INSERTS FOR PLASTIC

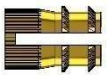
ATS
bet on us

Quality Sistem Certified Company UNI EN ISO 9001:2015 Reg.3023-A

INDEX

INSERT SELECTION GUIDE

	Hard thermoplastics PA – PPS- PBT – PC/ABS	Medium thermoplastics ABS – PA – POM – PVC	Soft thermoplastics PP – PE –HDPE	Amorphous thermoplastics PPO – PC	Thermosetting	Thermosetting polyesters SMC – DMC – BMC	Thermo-plastic foams	Transparent foams	Traction
 ATSUSL	OK	OK	OK	OK hot No ultrasound	NO	NO	+/-	NO	OK
 ATSHSL	OK	OK	OK	OK hot No ultrasound	NO	NO	+/-	NO	OK
 ATSUTC	OK	OK	OK	OK hot No ultrasound	NO	NO	+/-	NO	OK
 ATSUHL	+/-	+/-	NO	OK	NO	NO	+/-	NO	OK
 ATSHHL	+/-	+/-	NO	OK	NO	NO	+/-	NO	OK
 ATSUFL	NO	OK	OK	NO	NO	NO	NO	NO	+/-
 ATSHFL	NO	OK	OK	NO	NO	NO	NO	NO	+/-
 ATSUPLK	NO	OK	OK	NO	NO	NO	NO	NO	+/-
 ATSUBL	NO	NO	NO	NO	OK	NO	NO	NO	+/-
 ATSHBL	NO	NO	NO	NO	OK	NO	NO	NO	+/-
 ATSHBLR	NO	NO	NO	NO	OK	NO	NO	NO	+/-
 ATSUSP	NO	NO	NO	NO	OK	+/-	NO	NO	+/-

	Hard thermoplastics PA – PPS-PBT – PC/ABS	Medium thermoplastics ABS – PA – POM – PVC	Soft thermoplastics PP – PE – HDPE	Amorphous thermoplastics PPO – PC	Thermosetting	Thermosetting polyesters SMC – DMC – BMC	Thermo-plastic foams	Transparent foams	Traction
 ATSHSP	NO	NO	NO	NO	OK	+/-	NO	NO	+/-
 ATSUPTS	NO	NO	NO	NO	OK	+/-	NO	NO	+/-
 ATSHPTS	NO	NO	NO	NO	OK	+/-	NO	NO	+/-
 ATSUFTC	OK	OK	OK	OK	OK	OK	OK	OK	OK
 ATSCPBCM	+/-	OK	OK	OK	+/-	NO	NO	NO	+/-
 ATSCPBCML	+/-	OK	OK	OK	+/-	NO	NO	NO	+/-
 ATSU212	+/-	OK	OK	NO	+/-	+/-	OK	OK	OK
 ATSBAF212	+/-	OK	OK	NO	+/-	+/-	OK	OK	OK
 ATSBAF318	+/-	OK	OK	NO	+/-	+/-	OK	OK	OK

ATSUSL - ATSHSL

HOT INSERTION

ATSUSL and **ATSHSL** are threaded brass inserts for use on thermoplastic materials by means of heat or ultrasonic insertion.
Opposite knurling provides excellent tensile and torsion resistance.
They can also be inserted in co-moulding.

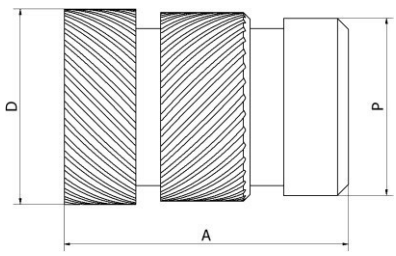
ATSUSL

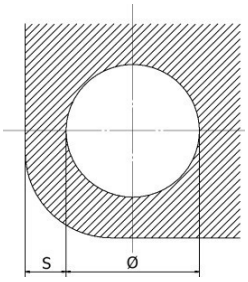
ATSHSL

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUSLM2 **ATSHSLM2**	M 2	4	0,53	4,8	3,6	3,1	3,2	1,3
ATSUSLM2,5 **ATSHSLM2,5**	M 2,5	5,7	0,61	5,5	4,6	3.9	4	1,6
ATSUSLM3 **ATSHSLM3**	M 3	5,7	0,61	5,5	4,6	3,9	4	1,6
ATSUSLM4 **ATSHSLM4**	M 4	8,1	0,91	7,1	6,3	5,5	5,6	2,1
ATSUSLM5 **ATSHSLM5**	M 5	9,5	1,09	7,9	7,1	6,3	6,4	2,6
ATSUSLM6 **ATSHSLM6**	M 6	12,7	1,35	9,5	8,7	7,9	8	3,3
ATSUSLM8 **ATSHSLM8**	M 8	12,7	1,35	11,1	10,2	9,5	9,6	4,5
ATSUSLM10 **ATSHSLM10**	M 10	12,7	1,6	14	12,6	11,8	11,9	6
ATSUSLM12 **ATSHSLM12**	M 12	15,9	2	19	16,7	15,8	16	8

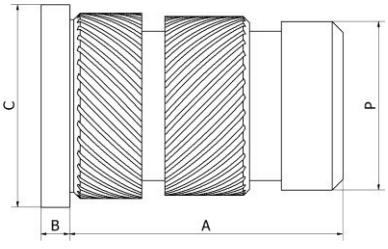
All dimensions are expressed in mm

ATSUSL





ATSHSL



ATSUTC
HOT INSERTION

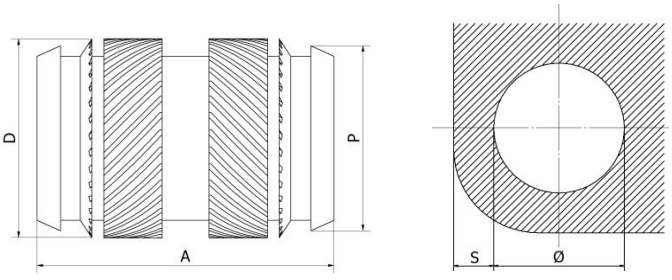
ATSUTC is a threaded brass insert with superior sealing characteristics than the ATSUSL insert due to its opposing knurls and knurled flanges.
The insert's symmetrical shape is also recommended for automatic insertion.

ATSUTC

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUTCM2	M 2	4	/	/	3,5	3,1	3,2	1,3
ATSUTCM2,5	M 2,5	5,7	/	/	4,4	3.9	4	1,6
ATSUTCM3	M 3	5,7	/	/	4,4	3,9	4	1,6
ATSUTCM4	M 4	8,1	/	/	6,1	5,5	5,6	2,1
ATSUTCM5	M 5	9,5	/	/	6,8	6,3	6,4	2,6
ATSUTCM6	M 6	12,7	/	/	8,5	7,9	8	3,3
ATSUTCM8	M 8	12,7	/	/	10,0	9,5	9,6	4,5
ATSUTCM10	M 10	12,7	/	/	12,3	11,8	11,9	6
ATSUTCM12	M 12	15,9	/	/	16,3	15,8	16	8

All dimensions are expressed in mm

ATSUTC



ATSUHL - ATSHHL

HOT INSERTION

ATSUHL and **ATSHHL** are threaded brass inserts for installation in amorphous, notch-sensitive thermoplastics.
Characterised by rounded knurls, they can also be inserted in co-moulding.

