

# Meter Units

## Inch & Metric Threads



### General

Meter units are oil proportioning devices for cyclic systems. Each outlet of a lubricating system is controlled by a meter unit. The lubricator in the system dispenses known amounts of oil to the distribution network and meter units deliver this oil in varying amounts to the bearing points.

The first letter of the meter unit identifies the type of threads on the unit. Meter units that begin with the letter "F" denote inch threads, while those that start with the letter "A" signify metric threads.

Standard flow rates range from 00 (medium slow) to 3 (fast). For special situations, 3/0 (slow) and 5 (extra, extra fast) rates are available. Each incremental increase in rate size doubles the oil flow to a point.

### Application

Meter units type "F" must be used with all cyclic type lubricators (cannot be used with continuous lubricators). Meter units feed in one direction only. This is indicated by arrow stamped on body.

### How to Order

Meter units have a letter and number designation stamped on the flat surface of the hexagonal body. Part numbers are listed in the tables on the following pages. When ordering, specify the complete name and part number, e.g. Meter Unit, Type FSA-0, Part #B1083. (Use the chart below as reference only for letter and number designation definitions.)

#### Thread Type

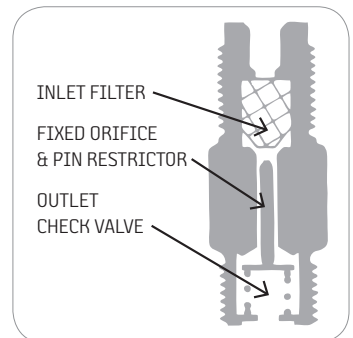
- F- Inch thread - 5 lb check valve
- A- Metric thread - 5 lb check valve
- M- Inch thread - 1.25 lb check valve

#### Type, Location & Mating Parts

- B- British Thread Tee Type:** A 1/8 BSPT outlet thread and 1/8NPT inlet thread (FB-) is designed for use with a series of junction headers providing various combinations of tubing connections, 2-way, 3-way and 4-way. They are generally mounted directly at the bearing, similar to the "FSA," but the multiple combinations of junction headers afford great flexibility in the tubing arrangement.
- J- Junction Type:** Threaded into a junction or junction header with a tail tube leading to the bearing. The inlet thread on the "FJ-" meter unit is 5/16-24 to mate with standard junctions and junction headers. The "AJ-" meter unit has the metric-M8x1 thread which is very close to a 5/16-24 thread. There are three different "Junction" types identified by the third letters "B", "C" and "D". Type "-JB" is the most commonly used meter unit and has a 5/16-24 or M8x1 outlet thread for a 5/32 tail tube to the bearing. The type "-JC" also has a 5/16-24 outlet thread but has a tubing connection insert for a 3/32 dia. tail tube. Type "-JD" are thinner than standard junctions and also have closer hole spacing. Type "-JD" are made from 5/16" hexagon bar and have a 1/4-28 outlet thread to accommodate the 5/16 hex compression nut #B3610.
- K- Insert Type:** Designed to be inserted into a tapped hole mating with a drilled passage, so there is no tubing connection to the fitting itself. The "-KA" and "-KB" are provided with a 1/8 NPT thread on one end only (outlet end of the "-KA" and the inlet end of the "-KB"). The "FKD" and "FKE" are the 1/8 BSP equivalent of the "FKA" and "FKB".
- R- Reverse Flow Type:** Have the same threads as the FSA, but in reverse. The inlet thread is 1/8 NPT and the outlet thread is 5/16-24. These are generally used to connect to pressurized drilled oil passages within the machine with tail tubes leading to the bearings. The "FRA" accommodates 5/32" O.D. tail tubes and the "FRC" has the insert for 3/32" tubes.
- S- Straight Type:** Mounted directly at the bearing and at the end of a pressure line. The inlet end is a 5/16-24 male thread for connection to 5/32" tubing and the outlet end has a 1/8 pipe thread to provide a sealed connection to the bearing tap. The "-SA" has a 1/8 NPT outlet thread and the "-SB" has a 1/8 BSP thread.
- T- Tee Type:** Identical to the British Thread Tee-Type meter unit, except these units have a 1/8 NPT thread on each end.

