



GITA MARKETING CO.

TECHNICAL DATA SHEET

TDS PU TUBING

Polyurethane Pneumatic Tubing | Automation | Compressed Air

Gita Marketing Co.

Spl Plot No-4, NGEF Industrial Estate,
Off Whitefield Road, Mahadevapura, Bangalore - 560048
www.gitamarketing.com

Issued 2026



PU TUBING

Technical Data Sheet -- Polyurethane Pneumatic Tubing

Polyurethane (PU) tubing is the standard choice for pneumatic automation, machine tools, and compressed air distribution at working pressures up to 12 bar. It combines excellent flexibility with good abrasion resistance, a wide temperature range, and compatibility with push-to-connect pneumatic fittings. Gita Marketing Co. supplies PU tubing in standard metric OD sizes as part of its pneumatic components range.

Construction & Material

Material	Thermoplastic polyurethane (PU / TPU)
Standard	Smooth bore, consistent wall thickness
Colours	Blue (standard) Black Transparent Red Other RAL colours on request
Hardness	Shore A 90-95 (typical)
Compatibility	Compatible with standard push-to-connect pneumatic fittings (metric OD)

Size Range & Pressure Ratings

OD x ID format. Ratings at 20 degrees C -- de-rate at elevated temperatures.

OD x ID (mm)	Wall (mm)	W.P. (bar) @ 20C	Burst (bar)	Min. Bend Radius (mm)
4 x 2.5	0.75	12	48	15
6 x 4	1.0	12	48	25
8 x 5	1.5	12	48	35
8 x 6	1.0	10	40	35
10 x 6.5	1.75	10	40	45
10 x 8	1.0	8	32	45
12 x 8	2.0	10	40	55
12 x 9	1.5	8	32	55
16 x 12	2.0	8	32	75

Technical Specifications

Temperature Range	-40 degrees C to +60 degrees C continuous
Peak Temperature	+70 degrees C (brief; de-rate pressure above 40 degrees C)
Working Pressure	Up to 12 bar at 20 degrees C (see table above)
Abrasion Resistance	Excellent -- polyurethane resists mechanical wear
Chemical Resistance	Good resistance to oils, greases, fuels, and aliphatic solvents





UV Resistance	Moderate -- suitable for indoor and sheltered outdoor use
Flexibility	Remains flexible at low temperatures; coilable for compact routing
Coil Lengths	Standard 25 m and 100 m coils Custom cut lengths available

Applications

- Pneumatic automation -- cylinders, actuators, valves, and sensors
- Machine tools and CNC equipment air lines
- Compressed air distribution on factory floors
- Robotics and handling systems
- Food processing (food-grade PU available on request)
- Instrumentation and control tubing

Fluid Compatibility

Suitable	Compressed air (dry and lubricated) Nitrogen Inert gases Mineral oils (splash contact) Aliphatic hydrocarbons
Not Suitable	Aromatic solvents (benzene, toluene) Concentrated acids or alkalis Ketones (acetone, MEK) Steam Chlorinated solvents

Important

Working pressure decreases at elevated temperatures. De-rate by approximately 25% at 40 degrees C and 50% at 60 degrees C. Do not use PU tubing for steam, hot water above 60 degrees C, or aggressive chemical service without confirming compatibility.

Ordering & Supply

Distributor	Gita Marketing Co., Bangalore
Supply	Standard coils (25 m / 100 m) Cut lengths Custom colours
Fittings	Push-to-connect pneumatic fittings available to match all sizes
Contact	+91-89040-35515 info@gitamarketing.com
Website	www.gitamarketing.com

Sources: ISO 10619 / DIN 73378 | www.gitamarketing.com

