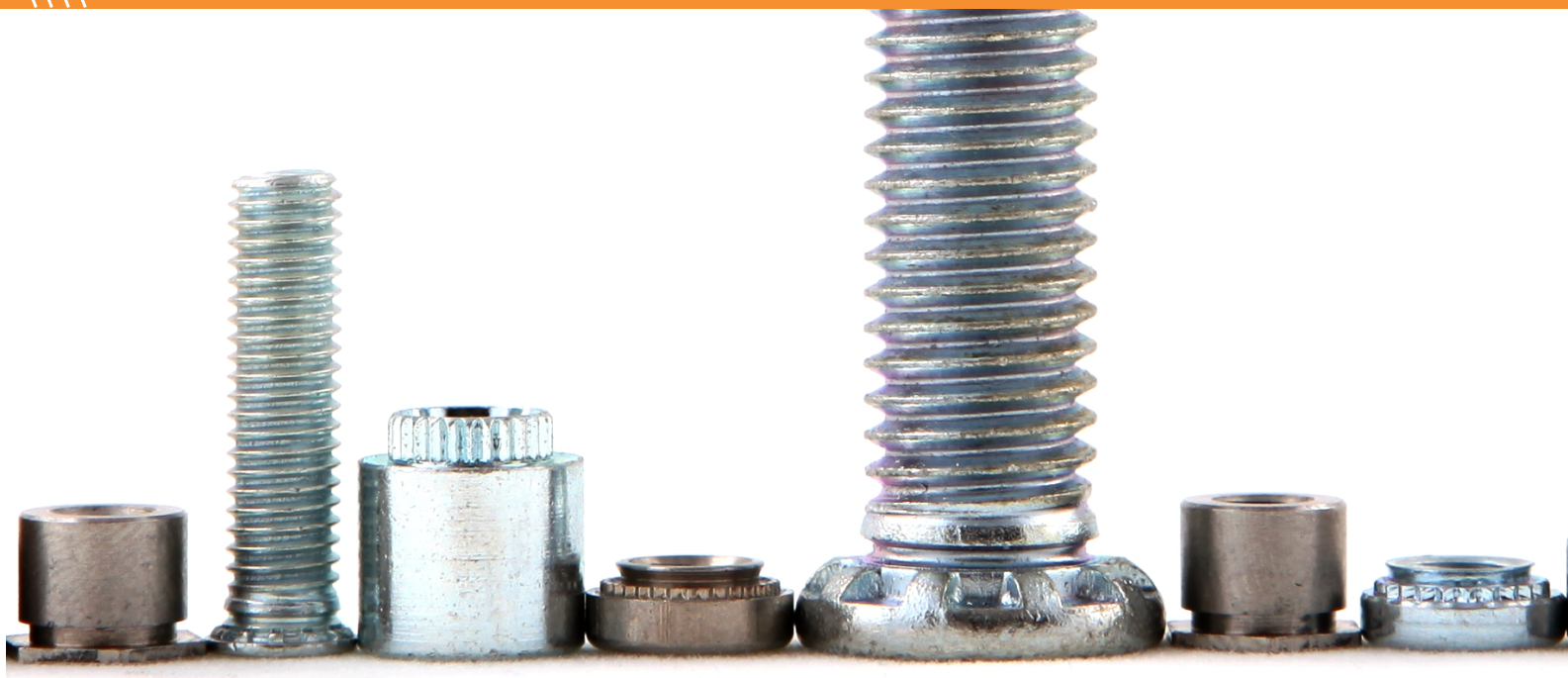
INSERCO FASTENERS

PRODUCT CATALOG



FASTENERS FOR SHEET METAL

www.inserco.eu

Sheet metal fasteners P.3

ANCHOR RIVET NUTS AND CLINCH NUTS

Anchor Rivet Bush – Knurled Shank P.4

Miniature knurled body P.5

Clinch Nut P.6

Stainless Flush Clinch Nut P.7

CLINCH STUDS AND STANDOFFS

Clinch Stud Flush P.8

Clinch Stud Reduced Head P.9

Clinch Stud High Strength P.10

Clinch Standoff Open P.11

Clinch Standoff Blind P.12

SELF-TAPPING INSERTS

Self-tapping inserts three holes P.13

Special parts according to drawing P.14

INSERCO FASTENERS

FASTENERS FOR SHEET METAL

RIVET AND CLINCH NUTS

Based on our long term experience in the sheet metal industry we offer a large range of fixations adapted to your type of sheet metal and your installation method. Our parts are mainly made of steel and stainless steel; other materials as aluminum are possible on request.

