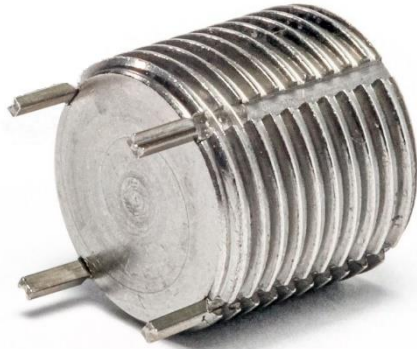


# KEY INSERTS - THREAD INSERTS W/KEYS



**TECNIMETAL**

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Tel: +39 051 735744  
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# Technical characteristics of Key Inserts

High resistance threaded inserts in stainless steel AISI303 1.4305.

As standard they are available in metric coarse pitch, on request metric fine pitch, UNC-UNF and other materials and/or surface treatments.

They are in the Free Running or Locking version, the self-locking version has a Dry-Lube surface treatment.

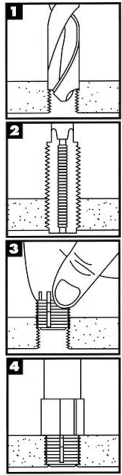
They have 2 or 4 anchoring keys which, once positioned, make the insert mechanically blocked against unscrewing by rotation or vibrations. They are used to obtain high resistance threads on different materials, from light alloys to steels or to repair damaged threads.

They can be installed in a simple way as the host thread is standard so it does not require the use of special males, they can be removed and replaced if necessary.

The inserts are supplied with the anchor keys already positioned inside the grooves. The pre-positioned keys mean that by screwing the insert it automatically positions itself at the correct installation depth.

## Install Inserts with Keys

### INSTALLATION



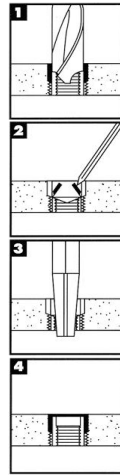
1 Drill with a standard drill bit and countersink to 82°-100° with a standard countersink

2 Tap with a standard tap

3 Screw the insert in by hand or with its setting tool (the insert automatically fits into the correct installation depth)

4 Using the installation tool, drive the anchor keys into the material using a hammer or a press

### REMOVAL



1 Drill with a standard drill bit to remove material holding the anchor keys in place (see catalog tables for drill diameter)

2 Flex the keys inside and break them

3 Unscrew the insert with an extraction tool

4 Screw in a new insert exactly the same as the one removed and fit the keys in correspondence with the imprints of the previous ones



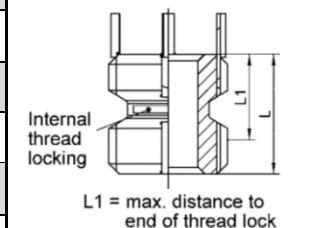
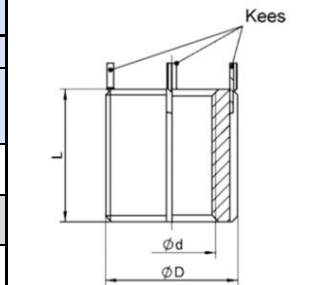
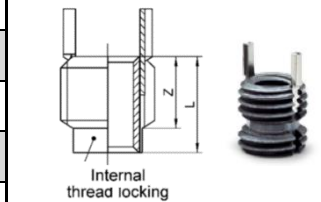
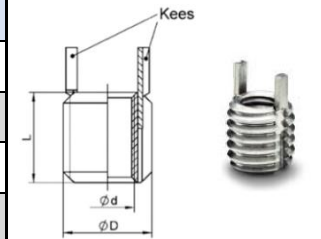
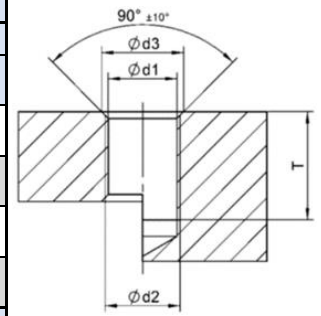
## Tools for Install



