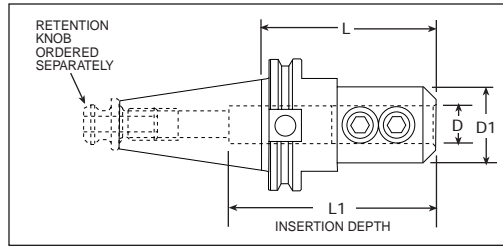


CAT (V-Flange) END MILL HOLDERS



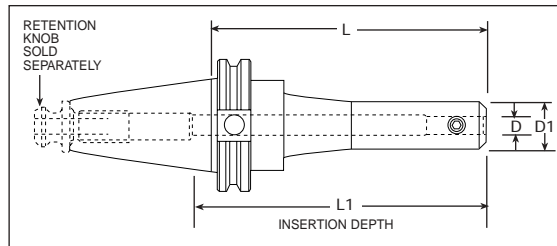
CAT (V-Flange)

|                           | Part No.            | D      | D1   | L    | L1   | Ret. Knob Thread |
|---------------------------|---------------------|--------|------|------|------|------------------|
| <b>CAT 40</b> STUB LENGTH | SC40SE0500          | 0.5000 | 1.75 | 1.75 | 3.18 | 5/8 - 11         |
|                           | SC40SE0625          | 0.6250 | 1.75 | 1.75 | 3.18 | 5/8 - 11         |
|                           | SC40SE0750          | 0.7500 | 1.75 | 1.75 | 2.35 | 5/8 - 11         |
|                           | SC40SE1000          | 1.0000 | 1.75 | 1.75 | 2.35 | 5/8 - 11         |
|                           | SC40SE1250          | 1.2500 | 2.25 | 2.00 | 2.35 | 5/8 - 11         |
| STANDARD LENGTH           | SC40E0125 w/bushing | 0.1250 | 1.00 | 3.00 | 3.60 | 5/8 - 11         |
|                           | SC40E0187           | 0.1875 | 1.00 | 2.50 | 3.60 | 5/8 - 11         |
|                           | SC40E0250           | 0.2500 | 1.00 | 2.50 | 3.60 | 5/8 - 11         |
|                           | SC40E0312           | 0.3125 | 1.00 | 2.50 | 3.60 | 5/8 - 11         |
|                           | SC40E0375           | 0.3750 | 1.00 | 2.50 | 3.80 | 5/8 - 11         |
|                           | SC40E0437           | 0.4375 | 1.25 | 2.62 | 3.80 | 5/8 - 11         |
|                           | SC40E0500           | 0.5000 | 1.25 | 2.62 | 3.80 | 5/8 - 11         |
|                           | SC40E0625           | 0.6250 | 1.50 | 3.75 | 3.80 | 5/8 - 11         |
|                           | SC40E0750           | 0.7500 | 1.87 | 3.75 | 3.94 | 5/8 - 11         |
|                           | SC40E0875           | 0.8750 | 2.00 | 4.00 | 4.25 | 5/8 - 11         |
|                           | SC40E1000           | 1.0000 | 2.00 | 4.00 | 4.50 | 5/8 - 11         |
|                           | SC40E1250           | 1.2500 | 2.50 | 4.25 | 2.31 | 5/8 - 11         |
|                           | SC40E1500           | 1.5000 | 2.62 | 4.62 | 2.50 | 5/8 - 11         |
| EXTENDED LENGTH           | SC40EE0187          | 0.1875 | 1.00 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0250          | 0.2500 | 1.00 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0375          | 0.3750 | 1.25 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0500          | 0.5000 | 1.50 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0625          | 0.6250 | 1.75 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0750          | 0.7500 | 2.00 | 6.00 | 3.80 | 5/8 - 11         |
|                           | SC40EE0875          | 0.8750 | 2.00 | 6.00 | 4.25 | 5/8 - 11         |
|                           | SC40EE1000          | 1.0000 | 2.00 | 6.00 | 4.50 | 5/8 - 11         |
|                           | SC40EE1250          | 1.2500 | 2.50 | 6.00 | 2.31 | 5/8 - 11         |

NOTE: Holders balanced to 22,000 RPM available upon request.

## CAT (V-Flange) END MILL HOLDERS

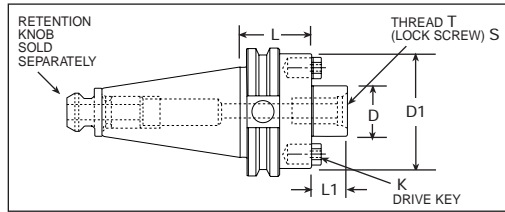
CAT (V-Flange)



|                       | Part No.    | D      | D1   | L    | L1     | Ret. Knob Thread |
|-----------------------|-------------|--------|------|------|--------|------------------|
| CAT 50 STUB LENGTH    | SC50SE0625  | 0.6250 | 1.75 | 2.06 | 4.50   | 1" - 8           |
|                       | SC50SE0750  | 0.7500 | 1.75 | 2.06 | 4.50   | 1" - 8           |
|                       | SC50SE1000  | 1.0000 | 2.00 | 2.25 | 4.50   | 1" - 8           |
|                       | SC50SE1250  | 1.2500 | 2.50 | 2.25 | 2.75   | 1" - 8           |
|                       | SC50SE1500  | 1.5000 | 2.62 | 2.75 | 2.75   | 1" - 8           |
| STANDARD LENGTH       | SC50E0187   | 0.1875 | 0.68 | 2.50 | 3.80   | 1" - 8           |
|                       | SC50E0250   | 0.2500 | 0.75 | 2.50 | 3.80   | 1" - 8           |
|                       | SC50E0312   | 0.3125 | 0.75 | 2.50 | 3.80   | 1" - 8           |
|                       | SC50E0375   | 0.3750 | 1.00 | 2.50 | 4.00   | 1" - 8           |
|                       | SC50E0437   | 0.4375 | 1.25 | 2.50 | 4.00   | 1" - 8           |
|                       | SC50E0500   | 0.5000 | 1.38 | 2.62 | 5.00   | 1" - 8           |
|                       | SC50E0625   | 0.6250 | 1.50 | 3.75 | 6.00   | 1" - 8           |
|                       | SC50E0750   | 0.7500 | 1.75 | 3.75 | 4.00   | 1" - 8           |
|                       | SC50E0875   | 0.8750 | 2.00 | 3.75 | 4.31   | 1" - 8           |
|                       | SC50E1000   | 1.0000 | 2.00 | 4.00 | 4.50   | 1" - 8           |
|                       | SC50E1250   | 1.2500 | 2.50 | 4.00 | 2.75   | 1" - 8           |
|                       | SC50E1500   | 1.5000 | 2.75 | 4.00 | 3.50   | 1" - 8           |
| SC50E2000             | 2.0000      | 3.75   | 5.62 | 3.50 | 1" - 8 |                  |
| EXTENDED LENGTH       | SC50EE0187  | 0.1875 | 0.68 | 4.50 | 7.00   | 1" - 8           |
|                       | SC50EE0250  | 0.2500 | 0.75 | 4.50 | 7.00   | 1" - 8           |
|                       | SC50EE0312  | 0.3125 | 0.75 | 4.50 | 7.00   | 1" - 8           |
|                       | SC50EE0375  | 0.3750 | 1.00 | 4.50 | 7.00   | 1" - 8           |
|                       | SC50EE0437  | 0.4375 | 1.25 | 4.50 | 7.00   | 1" - 8           |
|                       | SC50EE0500  | 0.5000 | 1.38 | 4.62 | 7.00   | 1" - 8           |
|                       | SC50EE0625  | 0.6250 | 1.50 | 5.75 | 8.00   | 1" - 8           |
|                       | SC50EE0750  | 0.7500 | 1.75 | 5.75 | 4.31   | 1" - 8           |
|                       | SC50EE0875  | 0.8750 | 1.87 | 5.75 | 4.31   | 1" - 8           |
|                       | SC50EE1000  | 1.0000 | 2.00 | 6.00 | 4.50   | 1" - 8           |
|                       | SC50EE1250  | 1.2500 | 2.50 | 6.00 | 2.75   | 1" - 8           |
|                       | SC50EE1500  | 1.5000 | 2.75 | 6.00 | 3.50   | 1" - 8           |
| SC50EE2000            | 2.0000      | 3.75   | 7.62 | 3.50 | 1" - 8 |                  |
| EXTRA EXTENDED LENGTH | SC50EXE0187 | 0.1875 | 0.68 | 6.50 | 9.00   | 1" - 8           |
|                       | SC50EXE0250 | 0.2500 | 0.75 | 6.50 | 9.00   | 1" - 8           |
|                       | SC50EXE0312 | 0.3125 | 0.75 | 6.50 | 9.00   | 1" - 8           |
|                       | SC50EXE0375 | 0.3750 | 1.00 | 6.50 | 9.00   | 1" - 8           |
|                       | SC50EXE0437 | 0.4375 | 1.25 | 6.50 | 9.00   | 1" - 8           |
|                       | SC50EXE0500 | 0.5000 | 1.38 | 6.62 | 9.00   | 1" - 8           |
|                       | SC50EXE0625 | 0.6250 | 1.50 | 7.75 | 10.00  | 1" - 8           |
|                       | SC50EXE0750 | 0.7500 | 1.75 | 7.75 | 10.00  | 1" - 8           |
|                       | SC50EXE0875 | 0.8750 | 1.87 | 7.75 | 4.31   | 1" - 8           |
|                       | SC50EXE1000 | 1.0000 | 2.00 | 8.00 | 4.50   | 1" - 8           |
|                       | SC50EXE1250 | 1.2500 | 2.50 | 8.00 | 2.75   | 1" - 8           |
|                       | SC50EXE1500 | 1.5000 | 2.75 | 8.00 | 3.50   | 1" - 8           |
| SC50EXE2000           | 2.0000      | 3.75   | 9.62 | 3.50 | 1" - 8 |                  |

NOTE: Holders balanced to 22,000 RPM available upon request.

CAT (V-Flange) SHELL MILL HOLDERS



CAT (V-Flange)

CAT 40

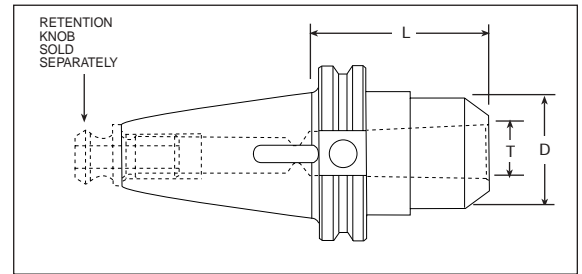
| Part No.   | D     | D1   | L     | L1   | K    | T        | S     |
|------------|-------|------|-------|------|------|----------|-------|
| C40SM0750  | 0.750 | 1.75 | 1.375 | 0.68 | 0.31 | 3/8 - 24 | C5002 |
| C40SME0750 | 0.750 | 1.75 | 4.000 | 0.68 | 0.31 | 3/8 - 24 | C5002 |
| C40SM1000  | 1.000 | 2.19 | 2.062 | 0.68 | 0.38 | 1/2 - 20 | C5003 |
| C40SME1000 | 1.000 | 2.19 | 4.000 | 0.68 | 0.38 | 1/2 - 20 | C5003 |
| C40SM1250  | 1.250 | 2.88 | 2.125 | 0.68 | 0.50 | 5/8 - 18 | C5004 |
| C40SME1250 | 1.250 | 2.88 | 4.000 | 0.68 | 0.50 | 5/8 - 18 | C5004 |
| C40SM1500  | 1.500 | 3.81 | 2.406 | 0.94 | 0.62 | 3/4 - 18 | C5005 |
| C40SME1500 | 1.500 | 3.81 | 4.000 | 0.94 | 0.62 | 3/4 - 18 | C5005 |

