

ROLL GRIP® Series Stud Driver and Remover

When the **ROLL GRIP**® is loaded onto the stud, the smoothly ground rolls compete for space with the stud and the internal cams on the main ring. Any movement right or left causes a positive grip on the stud.

When used as a REMOVER, the stud falls free from the tool as soon as it clears the part.

When used as a DRIVER, the power source must be brought to a complete rotational stop and all torque relaxed before the Roll-Grip will release the stud.

The **ROLL GRIP**® Stud Driver is designed with enough adjustment, so that on most applications the rolls will pass over the threads and grip on the unthreaded body of the stud. However, certain conditions may cause the **ROLL GRIP**® to bite directly on the threads, which will cause thread distortion. The degree of distortion would be commensurate with the hardness of the stud, and the amount of torque applied.

If unthreaded area is smaller in diameter than threaded diameter, special tool modifications may be required.

Do not use any lubricant, wet or dry, on this tool. Occasionally the tools should be disassembled and the rolls and internal cams sanded with emery cloth.



Automatic Stud Pick-up:

Ask for information on the POSI-LOAD STUD RETAINER, and the **"RCD"**® series. (Available for sizes 3/16" thru 3/8" or M5 thru M10.)

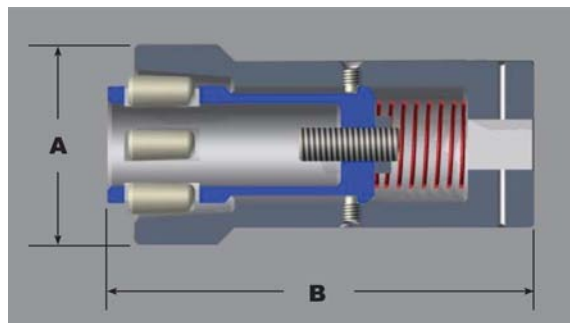
Pipe Diameters:

Ask for brochure on the **MODEL "R"**®

When ordering tool:

Specify diameter of stud, length of thread on nut end, length of unthreaded body, and height of stud projection above casting.

Specify tool number.



Part numbers - Dimensions

| metric Sizes | | | | | |
|--------------|-----------|------------------|-------------|-------------|--------------|
| Square Drive | Stud Size | Part number | A ±0.8MM | B ±1.6MM | Weight kg |
| 3/8" | M5 | 3RM-1-6 | 25.4 | 65.1 | 0,4 |
| | M6 | 4RM-1-6 | 29.4 | 78.6 | 0,3 |
| | M7 | 4RM-2-6 | 29.4 | 78.6 | 0,3 |
| | M8 | 5RM-1-6 | 36.5 | 83.3 | 0,4 |
| 1/2" | M5 | 3RM-1-8 | 25.4 | 65.1 | 0,2 |
| | M6 | 4RM-1-8 | 29.4 | 78.6 | 0,3 |
| | M7 | 4RM-2-8 | 29.4 | 78.6 | 0,3 |
| | M8 | 5RM-1-8 | 36.5 | 83.3 | 0,4 |
| | M10 | 6RM-1-8 | 42.9 | 93.7 | 0,6 |
| | M12 | 8RM-1-8 | 49.2 | 123.8 | 0,9 |
| 3/4" | M12 | 8RM-1-12 | 48.4 | 130.2 | 1,3 |
| | M14 | 9RM-1-12 | 50.8 | 136.5 | 1,5 |
| | M16 | 10RM-1-12 | 54.0 | 142.9 | 1,8 |
| | M18 | 12RM-1-12 | 57.2 | 162.0 | 2,3 |
| | M20 | 12RM-2-12 | 57.2 | 162.0 | 2,3 |
| | M22 | 14RM-1-12 | 61.0 | 171.5 | 2,8 |
| | M24 | 16RM-1-12 | 64.3 | 178.6 | 3,1 |
| | M27 | 16RM-2-12 | 64.3 | 178.6 | 3,1 |
| | M30 | 18RM-1-12 | 69.9 | 185.0 | 3,0 |
| | M33 | 20RM-1-12 | 73.0 | 191.3 | 3,6 |
| 1" | M18 | 12RM-1-16 | 57.2 | 162.0 | 2,3 |
| | M20 | 12RM-2-16 | 57.2 | 162.0 | 2,3 |
| | M22 | 14RM-1-16 | 61.0 | 171.5 | 2,8 |
| | M24 | 16RM-1-16 | 64.3 | 178.6 | 3,1 |
| | M27 | 16RM-2-16 | 64.3 | 178.6 | 3,1 |
| | M30 | 18RM-1-16 | 69.9 | 185.0 | 3,0 |
| | M33 | 20RM-1-16 | 73.0 | 191.3 | 3,5 |

