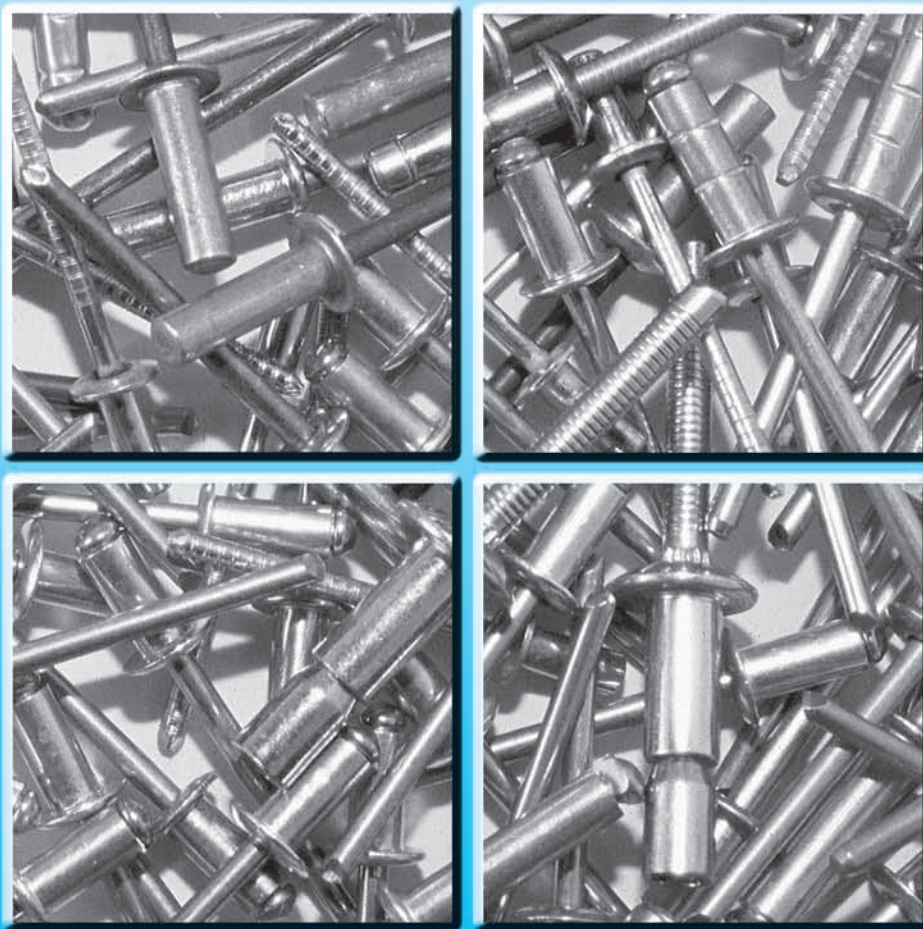


1



# R I V E T T I A S T R A P P O B L I N D R I V E T S

**GRIV SRL**

**Sede Legale:** via Giuseppe Mazzini, 4 - 80040 - Pollena Trocchia (Na)

**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

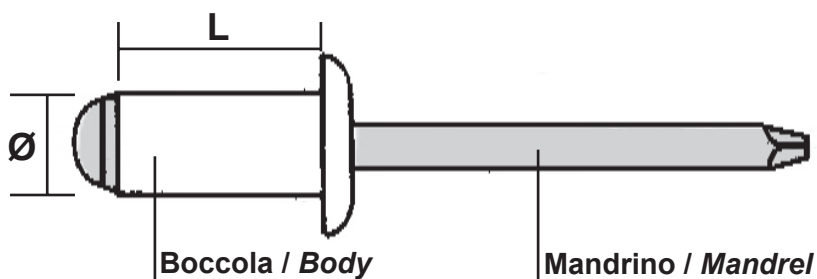
**Tel/Fax:** +39 081 8990496

**Email:** [info@grivsr.it](mailto:info@grivsr.it)

**Web:** [www.grivsr.it](http://www.grivsr.it)

# RIVETTI A STRAPPO

## BLIND RIVETS



**! Scelta del diametro del foro =  $\varnothing$  boccola + 0,1**

**! Choice of hole diameter =  $\varnothing$  body + 0,1**

ESEMPIO / EXAMPLE

$\varnothing 4,8 + 0,1 = 4,9 \text{ mm.}$

**!! Scelta della lunghezza del rivetto = spessore da serrare +  $\varnothing$  boccola**

**!! Choice of length of blind rivet = grip +  $\varnothing$  body**

ESEMPIO / EXAMPLE

$4 \text{ mm.} + \varnothing 6 = 10 \text{ mm.}$

### LEGENDA SIMBOL LIST

#### RIVETTI STANDARD STANDARD RIVETS

<b>TT TESTA TONDA</b> DOME HEAD 	<b>TS TESTA SVASATA</b> COUNTERSUNK HEAD 	<b>TL TESTA LARGA</b> LARGE HEAD 	<b>TXL TESTA EXTRA LARGA</b> EXTRA LARGE HEAD 
--	---	---	--

#### RIVETTI A TENUTA STAGNA SEALED RIVETS

<b>TST TT TESTA TONDA</b> DOME HEAD 	<b>TST TS TESTA SVASATA</b> COUNTERSUNK HEAD 
--	---

#### RIVETTI PER MATERIE PLASTICHE PEEL RIVETS

<b>FA TT TESTA TONDA</b> DOME HEAD 	<b>SOF TT TESTA TONDA</b> DOME HEAD 
---	--

#### RIVETTI MULTIFIX MULTIGRIP RIVETS

<b>MX TT TESTA TONDA</b> DOME HEAD 	<b>MX TS TESTA SVASATA</b> COUNTERSUNK HEAD 	<b>MX TL TESTA LARGA</b> LARGE HEAD 
---	--	--

#### RIVETTI RULLATI GROOVED RIVETS

<b>RUL TT TESTA TONDA</b> DOME HEAD 
--

#### RIVETTI STRUTTURALI STRUCTURAL RIVETS

<b>MFX TT TESTA TONDA</b> DOME HEAD 	<b>MFX TS TESTA SVASATA</b> COUNTERSUNK HEAD 	<b>MBX TT TESTA TONDA</b> DOME HEAD 
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#### RIVETTI PER FOTOVOLTAICO PHOTOVOLTAIC RIVETS

<b>SOF TTO TESTA TONDA</b> DOME HEAD 
---

# INDICE DEI RIVETTI

## INDEX OF RIVETS

CODICE CODE	DESCRIZIONE DESCRIPTION	PAGINA PAGE
AL-TT	ALLUMINIO-ACCIAIO TESTA TONDA / ALUMINIUM-STEEL DOME HEAD	3-4
AL-TS	ALLUMINIO-ACCIAIO TESTA SVASATA / ALUMINIUM-STEEL CSK HEAD	5
AL-TL	ALLUMINIO-ACCIAIO TESTA LARGA / ALUMINIUM-STEEL LARGE HEAD	6
AL-TXL	ALLUMINIO-ACCIAIO TESTA EXTRA LARGA / ALUMINIUM-STEEL EXTRA L. HEAD	6
ALAL-TT	ALLUMINIO-ALLUMINIO TESTA TONDA / ALUMINIUM-ALUMINIUM DOME HEAD	7
ALX-TT	ALLUMINIO-INOX TESTA TONDA / ALUMINIUM-STAINLESS STEEL DOME HEAD	8
AOZ-TT	ACCIAIO-ACCIAIO TESTA TONDA / STEEL-STEEL DOME HEAD	9
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TUX-TT	CUPRO NICHEL-INOX TESTA TONDA / COPPER NICKEL-A2 DOME HEAD	11
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IX-A2-TS	INOX-INOX TESTA SVASATA / A2 - A2 CSK HEAD	12
IX-A2-TL	INOX-INOX TESTA LARGA / A2 - A2 LARGE HEAD	13
IX-A2-TXL	INOX-INOX TESTA EXTRA LARGA / A2 - A2 EXTRA LARGE HEAD	13
IX-A4-TT	INOX A4-INOX A4 TESTA TONDA / A4 - A4 DOME HEAD	14
CU-TT	RAME-ACCIAIO TESTA TONDA / COPPER-STEEL DOME HEAD	15
CUO-TT	RAME-OTTONE TESTA TONDA / COPPER-BRAS DOME HEAD	16
AL-RUL-TT	ALLUMINIO-ACCIAIO TESTA TONDA / ALUMINIUM-STEEL DOME HEAD	17
FA-TT	ALLUMINIO-ACCIAIO TESTA TONDA / ALUMINIUM-STEEL DOME HEAD	17
AL-SOF-TT	ALLUMINIO-ALLUMINIO TESTA TONDA / ALUM.-ALUM. DOME HEAD	18
AL-SOF-TTO	ALLUMINIO-ALLUMINIO TESTA TONDA / ALUM.-ALUM. DOME HEAD	18
TST-AL-TT	ALLUMINIO-ACCIAIO TESTA TONDA / ALUMINIUM-STEEL DOME HEAD	19
TST-AL-TS	ALLUMINIO-ACCIAIO TESTA SVASATA / ALUMINIUM-STEEL CSK HEAD	19
TST-ALX-TT	ALLUMINIO-INOX TESTA TONDA / ALUMINIUM-A2 DOME HEAD	20
TST-AOZ-TT	ACCIAIO-ACCIAIO TESTA TONDA / STEEL-STEEL DOME HEAD	20
TST-CU-TT	RAME-ACCIAIO TESTA TONDA / COPPER-STEEL DOME HEAD	21
TST-CUX-TT	RAME-INOX TESTA TONDA / COPPER-A2 DOME HEAD	21
TST-IX-TT	INOX-INOX TESTA TONDA / A2-A2 DOME HEAD	22
MX-AL-TT	ALLUMINIO-ACCIAIO TESTA TONDA / ALUMINIUM-STEEL DOME HEAD	23
MX-AL-TS	ALLUMINIO-ACCIAIO TESTA SVASATA / ALUMINIUM-STEEL CSK HEAD	23
MX-AL-TL	ALLUMINIO-ACCIAIO TESTA LARGA / ALUMINIUM-STEEL LARGE HEAD	24
MX-AL-TXL	ALLUMINIO-ACCIAIO TESTA EXTRA LARGA / ALUMINIUM-STEEL EXTRA L	24
MX-ALX-TT	ALLUMINIO-INOX TESTA TONDA / ALUMINIUM-A2 DOME HEAD	25
MX-AOZ-TT	ACCIAIO-ACCIAIO TESTA TONDA / STEEL-STEEL DOME HEAD	25
MFX-TT	ACCIAIO-ACCIAIO TESTA TONDA / STEEL-STEEL DOME HEAD	26
MFX-TS	ACCIAIO-ACCIAIO TESTA SVASATA / STEEL-STEEL CSK HEAD	26
MFX-TT-AL	ALLUMINIO-ALLUMINIO TESTA TONDA / ALUM.-ALUM. DOME HEAD	27
MFX-TS-AL	ALLUMINIO-ALLUMINIO TESTA SVASATA / ALUM.-ALUM. CSK HEAD	27
MFX-TT-IX	INOX-INOX TESTA TONDA / A2 - A2 DOME HEAD	28
MFX-TS-IX	INOX-INOX TESTA SVASATA / A2 - A2 DOME HEAD	28
MBX-TT	ACCIAIO-ACCIAIO TESTA TONDA / STEEL-STEEL DOME HEAD	29
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RI144BB	RIVETTATRICE A BATTERIA / BLAIND RIVETS SETTING TOOL	32
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# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

# AL - TT

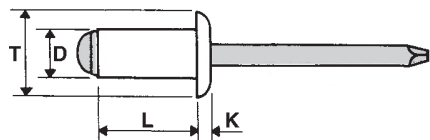
**TESTA TONDA**  
**DOME HEAD**

boccola / *body*

alluminio / *aluminium*

mandrino / *mandrel*

acciaio zincato / *steel zinc plated*



**RIVETTI VERNICIATI A RICHIESTA**

**PAINTED RIVETS ON REQUEST**




D	L	T	K	Ø foro/hole		CODICE code		
2,4	4	5	0,7	2,5	0,5 - 2	AL2404TT	800 N	500 N
	5				0,5 - 2,5	AL2405TT		
	6				2,5 - 4	AL2406TT		
	8				4 - 6	AL2408TT		
	10				6 - 8	AL2410TT		
	12				8 - 10	AL2412TT		
3,0	4	6	0,8	3,1	0,5 - 1,5	AL3004TT	900 N	550 N
	5				0,5 - 2	AL3005TT		
	6				1 - 3	AL3006TT		
	7				2 - 4	AL3007TT		
	8				3 - 5	AL3008TT		
	9				4 - 6	AL3009TT		
	10				5 - 7	AL3010TT		
	11				6 - 8	AL3011TT		
	12				7 - 9	AL3012TT		
	14				9 - 11	AL3014TT		
	16				11 - 13	AL3016TT		
	18				13 - 15	AL3018TT		
	20				15 - 17	AL3020TT		
	3,2				5	6,5		
6		1 - 3	AL3206TT					
7		2 - 4	AL3207TT					
8		3 - 5	AL3208TT					
9		4 - 6	AL3209TT					
10		5 - 7	AL3210TT					
11		6 - 8	AL3211TT					
12		7 - 9	AL3212TT					
14		9 - 11	AL3214TT					
16		11 - 13	AL3216TT					
18		13 - 15	AL3218TT					
20		14 - 17	AL3220TT					
25		17 - 22	AL3225TT					
3,4		5	7	0,8	3,5		0,5 - 2	AL3405TT
	7	2 - 4				AL3407TT		
	9	4 - 6				AL3409TT		
	11	6 - 8				AL3411TT		
	14	9 - 11				AL3414TT		
	16	11 - 13				AL3416TT		
18	13 - 15	AL3418TT						
4,0	5	8	1,0	4,1	0,5 - 1,5	AL4005TT	2050 N	1300 N
	6				1 - 2,5	AL4006TT		
	7				2 - 3,5	AL4007TT		
	8				3 - 4,5	AL4008TT		
	9				4 - 5,5	AL4009TT		
	10				5 - 6,5	AL4010TT		
	11				6 - 7,5	AL4011TT		
	12				7 - 8,5	AL4012TT		
	14				8 - 10,5	AL4014TT		
	16				10 - 12,5	AL4016TT		
	18				12 - 14,5	AL4018TT		
	20				14 - 16,5	AL4020TT		
	22				16 - 18,5	AL4022TT		
	24				18 - 20,5	AL4024TT		
	26				20 - 22,5	AL4026TT		
	28				22 - 24,5	AL4028TT		
	30				24 - 26,5	AL4030TT		
	35				27 - 31,5	AL4035TT		

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

# 1

4.34

D	L	T	K	∅ foro/hole		CODICE code		
4,8	6	10	1,1	5,0	0,5 - 2	AL4806TT	2800	2050
	7				1,5 - 3	AL4807TT		
	8				2,5 - 4	AL4808TT		
	9				3,5 - 5	AL4809TT		
	10				4,5 - 6	AL4810TT		
	11				5,5 - 7	AL4811TT		
	12				6,5 - 8	AL4812TT		
	14				7,5 - 10	AL4814TT		
	16				9,5 - 12	AL4816TT		
	18				11,5 - 14	AL4818TT		
	20				13,5 - 16	AL4820TT		
	22				15,5 - 18	AL4822TT		
	24				17,5 - 20	AL4824TT		
	26				19,5 - 22	AL4826TT		
	28				21,5 - 24	AL4828TT		
	30				23,5 - 26	AL4830TT		
	35				25,5 - 28	AL4835TT		
	40				30,5 - 36	AL4840TT		
	45				35,5 - 40	AL4845TT		
	50				39,5 - 45	AL4850TT		
55	45 - 50	AL4855TT						
60	50 - 55	AL4860TT						
65	55 - 60	AL4865TT						
70	60 - 65	AL4870TT						
6,0	8	12	1,5	6,1	2 - 4	AL6008TT	4350	3200
	10				2,5 - 5	AL6010TT		
	12				4,5 - 7	AL6012TT		
	14				5,5 - 9	AL6014TT		
	16				6,5 - 10	AL6016TT		
	18				9,5 - 13	AL6018TT		
	20				11 - 14	AL6020TT		
	22				12,5 - 17	AL6022TT		
	26				16,5 - 21	AL6026TT		
	30				20,5 - 25	AL6030TT		
	35				24,5 - 30	AL6035TT		
	40				29,5 - 35	AL6040TT		
6,4	10	13	1,8	6,6	2,5 - 5	AL6410TT	5100	3250
	12				4,5 - 7	AL6412TT		
	16				6,5 - 10	AL6416TT		
	18				9,5 - 13	AL6418TT		
	22				12,5 - 17	AL6422TT		
	26				16,5 - 21	AL6426TT		
	30				20,5 - 25	AL6430TT		
	35				24,5 - 30	AL6435TT		
40	29,5 - 35	AL6440TT						

## AL - TT

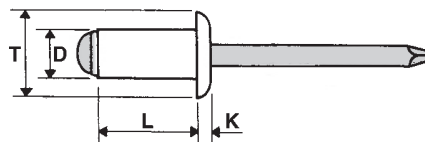
**TESTA TONDA**  
**DOME HEAD**

boccola / body

**alluminio / aluminium**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



**RIVETTI VERNICIATI A RICHIESTA**  
**PAINTED RIVETS ON REQUEST**

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

# AL - TS

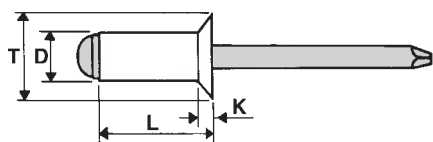
**TESTA SVASATA**  
**COUNTERSUNK HEAD**

boccola / *body*

**alluminio / *aluminium***

mandrino / *mandrel*

**acciaio zincato / *steel zinc plated***








D	L	T	K	∅ foro/hole		CODICE code		
2,4	6	5	-	2,5		AL2406TS AL2408TS AL2410TS	900 N	500 N
	8							
	10							
3,0	6	6	-	3,1		AL3006TS AL3007TS AL3008TS AL3009TS AL3010TS AL3011TS AL3012TS AL3014TS	900 N	550 N
	7							
	8							
	9							
	10							
	11							
	12							
14								
3,2	6	6,5	-	3,3		AL3206TS AL3207TS AL3208TS AL3209TS AL3210TS AL3211TS AL3212TS AL3214TS AL3216TS	1100 N	800 N
	7							
	8							
	9							
	10							
	11							
	12							
	14							
16								
4,0	6	8	-	4,1		AL4006TS AL4007TS AL4008TS AL4009TS AL4010TS AL4011TS AL4012TS AL4014TS AL4016TS AL4018TS AL4020TS	2050 N	1300 N
	7							
	8							
	9							
	10							
	11							
	12							
	14							
	16							
	18							
	20							
4,8	7	10	-	5		AL4807TS AL4808TS AL4809TS AL4810TS AL4811TS AL4812TS AL4814TS AL4816TS AL4818TS AL4820TS AL4826TS AL4830TS AL4835TS	2800 N	2050 N
	8							
	9							
	10							
	11							
	12							
	14							
	16							
	18							
	20							
	26							
	30							
	35							

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

6.34

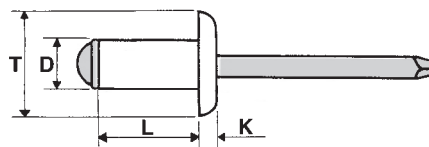
D	L	T	K	∅ foro/hole		CODICE code		
3,2	6	10	2	3,3		AL3206TL	1100 N	800 N
	8					AL3208TL		
	10					AL3210TL		
	12					AL3212TL		
	14					AL3214TL		
	16					AL3216TL		
4,0	6	10	2,5	4,1		AL4006TL	2050 N	1300 N
	8					AL4008TL		
	10					AL4010TL		
	12					AL4012TL		
	14					AL4014TL		
	16					AL4016TL		
	20					AL4020TL		
	4,8					8		
10		AL4810TL						
12		AL4812TL						
14		AL4814TL						
16		AL4816TL						
18		AL4818TL						
20		AL4820TL						
24		AL4824TL						
26		AL4826TL						
30		AL4830TL						
35		AL4835TL						
40		AL4840TL						



## AL - TL

**TESTA LARGA**  
**LARGE HEAD**

boccola / *body*  
**alluminio / aluminium**

mandrino / *mandrel*  
**acciaio zincato / steel zinc plated**



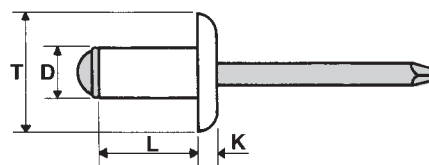
4,0	8	12	2	4,1		AL4008TXL	2050 N	1300 N
	10					AL4010TXL		
	12					AL4012TXL		
	14					AL4014TXL		
	16					AL4016TXL		
	20					AL4020TXL		
4,8	8	16	2,5	5,0		AL4808TXL	2800 N	2050 N
	10					AL4810TXL		
	12					AL4812TXL		
	14					AL4814TXL		
	16					AL4816TXL		
	18					AL4818TXL		
	20					AL4820TXL		
	24					AL4824TXL		
	26					AL4826TXL		
	30					AL4830TXL		
	35					AL4835TXL		
	40					AL4840TXL		

## AL - TXL

**TESTA EXTRA LARGA**  
**EXTRA LARGE HEAD**

boccola / *body*  
**alluminio / aluminium**

mandrino / *mandrel*  
**acciaio zincato / steel zinc plated**



# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

### ALAL - TT

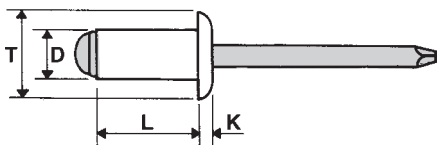
#### TESTA TONDA DOME HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

alluminio / aluminium



D	L	T	K	∅ foro/hole		CODICE code									
3,2	6	6,5	0,8	3,3		1,5 - 3,5	670 N	540 N							
	8					3,5 - 5									
	10					5 - 7									
	12					7 - 8,5									
	14					8,5 - 10,5									
	16					10,5 - 13									
4,0	6	8	1,0	4,1		1,5 - 3,5	1020 N	850 N							
	8					3,5 - 5									
	10					5 - 6,5									
	12					6,5 - 8,5									
	14					8,5 - 10,5									
	16					10,5 - 12,5									
	18					12,5 - 14,5									
	20					14,5 - 16,5									
	4,8					8			9,5	1,1	5,0		3 - 4,5	1400 N	1150 N
						10							4,5 - 6		
12		6 - 7,5													
14		7,5 - 9													
16		9 - 11,5													
18		11,5 - 13													
20		13 - 15													
25		15 - 20													
30		20 - 25													


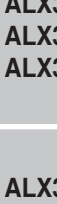
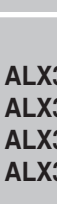






# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

8.34

1

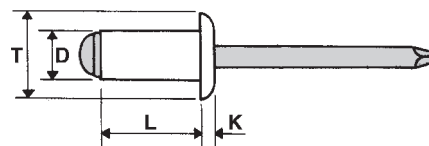
D	L	T	K	∅ foro/hole		CODICE code		
3,0	6	6	0,8	3,1		1 - 3	950	750
	8					3 - 5		
	10					5 - 7		
	12					7 - 9		
	14					9 - 11		
3,2	6	6,5	0,8	3,3		1 - 3	1200	750
	8					3 - 5		
	10					5 - 7		
	12					7 - 9		
4,0	6	8	1,0	4,1		1 - 2,5	2150	1300
	8					3 - 4,5		
	10					5 - 6,5		
	12					7 - 8,5		
	14					8 - 10,5		
	16					10 - 12,5		
	20					14 - 16,5		
4,8	6	10	1,1	5,0		0,5 - 2	2500	2100
	8					2,5 - 4		
	10					4,5 - 6		
	12					6,5 - 8		
	14					7,5 - 10		
	16					9,5 - 12		
	18					11,5 - 14		
	20					13,5 - 16		
	26					19,5 - 22		
	30					23,5 - 26		

# ALX - TT

**TESTA TONDA**  
**DOME HEAD**

boccola / body  
**alluminio / aluminium**

mandrino / mandrel  
**acciaio inox A2 / stainless steel A2**



# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

### AOZ - TT

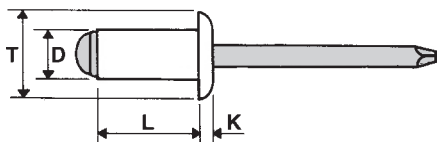
#### TESTA TONDA DOME HEAD

boccola / body

acciaio zincato / steel zinc plated

mandrino / mandrel

acciaio zincato / steel zinc plated










D	L	T	K	Ø foro/hole		CODICE code		
3,0	5	6	0,8	3,1		0,5 - 1,5	1300 N	950 N
	6					AOZ3005TT		
	7					AOZ3006TT		
	8					AOZ3007TT		
	9					AOZ3008TT		
	10					AOZ3009TT		
	11					AOZ3010TT		
	12					AOZ3011TT		
	13					AOZ3012TT		
	14					AOZ3014TT		
3,2	6	6,5	0,8	3,3		0,5 - 3	1500 N	1000 N
	7					AOZ3206TT		
	8					AOZ3207TT		
	9					AOZ3208TT		
	10					AOZ3209TT		
	11					AOZ3210TT		
	12					AOZ3211TT		
	13					AOZ3212TT		
	14					AOZ3214TT		
	16					AOZ3216TT		
4,0	6	8	1,0	4,1		0,5 - 2,5	2350 N	1800 N
	7					AOZ4006TT		
	8					AOZ4007TT		
	9					AOZ4008TT		
	10					AOZ4009TT		
	11					AOZ4010TT		
	12					AOZ4011TT		
	13					AOZ4012TT		
	14					AOZ4014TT		
	16					AOZ4016TT		
	18					AOZ4018TT		
	20					AOZ4020TT		
	24					AOZ4024TT		
	30					AOZ4030TT		
4,8	6	9	1,1	5		0,5 - 2	3900 N	3050 N
	7					AOZ4806TT		
	8					AOZ4807TT		
	9					AOZ4808TT		
	10					AOZ4809TT		
	11					AOZ4810TT		
	12					AOZ4811TT		
	13					AOZ4812TT		
	14					AOZ4814TT		
	16					AOZ4816TT		
	18					AOZ4818TT		
	20					AOZ4820TT		
	24					AOZ4824TT		
	26					AOZ4826TT		
	30					AOZ4830TT		
	6,0					10		
12		AOZ6010TT						
15		AOZ6012TT						
18		AOZ6015TT						
22		AOZ6018TT						
26		AOZ6022TT						
30		AOZ6026TT						
6,4	12	12	1,8	6,6		3,5 - 7	6800 N	5250 N
	15					AOZ6412TT		
	18					AOZ6415TT		
	22					AOZ6418TT		
	26					AOZ6422TT		
	30					AOZ6426TT		
	30					AOZ6430TT		

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

# 1

10.34

D	L	T	K	∅ foro/hole		CODICE code		
3,0	6	6	-	3,1		AOZ3006TS	1125 N	950 N
	8					AOZ3008TS		
	10					AOZ3010TS		
	12					AOZ3012TS		
3,2	6	6,5	-	3,3		AOZ3206TS	1500 N	1000 N
	8					AOZ3208TS		
	10					AOZ3210TS		
	12					AOZ3212TS		
	14					AOZ3214TS		
4,0	6	8	-	4,1		AOZ4006TS	2350 N	1800 N
	8					AOZ4008TS		
	10					AOZ4010TS		
	12					AOZ4012TS		
	14					AOZ4014TS		
	16					AOZ4016TS		
4,8	8	10	-	5,0		AOZ4808TS	3900 N	3050 N
	10					AOZ4810TS		
	12					AOZ4812TS		
	14					AOZ4814TS		
	16					AOZ4816TS		
	20					AOZ4820TS		
	22					AOZ4822TS		

## AOZ - TS

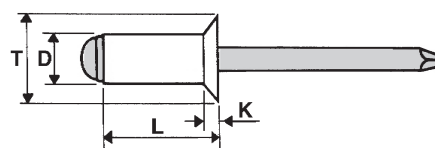
**TESTA SVASATA**  
**COUNTERSUNK HEAD**

boccola / body

**acciaio zincato / steel zinc plated**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

### TUX - TT

**TESTA TONDA**  
**DOME HEAD**

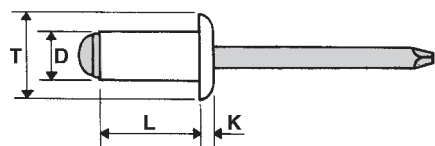
boccola / body

**lega cupro nichel / copper nickel**

mandrino / mandrel

**acciaio inox A2 / stainless**

**steel A2**



D	L	T	K	∅ foro/hole		CODICE code		
3,2	6	6,5	0,8	3,3	0,5 - 3	TUX3206TT	1050 N	950 N
	7					TUX3207TT		
	9					TUX3209TT		
	11					TUX3211TT		
	12					TUX3212TT		
4,0	7	8	1,0	4,1	2 - 3,5	TUX4007TT	3200 N	2400 N
	9					TUX4009TT		
	11					TUX4011TT		
	12					TUX4012TT		
	14					TUX4014TT		
	16					TUX4016TT		
	18					TUX4018TT		
	12 - 14,5					TUX4018TT		
4,8	7	9	1,1	5,0	0,5 - 3	TUX4807TT	5550 N	3500 N
	9					TUX4809TT		
	11					TUX4811TT		
	12					TUX4812TT		
	14					TUX4814TT		
	16					TUX4816TT		
	18					TUX4818TT		
	20					TUX4820TT		
	13,5 - 16					TUX4820TT		

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

12.34

1

D	L	T	K	∅ foro/hole		CODICE code		
3,0	6	6,5	0,8	3,1	1,5 - 2,5	IXA23006TT	2000 N	1600 N
	8				2,5 - 4,5	IXA23008TT		
	10				4,5 - 6,5	IXA23010TT		
	12				6,5 - 8,5	IXA23012TT		
3,2	6	6,5	0,8	3,3	1,5 - 2,5	IXA23206TT	2500 N	1800 N
	8				2,5 - 4,5	IXA23208TT		
	10				4,5 - 6,5	IXA23210TT		
	12				6,5 - 8,5	IXA23212TT		
	14				8,5 - 12	IXA23215TT		
16					12 - 15	IXA23218TT		
4,0	6	8	1,0	4,1	1 - 2	IXA24006TT	3800 N	3100 N
	8				2 - 4	IXA24008TT		
	10				4 - 6	IXA24010TT		
	12				6 - 8	IXA24012TT		
	14				8 - 10	IXA24014TT		
	16				10 - 12,5	IXA24016TT		
	18				12 - 14	IXA24018TT		
	20				14 - 16	IXA24020TT		
	25				16 - 20	IXA24025TT		
4,8	8	9,5	1,1	5,0	1,5 - 3	IXA24808TT	6000 N	4500 N
	10				3 - 5	IXA24810TT		
	12				5 - 7	IXA24812TT		
	14				7 - 9	IXA24814TT		
	16				9 - 11	IXA24816TT		
	18				11 - 13	IXA24818TT		
	20				13 - 15	IXA24820TT		
	22				15 - 17	IXA24823TT		
	25				17 - 20	IXA24825TT		
	30				20 - 25	IXA24830TT		
6,0	10	12	1,5	6,1	2 - 4	IXA26010TT	8800 N	6500 N
	12				4 - 6	IXA26012TT		
	15				6 - 9	IXA26015TT		
	18				9 - 12	IXA26018TT		
	20				12 - 14	IXA26020TT		
6,4	10	13	1,8	6,5	2 - 4	IXA26410TT	8800 N	6500 N
	12				2,5 - 4,5	IXA26412TT		
	15				6 - 9	IXA26415TT		
	18				9 - 13	IXA26418TT		
	20				13 - 16	IXA26420TT		
	25				16 - 20	IXA26425TT		
3,2	6	6	-	3,3	1,5 - 2,5	IXA23206TS	2500 N	1800 N
	8				2,5 - 4,5	IXA23208TS		
	10				4,5 - 6,5	IXA23210TS		
	12				6,5 - 8,5	IXA23212TS		
4,0	6	7,5	-	4,1	1 - 2	IXA24006TS	3800 N	3100 N
	8				2 - 4	IXA24008TS		
	10				4 - 6	IXA24010TS		
	12				6 - 8	IXA24012TS		
	14				8 - 10	IXA24014TS		
	16				10 - 12	IXA24016TS		
4,8	8	9	-	4,9	1,5 - 3	IXA24808TS	6000 N	4500 N
	10				3 - 5	IXA24810TS		
	12				5 - 7	IXA24812TS		
	16				9 - 11	IXA24815TS		
	18				11 - 13	IXA24818TS		
	20				13 - 15	IXA24821TS		

## IX-A2 - TT

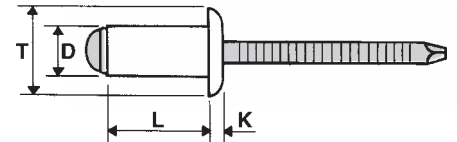
### TESTA TONDA DOME HEAD

boccola / body

acciaio inox A2 / stainless steel A2

mandrino / mandrel

acciaio inox A2 / stainless steel A2



## IX-A2 - TS

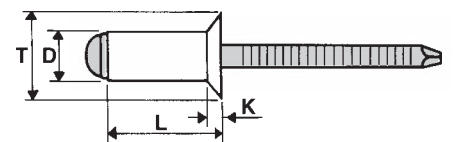
### TESTA SVASATA COUNTERSUNK HEAD

boccola / body

acciaio inox A2 / stainless steel A2

mandrino / mandrel

acciaio inox A2 / stainless steel A2



# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

### IX-A2 - TL

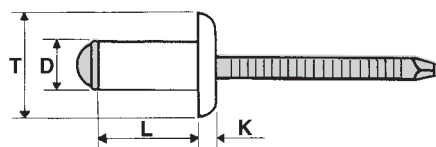
#### TESTA LARGA LARGE HEAD

boccola / body

acciaio inox A2 / stainless steel A2

mandrino / mandrel

acciaio inox A2 / stainless steel A2



D	L	T	K	∅ foro/hole		CODICE code				
3,2	6	9,5	1,3	3,3		IXA23206TL	2300 N	1800 N		
	8								1,5 - 2,5	IXA23208TL
	10								2,5 - 4,5	
	12								4,5 - 6,5	
	14								6,5 - 8,5	
	16	8,5 - 12	IXA23214TL							
4,0	6	12	1,6	4,1		IXA24006TL	3600 N	2800 N		
	8								1 - 2	
	10								2 - 4	
	12								4 - 6	
	14								6 - 8	
	16								8 - 10	
	16	10 - 12	IXA24016TL							
4,8	8	14	1,8	4,9		IXA24808TL	5300 N	4200 N		
	10								1,5 - 3	
	12								3 - 5	
	14								5 - 7	
	16								7 - 9	
	18								9 - 11	
	20								11 - 13	
									13 - 15	IXA24818TL
										IXA24820TL

### IX-A2 - TXL

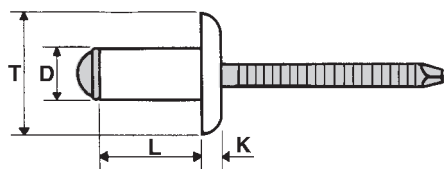
#### TESTA EXTRA LARGA EXTRA LARGE HEAD

boccola / body

acciaio inox A2 / stainless steel A2

mandrino / mandrel

acciaio inox A2 / stainless steel A2










4,8	8	16	1,8	4,9		IXA24808TXL	5300 N	4200 N		
	10								1,5 - 3	
	12								3 - 5	
	14								5 - 7	
	16								7 - 9	
	18								9 - 11	
	20								11 - 13	
	22								13 - 15	
	25								16 - 18	
	30								18 - 20	
									20 - 25	IXA24825TXL
										IXA24830TXL

# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

14.34

D	L	T	K	∅ foro/hole		CODICE code		
3,0	6	6,5	0,8	3,1		IXA43006TT	2000 N	1600 N
	8					IXA43008TT		
	10					IXA43010TT		
3,2	6	6,5	0,8	3,3		IXA43206TT	2500 N	1800 N
	8					IXA43208TT		
	10					IXA43210TT		
	12					IXA43212TT		
	14					IXA43214TT		
	16					IXA43216TT		
4,0	6	8,0	1,0	4,1		IXA44006TT	3800 N	3100 N
	8					IXA44008TT		
	10					IXA44010TT		
	12					IXA44012TT		
	14					IXA44014TT		
	16					IXA44016TT		
4,8	8	9,5	1,1	4,9		IXA44808TT	6000 N	4500 N
	10					IXA44810TT		
	12					IXA44812TT		
	14					IXA44814TT		
	16					IXA44816TT		
	18					IXA44818TT		

## IX-A4 - TT

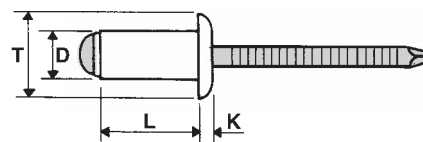
**TESTA TONDA**  
**DOME HEAD**

boccola / body

**acciaio inox A4 / stainless steel A4**

mandrino / mandrel

**acciaio inox A4 / stainless steel A4**



# RIVETTI A STRAPPO STANDARD

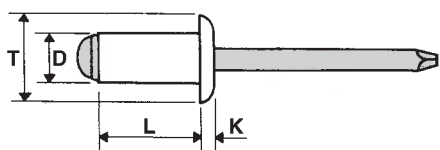
## STANDARD BLIND RIVETS

### CU - TT

**TESTA TONDA**  
**DOME HEAD**

boccola / *body*  
rame / *copper*

mandrino / *mandrel*  
acciaio zincato / *steel zinc plated*



D	L	T	K	∅ foro/hole		CODICE code		
3,0	5	6	0,8	3,1	0,5 - 2	CU3005TT	950 N	650 N
	6				1 - 3	CU3006TT		
	7				2 - 4	CU3007TT		
	9				4 - 6	CU3009TT		
	11				6 - 8	CU3011TT		
	12				7 - 9	CU3012TT		
3,2	6	6,5	0,8	3,3	1 - 3	CU3206TT	950 N	650 N
	7				2 - 4	CU3207TT		
	9				4 - 6	CU3209TT		
	11				6 - 8	CU3211TT		
	12				7 - 9	CU3212TT		
	3,4				7	7		
9		4 - 6	CU3409TT					
11		6 - 8	CU3411TT					
12		7 - 9	CU3412TT					
14		9 - 11	CU3414TT					
4,0		6	8	1,0	4,1		1 - 2	CU4006TT
	7	2 - 3,5				CU4007TT		
	9	4 - 5,5				CU4009TT		
	11	6 - 7,5				CU4011TT		
	12	7 - 8,5				CU4012TT		
	14	8 - 10,5				CU4014TT		
	16	10 - 12,5				CU4016TT		
4,8	8	9,5	1,1	5,0	1,5 - 3,5	CU4808TT	2000 N	1500 N
	10				3,5 - 5,5	CU4810TT		
	12				5,5 - 7,5	CU4812TT		
	14				7,5 - 9,5	CU4814TT		
	16				9,5 - 11,5	CU4816TT		
	18				11,5 - 13,5	CU4818TT		
	20				13,5 - 15,5	CU4820TT		



