



Shri Aarohi

Industries Pvt. Ltd.

An ISO 9001:2015 COMPANY

Manufacturer & Stockists of Stainless Steel Fasteners

TECHNICAL DATA SHEET



Quality First



On Time Delivery



Ready Stock

Think Different.... Work Better....

ABOUT COMPANY



Shri Aarohi Industries
An ISO 9001:2015 COMPANY
Manufacturer of Stainless Steel Fasteners Pvt. Ltd.

COMPANY PROFILE

SHRI AAROHI INDUSTRIES is the leading manufacturer of Stainless Steel Fasteners in Mumbai catering to Domestic Market, Global Market and also to the reputed OEM's. The company is founded by Mr. Shrikant Pawar in 2011.

We supply fasteners such as Screws, Nuts, Bolts, Washers & Threaded Rods. Since our inception, we supply international quality Stainless Steel Fasteners to our customers. We have an endless range of Fasteners, Bolts, Nuts, Screws, Washers etc. All of our products are produced in Compliance with DIN, IS, BS and JIS Standards.

QUALITY POLICY

We at **SHRI AAROHI INDUSTRIES** are a Quality Driven Company with a motto to provide Superior Quality Products to our Customers. The main quality policy of our organisation is "**Quality Before Self**". We have gained the Status of ISO 9001:2008. We have set up a quality checking unit that helps us to follow stringent quality checking norms to ensure delivery of qualitative range of Stainless Steel Fasteners, Stainless Steel Screws, Stainless Steel Bolts, Stainless Steel Nuts Etc. The quality control process takes place right from the procurement of raw materials to the packaging and final delivery of the fasteners.

VISION OF THE FIRM

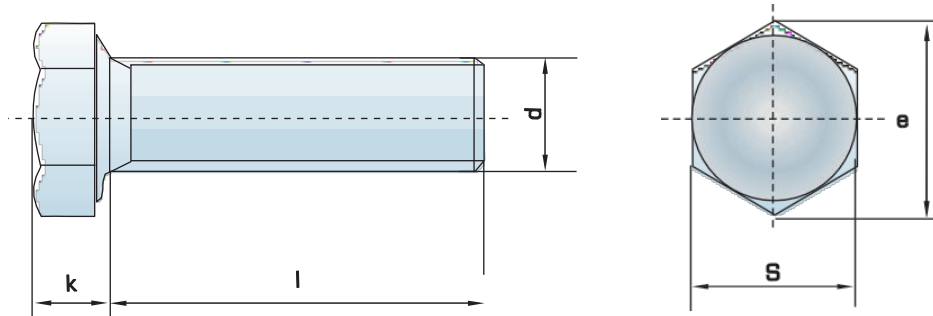
To strive relentlessly with an aim to achieve excellence in all businesses that **SHRI AAROHI INDUSTRIES** ventures into, with the objective of becoming an organization that all its employees and associates are proud of.



भारत सरकार Government of India सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय Ministry of Micro, Small and Medium Enterprises				
UDYAM REGISTRATION CERTIFICATE				
UDYAM REGISTRATION NUMBER: UDYAM-MH-19-0357811				
NAME OF ENTERPRISE: SHRI AAROHI INDUSTRIES PRIVATE LIMITED				
TYPE OF ENTERPRISE *				
S.No.	Classification Year	Enterprise Type	Classification Date	
1	2025-26	Micro	16/05/2025	
MAJOR ACTIVITY		MANUFACTURING		
SOCIAL CATEGORY OF ENTREPRENEUR		GENERAL		
NAME OF UNIT(S)		Name of Unit(s)		
1 OFFICE				
2 FACTORY				
3 DELHI OFFICE				
OFFICIAL ADDRESS OF ENTERPRISE		Name of Premises/ Building: ALAHI BAUG, 75		
Village/Town: MASJID BUNDER		Block:		
Road/Street/Lane: ABDUL REHMAN STREET		City: MUMBAI		
State: MAHARASHTRA		District: MUMBAI, Pin 400003		
Mobile: 9820712984		Email: shriaarohi555@gmail.com		
DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE		07/05/2025		
DATE OF COMMENCEMENT OF PRODUCTION/BUSINESS		07/05/2025		
NATIONAL INDUSTRY CLASSIFICATION CODE(S)		Activity		
S.No.		NIC 4 Digit	NIC 5 Digit	Activity
1		25 - Manufacture of fabricated metal products, except machinery and equipment	2599 - Manufacture of other fabricated metal products n.e.c.	25991 - Manufacture of metal fasteners (nails, rivets, tacks, pins, staples, washers and similar non-threaded products and nuts, bolts, screws and other threaded products)
DATE OF UDYAM REGISTRATION		16/05/2025		
* In case of graduation (upward/reverse) of status of an enterprise, the benefit of the Government Schemes will be available as per the provisions of Notification No. S.O. 2179(E) dated 26.06.2020 issued by the M/s MSME.				
Disclaimer: This is computer generated statement, no signature required. Printed from https://udyamregistration.gov.in & Date of printing= 17/05/2025				
For any assistance, you may contact:				
1. District Industries Centre: MUMBAI CITY (MAHARASHTRA)				
2. MSME-DFO: MUMBAI (MAHARASHTRA)				
Visit : www.msme.gov.in ; www.dcmsme.gov.in ; www.champions.gov.in				
Follow us @minmsme & @msmechampion				

DIN 933

Hexagon Head Screws

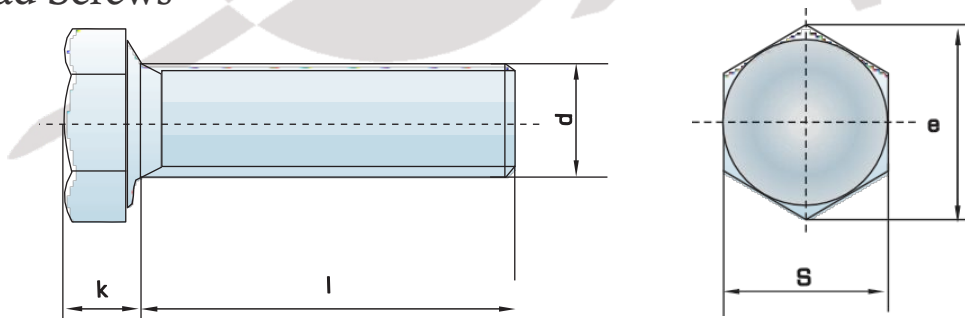


Thread size		M3	M3.5	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
Pitch		0.5	0.6	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5	3
e Min		6.01	6.58	7.66	8.79	11.1	14.4	18.9	21.1	24.5	26.8	30.1	33.5	40
k	Min	1.88	2.28	2.68	3.35	3.85	5.15	6.22	7.32	8.62	9.82	11.3	12.3	14.8
	Max	2.12	2.52	2.92	3.65	4.15	5.45	6.56	7.68	8.98	10.2	11.7	12.7	15.2
s	Max	5.5	6	7	8	10	13	17	19	22	24	27	30	36
	Min	5.32	5.82	6.78	7.78	9.78	12.7	16.7	18.7	21.7	23.7	26.7	29.7	35.4

ALL DIMENSIONS ARE IN MILLIMETER.

IS:1364 (P2)-1992/ ISO 4017

Hexagon Head Screws



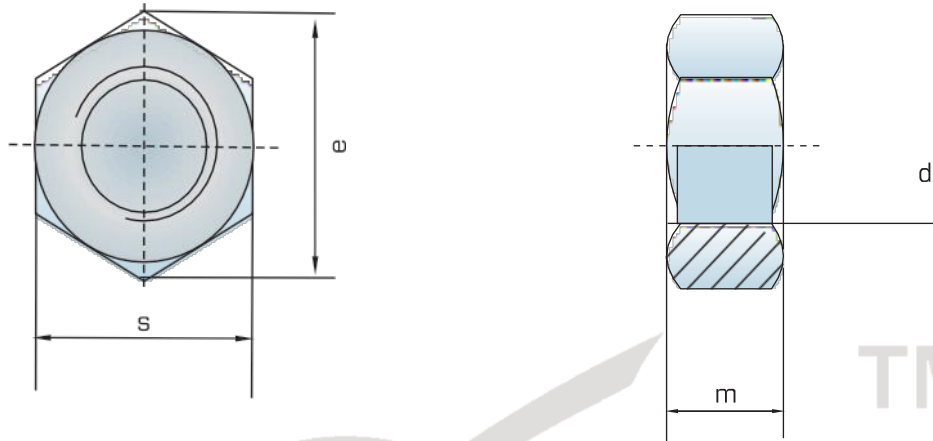
Thread size		M3	M3.5	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
Pitch		0.5	0.6	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5	3
e Min		6.01	6.58	7.66	8.79	11.1	14.4	18.9	21.1	24.5	26.8	30.1	33.5	40
k	Min	1.88	2.28	2.68	3.35	3.85	5.15	6.22	7.32	8.62	9.82	11.3	12.3	14.8
	Max	2.12	2.52	2.92	3.65	4.15	5.45	6.56	7.68	8.98	10.2	11.7	12.7	15.2
s	Max	5.5	6	7	8	10	13	17	19	22	24	27	30	36
	Min	5.32	5.82	6.78	7.78	9.78	12.7	16.7	18.7	21.7	23.7	26.7	29.7	35.4

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 934

Hexagon Nuts



Thread Size (d)		M1.6	M2	M2.5	M3	(M3.5)	M4	M5	M6
Pitch		0.35	0.4	0.45	0.5	0.6	0.7	0.8	1
e Min		3.41	4.32	5.45	6.01	6.58	7.66	8.79	11.05
m	Max	1.3	1.6	2	2.4	2.8	3.2	4	5
	Min	1.05	1.35	1.75	2.15	2.55	2.9	3.7	4.7
s	Max	3.2	4	5	5.5	6	7	8	10
	Min	3.02	3.82	4.82	5.32	5.82	6.78	7.78	9.78

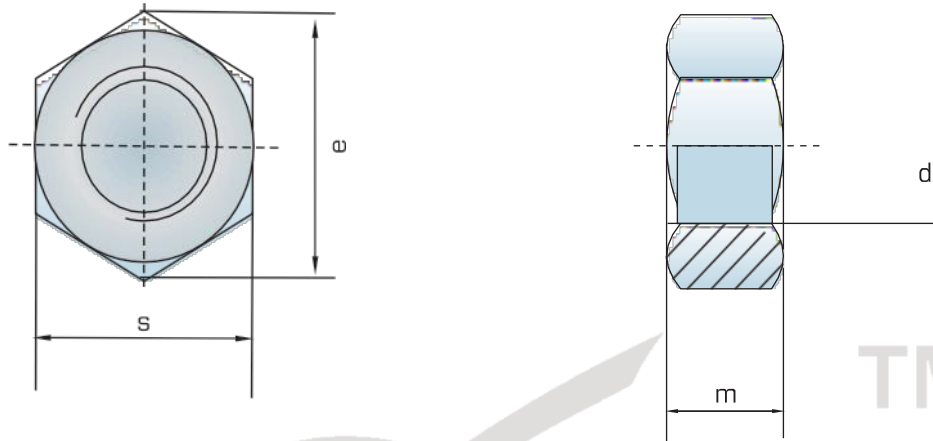
Thread Size (d)		M8	M10	M12	M14	M16	M18	M20	M24
Pitch		1.25	1.5	1.75	2	2	2.5	2.5	3
e Min		14.38	18.9	21.1	24.49	26.75	29.56	32.95	39.55
m	Max	6.5	8	10	11	13	15	16	19
	Min	6.14	7.64	9.64	10.3	12.3	14.3	14.9	17.7
s	Max	13	17	19	22	24	27	30	36
	Min	42.73	16.73	18.67	21.67	23.67	28.616	29.16	35

ALL DIMENSIONS ARE IN MILLIMETER.



IS:1364 P3-2002/ ISO 4032

Hexagon Nuts



Thread Size (d)		M1.6	M2	M2.5	M3	(M3.5)	M4	M5	M6
Pitch		0.35	0.4	0.45	0.5	0.6	0.7	0.8	1
e Min		3.41	4.32	5.45	6.01	6.58	7.66	8.79	11.05
m	Max	1.3	1.6	2	2.4	2.8	3.2	4	5
	Min	1.05	1.35	1.75	2.15	2.55	2.9	3.7	4.7
s	Max	3.2	4	5	5.5	6	7	8	10
	Min	3.02	3.82	4.82	5.32	5.82	6.78	7.78	9.78

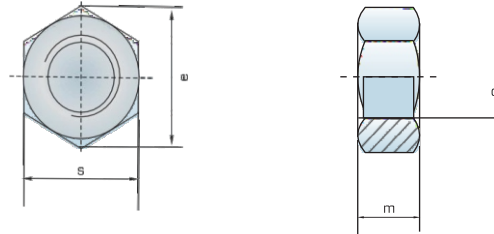
Thread Size (d)		M8	M10	M12	M14	M16	M18	M20	M24
Pitch		1.25	1.5	1.75	2	2	2.5	2.5	3
e Min		14.38	18.9	21.1	24.49	26.75	29.56	32.95	39.55
m	Max	6.5	8	10	11	13	15	16	19
	Min	6.14	7.64	9.64	10.3	12.3	14.3	14.9	17.7
s	Max	13	17	19	22	24	27	30	36
	Min	42.73	16.73	18.67	21.67	23.67	28.616	29.16	35

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 439

Hexagon Thin Nuts

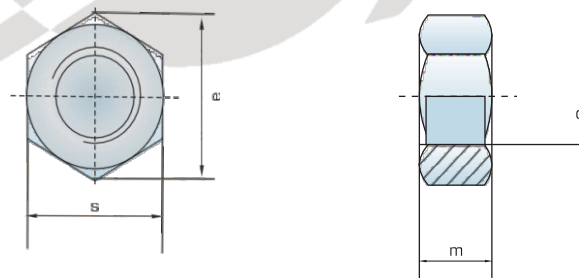


Thread Size		M 3	M 4	M 5	M 6	M 8	M 10	M 12	M [14]	M 16	M 20
Pitch		0.50	0.70	0.80	1.00	1.25	1.50	1.75	2.00	2.00	2.50
e Min		6.01	7.66	8.79	11.05	14.38	18.90	21.10	24.49	26.75	32.95
m	Max	1.80	2.20	2.70	3.20	4.00	5.00	6.00	7.00	8.00	10.00
	Min	1.55	1.95	2.45	2.90	3.70	4.70	5.70	6.42	7.42	9.10
s	Max	5.50	7.00	8.00	10.00	13.00	17.00	19.00	22.00	24.00	30.00
	Min	5.32	6.78	7.78	9.78	12.73	16.73	18.67	21.67	23.67	29.16

ALL DIMENSIONS ARE IN MILLIMETER.

