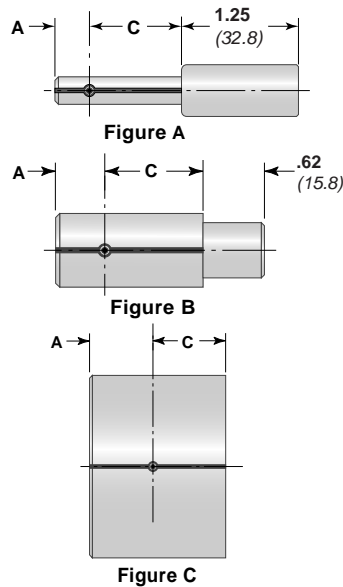


Air Probe Dimensional Data - Dual Master - Series 10 - 50



Body clearances

Clearances for series 10 thru 50 air gage members are referenced to the maximum material condition of the feature to be inspected. Determine the body size of an air probe by subtracting the clearance value shown in the adjacent table from the minimum part size. For air ring gages, add the value shown to the maximum part size.

Clearance recommendations

Low clearance . . Class 1 -- for the highest accuracy applications such as select fitting of valve spools and sleeves where finishing tolerance is less than .00016" (4.1 μm).

Standard clearance . . Class 2 -- best for most applications. Members are furnished to this specification when no other specification is given.

Extra clearance . . Class 3 -- for applications requiring extra gaging range such as grinding and honing operations where sizing information is required before the final size is obtained.

Sample order code for Dual master air probes

APT-12-C-.5000/.5005

member type
series spec.
clearance spec.

min / max size
material

(Air Probe Thru - Spec 12 - Chrome - Range)

AIR PROBE DIMENSIONAL DATA, Series 10, 40, & 50

Air probe body dimensions (inches / millimeters):

| Size above -incl. | Dimension A | | | Dim. C | Fitting | Figure |
|----------------------------------|----------------|--------------|--------------|----------------|------------|--------|
| | APT | APB | APS | | | |
| .059 - .073 1.50 - 1.85 | .190 4.83 | .080 2.03 | .050 1.27 | .625 15.88 | #10-32 UNF | A |
| .073 - .120 1.85 - 3.05 | .190 4.83 | .080 2.03 | .050 1.27 | .625 15.88 | #10-32 UNF | A |
| .120 - .183 3.05 - 4.65 | .250 6.35 | .085 2.16 | .065 1.65 | .750 19.05 | .25-28 UNF | A |
| .183 - .300 4.65 - 7.62 | .375 9.53 | .095 2.41 | .075 1.91 | 1.000 25.40 | .25-28 UNF | A |
| .300 - .485 7.62 - 12.32 | .440 11.18 | .095 2.41 | .075 1.91 | 1.000 25.40 | #10-32 UNF | B |
| .485 - .860 12.32 - 21.84 | .500 12.70 | .095 2.41 | .075 1.91 | 1.000 25.40 | .25-28 UNF | B |
| .860 - 2.510 21.84 - 63.75 | .750 19.05 | .095 2.41 | .075 1.91 | 1.000 25.40 | .50-20 UNF | B |
| 2.510 - 5.865 63.75 - 148.97 | .875 22.23 | .105 2.67 | .085 2.16 | 1.000 25.40 | .50-20 UNF | C |
| 5.865 - 8.260 148.97 - 209.80 | 1.062 26.97 | .125 3.17 | .105 2.67 | 1.000 25.40 | .50-20 UNF | C |

Air probe body clearances (inches / micrometers):

| Size above - incl. | Clearance class | | |
|----------------------------------|-----------------|----------------|----------------|
| | 1 | 2 | 3 |
| .059 - .120 1.50 - 3.05 | .00015 3.81 | .0003 7.62 | .0006 15.24 |
| .120 - .183 3.05 - 4.65 | .00015 3.81 | .0004 10.16 | .0008 20.32 |
| .183 - .540 4.65 - 13.72 | .0002 5.08 | .0005 12.70 | .0010 25.40 |
| .540 - 1.510 13.72 - 38.35 | .0003 7.62 | .0006 15.24 | .0012 30.48 |
| 1.510 - 3.010 38.35 - 76.45 | .0004 10.16 | .0008 20.32 | .0014 35.56 |
| 3.010 - 4.510 76.45 - 114.55 | .0005 12.62 | .0009 22.86 | .0018 45.72 |
| 4.510 - 6.510 114.55 - 165.40 | .0007 17.78 | .0012 30.48 | .0022 55.88 |

