

K15



KS TOOLS

NON SPARKING TOOLS



KS TOOLS®

*Innovation is
our mission!*

| | PAGE | |
|---|-----------|----|
| | | 1 |
| | | 2 |
| NON SPARKING OPEN ENDED SPANNER | 296 - 297 | |
| NON SPARKING COMBINATION SPANNER | 297 - 298 | 3 |
| NON SPARKING RING SPANNERS | 298 - 300 | 4 |
| NON SPARKING IMPACT SPANNERS | 300 - 302 | |
| NON SPARKING INSTALLATION WRENCH | 303 | 5 |
| NON SPARKING HOSE COUPLING WRENCHES & HOOK WRENCHES | 303 - 304 | |
| NON SPARKING SPECIAL BITS | 304 - 305 | 6 |
| NON SPARKING BOX SPANNERS | 305 - 308 | |
| NON SPARKING FRICTION RATCHETS | 308 | 7 |
| 1/4" DRIVE NON SPARKING SOCKETS | 308 - 309 | |
| 1/2" DRIVE NON SPARKING SOCKETS | 309 - 312 | 8 |
| 3/4" DRIVE NON SPARKING SOCKETS | 312 - 314 | 9 |
| 1" DRIVE NON SPARKING SOCKETS | 314 - 315 | |
| NON SPARKING SCREWDRIVERS | 316 - 317 | 10 |
| NON SPARKING KEY WRENCHES | 317 - 318 | |
| NON SPARKING PLIERS | 319 - 321 | 11 |
| NON SPARKING TWEEZERS | 321 | |
| NON SPARKING DRILLS | 321 | 12 |
| NON SPARKING SAWS | 322 | |
| NON SPARKING WIRE BRUSHES | 322 - 323 | 13 |
| NON SPARKING FILES | 323 | 14 |
| NON SPARKING KNIVES | 323 | |
| NON SPARKING SHEARS | 323 - 324 | 15 |
| NON SPARKING CUTTING TOOLS | 324 | |
| NON SPARKING SCRAPERS | 324 - 325 | 16 |
| NON SPARKING FLANGE SPREADERS | 325 | |
| NON SPARKING HAMMERS | 325 - 328 | 17 |
| NON SPARKING AXES | 328 | 18 |
| NON SPARKING PICKS | 328 - 329 | |
| NON SPARKING CHISELS | 329 - 330 | 19 |
| NON SPARKING PIN PUNCHES & PUNCHES | 330 - 331 | |
| NON SPARKING CONSTRUCTION TOOLS | 331 - 332 | 20 |
| NON SPARKING SPATULAS | 332 | |
| NON SPARKING SHOVELS & FORKS | 332 - 333 | 21 |
| NON SPARKING WEDGES | 333 - 334 | 22 |
| NON SPARKING PRY BARS | 334 | |
| NON SPARKING CROWBARS | 334 - 335 | 23 |
| NON SPARKING DRUM LIFTERS | 335 | |
| NON SPARKING SHACKLES | 335 | 24 |
| NON SPARKING PIPE CUTTERS | 336 | |
| NON SPARKING CLAMPING TOOLS | 336 | 25 |
| NON SPARKING NEEDLES | 336 | |
| NON SPARKING OIL PUMPS | 336 | 26 |
| NON SPARKING HOISTS | 336 | 27 |

NON SPARKING TOOLS

Explosion protection after **ATEX** = **AT**mosphere **EX**plosible

Directive 137 (also known as directive 99/92) determines that the end user (employer) is responsible for the safety of the employees working (installing, operating or maintaining equipment) in a potentially explosive atmosphere.

The directive has been in force since July 2003.

Classification of the zones by explosion risks

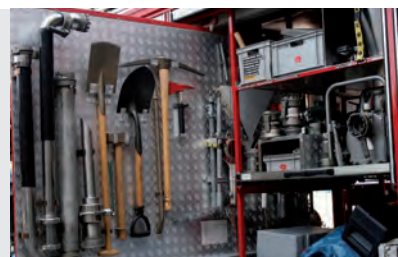
| ATEX Feasibility | high | average-low | very low |
|------------------|--|--|---|
| Gases | <p>ZONE 0</p> <p>is an area, in which dangerous atmosphere capable of explosion as a mixture from air and combustible gases, damping or fogs exists constantly, for long time or frequently. The notion „frequently“ is to be used for means of „temporally mainly“, which means that explosion-endangered areas are to be assigned zone 0, if the atmosphere is capable of explosion for more than 50% during the working duration of an arrangement. Actually, this is only inside tubes and reservoirs the case.</p> | <p>ZONE 1</p> <p>is an area in which at normal working duration, occasionally a dangerous atmosphere is capable of explosion as a mixture from air and combustible gases, damping or fogs. If the existence of atmosphere capable of explosion comes to a duration of approximately 30 minutes per year or this appears occasionally, e.g. daily, however, it is smaller than 50% of the activity duration of the arrangement, zone 1 applies according to general opinion.</p> | <p>ZONE 2</p> <p>is an area in which at normal working duration, occasionally a dangerous atmosphere is capable of explosion as a mixture from air and combustible gas, damping or fogs. Among a number of experts the general consensus consists the fact that the notion corresponds „briefly“ to a duration of approximately 30 minutes per year. Furthermore it is stated that atmosphere capable of explosion is not to be expected at normal activity usually. If atmosphere capable of explosion already appears once a year briefly, the affected area should be already classified in zone 2.</p> |
| Dust | <p>ZONE 20</p> <p>is an area in which dangerous atmosphere, that is capable of explosion, exists in form of a cloud in the air which contains combustible dust constantly, for long time or frequently.</p> | <p>ZONE 21</p> <p>is an area in which at normal activity occasionally a dangerous atmosphere capable of explosion exists in form of a cloud in the air which contains combustible dust.</p> | <p>ZONE 22</p> <p>is an area in which at normal activity a dangerous atmosphere capable of explosion does not appear in form of a cloud in the air which contains combustible dust usually or, however, only briefly.</p> |

Application remarks:

- Non sparking tools are softer than usual tools. The operation with these tools has to be carried out with accuracy and care. Overstraining has to be prevented.
- Only using non sparking tools as a protection measure in fire endangered and explosion endangered areas is not enough. Please consider the instructions of local health and safety regulations for the protection of employees and accommodation.

