

METRIC SLEEVE BEARINGS

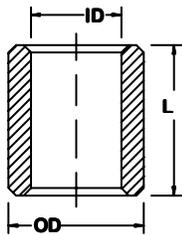
DIN 1850 Form J Sinterbronze
 Oil Impregnated Bronze
 ASTM: B-438-73 Gr 1 Type II



| Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L |
|----------|-----|----|----|----------|----|----|----|----------|----|------|----|------------|----|----|------|
| 1.5-4x7 | 1.5 | 4 | 7 | 5-12x10 | 5 | 12 | 10 | 8-12x16 | 8 | 12 | 16 | 10-16x15 | 10 | 16 | 15 |
| 2-4x4 | 2 | 4 | 4 | 6-8x8 | 6 | 8 | 8 | 8-12x20 | 8 | 12 | 20 | 10-16x16 | 10 | 16 | 16 |
| 2-5x2 | 2 | 5 | 2 | 6-9x4 | 6 | 9 | 4 | 8-12x24 | 8 | 12 | 24 | 10-16x20 | 10 | 16 | 20 |
| 2-5x3 | 2 | 5 | 3 | 6-9x6 | 6 | 9 | 6 | 8-13x10 | 8 | 13 | 10 | 10-16x25 | 10 | 16 | 25 |
| 2.5-6x8 | 2.5 | 6 | 8 | 6-9x8 | 6 | 9 | 8 | 8-13.5x9 | 8 | 13.5 | 9 | 10-16x30 | 10 | 16 | 30 |
| 3-6x4 | 3 | 6 | 4 | 6-9x10 | 6 | 9 | 10 | 8-14x8 | 8 | 14 | 8 | 10-20x30 | 10 | 20 | 30 |
| 3-6x5 | 3 | 6 | 5 | 6-9x12 | 6 | 9 | 12 | 8-14x12 | 8 | 14 | 12 | 10-22x20 | 10 | 22 | 20 |
| 3-6x6 | 3 | 6 | 6 | 6-9x15 | 6 | 9 | 15 | 8-14x14 | 8 | 14 | 14 | 11-14x12.5 | 11 | 14 | 12.5 |
| 3-6x10 | 3 | 6 | 10 | 6-9x16 | 6 | 9 | 16 | 8-14x16 | 8 | 14 | 16 | 12-14x9 | 12 | 14 | 9 |
| 3-8x4 | 3 | 8 | 4 | 6-9x18 | 6 | 9 | 18 | 8-14x20 | 8 | 14 | 20 | 12-14x12 | 12 | 14 | 12 |
| 3-8x6 | 3 | 8 | 6 | 6-10x4 | 6 | 10 | 4 | 8-16x10 | 8 | 16 | 10 | 12-14x14 | 12 | 14 | 14 |
| 4-6x10 | 4 | 6 | 10 | 6-10x6 | 6 | 10 | 6 | 8-16x25 | 8 | 16 | 25 | 12-14x16 | 12 | 14 | 16 |
| 4-6x17 | 4 | 6 | 17 | 6-10x10 | 6 | 10 | 10 | 8-18x16 | 8 | 18 | 16 | 12-15x8 | 12 | 15 | 8 |
| 4-7x4 | 4 | 7 | 4 | 6-10x12 | 6 | 10 | 12 | 9-12x6 | 9 | 12 | 6 | 12-15x12 | 12 | 15 | 12 |
| 4-7x8 | 4 | 7 | 8 | 6-10x14 | 6 | 10 | 14 | 9-12x10 | 9 | 12 | 10 | 12-15x12.8 | 12 | 15 | 12.8 |
| 4-7x10 | 4 | 7 | 10 | 6-10x16 | 6 | 10 | 16 | 9-12x14 | 9 | 12 | 14 | 12-15x15 | 12 | 15 | 15 |
| 4-7x12 | 4 | 7 | 12 | 6-12x6 | 6 | 12 | 6 | 9-12x15 | 9 | 12 | 15 | 12-15x16 | 12 | 15 | 16 |
| 4-7x16 | 4 | 7 | 16 | 6-12x8 | 6 | 12 | 8 | 9-12x18 | 9 | 12 | 18 | 12-15x18 | 12 | 15 | 18 |
| 4-8x4 | 4 | 8 | 4 | 6-12x11 | 6 | 12 | 11 | 9-13x10 | 9 | 13 | 10 | 12-15x20 | 12 | 15 | 20 |
| 4-8x6 | 4 | 8 | 6 | 6-12x12 | 6 | 12 | 12 | 9-14x8 | 9 | 14 | 8 | 12-15x25 | 12 | 15 | 25 |
| 4-8x8 | 4 | 8 | 8 | 6-12x15 | 6 | 12 | 15 | 9-14x16 | 9 | 14 | 16 | 12-16x8 | 12 | 16 | 8 |
| 4-8x10 | 4 | 8 | 10 | 6-12x16 | 6 | 12 | 16 | 10-12x10 | 10 | 12 | 10 | 12-16x12 | 12 | 16 | 12 |
| 4-8x12 | 4 | 8 | 12 | 6-12x25 | 6 | 12 | 25 | 10-12x11 | 10 | 12 | 11 | 12-16x15 | 12 | 16 | 15 |
| 4-10x8 | 4 | 10 | 8 | 6-14x12 | 6 | 14 | 12 | 10-12x20 | 10 | 12 | 20 | 12-16x16 | 12 | 16 | 16 |
| 4-10x10 | 4 | 10 | 10 | 7-9x14 | 7 | 9 | 14 | 10-13x10 | 10 | 13 | 10 | 12-16x20 | 12 | 16 | 20 |
| 4-12x8 | 4 | 12 | 8 | 7-10x5 | 7 | 10 | 5 | 10-13x12 | 10 | 13 | 12 | 12-16x25 | 12 | 16 | 25 |
| 5-7x7 | 5 | 7 | 7 | 7-10x8 | 7 | 10 | 8 | 10-13x16 | 10 | 13 | 16 | 12-16x27 | 12 | 16 | 27 |
| 5-8x5 | 5 | 8 | 5 | 7-10x10 | 7 | 10 | 10 | 10-13x18 | 10 | 13 | 18 | 12-16x30 | 12 | 16 | 30 |
| 5-8x8 | 5 | 8 | 8 | 7-11x8 | 7 | 11 | 8 | 10-13x20 | 10 | 13 | 20 | 12-17x10 | 12 | 17 | 10 |
| 5-8x10 | 5 | 8 | 10 | 7-11x13 | 7 | 11 | 13 | 10-13x25 | 10 | 13 | 25 | 12-17x12 | 12 | 17 | 12 |
| 5-8x12 | 5 | 8 | 12 | 7-11x14 | 7 | 11 | 14 | 10-14x8 | 10 | 14 | 8 | 12-17x16 | 12 | 17 | 16 |
| 5-8x15 | 5 | 8 | 15 | 7-13x22 | 7 | 13 | 22 | 10-14x10 | 10 | 14 | 10 | 12-17x18 | 12 | 17 | 18 |
| 5-8x16 | 5 | 8 | 16 | 7-14x10 | 7 | 14 | 10 | 10-14x14 | 10 | 14 | 14 | 12-17x20 | 12 | 17 | 20 |
| 5-9x4 | 5 | 9 | 4 | 8-10x8 | 8 | 10 | 8 | 10-14x15 | 10 | 14 | 15 | 12-17x21 | 12 | 17 | 21 |
| 5-9x5 | 5 | 9 | 5 | 8-11x6 | 8 | 11 | 6 | 10-14x16 | 10 | 14 | 16 | 12-17x25 | 12 | 17 | 25 |
| 5-9x8 | 5 | 9 | 8 | 8-11x8 | 8 | 11 | 8 | 10-14x18 | 10 | 14 | 18 | 12-18x8 | 12 | 18 | 8 |
| 5-9x9 | 5 | 9 | 9 | 8-11x12 | 8 | 11 | 12 | 10-14x20 | 10 | 14 | 20 | 12-18x10 | 12 | 18 | 10 |
| 5-9x11 | 5 | 9 | 11 | 8-11x16 | 8 | 11 | 16 | 10-14x25 | 10 | 14 | 25 | 12-18x12 | 12 | 18 | 12 |
| 5-10x5 | 5 | 10 | 5 | 8-11x20 | 8 | 11 | 20 | 10-15x10 | 10 | 15 | 10 | 12-18x16 | 12 | 18 | 16 |
| 5-10x6 | 5 | 10 | 6 | 8-12x6 | 8 | 12 | 6 | 10-15x16 | 10 | 15 | 16 | 12-18x18 | 12 | 18 | 18 |
| 5-10x8 | 5 | 10 | 8 | 8-12x8 | 8 | 12 | 8 | 10-15x20 | 10 | 15 | 20 | 12-18x20 | 12 | 18 | 20 |
| 5-10x10 | 5 | 10 | 10 | 8-12x10 | 8 | 12 | 10 | 10-15x25 | 10 | 15 | 25 | 12-18x25 | 12 | 18 | 25 |
| 5-10x14 | 5 | 10 | 14 | 8-12x12 | 8 | 12 | 12 | 12-20x16 | 12 | 20 | 16 | 12-18x30 | 12 | 18 | 30 |
| | | | | 8-12x14 | 8 | 12 | 14 | 10-16x8 | 10 | 16 | 8 | 12-24x30 | 12 | 24 | 30 |
| | | | | | | | | 10-16x10 | 10 | 16 | 10 | | | | |

Tolerance: Tolerances may vary for some sizes due to different molds available at time of manufacture.

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Oil Impregnated Bronze
ASTM: B-438-73 Gr 1 Type II