IS:1364 / ISO-4035

Hexagon Thin Nuts



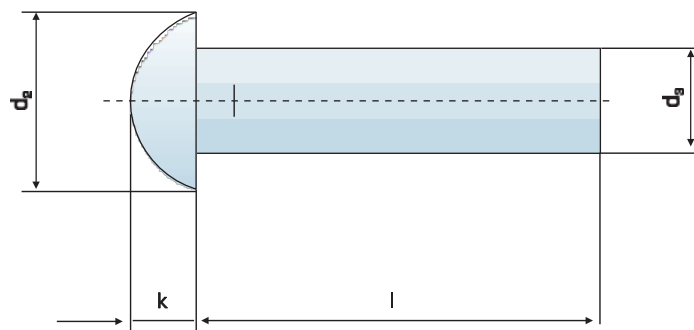
Thread Size		M 3	M 4	M 5	M 6	M 8	M 10	M 12	M [14]	M 16	M 20
Pitch		0.50	0.70	0.80	1.00	1.25	1.50	1.75	2.00	2.00	2.50
e Min		6.01	7.66	8.79	11.05	14.38	18.90	21.10	24.49	26.75	32.95
m	Max	1.80	2.20	2.70	3.20	4.00	5.00	6.00	7.00	8.00	10.00
	Min	1.55	1.95	2.45	2.90	3.70	4.70	5.70	6.42	7.42	9.10
s	Max	5.50	7.00	8.00	10.00	13.00	17.00	19.00	22.00	24.00	30.00
	Min	5.32	6.78	7.78	9.78	12.73	16.73	18.67	21.67	23.67	29.16

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 660/ISO R-1051

Round Head Rivets

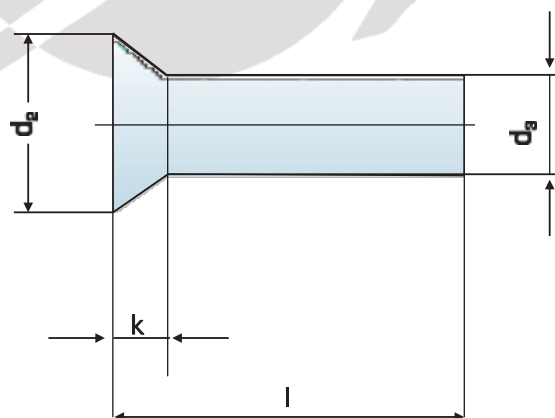


Nominal Size (d)	1.6	2	2.5	3	4	5	6	8
d ₂	2.8	3.5	4.4	5.2	7	8.8	10.5	14
d ₃	1.52	1.87	2.37	2.87	3.87	4.82	5.82	7.76
k	1.0	1.2	1.5	1.8	2.4	3.0	3.6	4.8

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 661/ISO R-1051

Countersunk Head Rivets



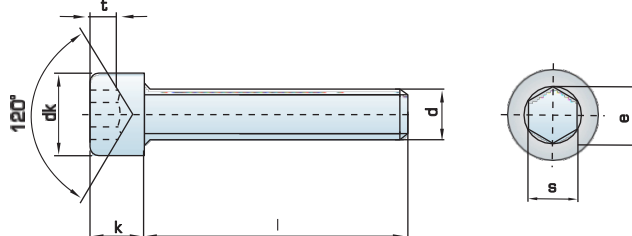
Nominal Size (d)	1.6	2	2.5	3	4	5	6	8
d ₂ Min	2.8	3.5	4.4	5.2	7	8.8	10.5	14
d ₃	1.52	1.87	2.37	2.87	3.87	4.82	5.82	7.76
k	0.8	1	1.2	1.4	2.00	2.5	3	4

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 912 / ISO 4762

Hexagon Socket Head Cap Screws

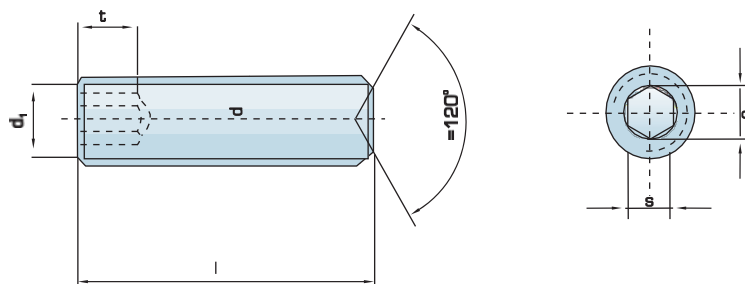


Thread size d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
Pitch	0.5	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5
dk	Min	5.32	6.78	8.28	9.78	12.73	15.73	17.73	20.67	23.67	26.67
	Max	5.68	7.22	8.72	10.22	13.27	16.27	18.27	21.33	24.33	30.33
e Min	2.87	3.44	4.58	5.72	6.86	9.15	11.43	13.72	16	16	19.44
k	Max	3	4	5	6	8	10	12	14	16	20
	Min	2.86	3.82	4.82	5.7	7.64	9.64	11.57	13.57	15.57	19.48
s	Min	2.52	3.02	4.02	5.02	6.02	8.02	10.02	12.03	14.03	17.05
	Max	2.58	3.08	4.09	5.14	6.14	8.175	10.17	12.21	14.21	17.23
t min	1.3	2	2.5	3	4	5	6	7	8	9	10

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 916/IS: 6094-1981 (Type CP)/ISO 4029

Hexagon Socket Set Screws with Cup Point



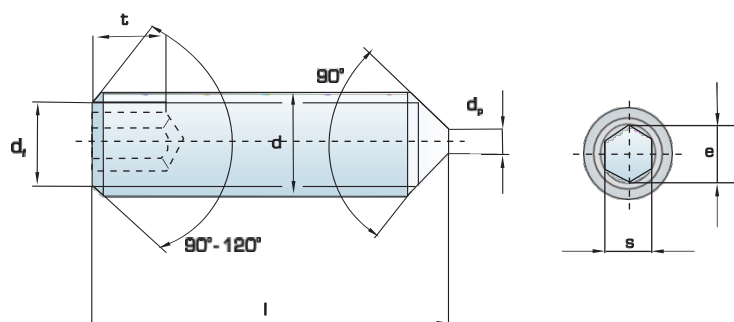
Thread Size (d)	M3	M4	M5	M6	M 8	M1 0	M1 2
Pitch	0.5	0.7	0.8	1	1.25	1.5	1.75
e Min	1.73	2.30	2.87	3.44	4.58	5.72	6.86
s	Min	1.5	2.0	2.5	3.0	4.0	5.0
	Max	1.54	2.04	2.56	3.08	4.09	5.09
t	1.2	1.5	2	2	3	4	4.8

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 914/IS: 6094-1981 (Type TP)/ISO 4027

Hexagon Socket Set Screws with Cone Point

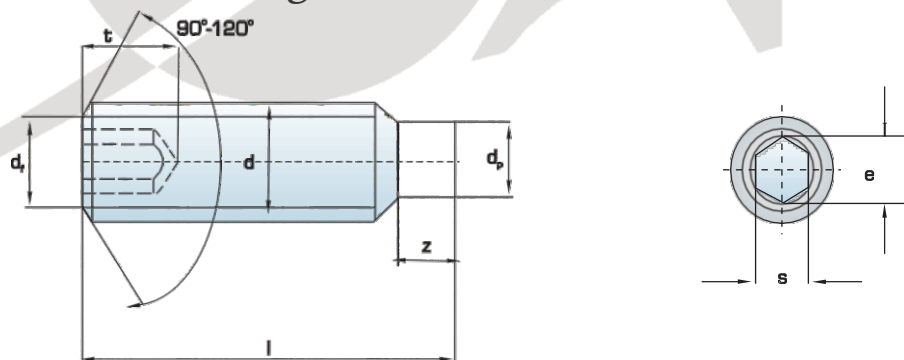


Thread size d		M3	M4	M5	M6	M8	M10	M12
Pitch		0.5	0.7	0.8	1	1.25	1.5	1.75
e Min		1.73	2.30	2.87	3.44	4.58	5.72	6.86
s	Min	1.5	2.0	2.5	3.0	4.0	5.0	6.0
	Max	1.54	2.04	2.56	3.08	4.09	5.09	6.09
t Min		1.2	1.5	2	2	3	4	4.5

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 915/IS: 6094-1981 (Type DP)/ISO 4028

Hexagon Socket Screws with Dog Point



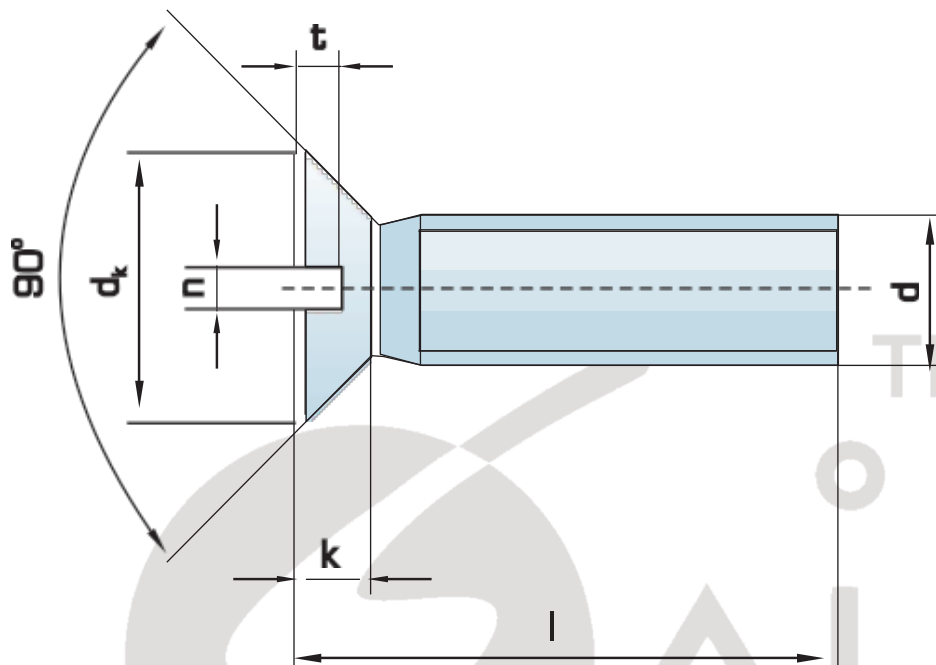
Thread size d		M3	M4	M5	M6	M8B	M10	M12
Pitch		0.5	0.7	0.8	1.0	1.25	1.5	1.75
d_p	Max	2.0	2.5	3.5	4.0	5.5	7.0	8.5
	Min	1.75	2.25	3.2	3.7	5.2	6.64	8.14
e	Min	1.73	2.30	2.87	3.44	4.58	5.72	6.86
s	Min	1.5	2.0	2.5	3.0	4.0	5.0	6.0
	Max	1.54	2.04	2.56	3.06	4.09	5.09	6.09
t	Min	1.2	1.5	2.0	2.0	3.0	4.0	4.8
z	Min	0.75	1.0	1.25	1.5	2.0	2.5	3.0
	Max	1.0	1.25	1.5	1.75	2.25	2.75	3.25

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 963/IS: 1365-1978 /ISO 2009

Slotted Countersunk Head Screws



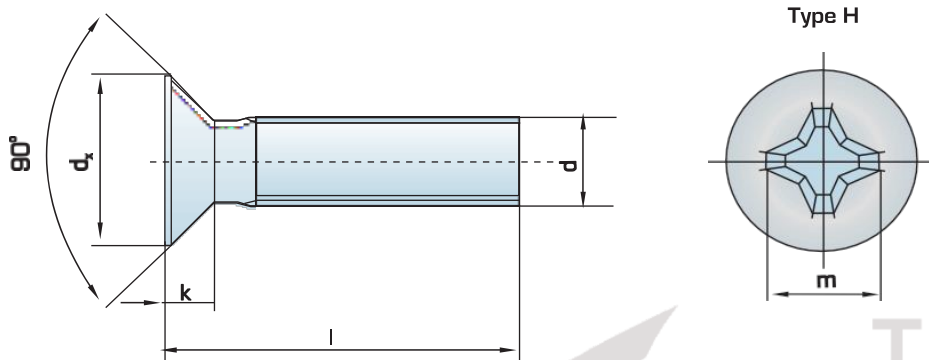
Thread size d		M 2	[M 2.5]	M 3	M 3.5	M 4	M 5	M 6	M 8	M 10	M 12	M 16
Pitch		0.4	0.45	0.5	0.6	0.7	0.8	1	1.25	1.5	1.75	2
dk	Max	3.8	4.7	5.6	6.5	7.5	9.2	11	14.5	18	22	29
	Min	3.5	4.4	5.3	6.14	7.14	8.84	10.57	14.07	17.57	21.48	28.48
k Max		1.2	1.5	1.65	1.93	2.2	2.5	3	4	5	6	8
n	Min	0.5	0.6	0.8	0.8	1.0	1.2	1.6	2.0	2.5	3.0	4.0
	Max	0.7	0.8	1	1	1.2	1.51	1.91	2.31	2.81	3.31	4.37
t	Min	0.4	0.5	0.6	0.7	0.8	1	1.2	1.6	2	2.4	3.2
	Max	0.6	0.7	0.85	1	1.1	1.3	1.6	2.1	2.6	3	4

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 965/IS: 7485-1985 /ISO 7046

Crosse Recessed Countersunk Flat Head Screws



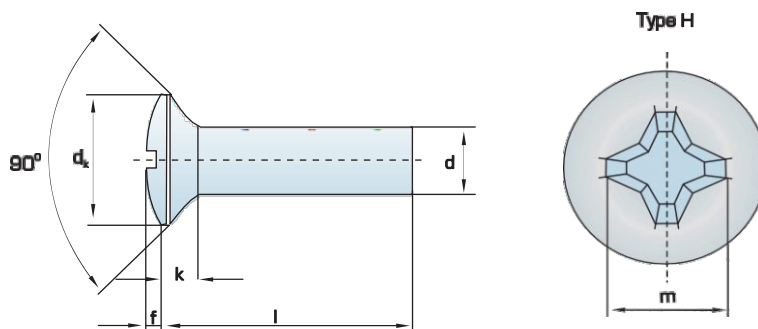
Thread size [d]		M2	M2.5	M3	(M3.5)	M4	M5	M6	M8	M10
Pitch		0.4	0.45	0.5	0.6	0.7	0.8	1	1.25	1.5
d _k	Max	3.8	4.7	5.6	6.5	7.5	9.2	11	14.5	18
	Min	3.5	4.4	5.3	6.14	7.14	8.84	10.57	14.07	17.57
k Max		1.2	1.5	1.65	1.93	2.2	2.5	3	4	5
Cross Recess No.		1			2			3	4	
m		2.35	2.7	2.9	3.9	4.4	4.6	6.6	8.7	9.6
Type H	Penetration Min	0.95	1.25	1.5	1.4	1.9	2.1	2.8	3.9	4.8
	Depth Max	1.25	1.55	1.8	1.9	2.4	2.6	3.3	4.4	5.3

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 966/IS: 7486-1985 /ISO 7047

Crosse Recessed Raised Countersunk Head Screws

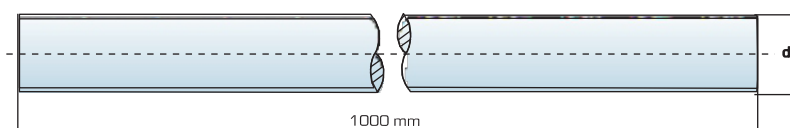


Thread Size [d]		M2	M2.5	M3	[M3.5)	M4	M5	M6	M8	M10
Pitch		0.4	0.45	0.5	0.6	0.7	0.8	1.0	1.25	1.5
dk	Max	3.8	4.7	5.6	6.5	7.5	9.2	11.0	14.5	18.0
	Min	3.5	4.4	5.3	6.14	7.14	8.84	10.57	14.07	17.57
f		0.5	0.6	0.75	0.9	1.0	1.25	1.5	2.0	2.5
k Max		1.2	1.5	1.65	1.93	2.2	2.5	3.0	4.0	5.0
Cross Recess No.		1			2			3	4	
m		2.5	2.7	3.1	4.2	4.5	5.3	6.8	9.0	10.0
Type H	Penetration Min	1.1	1.3	1.7	1.74	2.04	2.77	3.03	4.18	5.38
	Depth Max	1.4	1.6	2.0	2.24	2.54	3.27	3.53	4.68	5.88

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 975

Threaded Rod



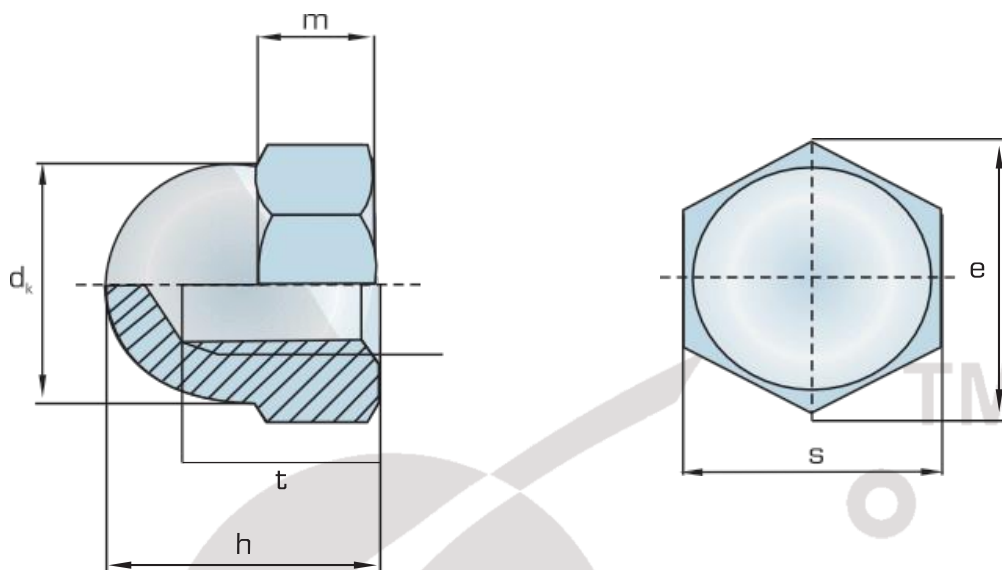
Thread Size d	M2	M2.5	M3	M4	M5
Pitch	0.4	0.45	0.5	0.7	0.8
Thread Size d	M6	M8	M10	M12	(M14)
Pitch	1.0	1.25	1.50	1.75	2.0
Thread Size d	M16	[M18)	M20	M22	M24
Pitch	2.0	2.50	2.50	2.5	3.0

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 1587/IS: 7790-1975

Hexagon Domed Cap Nuts



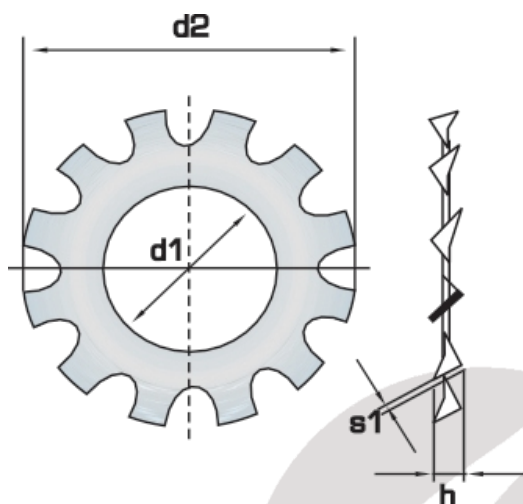
Thread Size [d]		M4	M5	M6	M8	M10	M12	M16
Pitch		0.7	0.8	1.0	1.25	1.5	1.75	2.0
h Max		8.0	10.0	12.0	15.0	18.0	22.0	28.0
m	Max	3.2	4.0	5.0	6.5	8.0	10.0	13.0
	Min	2.9	3.7	4.7	6.14	7.64	9.64	12.3
s	Max	7.0	8.0	10.0	13.0	17	19	24.0
dk	Max	6.5	7.5	9.5	12.5	16	18	23.0
t	Min	5.26	7.21	7.71	10.65	12.65	15.65	20.58
	Max	5.74	7.79	8.29	11.35	13.35	16.35	21.42

ALL DIMENSIONS ARE IN MILLIMETER.