Reworking:

- Technical marking sheets are available on request for reworking (e.g. re-sharpen).



BERYLLIUMplus

| | | | | | |
|-----------------------------|-----------------------------------|-------|----------|--|---------|
| Material | Be | Ni+Co | Impurity | | Balance |
| min in % | 1.8 | 0.2 | | | Cu |
| max in % | 2.0 | 0.8 | 0.5 | | |
| Technical properties | 800-940 Mp (average value 850 Mp) | | | | |
| Tensile strength | HRC35-42 | | | | |
| Hardness | 8,5 (average value) | | | | |
| Specific weight | 1.0004 | | | | |
| Magnetic characteristics | 0,53079 S/m | | | | |
| Electrical conduction | | | | | |

BRONZEplus

| | | | | | |
|-----------------------------|-----------------------------------|-----|-----|-----|---------|
| Material | Al | Ni | Fe | Mn | Balance |
| min in % | 9.0 | 4.0 | 4.0 | 0.8 | Cu |
| max in % | 10.0 | 5.0 | 5.0 | 2.5 | |
| Technical properties | 700-740 Mp (average value 725 Mp) | | | | |
| Tensile strength | 120 Mp | | | | |
| Yield stress | HRC25-32 | | | | |
| Hardness | 7,5 (average value) | | | | |
| Specific weight | 1.348 | | | | |
| Magnetic characteristics | 0,42463 S/m | | | | |
| Electrical conduction | | | | | |

Non sparking tool - lines

BRONZE *plus*

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

BERYLLIUM *plus*

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



Applications BERYLLIUMplus / BRONZEplus

- Chemical industries
- Petro refineries
- Oil and gas carriages
- Pipeline business
- Drilling platforms
- Fuel service (cleaning etc.)
- Gas and electricity works
- Varnishing
- Federal armed forces, army
- Civil defence and civil protection
- Fire department

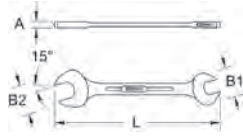
You can use it on all places where sparks create potential danger of explosion and fire. For the activities which require the use (application) of a hundred percent non-magnetic and extremely rustproof tools.



NON SPARKING OPEN ENDED SPANNER

BRONZEplus double open ended spanner

- In accordance to DIN 895 / ISO 3318 / ISO 1085
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | A mm | B1 mm | B2 mm | kg |
|----------|-------|-------|------|-------|-------|------|
| 963.7005 | 6x7 | 125.0 | 6.0 | 15.0 | 17.0 | 0.07 |
| 963.7006 | 6x8 | 125.0 | 6.0 | 15.0 | 17.0 | 0.07 |
| 963.7007 | 7x8 | 125.0 | 6.0 | 19.0 | 22.0 | 0.07 |
| 963.7008 | 7x9 | 125.0 | 6.0 | 19.0 | 22.0 | 0.07 |
| 963.7009 | 8x9 | 125.0 | 6.0 | 19.0 | 22.0 | 0.07 |
| 963.7010 | 8x10 | 125.0 | 6.0 | 19.0 | 22.0 | 0.06 |
| 963.7011 | 9x10 | 125.0 | 6.0 | 19.0 | 22.0 | 0.06 |
| 963.7012 | 9x11 | 140.0 | 7.0 | 22.0 | 27.0 | 0.09 |
| 963.7013 | 10x11 | 140.0 | 7.0 | 22.0 | 27.0 | 0.09 |
| 963.7014 | 10x12 | 140.0 | 7.0 | 22.0 | 27.0 | 0.09 |
| 963.7015 | 10x13 | 140.0 | 7.0 | 22.0 | 27.0 | 0.08 |
| 963.7016 | 10x14 | 160.0 | 7.5 | 27.0 | 30.0 | 0.18 |
| 963.7017 | 11x13 | 160.0 | 7.5 | 27.0 | 30.0 | 0.18 |
| 963.7018 | 11x14 | 160.0 | 7.5 | 27.0 | 30.0 | 0.18 |
| 963.7019 | 12x13 | 160.0 | 7.5 | 27.0 | 30.0 | 0.18 |
| 963.7020 | 12x14 | 160.0 | 7.5 | 27.0 | 30.0 | 0.17 |
| 963.7021 | 16x15 | 160.0 | 7.5 | 27.0 | 30.0 | 0.17 |
| 963.7022 | 14x15 | 200.0 | 8.0 | 30.0 | 36.0 | 0.17 |
| 963.7023 | 14x16 | 200.0 | 8.0 | 30.0 | 36.0 | 0.22 |
| 963.7024 | 14x17 | 200.0 | 8.0 | 30.0 | 36.0 | 0.22 |
| 963.7025 | 16x17 | 200.0 | 8.0 | 35.0 | 38.0 | 0.21 |
| 963.7026 | 16x18 | 200.0 | 8.0 | 35.0 | 38.0 | 0.21 |
| 963.7027 | 17x19 | 225.0 | 10.0 | 35.0 | 38.0 | 0.35 |
| 963.7028 | 17x22 | 225.0 | 10.0 | 39.0 | 44.0 | 0.32 |
| 963.7029 | 18x19 | 225.0 | 10.0 | 39.0 | 44.0 | 0.32 |
| 963.7030 | 18x20 | 225.0 | 10.0 | 39.0 | 44.0 | 0.31 |
| 963.7031 | 18x21 | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7032 | 19x22 | 240.0 | 11.0 | 39.0 | 44.0 | 0.44 |
| 963.7033 | 19x24 | 240.0 | 11.0 | 44.0 | 48.0 | 0.42 |
| 963.7034 | 20x22 | 240.0 | 11.0 | 44.0 | 48.0 | 0.44 |
| 963.7035 | 21x23 | 240.0 | 11.0 | 44.0 | 48.0 | 0.42 |
| 963.7036 | 22x24 | 240.0 | 11.0 | 44.0 | 48.0 | 0.42 |
| 963.7037 | 22x27 | 270.0 | 12.0 | 48.0 | 54.0 | 0.73 |
| 963.7038 | 23x26 | 270.0 | 12.0 | 48.0 | 54.0 | 0.73 |
| 963.7039 | 24x26 | 270.0 | 12.0 | 48.0 | 54.0 | 0.73 |
| 963.7040 | 24x27 | 270.0 | 12.0 | 48.0 | 54.0 | 0.73 |
| 963.7041 | 24x30 | 270.0 | 13.0 | 54.0 | 60.0 | 0.70 |
| 963.7042 | 25x28 | 270.0 | 13.0 | 54.0 | 60.0 | 0.70 |
| 963.7043 | 26x29 | 270.0 | 13.0 | 54.0 | 60.0 | 0.70 |
| 963.7044 | 27x29 | 300.0 | 13.0 | 54.0 | 60.0 | 0.81 |
| 963.7045 | 27x30 | 300.0 | 13.0 | 54.0 | 60.0 | 0.80 |
| 963.7046 | 27x32 | 300.0 | 14.0 | 59.0 | 62.0 | 0.80 |
| 963.7047 | 30x32 | 300.0 | 14.0 | 59.0 | 62.0 | 0.78 |
| 963.7048 | 30x34 | 320.0 | 16.0 | 70.0 | 75.0 | 1.24 |
| 963.7049 | 30x36 | 320.0 | 16.0 | 70.0 | 75.0 | 1.22 |
| 963.7050 | 32x34 | 320.0 | 16.0 | 70.0 | 75.0 | 1.20 |
| 963.7051 | 32x36 | 320.0 | 16.0 | 70.0 | 75.0 | 1.14 |
| 963.7052 | 34x36 | 320.0 | 16.0 | 70.0 | 75.0 | 1.10 |
| 963.7053 | 35x38 | 370.0 | 16.0 | 75.0 | 88.0 | 1.48 |
| 963.7054 | 36x41 | 370.0 | 16.0 | 75.0 | 88.0 | 1.48 |
| 963.7055 | 41x46 | 370.0 | 18.0 | 85.0 | 100.0 | 1.45 |
| 963.7056 | 46x50 | 390.0 | 19.0 | 95.0 | 105.0 | 1.40 |
| 963.7057 | 50x55 | 440.0 | 20.0 | 100.0 | 115.0 | 1.70 |
| 963.7058 | 50x60 | 440.0 | 22.0 | 110.0 | 125.0 | 1.70 |
| 963.7059 | 55x60 | 470.0 | 22.0 | 110.0 | 125.0 | 1.80 |
| 963.7060 | 60x65 | 470.0 | 22.0 | 125.0 | 135.0 | 1.80 |
| 963.7061 | 65x70 | 630.0 | 24.0 | 130.0 | 145.0 | 3.50 |
| 963.7062 | 70x80 | 630.0 | 24.0 | 140.0 | 155.0 | 3.40 |
| 963.7063 | 75x80 | 630.0 | 24.0 | 150.0 | 165.0 | 3.30 |