| inch Sizes | | | | | |
|--------------|-----------|---------------|-------------|-------------|--------------|
| Square Drive | Stud Size | Part number | A ±0.8MM | B ±1.6MM | Weight kg |
| 3/8" | 3/16" | 3R-6 | 25,4 | 65,1 | 0,2 |
| | 1/4" | 4R-6 | 29,4 | 78,6 | 0,3 |
| | 5/16" | 5R-6 | 36,5 | 83,3 | 0,4 |
| 1/2" | 3/16" | 3R-8 | 25,4 | 65,1 | 0,2 |
| | 1/4" | 4R-8 | 29,4 | 78,6 | 0,3 |
| | 5/16" | 5R-8 | 36,5 | 83,3 | 0,4 |
| | 3/8" | 6R-8 | 42,9 | 93,7 | 0,6 |
| | 7/16" | 7R-8 | 49,2 | 120,7 | 0,9 |
| | 1/2" | 8R-8 | 49,2 | 123,8 | 0,9 |
| 3/4" | 1/2" | 8R-12 | 48,4 | 130,2 | 1,3 |
| | 9/16" | 9R-12 | 50,8 | 136,5 | 1,5 |
| | 5/8" | 10R-12 | 54,0 | 142,9 | 1,8 |
| | 3/4" | 12R-12 | 57,2 | 161,9 | 2,3 |
| | 7/8" | 14R-12 | 61,0 | 171,5 | 2,8 |
| | 1" | 16R-12 | 64,3 | 178,6 | 3,1 |
| | 1-1/8" | 18R-12 | 69,9 | 184,9 | 3,0 |
| | 1-1/4" | 20R-12 | 73,0 | 191,3 | 3,6 |
| 1" | 3/4" | 12R-16 | 57,2 | 161,9 | 2,3 |
| | 7/8" | 14R-16 | 61,0 | 171,5 | 2,8 |
| | 1" | 16R-16 | 64,3 | 178,6 | 3,1 |
| | 1-1/8" | 18R-16 | 69,9 | 184,9 | 3,0 |
| | 1-1/4" | 20R-16 | 73,0 | 191,3 | 3,5 |
| | 1-3/8" | 22R-16 | 79,4 | 209,6 | 3,8 |
| | 1-1/2" | 24R-16 | 82,5 | 223,0 | 6,6 |
| | 1-5/8" | 26R-16 | 89,0 | 229,4 | 5,0 |
| | 1-3/4" | 28R-16 | 92,1 | 237,3 | 5,5 |
| | 1-7/8" | 30R-16 | 95,3 | 251,6 | 9,5 |
| | 2" | 32R-16 | 101,6 | 251,6 | 11,4 |

| inch Sizes | | | | | |
|---------------|-----------|---------------|-------------|-------------|--------------|
| Square Drive | Stud Size | Part number | A ±0.8MM | B ±1.6MM | Weight kg |
| 1-1/2" | 1-3/8" | 22R-24 | 79,4 | 209,6 | 6,9 |
| | 1-1/2" | 24R-24 | 82,5 | 223,0 | 7,3 |
| | 1-5/8" | 26R-24 | 89,0 | 229,4 | 7,8 |
| | 1-3/4" | 28R-24 | 92,1 | 237,3 | 10,6 |
| | 1-7/8" | 30R-24 | 95,3 | 243,7 | 7,7 |
| | 2" | 32R-24 | 101,6 | 251,6 | 7,8 |
| | 2-1/8" | 34R-24 | 104,8 | 256,6 | 12,0 |
| | 2-1/4" | 36R-24 | 108,0 | 265,9 | 12,6 |
| | 2-3/8" | 38R-24 | 111,1 | 273,8 | 13,8 |
| | 2-1/2" | 40R-24 | 114,3 | 280,1 | 11,4 |
| | 2-3/4" | 44R-24 | 120,7 | 296,1 | 13,4 |
| | 3" | 48R-24 | 127,0 | 310,4 | 13,4 |