#### Flow Rate


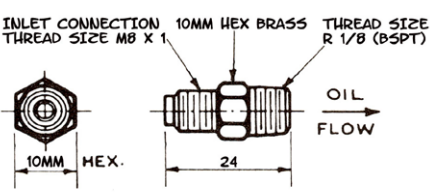

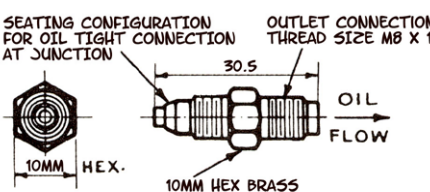

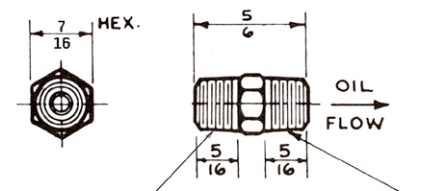

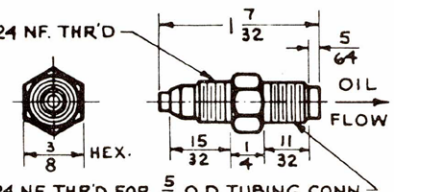

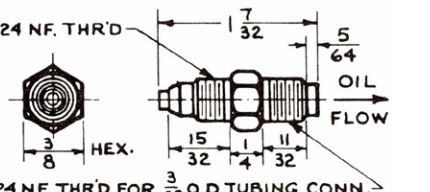

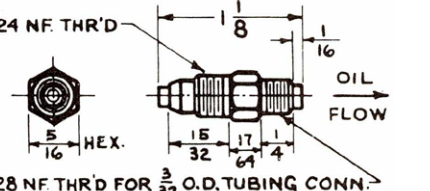

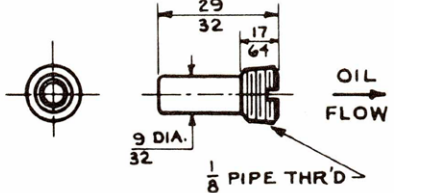
- 3/0- Extra slow
- 00- Slow
- 0- Medium slow
- 1- Medium
- 2- Medium fast
- 3- Fast
- 4- Extra fast
- 5- Extra, extra fast



#### References


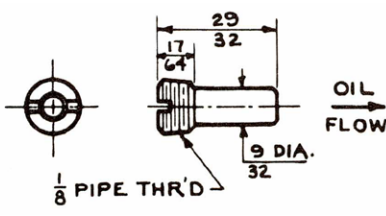

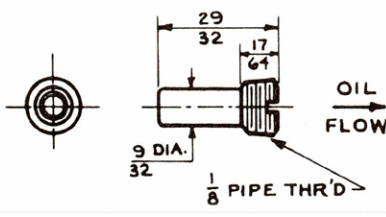

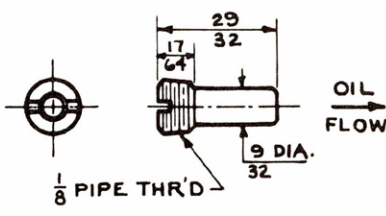

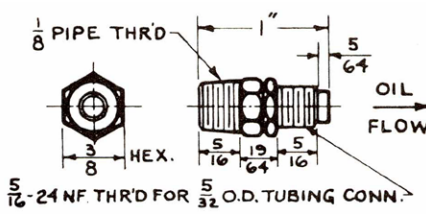

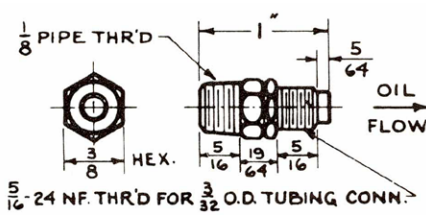

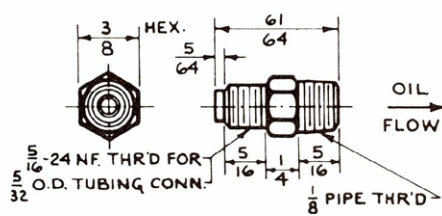

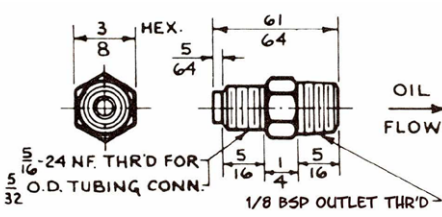
- + Brochure #106: Single Line Resistance Systems
- + Brochure #151: Specialty Fluid Fittings
- + Flier #005: Bijur Sales Flier