| | mm | L mm | A mm | B1 mm | B2 mm | kg |
|----------|----------------|-------|------|-------|-------|------|
| 963.7065 | 7/32x1/4" | 125.0 | 6.0 | 15.0 | 17.0 | 0.07 |
| 963.7066 | 1/4x5/16" | 125.0 | 6.0 | 15.0 | 17.0 | 0.07 |
| 963.7067 | 5/16x3/8" | 125.0 | 6.0 | 19.0 | 22.0 | 0.06 |
| 963.7068 | 3/8x7/16" | 140.0 | 7.0 | 22.0 | 27.0 | 0.09 |
| 963.7069 | 7/16x1/2" | 140.0 | 7.0 | 22.0 | 27.0 | 0.09 |
| 963.7070 | 1/2x5/8" | 160.0 | 7.5 | 27.0 | 30.0 | 0.17 |
| 963.7071 | 1/2x9/16" | 160.0 | 7.5 | 27.0 | 30.0 | 0.17 |
| 963.7072 | 1/2x11/16" | 200.0 | 8.0 | 30.0 | 36.0 | 0.22 |
| 963.7073 | 9/16x5/8" | 200.0 | 8.0 | 30.0 | 36.0 | 0.22 |
| 963.7074 | 9/16x3/4" | 200.0 | 8.0 | 30.0 | 36.0 | 0.22 |
| 963.7075 | 19/32x11/16" | 200.0 | 8.0 | 35.0 | 38.0 | 0.22 |
| 963.7076 | 19/32x25/32" | 200.0 | 8.0 | 35.0 | 38.0 | 0.22 |
| 963.7077 | 5/8x11/16" | 200.0 | 8.0 | 35.0 | 38.0 | 0.20 |
| 963.7078 | 5/8x3/4" | 225.0 | 10.0 | 39.0 | 44.0 | 0.31 |
| 963.7079 | 11/16x25/32" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7080 | 11/16x7/8" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7081 | 3/4x7/8" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7082 | 3/4x25/32" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7083 | 3/4x13/16" | 225.0 | 10.0 | 39.0 | 44.0 | 0.31 |
| 963.7084 | 3/4x7/8" | 225.0 | 10.0 | 39.0 | 44.0 | 0.31 |
| 963.7085 | 25/32x13/16" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7086 | 25/32x7/8" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7087 | 13/16x7/8" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7088 | 7/8x15/16" | 225.0 | 10.0 | 39.0 | 44.0 | 0.30 |
| 963.7089 | 7/8x31/32" | 240.0 | 10.0 | 44.0 | 48.0 | 0.40 |
| 963.7090 | 7/8x1" | 240.0 | 10.0 | 44.0 | 48.0 | 0.40 |
| 963.7091 | 7/8x1.1/16" | 270.0 | 12.0 | 48.0 | 54.0 | 0.72 |
| 963.7092 | 15/16x1" | 270.0 | 12.0 | 48.0 | 54.0 | 0.72 |
| 963.7093 | 15/16x1.1/16" | 270.0 | 12.0 | 48.0 | 54.0 | 0.72 |
| 963.7094 | 1x1.1/8" | 270.0 | 12.0 | 48.0 | 54.0 | 0.70 |
| 963.7095 | 1x1.5/16" | 300.0 | 14.0 | 59.0 | 62.0 | 0.75 |
| 963.7096 | 1.1/16x1.1/4" | 300.0 | 14.0 | 59.0 | 62.0 | 0.75 |
| 963.7097 | 1.1/8x1.5/16" | 300.0 | 14.0 | 59.0 | 62.0 | 0.75 |
| 963.7098 | 1.1/16x1.7/16" | 320.0 | 16.0 | 70.0 | 75.0 | 1.22 |
| 963.7099 | 1.1/8x1.1/2" | 320.0 | 16.0 | 70.0 | 75.0 | 1.15 |
| 963.7100 | 1.1/4x1.3/8" | 320.0 | 16.0 | 70.0 | 75.0 | 1.15 |
| 963.7101 | 1.1/4x1.7/16" | 320.0 | 16.0 | 70.0 | 75.0 | 1.15 |
| 963.7102 | 1.5/16x1.1/2" | 370.0 | 16.0 | 75.0 | 88.0 | 1.48 |
| 963.7103 | 1.1/4x1.5/8" | 370.0 | 16.0 | 75.0 | 88.0 | 1.40 |
| 963.7104 | 1.3/8x1.1/2" | 370.0 | 16.0 | 75.0 | 88.0 | 1.40 |
| 963.7105 | 1.7/16x1.5/8" | 370.0 | 16.0 | 75.0 | 88.0 | 1.40 |
| 963.7106 | 1.1/2x1.11/16" | 370.0 | 16.0 | 75.0 | 88.0 | 1.40 |
| 963.7107 | 1.5/8x1.1/4" | 370.0 | 16.0 | 75.0 | 88.0 | 1.40 |
| 963.7108 | 1.5/8x1.3/4" | 370.0 | 16.0 | 75.0 | 88.0 | 1.35 |
| 963.7109 | 1.11/16x1.7/8" | 370.0 | 18.0 | 85.0 | 100.0 | 1.35 |
| 963.7110 | 1.11/16x2" | 390.0 | 19.0 | 95.0 | 105.0 | 1.70 |
| 963.7111 | 1.13/16x2" | 390.0 | 19.0 | 95.0 | 105.0 | 1.70 |
| 963.7112 | 1.3/4x2.1/16" | 390.0 | 19.0 | 95.0 | 105.0 | 1.70 |
| 963.7113 | 2x2.3/16" | 440.0 | 20.0 | 100.0 | 115.0 | 1.70 |
| 963.7114 | 2x2.5/16" | 440.0 | 20.0 | 100.0 | 115.0 | 1.70 |
| 963.7115 | 2.3/16x2.3/8" | 470.0 | 22.0 | 110.0 | 125.0 | 1.80 |
| 963.7116 | 2.1/4x2.3/8" | 470.0 | 22.0 | 110.0 | 125.0 | 1.80 |

