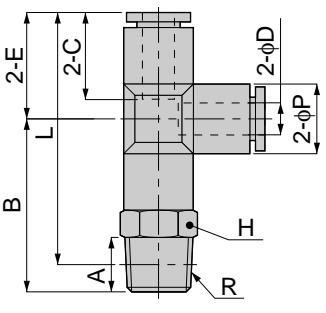




PD

Branch Tee



unit:mm

| Model | Tube dia. φD | R | A | B | L | φP | C | E | H | Mass (g) | Orifice (φmm) | Eff. a. (mm ²) | | |
|------------|--------------|--------|----|------|------|------|------|------|----|----------|---------------|----------------------------|------|------|
| PD 4-M5 | 4 | M5×0.8 | 3 | 20.5 | 34 | 10 | 15 | 17 | 10 | 11.5 | 1.8 | 1.9 | | |
| PD 4-M6 | | M6×1 | 4 | 21.5 | 35 | | | | | 16 | | | | |
| PD 4-01 | | R1/8 | 8 | 23.5 | 36.5 | | | | | 14.5 | | | 3 | 5.3 |
| PD 4-02 | | R1/4 | 11 | 26.5 | 37.5 | | | | | 23.5 | | | | |
| PD 6-M5 | 6 | M5×0.8 | 3 | 23 | 40.5 | 13 | 17 | 20 | 12 | 15.5 | 1.8 | 1.9 | | |
| PD 6-M6 | | M6×1 | 4 | 24 | 41 | | | | | 16 | | | 3 | 6.4 |
| PD 6-01 | | R1/8 | 8 | 26 | 42 | | | | | 17 | | | | |
| PD 6-02 | | R1/4 | 11 | 29 | 43 | | | | | 14 | | | 26 | |
| PD 6-03 | R3/8 | 12 | 31 | 44.5 | 17 | 38.5 | | | | | | | | |
| PD 8-01 | 8 | R1/8 | 8 | 28.5 | 46 | 15 | 18 | 22 | 14 | 22.5 | 6 | 20 | | |
| PD 8-02 | | R1/4 | 11 | 31.5 | 47 | | | | | 28.5 | | | | |
| PD 8-03 | | R3/8 | 12 | 33 | 48.5 | | | | | 17 | | | 41 | |
| PD 10-02 | 10 | R1/4 | 11 | 36 | 56.5 | 17.5 | 20 | 25.5 | 17 | 41.5 | 8 | 35 | | |
| PD 10-03 | | R3/8 | 12 | 37 | 56 | | | | | 50.5 | | | | |
| PD 10-04 | | R1/2 | 15 | 40 | 57.5 | | | | | 72 | | | | |
| PD 12-02 | 12 | R1/4 | 11 | 38 | 60 | 21 | 23.5 | 28 | 21 | 61 | 8 | 35 | | |
| PD 12-03 | | R3/8 | 12 | 39 | 60.5 | | | | | 62.5 | | | 10 | 59 |
| PD 12-04 | | R1/2 | 15 | 42 | 62 | | | | | 77.5 | | | | |
| PD 16-03 | 16 | R3/8 | 12 | 47 | 74.5 | 25 | 24 | 33.5 | 22 | 89.5 | 11 | 79.5 | | |
| PD 16-04 | | R1/2 | 15 | 51 | 76.5 | | | | | 99 | | | 13 | 92.8 |
| PD 1/4-01 | 1/4 | R1/8 | 8 | 26 | 42 | 13 | 17 | 20 | 12 | 17.5 | 4.6 | 12.5 | | |
| PD 1/4-02 | | R1/4 | 11 | 29 | 43 | | | | | 14 | | | 25.5 | |
| PD 1/4-03 | | R3/8 | 12 | 31 | 44.5 | | | | | 17 | | | 39 | |
| PD 5/16-01 | 5/16 | R1/8 | 8 | 28.5 | 46 | 15 | 18 | 22 | 14 | 22.5 | 6 | 20 | | |
| PD 5/16-02 | | R1/4 | 11 | 31.5 | 47 | | | | | 28.5 | | | | |
| PD 5/16-03 | | R3/8 | 12 | 33 | 48.5 | | | | | 17 | | | 41 | |
| PD 3/8-02 | 3/8 | R1/4 | 11 | 36 | 56.5 | 17.5 | 20 | 25.5 | 17 | 42.5 | 8 | 35 | | |
| PD 3/8-03 | | R3/8 | 12 | 37 | 56 | | | | | 51 | | | | |
| PD 3/8-04 | | R1/2 | 15 | 40 | 57.5 | | | | | 72 | | | | |