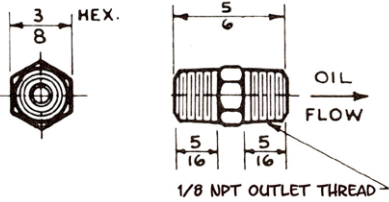

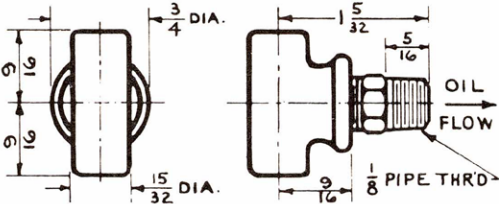

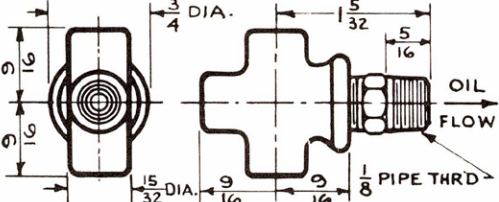

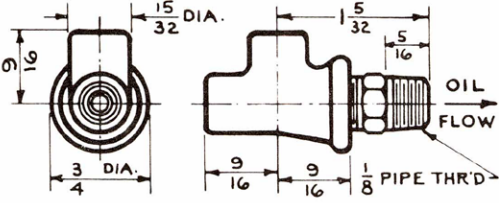

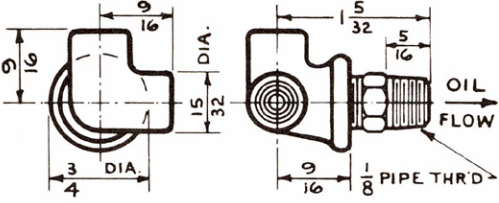

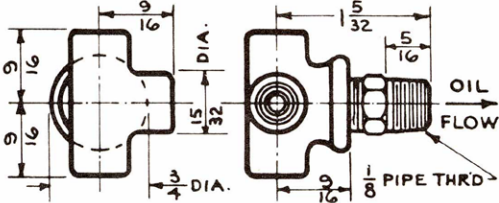

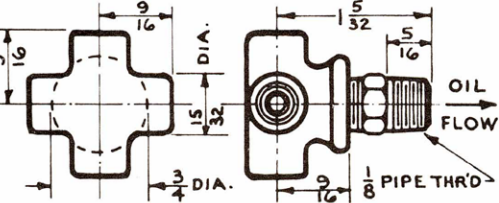


Name	Photo	Flow	Part #	Dimensional Schematic
ASA		3/0	17841-3/0	<p>INLET CONNECTION THREAD SIZE M8 X 1</p> <p>10MM HEX BRASS</p> <p>THREAD SIZE R 1/8 (BSPT)</p>  <p>10MM HEX.</p> <p>24</p> <p>OIL FLOW</p>
		00	17841-00	
		0	17841-0	
		1	17841-1	
		2	17841-2	
		3	17841-3	
		4	17841-4	
5	17841-5			
AJB		3/0	15323-3/0	<p>SEATING CONFIGURATION FOR OIL TIGHT CONNECTION AT JUNCTION</p> <p>OUTLET CONNECTION THREAD SIZE M8 X 1</p>  <p>10MM HEX.</p> <p>30.5</p> <p>10MM HEX BRASS</p> <p>OIL FLOW</p>
		00	15323-00	
		0	15323-0	
		1	15323-1	
		2	15323-2	
		3	15323-3	
		4	15323-4	
5	15323-5			
FB		3/0	B8724	 <p>7 16 HEX.</p> <p>5 6</p> <p>1/8 NPT INLET THR'D</p> <p>1/8 BSPT OUTLET THR'D</p> <p>OIL FLOW</p>
		00	B8725	
		0	B8452	
		1	B8726	
		2	B8727	
		3	B8728	
		4	B8729	
5	B8730			
FJB		3/0	B6548	 <p>5/16-24 NF. THR'D</p> <p>7 32</p> <p>5 64</p> <p>3 8 HEX.</p> <p>15 32</p> <p>1 4</p> <p>11 32</p> <p>5/16-24 NF. THR'D FOR 5/32 O.D. TUBING CONN.</p> <p>OIL FLOW</p>
		00	B2494	
		0	B2495	
		1	B2496	
		2	B2497	
		3	B2498	
		4	B2499	
5	B2500			
FJC		3/0	B7267	 <p>5/16-24 NF. THR'D</p> <p>7 32</p> <p>5 64</p> <p>3 8 HEX.</p> <p>15 32</p> <p>1 4</p> <p>11 32</p> <p>5/16-24 NF. THR'D FOR 3/32 O.D. TUBING CONN.</p> <p>OIL FLOW</p>
