

شركة عبدالله ناصر القحطاني التجارية ذ.م.م

ABDULLAH NASSER AL-QAHTANI TRADING CO.LTD



# STUD BOLTS & FASTENERS.

MOBILE VERSION 2022

By Awad Al-Shahrani ANSE-CO, STUD BOLTS & FASTENERS.MOBILE V004 29.03.2022

## DETAILED INDEX OF CONTENTS SEARCH

INTRODUCTION

VENDOR ID

ANCHOR BOLTS STRAIGHT TYPE

ANCHOR BOLTS L – TYPE

ANCHOR BOLTS J – TYPE

ANCHOR BOLTS JE - TYPE SLEEVE

ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S

FULLY THREAD ROD

HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)

HEXAGON NUTS ISO 934 / DIN 555

FLAT WASHER DIN 125 A / DIN 126 A

FENDER WASHER

FLAT WASHER ASTM F436 M

HELICAL SPRING LOCK WAHERS DIN 127

U – BOLT

PIPE SUPPORT CLAMPS WITH AND WITHOUT RUBBER

ADJUSTABLE CLEVIS HANGER

CHANNEL CLAMPS

SUPPORT ASSEMBLY COMPONENTS

PIPE CLAMP AND RISERS

CLIENT

FOR ENQUIRY PLEASE CONTACT

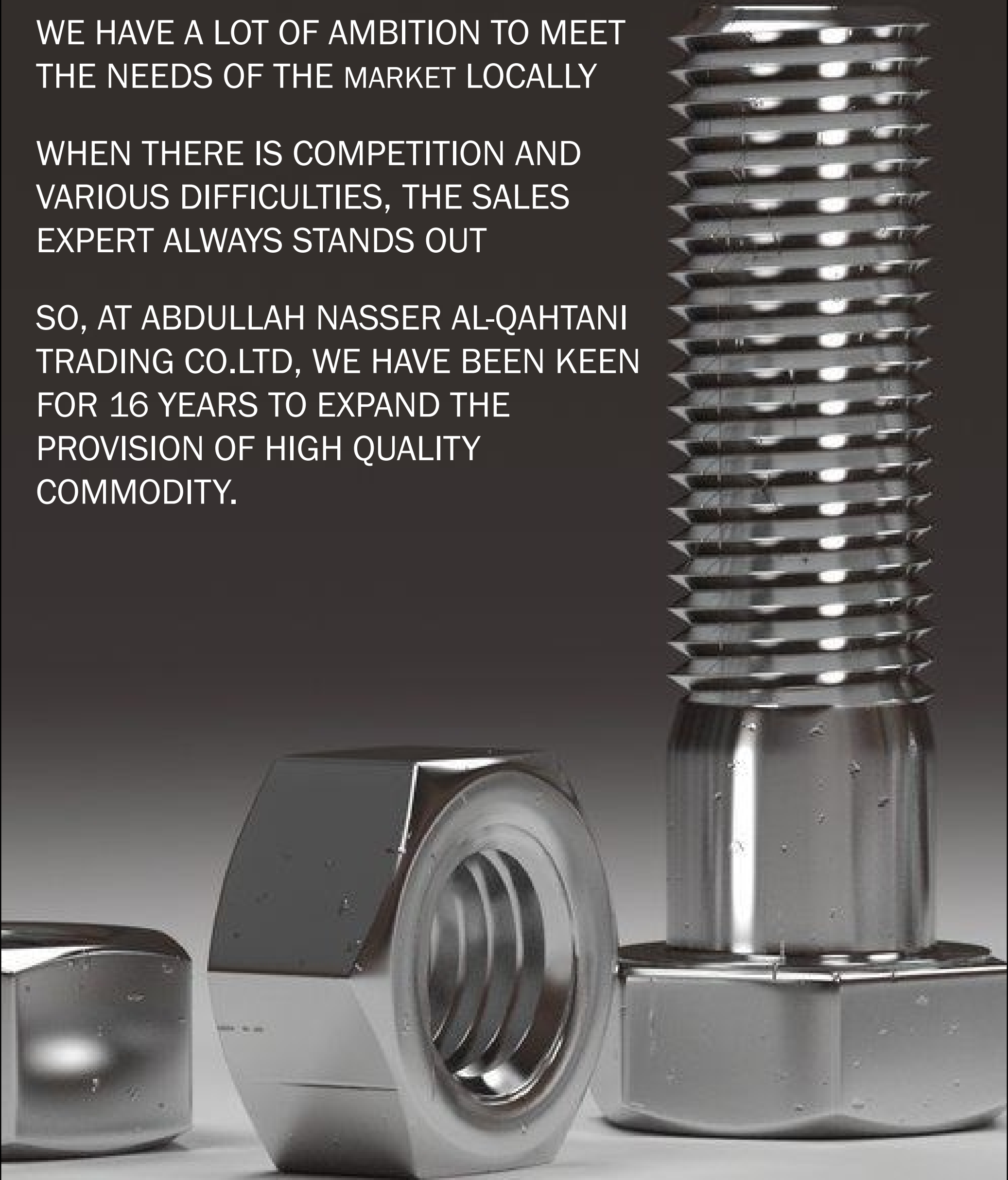
WEBSITE & LINKS

## INTRODUCTION

WE HAVE A LOT OF AMBITION TO MEET  
THE NEEDS OF THE MARKET LOCALLY

WHEN THERE IS COMPETITION AND  
VARIOUS DIFFICULTIES, THE SALES  
EXPERT ALWAYS STANDS OUT

SO, AT ABDULLAH NASSER AL-QAHTANI  
TRADING CO.LTD, WE HAVE BEEN KEEN  
FOR 16 YEARS TO EXPAND THE  
PROVISION OF HIGH QUALITY  
COMMODITY.



## VENDOR ID



132381



102255



11450



100679



100661



206265



102045



35301



10039107



504697

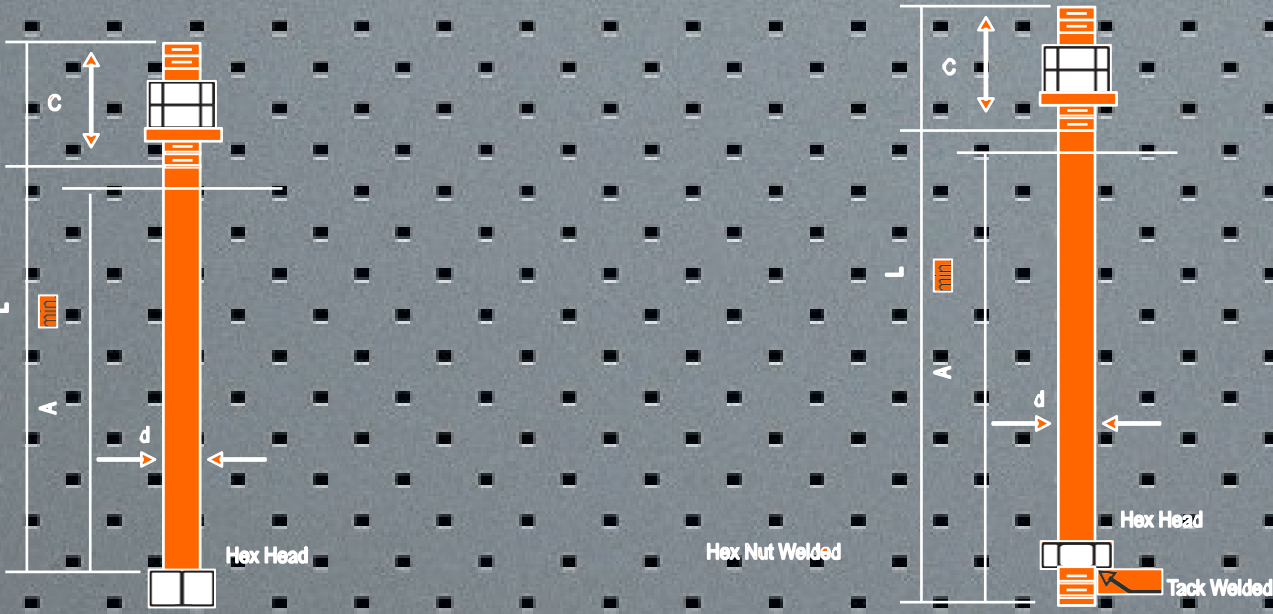


100423



3142

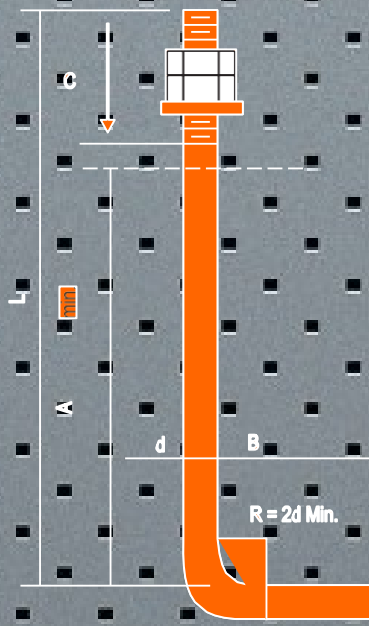
# ANCHOR BOLTS STRAIGHT TYPE



Anchor Bolts		Dimensin in MM			Minimum Edge Distance		Capacity	
Dia in Inches	Dia in MM	A	C	L	MM To Center Bolts		Shear KN	Tension KN
		Minimum Depth	Thread Length	Total Length	Tension	Shear		
1/2"	12	250	40	355	80	100	4.5	6.8
5/8"	16	250	40	355	85	125	6.8	7.7
3/4"	20	300	50	405	85	150	9.9	10.4
7/8"	22	360	50	460	85	175	14.0	13.1
1"	24	410	65	510	90	175	18.5	15.8
1-1/8"	27	460	75	560	90	200	23.4	15.8
1-1/4"	32	510	75	610	100	225	29.7	18.0
1-3/8"	36	560	90	680	100	250	35.1	
1-1/2"	39	610	90	730	100	275	43.2	
1-5/8"	42	660	100	800	125	300	50.9	
1-3/4"	45	710	115	865	125	325	58.5	
2"	50	810	125	990	150	350	77.4	
2-1/4"	57	910	140	1100	150	400	101.7	
2-1/2"	64	1020	160	1240	175	450	125.6	

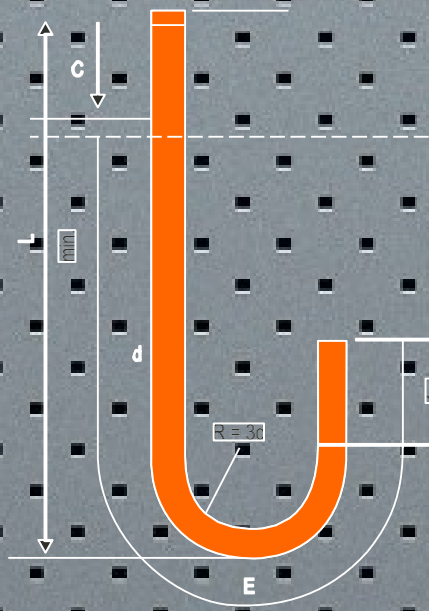
- ✓ Coating: Mill Finish, Electro Galv. & Hotdip Galv.
- ✓ Grade : 4.6, A307A, A307B, ASTM A36, 8.8, B7, SS304, SS316

# ANCHOR BOLTS L - TYPE



Anchor Bolts		Dimension in MM				Minimum Edge Distance		Capacity	
Dia in Inches	Dia in MM	A	B	C	L	MM To Center Bolts		Shear KN	Tension KN
		Minimum Depth	Bend	Thread Length	Total Length	Tension	Shear		
1/2"	12	250	100	40	355	80	10	4.5	8.1
5/8"	16	250	100	40	355	85	125	6.8	10.4
3/4"	20	300	150	50	405	85	150	9.9	14.0
7/8"	22	360	150	50	460	85	175	14.0	18.0
1"	24	410	200	65	510	90	175	18.5	22.5
1-1/8"	27	460	200	75	560	90	200	23.4	24.3
1-1/4"	32	510	200	75	610	100	225	29.7	28.8
1-3/8"	36	560	200	90	660	100	250	35.1	33.8
1-1/2"	39	610	200	90	710	100	275	43.2	38.7
1-5/8"	42	660	200	100	760	125	300	50.9	44.1
1-3/4"	45	710	255	115	850	125	325	58.5	46.8
2"	50	810	255	125	950	150	350	77.4	58.5
2-1/4"	57	910	255	140	1070	150	400	101.7	70.7
2-1/2"	64	1020	255	160	1200	175	450	125.6	84.2

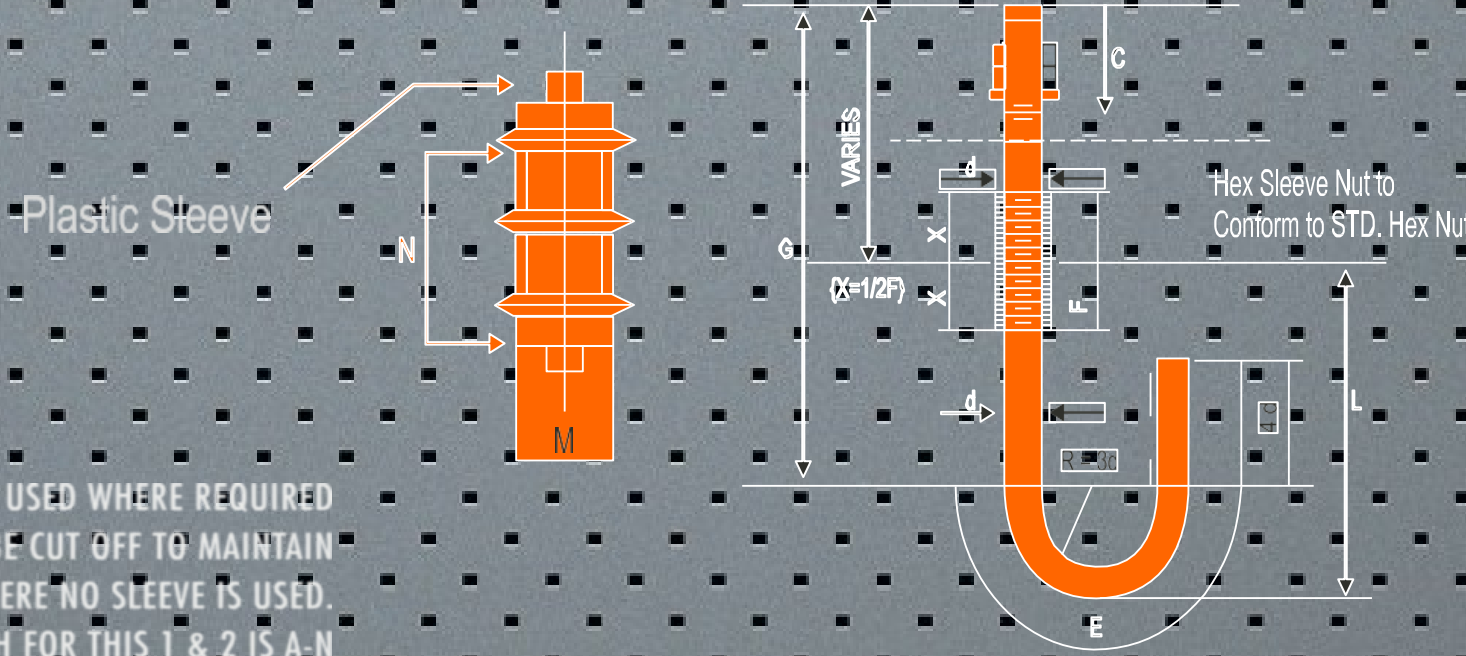
# ANCHOR BOLTS J - TYPE



Anchor Bolts		Dimension in MM			Cut Length		Minimum Edge Distance			Capacity
Dia in Inches	Dia in MM	A	C	E	L	Cut Length	MM To Center Bolts			Tension KN
		Minimum Depth	Thread Length	Hook Length	Total Length		Tension	Shear	Shear KN	
1/2"	12	250	50	190	410	542	80	100	4.5	9.5
5/8"	16	250	60	240	420	595	85	125	6.8	14.9
3/4"	20	300	70	285	485	705	85	150	9.9	22.5
7/8"	22	360	75	335	545	787	85	175	14.0	31.1
1"	24	410	90	380	610	874	90	175	18.5	40.5
1-1/8"	27	460	100	430	675	970	90	200	23.4	51.3
1-1/4"	32	510	115	475	735	1065	100	225	29.7	65.3
1-3/8"	36	560	125	525	800	1163	100	250	35.1	78.3
1-1/2"	39	610	125	570	865	1281	100	275	43.2	95.0
1-5/8"	42	660	145	620	925	1354	125	300	50.9	108.5
1-3/4"	45	710	150	665	990	1452	125	325	58.5	128.3
2"	50	810	180	760	1120	1648	150	350	77.4	168.8
2-1/4"	57	910	200	855	1245	1861	150	400	101.7	212.0
2-1/2"	64	1020	220	955	1370	2074	175	450	125.6	258.8

- ✓ Coating: Mill Finish, Electro Galv. & Hotdip Galv.
- ✓ Grade : 4.6, A307A, A307B, ASTM A36, 8.8, B7, SS304, SS316

# ANCHOR BOLTS JE - TYPE SLEEVE



## DETAIL OF SLEEVE

PLASTIC ANCHOR BOLT SLEEVES SHALL BE USED WHERE REQUIRED BY DESIGN. TOP OF SLEEVE SHALL BE CUT OFF TO MAINTAIN EMBEDMENT LENGTH 'N' WHERE NO SLEEVE IS USED. EMBEDMENT LENGTH FOR THIS 1 & 2 IS A-N

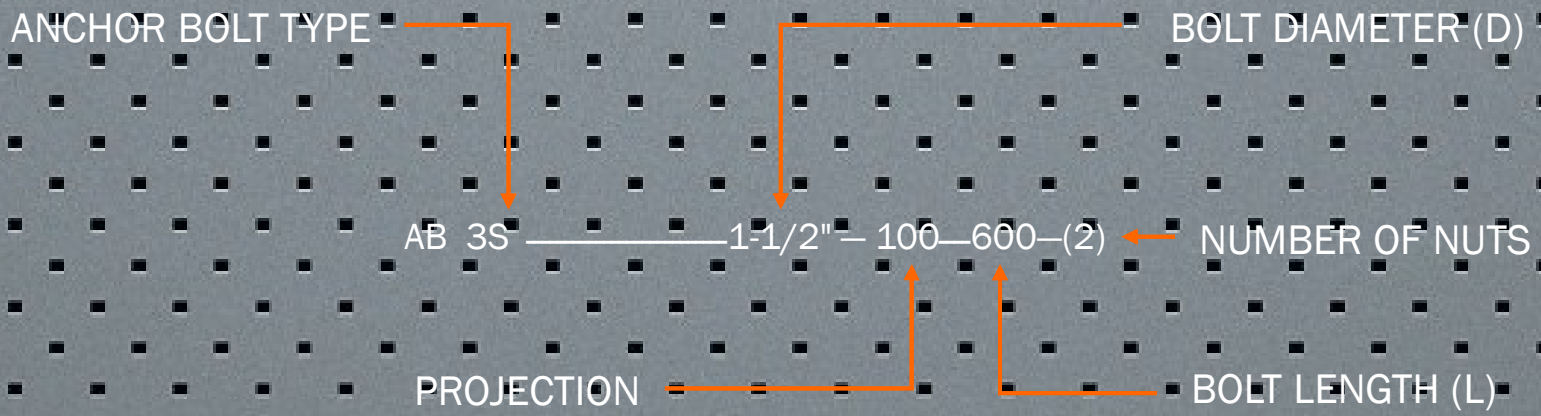
Anchor Bolts		Dimension in MM			Cut Length		Minimum Edge Distance			Capacity
Dia in Inches	Dia in MM	A	C	E	L	Cut Length	MM To Center Bolts			Tension KN
		Minimum Depth	Thread Length	Hook Length	Total Length		Tension	Shear	Shear KN	
1/2"	12	250	50	190	410	542	80	100	4.5	9.5
5/8"	16	250	60	240	420	595	85	125	6.8	14.9
3/4"	20	300	70	285	485	705	85	150	9.9	22.5
7/8"	22	360	75	335	545	787	85	175	14.0	31.1
1"	24	410	90	380	610	874	90	175	18.5	40.5
1-1/8"	27	460	100	430	675	970	90	200	23.4	51.3
1-1/4"	32	510	115	475	735	1065	100	225	29.7	65.3
1-3/8"	36	560	125	525	800	1163	100	250	35.1	78.3
1-1/2"	39	610	125	570	865	1281	100	275	43.2	95.0
1-5/8"	42	660	145	620	925	1354	125	300	50.9	108.5
1-3/4"	45	710	150	665	990	1452	125	325	58.5	128.3
2"	50	810	180	760	1120	1648	150	350	77.4	168.8
2-1/4"	57	910	200	855	1245	1861	150	400	101.7	212.0
2-1/2"	64	1020	220	955	1370	2074	175	450	125.6	258.8

- ✓ Coating: Mill Finish, Electro Galv. & Hotdip Galv.
- ✓ Grade : 4.6, A307A, A307B, ASTM A36, 8.8, B7, SS304, SS316

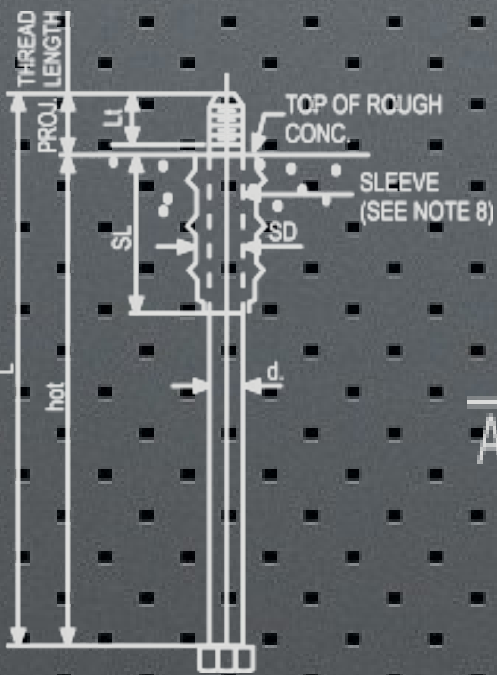
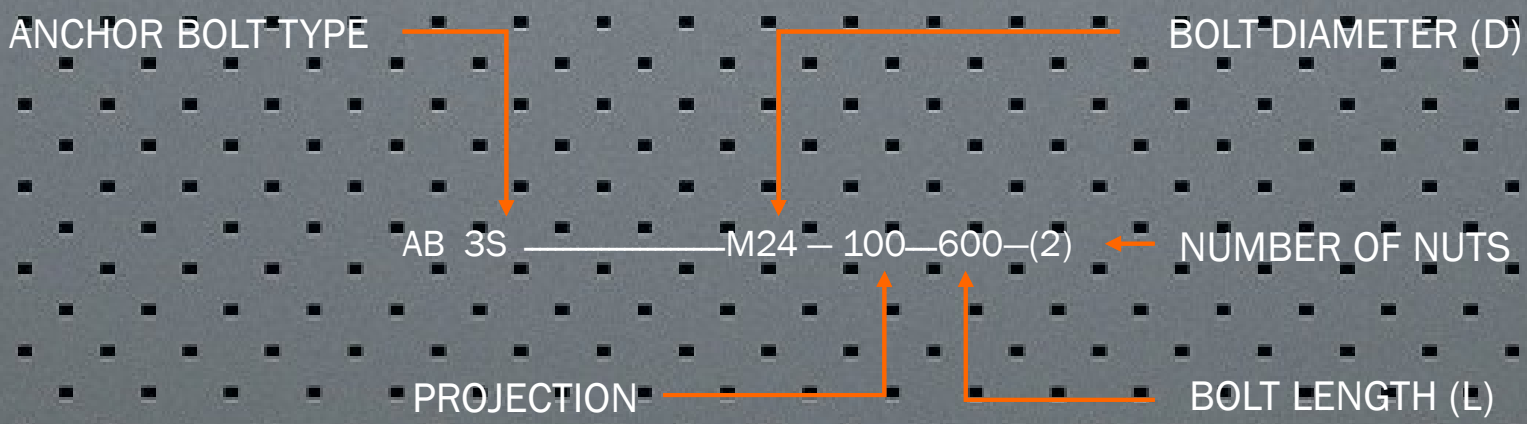


# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S

## FORMAT FOR ANCHOR BOLT CALL OUT ON DRAWINGS

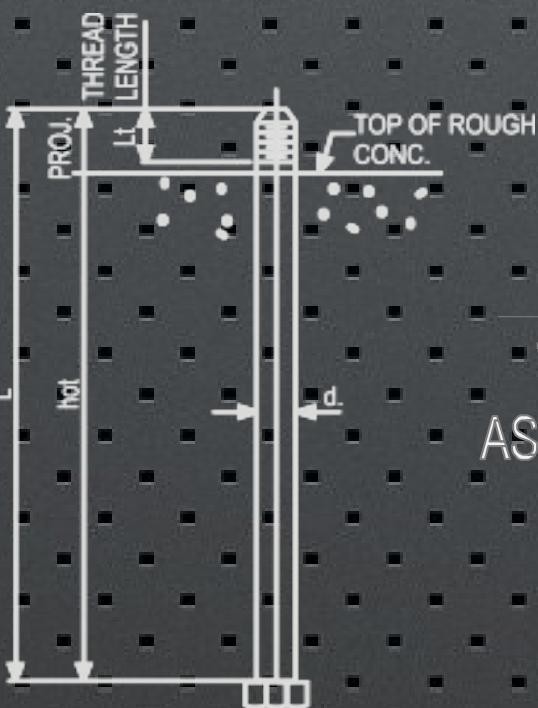
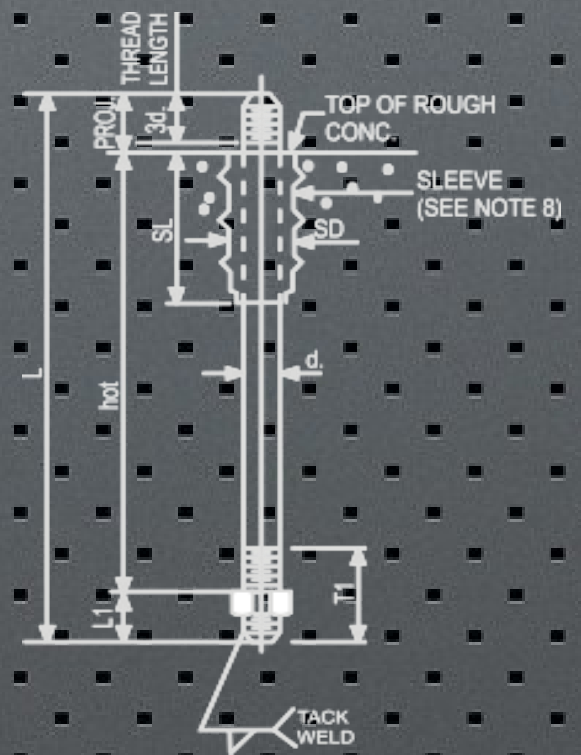


## INCH SIZES



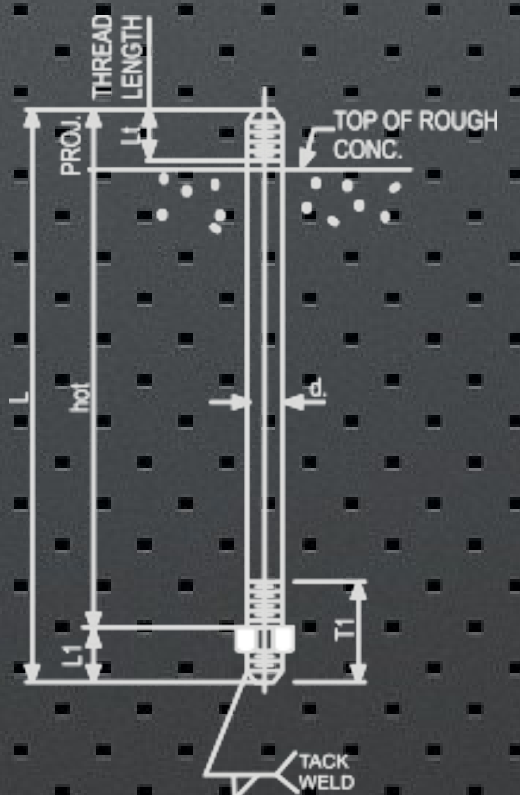
**TYPE 1S**  
 ASTM A307

**TYPE 2S**  
 ASTM A36/A36M or  
 ASTM F1554, Gr. 36  
 (SEE NOTE 4)



**TYPE 1**  
 ASTM A307

**TYPE 2**  
 ASTM A36/A36M or  
 ASTM F1554, Gr. 36  
 (SEE NOTE 4)



# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S

## Table 1 : ASTM A307, Grade Sizes Inch

Bolt Properties					Type 1					Type 15					
Size d Inch	Type	LT (in)	TPI	Stress Area (In <sup>2</sup> )	Max. Proj. (Bolt o) (mm)	Min. 12d (mm)	Length (L) Proj. (In)	Edge Dist 4d>M+da /2 (mm)	Spacing 6d. (mm)	Min. SL+150 (mm)	Length (L) Proj. (In)	Edge Dist (Note dl) (mm)	Spacing (note s) (mm)	Sleeve	
														SD (mm)	SL (mm)
1/2"	Hex	1.50	13	0.142	107	152	10	100	76	275	15	127	114	50	125
5/8"	Hex	1.75	11	0.226	115	191	12	110	95	325	17-1/2	127	129	50	175
3/4"	Hex	2.00	10	0.334	123	229	14	111	114	325	17-1/2	127	145	50	175
2/8"	Hex	2.25	9	0.462	131	267	15-1/4	113	133	325	18	127	161	50	175
1"	Hex	2.50	8	0.606	139	305	17-1/2	114	152	400	21	139	202	75	250
1-1/8"	Hex	2.75	7	0.763	146	343	19-1/2	116	171	421	22-1/2	139	218	75	250
1-1/4"	Hex	3.00	7	0.969	154	381	21	127	197	441	23-1/2	149	234	75	250
1-3/8"	Hex	3.25	6	1.155	162	419	23	140	210	460	24-1/2	160	250	75	250
1-1/2"	Hex	3.50	6	1.495	170	457	24-1/2	152	229	604	30-1/2	183	291	100	375
1-3/4"	Heavy Hex	4.00	5	1.899	186	533	28-1/2	178	267	642	32-1/2	206	322	100	375
2"	Heavy Hex	4.50	4.5	2.498	202	610	32	203	305	755	37-1/2	228	354	100	450
2-1/4"	Heavy Hex	5.00	4.5	3.248	218	686	35-1/2	229	343	793	40	258	386	100	450
2-1/2"	Heavy Hex	5.50	4	3.999	234	762	39	254	381	981	48	297	468	150	600
2-3/4"	Heavy Hex	6.00	4	4.934	250	838	43	279	419	1019	50	319	499	150	600
3"	Heavy Hex	6.50	4	5.967	266	914	46-1/2	305	457	1057	52	342	531	150	600

### METRIC SIZES

Notes: Table-1

Minimum Edge distance is measured from the centerline of the Anchor Bolt to the EDGE of the Concrete.

ASTM A307 Bolt lengths may not be available for the larger diameter type is Bolts.

If the required projection exceed the maximum projection in the table above, use A type 2 Anchor Bolt.

EDGE distance for bolts with sleeves must be increased by (SD-d.), 1/2

Spacing of Bolts with sleeves must be increased by (SD-d.)

TPI + threads per inch

# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S

Anchor Material Specifications	Sizes	Profile	Thread Profile	Nut Material Specification	Coating Type
ASTM A307, Grade A	½* thru 1-1/2* Over 1-1/2	Hex bolt Heavy Hex bolt	ASME B18.21 UNC	ASTM A563, Grade A Heavy Hex	Golvanized to ASTM A153, ClassC Or ASTM B695 ,Class 50
ASTM A36/A36M	½*thru 3* M12thru M72	Rod	ASME B18 2.1 , UNC Class 2 ASME B1.13M	ASTM A563, Grade A Heavy Hex	Golvanized to ASTM A153, Class C Or ASTM B695 ,Class 50
ASTM F1554 M GR , 36	½ thru 3"	Rod	ASME B18 2.1 , UNC Class 2	ASTM A563, Grade A Heavy Hex	Golvanized to ASTM A153, Class C Or ASTM B695 ,Class 50
ASTM 193/A 193M GR . B7	¾ *thru 3* M20 thru M72	Bolts / Rods	ASME B1 .1, 8 UNC Class 2 ASME B1.13M	ASTM A563 , DH Heavy Hex Or ASTM A 194/A 194 M	Painted as per APCS - IC OR APCS - IF PER SAES -H- 001
ASTM F1554 Gr . 105	½*thru 3* M12thru M72	Rod	ASME B1.1, UNC Class 2	ASTM A563 , DH Heavy Hex Or ASTM A 194/A 194 M	Golvanized to ASTM A153, Class C Or ASTM B695 ,Class 50

**Table 2 : ASTM A193 , F1554 Grade 105 Anchor Rods inch Series**

Bolt Properties					Type 1			Type 15				
Size d Inch	TPI	Stres s Area (In2)	LT d + 13 (mm)	TI 2d (mm)	Min 12d. (mm)	Edge Dist 4d>M+ da/2 (mm)	Spaci ng 6d. (mm)	Min. SL+1 50 (mm)	Edge Dist (Note b) (mm)	Spaci ng (note o) (mm)	Sleeve	
											SD (mm)	SL (mm)
1/2"	13	0.142	26	25	152	100	76	275	127	114	50	125
5/8"	11	0.226	29	32	191	110	95	325	127	129	50	175
3/4"	10	0.334	32	38	229	111	114	325	127	145	50	175
7/8"	9	0.462	35	44	267	113	133	325	127	161	50	175
1"	8	0.606	38	51	305	114	152	400	139	202	75	250
1-1/8"	7	0.752	42	57	343	116	171	421	139	218	75	250
1-4/4"	7	0.969	45	64	381	127	191	441	149	234	75	250
1-3/8"	6	1.155	48	70	419	140	210	160	160	250	75	250
1-1/2"	6	1.405	51	76	457	152	229	604	183	291	100	375
1-3/4"	5	1.899	57	89	533	178	267	642	206	322	100	375
2"	4.5	2.498	64	102	610	203	305	755	228	354	100	450
2-1/4"	4.5	3.248	70	114	686	229	343	793	250	386	100	450
2-1/2"	4.0	3.999	77	127	762	254	381	981	297	468	150	600
2-3/4"	4.0	4.934	83	140	833	279	419	1019	319	499	150	600
3"	4.0	5.967	89	152	914	305	457	1057	342	531	150	600

Notes: Table-2

Minimum Edge distance is measured from the centerline of the Anchor Bolt to the EDGE of the Concrete.

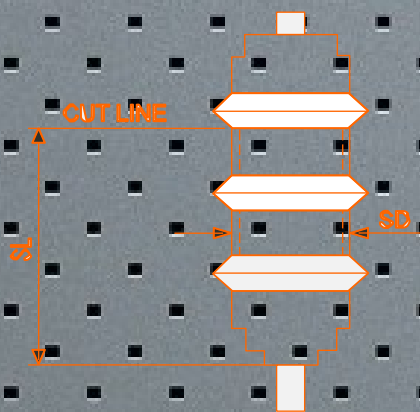
EDGE distance for bolts with sleeves must be increased by (SD-d.)/2

Spacing of Bolts with Sleeves must ne increased by (SD-d.)

TPI + thred per Inch.

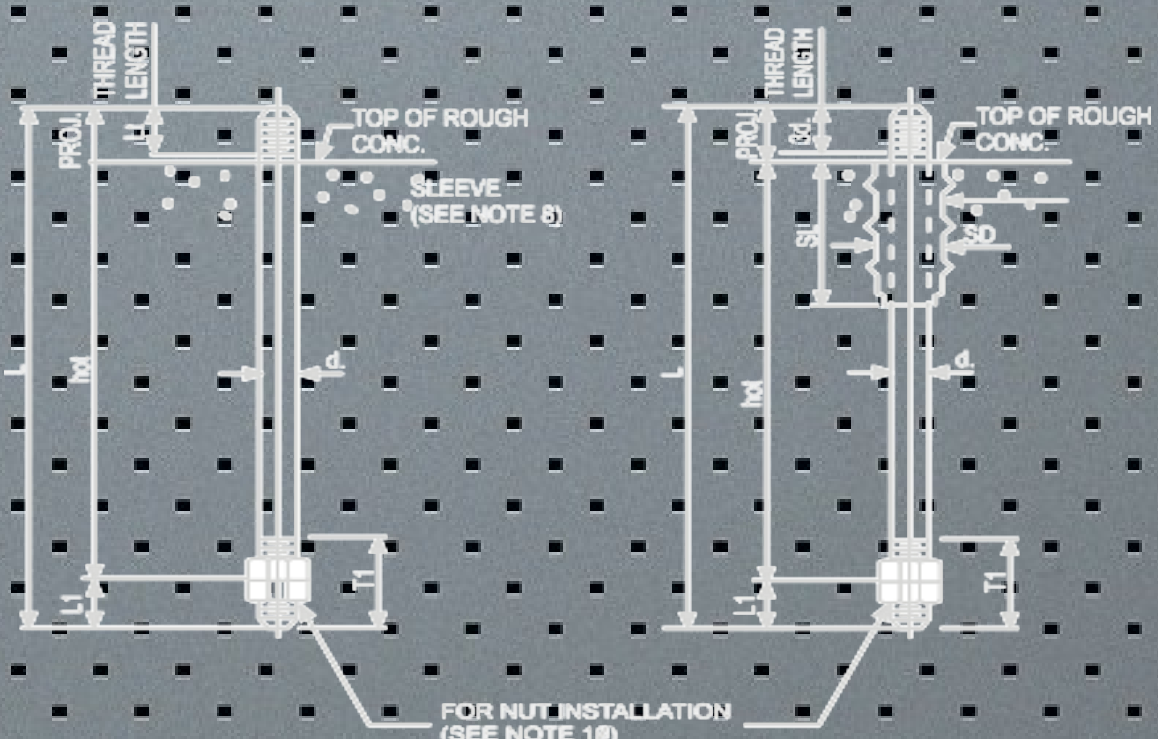
Coating : Mill Finish, Electro Galv. & Hotdip Galv. and Painted

# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S



DETAIL OF SLEEVE

PLASTIC ANCHOR BOLT SLEEVE SHALL BE USED WHERE REQUIRED BY DESIGN. TOP OF SLEEVE SHALL BE CUT OFF TO MAINTAIN EMBEDMENT LENGTH



TYPE 3  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

TYPE 3S  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

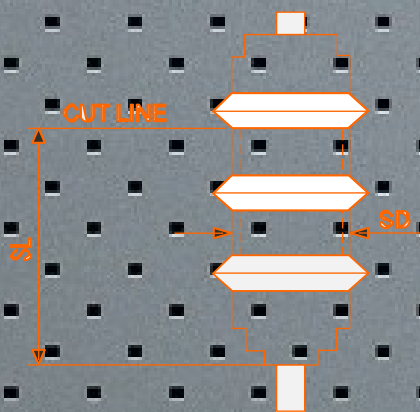
**Table 3: ASTM A193, ASTM F1554 Grade 105 Anchor Rods-inch Series**

Bolt Properties				Type 3			Type 3S					
Size d Inch	TPI	Stress Area (In <sup>2</sup> )	LT d + 13 (mm)	TI 2d (mm)	Min 12d. (mm)	Edge Dist 4d > M + da /2 (mm)	Spacing 6d. (mm)	Min. SL+150 (mm)	Edge Dist (Note b) (mm)	Spacing (note o) (mm)	Sleeve	
											SD (mm)	SL (mm)
3/4"	10	0.334	51	57	229	114	114	325	130	145	50	175
7/8"	9	0.462	57	67	267	133	133	325	147	161	50	175
1"	8	0.606	64	76	305	152	152	400	177	202	75	250
1-1/8"	8	0.790	70	86	343	171	171	421	195	218	75	250
1-1/4"	8	1.000	77	95	381	191	191	441	252	234	75	250
1-3/8"	8	1.234	83	105	419	210	210	460	230	250	75	250
1-1/2"	8	1.492	89	114	457	229	229	604	260	291	100	375
1-3/4"	8	2.882	102	133	533	267	267	642	294	322	100	375
2"	8	3.125	118	155	575	301	301	690	325	360	100	450
2-1/4"	8	3.557	127	171	610	343	343	793	364	386	100	450
2-1/2"	8	4.442	140	191	762	381	381	981	424	468	150	600
2-3/4"	8	5.425	153	218	838	419	419	1019	459	499	150	600
3"	8	6.506	165	229	914	457	457	1057	494	531	150	600

## Notes : Table-3

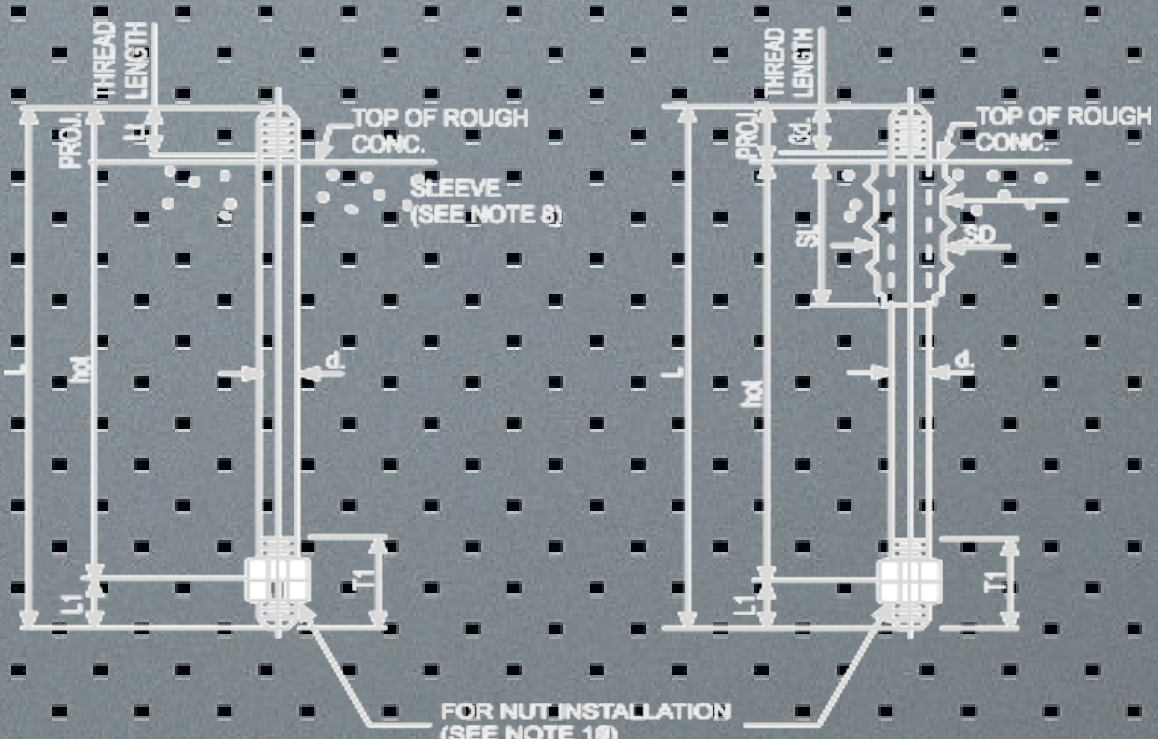
1. Minimum EDGE distance is measured from the centerline of the Anchor Bolt to the EDGE of the Concrete
2. EDGE distance for bolts with sleeves must be increased by (SD-d.)<sup>2</sup>
3. Spacing of Bolts with sleeves must be increased by (SD-d.),
4. TPI + thread per Inch

# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S



DETAIL OF SLEEVE

PLASTIC ANCHOR BOLT SLEEVE SHALL BE USED WHERE REQUIRED BY DESIGN. TOP OF SLEEVE SHALL BE CUT OFF TO MAINTAIN EMBEDMENT LENGTH



TYPE 3  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

TYPE 3S  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

Table 2M: ASTM A 36 Anchor Rods - inch Metric

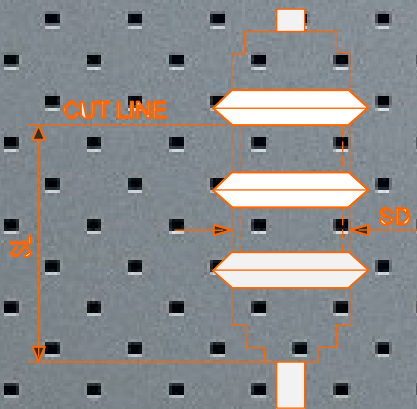
Bolt Perperties					Type 2			Type 3S			
Size d Inch	Stress Area (In2)	LT d + 13 (mm)	T1 2d (mm)	Min 12d. (mm)	Edge Dist 4d>M+da/ 2 (mm)	Spacing 6d. (mm)	Min. SL+150 (mm)	Edge Dist (Note b) (mm)	Spacing (note o) (mm)	Sleeve	
										SD (mm)	SL (mm)
M12X1.75	84.3	25	24	144	106	72	275	125	110	50	125
M16X2	157	29	32	192	108	96	275	125	130	50	125
M20X2.5	245	33	40	240	110	120	325	125	150	50	175
M24X3	353	37	40	280	112	144	400	138	195	75	250
M27X3	459	40	54	324	114	162	400	138	210	75	250
M30X3.5	561	43	60	360	120	180	400	143	225	75	250
M36X4	817	49	72	432	144	216	525	176	280	100	375
M42X4.5	1120	55	84	504	168	252	525	197	318	100	375
M48X5	1470	61	96	576	192	288	600	218	340	100	450
M56X5.5	2030	69	112	672	224	336	672	246	380	100	450
M64X6	2680	77	126	768	256	384	768	299	470	150	600
M72X6	3460	85	144	864	288	432	864	327	510	150	600

## Notes :

Table-2M

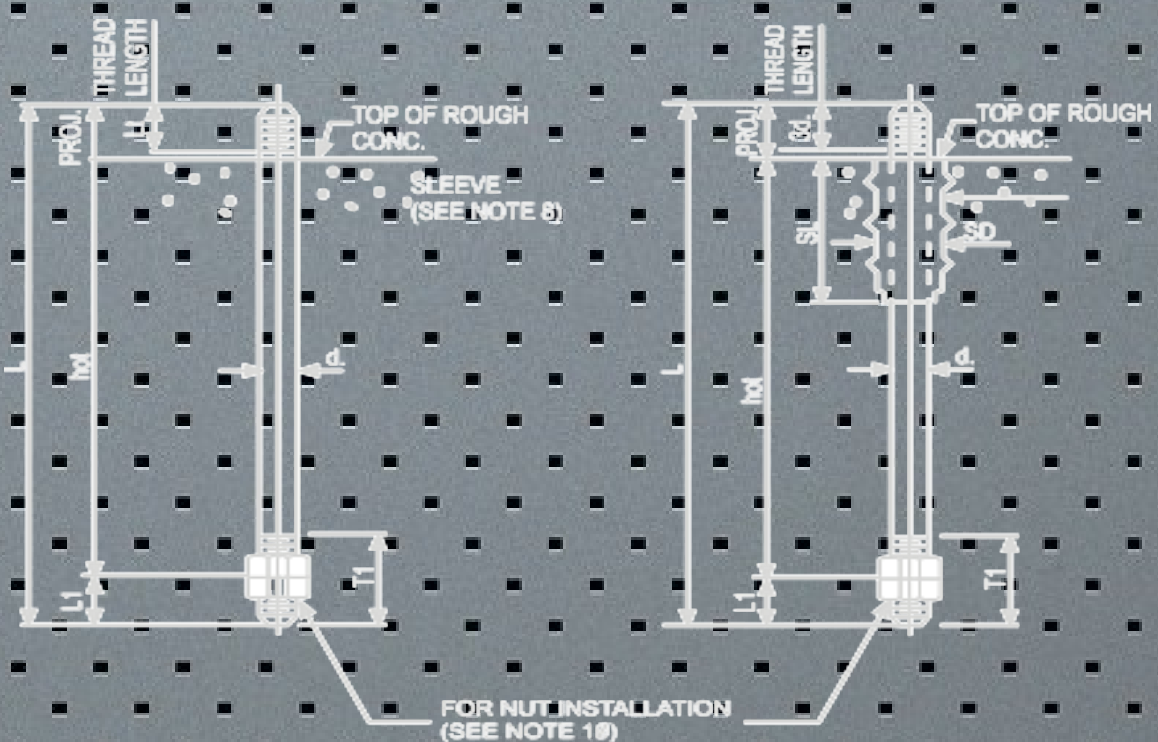
1. Minimum EDGE distance is measured from the centerline of the Anchor Bolt to the EDGE of the Concrete,
2. EDGE distance for bolts with sleeves must be increased by (SD-d.)<sup>2</sup>
3. Spacing of Bolts with sleeves must be increased by (SD-d.), 4. TPI + thread per Inch.