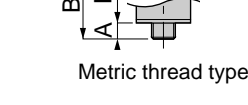
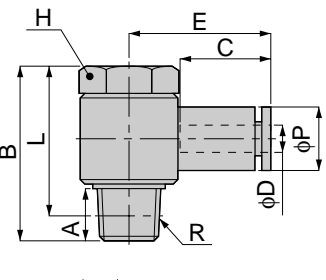
unit:inch

| MODEL | Tube dia. φD | NPT | A | B | L | φP | C | E | H | Weight (g) | Orifice φMM | Eff.a. mm ² | Cv |
|--------------|--------------|----------|------|------|------|------|------|------|-------|------------|-------------|------------------------|------|
| PD 5/32-U10U | 5/32 | 10-32UNF | 0.14 | 0.81 | 0.69 | 0.39 | 0.59 | 0.67 | 7/16 | 10.5 | 1.8 | 1.9 | 0.10 |
| PD 5/32-N1U | 5/32 | 1/8 | 0.31 | 0.93 | 0.77 | 0.39 | 0.59 | 0.67 | 7/16 | 14.0 | 3.0 | 5.3 | 0.29 |
| PD 5/32-N2U | 5/32 | 1/4 | 0.43 | 1.04 | 0.85 | 0.39 | 0.59 | 0.67 | 9/16 | 22.4 | 3.0 | 5.3 | 0.29 |
| PD 3/16-U10U | 3/16 | 10-32UNF | 0.14 | 0.91 | 0.79 | 0.45 | 0.67 | 0.81 | 1/2 | 16.3 | 1.8 | 1.9 | 0.10 |
| PD 3/16-N1U | 3/16 | 1/8 | 0.31 | 1.02 | 0.87 | 0.45 | 0.67 | 0.81 | 1/2 | 18.5 | 4.0 | 6.0 | 0.33 |
| PD 3/16-N2U | 3/16 | 1/4 | 0.43 | 1.14 | 0.91 | 0.45 | 0.67 | 0.81 | 9/16 | 26.1 | 4.0 | 5.6 | 0.30 |
| PD 3/16-N3U | 3/16 | 3/8 | 0.47 | 1.22 | 0.96 | 0.45 | 0.67 | 0.81 | 11/16 | 39.9 | 4.0 | 5.8 | 0.31 |
| PD 1/4-U10U | 1/4 | 10-32UNF | 0.14 | 0.91 | 0.79 | 0.45 | 0.67 | 0.81 | 1/2 | 16.0 | 1.8 | 1.9 | 0.10 |
| PD 1/4-N1U | 1/4 | 1/8 | 0.31 | 1.02 | 0.87 | 0.45 | 0.67 | 0.81 | 1/2 | 18.1 | 4.6 | 12.5 | 0.68 |
| PD 1/4-N2U | 1/4 | 1/4 | 0.43 | 1.14 | 0.91 | 0.45 | 0.67 | 0.81 | 9/16 | 25.7 | 4.6 | 12.5 | 0.68 |
| PD 1/4-N3U | 1/4 | 3/8 | 0.47 | 1.22 | 0.96 | 0.45 | 0.67 | 0.81 | 11/16 | 38.6 | 4.6 | 12.5 | 0.68 |
| PD 5/16-N1U | 5/16 | 1/8 | 0.31 | 1.04 | 0.89 | 0.57 | 0.71 | 0.89 | 9/16 | 23.2 | 6.0 | 20.0 | 1.08 |
| PD 5/16-N2U | 5/16 | 1/4 | 0.43 | 1.46 | 0.93 | 0.57 | 0.71 | 0.89 | 9/16 | 29.0 | 6.0 | 20.0 | 1.08 |
| PD 5/16-N3U | 5/16 | 3/8 | 0.47 | 1.57 | 0.98 | 0.57 | 0.71 | 0.89 | 11/16 | 42.3 | 6.0 | 20.0 | 1.08 |
| PD 3/8-N2U | 3/8 | 1/4 | 0.43 | 1.42 | 1.18 | 0.69 | 0.79 | 1.00 | 11/16 | 42.2 | 6.0 | 28.9 | 1.57 |
| PD 3/8-N3U | 3/8 | 3/8 | 0.47 | 1.46 | 1.20 | 0.69 | 0.79 | 1.00 | 11/16 | 50.6 | 8.0 | 29.7 | 1.61 |
| PD 3/8-N4U | 3/8 | 1/2 | 0.59 | 1.57 | 1.26 | 0.69 | 0.79 | 1.00 | 7/8 | 73.5 | 8.0 | 28.5 | 1.54 |
| PD 1/2-N2U | 1/2 | 1/4 | 0.43 | 1.50 | 1.26 | 0.83 | 0.93 | 1.10 | 7/8 | 61.8 | 8.0 | 35.0 | 1.90 |
| PD 1/2-N3U | 1/2 | 3/8 | 0.47 | 1.54 | 1.28 | 0.83 | 0.93 | 1.10 | 7/8 | 62.7 | 10.0 | 59.0 | 3.20 |
| PD 1/2-N4U | 1/2 | 1/2 | 0.59 | 1.65 | 1.34 | 0.83 | 0.93 | 1.10 | 7/8 | 76.6 | 10.0 | 59.0 | 3.20 |