		00	B3314	
		0	B3315	
		1	B3316	
		2	B3317	
		3	B3318	
		4	B3319	
5	B3320			
FJD		3/0	B6085	 <p>5/16-24 NF. THR'D</p> <p>1 8</p> <p>1 16</p> <p>5 16 HEX.</p> <p>15 32</p> <p>17 64</p> <p>1 4</p> <p>1/4-28 NF. THR'D FOR 3/32 O.D. TUBING CONN.</p> <p>OIL FLOW</p>
		00	B3773	
		0	B3774	
		1	B3775	
		2	B3776	
		3	B3777	
		4	B3778	
5	B3779			
FKA		3/0	B7271	 <p>29 32</p> <p>17 64</p> <p>9 DIA. 32</p> <p>1/8 PIPE THR'D</p> <p>OIL FLOW</p>
		00	B3913	
		0	B3914	
		1	B3915	
		2	B3916	
		3	B3917	
		4	B3918	
5	B3919			


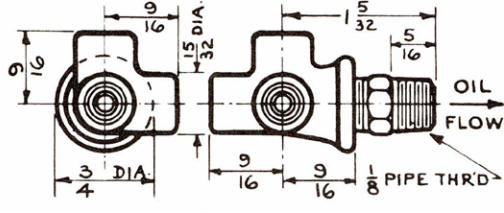

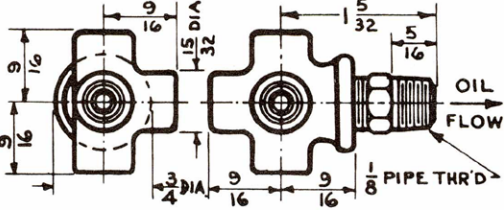

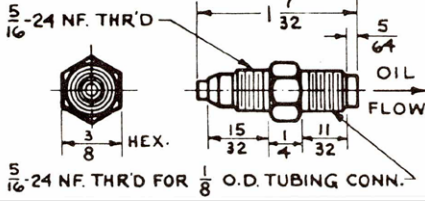
Measurements shown in millimeters.

Measurements shown in millimeters.

Name	Photo	Flow	Part #	Dimensional Schematic
<b>FKB</b>		3/0	B7273	
		00	B3980	
		0	B3981	
		1	B3982	
		2	B3983	
		3	B3984	
		4	B3985	
5	B3986			
<b>FKD</b>		3/0	B8878	
		00	B8870	
		0	B8871	
		1	B8872	
		2	B8873	
		3	B8874	
		4	B8875	
5	B8876			
<b>FKE</b>		3/0	B8868	
		00	B8860	
		0	B8861	
		1	B8862	
		2	B8863	
		3	B8864	
		4	B8865	
5	B8866			
<b>FRA</b>		3/0	B7265	
		00	B2559	
		0	B3215	
		1	B3216	
		2	B3217	
		3	B3218	
		4	B3219	
5	B3220			
<b>FRC</b>		3/0	B7269	
		00	B3579	
		0	B3580	
		1	B3581	
		2	B3582	
		3	B3583	
		4	B3584	
5	B3585			
<b>FSA</b>		3/0	B6526	
		00	B1620	
		0	B1083	
		1	B1084	
		2	B1085	
		3	B1086	
		4	B1087	
5	B1088			
<b>FSB</b>		3/0	B8717	
		00	B8718	
		0	B8455	
		1	B8719	
		2	B8720	
		3	B8721	
		4	B8722	
5	B8723			