Tool Code	Key Insert Code	Key Insert Code	Tool Code	Key Insert Code	Key Insert Code	Tool Code	Key Insert Code	Key Insert Code
KTTW-M2	KN-M4X0.7	KNCM(L)2x0.4_IN	KTTW-02	KN-UNC2	KNC(L)0256_IN	KTHD-1011	KN-UNF14	KNH(L)1011_IN
KTTW-M2.5	KN-M4.5X0.75	KNCM(L)2.5x0.45_IN	KTTW-04	KN-UNF3	KNC(L)0440_IN	KTHD-1018	KN-UNF14	KNH(L)1018_IN
KTTW-M3	KN-M5X0.8	KNCM(L)3x0.5_IN	KTTW-06	KN-UNF1	KNC(L)0632_IN	KTHD-1210	KN-UNF18	KNH(L)1210_IN
KTTW-M4	KN-M6X0.75	KNCM(L)4x0.7_IN	KTTW-08	KN-UNF4	KNC(L)A0832_IN	KTHD-1216	KN-UNF18	KNH(L)1216_IN
KTTW-M5	KN-M8X1.25	KNM(L)5x0.8_IN	KTTW-1024	KN-UNC5	KN(L)1024_IN	KTHD-1409	KN-UNF20	KNH(L)1409_IN
KTTW-M6	KN-M10X1.25	KNM(L)6x1_IN	KTTW-1032	KN-UNC5	KN(L)1032_IN	KTHD-1414	KN-UNF20	KNH(L)1414_IN
KTTW-M8	KN-M12X1.25	KNM(L)8x1.25_IN	KTTW-420	KN-UNC6	KN(L)420_IN	KTHD-1608	KN-UNF22	KNH(L)1608_IN
KTTW-M8X1	KN-M12X1.25	KNM(L)8x1_IN	KTTW-428	KN-UNC6	KN(L)428_IN	KTHD-1612	KN-UNF22	KNH(L)1612_IN
KTTW-M10	KN-M14X1.5	KNM(L)10x1.5_IN	KTTW-518	KN-UNC7	KN(L)518_IN	KTXHD-1024	KN-UNC7	KNHXL(L)1024_IN
KTTW-M10X1.25	KN-M14X1.5	KNM(L)10x1.25_IN	KTTW-524	KN-UNC7	KN(L)524_IN	KTXHD-1032	KN-UNC7	KNHXL(L)1032_IN
KTTW-M12	KN-M16X1.5	KNM(L)12x1.75_IN	KTTW-616	KN-UNC8	KN(L)616_IN	KTXHD-420	KN-UNC8	KNHXL(L)420_IN
KTTW-M12X1.5	KN-M16X1.5	KNM(L)12x1.5_IN	KTTW-624	KN-UNC8	KN(L)624_IN	KTXHD-428	KN-UNC8	KNHXL(L)428_IN
KTTW-M12X1.25	KN-M16X1.5	KNM(L)12x1.25_IN	KTTW-714	KN-UNC9	KN(L)714_IN	KTXHD-518	KN-UNC9	KNHXL(L)518_IN
KTHD-M4	KN-M8X1.25	KNHM(L)4x0.7_IN	KTTW-720	KN-UNC9	KN(L)720_IN	KTXHD-524	KN-UNC9	KNHXL(L)524_IN
KTHD-M5	KN-M10X1.25	KNHM(L)5x0.8_IN	KTTW-813	KN-UNC10	KN(L)813_IN	KTXHD-616	KN-UNC10	KNHXL(L)616_IN
KTHD-M6	KN-M12X1.25	KNHM(L)6x1.0_IN	KTTW-820	KN-UNC10	KN(L)820_IN	KTXHD-624	KN-UNC10	KNHXL(L)624_IN
KTHD-M8	KN-M14X1.5	KNHM(L)8x1.25_IN	KTHD-0832	KN-UNC5	KNH(L)0832_IN	KTXHD-714	KN-111611NS	KNHXL(L)714_IN
KTHD-M10	KN-M16X1.5	KNHM(L)10x1.5_IN	KTHD-1024	KN-UNC6	KNH(L)1024_IN	KTXHD-720	KN-111611NS	KNHXL(L)720_IN
KTHD-M10X1.25	KN-M16X1.5	KNHM(L)10x1.25_IN	KTHD-1032	KN-UNC6	KNH(L)1032_IN	KTXHD-813	KN-131616A	KNHXL(L)813_IN
KTHD-M12	KN-M18X1.5	KNHM(L)12x1.25_IN	KTHD-420	KN-UNC7	KNH(L)420_IN	KTXHD-820	KN-131616A	KNHXL(L)820_IN
KTHD-M12X1.25	KN-M18X1.5	KNHM(L)12x1.75_IN	KTHD-428	KN-UNC7	KNH(L)428_IN	KTXHD-912	KN-UNF14	KNHXL(L)912_IN
KTHD-M12X1.5	KN-M18X1.5	KNHM(L)12x1.5_IN	KTHD-518	KN-UNC8	KNH(L)518_IN	KTXHD-918	KN-UNF14	KNHXL(L)918_IN
KTHD-M14	KN-M20X1.5	KNHM(L)14x2.0_IN	KTHD-524	KN-UNC8	KNH(L)524_IN	KTXHD-1011	KN-UNF16	KNHXL(L)1011_IN
KTHD-M14X1.5	KN-M20X1.5	KNHM(L)14x1.5_IN	KTHD-616	KN-UNC9	KNH(L)616_IN	KTXHD-1018	KN-UNF16	KNHXL(L)1018_IN
KTHD-M16	KN-M22X1.5	KNHM(L)16x2.0_IN	KTHD-624	KN-UNC9	KNH(L)624_IN	KTXHD-1210	KN-UNF20	KNHXL(L)1210_IN
KTHD-M18X1.5	KN-M24X1.5	KNHM(L)18x1.5_IN	KTHD-714	KN-UNC10	KNH(L)714_IN	KTXHD-1216	KN-UNF20	KNHXL(L)1216_IN
KTHD-M20X2.0	KN-M30X2.0	KNHM(L)20x2.0_IN	KTHD-720	KN-UNC10	KNH(L)720_IN	KTXHD-1409	KN-UNF22	KNHXL(L)1409_IN
KTHD-M20X1.5	KN-M20X1.5	KNHM(L)20x2.5_IN	KTHD-813	KN-111611NS	KNH(L)813_IN	KTXHD-1414	KN-UNF22	KNHXL(L)1414_IN
KTHD-M22X1.5	KN-M32X2.0	KNHM(L)22x1.5_IN	KTHD-820	KN-111611NS	KNH(L)820_IN	KTXHD-1608	KN-UNF25	KNHXL(L)1608_IN
KTHD-M24	KN-M33X2.0	KNHM(L)24x3.0_IN	KTHD-912	KN-131616A	KNH(L)912_IN	KTXHD-1612	KN-UNF24	KNHXL(L)1612_IN
KTHD-M24X1.5	KN-M33X2.0	KNHM(L)24x1.5_IN	KTHD-918	KN-131616A	KNH(L)918_IN			

