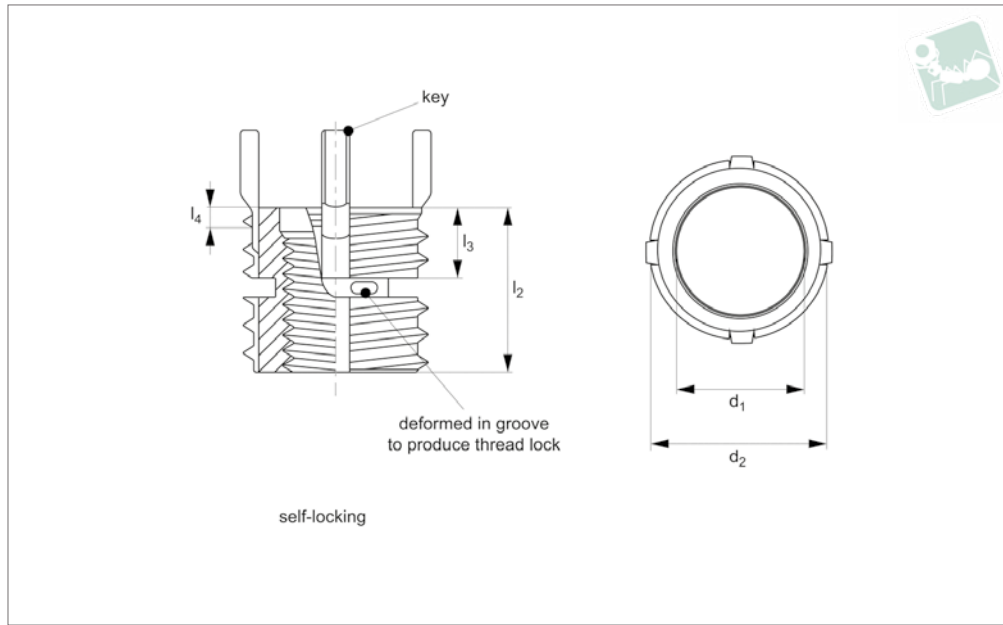




# Threaded Insert MS/NAS - H Duty - 4140 steel - self-locking - MS/NAS grade



## TR1611

THREADED INSERTS STEEL

### Material

Inserts - 4140 alloy steel (160 KSI Min).  
Keys - 302 CRES.  
Cadmium plate (QQ-P-416 Type II, Cl. 2).  
Dry film lubrication on self-locking inserts only.

### Technical Notes

All dimensions in millimetres.  
Internal threads: to Fed. Std. H28/21, MJ Form  
General tolerances -

+/- 0,25mm, unless specified.

Tap drill hole tolerances -  
6,9 to 10,8 = +0,100/-0,025  
12,8 and over = +0,130/-0,025

**SL** = Self-Locking type, deliberate deformity in thread produces self-affect once installed (see technical diagram).

### Tips

Order installation tool separately, as identified by „Inst. Tool ref.“ in table.

### Important Notes

Four locking keys on internal threads M 6 and over. Two locking keys on internal threads smaller than M 6.  
Installation (Inst.) drill size, counter sink, thread tap and thread depth as specified in table.  
Removal (Rem.) drill size and drill depth as specified in table.  
Perform to standards: NA0150