# ANCHOR BOLTS - TYPE 1, 1S, 2, 2S, 3, 3S



DETAIL OF SLEEVE

PLASTIC ANCHOR BOLT SLEEVE SHALL BE USED WHERE REQUIRED BY DESIGN. TOP OF SLEEVE SHALL BE CUT OFF TO MAINTAIN EMBEDMENT LENGTH



TYPE 3  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

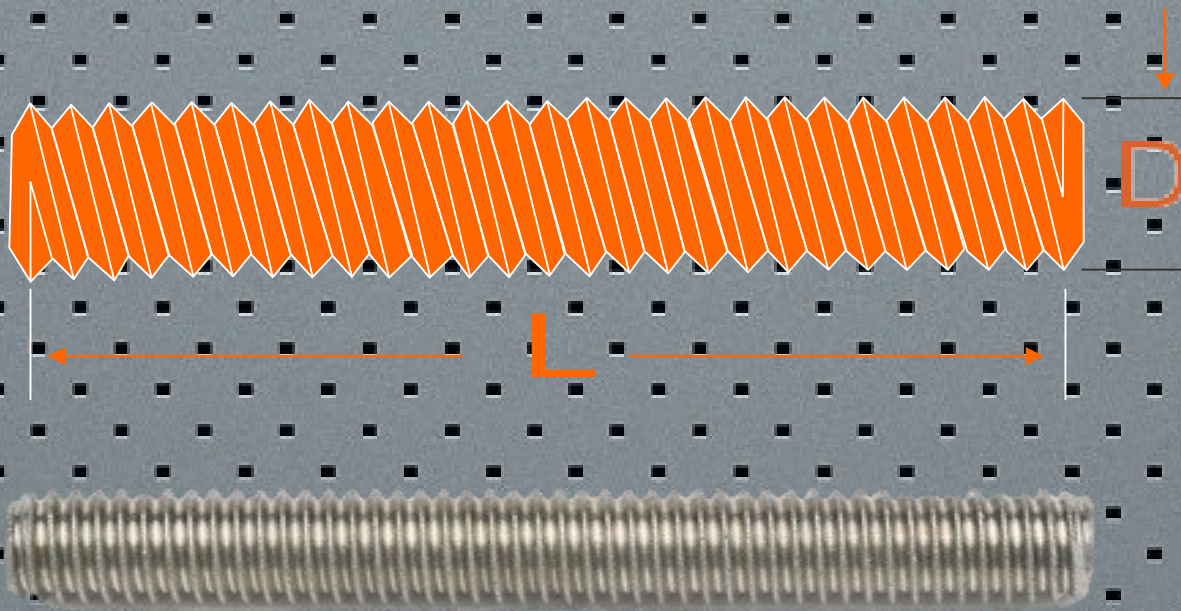
FOR NUT INSTALLATION  
 (SEE NOTE 10)

TYPE 3S  
 ASTM A93/A193M or  
 ASTM F1554, Gr. 105  
 (SEE NOTE 5)

## Notes:

- ANCHOR BOLTS SHALL BE SET ACCURATELY AND HELD IN PLACE BY A TEMPLATE.
- SLEEVES SHALL BE USED WHERE SPECIFIED IN CONSTRUCTION DRAWINGS CENTER SLEEVES AROUND BOLTS.
- ANCHOR BOLTS SHALL BE PLACED INSIDE PIER THE STEEL, BUT SHALL NOT BE TIED TO OR TOUCHING THE REBAR.
- FULLY THREADED ASTM A36/A36M RODS MAY BE USED TO FABRICATE TYPE 2 OR TYPE 2S ANCHOR BOLTS.
- FULLY THREADED ASTM A193/A19M RODS MAY BE USED TO FABRICATE TYPE 3 OR TYPE 3S ANCHOR BOLTS.
- ANCHOR BOLT DESIGN SHALL COMPLY WITH SAES 0-005 AND ACI 318-02, APPENDIX D.
- THE FINAL TIGHTENING OF ANCHOR BOLTS SHALL BE AS FOLLOWS : AFTER GROUTING OF THE BASE PLATE THE ANCHOR BOLTS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION. THIS IS DEFINED AS THE TIGHTNESS THAT EXISTS AFTER A FEW IMPACTS FROM AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING A SPUD WRENCH. AT THIS POINT ALL SURFACES SHOULD BE IN FULL CONTACT.
- ANCHOR BOLT SLEEVES SHALL BE FULLY GROUTED IN ACCORDANCE WITH SAES-0-010 AFTER THE BASE PLATE HAS BEEN POSITIONED.
- THE SPACING EMBEDMENT AND EDGE DISTANCE DIMENSIONS SHOWN ON THIS DRAWING ARE VALUED, EVERY ANCHOR BOLT MUST BE DESIGN PER ACI 318-02 AND MINIMUM DIMENSIONS MAY NEED TO BE INCREASED AS REQUIRED BY DESIGN.
- TIGHTEN NUTS TO LOCK, APPLY TORQUE TO BOTTOM NUS, LOCK BOTH NUTS IN POSITION BY COUNTER PUNCHING THE THREADS AT JUNCTURE OF NUTS AND BOLT.

# FULLY THREAD ROD



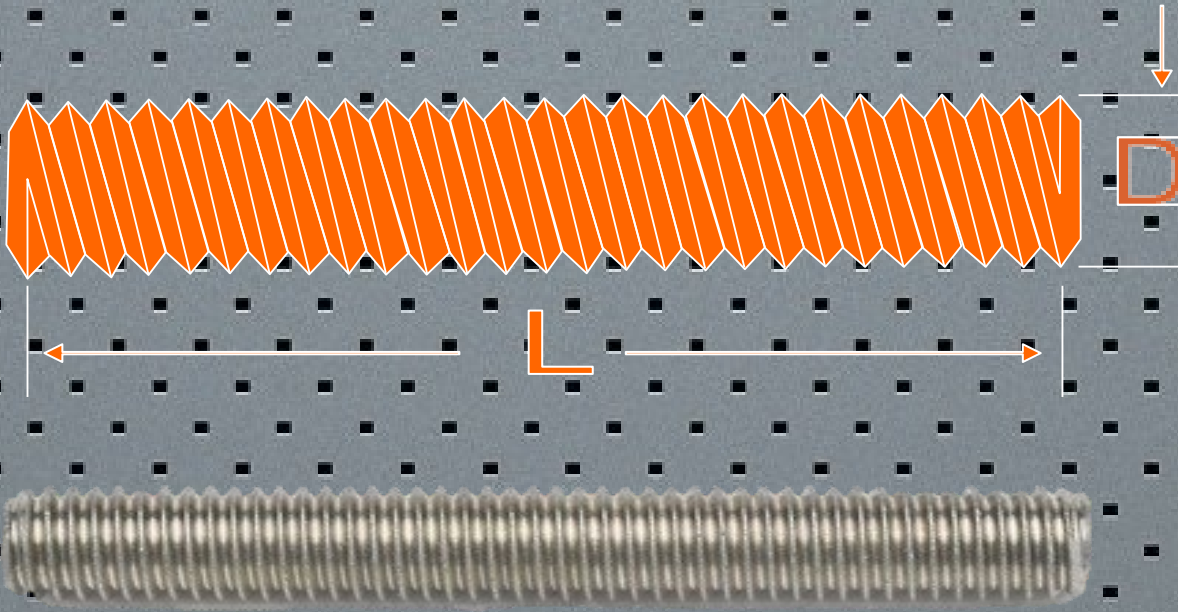
Nomin al Thread Size 'D'	TPI		Lengt h 'L'	Nomin al Thread Size 'D'	TPI		Lengt h 'L'
	UNC	UN			UNC	UN	
1/2"	13	-	144"	2-3/8"	-	8	144"
5/8"	11	-	144"	2-1/2"	-	8	144"
3/4"	10	-	144"	2-5/8"	-	8	144"
7/8"	9	-	144"	2-3/4"	-	8	144"
1"	8	-	144"	2-7/8"	-	8	144"
1-1/8"	-	8	144"	3"	-	8	144"
1-1/4"	-	8	144"	3-1/8"	-	8	144"
1-3/8"	-	8	144"	3-1/4"	-	8	144"
1-1/2"	-	8	144"	3-3/8"	-	8	144"
1-5/8"	-	8	144"	3-1/2"	-	8	144"
1-3/4"	-	8	144"	3-5/8"	-	8	144"
1-7/8"	-	8	144"	3-3/4"	-	8	144"
2"	-	8	144"	3-7/8"	-	8	144"
2-1/8"	-	8	144"	4"	-	8	144"
2-1/4"	-	8	144"				

## Dimensions:

Note :

- 1.The stud bolts will generally conform to ASTM A 193 Gr: B7, B7M, B16, B8, B8M ,A320 B8, B8M, L7, A307B
- 2.Threads will conform to class 2A of united coure threads as per ANSI B1.1.
- 3.Material : medium carbon chromium Molybdeum steel, CR-Mo alloy Steel ( Gr-Mo).
- 4.As per standard
- 5.All dimensions are in inches.

## FULLY THREAD ROD



MM	PITCH
06	1.00
08	1.25
10	1.50
12	1.75
14	2.00
16	2.50
18	2.50
20	2.50
22	3.00
24	3.00
27	3.00
30	3.50
33	3.50
36	4.00
39	4.00
42	4.50
45	4.50
48	5.00
52	5.00
56	5.50
64	6.00

UNC	PITCH
1/4"	20
5/16"	18
3/8"	16
1/2"	13
5/8"	11
3/4"	10
7/8"	9
1"	8
1-1/8"	7
1-1/4"	7
1-1/2"	6
1-3/4"	5
2"	4
2-1/2"	4.5

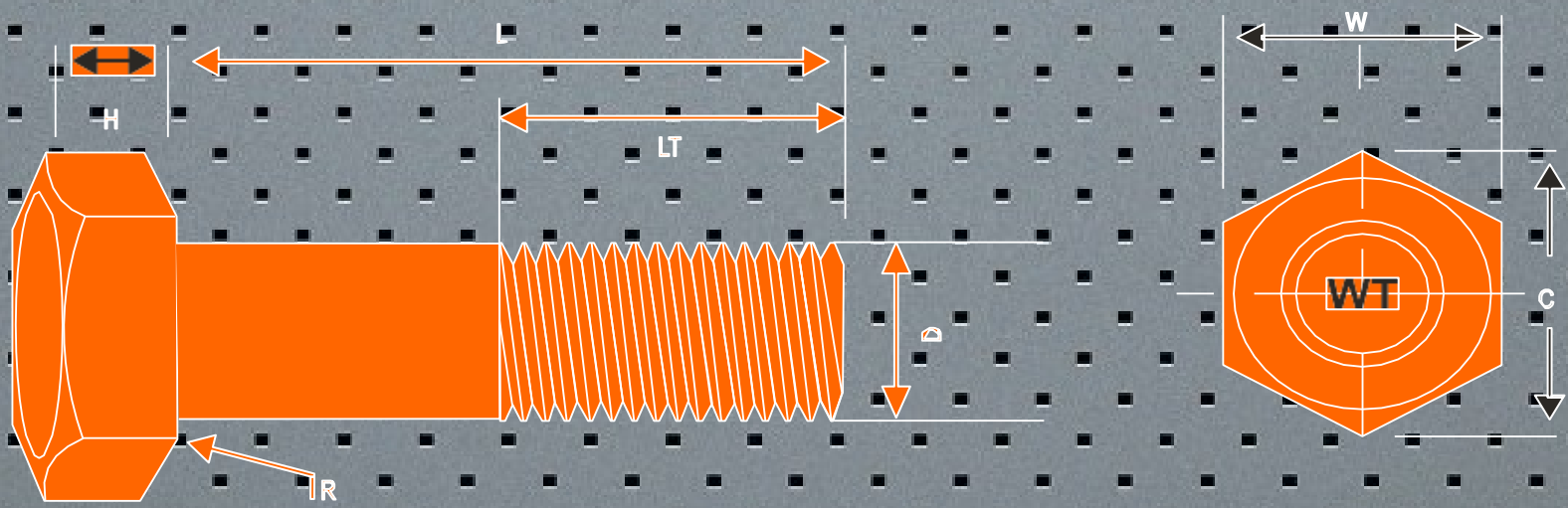
### Note :

The stud bolts will generally conform to ASTM, A307A, A307B, DIN 975  
 As per standard

Coating : Electro Galv., Hotdip Galv., Stainless Steel Brass Grade : 4.8 ,  
 8.8, A307A, A307B, A36, SS304, SS316



## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



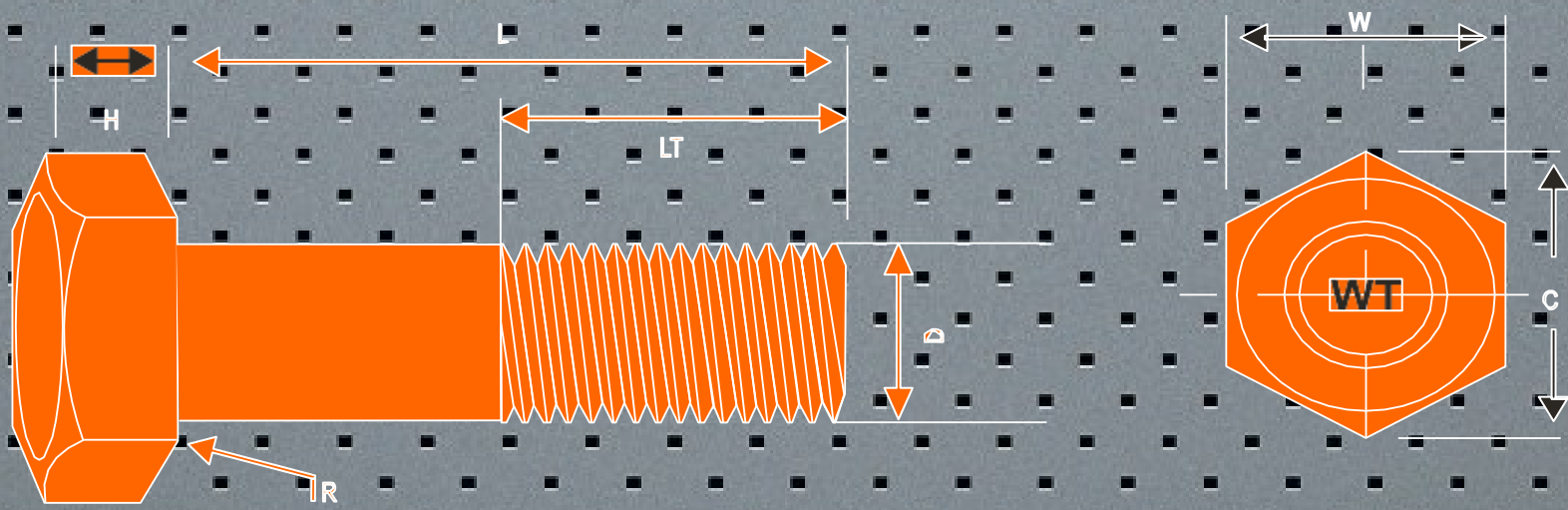
Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread				Length Range L
							LT 1	LT 2	LT 3	LFT	
M 06	1.0	10.0	11.05	6.0	4.0	0.25	18	-	-	FT	10-150
M 08	1.25	13.0	14.98	8.0	5.3	0.4	22	28	-	FT	12-150
M 10	1.5	17.0- 16.0	18.90-17.80	10.0	6.4	0.4	26	32	45	FT	16-250
M 12	1.75	19.0- 18.0	21.10-20.03	12.0	7.5	0.6	30	36	49	FT	20-250
M 14	2.0	22.0-21.0	24.49-23.25	14.0	8.8	0.6	34	40	53	FT	25-200
M 16	2.0	24.0	26.75	16.0	10.0	0.6	38	44	57	FT	25-400
M 18	2.5	27.0	30.14	18.1	11.5	0.6	42	48	61	FT	35-200
M 20	2.5	30.0	33.53	20.0	12.5	0.8	46	52	65	FT	30-400
M 22	2.5	32.0-34.0	35.72-37.72	22.0	14.0	0.8	50	56	69	FT	40-200
M 24	3.0	36.0	39.98	24.0	15.0	0.8	54	60	73	FT	50-450
M 27	3.0	41.0	45.20	27.0	17.0	1.0	60	66	79	FT	60-300
M 30	3.5	46.0	50.85	30.0	18.7	1.0	66	72	85	FT	60-400
M 33	3.5	50.0	55.37	33.0	21.0	1.0	72	78	91	FT	75-500
M 36	4.0	55.0	60.79	36.0	22.5	1.0	78	84	97	FT	80-500
M 39	4.0	60.0	66.44	39.0	25.0	1.0	84	90	103	FT	80-500
M 42	4.5	65.0	72.02	42.0	26.0	1.2	90	96	109	FT	90-500
M 45	4.5	69.5	77.00	45.0	27.8	1.2	90	96	109	FT	90-500

### Dimensions:

Note :

- 1.The bolts & screws will generally conform to ISO 4014 , ISO 4017 and DIN 931/933.
- 2.Threads will conform to class 6g of ISO 965/2, Coarse Series.
- 3.Material High grade carbon / alloy steel.
- 4.Heat Treatment : Property Class 8.8 or 10.9\*
- 5.Thread Length LT- LT1 for L < 125 LT2 for L > 125 to 200 LT3 for L > 200
- 6.Screw Length equal to or shorter than listed in column 'LFT' will be fully threaded.
- 7.All dimensions are in millimeters.