# Key Inserts Thread Inserts with Keys Industrial Version Metric

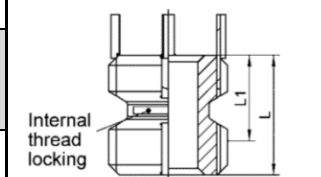
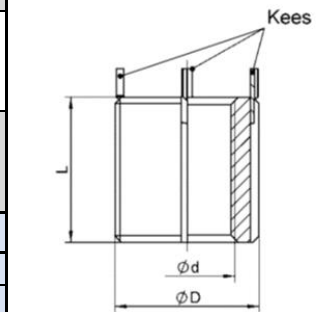
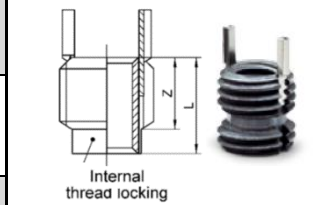
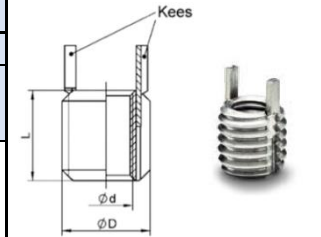
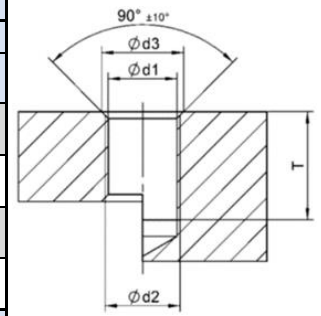
Miniatures series												
Code Standard   Locking	Dimensions				Installation				Removal			
	Internal Ød 6H	External ØD	L ±0.25	Z	d1 drill hole	d3 csink	d2 6H	T min.	Drill Diam.	Depth		
KNCM2x0.4_IN KNCML2x0.4_IN	M2x0.4	M4x0.7	3	2.2	3.4	+0.080 -0.025	4.1	M4x0.7	4.0	2.8	2.00	
KNCM2.5x0.45_IN KNCML2.5x0.45_IN	M2.5x0.45	M4.5x0.75	3.8	2.7	3.9	+0.080 -0.025	4.6	M4.5x0.75	5.0	3.0	2.00	
KNCM3x0.5_IN KNCML3x0.5_IN	M3x0.5	M5x0.8	4.25	3.1	4.4	+0.080 -0.025	5.1	M5x0.8	5.5	3.5	2.25	
KNCM4x0.7_IN KNCML4x0.7_IN	M4x0.7	M6x0.75	5.25	4.1	5.5	+0.080 -0.025	6.1	M6x0.75	6.5	4.6	2.50	
Light Series												
Code Standard   Locking	Dimensions				Installation				Removal			
	Internal Ød 6H	External ØD	L ±0.30	L1	d1 drill hole	d3 Swas .	d2 6H	T min.	Drill Diam.	Depth		
KNM5x0.8_IN KNML5x0.8_IN	M5x0.8	M8x1.25	8	7.6	6.90	+0.100 -0.025	8.25	M8x1.25	9.5	5.5	4.00	
KNM6x1_IN KNML6x1_IN	M6x1.0	M10x1.25	10	7.0	8.80	+0.100 -0.025	10.25	M10x1.25	11.5	7.5	4.75	
KNM8x1_IN KNML8x1_IN	M8x1	M12x1.25	12	8.2	10.80	+0.100 -0.025	12.25	M12x1.25	13.5	9.5	4.75	
KNM8x1.25_IN KNML8x1.25_IN	M8x1.25	M12x1.25	12	9.5	10.80	+0.100 -0.025	12.25	M12x1.25	13.5	9.5	4.75	
KNM10x1.25_IN KNML10x1.25_IN	M10x1.25	M14x1.5	14	9.0	12.80	+0.130 -0.025	14.25	M14x1.5	15.5	11.5	4.75	
KNM10x1.5_IN KNML10x1.5_IN	M10x1.5	M14x1.5	14	10.0	12.80	+0.130 -0.025	14.25	M14x1.5	15.5	11.5	4.75	
KNM12x1.25_IN KNML12x1.25_IN	M12x1.25	M16x1.5	16	9.5	14.75	+0.130 -0.025	16.25	M16x1.5	17.5	13.5	4.75	
KNM12x1.5_IN KNML12x1.5_IN	M12x1.5	M16x1.5	16	11.2	14.75	+0.130 -0.025	16.25	M16x1.5	17.5	13.5	4.75	
KNM12x1.75_IN KNML12x1.75_IN	M12x1.75	M16x1.5	16	10.2	14.75	+0.130 -0.025	16.25	M16x1.5	17.5	13.5	4.75	
Heavy Duty Series												
Code Standard   Locking	Dimensions				Installation				Removal			
	Internal Ød 6H	External ØD	L ±0.30	L1	d1 drill hole	d3 csink	d2 6H	T min.	Drill Diam.	Depth		
KNHM4x0.7_IN KNHML4x0.7_IN	M4x0.7	M8x1.25	8	8.0	6.9	+0.100 -0.025	8.25	M8x1.25	9.5	5.5	4.00	
KNHM5x0.8_IN KNHML5x0.8_IN	M5x0.8	M10x1.25	10	8.7	8.8	+0.100 -0.025	10.25	M10x1.25	11.5	7.5	4.75	
KNHM6x1.0_IN KNHML6x1.0_IN	M6x1.0	M12x1.25	12	9.5	10.8	+0.100 -0.025	12.25	M12x1.25	13.5	9.5	4.75	
KNHM8x1.25_IN KNHML8x1.25_IN	M8x1.25	M14x1.5	14	10.0	12.8	+0.100 -0.025	14.25	M14x1.5	15.5	11.5	4.75	
KNHM10x1.25_IN KNHML10x1.25_IN	M10x1.25	M16x1.5	16	10.0	14.8	+0.130 -0.025	16.25	M16x1.5	17.5	13.5	4.75	
KNHM10x1.5_IN KNHML10x1.5_IN	M10x1.5	M16x1.5	16	10.0	14.8	+0.130 -0.025	16.25	M16x1.5	17.5	13.5	4.75	
KNHM12x1.25_IN KNHML12x1.25_IN	M12x1.25	M18x1.5	18	10.7	16.8	+0.130 -0.025	18.25	M18x1.5	19.5	15.5	4.75	
KNHM12x1.5_IN KNHML12x1.5_IN	M12x1.5	M18x1.5	18	10.7	16.8	+0.130 -0.025	18.25	M18x1.5	19.5	15.5	4.75	
KNHM12x1.75_IN KNHML12x1.75_IN	M12x1.75	M18x1.5	18	10.7	16.8	+0.130 -0.025	18.25	M18x1.5	19.5	15.5	4.75	
KNHM14x1.5_IN KNHML14x1.5_IN	M14x1.5	M20x1.5	20	12.4	17.85	+0.130 -0.025	20.25	M20x1.5	22.5	17.50	4.75	
KNHM14x2.0_IN KNHML14x2.0_IN	M14x2.0	M20x1.5	20	12.4	17.85	+0.130 -0.025	20.25	M20x1.5	22.5	17.50	4.75	
KNHM16x2.0_IN KNHML16x2.0_IN	M16x2.0	M22x1.5	22	12.4	20.5	+0.130 -0.025	22.25	M22x1.5	24.5	17.75	4.75	
KNHM18x1.5_IN KNHML18x1.5_IN	M18x1.5	M24x1.5	24	16.8	22.5	+0.130 -0.025	24.25	M24x1.5	26.5	19.75	6.35	
KNHM20x1.5_IN KNHML20x1.5_IN	M20x1.5	M30x2.0	30	17.5	28	+0.130 -0.025	30.25	M30x2.0	34.5	25.75	6.35	
KNHM20x2.5_IN KNHML20x2.5_IN	M20x2.5	M30x2.0	30	17.5	28	+0.130 -0.025	30.25	M30x2.0	34.5	25.75	6.35	
KNHM22x1.5_IN KNHML22x1.5_IN	M22x1.5	M32x2.0	32	18.3	30	+0.130 -0.025	32.25	M32x2.0	36.5	27.75	6.35	
KNHM24x2.0_IN KNHML24x2.0_IN	M24x2.0	M33x2.0	33	19	31	+0.130 -0.025	37.5	M33x2.0	37.5	28.75	6.35	
KNHM24x3.0_IN KNHML24x3.0_IN	M24x3.0	M33x2.0	33	19	31	+0.130 -0.025	37.5	M33x2.0	37.5	28.75	6.35	



