

# AirWave® Flat Duct Microduct Assemblies

## Introduction

### AirWave® Flat DUCT

For micro-trenching with narrow width, FLAT DUCT 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 Walled Duct), customers can enjoy the same benefits of TWD.



2way



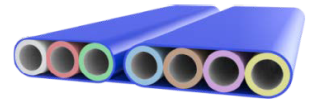
3way



4way



5way



6way



7way

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

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## 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
2way	16.0x9.0	1,100	93	110	2,000	2,000	40
3way	23.0x9.0	1,600	135	110	3,000	2,000	33
4way	29.6x8.6	1,900	162	110	3,000	2,000	32
5way	41.2x8.6	2,500	210	110	3,000	2,000	24
6way	48.2x8.6	2,900	248	110	3,000	2,000	22
7way	55.2x8.6	3,400	286	110	3,000	2,000	21

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
2way	22.0x12.0	1,700	149	150	2,000	2,000	32
3way	32.0x12.0	2,500	216	150	3,000	2,000	24
4way	41.6x11.6	3,100	264	140	3,000	2,000	21
5way	56.2x11.6	4,000	340	140	3,000	2,000	18
6way	66.2x11.6	4,800	403	140	3,000	2,000	13
7way	76.2x11.6	5,500	466	140	3,000	2,000	12

# AirWave® Flat Duct Microduct Assemblies

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
2way	26.0x14.0	2,100	182	170	2,000	2,000	24
3way	38.0x14.0	3,100	265	170	3,000	2,000	19
4way	49.6x13.6	3,900	326	170	3,000	2,000	18
5way	66.2x13.6	5,000	420	170	3,000	2,000	12
6way	78.2x13.6	5,900	498	170	3,000	1,000	18
7way	90.2x13.6	6,900	576	170	3,000	1,000	14

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
2way	30.0x16.0	2,500	216	200	2,000	2,000	21
3way	44.0x16.0	3,700	315	200	3,000	2,000	18
4way	57.6x15.6	4,600	388	190	3,000	2,000	12
5way	76.2x15.6	5,900	499	190	3,000	1,000	18
6way	90.2x15.6	7,100	592	190	3,000	1,000	13
7way	104.2x15.6	8,200	685	190	3,000	1,000	12

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
2way	34.0x18.0	3,000	250	220	2,000	2,000	19
3way	50.0x18.0	4,300	364	220	3,000	2,000	12
4way	65.6x17.6	5,300	449	220	3,000	2,000	11
5way	86.2x17.6	6,900	578	220	3,000	1,000	12
6way	102.2x17.6	8,200	686	220	3,000	1,000	12
7way	118.2x17.6	8,500	794	220	3,000	1,000	11

# AirWave® Flat Duct Microduct Assemblies

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
2way	38.0x20.0	3,300	283	240	2,000	1,750	18
3way	56.0x20.0	4,900	414	240	3,000	1,000	18
4way	73.6x19.6	6,100	511	240	3,000	1,000	13
5way	96.2x19.6	7,800	657	240	3,000	1,000	12
6way	114.2x19.6	9,300	780	240	3,000	1,000	10
7way	132.2x19.6	10,000	903	240	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
2way	42.0x22.0	3,700	316	270	2,000	1,000	21
3way	62.0x22.0	5,500	462	270	3,000	1,000	18
4way	81.6x21.6	6,800	571	270	3,000	1,000	12
5way	106.2x21.6	8,800	736	270	3,000	1,000	11
6way	126.2x21.6	10,000	873	270	3,000	800	11
7way	146.2x21.6	11,000	1,011	270	3,000	800	10