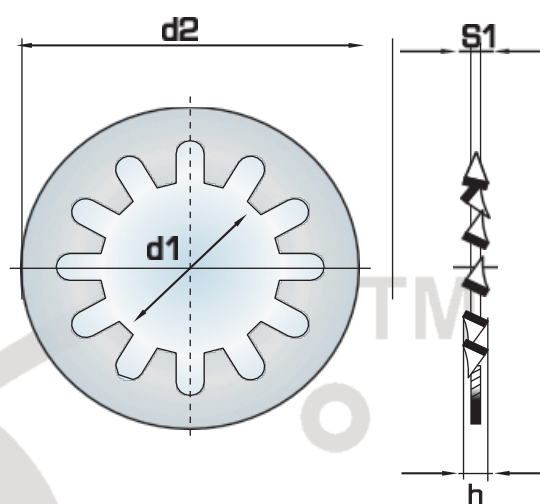
DIN 6797/IS: 5371-1982

Toothed Lock Washers

Type A, with external teeth



Type J, with external teeth



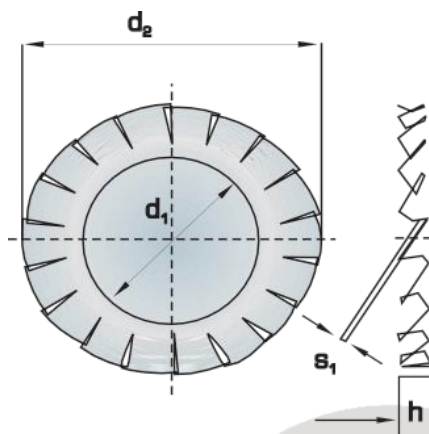
Nominal Size	For Nom. Diameter	d1		d2		s1	Min. No. Of Teeth
		Min	Max	Max	Min		
4.3	4	4.3	4.48	8	7.64	0.5	8
5.3	5	5.3	5.48	10	9.64	0.6	8
6.4	6	6.4	6.62	11.0	10.57	0.7	8
8.4	8	8.4	8.62	15.0	14.57	0.8	8
10.5	10	10.5	10.77	18.0	17.57	0.9	9
13.0	12	13	13.27	20.5	19.98	1.0	10
15.0	14	15	15.27	24.0	23.48	1.0	10
17.0	16	17	17.27	26.0	25.48	1.2	12

ALL DIMENSIONS ARE IN MILLIMETER.

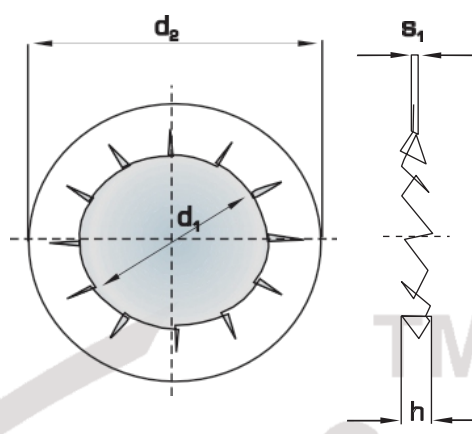
DIN 6798/IS: 5556-1970

Serrated Lock Washers

Type A ,with external teeth



Type J ,with external teeth

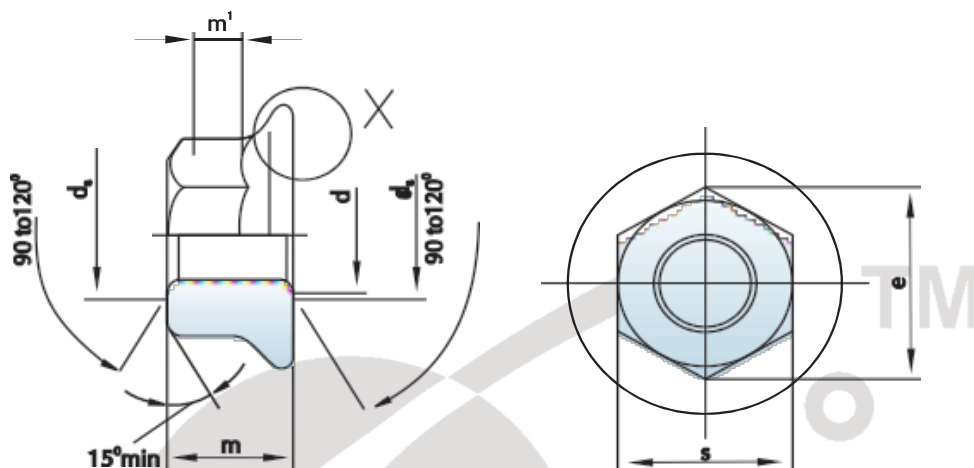


Nominal size	For Thread Dia	d1		d2		No. Of Teeth	
		Min	Max	Max	Min	A Type	J Type
1.7	1.6	1.7	1.84	3.6	3.3	9.0	7.0
2.2	2.0	2.2	2.34	4.5	4.2	9.0	7.0
2.7	2.5	2.7	2.84	5.5	5.2	9.0	7.0
3.2	3.0	3.2	3.38	6.0	5.7	9.0	7.0
3.7	3.5	3.7	3.88	7.0	6.64	10.0	8.0
4.3	4.0	4.3	4.48	8.0	7.64	11.0	8.0
5.3	5.0	5.3	5.48	10.0	9.64	11.0	8.0
6.4	6.0	6.4	6.62	11.0	10.57	12.0	9.0
8.4	8.0	8.4	8.62	15.0	14.57	14.0	10.0
10.5	10.0	10.5	10.77	18.0	17.57	16.0	12.0
13.0	12.0	13.0	13.27	20.5	19.98	16.0	12.0
15.0	14.0	15.0	15.27	24.0	23.48	18.0	14.0
17.0	16.0	17.0	17.27	26.0	25.48	18.0	14.0
19.0	18.0	19.0	19.33	30.0	29.48	18.0	14.0
21.0	20.0	21	21.33	33.0	32.38	20.0	16.0

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 6923

Hexagon Flange Nuts



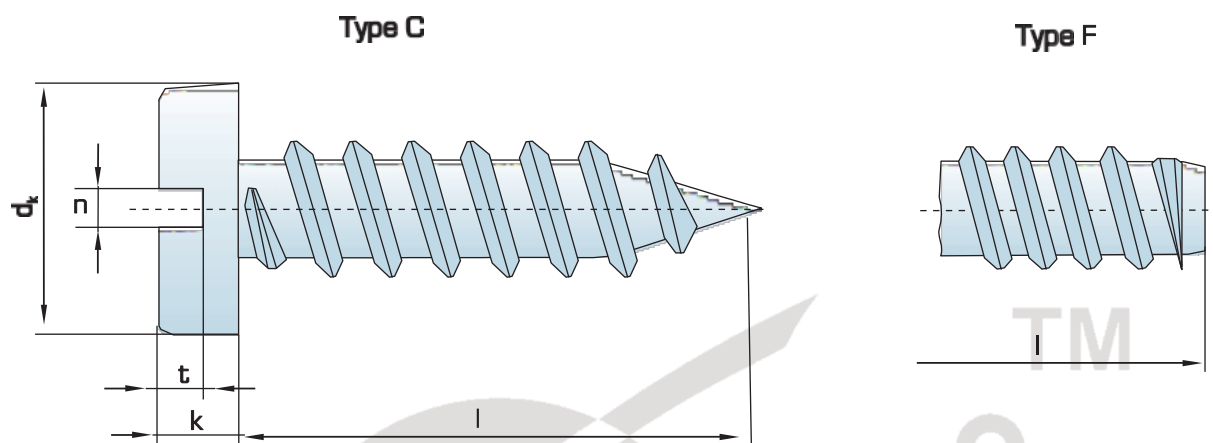
Thread Size d		M5	M6	M8	M10	M12	M14	M16	M20
Pitch		0.8	1	1.25	1.5	1.75	2	2	2.5
d_a	Min	5	6	8	10	12	14	16	20
	Max	5.75	6.75	8.75	10.8	13	15.1	17.3	21.6
e	Min	8.79	11.05	14.38	16.64	20.03	23.36	26.75	32.95
m	Max	5	6	8	10	12	14	16	20
	Min	4.7	5.7	7.6	9.6	11.6	13.3	15.3	18.9
m_1	Min	2.2	3.1	4.5	5.5	6.7	7.8	9	11.1
s	Max	8	10	13	15	18	21	24	30
	Min	7.78	9.78	12.73	14.73	17.73	20.67	23.67	29.67

ALL DIMENSIONS ARE IN MILLIMETER.



DIN 7971/IS:7173-1974/ISO 1481

Slotted Pan Head Tapping Screws

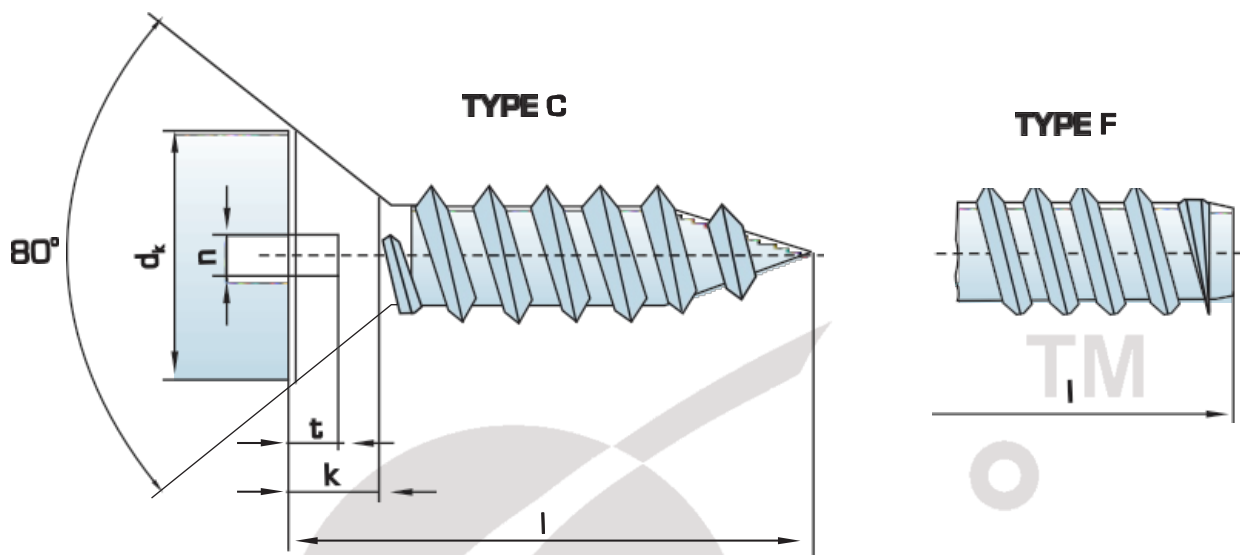


Thread Size		ST 2.2	ST 2.9	ST 3.5	ST 4.2	ST 4.8	ST 5.5	ST 6.3
No		#4	#5	#6	#8	#10	#12	#14
Pitch		0.8	1.1	1.3	1.4	1.6	1.8	1.8
dk	Max	4.2	5.6	6.9	8.2	9.5	10.8	12.5
	Min	3.9	5.3	6.54	7.84	9.14	10.37	12.07
k	Max	1.35	1.75	2.1	2.45	2.8	3.2	3.65
	Min	1.15	1.5	1.85	2.15	2.5	2.85	3.3
n	Min	0.6	0.8	1.0	1.2	1.2	1.6	1.6
	Max	0.8	1	1.2	1.51	1.51	1.91	1.91
t	Min	0.55	0.75	0.95	1.15	1.35	1.55	1.8
	Max	0.8	1	1.25	1.5	1.7	1.95	2.2

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 7972/IS:7170-1974/ISO 1482

Slotted Countersunk Head Tapping Screws

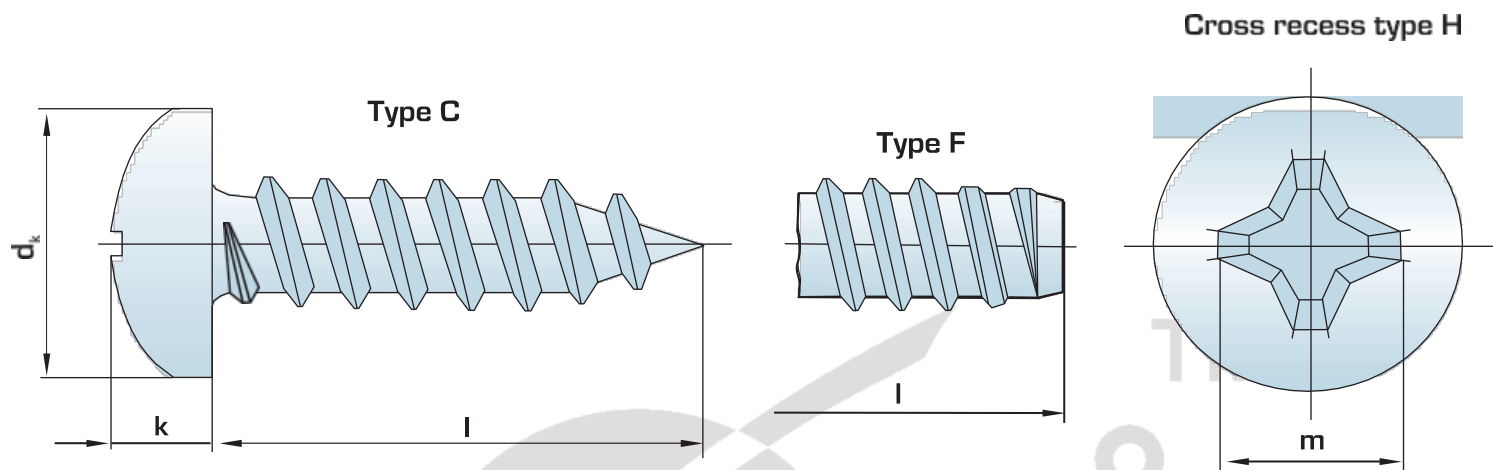


Thread Size		ST 2.2	ST 2.9	ST 3.5	ST 4.2	ST 4.8	ST 5.5	ST 6.3
No		#4	#5	#6	#8	#10	#12	#14
Pitch		0.8	1.1	1.3	1.4	1.6	1.8	1.8
dk	Max	4.3	5.5	6.8	8.1	9.5	10.8	12.4
	Min	4	5.2	6.44	7.74	9.14	10.37	11.97
k		1.3	1.7	2.1	2.5	3	3.4	3.8
n	Min	0.6	0.8	1.0	1.2	1.2	1.6	1.6
	Max	0.8	1	1.2	1.51	1.51	1.91	1.91
t	Min	0.4	0.5	0.6	0.75	0.85	1	1.20
	Max	0.6	0.75	0.95	1.15	1.35	1.5	1.75

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 7981/ISO 7049

Cross Recessed Pan Head Tapping Screws

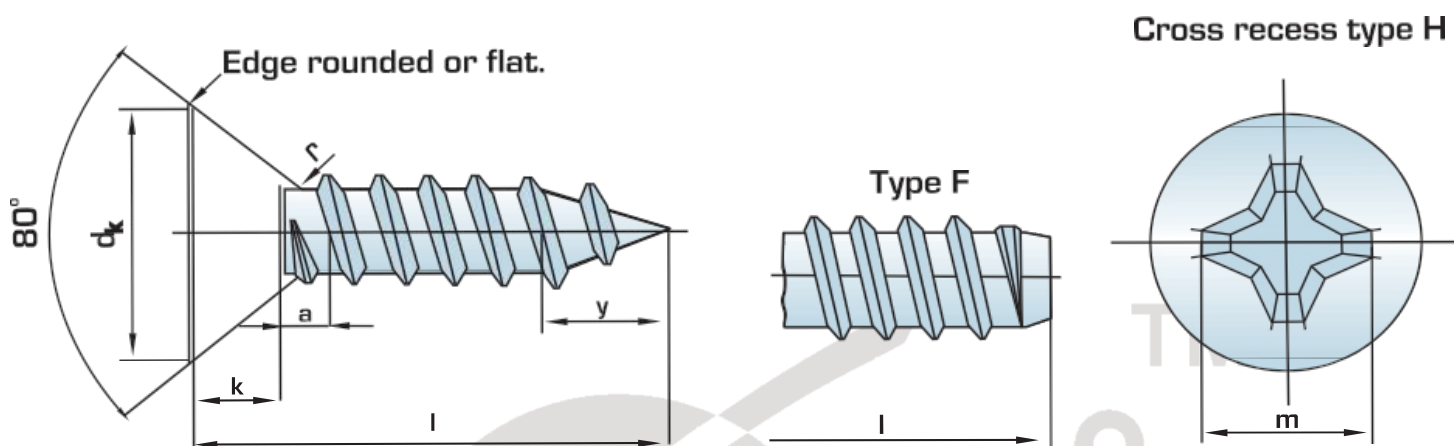


Thread Size d		ST 2.2	ST 2.9	ST 3.5	ST 4.2	ST 4.8	ST 5.5	ST 6.3
No		#4	#5	#6	#8	#10	#12	#14
Pitch		08	11	13	14	16	18	18
dk	Max	42	56	69	82	95	108	125
	Min	39	53	65	78	91	1,037	1,207
k	Max	18	22	26	30	35	39	45
	Min	15	19	23	27	32	36	42
Cross Recess No.		1		2				3
M -		26	3	42	46	5	65	71
Type H	Penetration Min	086	135	14	18	226	249	3
	Depth Max	132	18	203	246	287	315	366

ALL DIMENSIONS ARE IN MILLIMETER.

