

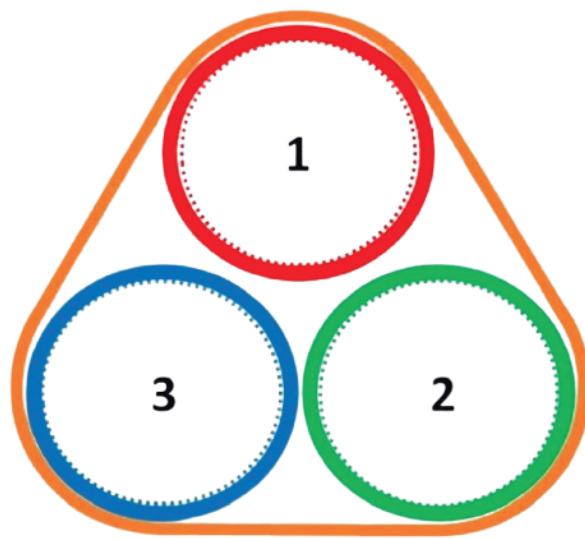


## Micro Duct 3 Way 14.0 x 10.0MM

AR-MDUCT-TR-3X14.0X10.0

## ① Product Description

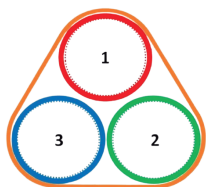
For micro-trenching with narrow width, AR-MDUCT-TR-3\*14.0\*10.0 is the most optimized item. The product itself can be placed vertically to fit on micro-trenching. The size of the product is relatively small which allows better shipping and handling with the smaller reel size. Since Flat Duct has the same thickness of TWD(Thick Wa-lled Duct), customers can enjoy the same benefits of TWD).



## ② Optional Features

- Wide range of number of inner tube from 1 way to 24+1 way Ribbed & Smooth Type
- Rip cords
- Insulated Locatable copper wire

### 3 Materials



Test	Characteristic	Test Method	Acceptance Criteria
1	Bundles is manufactured with 100% virgin HDPE		
2	Melt flow index	ASTM 1238 190° @ 2.16KG Load	≤ 0.40 g/10min
3			
4	Density	ASTM D792	0.940~0.958 g/cm <sup>3</sup>
	Environmental stress crack resist (F50)	ISO4599	Min. 96h

### Dimensions

	Test	Micro tube Multi
Outside diameter	14.0 -14.3 mm	29.4 mm (nominal)
Inside diameter	10.0 – 10.3 mm	
Thickness	2.0 mm	0.7mm

### Product Properties

Material	PE-HD
Color	3x14/10 mm –date time meter batch line number Take care including light conductor
Marking per meters	Can be with customer-specific text
Standard length	1500 m; drum h 1800 mm w 1120 mm k 800 mm
Design monotube	Smooth on the outside, grooved on the inside.
Inner Reduction Friction	Inner surface with low friction silicone treatment plus micro stretch marks.

### Material Properties for Monotube

Density	γ 0.935 kg/m <sup>3</sup>
MFI (190°C, 5 kg)	0.1 to 1.4 g/10 min
Linear expansion	0.2 mm/m*K
Shore hardness	~ 55 Shore-D

### 3 Mechanical Characteristics

#### Mechanical Properties

Bending	10 x the outside diameter of the pipe
<b>Temperatures</b>	
Transport/Storage	-10 °C to 50 °C
Installation Microduct	-10 °C to 50 °C
Installation Cables/Fibers	-5 °C to 35 °C
Weight multi-tube calculated	0.272 kg/m
Ovality (During Production)	Max. 0.3 mm
Max. Pressure	16 bars
Refractive Radius	< 10x external diameter of the pipe
Pressure Strength	> 1000 N/dm
UV-Resilience	> 2 years (Central European climate)
Linear Expansión	0.2 mm/m*k
Heat Treatment	Change in length ≤ 3 %

#### Mechanical Performance Test Compliance

Bend	IEC 60794-1-21 E11
Click	IEC 60794-1-21 E10
Impact Test	IEC 60794-1-21 E4
Crush	IEC 60794-1-21 E3
Torsion Test	IEC 60794-1-21 E7

#### Code Color

Color	RAL/PMS
Zinc Yellow	RAL 1018
Pastel Orange	RAL 2003
Red	RAL 3000
Pink	RAL 4003
Violet	RAL 4006
Blue	RAL 5010
Light green	RAL 6027
Dark Green	RAL 6001
Brown	RAL 8015
Silver Grey	RAL 7001
White	RAL 9010
Black	RAL 9011

## ④ Internationally Certified

ARTIC has met and maintains the rigorous standards required to become a Certified ISO 9001, ISO 14001 and TL9000 manufacturer. ARTIC microduct assemblies has been rigorously tested by Telcordia Technologies and found to be compliant to Telcordia GR-3155- CORE.

DIN EN ISO 9001 (quality management),  
DIN EN ISO 14001 (environmental management)  
DIN EN ISO 50001 (energy management)

CERTIFICATE SZK Testing GmbH

## ⑤ Packaging and Drum

### MICRODUCT LENGTH

Standard microduct length: 1700 m/reel, other length is also available.

### REEL SIZE

Reel dimensions are 140x113x75 cm