



TECHNICAL PE PIPES & FITTINGS





SportsPro 100 has been developed using the very latest raw materials and extruding techniques to offer the sports irrigation market and particularly the golf industry, a pipe with excellent installation and long term operational properties. Using XS10B Total petrochemical granules which are of such quality standards that they have been tested for use not only in water but gaseous fuel installations – **you would get more than just a wet fairway if one of these pipes fails!**

– **SportsPro 100** exceeds existing standards that are present in the sports industry giving all concerned; the consultant, the installer and the end user, the confidence to install SportsPro 100 for all occasions.

SportsPro 100 is available in 10, 12.5 and 16 bar configurations and although the standard lengths are 50m and 100m, Netafim prides itself on being able to offer a 'bespoke' service; we can offer a full range of specific lengths

dependent upon your requirements. The length of coil limits are only the physical limitations of unwinding on site.

SportsPro 100 has an identification system of four light green lines along the length of the pipe. No other pipe has this identification system. **SportsPro 100** is designed to have maximum strength with minimum wall thickness; this of course achieves a higher dynamic performance for the pipe meaning longer run lengths or lower power inputs. Plus, its increased tensile strength and high resistance to scoring, makes **SportsPro** more suitable to mole plough installation than PE80 pipes. **SportsPro 100** can be used with all approved fitting systems although we recommend +GF+ compression and fusion fittings. Sports Pro is marked in accordance with WRAS information and guidance note '9-02-05 Issue 2', relating to the pipe marking and identification of non-potable water supply.

TEST	STANDARD	NETAFIM SPORTSPRO	
		Mat. test	Pipe test
Carbon black content	ISO 6964	✓	
Carbon black dispersion	ISO 11420 / ISO 18553:2002	✓	
Antioxidants	-	✓	
Density	ISO 1183 (part1)	✓	
MFR	ISO 1133	✓	
Moisture	ISO 760 / EN 12118	✓	
Volatile content	EN 12099	✓	
OIT	ISO/TR 10837	✓	
Stress-Strain Response	-	✓	
Slow crack growth pipe size 110 or 125mm SDR11	EN ISO 13479	✓	
Long term Stress Crack Resistance at 80 °C: on notched pipe	EN ISO 13479	✓	✓
Long term MRS at 20 °C	NEN-EN-ISO 9080:2003	✓	
Resistance to gas condensates at 80 °C, 2,0MPa	EN 921 + NEN-EN-1555	✓	
Resistance to fracture by impact (Gc)	EN-ISO 179:1997	✓	
RCP (Full Scale Test)	ISO 13478	✓	
Welding Characteristics		✓	
Dimensions	NEN-EN-12201 / NEN-EN-1555		✓
Marking	NEN-EN-12201 / NEN-EN-1555		✓
Tensile yield stress	EN-ISO 6259		✓
Elongation at break	EN-ISO 6259		✓
Appearance	NEN-EN-12201 / NEN-EN-1555		✓
Long term hydrostatic at 20 °C (Cross checks)	ISO 1167	✓	
Long term hydrostatic at 20 °C (Squeezed pipe)	EN 12106:1998	✓	
Hydrostatic pressure resistance at 20 °C / 1h	EN 921		✓
Hydrostatic pressure resistance at 80 °C / 165h	EN 921		✓
Water Quality	BRL K533/03 / NEN-EN-12201	✓	
Gas Quality	NEN-EN-1555	✓	
Green Stripes	Internal standard		✓

*WIS 4-32-17 *WIS 4-32-09-1991 **BS6730 : 1986 **BS6572 : 1985

Glossary of Terms

Carbon Black content (ISO 6964)

Test for the determination of carbon black content in raw material or material taken from a pipe. The test is based on pyrolysis of a specified quantity of material at 550°C ±50°C in a stream of nitrogen for 45 minutes and calcinations at 900°C ±50°C. Calculation of the carbon black content from the difference in mass before and after calcinations and pyrolysis. The specification of the carbon black content according the several standards is 2 – 2,5%.

Carbon Black dispersion (ISO 18553:2002)

Describes a method with two procedures for the assessment of pigment or carbon black particle and agglomerative size and dispersion in polyolefin pipes, fittings and compounds. The method is applicable to polyolefin pipes and fittings, as well as raw material in pellet form, with the choice of procedure to be determined by the referring specification. The method is applicable to carbon black pigmented polyolefin pipes, fittings and compounds with a carbon black content of less than 3%.

