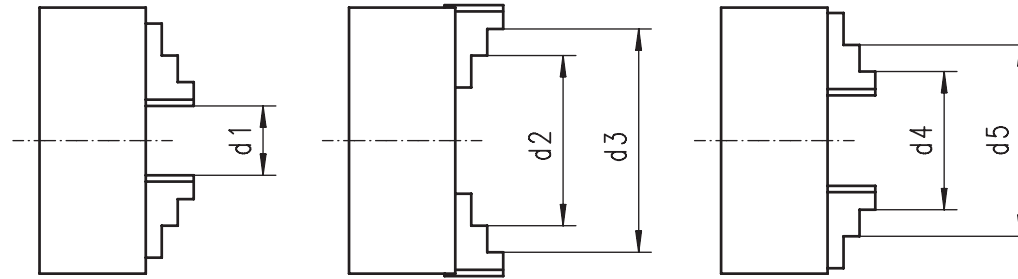


CLAMPING RANGES

■ Do not exceed the maximum allowable clamping ranges!



32**, 35**, 36**, 37**

■ 3- and 4-jaw scroll chucks

| Chuck size [in] | Hard solid jaws | | | | | Hard 2-piece jaws | | | | | Max. swing diameter |
|-----------------|-----------------|-------------|-------------|-------------|-------------|-------------------|-------------|-------------|-------------|-------------|---------------------|
| | d1 | d2 | d3 | d4 | d5 | d1 | d2 | d3 | d4 | d5 | |
| 3" | 0.08 - 1.06 | 0.98 - 1.97 | 1.89 - 2.8 | 0.87 - 1.81 | 1.77 - 2.72 | - | - | - | - | - | 3.54 |
| 4" | 0.12 - 1.3 | 1.26 - 2.44 | 2.44 - 3.66 | 0.98 - 2.2 | 2.2 - 3.43 | - | - | - | - | - | 4.61 |
| 5" | 0.12 - 1.97 | 1.54 - 3.27 | 3.15 - 4.92 | 1.34 - 2.91 | 2.83 - 4.53 | 0.12 - 1.97 | 2.05 - 3.78 | 3.74 - 4.92 | 1.34 - 2.99 | 2.95 - 4.65 | 5.94 |
| 6" | 0.12 - 2.52 | 1.97 - 4.21 | 3.86 - 6.3 | 1.65 - 3.94 | 3.7 - 6.06 | 0.12 - 2.52 | 2.44 - 4.76 | 4.53 - 6.3 | 1.65 - 3.82 | 3.46 - 5.75 | 8.03 |
| 8" | 0.16 - 3.54 | 2.36 - 5.71 | 5.12 - 7.87 | 2.05 - 5.31 | 4.72 - 7.95 | 0.16 - 3.54 | 2.83 - 6.14 | 5.24 - 7.87 | 1.97 - 5.12 | 4.13 - 7.48 | 9.69 |
| 10" | 0.2 - 4.6 | 3 - 7.4 | 6.3 - 9.8 | 2.4 - 6.9 | 5.7 - 10.1 | 0.2 - 4.65 | 3.39 - 7.76 | 6.3 - 9.84 | 2.28 - 6.5 | 4.92 - 9.25 | 12.05 |
| 12" | 0.4 - 5.2 | 3.5 - 8.5 | 7.5 - 12.4 | 3.1 - 7.9 | 6.8 - 11.8 | 0.39 - 5.16 | 4.06 - 8.9 | 7.48 - 12.4 | 2.56 - 7.17 | 5.7 - 10.4 | 15.12 |
| 16" | 0.4 - 7.1 | 4.1 - 10.7 | 9.1 - 15.7 | 3.3 - 9.9 | 8.3 - 15 | 0.4 - 7.1 | 5 - 11.6 | 9.1 - 15.7 | 2.8 - 9 | 6.5 - 13 | 18.58 |
| 20" | 0.8 - 9.3 | 5.5 - 14.1 | 10.9 - 19.7 | 4.7 - 13.2 | 9.6 - 18.7 | 0.8 - 9.3 | 4.3 - 15.7 | 7.5 - 19.7 | 4.7 - 16.1 | 7.9 - 19.1 | 23.62 |
| 25" | 1.2 - 13.2 | 7.1 - 19.2 | 13.6 - 24.8 | 6.3 - 18.3 | 12.8 - 24.8 | 1.2 - 13.2 | 4.7 - 22.4 | 7.9 - 24.8 | 5.5 - 23.2 | 8.3 - 24.8 | 30.31 |
| 32" | 5.9 - 19 | 11.9 - 25 | 18.4 - 31.5 | 11.1 - 24.2 | 17.6 - 30.7 | 5.9 - 19 | 9.4 - 28.5 | 12.4 - 31.5 | 9.9 - 29 | 12.9 - 31.5 | 37.01 |
| 40" | - | - | - | - | - | 3.9 - 23.6 | 13.8 - 34.6 | 16.9 - 39.4 | 16.7 - 35.4 | 19.7 - 39.4 | 44.88 |
| 49" | - | - | - | - | - | 18.9 - 39.4 | 23 - 42.9 | 29.1 - 49.2 | 22.8 - 42.1 | 29.5 - 49.2 | 54.72 |
| 55" | - | - | - | - | - | 18.9 - 45.3 | 23 - 48.8 | 29.5 - 55.1 | 22.8 - 48 | 29.5 - 55.1 | 60.63 |
| 63" | - | - | - | - | - | 18.9 - 52.4 | 23 - 55.9 | 29.5 - 63 | 22.8 - 55.1 | 29.5 - 63 | 68.50 |
| 71" | - | - | - | - | - | 18.9 - 60.2 | 23 - 63.8 | 29.5 - 70.9 | 22.8 - 63 | 29.5 - 70.9 | 76.77 |
| 79" | - | - | - | - | - | 18.9 - 67.9 | 23 - 71.5 | 29.5 - 78.7 | 22.8 - 70.9 | 29.5 - 78.7 | 84.65 |