BRONZEplus double open ended spanner set

- In accordance to DIN 895
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | kg |
|----------|---|------|
| 963.7064 | 12 pcs 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 30x32 mm | 3.50 |
| 963.7117 | 8 pcs 1/4x5/16 - 3/8x7/16 - 7/16x1/2 - 1/2x9/16 - 9/16x5/8 - 5/8x11/16 - 3/4x7/8 - 15/16x1" | 1.70 |

BRONZEplus Double open ended spanner

- Jaw 15° and 75° offset
- Both jaws the same size
- Extra flat heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | A mm | B mm | L mm | kg |
|----------|-----|------|------|-------|----|
| 963.7118 | 4 | 6.0 | 12.0 | 70.0 | 7 |
| 963.7119 | 4.5 | 6.0 | 12.0 | 70.0 | 7 |
| 963.7120 | 5 | 6.0 | 15.0 | 78.0 | 7 |
| 963.7121 | 5.5 | 6.0 | 15.0 | 78.0 | 10 |
| 963.7122 | 6 | 6.0 | 15.0 | 78.0 | 10 |
| 963.7123 | 7 | 6.0 | 19.0 | 91.0 | 10 |
| 963.7124 | 8 | 6.0 | 19.0 | 96.0 | 15 |
| 963.7125 | 9 | 6.0 | 22.0 | 103.0 | 15 |
| 963.7126 | 10 | 6.0 | 22.0 | 105.0 | 20 |
| 963.7127 | 11 | 7.0 | 25.0 | 116.0 | 20 |
| 963.7128 | 12 | 7.0 | 25.0 | 116.0 | 35 |
| 963.7129 | 13 | 7.0 | 30.0 | 131.0 | 35 |
| 963.7130 | 14 | 8.0 | 30.0 | 131.0 | 35 |

BRONZEplus Double open ended spanner-set

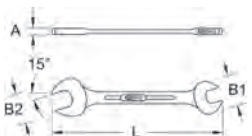
- Jaw 15° and 75° offset
- Both jaws the same size
- Extra flat heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | kg |
|----------|---|-----|
| 963.7131 | 10 pcs 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm | 180 |

BRONZEplus Double open ended spanner

- Jaw 15° offset
- Extra flat heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | A mm | B1 mm | B2 mm | L mm | kg |
|----------|-------|------|-------|-------|-------|----|
| 963.7132 | 3x3,5 | 5.0 | 9.0 | 12.0 | 50.0 | 5 |
| 963.7133 | 4x4,5 | 5.0 | 12.0 | 14.0 | 60.0 | 5 |
| 963.7134 | 5x5,5 | 6.0 | 12.0 | 14.0 | 70.0 | 6 |
| 963.7135 | 6x7 | 6.0 | 14.0 | 16.0 | 80.0 | 8 |
| 963.7136 | 8x9 | 6.0 | 17.0 | 20.0 | 90.0 | 10 |
| 963.7137 | 10x11 | 6.0 | 20.0 | 22.0 | 100.0 | 12 |

| | | A mm | B1 mm | B2 mm | L mm | kg |
|----------|-------------|------|-------|-------|-------|----|
| 963.7138 | 5/32x3/16" | 5.0 | 12.0 | 14.0 | 60.0 | 5 |
| 963.7139 | 3/16x7/32" | 6.0 | 12.0 | 14.0 | 70.0 | 6 |
| 963.7140 | 1/4x9/32" | 6.0 | 14.0 | 16.0 | 80.0 | 8 |
| 963.7141 | 1/4x5/16" | 6.0 | 14.0 | 16.0 | 80.0 | 8 |
| 963.7142 | 5/16x11/32" | 6.0 | 17.0 | 20.0 | 90.0 | 10 |
| 963.7143 | 5/16x3/18" | 6.0 | 17.0 | 20.0 | 90.0 | 10 |
| 963.7144 | 5/16x13/32" | 6.0 | 20.0 | 22.0 | 100.0 | 12 |
| 963.7145 | 3/8x7.16" | 6.0 | 20.0 | 22.0 | 100.0 | 12 |

