

# Developed by specialists in Germany specifically for both indoor and outdoor construction markets.

EXTRO FLEX® flexible protection tubes stand out with a particularly robust profile, resistant to mechanical stress according to specific standards, but also flexible enough to be easy to install. The material used, a complex of high-density polyethylene (HDPE) base gives it great flexibility even at low temperatures, for a good maneuverability on site, and at the same time ensures the preservation of all properties in the very long term, up to 50 years. EXTRO FLEX® products are ideal for the protection of electrical cables and data networks in residential buildings, industrial and public schools, administrative buildings, malls, cinemas, etc. Doesn't propagate the flame. For special applications, we offer the entire range in the VO - fireproof version with self-extinguishing properties.

#### **Products**

EXTROFLEX® Light	Extremely flexible tubes with mechanical resistance adequate for installations in vertical walls.
EXTRO FLEX®	Standard tubes, with good mechanical resistance for networks buried under plaster or under a light screed.
EXTRO FLEX® dur	Increased resistance to static and dynamic stresses, such as overlapping weights, traffic with step or wheelbarrow, recommends the tubes in this range for works complexes on large construction sites, with a lot of traffic and teams from various fields.
EXTRO FLEX® Xdur	Extremely durable, the tubes in this range can be used in stressful situations extreme or when a subsequent repair would be extremely expensive.

### The main advantages offered by our products

#### 1. Halogen Free - HF

Does not eliminate toxic gases in case of fire. In the case of standard halogenated plastic tubes (ex. PVC), chlorine released in case of fire reacts with the humidity of the air or water used to extinguish and produces acid Hydrochloride, which is particularly harmful and can lead to serious accidents. Such plastics are not used in EXTRO range.

#### 2. No damage when exposed to sunlight (UV resistent)

The used material is UV stabilized, this guaranteeing a virtually unlimited resistance to ultraviolet rays in the sunlight spectrum, without losing its flexibility and mechanical properties over time.

#### 3. Very good flexibility even in very low temperature conditions

In case of execution of works at low temperatures, the natural ductility of the raw material used ensures the products EXTRO FLEX® a much superior flexibility to other plastic products, which become brittle, an effect that can lead to difficulties during handling on site or even to cable damage.

#### 4. Standard products do not spread combustion and no not emit black smoke

Once ignited during a fire, the material used has self-extinguishing properties and does not propagate combustion.

Even lit, the smoke emitted by the material used is neither black nor drowning.

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# **EXTRO FLEX® Light**

Туре	Article Nr.	Option	Exterior Diameter (mm)	Interior Diameter (mm)	Coil size (m)	Pallet size (m)
9	10101009	Without Wire	09 +0/-0,5	$7,1 \pm 0,3$	100	18000
11	10101011	Without Wire	11 +0/-0,5	8,4 ± 0,3	50	9000
11	10102011	With Wire	11 +0/-0,5	0,4 ± 0,5	50	3000
13	10101013	Without Wire	13 +0/-0,5	10,3 ± 0,3	50	6000
15	10102013	With Wire	13 +0/-0,3			
16	10101016	Without Wire	16 +0/-0,5	11,8 ± 0,3	50	5500
10	10102016	With Wire	10 +0/-0,3			
20	10101020	Without Wire	20 +0/-0,5	14,9 ± 0,3	50	3750
20	10102020	With Wire				
25	10101025	Without Wire	25 +0/-0,5	19,5 ± 0,4	50	2600
23	10102025	With Wire	23 +0/-0,3	19,5 ± 0,4	30	2000
32	10101032	Without Wire	32 +0/-0,5	25,4 ± 0,4	50	1600
32	10102032	With Wire		23,4 ± 0,4	30	1000
40	10101040	Without Wire	/O . O E / O E	32,2 ± 0,3	50	1600
40	10102040	With Wire	40 +0,5/-0,5	32,2 ± 0,3	30	1000
50	10101050	Without Wire	50 +0,5/-0,5	40,1 ± 0,3	25	800
50	10102050	With Wire				

Properties		
Compression resistan	ce	<320N
Impact resistance		3J
Minimum temperatur	e	-40 °C
Maximum temperatu	re	+105 °C
Bending resistance		Flexible
Electrical characterist	ics	Insulator
Burning properties	Doesn't prop	agate flame
HF (halogen free)	No toxic smoke or combus	tion propagated
UV resistance: 50 years	Very good flexibility	



