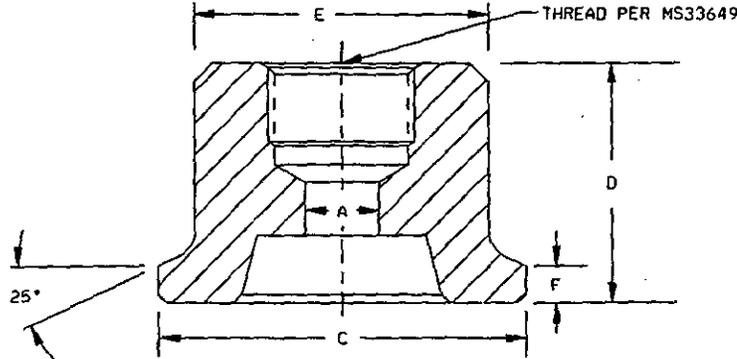




FED SUP CLASS  
4730



NOTICE: WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

- MATERIAL CODE:** ADD A AFTER DASH NO. TO DENOTE SA-105-GR11.  
ADD B AFTER DASH NO. TO DENOTE SA-182-F316.
- TEMPERATURE RANGE:** SEE MATERIAL SPECIFICATION.
- NOTES:**
1. ALL MATERIALS ARE PER ASTM SPECIFICATIONS
  2. ALL DIMENSIONS ARE IN INCHES.
  3. TOLERANCE: SEE KC161.
  4. FOR DESIGN FEATURE PURPOSES, THIS DRAWING TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
  5. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON THE DATE OF INVITATION FOR BID.
-  HUB PRESSURE RATING IS THE LOWER OF EITHER THE VENDOR'S PRESSURE LIMIT ON THE HUB OR KSC'S PRESSURE LIMIT ON THE FITTING WHICH SCREWS INTO THE THREADED HOLE.
-  THIS SIZE IS NOT TO BE USED FOR NEW DESIGN. SEE KC167 FOR NEW DESIGN.
8. DO NOT USE THIS STANDARD FOR ITEMS WHICH CANNOT BE IDENTIFIED BY THE LIMITATIONS CONTAINED HEREIN.
  9. ALL PARTS NOT MANUFACTURED BY GRAY TOOL CO. MUST BE CERTIFIED BY THE MANUFACTURER TO BE INTERCHANGEABLE WITH THE GRAY TOOL PART NUMBER.

**EXAMPLE OF PART NOS.**

BASIC PART NUMBER KC166-3A



**APPROVED SOURCE:** COMMERCIAL PARTS CAN BE PURCHASED FROM: VETCO-GRAY 18777 NW FWY  
P.O. BOX 2291, HOUSTON, TX 77001-2291.

**ALTERNATE SOURCES:**

OTECO EQUIPMENT COMPANY 2811 TROUT STREET P.O. BOX 1849 HOUSTON, TX 77251-1849	REFLANGE, INC. 5730 CENTRALCREST HOUSTON, TX 77092
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APPROVED: 2-6-76  
 REVISED: (C) CHANGED APPROVED SOURCE. 10-2-92

<b>CUSTODIAN:</b> JOHN F. KENNEDY SPACE CENTER	
<b>PROCUREMENT SPEC.</b> NONE	<b>HUB, TAPPED BLIND</b>
<b>COORDINATION STATUS</b> KSC DE	
<b>STANDARD PART</b>	
<b>KC166</b>	
SHEET 1 OF 2	



FED SUP CLASS  
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DASH NO.	HUB SIZE	MS33649 THREAD SIZE	OPERATING PRESSURE RATING (PSIG)		DIMENSIONS						MATERIAL CODE	
			MAT'L CODE		A	C	D	E	F	-A	-B	
			-A	-B						SA-105 GRII	SA-102 F-316	
											GRAYLOC STK NO.	GRAYLOC STK NO.
-1	1GR4	-4	9600	9600	.172	2.000	1.750	1.500	.313	I-4708-1	I-4709-1	
-2		-6	6900	6900	.297					I-4708-5	I-4709-5	
-3		-8	7400	7400	.391					I-4708-9	I-4709-9	
▽-4	-12	6500	6500		I-4708-13					I-4709-13		
-5	1GR5	-4	9600	9600	.172					I-4708-2	I-4709-2	
-6		-6	6900	6900	.297					I-4708-6	I-4709-6	
-7		-8	7400	7400	.391					I-4708-10	I-4709-10	
▽-8	-12	6500	6500		I-4708-14					I-4709-14		
-9	1GR7	-4	8784	8180	.172					I-4708-3	I-4709-3	
-10		-6	6900	6900	.297					I-4708-7	I-4709-7	
-11		-8	7400	7400	.391					I-4708-11	I-4709-11	
▽-12	-12	6500	6500		I-4708-15					I-4709-15		
-13	1GR11	-4	4264	4340	.172					I-4708-4	I-4709-4	
-14		-6	4264	4340	.297					I-4708-8	I-4709-8	
-15		-8	4264	4340	.391					I-4708-12	I-4709-12	
▽-16	-12	4264	4340		I-4708-16					I-4709-16		

REVISED: (C) CHANGED APPROVED SOURCE ON SHEET 1. 10-2-92

APPROVED: 2-6-76

CUSTODIAN:		JOHN F. KENNEDY SPACE CENTER	
PROCUREMENT SPEC.	HUB, TAPPED BLIND	STANDARD PART	
NONE		KCI66	
COORDINATION STATUS		SHEET 2 OF 2	
KSC DE			