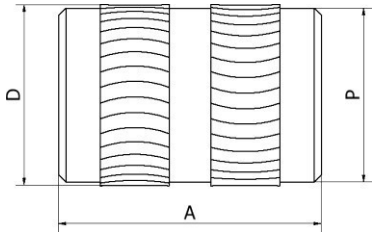
ATSUHL

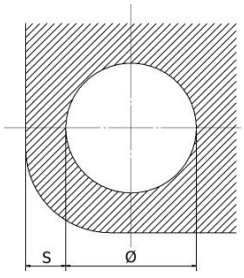
ATSHHL

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUHLM2 **ATSHHLM2**	M 2	3,9	0,51	4,8	3,5	3,1	3,2	1,4
ATSUHLM2,5 **ATSHHLM2,5**	M 2,5	5,8	0,58	5,5	4,4	3,9	4,0	1,8
ATSUHLM3 **ATSHHLM3**	M 3	5,8	0,58	5,5	4,4	3,9	4,0	1,8
ATSUHLM4 **ATSHHLM4**	M 4	8,1	0,89	7,1	6,1	5,5	5,6	2,4
ATSUHLM5 **ATSHHLM5**	M 5	9,5	1,07	7,9	6,9	6,3	6,4	2,8
ATSUHLM6 **ATSHHLM6**	M 6	12,7	1,32	9,5	8,5	7,9	8,0	3,6
ATSUHLM8 **ATSHHLM8**	M 8	12,7	1,32	11,1	10,0	9,5	9,6	5

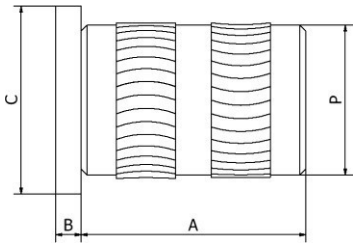
All dimensions are expressed in mm

ATSUHL





ATSHHL



ATSUFL - ATSHFL

INSERTION BY PRESSURE

ATSUFL and **ATSHFL** are threaded brass press-fit inserts suitable for most soft and medium thermoplastic materials.

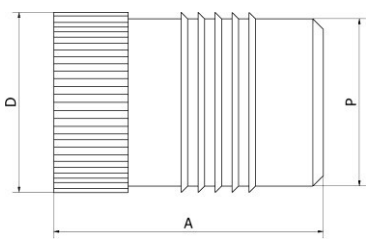
ATSUFL

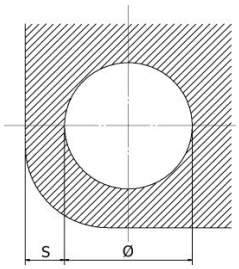
ATSHFL

CODE	THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUFLM2 **ATSHFLM2**	M 2	3,9	0,51	4,8	3,5	3,1	3,2	1,4
ATSUFLM2,5 **ATSHFLM2,5**	M 2,5	5,8	0,58	5,5	4,4	3,9	4	1,8
ATSUFLM3 **ATSHFLM3**	M 3	5,8	0,58	5,5	4,4	3,9	4	1,8
ATSUFLM4 **ATSHFLM4**	M 4	8,1	0,89	7,1	6,1	5,5	5,6	2,4
ATSUFLM5 **ATSHFLM5**	M 5	9,5	1,07	7,9	6,9	6,3	6,4	2,8
ATSUFLM6 **ATSHFLM6**	M 6	12,7	1,32	9,5	8,5	7,9	8	3,6
ATSUFLM8 **ATSHFLM8**	M 8	12,7	1,32	11,1	10	9,5	9,6	5

All dimensions are expressed in mm

ATSUFL





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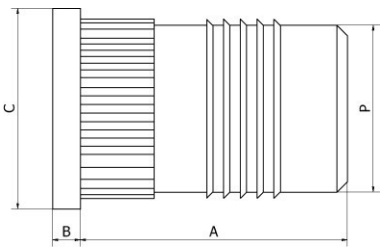


ATSUPLK

INSERTION BY PRESSURE

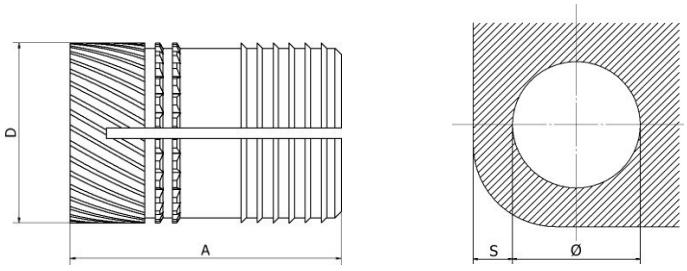
ATSUPLK is a threaded brass insert for quick installation in soft and medium thermoplastic materials.
Equipped with fins and knurling, unlike the ATSUFL insert, it features a vertical notch which, after insertion, has a slight self-braking effect on the screw.

ATSUPLK

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUPLKM2	M 2	4	/	/	3,5	/	3,2	1,6
ATSUPLKM2,5	M 2,5	5,8	/	/	4,4	/	4,0	2
ATSUPLKM3	M 3	5,8	/	/	4,4	/	4,0	2
ATSUPLKM4	M 4	8,2	/	/	6,1	/	5,6	2,8
ATSUPLKM5	M 5	9,5	/	/	6,8	/	6,4	3,2
ATSUPLKM6	M 6	12,7	/	/	8,5	/	8	4
ATSUPLKM8	M 8	12,7	/	/	10	/	9,6	4,8

All dimensions are expressed in mm

ATSUPLK



ATSUBL – ATSHBL - ATSHBLR

INSERTION BY PRESSURE

ATSXBL, **ATSXHBL** and **ATSXHBLR** are press-fit brass threaded inserts with an expanding seal, ideal for thermosets.
Equipped with knurling, they feature a vertical notch which has a slight self-locking effect on the screw after insertion.