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



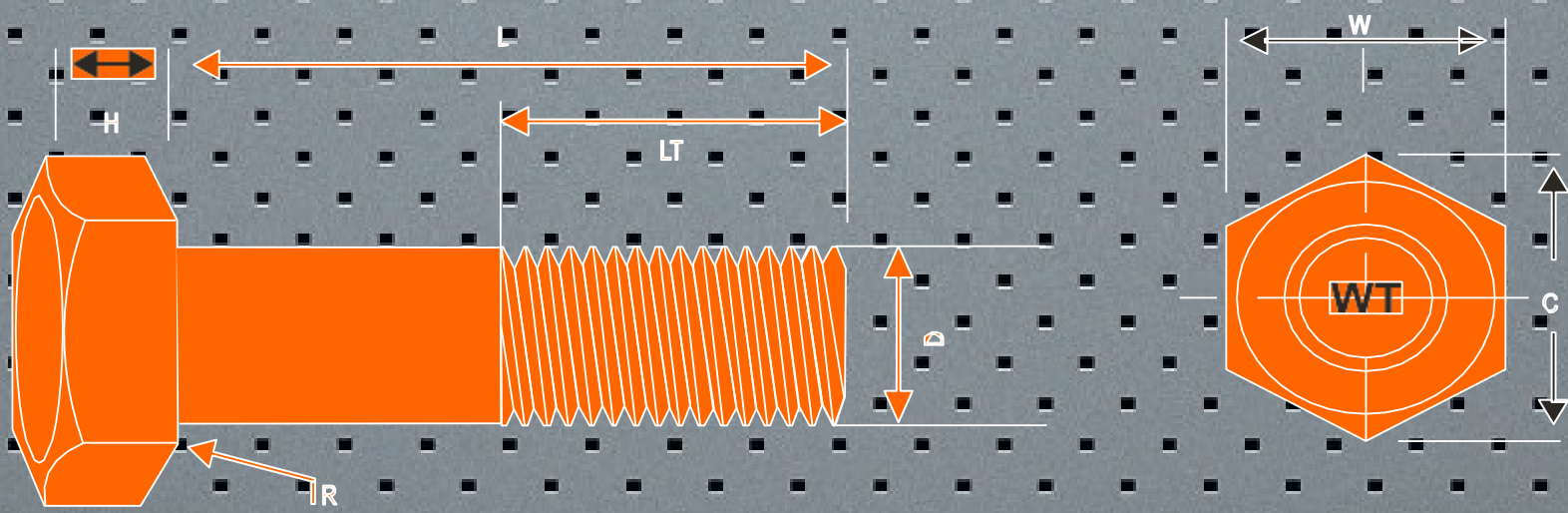
Normal Thread Size	TPI UNC	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread			Length Range
							L < 6"	L > 6"	LFT	
1/4"	20	0.433	0.511	0.250	5/32"	0.01	3/4"	3/4"	FT	1/2"-6"
5/16"	18	0.493	0.560	0.310	7/32"	0.01	7/8"	1/4"	FT	1/2"-6"
3/8"	16	0.562	0.650	0.388	1/4"	0.01	1-1/2"	1-1/4"	FT	1/2"-6"
1/2"	13	0.750	0.866	0.515	11/32"	0.01	1-1/4"	1-1/2"	FT	3/4"-12"
5/8"	11	0.938	1.083	0.642	27/64"	0.02	1-1/2"	2"	FT	1"-12"
3/4"	10	1.125	1.299	0.768	1/2"	0.02	1-3/4"	2-1/4"	FT	1-1/2"-12"
7/8"	9	1.312	1.516	0.895	37/64"	0.02	2"	2-1/2"	FT	1-1/2"-12"
1"	8	1.500	1.732	1.022	43/64"	0.02	2-1/4"	3"	FT	1-1/2"-12"
1-1/8"	7	1.688	1.949	1.149	3/4"	0.03	2-1/2"	3-1/4"	FT	2"-12"
1-1/4"	7	1.875	2.165	1.277	27/32"	0.03	2-3/4"	4"	FT	2"-12"
1-3/8"	6	2.062	2.382	1.404	29/32"	0.03	3"	4-1/2"	FT	2-1/2"-12"
1-1/2"	6	2.250	2.598	1.531	1"	0.03	3-1/4"	5"	FT	2-1/2"-12"

### Dimensions :

#### Note :

1. The bolt will generally conform to ANSI / ASME B 18.21 Hex Bolts
2. Thread will conform to Class 2A of ANSI B1.1 Coarse Series
3. Material : Low Carbon Steel
4. Bolt lengths equal to or shorter than listed in column / LFT will be fully threaded
5. All dimensions are in inches

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	TPI UNC	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread			Length Range
							L < 6"	L > 6"	LFT	
3/8"	16	0.562	0.650	0.388	1/4"	0.01	1.00	1.25	FT	1/2"-8"
1/2"	13	0.750	0.866	0.515	11/32"	0.01	1.25	1.50	FT	3/4"-12"
5/8"	11	0.938	1.083	0.642	27/64"	0.02	1.50	1.75	FT	1"-12"
3/4"	10	1.125	1.299	0.768	1/2"	0.02	1.75	2.00	FT	1-1/2"-12"
7/8"	9	1.312	1.516	0.895	37/64"	0.02	2.00	2.25	FT	1-1/2"-12"
1"	8	1.500	1.732	1.022	43/64"	0.02	2.25	2.50	FT	1-1/2"-12"
1-1/8"	7	1.688	1.949	1.149	3/4"	0.03	2.50	2.75	FT	2"-12"
1-1/4"	7	1.875	2.165	1.277	27/32"	0.03	2.75	3.00	FT	2"-12"
1-3/8"	6	2.062	2.382	1.404	29/32"	0.03	3.00	3.25	FT	2-1/2"-12"
1-1/2"	6	2.250	2.598	1.531	1"	0.03	3.25	3.50	FT	2-1/2"-12"

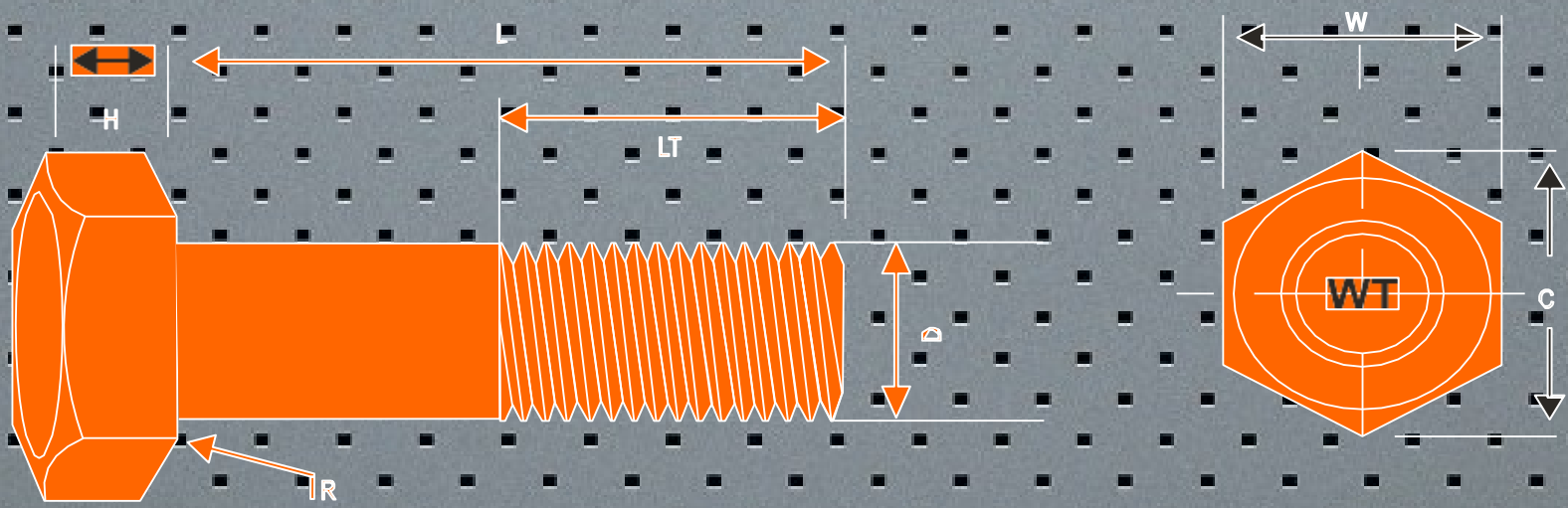
### Dimension

#### Note :

1. The Bolt will generally conform to ANSI / ASME B 18.2.1 Hex Bolts
2. Thread will conform to class 2A of ANSI B1.1 Coarse Series .
3. Material : Low Carbon Steel
4. Bolt lengths equal to or shorter than those listed in column / LFT will be fully threaded
5. All dimensions are in inches

Coating : Black Hotdip Galv., Electro Galv. Grade : ASTM A307A

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	TPI UNC	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread			Length Range
							L < 6"	L > 6"	LFT	
1/2"	13	0.875	1.010	0.515	11/32"	0.01	1.25	1.50	FT	3/4"-12"
5/8"	11	1.062	1.227	0.642	27/64"	0.02	1.50	1.75	FT	1"-12"
3/4"	10	1.250	1.443	0.768	1/2"	0.02	1.75	2.00	FT	1-1/2"-12"
7/8"	9	1.438	1.660	0.895	37/64"	0.02	2.00	2.25	FT	1-1/2"-12"
1"	8	1.625	1.876	1.022	43/64"	0.03	2.25	2.50	FT	1-1/2"-12"
1-1/8"	7	1.812	2.093	1.149	3/4"	0.03	2.50	2.75	FT	2"-16"
1-1/4"	7	2.000	2.309	1.277	27/32"	0.03	2.75	3.00	FT	2"-16"
1-3/8"	6	2.188	2.526	1.404	29/32"	0.03	3.00	3.25	FT	2-1/2"-16"
1-1/2"	6	2.375	2.742	1.531	1"	0.03	3.25	3.50	FT	2-12"-16"
1-5/8"	5	2.618	3.022	1.680	1.10"	0.03	3.50	3.75	FT	3"-16"
1-3/4"	5	2.805	3.238	1.800	1.18"	0.04	3.50	3.75	FT	3-1/2"-16"
1-7/8"	4.5	3.000	3.450	1.928	1.26"	0.04	4.00	4.25	FT	4"-16"
2"	4.5	3.160	3.650	2.041	1.33"	0.04	4.25	4.50	FT	4-1/2"-16"
2-1/4"	4.5	3.550	4.100	2.100	1.495"	0.04	5.00	5.25	FT	5"-16"
2-1/2"	4.0	3.950	4.570	2.234	1.66"	0.04	5.50	5.75	FT	5-1/2"-16"

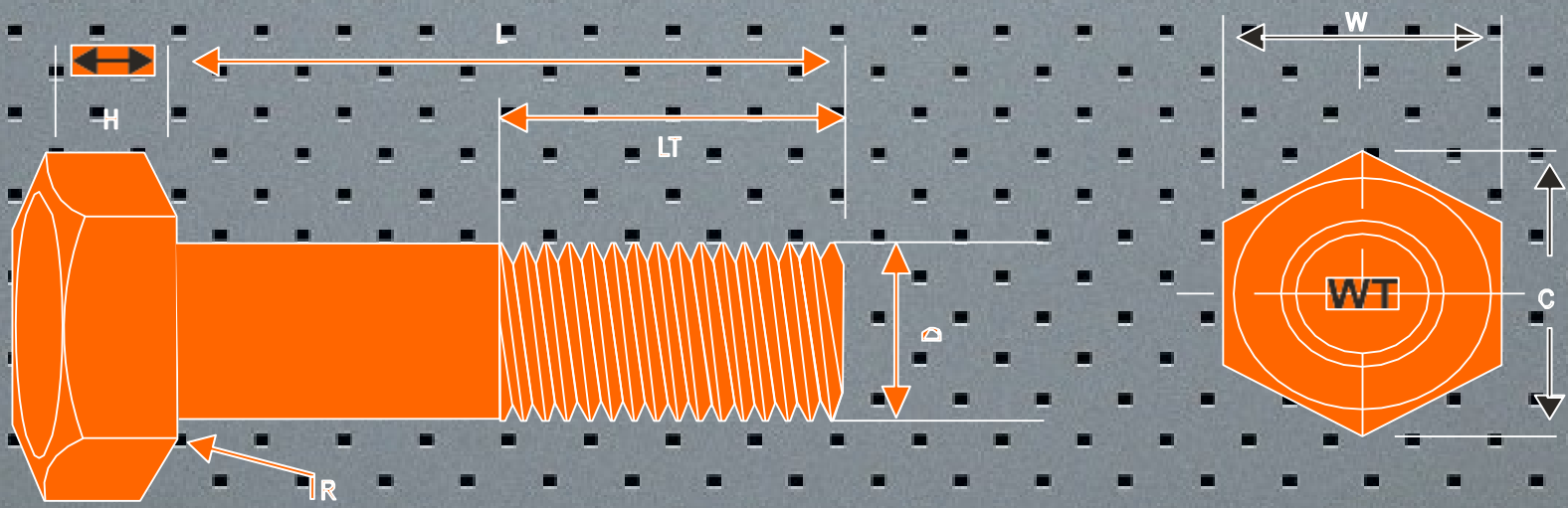
### Dimension

#### Note :

1. The Bolt will generally conform to ANSI / ASME B 18.2.1 Hex Bolts
2. Thread will conform to class 2A of ANSI B1.1 Coarse Series .
3. Material : Low Carbon Steel
4. Bolt lengths equal to or shorter than those listed in column / LFT will be fully threaded
5. All dimensions are in inches

Coating : Black Hotdip Galv., Electro Galv. Grade : ASTM A307A

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)

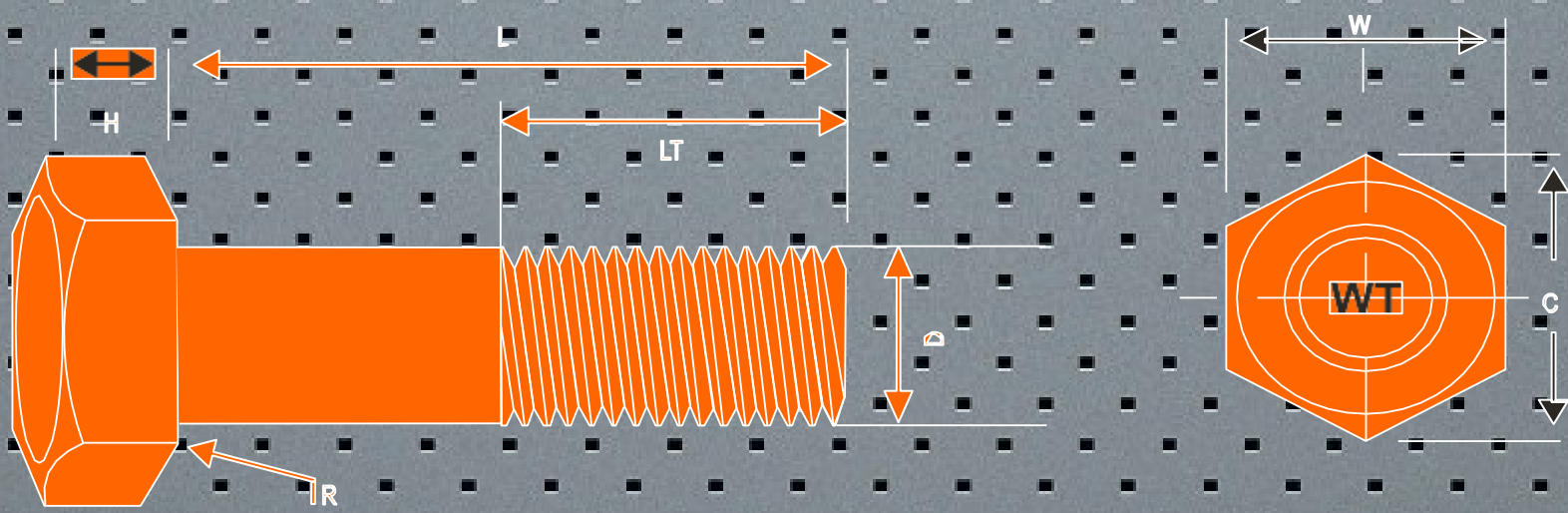


Normal Thread Size	TPI UNC	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread			Length Range
							LT-1	LT-2	LFT	
M 12	1.75	22.00	25.40	12.70	8.00	0.60	25	25	FT	25-150
M 16	2.00	27.00	31.88	16.70	10.00	0.60	31	38	FT	30-300
M 20	2.50	34.00	39.26	20.84	12.50	0.80	36	43	FT	35-300
M 22	2.50	36.00	41.57	22.84	14.00	0.80	38	45	FT	40-300
M 24	3.00	41.00	47.34	24.84	15.00	1.00	41	48	FT	40-300
M 27	3.00	46.00	52.12	27.84	17.00	1.20	44	51	FT	60-300
M 30	3.50	50.00	57.74	30.84	18.70	1.20	49	56	FT	60-400
M 36	4.00	60.00	69.28	37.00	22.50	1.50	56	63	FT	70-300
M 39	4.00	65.00	75.00	39.50	24.37	1.62	61	68	FT	75-300

### Dimension Note :

1. The bolts will generally conform to ANSI / ASME 818.2.3.7M Metric heavy Hex Structural Bolts
2. Threads will conform to Class 6g of ANSI B.1.13M Coarse Series
3. Material : High Grade Carbon / Alloy Steel
4. Heat Treatment as per ASTM A325M or ASTM F568M Class 8.8
5. Thread Length LT LT 1 for L < 100 LT 2 for L > 100
6. All dimensions are in millimeters .

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	TPI UN C	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread	Length Range
							LT	
1/2"	13	0.875	1.010	0.515	5/16"	0.009"	1.00"	1-1/2"-4"
5/8"	11	1.062	1.227	0.642	25/64"	0.021"	1.25"	1-1/2"-8"
3/4"	10	1.250	1.443	0.768	15/32"	0.021"	1.38"	1-1/2"-8"
7/8"	9	1.438	1.660	0.895	35/64"	0.031"	1.50"	1-1/2"-8"
1"	8	1.625	1.876	1.022	39/64"	0.062"	1.75"	1-1/2"-8"
1-1/8"	8	1.812	2.093	1.149	11/16"	0.062"	2.00"	2"-8"
1-1/4"	8	2.000	2.309	1.277	25/32"	0.062"	2.00"	2"-8"
1-3/8"	8	2.188	2.526	1.404	27/32"	0.062"	2.00"	2-1/2"-8"
1-1/2"	8	2.375	2.742	1.531	25/32"	0.062"	2.00"	2-1/2"-8"

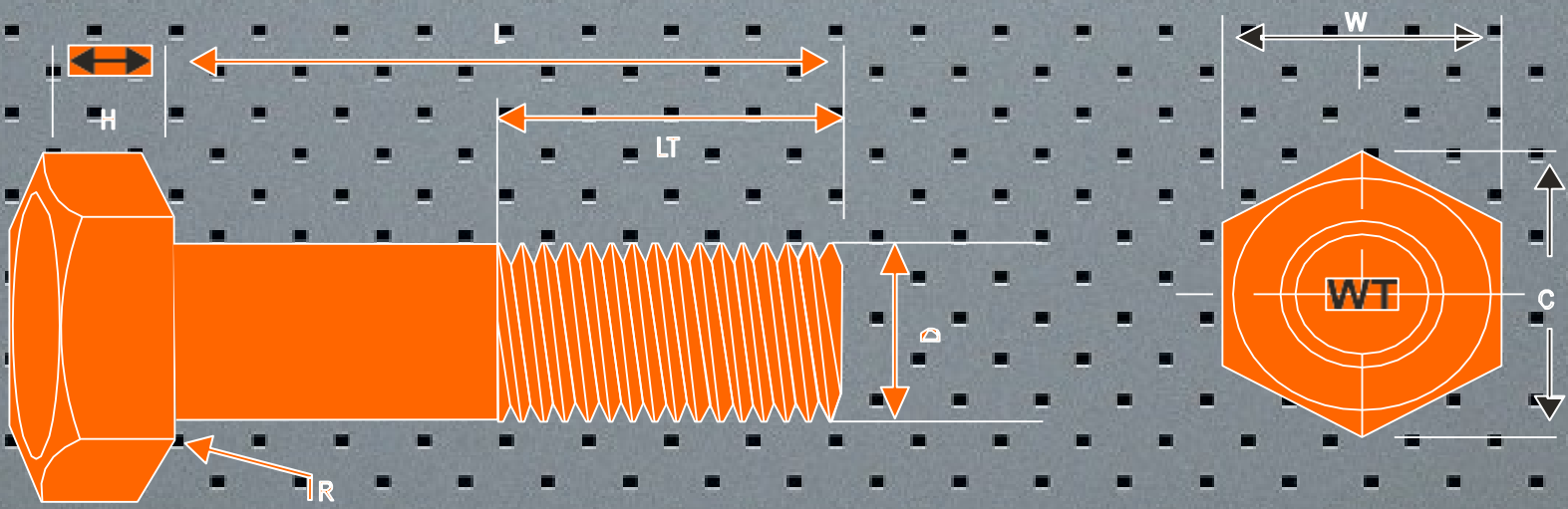
## Dimension

Note :

1. The Bolts will generally conform to ANSI / ASME B18.2.1 Heavy Hex Structural Bolts
2. Thread will conform to Class 2A of ANSI B.1.1 Coarse Series
3. Material : Alloy Steel
4. Heat Treatment : As per ASTM A490 Type-1
5. All Dimensions are in inches

Coating : Black, Hotdip Galv., Electro Galv. Grade : ASTM A490

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread		Length Range L
							LT-1	LT-2	
M 12	1.75	22.00	25.40	12.70	8.00	0.60	25	25	30-100
M 16	2.00	27.00	31.88	16.70	10.0	0.60	31	38	30-300
M 20	2.50	34.00	39.26	20.84	12.5	0.80	36	43	35-300
M 22	2.50	36.00	41.57	22.84	14.0	0.80	38	45	50-200
M 24	3.00	41.00	47.34	24.84	15.0	1.00	41	48	40-200
M 27	3.00	46.00	52.12	27.84	17.0	1.20	44	51	60-300
M 30	3.50	50.00	57.74	30.84	18.7	1.20	49	56	60-400
M 36	4.00	60.00	69.28	37.00	22.50	1.50	56	63	70-300
M 39	4.00	65.00	75.00	39.5	24.37	1.62	61	68	75-300

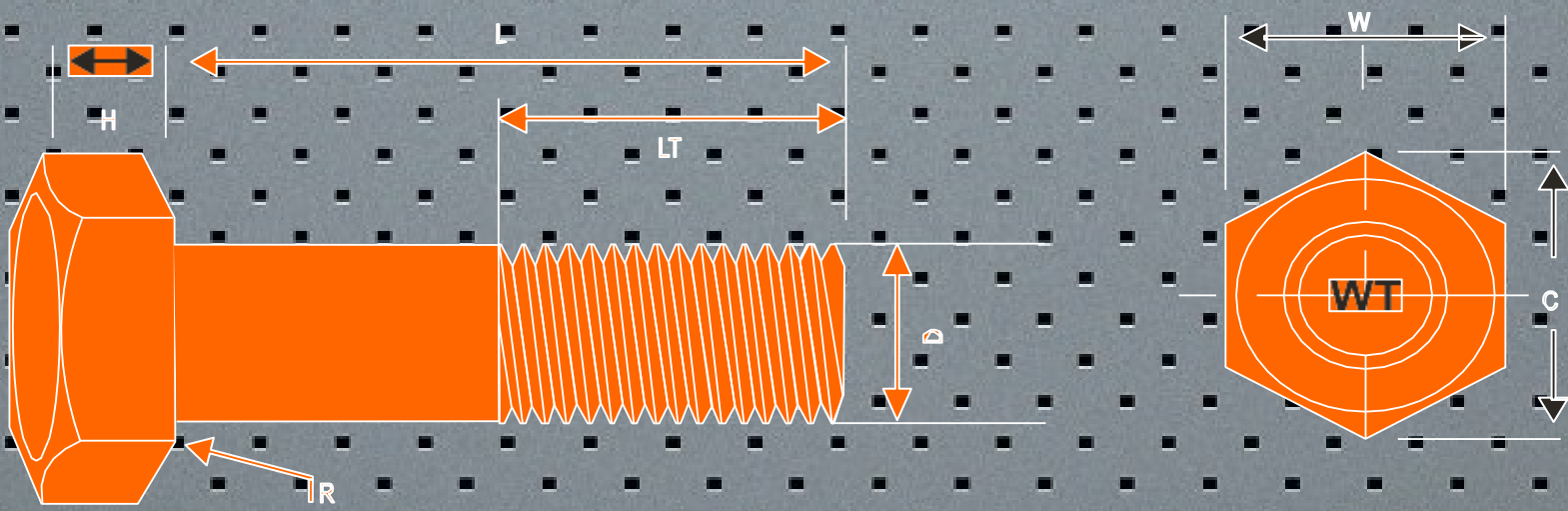
## Dimension

### Note :

1. The Bolts will generally conform ANSI / ASME B18.2.3.7M Metric Heavy Hex Structural Bolts
2. Threads will conform to Class 6g of ANSI B.1.13M Coarse Series
3. Material : Carbon / Alloy Steel
4. Heat Treatment as per ASTM A490 OR ASTM F568M Class 10.9
5. Thread Length LT LT1 for L < 100 LT2 for L > 100
6. All dimensions are in millimeters

