

4 CPI Tube Fittings

Table 1 – Typical Raw Material Specifications and Tube End Dimensional Data

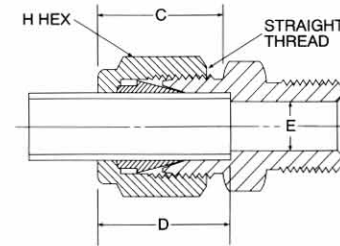
BASIC FITTING MATERIAL	BAR STOCK	FORGING	COMMON TUBING SPECIFICATION
BRASS	CA-360 QQ-B 626 Alloy 360 ASTM-B16 Alloy 360 CA-345 ASTM-B-453 Alloy 345	CA-377 QQ-B 626 Alloy 377 ASTM-B-124 Alloy 377	ASTM-B75 ASME-SB75 (TEMPER "O")
STAINLESS STEEL (Type 316) ¹	ASME-SA-479 Type 316-SS	ASME-SA-182 F316	ASME-SA-213 ASTM-A-213 ASTM-A-249 ASTM-A-269 ⁽²⁾ MIL T-8504 MIL T-8506
STEEL	ASTM-A-108 QQ-S-637	ASTM-A-576	SAE J524b SAE J525b ASTM-A-179
ALUMINUM	2017-T4 or 2024-T4 ASTM-B211 QQ-A-225/5 or 6	2014T (as fabricated) ASTM-B-211 QQ-A-225/4	303, 6061T6 ASTM-B-210
NICKEL-COPPER	ASTM-B-164 QQ-N-281	ASTM-B-164 QQ-N-281	ASTM-B-165
HASTELLOY C-276 [®]	ASTM-B-574	ASTM-B-574 ASTM-B-575	ASTM-B-622 ASTM-B-626
ALLOY 600	ASTM B-166 ASME-SB-166	ASTM-B-564	ASTM-B-163
CARPENTER 20 [®]	ASTM-B-473	ASTM-B-462 ASTM-B-472	ASTM-B-468
TITANIUM	ASTM-B-348	ASTM-B-381	ASTM-B-338

Size No.	Tube O.D.	CPI Straight Thread	Inches				†D Tube Ins. Depth
			†C	H Hex	E Dia.		
1	1/16	10-32	.43	5/16	.052	.34	
2	1/8	5/16-20	.60	7/16	.093	.50	
3	3/16	3/8-20	.64	1/2	.125	.54	
4	1/4	7/16-20	.70	9/16	.187	.60	
5	5/16	1/2-20	.73	5/8	.250	.64	
6	3/8	9/16-20	.76	11/16	.281	.67	
8	1/2	3/4-20	.87	7/8	.406	.90	
10	5/8	7/8-20	.87	1	.500	.96	
12	3/4	1-20	.87	1-1/8	.625	.96	
14	7/8	1-1/8-20	.87	1-1/4	.750	1.03	
16	1	1-5/16-20	1.05	1-1/2	.875	1.24	
20	1-1/4	1-5/8-20	1.52	1-7/8	1.09	1.61	
24	1-1/2	1-15/16-20	1.77	2-1/4	1.34	1.96	

NOTE: Dimensions C and D are shown in the finger tight position.

† Average Value

Dimensions for Reference Only, Subject to Change.



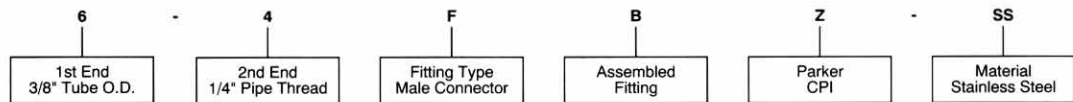
- (1) If more specific information, including heat code traceability, is required, your Parker Hannifin CPI distributor will provide details.
- (2) Stainless steel CPI fittings work reliably on both seamless and welded-redrawn, fully annealed type 304 and 316 tubing.

Nomenclature

Parker CPI fittings part numbers are constructed from symbols that identify the size and style of the fitting and material used.

Example: The part number shown below is for a Parker CPI stainless steel male connector for 3/8" O.D. tube (-6) and 1/4" male pipe thread (-4).

How To Order



Parker CPI Fittings are ordered by part number as listed in this catalog.

Size: Tube and pipe thread sizes are designed by the number of sixteenths of an inch (3/8" tube = 6/16" = 6). (1/4" pipe thread = 4/16" = 4).

Straights & Elbows: Call out largest CPI tube end size first followed by the smaller CPI tube end or pipe thread size.

Tees & Crosses: For tees – first size the run (1 to 2) and then branch (3). Example – the size designator for a male run tee for 3/8" O.D. tube and 1/4" male pipe thread would be 6-4-6. For crosses – first size the run (1 to 2) and then the branch (3 to 4).

Type: A letter or combination of letters and numbers are used to designate the type of fitting. (i.e. F = male connector, H = union connector, etc.) See the visual index for other type fittings.

BZ: This is the standard CPI designator for assembled fitting with nut and ferrules.

Material: Basic material type (B = brass, SS = stainless steel, type 316; S = steel; A = aluminum; M = nickel copper; HC = Hastelloy C-276[®]; IN = Alloy 600; SS20 = Carpenter 20[®]). Parker CPI Tube fittings, for special applications, can be furnished in almost any material suitable for machining.

Special Fittings: If there is any question as to the fitting desired, particularly for special fitting configurations, it is suggested that a customer print be submitted with the fitting request for quote

Availability: Items priced in current price list 4230 are carried in stock. Price and delivery for non-standard items quoted on request through the quick response department.

Note: Hastelloy C-276 is a registered trademark of Cabot Corporation. Carpenter 20 is a registered trademark of Carpenter Technology Corporation.