3864, 3865

■ 6-jaw scroll chucks

| Chuck size [in] | Hard solid jaws | | | | | Hard 2-piece jaws | | | | | Max. swing diameter |
|-----------------|-----------------|-------------|-------------|-------------|-------------|-------------------|-------------|-------------|-------------|-------------|---------------------|
| | d1 | d2 | d3 | d4 | d5 | d1 | d2 | d3 | d4 | d5 | |
| 5" | 0.24 - 1.69 | 1.65 - 3.07 | 3.27 - 4.72 | 1.34 - 2.68 | 2.91 - 4.33 | 0.24 - 1.69 | 1.97 - 3.43 | 3.7 - 4.92 | 1.3 - 2.76 | 2.99 - 4.69 | 5.94 |
| 6" | 0.31 - 2.52 | 2.05 - 4.21 | 4.02 - 6.3 | 1.85 - 3.94 | 3.86 - 6.06 | 0.31 - 2.52 | 2.64 - 4.76 | 4.65 - 6.3 | 1.77 - 3.82 | 3.62 - 5.75 | 8.03 |
| 8" | 0.31 - 3.54 | 2.52 - 5.71 | 5.2 - 7.87 | 2.17 - 5.31 | 4.76 - 7.95 | 0.31 - 3.54 | 2.91 - 6.14 | 5.28 - 7.87 | 2.05 - 5.12 | 4.29 - 7.48 | 9.69 |
| 10" | 0.47 - 4.65 | 3.23 - 7.4 | 6.5 - 9.84 | 2.68 - 6.85 | 5.9 - 10.1 | 0.47 - 4.65 | 3.23 - 7.4 | 6.46 - 9.84 | 2.68 - 6.85 | 5.9 - 10.1 | 12.05 |
| 12" | 0.47 - 5.16 | 3.74 - 8.46 | 7.56 - 12.4 | 3.23 - 7.87 | 7.0 - 11.77 | 0.47 - 5.16 | 4.25 - 8.9 | 6.02 - 12.4 | 2.68 - 7.17 | 5.9 - 10.4 | 15.12 |
| 16" | 0.6 - 8 | 5.5 - 12.1 | 9.1 - 15.7 | 3.7 - 11 | 8.4 - 15.7 | 0.6 - 8 | 5.2 - 11.7 | 9.3 - 15.7 | 2.9 - 9.9 | 6.7 - 13.9 | 18.58 |
| 20" | 1.2 - 9.3 | 6 - 14.2 | 11.5 - 19.7 | 5.2 - 13.2 | 10.6 - 18.7 | 1.2 - 9.3 | 4.8 - 15.8 | 7.8 - 18.8 | 5.3 - 16.3 | 8.3 - 19.3 | 23.62 |
| 25" | 1.6 - 13.2 | 7.6 - 19.2 | 14.1 - 24.8 | 6.9 - 18.4 | 13.4 - 24.8 | 1.6 - 13.2 | 5.2 - 21.9 | 8.3 - 24.8 | 5.9 - 23 | 8.7 - 24.8 | 30.31 |
| 32" | - | - | - | - | - | 7.1 - 19 | 11.4 - 25.4 | 16.5 - 31.5 | 11.2 - 25 | 17.3 - 31.5 | 37.01 |
| 40" | - | - | - | - | - | 12.2 - 23.6 | 16.1 - 37.4 | 22.8 - 39.4 | 16.3 - 33.1 | 20.9 - 39.4 | 44.88 |
| 49" | - | - | - | - | - | 18.9 - 39.4 | 23 - 42.9 | 29.1 - 49.2 | 22.8 - 42.1 | 30.3 - 49.2 | 54.72 |
| 55" | - | - | - | - | - | 18.9 - 45.3 | 23 - 48.8 | 29.5 - 55.1 | 22.8 - 48 | 30.3 - 55.1 | 60.63 |
| 63" | - | - | - | - | - | 18.9 - 52.4 | 23 - 55.9 | 29.5 - 63 | 22.8 - 55.1 | 30.3 - 63 | 68.50 |
| 71" | - | - | - | - | - | 18.9 - 60.2 | 23 - 63.8 | 29.5 - 70.9 | 22.8 - 63 | 30.3 - 70.9 | 76.77 |
| 79" | - | - | - | - | - | 18.9 - 67.9 | 23 - 71.5 | 29.5 - 78.7 | 22.8 - 70.9 | 30.3 - 78.7 | 84.65 |

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■ 4-jaw independent chucks

| Chuck size [in] | d1 min. | d2 max. | Max. swing diameter |
|-----------------|---------|---------|---------------------|
| | [in] | | |
| 3-1/2" | 0.12 | 3.35 | 3.98 |
| 4" | 0.12 | 0.39 | 4.57 |
| 5" | 0.31 | 4.92 | 5.91 |
| 6" | 0.31 | 6.30 | 7.28 |
| 8" | 0.39 | 7.87 | 9.25 |
| 10" | 0.39 | 9.84 | 11.60 |
| 12" | 0.59 | 12.40 | 14.50 |
| 13-2/3" | 0.59 | 13.80 | 15.90 |
| 16" | 0.79 | 15.70 | 18.30 |
| 20" | 1.77 | 19.70 | 22.40 |
| 25" | 1.97 | 24.80 | 28.30 |
| 32" | 1.97 | 31.50 | 35.40 |
| 40" | 6.69 | 39.40 | 42.90 |
| 49" | 6.69 | 49.20 | 52.80 |
| 55" | 18.50 | 55.10 | 59.60 |
| 63" | 18.50 | 63.00 | 67.50 |
| 71" | 18.50 | 70.90 | 75.60 |
| 79" | 18.50 | 78.70 | 83.50 |

4505, 4605, 4705, 4805

■ 3- and 4-jaw combination chucks

| Chuck size [in] | d1 min. | d2 max. | Max. swing diameter |
|-----------------|---------|---------|---------------------|
| | [in] | | |
| 8" | 0.16 | 7.87 | 9.45 |
| 10" | 0.20 | 9.84 | 11.80 |
| 12" | 0.39 | 12.40 | 14.60 |
| 16" | 0.59 | 15.70 | 18.50 |
| 20" | 0.79 | 19.70 | 22.60 |
| 25" | 1.18 | 24.80 | 28.50 |
| 32" | 1.97 | 31.50 | 35.40 |
| 40" | 6.89 | 39.40 | 43.30 |
| 49" | 13.8 | 49.20 | 52.90 |
| 55" | 13.8 | 55.10 | 59.80 |
| 63" | 13.8 | 63.00 | 67.90 |
| 71" | 13.8 | 70.90 | 75.80 |
| 79" | 13.8 | 78.70 | 83.90 |