BRONZEplus open ended spanner

- In accordance to DIN 894 / ISO 3380
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | A mm | B mm | L mm | kg |
|----------|-----|------|-------|--------|------|
| 963.7146 | 6 | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7147 | 7 | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7148 | 8 | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7149 | 9 | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7150 | 10 | 7.0 | 28.0 | 100.0 | 0.03 |
| 963.7151 | 11 | 7.0 | 28.0 | 100.0 | 0.02 |
| 963.7152 | 12 | 7.0 | 33.0 | 140.0 | 0.05 |
| 963.7153 | 13 | 7.0 | 33.0 | 140.0 | 0.04 |
| 963.7154 | 14 | 8.0 | 40.0 | 165.0 | 0.08 |
| 963.7155 | 15 | 8.0 | 40.0 | 145.0 | 0.08 |
| 963.7156 | 16 | 8.0 | 40.0 | 165.0 | 0.07 |
| 963.7157 | 17 | 8.0 | 40.0 | 165.0 | 0.07 |
| 963.7158 | 18 | 8.0 | 40.0 | 165.0 | 0.07 |
| 963.7159 | 19 | 10.0 | 44.0 | 190.0 | 0.10 |
| 963.7160 | 20 | 10.0 | 44.0 | 190.0 | 0.10 |
| 963.7161 | 21 | 12.0 | 46.0 | 205.0 | 0.14 |
| 963.7162 | 22 | 12.0 | 46.0 | 205.0 | 0.13 |
| 963.7163 | 23 | 14.0 | 52.0 | 220.0 | 0.17 |
| 963.7164 | 24 | 14.0 | 52.0 | 220.0 | 0.17 |
| 963.7165 | 25 | 14.0 | 57.0 | 220.0 | 0.16 |
| 963.7166 | 26 | 14.0 | 57.0 | 220.0 | 0.16 |
| 963.7167 | 27 | 14.0 | 57.0 | 220.0 | 0.15 |
| 963.7168 | 28 | 15.0 | 63.0 | 250.0 | 0.27 |
| 963.7169 | 29 | 15.0 | 63.0 | 250.0 | 0.26 |
| 963.7170 | 30 | 15.0 | 63.0 | 250.0 | 0.25 |
| 963.7171 | 32 | 16.0 | 69.0 | 285.0 | 0.34 |
| 963.7172 | 33 | 16.0 | 69.0 | 285.0 | 0.34 |
| 963.7173 | 34 | 17.0 | 75.0 | 285.0 | 0.32 |
| 963.7174 | 35 | 17.0 | 75.0 | 285.0 | 0.32 |
| 963.7175 | 36 | 17.0 | 75.0 | 285.0 | 0.30 |
| 963.7176 | 37 | 17.0 | 75.0 | 285.0 | 0.30 |
| 963.7177 | 38 | 18.0 | 86.0 | 330.0 | 0.54 |
| 963.7178 | 41 | 18.0 | 86.0 | 330.0 | 0.52 |
| 963.7179 | 42 | 18.0 | 86.0 | 330.0 | 0.50 |
| 963.7180 | 46 | 21.0 | 95.0 | 360.0 | 0.65 |
| 963.7181 | 47 | 21.0 | 95.0 | 360.0 | 0.63 |
| 963.7182 | 50 | 22.0 | 105.0 | 440.0 | 1.10 |
| 963.7183 | 52 | 22.0 | 105.0 | 440.0 | 1.10 |
| 963.7184 | 54 | 23.0 | 117.0 | 440.0 | 1.05 |
| 963.7185 | 55 | 23.0 | 117.0 | 440.0 | 1.05 |
| 963.7186 | 56 | 23.0 | 117.0 | 440.0 | 1.00 |
| 963.7187 | 58 | 23.0 | 125.0 | 480.0 | 1.48 |
| 963.7188 | 60 | 23.0 | 125.0 | 480.0 | 1.48 |
| 963.7189 | 63 | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7190 | 65 | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7191 | 67 | 25.0 | 145.0 | 520.0 | 1.70 |
| 963.7192 | 70 | 25.0 | 145.0 | 540.0 | 1.90 |
| 963.7193 | 71 | 25.0 | 145.0 | 540.0 | 1.90 |
| 963.7194 | 75 | 25.0 | 155.0 | 540.0 | 1.80 |
| 963.7195 | 77 | 25.0 | 155.0 | 540.0 | 1.80 |
| 963.7196 | 80 | 27.0 | 165.0 | 630.0 | 2.90 |
| 963.7197 | 82 | 27.0 | 165.0 | 630.0 | 2.80 |
| 963.7198 | 85 | 29.0 | 175.0 | 680.0 | 3.40 |
| 963.7199 | 88 | 30.0 | 185.0 | 680.0 | 3.30 |
| 963.7200 | 90 | 30.0 | 185.0 | 680.0 | 3.20 |
| 963.7201 | 94 | 32.0 | 195.0 | 830.0 | 5.00 |
| 963.7202 | 95 | 32.0 | 195.0 | 830.0 | 4.80 |
| 963.7203 | 100 | 32.0 | 209.0 | 800.0 | 5.90 |
| 963.7204 | 105 | 33.0 | 210.0 | 850.0 | 8.90 |
| 963.7205 | 110 | 33.0 | 230.0 | 900.0 | 9.00 |
| 963.7206 | 115 | 33.0 | 240.0 | 950.0 | 9.30 |
| 963.7207 | 120 | 35.0 | 245.0 | 990.0 | 9.60 |
| 963.7208 | 125 | 35.0 | 250.0 | 1000.0 | 8.30 |
| 963.7209 | 130 | 35.0 | 270.0 | 1000.0 | 8.30 |
| 963.7210 | 135 | 35.0 | 275.0 | 1000.0 | 8.30 |