ATSUBL

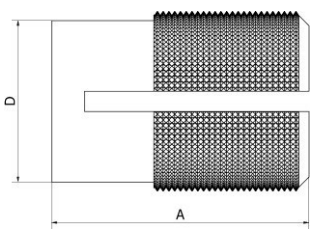
ATSHBL

ATSHBLR

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUBLM2 **ATSHBLM2** **ATSHBLRM2**	M 2	3,9	0,43	4,8	3,2	/	3,2	2,4
ATSUBLM2,5 **ATSHBLM2,5** **ATSHBLRM2,5**	M 2,5	4,7	0,51	5,5	4	/	4	3,2
ATSUBLM3 **ATSHBLM3** **ATSHBLRM3**	M 3	4,7	0,51	5,5	4	/	4	3,2
ATSUBLM4 **ATSHBLM4** **ATSHBLRM4**	M 4	7,9	0,82	7,1	5,5	/	5,6	4
ATSUBLM5 **ATSHBLM5** **ATSHBLRM5**	M 5	9,4	0,99	7,9	6,3	/	6,4	4,8
ATSUBLM6 **ATSHBLM6** **ATSHBLRM6**	M 6	12,6	1,25	9,5	7,9	/	8	6
ATSUBLM8 **ATSHBLM8** **ATSHBLRM8**	M 8	12,6	1,25	11,1	9,5	/	9,6	7

All dimensions are expressed in mm

ATSUBL



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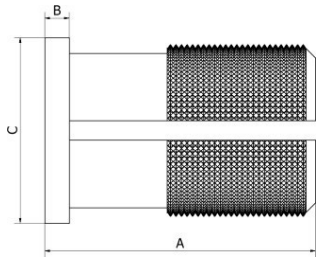
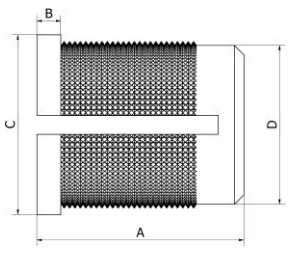
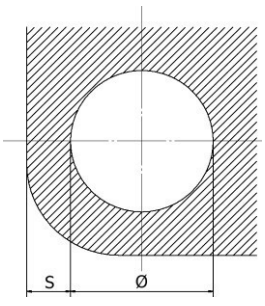


ATSHBLR





ATSUSP - ATSHSP

INSERTION BY PRESSURE

ATSUSP and **ATSHSP** are threaded brass inserts designed for use in hard and brittle thermosets.
The sharp-edged knurling allows for high torsion resistance.

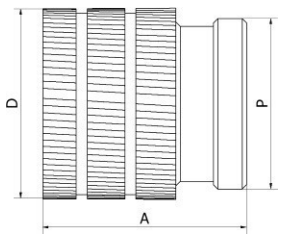
ATSUSP

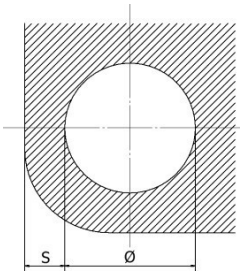
ATSHSP

CODE	INTERNAL THREAD	A	B	C	D	P	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS S
ATSUSPM2 **ATSHSPM2**	M 2	4,1	0,51	4,8	3,3	3	3,1	1,6
ATSUSPM2,5 **ATSHSPM2,5**	M 2,5	5,3	0,58	5,5	4,2	3,7	3,8	2
ATSUSPM3 **ATSHSPM3**	M 3	5,3	0,58	5,5	4,2	3,7	3,8	2
ATSUSPM4 **ATSHSPM4**	M 4	7,4	0,89	7,1	5,8	5,3	5,4	2,5
ATSUSPM5 **ATSHSPM5**	M 5	8,3	1,07	7,9	6,6	6,1	6,2	2,5
ATSUSPM6 **ATSHSPM6**	M 6	9,2	1,32	9,5	8,2	7,7	7,8	2,8
ATSUSPM8 **ATSHSPM8**	M 8	9,2	1,32	11,1	9,7	9,3	9,3	3,8
ATSUSPM10 **ATSHSPM10**	M 10	9,2	1,32	14	12,7	12,2	12,3	5

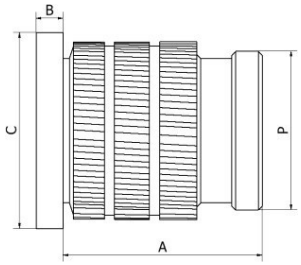
All dimensions are expressed in mm

ATSUSP





ATSHSP



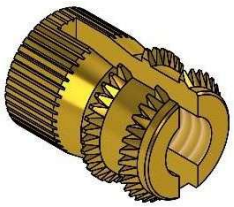
ATSCPBCM – ATSCPBCML

INSERTION BY PRESSURE

ATSCPBCM and **ATSCPBCML** are brass expansion inserts designed for press-fit installation in all thermoplastic materials. Once installed, they provide a slight self-locking effect on the screw. Excellent resistance to torque and pull-out forces.

ATSCPBCM

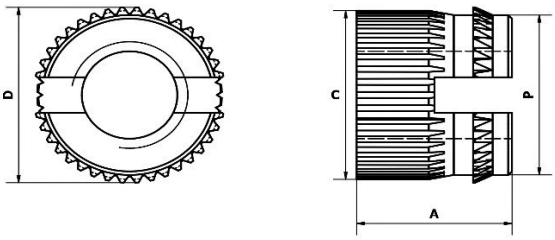
ATSCPBCML



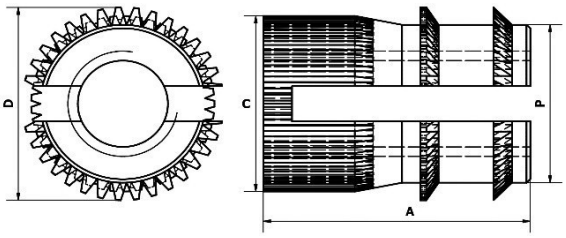
CODE	INTERNAL THREAD	A	C	D	P	HOLE Ø
ATSCPBCM2	M 2	3,5	3,5	3,9	3,1	3,1-3,2
ATSCPBCM2,5	M 2,5	4	4	4,4	3,5	3,6-3,7
ATSCPBCM3	M3	5	5	5,6	4,5	4,6-4,7
ATSCPBCML3		8	5	5,6	4,5	4,6-4,7
ATSCPBCMLL3		9,5	5	5,6	4,5	4,6-4,7
ATSCPBCM4	M4	5	6	6,6	5,4	5,5-5,6
ATSCPBCML4		8	6	6,6	5,4	5,5-5,6
ATSCPBCMLL4		9,5	6	6,6	5,4	5,5-5,6
ATSCPBCM5	M5	6	7	7,6	6,5	6,6-6,7
ATSCPBCML5		9	7	7,6	6,5	6,6-6,7
ATSCPBCM6	M6	7	8	8,6	7,5	7,6-7,7
ATSCPBCML6		9	8	8,6	8,72	7,6-7,7
ATSCPBCML8	M8	10	10	10,6	9,4	9,5-9,6

All dimensions are expressed in mm

ATSCPBCM



ATSCPBCML



ATSUPTS - ATSHPTS

INSERTION BY PRESSURE

ATSUPTS and **ATSHPTS** are male threaded brass inserts designed for use in thermosets.
The sharp-edged knurling allows for high torsion and tensile strength, pin threads available in different lengths.