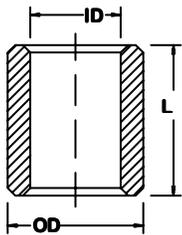
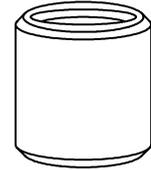
| Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L |
|----------|----|----|----|------------|----|----|------|----------|----|----|----|----------|----|----|----|
| 12-25x25 | 12 | 25 | 25 | 15-22x15 | 15 | 22 | 15 | 18-24x24 | 18 | 24 | 24 | 20-28x16 | 20 | 28 | 16 |
| 13-16x19 | 13 | 16 | 19 | 15-22x16 | 15 | 22 | 16 | 18-24x25 | 18 | 24 | 25 | 20-28x20 | 20 | 28 | 20 |
| 14-18x10 | 14 | 18 | 10 | 15-22x20 | 15 | 22 | 20 | 18-24x28 | 18 | 24 | 28 | 20-28x25 | 20 | 28 | 25 |
| 14-18x14 | 14 | 18 | 14 | 15-22x22 | 15 | 22 | 22 | 18-24x30 | 18 | 24 | 30 | 20-28x28 | 20 | 28 | 28 |
| 14-18x15 | 14 | 18 | 15 | 15-22x25 | 15 | 22 | 25 | 18-24x36 | 18 | 24 | 36 | 20-28x30 | 20 | 28 | 30 |
| 14-18x18 | 14 | 18 | 18 | 15-22x30 | 15 | 22 | 30 | 18-24x40 | 18 | 24 | 40 | 20-28x32 | 20 | 28 | 32 |
| 14-18x19 | 14 | 18 | 19 | 15-24x30 | 15 | 24 | 30 | 18-25x16 | 18 | 25 | 16 | 20-28x40 | 20 | 28 | 40 |
| 14-18x20 | 14 | 18 | 20 | 15-25x18 | 15 | 25 | 18 | 18-25x20 | 18 | 25 | 20 | 20-30x20 | 20 | 30 | 20 |
| 14-18x22 | 14 | 18 | 22 | 15-30x30 | 15 | 30 | 30 | 18-25x22 | 18 | 25 | 22 | 20-30x30 | 20 | 30 | 30 |
| 14-18x26 | 14 | 18 | 26 | 16-18x22 | 16 | 18 | 22 | 18-25x28 | 18 | 25 | 28 | 20-30x45 | 20 | 30 | 45 |
| 14-18x28 | 14 | 18 | 28 | 16-19x14.2 | 16 | 19 | 14.2 | 18-25x30 | 18 | 25 | 30 | 20-40x40 | 20 | 40 | 40 |
| 14-20x10 | 14 | 20 | 10 | 16-19x19 | 16 | 19 | 19 | 18-25x36 | 18 | 25 | 36 | 22-25x20 | 22 | 25 | 20 |
| 14-20x12 | 14 | 20 | 12 | 16-20x12 | 16 | 20 | 12 | 18-28x40 | 18 | 28 | 40 | 22-25x35 | 22 | 25 | 35 |
| 14-20x14 | 14 | 20 | 14 | 16-20x16 | 16 | 20 | 16 | 18-35x30 | 18 | 35 | 30 | 22-26x22 | 22 | 26 | 22 |
| 14-20x15 | 14 | 20 | 15 | 16-20x20 | 16 | 20 | 20 | 19-25x25 | 19 | 25 | 25 | 22-26x26 | 22 | 26 | 26 |
| 14-20x18 | 14 | 20 | 18 | 16-20x25 | 16 | 20 | 25 | 20-23x24 | 20 | 23 | 24 | 22-26x28 | 22 | 26 | 28 |
| 14-20x20 | 14 | 20 | 20 | 16-20x28 | 16 | 20 | 28 | 20-24x16 | 20 | 24 | 16 | 22-27x15 | 22 | 27 | 15 |
| 14-20x22 | 14 | 20 | 22 | 16-20x30 | 16 | 20 | 30 | 20-24x20 | 20 | 24 | 20 | 22-27x18 | 22 | 27 | 18 |
| 14-20x25 | 14 | 20 | 25 | 16-20x32 | 16 | 20 | 32 | 20-24x24 | 20 | 24 | 24 | 22-27x20 | 22 | 27 | 20 |
| 14-20x28 | 14 | 20 | 28 | 16-20x35 | 16 | 20 | 35 | 20-24x25 | 20 | 24 | 25 | 22-27x22 | 22 | 27 | 22 |
| 14-20x30 | 14 | 20 | 30 | 16-22x12 | 16 | 22 | 12 | 20-24x27 | 20 | 24 | 27 | 22-27x25 | 22 | 27 | 25 |
| 14-28x30 | 14 | 28 | 30 | 16-22x16 | 16 | 22 | 16 | 20-24x30 | 20 | 24 | 30 | 22-27x28 | 22 | 27 | 28 |
| 15-17x20 | 15 | 17 | 20 | 16-22x20 | 16 | 22 | 20 | 20-24x32 | 20 | 24 | 32 | 22-27x36 | 22 | 27 | 36 |
| 15-18x12 | 15 | 18 | 12 | 16-22x22 | 16 | 22 | 22 | 20-25x15 | 20 | 25 | 15 | 22-28x18 | 22 | 28 | 18 |
| 15-18x20 | 15 | 18 | 20 | 16-22x25 | 16 | 22 | 25 | 20-25x16 | 20 | 25 | 16 | 22-28x20 | 22 | 28 | 20 |
| 15-18x22 | 15 | 18 | 22 | 16-22x30 | 16 | 22 | 30 | 20-25x20 | 20 | 25 | 20 | 22-28x22 | 22 | 28 | 22 |
| 15-19x10 | 15 | 19 | 10 | 16-22x32 | 16 | 22 | 32 | 20-25x22 | 20 | 25 | 22 | 22-28x28 | 22 | 28 | 28 |
| 15-19x15 | 15 | 19 | 15 | 16-22x45 | 16 | 22 | 45 | 20-25x25 | 20 | 25 | 25 | 22-28x30 | 22 | 28 | 30 |
| 15-19x16 | 15 | 19 | 16 | 17-21x22 | 17 | 21 | 22 | 20-25x28 | 20 | 25 | 28 | 22-28x36 | 22 | 28 | 36 |
| 15-19x20 | 15 | 19 | 20 | 17-21x32 | 17 | 21 | 32 | 20-25x30 | 20 | 25 | 30 | 22-28x40 | 22 | 28 | 40 |
| 15-19x25 | 15 | 19 | 25 | 17-22x17 | 17 | 22 | 17 | 20-25x32 | 20 | 25 | 32 | 22-29x18 | 22 | 29 | 18 |
| 15-19x32 | 15 | 19 | 32 | 17-25x25 | 17 | 25 | 25 | 20-25x34 | 20 | 25 | 34 | 22-29x19 | 22 | 29 | 19 |
| 15-20x10 | 15 | 20 | 10 | 18-22x12 | 18 | 22 | 12 | 20-25x35 | 20 | 25 | 35 | 22-29x22 | 22 | 29 | 22 |
| 15-20x12 | 15 | 20 | 12 | 18-22x18 | 18 | 22 | 18 | 20-25x40 | 20 | 25 | 40 | 22-29x28 | 22 | 29 | 28 |
| 15-20x15 | 15 | 20 | 15 | 18-22x22 | 18 | 22 | 22 | 20-26x15 | 20 | 26 | 15 | 22-29x36 | 22 | 29 | 36 |
| 15-20x20 | 15 | 20 | 20 | 18-22x28 | 18 | 22 | 28 | 20-26x16 | 20 | 26 | 16 | 22-30x40 | 22 | 30 | 40 |
| 15-20x24 | 15 | 20 | 24 | 18-22x30 | 18 | 22 | 30 | 20-26x20 | 20 | 26 | 20 | 22-32x20 | 22 | 32 | 20 |
| 15-20x25 | 15 | 20 | 25 | 18-22x36 | 18 | 22 | 36 | 20-26x25 | 20 | 26 | 25 | 22-32x30 | 22 | 32 | 30 |
| 15-20x28 | 15 | 20 | 28 | 18-22x40 | 18 | 22 | 40 | 20-26x26 | 20 | 26 | 26 | 22-32x45 | 22 | 32 | 45 |
| 15-20x30 | 15 | 20 | 30 | 18-24x12 | 18 | 24 | 12 | 20-26x30 | 20 | 26 | 30 | 24-28x30 | 24 | 28 | 30 |
| 15-20x36 | 15 | 20 | 36 | 18-24x17 | 18 | 24 | 17 | 20-26x32 | 20 | 26 | 32 | 24-30x30 | 24 | 30 | 30 |
| 15-21x10 | 15 | 21 | 10 | 18-24x18 | 18 | 24 | 18 | 20-26x40 | 20 | 26 | 40 | 25-30x20 | 25 | 30 | 20 |
| 15-21x15 | 15 | 21 | 15 | 18-24x22 | 18 | 24 | 22 | 20-27x16 | 20 | 27 | 16 | 25-30x25 | 25 | 30 | 25 |
| 15-21x16 | 15 | 21 | 16 | 18-24x28 | 18 | 24 | 28 | 20-27x20 | 20 | 27 | 20 | 25-30x28 | 25 | 30 | 28 |
| 15-21x20 | 15 | 21 | 20 | 18-24x30 | 18 | 24 | 30 | 20-27x25 | 20 | 27 | 25 | 25-30x30 | 25 | 30 | 30 |
| 15-21x21 | 15 | 21 | 21 | 18-24x36 | 18 | 24 | 36 | 20-27x32 | 20 | 27 | 32 | | | | |
| 15-21x25 | 15 | 21 | 25 | 18-24x40 | 18 | 24 | 40 | | | | | | | | |
| 15-21x30 | 15 | 21 | 30 | | | | | | | | | | | | |
| 15-21x32 | 15 | 21 | 32 | | | | | | | | | | | | |

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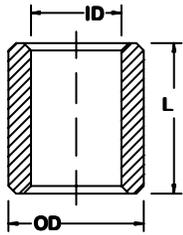
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| Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | |
|----------|----|----|----|----------|----|----|----|----------|----|----|----|-----------|----|----|-----|--|
| 25-30x32 | 25 | 30 | 32 | 30-35x40 | 30 | 35 | 40 | 35-44x22 | 35 | 44 | 22 | 45-52x40 | 45 | 52 | 40 | |
| 25-30x35 | 25 | 30 | 35 | 30-35x43 | 30 | 35 | 43 | 35-44x28 | 35 | 44 | 28 | 45-55x35 | 45 | 55 | 35 | |
| 25-30x40 | 25 | 30 | 40 | | | | | 35-44x35 | 35 | 44 | 35 | 45-55x40 | 45 | 55 | 40 | |
| 25-30x45 | 25 | 30 | 45 | 30-38x15 | 30 | 38 | 15 | | | | | 45-55x45 | 45 | 55 | 45 | |
| 25-30x50 | 25 | 30 | 50 | 30-38x20 | 30 | 38 | 20 | 35-45x25 | 35 | 45 | 25 | 45-55x50 | 45 | 55 | 50 | |
| | | | | 30-38x24 | 30 | 38 | 24 | 35-45x35 | 35 | 45 | 35 | 45-55x55 | 45 | 55 | 55 | |
| 25-32x20 | 25 | 32 | 20 | 30-38x25 | 30 | 38 | 25 | 35-45x40 | 35 | 45 | 40 | 45-55x60 | 45 | 55 | 60 | |
| 25-32x25 | 25 | 32 | 25 | 30-38x30 | 30 | 38 | 30 | 35-45x45 | 35 | 45 | 45 | 45-55x65 | 45 | 55 | 65 | |
| 25-32x30 | 25 | 32 | 30 | 30-38x38 | 30 | 38 | 38 | 35-45x50 | 35 | 45 | 50 | 45-55x75 | 45 | 55 | 75 | |
| 25-32x32 | 25 | 32 | 32 | 30-38x40 | 30 | 38 | 40 | 35-50x50 | 35 | 50 | 50 | | | | | |
| 25-32x35 | 25 | 32 | 35 | 30-38x45 | 30 | 38 | 45 | | | | | 45-56x28 | 45 | 56 | 28 | |
| 25-32x40 | 25 | 32 | 40 | 30-38x50 | 30 | 38 | 50 | 36-42x22 | 36 | 42 | 22 | 45-56x36 | 45 | 56 | 36 | |
| | | | | 30-38x60 | 30 | 38 | 60 | 36-42x28 | 36 | 42 | 28 | 45-56x45 | 45 | 56 | 45 | |
| 25-35x15 | 25 | 35 | 15 | 30-40x25 | 30 | 40 | 25 | 36-42x36 | 36 | 42 | 36 | 45-56x56 | 45 | 56 | 56 | |
| 25-35x20 | 25 | 35 | 20 | 30-40x30 | 30 | 40 | 30 | 36-42x45 | 36 | 42 | 45 | | | | | |
| 25-35x25 | 25 | 35 | 25 | 30-40x40 | 30 | 40 | 40 | | | | | 45-65x80 | 45 | 65 | 80 | |
| 25-35x35 | 25 | 35 | 35 | 30-40x45 | 30 | 40 | 45 | 36-45x22 | 36 | 45 | 22 | | | | | |
| 25-35x38 | 25 | 35 | 38 | 30-40x50 | 30 | 40 | 50 | 36-45x28 | 36 | 45 | 28 | 50-54x45 | 50 | 54 | 45 | |
| 25-35x40 | 25 | 35 | 40 | 30-40x60 | 30 | 40 | 60 | 36-45x36 | 36 | 45 | 36 | | | | | |
| 25-35x50 | 25 | 35 | 50 | | | | | 36-45x45 | 36 | 45 | 45 | 50-56x32 | 50 | 56 | 32 | |
| 25-36x50 | 25 | 36 | 50 | 30-41x55 | 30 | 41 | 55 | 36-50x50 | 36 | 50 | 50 | 50-56x40 | 50 | 56 | 40 | |
| 25-45x35 | 25 | 45 | 35 | 30-50x60 | 30 | 50 | 60 | | | | | 50-56x50 | 50 | 56 | 50 | |
| 26-30x40 | 26 | 30 | 40 | 32-35x40 | 32 | 35 | 40 | 38-44x25 | 38 | 44 | 25 | 50-56x63 | 50 | 56 | 63 | |
| 26-35x45 | 26 | 35 | 45 | 32-38x20 | 32 | 38 | 20 | 38-44x35 | 38 | 44 | 35 | | | | | |
| | | | | 32-38x25 | 32 | 38 | 25 | 38-44x45 | 38 | 44 | 45 | 50-60x32 | 50 | 60 | 32 | |
| 28-32x22 | 28 | 32 | 22 | 32-38x28 | 32 | 38 | 28 | 38-44x50 | 38 | 44 | 50 | 50-60x35 | 50 | 60 | 35 | |
| 28-32x28 | 28 | 32 | 28 | 32-38x32 | 32 | 38 | 32 | | | | | 50-60x40 | 50 | 60 | 40 | |
| 28-32x30 | 28 | 32 | 30 | 32-38x40 | 32 | 38 | 40 | 40-30x36 | 40 | 30 | 36 | 50-60x50 | 50 | 60 | 50 | |
| 28-32x36 | 28 | 32 | 36 | 32-38x50 | 32 | 38 | 50 | | | | | 50-60x60 | 50 | 60 | 60 | |
| 28-32x45 | 28 | 32 | 45 | | | | | 40-45x50 | 40 | 45 | 50 | 50-60x63 | 50 | 60 | 63 | |
| | | | | 32-40x20 | 32 | 40 | 20 | | | | | 50-60x70 | 50 | 60 | 70 | |
| 28-33x22 | 28 | 33 | 22 | 32-40x25 | 32 | 40 | 25 | 40-46x25 | 40 | 46 | 25 | 50-60x75 | 50 | 60 | 75 | |
| 28-33x28 | 28 | 33 | 28 | 32-40x32 | 32 | 40 | 32 | 40-46x30 | 40 | 46 | 30 | 50-60x100 | 50 | 60 | 100 | |
| 28-33x36 | 28 | 33 | 36 | 32-40x40 | 32 | 40 | 40 | 40-46x32 | 40 | 46 | 32 | | | | | |
| 28-33x45 | 28 | 33 | 45 | 32-40x50 | 32 | 40 | 50 | 40-46x40 | 40 | 46 | 40 | 50-70x70 | 50 | 70 | 70 | |
| | | | | | | | | 40-46x50 | 40 | 46 | 50 | | | | | |
| 28-35x32 | 28 | 35 | 32 | 32-45x50 | 32 | 45 | 50 | 40-50x25 | 40 | 50 | 25 | 55-65x40 | 55 | 65 | 40 | |
| | | | | 34-40x50 | 34 | 40 | 50 | 40-50x30 | 40 | 50 | 30 | 55-65x55 | 55 | 65 | 55 | |
| 28-36x22 | 28 | 36 | 22 | | | | | 40-50x32 | 40 | 50 | 32 | 55-65x60 | 55 | 65 | 60 | |
| 28-36x28 | 28 | 36 | 28 | | | | | 40-50x35 | 40 | 50 | 35 | 55-65x65 | 55 | 65 | 65 | |
| 28-36x36 | 28 | 36 | 36 | 35-40x30 | 35 | 40 | 30 | 40-50x40 | 40 | 50 | 40 | 55-65x70 | 55 | 65 | 70 | |
| 28-36x45 | 28 | 36 | 45 | 35-40x35 | 35 | 40 | 35 | 40-50x50 | 40 | 50 | 50 | | | | | |
| | | | | 35-40x40 | 35 | 40 | 40 | 40-50x60 | 40 | 50 | 60 | 55-66x56 | 55 | 66 | 56 | |
| 28-40x50 | 28 | 40 | 50 | 35-40x45 | 35 | 40 | 45 | 40-50x80 | 40 | 50 | 80 | | | | | |
| | | | | | | | | | | | | 55-70x70 | 55 | 70 | 70 | |
| 30-33x35 | 30 | 33 | 35 | 35-41x25 | 35 | 41 | 25 | 40-60x60 | 40 | 60 | 60 | 60-68x50 | 60 | 68 | 50 | |
| 30-33x45 | 30 | 33 | 45 | 35-41x35 | 35 | 41 | 35 | | | | | 60-68x60 | 60 | 68 | 60 | |
| | | | | 35-41x40 | 35 | 41 | 40 | 45-51x28 | 45 | 51 | 28 | 60-68x70 | 60 | 68 | 70 | |
| 30-35x15 | 30 | 35 | 15 | | | | | 45-51x35 | 45 | 51 | 35 | | | | | |
| 30-35x20 | 30 | 35 | 20 | 35-42x35 | 35 | 42 | 35 | 45-51x36 | 45 | 51 | 36 | 60-70x50 | 60 | 70 | 50 | |
| 30-35x25 | 30 | 35 | 25 | 35-42x42 | 35 | 42 | 42 | 45-51x45 | 45 | 51 | 45 | 60-70x60 | 60 | 70 | 60 | |
| 30-35x30 | 30 | 35 | 30 | 35-42x50 | 35 | 42 | 50 | 45-51x55 | 45 | 51 | 55 | 60-70x90 | 60 | 70 | 90 | |
| 30-35x35 | 30 | 35 | 35 | | | | | 45-51x56 | 45 | 51 | 56 | 60-70x120 | 60 | 70 | 120 | |