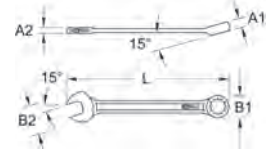
| | | A mm | B mm | L mm | kg |
|----------|----------|------|-------|-------|------|
| 963.7211 | 1/4" | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7212 | 5/16" | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7213 | 11/32" | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7214 | 3/8" | 6.0 | 21.0 | 90.0 | 0.01 |
| 963.7215 | 13/32" | 7.0 | 28.0 | 100.0 | 0.03 |
| 963.7216 | 7/16" | 7.0 | 28.0 | 100.0 | 0.02 |
| 963.7217 | 1/2" | 7.0 | 33.0 | 140.0 | 0.04 |
| 963.7218 | 9/16" | 8.0 | 40.0 | 165.0 | 0.08 |
| 963.7219 | 19/32" | 8.0 | 40.0 | 165.0 | 0.08 |
| 963.7220 | 5/8" | 8.0 | 40.0 | 165.0 | 0.07 |
| 963.7221 | 11/16" | 8.0 | 40.0 | 165.0 | 0.07 |
| 963.7222 | 3/4" | 10.0 | 44.0 | 190.0 | 0.10 |
| 963.7223 | 25/32" | 10.0 | 44.0 | 190.0 | 0.10 |
| 963.7224 | 13/16" | 12.0 | 46.0 | 205.0 | 0.14 |
| 963.7225 | 7/8" | 12.0 | 46.0 | 205.0 | 0.13 |
| 963.7226 | 15/16" | 14.0 | 57.0 | 220.0 | 0.17 |
| 963.7227 | 31/32" | 14.0 | 57.0 | 220.0 | 0.17 |
| 963.7228 | 1" | 14.0 | 57.0 | 220.0 | 0.16 |
| 963.7229 | 1.1/16" | 14.0 | 57.0 | 220.0 | 0.15 |
| 963.7230 | 1.1/8" | 15.0 | 63.0 | 250.0 | 0.27 |
| 963.7231 | 1.3/16" | 15.0 | 63.0 | 250.0 | 0.25 |
| 963.7232 | 1.1/4" | 16.0 | 69.0 | 285.0 | 0.34 |
| 963.7233 | 1.5/16" | 16.0 | 69.0 | 285.0 | 0.34 |
| 963.7234 | 1.3/8" | 17.0 | 75.0 | 285.0 | 0.32 |
| 963.7235 | 1.7/16" | 17.0 | 75.0 | 285.0 | 0.30 |
| 963.7236 | 1.1/2" | 18.0 | 86.0 | 330.0 | 0.54 |
| 963.7237 | 1.9/16" | 18.0 | 86.0 | 330.0 | 0.52 |
| 963.7238 | 1.5/8" | 18.0 | 86.0 | 330.0 | 0.52 |
| 963.7239 | 1.11/16" | 18.0 | 86.0 | 330.0 | 0.50 |
| 963.7240 | 1.3/4" | 21.0 | 95.0 | 360.0 | 0.65 |
| 963.7241 | 1.13/16" | 21.0 | 95.0 | 360.0 | 0.65 |
| 963.7242 | 1.7/8" | 21.0 | 95.0 | 360.0 | 0.63 |
| 963.7243 | 2" | 22.0 | 105.0 | 440.0 | 1.10 |
| 963.7244 | 2.1/16" | 22.0 | 105.0 | 440.0 | 1.10 |
| 963.7245 | 2.1/8" | 22.0 | 105.0 | 440.0 | 1.05 |
| 963.7246 | 2.3/16" | 22.0 | 105.0 | 440.0 | 1.05 |
| 963.7247 | 2.1/4" | 23.0 | 125.0 | 480.0 | 1.00 |
| 963.7248 | 2.5/16" | 23.0 | 125.0 | 480.0 | 1.48 |
| 963.7249 | 2.3/8" | 23.0 | 125.0 | 520.0 | 1.48 |
| 963.7250 | 2.7/16" | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7251 | 2.1/2" | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7252 | 2.9/16" | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7253 | 2.5/8" | 24.0 | 135.0 | 520.0 | 1.70 |
| 963.7254 | 2.3/4" | 25.0 | 145.0 | 540.0 | 1.90 |
| 963.7255 | 2.13/16" | 25.0 | 145.0 | 540.0 | 1.90 |
| 963.7256 | 2.15/16" | 25.0 | 155.0 | 540.0 | 1.90 |
| 963.7257 | 3" | 25.0 | 155.0 | 540.0 | 1.80 |
| 963.7258 | 3.1/8" | 27.0 | 165.0 | 630.0 | 2.90 |
| 963.7259 | 3.1/4" | 27.0 | 165.0 | 630.0 | 2.80 |
| 963.7260 | 3.3/8" | 30.0 | 185.0 | 680.0 | 3.40 |
| 963.7261 | 3.1/2" | 30.0 | 185.0 | 680.0 | 3.30 |
| 963.7262 | 3.5/8" | 30.0 | 185.0 | 680.0 | 3.20 |
| 963.7263 | 3.3/4" | 32.0 | 195.0 | 830.0 | 5.00 |
| 963.7264 | 3.7/8" | 32.0 | 195.0 | 830.0 | 4.80 |



