Roxtec Cable Transits — Frames, Multidiameter Modules and Spare Capacity Planning

cBallast Technical Sourcing · Cable transits and seals · issued 2026-10-18 · cballast.com/documents/roxtec-cable-transit-selection

How the Roxtec system composes: weld/bolt frames by opening count, RM modules whose peelable Multidiameter layers adapt one block to a span of cable diameters, blank modules and the compression unit, EMC/galvanised/stainless executions, and the spare-capacity habit that makes transits a project asset instead of a bottleneck.

A transit is a kit of three decisions

Layer | What you choose | Stocked examples |

Frame | Opening count/arrangement and material — bolted or welded into the wall, floor or cabinet | G 6x3 AISI316, G 6x4 AISI316, galvanised GH 2x1 / GH 4x1 |

Modules | RM blocks by size (RM 15…120), each gripping a cable-diameter window via peelable layers | RM 60 for 24–54 mm, RM 30, blanks: RM 120 WOC, RM 60 WOC |

Compression | The wedge/compression unit that loads the packed frame to sealing pressure, plus stayplates between rows | pre-compression tool, stayplate clips |

Multidiameter is the trick: each half-module carries concentric peelable layers — strip layers until the printed window matches the cable OD, and one stocked module size seals dozens of cable types. "WOC" (without core) modules are the solid blanks: they fill unused openings today and become tomorrow's cable routes by swapping to a cored module — no new penetration, no hot work.

Execution choices that follow the wall

Material: AISI316 frames for exposed, washdown and corrosive sites; galvanised (GH) for dry industrial walls. The frame must suit the structure it welds or bolts into.

Ratings follow the assembly — fire class, water/gas tightness and pressure are certified for frame + modules + compression as a system; mixing foreign blocks voids the lot.

EMC versions bond cable screens through the transit for EMI-critical rooms — specified at order, not retrofitted.

Versus glands: one multi-cable wall opening with a transit replaces a plate of single glands wherever cables arrive in numbers or will grow — and transits forgive cable replacement without re-drilling.

The spare-capacity habit

Projects that fill every opening on day one buy a second transit within two years. The planning rule: size the frame for ~30 % spare openings filled with WOC blanks, record the layer-strip chart per cable in the handover docs, and keep a small stock of cored modules and blanks — around 240 Roxtec line items are stocked under the brand page for exactly these top-ups. Frame + module list + compression unit quote as one package within 24 hours; send the cable schedule (type, OD, count, growth margin) and the composition comes back engineered.

Frequently asked questions
How do Multidiameter modules fit different cable sizes?Each half-block is built of concentric peelable layers: strip layers until the remaining bore matches the cable's outside diameter per the printed window (an RM 60 spans roughly 24–54 mm). One module size thereby covers a whole range of cables.What does WOC mean in a Roxtec reference?Without core — a solid blank module. Blanks seal unused openings at full rating and are the cheap way to build spare capacity: swap a blank for a cored module when the new cable arrives.Can I mix module brands inside a Roxtec frame?No — the certification (fire, water, gas, pressure) applies to the tested system of frame, modules, stayplates and compression unit together. Foreign blocks or improvised fillers void the rating of the whole transit.Transit or cable glands — when does each win?Glands win for one or two cables through a cabinet wall. Transits win where cables arrive in bundles, will be added to, or where a certified fire/water barrier is required across many cables in one opening — ships' practice that industrial plants adopted for good reasons.How much compression does the frame need?Whatever brings the compression unit to its stated travel/torque once modules and stayplates are packed — hence the pre-compression tool in stock. Under-compressed transits leak; over-packing with the wrong module count prevents proper wedging at all.

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