CAT 50

| Part No.    | D     | D1    | L    | L1    | K    | T        | S     |
|-------------|-------|-------|------|-------|------|----------|-------|
| C50SM0750   | 0.750 | 1.750 | 1.50 | 0.680 | 0.31 | 3/8 - 24 | C5002 |
| C50SME0750  | 0.750 | 1.750 | 3.50 | 0.680 | 0.31 | 3/8 - 24 | C5002 |
| C50SMEX0750 | 0.750 | 1.750 | 5.50 | 0.680 | 0.31 | 3/8 - 24 | C5002 |
| C50SM1000   | 1.000 | 2.750 | 2.00 | 0.680 | 0.38 | 1/2 - 20 | C5003 |
| C50SME1000  | 1.000 | 2.750 | 4.00 | 0.680 | 0.38 | 1/2 - 20 | C5003 |
| C50SMEX1000 | 1.000 | 2.750 | 6.00 | 0.680 | 0.38 | 1/2 - 20 | C5003 |
| C50SM1250   | 1.250 | 2.880 | 1.50 | 0.680 | 0.50 | 5/8 - 18 | C5004 |
| C50SME1250  | 1.250 | 2.880 | 3.50 | 0.680 | 0.50 | 5/8 - 18 | C5004 |
| C50SMEX1250 | 1.250 | 2.880 | 5.50 | 0.680 | 0.50 | 5/8 - 18 | C5004 |
| C50SM1500   | 1.500 | 3.810 | 2.40 | 0.930 | 0.62 | 3/4 - 16 | C5005 |
| C50SME1500  | 1.500 | 3.810 | 4.00 | 0.930 | 0.62 | 3/4 - 16 | C5005 |
| C50SMEX1500 | 1.500 | 3.810 | 6.00 | 0.930 | 0.62 | 3/4 - 16 | C5005 |
| C50SM2000   | 2.000 | 4.875 | 2.40 | 0.930 | 0.75 | 1" - 14  | C5006 |
| C50SME2000  | 2.000 | 4.875 | 4.00 | 0.930 | 0.75 | 1" - 14  | C5006 |
| C50SMEX2000 | 2.000 | 4.875 | 6.00 | 0.930 | 0.75 | 1" - 14  | C5006 |
| C50SM2500   | 2.500 | 4.875 | 2.40 | 1.125 | 1.00 | 1" - 14  | C5006 |
| C50SME2500  | 2.500 | 4.875 | 4.00 | 1.125 | 1.00 | 1" - 14  | C5006 |
| C50SMEX2500 | 2.500 | 4.875 | 6.00 | 1.125 | 1.00 | 1" - 14  | C5006 |

## CAT (V-Flange) MORSE TAPER ADAPTERS

CAT (V-Flange)



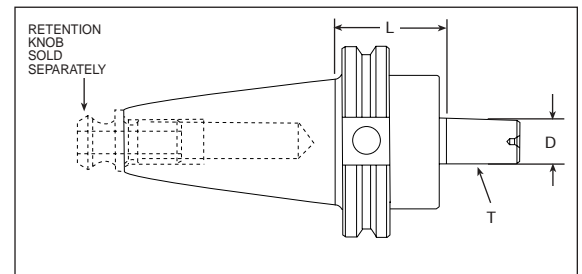
## CAT 40

| Part No. | T<br>Taper | D    | L    |
|----------|------------|------|------|
| C40MT1   | 1          | 1.00 | 1.75 |
| C40MT2   | 2          | 1.25 | 2.44 |
| C40MT3   | 3          | 3.00 | 3.00 |
| C40MT4   | 4          | 3.75 | 3.75 |

## CAT 50

| Part No. | T<br>Taper | D    | L    |
|----------|------------|------|------|
| C50MT2   | 2          | 1.25 | 2.00 |
| C50MT3   | 3          | 1.62 | 2.50 |
| C50MT4   | 4          | 2.20 | 3.38 |
| C50MT5   | 5          | 2.75 | 3.75 |

## CAT (V-Flange) JACOBS TAPER ADAPTERS



## CAT 40

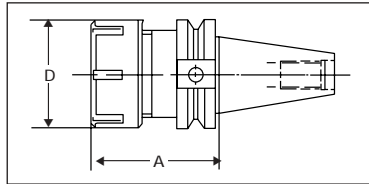
| Part No. | T<br>Taper | D     | L     |
|----------|------------|-------|-------|
| C40JT2   | 2          | 0.559 | 1.375 |
| C40JT3   | 3          | 0.811 | 1.375 |
| C40JT4   | 4          | 1.120 | 1.375 |
| C40JT6   | 6          | 0.676 | 1.375 |
| C40JT33  | 33         | 0.624 | 1.375 |

## CAT 50

| Part No. | T<br>Taper | D     | L     |
|----------|------------|-------|-------|
| C50JT2   | 2          | 0.559 | 1.375 |
| C50JT3   | 3          | 0.811 | 1.375 |
| C50JT4   | 4          | 1.120 | 1.375 |
| C50JT6   | 6          | 0.676 | 1.375 |
| C50JT33  | 33         | 0.624 | 1.375 |

CAT (V-Flange) RD/ER COLLET CHUCKS

STANDARD LENGTH

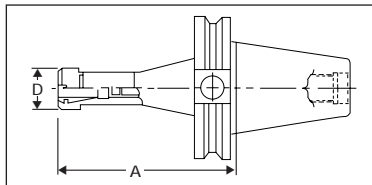


Retention knob sold separately.



|       | Part No. | Taper  | A     |       | D     |       | Ret. Knob Threading | Nut Style/Part No. | Wrench Part No. |
|-------|----------|--------|-------|-------|-------|-------|---------------------|--------------------|-----------------|
|       |          |        | (mm.) | (in.) | (mm.) | (in.) |                     |                    |                 |
| RD 11 | C40RD11  | CAT 40 | 76    | 3.00  | 16    | 0.63  | 5/8-11              | M-30011            | 22011           |
| RD 16 | 654016   | CAT 40 | 70    | 2.76  | 28    | 1.10  | 5/8-11              | H-30116            | 22325           |
|       | 654016M  | CAT 40 | 70    | 2.76  | 22    | 0.87  | 5/8-11              | M-30016            | 22016           |
|       | C40RD16  | CAT 40 | 64    | 2.50  | 32    | 1.36  | 5/8-11              | E-30126            | 22116           |
|       | C50RD16  | CAT 50 | 102   | 4.00  | 32    | 1.36  | 1-8                 | E-30126            | 22116           |
| RD 20 | 654020   | CAT 40 | 70    | 2.76  | 34    | 1.34  | 5/8-11              | H-30120            | 22330           |
|       | C40RD20  | CAT 40 | 76    | 3.00  | 35    | 1.38  | 5/8-11              | E-30127            | 22120           |
| RD 25 | 654025   | CAT 40 | 70    | 2.76  | 42    | 1.65  | 5/8-11              | E-30125            | 22125           |
|       | C40RD25  | CAT 40 | 64    | 2.50  | 42    | 1.65  | 5/8-11              | E-30125            | 22125           |
|       | 664625   | CAT 45 | 70    | 2.76  | 42    | 1.65  | 3/4-10              | E-30125            | 22125           |
|       | 674025   | CAT 50 | 90    | 3.54  | 42    | 1.65  | 1-8                 | E-30125            | 22125           |
| RD 32 | C50RD25  | CAT 50 | 102   | 4.00  | 42    | 1.65  | 1-8                 | E-30125            | 22125           |
|       | 654802   | CAT 40 | 70    | 2.76  | 50    | 1.97  | 5/8-11              | E-30132            | 22132           |
|       | C40RD32  | CAT 40 | 76    | 3.00  | 50    | 1.97  | 5/8-11              | E-30132            | 22132           |
| RD 40 | 674801   | CAT 50 | 100   | 3.94  | 50    | 1.97  | 1-8                 | E-30132            | 22132           |
|       | 654803   | CAT 40 | 80    | 3.15  | 63    | 2.48  | 5/8-11              | E-30140            | 22140           |
|       | 675650   | CAT 40 | 76    | 3.00  | 63    | 2.48  | 5/8-11              | E-30140            | 22140           |
|       | 664851   | CAT 45 | 80    | 3.15  | 63    | 2.48  | 3/4-10              | E-30140            | 22140           |
| RD 50 | 674803   | CAT 50 | 100   | 3.94  | 63    | 2.48  | 1-8                 | E-30140            | 22140           |
|       | 664852   | CAT 45 | 80    | 3.15  | 78    | 3.07  | 3/4-10              | E-30150            | 22150           |

EXTENDED LENGTH



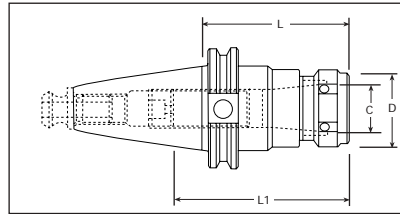
Retention knob sold separately.



|       | Part No.  | Taper  | A     |       | D     |       | Ret. Knob Threading | Nut Style/Part No. | Wrench Part No. |
|-------|-----------|--------|-------|-------|-------|-------|---------------------|--------------------|-----------------|
|       |           |        | (mm.) | (in.) | (mm.) | (in.) |                     |                    |                 |
| RD 16 | 624516    | CAT 30 | 120   | 4.73  | 22    | 0.87  | 1/2-13              | M-30016            | 22016           |
|       | 654516    | CAT 40 | 125   | 4.93  | 22    | 0.87  | 5/8-11              | M-30016            | 22016           |
|       | C40RDE16  | CAT 40 | 127   | 5.00  | 32    | 1.36  | 5/8-11              | H-30116            | 22325           |
|       | 664516    | CAT 45 | 125   | 4.93  | 22    | 0.87  | 3/4-10              | M-30016            | 22016           |
|       | 674516    | CAT 50 | 125   | 4.93  | 22    | 0.87  | 1-8                 | M-30016            | 22016           |
| RD 20 | C50RDEX16 | CAT 50 | 178   | 7.00  | 32    | 1.36  | 1-8                 | H-30116            | 22325           |
|       | 654520    | CAT 40 | 135   | 5.32  | 28    | 1.10  | 5/8-11              | M-30020            | 22020           |
|       | C40RDE20  | CAT 40 | 102   | 4.00  | 35    | 1.38  | 5/8-11              | H-30120            | 22330           |
|       | C40RDEX20 | CAT 40 | 134   | 5.25  | 35    | 1.38  | 5/8-11              | H-30120            | 22330           |
|       | 664520    | CAT 45 | 135   | 5.32  | 28    | 1.10  | 3/4-10              | M-30020            | 22020           |
|       | 674520    | CAT 50 | 135   | 5.32  | 28    | 1.10  | 1-8                 | M-30020            | 22020           |
| RD 25 | 650025    | CAT 40 | 100   | 3.94  | 35    | 1.38  | 5/8-11              | M-30025            | 22025           |
|       | 654525    | CAT 40 | 150   | 5.91  | 35    | 1.38  | 5/8-11              | M-30025            | 22025           |
|       | C40RDE25  | CAT 40 | 102   | 4.00  | 42    | 1.65  | 5/8-11              | E-30125            | 22125           |
|       | C40RDEX25 | CAT 40 | 153   | 6.00  | 42    | 1.65  | 5/8-11              | E-30125            | 22125           |
|       | 664525    | CAT 45 | 150   | 5.91  | 35    | 1.38  | 3/4-10              | M-30025            | 22025           |
| RD 32 | C50RDE25  | CAT 50 | 153   | 6.00  | 42    | 1.65  | 1-8                 | E-30125            | 22125           |
|       | C40RDE32  | CAT 40 | 102   | 4.00  | 50    | 1.97  | 5/8-11              | E-30132            | 22132           |
|       | C40RDEX32 | CAT 40 | 153   | 6.00  | 50    | 1.97  | 5/8-11              | E-30132            | 22132           |
| RD 40 | 674802    | CAT 50 | 160   | 6.30  | 50    | 1.97  | 1-8                 | E-30132            | 22132           |
|       | 654804    | CAT 40 | 153   | 6.00  | 63    | 2.48  | 5/8-11              | E-30140            | 22140           |
|       | 674804    | CAT 50 | 160   | 6.30  | 63    | 2.48  | 1-8                 | E-30140            | 22140           |
| RD 50 | 674805    | CAT 50 | 100   | 3.94  | 78    | 3.07  | 1-8                 | E-30150            | 22150           |

Balanced to 22,000 RPM upon request. Wrenches are sold separately.