Type	Family	Applications		
		Steel Sheet	*Stainless Steel Sheet*	
Rivet Nut knurled Shank	**IARB**	✓	✓	
Mini-Rivet Nut knurled Shank	**IMINARB**	✓	✓	
Clinch Nut	**IPS**	✓	✓	
Stainless Flush Clinch Nut	**IPF**	✓	✓	

CLINCH STUDS AND STANDOFFS

Type	Family	Applications		
		Steel Sheet	*Stainless Steel Sheet*	
Standard Clinch Stud	**IPFH**	✓	✓	
Reduced-head Clinch Stud	**IPFHL**	✓	✓	
High-torque Clinch Stud	**IHPFH**	✓	✓	
Standoff	**IPTSO**	✓	✓	
Blind Standoff	**IPBSO**	✓	✓	

INSERCO FASTENERS

ROUND RIVET BUSH KNURLED SPIGOT- IARB

NOTES

Round rivet bushes provide strong reusable threads in panels too thin to be conventionally tapped. They can be installed into panels as thin as 0.5mm and do not suffer from the maximum hardness limitations of self-clinching nuts and standoffs so they are suitable for installation into stainless steel panels. The round knurled spigot patterns provides excellent resistance to torque in softer materials and are available in steel and stainless steel as standard with aluminum and brass available to order.

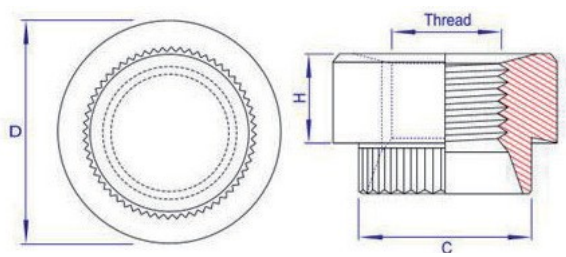
IARB

THREAD AND PITCH	Sheet thickness	Hole Size +0.1/-0.0	D + - 0.13	H + - 0.13	C + 0.0/- 0.13
M2.5 x 0.45	001-026	5,90	7,90	3,20	5,80
M3 x 0.5	001-026	5,90	7,90	3,20	5,80
M3,5 x 0.6	001-026	6,95	9,50	3,80	6,90
M4 x 0.7	001-026	6,95	9,50	3,80	6,90
M5 x 0,8	001-026	8,35	11,10	4,40	8,30
M6 x 1.0	001-026	9,65	12,70	5,70	9,50
M8 x 1.25	001-026	13,10	15,90	6,40	13,00
M10 x 1.5	001-026	15,50	19,10	7,60	15,40
M12 x 1.75	001-026	19,50	25,40	10,20	19,40

GAUGE CONVERSION CHART

Shank Code	001	003	004	006	008	010	012	013	014
Sheet Metal Thickness	0,5 0,6	0,7 0,8	0,9 1,0	1,1 1,3	1,4 1,6	1,7 1,9	2,0 2,2	2,3 2,5	2,6 2,8

Shank Code	016	017	018	019	020	022	023	024	026
Sheet Metal Thickness	2,9 3,1	10swg	3,2 3,4	3,5 3,7	3,8 4,0	4,1 4,3	4,4 4,6	4,7 4,9	5,0 5,9



MATERIALS AND OTHER TYPES

- Mild Steel
- 300 series Stainless Steel
- Aluminum and Brass to special order
- Plain