all dimensions in millimeters
other sizes quoted on request

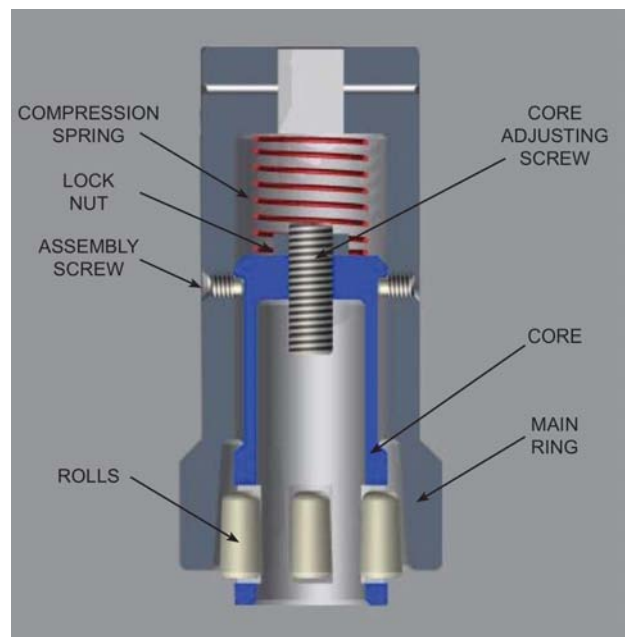
The 3/8" and 1/2" Female Squares are equipped with a plain hole in one side for pin lock on male squares, and have a setscrew in the other side.

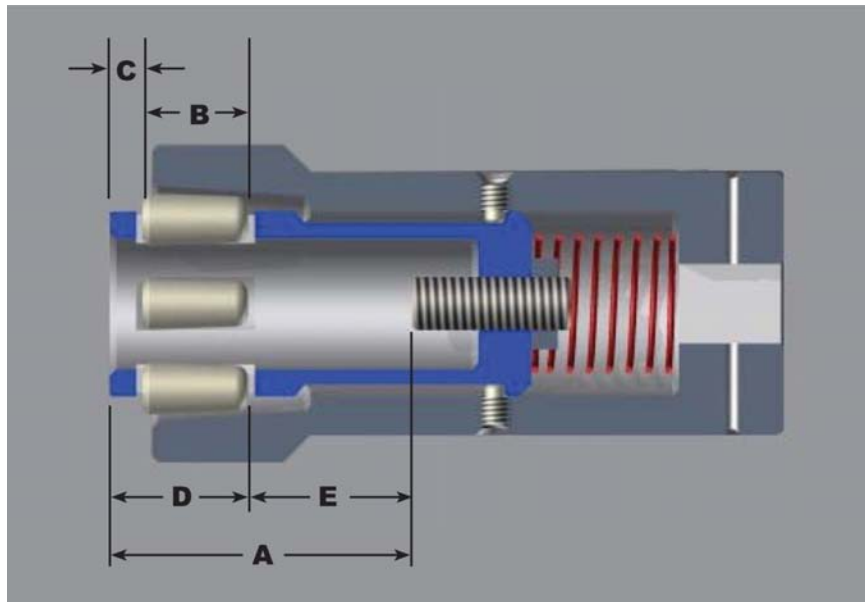
The 3/4" - 1" and 1-1/2" Female Squares are equipped with a cross pin and "O"-Ring.
Larger sizes quoted on request.

When ordering Spare Parts:

Please give stud size and name of part required.

If ordering "Main Ring", also include square drive size.