DIN 7982/ISO 7050

Cross Recessed Countersunk Head Tapping Screws

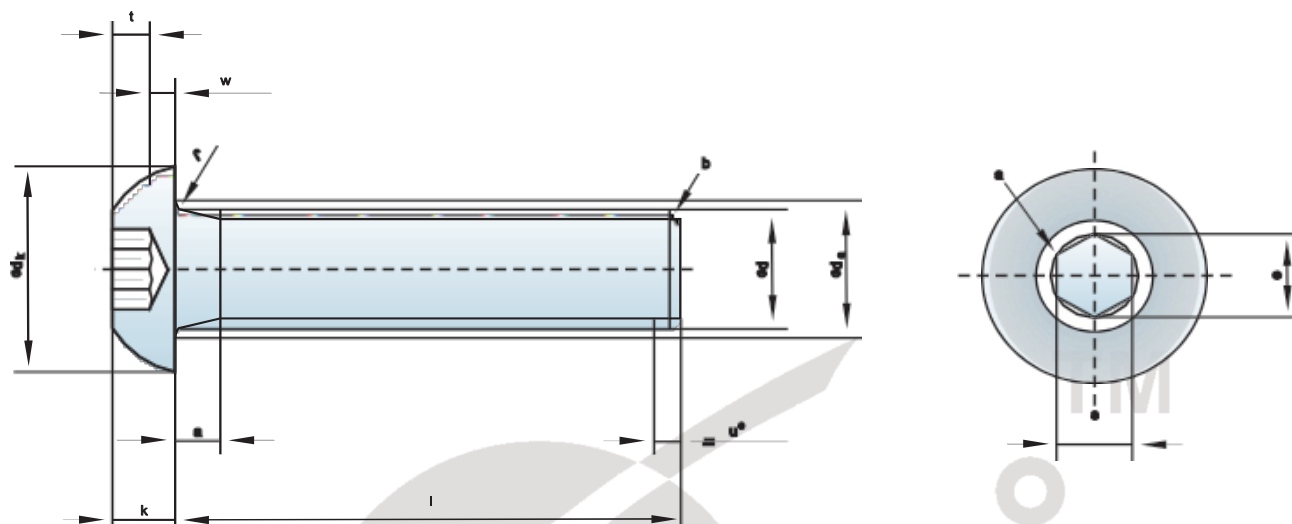


Thread Size d		ST 2.2	ST 2.9	ST 3.5	ST 4.2	ST 4.8	ST 5.5	ST 6.3
No		#4	#5	#6	#8	#10	#12	#14
Pitch		0.8	1.1	1.3	1.4	1.6	1.8	1.8
dk	Max	4.3	5.5	6.8	8.1	9.5	10.8	12.4
	Min	4	5.2	6.44	7.74	9.14	10.37	11.97
k		1.3	1.7	2.1	2.5	3	3.4	3.8
Cross Recess No.		1		2				3
M-		2.5	3	4.2	4.7	5.1	6.8	7.1
Type H	Penetration Min	1.02	1.4	1.62	2.11	2.59	2.95	3.33
	Depth Max	1.32	1.7	2.12	2.62	3.1	3.53	3.91

ALL DIMENSIONS ARE IN MILLIMETER.

ISO 7380

Hexagon Socket Button Head Screws



Thread Size d	M3	M4	M5	M6	M8	M10	M12	M16
Pitch	0.5	0.7	0.8	1	1.25	1.5	1.75	2
a	Max	1.0	1.4	1.6	2	2.50	3.0	4
	Min	0.5	0.7	0.8	1	1.25	1.5	2
d _a	Max	3.6	4.7	5.7	6.8	9.2	11.2	18.2
d _k	Max	5.7	7.60	9.50	10.50	14.00	17.50	28.00
	Min	5.4	7.24	9.14	10.07	13.57	17.07	27.48
ea,b	Min	2,303	2.873	3.443	4.583	5.723	6.863	11.429
k	Max	1.65	2.20	2.75	3.3	4.4	5.5	8.80
	Min	1.40	1.95	2.50	3.0	4.1	5.2	8.44
f	Min	0.1	0.2	0.2	0.25	0.4	0.4	0.6
s _c	Max	2.080	2.58	3.080	4.095	5.140	6.140	10.175
	Min	2.020	2.52	3.020	4.020	5.020	6.020	10.025
t	Min	1.04	1.3	1.56	2.08	2.6	3.12	5.2
w	Min	0.2	0.3	0.38	0.74	1.05	1.45	2.25

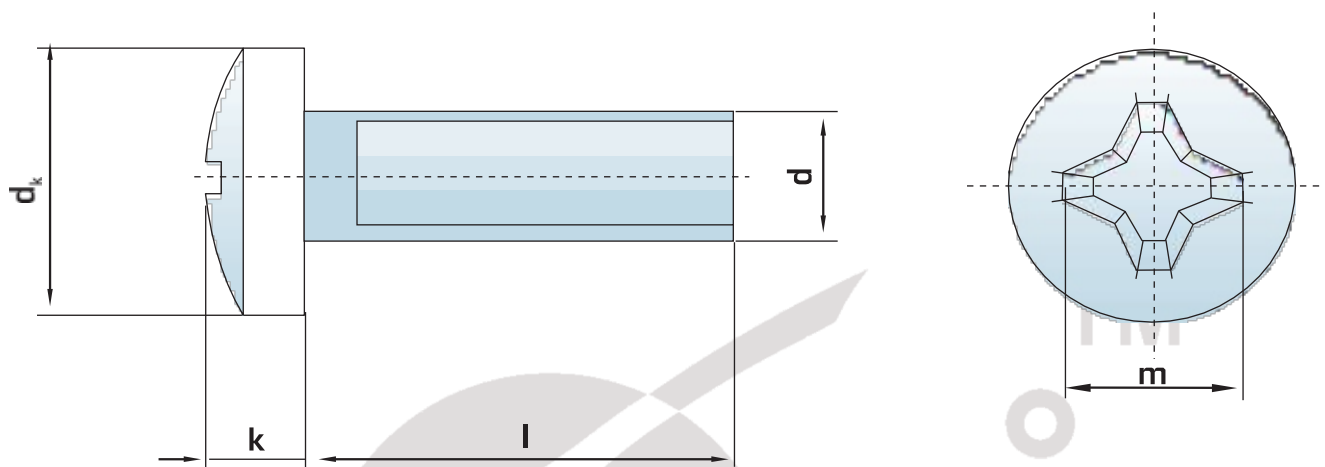
ALL DIMENSIONS ARE IN MILLIMETER.



DIN 7985/IS:7483-1985 ISO 7045

Cross Recessed Raised Cheese Head Screws (Pan Philip Screw)

Cross recess type H



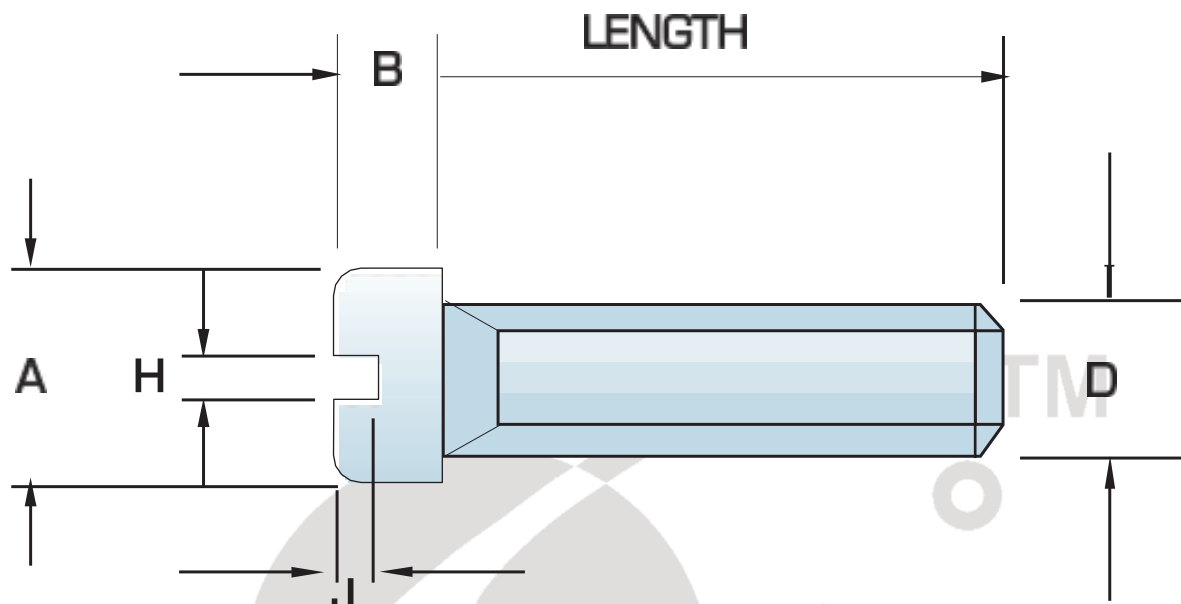
Thread Size d		M1.6	M2	M2.5	M 3	M3.5	M4	M5	M6	M8	M10
Pitch		0.35	0.4	0.45	0.5	0.6	0.7	0.8	1	1.25	1.5
dk	Max	3.2	4	5	6	7	8	10	12	16	20
	Min	2.9	3.7	4.7	5.7	6.64	7.64	9.64	11.57	15.57	19.48
k	Max	1.42	1.72	2.12	2.52	2.82	3.25	3.95	4.75	6.15	7.68
	Min	1.18	1.48	1.88	2.28	2.58	2.95	3.65	4.45	5.85	7.32
Cross Recess No.		0	1			2			3	4	
M		1.8	2.5	2.7	3.1	4.2	4.6	5.3	6.8	9	10.2
Type H	Penetration Min	0.72	1.1	1.3	1.7	1.74	2.04	2.77	3.03	4.18	5.38
	Depth Max	1.02	1.4	1.6	2	2.24	2.54	3.27	3.53	4.68	5.88

ALL DIMENSIONS ARE IN MILLIMETER.



BS 450 / 1958

Cheese Head Screws

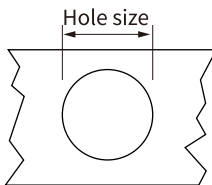
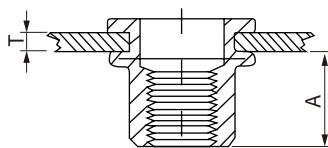
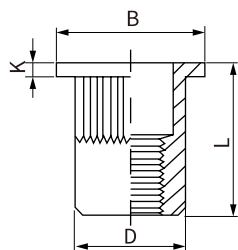


Norn. Size of Screw	D	Thread s per Inch	A		B		H		J
		B.S.W.	Max.	Min.	Max.	Min.	Max.	Min.	
1/ 8	0.1250	40	0.188	0.180	0.087	0.082	0.039	0.032	0.039
3/ 16	0.1875	24	0.281	0.270	0. 131	0.124	0.050	0.042	0.059
1/ 4	0.2500	20	0.375	0.360	0. 175	0.165	0.061	0.051	0.079
5/ 16	0.3125	18	0.469	0.450	0.219	0.207	0.071	0.061	0.098
3/ 8	0.3750	16	0.562	0.540	0.262	0.249	0.082	0.072	0.118

ALL DIMENSIONS ARE IN MILLIMETER.



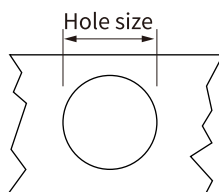
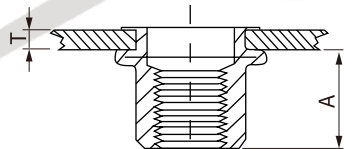
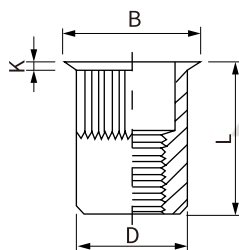
Flat Head Knurled Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-KB-0315	0.5-1.5	5.5	5.0	4.9	8.0	0.8	9.0
	FH-KB-0330	1.5-3.0						10.5
M4	FH-KB-0420	0.5-2.0	6.0	6.0	5.9	9.0	0.8	11.0
	FH-KB-0435	2.0-3.5						13.0
M5	FH-KB-0525	0.5-2.5	7.5	7.0	6.9	10.0	1.0	13.0
	FH-KB-0545	2.5-4.5						16.0
M6	FH-KB-0630	0.5-3.0	9.2	9.0	8.9	12.3(*13.0)	1.3	15.0(15.5)
	FH-KB-0655	3.0-5.5						19.5
M8	FH-KB-0835	1.0-3.5	11.5	11.0	10.9	14.5(*16.0)	1.5	18.0(18.5)
	FH-KB-0860	3.5-6.0						21.0
M10	FH-KB-1040	1.0-4.0	13.5	13.0	12.9	17.0(*19.0)	1.7	21.0
	FH-KB-1065	4.0-6.5						24.0
M10	FH-KB-1035(12H)	1.0-3.5	11.0	12.0	11.9	16.0	1.6	19.0
	FH-KB-1055(12H)	3.5-5.5						24.0
M12	FH-KB-1240	1.0-4.0	13.5	15.0	14.9	18.8	1.7	22.0
	FH-KB-1265	4.0-6.5						25.0
M12	FH-KB-1240(16H)	1.0-4.0	15.0	16.0	15.9	22.0	2.0	25.0
	FH-KB-1260(16H)	3.5-6.0						28.0

Part are different series, if customers need this size, please mark.
All this part included serration or without serration under the flanges.

