NOTICE OF VALIDATION

INCH-POUND

A-A-59248
NOTICE 1
27 January 2004

COMMERCIAL ITEM DESCRIPTIONS (CIDS)

METER, VOLUMETRIC, POSITIVE DISPLACEMENT, LIQUID, FUEL, 600 GPM

A-A-59248, dated 16 June 1998, has been reviewed and determined to be valid for use in acquisition

Custodians:
Army - AV
Navy - YD
Air Force - 99

Preparing activity:
DLA - GS1

Review Activities:
Navy - AS, CG
Air Force - 71

AMSC N/A **FSC 6680**

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[INCH-POUND]
A-A-59248
June 16, 1998
SUPERSEDING
GG-M-2742
June 26, 1991

COMMERCIAL ITEM DESCRIPTION

METER, VOLUMETRIC, POSITIVE DISPLACEMENT, LIQUID, FUEL, 600 GPM

The General Services Administration has authorized the use of this commercial item description for all Federal agencies.

1. SCOPE. This commercial item description (CID) covers 600 gallon per minute (gpm) (2 271 litre per minute (L/m)) diesel fuel, automotive gasoline, jet fuel and aviation gasoline volumetric, positive displacement meters.

2. SALIENT CHARACTERISTICS.

2.1 Description. The positive displacement meter, herein after referred to as meter, shall be used to meter fuel pumped into tanker trucks. The meter shall be capable of handling fuels at a flow rate of 600 gpm (2 271 L/m). The meter shall have a digital readout register that indicates the gallonage throughput. The fuels most generally metered shall be diesel fuel and automotive gasoline, however, under some circumstances it shall be used for metering of jet fuel and aviation gasoline. All fuels shall pass through a strainer prior to reaching the meter.

2.2 Standard commercial product. The meter shall, as a minimum, be in accordance with the requirements of this CID and shall be the manufacturer's standard commercial product. Additional or better features which are not specifically prohibited by this CID, but which are a part of the manufacturer's standard commercial product, shall be included in the meter being furnished. A standard commercial product is a product which is being sold or is being currently offered for sale on the commercial market through advertisements or manufacturer's catalogs or brochures, and represents the latest production model.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Officer in Charge (Code 15E2), Seabee Logistics Center, 4111 San Pedro St., Port Hueneme, CA 93043-4410, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

2.3 Performance.

2.3.1 Static pressure. The meter shall be capable of operating at a working pressure of 275 pounds force per square inch (psi) (1 896 kilopascal (kPa).

2.3.2 Flow pressure drop. The maximum pressure drop between inlet and outlet shall be not greater than 5 psi (34.5 kPa) when operating at rated capacity.

2.3.4 Meter error. The meter repeatability error shall be not greater than 0.1 percent for any one predetermined flow rate and accuracy setting.

2.3.5 Overload protection. The meter shall be capable of 125 percent of maximum rated capacity without damage to the mechanism.

2.4 Environmental conditions. Unless otherwise specified (see 6.2), the meter shall be capable of meeting all performance requirements specified herein at ambient temperatures ranging from - 20 to 126 °F (- 29 to 52 °C). The maximum pressure drop at - 65 °F (- 54 °C) shall be not greater than 4 psi (27.6 kPa). The meter shall meet all performance requirements under high humidity, salt fog, sand and dust conditions.

2.5 Design and construction.

2.5.1 Interchangeability. All units of the same classification furnished with similar options under a specific contract shall be identical to the extent necessary to ensure interchangeability of component parts, assemblies, accessories, and spare parts.

2.5.2 Adjustment mechanism. The meter shall be equipped with an accuracy adjustment mechanism that will operate without change during the life of the meter, except by manual adjustment. The accuracy adjustment mechanism shall be so designed as to be direct-reading and permit ready adjustment without disassembly of the mechanism. The accuracy adjustment shall have a range of not less than 5 percent.

2.5.3 Inlet and outlet. Unless otherwise specified (see 6.2), the meter shall be designed for straight-through flow. Unless otherwise specified (see 6.2), the meter shall be provided with 4-inch 300 class raised face flanges in accordance with ANSI B16.24, and as specified herein.