Coating : Black, Hotdip Galv., Electro Galv. Grade : ASTM A490M

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread		Length Range L
							LT-1	LT-2	
M 12	1.75	22.00	23.91	12.70	8.00	1.20	25	25	30-200
M 16	2.00	27.00	29.56	16.70	10.0	1.20	31	38	35-200
M 20	2.50	34.00	35.03	20.84	12.5	1.50	36	43	40-300
M 22	2.50	36.00	39.55	22.84	14.0	1.50	38	45	50-200
M 24	3.00	41.00	45.20	24.84	15.0	1.50	41	48	50-300
M 27	3.00	46.00	50.85	27.84	17.0	2.00	44	51	60-200
M 30	3.50	50.00	55.37	30.84	18.7	2.00	49	56	60-300
M 36	4.00	60.00	66.44	37.00	22.50	2.00	56	63	70-300
M 39	4.00	65.00	75.00	39.5	24.37	1.62	61	68	75-300

## Dimension

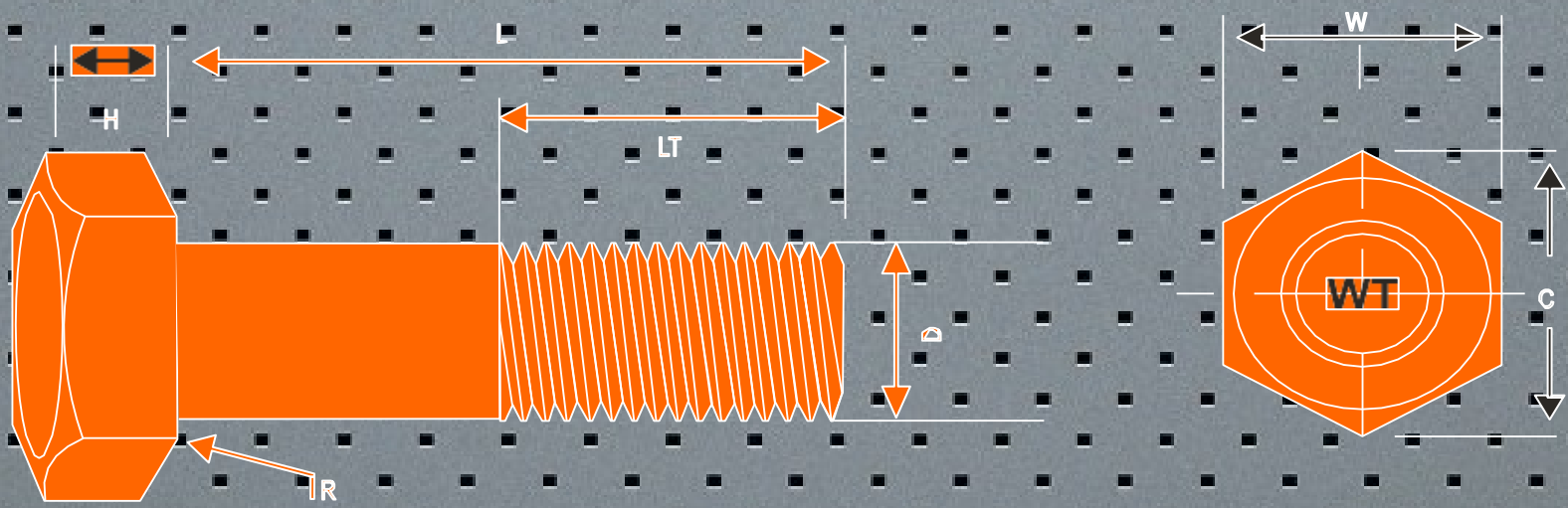
### Note :

1. The Bolts will generally conform to DIN 6914 High Strength Hex Head Bolts
2. Threads will conform to Class 6g of DIN 13 Coarse Series
3. Material : High Grade Carbon / Alloy Steel
4. Heat Treatment : To achieve mechanical properties of Class 10.9
5. Thread Length LT1& LT2
6. All dimensions are in millimeters

Coating : Black, Hotdip Galv., Electro Galv. Grade : DIN-6914



## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	LT-1	Length of Thread			Length Range L
								LT-2	LT-3	LFT	
M 06	1.00	10.0	11.05	6.0	4.0	0.25	18	-	-	25	10-150
M 08	1.25	13.0	14.98	8.0	5.3	0.4	22	28	-	30	12-150
M 10	1.5	17.0-16.0	18.90-17.80	10.0	6.4	0.4	26	32	45	35	16-250
M 12	1.75	19.0-18.0	21.10-20.03	12.0	7.5	0.6	30	36	49	40	20-250
M 16	2.0	24.0	26.75	16.0	10.0	0.6	38	44	57	50	25-400
M 20	2.5	30.0	33.53	20.0	12.5	0.8	46	52	65	60	30-400
M 22	2.5	32.0-34.0	35.72-37.72	22.0	14.0	0.8	50	56	69	65	40-200
M 24	3.0	36.0	39.98	24.0	15.0	0.8	54	60	73	75	50-450
M 27	3.0	41.0	45.20	27.0	17.0	1.0	60	66	79	85	60-300
M 30	3.5	46.0	50.85	30.0	18.7	1.0	66	72	85	85	60-400
M 33	3.5	50.0	55.37	33.0	21.0	1.0	72	78	91	95	75-500
M 36	4.0	55.0	60.79	36.0	22.5	1.0	78	84	97	100	80-500
M 39	4.0	60.0	66.44	39.0	25.0	1.0	84	90	103	110	80-500
M 42	4.5	65.0	72.02	42.0	26.0	1.2	90	96	109	120	90-500

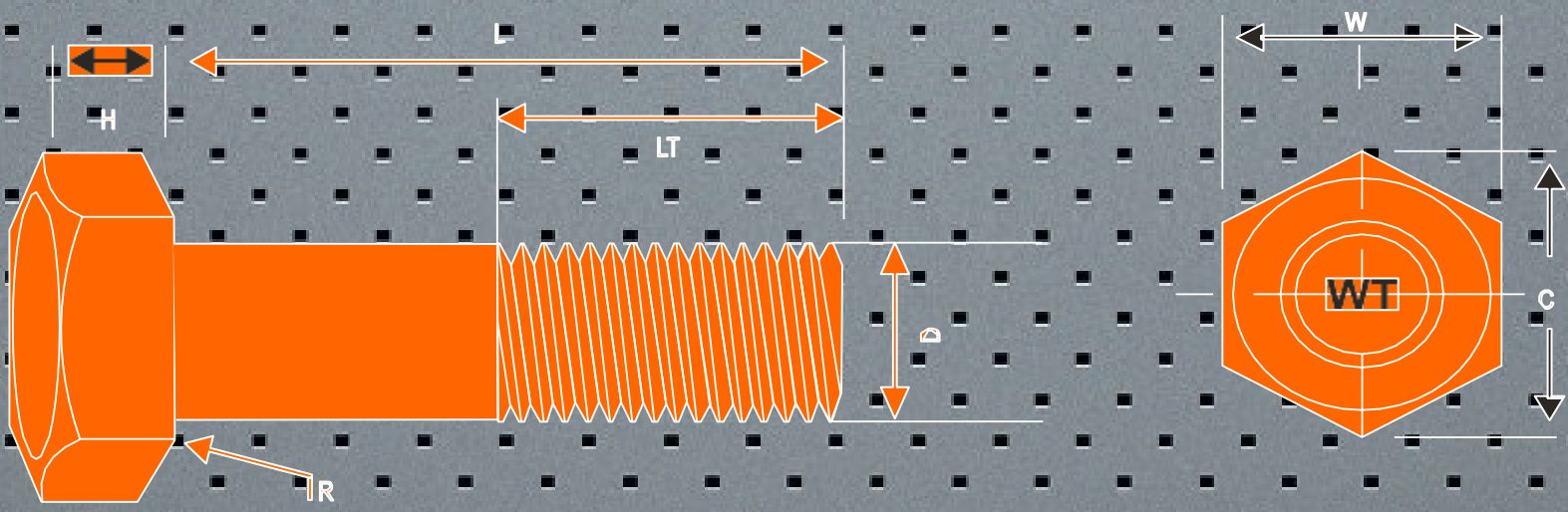
## Dimension

Note :

1. The Bolts and Screws will generally conform to BS 4190
2. Threads will conform to Class 6g of BS 4190 Coarse Series
3. Material : Carbon / Alloy Steel
4. Thread Length LT LT1 for L < 125
5. LT2 for L < 125 to 200 LT3 for L > 200
6. In Bolts / Nut assembly , tightening should be done by rotation of nuts .
7. All dimensions are in millimeters

Coating : Mill finish, Electro Galv. & Hotdip Galv. Grade : BS 4190

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread				Length Range L
							LT-1	LT-2	LT-3	LFT	
M 06	1.00	10.0	11.05	6.0	4.0	0.25	18	-	-	25	10-150
M 08	1.25	13.0	14.98	8.0	5.3	0.4	22	28	-	30	12-150
M 10	1.50	17.0-16.0	18.90-17.80	10.0	6.4	0.4	26	32	45	35	16-250
M 12	1.75	19.0-18.0	21.10-20.03	12.0	7.5	0.6	30	36	49	40	20-250
M 14	2.00	22.0-21.0	24.49-23.25	14.0	8.8	0.6	34	40	53	45	25-200
M 16	2.00	24.0	26.75	16.0	10.0	0.6	38	44	57	50	25-400
M 18	2.50	27.0	30.14	18.0	11.5	0.6	42	48	61	60	35-200
M 20	2.50	30.0	33.53	20.0	12.5	0.8	46	52	65	60	30-400
M 22	2.50	32.0-34.0	35.72-35.72	22.0	14.0	0.8	50	56	69	65	40-200
M 24	3.00	36.0	39.98	24.0	15.0	0.8	54	60	73	75	50-450
M 27	3.00	41.0	45.20	27.0	17.0	1.0	60	66	79	85	60-300
M 30	3.50	46.0	50.85	30.0	18.7	1.0	66	72	85	85	60-400
M 33	3.50	50.0	55.37	33.0	21.0	1.0	72	78	91	95	75-500
M 36	4.00	55.0	60.79	36.0	22.5	1.0	78	84	97	100	80-500
M 39	4.00	60.0	66.44	39.0	25.0	1.0	84	90	103	110	80-500
M 42	4.50	65.0	72.02	42.0	26.0	1.2	90	96	109	120	90-500

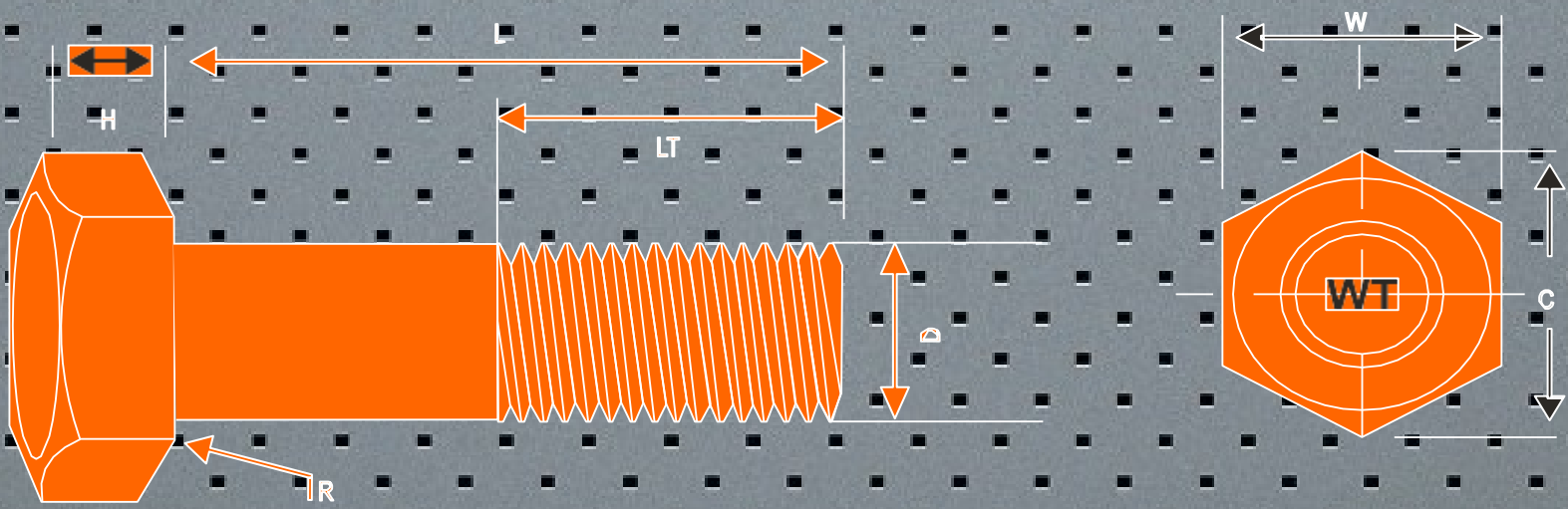
### Dimension

Note :

1. The Bolts and Screws will generally conform to BS 3692
2. Threads will conform to Class 6g of BS 3643 Coarse Series
3. Material : Carbon / Alloy Steel
4. Thread Length LT LT1 L < 125
5. LT2 for L < 125 to 200 LT3 for L > 200
6. In Bolts / Nut assembly , tightening should be done by rotation of nuts
7. All dimension are in millimeters .

Coating : Mill Finish, Electro Galv. & Hotdip Galv. Grade : BS 3692

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread				Length Range L
							LT-1	LT-2	LT-3	LFT	
M 06	1.00	10.0	11.05	6.0	4.0	0.25	18	-	-	25	10-150
M 08	1.25	13.0	14.98	8.0	5.3	0.4	22	28	-	30	12-150
M 10	1.50	17.0-16.0	18.90-17.80	10.0	6.4	0.4	26	32	45	35	16-250
M 12	1.75	19.0-18.0	21.10-20.03	12.0	7.5	0.6	30	36	49	40	20-250
M 14	2.00	22.0-21.0	24.49-23.25	14.0	8.8	0.6	34	40	53	45	25-200
M 16	2.00	24.0	26.75	16.0	10.0	0.6	38	44	57	50	25-400
M 18	2.50	27.0	30.14	18.0	11.5	0.6	42	48	61	60	35-200
M 20	2.50	30.0	33.53	20.0	12.5	0.8	46	52	65	60	30-400
M 22	2.50	32.0-34.0	35.72-35.72	22.0	14.0	0.8	50	56	69	65	40-200
M 24	3.00	36.0	39.98	24.0	15.0	0.8	54	60	73	75	50-450
M 27	3.00	41.0	45.20	27.0	17.0	1.0	60	66	79	85	60-300
M 30	3.50	46.0	50.85	30.0	18.7	1.0	66	72	85	85	60-400
M 33	3.50	50.0	55.37	33.0	21.0	1.0	72	78	91	95	75-500
M 36	4.00	55.0	60.79	36.0	22.5	1.0	78	84	97	100	80-500
M 39	4.00	60.0	66.44	39.0	25.0	1.0	84	90	103	110	80-500
M 42	4.50	65.0	72.02	42.0	26.0	1.2	90	96	109	120	90-500

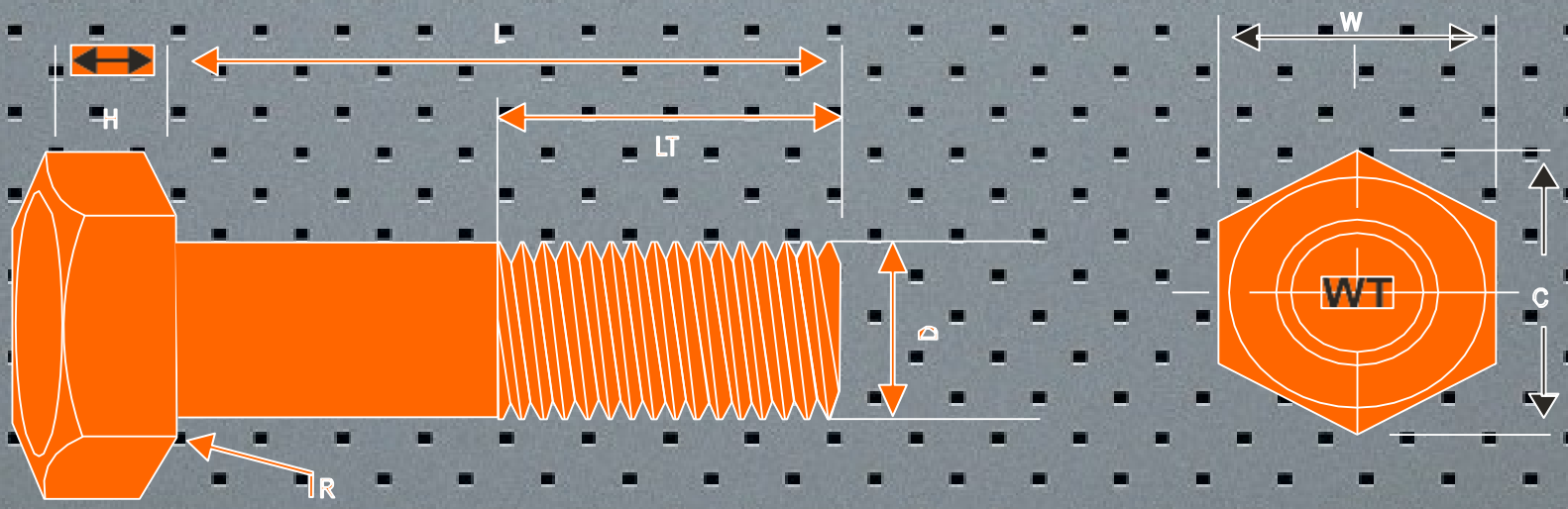
### Dimension

#### Note :

1. The Bolts & Screws will generally conform to DIN 7990
2. Threads will conform to Class 6g of DIN 13 Coarse Series
3. Material : Carbon / Alloy Steel
4. Heat Treatment : To achieve Mechanical properties of Class 4.6, 5.8, 6.8, 8.8, 10.9
5. All dimensions are in millimeters

Coating : Black, Hotdip Galv. & Electro Galv. Grade : 4.6, 5.8, 6.8, 8.8, 10.9

## HEXAGON HEAD BOLT / SCREW DIN 931 / 933 (MM THREAD)



Normal Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread	Length Range L
							L T-1	
M 12	1.75	19.0	21.10	12.70	8.00	0.60	17.75	25-120
M 16	2.00	24.0	26.16	16.70	10.0	0.60	21.00	30-150
M 20	2.50	30.0	32.95	20.84	12.5	0.80	23.50	35-200
M 22	2.50	32.0	35.03	22.84	14.0	0.80	25.50	45-200
M 24	3.00	36.0	39.55	24.84	15.0	0.80	26.00	50-200
M 27	3.00	41.0	45.20	27.84	17.0	1.00	29.00	70-200
M 30	3.50	46.0	50.85	30.84	19.0	1.00	30.50	80-300

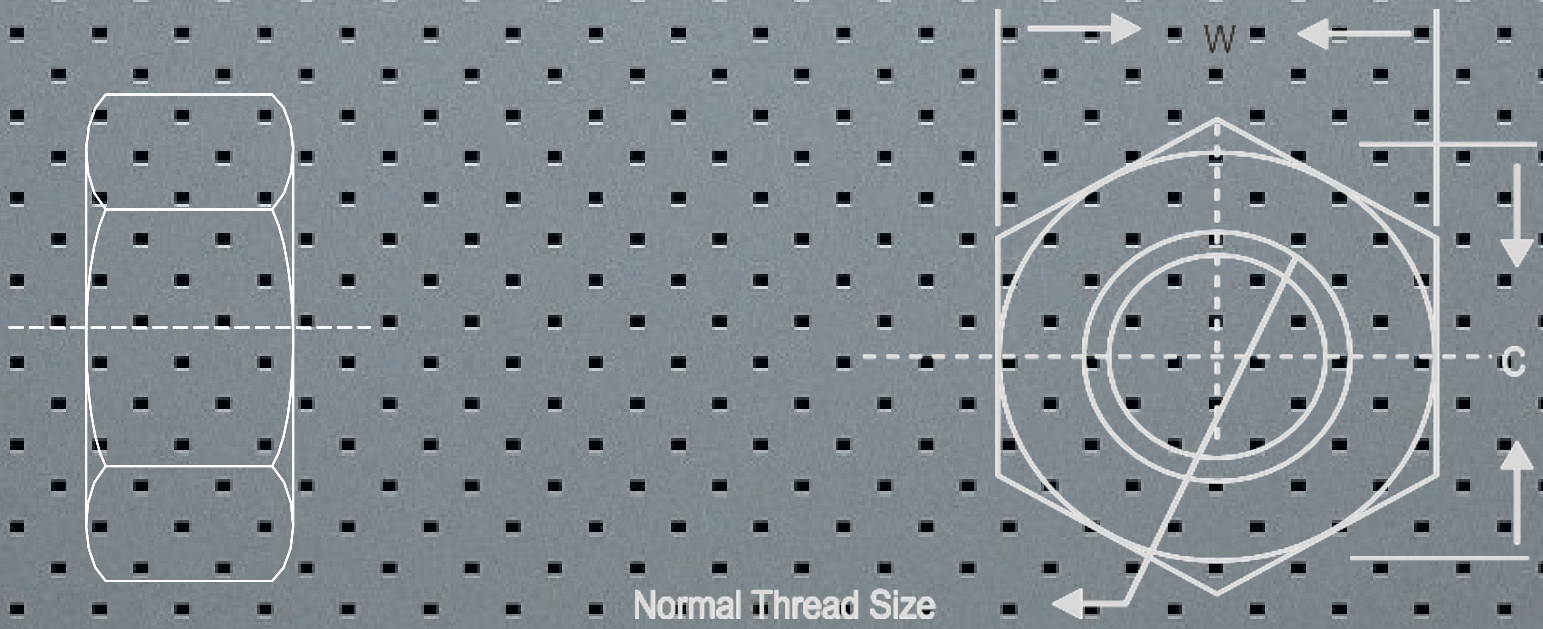
### Dimension

#### Note :

1. The Bolts & Screws will generally conform to DIN 7990
2. Threads will conform to Class 6g of DIN 13 Coarse Series
3. Material : Carbon / Alloy Steel
4. Heat Treatment : To achieve Mechanical properties of Class 4.6, 5.8, 6.8, 8.8, 10.9
5. All dimensions are in millimeters

Coating : Black, Hotdip Galv. & Electro Galv. Grade : 4.6, 5.8, 6.8, 8.8, 10.9

## HEXAGON NUTS ISO 934 / DIN 555



Thread Size	Pitch	W Max.	C Max.	H Norm.
M06	1.00	10.00	11.05	5.00
M08	1.25	13.00	14.38	6.50
M10	1.50	17.00	18.90	8.00
M12	1.75	19.00	21.00	10.00
M14	2.00	22.00	24.49	11.00
M16	2.00	24.00	26.75	13.00
M18	2.50	27.00	29.56	15.00
M20	2.50	30.00	32.95	16.00
M22	2.50	32.00	35.03	18.00
M24	3.00	36.00	39.55	19.00
M27	3.00	41.00	45.20	22.00
M30	3.50	46.00	50.85	24.00
M33	3.50	50.00	55.37	26.00
M36	4.00	55.00	60.79	29.00
M39	4.00	60.00	66.44	31.00
M42	4.50	65.00	71.30	34.00
M45	4.50	69.64	76.25	36.40
M48	5.00	74.28	81.40	38.75
M52	5.00	80.00	88.00	51.00
M56	5.50	86.50	96.00	54.75
M60	5.50	92.85	101.50	58.50
M64	6.00	99.00	108.00	62.25

