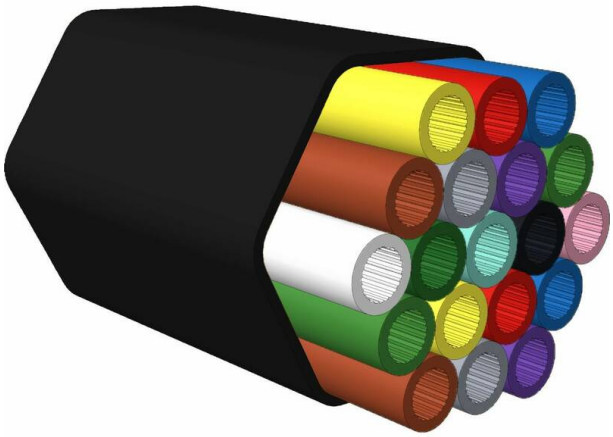
Excel Enbeam 19 Way External 5/3.5 mm Blowing Tube Black

Item Code: 208-828



- Duct-installable
- PE Sheath
- Available up to 24x5mm bundles
- Crush and Impact Resistant
- RoHS compliant
- 25 Year system warranty

Product Overview

Enbeam Fibre Units are designed specifically for blown-fibre applications and are optimised for installation within our range of blown-fibre tubes. The fibres are contained within a soft acrylate layer which cushions the fibres. This layer is coated with a hard layer for strength and finally a low-friction coating to ensure low drag and maximise blowing distances within the tubes. The acrylate coatings are easy to remove to expose the 250-micron primary-coated fibres for quick splicing. The fibres are colour-coded according to TIA-598-C.

The tubes are easy to terminate and branch-off using suitable Excel connection closures and push-fit connectors. The tubes are supplied on disposable wooden drums and capped at both ends to prevent ingress of moisture or contamination.

Product Specifications

Feature	Values
Suitable for outdoor installation	yes
Outer sheath colour	Black

Additional specifications

Features	Values
Transport and storage temperature range	-40°C to +70°C
Installation temperature range	-10°C to +50°C
Operating temperature range	-40°C to +70°C
Outdoor exposure limit in Central Europe	max. 12 months

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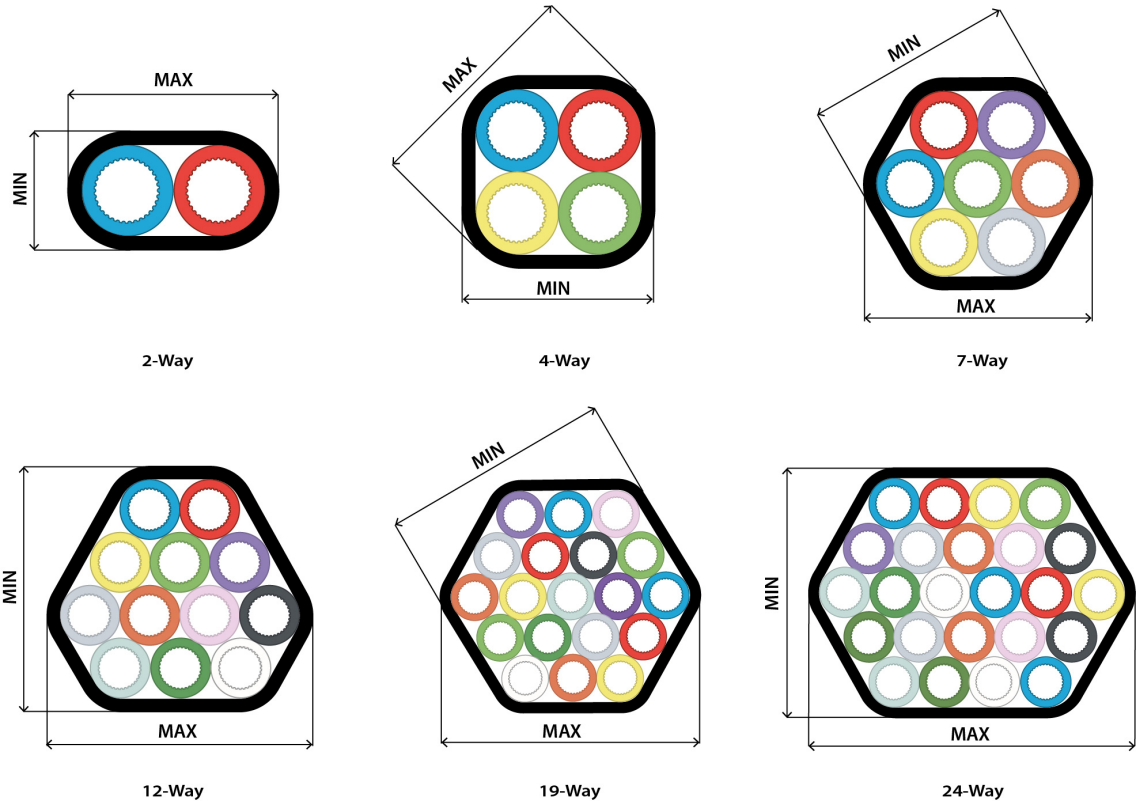
Product drawing