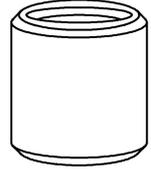
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DIN 1850 Form J Sinterbronze
 Oil Impregnated Bronze
 ASTM: B-438-73 Gr 1 Type II

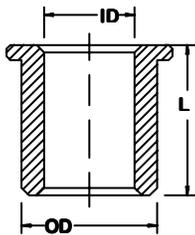


| Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L |
|------------|----|-----|-----|--------------|-----|-------|-----|----------|----|----|---|----------|----|----|---|
| 60-72x50 | 60 | 72 | 50 | 85-95x100 | 85 | 95 | 100 | | | | | | | | |
| 60-72x60 | 60 | 72 | 60 | 85-100x100 | 85 | 100 | 100 | | | | | | | | |
| 60-72x63 | 60 | 72 | 63 | 90-105x80 | 90 | 105 | 80 | | | | | | | | |
| 60-72x70 | 60 | 72 | 70 | 90-110x80 | 90 | 110 | 80 | | | | | | | | |
| 60-75x60 | 60 | 75 | 60 | 90-110.3x65 | 90 | 110.3 | 65 | | | | | | | | |
| 60-75x90 | 60 | 75 | 90 | 100-120x80 | 100 | 120 | 80 | | | | | | | | |
| 60-80x90 | 60 | 80 | 90 | 100-120x120 | 100 | 120 | 120 | | | | | | | | |
| 60-80x120 | 60 | 80 | 120 | 100-120.3x65 | 100 | 120.3 | 65 | | | | | | | | |
| 60-85x90 | 60 | 85 | 90 | 110-123.5x65 | 110 | 123.5 | 65 | | | | | | | | |
| 63-70x40 | 63 | 70 | 40 | 110-125x120 | 110 | 125 | 120 | | | | | | | | |
| 63-70x50 | 63 | 70 | 50 | 120-130x65 | 120 | 130 | 65 | | | | | | | | |
| 65-75x60 | 65 | 75 | 60 | 125-150x120 | 125 | 150 | 120 | | | | | | | | |
| 65-75x90 | 65 | 75 | 90 | 140-155x65 | 140 | 155 | 65 | | | | | | | | |
| 65-77x63 | 65 | 77 | 63 | | | | | | | | | | | | |
| 65-80x60 | 65 | 80 | 60 | | | | | | | | | | | | |
| 65-80x90 | 65 | 80 | 90 | | | | | | | | | | | | |
| 65-81x60 | 65 | 81 | 60 | | | | | | | | | | | | |
| 70-80x60 | 70 | 80 | 60 | | | | | | | | | | | | |
| 70-80x90 | 70 | 80 | 90 | | | | | | | | | | | | |
| 70-80x120 | 70 | 80 | 120 | | | | | | | | | | | | |
| 70-82x63 | 70 | 82 | 63 | | | | | | | | | | | | |
| 70-85x60 | 70 | 85 | 60 | | | | | | | | | | | | |
| 70-85x90 | 70 | 85 | 90 | | | | | | | | | | | | |
| 75-85x70 | 75 | 85 | 70 | | | | | | | | | | | | |
| 75-85x100 | 75 | 85 | 100 | | | | | | | | | | | | |
| 75-90x60 | 75 | 90 | 60 | | | | | | | | | | | | |
| 75-90x63 | 75 | 90 | 63 | | | | | | | | | | | | |
| 75-90x70 | 75 | 90 | 70 | | | | | | | | | | | | |
| 75-90x100 | 75 | 90 | 100 | | | | | | | | | | | | |
| 75-100x100 | 75 | 100 | 100 | | | | | | | | | | | | |
| 80-90x70 | 80 | 90 | 70 | | | | | | | | | | | | |
| 80-90x100 | 80 | 90 | 100 | | | | | | | | | | | | |
| 80-95x63 | 80 | 95 | 63 | | | | | | | | | | | | |
| 80-95x70 | 80 | 95 | 70 | | | | | | | | | | | | |
| 80-95x100 | 80 | 95 | 100 | | | | | | | | | | | | |
| 80-96x60 | 80 | 96 | 60 | | | | | | | | | | | | |
| 80-100x120 | 80 | 100 | 120 | | | | | | | | | | | | |
| 80-105x100 | 80 | 105 | 100 | | | | | | | | | | | | |

Tolerance: Tolerances may vary for some sizes due to different molds available at time of manufacture.

Note: Inquire for additional standard and non-standard sizes. Cast bronze and steel bushings also available by special request.





METRIC FLANGE BEARINGS

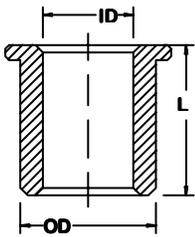
DIN 1850 Form V Sinterbronze
 Oil Impregnated Bronze
 ASTM: B-438-73 Gr 1 Type II



| Part No. | ID | OD | L | Flange OD | Flange Thickness | Part No. | ID | OD | L | Flange OD | Flange Thickness |
|----------------|----|----|----|-----------|------------------|-------------------|----|----|----|-----------|------------------|
| 3-5x4-8X1.5 | 3 | 5 | 4 | 8 | 1.5 | 6-12x8-14x2 | 6 | 12 | 8 | 14 | 2 |
| 3-6x10-8x1 | 3 | 6 | 10 | 8 | 1 | 6-12x13-14x2 | 6 | 12 | 13 | 14 | 2 |
| 3-6x4-9X1.5 | 3 | 6 | 4 | 9 | 1.5 | 6-12x20-14x2 | 6 | 12 | 20 | 14 | 2 |
| 3-6x6-9X1.5 | 3 | 6 | 6 | 9 | 1.5 | 7-12x15-15x2.5 | 7 | 12 | 15 | 15 | 2.5 |
| 3-6x10-9X1.5 | 3 | 6 | 10 | 9 | 1.5 | 8-11x6-12X1.5 | 8 | 11 | 6 | 12 | 1.5 |
| 4-6x8-8X1 | 4 | 6 | 8 | 8 | 1 | 8-11x10-12X1.5 | 8 | 11 | 10 | 12 | 1.5 |
| 4-7x6-10X1.5 | 4 | 7 | 6 | 10 | 1.5 | 8-11x12-12X1.5 | 8 | 11 | 12 | 12 | 1.5 |
| 4-7x6-12X2 | 4 | 7 | 6 | 12 | 2 | 8-11x6-14X1.5 | 8 | 11 | 6 | 14 | 1.5 |
| 4-7x10-12X2 | 4 | 7 | 10 | 12 | 2 | 8-11x10-14X1.5 | 8 | 11 | 10 | 14 | 1.5 |
| 4-8x17-9x2.5 | 4 | 8 | 17 | 9 | 2.5 | 8-11x12-14X1.5 | 8 | 11 | 12 | 14 | 1.5 |
| 4-8x6-10X1.5 | 4 | 8 | 6 | 10 | 1.5 | 8-12x6-16X2 | 8 | 12 | 6 | 16 | 2 |
| 4-8x4-12X2 | 4 | 8 | 4 | 12 | 2 | 8-12x8-16X2 | 8 | 12 | 8 | 16 | 2 |
| 4-8x6-12X2 | 4 | 8 | 6 | 12 | 2 | 8-12x12-16X2 | 8 | 12 | 12 | 16 | 2 |
| 4-8x8-12X2 | 4 | 8 | 8 | 12 | 2 | 8-12x14-16x2 | 8 | 12 | 14 | 16 | 2 |
| 4-8x12-12X2 | 4 | 8 | 12 | 12 | 2 | 8-12x16-16X2 | 8 | 12 | 16 | 16 | 2 |
| 5-8x12-11x1.4 | 5 | 8 | 12 | 11 | 1.4 | 8-13x14-16x2 | 8 | 13 | 14 | 16 | 2 |
| 5-8x5-12X2 | 5 | 8 | 5 | 12 | 2 | 8-14x8-18X3 | 8 | 14 | 8 | 18 | 3 |
| 5-8x6-12X2 | 5 | 8 | 6 | 12 | 2 | 8-14x14-18x3 | 8 | 14 | 14 | 18 | 3 |
| 5-8x10-12X2 | 5 | 8 | 10 | 12 | 2 | 8-14x20-18x3 | 8 | 14 | 20 | 18 | 3 |
| 5-8x12-12X2 | 5 | 8 | 12 | 12 | 2 | 8-15x20-18x2 | 8 | 15 | 20 | 18 | 2 |
| 5-9x4-13X2 | 5 | 9 | 4 | 13 | 2 | 9-12x15-15.5x2.5 | 9 | 12 | 15 | 15.5 | 2.5 |
| 5-9x5-13X2 | 5 | 9 | 5 | 13 | 2 | 9-14x6-19X2.5 | 9 | 14 | 6 | 19 | 2.5 |
| 5-9x8-13X2 | 5 | 9 | 8 | 13 | 2 | 9-14x10-19X2.5 | 9 | 14 | 10 | 19 | 2.5 |
| 5-10x6-12X2 | 5 | 10 | 6 | 12 | 2 | 9-14x14-19X2.5 | 9 | 14 | 14 | 19 | 2.5 |
| 5-10x15-13x2 | 5 | 10 | 15 | 13 | 2 | 9-15x20-20x4.5 | 9 | 15 | 20 | 20 | 4.5 |
| 6-9x6-12X1.5 | 6 | 9 | 6 | 12 | 1.5 | 10-12x10-14x1 | 10 | 12 | 10 | 14 | 1 |
| 6-9x10-12X1.5 | 6 | 9 | 10 | 12 | 1.5 | 10-13x6-16X1.5 | 10 | 13 | 6 | 16 | 1.5 |
| 6-9x12-12X1.5 | 6 | 9 | 12 | 12 | 1.5 | 10-13x8-16X1.5 | 10 | 13 | 8 | 16 | 1.5 |
| 6-9x5-14X1.5 | 6 | 9 | 5 | 14 | 1.5 | 10-13x10-16X1.5 | 10 | 13 | 10 | 16 | 1.5 |
| 6-9x6-14X1.5 | 6 | 9 | 6 | 14 | 1.5 | 10-13x12-16X1.5 | 10 | 13 | 12 | 16 | 1.5 |
| 6-9x10-14X1.5 | 6 | 9 | 10 | 14 | 1.5 | 10-13x16-16X1.5 | 10 | 13 | 16 | 16 | 1.5 |
| 6-9x12-14X1.5 | 6 | 9 | 12 | 14 | 1.5 | 10-13x20-16X1.5 | 10 | 13 | 20 | 16 | 1.5 |
| 6-10x4-14X2 | 6 | 10 | 4 | 14 | 2 | 10-14x15-17.2x2.8 | 10 | 14 | 15 | 17.2 | 2.8 |
| 6-10x6-14X2 | 6 | 10 | 6 | 14 | 2 | 10-14x10-18x3 | 10 | 14 | 10 | 18 | 3 |
| 6-10x10-14X2 | 6 | 10 | 10 | 14 | 2 | 10-14x14-18x3 | 10 | 14 | 14 | 18 | 3 |
| 6-10x16-14X2 | 6 | 10 | 16 | 14 | 2 | 10-14x20-18x3 | 10 | 14 | 20 | 18 | 3 |
| 6-10x13-12x2 | 6 | 10 | 13 | 12 | 2 | 10-15x20-19x2 | 10 | 15 | 20 | 19 | 2 |
| 6-10x13-14x1.5 | 6 | 10 | 13 | 14 | 1.5 | 10-15x10-20X2.5 | 10 | 15 | 10 | 20 | 2.5 |
| 6-10x14-14x2 | 6 | 10 | 14 | 14 | 2 | 10-15x16-20X2.5 | 10 | 15 | 16 | 20 | 2.5 |
| 6-12x6-14X2 | 6 | 12 | 6 | 14 | 2 | 10-15x20-20X2.5 | 10 | 15 | 20 | 20 | 2.5 |
| | | | | | | 10-16x30-20x2.5 | 10 | 16 | 30 | 20 | 2.5 |
| | | | | | | 10-16x8-20X3 | 10 | 16 | 8 | 20 | 3 |

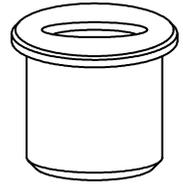
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METRIC FLANGE BEARINGS