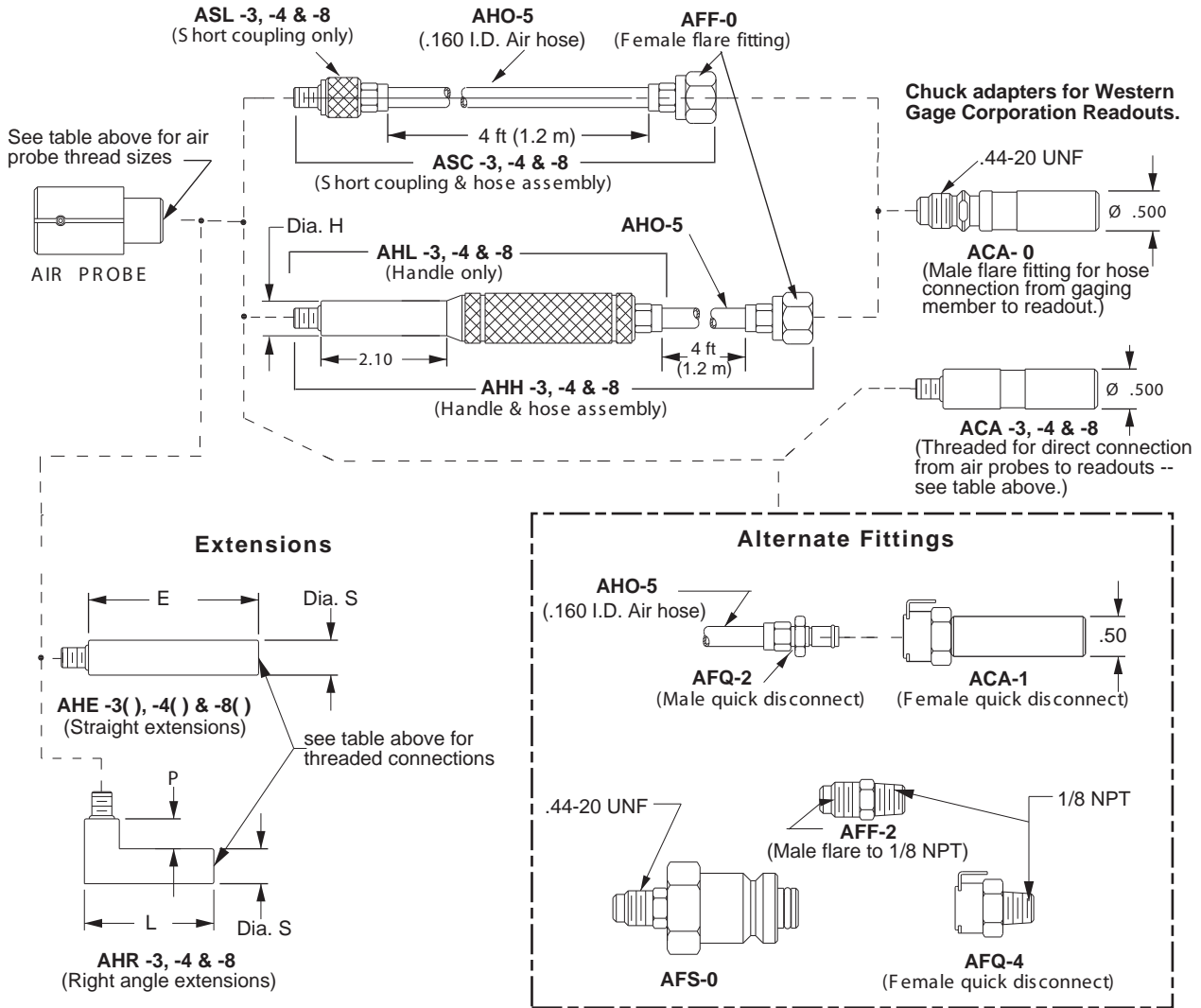
Standard jet diameters (inches / millimeters):