# RIVETTI A STRAPPO STANDARD

## STANDARD BLIND RIVETS

16.34

1

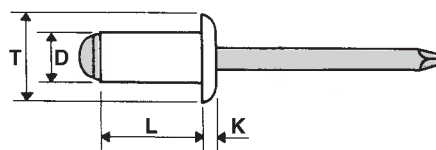
D	L	T	K	∅ foro/hole		CODICE code		
3,2	6	6,5	0,8	3,3		1 - 3	1200 N	
	7					2 - 4		900 N
	9					4 - 6		
	11					6 - 8		
	12					7 - 9		
3,4	7	7	0,8	3,5		2 - 4	1400 N	
	9					4 - 6		1000 N
	11					6 - 8		
	12					7 - 9		
	14					9 - 11		
4,0	6	8	1,0	4,1		1 - 2	2200 N	
	7					2 - 3,5		1650 N
	9					4 - 5,5		
	11					6 - 7,5		
	12					7 - 8,5		
	14					8 - 10,5		
	16					10 - 12,5		

### CUO - TT

**TESTA TONDA**  
**DOME HEAD**

boccola / *body*  
**rame / *copper***

mandrino / *mandrel*  
**ottone / *brass***



# RIVETTI A STRAPPO RULLATI

## GROOVED RIVETS

### AL-RUL - TT

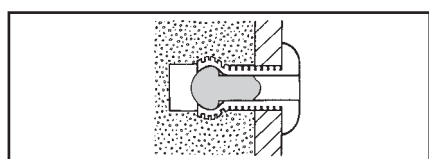
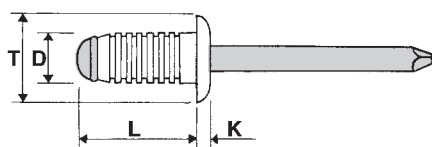
#### TESTA TONDA DOME HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio zincato / steel zinc plated



D	L	T	K	Ø foro/hole		CODICE code		
3,2	10	6	1,4	3,4	MAX 6 MAX 10	ALRUL3210TT	930 N	525 N
	14					ALRUL3214TT		
4,0	8	8	1,7	4,3	MAX 4 MAX 6 MAX 8 MAX 12	ALRUL4008TT	1410 N	885 N
	10					ALRUL4010TT		
	12					ALRUL4012TT		
	16					ALRUL4016TT		
4,8	8	9,5	2,0	5,1	MAX 4 MAX 6 MAX 7 MAX 8 MAX 10 MAX 12 MAX 14 MAX 16 MAX 21 MAX 26	ALRUL4808TT	1575 N	1185 N
	10					ALRUL4810TT		
	11					ALRUL4811TT		
	12					ALRUL4812TT		
	14					ALRUL4814TT		
	16					ALRUL4816TT		
	18					ALRUL4818TT		
	20					ALRUL4820TT		
	25					ALRUL4825TT		
	30					ALRUL4830TT		

### FA - TT

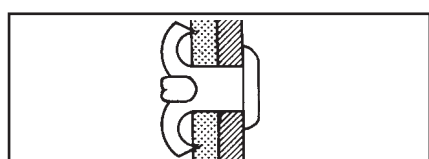
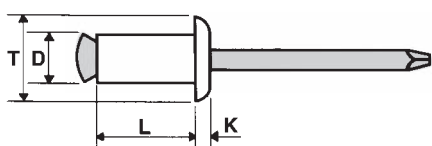
#### TESTA TONDA DOME HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio zincato / steel zinc plated






D	L	T	K	Ø foro/hole		CODICE code		
3,2	8	6	0,8	3,5	0,5 - 1 1 - 3 3 - 5	FA3208TT	700 N	765 N
	10					FA3210TT		
	12					FA3212TT		
4,0	10	8	1,2	4,3	1,5 - 5 3 - 6 6 - 10 10 - 14 14 - 18 18 - 24	FA4010TT	1150 N	1260 N
	12					FA4012TT		
	16					FA4016TT		
	20					FA4020TT		
	24					FA4024TT		
	30					FA4030TT		
4,8	10	10	1,3	5,2	0,5 - 4 2 - 6 4 - 8 5 - 10 10 - 14 14 - 18 18 - 22 22 - 27 27 - 32 32 - 37 37 - 42	FA4810TT	2400 N	2200 N
	12					FA4812TT		
	14					FA4814TT		
	16					FA4816TT		
	20					FA4820TT		
	24					FA4824TT		
	30					FA4830TT		
	35					FA4835TT		
	40					FA4840TT		
	45					FA4845TT		
	50					FA4850TT		

# RIVETTI PER MATERIE PLASTICHE

## BLIND RIVETS FOR PLASTIC

# 1

18.34

D	L	T	K	∅ foro/hole		CODICE code		
4,0	13,6 18,8	8	1,4	4,3	1 - 3 3 - 7	ALSOFF4014TT ALSOFF4019TT	800 N	500 N
4,8	15,3 20,5 24,5	9,6	1,6	5,1	1 - 3 3 - 9 5 - 12	ALSOFF4815TT ALSOFF4821TT ALSOFF4825TT	1100 N	900 N

## AL-SOF - TT

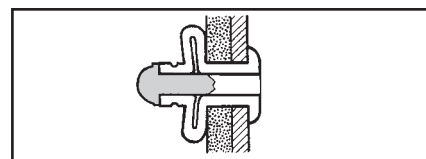
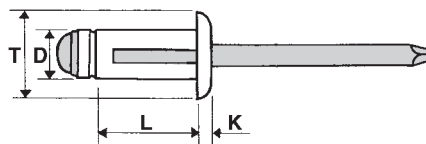
### TESTA TONDA DOME HEAD




boccola / body

**alluminio / aluminium**

mandrino / mandrel

**alluminio / aluminium**



D	L	T	K	∅ foro/hole		CODICE code		
5,2	17,5 22,2 25,4 28,6 31,8	11,7	2,2	5,3	0,5 - 4,8 4,8 - 9,5 7,9 - 12,7 11,1 - 15,9 14,3 - 19,1	ALSOFF5218TTO ALSOFF5222TTO ALSOFF5225TTO ALSOFF5229TTO ALSOFF5232TTO	3200 N	2000 N

## AL-SOF - TTO

### TESTA TONDA DOME HEAD

boccola / body

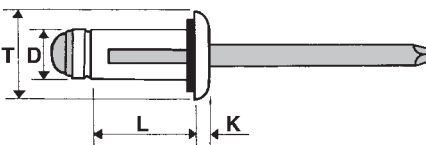
**alluminio / aluminium**

mandrino / mandrel

**alluminio / aluminium**

La rondella in neoprene garantisce la tenuta stagna

*Good seal thanks to neoprene washer*



# RIVETTI A STRAPPO TENUTA STAGNA

## SEALED BLIND RIVETS

### TST-AL - TT

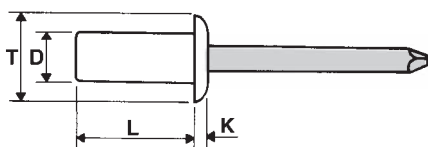
#### TESTA TONDA DOME HEAD








boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio / steel



D	L	T	K	Ø foro/hole		CODICE code		
3,2	6,5	6	1,4	3,3		TSTAL3206TT	1250 N	1070 N
	8					TSTAL3208TT		
	9,5					TSTAL3210TT		
	10,7					TSTAL3211TT		
	12,5					TSTAL3212TT		
4,0	8	8	1,7	4,1		TSTAL4008TT	2240 N	1700 N
	9,5					TSTAL4010TT		
	11					TSTAL4011TT		
	12,5					TSTAL4012TT		
	15					TSTAL4014TT		
4,8	8	9	2,0	4,9		TSTAL4808TT	3100 N	2200 N
	9,5					TSTAL4810TT		
	11					TSTAL4811TT		
	12,5					TSTAL4812TT		
	14					TSTAL4814TT		
	16					TSTAL4816TT		
	18					TSTAL4818TT		
	21					TSTAL4821TT		
	25					TSTAL4825TT		
6,4	12,5	12,7	2,5	6,5		TSTAL6413TT	4900 N	3950 N
	16					TSTAL6416TT		

### TST-AL - TS

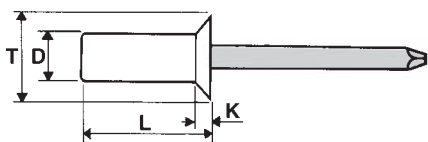
#### TESTA SVASATA COUNTERSUNK HEAD




boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio / steel









3,2	7,5	6	-	3,3		TSTAL3207TS	1250 N	1070 N
	9					TSTAL3209TS		
	10,5					TSTAL3211TS		
	12					TSTAL3212TS		
	13					TSTAL3213TS		
4,0	9,5	8	-	4,1		TSTAL4009TS	2240 N	1700 N
	11					TSTAL4011TS		
	12,5					TSTAL4013TS		
	14					TSTAL4014TS		
4,8	9,5	9,5	-	4,9		TSTAL4810TS	3100 N	2200 N
	11					TSTAL4811TS		
	12,5					TSTAL4812TS		
	14					TSTAL4814TS		
	15,5					TSTAL4816TS		
	17					TSTAL4817TS		
	19					TSTAL4819TS		
	24					TSTAL4824TS		

# RIVETTI A STRAPPO TENUTA STAGNA

## SEALED BLIND RIVETS

20.34

1

D	L	T	K	∅ foro/hole		CODICE code		
3,2	6,5	6	1,4	3,3		TSTALX3207TT	1250 N	1070 N
	8					TSTALX3208TT		
	9,5					TSTALX3210TT		
	10,7					TSTALX3211TT		
	12,5					TSTALX3213TT		
4,0	8	8	1,7	4,1		TSTALX4008TT	2240 N	1700 N
	9,5					TSTALX4010TT		
	11					TSTALX4011TT		
	12,5					TSTALX4013TT		
	15					TSTALX4015TT		
4,8	8	9	2,0	4,9		TSTALX4808TT	3100 N	2200 N
	9,5					TSTALX4810TT		
	11					TSTALX4811TT		
	12,5					TSTALX4813TT		
	14					TSTALX4814TT		
	16					TSTALX4816TT		
	18					TSTALX4818TT		
	21					TSTALX4821TT		
	25					TSTALX4825TT		

## TST-ALX - TT

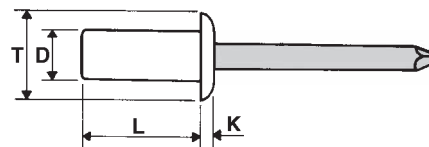
### TESTA TONDA DOME HEAD




boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio inox A2 / stainless steel A2



3,2	6	6	1	3,3		TSTAOZ3206TT	2200 N	1600 N
	8					TSTAOZ3208TT		
	9,5					TSTAOZ3209TT		
	12					TSTAOZ3212TT		
4,0	6	8	1,4	4,1		TSTAOZ4006TT	2500 N	2300 N
	8					TSTAOZ4008TT		
	10					TSTAOZ4010TT		
	12					TSTAOZ4012TT		
	15					TSTAOZ4015TT		
4,8	8	9,5	1,7	4,9		TSTAOZ4808TT	3800 N	2900 N
	9,5					TSTAOZ4809TT		
	12					TSTAOZ4812TT		
	16					TSTAOZ4816TT		

## TST-AOZ - TT

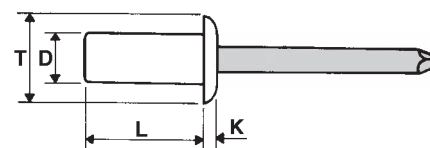
### TESTA TONDA DOME HEAD

boccola / body

acciaio zincato / steel zinc plated

mandrino / mandrel

acciaio zincato / steel zinc plated



# RIVETTI A STRAPPO TENUTA STAGNA

## SEALED BLIND RIVETS

### TST-CU - TT

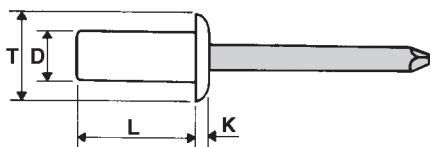
#### TESTA TONDA DOME HEAD

boccola / body

rame / copper

mandrino / mandrel

acciaio / steel zinc plated



D	L	T	K	∅ foro/hole		CODICE code		
3,2	6	6	1,4	3,3	1 - 1,6 1,6 - 3,2 3,2 - 4,8 4,8 - 8	TSTCU3206TT	1420 N	1020 N
	7,5					TSTCU3207TT		
	9					TSTCU3209TT		
	12					TSTCU3212TT		
4,0	8	8	1,7	4,1	0,5 - 3,5 3 - 4,8 4,8 - 8	TSTCU4008TT	2260 N	1550 N
	9,5					TSTCU4009TT		
	12,5					TSTCU4012TT		
4,8	8,5	9,5	2,0	5,0	2 - 3,2 3,2 - 6,4	TSTCU4808TT	3110 N	2130 N
	11,5					TSTCU4811TT		

### TST-CUX - TT

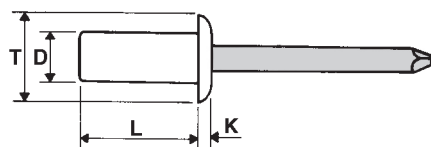
#### TESTA TONDA DOME HEAD

boccola / body

rame / copper

mandrino / mandrel

acciaio inox A2 / stainless steel A2






3,2	6	6	1,4	3,3	1 - 1,6 1,6 - 3,2 3,2 - 4,8 4,8 - 8	TSTCUX3206TT	1300 N	850 N
	7,5					TSTCUX3207TT		
	9					TSTCUX3209TT		
	12					TSTCUX3212TT		
4,0	8	8	1,7	4,1	0,5 - 3,5 3 - 4,8	TSTCUX4008TT	2000 N	1350 N
	9,5					TSTCUX4009TT		

# RIVETTI A STRAPPO TENUTA STAGNA

## SEALED BLIND RIVETS

# 1

22.34

D	L	T	K	∅ foro/hole		CODICE code		
3,2	6 8 9,5 12	6	1,4	3,3	0,5 - 1,5 1,5 - 3 3 - 5 5 - 7	TSTIX3206TT TSTIX3208TT TSTIX3210TT TSTIX3212TT	2500 N	2000 N
4,0	6 8 10 12 15	8	1,7	4,1	0,5 - 1,5 1,5 - 3 3 - 5 5 - 6,5 6,5 - 10,5	TSTIX4006TT TSTIX4008TT TSTIX4010TT TSTIX4012TT TSTIX4015TT	4000 N	3000 N
4,8	8 9,5 12 16 20	9,5	2	4,9	1 - 3 3 - 4,5 4,5 - 6 6 - 10,5 10,5 - 14	TSTIX4808TT TSTIX4810TT TSTIX4812TT TSTIX4816TT TSTIX4820TT	5500 N	4500 N
6,4	14 15,5 20	12,5	-	6,5	3,5 - 6,5 6,5 - 8 8 - 12,8	TSTIX6414TT TSTIX6415TT TSTIX6420TT	8700 N	6800 N

## TST-IX - TT

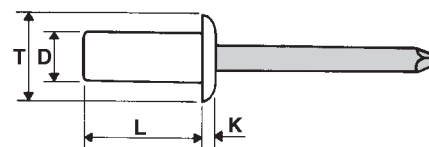
### TESTA TONDA DOME HEAD

boccola / body

**acciaio inox 304 / stainless  
steel 304**

mandrino / mandrel

**acciaio inox 420 / stainless  
steel 420**



# RIVETTI A STRAPPO MULTIFIX

## MULTIGRIP BLIND RIVETS

### MX-AL - TT

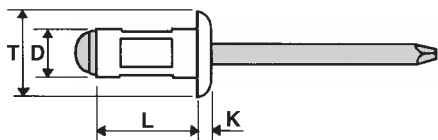
#### TESTA TONDA DOME HEAD

boccola / body

alluminio Mg. 2,5 / aluminium Mg. 2,5

mandrino / mandrel

acciaio zincato / steel zinc plated



D	L	T	K	Ø foro/hole		CODICE code		
3,0	6	6	1,4	3,1		MXAL3006TT	810 N	620 N
	8					MXAL3008TT		
	10					MXAL3010TT		
	12					MXAL3012TT		
3,2	6	6	1,4	3,3		MXAL3206TT	980 N	760 N
	8					MXAL3208TT		
	9,5					MXAL3210TT		
	11					MXAL3211TT		
	12,5					MXAL3212TT		
	14					MXAL3214TT		
	16					MXAL3216TT		
4,0	8	8	1,7	4,1		MXAL4008TT	1600 N	1200 N
	9,5					MXAL4010TT		
	12,5					MXAL4012TT		
	17					MXAL4017TT		
	18					MXAL4018TT		
	20					MXAL4020TT		
						MXAL4020TT		
4,8	11	9,5	2,0	4,9		MXAL4811TT	2350 N	1690 N
	12,5					MXAL4813TT		
	15					MXAL4815TT		
	17					MXAL4817TT		
	20					MXAL4820TT		
	24,8					MXAL4825TT		
	27					MXAL4827TT		
	30					MXAL4830TT		
						MXAL4830TT		
						MXAL4830TT		

### MX-AL - TS

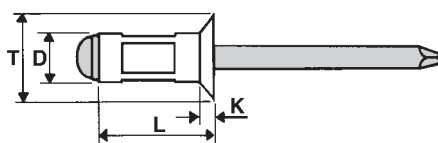
#### TESTA SVASATA COUNTERSUNK HEAD

boccola / body

alluminio Mg. 2,5 / aluminium Mg. 2,5

mandrino / mandrel

acciaio zincato / steel zinc plated



3,2	8	6	-	3,3		MXAL3208TS	980 N	760 N
	9,5					MXAL3210TS		
	12,5					MXAL3212TS		
	14					MXAL3214TS		
	16					MXAL3216TS		
4,0	8	8	-	4,1		MXAL4008TS	1600 N	1200 N
	9,5					MXAL4010TS		
	12,5					MXAL4012TS		
	14					MXAL4014TS		
	17					MXAL4017TS		
	18					MXAL4018TS		
	20					MXAL4020TS		
4,8	10	9,5	-	4,9		MXAL4810TS	2350 N	1690 N
	12,5					MXAL4812TS		
	15					MXAL4815TS		
	17					MXAL4817TS		
	20					MXAL4820TS		
	22					MXAL4822TS		
	24					MXAL4824TS		
	27					MXAL4827TS		
	30					MXAL4830TS		
						MXAL4830TS		
						MXAL4830TS		
						MXAL4830TS		






# RIVETTI A STRAPPO MULTIFIX

## MULTIGRIP BLIND RIVETS

# 1

24.34

D	L	T	K	∅ foro/hole		CODICE code		
3,2	8 9,5 12,5 14 16	9,5	2,0	3,3	0,5 - 5 2 - 6,5 5 - 9,5 6,5 - 11 8,5 - 13	MXAL3208TL MXAL3210TL MXAL3212TL MXAL3214TL MXAL3216TL	980 N	760 N
4,0	9,5 12,5 14 17 18 20	12,0	2,5	4,1	1 - 6 4 - 9 5,5 - 10,5 8,5 - 13,5 9,5 - 15,5 11,5 - 16,5	MXAL4010TL MXAL4012TL MXAL4014TL MXAL4017TL MXAL4018TL MXAL4020TL	1600 N	1200 N
4,8	10 12,5 15 17 20	14	2,5	4,9	1 - 5 3 - 7,5 5 - 10 7 - 12 10 - 15	MXAL4810TL MXAL4812TL MXAL4815TL MXAL4817TL MXAL4820TL	2350 N	1690 N

## MX-AL-TL

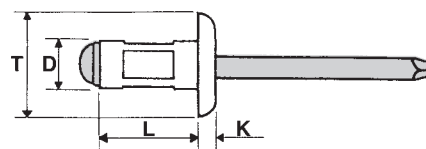
**TESTA LARGA**  
**LARGE HEAD**

boccola / body

**alluminio Mg. 2,5 / aluminium**  
**Mg. 2,5**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



4,8	10 12,5 15 17 20 24,8 27	16	2,5	4,9	1 - 5 3 - 7,5 5 - 10 7 - 12 10 - 15 14,5 - 19,5 15 - 23	MXAL4810TXL MXAL4812TXL MXAL4815TXL MXAL4817TXL MXAL4820TXL MXAL4824TXL MXAL4827TXL	2350 N	1690 N
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## MX-AL-TXL

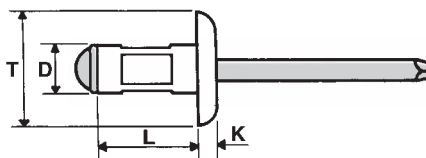
**TESTA EXTRA LARGA**  
**EXTRA LARGE HEAD**

boccola / body

**alluminio Mg. 2,5 / aluminium**  
**Mg. 2,5**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



# RIVETTI A STRAPPO MULTIFIX

## MULTIGRIP BLIND RIVETS

### MX-ALX - TT

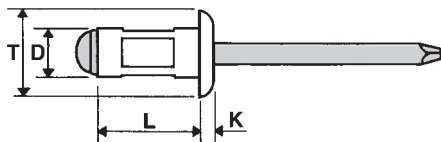
#### TESTA TONDA DOME HEAD

boccola / body

alluminio Mg. 2,5 / aluminium  
Mg. 2,5

mandrino / mandrel

acciaio inox A2 / stainless  
steel A2



D	L	T	K	Ø foro/hole		CODICE code		
3,0	8	6	1,4	3,1		MXALX3008TT	810 N	620 N
	9,5					MXALX3010TT		
	12,5					MXALX3013TT		
3,2	8	6	1,4	3,3		MXALX3208TT	980 N	760 N
	9,5					MXALX3210TT		
	12,5					MXALX3213TT		
4,0	9,5	8	1,7	4,1		MXALX4009TT	1600 N	1200 N
	12,5					MXALX4012TT		
	16,9					MXALX4016TT		
4,8	10	9,5	2	5,0		MXALX4810TT	2350 N	1690 N
	12,5					MXALX4813TT		
	15					MXALX4815TT		
	16,9					MXALX4816TT		
	20					MXALX4820TT		
	24,8					MXALX4824TT		

### MX-AOZ - TT

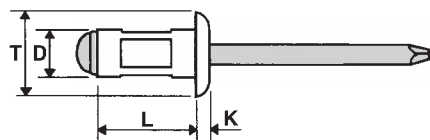
#### TESTA TONDA DOME HEAD

boccola / body

acciaio zincato / steel zinc plated

mandrino / mandrel

acciaio zincato / steel zinc plated






D	L	T	K	Ø foro/hole		CODICE code		
3,2	7	7,2	1	3,3		MXAOZ3207TT	1700 N	1500 N
	9					MXAOZ3209TT		
	11					MXAOZ3211TT		
4,0	10,8	8,1	1,2	4,1		MXAOZ4011TT	2350 N	1955 N
	12,5					MXAOZ4013TT		
	15					MXAOZ4015TT		
4,8	10,2	9,8	1,75	4,9		MXAOZ4810TT	3600 N	3335 N
	12,7					MXAOZ4813TT		
	13,5					MXAOZ4814TT		
	17,5					MXAOZ4818TT		

# RIVETTI STRUTTURALI AD ALTA TENUTA

## STRUCTURAL RIVETS

26.34

- Elevata resistenza alle vibrazioni e buona tenuta ermetica
- High resistance to vibrations and good seal

D	L	T	K	F	∅		CODICE code		
4,8	10 14	9,6	2,4	18,3 25,5	4,9	1,6 - 6,4 1,6 - 11,1	MFX4810TT MFX4814TT	4800 N	6000 N
6,4	14 20	13	3,1	25,0 35,0	6,6	2 - 9,5 2 - 15,9	MFX6414TT MFX6420TT	8240 N	10690 N

### MFX - TT

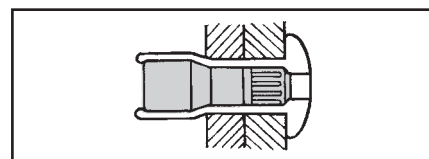
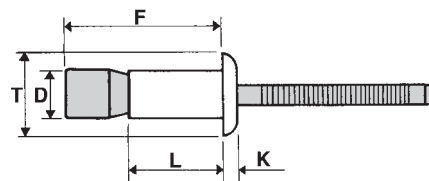
#### TESTA TONDA DOME HEAD

boccola / body

**acciaio zincato / steel zinc plated**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



4,8	13 16	8,5	1,9	20 26	4,9	3,6 - 7,9 3,6 - 12,7	MFX4813TS MFX4816TS	4800 N	6000 N
6,4	17 22	10,2	2,2	27	6,6	5 - 11,1 5 - 17,5	MFX6417TS MFX6422TS	8240 N	10690 N

### MFX - TS

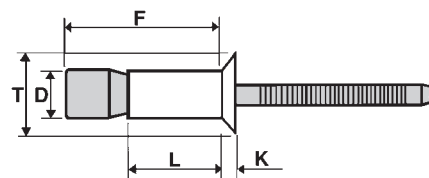
#### TESTA SVASATA COUNTERSUNK HEAD

boccola / body

**acciaio zincato / steel zinc plated**

mandrino / mandrel

**acciaio zincato / steel zinc plated**



# RIVETTI STRUTTURALI AD ALTA TENUTA

## STRUCTURAL RIVETS

- Elevata resistenza alle vibrazioni e buona tenuta ermetica
- High resistance to vibrations and good seal

### MFX - TT AL

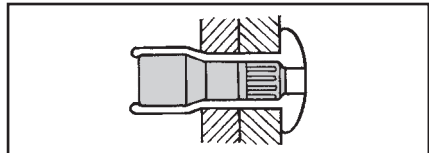
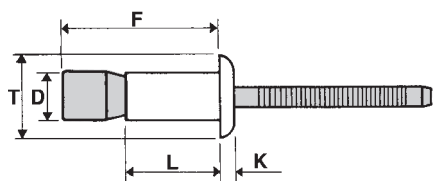
#### TESTA TONDA DOME HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

alluminio / aluminium



D	L	T	K	F	∅		CODICE code		
4,8	10,9 14,2	10	2,0	18,3 24	5,0	1,6 - 6,9 1,6 - 11,1	MFX4810TTAL MFX4814TTAL	2200 N	3000 N
6,4	14,6 19,7	13	2,5	24,5 34,7	6,6	2 - 9,5 2 - 15,9	MFX6414TTAL MFX6420TTAL	4200 N	6000 N

### MFX - TS AL

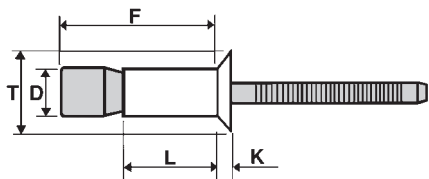
#### TESTA SVASATA COUNTERSUNK HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

alluminio / aluminium






4,8	12,7 15,9	8,25	2	20 26,2	5,0	3,2 - 8,4 1,6 - 11,1	MFX4813TSAL MFX4816TSAL	2100 N	2800 N
6,4	17,2	10	2,2	27,2	6,6	3,2 - 12,1	MFX6417TSAL	4200 N	6000 N

# RIVETTI STRUTTURALI AD ALTA TENUTA

## STRUCTURAL RIVETS

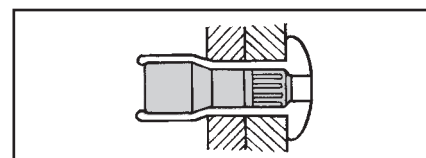
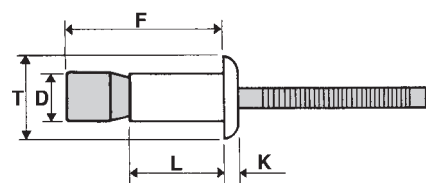
- Elevata resistenza alle vibrazioni e buona tenuta ermetica
- *High resistance to vibrations and good seal*




D	L	T	K	F	∅		CODICE code		
4,8	10 14	9,6	2,4	18 25	4,9	1,6 - 6,4 1,6 - 11,1	MFX4810TTIX MFX4814TTIX	5700 N	6700 N
6,4	14 20	13	3,1	24 33	6,6	2 - 9,5 2 - 15,9	MFX6414TTIX MFX6420TTIX	8700 N	10700 N

## MFX - TT IX

### TESTA TONDA DOME HEAD

boccola / *body*  
acciaio inox 304 / *stainless steel 304*  
mandrino / *mandrel*  
acciaio inox 304 / *stainless steel 304*

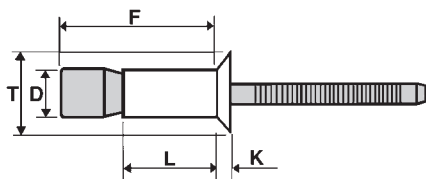


D	L	T	K	F	∅		CODICE code		
4,8	12 16	8,5	1,9	18 25	4,9	3,6 - 7,9 3,6 - 12,7	MFX4812TSIX MFX4816TSIX	5700 N	6700 N
6,4	16 22	10,2	2,2	18 25	6,6	5 - 11,1 5 - 17,5	MFX6416TSIX MFX6422TSIX	8700 N	10700 N

## MFX - TS IX

### TESTA SVASATA COUNTERSUNK HEAD

boccola / *body*  
acciaio inox 304 / *stainless steel 304*  
mandrino / *mandrel*  
acciaio inox 304 / *stainless steel 304*



# RIVETTI STRUTTURALI AD ALTA TENUTA

## STRUCTURAL RIVETS

- La controtesta più larga garantisce maggiore tenuta e non deforma i materiali a lastra sottile  
*For thin sheet applications*
- E' resistente all'acqua ed alle vibrazioni  
*Good resistance to vibrations and good seal*

### MBX - TT

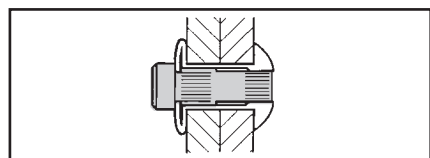
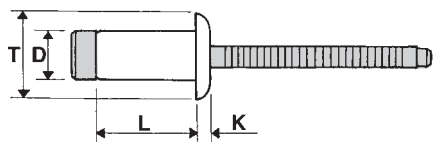
#### TESTA TONDA DOME HEAD




boccola / *body*

acciaio zincato / *steel zinc plated*

mandrino / *mandrel*

acciaio zincato / *steel zinc plated*



D	L	T	K	∅		CODICE code		
3,2	7	6,5	1,4	3,3	1 - 3	MBX3207TT	1300	1600
	9				3 - 5	MBX3209TT		
	11				5 - 7	MBX3211TT		
4,0	7,5	8	1,7	4,1	1 - 3	MBX4008TT	2800	3500
	9,5				3 - 5	MBX4010TT		
	12,5				5 - 7	MBX4012TT		
4,8	10	9,5	2	4,9	1,5 - 3,5	MBX4810TT	3800	4200
	12				3,5 - 6	MBX4812TT		
	14				6 - 8,5	MBX4814TT		
6,0	10	12	1,8	6,1	1,5 - 4	MBX6010TT	5400	4200
	13				3 - 6	MBX6013TT		5400
	16				6 - 9	MBX6016TT		8500
	19				9 - 12	MBX6019TT		8500
6,4	9	13	3	6,6	1,5 - 3,5	MBX6409TT	7100	8900
	10				2,8 - 4,8	MBX6410TT		10200
	11				3,4 - 5,4	MBX6411TT		10600
	12				4,8 - 6,8	MBX6412TT		10600
	14				6,8 - 8,8	MBX6414TT		12700
	16				8,8 - 10,8	MBX6416TT		13600
	18				10,8 - 12,8	MBX6418TT		13600








# RIVETTI STRUTTURALI AD ALTA TENUTA

## STRUCTURAL RIVETS

# 1

30.34

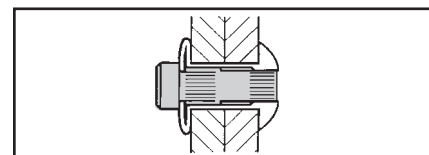
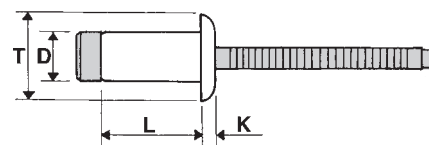
- La controtesta più larga garantisce maggiore tenuta e non deforma i materiali a lastra sottile  
*For thin sheet applications*
- E' resistente all'acqua ed alle vibrazioni  
*Good resistance to vibrations and good seal*

D	L	T	K	∅		CODICE code		
3,2	6,6	6,5	1,4	3,3		1 - 3 MBX3207TTIX	2000	1600
	9,2					3 - 5 MBX3209TTIX		
	11,5					5 - 7 MBX3211TTIX		
4,0	8	8	1,7	4,1		1 - 3 MBX4008TTIX	3800	4200
	10					3 - 5 MBX4010TTIX		
	12					5 - 7 MBX4012TTIX		
4,8	10	9,5	2	4,9		1,5 - 3,5 MBX4810TTIX	5000	5500
	12					3,5 - 6 MBX4812TTIX		
	14,3					6 - 8,5 MBX4814TTIX		
6,4	9	13	3	6,6		1,5 - 3,5 MBX6409TTIX	8000	10000
	10					2,8 - 4,8 MBX6410TTIX		
	11					3,4 - 5,4 MBX6411TTIX		
	12					4,8 - 6,8 MBX6412TTIX		
	14					6,8 - 8,8 MBX6414TTIX		
	16					8,8 - 10,8 MBX6416TTIX		
	18					10,8 - 12,8 MBX6418TTIX		

## MBX - TT IX

### TESTA TONDA DOME HEAD

boccola / body  
**acciaio inox A2 /  
stainless steel A2**  
mandrino / mandrel  
**acciaio inox A2 /  
stainless steel A2**



# RIVETTATRICI MANUALI PER RIVETTI A STRAPPO

## HAND TOOLS FOR BLIND RIVETS

### ATTREZZATURE TOOLS



150

**UTILIZZO**  
CAPACITY ø 2,4 - 5 mm.

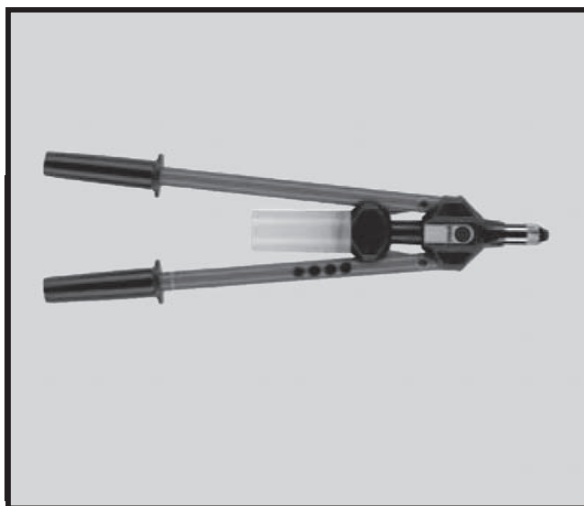
**LUNGHEZZA**  
LENGHT 255 mm.

**EQUIPAGGIAMENTO**  
EQUIPMENT  
UGELLI  
NOSE PIECES ø 2,4 - 5 mm.

**MATERIALE DEL CORPO**  
BODY MATERIAL  
ALLUMINIO / ALUMINIUM

**MATERIALE DELLA LEVA**  
LEVER MATERIAL  
FERRO / STEEL

**PESO**  
WEIGHT 0,7 Kg.



260

**UTILIZZO**  
CAPACITY ø 3 - 6,4 mm.

**LUNGHEZZA**  
LENGHT 500 mm.

**EQUIPAGGIAMENTO**  
EQUIPMENT  
UGELLI  
NOSE PIECES ø 3 - 6,4 mm.

**MATERIALE DEL CORPO**  
BODY MATERIAL  
PLASTICA CON PARTI IN ACCIAIO  
PLASTIC WITH STEEL PARTS

**MATERIALE DELLA LEVA**  
LEVER MATERIAL  
FERRO / STEEL

**PESO**  
WEIGHT 1,8 Kg.



# RIVETTATRICE A BATTERIA

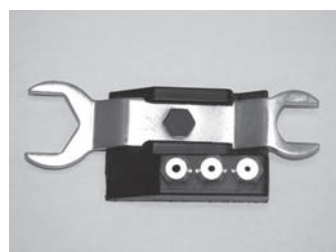
## BLIND RIVET BATTERY TOOL



### DATI TECNICI:

#### TECHNICAL SPECIFICATION:

<b>alluminio,rame</b> <i>aluminium, copper:</i>	2,8 - 3,2 - 4,0 - 4,8 - 5,2 mm
<b>acciaio,inox</b> <i>steel, stainless steel:</i>	2,8 - 3,2 - 4,0 - 4,8 mm
<b>tensione della batteria</b> <i>battery power:</i>	14,4 V (Li-ion) 3.0 Ah
<b>forza di trazione</b> <i>traction power:</i>	8500 N
<b>corsa</b> <i>stroke:</i>	20 mm
<b>peso con batteria</b> <i>total weight:</i>	2,1 Kg
<b>caricabatteria intelligente</b> <i>fast charger:</i>	14.4 V VDC
<b>tensione in entrata</b> <i>power surce:</i>	220V VAC, 50 Hz
<b>tensione in uscita</b> <i>charging voltage:</i>	14.4 V VDC
<b>tempo di ricarica</b> <i>charging time:</i>	60 min. at 20°



### ACCESSORI E RICAMBI IN DOTAZIONE:

#### SPARE PARTS:

#### Seconda Batteria in dotazione Li-Ion

*Second Battery* 14.4 V, 3 Ah

#### Caricabatteria intelligente

*Charger intelligent*

#### Ugelli

2,8 mm - 3,2 mm

#### Nose pieces

4,0 mm - 4,8 mm



### ACCESSORI E RICAMBI A RICHIESTA:

#### SPARE PART ON REQUEST

#### Morsetti di ricambio

*Jaws (2 pieces)*

#### Spazzole di ricambio (2 pzi)

*Brushes (2 pieces)*

#### Corpo in nylon dx

*Housing dx*

#### Corpo in nylon sx

*Housing sx*

#### Prolunga

*Extension*



# RIVETTATRICI PNEUMATICHE PER RIVETTI A STRAPPO

## PNEUMATIC TOOLS FOR BLIND RIVETS

### ATTREZZATURE TOOLS



<b>AP 1</b>	<b>UTILIZZO</b> CAPACITY	ø 2,4 - 5 mm.
	<b>PRESSIONE DI UTILIZZO</b> PRESSURE REQUIRED	5 - 7 BAR
	<b>DIMENSIONI</b> DIMENSIONS	272 x 264mm.
	<b>EQUIPAGGIAMENTO</b> EQUIPMENT	
	UGELLI NOSE PIECES	ø 2,4-5 mm
	<b>CORSA</b> STROKE	17 mm.
	<b>FORZA (6 BAR)</b> TRACTION POWER (6 BAR)	7,3 KN
	<b>PESO</b> WEIGHT	1.25 Kg.