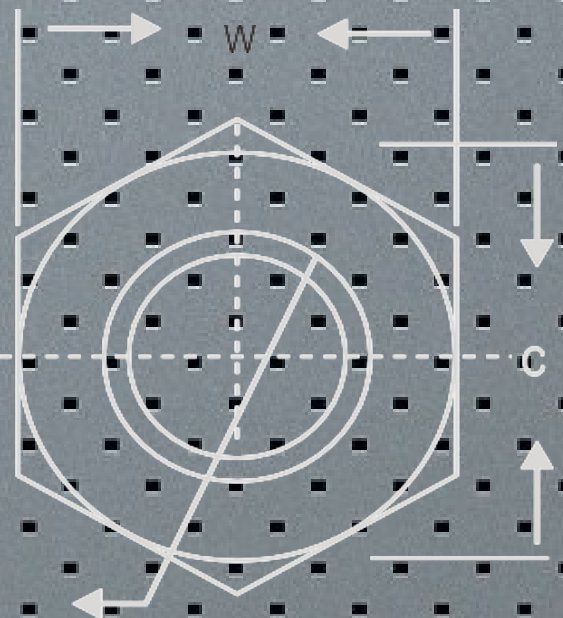
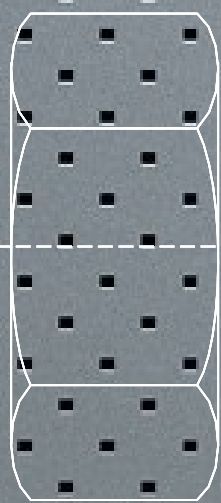
### Dimensions :

#### Note :

1. The nut will generally conform to DIN 934 , DIN 555 & BS3692.
2. Thread will conform to class 6H of DIN 13 Coarse Series
3. Heat Treatment : to achieve mechanical properties to property Class 8 or 10
4. Nuts of property Class 8 are used with bolts of property Class 8.8 Nuts of property Class 10 are used with bolts of property Class 10.9
5. (In general nuts of a higher property class can replace nut of lower property class in a joint)
6. In Bolts / Nut assembly tightening should be done by rotation of nuts
7. All dimension are in millimeters

Coating : Electro Galv., Black, Hotdip Galv., Cadmium Plated Grade : 4, 6, 8, 10, SS304, SS316

## HEXAGON NUTS ISO 934 / DIN 555



Normal Thread Size

Thread Size	PTI UNC/UN	W Max.	C Max.	H Norm.
1/2"	13	0.875"	1.010"	0.484"
9/16"	12	0.938"	1.083"	0.547"
5/8"	11	1.062"	1.227"	0.609"
3/4"	10	1.250"	1.443"	0.734"
7/8"	9	1.238"	1.660"	0.859"
1"	8	1.625"	1.876"	0.984"
1-1/8"	7	1.812"	2.093"	1.109"
1-1/4"	7	2.000"	2.309"	1.219"
1-3/8"	6	2.188"	2.526"	1.344"
1-1/2"	6	2.375"	2.742"	1.469"
1-5/8"	5	2.562"	2.959"	1.594"
1-3/4"	5	2.750"	3.175"	1.719"
1-7/8"	4.5	2.938"	3.392"	1.844"
2"	4.5	3.125"	3.608"	1.969"
2-1/4"	4	3.500"	4.041"	2.203"
2-1/2"	4	3.875"	4.474"	2.453"
2-3/4"	4	4.250"	4.907"	2.703"
3"	4	4.625"	5.340"	2.953"
3-1/4"	4	5.000"	5.774"	3.188"
3-1/2"	4	5.375"	6.207"	3.438"
3-3/4"	4	5.755"	6.650"	3.683"
4"	4	6.142"	7.093"	3.930"

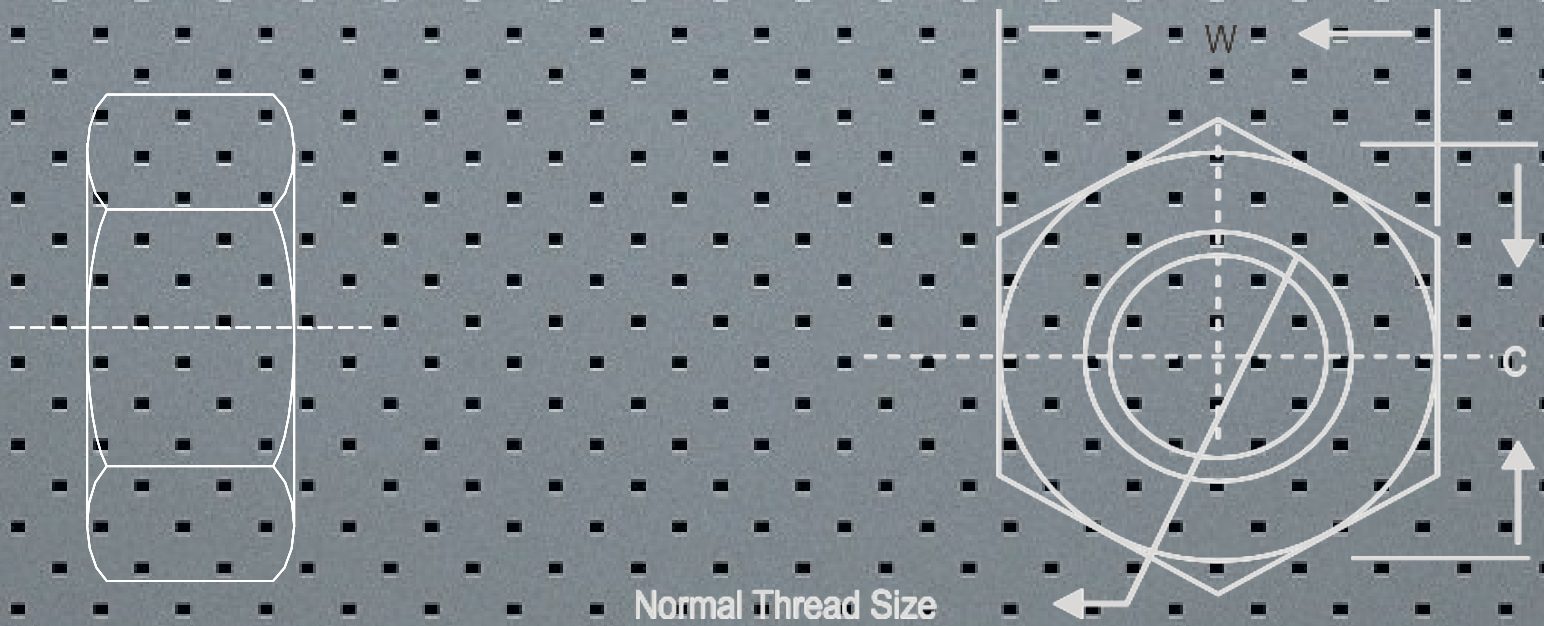
Dimension in inch series UNC/UNF.

Note :

1. The nut will generally conform ANSI / ASME 18.2.2 heavy hex nuts.
2. Threads will conform to class 2B of ANSI B1.1
3. In Bolts / Nut assembly tightening should be done by rotation of nuts. Torque values as recommended in tables for bolt
4. All dimension are in inches.

Coating : Electro Galv., Black, Hotdip Galv. Grade : ASTM, A563 , Gr. A&C

## HEXAGON NUTS ISO 934 / DIN 555



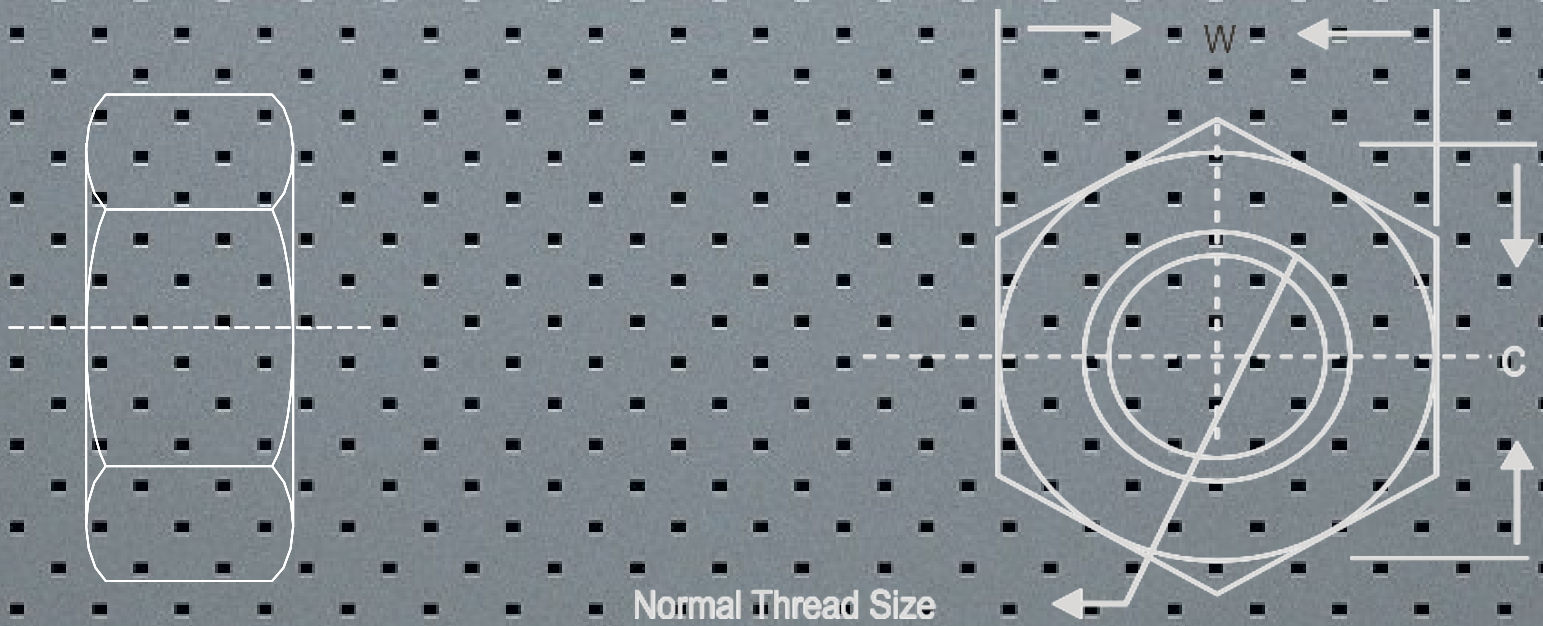
Thread Size	Pitch	W Max.	C Max.	H Norm.
M12	1.75	21.00	24.25	12.10
M14	2.00	24.00	27.71	13.95
M16	2.00	27.00	31.18	16.75
M20	2.50	34.00	39.26	20.05
M22	2.50	36.00	41.57	22.95
M24	3.00	41.00	47.34	23.55
M27	3.00	46.00	53.12	26.95
M30	3.50	50.00	57.74	29.90
M33	3.50	56.00	65.00	32.90
M36	4.00	61.00	71.00	35.90
M39	4.00	66.00	77.00	38.90
M42	4.50	71.00	83.00	41.90
M45	4.50	76.00	89.00	44.90
M48	5.00	82.00	95.00	42.90
M52	5.00	86.50	100.30	51.00
M56	5.50	93.00	107.00	54.75
M60	5.50	100.00	115.00	58.50
M64	6.00	106.00	123.00	62.25
M72	6.00	120.00	138.00	70.00
M76	6.00	126.50	146.00	74.00
M82	6.00	136.50	157.00	80.00
M90	6.00	136.50	173.00	87.50

### Dimensions:

#### Note :

- The nut will generally conform ANSI B18.2.4.6M metric Heavy Hex Nuts.
- Threads will conform to class 6H of ANSI B1.1.13M for coarse series.
- Heat Treatment : to achieve mechanical properties of Property Class 8S or 10S of ASTM A563M.
- Nuts of property Class 8S are used with bolts of ASTM A325M type 1 and 2 ( con coated).
- Nuts of property Class 10S are used with Bolts of ASTM A325M Type 1 & 2 (zinc - coated).
- In general Nuts of a higher properties Class can replace Nuts of Lower properties Class in a joint.
- In-Bolts / Nut assembly tightening should be done by rotation of nuts.
- Sizes in brackets are non preferred standards.
- All dimension are in millimeter.
- Coating : Electro Galv., Black, Hotdip Galv. Grade : ASTM A563-10S

## HEXAGON NUTS ISO 934 / DIN 555



Thread Size	PTI UNC/UN	W Max.	C Max.	H Norm.
1/2"	13	0.875"	1.010"	0.484
9/16"	12	0.938"	1.083"	0.547
5/8"	11	1.062"	1.227"	0.609
3/4"	10	1.150"	1.443"	0.734
7/8"	9	1.238"	1.660"	0.859
1"	8	1.625"	1.876"	0.984
1-1/8"	8	1.812"	2.093"	1.109
1-1/4"	8	2.000"	2.309"	1.219
1-3/8"	8	2.188"	2.526"	1.344
1-1/2"	8	2.375"	2.742"	1.469
1-5/8"	8	2.562"	2.959"	1.594
1-3/4"	8	2.750"	3.175"	1.719
1-7/8"	8	2.938"	3.392"	1.844
2"	8	3.125"	3.608"	1.969
2-1/4"	8	3.500"	4.041"	2.203
2-1/2"	8	3.875"	4.474"	2.453
2-3/4"	8	4.250"	4.907"	2.703
3"	8	4.625"	5.340"	2.953
3-1/4"	8	5.000"	5.774"	3.188
3-1/2"	8	5.375"	6.207"	3.438
3-3/4"	8	5.755"	6.650"	3.683
4"	8	6.142"	7.093"	3.930

### Dimension:

#### Note :

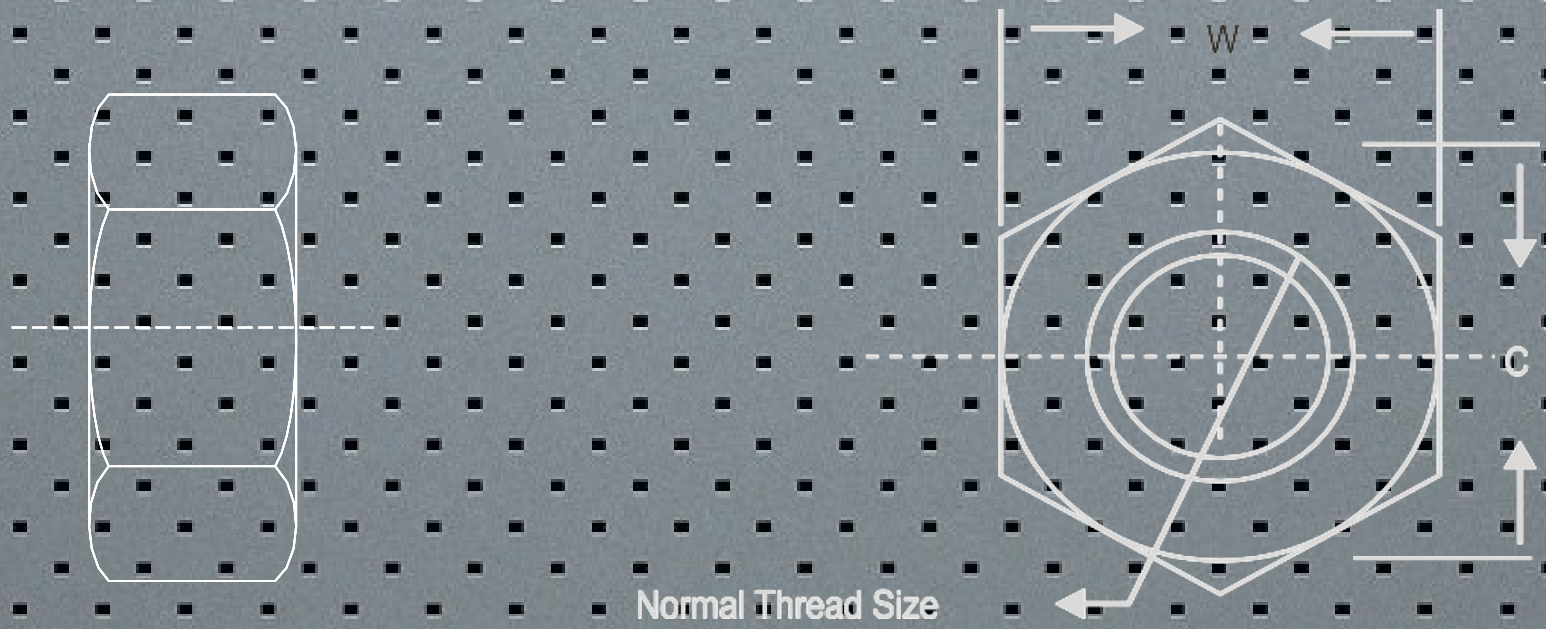
1. The nut will generally conform ANSI / ASME B 18 .2:2 Heavy Hex Nuts.
2. Threads will conform to class 2B of ANSI-B1.1.
3. Material and heat treatment : To achive mechanical properties of grade 2H, 4 and 7 which conform the requirements of ASTM A194.
4. In Bolts / Nut assembly , Tightening should be done by rotaion of nut Tarque values as recommended in tables for bolts.
5. All dimensions are in inches.

Inch series , UNC / UNF dimensions

Coating : Electro Galv., Black, Hotdip Galv. Grade : 2H, 2HM, GR4, GR7, B8, B8M



## HEXAGON NUTS ISO 934 / DIN 555



Thread Size	PTI UNC/UN	W Max.	C Max.	H Norm.
M16	2.00	24.00	26.75	13.00
M18	2.50	27.00	29.56	15.00
M20	2.50	30.00	32.95	16.00
M22	2.50	32.00	35.03	18.00
M24	3.00	36.00	39.55	19.00
M27	3.00	41.00	45.20	22.00
M30	3.50	46.00	50.85	24.00
M33	3.50	50.00	55.37	26.00
M36	4.00	55.00	60.79	29.00
M39	4.00	60.00	66.44	31.00
M42	4.50	65.00	71.30	34.00

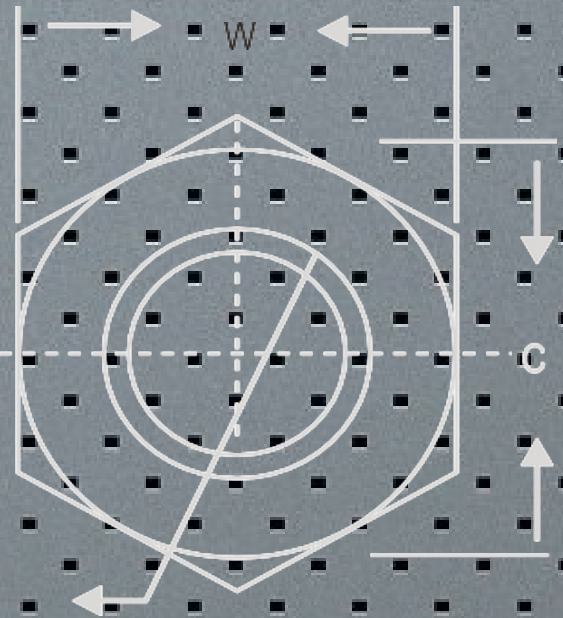
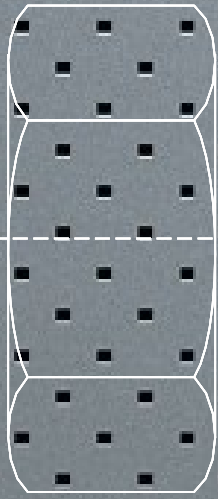
### Dimensions

#### Note :

- The nuts will generally conform DIN 6915.
  - Threads will conform to Class 6H of DIN-13 Coarse Series.
  - Heat treatment : To achieve mechanical properties of Class 10.9.
  - Nuts of Property Class 10 are used with bolts of Property Class 10.9  
 ( In general nuts of a higher property class can replace nuts of a lower property class in a joint.
- In Bolts/Nut assembly, tightening should be done by rotation of nuts.
  - All dimensions are in millimeters.

