Data sheet blind rivets and rivet nuts — drill hole, type, material, grip range

A blind rivet is set from one side: the tool pulls the mandrel, the body upsets at the back and the mandrel breaks off. Choose on four points: drill hole (rivet diameter + 0.1 mm), rivet type (open, sealed, multigrip, peel …), body and mandrel material (corrosion and strength) and grip range (sum of the sheet thicknesses). Rivet nuts give a metric thread in thin sheet; the drill hole depends on the thread size and body shape (round knurled, semi-hexagon).

Drill hole per rivet diameter

rivet diameter	drill hole
2.4 mm	2.5 mm
3 mm	3.1 mm
3.2 mm	3.3 mm
4 mm	4.1 mm
4.8 mm	4.9 mm
5 mm	5.1 mm
6 mm	6.1 mm
6.4 mm	6.5 mm

Which type where

type	feature	use
standard (open)	open body, dome/countersunk/large head	sheet, plastic, profile; general
multigrip	wide grip range, fills oversize holes	varying thicknesses, soft materials
sealed	closed body, no mandrel stub falling through	watertight, tanks, containers, food
peel	body splits into 4 petals	plastic, wood, plasterboard, brittle materials
grooved	grooves grip the hole wall	wood, plastic, concrete, blind holes
structural (high-strength)	mandrel stays locked	load-bearing and vibrating joints
hammer drive	pin driven in with a hammer	signs, trims on masonry/wood

Body / mandrel material

combination	strength	corrosion	remark
alu / steel	low–medium	body good, stub may rust	cheapest standard, indoors and under cover
alu / stainless	low–medium	good	outdoors, no rust stains from the stub
alu / alu	low	good	soft, thin sheet
steel / steel	medium–high	zinc plated: under cover	steel sheet, higher strength
stainless A2 / A2	high	very good	outdoors, damp, food
stainless A4 / A4	high	excellent	coast, pools, chemicals
copper / steel	low	good (copper)	copper gutters and roofing

Rivet nuts: drill hole (round knurled body, guide value)

thread	drill hole

M3	5 mm
M4	6 mm
M5	7 mm
M6	9 mm
M8	11 mm
M10	13 mm
M12	16 mm

Rules

- Grip range: add all layers; choose the rivet whose grip range covers that sum, when in doubt the longer one.
- Never drill larger than stated: too wide = no grip; deburr.
- Match materials (alu on alu, stainless on stainless) to avoid contact corrosion; never alu/steel on stainless outdoors.
- Set rivet nuts with a nut tool, not an impact wrench; semi-hexagon/knurled for anti-rotation in soft material.
- Choose the sealed type (rivet or nut) where water, dust or gas must not pass.

DHZ-Proshop · dhz-proshop.be · Sources: DIN 7337, ISO 15977–15984, ISO 16582–16585, manufacturer data Qonnect / PGB-Fasteners · version 10-11-2026