ROUND RIVET BUSH KNURLED SPIGOT– IARB

iNSERCO FASTENERS

MINIATURE ROUND RIVET BUSH KNURLED SPIGOT - IMINARB

NOTES

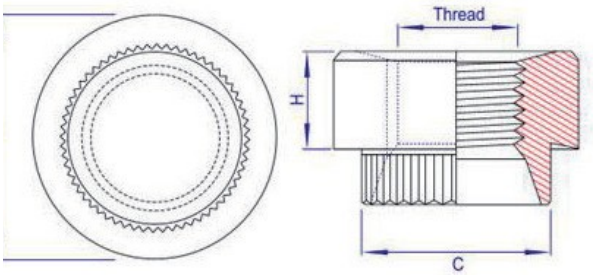
Miniature Round rivet bushes provide strong reusable threads in panels too thin to be conventionally tapped. They can be installed into panels as thin as 0.5mm and do not suffer from the maximum hardness limitations of self-clinching nuts and standoffs so they are suitable for installation into stainless steel panels. The round knurled spigot patterns provides excellent resistance to torque in softer materials and are available in steel and stainless steel as standard with aluminum and brass available to order.

IMINARB

THREAD AND PITCH	Sheet Metal Thickness	Hole Size +0.1/-0.0	D + - 0.13	H + - 0.13	C + 0.0/- 0.13
M2.5 x 0.45	001-016	4,3	5,5	2,8	4,2
M3 x 0.5	001-016	4,3	5,5	2,8	4,2
M3,5 x 0.6	001-016	5,5	7	3,2	5,4
M4 x 0.7	001-016	5,5	7	3,2	5,4
M5 x 0,8	001-016	6,5	8,5	3,8	6,4
M6 x 1.0	001-016	7,7	10	5,1	7,6
M8 x 1.25	001-016	9,8	12	6,5	9,7

GAUGE CONVERSION CHART

Shank Code	001	003	004	006	008	010	012	013	014	016
Sheet Metal Thickness	0,5 0,6	0,7 0,8	0,9 1,0	1,1 1,3	1,4 1,6	1,7 1,9	2,0 2,2	2,3 2,5	2,6 2,8	2,9 3,1



MATERIAL AND PLATING

- Mild Steel
- 300 series Stainless Steel
- Aluminum and Brass to special order
- Zinc
- Plain

INSERCO FASTENERS

CLINCH NUT- IPS

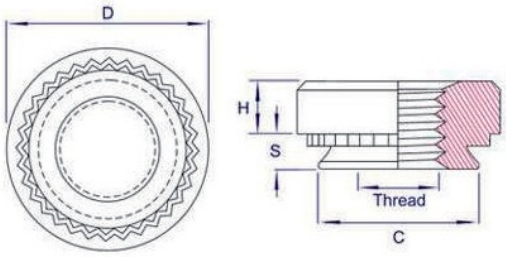
NOTES

The following installation panel material hardness limitations apply when installing Self Clinching Nuts. Steel Clinch Nuts: 80 HRB Max, 300 Series Stainless Steel Clinch Nuts: 70 HRB Max, 400 Series Stainless Steel Clinch Nuts: 90 HRB Max (A special punch/anvil is recommended for a proper installation), Aluminum Clinch Studs: 50 HRB Max.