Coating : Mill Finish, Electro Galv. & Hotdip Galv. Grade : DIN 6915

## HEXAGON NUTS ISO 934 / DIN 555



Normal Thread Size

Thread Size	PTI UNC/UN	W Max.	C Max.	H Norm.
M06	1.00	10.00	10.89	5.375
M08	1.25	13.00	14.25	6.875
M10	1.50	17.00	18.72	8.450
M12	1.75	19.00	20.88	10.450
M16	2.00	24.30	26.17	13.550
M20	2.50	30.00	32.53	16.550
M22	2.50	32.00	35.03	18.550
M24	3.00	36.00	39.55	19.650
M27	3.00	41.00	45.20	22.650
M30	3.50	46.00	50.85	24.650
M33	3.50	50.00	55.37	26.650
M36	4.00	55.00	60.79	29.650
M39	4.00	60.00	66.44	31.800
M42	4.50	65.00	72.09	34.800

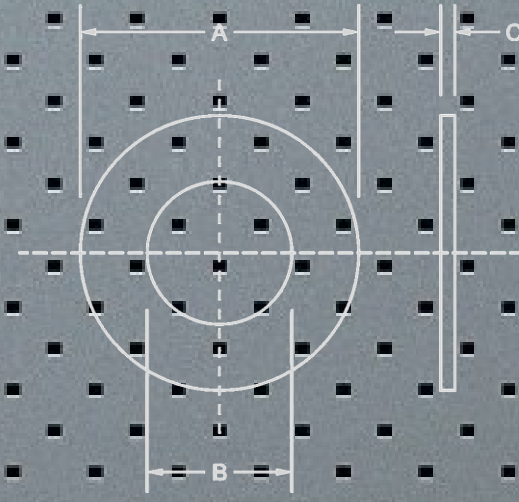
### Dimensions

Note :

1. The Hex nuts will generally conform to BS 4190.
2. Threads will conform to Class 6H of BS 3643 Coarse Series.
3. Heat treatment : To achieve mechanical properties of Class 8 or 10.
4. Nuts of Property class 8 are used with bolts of property Class 10.9 (In general nuts of a higher property class can replace nuts of a lower property class in a joint).
5. In bolts / Nut assembly , tightening should be done by rotation of nuts.
6. All dimensions are in millimeters

Coating : Mill finish, Electro Galv. & Hotdip Galv. Grade : BS 4190

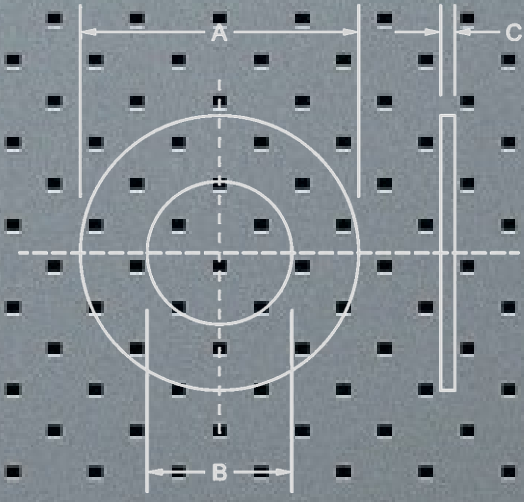
## FLAT WASHER DIN 125 A / DIN 126 A



MM	Internal Dia	External Dia	Thickness
M 06	6.6	12.5	1.60
M 08	8.6	16	1.60
M 10	11	21	2.00
M 12	14	24	2.50
M 14	16	28	2.50
M 16	18	30	3.15
M 18	20	34	3.15
M 20	22	37	3.15
M 22	24	39	3.15
M 24	26	44	4.00
M 27	30	50	4.00
M 30	33	56	4.00
M 33	36	60	5.00
M 36	39	66	5.00
M 39	42	72	6.00
M 42	45	78	6.00
M 45	48	85	8.00
M 48	52	92	8.00
M 52	56	100	8.00
M 56	60	108	8.00
M 60	64	116	8.00
M 64	68	124	8.00

1. Coating : Black, Electro Galv., Cadmium Plated & Hotdip Galv.
2. Grade : ASTM A36, C45, CRC, SS 304, SS316, Brass, Copper, Silicon Bronze

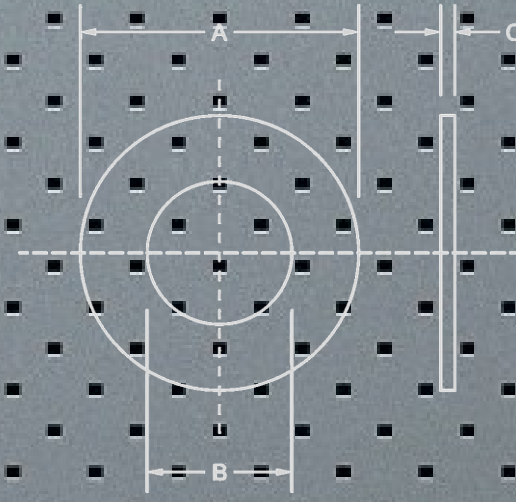
## FENDER WASHER



MM	Internal Dia	External Dia	Thickness
04	4.3	12	1.00
05	5.3	15	1.20
06	6.4	18	1.60
08	8.4	24	2.00
10	10.5	30	2.50
12	13	37	3.00
14	15	44	3.00
16	17	50	3.00
20	21	60	3.50
22	23.5	68	3.50
24	25.5	72	3.50

1. Coating : Self, Black, Electro Galv. Cadmium, Hotdip Galv.
2. Grade : ASTM A36, CRC, SS 304, SS 316, Brass, Copper, Silicon Bronze

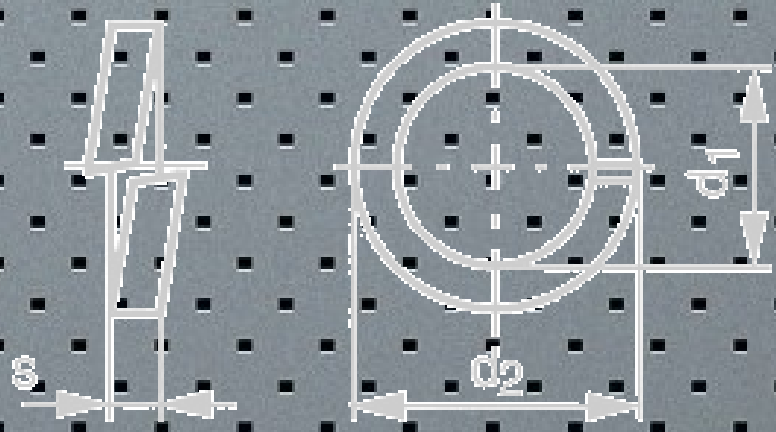
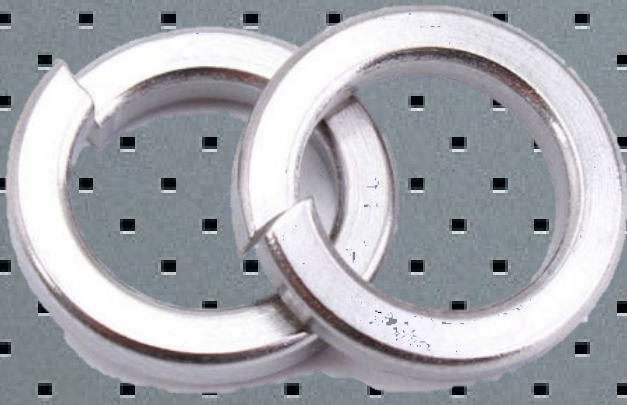
## FLAT WASHER ASTM F436 M



MM	Internal Dia	External Dia	Thickness
12	13.50	17.5	1.50
16	17.50	24.0	3.00
20	20.60	38.0	3.00
22	26.50	45.0	3.50
24	28.50	50.0	3.50
27	30.00	60.0	3.50
30	32.50	62.0	3.50
33	34.50	68.0	4.00
36	38.00	74.0	4.50
39	42.00	76.0	4.50
42	45.60	84.0	4.50
45	48.60	92.0	4.50
48	52.70	95.0	4.50
52	58.70	104.0	6.10
56	62.70	107.0	6.10
60	66.60	114.0	6.10
64	70.70	118.0	6.10
72	78.70	130.0	6.10
76	82.80	137.0	6.10
80	86.90	142.0	6.10
90	96.90	159.0	6.10
100	107.90	176.0	6.10

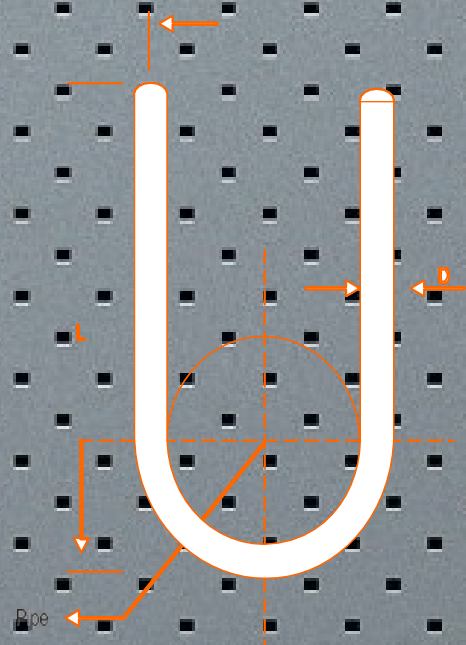
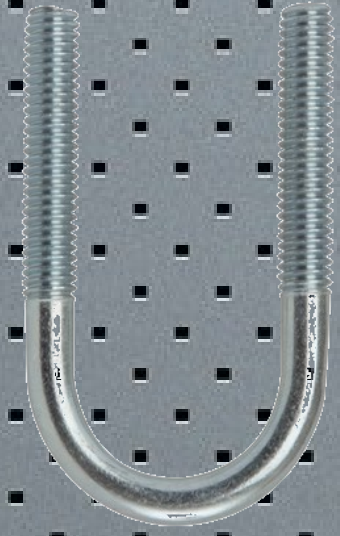
✓ Coating : Self, Black, Electro Galv., Hotdip Galv, Ceramic Fluoropolymer Coatings  
 Grade : SAE1045, Hardened

## HELICAL SPRING LOCK WAHERS DIN 127



MM	Internal Dia	External Dia	Thickness
06	6.5	9.00	1.20
08	8.5	12.00	1.25
10	10.5	15.00	1.50
12	13.50	17.50	1.50
16	17.50	24.00	3.00
20	20.60	38.00	3.00
22	23.50	45.00	3.50
24	28.50	50.00	3.50
27	30.00	60.00	3.50
30	32.50	62.00	3.50
33	34.50	68.00	4.00
36	38.00	74.00	4.50
39	42.00	76.00	4.50

- ✓ Coating : Black, Electro Galv. Hotdip Galv.
- ✓ Grade : SAE1045 , Hardened, A36, C4S, SS304, SS316, Brass-Copper

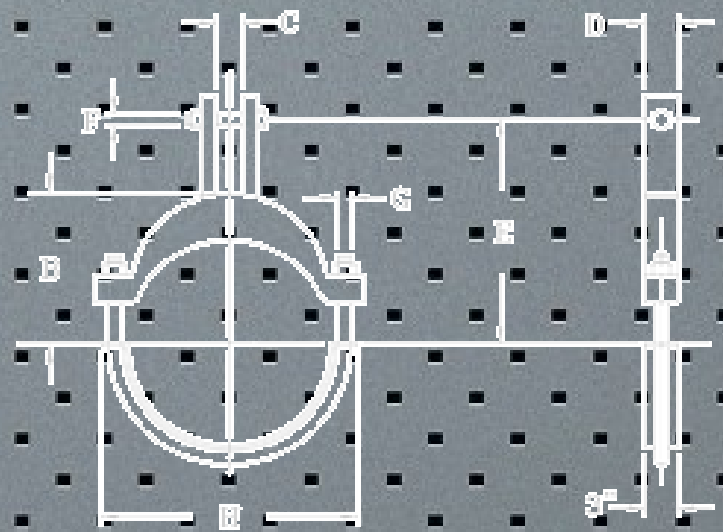


## U - BOLT

Pipe Size	D	V	L	S
1/2"	M08	32	55	30
3/4"	M08	38	60	32
1"	M08	44	75	40
1-1/4"	M10	55	85	45
1-1/2"	M10	61	95	45
2"	M13	78	105	50
2-1/2"	M13	92	118	50
3"	M13	104	130	50
4"	M13	130	160	50
6"	M16	187	215	60
8"	M16	236	265	60
10"	M16	292	315	60
12"	M18	345	370	60
14"	M18	377	410	70
16"	M22	430	465	80
18"	M22	484	515	90
20"	M25	535	570	90
22"	M25	595	635	90
24"	M25	637	670	90

- ✓ Coating : Electro Galv., Hotdip Galv., PVC Coating and Stainless Steel
- ✓ Grade : ASTM A36, A307, SS 304, SS 316, B7 and 8.8

## PIPE SUPPORT CLAMPS WITH AND WITHOUT RUBBER



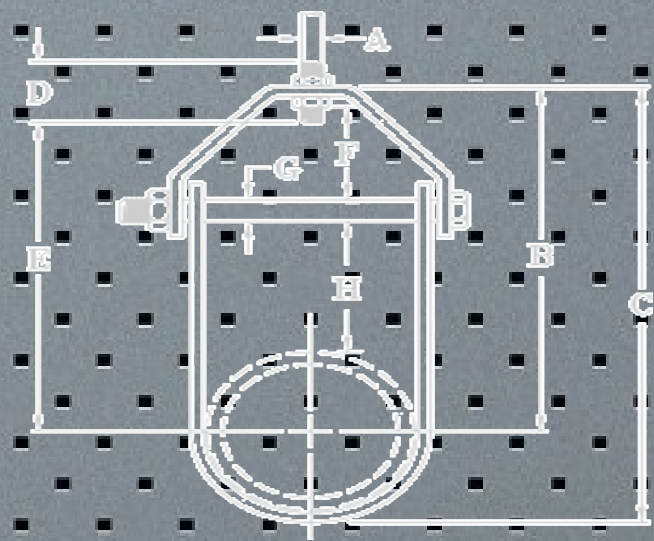
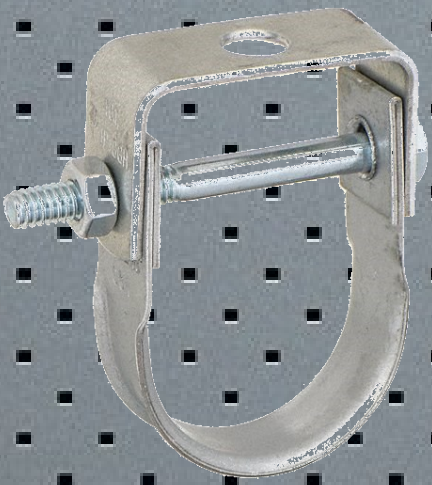
Size	Breaking Load	Maximum Load	Span Range
3/8"	600 KG	200KG	17-20
1/2"	600 KG	200KG	21-24
3/4"	600 KG	200KG	25-28
1"	600 KG	200KG	32-35
1-1/4"	600 KG	200KG	42-45
1-1/2"	600 KG	200KG	48-51
2"	600 KG	200KG	58-63
2-1/2"	600 KG	200KG	62-78
3"	600 KG	200KG	84-89
3-1/2"	600 KG	200KG	96-102
4"	600 KG	200KG	109-114
4-1/2"	600 KG	200KG	121-127
5"	600 KG	200KG	133-140
6"	600 KG	200KG	159-168
8"	600 KG	200KG	207-219
10"	600 KG	200KG	265-276
12"	600 KG	200KG	315-330
16"	600 KG	200KG	419-435

- ✓ COMBINATION NUT WELD M 8 & M10
- ✓ Thickness : Dia < 100 MM 2 mm,
- ✓ Dia > 100 MM 2.5 mm
- ✓ Width : 20 mm M6 Safety Screw

Coating : Hotdip Galv., PVC Coating and Electro Galv. Grade : ASTM A36, SS304, SS316



## ADJUSTABLE CLEVIS HANGER

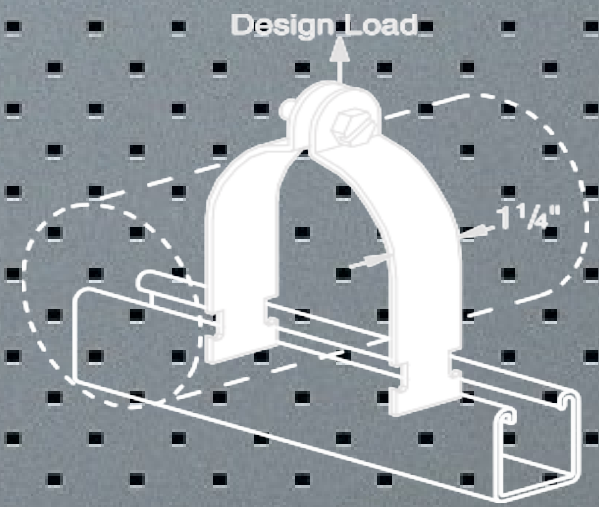


Pipe Size	Max. Recom. Load lbs.	Weight (Approx) lbs. per 100	Size of Steel		A	B	C	D	E	Adjustment	
			Upper	Lower						F	G
1/2"	610	34	1/8 x 1"	1/8" x 1"	3/8"	11-1/16"	2-1/8"	2-1/2"	7/8"	7/16"	1/4"
3/4"	610	39	1/8 x 1"	1/8" x 1"	3/8"	1-7/8"	2-7/16"	2-1/2"	1"	1/2"	1/4"
1"	730	44	1/8 x 1"	1/8" x 1"	3/8"	2-1/8"	2-13/16"	2-1/2"	1-1/4"	5/8"	1/4"
1.1/4"	730	45	1/8 x 1"	1/8" x 1"	3/8"	2-9/16"	3-7/16"	2-1/2"	1-3/4"	7/8"	1/4"
1.1/2"	730	55	1/8 x 1"	1/8" x 1"	3/8"	3"	4"	2-1/2"	2-1/8"	1-1/16"	1/4"
2"	730	61	1/8 x 1"	1/8" x 1"	3/8"	3-1/16"	4-7/8"	2-1/2"	2-15/16"	1-5/8"	1/4"
2.1/2"	1350	140	3/16" x 1-1/4"	3/16" x 1-1/4"	1/2"	4-1/16"	6-1/8"	3"	3-13/16"	2"	3/8"
3"	1350	152	3/16" x 1-1/4"	3/16" x 1-1/4"	1/2"	4-3/4"	6-9/16"	3"	3-7/8"	1-3/4"	3/8"
3.1/2"	1350	170	3/16" x 1-1/4"	3/16" x 1-1/4"	1/2"	4.15/16"	6-15/16"	3"	4-1/16"	1-3/4"	3/8"
4"	1430	213	1/4 " x 1-1/4"	3/16" x 1-1/4"	5/8"	5-9/16"	7-13/16"	3-1/2"	4-1/2"	1-15/16"	3/8"
5"	1430	244	1/4 x 1-1/4"	3/16" x 1-1/4"	5/8"	6-3/16"	9"	3-1/2"	5-1/8"	1-3/4"	1/2"
6"	1940	357	1/4 x 1-1/4"	3/16" x 1-1/2"	3/4"	6-15/16"	10-1/8"	4"	5-5/8"	1-7/8"	1/2"
8"	2000	497	1/4" x 1-1/2"	3/16" x 1-3/4"	7/8"	8-3/8"	12-5/8"	4-1/4"	7"	2-1/8"	5/8"
10"	3600	880	1/4" x 1-3/4"	1/4" x 1-3/4"	7/8"	9-7/8"	15-1/4"	4-1/2"	8-3/8"	2-1/4"	3/4"
12"	3800	1142	3/8" x 2"	1/4" x 2"	7/8"	11-1/2"	18"	4-1/2"	10-3/16"	3"	3/4"
14"	4200	1484	1/2" x 2"	1/4" x 2"	1"	12-7/16"	19-7/16"	5-1/4"	10-13/16"	2-15/16"	7/8"
16"	4600	2104	1/2" x 2-1/2 "	1/4" x 2 1/2 "	1"	14-1/16"	22-1/16"	6"	12-7/16"	2-5/8"	1"
18"	4800	2442	1/2" x 2-1/2 "	1/4" x 2 1/2 "	1"	15-1/2"	24-3/4"	6-1/2"	13-15/16"	3-7/8"	1-1/8"
20"	4800	4265	3/4" x 3"	3/8" x 3"	1-1/4"	17-1/4"	27-3/8"	7"	14-7/16"	4"	1-1/4"
24"	4800	4853	3/4" x 3"	3/8" x 3"	1-1/4"	19-5/8"	31-5/8"	7-1/2"	17-1/2"	4-1/4"	1-1/4"
30"	6000	6994	1 x 3"	3/8" x 3"	1-1/4"	24-1/8"	39-1/8"	8-1/4"	21-7/8"	5"	1-1/4"
36"	-	7716	1 x 3"	3/8" x 3"	1-1/4"	27-1/8"	46-3/16"	8-1/4"	25-1/2"	5-1/2"	1-1/4"

- ✓ Size Range : 1/2 inches thru 36 inches Max Temp : 650 " F.
- ✓ Features : Designed with the yoke outside of lower U- strap so the yoke cannot slide toward the center of the bolt , thus bending of the bolt is minimized . Spacer sleeves used for size 16" thru 36" . Components : Top yoke , bottom strap and bolt or stud with nut assembled.
- ✓ Installation : Hanger load nut ABOVE clevis must be tightened securely to assure proper hanger performance
- ✓ Note :
- ✓ Punched forming holes may be present on certain sizes of this clevis hanger. These holes are solely for the purpose of manufacturing and do not affect structural integrity or load carrying capacities of these Hangers.

Coating : Electro Galv., Hotdip Galv. Grade : ASTM A36, SS304, SS316

## CHANNEL CLAMPS



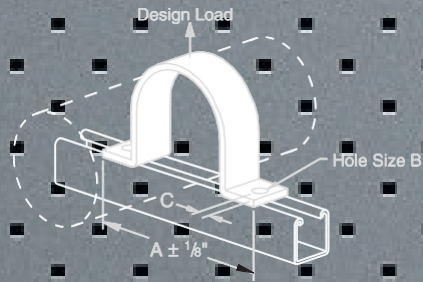
O.D. Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./ 100 pcs
4-5/8"	.125	1,000	70
4-3/4"	.125	1,000	72
4-7/8"	.125	1,000	73
5"	.125	1,000	74
5-1/8"	.125	1,000	76
5-1/4"	.125	1,000	77
5-3/8"	.125	1,000	78
5-1/2"	.125	1,000	79
5-5/8"	.135	1,000	88
5-3/4"	.135	1,000	90
5-7/8"	.135	1,000	92
6"	.135	1,000	94
6-1/8"	.135	1,000	96
6-1/4"	.135	1,000	98
6-3/8"	.135	1,000	99
6-1/2"	.135	1,000	100
6-5/8"	.135	1,000	102
6-3/4"	.135	1,000	104
6-7/8"	.135	1,000	106
7"	.135	1,000	108
7-1/8"	.135	1,000	110
7-1/4"	.135	1,000	112
7-1/2"	.135	1,000	114
7-1/2"	.135	1,000	116
7-5/8"	.135	1,000	117
7-3/4"	.135	1,000	119
7-7/8"	.135	1,000	121
8"	.135	1,000	123
8-1/8"	.135	1,000	125
8-1/4"	.135	1,000	126
8-3/8"	.135	1,000	128
8-1/2"	.135	1,000	129
8-5/8"	.135	1,000	130

O.D. Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./ 100 pcs		Other Finishes Available
1/4"	.060	400	8		
3/8"	.060	400	8	CPLT	
1/2"	.060	400	9	CPLT	
5/8"	.060	400	10	CPLT	
3/4"	.060	400	11		
7/8"	.060	400	12	CPLT	
1"	.075	600	14		
1-1/8"	.075	600	15	SS	CPLT
1-1/4"	.075	600	16	SS	
1-3/8"	.075	600	17	SS	CPLT
1-1/2"	.075	600	18	SS	
1-5/8"	.075	600	19	SS	CPLT
1-3/4"	.105	800	29	SS	
1-7/8"	.105	800	28	SS	
2"	.105	800	31	SS	
2-1/8"	.105	800	32	SS	CPLT
2-1/4"	.105	800	33	SS	
2-3/8"	.105	800	34	SS	
2-1/2"	.105	800	35	SS	
2-5/8"	.105	800	37	SS	CPLT
2-3/4"	.105	800	38	SS	
2-7/8"	.105	800	40	SS	
3"	.105	800	41	SS	
3-1/8"	.105	800	43	SS	CPLT
3-1/4"	.105	800	45	SS	
3-3/8"	.105	800	46	SS	
3-1/2"	.105	800	47	SS	
3-5/8"	.105	800	56	SS	CPLT
3-3/4"	.105	800	58	SS	
3-7/8"	.125	1,000	60	SS	
4"	.125	1,000	62	SS	
4-1/8"	.125	1,000	62	SS	CPLT
4-1/4"	.125	1,000	64	SS	
4-3/8"	.125	1,000	66	SS	
4-1/2"	.125	1,000	67	SS	

- ✓ Coating : Electro Galv., Hotdip Galv., PVC Coated
- ✓ Grade : ASTM A36, SS304, SS316

