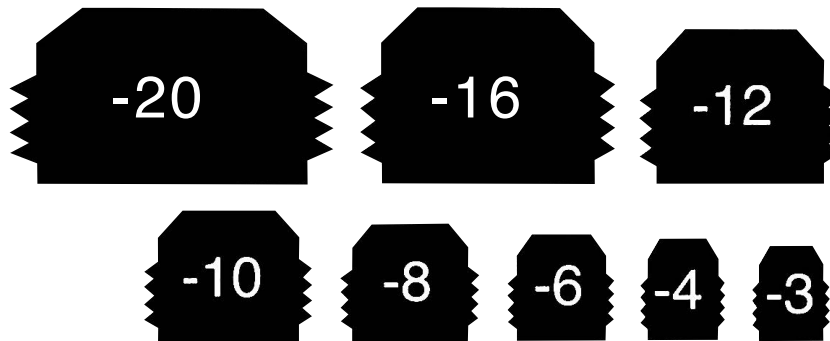


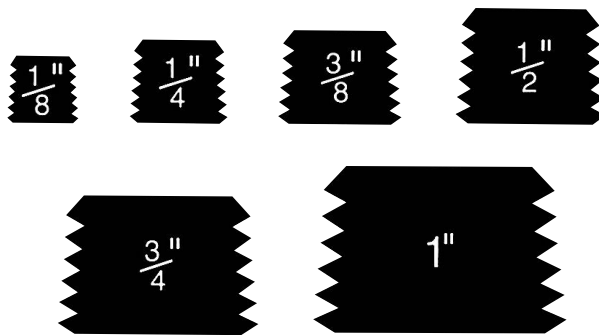
TECHNICAL INFORMATION

UNDERSTANDING AN THREAD SIZES Use the figures below to determine the AN thread size before ordering. The chart at the right shows the corresponding metal tube outer diameter and thread size for each size.



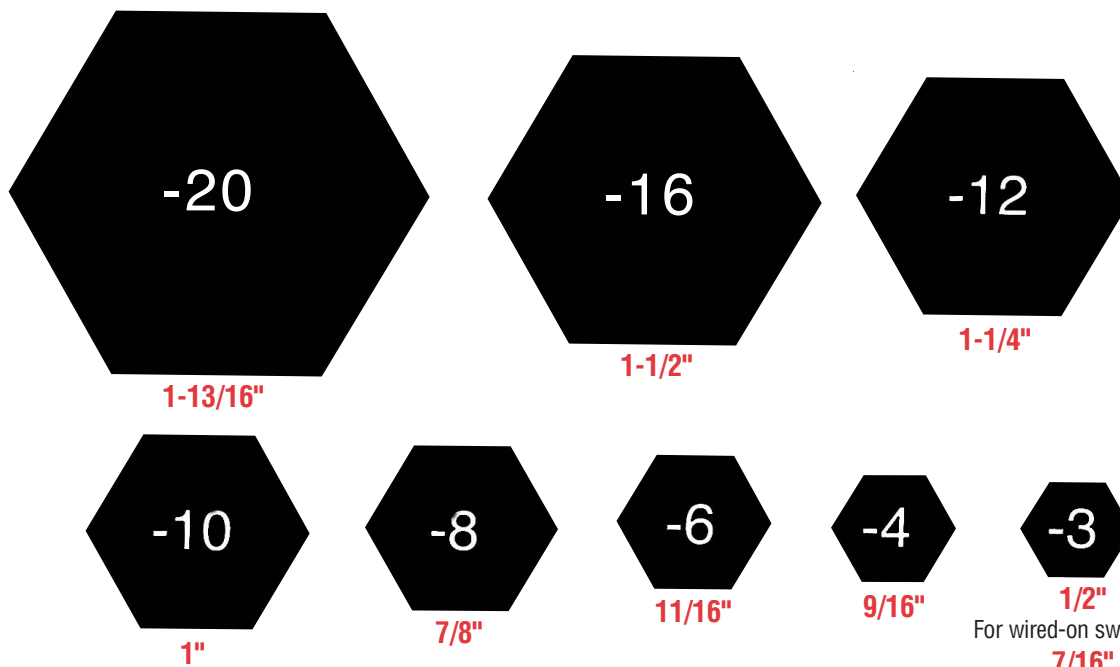
AN SIZE	METAL TUBE O.D.	THREAD SIZE
3	3/16"	3/8"-24 UNJ
4	1/4"	7/16"-20 UNJ
5	5/16"	1/2"-20 UNJ
6	3/8"	9/16"-18 UNJ
8	1/2"	3/4"-16 UNJ
10	5/8"	7/8"-14 UNJ
12	3/4"	1-1/16"-12 UNJ
16	1"	1-5/16"-12 UNJ
20	1-1/4"	1-5/8"-12 UNJ

UNDERSTANDING NPT THREAD SIZES Use the figures below to determine the NPT thread size before ordering. The chart at the right shows the corresponding thread size, threads per inch, outer diameter and closest AN fitting size for each.



PIPE THREAD SIZE	THREADS PER INCH	PIPE O.D.	CLOSEST AN FITTING SIZE
1/8"	27	.405"	4
1/4"	18	.540"	6
3/8"	18	.675"	8
1/2"	14	.840"	10
3/4"	14	1.050"	12
1"	11-1/2	1.315"	16
1-1/4"	11-1/2	1.660"	20

DETERMINING B-NUT SIZES Use the figures below to determine the B-nut size before ordering.



For wired-on swivel nut.
7/16"
For slip-on B-nut.

TECHNICAL INFORMATION

STANDARD TORQUE LIMITS FOR HOSE AND TUBE COUPLING NUTS

*Inch Pounds Shown

TUBE O.D.	HOSE SIZE	NUT HEX	A	B	C
1/4"	-4	9/16"	50-65	135-150	100-120
3/8"	-6	11/16"	110-125	270-300	210-250
1/2"	-8	7/8"	210-250	400-500	340-420
5/8"	-10	1"	300-350	650-700	400-480
3/4"	-12	1-1/4"	425-500	900-1000	725-850
1"	-16	1-1/2"	600-700	1200-1400	900-1150
1-1/4"	-20	2"	680-800	1200-1400	900-1150

$$\frac{\text{*Inch Pounds}}{12} = \text{Foot Pounds}$$

Over tightening of hose and tube coupling nuts will cause **thread and seal damage** and can result in **leakage**. Torque values are for threads lubricated with hydraulic fluid, 30 weight motor oil or antiseize compound.

KEY

- A** - Steel or aluminum flared fitting nuts and tube sleeves, AN818 and AN819: used on aluminum tube.
- B** - Steel or aluminum flared fitting nuts and tube sleeves, AN818 and AN819: used on steel tube.
- C** - Steel or aluminum flared fitting hose coupling nuts.

Where use of a torque wrench is not feasible, use a conventional wrench to tighten the coupling nuts. Tighten until a distinct increase in the torque is noted. Continue tightening an additional 1/6 of a turn. Back off the nut. Again, tighten until a distinct increase in the torque is noted. Continue tightening an additional 1/6 to 1/3 of a turn.

NOTE: One hex flat = 1/6 of a turn