ATSUPTS

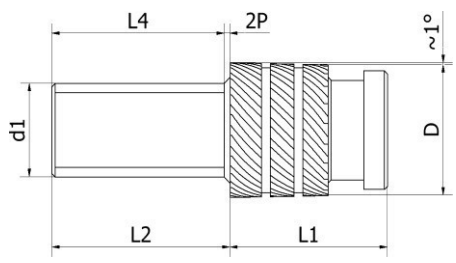
ATSHPTS

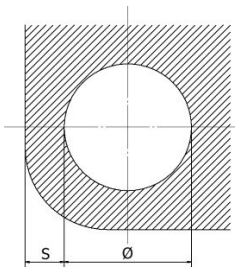
CODE	d1	L2	D	L1	D4	L3	HOLE Ø - 0,00 + 0,10	WALL MINIMUM THICKNESS
ATSUPTSM2 **ATSHPTSM2**	M 2	6-10-16-25	3,35	4	- 4,8	- 0,6	3,1	1,6
ATSUPTSM2,5 **ATSHPTSM2,5**	M 2,5	6-10-16-25	4,2	5,3	- 5,6	- 0,6	3,8	2
ATSUPTSM3 **ATSHPTSM3**	M 3	6-10-16-25	4,2	5,3	- 5,6	- 0,6	3,8	2
ATSUPTSM3,5 **ATSHPTSM3,5**	M 3,5	6-10-16-25	5	6,3	- 6,4	- 0,8	4,6	2,5
ATSUPTSM4 **ATSHPTSM4**	M 4	6-10-16-25	5,8	7,4	- 7,2	- 0,8	5,4	2,5
ATSUPTSM5 **ATSHPTSM5**	M 5	6-10-16-25	6,6	8,3	- 8	- 1	6,2	2,5
ATSUPTSM6 **ATSHPTSM6**	M 6	6-10-16-25	8,2	9,2	- 9.5	- 1,3	7,8	2,8
ATSUPTSM8 **ATSHPTSM8**	M 8	6-10-16-25	9,7	9,2	- 11	- 1,3	9,3	3,8

THREAD LENGTH L4 = L2-2P
(P=THREAD PITCH)

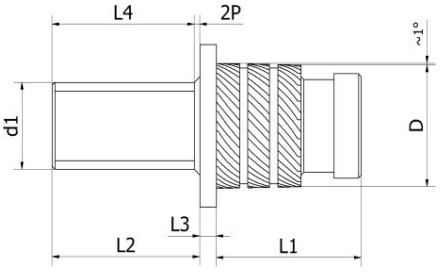
All dimensions are expressed in mm

ATSUPTS





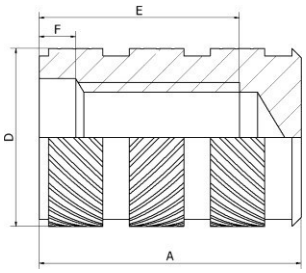
ATSHPTS



ATSUFTC
INSERTION MOULDING

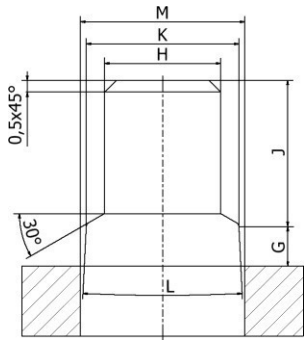
ATSUFTC is a threaded brass insert with a blind bottom ideal for co-moulding.
Its 3 opposed helical strip knurling together with its grooves provide high torsion and tension results.

ATSUFTC



CODE	INTERNAL THREAD	A	D	Min. E	F
ATSUFTCM2	M 2	5,5	3,4	3,6	1
ATSUFTCM2,5	M 2,5	6,4	4,3	4	1,2
ATSUFTCM3	M 3	7,3	4,7	4,6	1,3
ATSUFTCM4	M 4	10,2	6,3	6,7	1,8
ATSUFTCM5	M 5	11,2	7,3	7,4	2
ATSUFTCM6	M 6	14,4	9,8	8,1	2
ATSUFTCM8	M 8	16,5	11,4	11,1	2,3
ATSUFTCM10	M 10	17,9	13,8	11,9	2,4

REFERENCE PIN ON THE MOULD



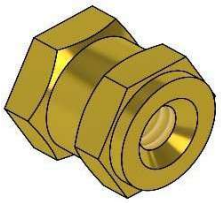
INTERNAL THREAD	G -020 +040 mm	H -025 +000 mm	J -100 +100 mm	K -0125 +0125 mm	L Including Degrees	M mm
M 2	0,8	1,55	2,65	2,3	6	3
M 2,5	0,9	2	3	2,8	5	3,5
M 3	1,05	2,45	3,4	3,125	4,5	4
M 4	1,55	3,25	5	4,425	4,5	5,4
M 5	1,7	4,15	5,55	5,125	5	6
M 6	1,8	4,95	6,15	6,5	5,5	8
M 8	2	6,7	9	8,5	6	10
M 10	2,1	8,4	9,7	10,5	6	12

All dimensions are expressed in mm

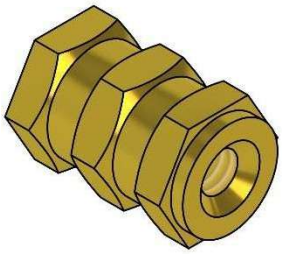
ATSIECM – ATSIECML

INSERTION MOULDING

ATSIECM



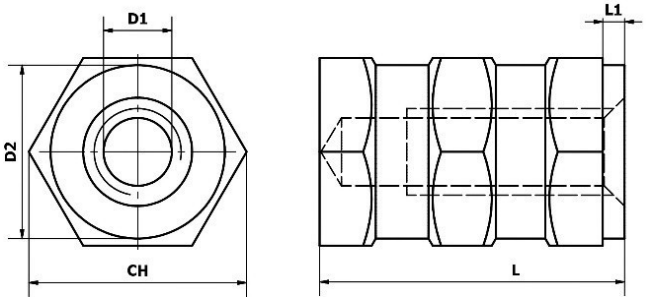
ATSIECML



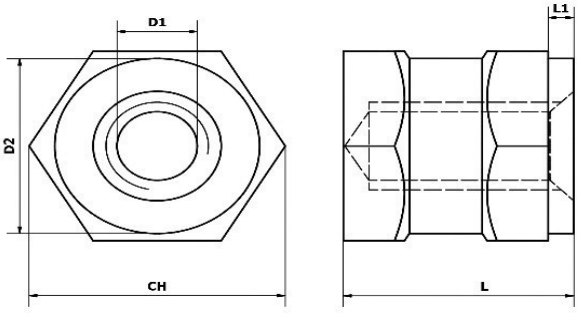
CODE	D1	CH	L	L1	D2
ATSIECM3	M3	5	4,5	1	4
ATSIECML3		5	6	1	4
ATSIECM4	M4	6	6	1	5,5
ATSIECML4		6	8	1	5,5
ATSIECM5	M5	7	7,5	1	7
ATSIECML5		7	10	1	7
ATSIECM6	M6	9	9	1	8
ATSIECML6		9	12	1	8
ATSIECM8	M8	11	12	1	10
ATSIECML8		11	16	1	10
ATSIECM10	M10	14	15	1	12
ATSIECML10		14	20	1	12