<b>AP 2</b>	<b>UTILIZZO</b> CAPACITY	ø 4 - 6,4 mm.
	<b>PRESSIONE DI UTILIZZO</b> PRESSURE REQUIRED	5-7 BAR
	<b>DIMENSIONI</b> DIMENSIONS	272 x 275mm
	<b>EQUIPAGGIAMENTO</b> EQUIPMENT	
	UGELLI NOSE PIECES	ø 4 - 6,4 mm
	<b>CORSA</b> STROKE	21 mm.
	<b>FORZA (6 BAR)</b> TRACTION POWER (6 BAR)	12,5 KN
	<b>PESO</b> WEIGHT	1.65 Kg.



<b>AP 3</b>	<b>UTILIZZO</b> CAPACITY	ø 4,0 - 6,4 mm.
	<b>RIVETTI STRUTTURALI</b> STRUCTURAL RIVETS	ø 4,8 - 6,4 mm
	<b>PRESSIONE DI UTILIZZO</b> PRESSURE REQUIRED	5-7 BAR
	<b>DIMENSIONI</b> DIMENSIONS	292 x 290 x 125mm
	<b>EQUIPAGGIAMENTO</b> EQUIPMENT	
	UGELLI NOSE PIECES	ø 4,8 - 6,4 mm
	<b>CORSA</b> STROKE	25 mm.
	<b>FORZA (6 BAR)</b> TRACTION POWER (6 BAR)	16 KN
	<b>PESO</b> WEIGHT	1.8 Kg.

# RIVETTATRICI PNEUMATICHE PER RIVETTI A STRAPPO

## PNEUMATIC TOOLS FOR BLIND RIVETS

### ATTREZZATURE TOOLS



<b>BZ 103</b>	<b>UTILIZZO</b> CAPACITY	ø 2,4 - 5 mm.
	<b>PRESSIONE DI UTILIZZO</b> PRESSURE REQUIRED	5 - 7 BAR
	<b>DIMENSIONI</b> DIMENSIONS	305 x 310 mm.
	<b>EQUIPAGGIAMENTO</b> EQUIPMENT	
	UGELLI NOSE PIECES	ø 2,4-5 mm
	<b>CORSA</b> STROKE	18 mm.
	<b>FORZA</b> TRACTION POWER	11.750 N
	<b>PESO</b> WEIGHT	1,86 Kg.
	<b>VIBRAZIONI</b> VIBRATIONS	0,62 m/s <sup>2</sup>



<b>BZ 123</b>	<b>UTILIZZO</b> CAPACITY	ø 4,0 - 6,4 mm.
	<b>RIVETTI STRUTTURALI</b> STRUCTURAL RIVETS	ø 4,8 - 6,4 mm
	<b>PRESSIONE DI UTILIZZO</b> PRESSURE REQUIRED	5-7 BAR
	<b>DIMENSIONI</b> DIMENSIONS	310 x 350 mm
	<b>EQUIPAGGIAMENTO</b> EQUIPMENT	
	UGELLI NOSE PIECES	ø 4 - 6,4 mm
	<b>CORSA</b> STROKE	25 mm.
	<b>FORZA</b> TRACTION POWER	17.730 N
	<b>PESO</b> WEIGHT	2,41 Kg.
	<b>VIBRAZIONI</b> VIBRATIONS	1,1 m/s <sup>2</sup>

2



**INSERTI FILETTATI**  
THREADED INSERTS  
BLINDNIETMUTTERN  
INSERTS FILETÉS

**GRIV SRL**

**Sede Legale:** via Giuseppe Mazzini, 4 - 80040 - Pollena Trocchia (Na)

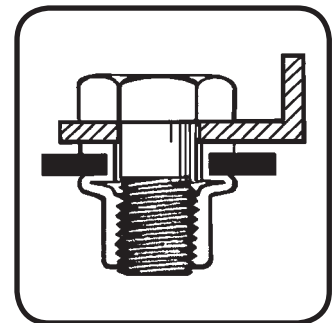
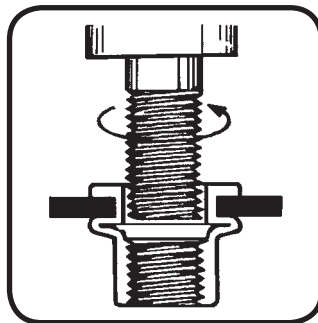
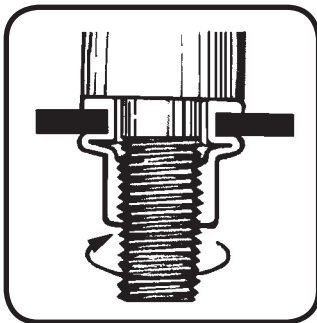
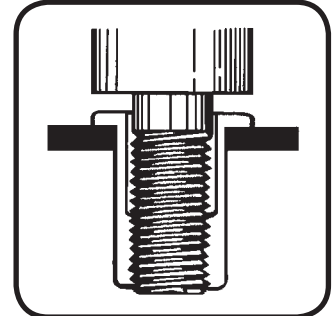
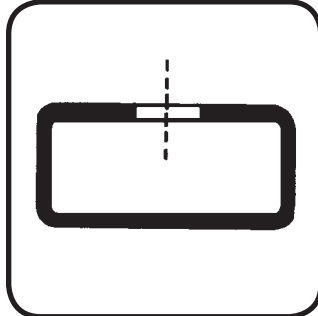
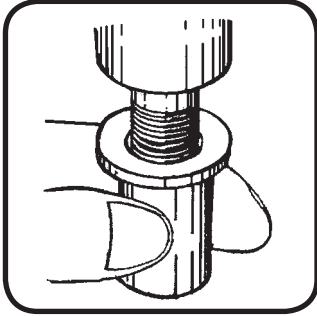
**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

**Tel/Fax:** +39 081 8990496

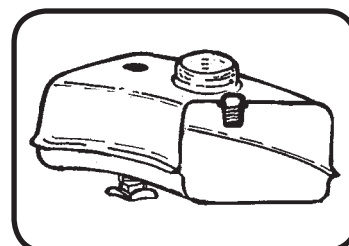
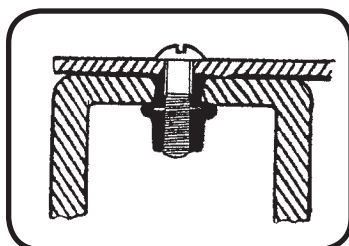
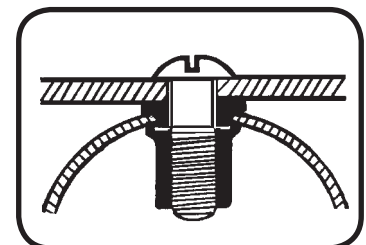
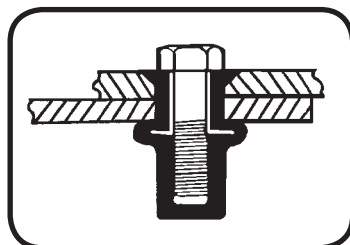
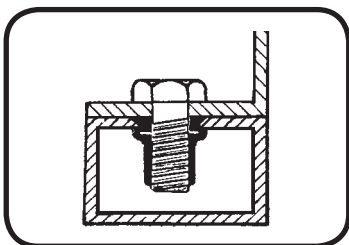
**Email:** [info@grivsr.it](mailto:info@grivsr.it)

**Web:** [www.grivsr.it](http://www.grivsr.it)

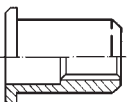
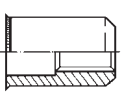
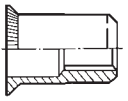
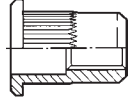
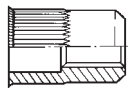
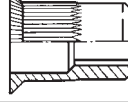
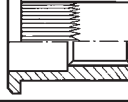
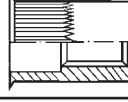

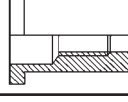
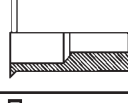
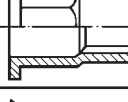
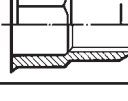
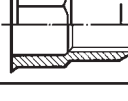
INSTALLATION  
ANWENDUNGSPRINZIP  
PRINCIPE D' APPLICATION  
**INSTALLAZIONE**

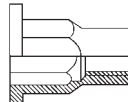
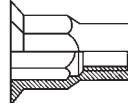
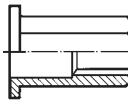
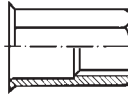
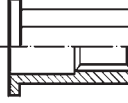
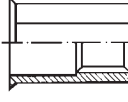
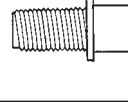
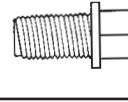
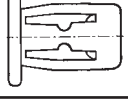
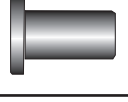




APPLICATIONS  
ANWENDUNG  
APPLICATIONS  
**APPLICAZIONI**



GENERAL INDEX  
 INHALTSWERZEICHNIS  
 SOMMAIRE GÉNÉRAL  
**INDICE**

TIPO TYPE TYP TYPE	ACCIAIO STEEL STAHL ACIER	ACCIAIO INOX STAINLESS STEEL EDELSTAHL ACIER INOXYDABLE	ALLUMINIO ALUMINIUM ALU ALUMINIUM
	Pag.	Pag.	Pag.
 ITT	4	10	15
 ITR/ITR-CP	4	10	15
 ITS	4	10	15
 ITTG	5	11	-
 ITRG	5	11	-
 ITSG	5	11	-
 ITTCG	6	-	-
 ITRCG	6	-	-
 ITSCG	6	-	-
 ITTC	-	13	-
 ITRC	-	13	-
 ITTSE	7	12	-
 IERSE	7	12	-
 ITRSE			-

TIPO TYPE TYP TYPE	ACCIAIO STEEL STAHL ACIER	ACCIAIO INOX STAINLESS STEEL EDELSTAHL ACIER INOXYDABLE	ALLUMINIO ALUMINIUM ALU ALUMINIUM
	Pag.	Pag.	Pag.
 ITTSEC	-	14	-
 IERSEC	-	14	-
 ITTE	8	-	-
 IER	8	-	-
 ITTEC	9	-	-
 IERC	9	-	-
 ITTM	16	-	-
 ITTEM	16	-	-
	17	17	-
 RN	17	-	-
 F212	18	-	-
 F318			
ATTREZZATURE TOOLS WERKZEUGE PINCES	19	-	-

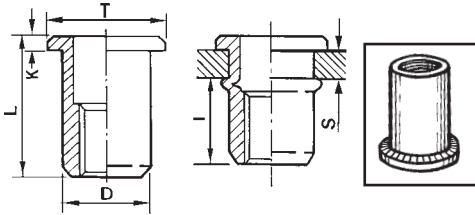
STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**




# CYLINDRICAL THREADED INSERTS BLINDNIETMUTTERN RUNDSCHAFT INSERTS FILETÉS CYLINDRIQUE **INSERTI FILETTATI CILINDRICI**

## ITT

### TESTA TONDA - CORTO

FLAT HEAD - SHORT TYPE  
 FLACHKOPF - KURZ  
 TÊTE CYLINDRIQUE - COURT

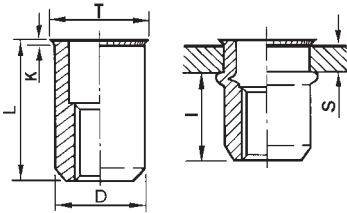


CODICE CODE		S	D		T	K	L	J	 Nm
AC-ITT M03-C	M3	0,5 - 1,5	4,9	5	7,2	0,8	8,5	4,7	1
AC-ITT M04-C	M4	0,5 - 2	5,9	6	8,5	0,8	10,5	6	5
AC-ITT M05-C	M5	0,5 - 2,5	6,9	7	10	1	13	7,5	9
AC-ITT M06-C	M6	0,5 - 3	8,9	9	12,3	1,3	15,5	9,2	14
AC-ITT M08-C	M8	1 - 3,5	10,9	11	15	1,5	18,5	11,5	25
AC-ITT M10-C12	M10	1 - 3,5	11,9	12	16	1,5	19	11	45
AC-ITT M10-C13		1 - 2,5	12,9	13	16,3	1,6	17	11,5	45
AC-ITT M12-C15	M12	1 - 4	14,9	15	18	1,7	22	13,5	70
AC-ITT M12-C16		1 - 4	15,9	16	22	2	25	16	70

## ITR

### TESTA RIDOTTA - CORTO

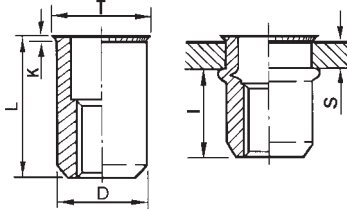
REDUCED COUNTERSUNK HEAD -  
 SHORT TYPE  
 KLEINER SENKKOPF - KURZ  
 TÊTE RÉDUITE - COURT



AC-ITR M03-C	M3	0,5 - 2	4,9	5	6	0,5	8,5	6,2	1
AC-ITR M04-C	M4	0,5 - 2	5,9	6	7	0,5	10,5	6,5	5
AC-ITR M05-C	M5	0,5 - 2	6,9	7	8	0,5	11,5	7	9
AC-ITR M06-C	M6	0,5 - 2,5	8,9	9	10	0,6	14	8,5	14
AC-ITR M08-C	M8	1 - 3	10,9	11	12	0,6	16,5	10	25
AC-ITR M10-C12	M10	0,5 - 3,5	11,9	12	13,5	0,85	19	13	45
AC-ITR M10-C13		1 - 3	12,9	13	14	0,7	17,5	12	45
AC-ITR M12-C15	M12	0,5 - 3,5	14,9	15	16,5	0,85	22,5	16	70
AC-ITR M12-C16		1 - 4	15,9	16	17,2	0,6	24	16	70

## ITR - CP

FORATURA SPECIALE  
 SPECIAL HOLE  
 VORBOHRUNG NOTWENIG  
 TROU SPÉCIAL

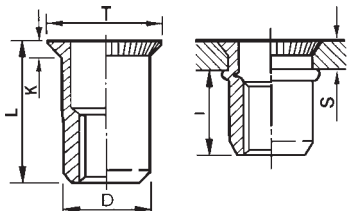


AC-ITR M03-CP	M3	0,5 - 1,5	4,7	4,8	5,4	0,4	9,0	5,5	1
AC-ITR M04-CP	M4	0,5 - 2,0	6,3	6,4	7,0	0,5	10,5	6,5	5
AC-ITR M05-CP	M5	0,5 - 2,5	7,1	7,2	7,8	0,5	12,0	7,5	9
AC-ITR M06-CP	M6	1,0 - 3,0	9,5	9,6	10,3	0,6	15,0	9,2	14
AC-ITR M08-CP	M8	1,0 - 3,5	10,5	10,6	11,4	0,6	16,0	10,5	25
AC-ITR M10-CP	M10	1,0 - 4,0	12,7	12,8	13,8	0,6	20,0	12,8	45

## ITS

### TESTA SVASATA - CORTO




COUNTERSUNK HEAD - SHORT TYPE  
 SENKKOPF - KURZ  
 TÊTE FRAISÉE - COURT



AC-ITS M03-C	M3	1,6 - 3,5	4,9	5	7,8	1,5	9,5	4,5	1
AC-ITS M04-C	M4	1,5 - 3	5,9	6	9	1,5	12	6,5	4
AC-ITS M05-C	M5	1,5 - 3,5	6,9	7	10	1,5	13	7,5	7
AC-ITS M06-C	M6	1,5 - 4	8,9	9	12	1,5	15,5	9	15
AC-ITS M08-C	M8	1,6 - 5	10,9	11	14	1,5	18,5	10	26
AC-ITS M10-C12	M10	1,6 - 5	11,9	12	15	1,5	19	11,5	45
AC-ITS M10-C13		1,6 - 5	12,9	13	16	1,5	19	11,5	45
AC-ITS M12-C15	M12	1,6 - 5	14,9	15	18	1,5	22,5	14,5	70
AC-ITS M12-C16		1,7 - 4,5	15,9	16	19	1,9	26	17,5	70

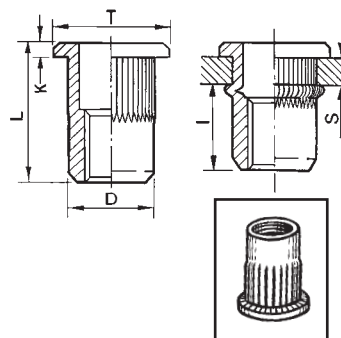
**KNURLED CYLINDRICAL THREADED INSERTS  
BLINDNIETMUTTERN RUNDSCHAFT GERÄNDELT  
INSERTS FILETÉS CRANTÉS CYLINDRIQUE  
INSERTI FILETTATI CILINDRICI GODRONATI**

STEEL WHITE ZINC PLATED Cr III  
STAHL VERZINKT Cr III  
ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**

CODICE CODE		S	D		T	K	L	J	 Nm
AC-ITTG M03-C AC-ITTG M03-L	M3	0,5 - 1,5 2 - 4,5	4,9	5	8 7	0,8	10 12	6 4,5	1
AC-ITTG M04-C AC-ITTG M04-L	M4	0,5 - 2 2,5 - 3,5	5,9	6	9	0,8	10,5 12	6 6	5
AC-ITTG M05-C AC-ITTG M05-L	M5	0,5 - 2,5 2,5 - 5	6,9	7	10 10	1 1	13 16,5	7,5 8,5	9
AC-ITTG M06-C AC-ITTG M06-L	M6	0,5 - 3 3 - 5,5	8,9	9	12,3 12,3	1,3 1,3	15,5 19,5	9,2 10,5	14
AC-ITTG M08-C AC-ITTG M08-L	M8	1 - 3,5 3,5 - 6	10,9	11	14,5 14,5	1,5 1,5	18,5 21	11,5	25
AC-ITTG M10-C12 AC-ITTG M10-L12	M10	0,5 - 3,5	11,9	12	16	1,7	18,3	12,5	45
AC-ITTG M10-C13 AC-ITTG M10-L13		4 - 6,5	11,9	12	16	1,8	25	12,5	
AC-ITTG M10-C13 AC-ITTG M10-L13		1 - 4	12,9	13	17	1,7	21,5	13,5	
AC-ITTG M12-C15 AC-ITTG M12-C16 AC-ITTG M12-L16	M12	1 - 4 1 - 3,5 3,5 - 6	14,9 15,9 15,9	15 16 16	18 22 22	1,7 2 2	22 25 28	13,5 15 16,5	82

**ITTG**

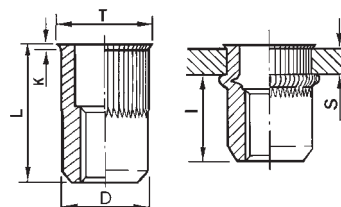
**TESTA TONDA**  
FLAT HEAD  
FLACHKOPF  
TÊTE CYLINDRIQUE



AC-ITRG M03-C AC-ITRG M03-L	M3	0,5 - 2 2,5 - 4,5	4,9	5	6 5,5	0,5 0,35	9 11,5	6,5 5,5	1
AC-ITRG M04-C AC-ITRG M04-L	M4	0,5 - 2 2 - 4	5,9	6	7 7	0,5	11,2 13	7 7	5
AC-ITRG M05-C AC-ITRG M05-L	M5	0,5 - 2,5 2 - 4	6,9	7	8	0,5 0,5	11,5 13	7 7	9
AC-ITRG M06-C AC-ITRG M06-L	M6	0,5 - 2,5 2,5 - 4,5	8,9	9	10	0,6	14 16	8,5 8,5	14
AC-ITRG M08-C AC-ITRG M08-L	M8	1 - 3 3 - 5	10,9	11	12 12	0,6	16,5 18,5	10 10	25
AC-ITRG M10-C12 AC-ITRG M10-L12	M10	1 - 3,5	11,9	12	13	0,7	19	13	45
AC-ITRG M10-C13 AC-ITRG M10-L13		4 - 6,5	11,9	12	13,3	0,85	24	12,5	
AC-ITRG M10-C13 AC-ITRG M10-L13		1 - 3,5	12,9	13	14	0,7	19,5	12,5	
AC-ITRG M12-C15 AC-ITRG M12-C16 AC-ITRG M12-L16	M12	0,5 - 3,5 1 - 4 3,5 - 7,5	14,9 15,9 15,9	15 16 16	16,5 17,6 17,2	0,85 0,75 0,6	22,5 23,5 27,5	16 16 16	82

**ITRG**

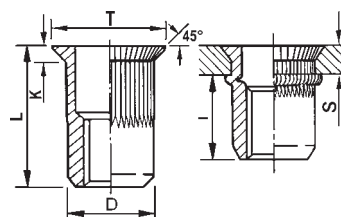
**TESTA RIDOTTA**  
REDUCED COUNTERSUNK HEAD  
KLEINER SENKKOPF  
TÊTE RÉDUITE



AC-ITSG M03-C AC-ITSG M03-L	M3	1,6 - 3,5 3,5 - 5	4,9	5	7,8	1,5	9,5 12	4,5	1
AC-ITSG M04-C AC-ITSG M04-L	M4	1,5 - 3 3,5 - 6	5,9	6	9	1,5	12 14	6,5 6	5
AC-ITSG M05-C AC-ITSG M05-L	M5	1,5 - 3,5 4 - 7	6,9	7	10	1,5	13 16,5	7,5 8,5	9
AC-ITSG M06-C AC-ITSG M06-L	M6	1,5 - 4 4 - 7	8,9	9	12	1,5	15,5 19	9	14
AC-ITSG M08-C AC-ITSG M08-L	M8	1,6 - 5 4,5 - 7,5	10,9	11	14	1,5	16,5 20	10	25
AC-ITSG M10-C12 AC-ITSG M10-L12	M10	1,6 - 5	11,9	12	15		19		45
AC-ITSG M10-C13 AC-ITSG M10-L13		4,5 - 7,5	11,9	12	15		24		
AC-ITSG M10-C13 AC-ITSG M10-L13		1,6 - 5	12,9	13	16	1,5	19	11,5	
AC-ITSG M12-C15 AC-ITSG M12-C16 AC-ITSG M12-L16	M12	1,6 - 5 1,7 - 4,5 4 - 7,5	14,9 15,9 15,9	15 16 16	18 19 19	1,5 1,9 1,9	22,5 26 29	14,5 17,5 17,5	82

**ITSG**

**TESTA SVASATA**  
COUNTERSUNK HEAD  
SENKKOPF  
TÊTE FRAISÉE





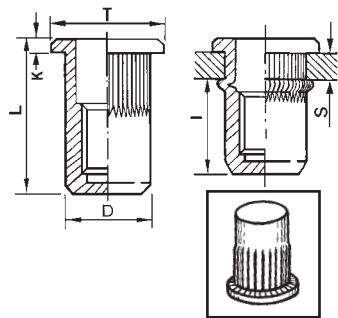
STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**




KNURLED CYLINDRICAL THREADED INSERTS, CLOSED END TYPE  
 BLINDNIETMUTTERN RUNDSCHAFT GERÄNDELT SCHAFTENDE GESCHLOSSEN  
 INSERTS FILÉTÉS CRANTÉS CYLINDRIQUE BORGNES  
**INSERTI CILINDRICI GODRONATI CIECHI**

**ITTCG**

**TESTA TONDA - CORTO**

FLAT HEAD - SHORT TYPE  
 FLACHKOPF - KURZ  
 TÊTE CYLINDRIQUE - COURT

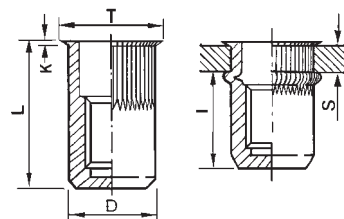





CODICE CODE		S	D		T	K	L	J	
AC-ITTCG M04-C	M4	0,5 - 2	5,9	6	9	0,8	16	11,3	3
AC-ITTCG M05-C	M5	0,5 - 3	6,9	7	10	1	17	11,5	6
AC-ITTCG M06-C	M6	0,5 - 3	8,9	9	12,3	1,3	19	12,7	10
AC-ITTCG M08-C	M8	0,5 - 3	10,9	11	15	1,5	21,5	14,8	24
AC-ITTCG M10-C13	M10	1 - 4	12,9	13	17	1,6	27	19,2	48

**ITRCG**

**TESTA RIDOTTA - CORTO**

REDUCED COUNTERSUNK HEAD -  
 SHORT TYPE  
 KLEINER SENKKOPF - KURZ  
 TÊTE RÉDUITE - COURT

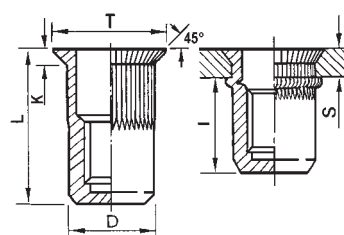





CODICE CODE		S	D		T	K	L	J	
AC-ITRCG M04-C	M4	0,5 - 2	5,9	6	7	0,5	15	11	-
AC-ITRCG M05-C	M5	0,5 - 2	6,9	7	8	0,5	16,5	12,5	-
AC-ITRCG M06-C	M6	0,5 - 3	8,9	9	10	0,6	20,5	15,5	-
AC-ITRCG M08-C	M8	1 - 3	10,9	11	12	0,6	23	17	-
AC-ITRCG M10-C13	M10	1 - 3	12,9	13	14,5	0,7	24,5	18,2	-

**ITSCG**

**TESTA SVASATA - CORTO**



COUNTERSUNK HEAD - SHORT TYPE  
 SENKKOPF - KURZ  
 TÊTE FRAISÉE- COURT



CODICE CODE		S	D		T	K	L	J	
AC-ITSCG M04-C	M4	1,6 - 3,5	5,9	6	9	1,5	17,3	12,3	-
AC-ITSCG M05-C	M5	1,6 - 4	6,9	7	10	1,5	19,5	14	-
AC-ITSCG M06-C	M6	1,6 - 4,5	8,9	9	12	1,5	23,5	17,5	-
AC-ITSCG M08-C	M8	1,6 - 5	10,9	11	14	1,5	26,5	20	-
AC-ITSCG M10-C13	M10	1,6 - 5	12,9	13	16	1,5	33	21,5	-

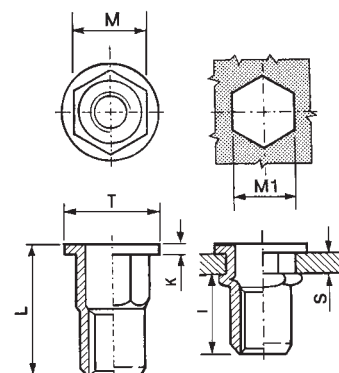
THREADED INSERTS SEMI – HEXAGONAL  
 BLINDNIETMÜTTERN TEILSECHSKANTSCHAFT  
 INSERTS FILÉTES SEMI – HEXAGONALS  
 INSERTI FILETTATI SEMIESAGONALI



STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**

CODICE CODE		S	M	M1	T	K	L	J	 Nm
AC-ITTSE M03-C	M3	0,3 - 1,8	4,9	5	8	0,75	9	5,5	-
AC-ITTSE M04-C	M4	0,5 - 2	5,9	6	9	0,8	11	6,5	5
AC-ITTSE M05-C	M5	0,5 - 2,5	6,9	7	10	1	13	8	9
AC-ITTSE M06-C	M6	0,5 - 3	8,9	9	12,7	1,3	15	8,5	14
AC-ITTSE M08-C	M8	1 - 3,5	10,9	11	16	1,5	18	10,5	28
AC-ITTSE M10-C12	M10	0,5 - 3,5	11,9	12	16,5	1,8	20,3	12	50
AC-ITTSE M10-C13		0,5 - 3,5	12,9	13	17	1,8	20,3	12	
AC-ITTSE M12-C16	M12	2 - 5	15,9	16	23	2,2	27,5	16,5	-

## ITTSE

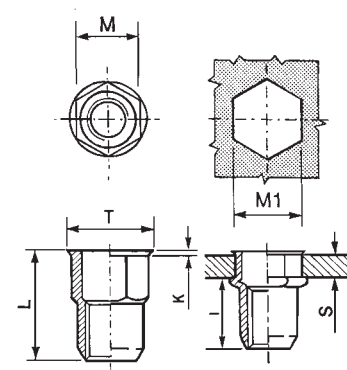
**TESTA TONDA**  
 FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE



CODICE CODE		S	M	M1	T	K	L	J	 Nm
AC-IERSE M03-C	M3	0,3 - 1,5	4,9	5	5,6	0,35	8,5	5,5	-
AC-IERSE M04-C	M4	0,5 - 2	5,9	6	7	0,5	12	7,5	5
AC-IERSE M05-C	M5	0,5 - 2,5	6,9	7	8	0,5	13	8	9
AC-IERSE M06-C	M6	1 - 3,5	8,9	9	10	0,6	16	9,2	14
AC-IERSE M08-C	M8	1 - 4	10,9	11	12	0,6	17,5	10,2	28
AC-IERSE M10-C12	M10	0,5 - 3,5	11,9	12	13	0,85	18,7	12,5	50
AC-IERSE M10-C13		0,5 - 3,5	12,9	13	14,3	0,85	23	12,5	
AC-IERSE M12-C16	M12	1 - 4	15,9	16	17,2	0,6	24	16	-

## IERSE

**TESTA RIDOTTA**  
 REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



AC-ITRSE M04-C	M4	0,5 - 2	6,3	6,4	7,4	0,5	10,5	6,5	-
AC-ITRSE M05-C	M5	0,5 - 2,5	7,1	7,2	8,2	0,5	12	7,5	-
AC-ITRSE M06-C	M6	1 - 3	9,5	9,6	10,6	0,6	15	9,2	-
AC-ITRSE M08-C	M8	1 - 3,5	10,5	10,6	11,6	0,6	16,5	10,5	-

## ITRSE

**TESTA RIDOTTA - FORATURA SPECIALE**  
 REDUCED COUNTERSUNK HEAD - SPECIAL HOLE  
 KLEINER SENKKOPF - VORBOHRUNG NOTWENIG  
 TÊTE RÉDUITE - TROU SPÉCIAL

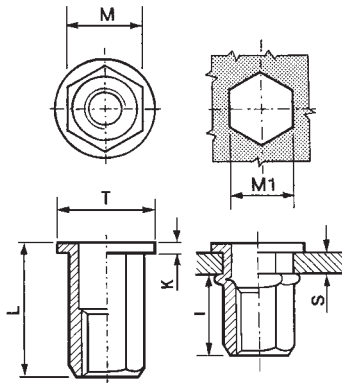
STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**



**THREADED INSERTS HEXAGONAL  
 SECHSKANTSCHAFT  
 INSERTS FILÉTÉS HEXAGONALS  
 INSERTI FILETTATI ESAGONALI**

**ITTE**

**TESTA TONDA**

FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE

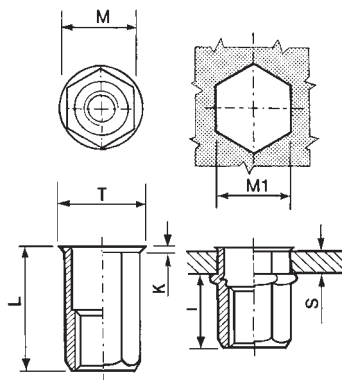


CODICE CODE		S	M	M1	T	K	L	J	 Nm
AC-ITTE M04-C AC-ITTE M04-L	M4	0,5 - 2 2,5 - 5	5,9	6	9	0,8	11 13,5	6,5 6,5	5
AC-ITTE M05-C AC-ITTE M05-L	M5	0,5 - 2,5 3 - 6	6,9	7	10	1	14 16,5	8	9
AC-ITTE M06-C AC-ITTE M06-L	M6	0,5 - 3 3,5 - 6	8,9	9	13	1,2 1,5	16 19,5	9,5 8,5	14
AC-ITTE M08-C AC-ITTE M08-L	M8	1 - 3,5 4 - 6	10,9	11	16 15	1,5	17 21,5	9,5 10,5	26
AC-ITTE M10-C12 AC-ITTE M10-C13 AC-ITTE M10-L13	M10	0,5 - 3,5 0,5 - 3,5 4 - 6,5	11,9 12,9 12,9	12 13 13	17	1,8 1,8 1,5	20,3 20,3 24	12 12 11,5	45
AC-ITTE M12-C15 AC-ITTE M12-C16	M12	1 - 3,5 1 - 4	14,9 15,9	15 16	19 23	1,8 2	24,3 27	16 -	115

**IER**

**TESTA RIDOTTA**



REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



AC-IER M04-C AC-IER M04-L	M4	0,5 - 2,5 3 - 5	5,9	6	7 7,6	0,5 0,8	11 13,5	6,7 6,5	5
AC-IER M05-C AC-IER M05-L	M5	0,5 - 3 3,5 - 5	6,9	7	8 8,9	0,5 0,8	14,5 15,5	9 8	9
AC-IER M06-C AC-IER M06-L	M6	1 - 3,5 3 - 6	8,9	9	10 10	0,6 0,6	16 18	10 8,5	15
AC-IER M08-C AC-IER M08-L	M8	1 - 4 3 - 6	10,9	11	12 12	0,6 0,6	18 20	11,5 10,5	26
AC-IER M10-C12 AC-IER M10-C13 AC-IER M10-L13	M10	0,5 - 3,5 0,5 - 3,5 4 - 6	11,9 12,9 12,9	12 13 13	14,5 14,5 14,5	1 1 1,1	19 19 22,5	12,5 12,5 12	- - -
AC-IER M12-C15 AC-IER M12-C16	M12	1 - 4 1 - 4	14,9 15,9	15 16	17,5 17,5	1,1 1,1	22,5 25	- -	- -

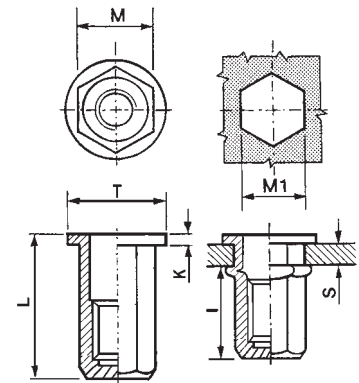
THREADED INSERTS HEXAGONAL - CLOSED END TYPE  
 BLINDNIETMÜTTERN SECHSKANTSCHAFT SCHAFTENDE GESCHLOSSEN  
 INSERTS FILÉTÉS HEXAGONALS BORGNE  
**INSERTI FILETTATI ESAGONALI CIECHI**

STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**

CODICE CODE		S	M	M1	T	K	L	J	 Nm
AC-ITTEC M04-C	M4	0,5 - 2	5,9	6	9	1	15	11	5
AC-ITTEC M05-C	M5	0,5 - 2,5	6,9	7	10	1	18	13,5	9
AC-ITTEC M06-C	M6	0,5 - 3	8,9	9	12,7	1,5	23	17	16
AC-ITTEC M08-C	M8	1 - 3,5	10,9	11	16	1,5	26	19	26
AC-ITTEC M10-C13	M10	1 - 4	12,9	13	19	2	33	25	

## ITTEC

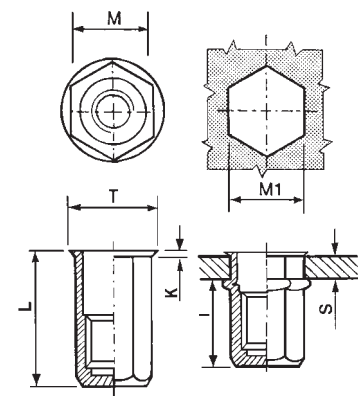
**TESTA TONDA - CORTO**  
 FLAT HEAD - SHORT TYPE  
 FLACHKOPF - KURZ  
 TÊTE CYLINDRIQUE - COURT



AC-IERC M04-C	M4	0,5 - 2,5	5,9	6	7	0,5	16	11,7	5
AC-IERC M05-C	M5	0,5 - 3	6,9	7	8	0,5	20	14,2	9
AC-IERC M06-C	M6	1 - 3,5	8,9	9	10,9	0,6	20,5	14,5	16
AC-IERC M08-C	M8	1 - 4	10,9	11	12	0,6	23	21	26
AC-IERC M10-C13	M10	1,5 - 4,5	12,9	13	14,5	0,7	28,5	21	

## IERC

**TESTA RIDOTTA-CORTO**  
 REDUCED COUNTERSUNK HEAD -  
 SHORT TYPE  
 KLEINER SENKKOPF - KURZ  
 TÊTE RÉDUITE - COURT



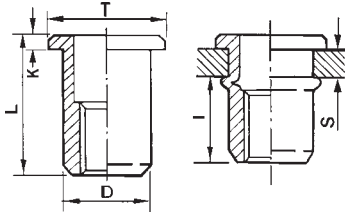
STAINLESS STEEL - A2 / A4  
 EDELSTAHL - A2 / A4  
 ACIER INOX - A2 / A4  
**ACCIAIO INOX - A2 / A4**




**CYLINDRICAL THREADED INSERTS  
 BLINDNIETMUTTERN RUNDSCHAFT  
 INSERTS FILETÉS CYLINDRIQUE  
 INSERTI FILETTATI CILINDRICI**

**ITT**

**TESTA TONDA**

FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE

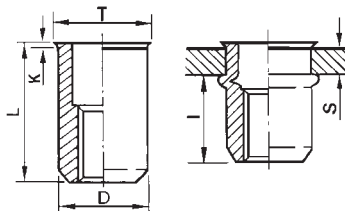


CODICE CODE		S	D		T	K	L	J	 Nm
IX-ITT M03-C	M3	0,3 - 1,8	4,9	5	8	0,75	9	5,5	-
IX-ITT M04-C	M4	0,3 - 2,5	5,9	6	9	1	11	6	-
IX-ITT M05-C	M5	0,3 - 3	6,9	7	10	1	13	8	-
IX-ITT M06-C	M6	0,5 - 3	8,9	9	12	1,5	16	9	-
IX-ITT M08-C	M8	0,5 - 3	10,9	11	15	1,5	17,5	10	-
IX-ITT M10- C12	M10	0,8 - 3	11,9	12	16	1,7	19	10,5	-
IX-ITT M10- C13		0,5 - 3	12,9	13	16	2	19	14,5	-

**ITR**

**TESTA RIDOTTA**

REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE

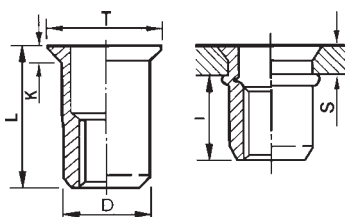


IX-ITR M03-C	M3	0,3 - 1,5	4,9	5	5,6	0,35	8,5	5,5	-
IX-ITR M04-C	M4	0,5 - 2,5	5,9	6	7	0,6	10	6	-
IX-ITR M05-C	M5	0,5 - 3	6,9	7	8	0,6	11,5	6,3	-
IX-ITR M06-C	M6	0,5 - 3	8,9	9	10	0,6	14	8,6	-
IX-ITR M08-C	M8	0,5 - 3	10,9	11	12	0,6	15,5	10	-
IX-ITR M10- C12	M10	0,8 - 3	11,9	12	13,5	0,8	18	11,2	-
IX-ITR M10- C13		0,8 - 3,5	12,9	13	14,5	0,8	19,5	12	-

