**INCH-POUND** 

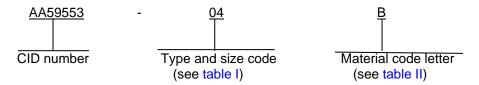
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## COMMERCIAL ITEM DESCRIPTION

## COUPLING HALVES, CAP AND WYE; QUICK DISCONNECT PNEUMATIC HOSE, TWO-LUG UNIVERSAL TYPE

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

- 1. SCOPE. This commercial item description (CID) covers the general requirements for coupling halves, cap and wye; quick disconnect pneumatic hose, two-lug universal type. Coupling halves, cap and wye; quick disconnect pneumatic hose, two-lug universal type covered by this CID are intended for commercial/industrial applications (see 7.10).
- 2. CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This CID uses a classification system which is included in the PIN as shown in the following example (see 7.1)



- 2.1 <u>Example of PIN</u>: The PIN AA59553-04B specifies a 3/4 inch, type I, bronze barbed fitting with male hose fitting end.
- 2.1.1 <u>Types</u>. The following are types of coupling halves, cap and wye; quick disconnect pneumatic hose, two-lug universal type (see 2.3 and table I):

Type I - Coupling half, quick disconnect with male hose fitting end (figure 1).

Type II - Coupling half, quick disconnect with female NPT fitting end (figure 2).

Type III - Coupling half, quick disconnect with male NPT fitting end (figure 3).

Type IV - Coupling half, quick disconnect, wye (figure 4).

Type V - Coupling half, quick disconnect, dead-end (cap) (figure 5).

2.2 <u>Sizes</u>. Couplings covered by this CID will be used with hose having the following inside diameters (see 2.3 and table I):

1/4 inch - 5/8 inch 3/8 inch - 3/4 inch 1/2 inch - 1 inch

Comments, suggestions, or questions on this document should be addressed to DLA, Land and Maritime, ATTN: VAI, P.O. Box 3990, Columbus, OH 43218-3990, or email to <a href="mailto:FluidFlow@dla.mil">FluidFlow@dla.mil</a>. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <a href="https://assist.daps.dla.mil">https://assist.daps.dla.mil</a>.

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2.3 Type and size of fitting. The size and type of hose fittings are identified by two digits (see table I).

TABLE I. Type and size code number.

Size (inch)	Type (see figures 1 through 5)				
	I	II	III	IV	V
None				16	17
1/4		06	11		
3/8	01	07	12		
1/2	02	08	13		
5/8	03				
3/4	04	09	14		
1	05	10	15		

2.4 <u>Material</u>. The pneumatic hose fitting is made from a material (see 3.2) identified by a single letter (see table II).

TABLE II. Material code letter.

Code letter	Material		
В	Bronze		
M	Malleable iron		
S	316 Corrosion resistant steel (CRES)		

## 3. SALIENT CHARACTERISTICS.

- 3.1 <u>Interface and physical dimensions</u>. These quick disconnect coupling halves supplied to this CID shall be as specified herein and are suitable for use with pneumatic hose and hose accessories. The pneumatic hose fittings, hereinafter called fittings, shall have the same size quick disconnect ends for interconnection of hoses regardless of hose sizes. Requirements shall be as defined herein.
- 3.2 <u>Materials</u>. Materials shall be as specified herein. Basic fitting material shall be malleable iron or bronze (see 3.2.2 and 3.2.3). Materials not specified shall be selected by the contractor and shall be subject to all provisions of this CID.
- 3.2.1 <u>Dissimilar metals</u>. Fitting parts shall be fabricated from compatible materials, inherently corrosion resistant or treated to provide protection against the various forms of corrosion and deterioration to which they are susceptible. Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion.
- 3.2.2 <u>Malleable iron</u>. Malleable iron castings shall conform to ASTM-A197/A197M or ASTM-A47/A47M, grade 32510. (see 3.2.4)
- 3.2.2.1 <u>Coating</u>. Malleable iron fittings shall be zinc-coated 25µm in accordance with ASTM-B633. Minimum film thickness shall be in accordance with ASTM-B633 Fe/Zn 24 service condition 4 (very severe service).
- 3.2.3 Bronze. Bronze castings shall conform to ASTM-B61 or ASTM-B584, UNS C85700.
- 3.2.4 Corrosion resistant steel. 316 CRES shall be in accordance with ASTM A666 or SAE-AMS5524.
- 3.2.4.1 <u>Corrosion resistant steel passivation</u>. Corrosion resistant steel shall be passivated in accordance with SAE-AMS2700, type 6 or 7.

## 3.3 Configuration.

- 3.3.1 Physical requirements. The fittings shall be commercial design and shall provide for interconnection between all types of fittings covered by this CID. The fittings shall have external lugs to provide a locking arrangement that will permit connection (or disconnection) of any two of the fittings by turning one into (or out of) the other a quarter of a turn. The fittings shall be furnished with lockwire holes. When the fittings are snapped together, at least one of the lockwire holes on each fitting shall line up to receive a lockwire or safety pin. A preformed packing shall be furnished with each fitting.
- 3.3.2 <u>Type I coupling</u>. The type I coupling halves shall conform to the configuration shown in figure 1 (see 7.6), and shall be the size specified (see 2.2).
- 3.3.3 <u>Types II and III coupling halves</u>. Type II and III coupling halves shall conform to the configurations shown in figures 2 and 3, respectively (see 7.6), and shall be the size specified with ASME-B1.20.1 NPT threads. (see 2.2)
- 3.3.4 <u>Types IV and V coupling halves</u>. Type IV wye and type V cap couplings shall conform to the configurations shown in figures 4 and 5, respectively (see 7.6).
- 3.4 Performance.
- 3.4.1 <u>Proof pressure</u>. Fittings and preformed packings shall withstand, without leakage or distortion, a hydrostatic proof pressure of 165 psi (1106 kpa).
- 3.4.2 Working pressure. Fittings conforming to this CID shall be rated for 110 psi (758 kpa) working pressure.
- 3.5 <u>Marking</u>. The fittings supplied to this CID shall be marked with the manufacturer's (MFR's) standard commercial PIN. (NOTE: The part number marked on the unit pack shall be the CID PIN.)
- 3.6 <u>Recycled, recovered, or environmentally preferable materials</u>. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.
- 3.7 <u>Workmanship</u>. Coupling halves, cap and wye; quick disconnect pneumatic hose, two-lug universal type shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.
- 4. REGULATORY REQUIREMENTS. The offerer/contractor is encouraged to use recovered material to the maximum extent practicable, in accordance with 23.403 of the Federal Acquisition Regulation (FAR).
- 5. PRODUCT CONFORMANCE PROVISIONS.
- 5.1 <u>Product conformance</u>. The products provided shall meet the salient characteristics of this CID; conform to the producer's own drawings, specifications, standards, and quality assurance practices; and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance.
- 6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.