Number of Keys: 2 keys up to M6, 4 keys from M8 to M12 | Internal thread: M 6H  
Standard material: 303 CRES inserts – 302 CRES keys

# Key Inserts Thread Inserts with Keys Industrial Version UN

Miniatures series											
Code Standard   Locking	Dimensions				Installation				Removal		
	Internal Ød 2B	External ØD 2A	L	Z	d1 drill hole	d3 csink	d2	T min.	Drill Diam.	Depth	
KNCA0256_IN KNCAL0256_IN	2-56 A C	8-32 UNF	.09	.120	.161	$^{+.003}_{-.001}$	.134	8-32 UNF	.140	#33 (.113)	1/16
KNCA0440_IN KNCAL0440_IN	4-40 A C	10-32 UNF	.17	.125	.161	$^{+.003}_{-.001}$	.194	10-32 UNF	.160	#29 (.136)	3/32
KNC0632_IN KNCL0632_IN	6-32 A C	12-28 UNF	.17	.125	.187	$^{+.003}_{-.001}$	.220	12-28 UNF	.160	#21 (.159)	3/32
KNCA0832_IN KNCAL0832_IN	8-32 A C	1/4-28 UNF	.22	.175	.228	$^{+.003}_{-.001}$	.255	1/4-28 UNF	.210	#8 (.199)	1/8
Light Series											
Code Standard   Locking	Dimensions				Installation				Removal		
	Internal Ød	External ØD	L	L1	d1 drill hole	d3 csink	d2	T min.	Drill Diam.	Depth	
KN1024_IN KNL1024_IN	10-24 A C	5/16-18	.31	.22	.272	.323	5/16-18	.37	7/32	5/32	
KN1032_IN KNL1032_IN	10-32 UNF										
KN420_IN KNL420_IN	1/4-20 A C	3/8-16	.37	.22	.332	.385	3/8-16	.43	9/32	3/16	
KN428_IN KNL428_IN	1/4-28 UNF										
KN518_IN KNL518_IN	5/16-18 A C	7/16-14	.43	.22	.397	.447	7/16-14	.5	11/32	3/16	
KN524_IN KNL524_IN	5/16-24 UNF										
KN616_IN KNL616_IN	3/8-16 A C	1/2-13	.50	.24	.453	.510	1/2-13	.56	13/32	3/16	
KN624_IN KNL624_IN	8/3-24 UNF										
KN714_IN KNL714_IN	7/16-14 A C	9/16-12	.56	.27	.516	.572	9/16-12	.62	15/32	3/16	
KN720_IN KNL720_IN	7/16-20 UNF										
KN813_IN KNL813_IN	1/2-13 A C	5/8-11	.62	.28	.578	.635	5/8-11	.68	17/32	3/16	
KN820_IN KNL820_IN	1/2-20 UNF										
Heavy Duty Series											
Code Standard   Locking	Dimensions				Installation				Removal		
	Internal Ød	External ØD	L	L1	d1 drill hole	d3 csink	d2	T min.	Drill Diam.	Depth	
KNH0832_IN KNHL0832_IN	8-32 A C	5/16-18	.31	.22	.272	.323	5/16-18	.37	7/32	1/8	
KNH1024_IN KNHL1024_IN	10-24 A C										
KNH1032_IN KNHL1032_IN	10-32 UNF	3/8-16	.31	.22	.332	.385	3/8-16	.37	9/32	1/8	
KNH420_IN KNHL420_IN	1/4-20 A C										
KNH428_IN KNHL428_IN	1/4-28 UNF	7/16-14	.37	.22	.397	.447	7/16-14	.43	11/32	3/16	
KNH518_IN KNHL518_IN	5/16-18 A C										
KNH524_IN KNHL524_IN	5/16-24 UNF	1/2-13	.43	.22	.453	.510	1/2-13	.50	13/32	3/16	
KNH616_IN KNHL616_IN	3/8-16 A C										
KNH624_IN KNHL624_IN	8/3-24 UNF	9/16-12	.50	.25	.516	.572	9/16-12	.56	15/32	3/16	
KNH714_IN KNHL714_IN	7/16-14 A C										
KNH720_IN KNHL720_IN	7/16-20 UNF	5/8-11	.62	.28	.578	.635	5/8-11	.68	17/32	3/16	
KNH813_IN KNHL813_IN	1/2-13 A C										
KNH820_IN KNHL820_IN	1/2-20 UNF	11/16-11	.68	.28	.641	.700	11/16-11	.75	19/32	3/16	