**ITS**

**TESTA SVASATA**




COUNTERSUNK HEAD  
 SENKKOPF  
 TÊTE FRAISÉE



IX-ITS M03-C	M3	1,7 - 3	4,9	5	8	1,5	11,5	5,5	-
IX-ITS M04-C	M4	2 - 3,5	5,9	6	9	1,5	11,5	6,5	-
IX-ITS M05-C	M5	2 - 4	6,9	7	10	1,5	13,5	7	-
IX-ITS M06-C	M6	2 - 4,5	8,9	9	12	1,5	16	9,5	-
IX-ITS M08-C	M8	2 - 4,5	10,9	11	14	1,5	19	11	-
IX-ITS M10- C12	M10	1 - 4	11,9	12	15	1,5	18	10,5	-
IX-ITS M10- C13		2 - 4,5	12,9	13	16	1,5	21	14,5	-

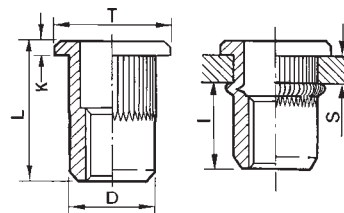
KNURLED CYLINDRICAL THREADED INSERTS  
 BLINDNIETMUTTERN RUNDSCHAFT GERÄNDELT  
 INSERTS FILETÉS CRANTÉS CYLINDRIQUE  
 INSERTI FILETTATI CILINDRICI GODRONATI

STAINLESS STEEL - A2 / A4  
 EDELSTAHL - A2 / A4  
 ACIER INOX - A2 / A4  
**ACCIAIO INOX - A2 / A4**

CODICE CODE		S	D		T	K	L	J	 Nm
IX-ITTG M03-C IX-ITTG M03-L	M3	0,3 - 1,8 1,8 - 3	4,9	5	8	0,8 0,75	9,5 10	5 5,5	-
IX-ITTG M04-C IX-ITTG M04-L	M4	0,5 - 2 2,5 - 4	5,9	6	9	0,8 0,75	10,5 12,5	6,5	-
IX-ITTG M05-C IX-ITTG M05-L	M5	0,3 - 2,5 2 - 4	6,9	7	10	1	13 15	8	-
IX-ITTG M06-C IX-ITTG M06-L	M6	0,5 - 3 3,5 - 6	8,9	9	12 13	1,5 1,5	16 19	9,5 9	-
IX-ITTG M08-C IX-ITTG M08-L	M8	0,5 - 3 3 - 6	10,9	11	15 16	1,5 1,5	17,5 20	10,5 10	-
IX-ITTG M10- C12 IX-ITTG M10- L12 IX-ITTG M10- C13 IX-ITTG M10- L13	M10	0,8 - 3,5 3,5 - 6 0,5 - 3 3 - 6	11,9 11,9 12,9 12,9	12 12 13 13	16 16 16 19	1,7 1,7 2 2	19 22 19 26	10,5 10,5 12,5 14,5	-

**ITTG**

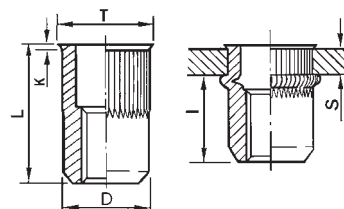
**TESTA TONDA**  
 FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE



IX-ITRG M03-C IX-ITRG M03-L	M3	0,5 - 2 1,5 - 2,5	4,9	5	5,5 5,6	0,4 0,35	10	5,5	-
IX-ITRG M04-C IX-ITRG M04-L	M4	0,5 - 2,5 2,5 - 4	5,9	6	7 7	0,5 0,5	10 12,5	6	-
IX-ITRG M05-C IX-ITRG M05-L	M5	0,5 - 2,5 2,5 - 4,5	6,9	7	8	0,5	11,5 13	8 6,8	-
IX-ITRG M06-C IX-ITRG M06-L	M6	0,5 - 3 3,5 - 6	8,9	9	10	0,6 0,5	14 17,5	9 8,6	-
IX-ITRG M08-C IX-ITRG M08-L	M8	0,5 - 3 3 - 6	10,9	11	12	0,6 0,5	15,5 19,5	10,5 10	-
IX-ITRG M10- C12 IX-ITRG M10- L12 IX-ITRG M10- C13 IX-ITRG M10- L13	M10	0,8 - 3 2 - 4,5 0,8 - 3,5 3 - 6	11,9 11,9 12,9 12,9	12 12 13 13	13,5 13,5 14,5 14	0,8 0,8 0,7 0,5	18 19,5 19,5 23	11,2 11,2 12,5 13,3	-

**ITRG**

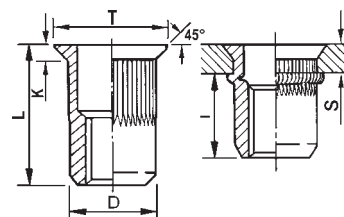
**TESTA RIDOTTA**  
 REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



IX-ITSG M03-C IX-ITSG M03-L	M3	1,7 - 3 3 - 4	4,9	5	8	1,5	11,5 12,5	5,5	-
IX-ITSG M04-C IX-ITSG M04-L	M4	2 - 3,5 3,5 - 5	5,9	6	9	1,5	11,5 13	6,5	-
IX-ITSG M05-C IX-ITSG M05-L	M5	2 - 4 4 - 6	6,9	7	10	1,5	13,5 15	7	-
IX-ITSG M06-C IX-ITSG M06-L	M6	2 - 4,5 4,5 - 6,5	8,9	9	12	1,5	16 19	9,5	-
IX-ITSG M08-C IX-ITSG M08-L	M8	2 - 4,5 3,5 - 6,5	10,9	11	14 13,7	1,5	19 21	11	-
IX-ITSG M10- C12 IX-ITSG M10- L12 IX-ITSG M10- C13 IX-ITSG M10- L13	M10	1,5 - 4 3 - 6 2 - 4,5 3,5 - 6,5	11,9 11,9 12,9 12,9	12 12 13 13	15 15 16 15,7	1,5 1,5 1,6 1,6	18 20 21 25	10,5 10,5 14,5 14,5	-

**ITSG**

**TESTA SVASATA**  
 COUNTERSUNK HEAD  
 SENKKOPF  
 TÊTE FRAISÉE



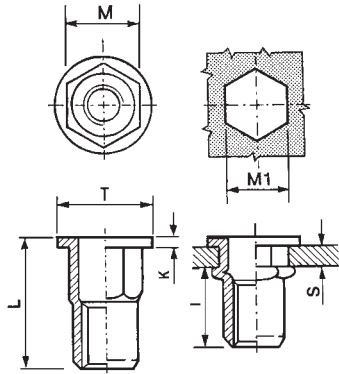
STAINLESS STEEL - A2 / A4  
 EDELSTAHL - A2 / A4  
 ACIER INOX - A2 / A4  
 ACCIAIO INOX - A2 / A4



THREADED INSERTS SEMI - HEXAGONAL  
 BLINDNIETMUTTERN TEILSECHSKANTSCHAFT  
 INSERTS FILÉTÉS SEMI - HEXAGONALS  
 INSERTI FILETTATI SEMIESAGONALI

# ITTSE

## TESTA TONDA

FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE

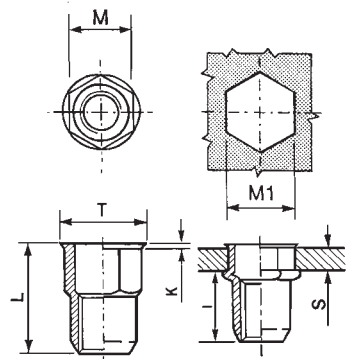


CODICE CODE		S	M	M1	T	K	L	J	 Nm
IX-ITTSE M03-C IX-ITTSE M03-L	M3	0,3 - 1,8 1,8 - 3	4,9	5	8	0,75	9 10	5,5	-
IX-ITTSE M04-C IX-ITTSE M04-L	M4	0,5 - 2 2,5 - 4	5,9	6	8,7 9	0,8 0,75	11 12,5	7,2 6	-
IX-ITTSE M05-C IX-ITTSE M05-L	M5	0,5 - 2,5 2 - 4	6,9	7	10 10	1	12 15	7,5 8	-
IX-ITTSE M06-C IX-ITTSE M06-L	M6	0,5 - 3 3,5 - 6	8,9	9	12,7 13	1,3 1,5	15,5 19	9	-
IX-ITTSE M08-C IX-ITTSE M08-L	M8	1 - 3,5 3 - 6	10,9	11	16 16	1,5	18 20	10	-
IX-ITTSE M10- C12 IX-ITTSE M10- L12	M10	0,8 - 3,5	11,9	12	16	1,7	19	10,5	-
IX-ITTSE M10- C13 IX-ITTSE M10- L13		3,5 - 6	11,9	12	16	1,7	22	10,5	-
IX-ITTSE M10- C13		1 - 3,5	12,9	13	18	1,7	21	13,2	-
IX-ITTSE M10- L13		3 - 6	12,9	13	19	2	26	14,5	-
IX-ITTSE M12-C16 IX-ITTSE M12-L16	M12	1,0 - 4,0 3,5 - 7,0	15,9	16	23	2	26 29	16,5	-

# IERSE

## TESTA RIDOTTA




REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



IX-IERSE M03-C IX-IERSE M03-L	M3	0,3 - 1,5 1,5 - 2,5	4,9	5	5,6	0,35 0,35	8,5 10	5,5	-
IX-IERSE M04-C IX-IERSE M04-L	M4	0,5 - 2 2,5 - 4	5,9	6	7 7	0,5 0,5	12 12,5	7,5 6	-
IX-IERSE M05-C IX-IERSE M05-L	M5	0,5 - 2,5 2,5 - 4,5	6,9	7	8 8	0,5 0,5	13 13	8 6,8	-
IX-IERSE M06-C IX-IERSE M06-L	M6	1 - 3,5 3,5 - 6	8,9 8,9	9	10 10	0,6 0,5	16 17,5	9,2 8,6	-
IX-IERSE M08-C IX-IERSE M08-L	M8	1 - 4 3 - 6	10,9	11	12 12	0,6 0,5	17,5 19,5	10	-
IX-IERSE M10- C12 IX-IERSE M10- L12	M10	0,8 - 3	11,9	12	13,5	0,8	18	11,2	-
IX-IERSE M10- C13 IX-IERSE M10- L13		2 - 4,5	11,9	12	13,5	0,8	19,5	11,2	-
IX-IERSE M10- C13		1 - 4,5	12,9	13	14,5	0,7	21	13	-
IX-IERSE M10- L13		3 - 6	12,9	13	14	0,5	23	13,3	-
IX-IERSE M12-C16 IX-IERSE M12-L16	M12	1,0 - 4,0 3,5 - 7,5	15,9	16	17,2	0,6	24 27,5	16	-

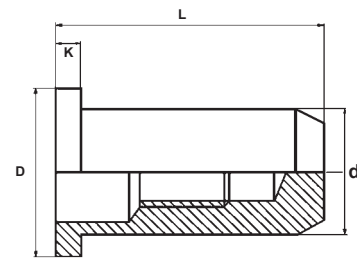
**CYLINDRICAL THREADED INSERTS, CLOSED END TYPE**  
**BLINDNIETMÜTTERN RUNDSCHAFT GESCHLOSSEN**  
**INSERTS FILÉTES AVEUGLES BORGNES**  
**INSERTI CILINDRICI CIECHI**

STAINLESS STEEL - A2 / A4  
 EDELSTAHL - A2 / A4  
 ACIER INOX - A2 / A4  
**ACCIAIO INOX - A2 / A4**

CODICE CODE		GRIP		d	D	L	K	I	 Nm
ITTC M4	M4	0,5 - 2	6,0	5,9	9,0	16,0	1,0	11,3	-
ITTC M5	M5	0,5 - 2,5	7,0	6,9	10,0	19,0	1,0	13,8	-
ITTC M6	M6	0,5 - 3,0	9,0	8,9	12,3	21,0	1,3	15	-
ITTC M8	M8	1 - 3,5	11,0	10,9	15,0	25	1,5	18,2	-
ITTC M10 C13	M10	1 - 4	13,0	12,9	17,0	27	1,7	19,4	-

## ITTC

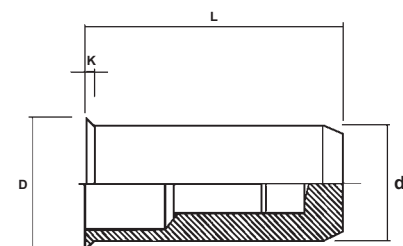
**TESTA TONDA**  
 FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE



ITRC M4	M4	0,5 - 2	6,0	5,9	7,0	15	0,5	11	-
ITRC M5	M5	0,5 - 2	7,0	6,9	8,0	16,5	0,5	12,5	-
ITRC M6	M6	0,5 - 2,5	9,0	8,9	10,0	20,5	0,6	15,5	-
ITRC M8	M8	1 - 3	11,0	10,9	12,0	23	0,6	17,6	-
ITRC M10 C13	M10	1,0 - 3,5	13,0	12,9	14	24,5	0,7	18,3	-

## ITRC

**TESTA RIDOTTA**  
 REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



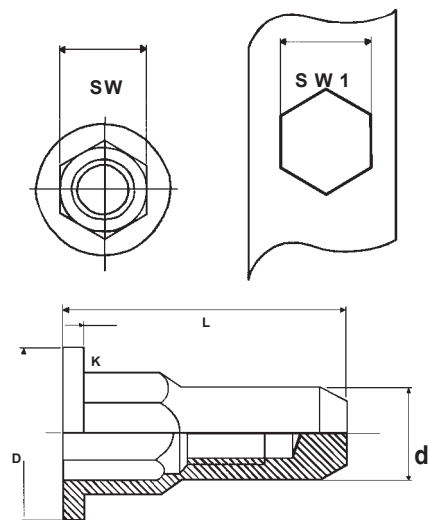




STAINLESS STEEL - A2 / A4  
 EDELSTAHL - A2 / A4  
 ACIER INOX - A2 / A4  
 ACCIAIO INOX - A2 / A4

SEMI HEXAGONAL THREADED INSERTS CLOSED END TYPE  
 BLINDNIETMUTTERN TEILSECHSKANTSCHAFT GESCHLOSSEN  
 INSERTS FILÉTES SEMI HEXAGONAL BORGNES  
**INSERTI SEMIESAGONALI CIECHI**

**ITTSEC**  
**ITTSEC**

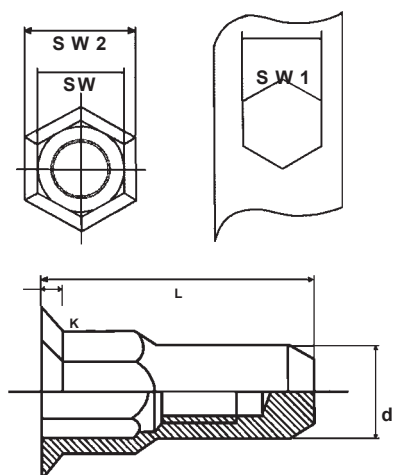
**TESTA TONDA**  
 FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE





CODICE CODE		GRIP	SW1	SW	d	D	L	K	 Nm
ITTSEC M4	M4	0,5 - 2,5	6,1	6,0	-	9,0	16,0	1,0	-
ITTSEC M5	M5	0,5 - 3,0	7,1	7,0	-	10,0	18,0	1,0	-
ITTSEC M6	M6	0,5 - 3,0	9,1	9,0	-	12,0	21,0	1,5	-
ITTSEC M8	M8	0,5 - 3,0	11,1	11,0	-	14,5	23,5	1,5	-
ITTSEC M10 C13	M10	1,0 - 3,5	13,1	13,0	-	16,5	26,5	2,0	-

**IERSEC**  
**IERSEC**




**TESTA RIDOTTA**  
 REDUCED COUNTERSUNK HEAD  
 KLEINER SENKKOPF  
 TÊTE RÉDUITE



CODICE CODE		GRIP	SW1	SW	SW2	d	L	K	 Nm
IERSEC M4	M4	0,5 - 2,5	6,1	6,0	7,0	-	16,0	0,5	-
IERSEC M5	M5	0,5 - 3,0	7,1	7,0	8,0	-	18,0	0,5	-
IERSEC M6	M6	0,5 - 3,0	9,1	9,0	10,0	-	21,0	0,5	-
IERSEC M8	M8	0,5 - 3,0	11,1	11,0	12,0	-	23,5	0,5	-
IERSEC M10 C13	M10	1,0 - 3,5	13,1	13,0	14,2	-	26,5	0,7	-

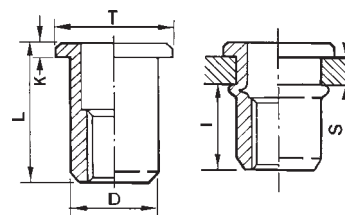
CYLINDRICAL THREADED INSERTS  
BLINDNIETMUTTERN RUNDSCHAFT  
INSERTS FILETÉS CYLINDRIQUE  
INSERTI FILETTATI CILINDRICI

ALUMINIUM AIMg 5  
ALUMINIUM AIMg 5  
ALUMINIUM AIMg 5  
ALLUMINIO AIMg 5

CODICE CODE		S	D		T	K	L	J	
									Nm
AL-ITT M03-C AL-ITT M03-L	M3	0,3 - 1,8 1,8 - 3	4,9	5	8 7	0,75 0,8	9 10,5	5,5 4,2	-
AL-ITT M04-C AL-ITT M04-L	M4	0,5 - 2 2,5 - 4	5,9	6	8,5 9	0,8 1	10,5 13	6	-
AL-ITT M05-C AL-ITT M05-L	M5	0,5 - 2,5 3 - 5	6,9	7	10	1 1,2	13 15,5	7,5 7,7	-
AL-ITT M06-C AL-ITT M06-L	M6	0,5 - 2,5 2,5 - 4	8,9	9	12,3 12	1,4 1,5	15 16	9,2 8	-
AL-ITT M08-C AL-ITT M08-L	M8	1 - 2,5 3,5 - 6	10,9	11	14,3 15	1,5 1,5	16,5 20	10,5 10	-
AL-ITT M10-C12 AL-ITT M10-L12	M10	0,8 - 3,5 3,5 - 6	11,9	12	16	1,7	19	10,5	-
AL-ITT M10-C13 AL-ITT M10-L13		1 - 4 4,5 - 7,5	12,9	13	17	1,6	19,5	12,5	-
				12,9	13	19	2	27,5	14,5
AL-ITT M12-C16 AL-ITT M12-L16	M12	1 - 4 3,5 - 7	15,9	16	23	2	26 29	16,5	-

**ITT**

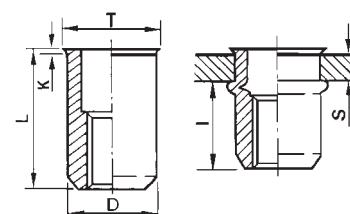
**TESTA TONDA**  
FLAT HEAD  
FLACHKOPF  
TÊTE CYLINDRIQUE



AL-ITR M03-C AL-ITR M03-L	M3	0,3 - 1,5 1,5 - 2,5	4,9	5	5,6	0,35	8,5 10	5,5	-
AL-ITR M04-C AL-ITR M04-L	M4	0,5 - 2 2,5 - 4	5,9	6	7	0,5	10,5 13	6,5 6	-
AL-ITR M05-C AL-ITR M05-L	M5	0,5 - 2 2 - 4,5	6,9	7	8	0,5	11,5 13	7 6,8	-
AL-ITR M06-C AL-ITR M06-L	M6	0,5 - 2,5 2 - 4	8,9	9	10	0,6 0,5	14 16	8,5 8,6	-
AL-ITR M08-C AL-ITR M08-L	M8	1 - 2,5 1,5 - 4,5	10,9	11	12	0,6 0,5	15,5 18	10	-
AL-ITR M10-C12 AL-ITR M10-L12	M10	0,8 - 3 2 - 4,5	11,9	12	13,5	0,8	18	11,2	-
AL-ITR M10-C13 AL-ITR M10-L13		1 - 3 3 - 6	12,9	13	14	0,7 0,5	17,5 23	12 13,3	-
				12,9	13	14	0,5	23	13,3
AL-ITR M12-C16 AL-ITR M12-L16	M12	1 - 4 3,5 - 7,5	15,9	16	17,2 17,2	0,6 0,6	24 27,5	16 16	-

**ITR**

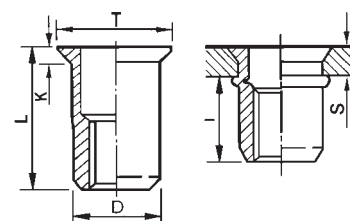
**TESTA RIDOTTA**  
REDUCED COUNTERSUNK HEAD  
KLEINER SENKKOPF  
TÊTE RÉDUITE



AL-ITS M03-C AL-ITS M03-L	M3	2 - 3 3 - 4	4,9	5	8	1,5	9,5 10,5	5	-
AL-ITS M04-C AL-ITS M04-L	M4	1,5 - 3 3,5 - 5	5,9	6	9	1,5	12 13	6	-
AL-ITS M05-C AL-ITS M05-L	M5	1,5 - 3 4 - 6	6,9	7	10	1,5	13 15	7	-
AL-ITS M06-C AL-ITS M06-L	M6	1,5 - 4 4 - 6	8,9	9	12	1,5 1,5	15,5 17	9	-
AL-ITS M08-C AL-ITS M08-L	M8	1,5 - 4 4 - 6	10,9	11	14	1,5	18,5 19	10	-
AL-ITS M10-C12 AL-ITS M10-L12	M10	2,5 - 4 4 - 6	11,9	12	15	1,5	18	11,5	-
AL-ITS M10-C13 AL-ITS M10-L13		1,5 - 4 3,5 - 6,5	12,9	13	15,7	1,6 1,6	22 25	14,5 14,5	-
				12,9	13	15,7	1,6	25	14,5
AL-ITS M12-C16 AL-ITS M12-L16	M12	1,7 - 4,5 4 - 7,5	15,9	16	19 19	1,9 1,9	26 29	17,5 17,5	-

**ITS**

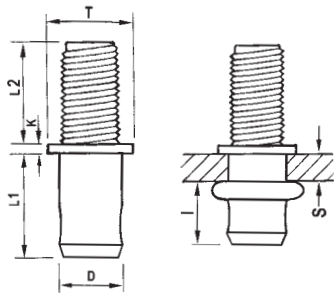
**TESTA SVASATA**  
COUNTERSUNK HEAD  
SENKKOPF  
TÊTE FRAISÉE





STEEL WHITE ZINC PLATED Cr III  
 STAHL VERZINKT Cr III  
 ACIER ZINGUÉ Cr III  
**ACCIAIO Z. B. CROMO III**

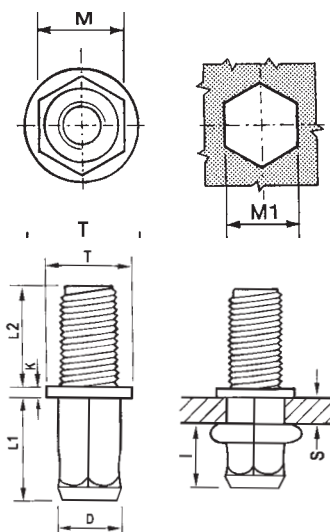
**SPECIAL THREADED INSERTS  
 SONDERANFERTIGUNGEN  
 INSÉRTS FILETÉS SPÉCIAUX  
 INSERTI FILETTATI SPECIALI**

**ITTM**




CODICE CODE		S	D		T	K	L1	L2	~												
AC-ITTM M04 10-C AC-ITTM M04 10-L AC-ITTM M04 15-C AC-ITTM M04 15-L	<b>M4</b>	0,5 - 2 2 - 3 0,5 - 2 2 - 3	5,4	5,5	8	0,8	8	10 10 15 15	3,5 4 3,5 4												
AC-ITTM M05 15-C AC-ITTM M05 20-C AC-ITTM M05 25-C		<b>M5</b>						0,5 - 3 0,5 - 3 0,5 - 3	6,9	7	10	1	12	15 20 25	- 6-7 -						
AC-ITTM M06 15-C AC-ITTM M06 20-C AC-ITTM M06 25-C								<b>M6</b>						0,5 - 3	8,9	9	13	1,5	14,5	15 20 25	- 8-9 -
AC-ITTM M08 20-C AC-ITTM M08 25-C														<b>M8</b>						0,5 - 3	10,9

**ITTEM**



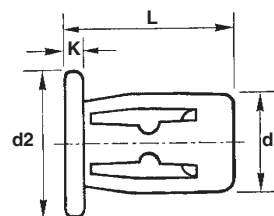
AC-ITTEM M05 25-C AC-ITTEM M05 30-C AC-ITTEM M05 35-C	<b>M5</b>	0,5 - 3	6,9	7	10	1	12	25 30 35	5-5,5							
AC-ITTEM M06 15-C AC-ITTEM M06 20-C AC-ITTEM M06 25-C								<b>M6</b>	0,5 - 3	8,9	9	13	1,5	14,5	15 20 25	7-7,5
AC-ITTEM M08 20-C AC-ITTEM M08 25-C															<b>M8</b>	0,5 - 3




SPECIAL THREADED INSERTS  
 SONDERANFERTIGUNGEN  
 INSÉRITS FILETÉS SPÉCIAUX  
**INSERTI FILETTATI SPECIALI**

CODICE CODE		Spess. Serr. Grip range	d1	∅ foro/hole	d2	K	L
JF 4 C	M4	0,4 - 4,7	8,1	8,2	11,9	1,8	16,6
JF 4 L		4,7 - 9,5					21,4
JF 5 C	M5	0,4 - 4,7	9,7	9,8	13,5	1,8	18,2
JF 5 L		4,7 - 9,5					22,6
JF 6 C	M6	0,4 - 4,7	11,2	11,3	15,9	1,8	18,6
JF 6 M		4,7 - 9,5					23,4
JF 6 L		9,5 - 12,7					27,8

# JACKFIX

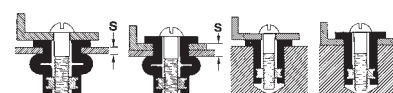
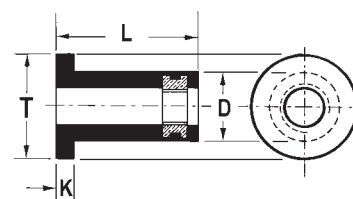
**TESTA TONDA**  
 FLAT HEAD  
 FLACHKOPF  
 TÊTE CYLINDRIQUE



CODICE CODE		S	D		T	K	L	 Nm
RN 314	M3	0,4 - 4	7,9	8 - 8,3	11	1,4	12,6	0,36
RN 414	M4	0,4 - 4	7,9	8 - 8,3	11	1,4	12,6	0,35
RN 515 RN 527 RN 541	M5	0,4 - 4,9	9,6	9,7 - 9,9	12,7	0,9	14,1	0,54
		7,9 - 16			14	1,3	26,1	0,35
		20,5 - 30			14	1,3	39,8	1,14
RN 617 RN 626 RN 628	M6	0,4 - 2,8	12,7	12,8 - 13	16	1,3	16	1,13
		0,8 - 4,7			17,5	4,7	21,1	1,69
		6,4 - 11,5			16,3	1,3	26,7	1,13
RN 822 RN 834 RN 852	M8	0,4 - 4,0	15,9	16,0 - 16,2 18,1 - 18,3	22,1	3,2	18,3	2,82
		3,9 - 9,5	15,9		22,1	5,7	27,9	-
		19,5 - 32,0	18,0		20	1,6	50	-

# RN

**NEOPRENE**  
 NEOPRENE  
 NEOPREN  
 NÉOPRÈNE

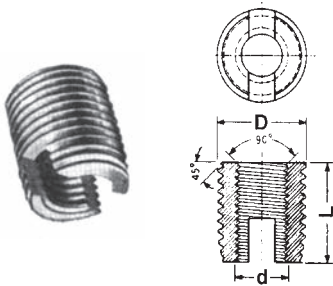



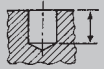
THREADED INSERTS SELF-TAPPING  
 GEWINDE - EINSÄTZE  
 INSÉRTS FILETÉS AUTOTARAUDEURS  
**BUSSOLE AUTOFILETTANTI**

# F 212

**ACCIAIO TEMPRATO**  
 STEEL HARDENED  
 STAHL EINSATZGEHÄRTET  
 ACIER CÉMENTÉ

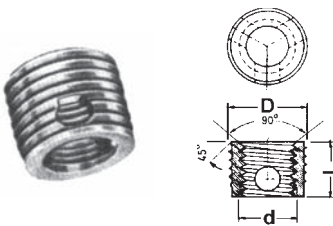
**OTTONE**  
 BRASS  
 MESSING  
 LAITON



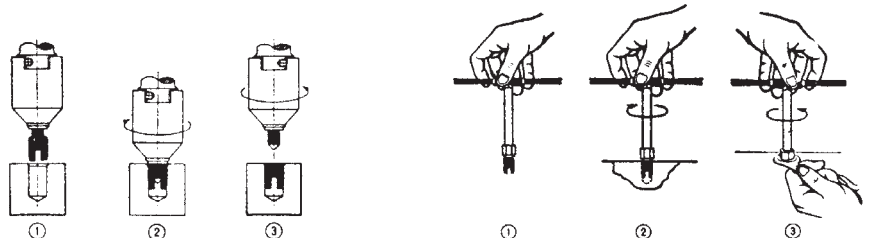
CODICE CODE	d	D			L
F212 M02,5	2,5 x 0,45	4,5 x 0,5	4,0 - 4,3	8	6
F212 M03	3,0 x 0,5	5,0 x 0,5	4,5 - 4,8	8	6
F212 M04	4,0 x 0,7	6,5 x 0,75	5,8 - 6,2	10	8
F212 M05	5,0 x 0,8	8,0 x 1,0	7,1 - 7,6	13	10
F212 M06A	6,0 x 1,0	9,0 x 1,0	8,1 - 8,6	15	12
F212 M06	6,0 x 1,0	10,0 x 1,5	8,6 - 9,4	17	14
F212 M08	8,0 x 1,25	12,0 x 1,25	10,6 - 11,4	18	15
F212 M10	10,0 x 1,5	14,0 x 1,5	12,6 - 13,4	22	18
F212 M12	12,0 x 1,75	16,0 x 1,5	14,6 - 15,4	26	22
F212 M14	14,0 x 2,0	18,0 x 1,5	16,6 - 17,4	28	24
F212 M16	16,0 x 2,0	20,0 x 1,5	18,6 - 19,4	27	22

# F 318

**ACCIAIO TEMPRATO**  
 STEEL HARDENED  
 STAHL EINSATZGEHÄRTET  
 ACIER CÉMENTÉ



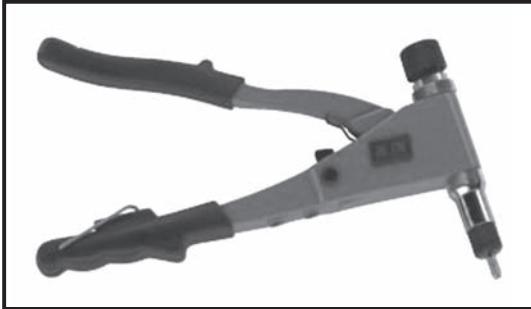
F318 M04 - C F318 M04 - L	4,0 x 0,7	6,5 x 0,8	6,0 - 6,2	8 10	6 8
F318 M05 - C F318 M05 - L	5,0 x 0,8	8,0 x 1,0	7,4 - 7,7	9 13	7 10
F318 M06 - C F318 M06 - L	6,0 x 1,0	10,0 x 1,25	9,3 - 9,6	10 15	8 12
F318 M08 - C F318 M08 - L	8,0 x 1,25	12,0 x 1,5	11,1 - 11,5	11 17	9 14
F318 M10 - C F318 M10 - L	10,0 x 1,5	14,0 x 1,5	13,1 - 13,5	13 22	10 18
F318 M12 - C F318 M12 - L	12,0 x 1,75	16,0 x 1,75	15,0 - 15,4	15 26	12 22
F318 M14 - C F318 M14 - L	14,0 x 2,0	18,0 x 2,0	17,0 - 17,4	17 28	14 24



TOOLS  
WERKZEUGE  
PINCES  
**ATTREZZATURE**

**TIRAINSERTI MANUALI PER INSERTI FILETTATI**

HAND TOOLS FOR THREADED INSERTS  
BLINDNIETMUTTERN HANDZANGEN  
PINCES À MAIN POUR INSÉRTS FILETÉS



**MFX 360**

**EQUIPAGGIAMENTO**

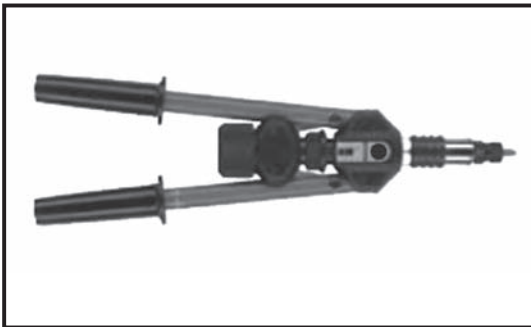
EQUIPMENT  
AUSRÜSTUNG  
ÉQUIPEMENT  
**M3 - M4 - M5 - M6**

**DIMENSIONI**

DIMENSIONS  
ABMESSUNG  
DIMENSIONS  
**280 mm.**

**PESO**

WEIGHT  
GEWICHT  
POIDS  
**0,8 Kg.**



**MFX 480QI**

**EQUIPAGGIAMENTO**

EQUIPMENT  
AUSRÜSTUNG  
ÉQUIPEMENT  
**M5 - M6 - M8 - M10**

**DIMENSIONI**

DIMENSIONS  
ABMESSUNG  
DIMENSIONS  
**440 mm.**

**PESO**

WEIGHT  
GEWICHT  
POIDS  
**1,8 Kg.**

**TIRAINSERTI OLEOPNEUMATICA PER INSERTI FILETTATI**

HYDRO PNEUMATIC TOOL FOR THREADED INSERTS  
PNEUMATISCHEN HYDRAULISCHES BLINDNIETMUTTERSETZGERÄT  
PISTOLET OLEO-PNEUMATIQUE POUR INSÉRTS FILETÉS



**AP 4**

**UTILIZZO**

USE  
GEBRAUCHEN  
UTILISATION  
**M3 ÷ M12**

**PRESSIONE DI UTILIZZO**

PRESSURE REQUIRED  
ARBEITSDRUCK  
PRESSION D' UTILISATION  
**5-7 BAR**

**DIMENSIONI**

DIMENSIONS  
ABMESSUNG  
DIMENSIONS  
**270 x 285 x 99 mm.**

**CORSA**

STROKE  
HUB  
COURSE  
**7 mm.**

**FORZA**

TRACTION POWER  
ZUGKRAFT  
FORCE DE TRACTION  
**18.7 kN**

**PESO**

WEIGHT  
GEWICHT  
POIDS  
**1.6 Kg.**

3



# AUTOFISSANTI

## SELF CLINCHING FASTENERS

**GRIV SRL**

**Sede Legale:** via Giuseppe Mazzini, 4 - 80040 - Pollena Trocchia (Na)

**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

**Tel/Fax:** +39 081 8990496

**Email:** [info@grivsr.it](mailto:info@grivsr.it)

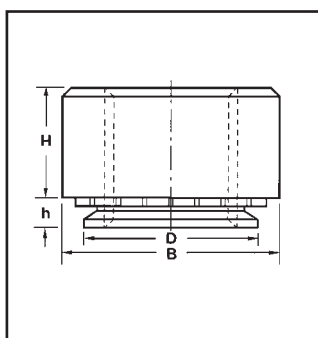
**Web:** [www.grivsr.it](http://www.grivsr.it)

# DADI AUTOFISSANTI PER LAMIERA

## SELF CLINCHING NUTS FOR THIN METAL

I dadi autofissanti C, CS e CSP garantiscono filettature resistenti a forti carichi di estrazione e di torsione su lamiere anche di minimo spessore (non inferiore a 0,8 mm). I dadi C e CS sono costruiti a norma delle specifiche militari MIL-N-45938/1.

