

HDPE PLB COMMUNICATION DUCT SPECIFICATIONS

APPLICATIONS:

High-density polyethylene (HDPE) communication duct pipe is suitable for use as conduit, duct, and inner duct with communication, CATV, and power wire and cable applications.

DESCRIPTION:

- HDPE PLB Communication Duct is available in 40/33 mm (O.D./I.D.) & 32/26 mm (O.D./I.D.) diameters, in blue, green, black, orange, gray, brown and red.
- It comes in continuous reels and is available with permanent internal lubrication (PLB) and as parallel reeled. It can be joined by various heat fusion methods including electrofusion, socket fusion, butt fusion and saddle fusion, as well as mechanical connections.
- With a COF is less than 0.06, it remains ductile at low temperatures and offers a maximum operating temperature of 90 degrees, which is compatible with the operating temperatures of the power cables.

BENEFITS:

HDPE PLB Communication Duct is the easy-to-install, high-performance solution to communications applications.

- Lightweight and flexible, it comes in long lengths, allowing for easy and convenient installation.
- Because of its flexible nature, it reduces the use of fittings and remains ductile at low temperatures.
- Its longer pull lengths mean manholes can be placed farther apart, with fewer joints needed for directional drilling and plowing.
- Its lengths allow for greater flexibility in system design, as well as the ability to follow trench contours and avoid underground obstacles.
- It is recognized in the industry for its high stress crack resistance, a coefficient of friction is less than 0.06, and high tensile strength.
- It is resistant to corrosive chemicals and aggressive soils and is impervious to bacteria and fungus.



TECHNICAL DATA SHEET

CLAUSE	TEST	SPECIFIED REQUIREMENTS (40/33mm)
6.2.1	Identification Strips	<ul style="list-style-type: none"> Shall contain minimum 4 longitudinal stripes of minimum width 3mm in white color. These stripes shall be co extruded during pipe manufacturing & shall not preferably be more than 0.20 mm in depth for wall thickness up to 10 mm & 0.5 mm beyond 10 mm.
7.1	Visual Appearance	<ul style="list-style-type: none"> The Internal & External surface of the pipe shall be smooth, clean, and free from grooving & other defects. The end shall be cleanly cut & square with axis. Slight shallow longitudinal grooves or irregularities in the wall thickness shall be permissible.
7.4	Outer Diameter (mm)	<ul style="list-style-type: none"> Min: 40.0 mm / Max: 40.4 mm
	Wall Thickness (mm)	<ul style="list-style-type: none"> Min: 3.3 mm / Max: 3.7 mm
	Ovality (mm)	<ul style="list-style-type: none"> Max: 1.0 mm
8.1.1	Internal Pressure Creep Rupture Test (@ 80° C For 48 Hrs)	<ul style="list-style-type: none"> Shall show no sign of localized swelling, leakage or weeping and shall not burst during prescribed test duration.
8.2	Longitudinal Reversion Test	<ul style="list-style-type: none"> Shall not be greater than 3%
	ESCR	<ul style="list-style-type: none"> Shall show no sign of failure
	Impact	<ul style="list-style-type: none"> Striker Weight 10 kg, Duct Shall not crack or split
8.4	Melt Flow Rate Test (@ 190° C & 5 Kg Load)	<ul style="list-style-type: none"> Shall be not deviate from the MFR of the resin by more than 30% (gm/10min)
8.5	Oxidation Induction Time	<ul style="list-style-type: none"> Shall not be less than 30 minutes
8.7	Density	<ul style="list-style-type: none"> Shall be between 940.00 to 958.00 Kg/m³
8.9	Elongation At Break	<ul style="list-style-type: none"> Shall be more than 600 %
	Internal Co-Efficient of Friction	<ul style="list-style-type: none"> COF shall be less than 0.06
	Maximum Pulling Force	<ul style="list-style-type: none"> Shall not be less than 300kg
	Ash Content of Finished Duct	<ul style="list-style-type: none"> Shall not be more than 0.3%
	UV Stabilizer Content of Resin	<ul style="list-style-type: none"> Shall not be more than 0.15%
	UV Stabilizer Content of Duct	<ul style="list-style-type: none"> Variation in tensile strength after aging not more than 20%