Density (ISO 1183:1987)

Method for the determination of the density of plastics. Our test is based on a calculation of a piece of material that has been measured on a balance in the open air and under water.

MFR (ISO 1133:2005)

This International Standard specifies the procedure for the determination of the melt mass-flow rate (MFR) of thermoplastic materials under specified conditions of temperature and load.

Moisture (EN-ISO 12118)

This International Standard specifies a method for the determination of moisture content in thermoplastics. This method is only applicable to thermoplastics for which the melting point is below 160°C. The method is suitable for measuring the moisture content down to 0,0005 %. This method determines the total moisture content in the test piece and included surface moisture and moisture contained within the test piece. Because the test piece is converted to a molten state, it is assumed that all moisture is expelled.

Volatile content (EN-ISO 12099)

Specifies a method for determining the content of material volatile at 105°C in polyethylene (PE) piping materials. This method is applicable to moulding and extrusion materials. It also can be applicable to components in PE piping systems.

OIT (ISO/TR 10837:1991)

Specifies a method of measuring the oxidative thermal stability in oxygen at typical processing and welding temperatures. The thermal stability measured by this method depends on mass and size of the test specimen used.

Short term surge pressure resistance (ING 4-37-02)

This test is done on a pipe with diameter > 90mm. The pipe is notched according EN-ISO 13479 and shall be pressurised to either give failure or attainment of at least 2,5 times the pressure rating (PN) at a loading of 8 bar/sec.

Slow crack growth pipe size 110 – 125 or 180mm SDR-11 (EN-ISO-13479)

Long term stress crack resistance at 80°C: on notched pipe (EN-ISO-13479)

Specifies a method for determining the resistance to slow crack growth of a polyethylene (PE) pipe expressed in terms of time to failure in a hydrostatic stress rupture test of a pipe with longitudinal notches machined in the outer surface. According EN-ISO-13479 the pipe shall not fail within 165h when pressurised at 9,2 bar (PE-100) or 8 bar (PE-80)

Long term MRS at 20°C (NEN-EN-ISO-9080:2003)

Describes a method for estimating the long-term hydrostatic strength of thermoplastics materials by statistical extrapolation. This method is applicable to all types of thermoplastics pipes at applicable temperatures. This method was developed on the basis of test data from pipe systems. The pipe dimensions to be tested can be specified in the relevant product/ system standards and have to be included in the test report.

Resistance to gas condensates at 80°C, 2,0MPa

(NEN-EN- 1555-1:2002 + EN-921)

The EN-921 standard (is going to be replaced by NEN-EN-ISO 1167) specifies a method for determining the resistance of thermoplastics pipes to constant internal water pressure at constant temperature. This standard applies to thermoplastics pipes intended for the transport of fluids. The NEN -EN-1555 gives the specific test parameters for this special test.

Resistance to fracture by impact (Gc) (EN-ISO 179:1997)

Specifies a method for determining the Charpy impact strength of plastics under defined conditions. A number of different types of specimen and test configurations are defined. Different test parameters are specified according to the type of material, the type of test specimen and the type of notch.

RCP (Full Scale Test) (EN-ISO 13478)

This International Standard specifies a full-scale method of test for determination of arrest or propagation of a crack initiated in a thermoplastics pipe at a specified temperature and internal pressure. It is applicable to the assessment of the performance of thermoplastics pipes intended for the supply of gases or liquids, in the latter case when air may also be present in the pipe.

Dimensions (NEN-EN-12201 and NEN-EN-1555)

These standards specifies the dimensions of the pipe.

Marking (NEN-EN-12201 and NEN-EN-1555)

These standards specifies the marking of the pipe.

Tensile Yield Stress (ISO 6259)

Specifies a method of determining the tensile properties of polyolefin (polyethylene, cross-linked polyethylene, polypropylene and polybutene) pipes, and in particular the following properties: - stress at yield point; - elongation at break.

Elongation at break (ISO 6259)

Specifies a method of determining the tensile properties of polyolefin (polyethylene, cross-linked polyethylene, polypropylene and polybutene) pipes, and in particular the following properties: - stress at yield point; - elongation at break.

