



Product description

The Anatolia Series of multi ducts bundles of thick-walled microducts at different Inner and outer diameters made of PE, each with superior blowing characteristics to assure the best blowing performance are designed for direct burying. Each bundle is surrounded with a flexible sheath of outdoor grade, UV resistant PE. Each individual mini-duct and the bundles are designed for burial in suitably prepared ground.

Without the need for a protective duct, the Anatolia microducts can be branched off easily by using a simple direct buried connector. No complex tube closure is needed

The special other sheath is primarily to hold the bundle together, the mini-ducts themselves having excellent physical resistance to the environment.

Product construction































Product Features

- Robust, having high crush resistance
- Superior characteristics for Anatolia Series of mini cables into microducts, high pressure resistance
- Simple line of connectivity products (direct buried connectors)

Individual Tube Dimensions

	Outer diameter		Inner diameter		Wall thickness		Pressure
Item	Nominal (mm)	Tolerance (mm)	Nominal (mm)	Tolerance (mm)	min (mm)	silicon	(bar)
7/3.5	7	±0.1	3.5	±0.1	1.65		
10/6	10	±0.1	6	±0.1	1.9		
12/8	12	±0.1	8	±0.1	1.9		
12/9.6	12	±0.1	9.6	±0.1	1.1		
12/10	12	±0.1	10	±0.1	1,1		
13/10	13	±0.1	10	±0.1	1.4	0.15	15
14/10	14	±0.1	10	±0.1	1.9		
17/14	17	±0.1	14	±0.1	1.4		
17/13	17	±0.1	13	±0.1	1.9		
16/12	16	±0.1	12	±0.1	1.9		
18/14	18	±0.1	14	±0.1	1.9		
20/16	20	±0.1	16	±0.1	1.9		12
24/20	24	±0.3	20	±0.3	1,7		12
25/20	25	±0.3	20	±0.3	1,7		12



Micro Duct Dimensions

Item	Nom. OD (mm) (W xH)	Sheath Thickness (mm)	Max. Tensile (N)	Weight (kg/km)	min.bend radius (mm)	Crush (N)
			7/3.5mm			
MD 1way	9.	1	500	52	110	2,000
MD 3way	16.0 x 15.1	1	1,250	128	190	2,000
MD 4way	16.0 x 16.0	1	1,580	162	200	2,000
MD 5way	23.0 x 15.1	1	1,910	195	190	2,000
MD 6way	21.1 x 19.5	1	2,240	228	240	2,000
MD 7way	23.0 x 21.1	1	2,520	258	260	2,000
MD 12way	30.0 x 27.2	1	4,060	415	330	2,000
MD 14way	37.0 x 21.1	1	4,750	485	260	2,000
MD 19way	37.0 x 33.3	1	6,140	627	400	2,000
MD 24way	44.0 x 33.3	1	7,610	777	400	2,000
MD 24+1	43.6 x 43.6	1	8,370	855	530	2,00
	<u>, </u>		10/6mm Multi			
MD 1way	12.0	1	790	81	150	2,00
MD 3way	22.0 x 20.7	1	2,010	206	250	2,00
MD 4way	22.0 x 22.0	1	2,580	264	270	2,00
MD 5way	32.0 x 20.7	1	3,130	320	250	2,00
MD 6way	29.4 x 27.0	1	3,660	374	330	2,00
MD 7way	32.0 x 29.3	1	4,170	426	360	2,00
			12/8mm Multi			
MD 1way	14.0	1	970	99	170	2,00
MD 3way	26.0 x 24.4	1	2,480	254	300	2,00
MD 4way	26.0 x 26.0	1	3,180	325	320	2,00
MD 5way	38.0 x 24.4	1	3,870	395	300	2,00
MD 6way	34.8 x 32.0	1	4,530	463	390	2,00
MD 7way	38.0 x 34.8	1	5,160	527	420	2,00
			12/9.6mm Multi			
MD 7+1way	41.3 x 40.6	1	4540	464	490	1,50
	1		12/10 mm Multi			
MD 7 ways	40,2	2	4500	460	490	2000
MD 7 . 4	44.0 40.5		13/10mm Multi	500	500	2.00
MD 7+1way	44.3 x 43.5	1	5510	563	530	2,000

Anatolia Telecom &Advanced Material Technologies R&D LTD .lstanbul Turkey .sales@anatoliacom.com Tel:0090 212 703 3210

