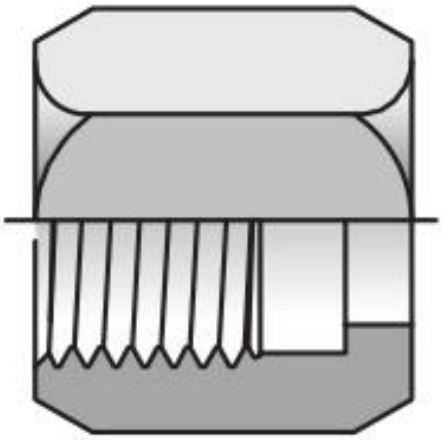
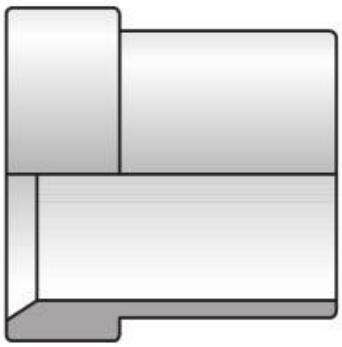
JIC Tube Nut and Sleeve





Industry Standard:

SAE J514 / ISO 8434-2

Design Type:

Nuts SAE 070110

Inch Sleeve SAE 070115

Metric Sleeve SAE 0701M15

Material:

Carbon Steel/Stainless Steel

Finish:

Zinc Plated/Zn-Ni Alloy Plated

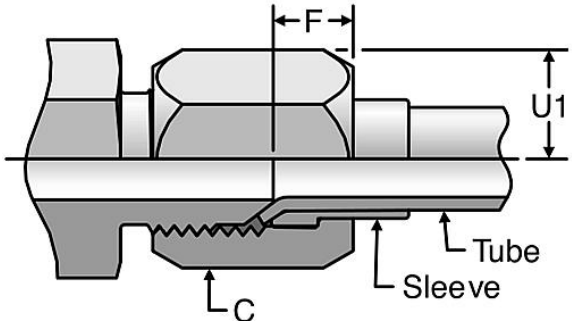
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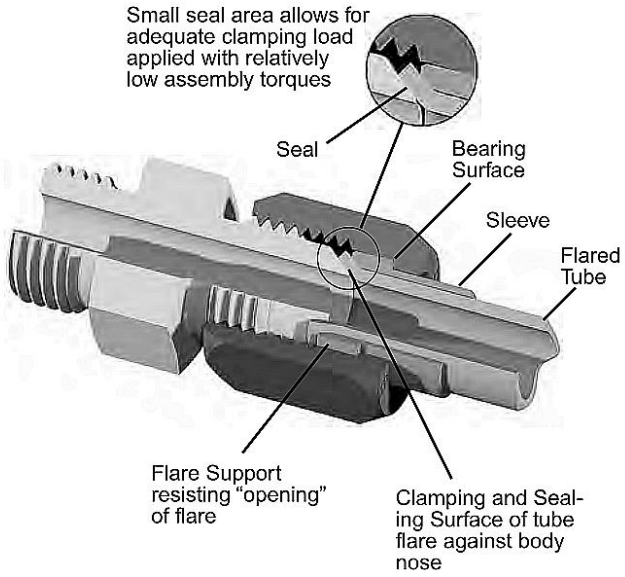
Introduction Of JIC Tube Nut and Sleeves

JIC Tube nuts is used for sleeve clamping the flare tube between the body nose(seat) producing a free-leak tight metal to metal face seal connection, connecting the 37 degree flare fittings. It has different symbols of nuts ISO “N”, Parker “BTX/BMTX”, Winner“NB200” , sleeve symbol is ISO “SL”, Parker“TX”, Winner“NB500/NB300” etc. JIC nut and sleeves meet the strict requirement of SAE J514 and ISO 8434-2 Industry standards.

Assembly Of JIC Tube Nut and Sleeves

The fitting consists of three pieces: the body, sleeve and nut. The tube is flared at a 37° angle (74° included angle) and held between the fitting nose (seat) and the sleeve (support) with the nut as shown in Figure, providing a very effective seal between the fitting nose and the tube flare.





Standards Of JIC Tube Nuts and Sleeves

JIC Tube Nuts meet standard of SAE J514 070110 MS51531and ISO 8434-2 N.

JIC Tube Sleeves meet standard of SAE J514 070115 MS51533 070M15 and ISO 8434-2 SL.

Finish is 72 hours without surface coating corrosion acc.to ISO 9227 Fe/Zn8/Cn/T0(T2).

