

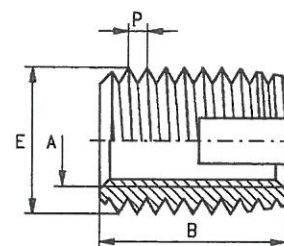
Application

The threaded insert 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.

It is suitable for installation in the following materials:

- Plastic, laminates
- Hardwood, but also
- Light alloys
- Cast iron, brass, bronze
- NF metals

For technical information see Publication 20



Dimensions in mm

Article no.	Internal thread A	External thread		Length B	Guideline values for receiving hole dia. L		Minimum drill hole depth in case of blind holes T
		E	P				
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	27
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 Ensats-S of Works Standard series 302 with internal thread A = M5 made of steel, hardened, zinc-plated and yellow chromated: Ensats-S 302 000 050.160

Materials

- Unhardened steel
- Case-hardened steel, zinc-plated, blue passivated
- Case-hardened steel, zinc-plated, yellow chromated
- Brass
- Rust-proof steel 1.4105
- Rust-proof steel 1.4305
- Other materials, designs and finishes on request.

- Article no. 100
- Article no. 110
- Article no. 160
- Article no. 800
- Article no. 400
- Article no. 500

Tolerances

ISO 2768-m

Thread

Internal thread A: as per ISO 6H
External thread E: metric, tolerances in accordance with works standard
Internal thread UNC, UNF, Whitworth, see page 9

Remark:

M2/M2.5 only for materials with minimal strength, as the shearing resistance of the studs in the installation tools may be insufficient.

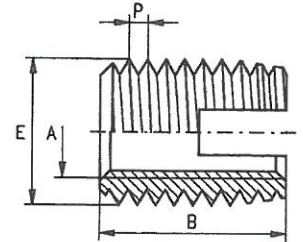


Threaded insert
self-tapping
imperial thread

Ensats®-S
Works Standard
302

Application

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



Dimensions in mm

	Article no.	Internal thread inch	External thread mm		Length mm	Guideline values for receiving hole dia.		Minimum drill hole depth in case of blind holes T
			E	P		L		
Whitworth B.S.84 Internal thread tolerance class 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	27	
UNC Unified Coarse Thread ANSI B1.1/BS 1580 Internal thread tolerance class 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	28
302 000 662 ...	5/8 - 11	20	1,5	22	18,9	to 19,2	27	
UNF Unified Fine Thread ANSI B1.1/B 1580 Internal thread tolerance class 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	28
302 000 762 ...	5/8 - 18	20	1,5	22	18,9	to 19,2	27	

Example for finding the article number

Self-tapping threaded insert Ensats-S of Works Standard series 302 with internal thread UNF 1/4"-28 made of steel, hardened, zinc-plated and yellow chromated: Ensats-S 302 000 725.160

Materials

Unhardened steel
Case-hardened steel, zinc-plated, blue passivated
Case-hardened steel, zinc-plated, yellow chromated
Brass
Rust-proof steel 1.4105
Rust-proof steel 1.4305
Other materials, designs and finishes on request.

Article no. 100
Article no. 110
Article no. 160
Article no. 800
Article no. 400
Article no. 500

Tolerances

ISO 2768-m

Thread

External thread E: metric, Tolerances in accordance with Works Standard