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MAXIMUM PERMISSIBLE ROTATION SPEEDS (RPM)

Admissible revolutions of the chuck depend on many factors, such as cutting parameters, weight of the workpiece and its balance or type of machining (interrupted or continuous turning) etc.

The max. speeds as indicated in the table below should not cause a decrease of the clamping force to the half of its initial value. When machining in the stable conditions (machining material, tools, working conditions), the clamping force may be reduced by up to 67% of its initial value.

This relates to the chuck equipped with standard jaws, that do not protrude beyond the outer diameter of the chuck and the unbalance condition of the 'chuck-machining workpiece' is maintained (not exceeding 20gmm/kg). The chuck and jaws must be in good condition. Otherwise, refer to the calculations as indicated in the PN-M-60650.

3105, 32 , 35** , 36** , 37** , 38****

■ 3-, 4- and 6-jaw scroll chucks

| Chuck size [in] | Max. rpm | | | |
|-----------------|--------------------|-------------|-------------------|-------|
| | Steel body | | Cast iron body | |
| | 35** , 356* , 37** | 38** , 386* | 3105, 32** , 36** | 38** |
| 3" | 7,000 | - | 5,000 | - |
| 4" | 6,300 | - | 4,500 | - |
| 5" | 5,500 | 3,800 | 4,000 | - |
| 6" | 4,600 | 3,200 | 3,600 | - |
| 8" | 4,000 | 2,800 | 3,000 | 2,000 |
| 10" | 3,500 | 2,400 | 2,500 | 1,500 |
| 12" | 2,800 | 1,900 | 2,000 | 1,200 |
| 16" | 2,000 | 1,400 | 1,600 | 800 |
| 20" | 1,300 | 900 | 1,000 | 600 |
| 25" | 1,000 | 700 | 800 | 500 |
| 32" | 800 | 560 | 600 | 400 |
| 40" | 600 | 400 | 400 | - |
| 49" | 500 | 350 | 300 | - |
| 55" | 440 | - | 250 | - |
| 63" | 380 | - | 220 | - |
| 71" | 340 | - | 190 | - |
| 79" | 300 | - | 170 | - |

43**

■ 4-jaw independent chucks

| Chuck size [in] | Max. rpm | |
|-----------------|------------|----------------|
| | Steel body | Cast iron body |
| 3" | 7,640 | - |
| 3-1/2" | 7,190 | - |
| 4" | 6,120 | - |
| 5" | 4,890 | - |
| 5-1/2" | 4,370 | - |
| 6" | 3,820 | - |
| 8" | 3,060 | 1,800 |
| 10" | 2,450 | 1,500 |
| 12" | 1,940 | 1,200 |
| 16" | 1,530 | 860 |
| 20" | 1,220 | 690 |
| 25" | 970 | 550 |
| 32" | 760 | 430 |
| 36" | 680 | 380 |
| 40" | 610 | 340 |
| 49" | 490 | 280 |
| 55" | 440 | 250 |
| 63" | 380 | 220 |
| 71" | 340 | 190 |
| 79" | 300 | 170 |