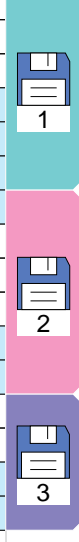
PH

Universal Elbow



unit:mm

| Model | Tube dia. φD | R | A | B | L | φP | C | E | H | Mass (g) | Orifice (φmm) | Eff. a. (mm ²) | | | | |
|------------|--------------|--------|----|------|------|------|------|------|----|----------|---------------|----------------------------|------|------|------|------|
| PH 4-M5 | 4 | M5×0.8 | 3 | 17 | 14 | 10 | 15 | 21.5 | 8 | 7.5 | 1.8 | 2 | | | | |
| PH 4-M6 | | M6×1 | | 18 | 15 | | | | | | 3 | 3.4 | | | | |
| PH 4-01 | | R1/8 | | 8 | 27 | | | | | | 23 | 4 | 4.6 | | | |
| PH 6-M5 | 6 | M5×0.8 | 4 | 17 | 13 | 12.5 | 17 | 23.5 | 8 | 8.5 | 1.8 | 1.9 | | | | |
| PH 6-M6 | | M6×1 | | 18 | 14 | | | | | | 21 | 3 | 3.3 | | | |
| PH 6-01 | | R1/8 | | 8 | 27 | | | | | | 23 | 24.5 | 14 | 35.5 | 4 | 10.9 |
| PH 6-02 | | R1/4 | | 11 | 31.5 | | | | | | 25.5 | 27 | 17 | 32.5 | 4.6 | 11.6 |
| PH 8-01 | 8 | R1/8 | 8 | 27 | 23 | 14.5 | 18 | 26.5 | 14 | 37 | 4 | 14.9 | | | | |
| PH 8-02 | | R1/4 | 11 | 31.5 | 25.5 | | | | | | 28.5 | 17 | 59.5 | 5.1 | 19.7 | |
| PH 8-03 | | R3/8 | 12 | 36 | 29.5 | | | | | | 30.5 | 21 | 54.5 | 6 | 21.4 | |
| PH 10-02 | 10 | R1/4 | 11 | 31.5 | 25.5 | 17.5 | 20 | 30.5 | 17 | 62.5 | 5.1 | 23.1 | | | | |
| PH 10-03 | | R3/8 | 12 | 36 | 29.5 | | | | | | 32.5 | 21 | 66 | 6.6 | 31.5 | |
| PH 12-03 | 12 | R3/8 | 12 | 36 | 29.5 | 21 | 23.5 | 35.5 | 21 | 97.5 | 6.6 | 39.7 | | | | |
| PH 12-04 | | R1/2 | 15 | 40 | 32 | | | | | | 38.5 | 24 | 100 | 8 | 49.8 | |
| PH 16-03 | 16 | R3/8 | 12 | 46 | 39.5 | 25 | 24 | 37 | 24 | 106 | 6.6 | 64.2 | | | | |
| PH 16-04 | | R1/2 | 15 | 48.5 | 40.5 | | | | | | 21 | 8 | 62.1 | | | |
| PH 1/4-01 | 1/4 | R1/8 | 8 | 27 | 23 | 12.5 | 17 | 24.5 | 14 | 35.5 | 4 | 10.9 | | | | |
| PH 1/4-02 | | R1/4 | 11 | 31.5 | 25.5 | | | | | | 27 | 17 | 32.5 | 4.6 | 11.6 | |
| PH 5/16-01 | 5/16 | R1/8 | 8 | 27 | 23 | 14.5 | 18 | 26 | 14 | 37 | 4 | 14.9 | | | | |
| PH 5/16-02 | | R1/4 | 11 | 31.5 | 25.5 | | | | | | 28.5 | 17 | 59.5 | 5.1 | 19.7 | |
| PH 5/16-03 | | R3/8 | 12 | 36 | 29.5 | | | | | | 30 | 21 | 54.5 | 6 | 21.4 | |
| PH 3/8-02 | 3/8 | R1/4 | 11 | 31.5 | 25.5 | 17.5 | 20 | 30.5 | 17 | 62.5 | 5.1 | 23.1 | | | | |
| PH 3/8-03 | | R3/8 | 12 | 36 | 29.5 | | | | | | 32.5 | 21 | 66 | 6.6 | 31.5 | |



