

PRODUCT SPECIFICATION

EloFIT

M001EF - REV.2 28/02/2017

According to the Commission Decision 472/1999 EC and the Regulation No. 305/20111 of the EU:
System 4.

Conveyance of water in pressured PE pipes, fittings and armatures for general purposes and for human consumption.

Intended use is construction of pressure pipelines, buried or above ground, for water, in the DN/OD 20-900 mm dimension range, PN16 bar operating pressure.

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	ELECTROFUSION FITTINGS
Sizes	20 to 800 mm – SDR11 90 to 900 mm – SDR17 (COUPLERS) 20 to 630 mm – SDR7.4 (COUPLERS)
Resin	BLACK VIRGIN HDPE PE100 CLASSIFIED (Ref. Std. ISO 12162) MRS 10.0 MPa (Ref. Std. ISO 9080) ISO 1872-PE,E/M-ACGHL,50-T003/006
Reference Standards	EN 1555 Plastics piping systems for the supply of gaseous fuels Polyethylene (PE) - PARTS -1, -2, -3, -4, -5, -7 EN 12201 Plastics piping systems for water supply, and for drainage and sewerage under pressure. Polyethylene (PE) - PARTS -1, -2, -3, -4, -5, -7 EN-ISO 15494 Plastics piping systems for industrial applications -- Polybutene (PB), polyethylene (PE) and polypropylene (PP) -- Specifications for components and the system -- Metric series FM 1613 Polyethylene (PE) Pipe and Fittings For Underground Fire Protection
Traceability system	BATCH NUMBER, MANUFACTURING DATE (WEEK/MONTH- YEAR) ISO 12176-4 BARCODE

2. APPLICATION

Use	ON PRESSURE PIPES AND FITTINGS CONFORMING TO EN 1555, EN 12201, ISO 4437, ISO 4427, EN-ISO 15494
Compatibility	NATURAL GAS, WATER, INDUSTRIAL APPLICATIONS
Operating temperature	MAX 40°C DERATING FACTORS FOR PRESSURE MUST BE CONSIDERED WHEN TEMPERATURE IS ABOVE 20°C (REF.STD. UNI-EN 1555 AND UNI-EN 12201)
Pressure rating	REFER TO TABLE BELOW



NUPI INDUSTRIE ITALIANE SpA.
Via Stefano Ferrario 8, Z.I. Sud-Ovest
Loc. Sacconago - 21052 Busto Arsizio (VA) – ITALY
www.nupiindustriaitaliane.com – info@nupinet.com

PRESSURE RATING (bar) at 20°C		
SDR	Water	Gas
11	PN 16	MOP 10*
17	PN 10	MOP 6*
7.4	PN 25	MOP 10*

* Or according with Country Regulations but in no case exceeding Maximum Operating Pressure (MOP)

3. INSTALLATION

The fittings referred in the present Product Specification are intended to be installed by electrofusion to HDPE pipes and fittings.

For installation refer to EN 12007-2 and manufacturer's instructions.

Fusion jointing must always be performed by qualified persons, through the use of conforming equipment. Pressure testing after installation must be executed according with EN 12327 and Company procedures.

Weldability	ELECTROFUSION WITH PE80 – PE100 RESINS (ISO 12162 CLASSIFIED)
Type of regulation	VOLTAGE CONTROL
Fusion range	SDR 7.4 to SDR 17.6 (depending on type)
Installation conditions	AMBIENT TEMPERATURE: -5°C to +40°C
Reference Standards	EN 12007-2 Gas infrastructure. Pipelines for maximum operating pressure up to and including 16 bar. Specific functional requirements for polyethylene (MOP up to and including 10 bar)
Connectors size	4 mm
Welding recognition system	ISO 13950 BARCODE WITH AUTOMATIC CORRECTION OF FUSION TIME ACCORDING WITH AMBIENT TEMPERATURE

For welding instructions and support, please consult Nupi website : www.nupiindustriaitaliane.com > Literature > Elofit > Installation instructions ; video-instructions are available on Youtube at Nupi account.

CURRENT LAWS AND RULES FOR SAFETY MUST BE RESPECTED DURING INSTALLATION.

4. PERFORMANCE AND QUALITY REQUIREMENTS

CHARACTERISTIC	TEST METHOD	REQUIREMENT
Dimensions, aspect, marking	ISO 3126	Conformity with EN 1555 / EN 12201
Hydrostatic strength	ISO 1167	Failure > 100 h, 20°C, 12.0 MPa (hoop stress) Failure > 165 h, 80°C, 5.5 MPa (hoop stress) Failure > 1000 h, 80°C, 5 MPa (hoop stress)
Tensile strength of the joints	ISO 13954 ISO 13955 ISO 13956	Ductile cohesion > L ₂ /3 (at 23°C, -10°C, +45°C)
Oxidation Induction Time	ISO 11357-6	> 20 minutes
Hygienic properties	National Reg.	Compliant

5. STORAGE

Store in a dry place, away from direct sun exposure and UV rays, with temperature in the range -20°C , +50°C. Avoid shocks and stresses, avoid contamination with water and chemicals. Remove the fitting from packaging only immediately before installation.

RECOMMENDATIONS FOR THE DISPOSAL:

POLYETHYLENE USED FOR THIS ACCESSORY IS RECYCLABLE: DISPOSE THROUGH AUTHORISED CENTRES. DO NOT DISPERSE WRAPPING AND PACKAGING OF THE PRODUCT, RECYCLE THROUGH COLLECTION.

THIS SPECIFICATION SUPERCEDES ALL PREVIOUS PRODUCT SPECIFICATIONS AND REVISIONS.

ELOFIT PRODUCTS ARE SUBJECT TO CONTINUOUS IMPROVEMENT: TECHNICAL DATA MAY CHANGE WITHOUT NOTICE.



Nupi Industrie Italiane SpA