All dimensions are expressed in mm

ATSIECML



ATSIECM

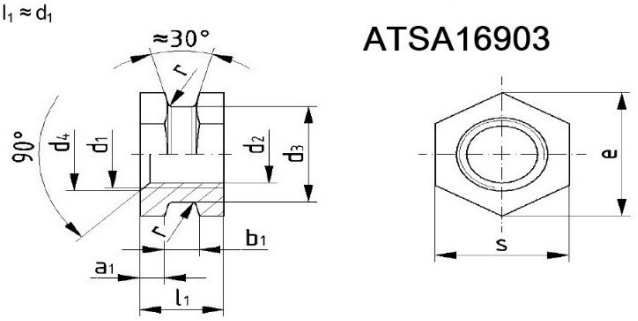


THREADED INSERT DIN 16903 (DIN ISO 1101)

INSERTION MOULDING

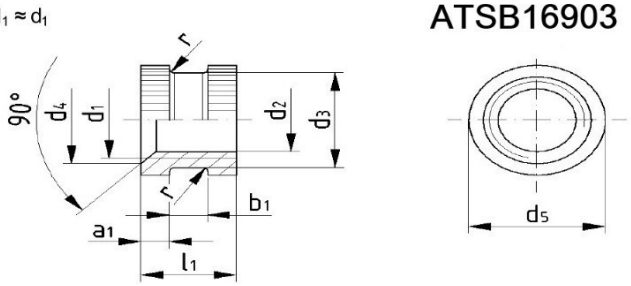
$l_1 \approx d_1$

ATSA16903



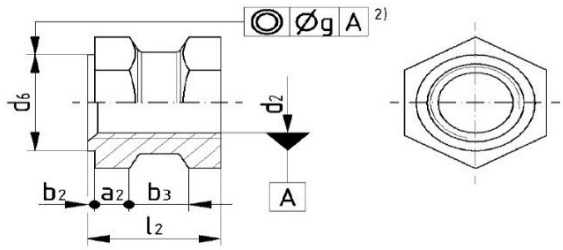
$l_1 \approx d_1$

ATSB16903



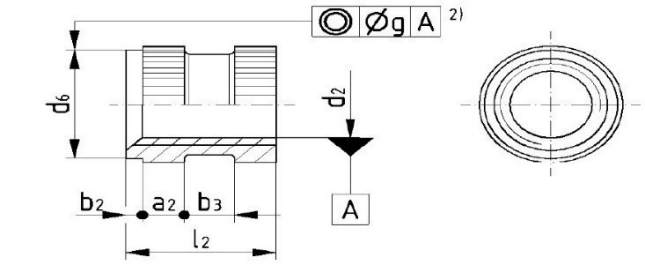
$l_2 \approx 1{,}5d_1$

ATSC16903

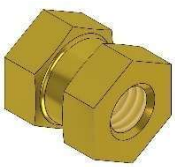


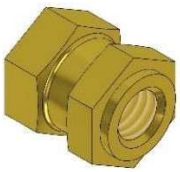
$l_2 \approx 1{,}5d_1$

ATSD16903



Threaded inserts		B, D		A, B, C, D					A, C		
Quote	Tolerance	M 2	M 2,5	M 3	M 3,5	M 4	M 5	M 6	M 8	M 10	M 12
a_1		0,8	0,9	0,9	1	1,2	1,6	1,8	2	3	3,5
a_2		0,9	1	1,2	1,6	1,8	2	2,5	4	4	5
b_1		0,8	0,8	1,2	1,4	1,4	1,8	2,4	4	4	5
b_2		0,8	0,8	1	1	1	1	1	1	1	1
b_3		0,8	1	1,2	1,4	1,4	2,5	3	4	6	7
d_2	H11	1,6	2,05	2,5	2,9	3,3	4,2	5	6,8	8,5	10,3
d_3	h12	3,2	3,4	3,8	4,5	5	6,4	7,4	10,4	13	17
d_4		2,7	3	3,4	4	4,5	5,5	6,8	8,8	11	13
d_5 1)		3,5	3,8	4,2	5	5,5	7	8	-	-	-
d_6	h11	3,5	3,8	4,2	5	5,5	7	8	10	12,5	16
g		0,1	0,1	0,1	0,1	0,1	0,1	0,16	0,16	0,2	0,2
l_1	h12	2,3	2,6	3	3,5	4	5	6	8	10	12
l_2	h12	3,5	4	4,5	5,5	6	7,5	9	12	15	18
r	≈	0,3	0,3	0,3	0,3	0,4	0,6	0,6	0,6	0,6	0,6
t		0,5	0,5	0,5	0,5	0,5	0,6	0,6	-	-	-
s	≈	-	-	5	5,5	6	7	9	11	14	19
e	≈	-	-	5,8	6,1	6,9	8,1	10,4	12,7	16,2	21,9

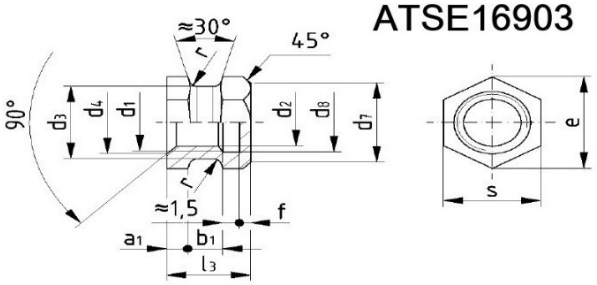




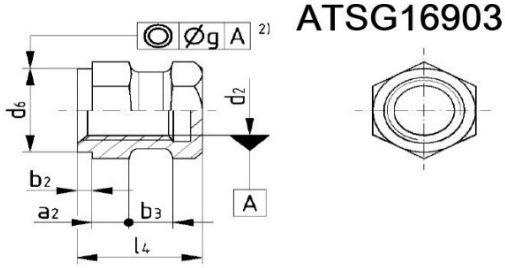

THREADED INSERT DIN 16903 (DIN ISO 1101)