Appearance (NEN-EN-12201 and NEN-EN-1555)

These standards specifies the appearance of the pipe.

Long term hydrostatic at 20°C (cross checks) (prNEN-EN-ISO-1167)

Specifies a general test method for determination of the resistance to internal hydrostatic pressure at a given temperature of thermoplastics pipes, fittings and piping systems for the transport of fluids. The preparation of test pieces to be used is described in the appropriate parts 2, 3 or 4 of this international standard.

Long term hydrostatic at 20°C (squeezed pipe) (NEN-EN-12106:1998)

Specifies a test method for the hydrostatic-strength of polyethylene (PE) pipes after being subjected to a squeeze-off procedure.

Hydrostatic pressure resistance at 20°C (1h) and 80°C (165h) (EN-921)

The EN-921 standard (is going to be replaced by NEN-EN-ISO 1167) specifies a method for determining the resistance of thermoplastics pipes to constant internal water pressure at constant temperature. This standard applies to thermoplastics pipes intended for the transport of fluids.

Water Quality (NEN-EN-12201)

Pipe made according to this standard is suitable for supply of drinking water.

GAS Quality (NEN-EN-1555)

Pipe made according this standard is suitable for supply of gaseous fuels.

Green Stripes (intern method)

The green stripe indicates that the pipe is Netafim SportsPro 100 and it is especially made for the professional irrigation industry.

PE PIPE 6-8 BAR

Technical Specifications of Polyethylene

Dimension (outside):	3-250mm
Pressure Class:	1-16 bar
Recommended Working Temp:	0-20°C
Maximum Temp:	60°C (at decreasing max pressure)
Specific Weight:	930-955 kg/m ³ (black PE)

Coefficient of Thermal Expansion

LDPE:	2.3 cm/100m,°C
HDPE:	1.8 cm/100m,°C



PE QUICK COUPLING SYSTEM

Technical Specifications

Diameter:	75 mm (other dimensions on request)
Length:	6 m (other lengths on request)
Max.	Pressure: 6 bar
Material:	HDPE
Starting Piece:	75 mm x 2 1/2" (F x female thread)
Nozzle Connection:	1" (on F connector)
Stabilising Plate:	40 x 5.5 cm
Optional:	80 x 5.5 cm

- Manifolds assembled by means of the PE coupling system are best (partly) buried at a shallow depth to avoid damage by tractors.
- Do not use soapy products for PE systems.

FLATNET

Specifications

- Available diameters: 2", 3" and 4".
- Maximum working pressure 3.0 bar at 50 Celsius degrees.
- Coil length: 50, 80 or 100 meter.
- Can be used as transportation blank pipe, as a distribution pipe with in-field stat connectors or as a distribution pipe with integral 1/2" female threaded connectors, distance between connectors must be defined at ordering time, according to the user needs.
- Robust and durable reinforced polyethylene weaves.
- White colored for high solar resistance, high chemical resistance and UV resistance.
- The pipe and the integral connectors are made of 100% Polyethylene, totally recyclable material.
- Red strip for easy identification.



Features & Benefits

- Low expansion and zero axial elongation, no snaking.
- Flat and compact coil design, reduces freight and storage costs.
- Integral connectors reduce significant labor time and increase confidence in the connections between distribution pipes and laterals.
- Light and flexible, easily moved from one installation to another.
- User friendly and faster layout and retrieving process.
- Up to 80% lighter than other similar products.
- Complete package, pipes, full range of branching connectors and a complete line of connectors for dripperlines and laterals.

FLATNET™ TECHNICAL DATA

FLATNET™	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR) AT 50 DEGREES CELSIUS
2" / 51mm.	51.5	1.1	53.7	3.0
3" / 78mm.	78.3	1.1	80.5	3.0
4" / 102mm.	102.5	1.1	104.7	3.0

FLATNET™ CONNECTORS

PRODUCT DESCRIPTION	PRODUCT PICTURE
PLN/FTN Coupling Barb Con. 2" kit PLN/FTN Coupling Barb Con. 3" kit PLN/FTN Coupling Barb Con. 4" kit	
PLN/FTN Barb Con. 2" * MTH BSP 2" kit PLN/FTN Barb Con. 3" * MTH BSP 3" kit PLN/FTN Barb Con. 4" * MTH BSP 4" kit	
PLN/FTN Barb Con. 2" * SW ISO 50/63 kit PLN/FTN Barb Con. 2" * SW ISO 75/90 kit PLN/FTN Barb Con. 2" * SW ISO 110 kit	

PLASSON COMPRESSION FITTINGS 16 BAR

The comprehensive Plasson Mechanical fittings range offer solutions for connecting PE pipes, used for conveying water and other fluids in urban and inter-urban infrastructure, industrial, mining, landscape and farming applications and for carrying communication lines.

