


extro

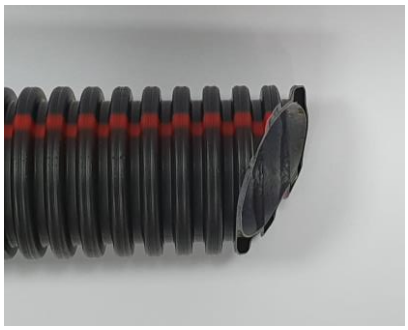
UV Resistance 30 years GUARANTEE

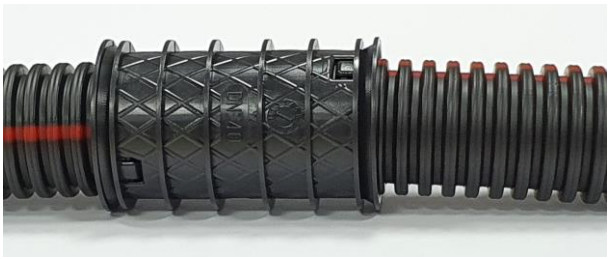
FLEX SUB

Flexible protective tubes for networks buried in the ground

The EXTRO Sub product range comprises flexible double wall tubes. The outer wall is what gives the tubes compression resistance and at the same time ensures excellent flexibility. The material used for this layer is a compound based on HDPE, resistant and ductile at low temperatures, which eliminates the risk of damage during installation. At the same time, the material is resistant to ultraviolet (UV) radiation, a property that is particularly important for branches that come out of the ground and are exposed to direct sunlight.

For a differentiation of the installed networks, the tubes are marked with longitudinal colored lines. The color of the marking can be red, blue, yellow or green. Other colors are possible on request. The material used for the inner layer is a softer, more flexible polyethylene (LDPE), which helps to retain the flexibility of the tube while providing a smooth inner layer with a lower coefficient of sliding friction, necessary for easy sliding of the cables inside the tube.





Double-walled tubes can be coupled using claw couplings of specific diameters.

Compression and impact resistance classes:

EXTRO Sub light: Class L, 450 N. These general-purpose tubes are tough, compression resistant enough to be buried in sand trenches and good flexibility makes them easy to handle. They are recommended for most applications.
EXTRO Sub hard: Class N, 750 N. Tubes in this class are particularly resistant to compression and impact. These properties recommend them for installation under concrete slabs, roads, passing under buildings and other applications, where the forces that may occur during installation and use are special and a subsequent repair can be very expensive.
The L, 750 N and N, 450 N classes can be produced and delivered upon request on a firm order. The technical sheet on the back is complete, the EXTRO Sub light and hard classes being highlighted in green.

For more information visit www.extro.ro

Compatibility with other EXTRO products:

EXTRO Sub double wall tubes are perfectly compatible with the rest of the EXTRO range. Thus, the EXTRO Sub tubes can be used together with the EXTRO seals to ensure an entry as protected as possible in a distribution panel, for example. Similarly, the couplers supplied with the EXTRO Sub tubes, which can also be purchased separately, can be used to connect the underground route with EXTRO Sub to the surface or indoor route protected with EXTRO Flex single wall tubes.

EXTRO Sub tube with EXTRO seal

Technical data:

Type		Art. Nr.	Description	Diameter	Exterior Diameter (mm)	Interior Diameter (mm)	Compression Resistance	Impact Resistance
EXTRO Sub L	450N	21102040	Corrugated tube with double walls 450N, D40, HF, UV resistant, with wire and coupler	D40	40 +0,5/-0,5	31,5 +0,5/-0,5	450 N	3 J
		21102050	Corrugated tube with double walls 450N, D50, HF, UV resistant, with wire and coupler	D50	50 +0,5/-0,5	39,5 +0,5/-0,5	450 N	3 J
	750N	22102040	Corrugated tube with double walls 750N, D40, HF, UV resistant, with wire and coupler	D40	40 +0,5/-0,5	31 +0,5/-0,5	750 N	3 J
		22102050	Corrugated tube with double walls 750N, D50, HF, UV resistant, with wire and coupler	D50	50 +0,5/-0,5	39 +0,5/-0,5	750 N	3 J
EXTRO Sub N	450N	21102040	Corrugated tube with double walls 450N, D40, HF, UV resistant, with wire and coupler	D40	40 +0,5/-0,5	31,2 +0,5/-0,5	450 N	15 J
		21102050	Corrugated tube with double walls 450N, D50, HF, UV resistant, with wire and coupler	D50	50 +0,5/-0,5	38,7 +0,5/-0,5	450 N	15 J
	750N	22102040	Corrugated tube with double walls 750N, D40, HF, UV resistant, with wire and coupler	D40	40 +0,5/-0,5	30,8 +0,5/-0,5	750 N	15 J
		22102050	Corrugated tube with double walls 750N, D50, HF, UV resistant, with wire and coupler	D50	50 +0,5/-0,5	38,3 +0,5/-0,5	750 N	15 J

Installation instructions in the ground:

EXTRO Sub double wall corrugated tubes will join with claw couplings without any welding required. As the tubes are flexible, it is not necessary to use bends at certain angles. The joining of the tubes will be done by pushing. The ends of the tubes must be cut with the help of sharp blades perpendicular to the axis of the tube in such a way that the flanks of the waves of the outer tube are not damaged. Careful! The quality of the joint essentially depends on the accuracy with which the cut is made. The tubes will be inserted until they reach the stop inside the coupling. Burying the tubes in the ground will be done in trenches below the frost limit specific to the area, usually around 80 cm. The total depth of the trench must be at least 20 centimeters greater. First, a base layer of 1 mm clean sand, well compacted, is placed. Place the tube or tubes on this lower bed in such a way that they do not overlap and do not touch each other, to allow the filling material to enter. It must also be made of sand and not contain boulders; concrete remains or other hard materials that can damage the tubes. The support material will be placed in successive layers until the tubes are covered by at least 10 cm. The rest of the trench will be filled with the earth from the excavation, but without boulders or plant debris, in layers of no more than 15 cm well compacted.