*C, CS and CSP nuts provide strong load-bearing threads in sheet metal C, CS and nuts meet spec. features of MIL-N-45938/1.*

**C**

- **ACCIAIO ZINCATO / STEEL WHITE ZINC**  
per lamiere fino a 80 HRB / sheet hardness max 80 HRB

**CS**

- **ACCIAIO INOX / STAINLESS STEEL**  
per lamiere fino a 70 HRB / sheet hardness max 70 HRB

**CSP**

- **INOX INDURITO / HARDENING STAINLESS STEEL**  
per lamiere inox fino a 90 HRB / sheet hardness max 90 HRB

Filetto per Passo <i>Thread Size x Pitch</i>	Tipo / Type			h Max	Spessore min. Lamiere <i>Min. Sheet Thickness</i>	H ±0.25	B ±0,25	D Max.	Foro Hole +0.08	Distanza Minima dal Bordo <i>Min. Dist. to Edge</i>
	Acciaio Zincato <i>Steel white zinc</i>	Acciaio Inox <i>Stainless steel</i>	Inox Indurito <i>Hardening stainless steel</i>							
M2x0.4	C M2 - 0	CS M2 - 0	-	0.76	0.8	1.5	6.3	4.22	4.25	4.8
	C M2 - 1	CS M2 - 1	-	0.97	1					
	C M2 - 2	CS M2 - 2	-	1.37	1.4					
	C M2 - 3	CS M2 - 3	-	2.21	2.3					
M2.5x0.45	C M2.5 - 0	CS M2.5 - 0	-	0.76	0.8	1.5	6.3	4.22	4.25	4.8
	C M2.5 - 1	CS M2.5 - 1	-	0.97	1					
	C M2.5 - 2	CS M2.5 - 2	-	1.37	1.4					
	C M2.5 - 3	CS M2.5 - 3	-	2.21	2.3					
M3x0.5	C M3 - 0	CS M3 - 0	CSP M3 - 0	0.76	0.8	1.5	6.3	4.22	4.25	4.8
	C M3 - 1	CS M3 - 1	CSP M3 - 1	0.97	1					
	C M3 - 2	CS M3 - 2	CSP M3 - 2	1.37	1.4					
	C M3 - 3	CS M3 - 3	-	2.21	2.3					
M3x0.5	C 35M3 - 0	CS 35M3 - 0	-	0.76	0.8	1.71	7.1	4.72	4.75	4.8
	C 35M3 - 1	CS 35M3 - 1	-	0.97	1					
	C 35M3 - 2	CS 35M3 - 2	-	1.37	1.4					
	C 35M3 - 3	CS 35M3 - 3	-	2.21	2.3					
M4x0.7	C M4 - 0	CS M4 - 0	CSP M4 - 0	0.76	0.8	2.0	7.9	5.38	5.4	6.9
	C M4 - 1	CS M4 - 1	CSP M4 - 1	0.97	1.0					
	C M4 - 2	CS M4 - 2	CSP M4 - 2	1.37	1.4					
	C M4 - 3	CS M4 - 3	-	2.21	2.3					

Filetto in pollici a richiesta  
Dimension in inches available



# DADI AUTOFISSANTI PER LAMIERA

## SELF CLINCHING NUTS FOR THIN METAL

# 3

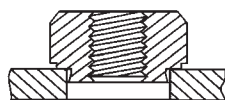
2.12

Filetto per Passo <i>Thread Size x Pitch</i>	Tipo / Type			h Max	Spessore min. Lamiera <i>Min. Sheet Thickness</i>	H ±0.25	B ±0,25	D Max.	Foro <i>Hole</i> +0.08	Distanza Minima dal Bordo <i>Min. Dist. to Edge</i>
	Acciaio Zincato <i>Steel white zinc</i>	Acciaio Inox <i>Stainless steel</i>	Inox Indurito <i>Hardening stainless steel</i>							
M5x0.8	C M5 - 0	CS M5 - 0	CSP M5 - 0	0.76	0.8	2.0	8.7	6.38	6.4	7.1
	C M5 - 1	CS M5 - 1	CSP M5 - 1	0.97	1.0					
	C M5 - 2	CS M5 - 2	CSP M5 - 2	1.37	1.4					
	C M5 - 3	CS M5 - 3	-	2.21	2.3					
M6x1.0	C M6 - 1	CS M6 - 1	CSP M6 - 1	1.37	1.4	4.08	11.05	8.72	8.75	8.6
	C M6 - 2	CS M6 - 2	CSP M6 - 2	2.21	2.3					
	C M6 - 3	CS M6 - 3	-	3.05	3.2					
M8x1.25	C M8 - 1	CS M8 - 1	CSP M8 - 1	1.37	1.4	5.47	12.65	10.44	10.5	9.7
	C M8 - 2	CS M8 - 2	CSP M8 - 2	2.21	2.3					
	C M8 - 3	CS M8 - 3	-	3.05	3.2					
M10x1.5	C M10 - 1	CS M10 - 1	-	2.21	2.3	7.5	17.35	13.9	14	11
	C M10 - 2	CS M10 - 2	-	3.05	3.1					
	C M10 - 3	CS M10 - 3	-	5.97	6.1					
M10x1.5	C 35M10 - 1	CS 35M10 - 1	-	2.21	2.3	6.72	14.3	12.65	12.7	11
	C 35M10 - 2	CS 35M10 - 2	-	3.05	3.1					
	C 35M10 - 3	CS 35M10 - 3	-	5.97	6.1					
M12x1.75	C M12 - 1	-	-	3.05	3.1	8.5	20.55	16.9	17	16
	C M12 - 2	-	-	5.97	6.1					

Filetto in pollici a richiesta  
Dimension in inches available

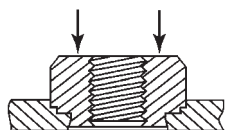
# DADI AUTOFISSANTI PER LAMIERA

## SELF CLINCHING NUTS FOR THIN METAL



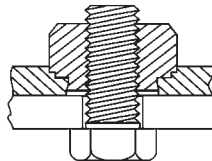
Il dado deve essere posizionato accuratamente nel foro.

*Install nut squarely in the thru hole.*



La pressione deve essere esercitata uniformemente sulla testa del dado.

*With punch and nut parallel, apply squeezing force.*



### Dati Tecnici Performance Data

Filetto Thread code	Tipo Type	Codice Shank code	Tipi di Lamiera Sheet Material	Installazione Installation (kN)	Espulsione Pushout (N)	Avvitatura Torque-out (N•m)
M2 M2.5 M3	C / CS	0	5052-H34 Alluminio /Aluminum	6.7-8.9	280	0.9
		1			400	1.13
		2			750	1.47
		0	Acciaio Cold-rolled Steel	11.2-15.6	470	1.47
		1			550	1.7
		2			1010	2.03
M4	C / CS	0	5052-H34 Alluminio /Aluminum	11.2-13.4	300	2.37
		1			470	2.6
		2			970	4
		0	Acciaio Cold-rolled Steel	18-27	490	2.95
		1			645	4
		2			1250	5.1
M5	C CS	0	5052-H34 Alluminio /Aluminum	11.2-15.6	300	3
		1			480	3.6
		2			845	5.7
		0	Acciaio Cold-rolled Steel	18-38	530	3.6
		1			800	4.5
		2			1112	6.8
M6	C CS	0	5052-H34 Alluminio /Aluminum	18-32	970	7.9
		1			1580	10.2
		2			1580	14.1
		0	Acciaio Cold-rolled Steel	27-36	1380	13
		1			1760	17
		2			1760	17
M8	C CS	1	5052-H34 Alluminio /Aluminum	18-32	1570	13.6
		2				18.1
		1	Acciaio Cold-rolled Steel	27-36	1870	18.7
		2				20.3
M10	C CS	1	5052-H34 Alluminio /Aluminum	22-36	1760	32.7
		2				32.7
		1	Acciaio Cold-rolled Steel	32-50	2020	36.2
		2				36.2
Filetto Thread code	Tipo Type	Codice Shank code	Tipi di Lamiera Sheet Material	Installazione Installation (kN)	Espulsione Pushout (N)	Avvitatura Torque-out (N•m)
M3	CSP	0	304	13-22	575	1.58
		1	Acciaio inossidabile Stainless Steel		725	1.92
		2	1290		2.03	
M4	CSP	0	304	22-31	645	3.38
		1	Acciaio inossidabile Stainless Steel		800	4.18
		2	1600		5.08	
M5	CSP	0	304	26-40	800	3.95
		1	Acciaio inossidabile Stainless Steel		1025	5.08
		2	1775		6.77	
M6	CSP	1	304 Acciaio inossidabile Stainless Steel	40-48	2000	17

I valori di espulsione e avvitatura sono validi se vengono seguite con cura le specifiche di installazione.

Variazioni nel foro, nella lamiera e nelle procedure di installazione, modificano i valori.

Installation, pushout and torque-out values reported are averages when all installation specifications and procedures are followed.

Variations in mounting hole size, sheet material and installation procedure will affects this data.

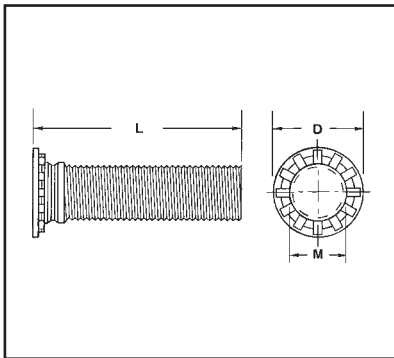
# PERNI AUTOFISSANTI PER LAMIERA SELF CLINCHING STUDS FOR THIN METAL

# 3

4.12

I perni autofissanti CH / CHS / CHS4 / CHA a testa piatta permettono di creare filetti su lamiere sottili (spessore minimo 1 mm) con elevate garanzie di tenuta a torsione e trazione.

The studs CH / CHS / CHS4 / CHA provide a strong flush-head assembly in material as thin as 1 mm with high torque-out and pullout performance.



## CH

- **ACCIAIO ZINCATO / STEEL WHITE Z INC**  
per lamiere fino a 80 HRB /sheet hardness max 80 HRB

## CHS

- **ACCIAIO INOX / STAINLESS STEEL**  
per lamiere fino a 70 HRB /sheet hardness max 70 HRB

## CHS4

- **INOX 400 / STAINLESS STEEL 400**  
per lamiere inox fino a 92 HRB /sheet hardness max 92 HRB

## CHA

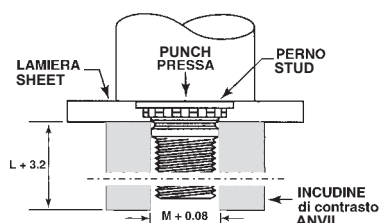
- **ALLUMINIO / ALUMINIUM 2024 T4**  
per lamiere fino a 50 HRB /sheet hardness max 50 HRB

Caratteristiche e Dimensioni Specifications and Dimensions																				
Filetto Thread code Iso 6H	Tipo Type	Lunghezza L Length ±0.15														D ±0.4	Foro Hole +0.08	Dist. Min. dal Bordo Min. Dist. to edge		
		6	8	10	12	15	16	18	20	22	25	28	30	35	38				40	50
M2.5 x 0.45	CH M2.5																	4.1	2.5	5.4
	CHS M2.5	•	•	•	•	•	•	•	•	•										
	CHA M2.5																			
M3 x 0.5	CH M3																	4.6	3.0	5.6
	CHS M3	•	•	•	•	•	•	•	•	•	•									
	CHA M3																			
	CHS4 M3																			
M4 x 0.7	CH M4																	5.9	4.0	7.2
	CHS M4	•	•	•	•	•	•	•	•	•	•	•	•	•						
	CHA M4																			
	CHS4 M4																			
M5 x 0.8	CH M5																	6.5	5.0	7.2
	CHS M5	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
	CHA M5																			
	CHS4 M5																			
M6 x 01.0	CH M6																	8.2	6.0	7.9
	CHS M6		•	•	•	•	•	•	•	•	•	•	•	•	•	•				
	CHA M6																			
	CHS4 M6																			
M8 x 1.25	CH M8																	9.6	8.0	9.6
	CHS M8			•	•	•	•	•	•	•	•	•	•	•	•	•				
	CHA M8																			

Filetto in pollici a richiesta  
Dimension in inches available

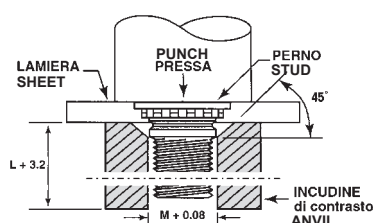
# PERNI AUTOFISSANTI PER LAMIERA

## SELF CLINCHING STUDS FOR THIN METAL



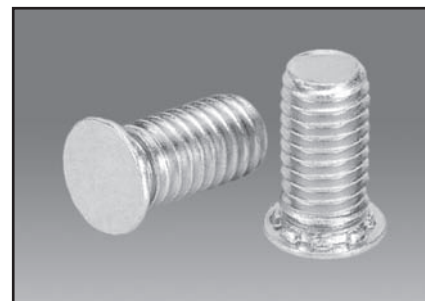
Esempio di installazione su lamiere minimo 1.5 mm e superiori, con filetto da M2.5 a M5 e per lamiere minimo 2.2 mm con filetto M6.

Tooling for sheet thicknesses 1,5 and greater with M3 - M5 threads and 2,4 and greater for M6 - M8 threads



Esempio di installazione su lamiere sino a 1.5 mm, con filetto da M2.5 a M5 e per lamiere fino a 2.2 mm con filetto M6.

Tooling for sheet thicknesses less than 1.5 mm with M3 - M5 threads and less than 2,4 mm for M6 threads



### Dati Tecnici Performance Data

Filetto Thread Code	Coppia Max di Serraggio Raccomandata Max. Nut Tightening Torque (N•m)	Tipo Type	Spessore e Materiale Sheet Thickness and Sheet Material	Durezza Lamiere Sheet Hardness HRB	Installazione Installation (kN)	Forza di Estrazione Pushout (N)	Coppia Torque-out (N•m)
M2.5	0.41	CH	1.6 mm Alluminio /Aluminum	29	8.9	625	1.1
		CHS	1.6 mm Alluminio /Aluminum	29	11.6	625	0.9
		CH	1.5 mm Acciaio /Steel	59	11.1	1025	1.1
		CHS	1.5 mm Acciaio /Steel	59	13.8	1025	0.9
M3	0.74	CH	1.6 mm Alluminio /Aluminum	29	12.9	890	1.7
		CHS	1.6 mm Alluminio /Aluminum	29	12.9	890	1.3
		CH	1.5 mm Acciaio /Steel	59	14.7	1250	1.7
		CHS	1.5 mm Acciaio /Steel	59	14.7	1250	1.3
M4	1.7	CH	1.6 mm Alluminio /Aluminum	29	20	1290	3.6
		CHS	1.6 mm Alluminio /Aluminum	29	22.3	1290	3.4
		CH	1.5 mm Acciaio /Steel	59	28.9	1780	5.1
		CHS	1.5 mm Acciaio /Steel	59	26.7	1780	3.9
M5	3.5	CH	1.6 mm Alluminio /Aluminum	29	24.5	1470	4.5
		CHS	1.6 mm Alluminio /Aluminum	29	24.5	1470	4.5
		CH	1.5 mm Acciaio /Steel	59	33.4	2440	7.3
		CHS	1.5 mm Acciaio /Steel	59	32.5	2440	7.3
M6	5.9	CH	2.4 mm Alluminio /Aluminum	28	28.9	2000	9
		CHS	2.4 mm Alluminio /Aluminum	28	28.9	2000	8.4
		CH	2.2 mm Acciaio /Steel	46	44.5	3110	13.6
		CHS	2.2 mm Acciaio /Steel	46	44.5	3110	12.4
M8	14.2	CH	2.4 mm Alluminio /Aluminum	28	29.8	2440	15.8
		CHS	2.4 mm Alluminio /Aluminum	28	29.8	2440	15.8
		CH	2.4 mm Acciaio /Steel	46	44.5	3780	21.5
		CHS	2.4 mm Acciaio /Steel	46	49.8	3780	21.5
M3	0,9	CHS4	1,5 mm Inox/Stainless steel	92	40	3300	1,8
M4	2,1	CHS4	1,5 mm Inox/Stainless steel	92	50	4400	6,5
M5	4,3	CHS4	1,5 mm Inox/Stainless steel	92	53	4900	10,7

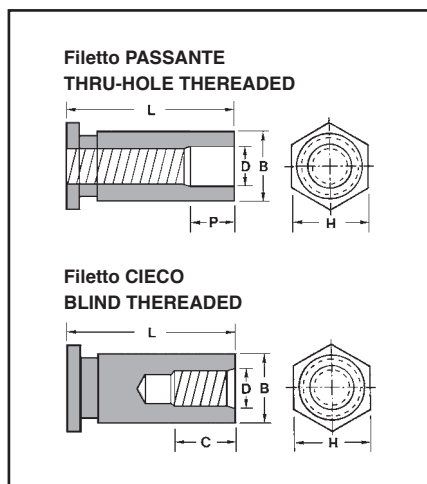
# COLONNINE AUTOFISSANTI PER LAMIERA SELF CLINCHING STANDOFFS

# 3

6.12

Le colonnine distanziali autofissanti CFSO / CFSOS - CFBSO / CFBSOS sono state progettate per una pratica e rapida installazione con qualsiasi normale attrezzatura pneumatica, idraulica o meccanica. I distanziali, sia con filetto passante sia con filetto cieco, sono utilizzati su lamiere di spessore non inferiore ad 1 mm. Non sono necessarie operazioni secondarie di alesatura o sbavatura prima dell'installazione.

*CFSO / CFBSO / CFSOS / CFBSOS self clinching standoffs are designed for quick, easy installation with any standard pneumatic, hydraulic or mechanical press through threaded or blind standoffs are used in metal panels with thickness off 1 mm and up no secondary operation, such as reaming or deburring, is necessary prior to installation.*



## CFSO

Filetto PASSANTE  
Thru-hole threaded

- ACCIAIO ZINCATO / HEAT TREATED  
per lamiere fino a 80 HRB / carbon steel 80 or less HRB

## CFSOS

Filetto PASSANTE  
Thru-hole threaded

- ACCIAIO INOX / 303 STAINLESS  
per lamiere fino a 70 HRB / steel 70 or less HRB

## CFBSO

Filetto CIECO  
Blind threaded

- ACCIAIO ZINCATO / HEAT TREATED  
per lamiere fino a 80 HRB / carbon steel 80 or less HRB

## CFBSOS

Filetto CIECO  
Blind threaded

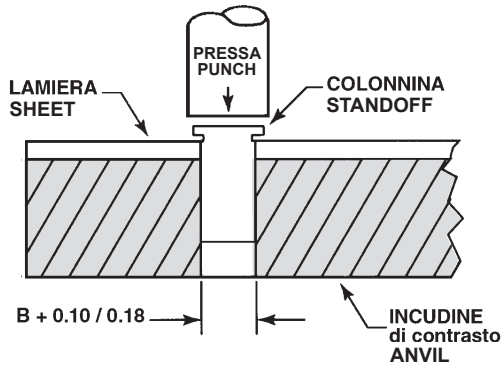
- ACCIAIO INOX / 303 STAINLESS  
per lamiere fino a 70 HRB / steel 70 or less HRB

Caratteristiche e Dimensioni Specifications and Dimensions																					
Filetto Thread code ISO 6H	Tipo Type  P ±0,25 C ±0,25	Lunghezza L Length +0,05 - 0,13												Foro Hole +0,08	B - 0,13	H	D ±0,13	Dist. Min.dal Bordo Min. Dist. to edge			
		3	4	5	6	8	10	12	14	16	18	20	22						25		
		0	0	0	0	0	4	4	4	8	8	8	11						11		
M2.5 x 0.45	CFSO		•	•	•	•	•	•									4.2	4.19	4.8	3.2	6.0
	CFSOS																				
	CFBSO				•	•	•	•													
	CFBSOS																				
M3 x 0.5	CFSO	•	•	•	•	•	•	•	•	•	•	•	•	•			4.2	4.19	4.8	3.2	6.0
	CFSOS																				
	CFBSO				•	•	•	•	•	•	•	•	•	•							
	CFBSOS																				
M3 x 0.5	CFSO	•	•	•	•	•	•	•	•	•	•	•	•	•			5.4	5.38	6.4	3.2	7.0
	CFSOS																				
	CFBSO				•	•	•	•	•	•	•	•	•	•							
	CFBSOS																				
M4 x 0.7	CFSO	•	•	•	•	•	•	•	•	•	•	•	•	•			7.2	7.11	7.9	4.8	8.0
	CFSOS																				
	CFBSO				•	•	•	•	•	•	•	•	•	•							
	CFBSOS																				
M5 x 0.8	CFSO	•	•	•	•	•	•	•	•	•	•	•	•	•			7.2	7.11	7.9	5.2	8.0
	CFSOS																				
	CFBSO				•	•	•	•	•	•	•	•	•	•							
	CFBSOS																				

Filetto in pollici a richiesta  
Dimension in inches available

# COLONNINE AUTOFISSANTI PER LAMIERA

## SELF CLINCHING STANDOFFS



### Dati Tecnici Performance Data

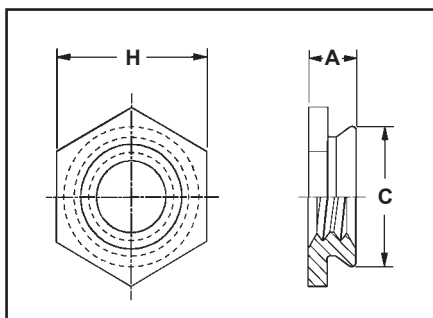
Filetto Thread Code	Materiale Colonnina Standoff Material	Coppia Max. Raccomandata Max. Rec. Tightening Torque for Mating Screw (N•m)	Materiale Lamiera / Sheet Material							
			1.5 mm 5052-H34 Alluminio / Aluminum				1.5 mm Lamiera di Ferro / Cold-rolled Steel			
			Installazione Installation	Espulsione Pushout (N)	coppia. Max Torque out (NM)	Strappo Pull-thru (N)	Installazione Installation	Espulsione Pushout (N)	Coppia. Max Torque out (NM)	Strappo Pull-thru (N)
M3	Acciaio Steel	0.55	4.9	710	1.24	1245	9.8	1000	2.15	1465
	Acciaio inoss. Stainless Steel	0.44	4.9	710	1.24	996	9.8	1000	2.15	1172
	Alluminio Aluminum	0.33	4.9	710	1.24	747	-	-	-	-
3.5M3	Acciaio Steel	0.55	7.6	1330	2.82	1375	14.7	1860	3.95	1690
	Acciaio inoss. Stainless Steel	0.44	7.6	1330	2.82	1100	14.7	1860	3.95	1352
	Alluminio Aluminum	0.33	7.6	1330	2.82	825	-	-	-	-
M4 M5	Acciaio Steel	2, 3.6	10.7	1780	5.08	2575	17.8	2490	8.47	3110
	Acciaio inoss. Stainless Steel	1.6, 2.88	10.7	1780	5.08	2060	17.8	2490	8.47	2488
	Alluminio Aluminum	1.2, 2.16	10.7	1780	5.08	1545	-	-	-	-

# DADI AUTOFISSANTI FILO LAMIERA

## SELF CLINCHING FLUS NUTS

# 3

8.12

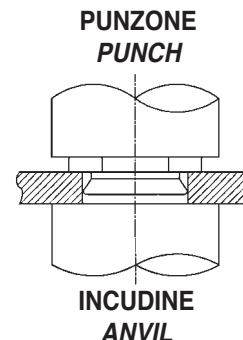


### CFL - ACCIAIO INOSSIDABILE

per lamiere fino a 70 HRB

### STAINLESS STEEL

sheet hardness max 70 HRB



Filetto Thread Size x Pitch	Articolo Type	Gambo Shank code	A max.	Spessore Lamiera Sheet Thickness	Foro Hole Size in Sheet +0.08	C max.	H max.	Dist. Min dal Bordo Min. Dist. Hole C/L to Edge
M2x0.4	CFLM2	1	1.5	1.5-2.3	4.4	4.34	4.8	6
		2	2.3	2.32-oltre /up				
M2.5x0.45	CFLM2.5	1	1.5	1.5-2.3	4.4	4.34	4.8	6
		2	2.3	2.32-oltre /up				
M3x0.5	CFLM3	1	1.5	1.5-2.3	4.4	4.34	4.8	6
		2	2.3	2.32-oltre /up				
M4x0.7	CFLM4	1	1.5	1.5-2.3	7.4	7.34	7.9	7.2
		2	2.3	2.32-oltre /up				
M5x0.8	CFLM5	1	1.5	1.5-2.3	7.9	7.87	8.7	8
		2	2.3	2.32-oltre /up				
M6x1	CFLM6	1	3.1	3.2-3.9	8.75	8.71	9.5	8.8
		2	3.9	4-4.7				
		3	4.7	4.72-oltre /up				

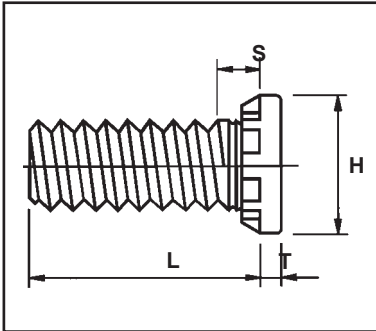
#### Dati Tecnici Performance Data

Filetto Thread Code	Gambo Shank Code	Max. Resist. Assiale Axial Tensile Strength (kN)	Coppia Max. Screw Tightening Torque (N•m)	Materiale Lamiera Sheet Material			
				5052-H34 Alluminio / Aluminum		Ferro / Cold-rolled Steel	
				Installazione / Installation (kN)	Espulsione / Pushout (kN)	Installazione / Installation (kN)	Espulsione / Pushout (kN)
M2	1	0.57	0.16	8.9	0.9	13.3	0.9
	2						
M2.5	1	0.68	0.23	8.9	0.9	13.3	0.9
	2						
M3	1	0.85	0.36	8.9	0.9	13.3	0.9
	2						
M4	1	1	0.58	8.9	1.1	17.8	1.1
	2						
M5	1	1.3	0.88	11.1	1.1	17.8	1.1
	2						
M6	1	4.5	3.7	15.6	2.8	20	3.7
	2						
	3						

Filetto in pollici a richiesta  
Dimension in inches available

# PERNI AUTOFISSANTI PER ALTE TENUTE DI COPPIA

## SELF CLINCHING STUDS FOR HIGH-STRENGTH APPLICATIONS



### HCH

**- ACCIAIO ZINCATO BIANCO**

per lamiere fino a 85 HRB

**HEAT TREATED CARBON STEEL**

sheet hardness max 85 HRB

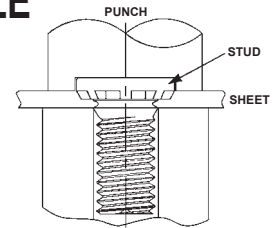
### HCHS

**- ACCIAIO INOSSIDABILE**

per lamiere fino a 70 HRB

**STAINLESS STEEL**

sheet hardness max 70 HRB



Filetto Thread Size x Pitch	Tipo / Type		Filetto Thread Code	Lunghezza Filetto "L" ±0.4 Length code "L" ±0.4 (length code in millimeters)							Spessore Min. Lamiere Sheet Thick- ness	Foro Hole Size in Sheet +0.13	H ±0.25	S Max.	T Max.	Distanza Min. dal Bordo Min. Dist. to Edge
	Acciaio Steel	Acciaio Inossidabile Stainless Steel		15	20	25	30	35	40	50						
M5x0.8	HCH	HCHS	M5	15	20	25	30	35	40	50	1.3	5	7.8	2.7	1.14	10.7
M6x1	HCH	HCHS	M6	15	20	25	30	35	40	50	1.5	6	9.4	2.8	1.27	11.5
M8x1.25	HCH	HCHS	M8	15	20	25	30	35	40	50	2	8	12.5	3.5	1.78	12.7
M10x1.5	HCH	HCHS	M10	15	20	25	30	35	40	50	2.3	10	15.7	4.1	2.29	13.7

#### Dati Tecnici Performance Data

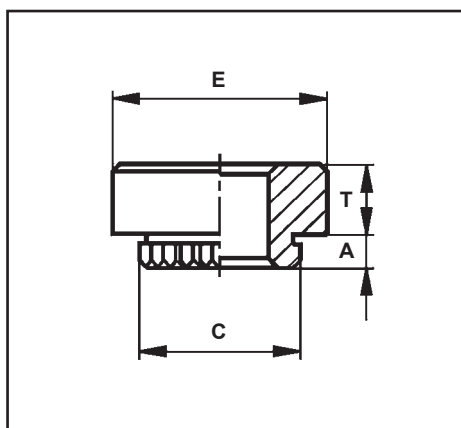
Filetto Thread Code	Tipo Type	Coppia Max. Raccomandata Max. Nut Tightening Torque (N•m)	Spessore e Materiale Sheet Thickness and Sheet Material	Durezza Lamiere Sheet Hardness HRB	Installazione Installation (kN)	Forza di Estrazione Pushout (N)	Coppia Max. Torque-out (N•m)
M5	HCH	4.4	1.5 mm Alluminio / Aluminum	15	13	778	5.4
	HCH	4.4	1.5 mm Acciaio / Steel	65	26	1556	8.1
	HCHS	4.4	1.62 mm Alluminio / Aluminum	35	12.4	1446	5.4
	HCHS	4.4	1.47 mm Acciaio / Steel	54	21.7	2026	8
M6	HCH	10	1.5 mm Alluminio / Aluminum	43	29	1620	16.3
	HCH	10	1.5 mm Acciaio / Steel	59	33	2020	16.4
	HCHS	10	1.62 mm Alluminio / Aluminum	35	15.4	1672	13.3
	HCHS	10	1.6 mm Acciaio / Steel	45	24.6	2019	14.2
M8	HCH	21.7	2.3 mm Alluminio / Aluminum	39	35.6	1780	31.2
	HCH	21.7	2.3 mm Acciaio / Steel	58	44.5	2890	36.6
	HCHS	21.7	2.23 mm Alluminio / Aluminum	44	24.4	1780	26.2
	HCHS	21.7	2.48 mm Acciaio / Steel	43	37.8	2890	32.6
M10	HCH	36.6	2.3 mm Alluminio / Aluminum	39	40	2445	38
	HCH	36.6	2.3 mm Acciaio / Steel	58	54	4000	48.8
	HCHS	36.6	2.3 mm Alluminio / Aluminum	44	33.3	2310	33.9
	HCHS	36.6	2.3 mm Acciaio / Steel	44	46.7	3870	43.3

Filetto in pollici a richiesta  
Dimension in inches available



# DADI PER CIRCUITI STAMPATI

## SELF CLINCHING NUTS FOR PC BOARDS

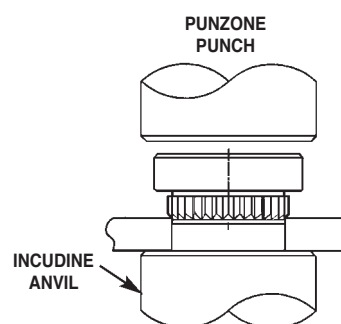


### CKF2

- ACCIAIO  
CARBON STEEL

### CKFS2

- ACCIAIO INOX  
STAINLESS STEEL



Filetto Thread Size x Pitch	Tipo /Type		Filetto Thread Code	A Max.	Min. Spessore Lamiera Min. Sheet Thickness	Foro Hole Size in Sheet +0.08	C ±0.08	E ±0.13	T ±0.13	Distanza min. dal Bordo Min. Dist to Edge
	Acciaio Carbon Steel	Acciaio Inox Stainless Steel								
M2x0.4	CKF2	CKFS2	M2	1,5	1,5	3,7	4,19	5,56	1,5	4,2
M2,5x0.45	CKF2	CKFS2	M2,5	1,5	1,5	4,2	4,68	5,56	1,5	4,4
M3x0.5	CKF2	CKFS2	M3	1,5	1,5	4,2	4,68	5,56	1,5	4,4
M4x0.7	CKF2	CKFS2	M4	1,5	1,5	6,4	6,81	8,74	2	6,4
M5x0.8	CKF2	CKFS2	M5	1,5	1,5	6,9	7,37	9,53	3	7,1

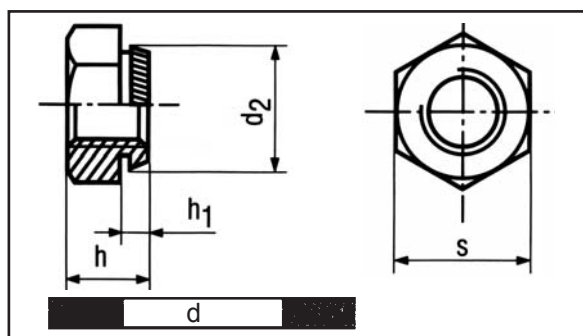
#### Dati Tecnici Performance Data

Tipo /Type	Filetto Thread Code	Coppia Max. Raccomandata Max. Nut Tightening Torque (N•m)	Spessore e Materiale Sheet Thickness & Sheet Material	Installazione Installation (KN)	Forza di Estrazione Pushout (N)	Coppia Max. Torque out (N•m)
CKF2 CKFS2	M3	-	1,5 mm FR-4 Fiberglass	2,2	200	1,35
	M4	-	1,5 mm FR-4 Fiberglass	2,2	330	3,73
	M5	-	1,5 mm FR-4 Fiberglass	2,9	350	4,52

Filetto in pollici a richiesta  
Dimension in inches available

# DADI ESAGONALI AUTOFISSANTI

## HEXAGON SELF CLINCHING NUTS



- **ACCIAIO CEMENTATO ZINCATO BIANCO**  
per lamiere fino a 80 HRB

**STEEL WHITE ZINC HARDENED**

sheet hardness max 80 HRB

- **ACCIAIO INOSSIDABILE**

per lamiere fino a 70 HRB

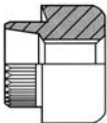
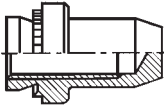

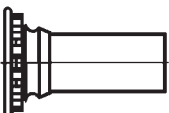
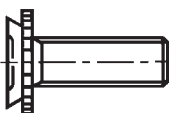

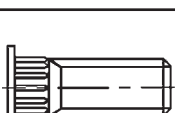

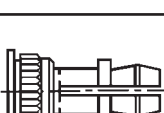
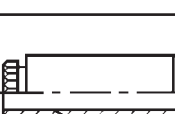
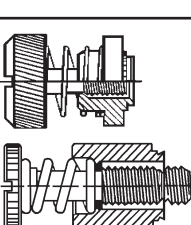
**STAINLESS STEEL** sheet hardness max 70 HRB

Filetto per Passo <i>Thread Size x Pitch</i>	Tipo <i>Type</i>		Spessore min. Lamiera <i>Min. Sheet Thickness</i>	S	d Foro <i>Hole</i>	d 2	h 1 altezza collare <i>Collar height</i>	h altezza totale <i>Total height</i>
	Acciaio <i>Steel</i>	Acciaio Inossidabile <i>Stainless Steel</i>						
M 2	K 02 - 09	KS 02 - 09	1,0	5,5	4,5	4,70	0,9	3,0
M 2,5	K 025 - 09	KS 025 - 09	1,0	5,5	4,5	4,70	0,9	3,0
M 2,5	K 025 - 14	KS 025 - 14	1,5	5,5	4,5	4,70	1,4	3,0
M 2,5	K 025 - 18	KS 025 - 18	2,0	5,5	4,5	4,70	1,8	3,0
M 3	K 03 - 09	KS 03 - 09	1,0	5,5	4,5	4,70	0,9	3,0
M 3	K 03 - 14	KS 03 - 14	1,5	5,5	4,5	4,70	1,4	3,0
M 3	K 03 - 18	KS 03 - 18	2,0	5,5	4,5	4,70	1,8	3,0
M 4	K 04 - 09	KS 04 - 09	1,0	7,0	5,5	5,70	0,9	3,2
M 4	K 04 - 14	KS 04 - 14	1,5	7,0	5,5	5,70	1,4	3,2
M 4	K 04 - 18	KS 04 - 18	2,0	7,0	5,5	5,70	1,8	3,2
M 5	K 05 - 09	KS 05 - 09	1,0	8,0	6,5	6,75	0,9	4,0
M 5	K 05 - 14	KS 05 - 14	1,5	8,0	6,5	6,75	1,4	4,0
M 5	K 05 - 18	KS 05 - 18	2,0	8,0	6,5	6,75	1,8	4,0
M 6	K 06 - 09	KS 06 - 09	1,0	10,0	8,0	8,30	0,9	5,0
M 6	K 06 - 14	KS 06 - 14	1,5	10,0	8,0	8,30	1,4	5,0
M 6	K 06 - 18	KS 06 - 18	2,0	10,0	8,0	8,30	1,8	5,0
M 8	K 08 - 18	KS 08 - 18	2,0	13,0	10,0	10,30	1,8	6,5
M 10	K 10 - 18	KS 10 - 18	2,0	15,0	12,5	12,85	1,8	8,0
M 12	K 12 - 28	KS 12 - 28	3,0	17,0	14,5	14,85	2,8	10,0
M 16	K 16 - 24	KS 16 - 24	3,0	22,0	18,5	18,85	2,4	13,0
M 20	K 20 - 38	KS 20 - 38	4,0	27,0	23,0	23,40	3,8	16,0

# PRODOTTI DISPONIBILI A RICHIESTA ITEMS AVAILABLE ON SPECIAL ORDER

# 3

12.12

	<b>DADI A RIBADIRE</b> <b>RIVET BUSH</b>
	<b>DADO AUTOFISSANTE CIECO</b> <b>SELF CLINCHING BLIND NUT</b>
	<b>DADO AUTOFISSANTE AUTOBLOCCANTE</b> <b>SELF CLINCHING LOCKING NUT</b>
	<b>PERNO AUTOFISSANTE LISCIO</b> <b>SELF CLINCHING PIN</b>
	<b>PERNO AUTOFISSANTE PER FORI CIECHI</b> <b>SELF CLINCHING CONCEALED-HEAD STUD</b>
	<b>PERNO AUTOFISSANTE PER LAMIERE SOTTILI</b> <b>SELF CLINCHING NON-FLUSH STUD</b>
	<b>PERNO AUTOFISSANTE PER CIRCUITI STAMPATI</b> <b>BROACHING STUD</b>
	<b>DISTANZIALE AUTOFISSANTE</b> <b>QUICK RELEASE STANDOFF</b>
	<b>DISTANZIALE AUTOFISSANTE PER CIRCUITO STAMPATO</b> <b>QUICK RELEASE STANDOFF FOR PC BOARD</b>
	<b>DISTANZIALE AUTOFISSANTE PER CIRCUITO STAMPATO</b> <b>BROACHING STANDOFF</b>
	<b>VITI IMPERDIBILI AUTOFISSANTI</b> <b>PANEL FASTENERS ASSEMBLIES</b>

4



# PERNI A SALDARE WELDING STUDS

**GRIV SRL**

**Sede Legale:** via Giuseppe Mazzini, 4 - 80040 - Pollena Trocchia (Na)

**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

**Tel/Fax:** +39 081 8990496

**Email:** [info@griv srl.it](mailto:info@griv srl.it)

**Web:** [www.griv srl.it](http://www.griv srl.it)

# ISTRUZIONI PER LA SALDATURA

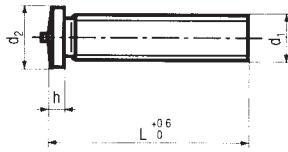
## WELDING INSTRUCTIONS

- OK
- +/-
- NO!