unit:inch

| MODEL | Tube dia. φD | NPT | A | B | L | φP | C | E | H | Weight (g) | Orifice φMM | Eff.a. mm ² | Cv |
|--------------|--------------|----------|------|------|------|------|------|------|-------|------------|-------------|------------------------|------|
| PH 5/32-U10U | 5/32 | 10-32UNF | 0.14 | 0.67 | 0.22 | 0.39 | 0.59 | 0.85 | 5/16 | 7.3 | 1.8 | 2.0 | 0.11 |
| PH 5/32-N1U | 5/32 | 1/8 | 0.31 | 1.06 | 0.47 | 0.39 | 0.59 | 0.89 | 6/16 | 20.6 | 3.0 | 4.6 | 0.25 |
| PH 3/16-U10U | 3/16 | 10-32UNF | 0.18 | 0.67 | 0.22 | 0.49 | 0.67 | 0.93 | 5/16 | 8.3 | 1.8 | 1.9 | 0.10 |
| PH 3/16-N1U | 3/16 | 1/8 | 0.31 | 1.06 | 0.47 | 0.49 | 0.67 | 0.94 | 9/16 | 21.6 | 4.0 | 5.9 | 0.32 |
| PH 3/16-N2U | 3/16 | 1/4 | 0.43 | 1.24 | 0.53 | 0.49 | 0.67 | 1.06 | 11/16 | 36.5 | 4.0 | 6.7 | 0.36 |
| PH 1/4-U10U | 1/4 | 10-32UNF | 0.18 | 0.67 | 0.22 | 0.49 | 0.67 | 0.93 | 5/16 | 8.1 | 1.8 | 1.9 | 0.10 |
| PH 1/4-N1U | 1/4 | 1/8 | 0.31 | 1.06 | 0.47 | 0.49 | 0.67 | 0.94 | 9/16 | 21.3 | 4.0 | 10.5 | 0.57 |
| PH 1/4-N2U | 1/4 | 1/4 | 0.43 | 1.24 | 0.53 | 0.49 | 0.67 | 1.06 | 11/16 | 36.2 | 4.0 | 12.4 | 0.67 |
| PH 5/16-N1U | 5/16 | 1/8 | 0.31 | 1.06 | 0.47 | 0.57 | 0.71 | 1.02 | 9/16 | 22.6 | 5.5 | 14.9 | 0.81 |
| PH 5/16-N2U | 5/16 | 1/4 | 0.43 | 1.24 | 0.53 | 0.57 | 0.71 | 1.12 | 11/16 | 37.5 | 6.0 | 19.7 | 1.07 |
| PH 5/16-N3U | 5/16 | 3/8 | 0.47 | 1.42 | 0.61 | 0.57 | 0.71 | 1.20 | 7/8 | 61.6 | 6.0 | 21.4 | 1.16 |
| PH 3/8-N2U | 3/8 | 1/4 | 0.43 | 1.24 | 0.57 | 0.69 | 0.79 | 1.20 | 9/16 | 42.0 | 6.8 | 19.5 | 1.06 |
| PH 3/8-N3U | 3/8 | 3/8 | 0.47 | 1.42 | 0.61 | 0.69 | 0.79 | 1.30 | 7/8 | 67.9 | 8.0 | 25.5 | 1.38 |
| PH 1/2-N3U | 1/2 | 3/8 | 0.47 | 1.42 | 0.61 | 0.83 | 0.93 | 1.38 | 7/8 | 67.0 | 9.2 | 39.7 | 2.15 |
| PH 1/2-N4U | 1/2 | 1/2 | 0.59 | 1.59 | 0.65 | 0.83 | 0.93 | 1.50 | 1 | 99.0 | 10.0 | 49.8 | 2.70 |