4505, 4605, 4705, 4805

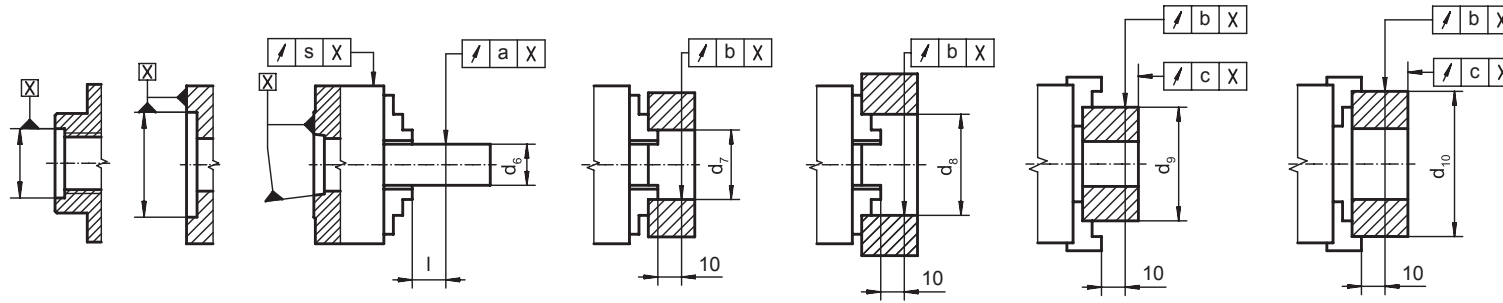
■ 3- and 4-jaw combination chucks

| Chuck size [in] | Max. rpm | | | |
|-----------------|----------|-------|-------|-------|
| | 4505 | 4605 | 4705 | 4805 |
| 8" | 2,500 | 2,000 | 3,000 | 2,500 |
| 10" | 2,000 | 1,800 | 2,500 | 2,000 |
| 12" | 1,500 | 1,200 | 2,000 | 1,700 |
| 16" | 1,000 | 800 | 1,500 | 1,300 |
| 20" | 700 | 600 | 1,000 | 800 |
| 25" | 540 | 480 | 750 | 660 |
| 32" | 420 | 360 | 600 | 520 |
| 40" | 280 | 240 | 380 | 330 |
| 49" | 210 | 170 | - | - |

34**

■ 3-jaw wedge bar chucks

| Chuck size [in] | Max. rpm |
|-----------------|----------|
| 5" | 6,000 |
| 6" | 5,400 |
| 8" | 4,600 |
| 10" | 4,200 |
| 12" | 3,300 |
| 16" | 2,400 |
| 20" | 1,500 |
| 25" | 1,200 |
| 32" | 960 |
| 36" | 840 |
| 40" | 720 |
| 49" | 600 |