DIN 1850 Form V Sinterbronze
Oil Impregnated Bronze
ASTM: B-438-73 Gr 1 Type II

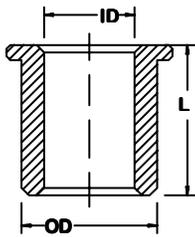


| Part No. | ID | OD | L | Flange OD | Flange Thickness | Part No. | ID | OD | L | Flange OD | Flange Thickness |
|-------------------|----|----|----|-----------|------------------|-----------------|----|----|----|-----------|------------------|
| 10-16x10-20X3 | 10 | 16 | 10 | 20 | 3 | 14-20x18-26X3 | 14 | 20 | 18 | 26 | 3 |
| 10-16x16-20x3 | 10 | 16 | 16 | 20 | 3 | 14-20x20-26X3 | 14 | 20 | 20 | 26 | 3 |
| 10-16x20-20x3 | 10 | 16 | 20 | 20 | 3 | 14-20x22-26X3 | 14 | 20 | 22 | 26 | 3 |
| 10-16x30-20x3 | 10 | 16 | 30 | 20 | 3 | 14-20x28-26X3 | 14 | 20 | 28 | 26 | 3 |
| 10-16x8-22X3 | 10 | 16 | 8 | 22 | 3 | 14-20x25-27X3 | 14 | 20 | 25 | 27 | 3 |
| 10-16x10-22X3 | 10 | 16 | 10 | 22 | 3 | 15-19x15-23x2 | 15 | 19 | 15 | 23 | 2 |
| 10-16x12-22X3 | 10 | 16 | 12 | 22 | 3 | 15-19x16-23X2 | 15 | 19 | 16 | 23 | 2 |
| 10-16x16-22X3 | 10 | 16 | 16 | 22 | 3 | 15-19x20-23X2 | 15 | 19 | 20 | 23 | 2 |
| 10-16x20-22X3 | 10 | 16 | 20 | 22 | 3 | 15-19x25-23x2 | 15 | 19 | 25 | 23 | 2 |
| 12-15x7-18X1.5 | 12 | 15 | 7 | 18 | 1.5 | 15-20x30-24x2.5 | 15 | 20 | 30 | 24 | 2.5 |
| 12-15x12-18X1.5 | 12 | 15 | 12 | 18 | 1.5 | 15-20x15-27X3 | 15 | 20 | 15 | 27 | 3 |
| 12-15x16-18X1.5 | 12 | 15 | 16 | 18 | 1.5 | 15-20x25-27X3 | 15 | 20 | 25 | 27 | 3 |
| 12-15x20-18X1.5 | 12 | 15 | 20 | 18 | 1.5 | 15-21x10-27X3 | 15 | 21 | 10 | 27 | 3 |
| 12-15x25-18X1.5 | 12 | 15 | 25 | 18 | 1.5 | 15-21x15-27X3 | 15 | 21 | 15 | 27 | 3 |
| 12-15x9-22x5 | 12 | 15 | 9 | 22 | 5 | 15-21x16-27X3 | 15 | 21 | 16 | 27 | 3 |
| 12-16x12-20x2 | 12 | 16 | 12 | 20 | 2 | 15-21x20-27X3 | 15 | 21 | 20 | 27 | 3 |
| 12-16x16-20x2 | 12 | 16 | 16 | 20 | 2 | 15-21x25-27X3 | 15 | 21 | 25 | 27 | 3 |
| 12-16x25-20x2 | 12 | 16 | 25 | 20 | 2 | 15-21x32-27X3 | 15 | 21 | 32 | 27 | 3 |
| 12-16x15-20x3 | 12 | 16 | 15 | 20 | 3 | 15-22x12-28X3 | 15 | 22 | 12 | 28 | 3 |
| 12-17x12-22X2.5 | 12 | 17 | 12 | 22 | 2.5 | 15-22x15-28x3 | 15 | 22 | 15 | 28 | 3 |
| 12-17x16-22X2.5 | 12 | 17 | 16 | 22 | 2.5 | 15-22x16-28X3 | 15 | 22 | 16 | 28 | 3 |
| 12-17x20-22X2.5 | 12 | 17 | 20 | 22 | 2.5 | 15-22x22-28x3 | 15 | 22 | 22 | 28 | 3 |
| 12-17x25-22X2.5 | 12 | 17 | 25 | 22 | 2.5 | 15-22x30-28x3 | 15 | 22 | 30 | 28 | 3 |
| 12-18x25-21.5x3.5 | 12 | 18 | 25 | 21.5 | 3.5 | 15-30x40-38x5 | 15 | 30 | 40 | 38 | 5 |
| 12-18x10-22X3 | 12 | 18 | 10 | 22 | 3 | 16-20x12-24X2 | 16 | 20 | 12 | 24 | 2 |
| 12-18x12-22X3 | 12 | 18 | 12 | 22 | 3 | 16-20x16-24X2 | 16 | 20 | 16 | 24 | 2 |
| 12-18x18-22x3 | 12 | 18 | 18 | 22 | 3 | 16-20x20-24X2 | 16 | 20 | 20 | 24 | 2 |
| 12-18x25-22x3 | 12 | 18 | 25 | 22 | 3 | 16-20x25-24X2 | 16 | 20 | 25 | 24 | 2 |
| 12-18x8-24X3 | 12 | 18 | 8 | 24 | 3 | 16-22x12-28X3 | 16 | 22 | 12 | 28 | 3 |
| 12-18x10-24X3 | 12 | 18 | 10 | 24 | 3 | 16-22x16-28X3 | 16 | 22 | 16 | 28 | 3 |
| 12-18x12-24X3 | 12 | 18 | 12 | 24 | 3 | 16-22x20-28X3 | 16 | 22 | 20 | 28 | 3 |
| 12-18x16-24X3 | 12 | 18 | 16 | 24 | 3 | 16-22x25-28X3 | 16 | 22 | 25 | 28 | 3 |
| 12-18x20-24X3 | 12 | 18 | 20 | 24 | 3 | 16-22x32-28X3 | 16 | 22 | 32 | 28 | 3 |
| 12-18x25-24X3 | 12 | 18 | 25 | 24 | 3 | 16-22x16-28x3.5 | 16 | 22 | 16 | 28 | 3.5 |
| 13-18x16-23x5 | 13 | 18 | 16 | 23 | 5 | 16-22x22-28x3.5 | 16 | 22 | 22 | 28 | 3.5 |
| 13-18x25-23x5 | 13 | 18 | 25 | 23 | 5 | 16-22x30-28x3.5 | 16 | 22 | 30 | 28 | 3.5 |
| 14-18x12-22X2 | 14 | 18 | 12 | 22 | 2 | 16-22x12-28X4 | 16 | 22 | 12 | 28 | 4 |
| 14-18x14-22X2 | 14 | 18 | 14 | 22 | 2 | 16-22x16-28X4 | 16 | 22 | 16 | 28 | 4 |
| 14-18x18-22X2 | 14 | 18 | 18 | 22 | 2 | 17-22x30-26x2 | 17 | 22 | 30 | 26 | 2 |
| 14-18x20-22X2 | 14 | 18 | 20 | 22 | 2 | 18-22x18-26X2 | 18 | 22 | 18 | 26 | 2 |
| 14-18x22-22X2 | 14 | 18 | 22 | 22 | 2 | 18-22x20-26X2 | 18 | 22 | 20 | 26 | 2 |
| 14-18x25-22X2 | 14 | 18 | 25 | 22 | 2 | 18-22x22-26X2 | 18 | 22 | 22 | 26 | 2 |
| 14-20x25-24x4 | 14 | 20 | 25 | 24 | 4 | 18-22x25-26X2 | 18 | 22 | 25 | 26 | 2 |
| 14-20x10-25X3 | 14 | 20 | 10 | 25 | 3 | 18-22x28-26X2 | 18 | 22 | 28 | 26 | 2 |
| 14-20x12-25X3 | 14 | 20 | 12 | 25 | 3 | 18-22x18-28x3 | 18 | 22 | 18 | 28 | 3 |
| 14-20x10-26X3 | 14 | 20 | 10 | 26 | 3 | 18-24x12-30X3 | 18 | 24 | 12 | 30 | 3 |
| 14-20x14-26X3 | 14 | 20 | 14 | 26 | 3 | | | | | | |

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METRIC FLANGE BEARINGS

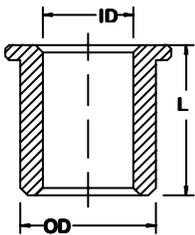
DIN 1850 Form V Sinterbronze
Oil Impregnated Bronze
ASTM: B-438-73 Gr 1 Type II



| Part No. | ID | OD | L | Flange OD | Flange Thickness | Part No. | ID | OD | L | Flange OD | Flange Thickness |
|-------------------|----|----|----|-----------|------------------|-----------------|----|----|----|-----------|------------------|
| 18-24x18-30X3 | 18 | 24 | 18 | 30 | 3 | 25-30x20-35X2.5 | 25 | 30 | 20 | 35 | 2.5 |
| 18-24x22-30X3 | 18 | 24 | 22 | 30 | 3 | 25-30x25-35X2.5 | 25 | 30 | 25 | 35 | 2.5 |
| 18-24x28-30X3 | 18 | 24 | 28 | 30 | 3 | 25-30x30-35X2.5 | 25 | 30 | 30 | 35 | 2.5 |
| 18-24x30-30X3 | 18 | 24 | 30 | 30 | 3 | 25-30x32-35X2.5 | 25 | 30 | 32 | 35 | 2.5 |
| 18-25x30-31x5 | 18 | 25 | 30 | 31 | 5 | 25-30x40-35X2.5 | 25 | 30 | 40 | 35 | 2.5 |
| 18-25x12-32x4 | 18 | 25 | 12 | 32 | 4 | 25-30x45-36x3 | 25 | 30 | 45 | 36 | 3 |
| 18-25x16-32x4 | 18 | 25 | 16 | 32 | 4 | 25-32x20-39X3.5 | 25 | 32 | 20 | 39 | 3.5 |
| 18-25x18-32x4 | 18 | 25 | 18 | 32 | 4 | 25-32x25-39X3.5 | 25 | 32 | 25 | 39 | 3.5 |
| 18-25x25-32x4 | 18 | 25 | 25 | 32 | 4 | 25-32x30-39X3.5 | 25 | 32 | 30 | 39 | 3.5 |
| 18-25x30-32x4 | 18 | 25 | 30 | 32 | 4 | 25-32x32-39X3.5 | 25 | 32 | 32 | 39 | 3.5 |
| 18-25x35-32x4 | 18 | 25 | 35 | 32 | 4 | 25-32x53-40x3 | 25 | 32 | 53 | 40 | 3 |
| 20-24x12-28X2 | 20 | 24 | 12 | 28 | 2 | 25-32x25-40x5 | 25 | 32 | 25 | 40 | 5 |
| 20-24x16-28X2 | 20 | 24 | 16 | 28 | 2 | 25-32x32-40x5 | 25 | 32 | 32 | 40 | 5 |
| 20-24x20-28X2 | 20 | 24 | 20 | 28 | 2 | 25-32x40-40x5 | 25 | 32 | 40 | 40 | 5 |
| 20-24x25-28X2 | 20 | 24 | 25 | 28 | 2 | 25-32x53-40x5 | 25 | 32 | 53 | 40 | 5 |
| 20-25x30-28x2 | 20 | 25 | 30 | 28 | 2 | 25-35x16-45X5 | 25 | 35 | 16 | 45 | 5 |
| 20-26x40-32x2 | 20 | 26 | 40 | 32 | 2 | 25-35x25-45X5 | 25 | 35 | 25 | 45 | 5 |
| 20-26x15-32X3 | 20 | 26 | 15 | 32 | 3 | 25-35x35-45x5 | 25 | 35 | 35 | 45 | 5 |
| 20-26x16-32X3 | 20 | 26 | 16 | 32 | 3 | 25-35x45-45x5 | 25 | 35 | 45 | 45 | 5 |
| 20-26x20-32X3 | 20 | 26 | 20 | 32 | 3 | 25-36x50-43x7 | 25 | 36 | 50 | 43 | 7 |
| 20-26x25-32X3 | 20 | 26 | 25 | 32 | 3 | 28-33x22-38X2.5 | 28 | 33 | 22 | 38 | 2.5 |
| 20-26x30-32X3 | 20 | 26 | 30 | 32 | 3 | 28-33x28-38X2.5 | 28 | 33 | 28 | 38 | 2.5 |
| 20-26x32-32X3 | 20 | 26 | 32 | 32 | 3 | 28-33x36-38X2.5 | 28 | 33 | 36 | 38 | 2.5 |
| 20-28x20-34x3 | 20 | 28 | 20 | 34 | 3 | 28-36x22-44X4 | 28 | 36 | 22 | 44 | 4 |
| 20-28x40-34.5x5.5 | 20 | 28 | 40 | 34.5 | 5.5 | 28-36x28-44X4 | 28 | 36 | 28 | 44 | 4 |
| 20-28x16-35X4 | 20 | 28 | 16 | 35 | 4 | 28-36x36-44X4 | 28 | 36 | 36 | 44 | 4 |
| 20-28x20-35X4 | 20 | 28 | 20 | 35 | 4 | 28-40x50-48x8 | 28 | 40 | 50 | 48 | 8 |
| 20-28x25-35x4 | 20 | 28 | 25 | 35 | 4 | 30-35x40-40x3 | 30 | 35 | 40 | 40 | 3 |
| 20-28x35-35x4 | 20 | 28 | 35 | 35 | 4 | 30-36x20-42x3 | 30 | 36 | 20 | 42 | 3 |
| 20-28x40-35x4 | 20 | 28 | 40 | 35 | 4 | 30-36x30-42x3 | 30 | 36 | 30 | 42 | 3 |
| 22-27x18-32X2.5 | 22 | 27 | 18 | 32 | 2.5 | 30-36x40-42x3 | 30 | 36 | 40 | 42 | 3 |
| 22-27x22-32X2.5 | 22 | 27 | 22 | 32 | 2.5 | 30-36x20-44X4 | 30 | 36 | 20 | 44 | 4 |
| 22-27x28-32X2.5 | 22 | 27 | 28 | 32 | 2.5 | 30-36x30-44X4 | 30 | 36 | 30 | 44 | 4 |
| 22-28x15-34X3 | 22 | 28 | 15 | 34 | 3 | 30-36x40-44X4 | 30 | 36 | 40 | 44 | 4 |
| 22-28x16-34X3 | 22 | 28 | 16 | 34 | 3 | 30-38x20-46X4 | 30 | 38 | 20 | 46 | 4 |
| 22-28x20-34X3 | 22 | 28 | 20 | 34 | 3 | 30-38x25-46X4 | 30 | 38 | 25 | 46 | 4 |
| 22-28x25-34X3 | 22 | 28 | 25 | 34 | 3 | 30-38x30-46X4 | 30 | 38 | 30 | 46 | 4 |
| 22-28x30-34X3 | 22 | 28 | 30 | 34 | 3 | 30-38x45-50x4 | 30 | 38 | 45 | 50 | 4 |
| 22-29x18-36X3.5 | 22 | 29 | 18 | 36 | 3.5 | 30-40x20-50X5 | 30 | 40 | 20 | 50 | 5 |
| 22-29x22-36X3.5 | 22 | 29 | 22 | 36 | 3.5 | 30-40x30-50X5 | 30 | 40 | 30 | 50 | 5 |
| 22-29x28-36X3.5 | 22 | 29 | 28 | 36 | 3.5 | 30-40x42-50x5 | 30 | 40 | 42 | 50 | 5 |
| 22-29x36-36X3.5 | 22 | 29 | 36 | 36 | 3.5 | 30-40x55-50x5 | 30 | 40 | 55 | 50 | 5 |
| 22-32x40-39x6 | 22 | 32 | 40 | 39 | 6 | 32-38x20-44X3 | 32 | 38 | 20 | 44 | 3 |
| 22-32x22-40x5 | 22 | 32 | 22 | 40 | 5 | 32-38x25-44X3 | 32 | 38 | 25 | 44 | 3 |
| 22-32x30-40x5 | 22 | 32 | 30 | 40 | 5 | 32-38x32-44X3 | 32 | 38 | 32 | 44 | 3 |
| 22-32x40-40x5 | 22 | 32 | 40 | 40 | 5 | | | | | | |

Tolerance: Tolerances may vary for some sizes due to different molds available at time of manufacture.