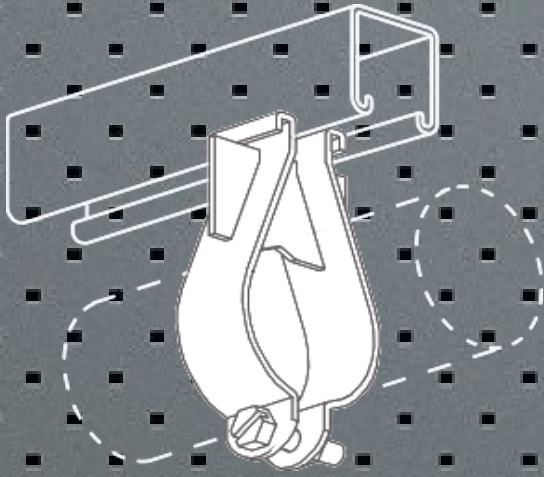
## SUPPORT ASSEMBLY COMPONENTS

### PS 3126 – One-Piece Pipe Strap



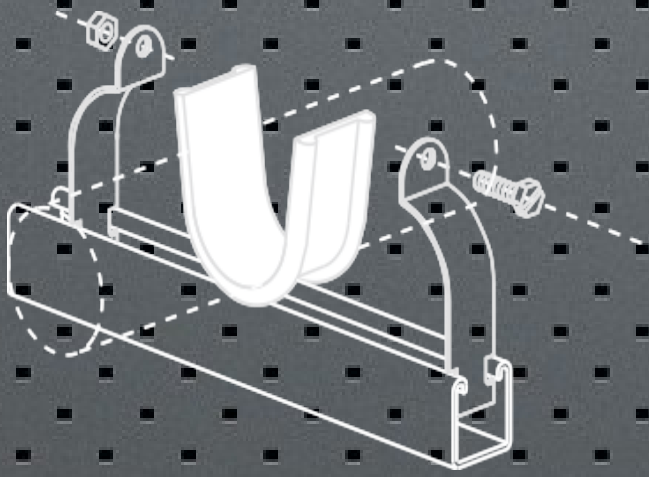
Pipe Size	A	B	C	Design Load	Wt./ 100 pcs
1/2"	2-7/8"	9/32"	7/16"	500	23
3/4"	3-1/8"	9/32"	7/16"	500	26
1"	3-3/8"	9/32"	7/16"	500	31
1-1/4"	3-3/4"	9/32"	7/16"	500	35
1-1/2"	3-7/8"	9/32"	7/16"	500	39
2"	5-3/4"	7/16"	11/16"	1,000	94
2-1/2"	6-1/4"	7/16"	11/16"	1,000	114
3"	6-7/8"	7/16"	11/16"	1,000	133
3-1/2"	7-3/8"	7/16"	11/16"	1,000	152
4"	7-7/8"	7/16"	11/16"	1,000	176
5"	9"	7/16"	11/16"	1,000	198
6"	10"	7/16"	11/16"	1,000	225

### PS 3138 – Parallel Run Pipe Clamp



Pipe Size	Load Rating	Wt./ 100 pcs
3/8"	300	27
1/2"	300	29
3/4"	300	30
1"	400	31
1-1/4"	400	38
1-1/2"	500	40
2"	500	47
2-1/2"	500	66
3"	500	78
3-1/2"	500	87
4"	500	90

### PS 3792 – Power-Wrap™



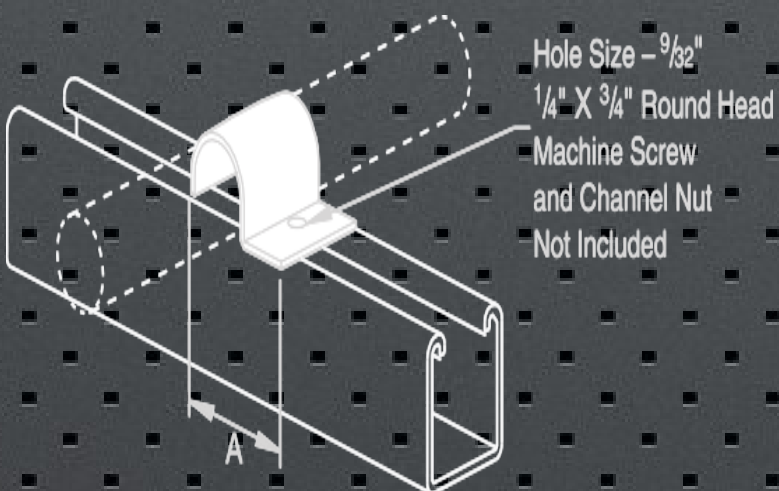
Material: EPDM

Stock Thickness 1/8"

Stock Length: 25 ft./box

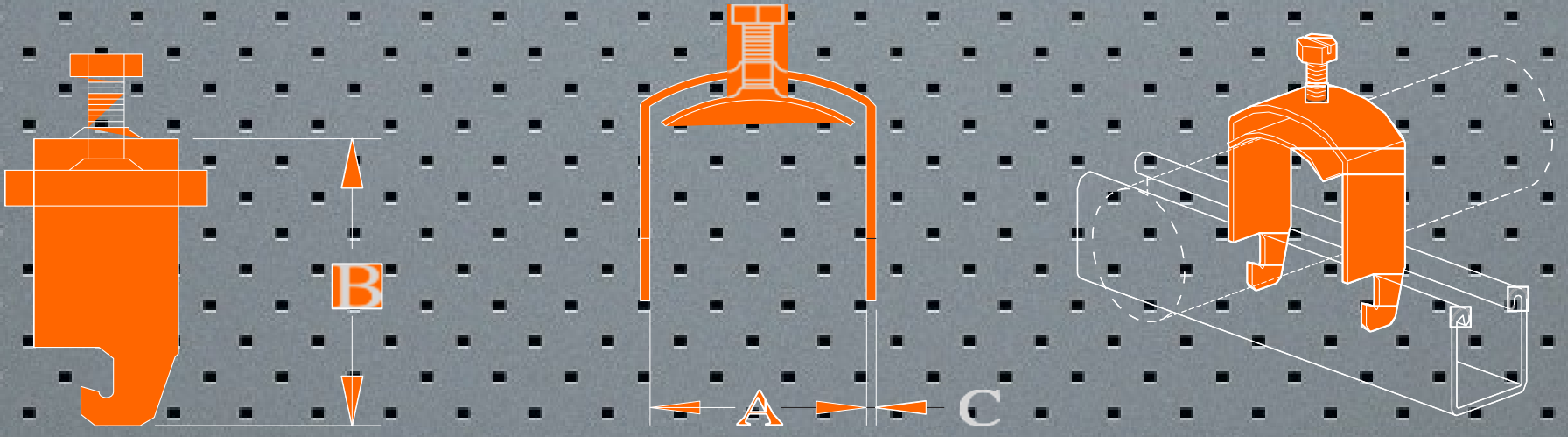
Service Temp: -70° to 350° F

### PS 1450 – One-Hole Clamp for O.D. Tubing



Size	A	Thickness Gages	Wt./ 100 pcs
1/4"	1-3/16"	16	4
3/8"	1-5/16"	16	5
1/2"	1-7/16"	16	6
5/8"	1-5/8"	14	8
3/4"	1-3/4"	14	9
7/8"	1-7/8"	14	10
1"	2"	14	11

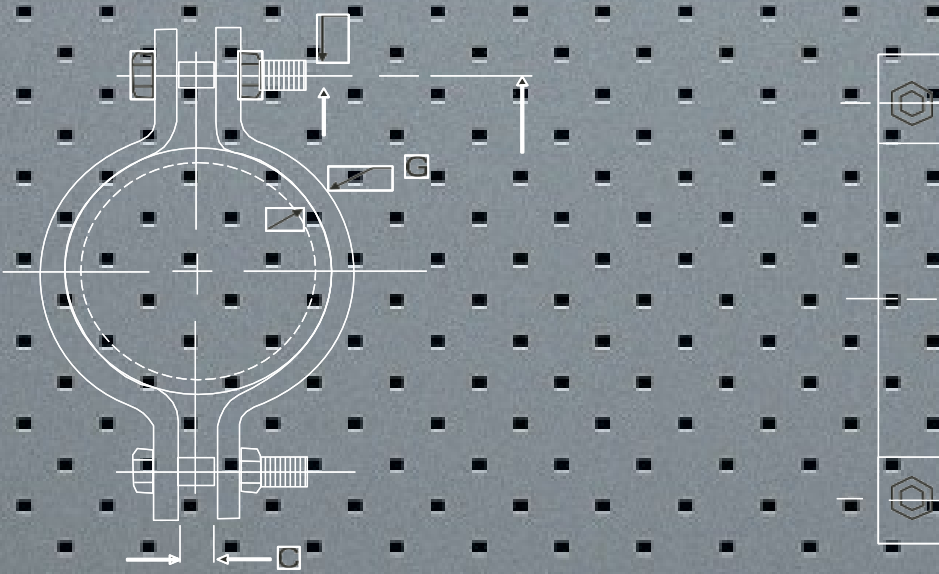
## SUPPORT ASSEMBLY COMPONENTS



Part No.	Max O.D. Size	A	B	C	Wt/ 100 pcs
PS 3101	3/8"	7/16"	1-5/8"	14	6
PS 3102	1/2"	9/16"	1-3/4"	14	7
PS 3103	3/4"	1-3/16"	2"	14	12
PS 3104	1"	1-1/16"	2-1/2"	14	15
PS 3105	1-1/4"	1-5/16"	2-1/2"	14	19
PS 3106	1-1/2"	1-9/16"	2-3/4"	14	20
PS 3107	1-3/4"	1-13/16"	3"	12	25
PS 3108	2"	2-1/16"	3-1/4"	12	35
PS 3109	2-3/8"	2-7/16"	3-5/8"	12	41
PS 3110	2-3/4"	2-13/16"	4"	12	60
PS 3111	3-1/4"	3-5/16"	4-1/2"	12	74
PS 3112	3-3/4"	3-13/16"	5"	12	91
PS 3113	4"	4-1/16"	5-1/4"	12	100
PS 3114	4-3/8"	4-7/16"	5-5/8"	12	115
PS 3115	4-3/4"	4-13/16"	6"	12	125

Note: Available in Electro-Galv. steel, Type 304 Stainless Steel or Aluminum

## PIPE CLAMP AND RISERS

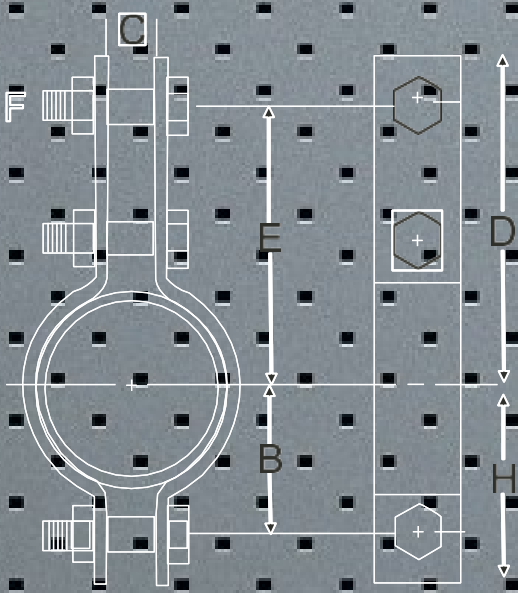


Pipe Size	Max. Recom. Load, lbs.		B	C	D	E	F	Stock Size G	H	Approx. Weight lbs. Per Each
	@ 6500 F	@ 7500 F								
1/2"	500	445	1"	1/2"	1-17/32"	1"	5/16"	1/8" x 1"	1-17/32"	0.29
3/4"	500	445	1-1/8"	1/2"	1-21/32"	1-1/8"	5/16"	1/8" x 1"	1-21/32"	0.33
1"	500	445	1-1/8"	1/2"	1-29/32"	1-3/8"	5/16"	1/8" x 1"	1-21/32"	0.35
1.1/4"	500	445	1-7/16"	1/2"	1-31/32"	1-7/16"	5/16"	1/8" x 1"	1-31/32"	0.37
1.1/2"	800	715	1-9/16"	1/2"	2-5/32"	1-5/8"	5/16"	1/8" x 1"	2-3/32"	0.43
2"	1040	930	2-1/8"	1/2"	2-3/4"	2-1/8"	1/2"	1/4" x 1"	2-3/4"	1.1
2.1/2"	1040	930	2-1/2"	5/8"	3-1/4"	2-5/8"	1/2"	1/4" x 1"	3-1/8"	1.2
3"	1040	930	2-13/16"	5/8"	3-9/16"	2-15/16"	1/2"	1/4" x 1"	3-7/16"	1.4
3.1/2"	1040	930	3-1/8"	5/8"	3-13/16"	33/16"	1/2"	1/4" x 1"	3-3/4"	1.5
4"	1040	930	3-4/16"	3/4"	4-3/8"	35/8"	5/8"	1/4" x 1-1/4"	4-3/16"	2.3
5"	1040	930	4"	3/4"	4-15/16"	43/16"	5/8"	1/4" x 1-1/4"	4-3/4"	2.3
6"	1615	1440	4-7/8"	7/8"	5-7/8"	5"	3/4"	3/8" x 1-1/4"	5-3/4"	5.4
8"	1615	1440	6"	1"	7"	61/8"	3/4"	3/8" x 1-1/4"	6-7/8"	6.5
10"	2490	2220	7-5/16"	1"	8-9/16"	77/16"	7/8"	1/2" x 2"	8-7/16"	13.6
12"	2490	2220	8-1/4"	1"	9-9/16"	87/16"	7/8"	1/2" x 2"	9-3/8"	15.2
14"	2490	2220	9"	1-1/8"	10-5/8"	91/4"	7/8"	1/2" x 2-1/2"	10-3/8"	20.5
16"	2490	2220	10"	1-1/8"	11-5/8"	101/4"	7/8"	1/2" x 2-1/2"	11-3/8"	22.3
18"	3060	2730	11-1/2"	1-1/4"	13"	115/8"	1"	5/8" x 2-1/2"	12-7/8"	31.6
20"	3060	2730	12-1/2"	1-3/8"	14-1/8"	123/4"	11/8"	5/8" x 2-1/2"	13-7/8"	35.8
24"	3060	2730	15"	1-5/8"	16-7/8"	151/4"	11/4"	5/8" x 3"	16-5/8"	53.1
30"	3500	3360	18-1/4"	2"	21-1/4"	19"	13/4"	3/4" x 4"	20-5/8"	113.9
36"	4000	3570	22-1/2"	2-1/2"	25-1/2"	23"	2"	1" x 5"	25"	219.0

- ✓ LIGHT DUTY PIPE CLAMP-2 BOLT
- ✓ Size Range : 1/2 inch thru 36 inches

- ✓ Coating : Electro Galv., Hotdip Galv., PVC Coating
- ✓ Grade : ASTM A36, SS304, SS316

## PIPE CLAMPS AND RISERS



Pipe Size	Max. Recom. Load, lbs.		B	C	D	E	F	Stock Size G	H	Approx. Weight lbs. Per Each
	@ 6500 F	@ 7500 F								
1/2"	950	850	15/16"	5/16"	2-7/8"	2-7/16"	3/8"	3/16" x 1"	1-3/8"	0.66
3/4"	950	850	15/16"	5/8"	2-7/8"	2-7/16"	3/8"	3/16" x 1"	1-3/8"	0.70
1"	950	850	1-1/16"	5/8"	3"	2-9/16"	3/8"	3/16" x 1"	1-1/2"	0.76
1-1/4"	950	850	1-1/4"	5/8"	3-1/8"	2-11/16"	3/8"	3/16" x 1"	1-11/16"	0.81
1-1/2"	1545	1380	1-13/16"	11/16"	4-7/8"	4-1/8"	5/8"	1/4" x 1.1/4"	2-3/8"	2.30
2"	1545	1380	2-1/8"	11/16"	5-7/8"	5-1/8"	5/8"	1/4" x 1.1/4"	2-11/16"	2.30
2-1/2"	1545	1380	2-5/16"	11/16"	6-1/8"	5-3/8"	5/8"	1/4" x 1.1/4"	2-15/16"	2.70
3"	1545	1380	2-3/4"	11/16"	6-11/16"	5-15/16"	5/8"	1/4" x 1.1/4"	3-1/2"	3.00
4"	2500	2230	3-3/8"	11/16"	7-5/8"	6-1/2"	3/4"	5/16" x 2"	4-1/2"	6.70
5"	2500	2230	3-15/16"	11/16"	8-1/8"	7"	3/4"	5/16" x 2"	5"	7.00
6"	2865	2555	4-3/4"	17/16"	9-11/16"	8-9/16"	7/8"	3/8" x 2.1/2"	6-1/8"	11.50
8"	2865	2555	5-3/4"	17/16"	10-11/16"	9-9/16"	7/8"	3/8" x 1/2"	7-1/8"	13.20
10"	3240	2890	6-7/8"	17/16"	12"	10-7/16"	1"	1/2" x 2.1/2"	8-1/4"	19.80
12"	3240	2890	7-7/8"	17/16"	13"	11-7/16"	1"	1/2" x 2.1/2"	9-1/4"	22.30
14"	4300	3835	9-1/16"	2"	14-5/16"	12-11/16"	1-1/4"	5/8" x 3"	10-11/16"	37.70
16"	4300	3835	10-1/16"	2"	15-5/16"	13-11/16"	1-1/4"	5/8" x 3"	11-11/16"	41.40
18"	4300	3835	11-1/16"	2"	16-5/16"	14-11/16"	1-1/4"	5/8" x 3"	12-11/16"	44.90
20"	5490	4900	12-3/8"	2"	17-5/8"	15-7/8"	1-1/2"	3/4" x 3"	14"	57.30
24"	4500	4015	14-3/8"	2"	19-5/8"	17-7/8"	1-1/2"	3/4" x 3"	16"	65.90
28"	6000	4015	17-1/2"	2.1/4"	24-1/4"	21-3/4"	1-1/2"	3/4" x 4"	20"	112.30
30"	7500	5340	18-1/2"	2.1/2"	26-1/8"	23-3/8"	1-1/2"	3/4" x 5"	21-1/4"	150.00
36"	10500	6675	22-1/2"	3"	32-1/4"	28-3/4"	1-3/4"	1 x 5"	26"	257.00

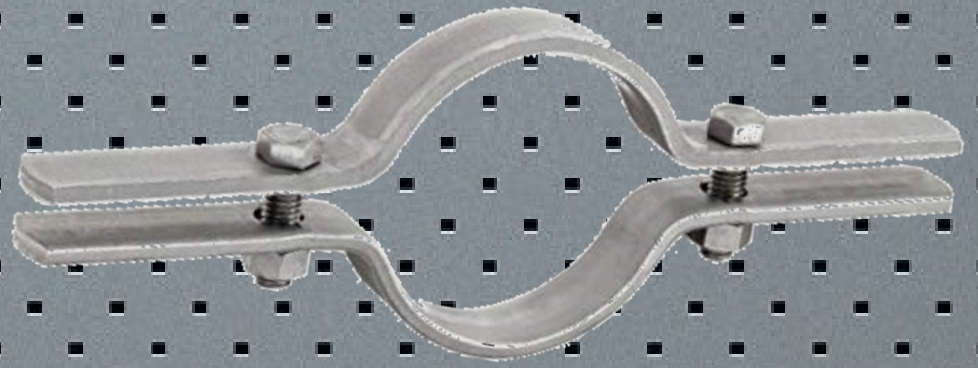
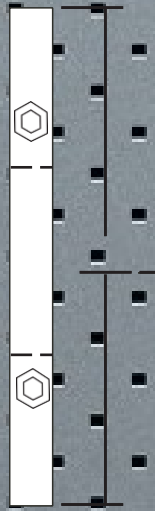
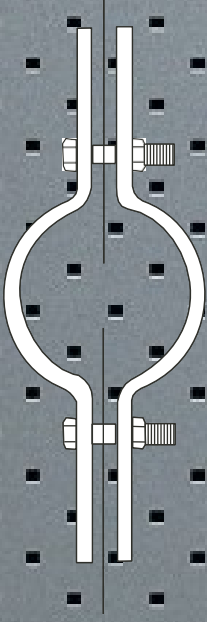
✓ LIGHT DUTY PIPE CLAMP - THREE BOLT

✓ Size Range : 1/2 inch thru 24 inches

✓ Coating : Electro Galv., Hotdip Galv., PVC Coating

✓ Grade : ASTM A36, SS 304, SS316

## PIPE CLAMPS AND RISERS



Pipe Size	Max. Reco. Load lbs.	Approx. Weight lbs. Per 100	Length A	Stock Size	Bolt Size
1/2"	255	123	9-3/8"	3/16" x 1-1/4"	3/8" x 1-1/2"
3/4"	255	136	9-3/8"	3/16" x 1-1/4"	3/8" x 1-1/2"
1"	255	138	9-5/8"	3/16" x 1-1/4"	3/8" x 1-1/2"
1-1/4"	255	195	10"	1/4" x 1-1/4"	3/8" x 1-1/2"
1-1/2"	255	201	10-3/8"	1/4" x 1-1/4"	3/8" x 1-1/2"
2"	255	217	10-3/4"	1/4" x 1-1/4"	7/16" x 2"
2-1/2"	390	229	11-1/4"	1/4" x 1-1/4"	7/16" x 2"
3"	530	250	12"	1/4" x 1-1/4"	7/16" x 2"
3-1/2"	670	330	13"	1/4" x 1-1/2"	1/2" x 2"
4"	810	242	13-1/2"	1/4" x 1-1/2"	1/2" x 2"
5"	1160	493	14-1/2"	1/4" x 2"	1/2" x 2"
6"	1570	526	15-1/2"	1/4" x 2"	1/2" x 2"
8"	2500	986	18-1/2"	3/8" x 2"	5/8 x 2-1/2"
10"	2500	1112	20-1/4"	3/8" x 2"	5/8 x 2-1/2"
12"	2700	1662	22-3/4"	1/2" x 2"	5/8 x 3"
14"	2700	1925	24"	1/2" x 2"	5/8 x 3"
16"	2900	3250	26"	5/8" x 2-1/2"	3/4" x 3-1/2"
18"	2900	3375	28"	3/8" x 2-1/2"	3/4" x 3-1/2"
20"	2900	3500	30"	5/8" x 2-1/2"	3/4" x 3-1/2"
24"	2900	5070	36"	5/8" x 3"	7/8" x 3-1/2"

✓ HEAVY DUTY PIPE CLAMP - DOUBLE BOLT

✓ Dimension:- Size 1/2 " to 24"

Coating : Electro Galv., Hotdip Galv., PVC Coating Grade : ASTM A36, SS304, SS316

## CLIENTS





FOR ENQUIRY PLEASE CONTACT

JISS

- MOB : 0542653810  
[JISS@ANSEGLOBAL.COM](mailto:JISS@ANSEGLOBAL.COM)
- EXT 105

LABEEB

- MOB : 0564756410  
[LABEEB@ANSEGLOBAL.COM](mailto:LABEEB@ANSEGLOBAL.COM)
- EXT 107 , 111

SUNIL

- MOB : 0506991726  
[SUNIL@ANSEGLOBAL.COM](mailto:SUNIL@ANSEGLOBAL.COM)
- EXT 116



شركة عبدالله ناصر القحطاني التجارية ذ.م.م  
ABDULLAH NASSER AL-QAHTANI TRADING CO.LTD

• WEB: [WWW.ANSEGLOBAL.COM](http://WWW.ANSEGLOBAL.COM)

• EMAIL: [MAIL@ANSEGLOBAL.COM](mailto:MAIL@ANSEGLOBAL.COM)

• P.O BOX 2018, AL-JUBAIL - 31951



**OFFICE**



**WAHRHOUSE**