## Mechanical Performance Test compliance

Tensile Strength: IEC 60794-1-2 Method E1

Bend: IEC 60794-1-2 Method E11

Kink: IEC 60794-1-2 Method E10

Impact: IEC 60794-1-2 Method E4

Crush: IEC 60794-1-2 Method E3

## Material

HDPE Inner tube and Outer sheath



# AirWave® Flat Duct Microduct Assemblies

## 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-FLTD-7/3.5-2	Flat micro duct ,2 way ,7/3.5mm
LN-AW-FLTD-7/3.5-3	Flat micro duct ,3 way ,7/3.5mm
LN-AW-FLTD-7/3.5-4	Flat micro duct ,4 way ,7/3.5mm
LN-AW-FLTD-7/3.5-5	Flat micro duct ,5 way ,7/3.5mm
LN-AW-FLTD-7/3.5-6	Flat micro duct ,6 way ,7/3.5mm
LN-AW-FLTD-7/3.5-7	Flat micro duct ,7 way ,7/3.5mm
LN- FLTD-10/6-2	Flat micro duct ,2 way ,10/6mm
LN- FLTD-10/6-3	Flat micro duct ,3 way ,10/6mm
LN- FLTD-10/6-4	Flat micro duct ,4 way ,10/6mm
LN- FLTD-10/6-5	Flat micro duct ,5 way ,10/6mm
LN- FLTD-10/6-6	Flat micro duct ,6 way ,10/6mm
LN- FLTD-10/6-7	Flat micro duct ,7 way ,10/6mm
LN-AW-FLTD-12/8-2	Flat micro duct ,2 way ,12/8mm
LN-AW-FLTD-12/8-3	Flat micro duct ,3 way ,12/8mm
LN-AW-FLTD-12/8-4	Flat micro duct ,4 way ,12/8mm
LN-AW-FLTD-12/8-5	Flat micro duct ,5 way ,12/8mm
LN-AW-FLTD-12/8-6	Flat micro duct ,6 way ,12/8mm
LN-AW-FLTD-12/8-7	Flat micro duct ,7 way ,12/8mm
LN-AW-FLTD-14/10-2	Flat micro duct ,2 way ,14/10mm
LN-AW-FLTD-14/10-3	Flat micro duct ,3 way ,14/10mm
LN-AW-FLTD-14/10-4	Flat micro duct ,4 way ,14/10mm
LN-AW-FLTD-14/10-5	Flat micro duct ,5 way ,14/10mm
LN-AW-FLTD-14/10-6	Flat micro duct ,6 way ,14/10mm
LN-AW-FLTD-14/10-7	Flat micro duct ,7 way ,14/10mm
LN-AW-FLTD-16/12-2	Flat micro duct ,2 way ,16/12mm
LN-AW-FLTD-16/12-3	Flat micro duct ,3 way ,16/12mm
LN-AW-FLTD-16/12-4	Flat micro duct ,4 way ,16/12mm
LN-AW-FLTD-16/12-5	Flat micro duct ,5 way ,16/12mm
LN-AW-FLTD-16/12-6	Flat micro duct ,6 way ,16/12mm
LN-AW-FLTD-16/12-7	Flat micro duct ,7 way ,16/12mm



# AirWave<sup>®</sup> Flat Duct Microduct Assemblies

Product Code	Microduct Description
LN-AW-FLTD-18/14-2	Flat micro duct ,2 way ,18/14mm
LN-AW-FLTD-18/14-3	Flat micro duct ,3 way ,18/14mm
LN-AW-FLTD-18/14-4	Flat micro duct ,4 way ,18/14mm
LN-AW-FLTD-18/14-5	Flat micro duct ,5 way ,18/14mm
LN-AW-FLTD-18/14-6	Flat micro duct ,6 way ,18/14mm
LN-AW-FLTD-18/14-7	Flat micro duct ,7 way ,18/14mm
LN-AW-FLTD-20/16-2	Flat micro duct ,2 way ,20/16mm
LN-AW-FLTD-20/16-3	Flat micro duct ,3 way ,20/16mm
LN-AW-FLTD-20/16-4	Flat micro duct ,4 way ,20/16mm
LN-AW-FLTD-20/16-5	Flat micro duct ,5 way ,20/16mm
LN-AW-FLTD-20/16-6	Flat micro duct ,6 way ,20/16mm
LN-AW-FLTD-20/16-7	Flat micro duct ,7 way ,20/16mm

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