



# Microduct Assembly 5/3.5 mm with Tracer

TPD 5/3.5 mm 1-26 -way Tr, TIA598

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## Features

- For installation in existing ducts
- 1, 2, 4, 7, 12, 19, 24 or 26 over-sheathed ducts
- 5/3.5 mm microducts
- Low friction inner surface for maximum installation lengths
- Excellent environmental properties
- Integrated tracer wire under sheath

## Application

The tight protected duct assemblies consist of a number of microducts with an inner low friction, antistatic surface that enables installation of air blown fiber. The duct assemblies are bundled with a single HDPE sheath depending on configuration. The design makes the duct assemblies especially suitable for installation into narrow existing ducts (pipes) or pipes occupied with cables or other obstacles. The round structure enables easy splicing and sealing at joints and branch locations. The microducts are optimized for best performance in combination with the Hexatronic Stingray Air Blown Fibers and Hexatronic Raptor Nano Cables.

The integrated tracer wire saves time and installation cost since an additional wire for tracing is not required.

## Design

The duct assemblies are available in several versions with 1 to 26 microducts.

Each microduct has an outer/inner diameter of 5/3.5 mm. These are suitable for installation of air blown fibers. The center duct of 24 and 26-way assemblies is 10/8 resp. 12/10 mm and can be used for blowing in a micro cable.

## Product Information

Microducts and outer sheath: HDPE

Tracer Wire

**Single ducts:** 24 AWG (0.2 mm<sup>2</sup>)

**Microduct assemblies:** 18 AWG (0.8 mm<sup>2</sup>)

**Material:** Isolated, stranded copper

## Technical Information

<b>Color Code</b>	TIA598
<b>Temperature, Operation [°C]</b>	-40 to +60
<b>Temperature, Storage [°C]</b>	-40 to +60
<b>Temperature, Installation [°C]</b>	-20 to +50

**Conformance**

- Abrasion:** IEC 60794-1-2-E2B(1)
- Kink:** IEC 60794-1-2-E10, 20 x outer diameter
- Impact:** IEC 60794-1-2-E4
- Crush:** IEC 60794-1-2-E3
- Tensile:** IEC 60794-1-2-E
- Bend:** IEC 60794-1-2-E11A
- Torsion:** IEC 60794-1-2-E
- Flexibility:** IEC 60794-1-2-E8
- Inner Clearance:** IEC 60794-5-20, IEC 60794-5-10, Ann. D

**Marking**

Duct assemblies have markings showing the tube length.  
 The individual microducts are numbered and also identified by their color and position in the bundle according to the TIA598 standard.  
 The assemblies are available in various sheath colors for easy identification.

**Technical Details**

TIA-598 Microducts 1-12	1	2	3	4	5	6	7	8	9	10	11	12	
	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua	
	TIA-598 Microducts 1-24	1	2	3	4	5	6	7	8	9	10	11	12
		Blue 1	Orange 1	Green 1	Brown 1	Slate 1	White 1	Red 1	Black 1	Yellow 1	Violet 1	Rose 1	Aqua 1
		13	14	15	16	17	18	19	20	21	22	23	24
		Blue 2	Orange 2	Green 2	Brown 2	Slate 2	White 2	Red 2	Black 2	Yellow 2	Violet 2	Rose 2	Aqua 2