IPS

Thread	Shank code	C Max	D + - 0.2	H + - 0.1	S Max	Min. Sheet Thickness	Hole Size +0.08/-0.00	Min. Distance to edge
M2/M2.5 M2/M2.5 IPSI	0 1 2 3	4,16 4,22	6,30	1,71 1,50	0,76 0,97 1,37 2,21	0,8 1,0 1,4 2,3	4,20 4,25	4,8
M3 M3 IPSI	0 1 2 3	4,72 4,22	7,10 6,30	1,71 1,50	0,76 0,97 1,37 2,21	0,8 1,0 1,4 2,3	4,75 4,25	4,8
M3,5 M3.5 IPSI	0 1 2 3	4,72	7,10	1,71 1,50	0,76 0,97 1,37 2,21	0,8 1,0 1,4 2,3	4,75	5,6
M4 M4 IPSI	0 1 2	5,36	7,90	2,32 2,00	0,76 0,97 1,37	0,8 1,0 1,4	5,40	6,9
M5 M5 IPSI	0 1 2 3	6,30 6,38	8,70	2,32 2,00	0,76 0,97 1,37 2,21	0,8 1,0 1,4 2,3	6,35 6,40	7,1
M6 M6 IPSI	1 2 3	8,72	11,05	4,36 4,10	1,37 2,21 3,05	1,4 2,3 3,1	8,75	8,6
M8 M8 IPSI	1 2 3	10,44	12,70	5,90 5,50	1,37 2,21 3,05	1,4 2,3 3,1	10,50	9,7
M10 M10 IPSI	1 2 3	12,65 13,90	14,30 17,35	6,72 7,50	2,21 3,05 5,97	2,3 3,2 6,1	12,70 14,00	12,0
M12 M12 IPSI	1 2	16,60 16,90	20,60	9,06 8,50	3,05 5,97	3,1 6,1	16,65 17,0	12,0

CLINCH NUT – IPS



MATERIALS AND PLATING

- Carbon Steel
- 300 series Stainless Steel
- Zinc
- Plain

INSERCO FASTENERS

FLUSH NUT - TYPE IPF

APPLICATION

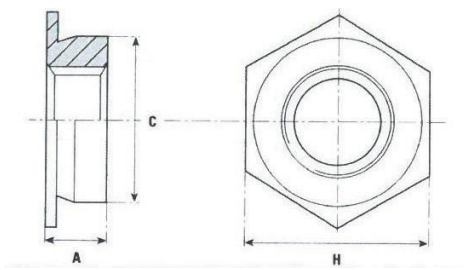
The type IPF installs in thin metal sheet by pressure on the hex head. The sheet metal flows into the groove and provides secure locking. The IPF installs flush on both sides.

FLUSH NUT - TYPE IPF

IPF TYPE

Thread	Shank Code	Min. sheet metal thickness	A max.	Hole -0.00/+0.08	C max.	H	Minimum edge distance to center of panel hole
M2	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	4.35	4.34	4.8	6.0
M2.5 M3*	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	4.35	4.34	4.8	6.0
M3	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	5.40	5.39	6.4	6.7
M3.5	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	5.40	5.39	6.4	6.7
M4	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	7.35	7.34	7.9	7.0
M5	1 2	1.5 - 2.3 ≥2.4	1.50 2.30	7.90	7.89	8.7	8.0
M6	3 4 5	3.2 - 3.9 4.0 - 4.7 ≥4.8	3.00 3.80 4.60	8.75	8.74	9.5	8.7

3* = M3 in body M2



MATERIAL

- INOX A2
- OTHER MATERIAL ON DEMAND

INSERCO FASTENERS

SELF-CLINCHING FLUSH HEAD STUDS- IPFH

SELF-CLINCHING FLUSH HEAD STUDS – IPFH

NOTES

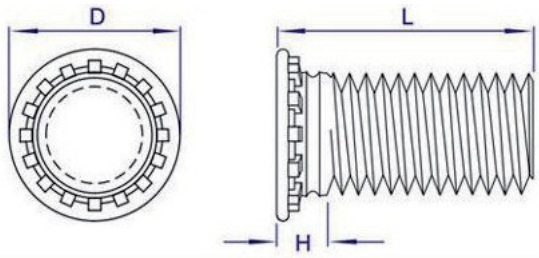
The following installation panel material hardness limitations apply when installing Self Clinching Studs.
Steel Clinch Studs: 80 HRB Max,
300 Series Stainless Steel Clinch Studs: 70 HRB Max,
400 Series Stainless Steel Clinch Studs: 92 HRB Max (A special anvil is recommended for a proper installation),
Aluminum Clinch Studs: 50 HRB Max.