Chemical Resistance:

Plasson Mechanical Fittings are supplied as standard with Polyacetal split rings and NBR O-rings which are suitable for water. For specific chemical applications CPVC split rings and EPDM or FPM O-rings can be supplied, please contact us for advice.

Installation Instructions



Insert liner into pipe & slacken nut until half the thread is visible
NOTE: Liners are not required on black pipe.



Push & twist pipe into body through the nut, split ring & O-ring.



Tighten nut firmly. For final tightening on 50 & 63mm use a Plasson wrench.

Technical Features

Range:	16mm - 125mm
Working Pressure:	Upto 16 bar
Materials:	Polypropylene, high-grade Copolymer Polypropylene, high-grade Copolymer Polyacetal (POM) Nitrile rubber (EPDM) NBR
Operating Temperatures:	Plasson Fittings and Valves are designed for cold water applications to 20 Degrees C, for other applications, please contact us for specific guidance. The fittings and valves will withstand sub-zero temperatures
Standards:	ISO 14236, AS/NZS 4129, ISO 7/1, BS 21, DIN 2999, UNI 9561, NEN 3258, AS 1722, DIN 8076

PLASSON STAINLESS STEEL REPAIR CLAMPS

Plasson's range of repair clamps are designed to repair water mains pipes where corrosion or mechanical damage has caused leakage. The clamps materials are selected to give maximum service life and the clamp is designed for ease of use. All materials meet the requirements of WRAS and the DWi for use on a potable water system.



Technical Features

- Stainless steel construction with Ductile clamping Jaws
- For assembly on main without pipe cutting,
- Wrap-around design
- Can be used on line mains
- Good tolerance range
- Wide size range available
- Light and easy to handle
- Waffle type seal
- Captive bolts with nuts that do not require removal to use clamps.

PLASSON THREADED FITTINGS

Plasson range includes a comprehensive range of threaded fittings, including sockets, bushes, elbows, tees, nipples and tank connectors. Manufactured from high performance polypropylene and pressure rated to 16 bar the threaded products enhance the Plasson offering allowing quick and easy adaption of a wide range of Plasson or third party products and fittings.



Technical Features

- Size:** Available in 1/2" up to 4"
- Pressure:** up to 16 Bar
- Materials:** Body: Polypropylene, high-grade copolymer.
Reinforcing Ring: Stainless steel
- Operating Temperatures:** The fittings and valves are not to be used with hot water, although they withstand the same temperature as the polyethylene pipe itself. The fittings and valves will withstand sub-zero temperatures.
- Note** We strongly recommend the use of PTEE tape in threaded connections.

All threads conform to ISO -7/1, BS 21 - 1973, DIN 2999, NEN 3258, AS 1722 Part 1 - 1975. All internal (female) threads smaller than 3" are parallel. All other threads (male and female) are tapered.

PLASSON SILVER LINE FITTINGS

Technical Features

- Range:** 20mm - 63mm
- Working Pressure:** upto 10 Bar
- Materials:** Body - Polypropylene, high-grade Copolymer
Nut - Polypropylene, high-grade Copolymer
Split Ring - Polyacetal (POM)
Seal - Nitrile rubber (EPDM)
O Ring - NBR
- Operating Temperatures:** The fittings are not to be used with hot water, although they withstand the same temperature as the polyethylene pipe itself. The fittings will withstand sub-zero temperatures.
- Thread:** All threads conform to ISO-7/1
BS 21-1973, DIN 2999, NEN 3258
AS 1722 Part 1-1975



Installation Instructions - 20 - 63mm

- Cut the pipe square and chamfer the end of the pipe. Undo the nut to the last thread. Leave the nut on the fitting while inserting the pipe.
- Twist the pipe into the fitting* through the split ring and rubber seal to the pipe stop. Tighten the nut firmly. Use a Plasson wrench (or similar tool) for final tightening of sizes 40 and above.
- The nut should be closed tightly, however there is no need for the nut to actually meet the body shoulder.
- * Lubrication of the pipe end will ease insertion of the pipe.