Order No.	Type	d <sub>1</sub> tol. 4H 5H	Thread type d <sub>1</sub>	d <sub>2</sub> tol. 4h	Thread type d <sub>2</sub>	l <sub>1</sub>	l <sub>3</sub> ±0,76	l <sub>4</sub> c'bore depth	C'sink hole size +0,25 - 0,00	Inst. tap drill size	Inst. thread tap tol. 6H	Inst. thread tap depth min.	Inst. tool ref. TR1715	Removal drill size	Removal drill depth
TR1611.81363	SL	M 4x0,7	Coarse	M 8x1,25	Coarse	8,0	5,00	1,27	8,25	6,90	M 8x1,25	9,5	.0630	5,50	4,00
TR1611.81364	SL	M 5x0,8	Coarse	M10x1,25	Fine	10,0	5,50	1,27	10,25	8,80	M10x1,25	12,5	.0640	7,50	4,75
TR1611.81365	SL	M 6x1,0	Coarse	M12x1,25	Fine	12,0	6,46	1,78	12,25	10,80	M12x1,25	14,5	.0650	9,50	4,75
TR1611.81366	SL	M 8x1,25	Coarse	M14x1,5	Fine	14,0	6,46	1,78	14,25	12,80	M14x1,5	16,5	.0660	11,50	4,75
TR1611.81566	SL	M 8x1,0	Fine	M14x1,5	Fine	14,0	6,46	1,78	14,25	12,80	M14x1,5	16,5	.0660	11,50	4,75
TR1611.81367	SL	M10x1,5	Coarse	M16x1,5	Fine	16,0	6,46	2,29	16,25	14,75	M16x1,5	18,5	.0670	13,50	4,75
TR1611.81567	SL	M10x1,25	Fine	M16x1,5	Fine	16,0	6,46	2,29	16,25	14,75	M16x1,5	18,5	.0670	13,50	4,75
TR1611.81369	SL	M12x1,75	Coarse	M18x1,5	Coarse	18,0	7,23	2,29	18,25	16,75	M18x1,5	20,5	.0690	15,50	4,75
TR1611.81569	SL	M12x1,25	Fine	M18x1,5	Coarse	18,0	7,23	2,29	18,25	16,75	M18x1,5	20,5	.0690	15,50	4,75
TR1611.81370	SL	M14x2,0	Coarse	M20x1,5	Fine	20,0	7,23	2,79	20,25	18,75	M20x1,5	22,5	.0700	17,50	4,75
TR1611.81570	SL	M14x1,5	Fine	M20x1,5	Fine	20,0	7,23	2,79	20,25	18,75	M20x1,5	22,5	.0700	17,50	4,75
TR1611.81371	SL	M16x2,0	Coarse	M22x1,5	Fine	22,0	8,50	2,79	22,25	20,50	M22x1,5	24,5	.0710	17,75	6,35
TR1611.81571	SL	M16x1,5	Fine	M22x1,5	Fine	22,0	8,50	2,79	22,25	20,50	M22x1,5	24,5	.0710	17,75	6,35
TR1611.81572	SL	M18x1,5	Coarse	M24x2,0	Fine	24,0	9,25	2,79	24,25	22,50	M24x2,0	28,5	.0720	19,75	6,35
TR1611.81373	SL	M20x2,5	Coarse	M30x2,0	Fine	30,0	12,51	2,79	30,25	28,00	M30x2,0	34,5	.0730	25,75	6,35
TR1611.81573	SL	M20x1,5	Fine	M30x2,0	Fine	30,0	12,51	2,79	30,25	28,00	M30x2,0	34,5	.0730	25,75	6,35
TR1611.81574	SL	M22x1,5	Fine	M32x2,0	Non-Std	32,0	12,51	2,79	32,25	30,00	M32x2,0	36,5	.0740	27,75	6,35
TR1611.81375	SL	M24x3,0	Coarse	M33x2,0	Non-Std	33,0	13,97	3,81	33,25	31,00	M33x2,0	37,5	.0750	28,75	6,35
TR1611.81575	SL	M24x2,0	Fine	M33x2,0	Non-Std	33,0	13,97	3,81	33,25	31,00	M33x2,0	37,5	.0750	28,75	6,35



Order No.	1/4 c'bore depth	C'sink hole size	Inst. tap drill size	Inst. thread tap	Inst. thread tap depth	Inst. tool ref. TR1715	Removal drill size	Removal drill depth
TR1611.81363	1.27	8.25	6.90	M 8x1,25	9.5	.0630	5.50	4.00
TR1611.81364	1.27	10.25	8.80	M10x1,25	12.5	.0640	7.50	4.75
TR1611.81365	1.78	12.25	10.80	M12x1,25	14.5	.0650	9.50	4.75
TR1611.81366	1.78	14.25	12.80	M14x1,5	16.5	.0660	11.50	4.75
TR1611.81566	1.78	14.25	12.80	M14x1,5	16.5	.0660	11.50	4.75
TR1611.81367	2.29	16.25	14.75	M16x1,5	18.5	.0670	13.50	4.75
TR1611.81567	2.29	16.25	14.75	M16x1,5	18.5	.0670	13.50	4.75
TR1611.81369	2.29	18.25	16.75	M18x1,5	20.5	.0690	15.50	4.75
TR1611.81569	2.29	18.25	16.75	M18x1,5	20.5	.0690	15.50	4.75
TR1611.81370	2.79	20.25	18.75	M20x1,5	22.5	.0700	17.50	4.75
TR1611.81570	2.79	20.25	18.75	M20x1,5	22.5	.0700	17.50	4.75
TR1611.81371	2.79	22.25	20.50	M22x1,5	24.5	.0710	17.75	6.35
TR1611.81571	2.79	22.25	20.50	M22x1,5	24.5	.0710	17.75	6.35
TR1611.81572	2.79	24.25	22.50	M24x2,0	28.5	.0720	19.75	6.35
TR1611.81373	2.79	30.25	28.00	M30x2,0	34.5	.0730	25.75	6.35
TR1611.81573	2.79	30.25	28.00	M30x2,0	34.5	.0730	25.75	6.35
TR1611.81574	2.79	32.25	30.00	M32x2,0	36.5	.0740	27.75	6.35
TR1611.81375	3.81	33.25	31.00	M33x2,0	37.5	.0750	28.75	6.35
TR1611.81575	3.81	33.25	31.00	M33x2,0	37.5	.0750	28.75	6.35