

ELECTROFUSION FITTINGS

1. FEATURES

Manufacturer	NUPI INDUSTRIE ITALIANE SpA Via Stefano Ferrario 8 -Z.I. Sud-Ovest Loc. Sacconago-21052 Busto Arsizio (VA) - ITALY
Brand name	ELOFIT
Type of accessory	COUPLERS, TEES, REDUCED TEES, REDUCERS, END CAPS, 45°ELBOWS, 90°ELBOWS, BRANCH SADDLES, TAPPING TEES, BALOON/CAMERA SADDLES, REPAIR FITTINGS
Sizes	½" to 30" IPS, DIPS (Couplers) – SDR11 ½" to 1" CTS – SDR11 Couplers: 8" to 42" IPS, DIPS – SDR17 Couplers: 6" to 24" IPS – SDR7
Resin	PE4710 / PE100 BLACK VIRGIN HDPE HDB 1600 psi , 73°F (Ref.Std. ASTM D2837) MRS 1450 psi , 68°F (Ref.Std. ISO 9080) Cell Classification 445486C / 445576C (Ref.Std. ASTM D3350) NSF 61 Listed
Reference Standards	ASTM D2513 Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings. ASTM F1055 Standard Specification For Electrofusion Type Polyethylene Fittings For Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (Pex) Pipe and Tubing. ASTM D3350 Standard Specification for Polyethylene Plastics Pipe and Fittings Materials. AWWA C901 Polyethylene (PE) Pressure Pipe and Tubing, ½ In. (13 mm) through 3 In. (76 mm), for Water Service. AWWA C906 Polyethylene (PE) Pressure Pipe And Fittings, 4 In. (100 mm) Through 63 In. (1,600 mm), For Water Distribution And Transmission. FM 1613 Polyethylene (PE) Pipe and Fittings For Underground Fire Protection ANSI/NSF 14 Plastics piping system components and related materials ANSI/NSF 61 Drinking water system components – Health effect

1/2

2. APPLICATION

Use	ON PRESSURE PIPE AND FITTINGS CONFORMING TO ASTM F714, D2513, D3035
Compatibility	NATURAL GAS, WATER, SEWERAGE, GEOTHERMAL, INDUSTRIAL APPLICATIONS (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

PRODUCT SPECIFICATION



PE4710 Fittings
For Water And Gas

PRESSURE RATING (psi) at 73°F					
SDR	Nominal	Water (0.63 DSF)	Water (0.5 DSF)	Gas (0.32 DSF)	Gas (0.4 DSF)
11	230	200	160	100	125
13.5	185	160	128	80	100
17	160	125	100	65	80
9	290	252	200	100	125
7	362	336	266	100	125

2/2

3. INSTALLATION

The fittings referred in the present Product Specification are intended to be installed by electrofusion to pipes and fittings. For installation refer to Nupi Instructions Manual, ASTM F1290, PPI TR-49, and the leaflet included in the package if present. 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 and/or Company's procedures.

Weldability	ELECTROFUSION WITH PE 4710-3608-3408-2708-2406, PE100, PE80 CONFORMING TO ASTM D3350 AND PPI TR-4
Fusion range	SDR11, SDR13.5, SDR17
Installation conditions	AMBIENT TEMPERATURE* : 14°F to 113°F * Contact Technical Service when temperature is beyond the indicated limits
Reference Standards	ASTM F1290 Standard Practice for Electrofusion Joining Polyolefin Pipe and Fittings. PPI TR-49 Generic Electrofusion User Guide for Field Joining of Polyethylene Gas Piping ASTM F2164 Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure

4. PRODUCT PERFORMANCE

CHARACTERISTIC	TEST METHOD	REQUIREMENT
Dimensions, aspect, marking	ASTM D2122	Conformity with ASTM D2513 and F1055
Hydrostatic strength	ASTM D1598	Failure > 200 h, 80°C, 750 psi (hoop stress) Failure > 1000 h, 80°C, 660 psi (hoop stress)
Pressure burst test	ASTM D1599	Failure after 60-70 s, 2900 psi (hoop stress)

5. STORAGE

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 the box and the sealed plastic bag immediately before installation.

THIS SPECIFICATION SUPERCEDES ALL PREVIOUS PRODUCT SPECIFICATIONS.

M001EF	5	07/19/2023	M. Rossi - <u>PRODUCT MANAGER</u>	R. Barbera - <u>QUALITY MANAGER</u>
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