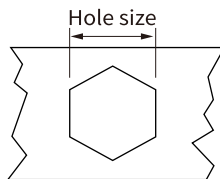
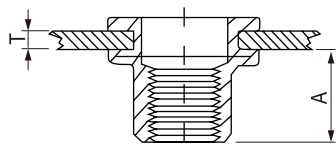
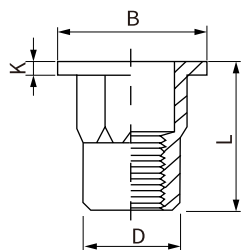
Reduced Head Knurled Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RH-KB-0320	0.5-2.0	6.2	5.0	4.9	6.0	0.5	9.0
	RH-KB-0330	1.5-3.0						11.5
M4	RH-KB-0420	0.5-2.0	7.0	6.0	5.9	7.0	0.5	11.0
	RH-KB-0440	2.0-4.0						13.0
M5	RH-KB-0520	0.5-2.0	7.0	7.0	6.9	8.0	0.5	11.5
	RH-KB-0540	2.0-4.0						13.0
M6	RH-KB-0625	0.5-2.5	8.5	9.0	8.9	10.0(10.4)	0.6	14.0
	RH-KB-0650	2.5-5.0						16.0
M8	RH-KB-0830	0.5-3.0	10.0	11.0	10.9	12.0(12.4)	0.65	16.5
	RH-KB-0850	3.0-5.0						18.5
M10	RH-KB-1035	1.0-3.5	12.5	13.0	12.9	14.0	0.7	19.5
	RH-KB-1060	3.5-6.0						22.0
M10	RH-KB-1035(12H)	1.0-3.5	12.5	12.0	11.9	13.0	0.7	19.5
	RH-KB-1055(12H)	3.5-5.5						22.0
M12	RH-KB-1240	1.0-4.0	16.2	16.0	15.9	17.6	0.75	24.2
	RH-KB-1265(12H)	4.0-6.5					0.8	27.5
M12	RH-KB-1235	0.5-3.5	15.2	15.0	14.9	16.5	0.8	22.0

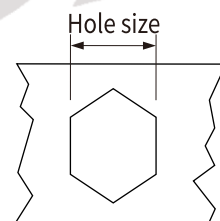
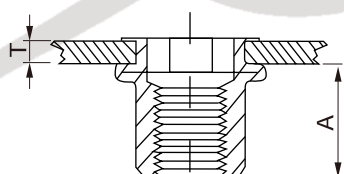
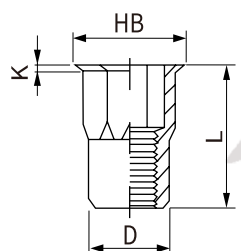


Flat Head Semi-Hex Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-SHB-0315	0.5-1.5	5.5	5.0	4.9	8.0	0.75	9.0
M4	FH-SHB-0420 FH-SHB-0440	0.5-2.0 2.0-4.0	7.0	6.0	5.9	9.0	0.8	11.0 13.0
M5	FH-SHB-0525 FH-SHB-0540	0.5-2.5 2.5-4.0	7.5	7.0	6.9	10.0	1.0	13.0 14.0
M6	FH-SHB-0630 FH-SHB-0645	0.5-3.0 3.0-4.5	9.2	9.0	8.9	12.7(13.0)	1.35	15.0(15.5) 18.0
M8	FH-SHB-0835 FH-SHB-0855	1.0-3.5 3.5-5.5	11.2	11.0	10.9	15.0	1.5	18.0 21.0
M10	FH-SHB-1040 FH-SHB-1060	1.0-4.0 3.5-6.0	12.5 12.8	13.0	12.9	18.0 18.0(19.0)	1.7	21.0 23.0
M10	FH-SHB-1035(12H)	1.0-3.5	11.0	12.0	11.9	17.0	1.6	19.0
M12	FH-SHB-1250(15H)	1.5-4.0	14.5	15.0	14.9	20.0	1.7	23.0

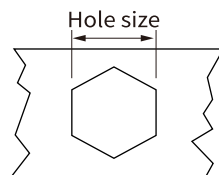
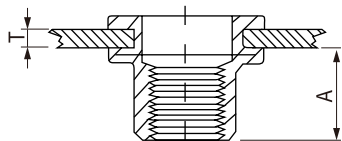
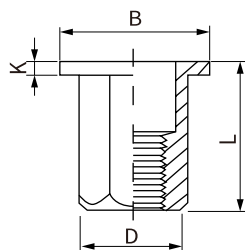
Reduced Hex Head Inner-Hex Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RHH-IHB-0315 RHH-IHB-0325	0.5-1.5 1.5-2.5	5.5	5.0	4.9	6.0	0.5	8.5 10.5
M4	RHH-IHB-0420 RHH-IHB-0440	0.5-2.0 2.0-4.0	8.3	6.0	5.9	7.0	0.5	12.0 14.0
M5	RHH-IHB-0525 RHH-IHB-0540	0.5-2.5 2.5-4.5	8.7	7.0	6.9	8.0	0.5	13.0 15.0
M6	RHH-IHB-0635 RHH-IHB-0650	1.0-3.5 3.5-5.0	10.5	9.0	8.9	10.0	0.6	15.5 18.0
M8	RHH-IHB-0830 RHH-IHB-0850	1.0-3.0 3.0-5.0	11.3	11.0	10.9	12.0	0.65	17.0 20.0
M10	RHH-IHB-1040 RHH-IHB-1050	1.0-4.0 4.0-6.0	12.8	13.0	12.9	14.5	0.75	21.0 23.0
M10	RHH-IHB-1040(12H)	1.0-4.0	11.3	12.0	11.9	13.5	0.7	19.5
M12	RHH-IHB-1240 RHH-IHB-1260	1.0-4.0 4.0-7.0	14.8	16.0	15.9	17.5	1.0	24.2 28.0



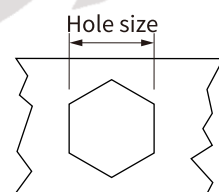
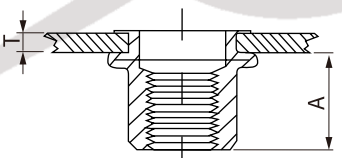
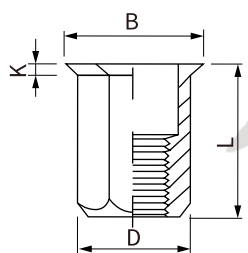
Flat Head Full Hex Body



Thread	P/N	T (GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-FHB-0315	0.5-1.5	5.5	5.0	4.9	7.5	0.8	8.5
M4	FH-FHB-0420 FH-FHB-0440	0.5-2.0 2.0-4.0	6.5	6.0	5.9	9.0	0.8	11.0 13.0
M5	FH-FHB-0525 FH-FHB-0540	0.5-2.5 2.5-4.0	8.0	7.0	6.9	10.0	1.0	14.0 16.5
M6	FH-FHB-0630 FH-FHB-0645	0.5-3.0 3.0-4.5	8.5	9.0	8.9	12.7(13.0)	1.35	15.0(16.0) 19.5
M8	FH-FHB-0835 FH-FHB-0855	1.0-3.5 3.5-5.5	10.5	11.0	10.9	16.0	1.5	18.0 21.0
M10	FH-FHB-1040 FH-FHB-1060	1.0-4.0 4.0-6.0	12.5	13.0	12.9	18.0(19.0) 19.0	1.7	21.0(23.0) 24.0
M10	FH-FHB-1035(12H) FH-FHB-1040(12H)	1.0-3.5 3.5-6.0	13.5	12.0	11.9	18.0	1.7	21.0 22.5
M12	FH-FHB-1245(15H)	1.0-4.5	14.0	15.0	14.9	20.0	1.7	23.0
M12	FH-FHB-1250(16H) FH-FHB-1280(16H)	2.0-5.0 5.0-8.0	16.5	16.0	15.9	23.0	2.0	27.0 30.0

Part are different series, if customers need this size, please mark.

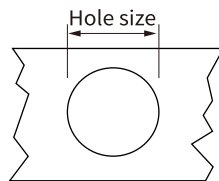
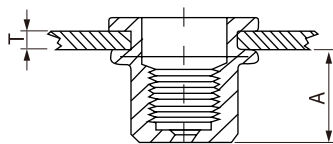
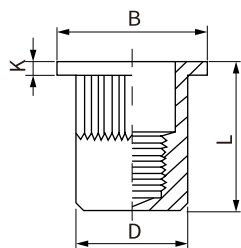
Reduced Hex Head Full-Hex Body



Thread	P/N	T (GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RHH-FHB-0315 RHH-FHB-0330	0.5-1.5 1.5-3.0	5.0	5.0	4.9	6.0	0.5	8.5 10.5
M4	RHH-FHB-0420 RHH-FHB-0440	0.5-2.0 2.0-4.0	6.7	6.0	5.9	7.0	0.5	11.0 13.5
M5	RHH-FHB-0525 RHH-FHB-0545	0.5-2.5 2.5-4.5	9.0	7.0	6.9	8.0	0.5	14.0 16.0
M6	RHH-FHB-0630 RHH-FHB-0650	1.0-3.0 3.0-5.0	10.0	9.0	8.9	10.0	0.6	16.0 18.0
M8	RHH-FHB-0840 RHH-FHB-0860	1.0-4.0 4.0-6.0	11.5	11.0	10.9	12.0	0.65	18.0 20.0
M10	RHH-FHB-1035(12H) RHH-FHB-1060(12H)	1.0-3.5 3.5-6.0	12.5 14.5	12.0	11.9	13.5	0.75	20.0 23.5
M10	RHH-FHB-1035 RHH-FHB-1060	1.0-3.5 3.5-6.0	12.5 14.5	13.0	12.9	14.5	0.75	19.0 23.5
M12	RHH-FHB-1240 RHH-FHB-1260	1.0-4.0 4.0-7.0	15.5	16.0	15.9	17.5	1.1	25.0 28.0
M12	RHH-FHB-1240(15H)	1.0-4.0	15.5	15.0	14.9	16.5	1.1	22.5

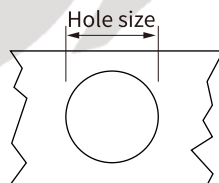
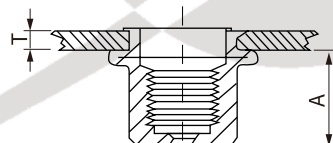
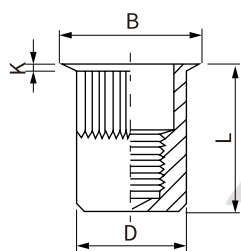


Flat Head Knurled Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	FH-KBC-0420	0.5-2.0	11.3	6.0	5.9	9.0	0.8	16.0
	FH-KBC-0435	2.0-3.5						18.0
M5	FH-KBC-0525	0.5-2.5	11.5	7.0	6.9	10.0	1.0	17.0
	FH-KBC-0545	2.5-4.5						20.0
M6	FH-KBC-0630	0.5-3.0	13.0	9.0	8.9	12.3	1.3	19.2
	FH-KBC-0655	3.0-5.5						23.0
M8	FH-KBC-0830	0.5-3.0	14.8	11.0	10.9	15.0	1.5	21.5
	FH-KBC-0855	3.0-5.5						28.0
M10	FH-KBC-1040	1.0-4.0	19.2	13.0	12.9	17.0	1.6	27.0
	FH-KBC-1060	3.5-6.0						34.0

Reduced Head Knurled Body Closed End



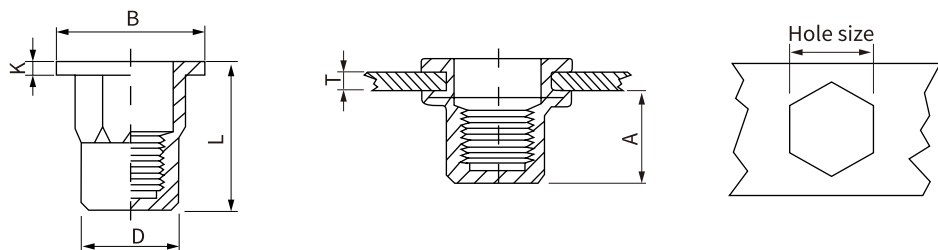
Unit (mm)



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	RH-KBC-0420	0.5-2.0	10.5	6.0	5.9	7.0	0.5	15.0
	RH-KBC-0435	2.0-3.5						16.5
M5	RH-KBC-0520	0.5-2.0	11.3	7.0	6.9	8.0	0.5	16.5
	RH-KBC-0535	2.0-3.5						18.0
M6	RH-KBC-0630	0.5-3.0	15.3	9.0	8.9	10.0	0.6	20.5
	RH-KBC-0645	3.0-4.5						22.0
M8	RH-KBC-0830	0.5-3.0	16.5	11.0	10.9	12.0	0.65	23.0
	RH-KBC-0845	3.0-4.5						24.5
M10	RH-KBC-1030	1.0-3.0	18.2	13.0	12.9	14.0	0.7	24.5
	RH-KBC-1050	3.0-5.0						26.0
M12	RH-KBC-1240	1.0-4.0	20.0	16.0	15.9	17.6	0.8	29.0
	RH-RBC-1260	3.0-6.0						32.0

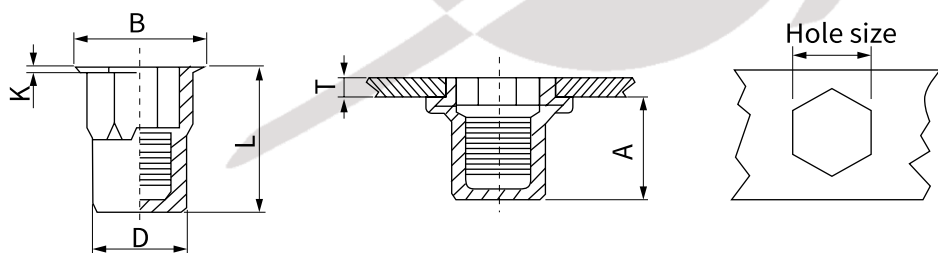


Flat Head Semi-Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	FH-IHBC-0420 FH-IHBC-0440	0.5-2.0 2.0-4.0	11.5	6.0	5.9	9.0	0.8	17.0 19.0
M5	FH-IHBC-0525 FH-IHBC-0540	0.5-2.5 2.5-4.0	13.5	7.0	6.9	10.0	1.0	20.0 22.0
M6	FH-IHBC-0635 FH-IHBC-0645	0.5-3.0 3.0-4.5	17.0	9.0	8.9	12.7	1.35	23.0 25.0
M8	FH-IHBC-0835 FH-IHBC-0855	1.0-3.5 3.5-5.5	18.2	11.0	10.9	15.0	1.5	26.0 28.0
M10	FH-IHBC-1040 FH-IHBC-1060	1.0-4.0 3.5-6.0	25.0	13.0	12.9	18.0(19.0)	1.7	33.0 35.0
M12	FH-IHBC-1250 FH-IHBC-1280	2.0-5.0 5.0-8.0	27.0	16.0	15.9	23.0	2.0	34.0 37.0

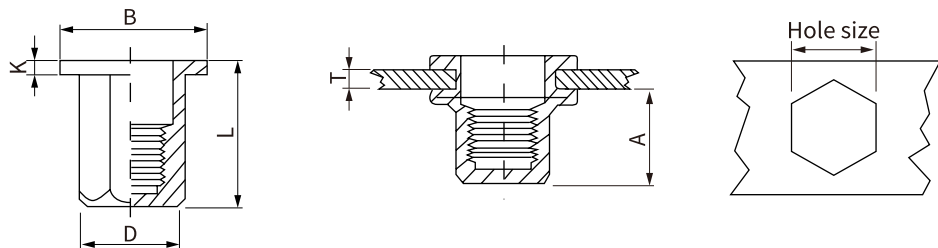
Reduced Hex Head Inner-Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	RHH-IHBC-0420 RHH-IHBC-0440	0.5-2.0 2.0-4.0	11.5	6.0	5.9	7.0	0.6	16.7 18.0
M5	RHH-IHBC-0525 RHH-IHBC-0545	0.5-2.5 2.5-4.5	13.5	7.0	6.9	8.0	0.6	20.0 23.0
M6	RHH-IHBC-0635 RHH-IHBC-0655	0.5-3.0 3.0-5.5	15.8	9.0	8.9	10.0	0.6	22.5 23.5
M8	RHH-IHBC-0835 RHH-IHBC-0855	1.0-3.5 3.5-5.0	18.2	11.0	10.9	12.0	0.7	24.0 25.0
M10	RHH-IHBC-1040 RHH-IHBC-1060	1.0-4.0 4.0-6.0	23.2	13.0	12.9	14.5	0.85	30.5 30.5
M12	RHH-IHBC-1265 RHH-IHBC-1285	4.0-6.5 6.5-8.5	22.5	16.0	15.9	17.5	1.0	32.5 35.0

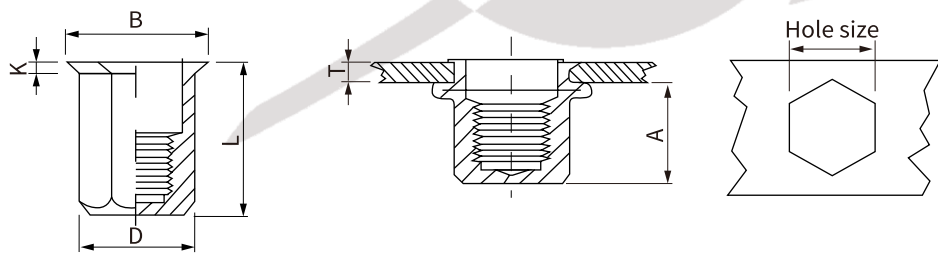


Flat Head Full Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	FH-FHBC-0420	0.5-2.0	11.0	6.0	5.9	9.0	1.0	17.5
	FH-FHBC-0440	2.0-4.0						19.0
M5	FH-FHBC-0525	0.5-2.5	13.5	7.0	6.9	10.0	1.0	18.0
	FH-FHBC-0540	2.5-4.0						20.0
M6	FH-FHBC-0630	0.5-3.0	17.0	9.0	8.9	12.7	1.3	23.0
	FH-FHBC-0645	3.0-4.5						25.0
M8	FH-FHBC-0835	1.0-3.5	19.0	11.0	10.9	16.0	1.5	26.0
	FH-FHBC-0855	3.5-5.5						29.0
M10	FH-FHBC-1040	1.0-4.0	25.0	13.0	12.9	19.0	2.0	33.0
	FH-FHBC-1060	4.0-6.0						35.0

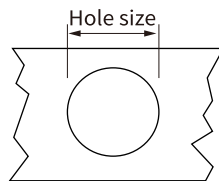
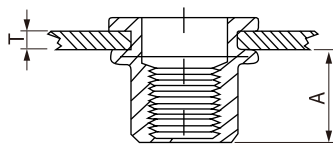
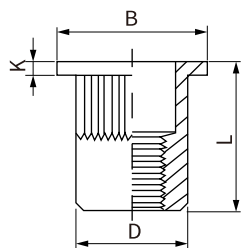
Reduced Hex Head Full-Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	RH-FHBC-0420	0.5-2.0	12.3	6.0	5.9	7.0	0.5	16.0
	RH-FHBC-0440	2.0-4.0						18.0
M5	RH-FHBC-0525	0.5-2.5	15.2	7.0	6.9	8.0	0.5	20.0
	RH-FHBC-0545	2.5-4.5						23.0
M6	RH-FHBC-0630	0.5-3.0	14.5	9.0	8.9	10.0	0.6	20.5
	RH-FHBC-0650	3.0-5.0						23.5
M8	RH-FHBC-0840	1.0-4.0	17.0	11.0	10.9	12.0	0.65	23.0
	RH-FHBC-0860	4.0-6.0						25.0
M10	RH-FHBC-1045	1.0-4.5	20.0	13.0	12.9	14.5	0.75	28.5
	RH-FHBC-1060	4.0-6.0						30.5

