LLDPE TUBES

DMfit® tubing is produced from an advanced grade of LLDPE. Its greatest advantage is superior environmental stress cracking resistance (ESCR), greatly exceeding that of ordinary polyethylene tubing as measured by ASTM D-1693 (IGEPAL) tests. Environmental stresses that can shorten the service life of tubing include chemical exposure, aging connections with barb-type fittings, or high vibration loads with connections to compression fittings. Our tubing is compliant to ANSI/NSF-51, 61, WRAS and FDA requirements for food contact applications. Our tubing is available in multiple coding colors, and offers the user :

- Dimensional stability
- Uniformity and long-term strength
- Higher burst pressure
- Greater tensile strength
- Wide range of available colors.
- Suitable for use with ***DMfit®*** products and those of other manufacturers.

Working Pressure and Temperature

Parameter \ Size	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
	4mm	5mm	6mm	8mm	10mm	12mm
Pressure	230 psi			170 psi		
Tube Tolerances	-0.1mm / +0.1mm					
Temperature	**Air** -20℃(-4℉) ~ 65℃(150℉) **Liquid**					

※ Pressure values are based on PE tube used at room temperature.
※ Consult our representative when using at continuous elevated temperature and pressure.

Order Information

DPE 04 (M) - B - 0500

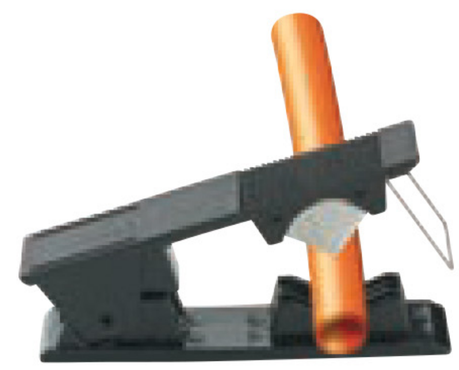
- 0500 → Reel Length
- B → Color: Blue
- (M) → "M", if metric size
- 04 → O.D. of tube

■ Colors Available

Suffix	Color	LLDPE													PE-RT	
		5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	4mm	5mm	6mm	8mm	10mm	12mm	15mm	1/4"	5/16"
B	Blue	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Y	Yellow	○	○	○	○	○	○	○	○	○	○	○	○	○		
W	White	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
N	Natural	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
BK	Black	○	○	○	○	○	○	○	○	○	○	○	○	○		
R	Red	○	○	○	○	○	○	○	○	○	○	○	○	○		
GR	Gray	○	○	○	○	○	○	○	○	○	○	○	○	○		
G	Green	○	○	○	○	○	○	○	○	○	○	○	○	○		

TC - Tube Cutter

- ***DMfit®*** Tube Cutter with quality blade is suitable for cutting plastic tubing sizes up to 13mm.



■ Inch Size

Part No.	Material	O.D.In.	I.D. In.	Wall	Reel Length (Meter)
DPE 01	LLDPE	5/32"	0.094	0.031	500
DPE 03	LLDPE	3/16"	0.125	0.031	400
DPE 04	LLDPE	1/4"	0.17	0.04	300
DPE-RT 04	PE-RT	1/4"	0.17	0.04	300
DPE 05	LLDPE	5/16"	0.216	0.048	200
DPE-RT 05	PE-RT	5/16"	0.216	0.048	200
DPE 06	LLDPE	3/8"	1/4"	0.062	150
DPE 07	LLDPE	1/2"	3/8"	0.062	100

■ Metric Size

Part No	Material	O.D.In.	I.D. In.	Wall	Reel Length (Meter)
DPE 04M	LLDPE	4	2.5	0.75	500
DPE 05M	LLDPE	5	3.5	0.75	400
DPE 06M	LLDPE	6	4	1	300
DPE 08M	LLDPE	8	6	1	200
DPE 10M	LLDPE	10	7	1.5	150
DPE 12M	LLDPE	12	9	1.5	100
DPE 12M	LLDPE	12	9	1.5	100
DPE 15M	LLDPE	15	11.5	1.75	70

CHEMICAL COMPATIBILITY TABLES

DMfit® has excellent resistance to exposure to organic compounds, industrial chemicals, and gases.

■ Resistance of chemical characteristics for plastic resins & elastomers.

