

# Microduct Assembly 5/3.5 mm Indoor – Standard Grade

FRD 5/3.5 mm 1-24 -way SG, StdE

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## Features

- For indoor installation
- 5/3.5 mm microducts
- Halogen-free, flame-retardant, standard grade
- 1, 4, 7, 12 or 24 over-sheathed ducts
- Low friction inner surface for maximum installation lengths

## Application

This series of duct assemblies consist of ultra slim microducts made of halogen free, flame retardant material. The slim design enables installation virtually in any existing risers in Multi Dwelling Units. The assemblies consist of a number of Microducts with an inner low friction, antistatic surface that enables installation of air blown fibers.

## Design

The duct assemblies are available in several versions from 1 to 24 microducts . Each microduct has an outer/inner diameter of 5/3.5 mm. The outer sheath is made of halogen-free, flame-retardant polymer. One unsheathed single duct version for minimal cross section is available for installation in existing external protective microducts or sheaths.

## Product Information



**Microducts and sheath:** Halogen-free, flame-retardant polyolefin

## Technical Information

<b>Color Code</b>	S12
<b>Temperature, Operation [°C]</b>	-20 to +60
<b>Temperature, Storage [°C]</b>	-20 to +60
<b>Temperature, Installation [°C]</b>	-20 to +50
<b>Conformance</b>	<p><b>Abrasion:</b> IEC 60794-1-2-E2B(1)</p> <p><b>Kink:</b> IEC 60794-1-2-E10, 20 x outer diameter</p> <p><b>Impact:</b> IEC 60794-1-2-E4</p> <p><b>Crush:</b> IEC 60794-1-2-E3</p> <p><b>Tensile:</b> IEC 60794-1-2-E</p> <p><b>Bend:</b> IEC 60794-1-2-E11A</p> <p><b>Torsion:</b> IEC 60794-1-2-E</p> <p><b>Flexibility:</b> IEC 60794-1-2-E8</p> <p><b>Inner Clearance:</b> IEC 60794-5-20, IEC 60794-5-10, Ann. D</p> <p><b>Flammability:</b> IEC60332-1</p>

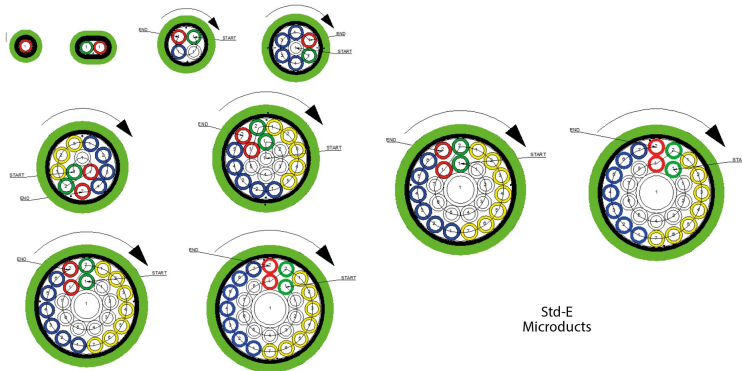
**Marking**

Duct assemblies have markings showing the tube length. The individual microducts are numbered as well as color coded according to the StdE reference.

**Installation Notes**

Flammability according to IEC60332-1 refers to sheathed empty ducts and sheathed ducts installed with typical versions of Hexatronic blown fiber units. Unsheathed 1-duct is not flame retardant and shall be installed in flame retardant cable channel.

**Technical Details**



StdE Color Code Chart for Microduct Assemblies

**Articles 12**

Article name	Color	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Crush [N/100 mm]	Impact [J]	Dimensions [mm]	Weight [kg/km]	Length [m]
<b>Microduct 1x5/3.5 ID Std Grade</b> MPB30251/1	White	1x5/3.5	–	–	–	–	8	36	500/K5, 1000/K6, 2000/K8, 4000/K10
<b>Microduct 1x5/3.5 ID Std Grade 500 m</b> MPB30251/1-2	White	1x5/3.5	–	–	–	–	8	36	500/K5
<b>Microduct 2x5/3.5 ID Std Grade</b> MPB30209/2	White	2x5/3.5	150	300	900	2	7.2 × 12.2	95	2000/K10, 4000/K14, 1000/K8, 500/K6
<b>Microduct 2x5/3.5 ID Std Grade 500 m</b> MPB30209/2-2	White	2x5/3.5	150	300	900	2	7.2 × 12.2	95	500/K6

Article name	Color	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Crush [N/100 mm]	Impact [J]	Dimensions [mm]	Weight [kg/km]	Length [m]
<b>Microduct 4x5/3.5 ID Std Grade</b> MPB30209/4	White	4x5/3.5	150	400	1500	5	12.2 × 12.2	120	4000/K14, 2000/K11, 1000/K9, 500/K7
<b>Microduct 4x5/3.5 ID Std Grade 500 m</b> MPB30209/4-2	White	4x5/3.5	150	400	1500	5	12.2 × 12.2	120	500/K7
<b>Microduct 7x5/3.5 ID Std Grade</b> MPB30209/7	White	7x5/3.5	220	600	1500	10	17.2	165	1000/K11, 2000/K14, 500/K9
<b>Microduct 7x5/3.5 ID Std Grade 500 m</b> MPB30209/7-2	White	7x5/3.5	220	600	1500	10	17.2	165	500/K9
<b>Microduct 12x5/3.5 ID Std Grade</b> MPB30209/12	White	12x5/3.5	300	950	1500	10	22.9	250	1000/K12, 2000/K18, 500/K10
<b>Microduct 12x5/3.5 ID Std Grade 500 m</b> MPB30209/12-2	White	12x5/3.5	300	950	1500	10	22.9	250	500/K11
<b>Microduct 19x5/3.5 ID Std Grade</b> MPB30209/19	White	19x5/3.5	350	1300	1500	10	26.9	340	1000/K14, 2000/K20, 500/K11
<b>Microduct 1x10/8+24x5/3,5 ID Std Gr</b> MPB30209/24	White	1x10/8+24x5/3,5	5500	1800	4000	10	32.5	490	500/K14, 1000/K18, 2000/K24