

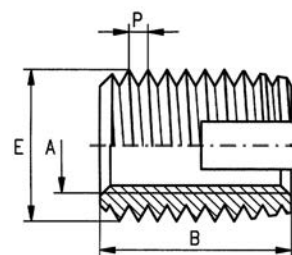


Threaded insert
self-tapping
metric inner thread

Ensat®-S
Works Standard
302 0

Application

The threaded insert Ensat®-S with cutting slot is a self-tapping fastener for the creation of wear-free, vibration resistant screw joints with high loading capacity in materials with low shearing strength.



Dimensions in mm

Article number	Internal thread	External thread		Length	Guideline values for receiving hole diameter	Minimum borehole depth for blind holes
	A	E	P	B	L	T
302 000 020 ...	M 2	4,5	0,5	6	4,1 to 4,2	8
302 000 025 ...	M 2,5	4,5	0,5	6	4,1 to 4,2	8
302 000 030 ...	M 3	5	0,5	6	4,6 to 4,7	8
302 000 035 ...	M 3,5	6	0,75	8	5,5 to 5,6	10
302 000 040 ...	M 4	6,5	0,75	8	6,0 to 6,1	10
302 000 050 ...	M 5	8	1	10	7,3 to 7,5	13
302 000 061 ...	M 6 (a)	9	1	12	8,3 to 8,5	15
302 000 060 ...	M 6	10	1,5	14	8,9 to 9,2	17
302 000 080 ...	M 8	12	1,5	15	10,9 to 11,2	18
302 000 100 ...	M 10	14	1,5	18	12,9 to 13,2	22
302 000 120 ...	M 12	16	1,5	22	14,9 to 15,2	26
302 000 140 ...	M 14	18	1,5	24	16,9 to 17,2	28
302 000 160 ...	M 16	20	1,5	22	18,9 to 19,2	26
302 000 180 ...	M 18	22	1,5	24	20,9 to 21,2	29
302 000 200 ...	M 20	26	1,5	27	24,9 to 25,2	32
302 000 220 ...	M 22	26	1,5	30	24,9 to 25,2	36
302 000 240 ...	M 24	30	1,5	30	28,9 to 29,2	36
302 000 270 ...	M 27	34	1,5	30	32,9 to 33,2	36
302 000 300 ...	M 30	36	1,5	40	34,9 to 35,2	46

Example for finding the article number

Self-tapping threaded insert Ensat®-S to Works Standard 302 0 with internal thread A = M5 made of case-hardened, zinc plated and blue passivated steel: Ensat®-S 302 000 050.110

Materials

Case-hardened steel, zinc plated, blue passivated
Case-hardened steel, zinc-nickel plated, transparent passivated
Stainless steel 1.4305
Brass

Article-No. (**fourth** group of digits) ... 110
Article-No. (**fourth** group of digits) ... 143
Article-No. (**fourth** group of digits) ... 500
Article-No. (**fourth** group of digits) ... 800

Other materials, designs (e. g. fine thread) and finishes on request.

Tolerance

ISO 2768-m

Thread

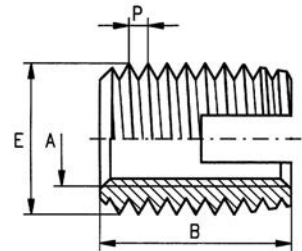
Internal thread A: as per ISO 6H
External thread E: as per KKV standard
Internal thread UNC, UNF, Whitworth see page 12

Animation



Application

Threaded insert with cutting slot and internal thread.
Whitworth, UNC or UNF



Dimensions in mm

	Article number	Internal thread	External thread		Length	Guideline values	Minimum
		inch	mm			for receiving hole diameter	
		A	E	P	B	L	T
Whitworth B.S.84 Internal thread Tolerance: medium	302 000 525 ...	1/4	10	1,5	14	8,9 to 9,2	17
	302 000 531 ...	5/16	12	1,5	15	10,9 to 11,2	18
	302 000 537 ...	3/8	14	1,5	18	12,9 to 13,2	22
	302 000 544 ...	7/16	16	1,5	22	14,9 to 15,2	26
	302 000 550 ...	1/2	18	1,5	22	16,9 to 17,2	26
	302 000 562 ...	5/8	20	1,5	22	18,9 to 19,2	26
UNC Unified Coarse Thread ANSI B1.1/BS 1580 Internal thread Tolerance 2B	302 000 604 ...	4 – 40	5	0,5	6	4,6 to 4,7	8
	302 000 606 ...	6 – 32	6	0,75	8	5,5 to 5,6	10
	302 000 608 ...	8 – 32	6,5	0,75	8	6,0 to 6,1	10
	302 000 610 ...	10 – 24	8	1	10	7,3 to 7,5	13
	302 000 625 ...	1/4 – 20	10	1,5	14	8,9 to 9,2	17
	302 000 631 ...	5/16 – 18	12	1,5	15	10,9 to 11,2	18
	302 000 637 ...	3/8 – 16	14	1,5	18	12,9 to 13,2	22
	302 000 644 ...	7/16 – 14	16	1,5	22	14,9 to 15,2	26
	302 000 650 ...	1/2 – 13	18	1,5	22	16,9 to 17,2	26
302 000 662 ...	5/8 – 11	20	1,5	22	18,9 to 19,2	26	
UNF Unified Fine Thread ANSI B1.1/B 1580 Internal thread Tolerance 2B	302 000 704 ...	4 – 48	5	0,5	6	4,6 to 4,7	8
	302 000 706 ...	6 – 40	6	0,75	8	5,5 to 5,6	10
	302 000 708 ...	8 – 36	6,5	0,75	8	6,0 to 6,1	10
	302 000 710 ...	10 – 32	8	1	10	7,3 to 7,5	13
	302 000 725 ...	1/4 – 28	10	1,5	14	8,9 to 9,2	17
	302 000 731 ...	5/16 – 24	12	1,5	15	10,9 to 11,2	18
	302 000 737 ...	3/8 – 24	14	1,5	18	12,9 to 13,2	22
	302 000 744 ...	7/16 – 20	16	1,5	22	14,9 to 15,2	26
	302 000 750 ...	1/2 – 20	18	1,5	22	16,9 to 17,2	26
	302 000 762 ...	5/8 – 18	20	1,5	22	18,9 to 19,2	26

Example for finding the article number

Self-tapping threaded insert Ensats®-S to Works Standard 302 0 with internal thread A = UNF 1/4-28 made of case-hardened, zinc plated and blue passivated steel: Ensats®-S 302 000 725.110

Materials

Case-hardened steel, zinc plated, blue passivated	Article-No. (fourth group of digits) ... 110
Case-hardened steel, zinc-nickel plated, transparent passivated	Article-No. (fourth group of digits) ... 143
Stainless steel 1.4305	Article-No. (fourth group of digits) ... 500
Brass	Article-No. (fourth group of digits) ... 800

Other materials, designs (e. g. fine thread) and finishes on request.

Tolerance

ISO 2768-m

Thread

External thread E: as per KKV standard

Remark:

Female threads in imperial measurements are also available for other Ensats® types.
Example: Self-tapping thread insert Ensats®-SB (see page 14, female thread M6) with female thread A = 1/4-20 UNC in steel, case hardened, zinc plated, blue passivated and a length of B = 12 mm: 308 000 625.110