

AirWave® Thick Walled Microduct Assemblies

Introduction

AirWave® **THICK WALLED MICRODUCT** is designed for direct burial by having thicker inner tube. It has advantage for easy and fast termination with thin outer sheath. The thickness of each inner tube allows individual tubes to be used direct buried solution. This item is suitable for any construction sites such as open cut, Micro trenching, Mini trenching and HDD.

This product is usually recommended to the site which requires fast and easy sheath cutting during fiber branch off from the FCP.



1way



3way



4way



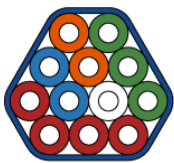
5way



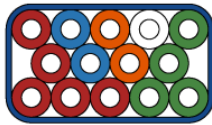
6way



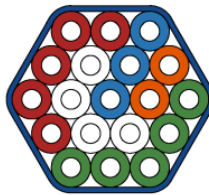
7way



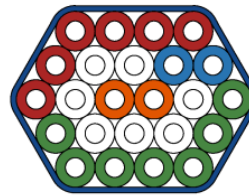
12way



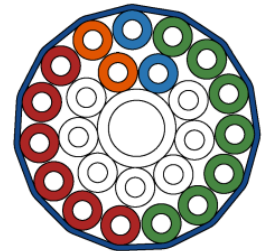
14way



19way



24way



24+1way

All Lenora Microduct has the excellent blowing performance with a silicone coated inner tube.

Optional Features

- Various configurations with different size between 7/3.5mm and 20/16mm
- Wide range of number of inner tubes from 1 way to 24+1 way
- Ribbed & Smooth Type
- Rip cords
- Insulated Locatable copper wire

AirWave® Thick Walled Microduct Assemblies

Primary Tubes Technical Details

Dimension

Item	Outer diameter(mm)		Inner diameter(mm)		Wall thickness(mm)		Pressure (bar/psi)
	Min	Max	Min	Max	Min	silicon	
7/3.5	6.9	7.1	3.4	3.6	1.65	0.1	15/220
10/6	9.9	10.1	5.9	6.1	1.9	0.1	15/220
12/8	11.9	12.1	7.9	8.1	1.9	0.1	15/220
14/10	13.9	14.1	9.9	10.1	1.9	0.1	15/220
16/12	15.9	16.1	11.9	12.1	1.9	0.1	15/220
18/14	17.9	18.1	13.9	14.1	1.9	0.1	15/220
20/16	19.9	20.1	15.9	16.1	1.9	0.1	15/220

Microduct Assemblies Technical details

7/3.5mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	7.0	300	28	90	1,000	2,000	104
1way	9.0	600	52	110	2,000	2,000	104
2way	16.0x9.0	1,100	93	110	2,000	2,000	40
3way	16.0x15.1	1,500	128	190	3,000	2,000	32
4way	16.0x16.0	1,900	162	200	3,000	2,000	32
5way	23.0x15.1	2,300	195	190	3,000	2,000	22
6way	21.1x19.5	2,700	228	240	3,000	2,000	22
7way	23.0x21.1	3,000	258	260	3,000	2,000	21
12way	30.0x27.2	4,900	415	330	3,000	2,000	14
14way	37.0x21.1	5,800	485	260	3,000	2,000	14
19way	37.0x33.3	7,300	627	400	3,000	1,000	19
24way	44.0x33.3	9,000	777	400	3,000	1,000	14
24+1way	43.6x43.6	10,000	855	530	3,000	1,000	12

AirWave® Thick Walled Microduct Assemblies

10/6mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	10.0	500	48	120	1,000	2,000	110
1way	12.0	950	81	150	2,000	1,000	104
2way	22.0x12.0	1,700	149	150	2,000	2,000	32
3way	22.0x20.7	2,400	206	250	3,000	2,000	22
4way	22.0x22.0	3,100	264	270	3,000	2,000	21
5way	32.0x20.7	3,800	320	250	3,000	2,000	18
6way	29.4x27.0	4,400	374	330	3,000	2,000	14
7way	32.0x29.3	5,100	426	360	3,000	2,000	12

12/8mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	12.0	700	60	150	1,000	2,000	66
1way	14.0	1,100	99	170	2,000	2,000	40
2way	26.0x14.0	2,100	182	170	2,000	2,000	24
3way	26.0x24.4	3,000	254	300	3,000	2,000	19
4way	26.0x26.0	3,900	325	320	3,000	2,000	18
5way	38.0x24.4	4,700	395	300	3,000	2,000	12
6way	34.8x32.0	5,500	463	390	3,000	2,000	12
7way	38.0x34.8	6,300	527	420	3,000	2,000	11

14/10mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	14.0	800	72	170	1,000	2,000	60
1way	16.0	1,140	117	200	2,000	1,000	88
2way	30.0x16.0	2,500	216	200	2,000	2,000	21
3way	30.0x28.1	2,940	301	340	3,000	2,000	13
4way	30.0x30.0	3,780	386	360	3,000	2,000	12
5way	44.0x28.1	4,600	470	340	3,000	2,000	11
6way	40.2x37.0	5,390	551	450	3,000	1,000	13
7way	44.0x40.2	6,150	628	490	3,000	1,000	12