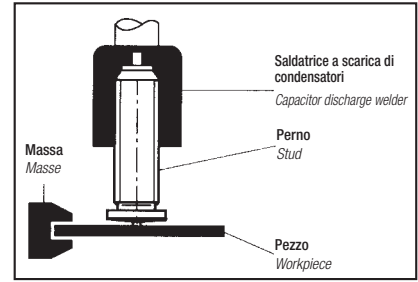
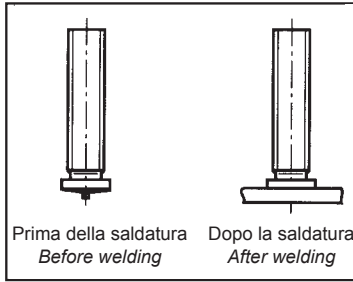
MATERIALE DEL PRIGIONIERO  <i>STUD MATERIAL</i>	Materiale della base / <i>Workpiece Material</i>								
	ACCIAIO fino a C35 <i>STEEL MAX C35</i>	ACCIAIO fino a C60 <i>STEEL MAX C60</i>	ACCIAIO ZINCATO <i>STEEL ZINC PLATED</i>	ACCIAIO INOX <i>STAINLESS STEEL</i>	OTTONE <i>BRASS</i>	RAME <i>COPPER</i>	Al 99,5	Al Mg3	Al Mg5
ACCIAIO 4.8 RAMATO <i>STEEL 4.8 COPPER PLATED</i>	●	—	○	○	○	○	—	—	—
ACCIAIO INOX A2-50 <i>STAINLESS STEEL A2-50</i>	●	○	○	●	○	○	—	—	—
ALLUMINIO AlMg3 <i>ALUMINIUM AlMg3</i>	—	—	—	—	—	—	○	●	○
OTTONE <i>BRASS</i>	●	—	●	○	●	●	—	—	—

# PERNI FILETTATI A SALDARE A SCARICA DI CONDENSATORI

## CAPACITOR DISCHARGE STUDS WITH EXTERNAL THREAD



d1	M3	M4	M5	M6	M8
d2 +/- 0.2	4.5	5.5	6.5	7.5	9
h	0.7 - 1		0.8 - 1.4		

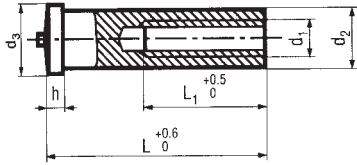


ACCIAIO 4.8 RAMATO STEEL 4.8 COPPER PLATED	ACCIAIO INOX A2-50 STAINLESS STEEL A2-50	ALLUMINIO AIMg3 ALUMINIUM AIMg3	OTTONE BRASS
M3 X 5 M3 X 6 M3 X 8 M3 X 10 M3 X 12 M3 X 14 M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30 M3 x 35 M3 x 40 M3 x 45 M3 x 50	M3 X 6 M3 X 8 M3 X 10 M3 X 12  M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30 M3 x 35 M3 x 40  M3 x 50	M3 X 6 M3 X 8 M3 X 10 M3 X 12  M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30 M3 x 35  M3 x 40	M3 X 6 M3 X 8 M3 X 10 M3 X 12  M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30 M3 x 35  M3 x 40
M4 X 6 M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40 M4 x 45	M4 X 6 M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40 M4 x 45 M4 x 50	M4 X 6 M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40 M4 x 45 M4 x 50	M4 X 6 M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40 M4 x 45 M4 x 50
M5 X 6 M5 X 8 M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30 M5 x 35 M5 x 40 M5 x 45 M5 x 50	M5 X 6 M5 X 8 M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30 M5 x 35 M5 x 40 M5 x 45 M5 x 50	M5 X 6 M5 X 8 M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30 M5 x 35 M5 x 40 M5 x 45 M5 x 50	M5 X 6 M5 X 8 M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30 M5 x 35 M5 x 40 M5 x 45 M5 x 50
M6 X 8 M6 X 10 M6 X 12  M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40 M6 x 45 M6 x 50 M6 x 55	M6 X 8 M6 X 10 M6 X 12  M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40 M6 x 45 M6 x 50 M6 x 55 M6 x 60	M6 X 8 M6 X 10 M6 X 12  M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40 M6 x 45 M6 x 50 M6 x 55 M6 x 60	M6 X 8 M6 X 10 M6 X 12  M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40 M6 x 45 M6 x 50 M6 x 55 M6 x 60
M8 X 10 M8 X 12  M8 X 15 M8 X 16 M8 X 20 M8 X 25 M8 X 30 M8 x 35 M8 x 40 M8 x 45 M8 x 50 M8 x 55 M8 x 60	M8 X 10 M8 X 12  M8 X 15 M8 X 16 M8 X 20 M8 X 25 M8 X 30 M8 x 35 M8 x 40 M8 x 45 M8 x 50 M8 x 55 M8 x 60		

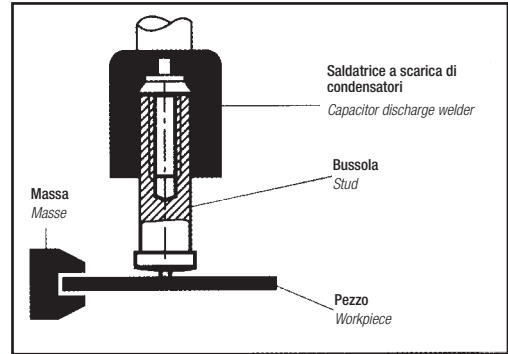
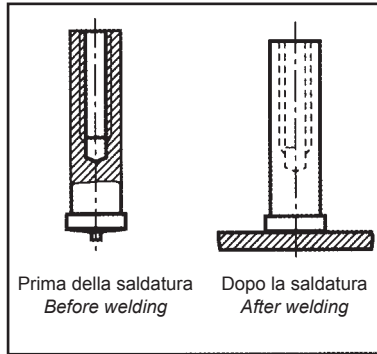


PERNO PER LA VERNICIATURA  
A RICHIESTA  
STUD FOR PAINTING ON  
REQUEST

## BUSSOLE FILETTATE A SALDARE A SCARICA DI CONDENSATORI CAPACITOR DISCHARGE STUDS WITH INTERNAL THREAD

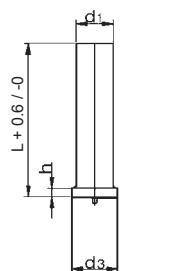


d1	M3	M4	M5	M6
d2	5	6	7.1	8
d3 +/- 0.2	6.5	7.5	9	9
L1	5	6	7.5	7.5
h	0.7 - 1.4			

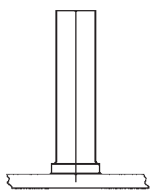


ACCIAIO 4.8 RAMATO STEEL 4.8 COPPER PLATED	ACCIAIO INOX A2-50 STAINLESS STEEL A2-50	ALLUMINIO AIMg3 ALUMINIUM AIMg3
M3 X 6 M3 X 8 M3 X 10 M3 X 12 M3 X 14 M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30	M3 X 6 M3 X 8 M3 X 10 M3 X 12 M3 X 14 M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30	M3 X 6 M3 X 8 M3 X 10 M3 X 12 M3 X 14 M3 X 15 M3 X 16 M3 X 20 M3 X 25 M3 X 30
M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40	M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40	M4 X 8 M4 X 10 M4 X 12  M4 X 15 M4 X 16 M4 X 20 M4 X 25 M4 X 30 M4 x 35 M4 x 40
M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30	M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20 M5 X 25 M5 X 30	M5 X 10 M5 X 12  M5 X 15 M5 X 16 M5 X 20
M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40	M6 X 15 M6 X 16 M6 X 20 M6 X 25 M6 X 30 M6 x 35 M6 x 40	M6 X 12  M6 X 16 M6 X 20 M6 X 25

## PERNI LISCI A SALDARE A SCARICA DI CONDENSATORI CAPACITOR DISCHARGE STUDS NOT THREADED



Prima della saldatura  
Before welding



Dopo la saldatura  
After welding

d1 +/- 0.1	3	4	5	6	7
d3 +/- 0.2	4.5	5.5	6.5	7.5	9
h	0.7-1.4		0.8-1.4		

ACCIAIO 4.8 RAMATO STEEL 4.8 COPPER PLATED				
3 X 6 3 X 8 3 X 10 3 X 12	4 X 6 4 X 8 4 X 10 4 X 12	5 X 6 5 X 8 5 X 10 5 X 12	6 X 8 6 X 10 6 X 12	7.1 X 10 7.1 X 12
3 X 15 3 X 16 3 X 20 3 X 25 3 X 30 3 x 35 3 x 40 3 x 45 3 x 50	4 X 15 4 X 16 4 X 20 4 X 25 4 X 30 4 x 35 4 x 40 4 x 45	5 X 15 5 X 16 5 X 20 5 X 25 5 X 30 5 x 35 5 x 40 5 x 45 5 x 50	6 X 15 6 X 16 6 X 20 6 X 25 6 X 30 6 x 35 6 x 40 6 x 45 6 x 50 6 x 55	7.1 X 15 7.1 X 16 7.1 X 20 7.1 X 25 7.1 X 30

ACCIAIO INOX A2-50 STAINLESS STEEL A2-50				
3 X 6 3 X 8 3 X 10 3 X 12	4 X 6 4 X 8 4 X 10 4 X 12	5 X 6 5 X 8 5 X 10 5 X 12	6 X 8 6 X 10 6 X 12	7.1 X 10 7.1 X 12
3 X 15 3 X 16 3 X 20 3 X 25 3 X 30 3 x 35 3 x 40 3 x 45 3 x 50	4 X 15 4 X 16 4 X 20 4 X 25 4 X 30 4 x 35 4 x 40 4 x 45	5 X 15 5 X 16 5 X 20 5 X 25 5 X 30 5 x 35 5 x 40 5 x 45 5 x 50	6 X 15 6 X 16 6 X 20 6 X 25 6 X 30 6 x 35 6 x 40 6 x 45 6 x 50 6 x 55	7.1 X 15 7.1 X 16 7.1 X 20 7.1 X 25 7.1 X 30

### PERNO SPECIALE A SCARICA DI CONDENSATORI

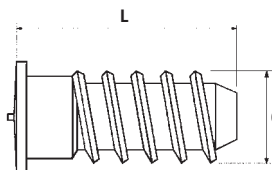
SPECIAL CAPACITOR DISCHARGE STUD

MATERIALE

MATERIAL

ACCIAIO 4.8 RAMATO

STEEL 4.8 COPPER PLATED



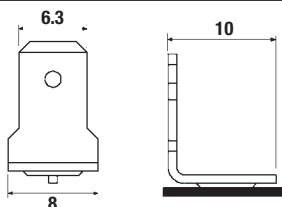
D x L

d. 5 x 9

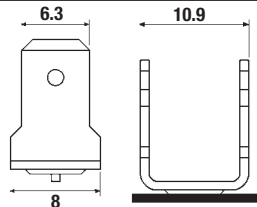
d. 5 x 14,2

d. 5 x 18

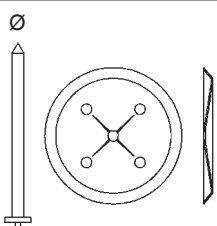
d. 5 x 25



**FASTON SINGOLO**  
SINGLE FASTON  
ACCIAIO 4.8 RAMATO  
STEEL 4.8 COPPER PLATED  
ALLUMINIO AlMg3  
ALUMINIUM AlMg3  
ACCIAIO INOX A2-50  
STAINLESS STEEL A2-50

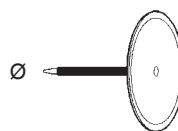


**FASTON DOPPIO**  
DOUBLE FASTON  
ACCIAIO 4.8 RAMATO  
STEEL 4.8 COPPER PLATED  
ALLUMINIO AlMg3  
ALUMINIUM AlMg3  
ACCIAIO INOX A2-50  
STAINLESS STEEL A2-50



### CHIODI PER ISOLAMENTO / INSULATION PINS

MAT.	L. mm.	Ø mm	rondella washer
Fe37	20 - 100	2	38
AISI 304	20 - 150	3	38



### CHIODI PER ISOLAMENTO / INSULATION PINS

MAT.	L. mm.	Ø mm	rondella washer
Fe37	9.5 - 54	2	30
AISI 304	9.5 - 152	2.7	38



# SALDATRICI A SCARICA DI CONDENSATORI

## CAPACITOR DISCHARGE WELDERS



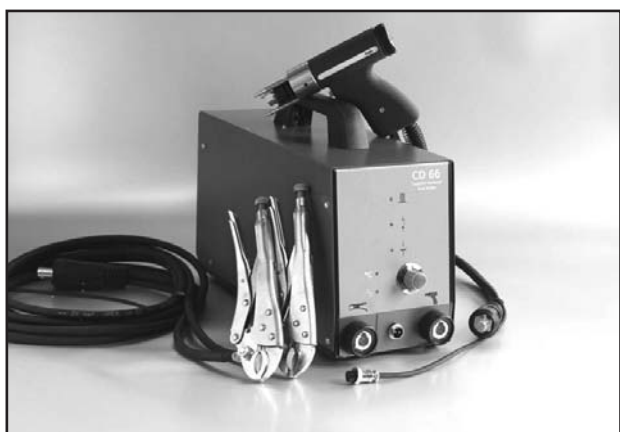
33

**UTILIZZO**

CAPACITY

**M3 - M4 Alluminio***M3 - M4 Aluminium***M3 - M4 - M5 Ferro - Inox***M3 - M4 - M5 Steel - Stainless steel***PESO**

WEIGHT

**10 Kg.**

66

**UTILIZZO**

CAPACITY

**M3 - M8 Alluminio - Ferro - Inox***M3 - M8 Aluminium - Steel - Stainless steel***PESO**

WEIGHT

**14 Kg.**

66 2T

**UTILIZZO**

CAPACITY

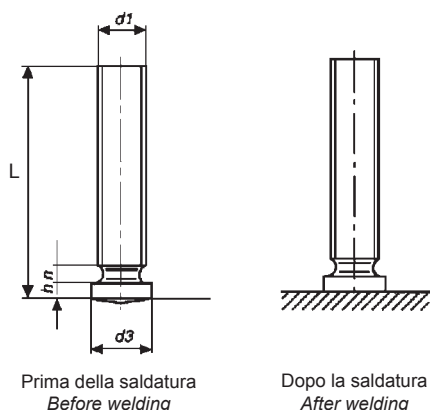
**M3 - M8 Alluminio - Ferro - Inox***M3 - M8 Aluminium - Steel - Stainless steel***PESO**

WEIGHT

**20.5 Kg.****Saldatrice utilizzabile con 2 pistole***Welder usable with 2 guns***ACCESSORI / ACCESSORIES****Porta perni / Chuck M3 - M10****Porta perni per faston**  
*Chuck for faston***Angolare / Corner cantilever**

# PERNI A SALDARE AD ARCO CORTO

## DRAWN-ARC STUDS



### MATERIALE

MATERIAL

**ACCIAIO 4.8 RAMATO**

STEEL 4.8 COPPER PLATED

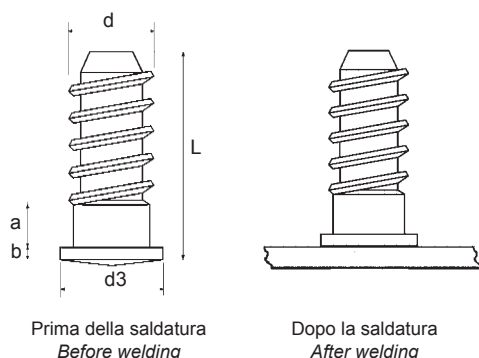
**ACCIAIO INOX A2-50**

STAINLESS STEEL A2-50

d1	M3	M4	M5	M6	M8	M10
d3 +/- 0.2	4	5	6	7	9	11
h	0.7 - 1.4		0.8 - 1.4			
n max	1.5		2			
L +/- 0.6 / - 0	6 - 30 mm	6 - 40 mm	8 - 45 mm	8 - 55 mm	10 - 55 mm	16 - 60 mm

# PERNI SPECIALI AD ARCO CORTO

## DRAWN-ARC SPECIAL STUDS



### MATERIALE

MATERIAL

**ACCIAIO 4.8 RAMATO**

STEEL 4.8 COPPER PLATED

d +/- 0.1	5	5	5	5	5	5
d3 +/- 0.3	6	6	6	6	6	6
b +/- 0.15	0.7					
a max	2.3	3				
L +/- 0.3	9.2	12	14.2	16.5	18.5	25

# SALDATRICE AD ARCO CORTO

## DRAWN-ARC WELDER



## 550

### UTILIZZO

CAPACITY

**M2 - M10 Alluminio - Ferro - Inox**

M2 - M10 Aluminium - Steel - Stainless steel

**Ø 2 - Ø 10 Alluminio - Ferro - Inox**

Ø 2 - Ø 10 Aluminium - Steel - Stainless steel

### PESO

WEIGHT

**41 Kg.**

5



# FISSAGGI PER MATERIE PLASTICHE FASTENERS FOR PLASTICS

**GRIV SRL**

**Sede Legale:** via Giuseppe Mazzini, 4 - 80040 - Pollena Trocchia (Na)

**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

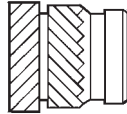
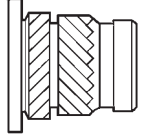
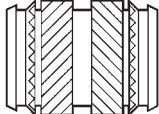
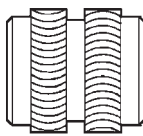
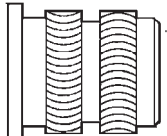
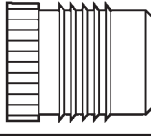
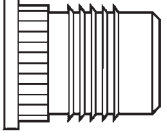
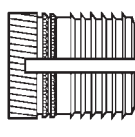
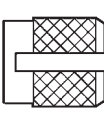
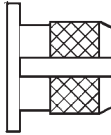
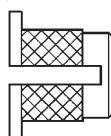
**Tel/Fax:** +39 081 8990496

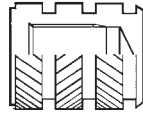
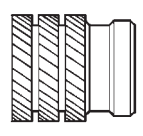
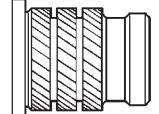
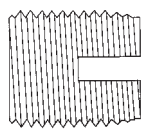
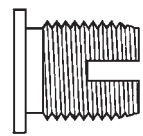
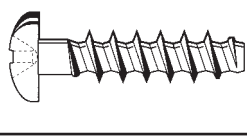
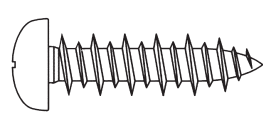
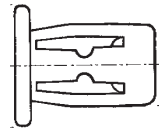
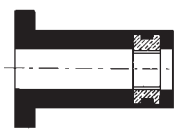
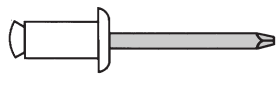
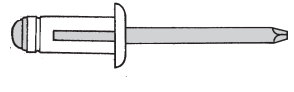
**Email:** [info@grivsr.it](mailto:info@grivsr.it)

**Web:** [www.grivsr.it](http://www.grivsr.it)

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# INSERTI FILETTATI IN OTTONE TIPO FXSL

INSERIMENTO A CALDO O ULTRASUONI

## THREADED INSERTS IN BRASS FXSL TYPE

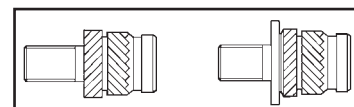
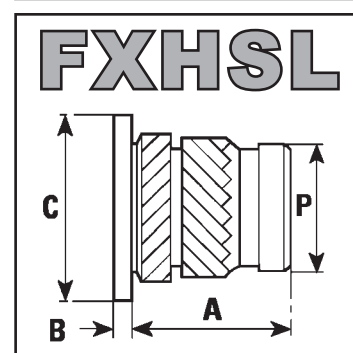
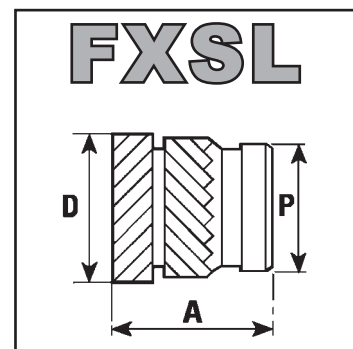
INSTALLATION USING HEAT OR ULTRASONICS

FXSL e FXHSL sono inserti in ottone, da utilizzare su materiali termoplastici. Le godronature invertite ne garantiscono un'ottima tenuta alla trazione ed alla rotazione. Possono anche essere inseriti in costampaggio.

*FXSL and FXHSL are brass inserts designed for thermoplastics materials. It features opposed helical knurl bands to provide a combination of high torque and pull out resistance. Can be moulded in.*

Filetto interno Internal Thread	A	B	C	D	P	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	4,0*	0,53	4,8	3,6	3,1	3,2	1,3
M 2,5	5,7*	0,61	5,5	4,6	3,9	4,0	1,6
M 3	5,7*	0,61	5,5	4,6	3,9	4,0	1,6
M 4	8,1*	0,91	7,1	6,3	5,5	5,6	2,1
M 5	9,5*	1,09	7,9	7,1	6,3	6,4	2,6
M 6	12,7*	1,35	9,5	8,7	7,9	8,0	3,3
M 8	12,7	1,35	11,1	10,2	9,5	9,6	4,5
M 10	12,7	1,60	14,0	12,6	11,8	11,9	6,0
M 12	15,9	2,00	19,0	16,7	15,8	16,0	8,0

\* DISPONIBILI ALTEZZE RIDOTTE / AVAILABLE SHORTER LENGTHS

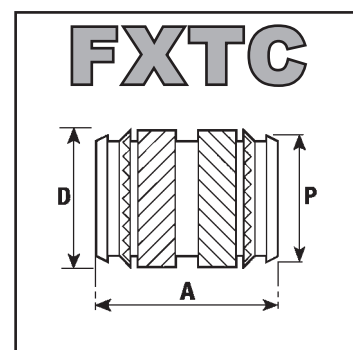


VERSIONE PRIGIONIERO A RICHIESTA  
STUD VERSION ON REQUEST

FXTC è un inserto filettato in ottone con le stesse caratteristiche di tenuta del FXSL. La forma simmetrica permette l'utilizzo durante lo stampaggio della plastica ed è consigliato anche per l'inserimento in automatico.

*FXTC is a brass insert with the same performance of FXSL. Installation is simplified by the symmetrical nature of the insert, eliminating the need for orientation during automated or hand feeding.*

Filetto interno Internal Thread	A	D	P	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	4,0	3,5	3,1	3,2	1,3
M 2,5	5,7	4,4	3,9	4,0	1,6
M 3	5,7	4,4	3,9	4,0	1,6
M 4	8,1	6,1	5,5	5,6	2,1
M 5	9,5	6,8	6,3	6,4	2,6
M 6	12,7	8,5	7,9	8,0	3,3
M 8	12,7	10,0	9,5	9,6	4,5
M 10	12,7	12,3	11,8	11,9	6,0
M 12	15,9	16,3	15,8	16,0	8,0



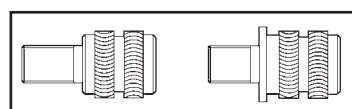
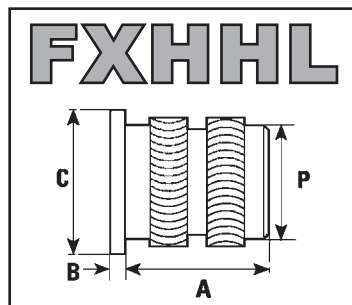
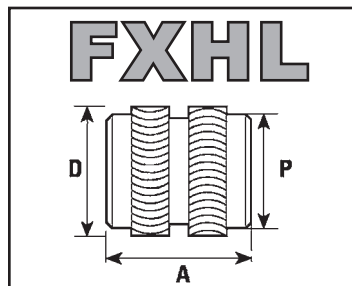
INSERIMENTO A CALDO  
INSTALLATION USING HEAT

# INSERTI FILETTATI IN OTTONE TIPO FXHL

INSERIMENTO A CALDO

## THREADED INSERTS IN BRASS FXHL TYPE

INSTALLATION USING HEAT



VERSIONE PRIGIONIERO A RICHIESTA  
STUD VERSION ON REQUEST

FXHL e FXHHL sono inserti in ottone, per l'installazione su materiali termoplastici amorfi, sensibili all'intaglio. Caratterizzati da zigrinature arrotondate e non taglienti. Possono anche essere inseriti in costampaggio.

*FXHL and FXHHL are brass inserts used in amorphous thermoplastics often sensitive to notch. Typical are the rounded knurls that doesn't cut the plastic. Can be moulded in.*

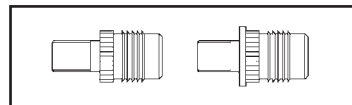
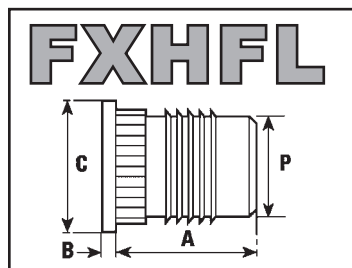
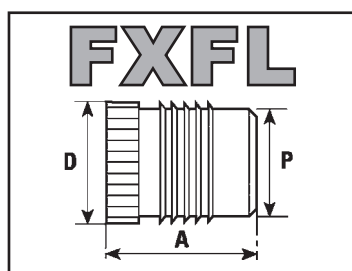
Filetto interno Internal Thread	A	B	C	D	P	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	3,9	0,51	4,8	3,5	3,1	3,2	1,4
M 2,5	5,8	0,58	5,5	4,4	3,9	4,0	1,8
M 3	5,8	0,58	5,5	4,4	3,9	4,0	1,8
M 4	8,1	0,89	7,1	6,1	5,5	5,6	2,4
M 5	9,5	1,07	7,9	6,9	6,3	6,4	2,8
M 6	12,7	1,32	9,5	8,5	7,9	8,0	3,6
M 8	12,7	1,32	11,1	10,0	9,5	9,6	5

# INSERTI FILETTATI IN OTTONE TIPO FXFL

INSERIMENTO A PRESSIONE

## THREADED INSERTS IN BRASS FXFL TYPE

INSTALLATION BY ACTION PRESS



VERSIONE PRIGIONIERO A RICHIESTA  
STUD VERSION ON REQUEST

FXFL - FXHFL sono inserti in ottone, da installare a pressione su materiali termoplastici teneri e medi.

*FXFL - FXHFL are press-in brass inserts which can be installed into soft and medium thermoplastics materials*

Filetto interno Internal Thread	A	B	C	D	P	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	4,0	0,45	4,8	3,7	3,1	3,2	1,6
M 2,5	4,8	0,58	5,5	4,5	3,9	4,0	2,0
M 3	4,8	0,58	5,5	4,5	3,9	4,0	2,0
M 4	7,9	0,89	7,1	6,1	5,5	5,6	2,8
M 5	9,5	1,07	7,9	7,0	6,3	6,4	3,2
M 6	12,7	1,32	9,5	8,6	7,9	8,0	4,0
M 8	12,7	1,32	11,1	10,2	9,5	9,6	4,8

# INSERTI FILETTATI IN OTTONE TIPO FXPLK

## INSERIMENTO A PRESSIONE

### THREADED INSERTS IN BRASS FXPLK TYPE

#### INSTALLATION BY ACTION PRESS

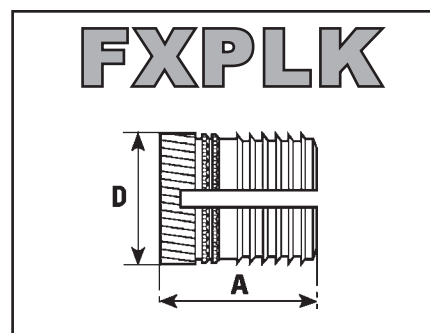
FXPLK é un inserto in ottone, per l'installazione rapida su materiali termoplastici teneri e medi.

Dopo l'inserimento ha un leggero effetto autofrenante sulla vite.

*FXPLK is a press-in expansion brass insert, used in soft and medium thermoplastics. After installation it's a little bit self locking.*

Filetto interno Internal Thread	A	D	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	4,0	3,5	3,2	1,6
M 2,5	5,8*	4,4	4,0	2,0
M 3	5,8*	4,4	4,0	2,0
M 4	8,2*	6,1	5,6	2,8
M 5	9,5*	6,8	6,4	3,2
M 6	12,7*	8,5	8,0	4,0
M 8	12,7	10,0	9,6	4,8

\* DISPONIBILI ALTEZZE RIDOTTE / AVAILABLE SHORTER LENGTHS



# INSERTI FILETTATI IN OTTONE TIPO FXBL

## INSERIMENTO A PRESSIONE

### THREADED INSERTS IN BRASS FXBL TYPE

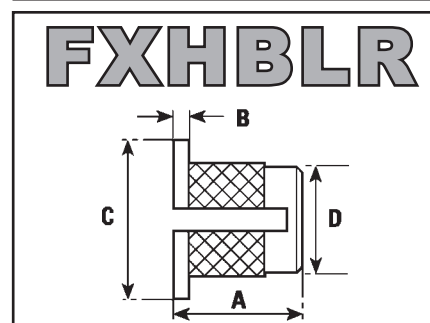
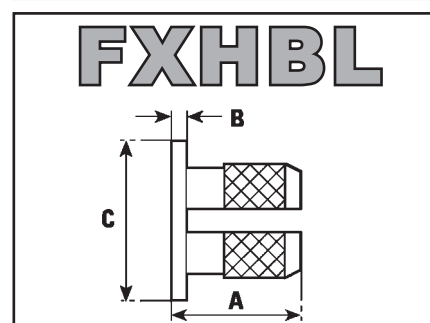
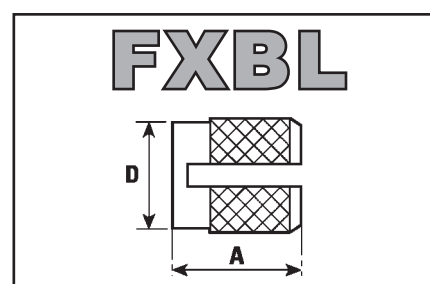
#### INSTALLATION BY ACTION PRESS

FXBL - FXHBL - FXHBLR sono inserti in ottone ad inserimento a pressione con tenuta ad espansione. Ideale per termoindurenti.

Dopo l'inserimento ha un leggero effetto autofrenante sulla vite.

*FXBL - FXHBL - FXHBLR are press-in expansion brass inserts used in hard thermosetting plastics. After installation it's a little bit self locking.*

Filetto interno Internal Thread	A	B	C	D	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	3,9	0,43	4,8	3,2	3,2	2,4
M 2,5	4,7	0,51	5,5	4,0	4,0	3,2
M 3	4,7	0,51	5,5	4,0	4,0	3,2
M 4	7,9	0,82	7,1	5,5	5,6	4,0
M 5	9,4	0,99	7,9	6,3	6,4	4,8
M 6	12,6	1,25	9,5	7,9	8,0	6,0
M 8	12,6	1,25	11,1	9,5	9,6	7,0



# INSERTI FILETTATI IN OTTONE CIECHI TIPO FXFTC

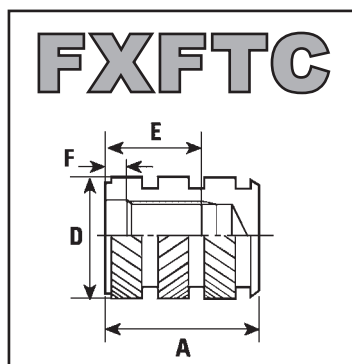
## INSERIMENTO COSTAMPAGGIO

### BLIND ENDED THEREADED BRASS INSERTS FXFTC TYPE

#### MOULD-IN INSTALLATION

FXFTC é un inserto in ottone, cieco studiato per il costampaggio.

FXFTC is a blind ended threaded brass insert ideal for mould in.

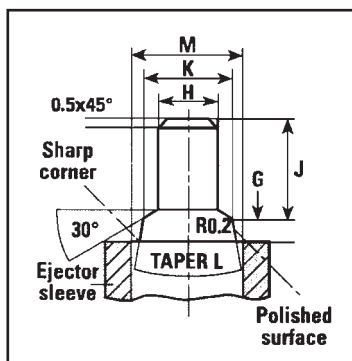
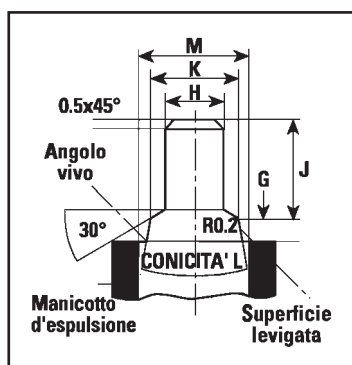


Filetto interno Internal Thread	A *	D	E min.	F
M 2	5,5	3,4	3,6	1,0
M 2,5	6,4	4,3	4,0	1,2
M 3	7,3	4,7	4,6	1,3
M 4	10,2	6,3	6,7	1,8
M 5	11,2	7,3	7,4	2,0
M 6	14,4	9,8	8,1	2,0
M 8	16,5	11,4	11,1	2,3
M 10	17,9	13,8	11,9	2,4

\* ALTEZZE SPECIALI SU RICHIESTA / AVAILABLE SPECIAL LENGTHS

## SPINA DI RIFERIMENTO SULLO STAMPO

### LOCATING PIN



Filetto interno Internal Thread	G -020 +040 mm	H -025 +000 mm	J -100 +100 mm	K -0125 +0125 mm	L inclusi gradi inclusive degrees	M mm
M 2	0,80	1,55	2,65	2,300	6	3,00
M 2,5	0,90	2,00	3,00	2,800	5	3,50
M 3	1,05	2,45	3,40	3,125	4,5	4,00
M 4	1,55	3,25	5,00	4,425	4,5	5,40
M 5	1,70	4,15	5,55	5,125	5	6,00
M 6	1,80	4,95	6,15	6,500	5,5	8,00
M 8	2,00	6,70	9,00	8,500	6	10,00
M 10	2,10	8,40	9,70	10,500	6	12,00



# INSERTI FILETTATI IN OTTONE TIPO FXSP

## INSERIMENTO A PRESSIONE

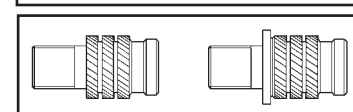
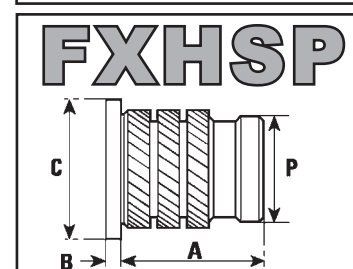
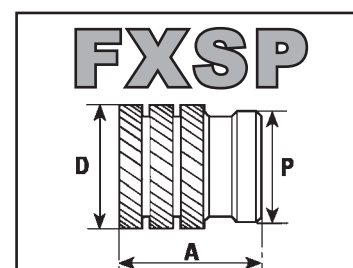
## THREADED INSERTS IN BRASS FXSP TYPE

### INSTALLATION BY ACTION PRESS

FXSP - FXHSP sono inserti in ottone, studiati per l'utilizzo nei termoindurenti. Le zigrinature permettono una grande resistenza alla torsione.

*FXSP - FXHSP are press-in brass inserts ideal for thermosetting materials. High torque resistance.*

Filetto interno Internal Thread	A	B	C	D	P	Ø foro Ø hole - 0,00 + 0,10	Spess. minimo parete Min. wall thickness
M 2	4,1	0,51	4,8	3,3	3	3,1	1,6
M 2,5	5,3	0,58	5,5	4,2	3,7	3,8	2,0
M 3	5,3	0,58	5,5	4,2	3,7	3,8	2,0
M 4	7,4	0,89	7,1	5,8	5,3	5,4	2,5
M 5	8,3	1,07	7,9	6,6	6,1	6,2	2,5
M 6	9,2	1,32	9,5	8,2	7,7	7,8	2,8
M 8	9,2	1,32	11,1	9,7	9,3	9,3	3,8
M 10	9,2	1,32	14,0	12,7	12,2	12,3	5,0



VERSIONE PRIGIONIERO A RICHIESTA  
STUD VERSION ON REQUEST

# BUSSOLE AUTOFILETTANTI TIPO FXSCT

## INSERIMENTO CON UTENSILE MANUALE O CON MASCHIATRICE

### THREADED INSERTS SELF-TAPPING FXSCT TYPE

#### INSTALLATION WITH HAND TOOL OR TAPPING MACHINE

Le bussole autofilettanti FXSCT e FXHSCT vengono avvitate sia su termoplastici sia su termoindurenti.

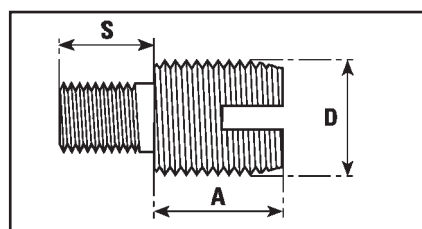
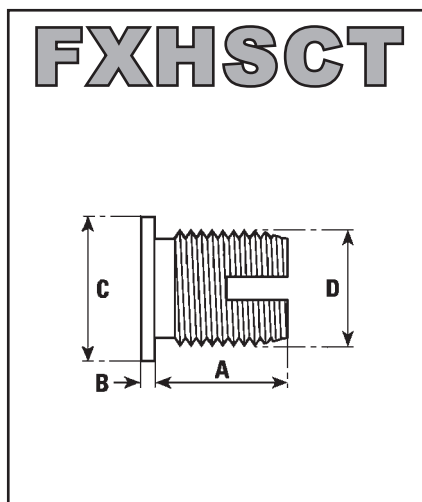
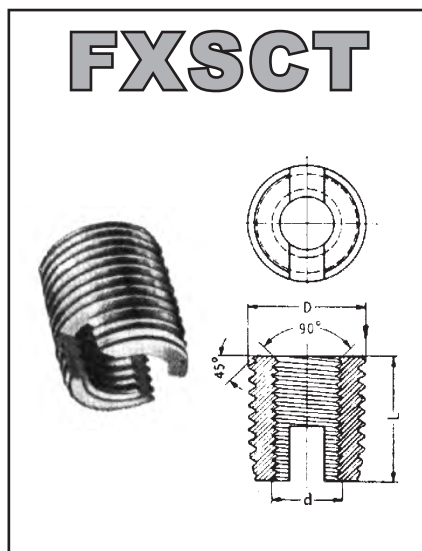
E' ottima la loro tenuta al taglio ed alla trazione.

Disponibili in ottone, in acciaio temprato ed in inox.

*FXSCT and FXHSCT are self tapping inserts suitable for thermoplastics and thermosetting materials.*

*High pull-out resistance.*

*Available in brass, steel hardened or stainless steel.*



VERSIONE PRIGIONIERO A RICHIESTA  
STUD VERSION ON REQUEST

FILETTO INTERNO <i>Internal Thread</i>	d Filetto int. <i>Internal Thread</i>	D Filetto est. <i>External Thread</i>	Ø indicativi di foratura* <i>Rec. hole size</i>	Profondità min. del foro <i>Min. depth hole</i>	L	B	C
M 2,5	2,5 x 0,45	4,5 x 0,5	4,0 - 4,3	8,0	6,0	0,58	6,0
M 3	3,0 x 0,5	5,0 x 0,5	4,5 - 4,8	8,0	6,0	0,58	6,5
M 4	4,0 x 0,7	6,5 x 0,75	5,8 - 6,2	10,0	8,0	0,89	8,0
M 5	5,0 x 0,8	8,0 x 1,0	7,1 - 7,6	13,0	10,0	1,06	9,5
M 6A	6,0 x 1,0	9,0 x 1,0	8,1 - 8,6	15,0	12,0	1,32	12,5
M 6	6,0 x 1,0	10,0 x 1,5	8,6 - 9,4	17,0	14,0	1,32	14,0
M 8	8,0 x 1,25	12,0 x 1,25	10,6 - 11,4	18,0	15,0	1,57	16,0
M 10	10,0 x 1,5	14,0 x 1,5	12,6 - 13,4	22,0	18,0	1,57	18,0
M 12	12,0 x 1,75	16,0 x 1,5	14,6 - 15,4	26,0	22,0	-	-
M 14	14,0 x 2,0	18,0 x 1,5	16,6 - 17,4	28,0	24,0	-	-
M 16	16,0 x 2,0	20,0 x 1,5	18,6 - 19,4	27,0	22,0	-	-

\* La scelta del Ø di foratura dipende dalla durezza del materiale di base.










\* Hole diameter will vary with the type of plastic material used.