IPFH

THREAD AND PITCH	D +/- 0.4	H Max	Min Sheet Thickness	Hole Size + 0.08 - 0.00	Min Distance to edge of Sheet
M3 x 0.5	4,6	2,1	1,0	3,0	5,6
M3.5 x 0.6	5,3	2,2	1,0	3,5	6,4
M4 x 0.7	5,9	2,4	1,0	4,0	7,2
M5 x 0.8	6,5	2,7	1,0	5,0	7,2
M6 x 1.0	8,2	3,0	1,6	6,0	7,9
M8 x 1.25	9,6	3,7	2,4	8,0	9,0

STANDARDS LENGTHS

THREAD AND PITCH	Length +/- 0.4										
M3	6	8	10	12	15	18	20	25	30		
M3.5	6	8	10	12	15	18	20	25			
M4	6	8	10	12	15	18	20	25	30		
M5		8	10	12	15	18	20	25	30	35	
M6			10	12	15	18	20	25	30	35	
M8			10	12	15	18	20	25	30	35	40



MATERIALS AND PLATING

- Carbon Steel
- 300 series Stainless Steel
- Zinc
- Plain

INSERCO FASTENERS

SELF-CLINCHING REDUCED HEAD STUD- IPFHL

NOTES

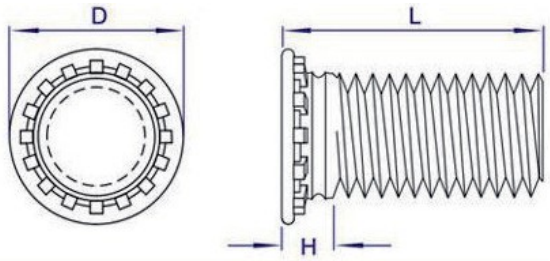
IPFHL has been specially designed for the installation close to the sheet metal edge.

IPFHL

THREAD AND PITCH	D +/- 0.4	H Max	Min Sheet Thickness	Hole Size + 0.08 - 0.00	Min Distance to edge of Sheet
M2.5 x 0.45	3,15	2,1	1,0	2,5	2,8
M3 x 0.5	3,65	2,1	1,0	3,0	3,3
M3.5 x 0.6	4,15	2,2	1,0	3,5	3,8
M4 x 0.7	4,65	2,4	1,0	4,0	4,3
M5 x 0.8	5,90	2,7	1,0	5,0	5,6

STANDARDS LENGTHS

THREAD AND PITCH	Length +/- 0.4									
M2.5	6	8	10	12	15	18				
M3	6	8	10	12	15	18	20	25		
M3.5	6	8	10	12	15	18	20	25	30	
M4	6	8	10	12	15	18	20	25	30	35
M5		8	10	12	15	18	20	25	30	35



MATERIALS AND PLATING

- Carbon Steel
- 300 series Stainless Steel
- Zinc
- Plain

INSERCO FASTENERS

HIGH TORQUE CLINCH STUDS- IHPFH

NOTES

Maximum hardness of parent material: Steel parts - 85 HRB, Stainless Steel parts - 70 HRB. Please note that Stainless Steel parts cannot usually be successfully installed into Stainless Steel Sheet.

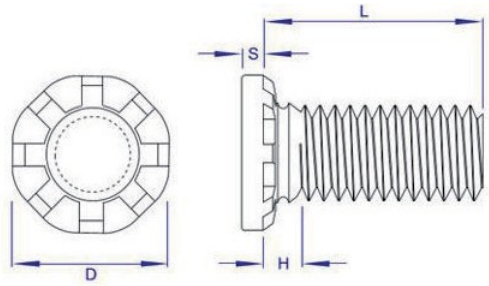
IHPFH

THREAD AND PITCH	H Max	Min Sheet Thickness	Hole Size +0.13 -0.0	S Max	D +- 0.25	Min C/L to edge of panel	Torque Out (Nm)	Push Out (N)
M5 x 0.8	2,7	1,3	5,0	1,14	7,8	10,7	7,8	1496
M6 x 1.0	2,8	1,5	6,0	1,27	9,4	11,5	16,1	2036
M8 x 1.25	3,5	2,0	8,0	1,78	12,5	12,7	37,3	2787
M10 x 1.5	4,1	2,3	10,0	2,29	15,7	13,7	47,9	4103

Torque out & Push out figures are to be used as a guide only and will vary depending on panel thickness and installation method. Figures are based on installation into 1.5mm cold rolled steel for M5 & M6, and 2.3 mm cold rolled steel for M8 & m10 under test conditions.