2.5.4 Meter register. The meter register shall be capable of recording a volume of 99,999,999 gallons (378 499 996 L) of fuel, and shall have a 8-digit totalizer unit. The meter register drive mechanism shall have a positive counter drive with no friction devices or a adjustable driving mechanism capable of transmitting without slippage, a torque not less than 4 ounce-inches (oz-in) (0.028 Newton metre (N·m)).

2.5.5 Strainer. When specified (see 6.2), each meter shall be protected from pipe scale or foreign objects by a strainer placed in the inlet piping to the meter.

2.5.6 Indexing. Unless otherwise specified (see 6.2), the registers shall be of a type that can be indexed throughout a full revolution in increments of 30 degrees or less, to permit positioning of the register in any direction with relation to the meter housing. The meter register face shall have a transparent, colorless face of sufficient size to provide a full view of all digits.

2.5.7 Torque limitation. The breakaway torque required to rotate the input shaft of the register shall be not greater than 4 oz-in (0.028 N·m) at - 65 °F (- 54 °C).

2.6 Workmanship. All operations and processes involved in accomplishing the requirements of this CID shall be in accordance with the highest grade practices associated with this type of work.

3. REGULATORY REQUIREMENTS.

3.1 Materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR). Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this commercial item description are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term “recovered materials” means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this commercial item description.

3.2 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest version of ASTM SI-10 (IEEE/ASTM SI-10), and all other requirements of this commercial item description including form, fit, and function are met. If a product is manufactured to metric dimensions and these dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable. The contracting officer has the option of accepting or rejecting the product.

4. QUALITY ASSURANCE PROVISIONS.

4.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer’s own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

5. PACKAGING. The preservation, packing, and marking shall be as specified in the contract or order.

6. NOTES.

6.1 Source of documents.

6.1.1 The Federal Acquisition Regulation (FAR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

6.1.2 ANSI Standard is available from the American National Standards Institute, Inc., 11 West 42nd Street, New York, NY 10036.

6.1.3 ASTM Standard is available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

6.1.4 IEEE Standard is available from the Institute of Electrical and Electronics Engineers, IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.

6.2 Ordering data. Acquisition documents should specify the following:

a. Title, number, and date of this CID.
b. When performance requirements are other than as specified (see 2.4).
c. When the meter and flanges are designed other than as specified (see 2.5.3).
d. When pipe strainers are required (see 2.5.5).
e. When register indexing is other than as specified (see 2.5.6).

6.3 Supersession data. This CID replaces Federal Specification GG-M-2742, dated June 26, 1991.

6.4 Metric units. The values stated in either inch-pound units or SI units are to be regarded separately as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents; therefore, each system should be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

6.5 Subject term (key word) listing.

Automotive
Aviation

MILITARY INTERESTS:

Custodians:
Army - AV
Navy - YD1
Air Force - 99

Review Activities:
Navy - AS, CG
Air Force - 82
DLA - GS

CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

Preparing Activity:
Navy - YD1

(Project 6680-0258)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	**1. DOCUMENT NUMBER** A-A-59248	**2. DOCUMENT DATE (YYMMDD)** 980616

3. DOCUMENT TITLE

METER, VOLUMETRIC, POSITIVE DISPLACEMENT, LIQUID, FUEL, 600 GPM

4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME *(Last, First, Middle Initial)*	b. ORGANIZATION	
c. ADDRESS *(Include Zip Code)*	d. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON *(if applicable)*	**7.DATE SUBMITTED** (YYMMDD)

8. PREPARING ACTIVITY

a. NAME RUSSELL REYNOLDS	b. TELEPHONE *Include Area Code)* (1) Commercial 805-982-5946 (2) AUTOVON 551-5946
c. ADDRESS *(Include Zip Code)* OFFICER IN CHARGE, SEABEE LOGISTICS CENTER (CODE 15E2), 4111 SAN PEDRO STREET PORT HUENEME, CA 93043-4410	**IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:** DEFENSE QUALITY AND STANDARDIZATION OFFICE 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22401-3466 Telephone (703) 756-2340 AUTOVON 289-2340