Data sheet hanger bolts, spacer screws and set screws — hex key size, pre-drilling, nut, point type

Hanger bolts (wood thread + metric thread) hang brackets, sanitary and consoles on wood with a nut; spacer screws mount the part at a distance from the substrate. Set screws DIN 913–916 (ISO 4026–4029) are headless threaded pins with a hex socket that lock hubs, bushes and levers on a shaft. The tables give the hex key size per thread, the pilot hole for the wood thread and the width across flats of the matching nut.

Set screws DIN 913/914/915/916: hex key size

thread	hex key AF (mm)
M3	1.5
M4	2
M5	2.5
M6	3
M8	4
M10	5
M12	6
M16	8
M20	10

Hanger bolts: pre-drilling and nut

M	pilot hole softwood	pilot hole hardwood	nut DIN 934 AF
M6	3 mm	4.2 mm	10 mm
M8	4 mm	5.6 mm	13 mm
M10	5 mm	7 mm	17 mm
M12	6 mm	8.4 mm	19 mm

Set screw point types

standard	point	use
DIN 913 / ISO 4026	flat point	repeated adjustment without damaging the shaft
DIN 914 / ISO 4027	cone point	grips in a centre hole; high locking force
DIN 915 / ISO 4028	dog point	in a groove or hole; shaft may slide in the groove
DIN 916 / ISO 4029	cup point	bites into the shaft; most used locking point

Procedure

topic	rule
driving a hanger bolt	lock two nuts against each other on the metric thread, drive with a spanner on the top nut until the wood thread is fully in the wood, free the nuts
engagement	the full wood thread in the wood; pre-drill 0.7 × d in hardwood, 0.5 × d in softwood
spacer screw	pre-drill, drive with a bit, set the spacer nut or nut on the metric thread, fix the part
locking a set screw	under vibration a second set screw on top (jam screw) or thread locker; hex key of the right size, otherwise the socket rounds off
material	plain steel (45H) indoors only; zinc plated indoors and under cover; stainless A2 outdoors, A4 near the coast