Note: Inquire for additional standard and non-standard sizes. Cast bronze and steel bushings also available by special request.



METRIC FLANGE BEARINGS

DIN 1850 Form V Sinterbronze
Oil Impregnated Bronze
ASTM: B-438-73 Gr 1 Type II



| Part No. | ID | OD | L | Flange OD | Flange Thickness | Part No. | ID | OD | L | Flange OD | Flange Thickness |
|-----------------|----|----|----|-----------|------------------|------------------|-----|-----|----|-----------|------------------|
| 32-40x50-45x5 | 32 | 40 | 50 | 45 | 5 | 45-55x45-65X5 | 45 | 55 | 45 | 65 | 5 |
| 32-40x20-48X4 | 32 | 40 | 20 | 48 | 4 | 45-55x55-65X5 | 45 | 55 | 55 | 65 | 5 |
| 32-40x25-48X4 | 32 | 40 | 25 | 48 | 4 | 45-55x30-65X6 | 45 | 55 | 30 | 65 | 6 |
| 32-40x30-48X4 | 32 | 40 | 30 | 48 | 4 | 45-55x45-65X6 | 45 | 55 | 45 | 65 | 6 |
| 32-40x32-48X4 | 32 | 40 | 32 | 48 | 4 | 45-56x28-67X5.5 | 45 | 56 | 28 | 67 | 5.5 |
| 35-40x32-48X4 | 35 | 40 | 32 | 48 | 4 | 45-56x36-67X5.5 | 45 | 56 | 36 | 67 | 5.5 |
| 35-45x50-50x6 | 35 | 45 | 50 | 50 | 6 | 45-56x45-67X5.5 | 45 | 56 | 45 | 67 | 5.5 |
| 35-45x20-55X5 | 35 | 45 | 20 | 55 | 5 | 50-56x30-62X3 | 50 | 56 | 30 | 62 | 3 |
| 35-45x25-55X5 | 35 | 45 | 25 | 55 | 5 | 50-56x32-62X3 | 50 | 56 | 32 | 62 | 3 |
| 35-45x35-55X5 | 35 | 45 | 35 | 55 | 5 | 50-56x40-62X3 | 50 | 56 | 40 | 62 | 3 |
| 35-45x40-55X5 | 35 | 45 | 40 | 55 | 5 | 50-56x50-62X3 | 50 | 56 | 50 | 62 | 3 |
| 36-42x22-48X3 | 36 | 42 | 22 | 48 | 3 | 50-60x32-70X5 | 50 | 60 | 32 | 70 | 5 |
| 36-42x28-48X3 | 36 | 42 | 28 | 48 | 3 | 50-60x35-70X5 | 50 | 60 | 35 | 70 | 5 |
| 36-42x36-48X3 | 36 | 42 | 36 | 48 | 3 | 50-60x40-70X5 | 50 | 60 | 40 | 70 | 5 |
| 36-45x22-54X4.5 | 36 | 45 | 22 | 54 | 4.5 | 50-60x50-70X5 | 50 | 60 | 50 | 70 | 5 |
| 36-45x28-54X4.5 | 36 | 45 | 28 | 54 | 4.5 | 50-60x30-70X6 | 50 | 60 | 30 | 70 | 6 |
| 36-45x36-54X4.5 | 36 | 45 | 36 | 54 | 4.5 | 50-60x50-70X6 | 50 | 60 | 50 | 70 | 6 |
| 40-46x25-52X3 | 40 | 46 | 25 | 52 | 3 | 50-60x60-70X6 | 50 | 60 | 60 | 70 | 6 |
| 40-46x32-52X3 | 40 | 46 | 32 | 52 | 3 | 55-64x45-71x5 | 55 | 64 | 45 | 71 | 5 |
| 40-46x40-52X3 | 40 | 46 | 40 | 52 | 3 | 60-70x50-80X5 | 60 | 70 | 50 | 80 | 5 |
| 40-50x30-60X5 | 40 | 50 | 30 | 60 | 5 | 60-70x60-80X5 | 60 | 70 | 60 | 80 | 5 |
| 40-50x32-60X5 | 40 | 50 | 32 | 60 | 5 | 60-72x50-84X6 | 60 | 72 | 50 | 84 | 6 |
| 40-50x40-60X5 | 40 | 50 | 40 | 60 | 5 | 60-72x60-84X6 | 60 | 72 | 60 | 84 | 6 |
| 40-50x50-60X5 | 40 | 50 | 50 | 60 | 5 | 60-75x35-85X8 | 60 | 75 | 35 | 85 | 8 |
| 40-50x25-60X6 | 40 | 50 | 25 | 60 | 6 | 60-75x60-85X8 | 60 | 75 | 60 | 85 | 8 |
| 40-50x40-60X6 | 40 | 50 | 40 | 60 | 6 | 70-85x60-95X8 | 70 | 85 | 60 | 95 | 8 |
| 40-50x50-60x6 | 40 | 50 | 50 | 60 | 6 | 80-95x70-105x8 | 80 | 95 | 70 | 105 | 8 |
| 40-50x60-60x6 | 40 | 50 | 60 | 60 | 6 | 90-110x50-120X8 | 90 | 110 | 50 | 120 | 8 |
| 45-51x28-57X3 | 45 | 51 | 28 | 57 | 3 | 100-120x80-130X8 | 100 | 120 | 80 | 130 | 8 |
| 45-51x36-57X3 | 45 | 51 | 36 | 57 | 3 | | | | | | |
| 45-51x45-57X3 | 45 | 51 | 45 | 57 | 3 | | | | | | |
| 45-55x35-65X5 | 45 | 55 | 35 | 65 | 5 | | | | | | |

Tolerance: Tolerances may vary for some sizes due to different molds available at time of manufacture.

Note: Inquire for additional standard and non-standard sizes. Cast bronze and steel bushings also available by special request.

Oil and Grease Grooves



SINGLE LOOP



FIGURE EIGHT



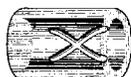
ONE STRAIGHT AND ONE CIRCULAR



DOUBLE LOOP



DOUBLE FIGURE EIGHT



R.H. AND L.H. SPIRAL



STRAIGHT GROOVE

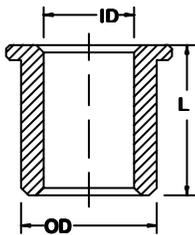


CIRCULAR GROOVE

Oil and Grease Grooves are available by special order.

METRIC SLEEVE BEARINGS

Sintered Self-Lubricating



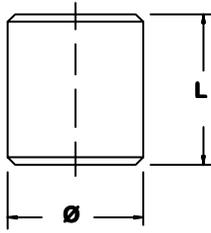
Materials Available

| | Oil-Bronze* | Oil-Steel | Graphite-Bronze | Lead-Bronze | Ferro-Bronze |
|--|---|---|-----------------|-------------|--------------|
| Approx. composition % | | | | | |
| Cu | 89.5 | | 78.0 | 80.0 | 45.0 |
| Sn | 9.3 | | 8.0 | 10.0 | 4.5 |
| C | 1.2 | | 6.0 | | 1.0 |
| Pb | | | 8.0 | 10.0 | |
| Fe | | 100.0 | | | 49.5 |
| Density g/cm ³ | 6.0 | 5.5 | 6.6 | 7.0 | 6.2 |
| Oil Content volume % | 25 | 25 | | | 20 |
| Ultimate tensile strength Rm N/mm ² | 60 | 60 | 25 | 100 | 100 |
| Elongation A% | 1 | 2 | 0.5 | 3 | 1 |
| Hardness HV 5 | 15 | 20 | 15 | 35 | 40 |
| Linear expansion x 10 ⁻⁶ /K | 18 | 12 | 14 | 18 | 15 |
| Thermal conductivity W/m x K | 40 | 30 | | 40 | 35 |
| Coefficient of friction | | | | | |
| pv/Nmm ² x m/s Continuous service Life 10,000 hours | 1.6 | 1.6 | 0.4 | 1.3 | 1.7 |
| p max (N/mm ²) Continuous service Surface velocity approx. 0.17 m/s | 10 | 9.5 | 2.5 | 10 | 10 |
| p max (N/mm ²) Static load 0.1% deformation | 50 | 50 | 40 | 50 | 50 |
| v max (m/s) Continuous service | 5 | 5 | 0.25 | 5 | 5 |
| Corresponding Standards | ASTM B 438 grad 1 typ 1 SAE 840 Sint-A 51 ISO 5755/1 P 4021 Z MPIF CTG-1001-K17 | ASTM B 439 grad 1 SAE 850 Sint-A 00 ISO 5755/1 P 1011 Z MPIF F-0000-K15 | | | |

* Standard material for stock sleeve bearings

Call to check delivery on non-standard material.

METRIC SINTERED SELF-LUBRICATING BARS



| Part No. | Material | Diameter Ø | Length L |
|-------------|-----------------|---------------|-------------|
| BAR 20X52 B | Oil-Bronze | 20 | 52 |
| BAR 30X52 B | | 30 | 52 |
| BAR 40X52 B | | 40 | 52 |
| BAR 50X60 B | | 50 | 60 |
| BAR 60X60 B | | 60 | 60 |
| BAR 80X80 B | | 80 | 80 |
| BAR 10X22 G | Graphite-Bronze | 10 | 22 |
| BAR 20X52 G | | 20 | 52 |
| BAR 30X52 G | | 30 | 52 |
| BAR 40X52 G | | 40 | 52 |
| BAR 50X60 G | | 50 | 60 |
| BAR 60X60 G | | 60 | 60 |
| BAR 80X80 G | | 80 | 80 |

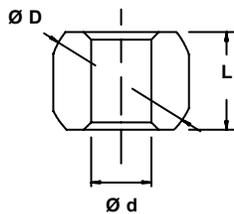
Machining

Machining of self-lubricated bearings should be avoided. Casting produces a far superior bearing. Oil-Bronze and Graphite-Bronze should be turned with diamond or carbide tips, quality ISO K 20, with a tip radius of max. 0.1-0.2 mm. Suitable cutting speeds are 100-200 m/min.

The bearing surface of self-lubricating bearings must not be ground as the oil transportation pores are then closed. The outer surface of bearing can be machined in any way required. The bearing can be heated on an electrical hot plate after machining to check that the pores are still open. Oil will then ooze out of the pores.

Bearings usually lose oil during the turning operation and the oil should be replaced before the bearing is used. A simple method of doing this is accomplished by immersing the bearing in oil SAE 20 heated to 80°C (176°F). The bearing should be immersed until the oil has cooled. The pores are filled with oil by this process and the bearing is then ready for use.