### **EXTRO FLEX®**

Туре	Article Nr.	Option	Exterior Diameter (mm)	Interior Diameter (mm)	Coil size (m)	Pallet size (m)
9	11101009	Without Wire	09 +0/-0,5	7,1 ± 0,3	100	18000
11	11101011	Without Wire	11 .0/05	02+02	50	
11	11102011	With Wire	11 +0/-0,5	8,2 ± 0,3	50	9000
13	11101013	Without Wire	13 +0/-0,5	06103	50	6000
13	11102013	With Wire	13 +0/-0,3	$9,6 \pm 0,3$		
16	11101016	Without Wire	16 +0/-0,5	11,2 ± 0,3	50	5500
16	11102016	With Wire				
20	11101020	Without Wire	20 +0/-0,5	14,2 ± 0,3	50	3750
20	11102020	With Wire	20 +0/-0,3			
25	11101025	Without Wire	25 +0/-0,5	18,8 ± 0,4	50	2600
25	11102025	With Wire	23 +0/-0,3			
32	11101032	Without Wire	32 +0/-0,5	25 ± 0,4	50	1600
32	11102032	With Wire	32 TU/-U,3	23 ± 0,4	30	1000
40	11101040	Without Wire	40 +0,5/-0,5	31,5 ± 0,3	50	1600
40	11102040	With Wire	-+U +U,J/-U,J	J1,J ± 0,3	30	1000
50	11101050	Without Wire	50 +0,5/-0,5	39,7 ± 0,3	25	800
	11102050	With Wire	C'0-/C'0+ OC			

Properties	
Compression resistar	nce 320N
Impact resistance	6J
Minimum temperatu	re -40 °C
Maximum temperatu	re +105 ℃
Bending resistance	Flexible
Electrical characteris	tics Insulator
Burning properties	Doesn't propagate flame
HF (halogen free)	No toxic smoke or combustion propagated
UV resistance: 50 years	Very good flexibility

## **EXTRO FLEX® dur**

Туре	Article Nr.	Option	Exterior Diameter (mm)	Interior Diameter (mm)	Coil size (m)	Pallet size (m)
9	12101009	Without Wire	09 +0/-0,5	7,1 ± 0,3	100	18000
11	12101011	Without Wire	11 +0/-0,5	7,9 ± 0,3	50	9000
11	12102011	With Wire	11+0/-0,3	7,9 ± 0,3	30	9000
13	12101013	Without Wire	13 +0/-0,5	9,3 ± 0,3	50	6000
15	12102013	With Wire	13 +0/-0,3	9,3 ± 0,3	50	
16	12101016	Without Wire	16 .0/05	10,9 ± 0,3	50	5500
10	12102016	With Wire	16 +0/-0,5			
20	12101020	Without Wire	20 .0/05	13,9 ± 0,3	50	3750
20	12102020	With Wire	20 +0/-0,5			
25	12101025	Without Wire	25 +0/-0,5	18,4 ± 0,4	50	2600
23	12102025	With Wire	23 +0/-0,3			
32	12101032	Without Wire	22 .0/05	24,6 ± 0,4	50	1600
32	12102032	With Wire	32 +0/-0,5			
40	12101040	Without Wire	10.05/05	245102	50	1600
40	12102040	With Wire	40 +0,5/-0,5	31,5 ± 0,3	30	1600
50	12101050	Without Wire	50 +0,5/-0,5	39,3 ± 0,3	25	800
30	12102050	With Wire				

rce 750N
6J
re -40 °C
re +105 °C
Flexible
tics Insulator
Doesn't propagate flame
No toxic smoke or combustion propagated
Very good flexibility

# **EXTRO FLEX® Xdur**

Туре	Article Nr.	Option	Exterior Diameter (mm)	Interior Diameter (mm)	Coil size (m)	Pallet size (m)
9	13101009	Without Wire	09 +0/-0,5	7,1 ± 0,3	100	18000
11	13101011	Without Wire	11 +0/-0,5	7,6 ± 0,3	50	9000
11	13102011	With Wire	11 +0/-0,3	7,0 ± 0,3	30	9000
13	13101013	Without Wire	13 +0/-0.5	9,3 ± 0,3	50	6000
13	13102013	With Wire	13 +0/-0,3			
16	13101016	Without Wire	16 +0/-0,5	10,5 ± 0,3	50	5500
10	13102016	With Wire	10 +0/-0,3			
20	13101020	Without Wire	20 +0/-0,5	13,5 ± 0,3	50	3750
20	13102020	With Wire	20 +0/-0,3			
25	13101025	Without Wire	25 +0/-0.5	18.0 ± 0.4	50	2600
23	13102025	With Wire	25 +0/-0,5	10,0 ± 0,4	50	2000
32	13101032	Without Wire	22 10/05	24,1 ± 0,4	50	1600
32	13102032	With Wire	32 +0/-0,5	24,1 ± 0,4	30	1000
40	13101040	Without Wire	40 +0,5/-0,5	31,2 ± 0,3	50	1600
40	13102040	With Wire				
50	13101050	Without Wire	50 +0,5/-0,5	38,9 ± 0,3	25	800
	13102050	With Wire				

Properties	
Compression resistan	nce 1250N
Impact resistance	6J
Minimum temperatur	re -40 ℃
Maximum temperatu	re +105 ℃
Bending resistance	Flexible
Electrical characteris	tics Insulator
Burning properties	Doesn't propagate flame
HF (halogen free)	No toxic smoke or combustion propagated
UV resistance: 50 years	Very good flexibility

Standards: N61386-1, EN61386-22, EN50642