Raw Material types of JIC Tube Nuts and Sleeves

They are made of carbon steel SAE 1010 to 1215, stainless steel AISI 304 or 316L and cooper C36000(CA360) bar stock or C37700(CA377) forging, types of material is cold formed, hot formed or machined from cold drawn bar, it is based on different size for right material shapes.

Dimensions of JIC tube nuts from ISO 8434-2/SAE J514 070110 MS51531

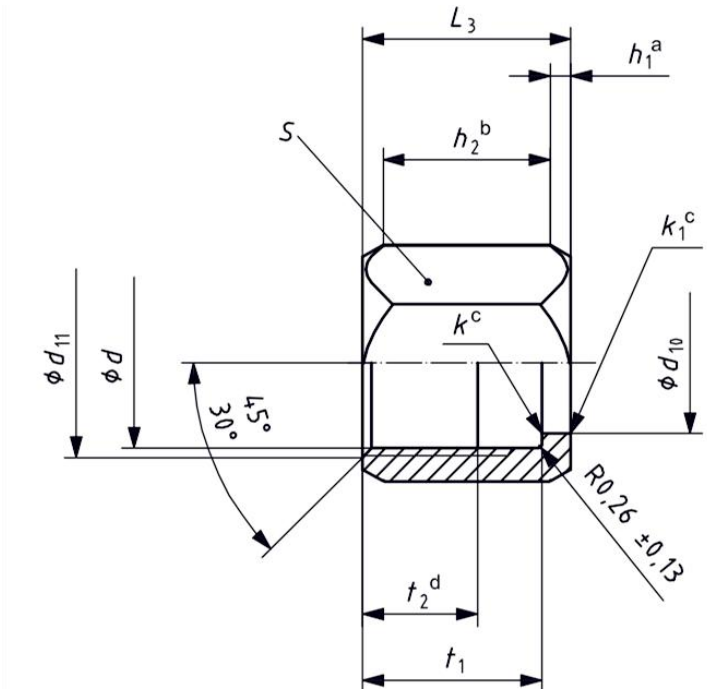


Figure 8 — Tube nut (N)

Table 11 — Dimensions of tube nuts

Dimensions in millimetres

Tube OD	Thread [a] d	Thread minor diameter [a]		d_{10}		d_{11}	L_3	h_1	h_2	k	k_1	S	t_1	t_2
		min.	max.	nom.	tol.	± 0,2	± 0,5	min.	min.	± 0,15	max.		± 0,4	min.
6	7/16-20 UNF	9,86	9,99	7,7	+0,10 0	11,5	15,8	0,4	8,5	0,15	0,5	14	12,9	7,5
8	1/2-20 UNF	11,46	11,59	9,45		13	17,3	0,4	9,5	0,15	0,5	17	14,7	8,3
10	9/16-18 UNF	12,90	13,03	11,15		14,6	18,5	0,4	10,5	0,25	0,5	19	15,3	8,3
12	3/4-16 UNF	17,48	17,61	14,45	+0,13 0	19,4	21,6	0,4	12,5	0,25	0,5	22	18,4	9,4
16	7/8-14 UNF	20,42	20,55	17,7		22,6	24,9	0,5	14,5	0,25	1	27	20,8	11,6
3/4 in.	1 1/16-12 UN	24,87	25,00	21,15		27,3	26,2	0,5	14,5	0,25	1	32	22	11,8
20	1 1/16-12 UN	24,87	25,00	21,85		30,5	26,2	0,5	14,5	0,25	1	32	22	11,8
25	1 5/16-12 UN	31,22	31,35	27,6		33,7	28,7	0,7	14,5	0,25	1	41	24,4	14,2
30	1 5/8-12 UN	39,14	39,27	32,5	+0,15 0	41,6	31,2	0,9	14	0,25	1	50	25,8	14,2
32	1 5/8-12 UN	39,14	39,27	34,15		41,6	31,2	0,9	14	0,25	1	50	25,8	14,2
38	1 7/8-12 UN	45,49	45,62	41		48	36,1	0,9	17	0,25	1	60	29,7	16,7
50	2 1/2-12 UN	61,37	61,50	54,95		63,8	44,5	1,2	20,5	0,4	1	75	37,1	21,3

[a] For the general plan of threads, see ISO 263; except that the minimum thread minor diameter is increased by 0,15 for all sizes, refer to the thread minor diameter column in this table, and also see provisions for screw threads in ISO 68-2 and ISO 5864:1993, class 2B.