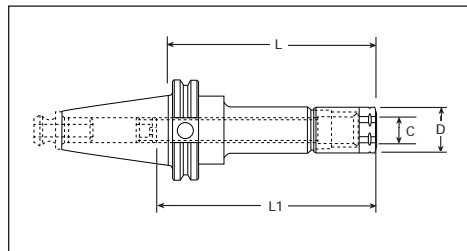
## CAT (V-Flange) RDG/TG COLLETS



Retention knob  
sold separately.

|        | Part No.      | Collet Series | C Capacity | D    | L    | L1   | Nut     |
|--------|---------------|---------------|------------|------|------|------|---------|
| CAT 40 | C40RDG075     | RDG75         | 3/4"       | 2.10 | 2.75 | 3.31 | RDG075H |
|        | C40RDG100     | RDG100        | 1"         | 2.44 | 3.00 | 3.68 | RDG100E |
|        | C40RDG150     | RDG150        | 1-1/2"     | 3.25 | 4.88 | 5.56 | RDG150S |
|        | C40RDGEX100   | RDG100        | 1"         | 2.44 | 4.00 | 4.68 | RDG100E |
|        | C40RDGEEEX100 | RDG100        | 1"         | 2.44 | 5.50 | 5.68 | RDG100E |
|        | C40RDGEEEX100 | RDG100        | 1"         | 2.44 | 6.50 | 7.18 | RDG100E |
| CAT 50 | C50RDG100     | RDG100        | 1"         | 2.44 | 3.00 | 4.50 | RDG100E |
|        | C50RDGEX100   | RDG100        | 1"         | 2.44 | 5.50 | 7.00 | RDG100E |
|        | C50RDGEEEX100 | RDG100        | 1"         | 2.44 | 7.50 | 9.00 | RDG100E |
|        | C50RDG150     | RDG150        | 1-1/2"     | 3.43 | 3.00 | 4.50 | RDG150S |

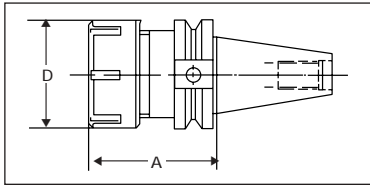
## CAT (V-Flange) RDA/DA COLLET CHUCKS



Retention knob  
sold separately.

|        | Part No.   | Collet Series | C Capacity | D     | L    | L1   | Nut   |
|--------|------------|---------------|------------|-------|------|------|-------|
| CAT 40 | C40RDA100  | RDA100        | 9/16"      | 1.06  | 3.00 | 3.00 | 20100 |
|        | C40RDA180  | RDA180        | 3/4"       | 1.42  | 3.00 | 2.75 | 20180 |
|        | C40RDAE180 | RDA180        | 3/4"       | 1.42  | 5.00 | 2.75 | 20180 |
|        | C40RDA200  | RDA200        | 3/8"       | 1.125 | 3.00 | 3.00 | 20200 |
|        | C40RDAE200 | RDA200        | 3/8"       | 1.125 | 5.00 | 3.00 | 20200 |
|        | C40RDA300  | RDA300        | 1/4"       | 0.81  | 3.00 | 3.82 | 20300 |
| CAT 50 | C50RDA100  | RDA100        | 9/16"      | 1.06  | 3.00 | 3.00 | 20180 |
|        | C50RDAE100 | RDA100        | 9/16"      | 1.06  | 6.00 | 3.00 | 20100 |
|        | C50RDA180  | RDA180        | 3/4"       | 1.44  | 3.00 | 4.04 | 20180 |
|        | C50RDAE180 | RDA180        | 3/4"       | 1.44  | 6.00 | 4.04 | 20180 |

CAT (V-Flange) RDF/AF COLLET CHUCKS



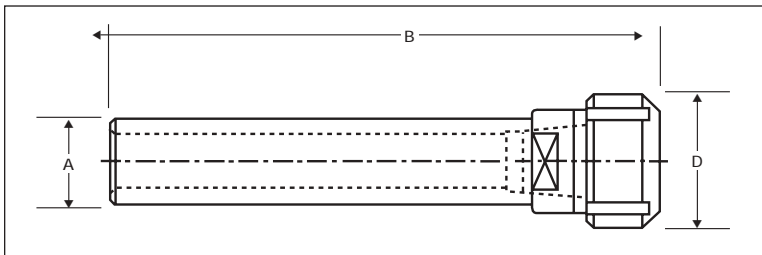
Retention knob sold separately.



CAT (V-Flange)

|        | Part No.   | Collet Type | A (in.) | D (in.) | Ret. Knob Threading | Nut Part No. | Wrench Part No. |
|--------|------------|-------------|---------|---------|---------------------|--------------|-----------------|
| CAT 40 | C40RDF075  | RDF 75      | 2.72    | 1.94    | 5/8-11              | C9400005     | 22132           |
|        | C40RDF100  | RDF 100     | 3.00    | 2.48    | 5/8-11              | C940021      | 22140           |
| CAT 45 | C45RDF100  | RDF 100     | 3.88    | 2.48    | 3/4-10              | C940021      | 22140           |
|        | C45RDFE100 | RDF 100     | 6.00    | 2.48    | 3/4-10              | C940021      | 22140           |
| CAT 50 | C50RDF100  | RDF 100     | 3.00    | 2.48    | 1-8                 | C940021      | 22140           |
|        | C50RDFE100 | RDF 100     | 6.00    | 2.48    | 1-8                 | C940021      | 22140           |

RDF/AF COLLET EXTENSIONS

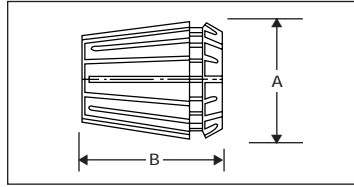


| Part No. | Collet Type | A (in.) | B (in.) | D (in.) | Nut Part No. | Wrench Part No. |
|----------|-------------|---------|---------|---------|--------------|-----------------|
| RDF90525 | RDF 25      | 0.50    | 7.00    | 0.73    | C9400022     |                 |
| RDF90538 | RDF 38      | 0.75    | 7.00    | 1.08    | 9400002      |                 |
| RDF90750 | RDF 50      | 0.75    | 7.50    | 1.34    | 19400020     | 22132           |
| RDF90375 | RDF 75      | 1.00    | 7.00    | 1.96    | 900005       | 22140           |

NOTE: Please see *Centaur 2000 Precision Tooling* catalog for collets.

RD/ER COLLET SYSTEMS

Collet Systems



Collet Dimensions

| Series | A                    | B                  |
|--------|----------------------|--------------------|
| 11     | 11.5 mm. (0.453 in.) | 18 mm. (0.709 in.) |
| 16     | 17 mm. (0.669 in.)   | 27 mm. (1.063 in.) |
| 20     | 21 mm. (0.827 in.)   | 31 mm. (1.220 in.) |
| 25     | 26 mm. (1.024 in.)   | 35 mm. (1.378 in.) |
| 32     | 33 mm. (1.299 in.)   | 40 mm. (1.575 in.) |
| 40     | 41 mm. (1.614 in.)   | 46 mm. (1.811 in.) |
| 50     | 52 mm. (2.047 in.)   | 60 mm. (2.362 in.) |

| Clamping Range |             | METRIC SIZES |          |          |
|----------------|-------------|--------------|----------|----------|
| (mm.)          | (in.)       | RD/ER 11     | RD/ER 16 | RD/ER 20 |
| Part No.       | Part No.    | Part No.     | Part No. | Part No. |
| 1.0-0.5        | 0.039-0.019 | 110-001      | 160-001  |          |
| 1.5-1.0        | 0.059-0.039 | 110-002      | 160-101  |          |
| 2.0-1.5        | 0.079-0.059 | 110-003      | 160-002  | 200-001  |
| 2.5-2.0        | 0.098-0.079 | 110-004      | 160-102  |          |
| 3.0-2.5        | 0.118-0.098 | 110-005      | 160-003  | 200-002  |
| 3.5-3.0        | 0.138-0.118 | 110-006      | 160-103  |          |
| 4.0-3.5        | 0.157-0.138 | 110-007      | 160-004  | 200-003  |
| 4.5-4.0        | 0.177-0.157 | 110-008      | 160-104  |          |
| 5.0-4.5        | 0.197-0.177 | 110-009      | 160-005  | 200-004  |
| 5.5-5.0        | 0.217-0.197 | 110-010      | 160-105  |          |
| 6.0-5.5        | 0.236-0.217 | 110-011      | 160-006  | 200-005  |
| 6.5-6.0        | 0.256-0.236 | 110-012      | 160-106  | 200-006  |
| 7.0-6.5        | 0.276-0.256 | 110-013      | 160-007  | 200-006  |
| 8-7            | 0.315-0.276 |              | 160-008  | 200-007  |
| 9-8            | 0.354-0.315 |              | 160-009  | 200-008  |
| 10-9           | 0.394-0.354 |              | 160-010  | 200-009  |
| 11-10          | 0.433-0.394 |              |          | 200-010  |
| 12-11          | 0.472-0.433 |              |          | 200-011  |
| 13-12          | 0.512-0.472 |              |          | 200-012  |

| Dia.  |          | INCH SIZES |          |          |
|-------|----------|------------|----------|----------|
| (in.) | Part No. | Part No.   | Part No. | Part No. |
| 1/16  | 110-501  | 160-501    | 200-501  |          |
| 3/32  | 110-502  | 160-502    | 200-502  |          |
| 1/8   | 110-503  | 160-503    | 200-503  |          |
| 5/32  | 110-504  | 160-504    | 200-504  |          |
| 3/16  | 110-505  | 160-505    | 200-505  |          |
| 7/32  | 110-506  | 160-506    | 200-506  |          |
| 1/4   | 110-507  | 160-507    | 200-507  |          |
| 9/32  |          | 160-508    | 200-508  |          |
| 5/16  |          | 160-509    | 200-509  |          |
| 11/32 |          | 160-510    | 200-510  |          |
| 3/8   |          | 160-511    | 200-511  |          |
| 13/32 |          | 160-512    | 200-512  |          |
| 7/16  |          |            | 200-513  |          |
| 15/32 |          |            | 200-514  |          |
| 1/2   |          |            | 200-515  |          |

|       | Metric Sets |          | Inch Sets   |          |
|-------|-------------|----------|-------------|----------|
|       | No. of Pcs. | Part No. | No. of Pcs. | Part No. |
| RD 11 | 13          | 110-014  | 7           | 110-508  |
| RD 16 | 10          | 160-011  | 12          | 160-513  |
| RD 20 | 12          | 200-013  | 15          | 200-516  |

RD/ER COLLET SYSTEMS

METRIC SIZES

| Clamping Range |             | MATIC SIZES |          |          |
|----------------|-------------|-------------|----------|----------|
| (mm.)          | (in.)       | RD/ER 25    | RD/ER 32 | RD/ER 40 |
|                |             | Part No.    | Part No. | Part No. |
| 2-1            | 0.079-0.039 | 250-001     |          |          |
| 3-2            | 0.118-0.079 | 250-002     | 320-001  |          |
| 4-3            | 0.157-0.118 | 250-003     | 320-002  | 400-001  |
| 5-4            | 0.197-0.157 | 250-004     | 320-003  | 400-002  |
| 6-5            | 0.236-0.197 | 250-005     | 320-004  | 400-003  |
| 7-6            | 0.276-0.236 | 250-006     | 320-005  | 400-004  |
| 8-7            | 0.315-0.276 | 250-007     | 320-006  | 400-005  |
| 9-8            | 0.354-0.315 | 250-008     | 320-007  | 400-006  |
| 10-9           | 0.394-0.354 | 250-009     | 320-008  | 400-007  |
| 11-10          | 0.433-0.394 | 250-010     | 320-009  | 400-008  |
| 12-11          | 0.472-0.433 | 250-011     | 320-010  | 400-009  |
| 13-12          | 0.512-0.472 | 250-012     | 320-011  | 400-010  |
| 14-13          | 0.551-0.512 | 250-013     | 320-012  | 400-011  |
| 15-14          | 0.591-0.551 | 250-014     | 320-013  | 400-012  |
| 16-15          | 0.630-0.591 | 250-015     | 320-014  | 400-013  |
| 17-16          | 0.669-0.630 | 250-016     | 320-015  | 400-014  |
| 18-17          | 0.709-0.669 |             | 320-016  | 400-015  |
| 19-18          | 0.748-0.709 |             | 320-017  | 400-016  |
| 20-19          | 0.787-0.748 |             | 320-018  | 400-017  |
| 21-20          | 0.827-0.787 |             |          | 400-018  |
| 22-21          | 0.866-0.827 |             |          | 400-019  |
| 23-22          | 0.906-0.866 |             |          | 400-020  |
| 24-23          | 0.945-0.906 |             |          | 400-021  |
| 25-24          | 0.984-0.945 |             |          | 400-022  |
| 26-25          | 1.024-0.984 |             |          | 400-023  |

INCH SIZES

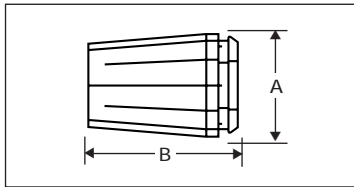
| Dia.  |  | INCH SIZES |          |          |
|-------|--|------------|----------|----------|
| (in.) |  | RD/ER 25   | RD/ER 32 | RD/ER 40 |
|       |  | Part No.   | Part No. | Part No. |
| 1/16  |  | 250-501    |          |          |
| 3/32  |  | 250-502    | 320-501  |          |
| 1/8   |  | 250-503    | 320-502  | 400-501  |
| 5/32  |  | 250-504    | 320-503  | 400-502  |
| 3/16  |  | 250-505    | 320-504  | 400-503  |
| 7/32  |  | 250-506    | 320-505  | 400-504  |
| 1/4   |  | 250-507    | 320-506  | 400-505  |
| 9/32  |  | 250-508    | 320-507  | 400-506  |
| 5/16  |  | 250-509    | 320-508  | 400-507  |
| 11/32 |  | 250-510    | 320-509  | 400-508  |
| 3/8   |  | 250-511    | 320-510  | 400-509  |
| 13/32 |  | 250-512    | 320-511  | 400-510  |
| 7/16  |  | 250-513    | 320-512  | 400-511  |
| 15/32 |  | 250-514    | 320-513  | 400-512  |
| 1/2   |  | 250-515    | 320-514  | 400-513  |
| 17/32 |  | 250-516    | 320-515  | 400-514  |
| 9/16  |  | 250-517    | 320-516  | 400-515  |
| 19/32 |  | 250-518    | 320-517  | 400-516  |
| 5/8   |  | 250-519    | 320-518  | 400-517  |
| 21/32 |  |            | 320-519  | 400-518  |
| 11/16 |  |            | 320-520  | 400-519  |
| 23/32 |  |            | 320-521  | 400-520  |
| 3/4   |  |            | 320-522  | 400-521  |
| 25/32 |  |            |          | 400-522  |
| 13/16 |  |            |          | 400-523  |
| 27/32 |  |            |          | 400-524  |
| 7/8   |  |            |          | 400-525  |
| 29/32 |  |            |          | 400-526  |
| 15/16 |  |            |          | 400-527  |
| 31/32 |  |            |          | 400-528  |
| 1     |  |            |          | 400-529  |

|       | Metric Sets |          | Inch Sets   |          |
|-------|-------------|----------|-------------|----------|
|       | No. of Pcs. | Part No. | No. of Pcs. | Part No. |
| RD 25 | 15          | 250-016  | 19          | 250-520  |
| RD 32 | 18          | 320-019  | 22          | 320-523  |
| RD 40 | 23          | 400-024  | 29          | 400-530  |

NOTE: RD 50 collets, as well as intermediate sizes, internal coolant collets, and tapping collets, are available in the Centaur 2000 Precision Tooling Systems catalog.