| Size above-incl. | Series # | |
|-----------------------------|---------------|---------------|
| | 10 & 50 | 40 |
| .059 - .073 1.50 - .185 | .018" .046 | NA NA |
| .073 - .120 .185 - 3.05 | .023" .058 | NA NA |
| .120 - .183 3.05 - 4.65 | .042" 1.07 | NA NA |
| .183 - .323 4.65 - 8.20 | .047" 1.19 | NA NA |
| .323 - 9.26 8.20 - 235.4 | .050" 1.27 | .078" 1.98 |

See pages 26 & 27 for more detail on specifying air probes

Accessories for Air Probe - Dual Master - Series 10 thru 50

| AIR GAGE SIZE ABOVE-INCL | DASH NO. | THREAD SIZE | HANDLE Dia. H | (EXTENSION DIMENSIONS) | | | (EXTENSION PART NO.S) | |
|--------------------------|----------|-------------|---------------|------------------------|-------|------|-----------------------|---------------|
| | | | | Dia. S | L | P | DIM E = 4 in. | DIM E = 6 in. |
| .059-.120 | -3 | .19-32 UNF | .287" | .312" | 1.62" | .38" | AHE-34 | AHE-36 |
| .120-.300 | -4 | .25-28 UNF | .437" | .437" | 1.62" | .38" | AHE-44 | AHE-46 |
| .300-.485 | -3 | .19-32 UNF | .287" | .312" | 1.62" | .38" | AHE-34 | AHE-36 |
| .485-.860 | -4 | .25-28 UNF | .437" | .437" | 1.62" | .38" | AHE-44 | AHE-46 |
| .860-UP | -8 | .50-20 UNF | .812" | .750" | 1.75" | .25" | AHE-84 | AHE-86 |



AIR PROBE ACCESSORIES, SERIES 10 THRU 50

AHH-3 Handle & hose -.19-32 UNF
 AHH-4 Handle & hose -.25-28 UNF
 AHH-8 Handle & hose -.50-20 UNF
 AHL-3 Handle only --- .19-32 UNF
 AHL-4 Handle only --- .25-28 UNF
 AHL-8 Handle only --- .50-20 UNF
 ASC-3 Short coupl'g & hose -.19-32 UNF
 ASC-4 Short coupl'g & hose -.25-28 UNF
 ASC-8 Short coupl'g & hose -.50-20 UNF
 ASL-3 Short coupling only -- .19-32 UNF
 ASL-4 Short coupling only -- .25-28 UNF
 ASL-8 Short coupling only -- .50-20 UNF

AHE-34 Extension, 4 in. - .19-32 UNF
 AHE-36 Extension, 6 in. - .19-32 UNF
 AHE-44 Extension, 4 in. - .25-28 UNF
 AHE-46 Extension, 6 in. - .25-28 UNF
 AHE-84 Extension, 4 in. - .50-20 UNF
 AHE-86 Extension, 6 in. - .50-20 UNF
 AHR-3 Rt. Angle adapter-.19-32 UNF
 AHR-4 Rt. Angle adapter-.25-28 UNF
 AHR-8 Rt. Angle adapter-.50-20 UNF

COMPARATOR FITTINGS

ACA-0 Chuck adapter -- male flare
 ACA-1 Chuck adapter, quick disconnect
 ACA-3 Chuck adapter -- .19-32 UNF

ACA-4 Chuck adapter -- .25-28 UNF
 ACA-8 Chuck adapter -- .50-20 UNF
 ACA-9 Chuck adapter, male flare w/bleed
 AFS-0 Set lock adapter, male flare
 AFF-2 Male flare -- 1/8 NPT

REPAIR PARTS

AHO-4 .125 Air hose only
 AHO-5 .160 Air hose only
 AFF-0 Female flare - .160 hose barb
 AOR-3 O-rings for -3 accessories, 10 pcs
 AOR-4 O-rings for -4 accessories, 10 pcs
 AOR-8 O-rings for -8 accessories, 10 pcs
 ACF-10 Chuck Nut & Brass Collet