NON SPARKING COMBINATION SPANNER

BRONZEplus combination spanner, offset

- FlankTraction profile
- In accordance to DIN 3113 Form A / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | A1 mm | A2 mm | B1 mm | B2 mm | L mm | kg |
|----------|----|-------|-------|-------|-------|-------|------|
| 963.7265 | 6 | 6.0 | 5.0 | 11.0 | 20.0 | 130.0 | 0.05 |
| 963.7266 | 7 | 6.0 | 5.0 | 11.0 | 20.0 | 130.0 | 0.06 |
| 963.7267 | 8 | 7.0 | 6.0 | 15.0 | 17.0 | 135.0 | 0.06 |
| 963.7268 | 9 | 7.0 | 6.0 | 18.0 | 22.0 | 150.0 | 0.10 |
| 963.7269 | 10 | 7.0 | 6.0 | 18.0 | 22.0 | 150.0 | 0.09 |
| 963.7270 | 11 | 7.0 | 6.0 | 18.0 | 22.0 | 150.0 | 0.09 |
| 963.7271 | 12 | 9.0 | 7.0 | 20.0 | 25.0 | 190.0 | 0.17 |
| 963.7272 | 13 | 10.0 | 7.0 | 22.0 | 32.0 | 190.0 | 0.17 |
| 963.7273 | 14 | 10.0 | 7.0 | 22.0 | 32.0 | 190.0 | 0.16 |
| 963.7274 | 15 | 11.0 | 8.0 | 27.0 | 34.0 | 210.0 | 0.23 |
| 963.7275 | 16 | 11.0 | 8.0 | 27.0 | 34.0 | 210.0 | 0.23 |
| 963.7276 | 17 | 11.0 | 8.0 | 27.0 | 34.0 | 210.0 | 0.22 |
| 963.7277 | 18 | 13.0 | 9.0 | 31.0 | 40.0 | 230.0 | 0.33 |
| 963.7278 | 19 | 13.0 | 9.0 | 31.0 | 40.0 | 230.0 | 0.33 |
| 963.7279 | 20 | 13.0 | 9.0 | 31.0 | 40.0 | 230.0 | 0.33 |
| 963.7280 | 21 | 14.0 | 9.0 | 36.0 | 43.0 | 250.0 | 0.36 |
| 963.7281 | 22 | 14.0 | 9.0 | 36.0 | 43.0 | 250.0 | 0.36 |
| 963.7282 | 23 | 14.0 | 9.0 | 36.0 | 43.0 | 250.0 | 0.35 |
| 963.7283 | 24 | 15.0 | 10.0 | 38.0 | 48.0 | 270.0 | 0.50 |
| 963.7284 | 25 | 15.0 | 10.0 | 38.0 | 48.0 | 270.0 | 0.48 |
| 963.7285 | 26 | 15.0 | 10.0 | 38.0 | 48.0 | 270.0 | 0.47 |
| 963.7286 | 27 | 17.0 | 13.0 | 43.0 | 55.0 | 280.0 | 0.67 |
| 963.7287 | 28 | 17.0 | 13.0 | 43.0 | 55.0 | 280.0 | 0.68 |
| 963.7288 | 29 | 17.0 | 13.0 | 43.0 | 55.0 | 280.0 | 0.63 |
| 963.7289 | 30 | 20.0 | 13.0 | 49.0 | 60.0 | 300.0 | 0.73 |
| 963.7290 | 32 | 22.0 | 14.0 | 53.0 | 64.0 | 300.0 | 0.65 |
| 963.7291 | 34 | 22.0 | 14.0 | 53.0 | 64.0 | 320.0 | 0.95 |
| 963.7292 | 36 | 22.0 | 14.0 | 54.0 | 72.0 | 330.0 | 0.93 |
| 963.7293 | 38 | 23.0 | 16.0 | 58.0 | 82.0 | 400.0 | 2.15 |
| 963.7294 | 41 | 24.0 | 16.0 | 61.0 | 87.0 | 410.0 | 2.00 |
| 963.7295 | 46 | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 1.90 |
| 963.7296 | 50 | 27.0 | 18.0 | 75.0 | 100.0 | 540.0 | 3.40 |
| 963.7297 | 55 | 27.0 | 22.0 | 90.0 | 105.0 | 520.0 | 3.50 |
| 963.7298 | 60 | 32.0 | 27.0 | 92.0 | 125.0 | 515.0 | 3.30 |
| 963.7299 | 65 | 34.0 | 28.0 | 95.0 | 140.0 | 500.0 | 3.20 |
| 963.7300 | 70 | 35.0 | 28.0 | 100.0 | 145.0 | 510.0 | 3.80 |
| 963.7301 | 75 | 35.0 | 29.0 | 105.0 | 157.0 | 680.0 | 3.90 |
| 963.7302 | 80 | 36.0 | 29.0 | 112.0 | 165.0 | 680.0 | 4.00 |

| | mm | A1 mm | A2 mm | B1 mm | B2 mm | L mm |
|--|----|-------|-------|-------|-------|------|
|--|----|-------|-------|-------|-------|------|

| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|----------|-------|-------|-------|-------|-------|------|
| 963.7330 | 1.7/16" | 22.0 | 14.0 | 55.0 | 72.0 | 330.0 | 0.84 |
| 963.7331 | 1.1/2" | 22.0 | 14.0 | 55.0 | 72.0 | 330.0 | 0.84 |
| 963.7332 | 1.9/16" | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 2.00 |
| 963.7333 | 1.5/8" | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 2.00 |
| 963.7334 | 1.11/16" | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 2.00 |
| 963.7335 | 1.3/4" | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 1.90 |
| 963.7336 | 1.13/16" | 24.0 | 18.0 | 67.0 | 95.0 | 410.0 | 1.90 |
| 963.7337 | 1.7/8" | 27.0 | 20.0 | 78.0 | 100.0 | 435.0 | 1.60 |
| 963.7338 | 2" | 27.0 | 20.0 | 78.0 | 100.0 | 435.0 | 1.60 |
| 963.7339 | 2.1/16" | 27.0 | 20.0 | 78.0 | 100.0 | 435.0 | 1.60 |
| 963.7340 | 2.1/8" | 27.0 | 22.0 | 90.0 | 105.0 | 455.0 | 2.00 |
| 963.7341 | 2.3/16" | 27.0 | 22.0 | 90.0 | 105.0 | 455.0 | 2.00 |
| 963.7342 | 2.1/4" | 30.0 | 25.0 | 92.0 | 110.0 | 475.0 | 2.50 |

BRONZEplus combination spanner set, offset

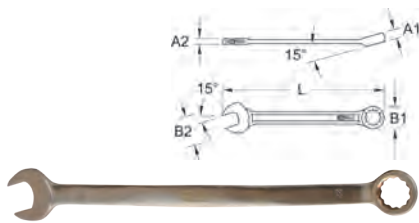
- FlankTraction profile
- In accordance to DIN 3113 Form A / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|--------|--|-------|-------|-------|------|------|
| 963.7303 | 8 pcs | 8 - 9 - 10 - 11 - 13 - 14 - 17 - 19 mm | | | | | 1.20 |
| 963.7304 | 11 pcs | 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 - 22 mm | | | | | 2.20 |
| 963.7305 | 12 pcs | 10 - 11 - 12 - 13 - 14 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm | | | | | 4.10 |
| 963.7306 | 26 pcs | 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 32 mm | | | | | 8.45 |
| 963.7343 | 12 pcs | 1/4" - 5/16" - 3/8" - 7/16" - 1/2" - 9/16" - 5/8" - 3/4" - 7/8" - 1" - 1.1/16" - 1.14" | | | | | 3.30 |