RDG/TG COLLET SYSTEMS

Collet Systems



Collet Dimensions

| Series  | A         | B         |
|---------|-----------|-----------|
| RDG 75  | 1.062 in. | 1.844 in. |
| RDG 100 | 1.379 in. | 2.375 in. |
| RDG 150 | 2.001 in. | 3.000 in. |

|       | RDG 75   | RDG 100  |
|-------|----------|----------|
| (in.) | Part No. | Part No. |
| 3/32  | 50001    | 70001    |
| 7/64  | 50002    | 70002    |
| 1/8   | 50003    | 70003    |
| 9/64  | 50004    | 70004    |
| 5/32  | 50005    | 70005    |
| 11/64 | 50006    | 70006    |
| 3/16  | 50007    | 70007    |
| 13/64 | 50008    | 70008    |
| 7/32  | 50009    | 70009    |
| 15/64 | 50010    | 70010    |
| 1/4   | 50011    | 70011    |
| 17/64 | 50012    | 70012    |
| 9/32  | 50013    | 70013    |
| 19/64 | 50014    | 70014    |
| 5/16  | 50015    | 70015    |
| 21/64 | 50016    | 70016    |
| 11/32 | 50017    | 70017    |
| 23/64 | 50018    | 70018    |
| 3/8   | 50019    | 70019    |
| 25/64 | 50020    | 70020    |
| 13/32 | 50021    | 70021    |
| 27/64 | 50022    | 70022    |
| 7/16  | 50023    | 70023    |
| 29/64 | 50024    | 70024    |
| 15/32 | 50025    | 70025    |
| 31/64 | 50026    | 70026    |
| 1/2   | 50027    | 70027    |
| 33/64 | 50028    | 70028    |
| 17/32 | 50029    | 70029    |
| 35/64 | 50030    | 70030    |

|       | RDG 75   | RDG 100  |
|-------|----------|----------|
| (in.) | Part No. | Part No. |
| 9/16  | 50031    | 70031    |
| 37/64 | 50032    | 70032    |
| 19/32 | 50033    | 70033    |
| 39/64 | 50034    | 70034    |
| 5/8   | 50035    | 70035    |
| 41/64 | 50036    | 70036    |
| 21/32 | 50037    | 70037    |
| 43/64 | 50038    | 70038    |
| 11/16 | 50039    | 70039    |
| 45/64 | 50040    | 70040    |
| 23/32 | 50041    | 70041    |
| 47/64 | 50042    | 70042    |
| 3/4   | 50043    | 70043    |
| 49/64 |          | 70044    |
| 25/32 |          | 70045    |
| 51/64 |          | 70046    |
| 13/16 |          | 70047    |
| 53/64 |          | 70048    |
| 27/32 |          | 70049    |
| 55/64 |          | 70050    |
| 7/8   |          | 70051    |
| 57/64 |          | 70052    |
| 29/32 |          | 70053    |
| 59/64 |          | 70054    |
| 15/16 |          | 70055    |
| 61/64 |          | 70056    |
| 31/32 |          | 70057    |
| 63/64 |          | 70058    |
| 1     |          | 70059    |

## RDG/TG COLLET SYSTEMS

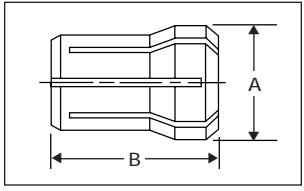
| RDG 150 |          | RDG 150 |          |
|---------|----------|---------|----------|
| (in.)   | Part No. | (in.)   | Part No. |
| 1/2     | 90001    | 1-1/64  | 90034    |
| 33/64   | 90002    | 1-1/32  | 90035    |
| 17/32   | 90003    | 1-3/64  | 90036    |
| 35/64   | 90004    | 1-1/16  | 90037    |
| 9/16    | 90005    | 1-5/64  | 90038    |
| 37/64   | 90006    | 1-3/32  | 90039    |
| 19/32   | 90007    | 1-7/64  | 90040    |
| 39/64   | 90008    | 1-1/8   | 90041    |
| 5/8     | 90009    | 1-9/64  | 90042    |
| 41/64   | 90010    | 1-5/32  | 90043    |
| 21/32   | 90011    | 1-11/64 | 90044    |
| 43/64   | 90012    | 1-3/16  | 90045    |
| 11/16   | 90013    | 1-13/64 | 90046    |
| 45/64   | 90014    | 1-7/32  | 90047    |
| 23/32   | 90015    | 1-15/64 | 90048    |
| 47/64   | 90016    | 1-1/4   | 90049    |
| 3/4     | 90017    | 1-17/64 | 90050    |
| 49/64   | 90018    | 1-9/32  | 90051    |
| 25/32   | 90019    | 1-19/64 | 90052    |
| 51/64   | 90020    | 1-5/16  | 90053    |
| 13/16   | 90021    | 1-21/64 | 90054    |
| 53/64   | 90022    | 1-11/32 | 90055    |
| 27/32   | 90023    | 1-23/64 | 90056    |
| 55/64   | 90024    | 1-3/8   | 90057    |
| 7/8     | 90025    | 1-25/64 | 90058    |
| 57/64   | 90026    | 1-13/32 | 90059    |
| 29/32   | 90027    | 1-27/64 | 90060    |
| 59/64   | 90028    | 1-7/16  | 90061    |
| 15/16   | 90029    | 1-29/64 | 90062    |
| 61/64   | 90030    | 1-15/32 | 90063    |
| 31/32   | 90031    | 1-31/64 | 90064    |
| 63/64   | 90032    | 1-1/2   | 90065    |
| 1       | 90033    |         |          |

## RDG Collet Sets

| Series  | Part No. | No. of Pcs. | Range (in.) | Increment |
|---------|----------|-------------|-------------|-----------|
| RDG 75  | 50044    | 43          | 3/32-3/4    | 1/64      |
| RDG 75  | 50056    | 41          | 1/8-3/4     | 1/64      |
| RDG 75  | 50055    | 33          | 1/4-3/4     | 1/64      |
| RDG 75  | 50045    | 25          | 3/8-3/4     | 1/64      |
| RDG 75  | 50046    | 22          | 3/32-3/4    | 1/32      |
| RDG 75  | 50047    | 13          | 3/8-3/4     | 1/32      |
| RDG 75  | 50048    | 11          | 1/8-3/4     | 1/16      |
| RDG 100 | 70060    | 59          | 3/32-1      | 1/64      |
| RDG 100 | 70061    | 41          | 3/8-1       | 1/64      |
| RDG 100 | 70062    | 30          | 3/32-1      | 1/32      |
| RDG 100 | 70063    | 21          | 3/8-1       | 1/32      |
| RDG 100 | 70064    | 15          | 1/8-1       | 1/16      |
| RDG 150 | 90066    | 65          | 1/2-1-1/2   | 1/64      |
| RDG 150 | 90067    | 33          | 1/2-1-1/2   | 1/32      |
| RDG 150 | 90068    | 17          | 1/2-1-1/2   | 1/16      |

NOTE: Metric sizes, internal coolant collets, and rigid tapping collets are available in the *Centaur 2000 Precision Tooling Systems* catalog.

RDA/DA COLLET SYSTEMS



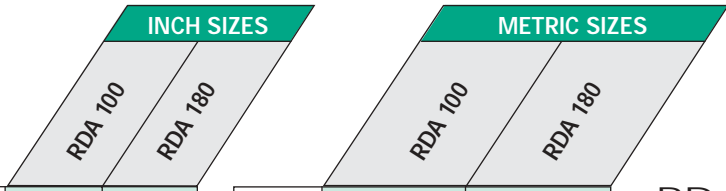
Collet Dimensions

| Series  | A         | B        |
|---------|-----------|----------|
| RDA 300 | 0.375 in. | 1.08 in. |
| RDA 200 | 0.539 in. | 1.18 in. |
| RDA 100 | 0.769 in. | 1.44 in. |
| RDA 180 | 1.035 in. | 1.62 in. |

| INCH SIZES |          |          |
|------------|----------|----------|
|            | RDA 300  | RDA 200  |
| (in.)      | Part No. | Part No. |
| 1/32       | 300-031  | 200-031  |
| 3/64       | 300-047  | 200-047  |
| 1/16       | 300-062  | 200-062  |
| 5/64       | 300-078  | 200-078  |
| 3/32       | 300-094  | 200-094  |
| 7/64       | 300-109  | 200-119  |
| 1/8        | 300-125  | 200-125  |
| 9/64       | 300-141  | 200-141  |
| 5/32       | 300-156  | 200-156  |
| 11/64      | 300-172  | 200-172  |
| 3/16       | 300-188  | 200-188  |
| 13/64      | 300-203  | 200-203  |
| 7/32       | 300-219  | 200-219  |
| 15/64      | 300-234  | 200-234  |
| 1/4        | 300-250  | 200-250  |
| 17/64      |          | 200-266  |
| 9/32       |          | 200-281  |
| 19/64      |          | 200-297  |
| 5/16       |          | 200-312  |
| 21/64      |          | 200-328  |
| 11/32      |          | 200-344  |
| 23/64      |          | 200-359  |
| 3/8        |          | 200-375  |
| 25/64      |          | 200-391  |

| METRIC SIZES |           |           |
|--------------|-----------|-----------|
|              | RDA 300   | RDA 200   |
| (mm.)        | Part No.  | Part No.  |
| 1            | 300-1.0MM | 200-1.0MM |
| 1.5          | 300-1.5MM | 200-1.5MM |
| 2            | 300-2.0MM | 200-2.0MM |
| 2.5          | 300-2.5MM | 200-2.5MM |
| 3            | 300-3.0MM | 200-3.0MM |
| 3.5          | 300-3.5MM | 200-3.5MM |
| 4            | 300-4.0MM | 200-4.0MM |
| 4.5          | 300-4.5MM | 200-4.5MM |
| 5            | 300-5.0MM | 200-5.0MM |
| 5.5          | 300-5.5MM | 200-5.5MM |
| 6            | 300-6.0MM | 200-6.0MM |
| 6.5          | 300-6.5MM | 200-6.5MM |
| 7            |           | 200-7.0MM |
| 7.5          |           | 200-7.5MM |
| 8            |           | 200-8.0MM |
| 8.5          |           | 200-8.5MM |
| 9            |           | 200-9.0MM |
| 9.5          |           | 200-9.5MM |