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14/10mm Multi									
MD 1way	16.0	1	1,140	117	200	2,000			
MD 3way	30.0 x 28.1	1	2,940	301	340	2,000			
MD 4way	30.0 x 30.0	1	3,780	386	360	2,000			
MD 5way	44.0 x 28.1	1	4,600	470	340	2,000			
MD 6way	40.2 x 37.0	1	5,390	551	450	2,000			
MD 7way	44.0 x 40.2	1	6,150	628	490	2,000			
	16/12mm Multi								
MD 1way	18.0	1	1,320	135	220	2,000			
MD 3way	34.0 x 31.9	1	3,420	349	390	2,000			
MD 4way	34.0 x 34.0	1	4,390	448	410	2,000			
MD 5way	49.98 x 31.86	1	5,340	545	550	2,000			
MD 7way	50.0 x 45.7	1	7,140	729	550	2,000			
MD 6+1way	53.36 x 46.15	1	7,470	763	560	2,000			
	17/13mm Multi								
MD 4way	42.97 x 36.0	1	4,720	482	440	2000			
	18/14mm Multi								
MD 4way	45.46 x 38	1	5,010	512	460	2000			
	20/16mm Multi								
TW 4 way	42,0*42,0	1	5580	570	510	2000			
24/20 mm Multi									
TW 4 way	50,0*50,0	1	6820	696	600	2000			
	25/20 mm Multi								
TW 4 way	52,0*52,0	1	8320	849	600	2000			



Product Benefits

- No damage to the ducting system when laying
- Usable in every environment
- When blowing, the ducts can withstand high pressure equipment and even under difficult circumstances acceptable blowing distances are achieved
- Use less skill labor and requires less time in the field to make connections
 Marking
- The microduct bundled shall be include the following information; (Frequency repeated every 1meter)
- Item(e.g. MD)
- Product spec.(e.g. 7WAY 14/10)
- Manufacturer(e.g. ANATOLIA)
- Manufactured code(e.g. 43ABMMDD) Length marking(e.g. = 0235m =)

 $An atolia\ Telecom\ \& Advanced\ Material\ Technologies\ R\&D\ LTD\ . Is tanbul\ Turkey\ . \\ sales@an atolia com.com\ Tel: 0090\ 212\ 703\ 3210\ An atolia\ Telecom\ Advanced\ Material\ Technologies\ R\&D\ LTD\ . Is tanbul\ Turkey\ . \\ sales@an atolia com.com\ Tel: 0090\ 212\ 703\ 3210\ An atolia\ Telecom\ Advanced\ Material\ Technologies\ R\&D\ LTD\ . Is tanbul\ Turkey\ . \\ sales@an atolia com.com\ Tel: 0090\ 212\ 703\ 3210\ An atolia\ Telecom\ Advanced\ Material\ Technologies\ R\&D\ LTD\ . \\ sales@an atolia com.com\ Tel: 0090\ 212\ 703\ 3210\ An atolia\ Telecom\ Advanced\ Material\ Technologies\ R\&D\ LTD\ . \\ sales@an atolia com.com\ Tel: 0090\ 212\ 703\ 3210\ An atolia\ Telecom\ Advanced\ Material\ Ma$

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Product colour

COLOUR IDENTIFICATION: Outer jacket is Blue

Primary tube clour coding:

	position	1	2	3	4	5	6	7
1 to 7 ways	colour	Natural	Red	Green	Blue	Brown	Violet	Yellow

Test Conditions – Micro duct assembled

Mechanical properties	International standard	Test conditions	Performance
Inner clearance	IEC 60794-5-10 Annex E	Pressure : 12bar Max. Sphere size : 85% of nom. ID	Pass: Pass through the primary tube.
Tensile Strength	IEC 60794-5-10&20	Tube length under tension: >1m Max. Tensile load: 1 x 9.8 x W*[N] Duration of max. load: 10 min *W = mass of 1km of component in kg	Pass: Under visual examination without magnification, There shall be no damage and no reduction of diameter greater than 15%.
Crush	IEC 60794-5-10&20	Sample length: 250mm Load: 2,000N Duration of Max. load: 1 minute Recovery time: 1 hr	Pass: The outer and inner diameter of the microducts shall show, under visual examination without magnification no damage and no reduction of diameter greater than 15%.
Impact	IEC 60794-5-10&20	Striking surface radius: impact: Number of impact: Recovery time: 300mm 5 J 1 hr	Pass: Under visual examination, without magnification, there shall be no damage to the microduct. There shall be no residual deformation greater than 15% of the microduct diameter and no splitting or permanent damage. The imprint of the anvil on the sheath is not considered as mechanical damage.
Kink	IEC 60794-5-10&20	Diameter: ≤ 20 x OD	Pass: The outer and inner diameter of the microduct shall show, under visual examination without magnification no damage and no reduction of diameter greater than 15%.
Bend	IEC 60794-5-10&20	Number of turns: 5 Mandrel diameter: ≤ 24 x OD Number of cycles: 3	Pass: The outer and inner diameter of the microducts shall show, under visual examination without magnification no damage and no reduction of diameter greater than 15%.

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Packing and labeling

Length: 1000 m /1500 m/2000 m as per client choses.(Spesific products may have max drum length out of these)

All products suitably packed in recyclable materials and clearly labeled with Anatolia article number and description.

Product Code	Length/drum(m)	Drum size(H x W)	Gross weight(kg)	Number of Drums in 40'(EA)
TWD20/16-4	1,000	2,030 x 1,100	804	11
TWD20/16-4	1,300	2,230 x 1,100	1,050	10
TWD20/16-4	1,500	2,350 x 1,100	1,154	10
TW 25/20 -4	1000	2370*1150	1010	10 drums in HQ container