Before installation ensure that the end of the pipe to be inserted into the fitting is free of scratches and other imperfections, and that both the pipe and the fitting itself are clean of sand, mud, stones etc. Do not over tighten the nut when closing. Never use wrenches or spanners with handle lengths longer than 46 cm. Excessive torque during tightening can spread the nut cone and result in pull outs. If fittings are reused, ensure split ring is sharp and bites into the pipe to avoid pull outs. Alternatively replace the split ring. We strongly recommend the use of PTFE tape in BSP threaded connections.

PLASSON ELECTROFUSION FITTINGS 16 BAR

Plasson fittings are specifically designed for reliable, high performance pipe joining and long system life. This automated system has been proven to be most economical due to the low potential for operator error.

All Plasson ElectroFusion fittings are produced from material class PE100 which conform to international standards for potable water and natural or suitable manufactured gas systems. Production from PE80, available upon request.



Technical Features

- Pressure Rating:**
 - PN 16 (Water)
 - MOP10 (Gas)
- Material:** All Plasson ElectroFusion fittings are produced from material class PE100 which conform to international standards for potable water and natural or suitable manufactured gas systems. Production from PE80, available upon request
- Standards:**
 - EN 1555
 - EN 12201
 - NF 136
 - AS/NZS 4129
 - WIS 4-32-14
 - WIS 4-32-15

- Stronger pipe joining** - Plasson ElectroFusion quality fittings have long penetration depths and fusion zones which ensure high quality joints.
- Most Economical** - Economic benefits are a result of overall integrated system quality and innovation including the computerized smart system which reduces the potential for operator error.
- High Performance** - Proven high performance in gas and water distribution and industrial applications.
- Superior Service** - Plasson provides unmatched service based on over 40 years in the field.

Installation Instructions for 75mm - 125mm Fittings



1. Undo the nut until 3-4 threads are visible



2. Insert the pipe in to the fitting until the STOP



3. Tighten the nut firmly with a Plasson Wrench.

NB: For 125mm see assembly instructions with fitting

GRIFFON CLEANER FOR PE, PP, PVDF AND PB

- Properties:**
- Universal
 - Very powerful cleaning effect
- Directions for use:**
1. Apply cleaner to a clean, non-pilling cloth (Griffon Cleaner Cloth)
 2. Clean and degrease surfaces to be joined.
 3. Remove any condensation with a clean cloth and let surfaces dry properly. Close packaging carefully immediately after use.
- Shelf life:** At least 24 months, if stored in well-closed packaging, in a dry place at a temperature between +5°C and +25°C. Limited shelf life after opening

Coverage: Indication of the number of connections per 1 L

Ø	32	40	50	63	75	90	110	125	160	200	250
#	800	700	650	550	330	250	160	140	90	50	35

GRIFFON PE CLEANING CLOTHS



- Properties:**
- Absorbent
 - Non-pilling
 - 23 x 41 cm
- Directions for use:**
1. Humidify cloth with (PE) Cleaner
 2. Clean and degrease surfaces
 3. Remove condensation, if any, with a clean, dry cloth and allow surfaces to dry well.
- Field of application:** For cleaning and degreasing (rigid) PVC, PVC-C, ABS, PE, PP, PVDF and PB pipes, sockets and fittings before joining. To be used in combination with Cleaner and PE Cleaner. Also suitable for removing non-hardened cement residue.

GRIFFON CLEANING WIPES FOR PE, PP, PVDF AND PB



Properties:

- Universal
- Very powerful cleaning effect
- Non-pilling
- 15 x 19,5 cm

Field of application:

For cleaning and degreasing PE, PP, PVDF and PB pipes, sockets and fittings before welding.

Directions for use:

1. Remove the foil and pull the first wipe through the opening,
2. Dry surfaces with a clean, dry cloth.
3. Clean and degrease surfaces. Wipe is suitable for single use. WDo not use dried out Wipes.
4. Remove condensation with a clean cloth and let surfaces dry thoroughly.
5. Close packaging carefully immediately after use.

