

INSERTS: PRODUCT OVERVIEW **TECHNIFAST**



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BLIND SELF-TAPPING INSERTS SERIES STB

Inside Thread	Length	ID	OD	OD Thread Type / Pitch
M2	7mm	M2 x 0.4mm	4.0mm	P=1.00mm
M3	8mm	M3 x 0.5mm	5.0mm	P=1.00mm
M4	9mm	M4 x 0.7mm	6.0mm	P=1.25mm
M5	10mm	M5 x 0.8mm	8.0mm	P=1.5mm
M6	12mm	M6 x 1.0mm	9.0mm	P=1.75mm
M6	30mm	M6 Heavy Duty	18.0mm	P=3.0mm
M8	15mm	M8 x 1.25mm	12.0mm	P=2.0mm
M8	30mm	M8 Heavy Duty	20.0mm	P=3.0mm
M10	20mm	M10 x 1.5mm	14.0mm	P=2.5mm
M10	30mm	M10 Heavy Duty	20.0mm	P=3.0mm
M12	25mm	M12 x 1.75mm	16.0mm	P=2.75mm
M16	35mm	M16 x 2.0mm	25.0mm	P=3.50mm
M20	40mm	M20 x 2.5mm	30.0mm	P=3.50mm



BLIND SELF-TAPPING INSERTS

These inserts offer standard metric internal threads with 30 degree inclusive form coarse pitch self-tapping external threads. We would recommend blind self-tapping inserts for use in applications where fluid ingress along the internal thread could be an issue.

The coarse thread of this type of insert is designed to give more strength, particularly when used on composite materials or softer materials such as wood, fibreglass or plastics. The insert has a 45 degree shoulder with an undercut to seat it when fully inserted, this provides an area where a sealant or bonding agent can be applied to prevent any fluids passing along the external surface of the insert into the host material or the area behind the insert.

The lead-in is chamfered at 10 degrees, with three notches milled into it, to help remove host material, provide a sharp cutting edge and assist keeping the insert parallel on insertion.

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INS300 INSERTS

Nominal Thread Size	External Thread Size	Length (mm)	Recommended Hole Size Min / Max (mm)
M3	M5 X0.5	6	4.6 / 4.8
M4	M6.5 X 0.75	8	5.8 / 6.2
M5	M8 X 1	10	7.1 / 7.6
M6	M10 X 1.5	14	8.6 / 9.4
M8	M12 X 1.5	15	10.06 / 11.4
M10	M14 X 1.5	18	12.6 / 13.4
M12	M16 X 1.5	22	14.6 / 15.4
M14	M18 X 1.5	24	16.6 / 17.4
M16	M20 X 1.5	25	18.6 / 19.4

INS300 INSERTS



Our 'off the shelf' INS300 inserts have standard through-tapped metric internal threads. These type of inserts generally have a fine pitch metric external thread, designed to be self-cutting and is not intended for insertion into pre-tapped holes.

A feature of the INS300 inserts is the two slots cut into the insertion end at 180 degrees, this slot aids the removal of host material and provides a sharp cutting edge.



INS300 inserts are designed for medium strength applications, unless an additional bonding agent is to be applied, they are not recommended for use where fluid ingress could be an issue. They have a lead-in chamfered at 10 degrees and do not have a shoulder.

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THREAD REDUCER INSERTS SERIES PTT

Thread	Length	ID	OD	Pitch	Cutting Relief
M4	8mm	M4 x 0.7mm	M8	1.25mm	N/A
M5	10mm	M5 x 0.8mm	M8	1.25mm	N/A
M6	14mm	M6 x 1.0mm	M10	1.50mm	N/A
M8	15mm	M8 x 1.25mm	M12	1.75mm	N/A
M10	20mm	M10 x 1.5mm	M14	2.0mm	N/A
M12	25mm	M12 x 1.75mm	M16	2.0mm	N/A

THREAD REDUCER INSERTS

This type of insert has a standard through-tapped metric internal with metric external threads.

They are ideal for use on pre-tapped holes which make them suitable for application with most materials. If required, through-tapped metric inserts can also self-cut.

Similar in form to the blind self-cutting inserts, they have a forty-five degree shoulder and undercut. The lead-in is chamfered at ten degrees and these inserts do not have a slot or notch.

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THROUGH TAPPED SELF-TAPPING INSERTS SERIES STT

Thread	Length	ID	OD	Pitch	Cutting Relief
M4	9mm	M4 x 0.7mm	6mm	1.25mm	3 x milled notch
M5	10mm or 12mm	M5 x 0.8mm	8mm	1.50mm	3 x milled notch
M6	14mm	M6 x 1.0mm	9mm	1.75mm	3 x milled notch
M8	16mm	M8 x 1.25mm	12mm	2.00mm	3 x milled notch
M10	20mm	M10 x 1.5mm	14mm	2.50mm	3 x milled notch
M12	26mm	M12 x 1.75mm	16mm	2.75mm	3 x milled notch

THROUGH TAPPED SELF-TAPPING INSERTS



Through-tapped metric OD inserts offer a hybrid of Metric OD inserts and blind self-tapping inserts.

They are shouldered, undercut and have metric internal threads. However the main difference that makes these inserts stand out is the external threads are a 30 degree self-tapping form with a three notch cutting relief that work in a similar way as the blind self-tapping inserts.

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HEX DRIVE INSERTS / KNURLED NUTS

Hex Drive Insert	Length	Inside Thread	Outside Thread	Pitch	Cutting Relief
M5 / 4.0mm Hex	10nn	M5 x 0.8mm	M8	1.0mm	3 x Holes

Knurled Nuts	Length	Thread	OD	OD Pitch
M3	3.0mm	M3 x 0.5mm	6.5mm	0.5mm
M4	4.0mm	M4 x 0.7mm	8.0mm	0.5mm
M5	4.0mm	M5 x 0.8mm	8.0mm	0.6mm
M6	5.0mm	M6 x 1.0mm	10.0mm	0.6mm
M8	6.0mm	M8 x 1.25mm	12.0mm	1.0mm

Overview

Hex Drive Inserts

Currently available with an M5 internal thread with an M8 x 1mm (fine pitch) external thread. This insert offers a 4mm hex drive which runs through the full length, meaning this insert is a popular choice as it can easily be inserted with nothing more than a hex drive key or allen key.

Hex drive inserts have three holes at 120 degrees on the lead-in to remove host material and provide a sharp cutting edge. They are similar in form to the INS300 insert.

Stainless Steel Knurled Nuts

Knurled nuts offer a simple solution for light duty applications. Manufactured from stainless steel, they have a straight- knurled outside surface with metric internal threads.