Description (%, ℃)	Brass	SUS	Resin		Rubber	
			Acetal	PP	NBR	EPDM
Caustic soda(10%, 20℃)	△	△	◎	○	○	◎
Gasoline	○	○	◎	△	◎	×
Formic acid(25%, 20℃)	×	△	×	◎	○	◎
Air	◎	◎	◎	◎	◎	◎
Mineral oil	○	○	◎	○	◎	×
Grease	○	◎	◎	△	◎	×
Sodium silicate	○	-	◎	◎	◎	◎
Glycerin	○	◎	◎	◎	◎	◎
Ozone	○	○	△	△	○	◎
Animal oil(Lard oil)	○	-	◎	○	◎	○
Kerosene	◎	◎	◎	◎	◎	×
Methane	○	-	◎	◎	◎	×
Methyl alcohol(Methanol)	◎	△	○	○	◎	◎
Water(24℃)	○	○	◎	◎	◎	◎
Water(100℃)	×	○	△	△	-	-
Sea water	△	○	◎	◎	-	-
Bunker oil	△	-	-	○	◎	-
Benzene(Benzol)	×	△	○	△	×	×
Butane	◎	◎	◎	◎	◎	×
Fluorine	×	×	×	×	-	△
Boric acid	○	○	○	◎	◎	◎
Carbon tetrachloride	△	△	○	△	△	×
Oxygen	◎	◎	○	○	○	◎
Petroleum	-	-	○	×	◎	×
Soda ash(Sodium carbonate)	○	△	◎	◎	◎	◎
Calcium hydroxide	△	△	◎	○	◎	◎
Hydrogen	△	◎	◎	◎	◎	◎
Mercury	×	-	-	◎	◎	◎
Steam(150℃)	○	-	△	×	×	◎
Sodium cyanide	×	-			◎	◎
Vegetable oil	-	-	○	○	◎	◎
Silicone greases	-	-	◎	△	◎	◎
Silicone oil	-	-	◎	△	◎	◎
Acetone	◎	△	○	△	×	◎
Sulfurous acid gas	-	-	△	○	○	○
Ammonia	△	◎	○	○	◎	◎
Liquiefied petroleum gas(LPG)	◎	◎	◎	○	◎	×
Ethyl alcohol(Ethanol)	◎	○	◎	○	◎	◎

Description (%, ℃)	Brass	SUS	Resin		Rubber	
			Acetal	PP	NBR	EPDM
Lye solution	-	-	◎	○	○	◎
Hydrochloric acid(10%, 20℃)	×	×	○	◎	-	-
Hydrochloric acid(20%, 20℃)	×	×	△	○	-	-
Hydrochloric acid(20%, 80℃)	×	×	×	×	×	△
Hydrochloric acid(38%, 20℃)	×	×	△	○	○	◎
Ammonium chloride	×	△	○	◎	◎	◎
Calcium chloride	○	△	◎	◎	◎	◎
Naphtha	△	○	◎	△	△	×
Olive oil	△	◎	○	◎	◎	○
Sulfur	×	○	◎	◎	×	◎
Sodium phosphate	×	△	○	◎	◎	◎
Ammonium phosphate	△	△	○	◎	◎	◎
Ammonium nitric	×	○	○	◎	◎	◎
Nitrogen	○	◎	◎	◎	◎	◎
Natural gas	◎	◎	◎	○	◎	×
Acetic acid(10%, 20℃)	-	-	-	-	-	-
Acetic acid(50%, 20℃)	-	-	-	-	-	-
Acetic acid(50%, 70℃)	-	-	-	-	-	-
Acetic acid(100%, 20℃)	-	-	-	-	-	-
Ketones	○	○	○	◎	-	○
Cresol	○	△	△	○	△	×
Chromic acid(2%, 70℃)	×	×	×	△	-	-
Chromic acid(10%, 70℃)	×	×	×	×	-	-
Chromic acid(25%, 70℃)	×	×	×	×	-	-
Chromic acid(2%, 50℃)	×	×	△	△	×	○
Soybean oil	△	○	◎	○	◎	△
Toluene	◎	◎	○	△	×	×
Glucose	◎	◎	◎	◎	◎	◎
Propane	◎	◎	◎	◎	◎	×
Castor oil	○	○	○	◎	◎	○
Sulfuric acid(10%, 20℃)	×	×	○	○	×	○
Sulfuric acid(10%, 70℃)	×	×	×	△	-	-
Sulfuric acid(30%, 20℃)	×	×	△	○	-	-
Sulfuric acid(30%, 70℃)	×	×	×	△	-	-
Sulfuric acid(98%, 20℃)	×	×	×	×	-	-
Aluminium sulfate	×	○	○	◎	◎	◎
Potassium sulfate	○	△	○	◎	◎	◎
Hydrogen sulfide	△	△	○	◎	×	◎

※ ◎ : Very acceptable ○ : Acceptable △ : Slightly Unacceptable × : Unacceptable - : No data

■ Resistance of chemical characteristics for Tube.

Name of chemical	Polyethylene	Remarks
Air	◎	
Alcohol	◎	
Ammonia gas	◎	
Ammonia liquid	○	high temperature △
Beer	◎	
Benzene	△	
Bromine liquid	×	
Carbon dioxide gas	○	
Caustic soda	○	
Diesel fuel	△	
Ethyl alcohol	○	high temperature △
Fluor gas, dry	×	
Fuel Oil	△	

Name of chemicals	Polyethylene	Remarks
Hexane	△	
Hydrogen gas	◎	
Lighting gas	△	
Mercury	◎	
Methanol (Methyl Alcolhol)	◎	
Milk	◎	
Molasses	◎	
Nickel salts	◎	
Oils, essential	△	
Propane gas	△	
Spindle Oil	△	
Water, high-purity	◎	

※ : Very acceptable, ○: Acceptable, △: Slightly unacceptable, ×: Very unacceptable
※ Differences in data can exist due to extended duration and elevated temperature (Standard data reflects use at ambient temperature.)
※ Consult our representative when using unsuitable liquids.