L1 = max. distance to end of thread lock

Number of Keys: 2 keys up to 1/4", 4 keys 5/16"  
 Standard material: 303 CRES inserts – 302 CRES keys  
 Internal thread: 2B

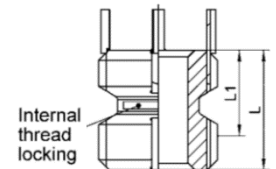
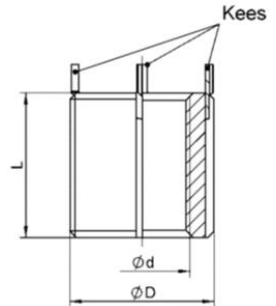
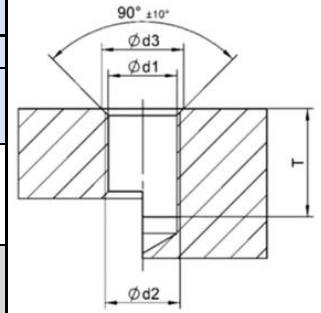


# Key Inserts Thread Inserts with Keys Industrial Version UN

Heavy Duty Series											
Code Standard   Locking	Dimensions				Installation				Removal		
	Internal Ød	External ØD	L	L1	d1 drill hole	d3 csink	d2	T min.	Drill Diam.	Depth	
KNH912_IN KNHL912_IN	9/16-12 A C	13/16-16	.81	.32	.766	.822	13/16-16	.94	23/32	3/16	
KNH918_IN KNHL918_IN	9/16-18 UNF										
KNH1011_IN KNHL1011_IN	5/8-11 A C	7/8-14	.87	.33	.828	.885	7/8-14	1.00	25/32	3/16	
KNH1018_IN KNHL1018_IN	5/8-18 UNF										
KNH1210_IN KNHL1210_IN	¾-10 A C	1-1/8-12	1.12	.49	1.062	1.145	1-1/8-12	1.31	31/32	5/16	
KNH1216_IN KNHL1216_IN	¾-16 UNF										
KNH1409_IN KNHL1409_IN	7/8-9 A C	1-1/4-12	1.25	.49	1.187	1,270	1-1/4-12	1.44	1-3/32	5/16	
KNH1414_IN KNHL1414_IN	7/8-14 UNF										
KNH1608_IN KNHL1608_IN	1-8 A C	1-3/8-12	1.37	.55	1,312	1,395	1-3/8-12	1.56	1-7/32	5/16	
KNH1612_IN KNHL1612_IN	1-16 UNF										

Extra Heavy Duty Series											
Code Standard   Locking	Dimensions				Installation				Removal		
	Internal Ød	External ØD	L	L1	d1 drill hole	d3 csink	d2	T min.	Drill Diam.	Depth	
KNHXH1024_IN KNHXHL1024_IN	10-24 A C	7/16-14	.31	.22	.397	.447	7/16-14	.37	11/32	3/16	
KNHXH1032_IN KNHXHL1032_IN	10-32 UNF										
KNHXH420_IN KNHXHL420_IN	1/4-20 A C	1/2-13	.37	.22	.453	.510	1/2-13	.43	13/32	3/16	
KNHXH428_IN KNHXHL428_IN	1/4-28 UNF										
KNHXH518_IN KNHXHL518_IN	5/16-18 A C	9/16-12	.43	.22	.516	.572	9/16-12	.50	15/32	3/16	
KNHXH524_IN KNHXHL524_IN	5/16-24 UNF										
KNHXH616_IN KNHXHL616_IN	3/8-16 A C	5/8-11	.50	.25	.578	.635	5/8-11	.56	17/32	3/16	
KNHXH624_IN KNHXHL624_IN	8/3-24 UNF										
KNHXH714_IN KNHXHL714_IN	7/16-14 A C	11/16-11	.62	.28	.641	.700	11/16-11	.68	19/32	3/16	
KNHXH720_IN KNHXHL720_IN	7/16-20 UNF										
KNHXH813_IN KNHXHL813_IN	1/2-13 A C	13/16-16	.68	.28	.766	.822	13/16-16	.75	23/32	3/16	
KNHXH820_IN KNHXHL820_IN	1/2-20 UNF										
KNHXH912_IN KNHXHL912_IN	9/16-12 A C	7/8-14	.81	.32	.828	.885	7/8-14	.94	25/32	3/16	
KNHXH918_IN KNHXHL918_IN	9/16-18 UNF										
KNH XH 1011_IN KNHXH L1011_IN	5/8-11 A C	1-12	.87	.33	.937	1,020	1-12	1.00	27/32	5/16	
KNH XH 1018_IN KNHXH L1018_IN	5/8-18 UNF										
KNHXH1210_IN KNHXHL1210_IN	¾-10 A C	1-1/4-12	1.12	.49	1.187	1,270	1-1/4-12	1.31	1-3/32	5/16	
KNHXH1216_IN KNHXHL1216_IN	¾-16 UNF										
KNH XH 1409_IN KNHXH L1409_IN	7/8-9 A C	1-3/8-12	1.25	.49	1,312	1,395	1-3/8-12	1.44	1-7/32	5/16	
KNH XH 1414_IN KNHXH L1414_IN	7/8-14 UNF										
KNHXH1608_IN KNHXHL1608_IN	1-8 A C	1-1/2-12	1.37	.55	1,437	1,520	1-1/2-12	1.56	1-11/32	5/16	
KNHXH1612_IN KNHXHL1612_IN	1-16 UNF										