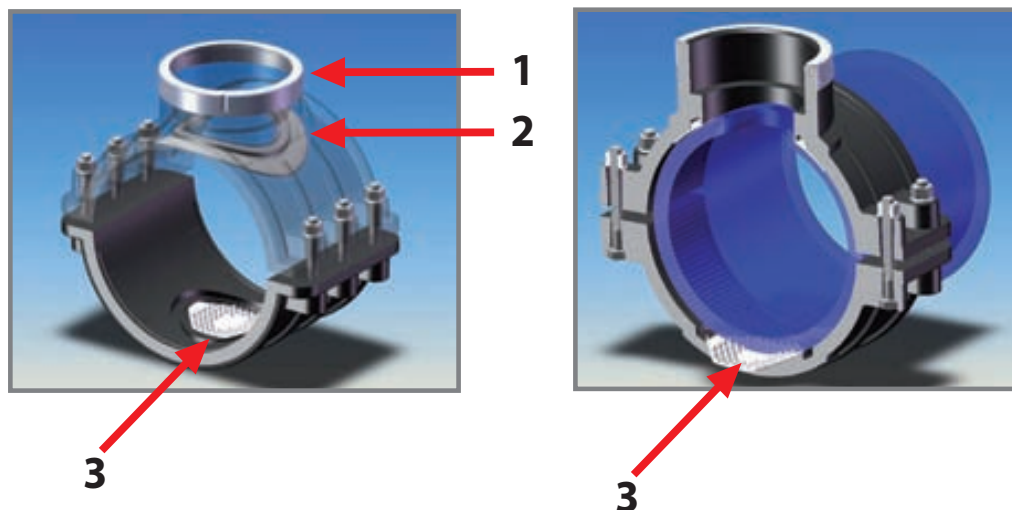
Shelf Life:

At least 24 months, if stored in a well-closed packaging in a dry place at a temperature between +5°C and +25°C. Limited shelf life after opening

Technical properties:

Moisture resistance: Very good

CLAMP SADDLES



Technical Features

- Material: grey Polypropylene copolymer PP-B
- Reinforcement ring in stainless steel (1): maximized height to increase pressure tightening in case of bending moment applied to the outlet and vibrations steady in time.
- Galvanized bolts
- Flat gasket in NBR 70sh (2): maximized internal diameter in order to increase the working confidence (better containment of the pipe drill-hole); flat extension to increase the contact surface with the pipe leading the better performance in case of unwanted extra-pressure (water hammer).
- Bolts grip system
- Gasket grip system
- Patented anti-rotation system Octopus : the innovative insert (3) works very effectively and long lasting against rotation and axial slide of the saddle, suitable to grip different type of PE 80-100 pipes with no risk of damage.
- Reference norms: ISO13460 – AS/NZS4129 etc; threads according to EN10226 (ex ISO7/1)
- Main application: top quality irrigation, potable water pipelines, fire fighting equipments

POLYPROPYLENE THREADED FITTINGS

Polypropylene (PP) threaded fittings are universal threaded couplings with an incorporated O ring for assembly without teflon tape (self-sealing). The PP threaded fittings set is extremely complete and includes threaded (transition) sockets and (transition) nipples, angles, tees and end plugs, both male and female threaded. The advantage of the selfsealing fittings is not only that they reduce assembly time (no tape or glue required), but the components can also easily be turned after assembly without causing leakage.



Technical Specifications

- Max Pressure:** 8 Bar (at 20°C)
- Max Temperature:** 60°C (at decreasing pressure)
- Nominal Pressure:** 6 Bar
- Thread:** 1/2" - 2" B.S.P.T. (male & female)
- Housing Material:** Polypropylene
- O Ring:** NBR

NUTLOCK FITTING

Nutlock fittings combine the advantages of barbed connectors and clamping couplings. The PE hose is slid over the loose grip and fastened with the swivel. No rings are required to seal the hose. The hose is easily assembled and disassembled, for a new crop for example: the grip and swivel remain on the hose and will not get lost. Nutlock fittings are available as couplings, tees or end sets, male or female threaded. The Nutlock fitting has standard B.S.P.T. thread. Nutlock fittings make a flexible system and facilitate future adjustment of standard Tavlit threaded couplings (addition or removal of swivel and grip, for example). The use of Nutlock fittings enables effortless installation or removal of valves, filters, water gauges etc. They can be repaired, replaced or temporarily removed for protection against frost in no time at all.