STANDARD LENGTHS

Thread Size	Length +/- 0.4									
M5	15	20	25	30	35	40	45	50		
M6	15	20	25	30	35	40	45	50		
M8	15	20	25	30	35	40	45	50		
M10	15	20	25	30	35	40	45	50		
M5	8	10	12	15	18	20	25	30	35	



MATERIALS AND OTHER TYPES

- Carbon Steel
- 300 series Stainless Steel
- Zinc
- Plain

INSERCO FASTENERS

THROUGH HOLE STANDOFF - IPTSO

NOTES

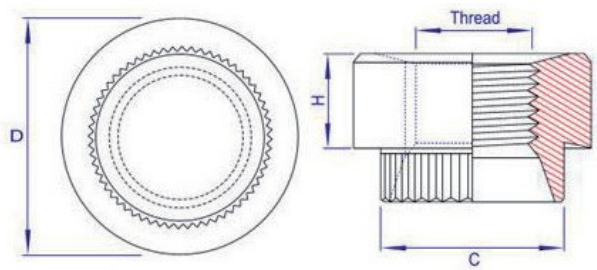
The IPTSO Through hole self-clinching standoff provides a strong torque resistant captivated female thread in a spacer configuration for thin panels' applications. This fastener installs fully flush from the back of the panel, meaning that minimal surface finishing is required after installation. Utilizing a proven clinch feature, the hexagon head provides excellent torque out and push out resistance. Like all self-clinching fasteners, they are installed using parallel squeezing action, so require access to both sides of the panel.

IPTSO

THREAD AND PITCH	Sheet thickness	Hole Size +0.08/-0.0	C +0.0 -0.13	D	E Nom	Min C/L to edge	Torque out Nm	Push Out Nm
M2.5 / M3 *	1,0	4,20	4,18	3,20	4,80	6,0	2,63	1012
5.4 M3	1,0	5,40	5,39	4,00	6,40	6,8	4,10	1879
M4	1,3	7,20	7,14	4,80	7,90	8,0	8,48	2517
M5	1,3	7,20	7,14	5,20	7,90	8,0	8,48	2517

LENGTHS

Thread	Length											
M2.5 / M3 *	4	5	6	8	10	12	14	16	18	20		
5.4 M3	4	5	6	8	10	12	14	16	18	20		
M4			6	8	10	12	14	16	18	20		
M5			6	8	10	12	14	16	18	20	22	
Trou non fileté	–				4			8		10	12	



MATERIAL AND PLATING

- Carbon Steel
- 300 Series Stainless Steel
- 400 Series Stainless Steel
- Aluminum and Brass to special order
- Zinc
- Plain

INSERCO FASTENERS

BLIND STANDOFF - IPBSO

NOTES

The IPBSO Blind self-clinching standoffs provide a strong torque resistant captivated female thread in a spacer configuration for thin panels' applications. This fastener installs fully flush from the back of the panel, meaning that minimal surface finishing is required after installation. Utilizing a proven clinch feature, the hexagon head provides excellent torque out and push out resistance. Like all self-clinching fasteners, they are installed using parallel squeezing action, so require access to both sides of the panel.

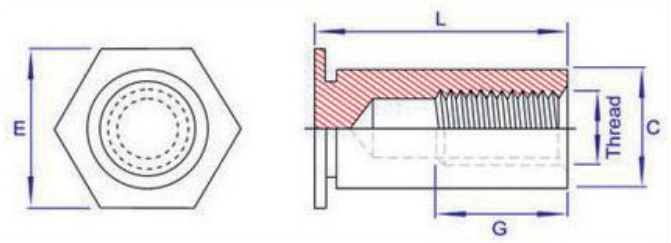
IPBSO

THREAD AND PITCH	Sheet Thickness	Hole Size +0.08/-0.0	C + 0.0 - 0.13	E nom	Min C/L to edge	Torque out Nm	Push Out Nm	Thread and pitch
M2.5 / M3 *	1,0	4,20	4,18	3,20	4,80	6,0	2,63	1012
5.4 M3	1,0	5,40	5,39	4,00	6,40	6,8	4,10	1879
M4	1,3	7,20	7,14	4,80	7,90	8,0	8,48	2517
M5	1,3	7,20	7,14	5,20	7,90	8,0	8,48	2517