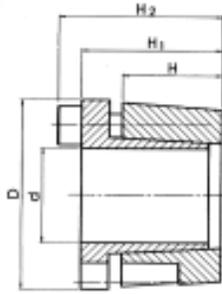
METRIC SINTERED SELF-LUBRICATING SPHERICAL BEARINGS



| Inside Ø d H7 | Outside Ø D h11 | Length L h13 | Inside Ø d H7 | Outside Ø D h11 | Length L h13 |
|------------------|--------------------|-----------------|------------------|--------------------|-----------------|
| 2 | 5 | 3 | 8 | 16 | 11 |
| 3 | 8 | 6 | 8 | 19 | 14 |
| 4 | 10 | 8 | 9 | 22 | 14 |
| 5 | 10 | 7 | 10 | 18 | 12 |
| 5 | 13 | 10 | 10 | 22 | 14 |
| 6 | 12 | 8 | 12 | 25 | 20 |
| 6 | 15 | 11 | 16 | 30 | 20 |
| 7 | 16 | 11 | 20 | 40 | 25 |
| | | | 25 | 50 | 30 |

Non-Stock, request price (quantity sensitive)

KEYLESS SELF-LOCKING BUSHING



Type 1108

| Part No. | Dimensions (mm) | | | | | Performances | | Screws | | | | Set Screws | | | |
|-----------|-----------------|----|------|------|----|--------------|---------|--------|------|---------|-----|------------|-------|---------|-----|
| | d | H | H1 | H2 | D | Mt (Nm) | Pax (N) | N° | Type | Ms (Nm) | Key | N° | Type | Ms (Nm) | Key |
| SL1108F12 | 12 | 20 | 28.8 | 32.8 | 39 | 40 | 6600 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F14 | 14 | 20 | 28.8 | 32.8 | 39 | 56 | 8000 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F15 | 15 | 20 | 28.8 | 32.8 | 39 | 85 | 11300 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F16 | 16 | 20 | 28.8 | 32.8 | 39 | 100 | 12500 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F18 | 18 | 20 | 28.8 | 32.8 | 39 | 120 | 13300 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F19 | 19 | 20 | 28.8 | 32.8 | 39 | 128 | 13500 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F20 | 20 | 20 | 28.8 | 32.8 | 39 | 136 | 13600 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |
| SL1108F22 | 22 | 20 | 28.8 | 32.8 | 39 | 150 | 13650 | 6 | M4 | 4.9 | 3 | 2 | 1/4 W | 4.9 | 3 |

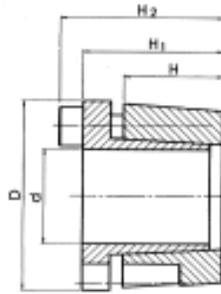
Type 1210

| | | | | | | | | | | | | | | | |
|-----------|----|----|------|------|----|-----|-------|---|----|----|---|---|-------|----|---|
| SL1210F14 | 14 | 25 | 34.8 | 40.8 | 49 | 100 | 14300 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F15 | 15 | 25 | 34.8 | 40.8 | 49 | 115 | 15300 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F16 | 16 | 25 | 34.8 | 40.8 | 49 | 130 | 16250 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F18 | 18 | 25 | 34.8 | 40.8 | 49 | 160 | 17800 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F19 | 19 | 25 | 34.8 | 40.8 | 49 | 175 | 18400 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F20 | 20 | 25 | 34.8 | 40.8 | 49 | 190 | 19000 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F22 | 22 | 25 | 34.8 | 40.8 | 49 | 270 | 24500 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F24 | 24 | 25 | 34.8 | 40.8 | 49 | 340 | 28300 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1210F25 | 25 | 25 | 34.8 | 40.8 | 49 | 400 | 32000 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |

Type 1610

| | | | | | | | | | | | | | | | |
|-----------|----|----|------|------|----|-----|-------|---|----|----|---|---|-------|----|---|
| SL1610F14 | 14 | 25 | 34.8 | 40.8 | 59 | 100 | 14300 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F15 | 15 | 25 | 34.8 | 40.8 | 59 | 115 | 15300 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F16 | 16 | 25 | 34.8 | 40.8 | 59 | 130 | 16250 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F18 | 18 | 25 | 34.8 | 40.8 | 59 | 160 | 17800 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F19 | 19 | 25 | 34.8 | 40.8 | 59 | 175 | 18400 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F20 | 20 | 25 | 34.8 | 40.8 | 59 | 190 | 19000 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F22 | 22 | 25 | 34.8 | 40.8 | 59 | 220 | 20000 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F24 | 24 | 25 | 34.8 | 40.8 | 59 | 250 | 20800 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F25 | 25 | 25 | 34.8 | 40.8 | 59 | 265 | 21200 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F28 | 28 | 25 | 34.8 | 40.8 | 59 | 310 | 22150 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F30 | 30 | 25 | 34.8 | 40.8 | 59 | 340 | 22700 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F32 | 32 | 25 | 34.8 | 40.8 | 59 | 380 | 23750 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |
| SL1610F35 | 35 | 25 | 34.8 | 40.8 | 59 | 420 | 24000 | 6 | M6 | 17 | 5 | 2 | 3/8 W | 17 | 5 |

KEYLESS SELF-LOCKING BUSHING



Type 2012

| Part No. | Dimensions (mm) | | | | | Performances | | Screws | | | | Set Screws | | | |
|-----------|-----------------|----|------|------|----|--------------|---------|--------|------|---------|-----|------------|--------|---------|-----|
| | d | H | H1 | H2 | D | Mt (Nm) | Pax (N) | N° | Type | Ms (Nm) | Key | N° | Type | Ms (Nm) | Key |
| SL2012F19 | 19 | 30 | 40.8 | 48.8 | 71 | 150 | 15800 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F20 | 20 | 30 | 40.8 | 48.8 | 71 | 180 | 18000 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F22 | 22 | 30 | 40.8 | 48.8 | 71 | 210 | 19100 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F24 | 24 | 30 | 40.8 | 48.8 | 71 | 280 | 23300 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F25 | 25 | 30 | 40.8 | 48.8 | 71 | 350 | 28000 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F28 | 28 | 30 | 40.8 | 48.8 | 71 | 500 | 35700 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F30 | 30 | 30 | 40.8 | 48.8 | 71 | 580 | 38700 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F32 | 32 | 30 | 40.8 | 48.8 | 71 | 650 | 40600 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F35 | 35 | 30 | 40.8 | 48.8 | 71 | 800 | 45700 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F38 | 38 | 30 | 40.8 | 48.8 | 71 | 900 | 47400 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F40 | 40 | 30 | 40.8 | 48.8 | 71 | 990 | 49500 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |
| SL2012F42 | 42 | 30 | 40.8 | 48.8 | 71 | 1100 | 52400 | 6 | M8 | 41 | 6 | 2 | 7/16 W | 41 | 6 |

Type 2517

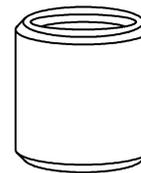
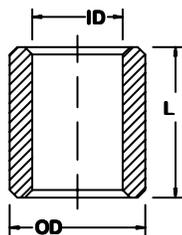
| | | | | | | | | | | | | | | | |
|-----------|----|----|------|------|----|------|-------|---|----|----|---|---|-------|----|---|
| SL2517F24 | 24 | 45 | 55.8 | 63.8 | 86 | 280 | 23300 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F25 | 25 | 45 | 55.8 | 63.8 | 86 | 350 | 28000 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F28 | 28 | 45 | 55.8 | 63.8 | 86 | 500 | 35700 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F30 | 30 | 45 | 55.8 | 63.8 | 86 | 580 | 38700 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F32 | 32 | 45 | 55.8 | 63.8 | 86 | 650 | 40600 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F35 | 35 | 45 | 55.8 | 63.8 | 86 | 800 | 45700 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F38 | 38 | 45 | 55.8 | 63.8 | 86 | 900 | 47300 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F40 | 40 | 45 | 55.8 | 63.8 | 86 | 990 | 49500 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F42 | 42 | 45 | 55.8 | 63.8 | 86 | 1100 | 52400 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F45 | 45 | 45 | 55.8 | 63.8 | 86 | 1360 | 60500 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F48 | 48 | 45 | 55.8 | 63.8 | 86 | 1640 | 68300 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F50 | 50 | 45 | 55.8 | 63.8 | 86 | 1650 | 74000 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |
| SL2517F55 | 55 | 45 | 55.8 | 63.8 | 86 | 2100 | 76300 | 6 | M8 | 41 | 6 | 2 | 1/2 W | 41 | 6 |

Type 3020

| | | | | | | | | | | | | | | | |
|-----------|----|----|------|------|-----|------|--------|---|-----|----|---|---|-------|----|---|
| SL3020F35 | 35 | 50 | 62.8 | 72.8 | 108 | 810 | 46300 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F38 | 38 | 50 | 62.8 | 72.8 | 108 | 960 | 50500 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F40 | 40 | 50 | 62.8 | 72.8 | 108 | 1200 | 60000 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F42 | 42 | 50 | 62.8 | 72.8 | 108 | 1580 | 75300 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F45 | 45 | 50 | 62.8 | 72.8 | 108 | 2000 | 89000 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F48 | 48 | 50 | 62.8 | 72.8 | 108 | 2140 | 90000 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F50 | 50 | 50 | 62.8 | 72.8 | 108 | 2310 | 92400 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F55 | 55 | 50 | 62.8 | 72.8 | 108 | 2530 | 92000 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F60 | 60 | 50 | 62.8 | 72.8 | 108 | 2950 | 98300 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F65 | 65 | 50 | 62.8 | 72.8 | 108 | 3360 | 103400 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |
| SL3020F70 | 70 | 50 | 62.8 | 72.8 | 108 | 4100 | 118000 | 6 | M10 | 83 | 8 | 2 | 5/8 W | 83 | 8 |

METRIC SLEEVE BEARINGS

Cast Bronze SAE 660

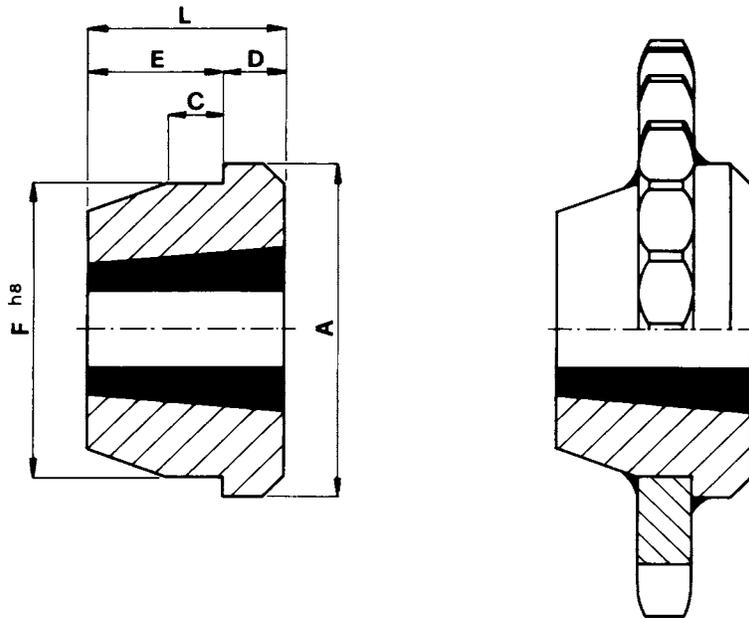


| Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L | Part No. | ID | OD | L |
|-------------|----|----|----|--------------|----|----|-----|--------------|----|----|-----|--------------|----|----|-----|
| CB 8-12x20 | 8 | 12 | 20 | CB 16-24x50 | 16 | 24 | 50 | CB 30-35x40 | 30 | 35 | 40 | CB 45-55x60 | 45 | 55 | 60 |
| CB 8-12x30 | 8 | 12 | 30 | CB 16-24x80 | 16 | 24 | 80 | CB 30-35x50 | 30 | 35 | 50 | CB 50-55x100 | 50 | 55 | 100 |
| CB 8-12x40 | 8 | 12 | 40 | CB 20-24x50 | 20 | 30 | 50 | CB 30-40x100 | 30 | 40 | 100 | CB 50-55x60 | 50 | 55 | 60 |
| CB 10-16x20 | 10 | 16 | 20 | CB 20-24x80 | 20 | 30 | 80 | CB 30-40x50 | 30 | 40 | 50 | CB 50-60x100 | 50 | 60 | 100 |
| CB 10-16x30 | 10 | 16 | 30 | CB 20-30x50 | 20 | 30 | 50 | CB 35-40x100 | 35 | 40 | 100 | CB 50-60x60 | 50 | 60 | 60 |
| CB 10-16x50 | 10 | 16 | 50 | CB 20-30x80 | 20 | 30 | 80 | CB 35-40x50 | 35 | 40 | 50 | CB 56-65x100 | 56 | 65 | 100 |
| CB 12-16x20 | 12 | 16 | 20 | CB 25-30x100 | 25 | 30 | 100 | CB 35-45x100 | 35 | 45 | 100 | CB 56-65x60 | 56 | 65 | 60 |
| CB 12-16x30 | 12 | 16 | 30 | CB 25-30x40 | 25 | 30 | 40 | CB 35-45x60 | 35 | 45 | 60 | | | | |
| CB 12-16x40 | 12 | 16 | 40 | CB 25-30x50 | 25 | 30 | 50 | CB 39-45x100 | 39 | 45 | 100 | | | | |
| CB 12-16x50 | 12 | 16 | 50 | CB 25-30x60 | 25 | 30 | 60 | CB 39-45x60 | 39 | 45 | 60 | | | | |
| CB 12-20x30 | 12 | 20 | 30 | CB 25-35x100 | 25 | 35 | 100 | CB 39-50x100 | 39 | 50 | 100 | | | | |
| CB 12-20x40 | 12 | 20 | 40 | CB 25-35x30 | 25 | 35 | 30 | CB 39-50x60 | 39 | 50 | 60 | | | | |
| CB 12-20x50 | 12 | 20 | 50 | CB 25-35x40 | 25 | 35 | 40 | CB 45-50x100 | 45 | 50 | 100 | | | | |
| CB 16-20x20 | 16 | 20 | 20 | CB 25-35x50 | 25 | 35 | 50 | CB 45-50x60 | 45 | 50 | 60 | | | | |
| CB 16-20x30 | 16 | 20 | 30 | CB 25-35x60 | 25 | 35 | 60 | CB 45-55x100 | 45 | 55 | 100 | | | | |
| CB 16-20x40 | 16 | 20 | 40 | CB 30-35x100 | 30 | 35 | 100 | | | | | | | | |
| CB 16-20x60 | 16 | 20 | 60 | CB 30-35x30 | 30 | 35 | 30 | | | | | | | | |

Tolerance: Inside Diameter + 0.25 mm
 Outside Diameter +0.060/ + 0.100 mm
 Length +25 mm

Note: Inquire for additional standard and non-standard sizes. Oil and grease grooves available

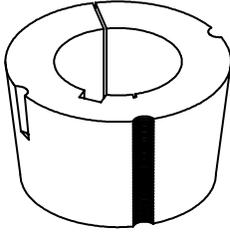
Weld-on-Hub "European" Metric Taper-Bushings



| Part No. | Bushing* | Outside Dia. Ø A | L | C | D | E | Seat Dia. Ø F ^{h8} |
|--------------|----------|---------------------|-----|----|----|----|--------------------------------|
| WHTL.1210 | 1210 | 70 | 25 | 10 | 9 | 16 | 60 |
| WHTL.1610 | 1610 | 83 | 25 | 10 | 9 | 16 | 70 |
| WHTL.1615 | 1615 | 83 | 38 | 11 | 16 | 22 | 70 |
| WHTL.2012 | 2012 | 95 | 32 | 12 | 12 | 20 | 90 |
| WHTL.2517BSW | 2517 BSW | 127 | 44 | 13 | 19 | 25 | 110 |
| WHTL.3020 | 3020 | 152 | 50 | 15 | 20 | 30 | 130 |
| WHTL.3030 | 3030 | 152 | 76 | 19 | 25 | 51 | 130 |
| WHTL.3535BSW | 3535 BSW | 184 | 87 | 25 | 32 | 57 | 155 |
| WHTL.4040 | 4040 | 225 | 102 | 32 | 32 | 70 | 195 |
| WHTL.4545BSW | 4545 BSW | 254 | 114 | 38 | 38 | 76 | 220 |
| WHTL.5050 | 5050 | 276 | 127 | 38 | 38 | 89 | 242 |

*Bushing types 2517, 2525, 3535 and 4545 are made to "European" specifications, with 1/2" x 12tpi BSW set screws. BSW (British Whitworth) threads are completely interchangeable with ANSI (American Standard Unified) except in the case of 1/2".