**RDA/DA COLLET SYSTEMS**



| INCH SIZES |          |          | METRIC SIZES |            |            |
|------------|----------|----------|--------------|------------|------------|
|            | RDA 100  | RDA 180  |              | RDA 100    | RDA 180    |
| (in.)      | Part No. | Part No. | (mm.)        | Part No.   | Part No.   |
| 3/64       | 100-047  | 180-047  | 1            | 100-1.0MM  | 180-1.0MM  |
| 1/16       | 100-062  | 180-062  | 1.5          | 100-1.5MM  | 180-1.5MM  |
| 5/64       | 100-078  | 180-078  | 2            | 100-2.0MM  | 180-2.0MM  |
| 3/32       | 100-094  | 180-094  | 2.5          | 100-2.5MM  | 180-2.5MM  |
| 7/64       | 100-109  | 180-109  | 3            | 100-3.0MM  | 180-3.0MM  |
| 1/8        | 100-125  | 180-125  | 3.5          | 100-3.5MM  | 180-3.5MM  |
| 9/64       | 100-141  | 180-141  | 4            | 100-4.0MM  | 180-4.0MM  |
| 5/32       | 100-156  | 180-156  | 4.5          | 100-4.5MM  | 180-4.5MM  |
| 11/64      | 100-172  | 180-172  | 5            | 100-5.0MM  | 180-5.0MM  |
| 3/16       | 100-188  | 180-188  | 5.5          | 100-5.5MM  | 180-5.5MM  |
| 13/64      | 100-203  | 180-203  | 6            | 100-6.0MM  | 180-6.0MM  |
| 7/32       | 100-219  | 180-219  | 6.5          | 100-6.5MM  | 180-6.5MM  |
| 15/64      | 100-234  | 180-234  | 7            | 100-7.0MM  | 180-7.0MM  |
| 1/4        | 100-250  | 180-250  | 7.5          | 100-7.5MM  | 180-7.5MM  |
| 17/64      | 100-266  | 180-266  | 8            | 100-8.0MM  | 180-8.0MM  |
| 9/32       | 100-281  | 180-281  | 8.5          | 100-8.5MM  | 180-8.5MM  |
| 19/64      | 100-297  | 180-297  | 9            | 100-9.0MM  | 180-9.0MM  |
| 5/16       | 100-312  | 180-312  | 9.5          | 100-9.5MM  | 180-9.5MM  |
| 21/64      | 100-328  | 180-328  | 10           | 100-10.0MM | 180-10.0MM |
| 11/32      | 100-344  | 180-344  | 10.5         | 100-10.5MM | 180-10.5MM |
| 23/64      | 100-359  | 180-359  | 11           | 100-11.0MM | 180-11.0MM |
| 3/8        | 100-375  | 180-375  | 11.5         | 100-11.5MM | 180-11.5MM |
| 25/64      | 100-375  | 180-375  | 12           | 100-12.0MM | 180-12.0MM |
| 13/32      | 100-406  | 180-406  | 12.5         | 100-12.5MM | 180-12.5MM |
| 27/64      | 100-422  | 180-422  | 13           | 100-13.0MM | 180-13.0MM |
| 7/16       | 100-438  | 180-438  | 13.5         | 100-13.5MM | 180-13.5MM |
| 29/64      | 100-453  | 180-453  | 14           | 100-14.0MM | 180-14.0MM |
| 15/32      | 100-469  | 180-469  | 14.5         | 100-14.5MM | 180-14.5MM |
| 31/64      | 100-484  | 180-484  | 15           | 100-15.0MM | 180-15.0MM |
| 1/2        | 100-500  | 180-500  | 15.5         |            | 180-15.5MM |
| 33/64      | 100-516  | 180-516  | 16           |            | 180-16.0MM |
| 17/32      | 100-531  | 180-531  | 16.5         |            | 180-16.5MM |
| 35/64      | 100-547  | 180-547  | 17           |            | 180-17.0MM |
| 9/16       | 100-562  | 180-562  | 17.5         |            | 180-17.5MM |
| 37/64      |          | 180-578  | 18           |            | 180-18.0MM |
| 19/32      |          | 180-594  | 18.5         |            | 180-18.5MM |
| 39/64      |          | 180-609  | 19           |            | 180-19.0MM |
| 5/8        |          | 180-625  | 19.5         |            | 180-19.5MM |
| 41/64      |          | 180-641  | 20           |            | 180-20.0MM |
| 21/32      |          | 180-656  |              |            |            |
| 43/64      |          | 180-672  |              |            |            |
| 11/16      |          | 180-688  |              |            |            |
| 45/64      |          | 180-703  |              |            |            |
| 23/32      |          | 180-719  |              |            |            |
| 47/64      |          | 180-734  |              |            |            |
| 3/4        |          | 180-750  |              |            |            |
| 49/64      |          | 180-765  |              |            |            |

**RDA 300 Collet Sets**

| Part No. | No. of Pcs. | Range (in.) | Increment |
|----------|-------------|-------------|-----------|
| 300-014  | 14          | 3/64-1/4    | 1/64      |
| 300-009  | 9           | 1/8-1/4     | 1/64      |
| 300-007  | 7           | 1/16-1/4    | 1/32      |
| 300-005  | 5           | 1/8-1/4     | 1/32      |

**RDA 200 Collet Sets**

| Part No. | No. of Pcs. | Range (in.) | Increment |
|----------|-------------|-------------|-----------|
| 200-021  | 21          | 1/16-3/8    | 1/64      |
| 200-017  | 17          | 1/8-3/8     | 1/64      |
| 200-009S | 9           | 1/8-3/8     | 1/32      |

**RDA 100 Collet Sets**

| Part No. | No. of Pcs. | Range (in.) | Increment |
|----------|-------------|-------------|-----------|
| 100-033  | 33          | 1/16-9/16   | 1/64      |
| 100-029  | 29          | 1/8-9/16    | 1/64      |
| 100-021  | 21          | 1/4-9/16    | 1/64      |
| 100-017  | 17          | 1/16-9/16   | 1/32      |
| 100-015  | 15          | 1/8-9/16    | 1/32      |
| 100-011  | 11          | 1/4-9/16    | 1/32      |
| 100-009  | 9           | 1/16-9/16   | 1/16      |

**RDA 180 Collet Sets**

| Part No. | No. of Pcs. | Range (in.) | Increment |
|----------|-------------|-------------|-----------|
| 180-045  | 45          | 1/16-3/4    | 1/64      |
| 180-041  | 41          | 1/8-3/4     | 1/64      |
| 180-033  | 33          | 1/4-3/4     | 1/64      |
| 180-023  | 23          | 1/16-3/4    | 1/32      |
| 180-021  | 21          | 1/18-3/4    | 1/32      |
| 180-017  | 17          | 1/4-3/4     | 1/32      |
| 180-012  | 12          | 1/16-3/4    | 1/16      |

**STRAIGHT-SHANK RDA/DA COLLET CHUCKS**

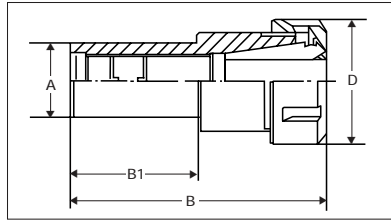


| Part No.  | Collet Series | Collet Range  | A    | B    | D     | Nut     |
|-----------|---------------|---------------|------|------|-------|---------|
| RDA012300 | DA300         | 0.047 - 0.250 | 0.50 | 6.88 | 0.562 | RDAN300 |
| RDA034200 | DA200         | 0.062 - 0.375 | 0.75 | 7.23 | 0.812 | RDAN200 |
| RDA100100 | DA100         | 0.062 - 0.562 | 1.00 | 7.50 | 1.062 | RDAN100 |
| RDA125180 | DA180         | 0.062 - 0.750 | 1.25 | 7.41 | 1.437 | RDAN180 |

**STRAIGHT-SHANK RD/ER COLLET CHUCKS**



With Step



Extension Style

|       | Part No. | A (mm.) (in.) | B (mm.) (in.) | B1 (mm.) (in.) | D (mm.) (in.) | Nut  | Wrench |      |         |        |
|-------|----------|---------------|---------------|----------------|---------------|------|--------|------|---------|--------|
| RD 16 | 381644   | 3/8           | 70            | 2.76           | 44            | 1.73 | 22     | 0.87 | RD 16 M | E 16 M |
|       | 121654   | 1/2           | 168           | 6.61           | 154           | 6.06 | 22     | 0.87 | RD 16 M | E 16 M |
|       | 581660   | 5/8           | 85            | 3.35           | 60            | 2.36 | 28     | 1.10 | RD 16 H | GS 25  |
|       | 581680   | 5/8           | 105           | 4.13           | 80            | 3.15 | 28     | 1.10 | RD 16 H | GS 25  |
|       | 341650   | 3/4           | 79            | 3.11           | 50            | 1.97 | 28     | 1.10 | RD 16 H | GS 25  |
|       | 341680   | 3/4           | 110           | 4.33           | 80            | 3.15 | 28     | 1.10 | RD 16 H | GS 25  |
|       | 341600   | 3/4           | 125           | 4.92           | 100           | 3.94 | 28     | 1.10 | RD 16 H | GS 25  |
|       | 1141600  | 1-1/4         | 85            | 3.35           | 60            | 2.36 | 28     | 1.10 | RD 16 H | GS 25  |
| RD 25 | 582550   | 5/8           | 85            | 3.35           | 50            | 1.97 | 42     | 1.65 | RD 25 E | E 25   |
|       | 342550   | 3/4           | 85            | 3.35           | 50            | 1.97 | 42     | 1.65 | RD 25 E | E 25   |
|       | 342500   | 3/4           | 135           | 5.31           | 100           | 3.94 | 42     | 1.65 | RD 25 E | E 25   |
| RD 32 | 1003250  | 1             | 95            | 3.74           | 50            | 1.97 | 50     | 1.97 | RD 32 E | E 32   |
|       | 1143250  | 1-1/4         | 98            | 4.33           | 50            | 1.97 | 50     | 1.97 | RD 32 E | E 32   |
|       | 1143260  | 1-1/4         | 108           | 4.13           | 60            | 2.36 | 50     | 1.97 | RD 32 E | E 32   |
| RD 40 | 1004050  | 1             | 95            | 3.74           | 50            | 1.97 | 63     | 2.48 | RD 40 E | E 40   |
|       | 10040238 | 1             | 106           | 4.33           | 61            | 2.38 | 63     | 2.48 | RD 40 E | E 40   |
|       | 1144060  | 1-1/4         | 105           | 4.13           | 60            | 2.36 | 63     | 2.48 | RD 40 E | E 40   |

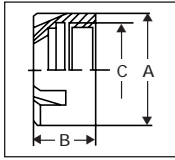
Extension Style

|         | Part No.  | A (mm.) (in.) | B (mm.) (in.) | B1 (mm.) (in.) | D (mm.) (in.) | Nut  | Wrench |      |         |         |        |
|---------|-----------|---------------|---------------|----------------|---------------|------|--------|------|---------|---------|--------|
| RD 11   | 121154    | 1/2           | 168           | 6.61           | 154           | 6.06 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 121180    | 1/2           | 100           | 3.94           | 80            | 3.15 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 121181    | 1/2           | 100           | 3.94           | 80            | 3.15 | 19     | 0.75 | RD 11 H | GS 17   |        |
|         | 5811140   | 5/8           | 155           | 6.10           | 140           | 5.51 | 19     | 0.75 | RD 11 H | GS 17   |        |
|         | 5811200   | 5/8           | 64            | 2.50           | 51            | 2.00 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 5811300   | 5/8           | 90            | 3.51           | 76            | 3.00 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 581154    | 5/8           | 168           | 6.61           | 154           | 6.06 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 581155    | 5/8           | 168           | 6.61           | 154           | 6.06 | 19     | 0.75 | RD 11 H | GS 17   |        |
|         | 341185*   | 3/4           | 100           | 3.94           | 85            | 3.35 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 34200011* | 3/4           | 51            | 2.00           | 25            | 1.00 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 34285011* | 3/4           | 72            | 2.85           | 49            | 1.92 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 344011    | 3/4           | 102           | 4.00           | 89            | 3.50 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | 1001180   | 1             | 93            | 3.66           | 80            | 3.15 | 16     | 0.63 | RD 11 M | E 11 M  |        |
|         | RD 16     | 581681        | 5/8           | 105            | 4.13          | 80   | 3.15   | 22   | 0.87    | RD 16 M | E 16 M |
|         |           | 581614        | 5/8           | 157            | 6.18          | 140  | 5.51   | 28   | 1.10    | RD 16 H | GS 25  |
|         |           | 581654        | 5/8           | 179            | 7.04          | 154  | 6.06   | 22   | 0.87    | RD 16 M | E 16 M |
| 341670* |           | 3/4           | 116           | 4.60           | 70            | 2.76 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 341680  |           | 3/4           | 103           | 4.05           | 80            | 3.15 | 28     | 1.10 | RD 16 H | GS 25   |        |
| 341681  |           | 3/4           | 115           | 4.52           | 80            | 3.15 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 341690* |           | 3/4           | 136           | 5.35           | 90            | 3.54 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 341610  |           | 3/4           | 135           | 5.31           | 100           | 3.94 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 341634  |           | 3/4           | 160           | 6.40           | 134           | 5.28 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 341654  |           | 3/4           | 189           | 7.44           | 154           | 6.06 | 22     | 0.87 | RD 16 M | E 16 M  |        |
| 101600  |           | 1             | 134           | 5.28           | 100           | 3.94 | 28     | 1.10 | RD 16 H | GS 25   |        |
| 101614  |           | 1             | 157           | 6.18           | 140           | 5.51 | 28     | 1.10 | RD 16 H | GS 25   |        |
| RD 20   |           | 1002034       | 1             | 160            | 6.30          | 134  | 5.28   | 28   | 1.10    | RD 20 M | E 20 M |
|         | 1002034H  | 3/4           | 174           | 6.85           | 134           | 5.28 | 34     | 1.34 | RD 20 H | GS 30   |        |
| RD 25   | 1002550   | 1             | 85            | 3.35           | 50            | 1.97 | 42     | 1.65 | RD 25 E | E 25    |        |
|         | 1002500   | 1             | 135           | 5.31           | 100           | 3.94 | 42     | 1.65 | RD 25 E | E 25    |        |
|         | 1002550M  | 1             | 85            | 3.35           | 50            | 1.97 | 35     | 1.38 | RD 25 M | E 25 M  |        |
|         | 1002500M  | 1             | 135           | 5.31           | 100           | 3.94 | 35     | 1.38 | RD 25 M | E 25 M  |        |