AirWave® Thick Walled Microduct Assemblies

16/12mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	16.0	1,000	84	200	1,000	1,000	88
1way	18.0	1,600	135	220	2,000	2,000	27
2way	34.0x18.0	3,000	250	220	2,000	2,000	19
3way	34.0x31.9	4,100	349	390	3,000	2,000	12
4way	34.0x34.0	5,300	448	410	3,000	2,000	11
7way	50.0x45.7	8,700	729	550	3,000	1,000	11

18/14mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	18.0	1,100	96	220	1,000	1,000	66
1way	20.0	1,800	153	240	2,000	1,000	36
2way	38.0x20.0	3,300	283	240	2,000	1,750	18
3way	38.0x35.6	4,700	395	430	3,000	1,000	14
4way	38.0	6,000	508	460	3,000	1,000	12
6way	51.2x47.0	8,500	728	570	3,000	1,000	10
7way	56.0x51.2	9,500	828	620	3,000	1,000	10

20/16mm	Nom. OD (mm)	Max. Tensile (N)	Weight (kg/km)	Bend Radius (mm)	Crush (N)	Length/drum (m)	Number of drums in 40'
Single Tube	20.0	1,200	108	240	1,000	1,000	30
1way	22.0	2,000	170	270	2,000	1,000	33
2way	42.0x22.0	3,700	316	270	2,000	1,000	21
3way	42.0x39.3	5,300	443	480	3,000	1,000	12
4way	42.0	6,800	569	510	3,000	1,000	12
7way	62.0x56.6	10,000	929	680	3,000	500	11



AirWave[®] Thick Walled Microduct Assemblies

Mechanical Performance Test compliance

Tensile Strength: IEC 60794-1-21 Method E1
Bend: IEC 60794-1-21 Method E11
Kink: IEC 60794-1-21 Method E10
Impact: IEC 60794-1-21 Method E4
Crush: IEC 60794-1-21 Method E3
Inner Clearance: IEC 60794-5-20 Ann. E

Material

HDPE Inner tube and Outer sheath

Packaging

Microduct assemblies are delivered on wooden drum. The drums protected with plastic foil and both ends of the microduct assembly are sealed with glued shrinkage tube to ensure that the product will not be affected by moisture or dust.

Marking

Product code
Product specification
Manufactured code (Lot No. and etc.)
Length marking
Other markings are available upon customer requests.

Ordering Information

Product Code	Microduct Description
LN-AW-TWD-7/3.5-1	Thick Walled micro duct ,1 way ,7/3.5mm
LN-AW-TWD-7/3.5-2	Thick Walled micro duct ,2 way ,7/3.5mm
LN-AW-TWD-7/3.5-3	Thick Walled micro duct ,3 way ,7/3.5mm
LN-AW-TWD-7/3.5-4	Thick Walled micro duct ,4 way ,7/3.5mm
LN-AW-TWD-7/3.5-5	Thick Walled micro duct ,5 way ,7/3.5mm
LN-AW-TWD-7/3.5-6	Thick Walled micro duct ,6 way ,7/3.5mm
LN-AW-TWD-7/3.5-7	Thick Walled micro duct ,7 way ,7/3.5mm
LN-AW-TWD-7/3.5-9	Thick Walled micro duct ,9 way ,7/3.5mm
LN-AW-TWD-7/3.5-12	Thick Walled micro duct ,12 way ,7/3.5mm
LN-AW-TWD-7/3.5-14	Thick Walled micro duct ,14 way ,7/3.5mm
LN-AW-TWD-7/3.5-19	Thick Walled micro duct ,19 way ,7/3.5mm
LN-AW-TWD-7/3.5-24	Thick Walled micro duct ,24 way ,7/3.5mm
LN-AW-TWD-7/3.5-24+1/10	Thick Walled micro duct ,24+1 way ,7/3.5mm+1 way 10/8
LN-AW-TWD-7/3.5-24+1/12	Thick Walled micro duct , 24+1 way ,7/3.5mm+1 way 12/10
LN-AW-TWD-7/4-1	Thick Walled micro duct ,1 way ,7/4mm
LN-AW-TWD-7/4-2	Thick Walled micro duct ,2 way ,7/4mm
LN-AW-TWD-7/4-3	Thick Walled micro duct ,3 way ,7/4mm
LN-AW-TWD-7/4-4	Thick Walled micro duct ,4 way ,7/4mm
LN-AW-TWD-7/4-5	Thick Walled micro duct ,5 way ,7/4mm
LN-AW-TWD-7/4-6	Thick Walled micro duct ,6 way ,7/4mm