CENTERING ACCURACY

32**, 35**, 36**, 37**, 38**
 ■ 3-, 4- and 6-jaw scroll chucks

| Chuck size [in] | l | d ₆ | d ₇ | d ₈ | d ₉ | d ₁₀ | | Centering accuracy | | | | | | | | | | | | | | | | | |
|-----------------|-----|----------------|----------------|----------------|----------------|-----------------|-------------------|--------------------|------|--------|--------|------------------|--------|--------|--------|------------|--------|--------|--------|------------|--------|--------|--------|--------|--------|
| | | | | | | Hard solid jaws | Hard 2-piece jaws | 35** PREMIUM | | | | 35**, 37**, 38** | | | | 32**, 36** | | | | 3284, 3285 | | | | | |
| | | | | | | | | a | b | c | s | a | b | c | s | a | b | c | s | a | b | c | s | | |
| [in] | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3" | 1.6 | 0.4 | - | 0.6 | 1.6 | 2.4 | 1.4 | 2.5 | - | 0.0004 | 0.0005 | 0.0003 | 0.0004 | 0.0008 | 0.0010 | 0.0006 | 0.0008 | 0.0012 | 0.0010 | 0.0006 | 0.0008 | 0.0020 | 0.0030 | 0.0016 | 0.0020 |
| 4" | 1.6 | 0.4 | 0.5 | 0.7 | 1.6 | 3.0 | 2.0 | 3.2 | - | 0.0004 | 0.0005 | 0.0003 | 0.0004 | 0.0008 | 0.0010 | 0.0006 | 0.0008 | 0.0012 | 0.0010 | 0.0006 | 0.0008 | 0.0020 | 0.0030 | 0.0016 | 0.0020 |
| 5" | 2.4 | 0.7 | 1.0 | 1.2 | 2.0 | 3.9 | 2.4 | 3.9 | 4.7 | 0.0006 | 0.0007 | 0.0004 | 0.0006 | 0.0012 | 0.0014 | 0.0008 | 0.0012 | 0.0012 | 0.0014 | 0.0008 | 0.0012 | 0.0020 | 0.0030 | 0.0016 | 0.0020 |
| 6" | 2.4 | 0.7 | 1.2 | 1.6 | 2.0 | 5.3 | 3.5 | 3.9 | 5.9 | 0.0006 | 0.0007 | 0.0004 | 0.0006 | 0.0012 | 0.0014 | 0.0008 | 0.0012 | 0.0012 | 0.0014 | 0.0008 | 0.0012 | 0.0020 | 0.0030 | 0.0016 | 0.0020 |
| 8" | 3.1 | 1.2 | 1.6 | 2.1 | 3.2 | 6.4 | 3.8 | 6.3 | 7.3 | 0.0008 | 0.0009 | 0.0005 | 0.0008 | 0.0016 | 0.0018 | 0.0010 | 0.0016 | 0.0016 | 0.0018 | 0.0010 | 0.0016 | 0.0020 | 0.0030 | 0.0016 | 0.0020 |
| 10" | 3.1 | 1.2 | 2.1 | 3.0 | 3.2 | 7.9 | 5.9 | 6.3 | 8.9 | 0.0008 | 0.0009 | 0.0005 | 0.0008 | 0.0016 | 0.0018 | 0.0010 | 0.0016 | 0.0016 | 0.0018 | 0.0010 | 0.0016 | 0.0031 | 0.0030 | 0.0028 | 0.0031 |