# GUIDA ALLA SCELTA DELL'INSERTO

## INSERT SELECTOR CHART

# 5

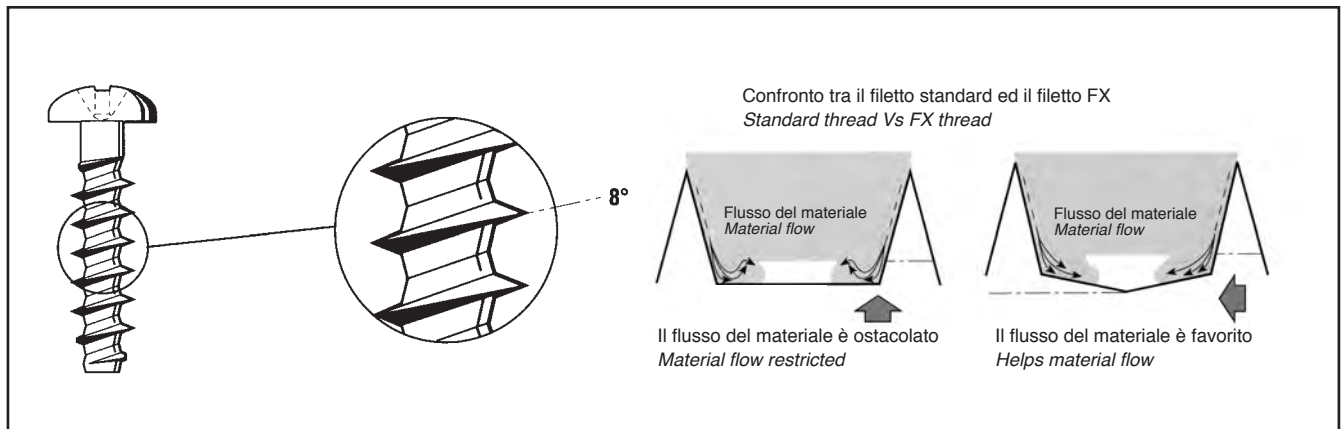
9.16

Caratteristiche del materiale Material Characteristics	FXSL 	FXTC 	FXHL 	FXFL 	FXPLK 	FXBL 	FXFTC 	FXSP 	FXSCT 
Termoplastici duri Hard Thermoplastics PA - PPS - PBT - PC/ABS	<b>OK</b>	<b>OK</b>	+/-	NO	NO	NO	<b>OK</b>	NO	+/-
Termoplastici medi Medium Thermoplastics ABS - PA - POM - PVC	<b>OK</b>	<b>OK</b>	+/-	<b>OK</b>	<b>OK</b>	NO	<b>OK</b>	NO	<b>OK</b>
Termoplastici teneri Soft Thermoplastics PP - PE - HDPE	<b>OK</b>	<b>OK</b>	NO	<b>OK</b>	<b>OK</b>	NO	<b>OK</b>	NO	<b>OK</b>
Termoplastici amorfi Amorphous Thermoplastics PPO - PC	OK caldo OK heat No ultrasuoni No ultrasinics	OK caldo OK heat No ultrasuoni No ultrasinics	<b>OK</b>	NO	NO	NO	<b>OK</b>	NO	NO
Termoindurenti Thermosetting	NO	NO	NO	NO	NO	<b>OK</b>	<b>OK</b>	<b>OK</b>	+/-
Poliesteri termoindurenti Thermosetting polyester SMC - DMC - BMC	NO	NO	NO	NO	NO	NO	<b>OK</b>	+/-	+/-
Schiume termoplastiche Foams thermoplastics	+/-	+/-	+/-	NO	NO	NO	<b>OK</b>	NO	<b>OK</b>
Schiume termoindurenti Foams thermosetting	NO	NO	NO	NO	NO	NO	<b>OK</b>	NO	<b>OK</b>

Dati tecnici Performance data	FXSL 	FXTC 	FXHL 	FXFL 	FXPLK 	FXBL 	FXFTC 	FXSP 	FXSCT 
Trazione Pull-out	<b>OK</b>	<b>OK</b>	<b>OK</b>	+/-	+/-	+/-	<b>OK</b>	+/-	<b>OK</b>
Coppia diretta Direct torque	<b>OK</b>	<b>OK</b>	<b>OK</b>	+/-	+/-	+/-	<b>OK</b>	<b>OK</b>	NO

# VITI PER PLASTICA TIPO FX

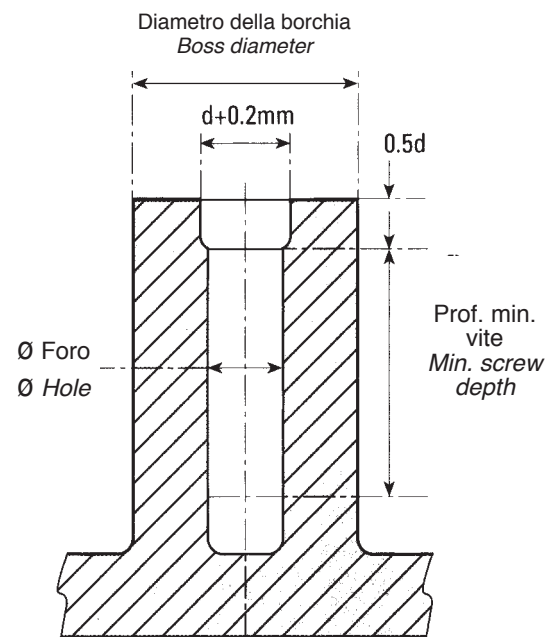
## SCREWS FOR PLASTICS FX TYPE



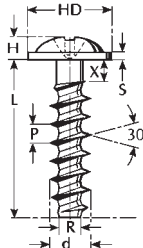
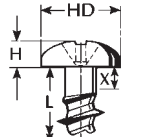
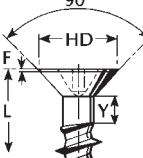
### GUIDA ALLA PROGETTAZIONE

#### DESIGN RECOMMENDATION

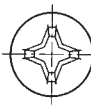
MATERIALE MATERIAL	Ø foro Ø Hole	Ø borchia Ø boss	Prof. min. vite Min. screw depth
ABS	0,8 d	2 d	2 d
Miscela ABS / PC	0,8 d	2 d	2 d
ASA	0,78 d	2 d	2 d
PA 4.6	0,73 d	1,85 d	1,8 d
PA 4.6 - GF 30	0,78 d	1,85 d	1,8 d
PA 6	0,75 d	1,85 d	1,7 d
PA 6 - GF 30	0,8 d	2 d	1,9 d
PA 6.6	0,75 d	1,85 d	1,7 d
PA 6.6 - GF 30	0,82 d	2 d	1,8 d
PBT	0,75 d	1,85 d	1,7 d
PBT - GF 30	0,8 d	1,8 d	1,7 d
PC	0,85 d	2,5 d	2,2 d
PC - GF 30	0,85 d	2,2 d	2,0 d
LOPE	0,7 d	2 d	2 d
HDPE	0,75 d	1,8 d	1,8 d
PET	0,75 d	1,85 d	1,7 d
PET - GF 30	0,8 d	1,8 d	1,7 d
PMMA	0,85 d	2 d	2 d
POM	0,75 d	1,95 d	2 d
PP	0,7 d	2 d	2 d
PP - TF 20	0,72 d	2 d	2 d
PPO	0,85 d	2,5 d	2,2 d
PS	0,8 d	2 d	2 d
PVC (hard)	0,8 d	2 d	2 d
SAN	0,77 d	2 d	1,9 d
PPS	contattare contact	FIXI FIXI	



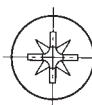
$d$  = Diametro nominale esterno del filetto  
compresa la conicità di 1° del foro  
 $d$  = Nominal external thread dia. hole taper 1° inclusive

<b>DIAMETRO NOMINALE</b> <i>NOMINAL DIAMETER</i>		1,8	2,2	2,5	3,0	3,5	4,0	5,0	6,0	7,0	10,0	
	d	1,8	2,2	2,5	3,0	3,5	4,0	5,0	6,0	7,0	10,0	
	R	1,04	1,25	1,40	1,66	1,91	2,17	2,68	3,19	3,70	5,23	
	P	0,80	0,98	1,12	1,34	1,57	1,79	2,24	2,69	3,14	4,49	
<b>Testa tonda con flangia</b> <i>Flange head</i> 	<b>A PHILLIPS</b>	HD	4,4	5,0	6,0	7,0	8,0	10,0	12,0	14,0		
		H	1,6	1,8	2,1	2,4	2,5	3,2	4,0	4,6		
		S	0,5	0,6	0,7	0,8	0,9	1,0	1,3	1,5		
		N.	1	1	1	2	2	2	3	3		
		N.	1	1	1	2	2	2	3	3		
	<b>B POZI</b>	HD	4,5	5,0	6,0	7,0	8,0	10,0	12,0	14,0	20,0	
		H	1,4	1,5	2,1	2,4	2,6	3,3	3,6	4,2	5,5	
		S	0,5	0,5	0,6	0,7	0,8	1,0	1,2	1,4	2,0	
		N.	T6	T6	T10	T10	T20	T20	T25	T30	T40	
		X Max	0,9	1,1	1,3	1,5	1,8	2,0	2,5	3,0	3,5	5,0
<b>Testa tonda</b> <i>Pan head</i> 	<b>A PHILLIPS</b>	HD	3,6	3,9	4,4	5,3	6,1	7,0	8,8	10,5	12,3	
		H	1,5	1,5	1,7	2,0	2,5	2,7	3,4	4,0	4,5	
		N.	0	1	1	1	2	2	2	3	3	
		N.	0	1	1	1	2	2	2	3	3	
		<b>C TX</b>	HD	3,6	4,0	4,2	5,6	6,9	7,5	8,2	10,8	12,5
	H		1,3	1,4	1,6	2,1	2,3	2,6	2,9	3,8	4,4	6,0
	N.		T6	T6	T7	T10	T10	T20	T20	T25	T30	T40
	X Max		0,9	1,1	1,3	1,5	1,8	2,0	2,5	3,0	3,5	5,0
	<b>Testa svasata</b> <i>Countersunk head</i> 		<b>A PHILLIPS</b>	HD	3,4	3,8	4,7	5,5	7,3	8,4	9,3	11,3
		F		0,20	0,25	0,30	0,35	0,40	0,45	0,50	0,55	0,60
Y Max		0,5		0,6	0,7	0,75	1,00	1,00	1,25	1,50	1,75	
N.		0		1	1	1	2	2	2	2	3	
N.		0		1	1	1	2	2	2	2	3	
<b>B POZI</b>		N.	T6	T6	T8	T8	T15	T20	T20	T30	T40	
		<b>C TX</b>	N.	T6	T6	T8	T8	T15	T20	T20	T30	T40

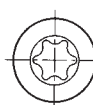
## IMPRONTE STANDARD STANDARD RECESS STYLES



A PHILLIPS



B POZI



C TX

Diam. nominale "Ø" (mm)	1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00	10,00
Lunghezza "L" (mm)										
4 ± 0,39										
5 ± 0,38										
6 ± 0,38										
7 ± 0,45										
8 ± 0,45										
10 ± 0,45										
12 ± 0,55										
14 ± 0,55										
16 ± 0,55										
18 ± 0,55										
20 ± 0,65										
25 ± 0,65										
30 ± 0,65										
35 ± 0,80										
40 ± 0,80										
50 ± 0,80										
60 ± 0,95										
70 ± 0,95										
80 ± 0,95										
90 ± 0,95										
100 ± 0,95										



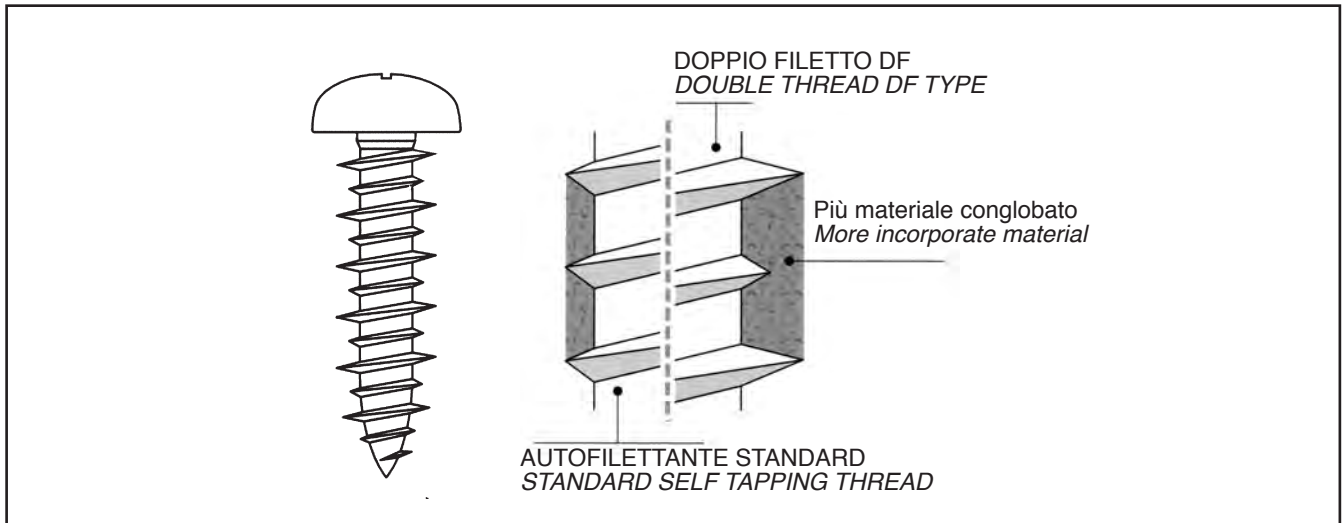
Lunghezze non standard  
Non standard lengths



Lunghezze standard  
Standard lengths

# VITI PER PLASTICA TIPO DF

## SCREWS FOR PLASTICS DF TYPE

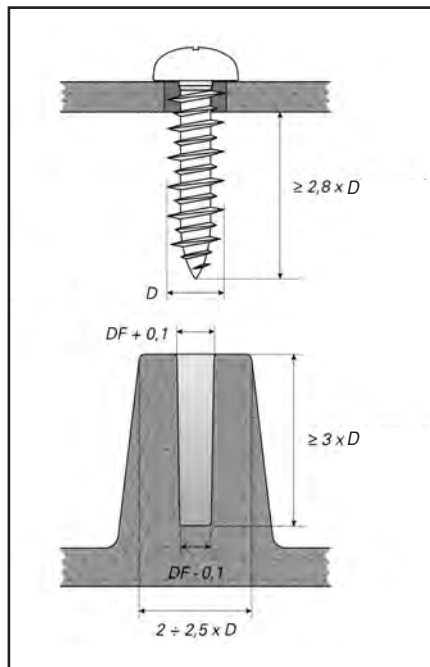


Riduzione fino al 50% del tempo di avvitamento.  
Ottima resistenza allo strappo.

*Reduction installation time until 50%.  
High torque resistance.*

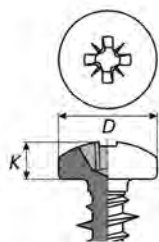
### GUIDA ALLA PROGETTAZIONE

#### DESIGN RECOMMENDATION



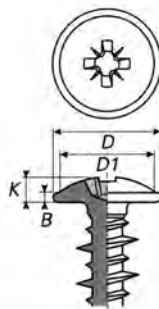
D	DF	DF	Nm
	Materiali termoplastici Thermoplastics materials	Materiali termoindurenti Thermosetting materials	
3	2,1 / 2,4	2,4 / 2,7	0,7
3,5	2,45 / 2,80	2,80 / 3,15	1
4	2,80 / 3,2	3,2 / 3,6	1,4
4,5	3,15 / 3,6	3,6 / 4,05	1,9
5	3,5 / 4	4 / 4,5	2,9
5,5	3,85 / 4,4	4,4 / 4,95	4,3
6	4,2 / 4,8	4,8 / 5,4	6
7	4,9 / 5,6	5,6 / 6,3	10,3

Diametro nominale / Nominal diameter	3,0	3,5	4,0	4,5	5,0	5,5	6,0	7,0
PZ / PH	1	1	2	2	2	2	3	3
TX	8	10	15	15	20	25	25	30
Lung. Max / Max Length	20	25	30	30	35	40	45	50



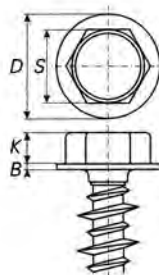
### TESTA CILINDRICA / PAN HEAD

D	max	4.90	5.60	6.90	7.50	8.20	9.50	10.80	12.50
	min	4.60	5.30	6.54	7.14	7.84	9.14	10.37	12.07
K	max	2.00	2.20	2.60	2.80	3.05	3.55	3.95	4.55
	min	1.75	1.95	2.35	2.55	2.75	3.25	3.65	4.25



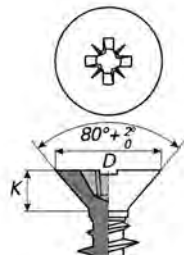
### TESTA TONDA CON FLANGIA / FLANGE HEAD

D	max	6.60	7.40	8.80	9.50	10.30	11.50	13.00	15.00
	min	6.24	7.04	8.44	9.14	9.87	11.07	12.57	14.57
D1	max	4.90	5.60	6.90	7.50	8.20	9.50	10.80	12.50
	min	4.60	5.30	6.54	7.14	7.84	9.14	10.37	12.07
K	max	2.00	2.20	2.60	2.80	3.05	3.55	3.95	4.55
	min	1.75	1.95	2.35	2.55	2.75	3.25	3.65	4.25
B	max	0.72	0.82	0.92	1.02	1.12	1.22	1.32	1.52
	min	0.47	0.57	0.67	0.77	0.87	0.97	1.07	1.27



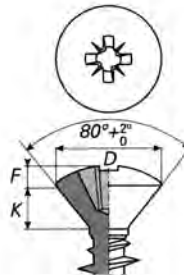
### TESTA ESAGONALE CON FLANGIA / HEXAGON FLANGE HEAD

S	max	-	5.00	5.50	7.00	7.00	8.00	8.00	10.00
	min	-	4.82	5.32	6.78	6.78	7.78	7.78	9.78
D	max	-	6.50	7.21	9.18	9.73	10.61	11.08	13.66
	min	-	6.02	6.61	8.46	9.01	9.85	10.20	12.80
K	max	-	1.87	2.67	2.67	3.17	3.42	4.45	5.25
	min	-	1.62	2.42	2.42	2.92	3.12	4.15	4.95
B	max	-	0.50	0.54	0.80	0.78	0.78	0.99	1.33
	min	-	0.28	0.32	0.47	0.48	0.48	0.55	0.79



### TESTA SVASATA PIANA / COUNTERSUNK HEAD

D	max	4.90	5.50	6.80	7.50	8.10	9.50	10.80	12.40
	min	4.60	5.20	6.44	7.14	7.74	9.14	10.37	11.97
K		1.5	1.7	2.1	2.3	2.5	3.0	3.4	3.8



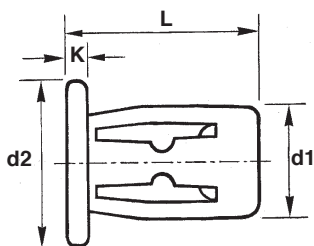
### TESTA SVASATA A CALOTTA / RAISED COUNTERSUNK HEAD

D	max	4.90	5.50	6.80	7.50	8.10	9.50	10.80	12.40
	min	4.60	5.20	6.44	7.14	7.74	9.14	10.37	11.97
K		1.5	1.7	2.1	2.3	2.5	3.0	3.4	3.8
F		0.6	0.9	1.2	1.3	1.4	1.5	1.7	2.0

# INSERTI FILETTATI SPECIALI

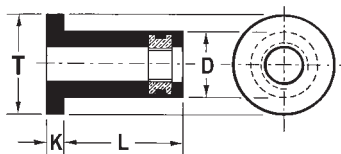
## SPECIAL THREADED INSERTS

### JACKFIX

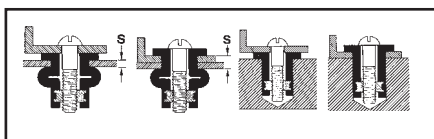





CODICE Code	Filetto	S Spess. Serr.	d1	Ø foro Hole	d2	K	L
JF 4 C	M4	0,4 - 4,7	8,1	8,2	11,9	1,8	16,6
JF 4 L		4,7 - 9,5					21,4
JF 5 C	M5	0,4 - 4,7	9,7	9,8	13,5	1,8	18,2
JF 5 L		4,7 - 9,5					22,6
JF 6 C	M6	0,4 - 4,7	11,2	11,3	15,9	1,8	18,6
JF 6 M		4,7 - 9,5					23,4
JF 6 L		9,5 - 12,7					27,8

### RN



NEOPRENE  
NEOPRENE



CODICE Code		S	D		T	K	L	 Nm
RN 314	M3	0,4 - 4	7,9	8 - 8,3	11	1,4	12,6	0,36
RN 414	M4	0,4 - 4	7,9	8 - 8,3	11	1,4	12,6	0,35
RN 515	M5	0,4 - 4,9	9,6	9,7 - 9,9	12,7	0,9	14,1	0,54
RN 527		7,9 - 16			14	1,3	26,1	0,35
RN 541		20,5 - 30			14	1,3	39,8	1,14
RN 617	M6	0,4 - 2,8	12,7	12,8 - 13	16	1,3	16	1,13
RN 626		0,8 - 4,7			17,5	4,7	21,1	1,69
RN 628		6,4 - 11,5			16,3	1,3	26,7	1,13
RN 822	M8	0,4 - 4,0	15,9	16,0 - 16,2	22,1	3,2	18,3	2,82
RN 834		3,9 - 9,5	15,9		22,1	5,7	27,9	-
RN 852		19,5 - 32,0	18,0		20	1,6	50	-









# RIVETTI PER MATERIE PLASTICHE

## BLIND RIVETS FOR PLASTIC MATERIALS

# 5

15.16

D	L	T	K	Ø foro hole		CODICE Code		
3,2	8	6	0,8	3,5		0,5 - 1	700 N	765 N
	10					1 - 3		
	12					3 - 5		
4,0	10	8	1,2	4,3		1,5 - 5	1150 N	1260 N
	12					3 - 6		
	16					6 - 10		
	20					10 - 14		
	24					14 - 18		
	30					18 - 24		
4,8	10	10	1,3	5,2		0,5 - 4	2400 N	2200 N
	12					2 - 6		
	14					4 - 8		
	16					5 - 10		
	20					10 - 14		
	24					14 - 18		
	30					18 - 22		
	35					22 - 27		
	40					27 - 32		
	45					32 - 37		
	50					37 - 42		

## FA - TT

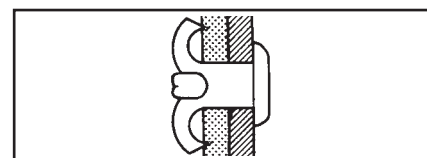
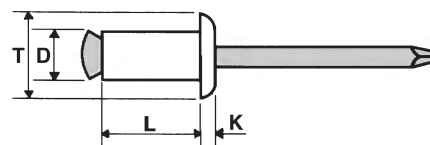
### TESTA TONDA DOME HEAD



boccola / body

alluminio / aluminium

mandrino / mandrel

acciaio zincato / steel zinc plated



4,0	13,6	8	1,4	4,3		1 - 3	800 N	500 N
	18,8					3 - 7		
4,8	15,3	9,6	1,6	5,1		1 - 3	1100 N	900 N
	20,5					3 - 9		
	24,5					5 - 12		

## AL-SOF - TT

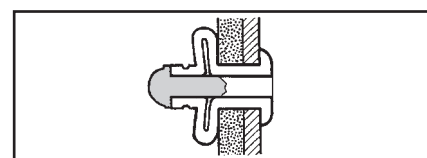
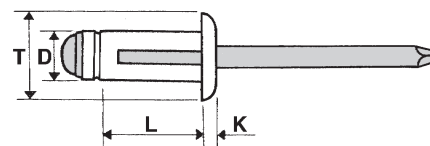
### TESTA TONDA DOME HEAD

boccola / body

alluminio / aluminium

mandrino / mandrel

alluminio / aluminium

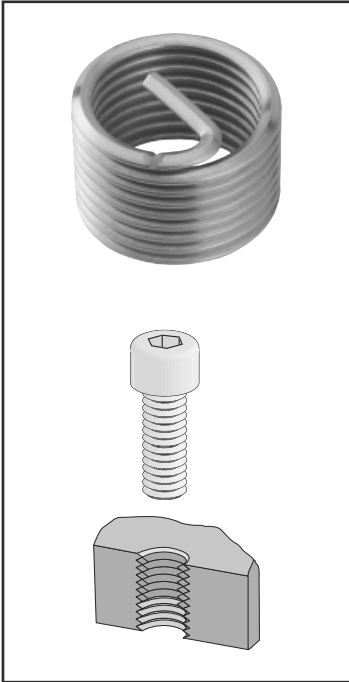




# FILETTI RIPORTATI *WIRE INSERTS*

# FILETTI RIPORTATI

## WIRE INSERTS



I filetti riportati sono costruiti in inox (**X 10 Cr Ni 18-8**) e vengono utilizzati per rinforzare o riparare tutti i tipi di foro. Particolarmente adatti per i materiali teneri (alluminio, magnesio), i filetti riportati sono resistenti al calore (fino a 425 °C per brevi periodi, oltre i 325° senza interruzioni), alla corrosione, agli agenti atmosferici e alle sollecitazioni meccaniche.

Vengono utilizzati in diversi settori (ferroviario, meccanico, militare, elettronico, automobilistico, aerospaziale). E' possibile trattare superficialmente i filetti riportati con lubrificanti a secco, zincature o argentature.

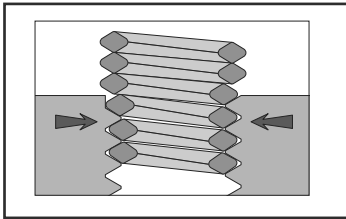
E' disponibile inoltre una versione colorata di verde che rende più visibile la presenza del filetto riportato all'interno dei fori delle basi di alluminio.

**Compatibili con la DIN 8140.**

*Wire inserts are made in stainless steel (X 10 Cr Ni 18-8) and are used to reinforce or repair all types of tappings.*

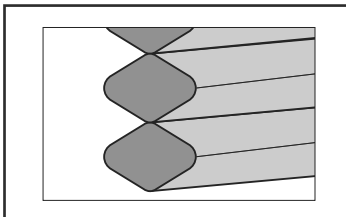
*Particularly adapted for soft materials (aluminium, magnesium), wire inserts presents a high resistance to thermal (up to 425°C for a short period of time and up to 325° C without interruption), corrosive, atmospheric conditions and mechanical strain. They are used in different areas ( railway, mechanics, armament, electronics, car industry, aerospace). Possible coatings: dried lubrication, zinc plating, silver plating. Wire insert can be delivered in green colour that makes the thread visible to the eye when it is inserted in aluminium tappings.*

**Comply with the DIN 8140.**



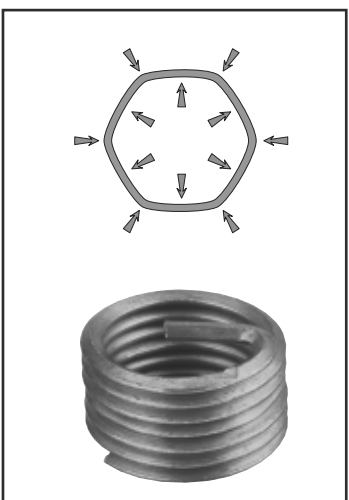
Siccome il diametro originale dei filetti riportati è più largo del foro nel quale viene inserito, è **impossibile svitarlo**.

*As its original diameter is larger than the one of the tapping which receives it, **It is impossible to unscrew.***



Il filo in inox di sezione diamantata ha una **resistenza alla trazione di 1400 N/mm<sup>2</sup>**.

*Diamond-sectioned stainless steel rolled wired with a 1400 N/mm<sup>2</sup> tensile strength.*



### “Versione autobloccante”

La versione autobloccante dei filetti riportati presenta una o più spire di forma poligonale che esercitando una pressione sulle pareti del foro filettato, rendono impossibile lo svitamento della vite.

La versione autobloccante viene fornita colorata di rosso.

### “Self locking version”

*Self locking version of thread insert presents one or more deformed polygon shaped turns which exert pressure on the thread walls thus it makes it impossible to unscrew.*

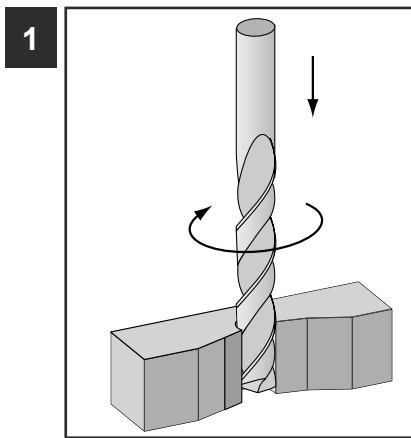
*The self locking version is in red color.*

# ISTRUZIONI PER L'ASSEMBLAGGIO

## ASSEMBLY INSTRUCTIONS

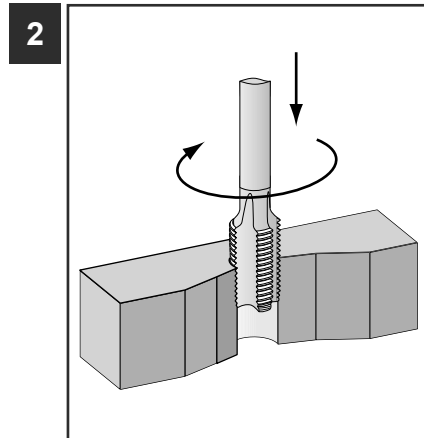
# 6

2.20



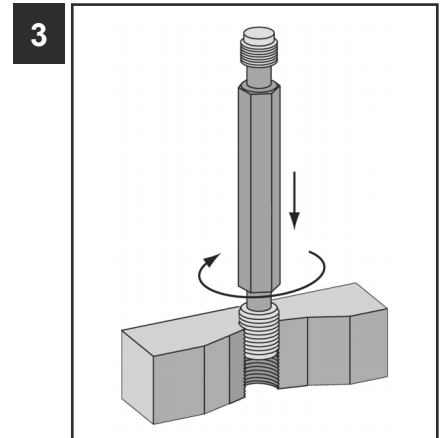
1

Forare  
*Drilling*



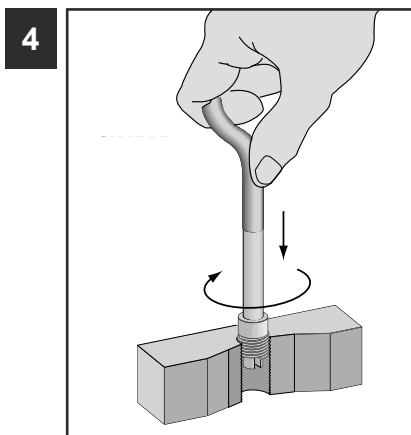
2

Maschiare  
*Tapping*



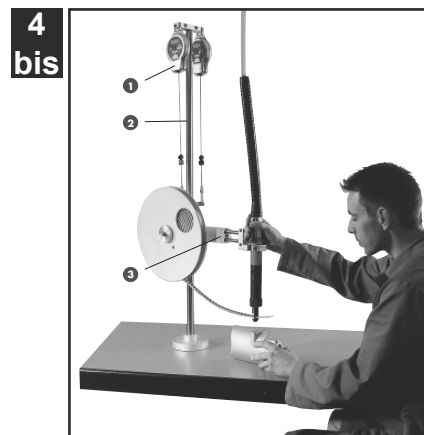
3

Controllo della maschiatura  
*Controlling the tapping*



4

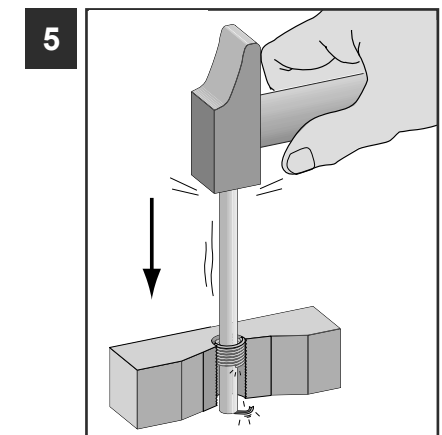
Inserire il filetto riportato  
*Installing wire insert*



4  
bis

Per un inserimento più veloce i filetti riportati possono essere montati in strisce di plastica arrotolate e montati in automatico.

*For a faster directly use wire insert can be installed in a plastic strip rolled and fastened quickly.*



5

Eliminare il codolo di trascinamento.  
*Break the tail off.*

# SCELTA DEL MASCHIO

## TAP CHOICE

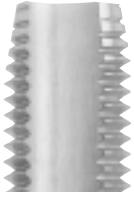


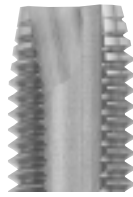



### LEGENDA

OK = UTILIZZO OTTIMO  
OPTIMUM USE

+/- = POSSIBILE UTILIZZO  
POSSIBLE USE

NO = UTILIZZO NON CONSIGLIATO  
NOT RECOMMENDED

	 <b>MASCHIO STANDARD</b> STANDARD TAP	 <b>MASCHIO SGROSSATORE</b> UNDERSIZED TAP	 <b>MASCHIO FINITORE</b> FINISHING TAP	 <b>MASCHIO PER FORI APERTI</b> OPEN HOLES TAP	 <b>MASCHIO PER FORI CIECHI</b> BLIND HOLES TAP
<b>VANTAGGI</b> ADVANTAGES	E' il maschio più comune usato in particolare per maschiature eseguite manualmente. <i>Commonly used especially for manual tapping.</i>	Da usare prima del maschio finitore in materiali duri. <i>It must be used before finishing tap in hard materials.</i>	Da usare dopo il maschio sgrossatore. <i>It must be used after undersized tap.</i>	Ideale per fori aperti. <i>Ideal for open holes.</i>	Ideale per fori ciechi. <i>Ideal for blind holes.</i>
<b>FORI APERTI</b> OPEN HOLES	+/-	+/-	+/-	OK	NO
<b>FORI CHIUSI</b> BLIND HOLES	+/-	+/-	+/-	NO	OK
<b>FORI MANUALI</b> MANUAL TAPPING	OK	+/-	+/-	OK	+/-
<b>FORI A MACCHINA</b> TOOL TAPPING	+/-	OK	OK	OK	OK
<b>MATERIALI TENERI</b> SOFT MATERIALS <i>R &lt; 80 Kg</i>	OK	+/-	+/-	OK	OK
<b>MATERIALI DURI</b> HARD MATERIALS <i>R &gt; 80 Kg</i>	NO	OK	OK	OK	+/-

# ACCESSORI ACCESSORIES

# 6

4.20



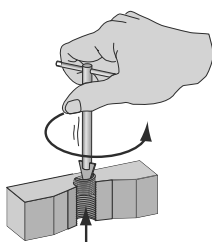
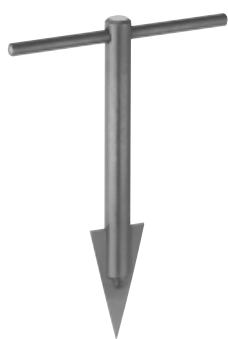
Tampone di controllo  
della maschiatura  
*Control plug gauge*



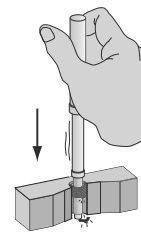
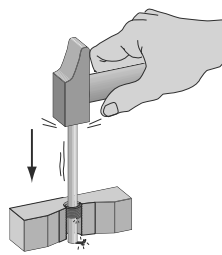
Attrezzo di posa  
pneumatico  
*Pneumatic  
inserting tool*



Attrezzo di posa  
manuale  
*Manual  
inserting tool*



Estrattore  
*Extractor*



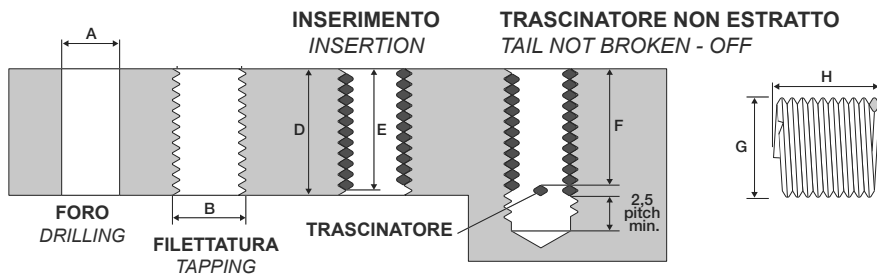
Troncatore manuale e automatico  
*Break-off tool manual and automatic*



*Blister e monokit*

# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

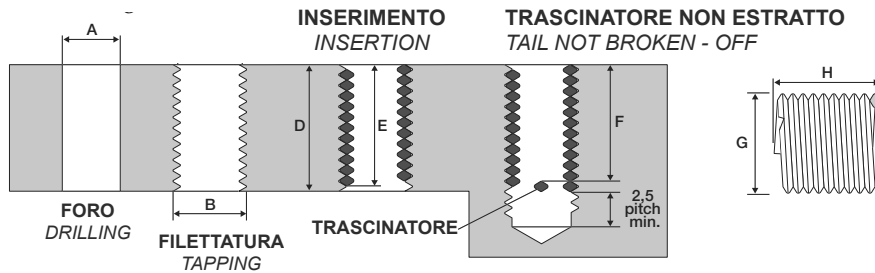
Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP B Ø EST. MIN. EXT. MIN
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	
M 2 x 0,40	1 d	2,00	2,90	2,60 2,75	2,10	2,090 + 0,090	2,520
	1,5 d	3,00	4,90				
	2 d	4,00	6,90				
	2,5 d	5,00	8,90				
	3 d	6,00	10,90				
M 2,5 x 0,45	1 d	2,50	3,60	3,15 3,30	2,60	2,597 + 0,100	3,084
	1,25 d	3,12	4,75				
	1,5 d	3,75	6,00				
	2 d	5,00	8,20				
	2,5 d	6,25	10,60				
M 3 x 0,50	1 d	3,00	3,95	3,70 3,90	3,20	3,108 + 0,112	3,650
	1,25 d	3,75	4,95				
	1,5 d	4,50	6,35				
	2 d	6,00	8,80				
	2,5 d	7,50	11,25				
M 3,5 x 0,60	1 d	3,50	3,90	4,35 4,45	3,70	3,630 + 0,125	4,280
	1,5 d	5,25	6,60				
	2 d	7,00	9,15				
	2,5 d	8,75	11,80				
	3 d	10,50	14,00				
M 4 x 0,70	1 d	4,00	3,80	5,00 5,15	4,20	4,152 + 0,140	4,910
	1,25 d	5,00	5,05				
	1,5 d	6,00	6,25				
	2 d	8,00	8,65				
	2,5 d	10,00	11,20				
M 5 x 0,80	1 d	5,00	4,45	6,10 6,30	5,20	5,174 + 0,160	6,040
	1,25 d	6,25	5,70				
	1,5 d	7,50	7,15				
	2 d	10,00	10,10				
	2,5 d	12,50	12,80				
M 6 x 1,00	1 d	6,00	4,30	7,40 7,65	6,30	6,217 + 0,190	7,300
	1,25 d	7,50	5,55				
	1,5 d	9,00	7,10				
	2 d	12,00	9,85				
	2,5 d	15,00	12,60				
3 d	18,00	15,00					

# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH

# 6

6.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

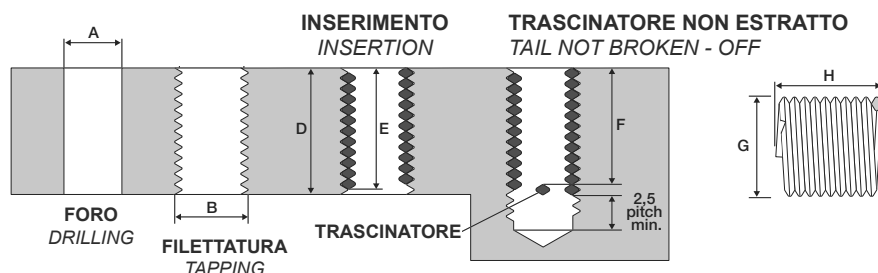
$$F = D - 1,5 \times \text{Pitch}$$

ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G ø INIZIALE INITIAL STATE MIN - MAX	A ø FORO DRILLING		MASCHIO TAP B ø EST. MIN. EXT. MIN
					ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	
M 7 x 1,00	1 d	7,00	5,45	8,40 8,65	7,30	7,217 + 0,190	8,300
	1,5 d	10,50	8,45				
	2 d	14,00	11,40				
	2,5 d	17,50	14,75				
	3 d	21,00	17,90				
M 8 x 1,00	1 d	8,00	6,30	9,45 9,75	8,30	8,217 + 0,190	9,300
	1,5 d	12,00	9,80				
	2 d	16,00	13,30				
	2,5 d	20,00	17,00				
	3 d	24,00	20,50				
M 8 x 1,25	1 d	8,00	4,80	9,70 9,90	8,40	8,271 + 0,212	9,624
	1,25 d	10,00	6,10				
	1,5 d	12,00	7,50				
	2 d	16,00	10,75				
	2,5 d	20,00	13,70				
3 d	24,00	16,65					
M 9 x 1,25	1 d	9,00	5,40	10,70 10,90	9,40	9,271 + 0,212	10,624
	1,5 d	13,50	8,70				
	2 d	18,00	12,10				
	2,5 d	22,50	15,50				
	3 d	27,00	18,35				
M 10 x 1,00	1 d	10,00	7,90	11,60 11,90	10,30	10,217 + 0,190	11,300
	1,5 d	15,00	12,60				
	2 d	20,00	17,00				
	2,5 d	25,00	21,55				
	3 d	30,00	26,05				
M 10 x 1,25	1 d	10,00	6,15	11,75 12,00	10,40	10,271 + 0,212	11,624
	1,5 d	15,00	10,00				
	2 d	20,00	13,50				
	2,5 d	25,00	17,00				
	3 d	30,00	20,70				
M 10 x 1,50	1 d	10,00	5,00	12,05 12,35	10,50	10,324 + 0,236	11,948
	1,25 d	12,50	6,50				
	1,5 d	15,00	8,10				
	2 d	20,00	11,25				
	2,5 d	25,00	14,25				
3 d	30,00	17,25					



# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

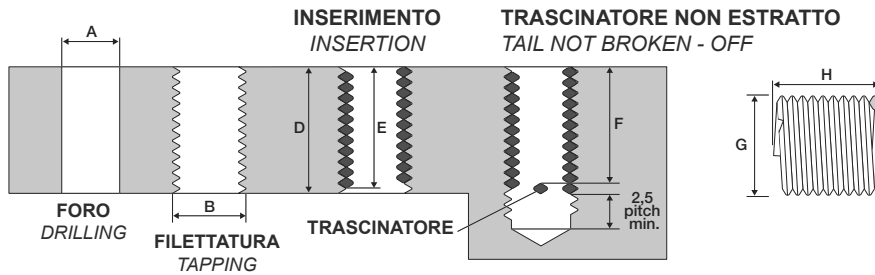
Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø EST. MIN. EXT. MIN
M 11 x 1,50	1 d	11,00	5,60	13,05 13,35	11,50	11,324 + 0,236	12,948
	1,5 d	16,50	9,00				
	2 d	22,00	12,35				
	2,5 d	27,50	15,75				
	3 d	33,00	18,95				
M 12 x 1,00	1 d	12,00	9,75	13,70 14,10	12,30	12,217 + 0,190	13,300
	1,5 d	18,00	15,20				
	2 d	24,00	20,50				
	2,5 d	30,00	25,95				
	3 d	36,00	31,30				
M 12 x 1,25	1 d	12,00	7,75	13,75 14,05	12,40	12,271 + 0,212	13,624
	1,5 d	18,00	12,15				
	2 d	24,00	16,65				
	2,5 d	30,00	21,15				
	3 d	36,00	25,65				
M 12 x 1,50	1 d	12,00	6,30	14,10 14,40	12,50	12,324 + 0,236	13,948
	1,5 d	18,00	10,00				
	2 d	24,00	13,80				
	2,5 d	30,00	16,00				
	3 d	36,00	21,25				
M 12 x 1,75	0,75 d	9,00	3,70	14,35 14,60	12,50	12,379 + 0,265	14,274
	1 d	12,00	5,20				
	1,25 d	15,00	6,90				
	1,5 d	18,00	8,40				
	2 d	24,00	11,75				
	2,5 d	30,00	14,75				
	3 d	36,00	18,05				
M 14 x 1,50	0,75 d	10,50	5,40	16,25 16,65	14,50	14,324 + 0,236	15,948
	1 d	14,00	7,50				
	1,5 d	21,00	11,85				
	2 d	28,00	16,15				
	2,5 d	35,00	20,10				
	3 d	42,00	24,55				
M 14 x 2,00	0,75 d	10,50	4,00	16,80 17,15	14,50	14,433 + 0,300	16,598
	1 d	14,00	5,60				
	1,25 d	17,50	7,20				
	1,5 d	21,00	8,80				
	2 d	28,00	12,00				
	2,5 d	35,00	15,20				
	3 d	42,00	18,40				

# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH

# 6

8.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

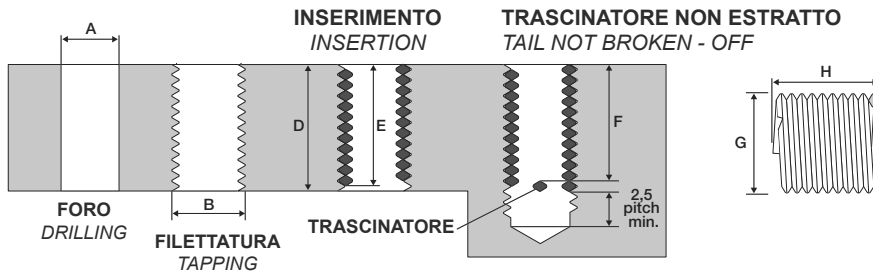
$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP B Ø EST. MIN. EXT. MIN
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	
M 16 x 1,50	0,75 d	12,00	6,50	18,40 18,80	16,50	16,324 + 0,236	17,948
	1 d	16,00	9,00				
	1,25 d	20,00	11,35				
	1,5 d	24,00	13,85				
	2 d	32,00	18,70				
	2,5 d	40,00	23,65				
M 16 x 2,00	0,75 d	12,00	4,65	18,80 19,10	16,50	16,433 + 0,300	18,598
	1 d	16,00	6,55				
	1,25 d	20,00	8,40				
	1,5 d	24,00	10,20				
	2 d	32,00	13,95				
	2,5 d	40,00	17,70				
M 18 x 1,50	0,75 d	13,50	7,30	20,60 21,00	18,50	18,324 + 0,236	19,948
	1 d	18,00	9,90				
	1,25 d	22,50	12,70				
	1,5 d	27,00	15,55				
M 18 x 2,00	0,75 d	13,50	5,20	21,00 21,40	18,50	18,433 + 0,300	20,598
	1 d	18,00	7,25				
	1,25 d	22,50	9,10				
	1,5 d	27,00	11,45				
M 18 x 2,50	0,75 d	13,50	3,80	21,35 21,70	18,75	18,541 + 0,355	21,248
	1 d	18,00	5,60				
	1,25 d	22,50	6,40				
	1,5 d	27,00	9,05				
M 20 x 1,50	0,75 d	15,00	8,15	23,00 23,50	20,50	20,433 + 0,300	22,598
	1 d	20,00	11,05				
	1,25 d	25,00	13,80				
	1,5 d	30,00	17,20				
M 20 x 2,00	0,75 d	15,00	6,00	22,90 23,40	20,50	20,433 + 0,300	22,598
	1 d	20,00	8,25				
	1,25 d	25,00	10,45				
	1,5 d	30,00	12,90				
	2 d	40,00	17,35				

# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

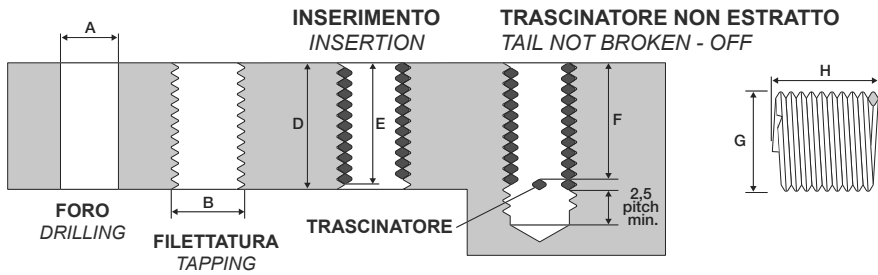
Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø EST. MIN. EXT. MIN
M 20 x 2,50	0,75 d	15,00	4,55	23,35 23,75	20,75	20,541 + 0,355	23,248
	1 d	20,00	6,40				
	1,25 d	25,00	8,10				
	1,5 d	30,00	10,15				
	2 d	40,00	13,90				
M 22 x 1,50	0,5 d	11,00	5,75	25,00 25,50	22,50	22,324 + 0,236	23,948
	0,75 d	16,50	9,05				
	1 d	22,00	12,30				
	1,25 d	27,50	15,55				
	1,5 d	33,00	19,00				
M 22 x 2,00	0,75 d	16,50	6,70	25,00 25,50	22,50	22,433 + 0,300	24,598
	1 d	22,00	9,15				
	1,25 d	27,50	11,55				
	1,5 d	33,00	14,30				
	2 d	44,00	19,35				
M 22 x 2,50	0,75 d	16,50	5,15	25,40 25,80	22,75	22,541 + 0,355	25,248
	1 d	22,00	7,10				
	1,25 d	27,50	9,10				
	1,5 d	33,00	11,25				
	2 d	44,00	15,50				
M 24 x 1,50	0,5 d	12,00	6,35	27,00 27,50	24,50	24,325 + 0,236	25,948
	0,75 d	18,00	10,05				
	1 d	24,00	13,65				
	1,25 d	30,00	17,15				
	1,5 d	36,00	20,95				
M 24 x 3,00	0,75 d	18,00	4,55	28,30 28,80	24,75	24,649 + 0,400	27,897
	1 d	24,00	6,25				
	1,25 d	30,00	8,15				
	1,5 d	36,00	10,10				
	2 d	48,00	14,15				
M 26 x 1,50	0,5 d	13,00	6,80	29,50 30,00	26,50	26,325 + 0,236	27,948
	0,75 d	19,50	10,80				
	1 d	26,00	14,70				
	1,25 d	32,50	18,45				
	1,5 d	39,00	22,70				

# FILETTI RIPORTATI PASSO METRICO

## WIRE INSERTS METRIC PITCH

# 6

10.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

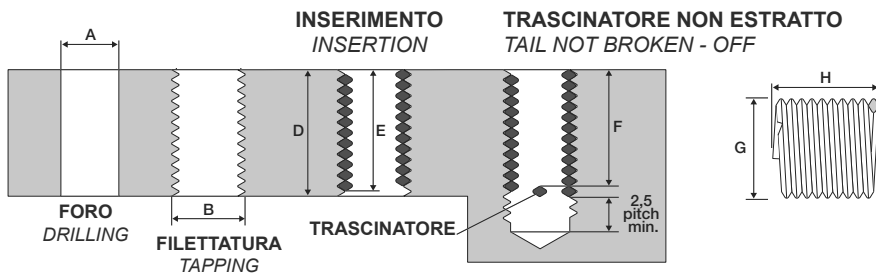
$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø EST. MIN. EXT. MIN
M 27 x 3,00	0,75 d	20,25	5,05	31,60 32,10	27,75	27,649 + 0,400	30,897
	1 d	27,00	7,20				
	1,25 d	33,75	9,35				
	1,5 d	40,50	11,60				
	2 d	54,00	15,65				
M 30 x 3,50	0,75 d	22,50	4,90	34,90 35,40	31,00	30,757 + 0,450	34,546
	1 d	30,00	7,05				
	1,25 d	37,50	9,05				
	1,5 d	45,00	11,05				
	2 d	60,00	15,00				

# FILETTI RIPORTATI PASSO UNC

## WIRE INSERTS UNC PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

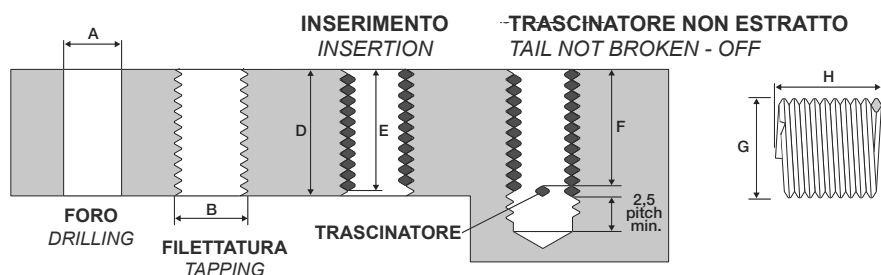
$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO No. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
<b>UNC</b>  2-56 2,18 x 0,453	1 d	0,086 2,2	3,00				
	1,5 d	0,129 3,3	5,25				
	2 d	0,172 4,3	7,40	0,110 0,116 2,80 2,95	0,0960 2,4	0,0899 0,0961 2,31 2,44	0,1118 2,84
	2,5 d	0,215 5,4	9,60				
	3 d	0,258 6,5	11,90				
4-40 2,84 x 0,635	1 d	0,112 2,9	2,75				
	1,5 d	0,168 4,3	4,75				
	2 d	0,224 5,8	6,75	0,142 0,154 3,60 3,90	0,1200 3,1	0,1175 0,1252 3,00 3,15	0,1445 3,67
	2,5 d	0,280 7,2	8,90				
	3 d	0,336 8,5	10,90				
5-40 3,17 x 0,635	1 d	0,125 3,2	3,25				
	1,5 d	0,188 4,8	5,50				
	2 d	0,250 6,4	7,75	0,157 0,167 4,00 4,25	0,1360 3,4	0,1305 0,1373 3,33 3,48	0,1575 4,00
	2,5 d	0,312 7,9	10,00				
	3 d	0,375 9,5	12,25				
6-32 3,51 x 0,794	1 d	0,138 3,5	2,75				
	1,5 d	0,207 5,3	4,75				
	2 d	0,276 7,0	6,90	0,177 0,187 4,50 4,75	0,1495 3,8	0,1448 0,1527 3,68 3,89	0,1787 4,54
	2,5 d	0,345 8,8	8,90				
	3 d	0,414 10,5	10,90				
8-32 4,17 x 0,794	1 d	0,164 4,2	3,50				
	1,5 d	0,246 6,3	6,00				
	2 d	0,328 8,3	8,40	0,205 0,215 5,20 5,45	0,1770 4,5	0,1708 0,1781 4,34 4,52	0,2047 5,20
	2,5 d	0,410 10,5	10,75				
	3 d	0,492 12,5	13,25				
10-24 4,83 x 1,058	1 d	0,190 4,8	2,90				
	1,5 d	0,285 7,2	5,00				
	2 d	0,380 9,6	7,10	0,244 0,256 6,20 6,50	0,2055 5,2	0,1990 0,2080 5,06 5,28	0,2441 6,20
	2,5 d	0,475 12,1	9,25				
	3 d	0,570 14,5	11,40				
1/4-20 6,35 x 1,270	1 d	0,250 6,4	3,40				
	1,5 d	0,375 9,5	5,75				
	2 d	0,500 12,7	8,00	0,315 0,329 8,00 8,35	0,2660 6,8	0,2608 0,2704 6,62 6,86	0,3150 8,00
	2,5 d	0,625 15,9	10,40				
	3 d	0,750 19,0	12,75				

# FILETTI RIPORTATI PASSO UNC WIRE INSERTS UNC PITCH

# 6

12.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

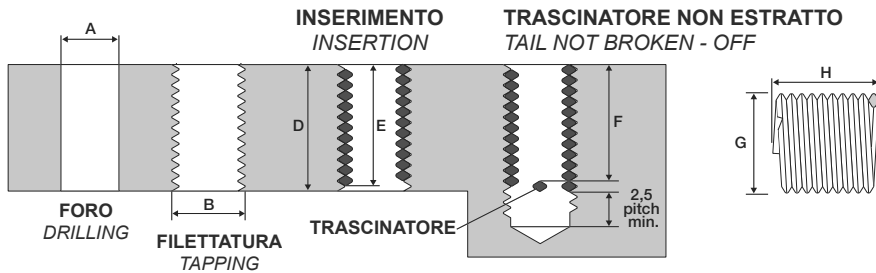
$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGTH	H N. DELLE SPIRE ALLO STATO LIBERO No. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
5/16-18 7,94 x 1,411	1 d	0,312 7,9	4,00	0,382 0,398 9,70 10,10	0,3320 8,4	0,3245 0,3342 8,24 8,49	0,3846 9,77
	1,5 d	0,469 11,9	6,60				
	2 d	0,625 15,9	9,25				
	2,5 d	0,781 19,8	11,90				
	3 d	0,937 23,8	14,60				
3/8-16 9,52 x 1,588	1 d	0,375 9,5	4,40	0,453 0,469 11,50 11,90	0,3970 10,1	0,3885 0,3987 9,89 10,12	0,4563 11,59
	1,5 d	0,562 14,3	7,25				
	2 d	0,750 19,1	10,00				
	2,5 d	0,937 23,8	12,90				
	3 d	1,125 28,6	15,75				
7/16-14 11,11 x 1,814	1 d	0,438 11,1	4,50	0,528 0,545 13,40 13,85	0,4531 11,7	0,4530 0,4639 11,51 11,78	0,5303 13,47
	1,5 d	0,656 16,7	7,40				
	2 d	0,875 22,2	10,25				
	2,5 d	1,094 27,8	13,10				
	3 d	1,312 33,3	16,10				
1/2-13 12,70 x 1,954	1 d	0,500 12,7	4,90	0,598 0,614 15,20 15,60	0,5312 13,2	0,5166 0,5273 13,12 13,40	0,6000 15,24
	1,5 d	0,750 19,1	7,90				
	2 d	1,000 25,4	11,00				
	2,5 d	1,250 31,8	14,10				
	3 d	1,500 38,1	17,10				
9/16-12 14,29 x 2,117	1 d	0,562 14,3	5,10	0,669 0,685 17,00 17,40	0,5938 15,0	0,5806 0,5918 14,75 15,03	0,6709 17,04
	1,5 d	0,844 21,5	8,25				
	2 d	1,125 28,6	11,50				
	2,5 d	1,406 35,7	14,75				
	3 d	1,688 42,9	17,90				
5/8-11 15,87 x 2,309	1 d	0,625 15,9	5,25	0,744 0,760 18,90 19,30	0,6562 16,6	0,6447 0,6564 16,38 16,68	0,7433 18,88
	1,5 d	0,937 23,8	8,50				
	2 d	1,250 31,8	11,75				
	2,5 d	1,562 39,7	15,00				
	3 d	1,875 47,6	18,40				
3/4-10 19,05 x 2,540	1 d	0,750 19,1	5,90	0,882 0,898 22,40 22,80	0,7812 19,8	0,7716 0,7838 19,60 19,91	0,8799 22,35
	1,5 d	1,125 28,6	9,40				
	2 d	1,500 38,1	13,00				
	2,5 d	1,875 47,6	16,50				
	3 d	2,250 57,2	20,10				

# FILETTI RIPORTATI PASSO UNC

## WIRE INSERTS UNC PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

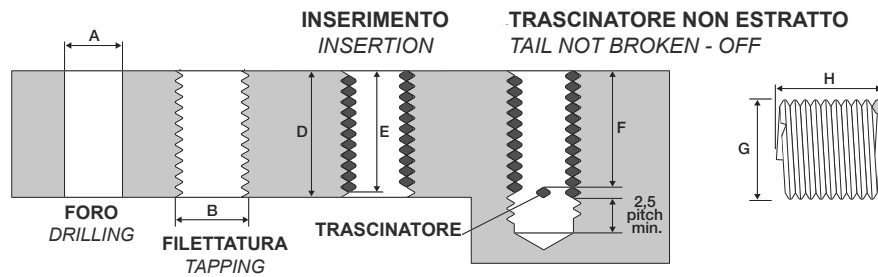
Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO No. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
7/8-9 22,22 x 2,822	1 d	0,875 22,2	6,25	1,024 1,039 26,00 26,40	0,9062	0,8990 0,9119 22,84 23,18	1,0193 25,89
	1,5 d	1,312 33,3	10,00				
	2 d	1,750 44,5	13,75				
	2,5 d	2,187 55,6	17,50				
	3 d	2,625 66,7	21,25				
1"-8 25,40 x 3,175	1 d	1,000 25,4	6,40	1,165 1,185 29,60 30,10	1,0312	1,0271 1,0421 26,09 26,47	1,1626 29,53
	1,5 d	1,500 38,1	10,10				
	2 d	2,000 50,8	14,00				
	2,5 d	2,500 63,5	17,75				
	3 d	3,000 76,2	21,60				
1 1/8-7 28,57 x 3,629	1 d	1,125 28,6	6,10	1,315 1,339 33,40 34,00	1,1719	1,1559 1,1730 29,36 29,74	1,3106 33,29
	1,5 d	1,687 42,9	9,90				
	2 d	2,250 57,2	13,60				
	2,5 d	2,812 71,4	17,50				
	3 d	3,375 85,7	21,25				
1 1/4-7 31,75 x 3,629	1 d	1,250 31,8	7,00	1,441 1,465 36,60 37,20	1,2969	1,2809 1,2980 32,54 32,92	1,4354 36,46
	1,5 d	1,875 47,6	11,25				
	2 d	2,500 63,5	15,40				
	2,5 d	3,125 79,4	19,55				
	3 d	3,750 95,3	23,80				
1 3/8-6 34,92 x 4,234	1 d	1,375 34,9	6,50	1,594 1,622 40,50 41,20	1,4219	1,4110 1,4310 35,84 36,35	1,5913 40,42
	1,5 d	2,062 52,4	10,50				
	2 d	2,750 69,9	14,40				
	2,5 d	3,437 87,3	18,45				
	3 d	4,125 104,8	22,30				
1 1/2-6 38,10 x 4,234	1 d	1,500 38,1	7,20	1,724 1,748 43,80 44,40	1,5469	1,5360 1,5560 39,02 39,53	1,7165 43,60
	1,5 d	2,250 57,2	11,50				
	2 d	3,000 76,2	15,90				
	2,5 d	3,750 95,3	20,15				
	3 d	4,500 114,3	24,55				

# FILETTI RIPORTATI PASSO UNF

## WIRE INSERTS UNF PITCH

# 6

14.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

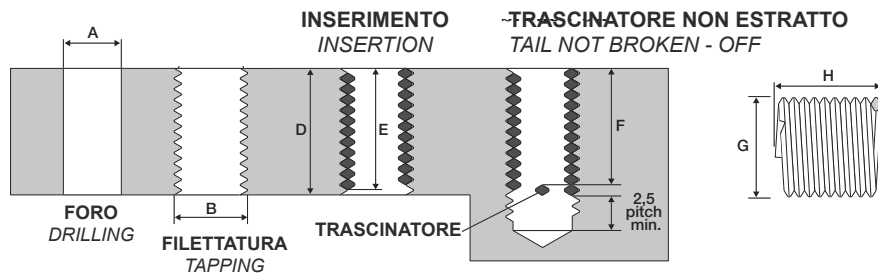
$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
<b>UNF</b>  <b>6-40</b> 3,51 x 0,635	1 d	0,138 3,5	3,55				
	1,5 d	0,207 5,3	6,10				
	2 d	0,276 7,0	8,55	0,173 0,181	0,1495	0,1435 0,1503	0,1705
	2,5 d	0,345 8,8	10,95	4,40 4,60	3,7	3,66 3,81	4,33
	3 d	0,414 10,5	13,55				
<b>8-36</b> 4,16 x 0,705	1 d	0,164 4,2	4,00				
	1,5 d	0,246 6,3	6,70				
	2 d	0,328 8,3	9,35	0,203 0,211	0,1770	0,1701 0,1771	0,2000
	2,5 d	0,410 10,5	11,90	5,15 5,35	4,4	4,32 4,47	5,08
	3 d	0,492 12,5	14,65				
<b>10-32</b> 4,83 x 0,794	1 d	0,190 4,8	4,20				
	1,5 d	0,285 7,2	7,05				
	2 d	0,380 9,6	9,75	0,234 0,244	0,2031	0,1968 0,2041	0,2307
	2,5 d	0,475 12,1	12,55	5,95 6,20	5,1	5,00 5,16	5,86
	3 d	0,570 14,5	15,25				
<b>1/4-28</b> 6,35 x 0,907	1 d	0,250 6,4	5,10				
	1,5 d	0,375 9,5	8,40				
	2 d	0,500 12,7	11,60	0,301 0,315	0,2638	0,2577 0,2646	0,3012
	2,5 d	0,625 15,9	14,75	7,65 8,00	6,7	6,55 6,72	7,53
	3 d	0,750 19,0	17,95				
<b>5/16-24</b> 7,94 x 1,058	1 d	0,312 7,9	5,65				
	1,5 d	0,469 11,9	9,15				
	2 d	0,625 15,9	12,55	0,372 0,382	0,3281	0,3215 0,3288	0,3665
	2,5 d	0,781 19,8	16,00	9,45 9,70	8,2	8,17 8,35	9,31
	3 d	0,937 23,8	19,50				
<b>3/8-24</b> 9,52 x 1,058	1 d	0,375 9,5	7,10				
	1,5 d	0,562 14,3	11,30				
	2 d	0,750 19,1	15,40	0,437 0,457	0,3906	0,3840 0,3910	0,4291
	2,5 d	0,938 23,8	19,60	11,10 11,60	9,8	9,75 9,93	10,90
	3 d	1,125 28,6	23,75				



# FILETTI RIPORTATI PASSO UNF

## WIRE INSERTS UNF PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

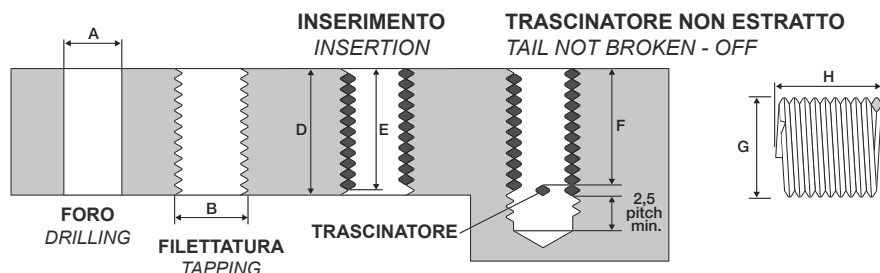
$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO No. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING			MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN	
7/16-20 11,11 x 1,270	1 d	0,438 11,1	6,85	0,508 0,524 12,90 13,30	0,4531 11,5	0,4483 0,4561 11,39 11,59	0,5024 12,76	
	1,5 d	0,656 16,7	11,00					
	2 d	0,875 22,2	15,15					
	2,5 d	1,094 27,8	19,20					
	3 d	1,312 33,3	23,35					
1/2-20 12,70 x 1,270	1 d	0,500 12,7	8,20	0,571 0,587 14,50 14,90	0,5156 13,1	0,5108 0,5186 12,97 13,17	0,5650 14,35	
	1,5 d	0,750 19,1	12,90					
	2 d	1,000 25,4	17,60					
	2,5 d	1,250 31,8	22,30					
	3 d	1,500 38,1	27,00					
9/16-18 14,29 x 1,411	1 d	0,562 14,3	8,20	0,646 0,665 16,40 16,90	0,5781 14,7	0,5745 0,5826 14,59 14,79	0,6346 16,12	
	1,5 d	0,844 21,5	12,85					
	2 d	1,125 28,6	17,60					
	2,5 d	1,406 35,7	22,40					
	3 d	1,687 42,9	27,05					
5/8-18 15,88 x 1,411	1 d	0,625 15,9	9,20	0,717 0,732 18,20 18,60	0,6406 16,3	0,6370 0,6451 16,18 16,38	0,6972 17,71	
	1,5 d	0,937 23,8	14,40					
	2 d	1,250 31,8	19,65					
	2,5 d	1,562 39,7	24,75					
	3 d	1,875 47,6	30,05					
3/4-16 19,05 x 1,588	1 d	0,750 19,1	10,00	0,850 0,870 21,60 22,10	0,7656 19,5	0,7635 0,7720 19,39 19,60	0,8311 21,11	
	1,5 d	1,125 28,6	15,55					
	2 d	1,500 38,1	21,15					
	2,5 d	1,875 47,7	26,70					
	3 d	2,250 57,2	32,35					
7/8-14 22,22 x 1,814	1 d	0,875 22,2	10,30	0,984 1,008 25,00 25,60	0,8906 22,7	0,8905 0,8994 22,62 22,84	0,9677 24,58	
	1,5 d	1,312 33,3	16,10					
	2 d	1,750 44,5	21,90					
	2,5 d	2,187 55,6	27,65					
	3 d	2,625 66,7	33,50					

# FILETTI RIPORTATI PASSO BSP WIRE INSERTS BSP PITCH

# 6

16.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

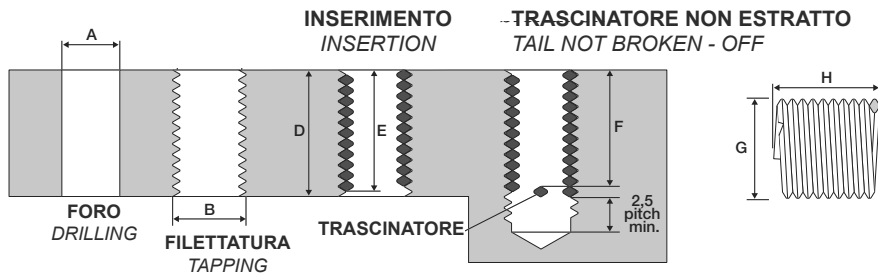
$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
				Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
1/8-28 9,728 x 0,907	4,8	3,70	11,2 11,6	10,1	9,91 10,16	10,82
	6,4	5,20				
	7,9	6,85				
	9,5	8,40				
1/4-19 13,157 x 1,337	9,5	5,45	15,2 15,7	13,7	13,46 13,72	14,74
	12,7	7,60				
	15,9	9,90				
	19	12,15				
3/8-19 16,662 x 1,337	9,5	5,40	19,0 19,5	17,2	17,02 17,27	18,25
	14,3	8,70				
	19,1	12,10				
	23,8	15,35				
1/2-14 20,955 x 1,814	12,7	5,40	23,7 24,3	21,5	21,34 21,59	23,09
	19,1	8,70				
	25,4	12,00				
	31,8	15,35				
5/8-14 22,911 x 1,814	15,9	7,05	25,6 26,3	23,5	23,24 23,55	25,05
	23,8	11,25				
	31,8	15,40				
	39,7	19,60				
3/4-14 26,441 x 1,814	19,1	8,70	29,3 30,0	27	26,75 27,08	28,59
	28,6	13,60				
	38,1	18,80				
	47,6	23,80				
7/8-14 30,201 x 1,814	22,2	10,35	33,3 34,0	30,7	30,48 30,81	32,35
	33,3	16,20				
	44,5	22,10				
1"-11 33,249 x 2,309	25,4	9,20	37,0 37,8	33,7	33,53 33,91	35,96
	38,1	14,40				
	50,8	19,60				

# FILETTI RIPORTATI PASSO BSW

## WIRE INSERTS BSW PITCH



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

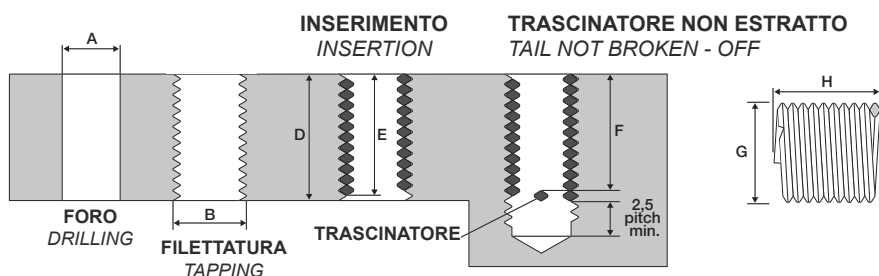
Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
1/4-20 6,350 x 1,270	1 d	6,4	3,40	7,9 8,2	6,7	6,63 6,78	7,84
	1,5 d	9,5	5,80				
	2 d	12,7	8,10				
	2,5 d	15,9	10,50				
5-16-18 7,938 x 1,411	1 d	7,9	4,10	9,7 10,1	8,5	8,33 8,48	9,59
	1,5 d	11,9	6,70				
	2 d	15,9	9,40				
	2,5 d	19,8	12,00				
3/8-16 9,525 x 1,588	1 d	9,5	4,50	11,5 11,9	10,1	9,91 10,11	11,39
	1,5 d	14,3	7,30				
	2 d	19,1	10,20				
	2,5 d	23,8	13,00				
7/16-14 11,113 x 1,814	1 d	11,1	4,65	13,35 13,8	11,7	11,51 11,76	13,24
	1,5 d	16,7	7,65				
	2 d	22,2	10,50				
	2,5 d	27,8	13,45				
1/2-12 12,700 x 2,117	1 d	12,7	4,40	15,3 15,7	13,2	13,08 13,34	15,17
	1,5 d	19,1	7,35				
	2 d	25,4	10,15				
	2,5 d	31,8	13,05				
9/16-12 14,290 x 2,117	1 d	14,3	5,20	16,9 17,3	14,7	14,68 14,94	16,76
	1,5 d	21,5	8,45				
	2 d	28,6	11,65				
	2,5 d	35,7	14,85				
5/8-11 15,876 x 2,309	1 d	15,9	5,45	18,7 19,1	16,6	16,59 16,84	18,57
	1,5 d	23,8	8,75				
	2 d	31,8	12,00				
	2,5 d	39,7	15,45				
3/4-10 19,051 x 2,540	1 d	19,1	6,05	22,2 22,6	20	19,84 20,09	22,02
	1,5 d	28,6	9,65				
	2 d	38,1	13,30				
	2,5 d	47,6	16,95				
7/8-9 22,226 x 2,822	1 d	22,2	6,45	25,7 26,2	23	23,01 23,27	25,52
	1,5 d	33,3	10,20				
	2 d	44,5	14,05				
	2,5 d	55,6	17,90				
1"-8 25,400 x 3,175	1 d	25,4	6,55	29,3 29,8	26,5	26,19 26,52	29,10
	1,5 d	38,1	10,30				
	2 d	50,8	14,20				
	2,5 d	63,5	18,05				

# FILETTI RIPORTATI PASSO BSF

## WIRE INSERTS BSF PITCH

# 6

18.20



$$E = D - 0,75 \times \text{Passo}$$

$$E = D - 0,75 \times \text{Pitch}$$

$$F = D - 1,5 \times \text{Passo}$$

$$F = D - 1,5 \times \text{Pitch}$$

Ø X PASSO X PITCH	X d	D LUNGHEZZA FILETTO BASE TAPPING LENGHT	H N. DELLE SPIRE ALLO STATO LIBERO Nb. OF TURNS AT THE INITIAL STATE -0,25	G Ø INIZIALE INITIAL STATE MIN - MAX	A Ø FORO DRILLING		MASCHIO TAP
					Ø FORO DRILL	TOLLERANZA TOLERANCE MIN - MAX	B Ø ESTERNO MINIMO EXT. MIN
1/4-26 6,350 x 0,977	1 d	6,4	4,75	7,6 7,9	6,7	6,53 6,71	7,51
	1,5 d	9,5	7,90				
	2 d	12,7	10,80				
	2,5 d	15,9	13,90				
5/16-22 7,938 x 1,156	1 d	7,9	5,15	9,5 9,8	8,3	8,20 8,38	9,30
	1,5 d	11,9	8,35				
	2 d	15,9	11,55				
	2,5 d	19,8	14,75				
3/8-20 9,525 x 1,270	1 d	9,5	5,85	11,1 11,4	9,9	9,78 9,96	11,02
	1,5 d	14,3	9,40				
	2 d	19,1	12,95				
	2,5 d	23,8	20,05				
7/16-18 11,113 x 1,411	1 d	11,1	6,15	13,0 13,4	11,5	11,43 11,63	12,78
	1,5 d	16,7	9,90				
	2 d	22,2	13,70				
	2,5 d	27,8	17,35				
1/2-16 12,700 x 1,588	1 d	12,7	6,35	14,8 15,3	13,2	13,03 13,26	14,57
	1,5 d	19,1	10,15				
	2 d	25,4	13,90				
	2,5 d	31,8	17,70				
9/16-16 14,288 x 1,588	1 d	14,3	7,30	16,5 17,0	14,7	14,66 14,88	16,16
	1,5 d	21,5	11,55				
	2 d	28,6	15,70				
	2,5 d	35,7	20,10				
5/8-14 15,875 x 1,814	1 d	15,9	7,10	18,3 18,9	16,4	16,26 16,49	18,01
	1,5 d	23,8	11,25				
	2 d	31,8	15,45				
	2,5 d	39,7	19,50				
3/4-12 19,050 x 2,117	1 d	19,1	7,35	21,8 22,4	19,5	19,43 19,69	21,53
	1,5 d	28,6	11,65				
	2 d	38,1	15,95				
	2,5 d	47,6	20,25				
7/8-11 22,225 x 2,309	1 d	22,2	7,95	25,3 26,1	22,7	22,61 22,86	24,94
	1,5 d	33,3	12,45				
	2 d	44,5	17,15				
	2,5 d	55,6	21,75				
1"-10 25,400 x 2,540	1 d	25,4	8,30	28,6 29,4	26,5	26,19 26,52	28,38
	1,5 d	38,1	13,20				
	2 d	50,8	18,05				
	2,5 d	63,5	22,80				





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**GRIV SRL**

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**Sede Operativa:** via F.lli Bandiera, 1 - 80026 - Casoria (Na)

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