Technical Specifications

- Max Pressure:** 8 Bar (at 20°C)
- Nom Pressure:** 6 Bar
- PE Hose Size:** 16 - 25mm
- Housing Material:** Polypropylene
- Swivel:** Polypropylene
- Grip:** Acetal
- Thread:** 1/2" - 1" B.S.P.T.

Recommended PE Wall Thickness

Nutlock fitting (mm)	Hose Wall Thickness (mm)
16 - 17	0.7 - 1.5
20	1.0 - 2.0
25	1.4 - 2.0

- Nutlock fittings can be mounted waterproof with Tavlit self-sealing fittings, i.e. without using tape.
- The 16 mm Nutlock fitting can also be used for 17 mm hoses.
- Hoses which are difficult to mount to the grip can be softened with lukewarm water (30-40 °C).
- Do not use soapy products during PE hose assembly!

PE VALVES

PE valves are low-pressure valves with a hose connection and/or threaded connection. Tavlit PE valves have a double O ring seal for extra security and long-term use. The valves remain easy to operate therefore. The housing with hose connection is made of Acetal, which ensures improved grip on the hose. The housing with threaded connection is made of Polyamide for improved sealing. PE valves are used in (indoor and outdoor) irrigation systems with pressures up to 3 bar.



Technical Specifications

Max Pressure: 4 Bar (at 20°C)
Nominal Pressure: 3 Bar
Hose Diameter: 16 -25mm
Thread: 1/2" - 3/4" B.S.P.T (male and female)
Housing Material: Acetal or Polyamide
Handle: Polyamide
O Ring: NBR

BARBED CONNECTORS

Barbed connectors (or hose sockets) are insert sockets for 12-25 mm PE hoses. Tavlit barbed connectors are made of Acetal, due to which they are rigid and retain their shape, thus improving their locking in the hose. Barbed connectors are used in indoor and outdoor irrigation systems with pressures up to 3 bar.



Technical Specifications

Max Pressure: 4 Bar (at 20°C)
Nom Pressure: 3 Bar
Hose Diameter: 16 - 25mm
Thread: 1/2" - 3/4" B.S.P.T (male and female)
Material: Acetal

Recommended PE Wall Thickness

Nutlock fitting (mm)	Hose Wall Thickness (mm)
16 - 17	0.7 - 1.5
20	1.0 - 2.0
25	1.4 - 2.0

- A strap or snap-clip can be used to fasten the hose if the pressure exceeds 3 bar or if the temperature may exceed 35°C.
- If required, the PE hose may be warmed up with lukewarm water (30-40°C) during assembly.
- Do not use soapy products during PE hose assembly!

SWIVEL FITTING

Swivel fittings allow for quick and simple assembly and disassembly of connections. The incorporated O ring ensures a perfect seal, even if the connection is tightened by hand. After assembly, the materials can be turned without causing leakage. Swivel fittings are available as couplings, tees or crosses, and are male threaded (swivel) or female threaded (B.S.P.). The Swivel fitting is also available with a Nutlock connection (16-20 mm). The use of Swivel fittings enables effortless installation or removal of valves, filters, water gauges etc. They are repaired, replaced or temporarily removed for protection against frost in no time at all.



Technical Specifications

- Max Pressure:** 8 Bar (at 20°C)
- Nom Pressure:** 6 Bar
- Thread:** 1/2" - 3/4" B.S.P.T (male and female)
- Housing Material:** Polypropylene
- Swivel:** Polypropylene
- Sealed Ring:** EPDM

Recommended PE Wall Thickness

Nutlock fitting (mm)	Hose Wall Thickness (mm)
16 - 17	0.7 - 1.5
20	1.0 - 2.0
25	1.4 - 2.0

- Swivel fittings can be mounted without using tape or other sealing material, with any Tavlit PP appendage and also with a great many other appendages and materials. If the required combination is unknown, it is recommended to first make a sample piece and test the sealing.