Name	Photo	Flow	Part #	Dimensional Schematic
FT		3/0	B6529	 <p>HEX. <math>\frac{3}{8}</math> <math>\frac{5}{6}</math> OIL FLOW  <math>\frac{5}{16}</math> <math>\frac{5}{16}</math> <math>\frac{1}{8}</math> NPT OUTLET THREAD</p>
		00	B1398	
		0	B1112	
		1	B1113	
		2	B1114	
		3	B1115	
		4	B1116	
5	B1117			
FTA		3/0	B6549	 <p><math>\frac{3}{4}</math> DIA. <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{15}{32}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD</p>
		00	B1524	
		0	B1071	
		1	B1072	
		2	B1073	
		3	B1074	
		4	B1075	
5	B1076			
FTB		3/0	B6550	 <p><math>\frac{3}{4}</math> DIA. <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{15}{32}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD</p>
		00	B1528	
		0	B1077	
		1	B1078	
		2	B1079	
		3	B1080	
		4	B1081	
5	B1082			
FTC		3/0	B6551	 <p><math>\frac{15}{32}</math> DIA. <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{3}{4}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD</p>
		00	B1530	
		0	B1098	
		1	B1099	
		2	B1100	
		3	B1101	
		4	B1102	
5	B1103			
FTD		3/0	B6552	 <p><math>\frac{9}{16}</math> <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{15}{32}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD  <math>\frac{3}{4}</math> DIA.</p>
		00	B1532	
		0	B1106	
		1	B1107	
		2	B1108	
		3	B1109	
		4	B1110	
5	B1111			
FTG		3/0	B6553	 <p><math>\frac{9}{16}</math> <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{15}{32}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD  <math>\frac{3}{4}</math> DIA.</p>
		00	B2759	
		0	B2760	
		1	B2761	
		2	B2762	
		3	B2763	
		4	B2764	
5	B2765			
FTH		3/0	B6554	 <p><math>\frac{9}{16}</math> <math>\frac{5}{32}</math> <math>\frac{5}{16}</math> OIL FLOW  <math>\frac{9}{16}</math> <math>\frac{15}{32}</math> DIA. <math>\frac{1}{8}</math> PIPE THRD  <math>\frac{3}{4}</math> DIA.</p>
		00	B2769	
		0	B2770	
		1	B2771	
		2	B2772	
		3	B2773	
		4	B2774	
5	B2775			



Name	Photo	Flow	Part #	Dimensional Schematic
FTK		3/0	B6555	 <p>Dimensional schematic for FTK fitting showing two views. The left view shows a cross-section with dimensions: 9/16" height, 9/16" width, 3/4" diameter, and 15/32" diameter. The right view shows a side view with dimensions: 5/32" length, 5/16" diameter, 9/16" length, 9/16" length, and 1/8" PIPE THRD. An arrow indicates OIL FLOW.</p>
		00	B4128	
		0	B4129	
		1	B4130	
		2	B4131	
		3	B4132	
FTL		3/0	B6556	 <p>Dimensional schematic for FTL fitting showing two views. The left view shows a cross-section with dimensions: 9/16" height, 9/16" width, 3/4" diameter, and 15/32" diameter. The right view shows a side view with dimensions: 5/32" length, 5/16" diameter, 9/16" length, 9/16" length, and 1/8" PIPE THRD. An arrow indicates OIL FLOW.</p>
		00	B4368	
		0	B4369	
		1	B4370	
		2	B4371	
		3	B4372	
MJ		00	B8042	 <p>Dimensional schematic for MJ fitting showing two views. The left view shows a cross-section of a hexagonal fitting with dimensions: 5/16" -24 NF. THR'D, 3/8" HEX., and 7/32" length. The right view shows a side view with dimensions: 5/64" length, 15/32" length, 1/4" length, and 11/32" length. An arrow indicates OIL FLOW. A note at the bottom states: 5/16" -24 NF. THR'D FOR 1/8" O.D. TUBING CONN.</p>
		1	B8043	
		2	B8044	
		5	B9514	