Stud Engagement Dimensions

| metric Sizes | | | | | |
|--------------|-------------------------|------------|-----|-----------------------------------|-----------|
| Stud Size | A max. Total Grip | B Rolls | C | D min. Grip to Top of Rolls | E max. |
| M5 | 24,6 | 9,5 | 2,4 | 11,9 | 12,7 |
| M6 | 30,2 | 11,0 | 3,2 | 14,3 | 15,9 |
| M7 | 30,2 | 11,0 | 3,2 | 14,3 | 15,9 |
| M8 | 33,4 | 11,0 | 3,2 | 14,6 | 19,0 |
| M10 | 38,9 | 12,5 | 4,0 | 16,7 | 22,2 |
| M12 | 53,2 | 20,7 | 4,0 | 24,6 | 28,6 |
| M14 | 57,1 | 20,7 | 4,8 | 25,4 | 31,8 |
| M16 | 60,3 | 20,7 | 4,8 | 25,4 | 34,9 |
| M18 | 66,7 | 20,7 | 4,8 | 25,4 | 41,3 |
| M20 | 66,7 | 20,7 | 4,8 | 25,4 | 41,3 |
| M22 | 73,0 | 20,7 | 4,8 | 25,4 | 47,6 |
| M24 | 80,2 | 20,7 | 5,6 | 26,2 | 54,0 |
| M27 | 80,2 | 20,7 | 5,6 | 26,2 | 54,0 |
| M30 | 86,5 | 20,7 | 5,6 | 26,2 | 60,6 |
| M33 | 92,9 | 20,7 | 5,6 | 26,2 | 66,7 |

Stud Engagement Dimensions

| inch Sizes | | | | | |
|------------|-------------------------|------------|-----|-----------------------------------|-----------|
| Stud Size | A max. Total Grip | B Rolls | C | D min. Grip to Top of Rolls | E max. |
| 3/16" | 24,6 | 9,5 | 2,4 | 12,0 | 12,7 |
| 1/4" | 30,2 | 11,1 | 3,2 | 14,3 | 15,9 |
| 5/16" | 33,3 | 11,1 | 3,2 | 14,3 | 19,0 |
| 3/8" | 38,9 | 12,7 | 4,0 | 16,7 | 22,2 |
| 7/16" | 50,0 | 20,6 | 4,0 | 24,6 | 25,4 |
| 1/2" | 53,2 | 20,6 | 4,0 | 24,6 | 28,6 |
| 9/16" | 57,2 | 20,6 | 4,8 | 25,4 | 31,8 |
| 5/8" | 60,3 | 20,6 | 4,8 | 25,4 | 34,9 |
| 3/4" | 66,7 | 20,6 | 4,8 | 25,4 | 41,3 |
| 7/8" | 73,0 | 20,6 | 4,8 | 25,4 | 47,6 |
| 1" | 80,2 | 20,6 | 5,6 | 26,2 | 54,0 |
| 1-1/8" | 86,5 | 20,6 | 5,6 | 26,2 | 60,3 |
| 1-1/4" | 92,9 | 20,6 | 5,6 | 26,2 | 66,7 |
| 1-3/8" | 99,2 | 20,6 | 5,6 | 26,2 | 73,0 |
| 1-1/2" | 106,4 | 20,6 | 6,4 | 27,0 | 79,4 |
| 1-5/8" | 112,7 | 20,6 | 6,4 | 27,0 | 85,7 |
| 1-3/4" | 119,0 | 20,6 | 6,4 | 27,0 | 92,1 |
| 1-7/8" | 125,4 | 20,6 | 6,4 | 27,0 | 98,4 |
| 2" | 131,8 | 20,6 | 6,4 | 27,0 | 104,8 |
| 2-1/8" | 138,1 | 20,6 | 6,4 | 27,0 | 111,0 |
| 2-1/4" | 144,4 | 20,6 | 6,4 | 27,0 | 117,5 |
| 2-3/8" | 150,8 | 20,6 | 6,4 | 27,0 | 123,8 |
| 2-1/2" | 157,2 | 20,6 | 6,4 | 27,0 | 130,2 |
| 2-3/4" | 169,9 | 20,6 | 6,4 | 27,0 | 143,0 |
| 3" | 182,6 | 20,6 | 6,4 | 27,0 | 155,6 |

all dimensions in millimeters
other sizes quoted on request