

# Industrial self-locking nuts

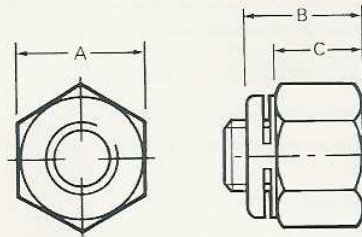
The most versatile self-locking nut in the Philidas range is the Philidas Industrial which can be confidently recommended as the first choice for most industrial applications. The Philidas Industrial is an all-metal one piece nut with a collar above the hexagon. Two slots, in the same plane, are cut in the collar and the metal above the slots set to depitch the threads. When the nut is tightened on to a bolt, the thread is gripped on the flank - the point at which it is designed to take the thrust.

The all-metal Philidas Industrial nut is suitable for use in high or low temperature conditions, and the locking performance is unaffected by oil, petrol or other liquids and vapours. It is easily assembled with hand or power tools, and will lock effectively either to a face or unsupported. Standard finishes are zinc and chromate passivation or self colour for metric threads and zinc or self colour for other threads. Special grades of material, finish and design are available subject to minimum manufacturing quantities.



## ISO metric coarse /standard

Size (mm)	Order reference	Dimensions (mm)		
		A a/f	B (nom)	C (nom)
5	5 MCI	8,0	6,5	4,3
6	6 MCI	10,0	7,5	5,0
8	8 MCI	13,0	8,5	5,7
10	10 MCI	17,0	11,0	8,0
12	12 MCI	19,0	13,0	9,5
14	14 MCI	22,0	15,0	11,0
16	16 MCI	24,0	17,0	12,8
18	18 MCI	27,0	20,0	15,5
20	20 MCI	30,0	22,0	17,5
22	22 MCI	32,0	23,0	18,0
24	24 MCI	36,0	25,0	19,5
27	27 MCI	41,0	28,0	22,0
30	30 MCI	46,0	31,0	24,5
33	33 MCI	50,0	33,0	26,2
36	36 MCI	55,0	36,0	28,6
39	39 MCI	60,0	39,0	31,1
42	42 MCI	65,0	42,0	33,5
45	45 MCI	70,0	45,0	36,0
48	48 MCI	75,0	48,0	38,0
52	52 MCI	80,0	52,0	41,5



A minimum protrusion of two bolt threads is recommended.

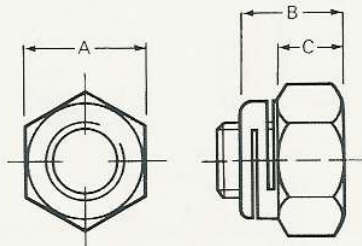
## UNF and UNC / standard and thin

Size (in)	Order reference				Dimensions (in)				
	UNF		UNC		A a/f	B(max)		C(nom)	
	Standard	Thin	Standard	Thin		Standard	Thin	Standard	Thin
8 - 32	-	-	CUCI	CUCJ	0,312	0,235	0,170	0,157	0,092
10 - 32	DUFI	DUFJ	-	-	0,344	0,267	0,203	0,174	0,110
1/4	EUFI	EUFJ	EUCI	EUCJ	0,437	0,270	0,203	0,175	0,108
5/16	GUFI	GUFJ	GUCI	GUCJ	0,500	0,330	0,246	0,225	0,141
3/8	JUFI	JUFJ	JUCI	JUCJ	0,562	0,400	0,296	0,285	0,183
7/16	LUFI	LUFJ	LUCI	LUCJ	0,687	0,480	0,340	0,345	0,205
1/2	NUFI	NUFJ	NUCI	NUCJ	0,750	0,546	0,404	0,395	0,253
9/16	PUFI	PUFJ	PUCI	PUCJ	0,875	0,600	0,433	0,438	0,266
5/8	QUFI	QUFJ	QUCI	QUCJ	0,937	0,672	0,493	0,503	0,319
3/4	SUFI	SUFJ	SUCI	SUCJ	1,125	0,785	0,593	0,593	0,401
7/8	UUFJ	UUFJ	UUCI	UUCJ	1,312	0,913	0,650	0,698	0,435
1	WUFI	WUFJ	WUCI	WUCJ	1,500	1,032	0,743	0,788	0,499
1 1/8	XUFI	XUFJ	XUCI	XUCJ	1,687	1,160	0,881	0,897	0,618
1 1/4	YUFI	YUFJ	YUCI	YUCJ	1,875	1,280	0,990	1,000	0,711
1 3/8	ZUFI	ZUFJ	ZUCI	ZUCJ	2,062	1,400	1,120	1,105	0,825
1 1/2	H2UFI	H2UFJ	H2UCI	H2UCJ	2,250	1,530	1,250	1,210	0,930
1 3/4	H3UFI	H3UFJ	H3UCI	H3UCJ	2,625	1,780	1,500	1,410	1,130
2	H4UFI	H4UFJ	H4UCI	H4UCJ	3,000	2,020	1,740	1,620	1,340
2 1/4	H5UFI	H5UFJ	H5UCI	H5UCJ	3,375	2,215	1,940	1,745	1,470
2 1/2	H6UFI	H6UFJ	H6UCI	H6UCJ	3,750	2,470	2,140	2,000	1,670
2 3/4	H7UFI	H7UFJ	H7UCI	H7UCJ	4,125	2,762	2,340	2,275	1,853
3	H8UFI	H8UFJ	H8UCI	H8UCJ	4,500	2,962	2,540	2,450	2,028