INSERTION MOULDING

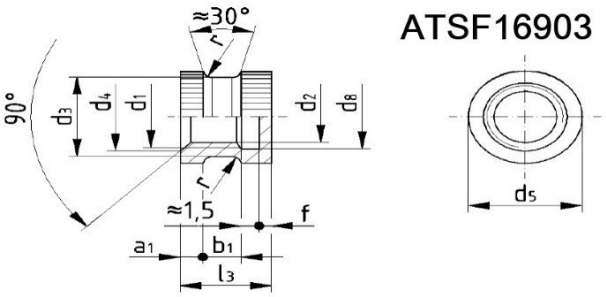
ATSE16903



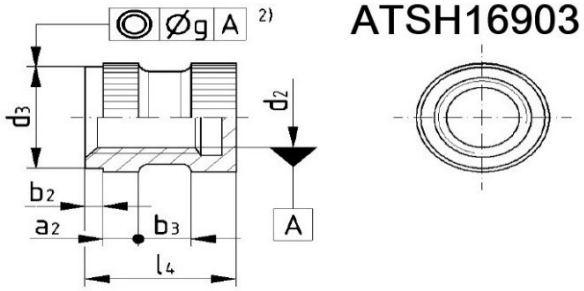
ATSG16903



ATSF16903



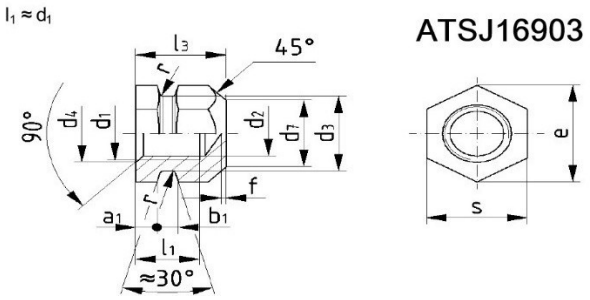
ATSH16903

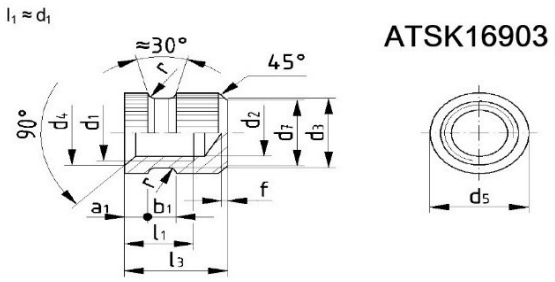


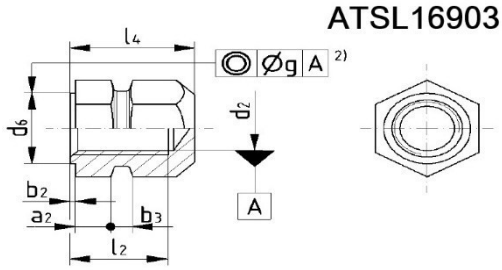
Threaded inserts		-		E, F, G, H					E, G	
Quote	**Tolerance**	-	-	M 3	M 3,5	M 4	M 5	M 6	M 8	M 10
a_1		-	-	1,2	1,4	1,4	1,5	1,8	2,5	ON REQUEST
a_2		-	-	1,2	1,5	1,5	2	2,5	3,5	
b_1		-	-	1,5	1,8	2,2	2,5	3,2	3,8	
b_2		-	-	1	1	1	1	1	1	
b_3		-	-	1,8	2,2	2,5	3	3,5	4,5	
f		-	-	**For manufacturing reasons, minimum pitch x 1.5 (to be specified before placing the order).**						
d_2	H11	-	-	2,5	2,9	3,3	4,2	5	6,8	
d_3	h12	-	-	3,8	4,5	5	6,4	7,4	10,4	
d_4		-	-	3,4	4	4,5	5,5	6,8	8,8	
d_5 1)		-	-	4,2	5	5,5	7	8	12	
d_6	h11	-	-	4,2	5	5,5	7	8	10	
d_7		-	-	4,2	5,5	6	7	9	11	
d_8	+0,3	-	-	3	3,5	4	5	6	8	
g	h14	-	-	0,1	0,1	0,1	0,1	0,16	0,16	
l_3	h12	-	-	3,8	4,5	5	6	7	9,5	
l_4	h12	-	-	5,3	6,5	7	8,5	10	13,5	
r		-	-	0,3	0,3	0,4	0,6	0,6	0,6	
t		-	-	0,5	0,5	0,5	0,5	0,6	-	
s		-	-	5	5,5	6	7	9	11	
e		-	-	5,8	6,1	6,9	8,1	10,4	12,7	

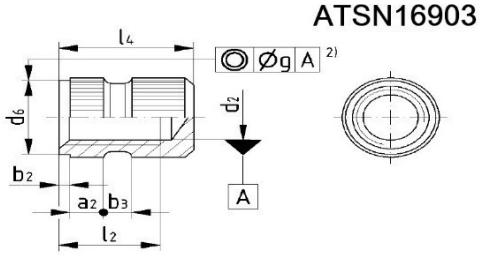
THREADED INSERT DIN 16903 (DIN ISO 1101)

INSERTION MOULDING









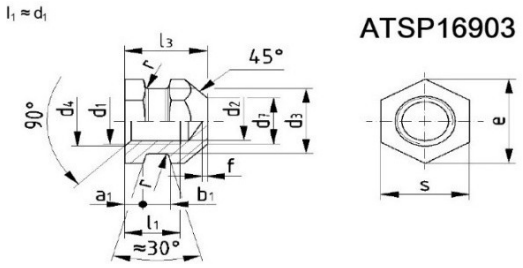
Threaded inserts		K, N		J, K, L, N					J, L		
Quote	Tolerance	M 2 4)	M 2,5 4)	M 3	(M 3,5)	M 4	M 5	M 6	M 8	M 10	M 12
a_1		1	1,2	1,4	1,5	1,5	1,8	2	2,8	3,5	4
a_2		1,2	1,5	1,6	2	2	2,5	3	4,2	5,5	6,5
b_1		1,2	1,2	1,2	1,5	1,8	2	2,5	3	3,5	4
b_2		0,8	0,8	1	1	1	1	1	1	1	1
b_3		1,2	1,2	1,2	1,5	1,8	2	2,5	3	3,5	4
d_2 3)	H11	1,6	2,05	2,5	2,9	3,3	4,2	5	6,8	8,5	10,3
d_3	h12	3,2	3,4	3,8	4,5	5	6,4	7,4	10	13	17
d_4		2,7	3	3,4	4	4,5	5,5	6,8	8,8	11	13
d_5 1)	≈	3,5	3,8	4,2	5	5,5	7	8	-	-	-
d_6	h11	3,5	3,8	4,2	5	5,5	7	8	10	12,5	16
d_7		3	3,4	3,8	4,5	5	6	7	9	12	15
f	+0,2 4)	0,4	0,4	0,5	0,5	0,5	0,5	0,5	0,8	0,8	1
l_1	h14 4)	2,3	2,6	3	3,5	4	5	6	8	10	12
l_2	h14 4)	3,5	4	4,5	5,5	6	7,5	9	12	15	18
l_3	h12 4)	3,8	4,2	4,8	5,5	6,5	7,6	9	12	14,2	17
l_4	h12 4)	5	5,6	6,3	7,5	8,5	10,2	12	16	19,2	23
s		-	-	-	-	6	7	9	11	14	19
e	≈	-	-	-	-	6,9	8,1	10,4	12,7	16,2	21,9
g 4)		0,1	0,1	0,1	0,1	0,1	0,1	0,16	0,16	0,2	0,2
r 4)	≈	0,3	0,3	0,3	0,3	0,4	0,6	0,6	0,6	0,6	0,6
t 4)	≈	0,5	0,5	0,5	0,5	0,5	0,5	0,6	-	-	-



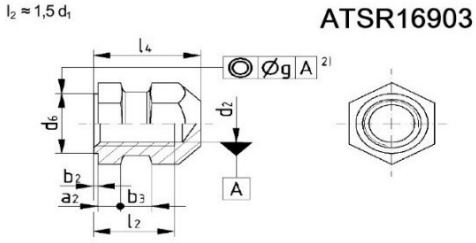

THREADED INSERT DIN 16903 (DIN ISO 1101)