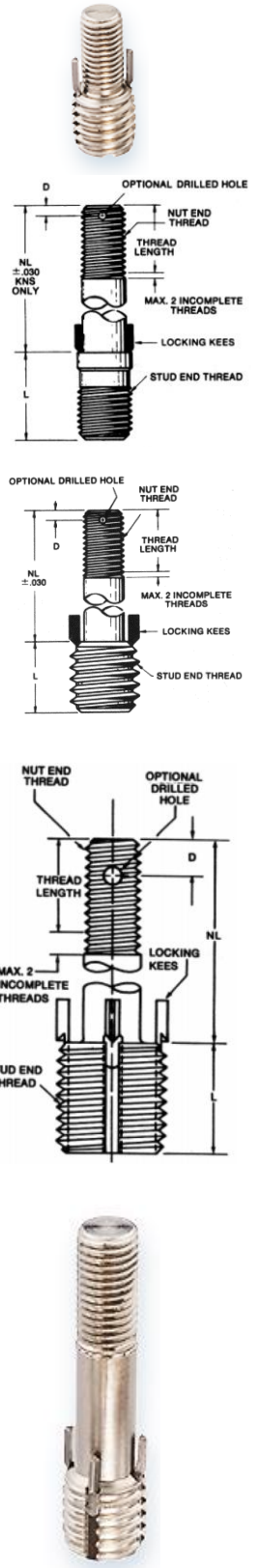
L1 = max. distance to end of thread lock

Number of Keys: 2 keys up to 1/4", 4 keys 5/16"  
 Standard material: 303 CRES inserts – 302 CRES keys  
 Internal thread: 2B