AirWave® Thick Walled Microduct Assemblies

Product Code	Microduct Description
LN-AW-TWD-7/4-7	Thick Walled micro duct ,7 way ,7/4mm
LN-AW-TWD-7/4-9	Thick Walled micro duct ,9 way ,7/4mm
LN-AW-TWD-7/4-12	Thick Walled micro duct ,12 way ,7/4mm
LN-AW-TWD-7/4-14	Thick Walled micro duct ,14 way ,7/4mm
LN-AW-TWD-7/4-19	Thick Walled micro duct ,19 way ,7/4mm
LN-AW-TWD-7/4-24	Thick Walled micro duct ,24 way ,7/4mm
LN-AW-TWD-10/6-1	Thick Walled micro duct ,1 way ,10/6mm
LN-AW-TWD-10/6-2	Thick Walled micro duct ,2 way ,10/6mm
LN-AW-TWD-10/6-3	Thick Walled micro duct ,3 way ,10/6mm
LN-AW-TWD-10/6-4	Thick Walled micro duct ,4 way ,10/6mm
LN-AW-TWD-10/6-5	Thick Walled micro duct ,5 way ,10/6mm
LN-AW-TWD-10/6-6	Thick Walled micro duct ,6 way ,10/6mm
LN-AW-TWD-10/6-7	Thick Walled micro duct ,7 way ,10/6mm
LN-AW-TWD-12/8-1	Thick Walled micro duct ,1 way ,12/8mm
LN-AW-TWD-12/8-2	Thick Walled micro duct ,2 way ,12/8mm
LN-AW-TWD-12/8-3	Thick Walled micro duct ,3 way ,12/8mm
LN-AW-TWD-12/8-4	Thick Walled micro duct ,4 way ,12/8mm
LN-AW-TWD-12/8-5	Thick Walled micro duct ,5 way ,12/8mm
LN-AW-TWD-12/8-6	Thick Walled micro duct ,6 way ,12/8mm
LN-AW-TWD-12/8-7	Thick Walled micro duct ,7 way ,12/8mm
LN-AW-TWD-14/10-1	Thick Walled micro duct ,1 way ,14/10mm
LN-AW-TWD-14/10-2	Thick Walled micro duct ,2 way ,14/10mm
LN-AW-TWD-14/10-3	Thick Walled micro duct ,3 way ,14/10mm
LN-AW-TWD-14/10-4	Thick Walled micro duct ,4 way ,14/10mm
LN-AW-TWD-14/10-5	Thick Walled micro duct ,5 way ,14/10mm
LN-AW-TWD-14/10-6	Thick Walled micro duct ,6 way ,14/10mm
LN-AW-TWD-14/10-7	Thick Walled micro duct ,7 way ,14/10mm
LN-AW-TWD-16/12-1	Thick Walled micro duct ,1 way ,16/12mm
LN-AW-TWD-16/12-2	Thick Walled micro duct ,2 way ,16/12mm
LN-AW-TWD-16/12-3	Thick Walled micro duct ,3 way ,16/12mm
LN-AW-TWD-16/12-4	Thick Walled micro duct ,4 way ,16/12mm
LN-AW-TWD-16/12-5	Thick Walled micro duct ,5 way ,16/12mm
LN-AW-TWD-16/12-6	Thick Walled micro duct ,6 way ,16/12mm
LN-AW-TWD-16/12-7	Thick Walled micro duct ,7 way ,16/12mm
LN-AW-TWD-18/14-1	Thick Walled micro duct ,1 way ,18/14mm
LN-AW-TWD-18/14-2	Thick Walled micro duct ,2 way ,18/14mm
LN-AW-TWD-18/14-3	Thick Walled micro duct ,3 way ,18/14mm
LN-AW-TWD-18/14-4	Thick Walled micro duct ,4 way ,18/14mm
LN-AW-TWD-18/14-5	Thick Walled micro duct ,5 way ,18/14mm
LN-AW-TWD-18/14-6	Thick Walled micro duct ,6 way ,18/14mm
LN-AW-TWD-18/14-7	Thick Walled micro duct ,7 way ,18/14mm
LN-AW-TWD-20/16-1	Thick Walled micro duct ,1 way ,20/16mm
LN-AW-TWD-20/16-2	Thick Walled micro duct ,2 way ,20/16mm
LN-AW-TWD-20/16-3	Thick Walled micro duct ,3 way ,20/16mm
LN-AW-TWD-20/16-4	Thick Walled micro duct ,4 way ,20/16mm
LN-AW-TWD-20/16-5	Thick Walled micro duct ,5 way ,20/16mm
LN-AW-TWD-20/16-6	Thick Walled micro duct ,6 way ,20/16mm
LN-AW-TWD-20/16-7	Thick Walled micro duct ,7 way ,20/16mm



AirWave[®] Thick Walled Microduct Assemblies

Product Code	Microduct Description
LN-AW-TWD-22/16-1	Thick Walled micro duct ,1 way ,22/16mm
LN-AW-TWD-22/16-2	Thick Walled micro duct ,2 way ,22/16mm
LN-AW-TWD-22/16-3	Thick Walled micro duct ,3 way ,22/16mm
LN-AW-TWD-22/16-4	Thick Walled micro duct ,4 way ,22/16mm
LN-AW-TWD-22/16-5	Thick Walled micro duct ,5 way ,22/16mm
LN-AW-TWD-22/16-6	Thick Walled micro duct ,6 way ,22/16mm
LN-AW-TWD-22/16-7	Thick Walled micro duct ,7 way ,22/16mm

Notice: The data in this document are only reference and will be changed without any notice.
This specification is intended as a guide only.