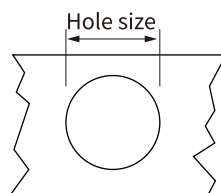
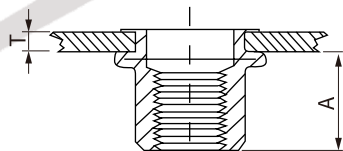
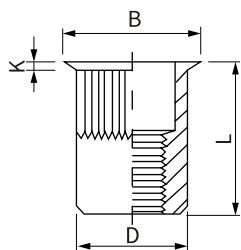


Stainless Steel Flat Head Knurled Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-KB/SS-0315	0.5-1.5	5.0	5.0	4.9	8.0	0.8	9.0
M4	FH-KB/SS-0420	0.5-2.0	6.5	6.0	5.9	9.0	0.8	11.0
	FH-KB/SS-0440	2.0-4.0		8.0				13.0
M5	FH-KB/SS-0525	0.5-2.5	8.0	7.0	6.9	10.0	1.0	13.0
	FH-KB/SS-0540	2.0-4.0	8.5					16.0
M6	FH-KB/SS-0630	0.5-3.0	9.2	9.0	8.9	12.3(13.0)	1.3	15.0(15.5)
	FH-KB/SS-0650	3.0-5.0	10.5					19.5
M8	FH-KB/SS-0835	1.0-3.5	11.0	11.0	10.9	14.5(16.0)	1.5	18.0
	FH-KB/SS-0855	3.5-5.5						21.0
M10	FH-KB/SS-1040	1.0-4.0	13.5	13.0	12.9	17.0	1.7	21.0
	FH-KB/SS-1060	4.0-6.0						24.0
M12	FH-KB/SS-1240	1.0-4.0	15.0	16.0	15.9	23.0	2.0	25.0
	FH-KB/SS-1260	4.0-6.0	16.0					28.0
M12	FH-KB/SS-1240	1.0-4.0	15.5	15.0	14.9	19	1.7	24.0
	FH-KB/SS-1260	4.0-6.0	16.5					27.0

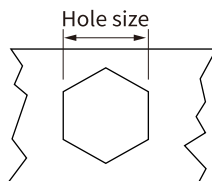
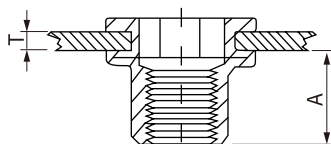
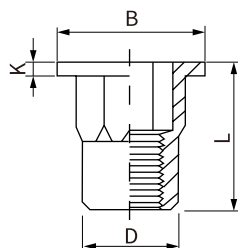
Stainless Steel Reduced Head Knurled Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RH-KB/SS-0315	0.5-1.5	5.0	5.0	4.9	6.0	0.5	9.0
	RH-KB/SS-0325	1.5-2.5	6.2					11.5
M4	RH-KB/SS-0410	0.5-2.0	5.7	6.0	5.9	7.0	0.5	10.0
	RH-KB/SS-0420	0.5-2.0	6.5					10.5
	RH-KB/SS-0440	2.0-4.0	7.0					13.0
M5	RH-KB/SS-0520	0.5-2.0	7.2	7.0	6.9	8.0	0.5	11.5
	RH-KB/SS-0540	2.0-4.0						13.0
M6	RH-KB/SS-0625	0.5-2.5	8.7	9.0	8.9	10.0	0.6	14.0
	RH-KB/SS-0650	2.5-5.0						16.0
M8	RH-KB/SS-0830	0.5-3.0	10.5	11.0	10.9	12.0	0.65	16.5
	RH-KB/SS-0850	3.0-5.0						19.5
M10	RH-KB/SS-1035	1.0-3.5	10.7	13.0	12.9	14.0	0.70	17.7
	RH-KB/SS-1060	3.5-6.0	12.5				0.75	23.0
M12	RH-KB/SS-1240	1.0-4.0	16.2	16.0	15.9	17.6	0.8	24.2
	RH-KB/SS-1265	4.0-6.5						27.0

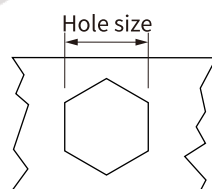
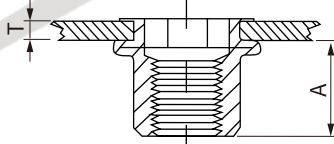
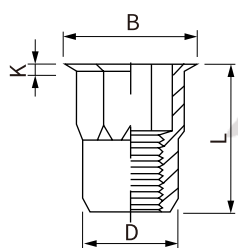


Stainless Steel Flat Head Inner Hex Body



Thread	P/N	T (GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-IHB/SS-0315	0.5-1.5	5.0	5.0	4.9	8.0	0.8	9.0
M4	FH-IHB/SS-0420	0.5-2.0	7.2	6.0	5.9	9.0	0.8	11.0
M5	FH-IHB/SS-0525	0.5-2.5	7.5	7.0	6.9	10.0	1.0	13.0
M5	FH-IHB/SS-0540	2.5-4.0	7.5	7.0	6.9	10.0	1.0	16.0
M6	FH-IHB/SS-0630	0.5-3.0	9.2	9.0	8.9	12.7	1.3	15.0
M6	FH-IHB/SS-0650	3.0-5.0	9.2	9.0	8.9	12.7	1.3	18.0
M8	FH-IHB/SS-0835	1.0-3.5	11.0	11.0	10.9	16.0	1.5	18.0
M8	FH-IHB/SS-0855	3.5-5.5	11.2	11.0	10.9	16.0	1.5	21.0
M10	FH-IHB/SS-1040	1.0-4.0	13.2	13.0	12.9	18.0	1.7	21.0
M12	FH-IHB/SS-1240	1.0-4.0	16.0	16.0	15.9	23.0	2.0	28.0

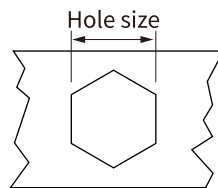
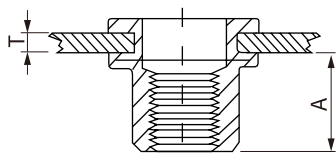
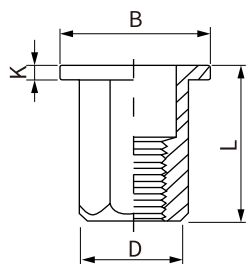
Stainless Steel Reduced Hex Head Inner-Hex Body



Thread	P/N	T (GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RHH-IHB/SS-0315	0.5-1.5	5.2	5.0	4.9	6.0	0.5	9.0
	RHH-IHB/SS-0325	1.5-2.5	6.0					11.0
M4	RHH-IHB/SS-0420	0.5-2.0	5.3	6.0	5.9	7.0	0.5	10.0
	RHH-IHB/SS-0440	2.0-4.0						12.0
M5	RHH-IHB/SS-0525	0.5-2.5	6.8	7.0	6.9	8.0	0.6	12.0
	RHH-IHB/SS-0540	2.0-4.0						14.0
M6	RHH-IHB/SS-0630	1.0-3.0	9.0	9.0	8.9	10.0	0.6	14.5
	RHH-IHB/SS-0650	3.5-5.0						16.5
M8	RHH-IHB/SS-0835	1.0-3.5	10.6	11.0	10.9	12.0	0.65	17.5
	RHH-IHB/SS-0850	3.5-5.0						19.5
M10	RHH-IHB/SS-1040	1.0-4.0	13.5	13.0	12.9	14.5	0.75	21.0
	RHH-IHB/SS-1050	3.5-5.0						23.0
M12	RHH-IHB/SS-1240	1.0-4.0	14.8	16.0	15.9	17.5	0.8	24.0
	RHH-IHB/SS-1260	4.0-6.0						27.0



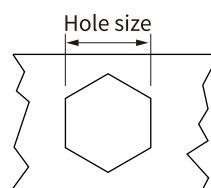
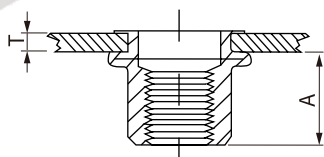
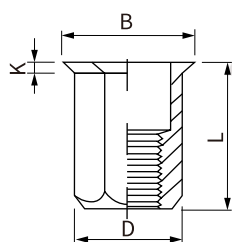
Stainless Steel Flat Head Full Hex Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-FHB/SS-0315	0.5-1.5	5.5	5.0	4.9	7.5	0.8	8.5
M4	FH-FHB/SS-0420	0.5-2.0	6.5	6.0	5.9	9.0	0.8	11.0
M5	FH-FHB/SS-0525	0.5-2.5	8.0	7.0	6.9	10.0	1.0	14.0
M6	FH-FHB/SS-0630	0.5-3.0	8.5	9.0	8.9	12.7(13.0)	1.35	15.0(16.0)
M8	FH-FHB/SS-0835	1.0-3.5	10.5	11.0	10.9	16.0	1.5	18.0
M10	FH-FHB/SS-1035	1.0-3.5	12.5	13.0	12.9	18.0(19.0)	1.7	21.0(23.0)
M10	FH-FHB/SS-1035(12H)	1.0-3.5	13.5	12.0	11.9	18.0	1.7	21.0
M12	FH-FHB/SS-1240(15H)	1.0-4.0	14.0	15.0	14.9	20.0	1.7	23.0
M12	FH-FHB/SS-1250(16H)	2.0-5.0	16.5	16.0	15.9	23.0	2.0	27.0

Part are different series, if customers need this size, please mark.

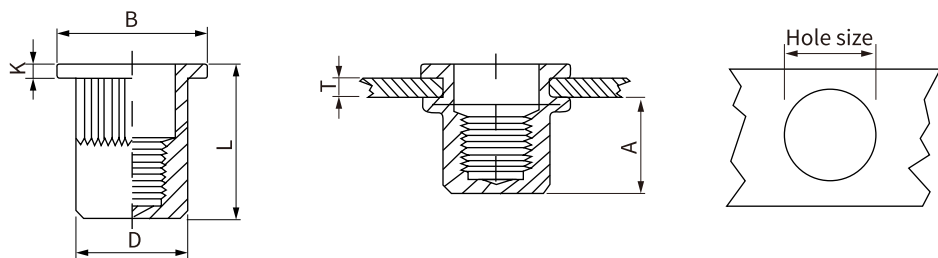
Stainless Steel Reduce Head Full Hex Body



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RHH-FHB/SS-0315	0.5-1.5	5.0	5.0	4.9	6.0	0.5	8.5
M4	RHH-FHB/SS-0425	0.5-2.5	6.7	6.0	5.9	7.0	0.5	11.0
M5	RHH-FHB/SS-0530	0.5-3.0	9.0	7.0	6.9	8.0	0.5	14.5
M6	RHH-FHB/SS-0635	1.0-3.5	10.0	9.0	8.9	10.0	0.6	16.0
M8	RHH-FHB/SS-0840	1.0-4.0	11.5	11.0	10.9	12.0	0.65	18.0
M10	RHH-FHB/SS-1035	1.0-3.5	12.5	12.0	11.9	13.5	0.75	19.0
M12	RHH-FHB/SS-1240	1.0-4.0	15.5	16.0	15.9	17.5	1.0	25.0

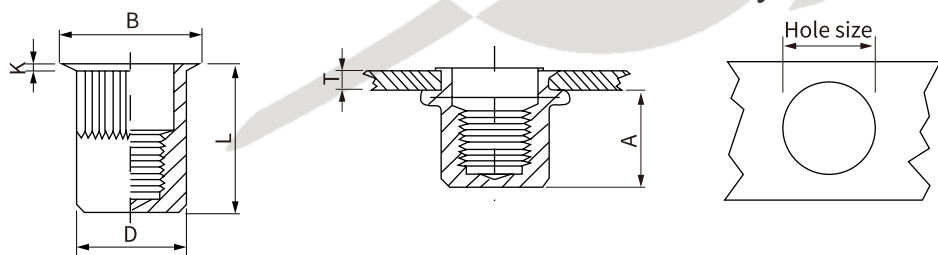


Stainless Steel Flat Head Knurled Body Closed



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	FH-KBC/SS-0315	0.5-1.5	8.0	5.0	4.9	8.0	0.8	15.0
M4	FH-KBC/SS-0420	0.5-2.0	11.8	6.0	5.9	9.0	0.9	17.0
	FH-KBC/SS-0440	2.0-4.0						19.0
M5	FH-KBC/SS-0525	0.5-2.5	12.0	7.0	6.9	10.0	0.9	19.0
	FH-KBC/SS-0540	2.0-4.0						20.5
M6	FH-KBC/SS-0630	0.5-3.0	12.7	9.0	8.9	12.3	1.3	19.2
	FH-KBC/SS-0650	3.0-5.0						21.0
M6	FH-KBC/SS-0660	0.5-3.0	17.0	9.0	8.9	12.3	1.3	23.5
M8	FH-KBC/SS-0835	1.0-3.5	14.2	11.0	10.9	14.5(15.0)	1.5	21.5
	FH-KBC/SS-0855	3.5-5.5	14.8					24.0
M10	FH-KBC/SS-1040	1.0-4.0	18.0	13.0	12.9	17.0	1.7	27.0
	FH-KBC/SS-1060	4.0-6.0	19.2					30.0
M12	FH-KBC/SS-1240	1.0-4.0	29.5	16.0	15.9	23.0	2.0	30.0
	FH-KBC/SS-1260	4.0-6.0						38.0

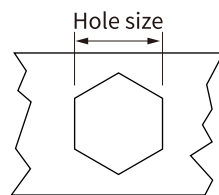
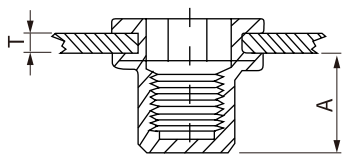
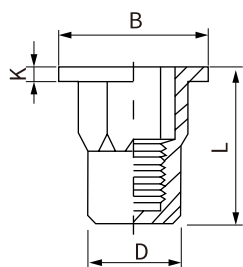
Stainless Steel Reduce Head Knurled Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RH-KBC/SS-0315	0.5-1.5	8.5	5.0	4.9	6.0	0.5	13.0
M4	RH-KBC/SS-0420	0.5-2.0	11.2	6.0	5.9	7.0	0.5	16.0
	RH-KBC/SS-0440	2.0-4.0						17.5
M5	RH-KBC/SS-0520	0.5-2.0	11.5	7.0	6.9	8.0	0.5	18.0
	RH-KBC/SS-0540	2.0-4.0						19.5
M6	RH-KBC/SS-0625	0.5-2.5	15.0	9.0	8.9	10.0	0.6	20.5
	RH-KBC/SS-0635	0.5-2.5	17.0					23.0
	RH-KBC/SS-0645	2.5-4.5	15.0					22.0
M8	RH-KBC/SS-0830	0.5-3.0	17.5	11.0	10.9	12.0	0.65	23.0
	RH-KBC/SS-0840	0.5-3.0	20.0				0.70	27.0
	RH-KBC/SS-0850	3.0-5.0	17.5				0.70	24.5
M10	RH-KBC/SS-1035	1.0-3.5	18.0	13.0	12.9	14.0	0.7	24.5
	RH-KBC/SS-1055	3.5-5.5					0.8	26.0
M12	RH-KBC/SS-1240	1.0-4.0	22.0	16.0	15.9	17.6	1.0	31.5

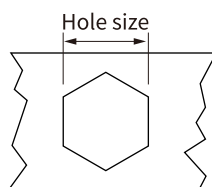
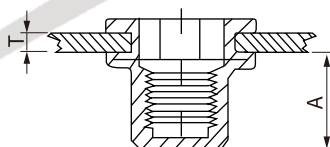
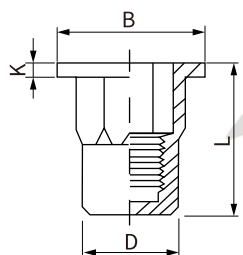


Stainless Steel Flat Head Inner-Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	FH-IHBC/SS-0420	0.5-2.0	12.5	6.0	5.9	9.0	1.0	17.0
M5	FH-IHBC/SS-0525	0.5-2.5	14.3	7.0	6.9	10.0	1.0	19.5
M6	FH-IHBC/SS-0630	0.5-3.0	16	9.0	8.9	12.7	1.5	23.0
M8	FH-IHBC/SS-0835	1.0-3.5	19.5	11.0	10.9	16.0	1.5	27.5
M10	FH-IHBC/SS-1040	1.0-4.0	25.0	13.0	12.9	19.0	1.7	33.0
M12	FH-IHBC/SS-1240	1.0-4.0	25.0	16.0	15.9	23.0	2.0	33.5
	FH-IHBC/SS-1260	3.0-6.0						35.5