| 12" | 4.7 | 2.1 | 3.0 | 3.9 | 4.9 | 9.9 | 8.3 | 9.8 | 11.8 | 0.0010 | 0.0011 | 0.0006 | 0.0010 | 0.0020 | 0.0022 | 0.0012 | 0.0020 | 0.0020 | 0.0022 | 0.0012 | 0.0020 | 0.0031 | 0.0030 | 0.0028 | 0.0031 |
| 16" | 4.7 | 2.1 | 3.9 | 4.9 | 4.9 | 11.1 | 9.8 | 9.8 | 13.8 | 0.0012 | 0.0013 | 0.0006 | 0.0012 | 0.0024 | 0.0026 | 0.0012 | 0.0024 | 0.0024 | 0.0026 | 0.0012 | 0.0024 | - | - | - | - |
| 20" | 6.3 | 2.9 | 3.9 | 4.9 | 7.9 | 11.1 | 11.8 | 15.8 | 15.8 | 0.0020 | 0.0022 | 0.0012 | 0.0020 | 0.0039 | 0.0030 | 0.0020 | 0.0039 | 0.0039 | 0.0039 | 0.0020 | 0.0039 | - | - | - | - |
| 25" | 6.3 | 2.9 | 4.9 | 6.3 | 7.9 | 12.8 | 15.8 | 15.8 | 15.8 | 0.0028 | 0.0030 | 0.0020 | 0.0028 | 0.0039 | 0.0039 | 0.0020 | 0.0039 | 0.0039 | 0.0039 | 0.0020 | 0.0039 | - | - | - | - |
| 32" | 6.3 | 6.3 | 7.9 | 9.8 | 12.8 | 19.7 | 15.8 | 19.7 | 19.7 | 0.0039 | 0.0039 | 0.0020 | 0.0039 | 0.0059 | 0.0059 | 0.0024 | 0.0059 | 0.0059 | 0.0059 | 0.0024 | 0.0059 | - | - | - | - |
| 40" | 6.3 | 9.8 | 12.4 | 15.8 | 19.7 | 24.8 | 19.7 | - | 24.8 | 0.0047 | 0.0047 | 0.0024 | 0.0047 | 0.0059 | 0.0059 | 0.0031 | 0.0059 | 0.0059 | 0.0059 | 0.0031 | 0.0059 | - | - | - | - |
| 49" | 7.9 | - | - | 19.7 | 31.5 | 31.5 | 39.4 | - | 39.4 | 0.0047 | 0.0047 | 0.0024 | 0.0047 | 0.0059 | 0.0059 | 0.0031 | 0.0059 | 0.0059 | 0.0059 | 0.0031 | 0.0059 | - | - | - | - |
| 55" | 7.9 | - | - | 19.7 | 31.5 | 31.5 | 39.4 | - | 39.4 | 0.0047 | 0.0047 | 0.0024 | 0.0047 | 0.0059 | 0.0059 | 0.0039 | 0.0059 | 0.0071 | 0.0071 | 0.0047 | 0.0071 | - | - | - | - |
| 63" | 7.9 | - | - | 19.7 | 31.5 | 31.5 | 39.4 | - | 39.4 | 0.0059 | 0.0059 | 0.0031 | 0.0059 | 0.0071 | 0.0071 | 0.0047 | 0.0071 | 0.0079 | 0.0079 | 0.0063 | 0.0079 | - | - | - | - |
| 71" | 7.9 | - | - | 19.7 | 31.5 | 31.5 | 39.4 | - | 39.4 | 0.0079 | 0.0079 | 0.0047 | 0.0079 | 0.0087 | 0.0087 | 0.0063 | 0.0087 | 0.0098 | 0.0098 | 0.0079 | 0.0098 | - | - | - | - |
| 79" | 7.9 | - | - | 19.7 | 31.5 | 31.5 | 39.4 | - | 39.4 | 0.0079 | 0.0079 | 0.0047 | 0.0079 | 0.0087 | 0.0087 | 0.0063 | 0.0087 | 0.0098 | 0.0098 | 0.0079 | 0.0098 | - | - | - | - |