NOTE: Wrenches are sold separately. \*Double-End Style

RD/ER CLAMPING NUTS & WRENCHES

MINI NUTS



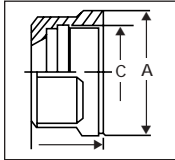
| Part No. | Type    | A     |       | B     |       | C          |
|----------|---------|-------|-------|-------|-------|------------|
|          |         | (mm.) | (in.) | (mm.) | (in.) |            |
| 30011    | RD 11 M | 16    | 0.63  | 11.3  | 0.44  | M13 X 0.75 |
| 30016    | RD 16 M | 22    | 0.87  | 17    | 0.67  | M19 X 1    |
| 30020    | RD 20 M | 28    | 1.10  | 19    | 0.75  | M24 X 1    |
| 30025    | RD 25 M | 35    | 1.38  | 20    | 0.79  | M30 X 1    |



MINI WRENCH

| Part No. | Type   |
|----------|--------|
| 22011    | E 11 M |
| 22016    | E 16 M |
| 22020    | E 20 M |
| 22025    | E 25 M |

HEX NUTS



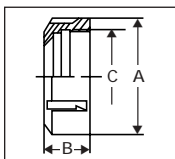
| Part No. | Type     | A     |       | B     |       | C          |
|----------|----------|-------|-------|-------|-------|------------|
|          |          | (mm.) | (in.) | (mm.) | (in.) |            |
| 30111    | UM/RD 11 | 19    | 0.75  | 11.3  | 0.44  | M14 X 0.75 |
| 30112    | UM/RD 12 | 19    | 0.75  | 12.5  | 0.49  | M14 X 0.75 |
| 30116    | UM/RD 16 | 28    | 1.10  | 17    | 0.67  | M22 X 1.5  |
| 30120    | UM/RD 20 | 34    | 1.34  | 19    | 0.75  | M25 X 1.5  |



HEX WRENCH

| Part No. | Type  |
|----------|-------|
| 22317    | GS 17 |
| 22317    | GS 17 |
| 22325    | GS 25 |
| 22330    | GS 30 |

"E" NUT



| Part No. | Type     | A     |       | B     |       | C         |
|----------|----------|-------|-------|-------|-------|-----------|
|          |          | (mm.) | (in.) | (mm.) | (in.) |           |
| 30126    | UX/RD 16 | 32    | 1.26  | 17.5  | 0.69  | M22 X 1.5 |
| 30127    | UX/RD 20 | 35    | 1.38  | 18.5  | 0.73  | M25 X 1.5 |
| 30125    | UM/RD 25 | 42    | 1.65  | 20    | 0.79  | M32 X 1.5 |
| 30132    | UM/RD 32 | 50    | 1.97  | 22    | 0.87  | M40 X 1.5 |
| 30140    | UM/RD 40 | 63    | 2.48  | 25    | 0.98  | M50 X 1.5 |
| 30150    | UM/RD 50 | 78    | 2.07  | 35    | 1.38  | M64 X 2   |

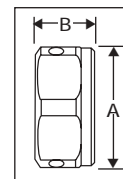


"E" WRENCH

| Part No. | Type |
|----------|------|
| 22116    | E 16 |
| 22120    | E 20 |
| 22125    | E 25 |
| 22132    | E 32 |
| 22140    | E 40 |
| 22150    | E 50 |

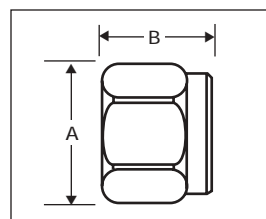
RDG/TG NUTS & WRENCHES

| Part No. | Collet Series | A (in.) | B (in.) | Wrench Type | Wrench Part No. |
|----------|---------------|---------|---------|-------------|-----------------|
| 30475    | RDG 75        | 2.18    | 0.91    | HEX         | RDG 75 HW       |
| 30400    | RDG 100       | 2.48    | 1.29    | E           | 22140           |
| 30480    | RDG 150       | 3.25    | 1.75    | SPANNER     | RDG 150 SW      |



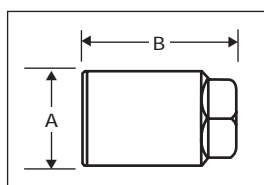
RDA/DA COLLET NUT

| Part No. | Collet  | A (in.) | B (in.) |
|----------|---------|---------|---------|
| 20300    | RDA 300 | 0.86    | 0.700   |
| 20200    | RDA 200 | 1.125   | 0.675   |
| 20100    | RDA 100 | 1.39    | 0.910   |
| 20180    | RDA 180 | 1.70    | 0.875   |

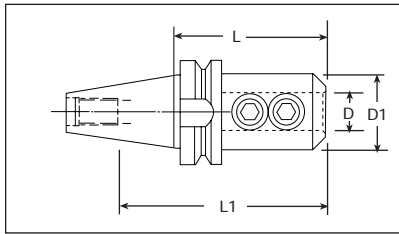


RDA/DA NOSEPIECE

| Part No. | Collet  | A (in.) | B (in.) |
|----------|---------|---------|---------|
| RDAN 300 | RDA 300 | 0.56    | 1.00    |
| RDAN 200 | RDA 200 | 0.81    | 1.35    |
| RDAN 100 | RDA 100 | 1.06    | 1.50    |
| RDAN 180 | RDA 180 | 1.44    | 1.60    |

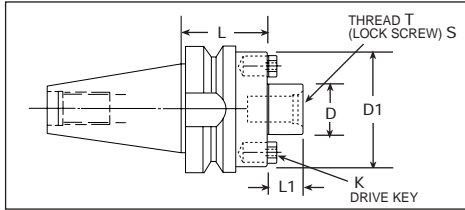


## BT END MILL HOLDERS



|              |                 | Part No.  | D      | D1   | L    | L1   | Ret. Knob Thread |
|--------------|-----------------|-----------|--------|------|------|------|------------------|
| <b>BT 40</b> | STUB LENGTH     | B40SE0500 | 0.500  | 1.75 | 1.75 | 3.18 | M16 X 2          |
|              |                 | B40SE0625 | 0.625  | 1.75 | 1.75 | 3.18 | M16 X 2          |
|              |                 | B40SE0750 | 0.750  | 1.75 | 1.75 | 2.35 | M16 X 2          |
|              |                 | B40SE1000 | 1.000  | 1.75 | 1.75 | 2.35 | M16 X 2          |
|              |                 | B40SE1250 | 1.250  | 2.25 | 2.00 | 2.35 | M16 X 2          |
|              | STANDARD LENGTH | B40E0125  | 0.1250 | 0.68 | 2.50 | 3.00 | M16 X 2          |
|              |                 | B40E0187  | 0.1875 | 0.68 | 2.50 | 3.00 | M16 X 2          |
|              |                 | B40E0250  | 0.2500 | 0.75 | 2.50 | 2.62 | M16 X 2          |
|              |                 | B40E0312  | 0.3125 | 0.75 | 2.50 | 2.62 | M16 X 2          |
|              |                 | B40E0375  | 0.3750 | 1.00 | 2.50 | 2.56 | M16 X 2          |
|              |                 | B40E0437  | 0.4375 | 1.13 | 2.50 | 2.56 | M16 X 2          |
|              |                 | B40E0500  | 0.5000 | 1.13 | 2.62 | 3.06 | M16 X 2          |
|              |                 | B40E0625  | 0.6250 | 1.50 | 3.75 | 4.24 | M16 X 2          |
|              |                 | B40E0750  | 0.7500 | 1.75 | 3.75 | 4.00 | M16 X 2          |
|              |                 | B40E0875  | 0.8750 | 2.00 | 4.00 | 4.31 | M16 X 2          |
|              |                 | B40E1000  | 1.0000 | 2.00 | 4.00 | 4.25 | M16 X 2          |
|              |                 | B40E1250  | 1.2500 | 2.50 | 4.25 | 2.31 | M16 X 2          |
|              |                 | B40E1500  | 1.5000 | 2.75 | 4.62 | 2.75 | M16 X 2          |
| <b>BT 50</b> | EXTENDED LENGTH | B50E0375  | 0.375  | 1.00 | 3.00 | 4.00 | M 24 X 3         |
|              |                 | B50E0500  | 0.500  | 1.25 | 3.00 | 4.00 | M 24 X 3         |
|              |                 | B50E0625  | 0.625  | 1.50 | 3.00 | 4.00 | M 24 X 3         |
|              |                 | B50E0750  | 0.750  | 1.75 | 3.00 | 4.00 | M 24 X 3         |
|              |                 | B50E0875  | 0.875  | 1.88 | 4.00 | 4.18 | M 24 X 3         |
|              |                 | B50E1000  | 1.000  | 2.00 | 4.00 | 4.44 | M 24 X 3         |
|              |                 | B50E1250  | 1.250  | 2.50 | 4.00 | 2.75 | M 24 X 3         |
|              |                 | B50E1500  | 1.500  | 2.62 | 4.62 | 3.50 | M 24 X 3         |
|              |                 | B50E2000  | 2.000  | 3.75 | 5.25 | 3.50 | M 24 X 3         |

**BT SHELL MILL ADAPTERS**



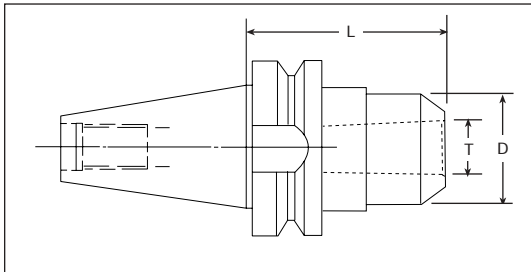
**BT 40**

| Part No.  | D    | D1   | L     | L1   | K    | T        | S     |
|-----------|------|------|-------|------|------|----------|-------|
| B40SM0750 | 0.75 | 1.75 | 1.375 | 0.68 | 0.31 | 3/8 - 24 | C5002 |
| B40SM1000 | 1.00 | 2.25 | 2.06  | 0.68 | 0.38 | 1/2 - 20 | C5003 |
| B40SM1250 | 1.25 | 2.75 | 2.12  | 0.68 | 0.50 | 5/8 - 18 | C5004 |
| B40SM1500 | 1.50 | 3.75 | 2.40  | 0.94 | 0.62 | 3/4 - 16 | C5005 |

**BT 50**

|           |      |      |      |       |      |          |       |
|-----------|------|------|------|-------|------|----------|-------|
| B50SM0750 | 0.75 | 1.75 | 2.00 | 0.68  | 0.31 | 3/8 - 24 | C5002 |
| B50SM1000 | 1.00 | 2.25 | 2.00 | 0.68  | 0.38 | 1/2 - 20 | C5003 |
| B50SM1250 | 1.25 | 2.75 | 2.00 | 0.68  | 0.50 | 5/8 - 18 | C5004 |
| B50SM1500 | 1.50 | 3.75 | 2.40 | 0.94  | 0.62 | 3/4 - 16 | C5005 |
| B50SM2000 | 2.00 | 4.88 | 2.40 | 0.94  | 0.75 | 1" - 14  | C5006 |
| B50SM2500 | 2.50 | 4.88 | 2.40 | 1.125 | 1.00 | 1" - 14  | C5007 |

**BT MORSE TAPER ADAPTERS**



**BT 40**

| Part No. | T Taper | D    | L    |
|----------|---------|------|------|
| B40MT2   | 2       | 2.38 | 1.25 |
| B40MT3   | 3       | 3.06 | 1.62 |
| B40MT4   | 4       | 3.94 | 2.00 |

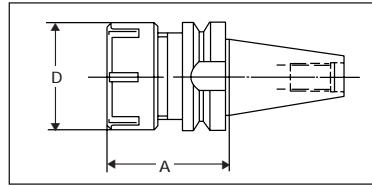
**BT 50**

| Part No. | T Taper | D    | L    |
|----------|---------|------|------|
| B50MT2   | 2       | 1.50 | 1.25 |
| B50MT3   | 3       | 2.31 | 1.62 |
| B50MT4   | 4       | 3.18 | 2.00 |
| B50MT5   | 5       | 4.75 | 2.75 |

## BT RD/ER COLLET CHUCKS



STANDARD LENGTH

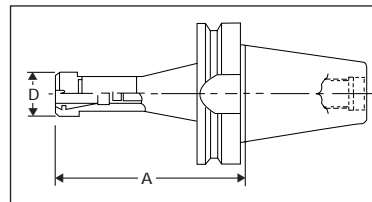


Retention knobs sold separately.