Dimensions of JIC tube sleeves from ISO 8434-2/SAE J514 Inch Sleeve SAE 070115 and Metric Sleeve SAE 0701M15

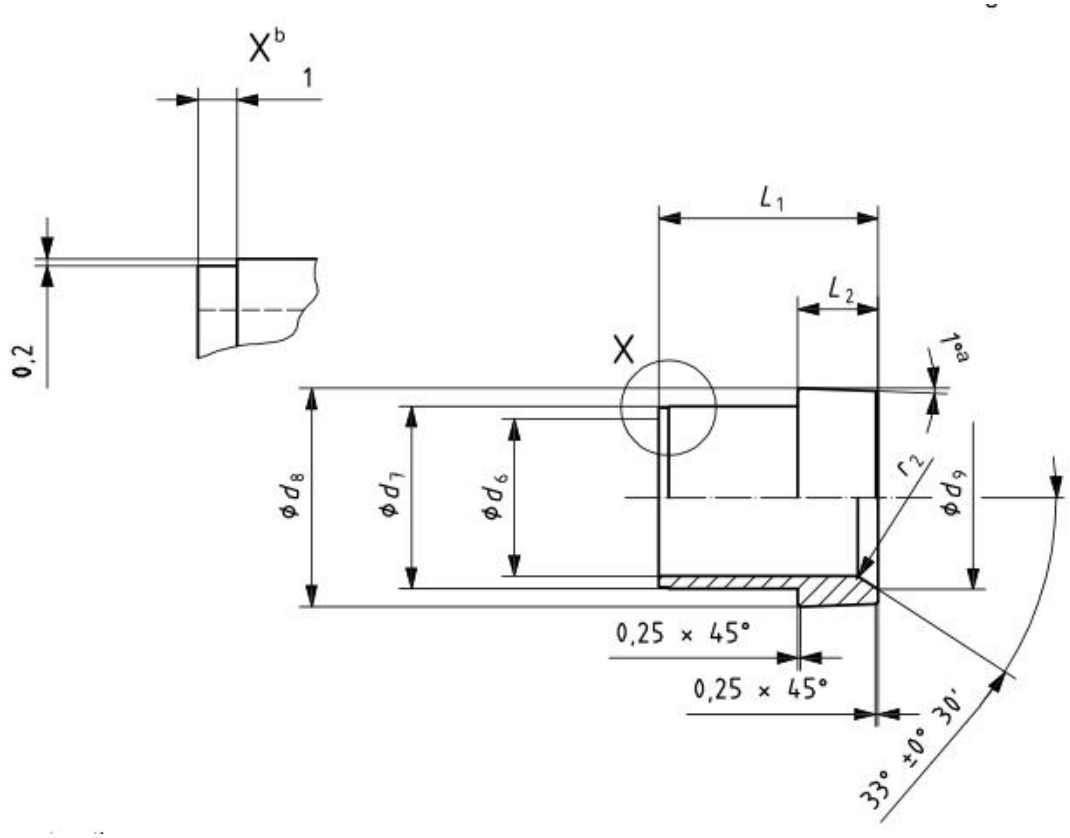


Table 10 — Dimensions of sleeves for metric and inch tubing

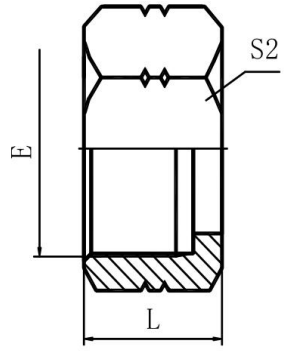
Dimensions in millimetres

Metric tubing [a]		Inch tubing								
Tube OD	d_6	Tube OD		d_6	d_7	d_8	d_9	L_1	L_2	r_2
mm	± 0,05	in	mm [b]	± 0,05	± 0,05	± 0,05	± 0,15	± 1	± 0,5	± 0,3
6	6,18	1/4	6,35	6,55	7,5	9,7	8	10,4	3,6	0,8
8	8,18	5/16	7,94	8,15	9,25	11,25	9,5	11,2	4,1	0,8
10	10,18	3/8	9,52	9,7	10,95	12,7	11,2	12,7	4,3	1,2
12	12,18	1/2	12,7	12,9	14,25	17,3	15	14,2	5,6	1,6
16	16,2	5/8	15,88	16,1	17,45	20,2	17,9	16,8	6,1	1,6
—	—	3/4	19,05	19,25	20,95	24,65	22,4	17,3	6,6	2
20	20,2	—	—	—	21,6	24,65	22,4	17,3	6,6	2
25	25,2	1	25,4	25,6	27,45	31	28,7	19,8	7,1	2,4
30	30,3	—	—	—	32,3	38,9	35,9	23,1	7,9	2,4
32	32,3	1 1/4	31,75	32,05	33,95	38,9	35,9	23,1	7,9	2,4
38	38,4	1 1/2	38,1	38,4	40,85	45,25	41,4	28,4	8,6	2,8
50	50,4	2	50,8	51,2	54,75	61,15	55,8	30,2	10,4	2,8

[a] Metric tubing shall be preferred for new and future designs.