"EUROPEAN" METRIC TAPER-BUSHINGS



Material: ASTM A159

| Bushing Type | Bores Available (mm) | Bushing Length | Set Screws (with metric sockets) | | |
|--------------|--|----------------|----------------------------------|---------|--------|
| | | | BSW*1 | Hexagon | Length |
| 1008 | 11 12 14 15 16 18 19 20 22 24 (25) | 20.1 | 1/4" X 20 TPI | 3 x 3.5 | 13 |
| 1108 | 11 12 14 15 16 18 19 20 22 24 25 (28) | 20.1 | 1/4" X 20 TPI | 3 x 3.5 | 13 |
| 1210 | 11 12 14 15 16 18 19 20 22 24 25 28 30 (32) | 25.4 | 3/8" X 16 TPI | 5 x 6 | 16 |
| 1215 | 14 16 18 19 20 22 24 25 26 28 30 (32) | 38.1 | 3/8" X 16 TPI | 5x 6 | 16 |
| 1310 | 14 16 18 19 20 22 24 25 28 30 32 (35) | 25.4 | 3/8" X 16 TPI | 5 x 6 | 16 |
| 1610 | 12 14 15 16 18 19 20 22 24 25 28 30 32 35 38 40 (42) | 25.4 | 3/8" X 16 TPI | 5 x 6 | 16 |
| 1615 | 14 16 18 19 20 22 24 25 28 30 32 35 38 40 (42) | 38.1 | 3/8" X 16 TPI | 5 x 6 | 16 |
| 2012 | 15 16 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 | 31.8 | 7/16" X 14 TPI | 6 x 8 | 22 |
| 2517 BSW | 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 55 60 (65) | 44.5 | 1/2" X 12 TPI | 6 x 8 | 25 |
| 2525 BSW | 20 22 24 25 28 30 32 35 38 40 42 45 48 50 55 60 | 63.5 | 1/2" X 12 TPI | 6 x 8 | 25 |
| 3020 | 25 28 30 32 35 38 40 42 45 48 50 55 60 65 70 75 | 50.8 | 5/8" X 11 TPI | 8 x 10 | 32 |
| 3030 | 35 38 40 42 45 48 50 55 60 65 70 75 | 76.2 | 5/8" X 11 TPI | 8 x 10 | 32 |
| 3535 BSW | 35 38 40 42 45 48 50 55 60 65 70 75 80 85 (90) | 88.9 | 1/2" X 12 TPI*2 | 10 x 10 | ~38 |
| 4040 | 48 50 55 60 65 70 75 80 85 90 95 100 | 101.6 | 5/8" X 11 TPI*2 | 12 x 12 | ~44 |
| 4545 | 55 60 65 70 75 80 85 90 95 100 110 | 114.3 | 3/4" X 10 TPI*2 | 14 x 14 | ~51 |
| 5050 | 70 75 80 85 90 95 100 110 120 125 | 127.0 | 7/8" X 9 TPI*2 | 14 x 14 | ~57 |

NOTE: Bores in parentheses () with shallow keyway.

*2 Socket head cap screw

Bushing types **2517**, **2525** and **3535** are made to "European" specifications, with 1/2" x 12tpi BSW set screws.

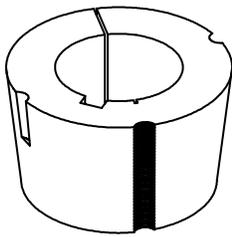
*1 BSW (British Whitworth) threads are completely interchangeable with ANSI (American Standard Unified) except not in the case of 1/2". In accordance with European norms, the above set screws use metric sockets.

Keyway Dimensions (per DIN 6885)

| Bore Diameter | Keyway Width | Keyway Depth |
|---------------|--------------|--------------|
| 10 to 12 | 4 | 1.8 |
| 13 to 17 | 5 | 2.3 |
| 18 to 22 | 6 | 2.8 |
| 23 to 30 | 8 | 3.3 |
| 31 to 38 | 10 | 3.3 |
| 39 to 44 | 12 | 3.3 |
| 45 to 50 | 14 | 3.8 |
| 51 to 58 | 16 | 4.3 |
| 59 to 65 | 18 | 4.4 |
| 66 to 75 | 20 | 4.9 |
| 76 to 85 | 22 | 5.4 |
| 86 to 95 | 25 | 5.4 |
| 96 to 110 | 28 | 6.4 |
| 111 to 130 | 32 | 7.4 |

Shallow Keyway Dimensions

| Bore Diameter | Keyway Width | Keyway Depth |
|---------------|--------------|--------------|
| 25 | 8 | 1.30 |
| 28 | 8 | 2.30 |
| 32-35 | 10 | 3.30 |
| 40 | 12 | 3.30 |
| 42 | 12 | 2.20 |
| 65 | 18 | 4.40 |
| 90 | 25 | 5.40 |



BRITISH STANDARD TAPER-BUSHINGS

INCH BORE AND ANSI KEYWAY

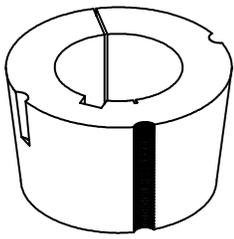
(ANSI B17.1-1967, R1973)

All dimensions in inches

Material: ASTM A159

| Bushing No. Bore Keyway | | | Bushing No. Bore Keyway | | | Bushing No. Bore Keyway | | | Bushing No. Bore Keyway | | | |
|-------------------------|-------------|-------------|-------------------------|-------------|-------------|-------------------------|-------------|-------------|-------------------------|---------|------------|-------------|
| 1008 | 1/2 | 1/8 x 1/16 | | 9/16 | " | | 11/16 | " | | 1-11/16 | " | |
| | 9/16 | " | | 5/8 | 3/16 x 3/32 | | 3/4 | " | | 1-3/4 | " | |
| | 5/8 | 3/16 x 3/32 | | 11/16 | " | | 13/16 | " | | 1-13/16 | 1/2 x 1/4 | |
| | 11/16 | " | | 3/4 | " | | 7/8 | " | | 1-7/8 | " | |
| | 3/4 | " | | 13/16 | " | | 15/16 | 1/4 x 1/8 | | 1-15/16 | " | |
| | 13/16 | " | | 7/8 | " | | 1 | " | | 2 | " | |
| | 7/8 | " | | 15/16 | 1/4 x 1/8 | | 1-1/16 | " | | 2-1/16 | " | |
| | 15/16 | 1/4 x 1/16* | | 1 | " | | 1-1/8 | " | | 2-1/8 | " | |
| | 1 | " | | 1-1/16 | " | | 1-3/16 | " | | 2-3/16 | " | |
| | | | | 1-1/8 | " | | 1-1/4 | " | | 2-1/4 | " | |
| 1108 | 1/2 | 1/8 x 1/16 | | 1-3/16 | " | | 1-5/16 | 5/16 x 5/32 | | 2-5/16 | 5/8 x 5/16 | |
| | 9/16 | " | | 1-1/4 | " | | 1-3/8 | " | | 2-3/8 | " | |
| | 5/8 | 3/16 x 3/32 | | 1-5/16 | 5/16 x 5/32 | | 1-7/16 | 3/8 x 3/16 | | 2-7/16 | " | |
| | 11/16 | " | | 1-3/8 | " | | 1-1/2 | " | | 2-1/2 | " | |
| | 3/4 | " | | 1-7/16 | 3/8 x 3/16 | | 1-9/16 | " | | 2-5/8 | " | |
| | 13/16 | " | | 1-1/2 | " | | 1-5/8 | " | | 2-11/16 | " | |
| | 7/8 | " | | 1-9/16 | 3/8 x 1/8* | | 1-11/16 | " | | 2-3/4 | " | |
| | 15/16 | 1/4 x 1/8 | | 1-5/8 | " | | 1-3/4 | " | | 2-13/16 | 3/4 x 1/4* | |
| | 1 | " | | | | | 1-13/16 | 1/2 x 1/4 | | 2-7/8 | " | |
| | 1-1/16 | 1/4 x 1/16* | | 1615 | 1/2 | 1/8 x 1/16 | | 1-7/8 | " | | 2-15/16 | " |
| 1-1/8 | " | | 9/16 | | " | | 1-15/16 | " | | 3 | " | |
| | | | 5/8 | | 3/16 x 3/32 | | | | | | | |
| 1210 | 1/2 | 1/8 x 1/16 | | | 11/16 | " | | 2-1/16 | " | 3030 | 15/16 | 1/4 x 1/8 |
| | 9/16 | " | | | 3/4 | " | | 2-1/8 | " | | 1 | " |
| | 5/8 | 3/16 x 3/32 | | | 13/16 | " | | 2-3/16 | " | | 1-1/8 | " |
| | 11/16 | " | | | 7/8 | " | | 2-1/4 | " | | 1-3/16 | " |
| | 3/4 | " | | | 15/16 | 1/4 x 1/8 | | 2-5/16 | 5/8 x 3/16* | | 1-1/4 | " |
| | 13/16 | " | | | 1 | " | | 2-3/8 | " | | 1-5/16 | 5/16 x 5/32 |
| | 7/8 | " | | | 1-1/16 | " | | 2-7/16 | " | | 1-3/8 | " |
| | 15/16 | 1/4 x 1/8 | | 1-1/8 | " | | 2-1/2 | " | 1-7/16 | | 3/8 x 3/16 | |
| | 1 | " | | 1-3/16 | " | | | | 1-1/2 | | " | |
| | 1-1/16 | " | | 1-1/4 | " | | 2525 BSW | 3/4 | 3/16 x 3/32 | | 1-9/16 | " |
| 1-1/8 | " | | 1-5/16 | 5/16 x 5/32 | | 7/8 | | " | 1-5/8 | " | | |
| 1-3/16 | " | | 1-3/8 | " | | 1 | | 1/4 x 1/8 | 1-11/16 | " | | |
| 1-1/4 | " | | 1-7/16 | 3/8 x 3/16 | | 1-1/8 | | " | 1-3/4 | " | | |
| | | | 1-1/2 | " | | 1-3/16 | | " | | | | |
| 1215 | 1/2 | 1/8 x 1/16 | | 1-9/16 | 3/8 x 1/8* | | | 1-1/4 | " | | | |
| | 9/16 | " | | 1-5/8 | " | | | 1-3/8 | 5/16 x 5/32 | | | |
| | 5/8 | 3/16 x 3/32 | | | | | | 1-7/16 | 3/8 x 3/16 | | | |
| | 11/16 | " | 2012 | 1/2 | 1/8 x 1/16 | | | 1-1/2 | " | | | |
| | 3/4 | " | | 9/16 | " | | | 1-5/8 | " | | | |
| | 13/16 | " | | 5/8 | 3/16 x 3/32 | | 1-11/16 | " | | | | |
| | 7/8 | " | | 11/16 | " | | 1-3/4 | " | | | | |
| | 15/16 | 1/4 x 1/8 | | 3/4 | " | | 1-13/16 | 1/2 x 1/4 | | | | |
| | 1 | " | | 13/16 | " | | 1-7/8 | " | | | | |
| | 1-1/16 | " | | 7/8 | " | | 1-15/16 | " | | | | |
| 1-1/8 | " | 15/16 | | 1/4 x 1/8 | | 2 | " | | | | | |
| 1-3/16 | " | 1 | | " | | 2-1/8 | " | | | | | |
| 1-1/4 | " | 1-1/16 | | " | | 2-3/16 | " | | | | | |
| | | 1-1/8 | " | | 2-1/4 | " | | | | | | |
| 1310 | 1/2 | 1/8 x 1/16 | | 1-3/16 | " | | 2-5/16 | 5/8 x 3/16* | | | | |
| | 9/16 | " | | 1-1/4 | 1/4 x 1/8 | | 2-3/8 | " | | | | |
| | 5/8 | 3/16 x 3/32 | | 1-5/16 | 5/16 x 5/32 | | 2-7/16 | " | | | | |
| | 11/16 | " | | 1-3/8 | " | | 2-1/2 | " | | | | |
| | 3/4 | " | | 1-7/16 | 3/8 x 3/16 | | | | | | | |
| | 13/16 | " | | 1-1/2 | " | 3020 | 7/8 | 3/16 x 3/32 | | | | |
| | 7/8 | " | | 1-9/16 | " | | 15/16 | 1/4 x 1/8 | | | | |
| | 15/16 | 1/4 x 1/8 | | 1-5/8 | " | | 1 | " | | | | |
| | 1 | " | | 1-11/16 | " | | 1-1/8 | " | | | | |
| | 1-1/16 | 1/4 x 1/8 | | 1-3/4 | " | | 1-3/16 | " | | | | |
| 1-1/8 | " | | 1-13/16 | 1/2 x 1/4 | 1-1/4 | | " | | | | | |
| 1-3/16 | " | | 1-7/8 | " | 1-5/16 | | 5/16 x 5/32 | | | | | |
| 1-1/4 | " | | 1-15/16 | 1/2 x 3/16* | 1-3/8 | | " | | | | | |
| 1-5/16 | 5/16 x 5/32 | | 2 | " | 1-7/16 | | 3/8 x 3/16 | | | | | |
| 1-3/8 | " | | | | 1-1/2 | | " | | | | | |
| | | | 2517 BSW | 1/2 | 1/8 x 1/16 | | 1-9/16 | " | | | | |
| 1610 | 1/2 | 1/8 x 1/16 | | 5/8 | 3/16 x 3/32 | | 1-5/8 | " | | | | |