# Key Locking Studs Industrial Version Metric

Miniatures series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 6H	'TL' Spec. L. Possible ±0.75	Foro 'D' N.B. on demand D - Ø	'NL' OAL	Thread 6H	L Thread L. ±0.75
KNMS3.5x0.6	'S'-'NL'-'D'-'TL' IN	M3.5x0.6	9.4	/ - /	Da Indicare	M5x0.5	9.5
KNMS4x0.7	'S'-'NL'-'D'-'TL' IN	M4x0.7	10.4	/ - /	Da Indicare	M6x0.75	11.0
KNMS5x0.8	'S'-'NL'-'D'-'TL' IN	M5x0.8	10.4	3.5 - 1.8	Da Indicare	M7x0.75	12.5
KNMS5x0.5	'S'-'NL'-'D'-'TL' IN	M5x0.5	10.4	3.5 - 1.8	Da Indicare	M7x0.75	12.5
KNMS6x1.0	'S'-'NL'-'D'-'TL' IN	M6x1.0	11.9	4.0 - 2.0	Da Indicare	M8x1.0	17.5
KNMS6x0.75	'S'-'NL'-'D'-'TL' IN	M6x0.75	11.9	4.0 - 2.0	Da Indicare	M8x1.0	17.5
KNMS8x1.25	'S'-'NL'-'D'-'TL' IN	M8x1.25	13.5	4.4 - 2.0	Da Indicare	M10x1.25	18.5
KNMS8x1.0	'S'-'NL'-'D'-'TL' IN	M8x1.0	13.5	4.4 - 2.0	Da Indicare	M10x1.25	18.5
KNMS10x1.5	'S'-'NL'-'D'-'TL' IN	M10x1.5	16.3	4.4 - 2.7	Da Indicare	M12x1.25	20.5
KNMS10x1.25	'S'-'NL'-'D'-'TL' IN	M10x1.25	16.3	4.4 - 2.7	Da Indicare	M12x1.25	20.5
KNMS12x1.75	'S'-'NL'-'D'-'TL' IN	M12x1.75	19.8	4.4 - 2.7	Da Indicare	M14x1.5	23.5
KNMS12x1.25	'S'-'NL'-'D'-'TL' IN	M12x1.25	19.8	4.4 - 2.7	Da Indicare	M14x1.5	23.5
Light Series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 6H	'TL' Spec. L. Possible ±0.75	Foro 'D' N.B. on demand D - Ø	'NL' OAL	Thread 6H	L Thread L. ±0.75
KNNMS5x0.8	'S'-'NL'-'D'-'TL' IN	M5x0.8	10.4	3.5 - 1.8	Da Indicare	M8x1.25	8.0
KNNMS6x1.0	'S'-'NL'-'D'-'TL' IN	M6x1.0	11.9	4.0 - 2.0	Da Indicare	M10x1.25	10.0
KNNMS8x1.25	'S'-'NL'-'D'-'TL' IN	M8x1.25	13.5	4.4 - 2.0	Da Indicare	M12x1.25	12.0
KNNMS8x1.0	'S'-'NL'-'D'-'TL' IN	M8x1.0	13.5	4.4 - 2.0	Da Indicare	M12x1.25	12.0
KNNMS10x1.5	'S'-'NL'-'D'-'TL' IN	M10x1.5	16.3	4.4 - 2.7	Da Indicare	M14x1.5	14.0
KNNMS10x1.25	'S'-'NL'-'D'-'TL' IN	M10x1.25	16.3	4.4 - 2.7	Da Indicare	M14x1.5	14.0
KNNMS12x1.75	'S'-'NL'-'D'-'TL' IN	M12x1.75	19.8	4.4 - 2.7	Da Indicare	M16x1.5	16.0
KNNMS12x1.25	'S'-'NL'-'D'-'TL' IN	M12x1.25	19.8	4.4 - 2.7	Da Indicare	M16x1.5	16.0
Heavy Duty Series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 6H	'TL' Spec. L. Possible ±0.75	Foro 'D' N.B. on demand D - Ø	'NL' OAL	Thread 6H	L Thread L. ±0.75
KNHMS4x0.7	'S'-'NL'-'D'-'TL' IN	M4x0.7	10.5	/ - /	Da Indicare	M8x1.25	8.0
KNHMS5x0.8	'S'-'NL'-'D'-'TL' IN	M5x0.8	11.0	3.5 - 1.8	Da Indicare	M10x1.25	10.0
KNHMS6x1.0	'S'-'NL'-'D'-'TL' IN	M6x1.0	12.0	4.0 - 2.0	Da Indicare	M12x1.25	12.0
KNHMS8x1.25	'S'-'NL'-'D'-'TL' IN	M8x1.25	14.0	4.6 - 2.0	Da Indicare	M14x1.5	14.0
KNHMS8x1.0	'S'-'NL'-'D'-'TL' IN	M8x1.0	14.0	4.6 - 2.0	Da Indicare	M14x1.5	14.0
KNHMS10x1.5	'S'-'NL'-'D'-'TL' IN	M10x1.5	16.0	5.2 - 2.7	Da Indicare	M16x1.5	16.0
KNHMS10x1.25	'S'-'NL'-'D'-'TL' IN	M10x1.25	16.0	5.2 - 2.7	Da Indicare	M16x1.5	16.0
KNHMS12x1.75	'S'-'NL'-'D'-'TL' IN	M12x1.75	20.0	5.6 - 2.7	Da Indicare	M18x1.5	18.0
KNHMS12x1.5	'S'-'NL'-'D'-'TL' IN	M12x1.5	20.0	5.6 - 2.7	Da Indicare	M18x1.5	18.0
KNHMS12x1.25	'S'-'NL'-'D'-'TL' IN	M12x1.25	20.0	5.6 - 2.7	Da Indicare	M18x1.5	18.0
KNHMS14x2.0	'S'-'NL'-'D'-'TL' IN	M14x2.0	24.0	5.6 - 3.6	Da Indicare	M20x1.5	20.0
KNHMS14x1.5	'S'-'NL'-'D'-'TL' IN	M14x1.5	24.0	5.6 - 3.6	Da Indicare	M20x1.5	20.0
KNHMS16x2.0	'S'-'NL'-'D'-'TL' IN	M16x2.0	26.0	5.6 - 3.6	Da Indicare	M22x1.5	22.0
KNHMS16x1.5	'S'-'NL'-'D'-'TL' IN	M16x1.5	26.0	5.6 - 3.6	Da Indicare	M22x1.5	22.0
KNHMS18x1.5	'S'-'NL'-'D'-'TL' IN	M18x1.5	28.0	5.6 - 3.6	Da Indicare	M24x1.5	24.0
KNHMS20x2.5	'S'-'NL'-'D'-'TL' IN	M20x2.5	30.0	5.6 - 3.6	Da Indicare	M30x2.0	30.0
KNHMS20x1.5	'S'-'NL'-'D'-'TL' IN	M20x1.5	30.0	5.6 - 3.6	Da Indicare	M30x2.0	30.0
KNHMS22x1.5	'S'-'NL'-'D'-'TL' IN	M22x1.5	32.0	6.8 - 3.6	Da Indicare	M32x2.0	32.0
KNHMS24x3.0	'S'-'NL'-'D'-'TL' IN	M24x3.0	34.0	7.2 - 3.6	Da Indicare	M33x2.0	33.0
KNHMS24x2.0	'S'-'NL'-'D'-'TL' IN	M24x2.0	34.0	7.2 - 3.6	Da Indicare	M33x2.0	33.0

Number of Keys: 2 keys up to M6, 4 keys from M8  
 Standard material: 303 CRES inserts - 302 CRES keys  
 Specials on demand, MJ thread on demand



