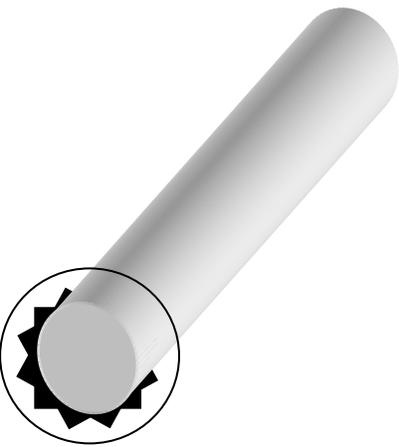
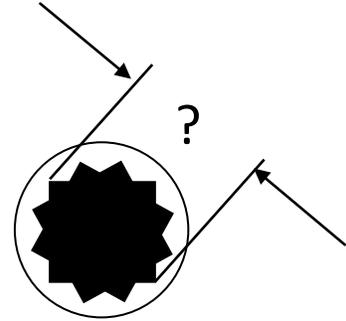


# Metalnerd® Brand Triple Square Spline Bit Identification

(also known as 12 point and XZN-type bits)

You can measure your bolts by using one of the following methods to help identify the correct Industry Nominal Size. © 2010 Charles Meglio, LLC

Industry Nominal Size (mm)	 <p>What size drill bit shank will fit inside the bolt head recess?</p>	 <p>What is the approximate diameter, point-to-point?</p>
M4	1/8" but not 5/32	3.7 mm or 0.15 inch
Our screwdriver type MNT10011 is used for internal lock mechanisms on MK4 (G/J/NB). Also in 10 PC set		
M5	5/32 but not 13/64	4.6 mm or 0.18 inch
M5 in our 10 PC set, needed for rear brake service on Touareg®, Cayenne® and Audi Q7® (to remove E-brake cable mounting). Also used on some clutch pressure plate mounting screws		
M6	13/64 but not 15/64	5.9 mm or 0.23 inch
M6 in our 10 PC set – some clutch pressure plate mounting screws		
M8	15/64 inch but not 5/16 inch A 6 mm hex bit also fits snug	7.5 mm or 0.30 inch
Our MNXZ8S and in our 10 PC set - M8 Many (but not all) inner CV joint flange applications - MEASURE FIRST! External door and trunk hardware. Touareg®, Cayenne® and similar seat mounting bolts.		
M10	5/16 inch but not 3/8 inch	9.8 mm or 0.38 inch
Our MNXZ10 is the 160 mm long version that is great for head bolts (some 1.8T, 2.0, V6) and is great for reaching some inner CV flange bolts. Our MNXZ10-S is a short, 55 mm long version that is great for flywheel mounting bolts and close engine work. The 10 pc set contains two lengths. See below.		
M12	3/8 inch but not 27/64 inch A 9 mm hex bit also fits inside	11.6 mm or 0.46 inch
Our MNXZ12 is the 160 mm long version that is great for head bolts (4 cyl diesel, 4 cyl TDI and VR6.) Our MNXZ12-S is a short, 55 mm long version that is great for flywheel mounting bolts and the center bolts on G/J/NB steering wheels. A short version is in our 10 pc set.		

M14	27/64 inch but not 1/2 inch A 10 mm hex bit fits inside	13.5 mm or 0.53 inch
Our MNXZ14 is an impact grade, 60 mm long bit that is needed for rear brake work and front suspension work on MK5 (2006 and later Jetta® and Rabbit®). Also used on rear brake and front suspension work on late model Passat® and Audi®. A non-impact version is in our 10 pc set.		
M16	1/2 inch but not 9/16 inch	15.6 mm or 0.61 inch
Our MNXZ16 is an impact grade, 60 mm long bit that is needed for rear brake service on Touareg®, Cayenne® and Audi Q7®. A non-impact version is in our 10 pc set.		
M18	9/16 inch	17.5 mm or 0.69 inch
Our MNXZ18 is an impact grade, 60 mm long bit that is needed to remove the rear wheel bearings on MK5 chassis cars (2006 and later Jetta® and Rabbit®) A non-impact version is in our 10 pc set.		

### Special Kits that Contain Triple Square Bits:

**Our MNT10099 Bell Housing Bit Set** has a super compact pair of M12 and M14 for certain bell housing bolts (JACO transaxles) and are extra small to be turned with a box wrench.

**Our MN3400 Serrated Alternator Bit Set** has both an M10 triple square bit and a T50 for reaching down inside the supplied ring bit.

**Our MN6525 Hinge Ratchet** has an M8 and M10 (along with T40 and T45) supplied with a compact ratchet for removing door hinge mounting bolts.

**Our MN10PC - 10 PC Triple Square Bit Set in Blow-Molded Case M4-M18** is specifically designed for your European automobile. We include all 9 known sizes of triple square bit (M4, M5, M6, M8, M10, M12, M14, M16 and M18) PLUS an extra long M10 for inner CV bolt access. To keep them affordable, we use 3 sizes of friction bases. The money saved on all those chrome bases allows us to use the highest grades of steel for the bits. The M4, 5, 6 & 8 are S2 tool steel. The M10, 12 & 14 are SAE8660 tool steel. The M16 and 18 are SAE6150 tool steel. This set is NOT recommended for head bolt removal due to length and clearance issues. This set is NOT impact tool rated. Extra long head bolt bits and impact-rated bits are sold separately.

### Special Tips for using Triple Square Bits:

Inner CV flange bolts are best reached along the top of the axle shaft, using ratchet extensions from outside the wheel well (reach straight in, just above the brake rotor). Place a screwdriver in the brake rotor vents near the caliper body to prevent axle rotation when applying torque to the flange bolts. Always clean the bolt head cavity with a pick, etc. before inserting the bit. Always seat the bit tip inside the bolt head with a few taps of a hammer (you can tap the end of the extensions) before attaching your ratchet. Use adhesive tape to keep your extensions together and attached to the bit if needed.