34**
 ■ 3-jaw wedge bar chucks

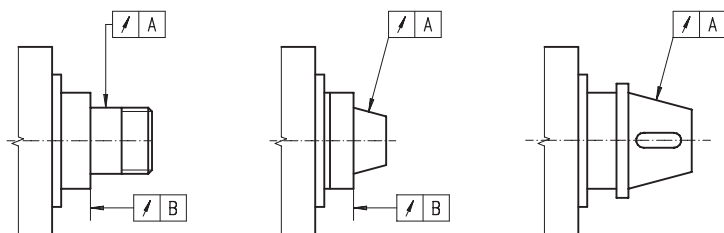
| Chuck size [in] | l | d ₆ | d ₇ | d ₈ | d ₉ | d ₁₀ | Centering accuracy | | | | | |
|-----------------|-----|----------------|----------------|----------------|----------------|-----------------|--------------------|------|--------|--------|--------|--------|
| | | | | | | | a | b | c | s | | |
| | | | | | | | [in] | | | | | |
| 5" | 2.4 | 0.6 | 0.8 | 1.1 | 2.0 | 3.9 | 3.7 | 4.9 | 0.0006 | 0.0006 | 0.0004 | 0.0008 |
| 6" | 2.4 | 0.6 | 0.8 | 1.5 | 2.0 | 5.3 | 3.9 | 6.3 | 0.0008 | 0.0006 | 0.0004 | 0.0008 |
| 8" | 3.1 | 0.6 | 0.9 | 2.0 | 3.1 | 6.4 | 5.9 | 7.9 | 0.0008 | 0.0008 | 0.0004 | 0.0008 |
| 10" | 3.1 | 0.6 | 1.3 | 2.5 | 3.1 | 7.9 | 7.1 | 9.8 | 0.0008 | 0.0008 | 0.0004 | 0.0008 |
| 12" | 4.7 | 0.8 | 2.5 | 3.5 | 4.9 | 9.9 | 8.9 | 11.4 | 0.0010 | 0.0010 | 0.0004 | 0.0010 |
| 16" | 4.7 | 2.1 | 3.9 | 4.9 | 4.9 | 11.1 | 9.8 | 11.8 | 0.0012 | 0.0012 | 0.0006 | 0.0012 |
| 20" | 6.3 | 3.0 | 3.9 | 4.9 | 7.9 | 12.8 | 11.8 | 15.7 | 0.0020 | 0.0020 | 0.0012 | 0.0020 |
| 25" | 6.3 | 3.0 | 4.9 | 6.3 | 7.9 | 15.7 | 15.7 | 15.7 | 0.0028 | 0.0028 | 0.0020 | 0.0028 |
| 32" | 6.3 | 7.9 | 9.8 | 11.1 | 15.7 | 19.7 | 15.7 | 24.8 | 0.0039 | 0.0039 | 0.0020 | 0.0039 |
| 40" | 6.3 | 12.8 | 15.7 | 19.7 | 19.7 | 24.8 | 24.8 | 31.5 | 0.0047 | 0.0047 | 0.0024 | 0.0047 |
| 47" | 6.3 | 19.7 | 24.8 | - | 27.6 | 31.5 | 31.5 | 39.4 | 0.0063 | 0.0063 | 0.0031 | 0.0063 |