## Articles 28

Article name	Color	Layout	Bend Radius [mm]	Tensile Force [N]	Crush [N/100 mm]	Impact [J]	Dimensions [mm]	Weight [kg/km]	Length [m]
<b>Microduct 1x5/3.5 DI TIA Tr</b> MPB302451UV	Black	1x5/3.5	120	150	450	3	7.4	34	2000/K8, 1000/K6, 500/K5
<b>Microduct 1x5/3.5 DI TIA Tr 1640ft</b> MPB302451UV6	Black	1x5/3.5	120	150	450	3	7.4	34	500/K5
<b>Microduct 1x5/3.5 DI TIA Tr 3280ft</b> MPB302451UV7	Black	1x5/3.5	120	150	450	3	7.4	34	1000/K6
<b>Microduct 1x5/3.5 DI TIA Tr 6560ft</b> MPB302451UV8	Black	1x5/3.5	120	150	450	3	7.4	34	2000/K8
<b>Microduct 2x5/3.5 DI TIA Tr</b> MPB302452UV	Black	2x5/3.5	170	250	1000	3	–	95	2000/K9, 1000/K7, 500/K6
<b>Microduct 2x5/3.5 DI TIA Tr 1640ft</b> MPB302452UV6	Black	2x5/3.5	170	250	1000	3	–	56	500/K6
<b>Microduct 2x5/3.5 DI TIA Tr 3280ft</b> MPB302452UV7	Black	2x5/3.5	170	250	1000	3	–	56	1000/K7
<b>Microduct 2x5/3.5 DI TIA Tr 6560ft</b> MPB302452UV8	Black	2x5/3.5	170	250	1000	3	–	56	2000/K9
<b>Microduct 4x5/3.5 DI TIA Tr</b> MPB302454UV	Black	4x5/3.5	190	400	1000	3	14.9	112	2000/K14, 1000/K11, 500/K9
<b>Microduct 4x5/3.5 DI TIA Tr 1640ft</b> MPB302454UV6	Black	4x5/3.5	190	400	1000	3	14.9	112	500/K9
<b>Microduct 4x5/3.5 DI TIA Tr 3280ft</b> MPB302454UV7	Black	4x5/3.5	190	400	1000	3	14.9	112	1000/K10
<b>Microduct 4x5/3.5 DI TIA Tr 6560ft</b> MPB302454UV8	Black	4x5/3.5	190	400	1000	3	14.9	112	2000/K14
<b>Microduct 7x5/3.5 DI TIA Tr</b> MPB302457UV	Black	7x5/3.5	220	600	1000	3	18.2	159	2000/K16, 1000/K12, 500/K10
<b>Microduct 7x5/3.5 DI TIA Tr 1640 ft</b> MPB302457UV6	Black	7x5/3.5	220	600	1000	3	18.2	159	500/K10
<b>Microduct 7x5/3.5 DI TIA Tr 3280 ft</b> MPB302457UV7	Black	7x5/3.5	220	600	1000	3	18.2	159	1000/K12
<b>Microduct 7x5/3.5 DI TIA Tr 6560 ft</b> MPB302457UV8	Black	7x5/3.5	220	600	1000	3	18.2	159	2000/K16
<b>Microduct 12x5/3.5 DI TIA Tr</b> MPB3024512UV	Black	12x5/3.5	290	1000	1000	3	23.1	240	2000/K20, 1000/K14, 500/K12
<b>Microduct12x5/3.5 DI TIA Tr 1640 ft</b> MPB3024512UV6	Black	12x5/3.5	290	1000	1000	3	23.1	240	500/K12
<b>Microduct12x5/3.5 DI TIA Tr 3280 ft</b> MPB3024512UV7	Black	12x5/3.5	290	1000	1000	3	23.1	240	1000/K14

Article name	Color	Layout	Bend Radius [mm]	Tensile Force [N]	Crush [N/100 mm]	Impact [J]	Dimensions [mm]	Weight [kg/km]	Length [m]
<b>Microduct 12x5/3.5 DI TIA Tr 6560 ft</b> MPB3024512UV8	Black	12x5/3.5	290	1000	1000	3	23.1	240	2000/K20
<b>Microduct 19x5/3.5 DI TIA Tr</b> MPB3024519UV	Black	19x5/3.5	320	1700	1000	3	27.5	332	2000/K22, 1000/K16, 500/K12
<b>Microduct 19x5/3.5 DI TIA Tr 1640 ft</b> MPB3024519UV6	Black	19x5/3.5	320	1700	1000	3	27.5	332	500/K12
<b>Microduct 19x5/3.5 DI TIA Tr 3280 ft</b> MPB3024519UV7	Black	19x5/3.5	320	1700	1000	3	27.5	332	1000/K16
<b>Microduct 19x5/3.5 DI TIA Tr 6560 ft</b> MPB3024519UV8	Black	19x5/3.5	320	1700	1000	3	27.5	332	2000/K22
<b>Microduct 1x10/8+24x5/3.5 DI TIA Tr</b> MPB3024524UV	Black	1x10/ 8+24x5/3.5	380	2100	1000	3	33	466	2000/K24, 1000/K20, 500/K14
<b>Microduct 24x5/3.5 DI TIA Tr 1640 ft</b> MPB3024524UV6	Black	24x5/3.5	380	2100	1000	3	33	466	500/K14
<b>Microduct 24x5/3.5 DI TIA Tr 3280 ft</b> MPB3024524UV7	Black	24x5/3.5	380	2100	1000	3	33	466	1000/K20
<b>Microduct 24x5/3.5 DI TIA Tr 6560 ft</b> MPB3024524UV8	Black	24x5/3.5	380	2100	1000	3	33	466	2000/K24