[b] Equivalent dimensions in millimetres.

Part No. Of JIC Tube Nut

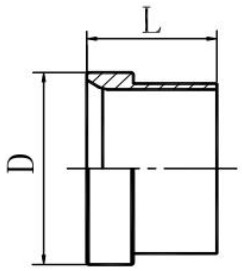


NB200/BTX

Tube Nut/Union Nut REF: ISO 8434-2 N/ SAE J514 070110 MS51531

PART NO.	THREAD	TUBE O.D.	INCH SLEEVE NO.	TUBE O.D.	METRIC SLEEVE NO.	L	S2
NB200-04	7/16"X20	1/4"	NB300-04	6	NB500-06	15.8	14
NB200-05	1/2"X20	5/16"	NB300-05	8	NB500-08	17.3	17
NB200-06	9/16"X18	3/8"	NB300-06	10	NB500-10	18.5	19
NB200-08	3/4"X16	1/2"	NB300-08	12	NB500-12	21.6	24
NB200-10	7/8"X14	-	-	14	NB500-14	24.9	27
NB200-10	7/8"X14	-	-	15	NB500-15	24.9	27
NB200-10	7/8"X14	5/8"	NB300-10	16	NB500-16	24.9	27
NB200-12	1.1/16"X12	3/4"	NB300-12	18	NB500-18	26.2	32
NB200-14	1.3/16"X12	-	-	20	NB500-20	27.7	36
NB200-14	1.3/16"X12	7/8"	NB300-14	22	NB500-22	27.7	36
NB200-16	1.5/16"X12	1"	NB300-16	25	NB500-25	28.7	38
NB200-20	1.5/8"X12	-	-	28	NB500-28	31.2	50
NB200-20	1.5/8"X12	-	-	30	NB500-30	31.2	50
NB200-20	1.5/8"X12	1.1/4"	NB300-20	32	NB500-32	31.2	50
NB200-24	1.7/8"X12	-	-	35	NB500-35	36.1	60
NB200-24	1.7/8"X12	1.1/2"	NB300-24	38	NB500-38	36.1	60
NB200-32	2.1/2"X12	2"	NB300-32	50	NB500-50	44.5	75

Part No. Of JIC Tube Inch Sleeve

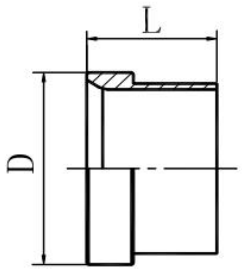


NB300/TX

JIC Inch Sleeve REF: ISO 8434-2 SL/ SAE J514 070115

PART NO.	THREAD	TUBE O.D.	D	L
NB300-04	7/16"X20	1/4"	9.73	10.4
NB300-05	1/2"X20	5/16"	11.3	11.2
NB300-06	9/16"X18	3/8"	12.75	12.7
NB300-08	3/4"X16	1/2"	17.32	14.2
NB300-10	7/8"X14	5/8"	20.24	16.8
NB300-12	1.1/16"X12	3/4"	24.69	17.3
NB300-14	1.3/16"X12	7/8"	27.86	19.3
NB300-16	1.5/16"X12	1"	31.04	19.8
NB300-20	1.5/8"X12	1.1/4"	38.96	23.1
NB300-24	1.7/8"X12	1.1/2"	45.31	28.4
NB300-32	2.1/2"X12	2"	61.19	30.2

Part No. Of JIC Tube Metric Sleeve



NB500/TX

JIC Metric Sleeves REF: ISO 8434-2 SL/ SAE J514 0701M15

PART NO.	THREAD	TUBE O.D.	D	L
NB500-06	7/16"X20	6	9.7	10.4
NB500-08	1/2"X20	8	11.3	11.2
NB500-10	9/16"X18	10	12.7	12.7
NB500-12	3/4"X16	12	17.3	14.2
NB500-14	7/8"X14	14	20.2	16.8
NB500-15	7/8"X14	15	20.2	16.8
NB500-16	7/8"X14	16	20.2	16.8
NB500-18	1.1/16"X12	18	24.7	17.3
NB500-20	1.3/16"X12	20	27.8	19.3
NB500-22	1.3/16"X12	22	27.8	19.3
NB500-25	1.5/16"X12	25	31	19.8
NB500-28	1.5/8"X12	28	38.9	23.1
NB500-30	1.5/8"X12	30	38.9	23.1
NB500-32	1.5/8"X12	32	38.9	23.1
NB500-35	1.7/8"X12	35	45.3	28.4
NB500-38	1.7/8"X12	38	45.3	28.4
NB500-50	2.1/2"X12	50	61.2	30.2