Additional specifications

Features	2x5/3.5	4x5/3.5	7x5/3.5	12x5/3.5	19x5/3.5	24x5/3.5
MAX (mm)	11.5	13.6	16.5	21.5	26.5	31.5
MIN (mm)	6.5	11.5	15.5	20	24	24
Sheath thickness (mm)	0.75	0.75	0.75	0.75	0.75	0.75
Installation tensile force, max	270 N	540 N	945 N	1620 N	2565 N	3240 N
Min. bending radius ⊥ MAX (mm)	65	136	165	200	265	240
Min. bending radius ⊥ MIN (mm)	115	115	N/A	N/A	N/A	315

Weight (kg/km)	36	60	96	160	230	280

Standards

Applicable standard	Detail
EN ISO 291:2008	Plastics – Standard atmospheres for conditioning and testing
EN ISO 2505:2005	Thermoplastics pipes – Longitudinal reversion – Test method
ČSN 010254:1976	Sampling inspection by attributes
EN ISO 1167-1:2006	Thermoplastics pipes, fittings and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure
EN 12201-1:2011	Plastics piping systems for water supply, and for drainage and sewerage under pressure – PE
EN 12201-2:2011+A1:2013	Plastics piping systems for water supply, and for drainage and sewerage under pressure – Polyethylene (PE) – Part 2: Pipes
EN ISO 3127:2017	Plastics piping and ducting systems – Thermoplastics pipes – Test method for resistance to external blows by the round-the-clock method
IEC 60 794-1-1:2015	Optical fibre cables – Part 1-1: Generic specification – General
IEC 60 794-1-2:2017	Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures – General guidance
IEC 60794-1-21:2015+AMD1:2020	Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical tests methods
IEC 60 794-1-22:2017	Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental tests methods
IEC 60 794-1-23:2019	Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods
EN IEC 60 794-1-24:2014	Optical fibre cables – Part 1-24: Generic specification – Basic optical cable test procedures – Electrical test methods
IEC 60 794-2:2017	Optical fibre cables – Part 2: Indoor cables – Sectional specification
ASTM D 1894-14	Standard Test Method for Static and Kinetic Coefficient of

	Friction of Plastic Film and Sheeting
ASTM D2122-16	Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
EN 13501-1:2018	Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests
ISO 6259-1,2,3:1997-2015	Thermoplastic pipes – Determination of tensile properties
ISO 3126:2005	Plastics piping systems – Plastics components – Determination of dimensions
ISO 527-1:2019	Plastics – determination of tensile properties – Part 1: General principles
ISO 1133-1:2011	Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics
EN 61386-24:2010	Conduit systems for cable management – Part 24: Particular requirements – Conduit systems buried underground.
ISO 1183-1:2019	Plastics – Methods for determining the density of non-cellular plastics – Part 1: Immersion method, liquid pycnometer method and titration method
ISO 1183-2:2019	Part 2: Density gradient column method
ISO 6964:2019	Polyolefin pipes and fittings – Determination of carbon black content by calcination and pyrolysis – Test method
ISO 18553:2002+Amd 1:2007	Method for the assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds
ISO 9969:2016	Thermoplastics pipes – Determination of ring stiffness
EN ISO 13263:2017	Thermoplastics piping systems for non-pressure underground drainage and sewerage – Thermoplastics fittings – Test method for impact strength
IEC 60304:1982	Color code
ASTM D 1693:2015	Standard Test Method for Environmental Stress Cracking of Ethylene Plastics
ISO 11357-6:2018	Plastics – Differential scanning calorimetry (DSC) – Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT)
ČSN EN ISO 899-2:2003/A1:2015	Plastics – Determination of creep behavior – Part 2: Flexural creep by three-point loading – Amendment 1
IEC 60 794-3-20:2016	Optical fibre cables – Part 3-20: Outdoor cables – Family specification for self-supporting aerial telecommunication cables
IEC 60794-4:2018	Optical fibre cables – Part 4: Sectional specification – Aerial optical cables along electrical power lines

IEC 60 794-5:2014	Optical fibre cables – Sectional specification – Microduct cabling for installation by blowing
RoHS-II/-III (2011/65/EU & 2015/863): 2023	Our products, demonstrate full adherence to the regulatory stipulations of the EU Directive 2011/65/EU (RoHS-II) and its corresponding delegated directive 2015/863 (RoHS-III).
WFD: 2023	Compliant to Waste Framework Directive
SCIP: 2023	Compliant - Does Not Contain Substances of Concern In articles as such or in complex objects (Products)
POPs (EU) No 2019/1021	EU Regulation for the restriction of Persistent Organic Pollutants.

Part Number Table

Part Number	Description
208-800	Excel Enbeam 2 Way External 5/3.5 mm Blowing Tube Black
208-801	Excel Enbeam 4 Way External 5/3.5 mm Blowing Tube Black
208-802	Excel Enbeam 7 Way External 5/3.5 mm Blowing Tube Black
208-803	Excel Enbeam 12 Way External 5/3.5 mm Blowing Tube Black
208-804	Excel Enbeam 24 Way External 5/3.5 mm Blowing Tube Black
208-828	Excel Enbeam 19 Way External 5/3.5 mm Blowing Tube Black