

BUTT FUSION FITTINGS

1. FEATURES

Manufacturer	NUPIGECO SpA Via Stefano Ferrario , snc-Z.I. Sud-Ovest Loc. Sacconago-21052 Busto Arsizio (VA) - ITALY
Brand name	ELOFIT
Type of accessory	TEE, REDUCED TEE, REDUCER, CAP, 45°ELBOW, 90°ELBOW
Sizes	2" to 6" 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 D3261 Standard Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic 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, ½ In. (13 mm) through 3 In. (76 mm), for Water Service. FM 1613 Polyethylene (PE) Pipe And Fittings For Underground Fire Protection ANSI/NSF 14 Plastics piping system components and related materials PPI TR-19 Chemical Resistance of Thermoplastics Piping Materials.

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2. APPLICATION

Use	ON PRESSURE PIPE AND FITTINGS 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

3. INSTALLATION

The fittings referred in the present Product Specification are intended to be installed by butt fusion and electrofusion to pipes and fittings. Refer to ASTM F2620 and PPI TR-33 for butt-fusion installation. Fusion jointing must always be performed by qualified persons, through the use of conforming equipment. Pressure testing after installation must be executed according with ASTM F2164 or Company's procedures.

Weldability	BUTT HEAT FUSION WITH PE RESINS CONFORMING TO ASTM D3350
Fusion range	SDR11
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 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 D3261
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.

M001BF	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.