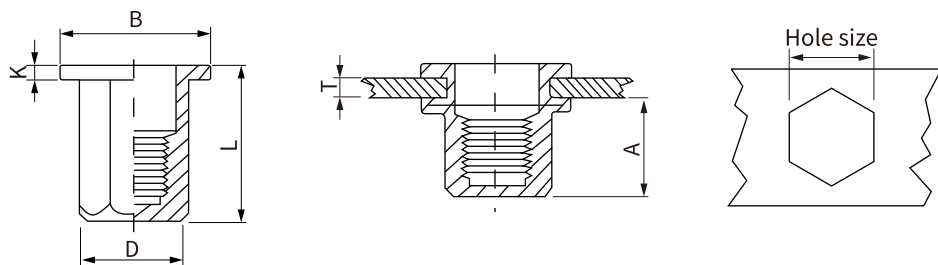
Stainless Steel Reduce Hex Inner Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M3	RHH-IHBC/SS-0315	0.5-1.5	8.5	5.0	4.9	6.0	0.5	13.0
	RHH-IHBC/SS-0320	1.5-2.5						15.0
M4	RHH-IHBC/SS-0420	0.5-2.0	11.5	6.0	5.9	7.0	0.5	16.5
	RHH-IHBC/SS-0440	2.0-4.0						18.5
M5	RHH-IHBC/SS-0525	0.5-2.5	13.0	7.0	6.9	8.0	0.5	18.5
	RHH-IHBC/SS-0540	2.0-4.0						20.5
M6	RHH-IHBC/SS-0630	0.5-3.5	15.8	9.0	8.9	10.0	0.6	21.5
	RHH-IHBC/SS-0640	0.5-3.5	17.5					23.0
	RHH-IHBC/SS-0650	3.5-5.0	15.8					23.0
M8	RHH-IHBC/SS-0835	1.0-3.5	18.2	11.0	10.9	12.0	0.65	24.0
	RHH-IHBC/SS-0840	1.0-3.5	19.4					26.5
	RHH-IHBC/SS-0850	3.5-5.0	18.2					26.0
M10	RHH-IHBC/SS-1040	1.0-4.0	23.2	13.0	12.9	14.5	0.75	30.5
	RHH-IHBC/SS-1050	3.5-5.0						33.0
M12	RHH-IHBC/SS-1240	1.0-4.0	23.2	16.0	15.9	17.5	0.75	3.1

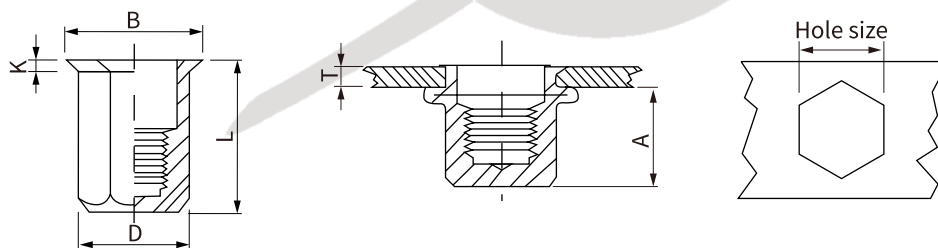


Stainless Steel Flat Head All hexagonal Blind Hole



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	FH-FHBC/SS-0420	0.5-2.0	11.0	6.0	5.9	9.0	1.0	15.0
M5	FH-FHBC/SS-0525	0.5-2.5	13.5	7.0	6.9	10.0	1.0	18.0
M6	FH-FHBC/SS-0630	0.5-3.0	17.0	9.0	8.9	12.7	1.3	23.0
M8	FH-FHBC/SS-0835	1.0-3.5	19.0	11.0	10.9	16.0	1.5	26.0
M10	FH-FHBC/SS-1040	1.0-4.0	25.0	13.0	12.9	18.0	1.7	33.0

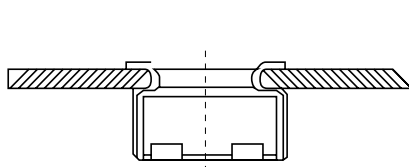
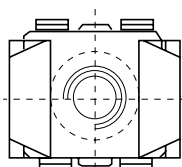
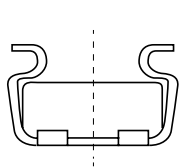
Stainless Steel Reduce Head Full Hex Body Closed End



Thread	P/N	T(GRIP RANGE) Min Max	A Rer	Hole size +0.1 0	D +0.07 -0.1	B	K	L
M4	RHH-FHBC/SS-0425	0.5-2.5	12.3	6.0	5.9	7.0	0.5	16.0
M5	RHH-FHBC/SS-0530	0.5-3.0	15.2	7.0	6.9	8.0	0.5	20.0
M6	RHH-FHBC/SS-0635	0.5-3.5	14.5	9.0	8.9	10.0	0.6	20.5
M8	RHH-FHBC/SS-0840	1.0-4.0	17.0	11.0	10.9	12.0	0.65	23.0
M10	RHH-FHBC/SS-1045	1.0-4.5	20.0	13.0	12.9	14.5	0.75	28.5



Cage Nut



Introduction

Cage nut, also known as floating nut, have a high-strength thread tightening effect. Place it in a pre drilled square or rectangular hole with a special tool, and then pull the tool backwards to fix it on a metal or other plate. Installation is quick and convenient, and it can be disassembled and repositioned. It can also be tilted for positioning. It is the preferred fastener for industries such as railways, vehicles, electrical cabinets, and molds, and is used in conjunction with Crown screws. Provide humanized decoration for cabinet panels, professional mass production, and can be customized according to requirements.

Application Technical Guide

1. The shell material of the cage nut is 65Mn, the nut material is low-carbon steel, and the surface is galvanized; Galvanized colors and special materials can be customized;
2. Select specifications and sizes based on the thickness of the used board, and determine the pre punching size of the board in the corresponding table. For other non-standard specifications, please call for consultation.

Product Specification Meaning

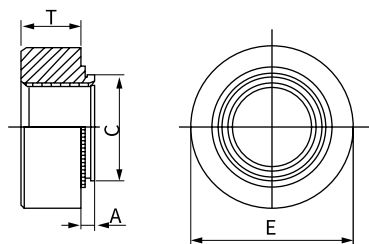
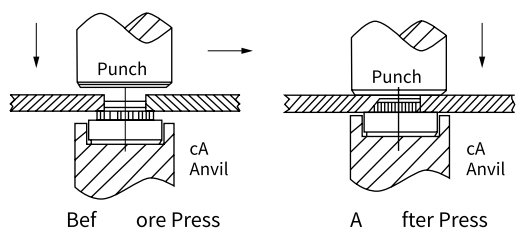
CN- Product code: M-x Product specifications (where x indicates the opposite side dimensions of square nuts).

For example: the label CN-M4-11x11 indicates a cassette nut with an opposite side size of 11x11 mm thread M4.

Screw thread specification	Screw pitch	Nut opposite edge	Nut thickness	Iron sheet thickness	Apply Plate thickness	Board dimension	Material shell	Material nut	Surface handle
M5	0.8	11	4	0.4	0.8-2.8	9.5x9.5	65Mn	Carbon steel	galvanize
M6	1.0	11	4	0.4	0.8-2.8	9.5x9.5	65Mn	Carbon steel	galvanize
M4	0.75	11	4.5	0.5	0.8-2.8	9.5x9.5	65Mn	Carbon steel	galvanize
M5	0.8	11	4.5	0.5	0.8-2.8	9.5x9.5	65Mn	Carbon steel	galvanize
M6	1.0	11	4.5	0.5	0.8-2.8	9.5x9.5	65Mn	Carbon steel	galvanize
M8	1.25	14	5.5	0.5	1-3.5	12.5x12.5	65Mn	Carbon steel	galvanize
M10	1.5	14	5.5	0.5	1-3.5	12.5x12.5	65Mn	Carbon steel	galvanize
M12	1.75	17	8	0.6	1.5-4	15.5x15.5	65Mn	Carbon steel	galvanize
M6	1.0	11	4.5	0.5	0.8-2.8	9.5x9.5	SUS304	Carbon steel	galvanize
M8	1.25	14	5.5	0.5	1-3.5	12.5x12.5	SUS304	Carbon steel	galvanize
M5	0.8	11	4.5	0.5	0.8-2.8	9.5x9.5	SUS304	SUS304	Natural quality
M6	1.0	11	4.5	0.5	0.8-2.8	9.5x9.5	SUS304	SUS304	Natural quality
M6	1.0	11	4.5	0.5	0.8-2.8	9.5x9.5	SUS304	SUS304	Natural quality
M8	1.25	14	5.5	0.5	1-3.5	12.5x12.5	SUS304	SUS304	Natural quality



Self Clinching Nut



Thread size Screw pitch	Model Number		Screw thread designation	Specification designation	A Max	Minimum plate thickness	Board mounting aperture	C MAX	E ±0.25	T ±0.25	Minimum distance from hole core to plate edge
	Carbon steel	Stainless steel									
M2x0.4	S	CLS	M2	0	0.77	0.8-1	4.25	4.22	6.3	1.5	4.8
				1	0.97	1					
				2	1.38	1.4					
M2.5x0.45	S	CLS	M2.5	0	0.77	0.8-1	4.25	4.22	6.3	1.5	4.8
				1	0.97	1					
				2	1.38	1.4					
M3x0.5	S	CLS	M3	0	0.77	0.8-1	4.25	4.22	6.33	1.5	4.8
				1	0.97	1					
				2	1.38	1.4					
M3.5x0.6	S	CLS	M3.5	0	0.77	0.5-1	4.75	4.73	7.1	1.5	6.6
				1	0.97	1					
				2	1.38	1.4					
M4x0.7	S	CLS	M4	0	0.77	0.8-1	5.4	5.38	7.9	2.0	6.9
				1	0.97	1					
				2	1.38	1.4					
M5x0.8	S	CLS	M5	0	0.77	0.5-1	6.4	6.38	8.7	2.0	7.1
				1	0.97	1					
				2	1.38	1.4					
M6x1.0	S	CLS	M6	0	0.89	0.92	8.75	8.72	11.05	4.06	8.6
				0	1.15	1.2					
				1	1.36	1.4					
M8x1.25	S	CLS	M8	2	2.21	2.3	10.5	10.47	12.7	6.47	9.7
				1	1.38	1.4					
				2	2.21	2.3					
M10x1.5	S	CLS	M10	1	2.21	2.21	14.0	13.97	17.35	7.48	13.5
				2	3.06	3.18					

Installation Instruction

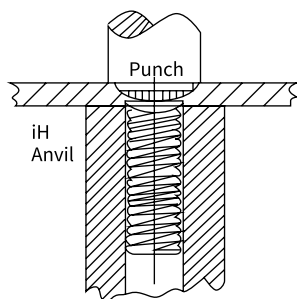
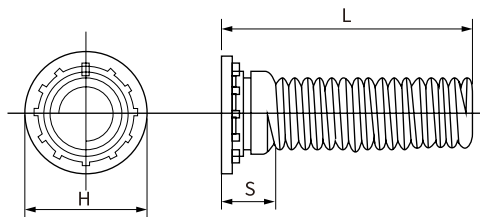
Carbon steel: suitable for riveting aluminum plates and steel plates, with a hardness of $HRB \leq 80$.

Stainless steel: suitable for riveting aluminum plates and steel plates, with a hardness of $HRB \leq 70$.

Hardened stainless steel: suitable for riveting stainless steel plates, with a hardness



Round Head Stud



ALL DIMENSIONS ARE IN MILLIMETER.

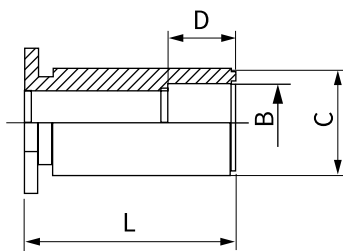
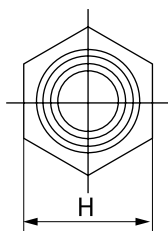
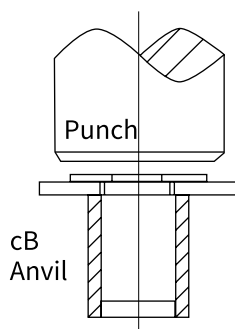
Screw thread Size x shortening	Material Type			Screw thread designation	Length L±0.4											Wafer thickness	Plate aperture	Maximum aperture	H±0.4	S Max	Core to Minimum edge distance
	Carbon steel	Stainless steel	Aluminum																		
M2.5x0.45	FH	FHS	FHA	M2.5	6	8	10	12	15	18	/	/	/	/	/	1.0	2.5	3.1	4.1	1.95	5.4
M3x0.5	FH	FHS	FHA	M3	6	8	10	12	15	18	20	25	/	/	/	1.0	3.0	3.6	4.6	2.1	5.6
M3.5x0.6	FH	FHS	FHA	M3.5	6	8	10	12	15	18	20	25	30	/	/	1.0	3.5	4.1	5.3	2.25	6.4
M4x0.7	FH	FHS	FHA	M4	6	8	10	12	15	18	20	25	30	35	38	1.0	4.0	4.6	5.9	2.4	7.2
M5x0.8	FH	FHS	FHA	M5	/	8	10	12	15	18	20	25	30	35	38	1.0	5.0	5.6	6.5	2.7	7.2
M6x1.0	FH	FHS	FHA	M6	/	/	10	12	15	18	20	25	30	35	38	1.6	6.0	6.6	8.2	3.0	7.9
M8x1.25	FH	FHS	FHA	M8	/	/	/	12	15	18	20	25	30	35	38	2.4	8.0	8.6	9.6	3.7	9.6

ALL DIMENSIONS ARE IN INCHES.

Screw thread Size x shortening	Material Type			Screw thread designation	Length L±0.38										Plate aperture	Maximum aperture	H ±0.4	S Max	Core to Minimum edge distance	
	Carbon steel	Stainless steel	Aluminum																	
.086-56 (#2-56)	FH	FHS	FHA	256	4	5	6	8	10	12	/	/	/	/	.040	.085	.105	.144	.075	.187
.112-40 (#4-40)	FH	FHS	FHA	440	4	5	6	8	10	12	14	16	/	/	.040	.111	.135	.176	.085	.219
.138-32 (#6-32)	FH	FHS	FHA	632	4	5	6	8	10	12	14	16	20	24	.040	.137	.160	.206	.090	.250
.164-32 (#8-32)	FH	FHS	FHA	832	4	5	6	8	10	12	14	16	20	24	.040	.163	.185	.237	.090	.281
.190-24 (#10-24)	FH	FHS	FHA	024	4	5	6	8	10	12	14	16	20	24	.040	.189	.210	.256	.100	.281
.190-32 (#10-32)	FH	FHS	FHA	032	4	5	6	8	10	12	14	16	20	24	.040	.189	.210	.256	.100	.281
.250-20 (1/4-20)	FH	FHS	FHA	0420	/	/	/	8	10	12	14	16	20	24	.040	.249	.270	.337	.135	.312
.313-18 (5/16-18)	FH	FHS	FHA	0518	/	/	/	8	10	12	14	16	20	24	.040	.311	.333	.376	.160	.375



Through Threaded Standoff



ALL DIMENSIONS ARE IN MILLIMETER.

Screw thread dimension	Minimum Plate thickness	Board perforation	C +0.00 -0.13	8CM Hexagonal opposite edge	Core to Minimum edge distance
M3	1.02	-0.00 4.2	5.38	4.75	6
M3	1.02	5.4	5.38	6.35	7.1
M4	1.2	7.14	7.12	8	8.4
M5	1.2	7.14	7.12	8	8.4
M6	1.2	8.75	8.68	10	/
M4	1.2	6	5.97	7	/

ALL DIMENSIONS ARE IN INCHES.

Screw thread dimension	Minimum Plate thickness	Board mounting aperture	Step hole diameter	C +0.00 -0.05	Common displacement dimension	Core to Minimum edge distance
440	.040	.166	.125	.165	.187	.23
644	.040	.213	.125	.212	.250	.27
632	.040	.213	.156	.212	.250	.27
8632	.050	.281	.156	.280	.312	.31
832	.050	.281	.188	.280	.312	.31
032	.050	.281	.203	.280	.312	.31

PS: Carbon steel Self-Clinching Standoffs with a length of less than or equal to 14mm are full thread, above 14mm are half Thread.

ALL DIMENSIONS ARE IN INCHES.

Screw thread Size x shortening	Carbon steel	Stainless steel	Aluminum	Screw thread designation	Length															
					.125	.187	.20	.312	.310	.437	.009	.062	.025	.087	.700	.812	.876	.937	1.00	1.062
.112-40 (#4-40)	SO	SOS	SOA	440 6440	4	6	8	10	12	14	16	18	20	22	24	N/A	N/A	N/A	N/A	N/A
.138-32 (#5-32)	SO	SOS	SOA	632 8632	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#3-32)	SO	SOS	SOA	602	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.190-22 (#10-32)				032																
D dimension±0.10					Nooe			.187			.312			.437						

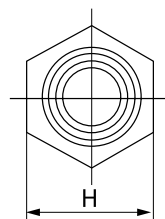
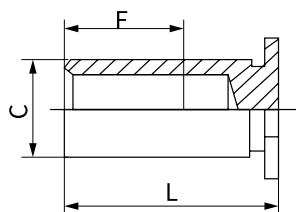
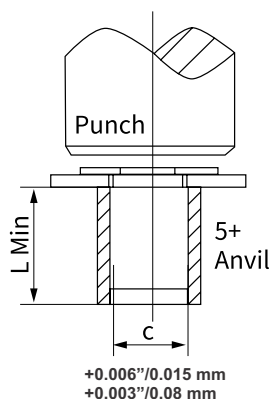
Note: The hard through-hole Self-Clinching Standoffs (SO4) series products for stainless steel plate pressing can be provided on the request

Installation Instructions

SO Carbon steel: for aluminum panel, stepanel with hardness HRB≤80.
SOS Stainlesteel: for aluminum panel, stepanel with hardness HRB≤70.
SOA Suitable for riveting aluminum plates, with hardness HRB≤50.
SO4 Hardened stainless steel: suitable for riveting stainless steel plates, with hardness HRB≤90 (No stock, need to be produced).