# Key Locking Studs Industrial Version UN

Miniatures series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 2A	'TL' Spec. L. Possible $\pm .030$ "	Foro 'D' N.B. on demand D - $\emptyset$	'NL' OAL	Thread 2A	L Thread L. $\pm .030$ "
KNS0632	'S'-NL'D'-TL' IN	6-32	.37	/ - /	Da Indicare	12-28	.312
KNS0832	'S'-NL'D'-TL' IN	8-32	.41	/ - /	Da Indicare	1/4-28	.375
KNS1032	'S'-NL'D'-TL' IN	10-32	.41	.141 - .070	Da Indicare	1/4-28	.437
KNS1024	'S'-NL'D'-TL' IN	10-24	.41	.141 - .070	Da Indicare	1/4-28	.437
KNS428	'S'-NL'D'-TL' IN	1/4-28	.47	.156 - .076	Da Indicare	5/16-24	.625
KNS420	'S'-NL'D'-TL' IN	1/4-2	.47	.156 - .076	Da Indicare	5/16-24	.625
KNS524	'S'-NL'D'-TL' IN	5/16-24	.53	.172 - .076	Da Indicare	3/8-24	.687
KNS518	'S'-NL'D'-TL' IN	5/16-18	.53	.172 - .076	Da Indicare	3/8-24	.687
KNS624	'S'-NL'D'-TL' IN	3/8-24	.64	.172 - .106	Da Indicare	7/16-20	.750
KNS616	'S'-NL'D'-TL' IN	3/8-16	.64	.172 - .106	Da Indicare	7/16-20	.750
KNS720	'S'-NL'D'-TL' IN	7/16-20	.66	.172 - .106	Da Indicare	1/2-20	.812
KNS714	'S'-NL'D'-TL' IN	7/16-14	.66	.172 - .106	Da Indicare	1/2-20	.812
KNS820	'S'-NL'D'-TL' IN	1/2-20	.78	.172 - .106	Da Indicare	9/16-18	.875
KNS813	'S'-NL'D'-TL' IN	1/2-13	.78	.172 - .106	Da Indicare	9/16-18	.875
Light Series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 2A	'TL' Spec. L. Possible $\pm .030$ "	Foro 'D' N.B. on demand D - $\emptyset$	'NL' OAL	Thread 2A	L Thread L. $\pm .030$ "
KNNS1032	'S'-NL'D'-TL' IN	10-32	.41	.141 - .070	Da Indicare	5/16-18	.31
KNNS1024	'S'-NL'D'-TL' IN	10-24	.41	.141 - .070	Da Indicare	5/16-18	.31
KNNS428	'S'-NL'D'-TL' IN	1/4-28	.47	.156 - .076	Da Indicare	3/8-16	.37
KNNS420	'S'-NL'D'-TL' IN	1/4-20	.47	.156 - .076	Da Indicare	3/8-16	.37
KNNS524	'S'-NL'D'-TL' IN	5/16-24	.53	.172 - .076	Da Indicare	7/16-14	.43
KNNS518	'S'-NL'D'-TL' IN	5/16-18	.53	.172 - .076	Da Indicare	7/16-14	.43
KNNS624	'S'-NL'D'-TL' IN	3/8-24	.64	.172 - .106	Da Indicare	1/2-13	.50
KNNS616	'S'-NL'D'-TL' IN	3/8-16	.64	.172 - .106	Da Indicare	1/2-13	.50
KNNS720	'S'-NL'D'-TL' IN	7/16-20	.66	.172 - .106	Da Indicare	9/16-12	.56
KNNS714	'S'-NL'D'-TL' IN	7/16-14	.66	.172 - .106	Da Indicare	9/16-12	.56
KNNS820	'S'-NL'D'-TL' IN	1/2-20	.78	.172 - .106	Da Indicare	5/8-11	.62
KNNS813	'S'-NL'D'-TL' IN	1/2-13	.78	.172 - .106	Da Indicare	5/8-11	.62
Heavy Duty Series							
Code	S: Material AISI303 NL: Screw Length D: Hole Yes/No TL: Tread Length	Screw Part				Stud Part	
		Thread 2A	'TL' Spec. L. Possible $\pm .030$ "	Foro 'D' N.B. on demand D - $\emptyset$	'NL' OAL	Thread 2A	L Thread L. $\pm .030$ "
KNHS0832	'S'-NL'D'-TL' IN	8-32	.41	/ - /	Da Indicare	5/16-18	.31
KNHS1032	'S'-NL'D'-TL' IN	10-32	.41	.070	Da Indicare	3/8-16	.31
KNHS1024	'S'-NL'D'-TL' IN	10-24	.41	.070	Da Indicare	3/8-16	.31
KNHS428	'S'-NL'D'-TL' IN	1/4-28	.47	.076	Da Indicare	7/16-14	.37
KNHS420	'S'-NL'D'-TL' IN	1/4-20	.47	.076	Da Indicare	7/16-14	.37
KNHS524	'S'-NL'D'-TL' IN	5/16-24	.53	.076	Da Indicare	1/2-13	.43
KNHS518	'S'-NL'D'-TL' IN	5/16-18	.53	.076	Da Indicare	1/2-13	.43
KNHS624	'S'-NL'D'-TL' IN	3/8-24	.64	.106	Da Indicare	9/16-12	.50
KNHS616	'S'-NL'D'-TL' IN	3/8-16	.64	.106	Da Indicare	9/16-12	.50
KNHS720	'S'-NL'D'-TL' IN	7/16-20	.66	.106	Da Indicare	5/8-11	.62
KNHS714	'S'-NL'D'-TL' IN	7/16-14	.66	.106	Da Indicare	5/8-11	.62
KNHS820	'S'-NL'D'-TL' IN	1/2-20	.78	.106	Da Indicare	11/16-11NS	.68
KNHS813	'S'-NL'D'-TL' IN	1/2-13	.78	.106	Da Indicare	11/16-11NS	.68
KNHS918	'S'-NL'D'-TL' IN	9/16-18	.91	.141	Da Indicare	13/16-16	.81
KNHS912	'S'-NL'D'-TL' IN	9/16-12	.91	.141	Da Indicare	13/16-16	.81
KNHS1018	'S'-NL'D'-TL' IN	5/8-18	.95	.141	Da Indicare	7/8-14	.87
KNHS1011	'S'-NL'D'-TL' IN	5/8-11	.95	.141	Da Indicare	7/8-14	.87
KNHS1216	'S'-NL'D'-TL' IN	3/4-16	1.09	.141	Da Indicare	1-1/8-12	1.12
KNHS1210	'S'-NL'D'-TL' IN	3/4-10	1.09	.141	Da Indicare	1-1/8-12	1.12
KNHS1414	'S'-NL'D'-TL' IN	7/8-14	1.25	.141	Da Indicare	1-1/4-12	1.25
KNHS1409	'S'-NL'D'-TL' IN	7/8-9	1.25	.141	Da Indicare	1-1/4-12	1.25
KNHS1612	'S'-NL'D'-TL' IN	1-12	1.37	.141	Da Indicare	1-3/8-12	1.37
KNHS1608	'S'-NL'D'-TL' IN	1-8	1.37	.141	Da Indicare	1-3/8-12	1.37

Number of Keys: 2 keys up to 1/4", 4 keys 5/16"  
 Standard material: 303 CRES inserts – 302 CRES keys  
 Specials on demand, UNJ thread on demand

