DESCRIPTION | DATE | AUT. | VERIF. | APPROV. |