fibreflow Blown Fibre Generic data DI metal-free 3mm, 5mm, 8mm



GENERIC PRODUCT DESCRIPTION:

Assemblies of PE microducts (m/d)(3, or 5 or 8mm), each with low friction performance. Each assembly (bundle) is surrounded by water-block material as an overlapped tape. Over this is a flexible black sheath of PE. These lightweight and flexible products are intended for direct installation into waiting duct, but not for direct burial or aerial use.

When using Emtelle Direct Install metal-free products adequate provision must be made to take account of all strain which may be caused by installation forces, practices and procedures, thermal changes, heat reversion or any other reasonably foreseeable force applied to the product. Emtelle recommend that suitable installation practices and procedures be used and that a suitable clamping or restraint method be adopted in all instances.

APPROPRIATE FIBRE TYPES:

Any suitable sized Emtelle fibre unit: The 5mm and 8mm bundles will accommodate all FU counts: 2FU, 4FU, 8FU and 12FU. The 3mm bundles will accommodate 2FU and 4FU.

Primary m/d outer diameter, nom	mm	3.0	5.0	8.0
Primary m/d inner diameter, nom	mm	2.1	3.5	6.0
primary m/d - mass, nominal	g/m	3.5	9.5	21
Min bend radius of primary m/d*	mm	30	50	80
Max pull tension, single m/d	N (kg)	20 (2)	70 (7)	140 (14)
centre m/d of 24-way inner diam, nom	mm	6	10	n/a
centre m/d of 24-way outer diam, nom	mm	4.5	8	n/a
centre m/d of 24-way – mass, nom	g/m	11.5	27	n/a
Min bend radius of single centre m/d*	mm	60	120	n/a

GENERIC DETAILS: MICRODUCTS (at 20°C):

*This radius relates to the m/d capability only, and does not indicate a suitable radius for blowing FU.

1. All m/d sizes are compatible with designated connectors, 3mm, 5mm and 8mm

2. Max air pressure for blowing, all m/ds: 15bar.

ΙΝΝΟΥΑΤΙΟΝ

3. Storage of unprotected m/ds: Indoors and well shielded from daylight.

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AND

FLEXIBILITY

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PE SHEATH:

- 1. The PE sheath shall be light-stabilised and coloured, normally black.
- 2. There shall be a water-activated layer under the sheath.
- 3. The sheath thickness measurement does not apply at the tape overlap position.
- 4. Normal printing includes product ident, metre marks and other data by arrangement.
- 5. Sheath Removal: using ripcord(s) provided under the sheath

INSTALLATION:

DImf products are more prone to 'length relaxation' after being pulled into a duct. This is partly because the assembly contains no stabilizing metal or strength member. Emtelle advise that at the manhole position:

- 1. Allow the normal excess length to permit relaxation (as per training notes)
- 2. Allow the normal relaxation time, but also anchor the installed DImf to the manhole (or some convenient fixed point) by a pullsock, before it is enters a closure, dome or other connection device. This is to prevent further longitudinal product shrinkage.

	3mm				5mm			8mm				
	OD	Mass	Min	Max*	OD	Mass	Min	Max*	OD	Mass	Min	Max*
	nom	nom	Bend	Pull	nom	nom	Bend	Pull	nom	nom	Bend	Pull
type	mm	g/m	Rad	force	mm	g/m	Rad	force	mm	g/m	Rad	force
			mm	Ν			mm	Ν			mm	N
1DImf					9.0	46	120	220	11.2	67	150	300
2DImf	6.7 x 9.7	44	90	hand	8.7x13.7	70	120	340	11.7 x 19.7	116	150	550
4DImf	10.9	62	150	300	15.8	108	200	520	23.0	188	300	900
7DImf	12.7	80	170	400	18.7	150	240	720	27.7	273	360	1300
12DImf	15.9	112	210	550	24.1	224	320	1000	36.3	417	550	2000
19DImf	18.3	149	240	700	28.1	310	360	1500	42.7	592	640	2800
24DImf	21.7	194	290	900	33.7	411	500	2000				

PRODUCT-SPECIFIC DETAILS:

* After applying pulling tensions, allow time for the pulled product to relax. See Installation manual.

TUBE AND ASSEMBLY TESTS:

1. Tensile test	test method IEC 60794-1-2-E1:	F
2. Crush test:	test method IEC 60794-1-2-E3:	F
Impact test:	test method IEC 60794-1-2-E4:	F

Procedure to IEC 60794-5 Procedure to IEC 60794-5 Procedure to IEC 60794-5

Note 1: Diameters and thicknesses are measured to the nearest 0.1mm.

Note 2: 'nominal' data is based on middle-spec, and is for information only, not for inspection purposes.

Note 3: Sketches are for information purposes only, and should not be used for inspection.

Note 4: When interpreting performance data and installing m/ds, bundles, or fibre units, it is assumed that the user has been trained by Emtelle.

Note 5: All data is believed to be accurate but users must establish the suitability of these products for their own applications.

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