LENGTHS

THREAD	Lengths											
M3 x 0.5			6	8	10	12	14	16	18	20		
5.4 M3 x 0.5			6	8	10	12	14	16	18	20		
M4 x 0,7			6	8	10	12	14	16	18	20		
M5 x 0.8			6	8	10	12	14	16	18	20	22	
Thread length	3			4		5	6,5		9,5			

BLIND STANDOFF - IPBSO



MATERIAL AND PLATING

- Carbon Steel
- 300 series Stainless Steel
- Aluminum to special order
- Zinc
- Plain

INSERCO FASTENERS

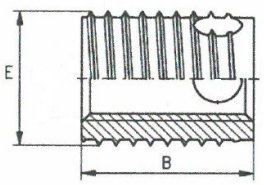
SELF - TAPPING INSERTS THREE HOLES - TYPE ISCT-3H/IHSCT-3H

APPLICATION

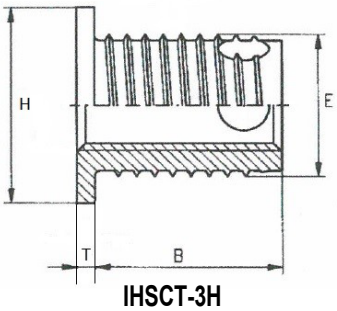
When installing self-tapping inserts with slot into hard plastics, the slot may crush and the screw gets locked.
This can be avoided by using the ISCT-3H. During installation the force is distributed over the three cutting edges giving a very precise positioning.
The SCT-3H installs into non threaded hole into plastics, composites, metals, alloys..
The headed version IHSCT63H provides higher torque out forces due to the enlarged surface.
Possibility to supply with hex drive for easier installation.

TYPE ISCT-3H/IHSCT-3H

Thread	Ext. Thread (E)	Length (B)	Head Thickness(T)	Head Dia. (H)	Hole Depth	Rec. Hole Diameter
M3 x 0.5	5 x 0.6	4 6	N/A	N/A	6 8	4.6-4.8
M3.5 x 0.6	6 x 0.8	5 8	N/A	N/A	7 10	5.5-5.7
M4 x 0.7	6.5 x 0.8	6 8	N/A	N/A	8 10	6.0-6.2
M5 x 0.8	8 x 1	7 10	1	11	9 13	7.4-7.7
M6 x 1.0	10 x 1.25	8 12	1.5	13	10 15	9.3-9.6
M8 x 1.25	12 x 1.5	9 14	1.5	15	11 17	11.1-11.5
M10 x 1.5	14 x 1.5	10 18	1.5	17	13 22	13.1-13.5
M12 x 1.75	16 x 1.75	12 22	N/A	N/A	15 26	15.0-15.5
M14 x 2.0	18 x 2	14 24	N/A	N/A	17 28	17.0-17.5
M16 x 2.0	20 x 2	14 24	N/A	N/A	17 28	19.0-19.5



ISCT-3H

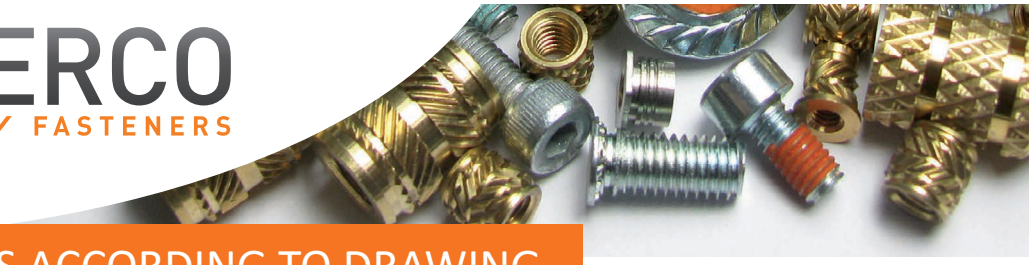


IHSCT-3H

MATERIAL

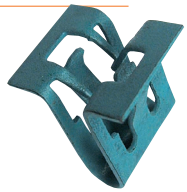
- Steel, hardened, soft
- Stainless Steel

