

PTFE Packing — Size Chart / Common Sizes / Specifications

PTFE Packing — Complete Attributes

1) Expanded PTFE braid (ePTFE braided packing)

Common sizes & typical application scenarios

Cross-section / code	Typical stocked sizes (metric & imperial)	Typical applications
Round braided cord	Ø 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0 mm (≈ 1/16" - 3/8" and larger)	Pumps (centrifugal), valves, mixers, chemical service stuffing boxes; general purpose gland packing.
Square braid	3×3, 4×4, 5×5, 6×6, 8×8 mm (and imperial equivalents)	High-speed shafts, marine stern tubes, where square braid corners improve sealing.
Rectangular / ribbon	widths 6 mm, 8 mm, 12 mm with thickness variants	Slow-speed mixers, agitators and where layered packing rings are used.
Spool lengths / reels	Small spools (1 - 10 m), large reels (10 - 100 m) sold by weight or length	Field cutting to gland dimensions; popular for maintenance stocking.
Typical service examples (by size)	Ø2 - 4 mm for small valve stems & instrumentation; 4 - 8 mm for standard pumps & mixers; ≥8 mm for large pump/stern tube stuffing boxes.	Chemical plants, pharma, cryogenic lines, vacuum systems.

2) Solid-PTFE (extruded / braided full-PTFE) packing

Common sizes & typical application scenarios

Cross-section	Typical stocked sizes	Typical applications
Round cord / braid	Ø 2 - 12 mm (1/16" - 1/2"+)	Pure chemical seals, sanitary valves, pharmaceutical pumps.
Square / ribbon	3×3 to 8×8 mm	Valve packing sets where low contamination is essential.
Example use	Thin 2 - 3 mm cords in sampling valves; 6 - 8 mm rings in pumps handling aggressive acids.	Chemical processing, food & beverage, semiconductor chemical delivery.

3) PTFE filled / modified packings (carbon-filled, graphite-filled, glass-filled, bronze-filled)

Common sizes & typical application scenarios

Packing type / typical fill	Common sizes	Typical applications
PTFE + carbon / graphite	Ø 4 - 10 mm, square 4×4 - 8×8 mm	Pumps & valves with abrasive or slurry media where lower leakage and reduced creep are needed.
PTFE + bronze (metal-filled)	Ø 4 - 12 mm	Bearings / dynamic shafts with higher loads, heavy duty pumps (consider galvanic/corrosion effects).
PTFE + glass / glass-fiber	Ø 3 - 8 mm	Improved dimensional stability, used where thermal cycling occurs.
Typical selection notes	Use carbon/graphite filled for chemical processes requiring better creep resistance; use bronze only where metal compatibility is acceptable.	Pumps, compressors, some valve services.

4) PTFE composite / hybrid packings (PTFE faces + aramid / high-strength corner yarns; PTFE core + aramid corners)

Common sizes & typical application scenarios

Type / code	Typical sizes	Typical applications
PTFE face + aramid corners	Ø 4 - 10 mm, square 4×4 - 8×8 mm	Abrasive slurry pumps, agitators, valves in petrochemical & water treatment plants.
PTFE + graphite face + aramid core	Ø 4 - 12 mm	High-temperature pumps with particulate contamination; compressors.

5) PTFE with metal/graphite jackets or Inconel/SS jackets (metal-reinforced jacketed PTFE)

Common sizes & typical application scenarios

Jacket type	Typical sizes	Typical applications
Inconel-jacketed PTFE	Ø 6 - 12 mm and larger custom sizes	High pressure, abrasive slurry pumps, high speed shafts in petrochemical & mining.
SS-mesh jacket over PTFE	Ø 5 - 12 mm	Pulp & paper refiner shafts, slurry pumps, critical service where extrusion must be prevented.

6) PTFE packing tapes, ribbon and gland tapes (flat PTFE gaskets / tapes used as packings)

Common sizes & typical uses

Product form	Typical dimensions	Typical use cases
PTFE tape rolls	widths 6/12/25 mm × thickness 0.2 - 1 mm	Temporary sealing, low pressure valves, small gland repairs.
Skived PTFE ribbon	3 - 12 mm wide, thickness 0.5 - 2 mm	Layered stuffing box packing for special shaft diameters.