|       | Part No. | Taper | A     |       | D     |       | Ret. Knob Threading | Nut Style/Part No. | Wrench Part No. |
|-------|----------|-------|-------|-------|-------|-------|---------------------|--------------------|-----------------|
|       |          |       | (mm.) | (in.) | (mm.) | (in.) |                     |                    |                 |
| RD 16 | 1614016  | BT 30 | 70    | 2.76  | 22    | 0.87  | M12                 | H-30116            | 22325           |
|       | 1624016  | BT 35 | 70    | 2.76  | 28    | 1.10  | M12                 | H-30116            | 22325           |
|       | 1634800  | BT 40 | 70    | 2.76  | 28    | 1.10  | M16                 | H-30116            | 22325           |
| RD 20 | 1614020  | BT 30 | 70    | 2.76  | 34    | 1.34  | M12                 | H-30120            | 22330           |
|       | 1634425  | BT 40 | 135   | 2.76  | 28    | 1.10  | M12                 | M-30020            | 22020           |
|       | 1624020  | BT 35 | 70    | 2.76  | 34    | 1.34  | M12                 | H-30120            | 22330           |
|       | 1634801  | BT 40 | 70    | 2.76  | 34    | 1.34  | M16                 | H-30120            | 22330           |
| RD 25 | 1614025  | BT 30 | 60    | 2.36  | 42    | 1.65  | M12                 | E-30125            | 22125           |
|       | 1624025  | BT 35 | 60    | 2.36  | 42    | 1.65  | M12                 | E-30125            | 22125           |
|       | 1634025  | BT 40 | 70    | 2.76  | 42    | 1.65  | M16                 | E-30125            | 22125           |
| RD 32 | 1614532  | BT 30 | 70    | 2.76  | 50    | 1.97  | M12                 | E-30132            | 22132           |
|       | 1624032  | BT 35 | 70    | 2.76  | 50    | 1.97  | M12                 | E-30132            | 22132           |
|       | 1634802  | BT 40 | 70    | 2.76  | 50    | 1.97  | M16                 | E-30132            | 22132           |
| RD 40 | 1634803  | BT 40 | 80    | 3.15  | 63    | 2.48  | M16                 | E-30140            | 22140           |
|       | 1644851  | BT 45 | 80    | 3.15  | 63    | 2.48  | M20                 | E-30140            | 22140           |
|       | 1654804  | BT 50 | 80    | 3.15  | 63    | 2.48  | M24                 | E-30140            | 22140           |
| RD 50 | 1644852  | BT 45 | 80    | 3.15  | 78    | 3.07  | M20                 | E-30150            | 22150           |
|       | 1654852  | BT 50 | 80    | 3.15  | 78    | 3.07  | M24                 | E-30150            | 22150           |



EXTENDED LENGTH

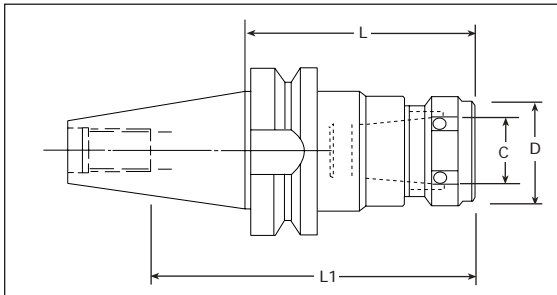


Retention knobs sold separately.

|       | Part No. | Taper | A     |       | D     |       | Ret. Knob Threading | Nut Style/Part No. | Wrench Part No. |
|-------|----------|-------|-------|-------|-------|-------|---------------------|--------------------|-----------------|
|       |          |       | (mm.) | (in.) | (mm.) | (in.) |                     |                    |                 |
| RD 16 | 1614516  | BT 30 | 120   | 4.73  | 22    | 0.87  | M12                 | M-30016            | 22016           |
|       | 1624516  | BT 35 | 120   | 4.73  | 22    | 0.87  | M12                 | M-30016            | 22016           |
|       | 1634516  | BT 40 | 125   | 4.93  | 22    | 0.87  | M16                 | M-30016            | 22016           |
|       | 1644516  | BT 45 | 125   | 4.93  | 22    | 0.87  | M20                 | M-30016            | 22016           |
|       | 1654516  | BT 50 | 135   | 5.32  | 22    | 0.87  | M24                 | M-30016            | 22016           |
| RD 20 | 1624520  | BT 35 | 135   | 5.32  | 28    | 1.10  | M12                 | M-30020            | 22020           |
|       | 1634520  | BT 40 | 135   | 5.32  | 28    | 1.10  | M16                 | M-30020            | 22020           |
|       | 1654520  | BT 50 | 135   | 5.32  | 28    | 1.10  | M24                 | M-30020            | 22020           |
| RD 25 | 1634525  | BT 40 | 150   | 5.91  | 35    | 1.38  | M16                 | M-30025            | 22025           |
| RD 32 | 1624132  | BT 35 | 100   | 3.94  | 50    | 1.97  | M12                 | E-30132            | 22132           |
|       | 1634810  | BT 40 | 100   | 3.94  | 50    | 1.97  | M16                 | E-30132            | 22132           |
| RD 50 | 1654805  | BT 50 | 100   | 3.94  | 78    | 3.07  | M24                 | E-30150            | 22150           |

Balanced to 22,000 RPM upon request.  
Wrenches are sold separately.

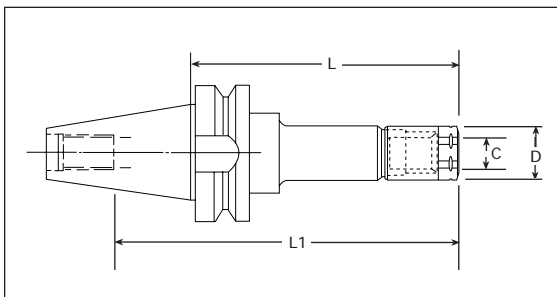
## BT RDG (TG) COLLET CHUCKS



|       | Part No.   | Collet Series | C Capacity      | D    | L    | L1   | Nut     |
|-------|------------|---------------|-----------------|------|------|------|---------|
| BT 40 | B40RDG075  | RDG75         | $\frac{3}{4}$ " | 2.10 | 2.75 | 3.31 | RDG75H  |
|       | B40RDG100  | RDG100        | 1"              | 2.44 | 3.00 | 3.68 | RDG100H |
|       | B40RDGE100 | RDG100        | 1"              | 2.44 | 5.00 | 5.68 | RDG100H |

|       | Part No.  | Collet Series | C Capacity          | D    | L    | L1   | Nut     |
|-------|-----------|---------------|---------------------|------|------|------|---------|
| BT 50 | B50RDG100 | RDG100        | 1"                  | 2.44 | 3.00 | 4.75 | RDG100H |
|       | B50RDG150 | RDG150        | 1 - $\frac{1}{2}$ " | 3.43 | 3.00 | 4.50 | RDG100H |

## BT RDA (DA) COLLET CHUCKS



|       | Part No.  | Collet Series | C Capacity       | D     | L    | L1   | Nut      |
|-------|-----------|---------------|------------------|-------|------|------|----------|
| BT 40 | B40RDA200 | RDA200        | $\frac{3}{8}$ "  | 1.125 | 3.00 | 3.00 | RDAN-200 |
|       | B40RDA180 | RDA180        | $\frac{3}{4}$ "  | 1.42  | 3.00 | 2.75 | RDAN-180 |
|       | B40RDA100 | RDA100        | $\frac{9}{16}$ " | 1.06  | 3.00 | 3.00 | RDAN-100 |

ANSI STANDARD RETENTION KNOBS



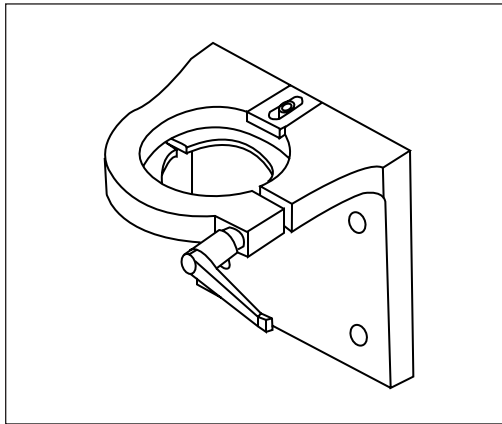
FOR MACHINES WITHOUT COOLANT THROUGH SPINDLES

FOR MACHINES WITH COOLANT THROUGH SPINDLES

| Part No. | Taper Size | Thread   |
|----------|------------|----------|
| C30VR    | CAT30      | 1/2 - 13 |
| C40VR    | CAT40      | 5/8 - 11 |
| C45VR    | CAT45      | 3/4 - 10 |
| C50VR    | CAT50      | 1" - 8   |
| C30VRC   | CAT30      | 1/2 - 13 |
| C40VRC   | CAT40      | 5/8 - 11 |
| C45VRC   | CAT45      | 3/4 - 10 |
| C50VRC   | CAT50      | 1" - 8   |

NOTE: Retention knobs for most machines available upon request.

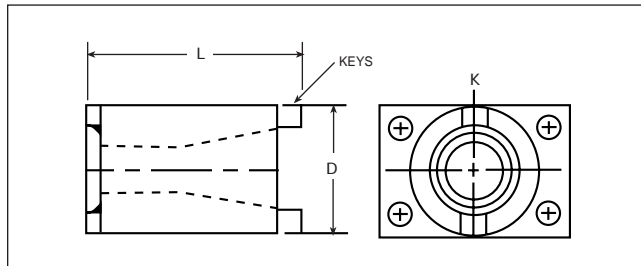
LOCKING TIGHTENING FIXTURES FOR CAT (V-Flange) TOOLHOLDERS



- For use in any position
- Access tool or retention knob
- Bolt down or use in vise

| Part No. | Shank Size |
|----------|------------|
| C40LTF   | CAT40      |
| C50LTF   | CAT50      |

LOCKING FIXTURE FOR ALL TAPERS



- Fit CAT (V-Flange), BT & NMTB tapers
- Bolt down or use in vise

| Part No. | Shank | L    | D    | K    |
|----------|-------|------|------|------|
| C30TF    | 30    | 3.91 | 3.00 | 0.62 |
| C40TF    | 40    | 4.65 | 3.00 | 0.62 |
| C45TF    | 45    | 4.90 | 3.50 | 0.75 |
| C50TF    | 50    | 6.35 | 4.00 | 1.00 |

BT

## NEW MACHINE START-UP PACKAGE

(CAT 40, 45 & 50 AND BT 40 & 50)

|   | Sizes   | Quantity       | Accessories                         |
|---|---|----------------|-------------------------------------|
| END MILL HOLDERS  | $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ "<br>$\frac{3}{4}$ ", 1", 1- $\frac{1}{4}$ " | 1 ea.          | Retention Knobs<br>VR               |
| RD 20 COLLET CHUCKS<br>RD 20 COLLET SET                               |   | 2 - 4<br>1     | Wrench                              |
| RD 32 COLLET CHUCKS<br>RD 32 COLLET SET                               |   | 2 - 4<br>1     | Wrench                              |
| SHELL MILL ADAPTERS   | 1", 1- $\frac{1}{4}$ "  | 1 ea.          |                                     |
| JACOBS TAPER ADAPTERS<br>KEYLESS CHUCKS                               | #1, #33<br>$\frac{1}{4}$ ", $\frac{5}{8}$ " Cap.  | 1 ea.<br>1 ea. |                                     |
| RIGID TAP HOLDERS<br>(Synchronous Feed Machines)                      | #1 (0 - $\frac{9}{16}$ ")<br>#2 ( $\frac{1}{4}$ - $\frac{7}{8}$ ")  | 1 ea.          | Positive-Drive<br>Tap Adapters      |
| TENSION-COMPRESSION<br>TAP HOLDERS<br>(Non-Synchronous Feed Machines) | #1 (0 - $\frac{9}{16}$ ")<br>#2 ( $\frac{1}{4}$ - $\frac{7}{8}$ ")  | 1 ea.          | Positive-Drive<br>or Torque Control |

## NEW MACHINE START-UP PACKAGE (COOLANT-THROUGH)

(CAT 40, 45 & 50 AND BT 40 & 50)

|  | Sizes   | Quantity   | Accessories   |
|--|---|------------|---|
| END MILL HOLDERS                               | $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ "<br>$\frac{3}{4}$ ", 1", 1- $\frac{1}{4}$ " | 1 ea.      | Retention Knobs<br>VRC  |
| RD 20 COLLET CHUCKS<br>RD 20 SEALED COLLET SET | To Tool Size  | 2 - 4<br>1 | Wrench  |
| RD 32 COLLET CHUCKS<br>RD 32 SEALED COLLET SET | To Tool Size  | 2 - 4<br>1 | Wrench  |
| SHELL MILL ADAPTERS                            | 1", 1- $\frac{1}{4}$ "  | 1 ea.      |   |
| RIGID, COOLANT-THROUGH<br>TAP HOLDERS          | #1 (0 - $\frac{9}{16}$ ")<br>#2 ( $\frac{1}{4}$ - $\frac{7}{8}$ ")  | 1 ea.      | CWE-K Adapters<br>For Blind &<br>Through-Hole<br>Applications |
|  |   | 1 ea.      | Standard CWE<br>Adapters For<br>Oil Hole Taps                 |

*Centaur's High-Grip Power Milling chuck provides the strength and precision you need for serious milling jobs.*



## Features:

### ■ EXTREME GRIP

Up to five times the gripping power of traditional collet chucks

### ■ HIGH RIGIDITY

Vibration-reducing design for outstanding surface finish

### ■ PEERLESS PRECISION

Unique clamping system guarantees 0.0004" TIR or less at 4 inches

### ■ COOLANT-THROUGH

Compatible with today's high-speed machining centers with coolant-through spindles

## HIGH-GRIP POWER MILLING CHUCKS

| Part No.    | Description                |
|-------------|----------------------------|
| C40PC0750   | V40 - 3/4" Diameter        |
| C50PC0750   | V50 - 3/4" Diameter        |
| H50APC0750  | HSK 50A - 3/4" Diameter    |
| H63APC0750  | HSK 63A - 3/4" Diameter    |
| B40PC0750   | BT 40 - 3/4" Diameter      |
| B50PC0750   | BT 50 - 3/4" Diameter      |
| C40PC1250   | V40 - 1-1/4" Diameter      |
| C50PC1250   | V50 - 1-1/4" Diameter      |
| H63APC1250  | HSK 63A - 1-1/4" Diameter  |
| H100APC1250 | HSK 100A - 1-1/4" Diameter |
| B40PC1250   | BT 40 - 1-1/4" Diameter    |
| B50PC1250   | BT 50 - 1-1/4" Diameter    |

NOTE: Other shank sizes available on request in MT, DIN69871B.