Blind Threaded Standoff



ALL DIMENSIONS ARE IN MILLIMETER.

Screw thread dimension	Minimum Plate thickness	Board mounting aperture	C +0.00 -0.13	8CM Hexagonal opposite edge	Core to Minimum edge distance
M3	1.02	-0.00 4.2	5.38	4.75	6
M3	1.02	5.4	5.38	6.35	7.1
M4	1.2	7.14	7.12	8	8.4
M5	1.2	7.14	7.12	8	8.4
M6	1.2	8.75	8.68	10	/
M4	1.2	6	5.97	7	/

ALL DIMENSIONS ARE IN INCHES.

Screw thread dimension	Minimum Plate thickness	Board mounting aperture	C +0.00 -0.05	Common displacement dimension	Core to Minimum edge distance
440	.040	.166	.165	.187	.23
644	.040	.213	.212	.250	.28
632	.040	.213	.212	.250	.28
8632	.050	.281	.280	.312	.33
832	.050	.281	.280	.312	.33
032	.050	.281	.280	.312	.33

ALL DIMENSIONS ARE IN MILLIMETER.

+0.1-0.08 Aperture diameter	Carbon steel	Stainless steel	Aluminum	Screw thread designation	Length±0.05-0.1										
M3x0.5	BSO	BSOS	BSOA	M3	6	8	10	12	14	16	18	20	22	24	25
M3.5x0.6	BSO	BSOS	BSOA	M3.5	6	8	10	12	14	16	18	20	22	24	25
M4x0.7				M4											
M5x0.8	BSO	BSOS	BSOA	M5	3.2	4	5	6.5					9.5		
F DIMENSION MIN															

ALL DIMENSIONS ARE IN INCHES.

Screw thread Size x shortening	Carbon steel	Stainless steel	Aluminum	Screw thread designation	Length											
					.312	.376	.437	.500	.562	.625	.687	.750	.812	.876	.937	1.00
.112-40 (#4-40)	BSO	BSOS	BSOA	440	10	12	14	16	18	20	22	24	26	28	30	32
.138-32 (#6-32)				6440	10	12	14	16	18	20	22	24	26	28	30	32
.164-32 (#8-32)	BSO	BSOS	BSOA	632	10	12	14	16	18	20	22	24	26	28	30	32
.190-32 (#10-32)				8632	10	12	14	16	18	20	22	24	26	28	30	32
	BSO	BSOS	BSOA	832	10	12	14	16	18	20	22	24	26	28	30	32
F Dimension Min					.156	.187	.250							.376		

Note: The hard through-hole Self-Clinching Standoffs (BSO4) series products for stainless steel plate pressing can be provided on the request

Installation Instructions

BSO Carbon steel: fotuminum panel, stepanel withhardnes HRB≤80.

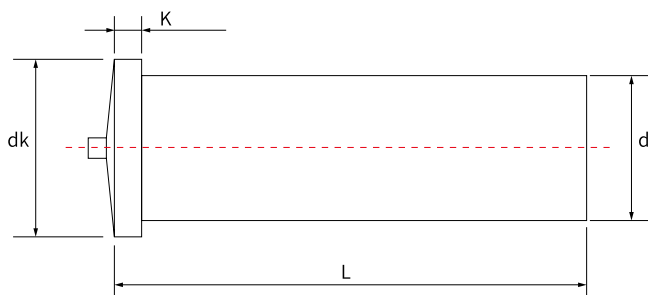
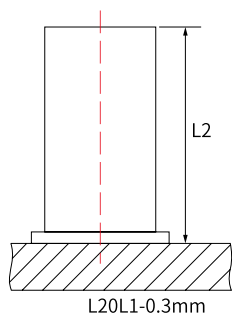
BSOS Stainlesteel: for aluminum panel, stepanel withhardness HRB≤70.

BSOA Suitable for riveting aluminum plates, with hardness HRB≤50.

BSO4 Hardened stainless steel: suitable for riveting stainless steel plates, with hardness HRB≤90 (No stock, need to be produced.



Welding Stud



ALL DIMENSIONS ARE IN MILLIMETER.

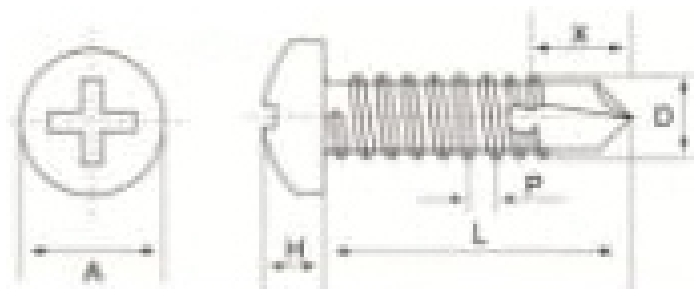
	d		dK		K	
	max	min	max	min	max	min
Ø3.0	2.87	3.13	4.65	4.35	1.3	0.7
Ø4.0	3.85	4.15	5.65	5.35	1.3	0.7
Ø5.0	4.85	5.15	6.68	6.32	1.4	1.1
Ø6.0	5.85	6.15	7.68	7.32	1.4	1.1
Ø8.0	5.85	6.15	7.68	7.32	1.4	1.1

ALL DIMENSIONS ARE IN MILLIMETER.

Thread Size X Pitch	Type				Thread Code	Length Code "L" +0.15 (Length Code in millimeters)										Min. Sheet Thick- Ness	Hole Size IN Sheet Steel +0.03 -0.00	D ±0.06	DK ±0.10	K ±0.15
	Steel	Stainless Steel	Steel-B	Stainless Steel-B		6	8	10	12	15	18	20	25	30	35					
M3*0.5	ZD	ZDS	ZDB	ZDSB	M3	6	8	10	12	15	18	20	25	30	35	0.6	3.6	2.93	4.50	0.9
M4*0.7	ZD	ZDS	ZDB	ZDSB	M4	6	8	10	12	15	18	20	25	30	35	0.8	4.6	3.92	5.50	0.9
M5*0.8	ZD	ZDS	ZDB	ZDSB	M5	/	8	10	12	15	18	20	25	30	35	0.8	5.6	4.90	6.50	1.0
M6*1.0	ZD	ZDS	ZDB	ZDSB	M6	/	/	10	12	15	18	20	25	30	35	0.8	6.6	5.98	7.50	1.1
M8*1.25	ZD	ZDS	ZDB	ZDSB	M8	/	/	/	12	15	18	20	25	30	35	1.0	8.6	7.87	8.50	1.2



Pan Head Phillips Recess Self Drilling Screw



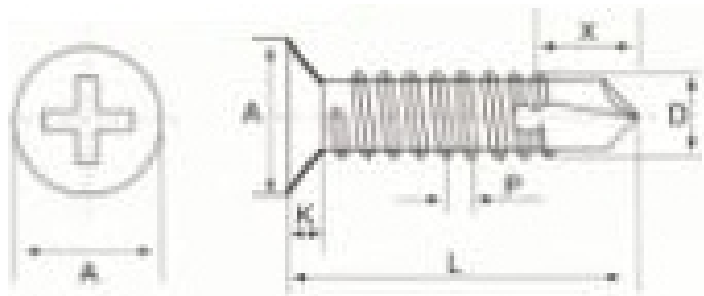
Standard: DIN7504N ISO:15451:1999

Material: SUS410, SUS304, SUS316

Size	A	H	P	D	L	X	
						Point No.	Drilling Capacity
(#6) 3.5	6.54-6.90	2.35-2.60	1.3	3.35-3.53	9.5-51	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#7) 3.9	7.14-7.50	2.55-2.80	1.3	3.73-3.90	9.5-51	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#8) 4.2	7.84-8.20	2.75-3.05	1.4	4.04-4.22	13-76	NO. 2(3.9)	0.9-2.8
						NO. 3 (4.7)	0.9-3.8
(#10) 4.8	9.14-9.50	3.25-3.55	1.6	4.62-4.80	13-150	NO. 2(4.8)	2.0-3.6
						NO. 3 (5.7)	2.0-4.5
(#12) 5.5	10.37-10.8	3.65-3.95	1.8	5.28-5.46	16-300	NO. 2(5.9)	2.5-4.5
						NO. 3 (6.7)	2.5-5.3
(#14) 6.3	12.07-12.50	4.25-4.55	1.8	6.03-6.25	16-300	NO. 2(7.0)	2.8-5.3
						NO. 3 (8.0)	2.8-6.3



Pan Head Phillips Recess Self Drilling Screw



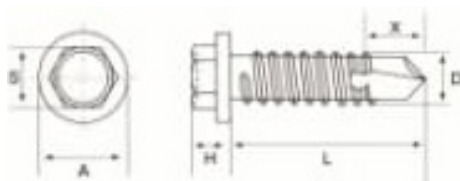
Standard: DIN7504P ISO:15451:1999

Material: SUS410, SUS304, SUS316

Size	A	K (Max)	P	D	L	X	
						Point No.	Drilling Capacity
(#6) 3.5	6.44-6.80	2.1	1.3	3.35-3.53	9.5-51	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#7) 3.9	7.14-7.50	2.3	1.3	3.73-3.90	9.5-51	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#8) 4.2	7.74-8.10	2.5	1.4	4.04-4.22	13-76	NO. 2(3.9)	0.9-2.8
						NO. 3 (4.7)	0.9-3.6
(#10) 4.8	9.14-9.50	3	1.6	4.62-4.80	13-120	NO. 2(4.8)	2.0-3.6
						NO. 3 (5.7)	2.0-4.5
(#12) 5.5	10.37-10.50	3.4	1.8	5.28-5.46	16-250	NO. 2(5.9)	2.5-4.5
						NO. 3 (6.7)	2.5-5.3
(#14) 6.3	11.97-12.40	3.8	1.8	6.03-6.25	16-250	NO. 2(7.0)	2.8-5.3
						NO. 3 (8.0)	2.8-6.3



Hex Washer Head Self Drilling Screw

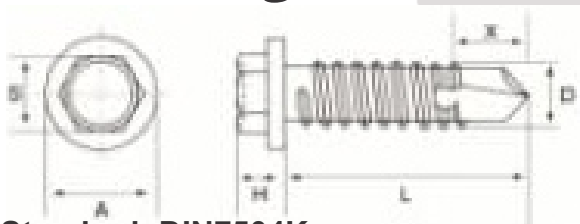


Standard: DIN7504K ISO:15480:1999

Material: SUS410, SUS304, SUS316

Size	A	H	D	L	S	X	
						Point No.	Drilling
(#6) 3.5	7.60-8.30	3.00-3.45	3.35-3.53	13-51	5.32-5.50	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#7) 3.9	7.60-8.30	3.00-3.45	3.73-3.90	13-51	5.32-5.50	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#8) 4.2	8.20-8.80	4.00-4.25	4.04-4.22	13-100	6.78-7.00	NO. 2(3.9)	0.9-2.8
						NO. 3 (4.7)	0.9-3.6
(#10) 4.8	9.80-10.50	4.15-4.45	4.62-4.80	13-150	7.78-8.00	NO. 2(4.8)	2.0-3.6
						NO. 3 (5.7)	2.0-4.5
(#12) 5.5	10.00-11.00	5.15-5.45	5.28-5.46	16-300	7.78-8.00	NO. 2(5.9)	2.5-4.5
						NO. 3 (6.7)	2.5-5.3
(#14) 6.3	12.20-13.20	6.15-6.45	6.03-6.25	16-300	9.78-10.00	NO. 2(7.0)	2.8-5.3
						NO. 3 (8.0)	2.8-6.3

Hex Flange Head Self Drilling Screw



Standard: DIN7504K

Material: SUS410, SUS304, SUS31

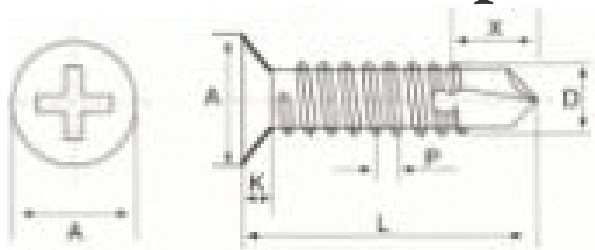
Size	A	H	P	D	L	S	X	
							Point No.	Drilling Capacity
(#10)4.2	8.20-8.80	4.00-4.25	0.08	4.04-4.22	13-100	6.78-7.00	NO. 2(3.9)	0.9-2.8
							NO. 3 (4.7)	0.9-3.6
(#10)4.8	9.80-10.50	4.15-4/45	1.06	4.60-4.80	13-150	7.78-8.00	NO. 2(4.8)	2.0-3.6
							NO. 3 (5.7)	2.0-4.5
(#12)5.5	12.20-13.20	5.15-5.45	1.06	5.28-5.46	16-300	7.78-8.00	NO. 2(5.9)	2.5-4.5
							NO. 3 (6.7)	2.5-5.3
(#14)6.3	12.20-13.20	6.15-6.45	1.27	6.03-6.25	16-300	9.78-10.00	NO. 2(7.0)	2.8-5.3
							NO. 3 (8.0)	2.8-6.3

1- The Above Data are Average Data measured under Laboratory Conditions and Safety Factor Should Be Taken Consideration while Under The Real Conditions.

2- Steel Plate For Testing According to DIN 7504 HIV110-125(HRB62)



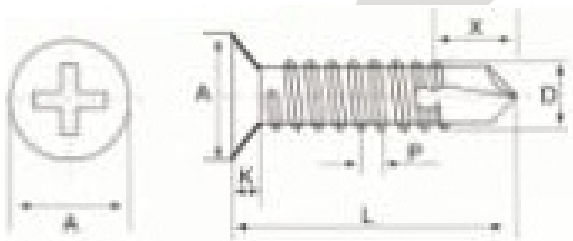
Truss Head Phillips Recess Self Drilling Screw



Material: SUS410, SUS304, SUS316

Size	A	H	P	D	L	X	
						Ponit No.	Drilling Capacity
(#7)3.9	9.10-9.60	1.90-2.20	1.3	3.73-3.90	9.5-51	NO. 2(3.0)	0.9-2.1
						NO. 3 (3.7)	0.9-2.8
(#8)4.2	10.40-11.00	1.90-2.20	1.4	4.04-4.22	13-76	NO. 2(3.9)	0.9-2.8
						NO. 3 (4.7)	0.9-3.6
(#10)4.8	10.50-11.00	2.15-2.45	1.6	4.62-4.80	13-150	NO. 2(4.8)	2.0-3.6
						NO. 3 (5.7)	2.0-4.5

Drilling Speed Standard



Size	Drill Length	Thickness of Plates	Max Loading	Max Time	Max Thickness of Plates	RPM
	(MM)	(MM)	(Kg)	Sec	(MM)	
ST 2.9 (#4)	No 2 (2.2)	1.6	11	2	2	2500
ST 3.6 (#6)	No 2 (2.2)	1.6	14	2.5	2.3	
	No 2 (2.2)	2.6	18	5	2.8	
ST 4.2 (#8)	No 2 (2.2)	1.6	14	3	2.5	
	No 2 (2.2)	3.2	18	5	3.5	
ST 4.10 (#10)	No 2 (2.2)	2.8	15	3.5	3	2000
	No 2 (2.2)	4.5	26	6	4.7	
ST 5.2(#12)	No 2 (2.2)	3	21	4	3.5	1800
	No 2 (2.2)	5.3	26	9	5.5	
ST 6.3(#14)	No 2 (2.2)	4	21	5	4.5	
	No 2 (2.2)	5.5	26	10	6.3	



Stainless Steel 410 Self Drilling Screw

Pull Out Test

Size	Material	Test Plate Model	Test Plate Hardness (HV)	Test Plate Thickness (MM)	Pull Out Force (N)
(#8)4.2	410	Fe2O 235 Cold Rolled Steel	97-118	3	>=3000
(#10)4.8	410	Fe2O 235 Cold Rolled Steel	97-118	3	>=8300
(#12)5.5	410	Fe2O 235 Cold Rolled Steel	97-118	3+3	>=13000
(#14)6.3	410	Fe2O 235 Cold Rolled Steel	97-118	3+3	>=15000

Torque Strength And Shear Strength Test

Size	Material	Single Shear Thickness	Measured Shear Single Sided Cutting (N)	Standard Torque (N)	Measured Torque(N)
(#8)4.2	410	4.8	>=5500	>=42	72-75
(#10)4.8	410	4.8	>=7300	>=61	97-105
(#12)5.5	410	5.0	>=8400	>=95	122-125
(#14)6.3	410	5.0	>=14000	>=170	200-234