INSERTION MOULDING

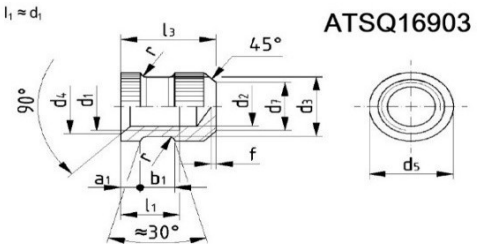
ATSP16903



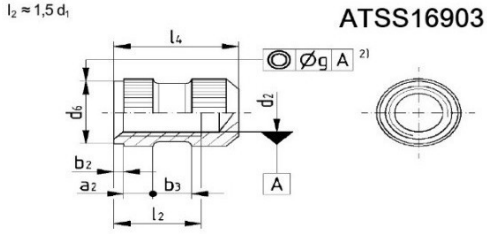
ATSR16903



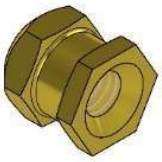
ATSQ16903

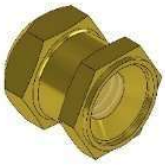


ATSS16903



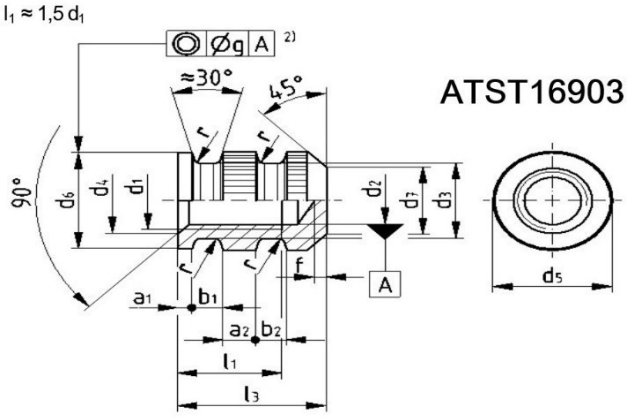
Threaded inserts		Q, S		P, Q, R, S					P, R		
Quote	Tolerance	M 2	M 2,5	M 3	(M 3,5)	M 4	M 5	M 6	M 8	M 10	M 12
a_1		1	1,2	1,4	1,5	1,5	1,8	2	2,8	3,5	4
a_2		1,2	1,5	1,6	2	2	2,5	3	4	5	5
b_1		1,2	1,5	1,8	1,8	2,5	3	3,5	4,5	5	6
b_2		0,8	0,8	1	1	1	1	1	1	1	1
b_3		1,6	1,6	1,8	2	2,8	3,5	4	5,5	6	7
d_2	H11	1,6	2,05	2,5	2,9	3,3	4,2	5	6,8	8,5	10,3
d_3	h12	3,2	3,4	3,8	4,5	5	6,4	7,4	10,4	13	17
d_4		2,7	3	3,4	4	4,5	5,5	6,8	8,8	11	13
d_5[1)]		3,5	3,8	4,2	5	5,5	7	8	-	-	-
d_6	h11	3,5	3,8	4,2	5	5,5	7	8	10	12,5	16
d_7		2,5	2,5	2,8	3,5	4	5	6	7	10	12
f	+0,2	0,4	0,4	0,5	0,5	0,5	0,5	0,5	0,8	0,8	1
g		0,1	0,1	0,1	0,1	0,1	0,1	0,16	0,16	0,2	0,2
l_1	h14	2,3	2,6	3	3,5	4	5	6	8	10	12
l_2	h14	3,5	4	4,5	5,5	6	7,5	9	12	15	18
l_3	h12	4	4,6	5,5	6	7	8,3	9,8	12,6	15	17,8
l_4	h12	5,2	6	7	8	9	10,8	12,8	16,6	20	23,8
r	≈	0,3	0,3	0,3	0,3	0,4	0,6	0,6	0,6	0,6	0,6
t	≈	0,5	0,5	0,5	0,5	0,5	0,5	0,6	-	-	-
s		-	-	5	5,5	6	7	9	11	14	19
e		-	-	5,8	6,1	6,9	8,1	10,4	12,7	16,2	21,9

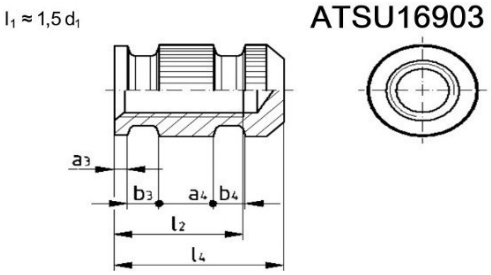




THREADED INSERT DIN 16903 (DIN ISO 1101)

INSERTION MOULDING





Threaded inserts		T				T, U			U		
Quote	Tolerance	M 2	M 2,5	M 3	(M 3,5)	M 4	M 5	M 6	M 8	M 10	M 12
a_1		0,6	0,6	0,8	0,8	0,8	1	1,2	-	-	-
a_2		1	1,1	1,3	1,6	1,8	2,2	2,8	-	-	-
a_3		-	-	-	-	1	1	1,2	1,5	1,5	2
a_4		-	-	-	-	4	4,5	5	6	8	10
b_1		1,2	1,4	1,5	1,7	1,9	2,2	2,7	-	-	-
b_2		1,2	1,4	1,5	1,7	1,9	2,2	2,7	-	-	-
b_3		-	-	-	-	2	2,5	3	4	5	6
b_4		-	-	-	-	2	2,5	3	4	5	6
d_2	H11	1,6	2,05	2,5	2,9	3,3	4,2	5	6,8	8,5	10,3
d_3	h12	3,2	3,5	4	4,6	5,3	6,6	7,8	10,5	13	15,7
d_4		2,7	3	3,4	4	4,5	5,5	6,8	8,8	11	13
d_5 1)		4,5	5	5,5	6	7	9	10	12	15	18
d_6	h11	4,5	5	5,5	6	7	9	10	12	15	18
d_7		3,4	3,6	3,8	4,5	5	6	7	9	12	15
f	+0,2	0,4	0,4	0,5	0,5	0,5	0,5	0,5	0,8	0,8	1
l_1	h14	3,5	4	4,5	5,5	6	7,5	9	-	-	-
l_2	h14	-	-	-	-	8	10	12	16	20	24
l_3	h12	5,2	6	7	8	9	10,5	12,8	-	-	-
l_4	h12	-	-	-	-	11	13,3	15,8	20,6	25	29,8
g		0,1	0,1	0,1	0,1	0,1	0,1	0,16	0,16	0,2	0,2
t	≈	0,5	0,5	0,5	0,5	0,5	0,6	0,6	0,6	0,6	0,8
r	≈	0,3	0,3	0,3	0,3	0,4	0,6	0,6	0,6	0,6	0,6

SELF-TAPPING THREADED INSERT
ATSU212 – ATSBAF212
INSERTION WITH MANUAL TOOL OR TAPPING MACHINE

The self-tapping bushing **ATSU212** and **ATSBAF212** is screwed onto both thermoplastics and thermosets.
The self-tapping insert with internal and external thread is characterized by a tapping slit and provides excellent shear and tensile strength.