BA, BSF AND BSW / standard and thin available on request

ISO metric coarse /standard

Size (mm)	Order reference	Dimensions (mm)		
		A a/f	B (nom)	C (nom)
2,5	2,5 MCP	5,0	4,5	2,4
3,0	3 MCP	5,5	4,75	2,45
3,5	3,5 MCP	7,0	5,0	2,5
4,0	4 MCP	7,0	5,6	3,3
5,0	5 MCP	8,0	6,8	3,9
6,0	6 MCP	10,0	8,5	5,0
8,0	8 MCP	13,0	10,5	6,0
10,0	10 MCP	17,0	13,0	7,6
12,0	12 MCP	19,0	15,0	8,5
14,0	14 MCP	22,0	17,0	10,0
16,0	16 MCP	24,0	19,5	12,0
18,0	18 MCP	27,0	22,0	14,0
20,0	20 MCP	30,0	24,0	15,5
22,0	22 MCP	32,0	26,5	17,5
24,0	24 MCP	36,0	29,0	19,0
27,0	27 MCP	41,0	33,0	22,0
30,0	30 MCP	46,0	39,0	26,0
33,0	33 MCP	50,0	43,0	30,0
36,0	36 MCP	55,0	47,0	32,5
39,0	39 MCP	60,0	50,0	35,0
42,0	42 MCP	65,0	54,0	37,5
45,0	45 MCP	70,0	58,0	41,0
48,0	48 MCP	75,0	62,0	42,5
52,0	52 MCP	80,0	67,0	46,5



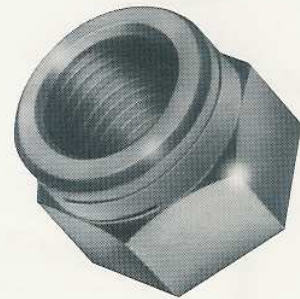
A minimum protrusion of two bolt threads is recommended.

# Turret self-locking nuts

The design concept of the Philidas Turret nut is similar to that of the universally adopted Philidas Industrial nut where the locking function is provided by a slotted collar or turret section above the hexagon. Whilst both types of nut have two slots, those on the Turret nut are positioned one above the other. The metal above these slots is set to depitch the threads such that when the nut is tightened on to a bolt the thread is gripped on the flank - the point at which it is designed to take the thrust. Special features of the Turret nut are a lower prevailing torque than the Industrial nut, and higher re-usability. Further, it can when required be fitted to a male thread locking element end first.

The all-metal Philidas Turret nut is suitable for use in high or low temperature conditions, and the locking performance is unaffected by oil, petrol or other liquids and vapours. It is easily assembled with hand or power tools, and will lock effectively either to a face or unsupported

Standard finishes are zinc and chromate passivation or self colour for metric threads and zinc or self colour for other threads. Special grades of material, finish and design are available subject to minimum manufacturing quantities.



## UNF and UNC / standard and thin

Size (in)	Order reference				Dimensions (in)				
	UNF		UNC		A a/f	B(max)		C(nom)	
	Standard	Thin	Standard	Thin		Standard	Thin	Standard	Thin
4 - 40	-	-	AUCP	AUCN	0,188	0,175	0,143	0,087	0,055
6 - 32	-	-	BUCP	BUCN	0,250	0,215	0,179	0,107	0,072
8 - 32	-	-	CUCP	CUCN	0,312	0,275	0,233	0,137	0,095
10 - 32	DUFP	DUFN	-	-	0,344	0,285	0,241	0,151	0,107
1/4	EUFP	EUFN	EUCP	EUCN	0,437	0,340	0,273	0,182	0,115
3/16	GUFP	GUFN	GUCP	GUCN	0,500	0,410	0,326	0,232	0,148
3/8	JUFP	JUFN	JUCP	JUCN	0,562	0,490	0,386	0,292	0,190
7/16	LUFP	LUFN	LUCP	LUCN	0,687	0,570	0,445	0,357	0,232
1/2	NUFP	NUFN	NUCP	NUCN	0,750	0,660	0,514	0,420	0,274
9/16	PUFP	PUFN	PUCP	PUCN	0,875	0,725	0,558	0,483	0,316
5/8	QUFP	QUFN	QUCP	QUCN	0,937	0,810	0,623	0,545	0,358
3/4	SUFP	SUFN	SUCP	SUCN	1,125	0,975	0,746	0,670	0,441
7/8	UUFN	UUFN	UUCP	UUCN	1,312	1,051	0,855	0,703	0,507
1	WUFP	WUFN	WUCP	WUCN	1,500	1,185	0,970	0,792	0,577
1 1/8	XUFP	XUFN	XUCP	XUCN	1,687	1,358	1,145	0,870	0,655
1 1/4	YUFP	YUFN	YUCP	YUCN	1,875	1,498	1,285	0,960	0,747
1 3/8	ZUFP	ZUFN	ZUCP	ZUCN	2,062	1,646	1,430	1,055	0,835
1 1/2	H2UFP	H2UFN	H2UCP	H2UCN	2,250	1,799	1,585	1,150	0,938
1 3/4	H3 UFP	H3UFN	H3UCP	H3UCN	2,625	2,101	1,890	1,365	1,150
2	H4UFP	H4UFN	H4UCP	H4UCN	3,000	2,226	2,000	1,425	1,199
2 1/4	H5UFP	H5 UFN	H5UCP	H5UCN	3,375	2,340	2,100	1,510	1,270
2 1/2	H6UFP	H6UFN	H6UCP	H6UCN	3,750	2,550	2,300	1,685	1,435
2 3/4	H7UFP	H7UFN	H7UCP	H7UCN	4,125	2,845	2,600	1,930	1,685
3	H8UFP	H8UFN	H8UCP	H8UCN	4,500	3,062	2,800	2,150	1,888

BA, BSF AND BSW / standard and thin available on request