BRITISH STANDARD TAPER-BUSHINGS

INCH BORE AND ANSI KEYWAY

(ANSI B17.1-1967, R1973)

All dimensions in inches

Material: ASTM A159

| Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway | | |
|-------------|------------|-------------|-------------|------------|--------------|-------------|------------|------------|-------------|------------|-----------|---------------|--|
| 3030 | 1-13/16 | 1/2 x 1/4 | 4040 | 2-3/4 | " | 4545 | 3-5/8 | " | 5050 | 3-7/16 | " | | |
| | 1-7/8 | " | | 2-7/8 | 3/4 x 3/8 | | 3-11/16 | " | | 3-5/8 | " | | |
| | 1-15/16 | " | | 2-15/16 | " | | 3-3/4 | " | | 3-7/8 | 1 x 1/2 | | |
| | 2 | " | | 3 | " | | 3-7/8 | 1 x 1/4* | | 3-15/16 | " | | |
| | 2-1/16 | " | | 3-1/8 | " | | 3-15/16 | " | | 4 | " | | |
| | 2-1/8 | " | | 3-3/16 | " | | 4 | " | | 4-1/4 | " | | |
| | 2-3/16 | " | | 3-1/4 | " | | 4-7/16 | " | | 4-3/8 | " | | |
| | 2-1/4 | " | | 3-5/16 | 7/8 x 1/4* | | 5050 | 1-15/16 | | 1/2 x 1/4 | 4-7/16 | " | |
| | 2-5/16 | 5/8 x 5/16 | | 3-3/8 | " | | | 2 | | " | 4-1/2 | " | |
| | 2-3/8 | " | | 3-7/16 | " | | | 2-3/16 | | " | 4-7/8 | 1-1/4 x 7/16* | |
| | 2-7/16 | " | | 3-1/2 | " | | | 2-3/8 | | 5/8 x 5/16 | 4-15/16 | " | |
| | 2-1/2 | " | | 3-15/16 | 1 x 1/4* | | | 2-7/16 | | " | 5 | " | |
| | 2-5/8 | " | | 4040 | 1-7/16 | | | 3/8 x 3/16 | | 2-5/8 | " | | |
| | 2-11/16 | " | | | 1-1/2 | | | " | | 2-3/4 | " | | |
| | 2-3/4 | " | | | 1-5/8 | | | " | | 2-7/8 | 3/4 x 3/8 | | |
| 2-7/8 | 3/4 x 1/4* | 1-11/16 | " | | 2-15/16 | " | | | | | | | |
| 2-15/16 | " | 1-3/4 | " | | 3-1/8 | " | | | | | | | |
| 3 | " | 1-7/8 | 1/2 x 1/4 | | 3-3/16 | " | | | | | | | |
| 3535 BSW | 1-3/16 | 1/4 x 1/8 | 1-15/16 | | " | 3-1/4 | | " | | | | | |
| | 1-1/4 | " | 2 | | " | 3-3/8 | | 7/8 x 7/16 | | | | | |
| | 1-3/8 | 5/16 x 5/32 | 2-1/8 | | " | 3-7/16 | | " | | | | | |
| | 1-7/16 | 3/8 x 3/16 | 2-3/16 | | " | 3-1/2 | | " | | | | | |
| | 1-1/2 | " | 2-1/4 | | " | 3-5/8 | " | | | | | | |
| | 1-5/8 | " | 2-3/8 | | 5/8 x 5/16 | 3-3/4 | 7/8 x 7/16 | | | | | | |
| | 1-11/16 | " | 2-7/16 | | " | 3-7/8 | 1 x 1/2 | | | | | | |
| | 1-3/4 | " | 2-1/2 | | " | 3-15/16 | " | | | | | | |
| | 1-7/8 | 1/2 x 1/4 | 2-5/8 | | " | 4 | " | | | | | | |
| | 1-15/16 | " | 2-11/16 | " | 4-1/8 | " | | | | | | | |
| | 2 | " | 2-3/4 | 5/8 x 5/16 | 4-3/16 | " | | | | | | | |
| | 2-1/8 | " | 2-7/8 | 3/4 x 3/8 | 4-1/4 | " | | | | | | | |
| | 2-3/16 | " | 2-15/16 | " | 4-3/8 | 1 x 1/4* | | | | | | | |
| | 2-1/4 | " | 3 | " | 4-7/16 | " | | | | | | | |
| | 2-5/16 | 5/8 x 5/16 | 3-1/8 | " | 4-1/2 | " | | | | | | | |
| 2-3/8 | 5/8 x 5/16 | 3-3/16 | " | 4-15/16 | 1-1/4 x 1/4* | | | | | | | | |
| 2-7/16 | " | 3-1/4 | " | 5050 | 2-7/16 | 5/8 x 5/16 | | | | | | | |
| 2-1/2 | " | 3-3/8 | 7/8 x 7/16 | | 2-15/16 | 3/4 x 3/8 | | | | | | | |
| 2-5/8 | " | 3-7/16 | " | | 3-3/8 | 7/8 x 7/16 | | | | | | | |
| 2-11/16 | " | 3-1/2 | " | | | | | | | | | | |

Note: * = Shallow Keyway

BSW = 1/2 -12 BSW threads (to fit Ametric® BSW pulleys and sheaves)

BSW (British Whitworth) threads are completely interchangeable with ANSI (American Standard Unified) except not in the case of 1/2". In accordance with European norms, the above setscrews use metric sockets.

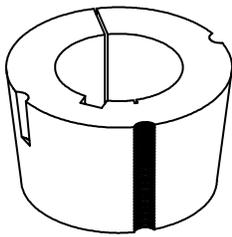
1008 through 3030 Taper Bushings

| Bushing No. | Dimension through bore (depth) | SetScrews (with metric sockets) | | Quantity |
|-------------|--------------------------------|---------------------------------|---|----------|
| | | Dia. x length | Hex socket screws Size x depth required | |
| 1008 | 7/8" | 1/4 x 1/2" | 3 x 3.5 mm | 2 |
| 1108 | 7/8" | 1/4 x 1/2" | 3 x 3.5 mm | 2 |
| 1210 | 1 | 3/8 x 5/8" | 5 x 6 mm | 2 |
| 1215 | 1-1/2" | 3/8 x 5/8" | 5 x 6 mm | 2 |
| 1310 | 1" | 3/8 x 5/8" | 5 x 6 mm | 2 |
| 1610 | 1" | 3/8 x 5/8" | 5 x 6 mm | 2 |
| 1615 | 1-1/2" | 3/8 x 5/8" | 5 x 6 mm | 2 |
| 2012 | 1-1/4" | 7/16 x 7/8" | 6 x 8 mm | 2 |
| 2017 | 1-3/4" | 7/16 x 7/8" | 6 x 8 mm | 2 |
| 2517 BSW | 1-3/4" | *1/2 x 1" | 6 x 8 mm | 2 |
| 2525 BSW | 2-1/2" | *1/2 x 1" | 6 x 8 mm | 2 |
| 3020 | 2" | 5/8 x 1-1/4" | 8 x 10 mm | 2 |
| 3030 | 3" | 5/8 x 1-1/4" | 8 x 10 mm | 2 |

3535 through 5050 Taper Bushings

| Bushing No. | Dimension through bore (depth) | SetScrews (with metric sockets) | | Quantity |
|-------------|--------------------------------|---------------------------------|---|----------|
| | | Dia. x length | Hex socket screws Size x depth required | |
| 3535 BSW | 3-1/2" | *1/2 x 1-1/2" | 10 x 10 mm | 3 |
| 4040 | 4" | 5/8 x 1-3/4" | 12 x 12 mm | 3 |
| 4545 | 4-1/2" | 3/4 x 2" | 14 x 14 mm | 3 |
| 5050 | 5" | 7/8 x 2-1/4" | 14 x 14 mm | 3 |

BSW *1/2 x 1 = 1/2-12 BSW threads



AMERICAN STANDARD TAPER-BUSHINGS

INCH BORE AND ANSI KEYWAY

(ANSI B17.1-1967, R1973)

All dimensions in inches

Material: ASTM A159

| Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway | Bushing No. | Bore | Keyway |
|-------------|--------|-------------|-------------|--------|-------------|--------------|---------|-------------|-------------|---------|-------------|
| 1008 | 1/2 | 1/8 x 1/16 | 1610 | 1/2 | 1/8 x 1/16 | 2517 ANSI | 1/2 | 1/8 x 1/16 | 3030 | 1-1/2 | " |
| | 9/16 | " | | 9/16 | " | | 5/8 | 3/16 x 3/32 | | 1-9/16 | " |
| | 5/8 | 3/16 x 3/32 | | 5/8 | 3/16 x 3/32 | | 11/16 | " | | 1-5/8 | " |
| | 11/16 | " | | 11/16 | " | | 3/4 | " | | 1-11/16 | " |
| | 3/4 | " | | 3/4 | " | | 13/16 | " | | 1-3/4 | " |
| | 13/16 | " | | 13/16 | " | | 7/8 | " | | 1-13/16 | 1/2 x 1/4 |
| | 7/8 | " | | 7/8 | " | | 15/16 | 1/4 x 1/8 | | 1-7/8 | " |
| | 15/16 | 1/4 x 1/16* | | 15/16 | 1/4 x 1/8 | | 1 | " | | 1-15/16 | " |
| | 1 | " | | 1 | " | | 1-1/16 | " | | 2 | " |
| | 1-1/16 | " | | 1-1/16 | " | | 1-1/8 | " | | 2-1/16 | " |
| 1108 | 1/2 | 1/8 x 1/16 | 1615 | 1/2 | 1/8 x 1/16 | 2525 ANSI | 3/4 | 3/16 x 3/32 | 3020 | 7/8 | 3/16 x 3/32 |
| | 9/16 | " | | 9/16 | " | | 7/8 | " | | 15/16 | 1/4 x 1/8 |
| | 5/8 | 3/16 x 3/32 | | 5/8 | 3/16 x 3/32 | | 1 | 1/4 x 1/8 | | 1 | " |
| | 11/16 | " | | 11/16 | " | | 1-1/8 | " | | 1-1/8 | " |
| | 3/4 | " | | 3/4 | " | | 1-1/4 | " | | 1-1/4 | " |
| | 13/16 | " | | 13/16 | " | | 1-3/8 | 5/16 x 5/32 | | 1-3/8 | 5/16 x 5/32 |
| | 7/8 | " | | 7/8 | " | | 1-7/16 | 3/8 x 3/16 | | 1-7/16 | 3/8 x 3/16 |
| | 15/16 | 1/4 x 1/8 | | 15/16 | 1/4 x 1/8 | | 1-11/16 | " | | 1-11/16 | " |
| | 1 | " | | 1 | " | | 1-13/16 | 1/2 x 1/4 | | 1-13/16 | " |
| | 1-1/16 | 1/4 x 1/16* | | 1-1/16 | " | | 1-7/8 | " | | 1-7/8 | " |
| 1210 | 1/2 | 1/8 x 1/16 | 2012 | 1/2 | 1/8 x 1/16 | 3020 | 7/8 | 3/16 x 3/32 | 3020 | 7/8 | 3/16 x 3/32 |
| | 9/16 | " | | 9/16 | " | | 15/16 | 1/4 x 1/8 | | 15/16 | 1/4 x 1/8 |
| | 5/8 | 3/16 x 3/32 | | 5/8 | 3/16 x 3/32 | | 1 | " | | 1 | " |
| | 11/16 | " | | 11/16 | " | | 1-1/8 | " | | 1-1/8 | " |
| | 3/4 | " | | 3/4 | " | | 1-1/4 | " | | 1-1/4 | " |
| | 13/16 | " | | 13/16 | " | | 1-3/8 | 5/16 x 5/32 | | 1-3/8 | 5/16 x 5/32 |
| | 7/8 | " | | 7/8 | " | | 1-7/16 | 3/8 x 3/16 | | 1-7/16 | 3/8 x 3/16 |
| | 15/16 | 1/4 x 1/8 | | 15/16 | 1/4 x 1/8 | | 1-11/16 | " | | 1-11/16 | " |
| | 1 | " | | 1 | " | | 1-13/16 | 1/2 x 1/4 | | 1-13/16 | " |
| | 1-1/16 | " | | 1-1/16 | " | | 1-7/8 | " | | 1-7/8 | " |
| 1215 | 1/2 | 1/8 x 1/16 | 1310 | 1/2 | 1/8 x 1/16 | 3020 | 7/8 | 3/16 x 3/32 | 3020 | 7/8 | 3/16 x 3/32 |
| | 9/16 | " | | 9/16 | " | | 15/16 | 1/4 x 1/8 | | 15/16 | 1/4 x 1/8 |
| | 5/8 | 3/16 x 3/32 | | 5/8 | 3/16 x 3/32 | | 1 | " | | 1 | " |
| | 11/16 | " | | 11/16 | " | | 1-1/8 | " | | 1-1/8 | " |
| | 3/4 | " | | 3/4 | " | | 1-1/4 | " | | 1-1/4 | " |
| | 13/16 | " | | 13/16 | " | | 1-3/8 | 5/16 x 5/32 | | 1-3/8 | 5/16 x 5/32 |
| | 7/8 | " | | 7/8 | " | | 1-7/16 | 3/8 x 3/16 | | 1-7/16 | 3/8 x 3/16 |
| | 15/16 | 1/4 x 1/8 | | 15/16 | 1/4 x 1/8 | | 1-11/16 | " | | 1-11/16 | " |
| | 1 | " | | 1 | " | | 1-13/16 | 1/2 x 1/4 | | 1-13/16 | " |
| | 1-1/16 | " | | 1-1/16 | " | | 1-7/8 | " | | 1-7/8 | " |