INSERCO FASTENERS

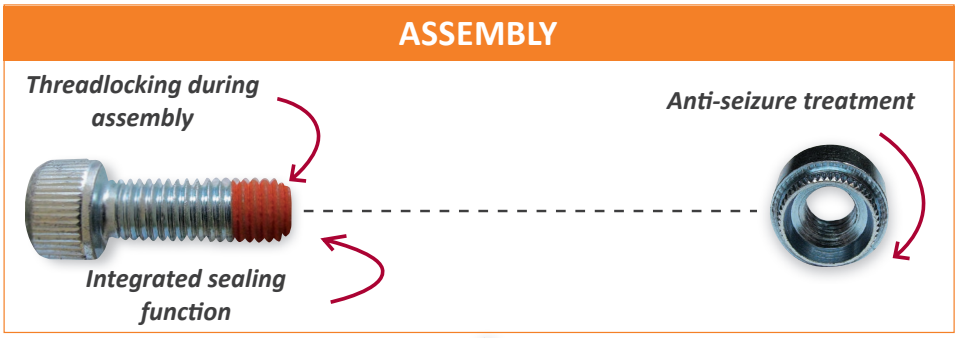


SPECIAL PARTS ACCORDING TO DRAWING

COMPREHENSIVE, INNOVATIVE SOLUTIONS



From specific parts to complete assemblies (screw + threaded part + integrated functions), Inserco Fasteners provides innovative and economical solutions. Our assembly expertise in many areas (screws, inserts, clips, pre-coating treatment, etc.) guarantees the implementation of comprehensive solutions at the best price.

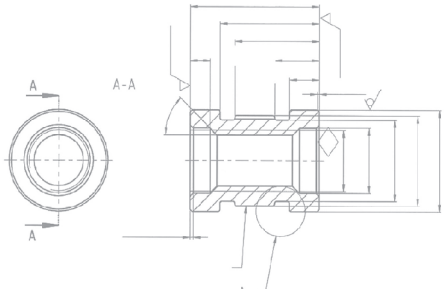


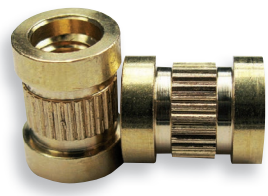
DEVELOPMENT OF SPECIAL PARTS

Inserco Fasteners can develop your assemblies, from specification to the delivery of complete systems.

Specifications	R&D	Sourcing	Technical Approval	Quality Documents	Logistics
Functional analysis	Drawing	Factory selection	Prototypes	Monitoring plan	Stock
Conform to Standards	Specifications	Capacity validation	Testing	PPAP AMDEC	Deliveries
					Packaging

We have been developing technical fasteners with the same partner factories in Europe and Asia for over 10 years. Both, high flexibility and reactivity allows us to support your DO with economic and longlasting solutions.





INSERCO
8, Boulevard des Bretonnières
49124 Saint Barthélemy d'Anjou

Tel.: +33(0)2 41 22 99 20
E-mail: contact@inserco.eu

Group specialized in global assembly solutions

Soprima, Inserco, Prelok and Foubert are joining together to form the LINKSY group.
The group's offer is organized around assembly solutions thanks to the know-how of each company :

- Inserco & Foubert for fasteners and parts on drawing.
- Soprima & Prelok for pre-coating.

More informations, www.linksy.eu

LINKSY
LINKING SYSTEMS

INSERCO FASTENERS | FOUBERT VISSERIE | PRELOK COATING | SOPRIMA INDUSTRIE