## COOLANT NOZZLES

## For 3/4" Chucks

| Part No.    | Shank Range |
|-------------|-------------|
| PCN750-2500 | 1/4 - 3/8"  |
| PCN750-5000 | 1/2 - 3/4"  |

## For 1-1/4" Chucks

| Part No.     | Shank Range |
|--------------|-------------|
| PCN1250-2500 | 1/4 - 3/8"  |
| PCN1250-3750 | 3/8 - 1/2"  |
| PCN1250-6250 | 5/8 - 3/4"  |
| PCN1250-1000 | 1 - 1-1/4"  |

## COLLETS FOR MILLING CHUCKS

## For 3/4" Chucks

| Part No. | Diameter |
|----------|----------|
| 600-501  | 1/8      |
| 600-502  | 3/16     |
| 600-503  | 1/4      |
| 600-504  | 5/16     |
| 600-505  | 3/8      |
| 600-506  | 7/16     |
| 600-507  | 1/2      |
| 600-508  | 9/16     |
| 600-509  | 5/8      |

## For 1-1/4" Chucks

| Part No. | Diameter |
|----------|----------|
| 800-501  | 1/8      |
| 800-502  | 3/16     |
| 800-503  | 1/4      |
| 800-504  | 5/16     |
| 800-505  | 3/8      |
| 800-506  | 7/16     |
| 800-507  | 1/2      |
| 800-508  | 9/16     |
| 800-509  | 5/8      |
| 800-510  | 3/4      |
| 800-511  | 7/8      |
| 800-512  | 1        |

# *μmatic*

*Increase Productivity At An Economy Price  
With The Unique Precision Chuck From Centaur*



CAT/V-FLANGE

The *μmatic* high precision chuck is designed specifically to meet the demands of today's new generation of machines and cutting tools. *μmatic's* powerful clamping force and ability to hold tools within 50 millionths T.I.R. eliminate the need for expensive hydraulic chucks and conventional milling chucks.

Centaur's innovative *μmatic* chuck features clamping surfaces ground directly from the toolholder body. Holding a cutting tool within 0.0002" T.I.R. is achieved with no adjustments.

*μmatic* incorporates truing screws that contact the tool shank directly, permitting rapid adjustments to within 50 millionths — either on a presetter or in the machine spindle.

*μmatic* is ideal for rough milling and finish milling. And because of *μmatic's* unusually high accuracy, it is perfectly suited for holmaking applications that normally require hydraulic chuck or boring operations.

The *μmatic* high precision chuck ensures greater workpiece accuracy, while delivering increased feed rates and tool life.

The bottom line: ***Increased productivity.***



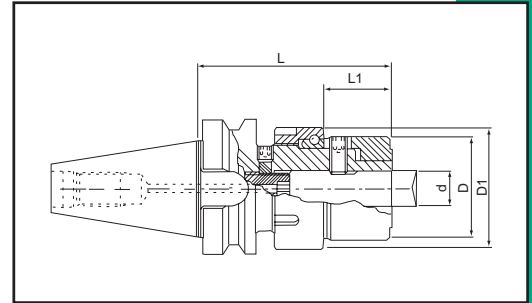
BT

## *Features and Benefits*

- **Patented, vibration-damping structure.** Centaur's *μmatic* interrupts the transmission of helical vibrations to allow increased RPM and feed rates.
- **Guaranteed high accuracies.** Tools clamp within 0.0002" T.I.R. with no adjustment. Truing screws that contact directly to the tool shank can be set easily and quickly to achieve T.I.R. within 50 millionths.
- **Ideal for today's finest machine tools.** *μmatic* is balanced to 22,000 RPM and is sealed for coolant-through applications.
- **Locking screw.** In addition to exerting extremely powerful clamping forces, the *μmatic* high precision chuck is equipped with a Weldon type screw to eliminate tool pullout common with standard heavy duty milling chucks.
- **Delivery from stock.** *μmatic* chucks are shipped directly from Centaur's huge U.S.-based inventory in all standard sizes. CAT/V-Flange, BT and HSK shanks are available. 40 taper toolholders have a capacity to 1-1/2" endmills; 50 taper to 2"
- **Value pricing.** *μmatic* high precision chucks can replace expensive hydraulic chucks and heavy duty milling chucks, yet are available from Centaur at a fraction of the cost.

## CAT/V-FLANGE SPECIFICATIONS

| Part No.  | Shank  | d      | D    |       | D1   |       | L   |       | L1   |       |
|-----------|--------|--------|------|-------|------|-------|-----|-------|------|-------|
|           |        |        | mm.  | in.   | mm.  | in.   | mm. | in.   | mm.  | in.   |
| C40UM0250 | CAT 40 | 0.250" | 28.5 | 1.122 | 37.5 | 1.476 | 86  | 3.386 | 25   | 0.984 |
| C40UM0312 | CAT 40 | 0.312" | 28.5 | 1.122 | 37.5 | 1.476 | 86  | 3.386 | 25   | 0.984 |
| C40UM0375 | CAT 40 | 0.375" | 35.5 | 1.398 | 44.5 | 1.752 | 96  | 3.780 | 31.5 | 1.240 |
| C40UM0437 | CAT 40 | 0.437" | 38   | 1.496 | 44.5 | 1.752 | 96  | 3.780 | 31.5 | 1.240 |
| C40UM0500 | CAT 40 | 0.500" | 38   | 1.496 | 44.5 | 1.752 | 96  | 3.780 | 31.5 | 1.240 |
| C40UM0625 | CAT 40 | 0.625" | 42.5 | 1.673 | 49.5 | 1.949 | 98  | 3.858 | 32.5 | 1.280 |
| C40UM0750 | CAT 40 | 0.750" | 48.5 | 1.909 | 54.5 | 2.146 | 100 | 3.937 | 34.5 | 1.358 |
| C40UM0875 | CAT 40 | 0.875" | 50.5 | 1.988 | 56.5 | 2.224 | 100 | 3.937 | 34.5 | 1.358 |
| C40UM1000 | CAT 40 | 1.000" | 61.5 | 2.421 | 68.5 | 2.697 | 106 | 4.173 | 39   | 1.535 |
| C40UM1125 | CAT 40 | 1.125" | 64   | 2.520 | 68.5 | 2.697 | 106 | 4.173 | 39   | 1.535 |
| C40UM1250 | CAT 40 | 1.250" | 70   | 2.756 | 73.5 | 2.894 | 114 | 4.488 | 43.5 | 1.713 |
| C50UM0250 | CAT 50 | 0.250" | 28.5 | 1.122 | 37.5 | 1.476 | 86  | 3.386 | 25   | 0.984 |
| C50UM0312 | CAT 50 | 0.312" | 28.5 | 1.122 | 37.5 | 1.476 | 86  | 3.386 | 25   | 0.984 |
| C50UM0375 | CAT 50 | 0.375" | 35.5 | 1.398 | 44.5 | 1.752 | 96  | 3.780 | 31.5 | 1.240 |
| C50UM0500 | CAT 50 | 0.500" | 38   | 1.496 | 44.5 | 1.752 | 96  | 3.780 | 31.5 | 1.240 |
| C50UM0625 | CAT 50 | 0.625" | 42.5 | 1.673 | 49.5 | 1.949 | 98  | 3.858 | 32.5 | 1.280 |
| C50UM0750 | CAT 50 | 0.750" | 48.5 | 1.909 | 54.5 | 2.146 | 100 | 3.937 | 34.5 | 1.358 |
| C50UM0875 | CAT 50 | 0.875" | 50.5 | 1.988 | 56.5 | 2.224 | 100 | 3.937 | 34.5 | 1.358 |
| C50UM1000 | CAT 50 | 1.000" | 61.5 | 2.421 | 68.5 | 2.697 | 106 | 4.173 | 39   | 1.535 |
| C50UM1125 | CAT 50 | 1.125" | 64   | 2.520 | 68.5 | 2.697 | 106 | 4.173 | 39   | 1.535 |
| C50UM1250 | CAT 50 | 1.250" | 70   | 2.756 | 73.5 | 2.894 | 114 | 4.488 | 43.5 | 1.713 |



Umatic

## BT SPECIFICATIONS

| Part No.  | Shank | d      | D    |       | D1   |       | L   |       | L1   |       |
|-----------|-------|--------|------|-------|------|-------|-----|-------|------|-------|
|           |       |        | mm.  | in.   | mm.  | in.   | mm. | in.   | mm.  | in.   |
| B40UM0250 | BT 40 | 0.250" | 28.5 | 1.122 | 37.5 | 1.476 | 78  | 3.071 | 25   | 0.984 |
| B40UM0312 | BT 40 | 0.312" | 28.5 | 1.122 | 37.5 | 1.476 | 78  | 3.071 | 25   | 0.984 |
| B40UM0375 | BT 40 | 0.375" | 35.5 | 1.398 | 44.5 | 1.752 | 88  | 3.465 | 31.5 | 1.240 |
| B40UM0437 | BT 40 | 0.437" | 38   | 1.496 | 44.5 | 1.752 | 88  | 3.465 | 31.5 | 1.240 |
| B40UM0500 | BT 40 | 0.500" | 38   | 1.496 | 44.5 | 1.752 | 88  | 3.465 | 31.5 | 1.240 |
| B40UM0625 | BT 40 | 0.625" | 42.5 | 1.673 | 49.5 | 1.949 | 90  | 3.543 | 32.5 | 1.280 |
| B40UM0750 | BT 40 | 0.750" | 48.5 | 1.909 | 54.5 | 2.146 | 92  | 3.622 | 34.5 | 1.358 |
| B40UM0875 | BT 40 | 0.875" | 50.5 | 1.988 | 56.5 | 2.224 | 92  | 3.622 | 34.5 | 1.358 |
| B40UM1000 | BT 40 | 1.000" | 61.5 | 2.421 | 68.5 | 2.697 | 98  | 3.858 | 39   | 1.535 |
| B40UM1125 | BT 40 | 1.125" | 64   | 2.520 | 68.5 | 2.697 | 98  | 3.858 | 39   | 1.535 |
| B40UM1250 | BT 40 | 1.250" | 70   | 2.757 | 73.5 | 2.894 | 106 | 4.173 | 43.5 | 1.713 |
| B50UM0250 | BT 50 | 0.250" | 28.5 | 1.122 | 37.5 | 1.476 | 89  | 3.504 | 25   | 0.984 |
| B50UM0312 | BT 50 | 0.312" | 28.5 | 1.122 | 37.5 | 1.476 | 89  | 3.504 | 25   | 0.984 |
| B50UM0375 | BT 50 | 0.375" | 35.5 | 1.398 | 44.5 | 1.752 | 99  | 3.898 | 31.5 | 1.240 |
| B50UM0500 | BT 50 | 0.500" | 38   | 1.496 | 44.5 | 1.752 | 99  | 3.898 | 31.5 | 1.240 |
| B50UM0625 | BT 50 | 0.625" | 42.5 | 1.673 | 49.5 | 1.949 | 99  | 3.898 | 32.5 | 1.280 |
| B50UM0750 | BT 50 | 0.750" | 48.5 | 1.909 | 54.5 | 2.146 | 101 | 3.976 | 34.5 | 1.358 |
| B50UM0875 | BT 50 | 0.875" | 50.5 | 1.988 | 56.5 | 2.224 | 101 | 3.976 | 34.5 | 1.358 |
| B50UM1000 | BT 50 | 1.000" | 61.5 | 2.421 | 68.5 | 2.697 | 109 | 4.291 | 39   | 1.535 |
| B50UM1125 | BT 50 | 1.125" | 64   | 2.520 | 68.5 | 2.697 | 109 | 4.291 | 39   | 1.535 |
| B50UM1250 | BT 50 | 1.250" | 70   | 2.756 | 73.5 | 2.894 | 127 | 5.000 | 43.5 | 1.713 |