ATSU212

- Brass

ATSBAF212

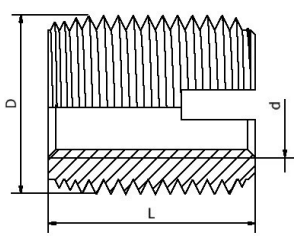
- Chrome VI-free Z.B. steel
- 303 Stainless steel
- 316 Stainless Steel

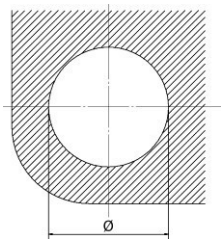
*** The choice of drilling Ø depends on the hardness of the base material**

CODE				THREAD		Indicative Drilling Ø*	Hole Min. Depth	L
Galvanised Steel	303 Stainless steel	316 Stainless Steel	Brass	d int. thread	D Ext. thread			
ATSBAF212M2,5ACC	ATSBAF212M2,5I	ATSBAF212M2,5II	ATSU212M2,5	M2,5x 0,45	4,5 x 0,5	4,0 – 4,3	8	6
ATSBAF212M03ACC	ATSBAF212M03I	ATSBAF212M03II	ATSU212M3	M3 x 0,5	5,0 x 0,5	4,5 – 4,8	8	6
ATSBAF212M04ACC	ATSBAF212M04I	ATSBAF212M04II	ATSU212M4	M4 x 0,7	6,5 X 0,75	5,8 – 6,2	10	8
ATSBAF212M05ACC	ATSBAF212M05I	ATSBAF212M05II	ATSU212M5	M5 x 0,8	8,0 X 1	7,1 – 7,6	13	10
ATSBAF212M06AACC	ATSBAF212M06AI	ATSBAF212M06AII	ATSU212M6A	M6 x 1	9,0 x 1	8,1 – 8,6	15	12
ATSBAF212M06ACC	ATSBAF212M06I	ATSBAF212M06II	ATSU212M6	M6 x 1	10 x 1,5	8,6 – 9,4	17	14
ATSBAF212M08ACC	ATSBAF212M08I	ATSBAF212M08II	ATSU212M8	M8 x 1,25	12 x 1,5	10,6 –11,4	18	15
ATSBAF212M10ACC	ATSBAF212M10I	ATSBAF212M10II	ATSU212M10	M10 x 1,5	14 x 1,5	12,6 –13,4	22	18
ATSBAF212M12ACC	ATSBAF212M12I	ATSBAF212M12II	ATSU212M12	M12 x1,75	16 x 1,5	14,6 –15,4	26	22
ATSBAF212M14ACC	ATSBAF212M14I	ATSBAF212M14II	ATSU212M14	M14 x 2	18 x 1,5	16,6 –17,4	28	24
ATSBAF212M16ACC	ATSBAF212M16I	ATSBAF212M16II	ATSU212M16	M16 x 2	20 x 1,5	18,6 –19,4	27	22

All dimensions are expressed in mm

ATSU212 - ATSBAF212





ATSBAF318 SELF-TAPPING THREADED INSERT

The self-tapping threaded insert **ATSBAF318** is screwed onto both thermoplastics and thermosets.
Short and compact, with internal and external threads characterized by tapping holes, it is particularly suitable for thin thicknesses.

ATSBAF318

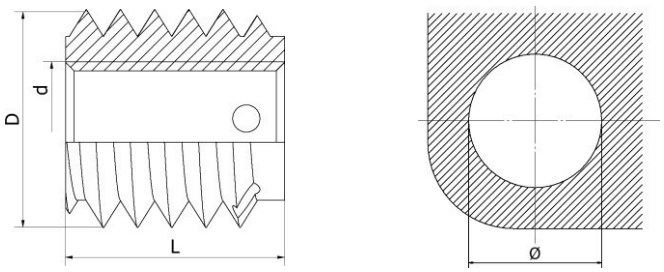
- Chrome VI-free Z.B. steel
- 303 Stainless steel

CODE		THREAD		Indicative Drilling Ø*	Hole Min. Depth	L
Galvanised Steel	303 Stainless steel	D int. thread	D Ext. thread			
ATSBAF318M03C ATSBAF318M03L	ATSBAF318M03CI ATSBAF318M03LI	M3 x 0,5	5 x 0,5	4,6 – 4,8	6 8	4 6
ATSBAF318M04C ATSBAF318M04L	ATSBAF318M04CI ATSBAF318M04LI	M4 x 0,7	6,5 x 0,8	6,0 – 6,2	8 10	6 8
ATSBAF318M05C ATSBAF318M05L	ATSBAF318M05CI ATSBAF318M05LI	M5 x 0,8	8,0 x 1	7,4 – 7,7	9 13	7 10
ATSBAF318M06C ATSBAF318M06L	ATSBAF318M06CI ATSBAF318M06LI	M6 x 1,0	10,0 x 1,25	9,3 – 9,6	10 15	8 12
ATSBAF318M08C ATSBAF318M08L	ATSBAF318M08CI ATSBAF318M08LI	M8 x 1,25	12,0 x 1,5	11,1 – 11,5	11 17	9 14
ATSBAF318M10C ATSBAF318M10L	ATSBAF318M10CI ATSBAF318M10LI	M10 x 1,5	14,0 x 1,5	13,1 – 11,5	13 22	10 18
ATSBAF318M12C ATSBAF318M12L	ATSBAF318M12CI ATSBAF318M12LI	M12 x 1,75	16,0 x 1,75	15,0 – 15,4	15 26	12 22
ATSBAF318M14C ATSBAF318M14L	ATSBAF318M14CI ATSBAF318M14LI	M14 x 2,0	18,0 x 2	17,0 – 17,4	17 28	14 24

*** The choice of drilling Ø depends on the hardness of the base material**

All dimensions are expressed in mm

ATSBAF318



The company A.T.S. S.n.c. was founded in 1983 initially as a technical service in the spot-welding sector, later, thanks to numerous customer requests, a license was acquired to market welding systems and related spare parts.

Today, A.T.S. S.r.l., with the help of valid collaborators who systematically attend training and refresher courses, is at the forefront in the supply of equipment and materials in the catalogue thus defined as standard. It also specializes in the manufacture of customer-specific parts, and any other items on request inherent to the tacking, stud welding and fastening sector.

All the equipment supplied is guaranteed by the assistance of specialized in-house technical staff using certified equipment.

On 22/07/2002 the company obtained with great satisfaction and pride the Quality Management System certification UNI EN ISO 9001:2000 adapting to the new standard UNI EN ISO 9001:2015 from 03/04/2018.

The main focus is on the customer, on the ability to recognize their needs and expectations, with the aim of being in line with market expectations and striving to achieve the objectives set through continuous improvement.

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