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SPINDLE NOSE CENTERING ACCURACY

To obtain the specified centering accuracy of a chuck mounted on a machine tool it is necessary:

- 1) to ensure the machine spindle nose run-out does not exceed the values specified,
- 2) to meet the basic requirements for correct mounting of the chuck on the spindle nose, according to the operations manual.



| A · B | | | |
|------------|---------|------------------|---------|
| 35** | | 32**, 36**, 37** | |
| Ø 3 - 16" | 0.0001" | Ø 3 - 6" | 0.0001" |
| Ø 20 - 25" | 0.0002" | Ø 8 - 32" | 0.0002" |

BALANCE VALUE

35**, 37**

- 3- and 4-jaw scroll chucks - steel body

| Chuck size [in] | lb-in |
|-----------------|--------|
| 3" | 0.0616 |
| 4" | 0.0896 |
| 5" | 0.1288 |
| 6" | 0.1792 |
| 8" | 0.2520 |
| 10" | 0.3527 |
| 12" | 0.5039 |
| 16" | 0.7839 |
| 20" | 1.6797 |
| 25" | 3.5834 |

34**

- 3-jaw wedge bar chucks

| Chuck size [in] | lb-in |
|-----------------|--------|
| 5" | 0.0896 |
| 6" | 0.1792 |
| 8" | 0.3527 |
| 10" | 0.6999 |
| 12" | 1.3998 |

TOTAL GRIPPING FORCE

- The gripping force is the total sum of all jaws acting radially on the stationary, nonrotating workpiece.
- The data refer to a chuck in good condition lubricated with grease as recommended in the chuck manual.

3105, 32**, 35**, 36**, 37**, 38**,
45**, 46**, 47**, 48**

34**

- All scroll, independent and combination chucks

| Chuck size [in] | Torque on wrench [lb/ft] | Total gripping force [lbf] |
|-----------------|--------------------------|----------------------------|
| 3" | 26 | 2,250 |
| 4" | 37 | 3,821 |
| 5" | 56 | 5,395 |
| 6" | 89 | 6,969 (5,395*) |
| 8" | 118 | 8,317 (6,519*) |
| 10" | 133 | 10,341 (8,093*) |
| 12" | 148 | 12,364 (9,891*) |
| 16" | 207 | 14,612 (11,015*) |
| 20" | 266 | 16,186 |
| 25" | 340 | 17,984 |
| 32" | 370 | 20,232 |
| 40" | 370 | 25,853 |
| 49" | 370 | 28,101 |
| 55" | 370 | 28,101 |
| 63" | 370 | 28,101 |
| 71" | 370 | 28,101 |
| 79" | 370 | 28,101 |

* For Type 3105 - 2-jaw scroll chucks

- 3-jaw wedge bar chucks

| Chuck size [in] | Torque on wrench [lb/ft] | Total gripping force [lbf] |
|-----------------|--------------------------|----------------------------|
| 5" | 30 | 6,740 |
| 6" | 74 | 13,490 |
| 8" | 118 | 19,110 |
| 10" | 148 | 24,730 |
| 12" | 185 | 29,225 |
| 16" | 207 | 44,960 |
| 20" | 237 | 51,700 |
| 25" | 259 | 56,200 |
| 32" | 259 | 56,200 |
| 40" | 259 | 56,200 |
| 47" | 259 | 56,200 |