BRONZEplus combination spanner, extra long

- FlankTraction profile
- In accordance to DIN 3113 / ISO 3318
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|----|-------|-------|-------|-------|-------|------|
| 963.7344 | 10 | 10.0 | 7.0 | 17.0 | 28.0 | 190.0 | 0.07 |
| 963.7345 | 12 | 12.0 | 8.0 | 20.0 | 32.0 | 210.0 | 0.07 |
| 963.7346 | 13 | 12.0 | 8.0 | 22.0 | 34.0 | 225.0 | 0.09 |
| 963.7347 | 17 | 13.0 | 9.0 | 28.0 | 43.0 | 280.0 | 0.14 |
| 963.7348 | 19 | 13.0 | 9.0 | 30.0 | 47.0 | 310.0 | 0.20 |
| 963.7349 | 22 | 15.0 | 10.0 | 35.0 | 53.0 | 350.0 | 0.26 |
| 963.7350 | 24 | 16.0 | 10.0 | 38.0 | 57.0 | 400.0 | 0.37 |
| 963.7351 | 27 | 18.0 | 12.0 | 42.0 | 64.0 | 450.0 | 0.50 |
| 963.7352 | 30 | 20.0 | 13.0 | 46.0 | 68.0 | 480.0 | 0.90 |
| 963.7353 | 32 | 22.0 | 14.0 | 50.0 | 74.0 | 500.0 | 0.73 |
| 963.7354 | 36 | 24.0 | 16.0 | 56.0 | 83.0 | 550.0 | 1.20 |
| 963.7355 | 41 | 24.0 | 17.0 | 63.0 | 93.0 | 600.0 | 2.00 |
| 963.7356 | 46 | 25.0 | 19.0 | 73.0 | 99.0 | 640.0 | 2.80 |

BRONZEplus Combination spanner set, extra long

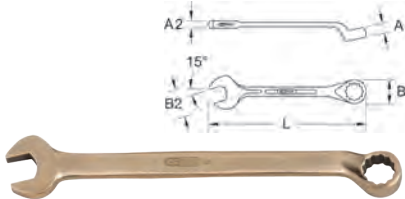
- FlankTraction profile
- In accordance to DIN 3113 / ISO 3318
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|--------|--|-------|-------|-------|------|------|
| 963.7357 | 6 pcs | 10 - 12 - 13 - 17 - 19 - 22 mm | | | | | 0.83 |
| 963.7358 | 10 pcs | 10 - 12 - 13 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm | | | | | 3.33 |

BRONZEplus Combination spanners, offset

- FlankTraction profile (12 point)
- In accordance to DIN 3113 Form B / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 70° offset
- Ring head 10° angled
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|----|-------|-------|-------|-------|-------|-----|
| 963.7359 | 10 | 10.0 | 7.0 | 17.0 | 28.0 | 148.0 | 70 |
| 963.7360 | 12 | 12.0 | 8.0 | 20.0 | 32.0 | 168.0 | 65 |
| 963.7361 | 13 | 12.0 | 8.0 | 22.0 | 34.0 | 185.0 | 80 |
| 963.7362 | 17 | 13.0 | 9.0 | 28.0 | 43.0 | 232.0 | 140 |
| 963.7363 | 19 | 13.0 | 9.0 | 30.0 | 47.0 | 258.0 | 190 |
| 963.7364 | 22 | 15.0 | 10.0 | 35.0 | 53.0 | 292.0 | 300 |
| 963.7365 | 24 | 16.0 | 10.0 | 38.0 | 57.0 | 318.0 | 370 |
| 963.7366 | 27 | 18.0 | 12.0 | 42.0 | 64.0 | 352.0 | 500 |
| 963.7367 | 30 | 20.0 | 13.0 | 46.0 | 68.0 | 390.0 | 645 |
| 963.7368 | 32 | 22.0 | 14.0 | 50.0 | 74.0 | 412.0 | 780 |

BRONZEplus Combination spanners set, offset

- FlankTraction profile (12 point)
- In accordance to DIN 3113 Form B / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 70° offset
- Ring head 10° angled
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

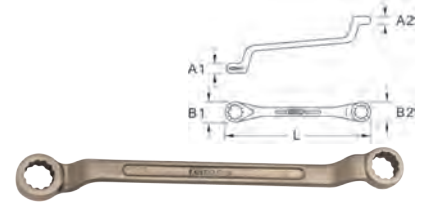


| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|--------|--|-------|-------|-------|------|------|
| 963.7369 | 6 pcs | 10 - 12 - 13 - 17 - 19 - 22 mm | | | | | 0.85 |
| 963.7370 | 10 pcs | 10 - 12 - 13 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm | | | | | 3.14 |

NON SPARKING RING SPANNERS

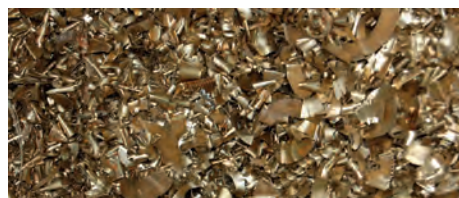
BRONZEplus double ring ended spanner

- FlankTraction profile
- In accordance to DIN 838 / ISO 1085 / ISO 10104 / ISO 3318
- Ring head 75° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



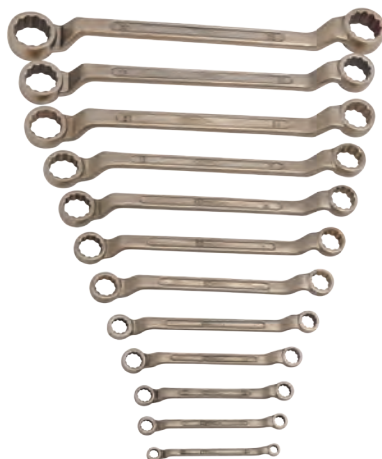
| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | |
|----------|-------|-------|-------|-------|-------|-------|------|
| 963.7371 | 6x7 | 6.0 | 6.0 | 12.0 | 14.0 | 170.0 | 0.11 |
| 963.7372 | 6x8 | 6.0 | 6.0 | 12.0 | 14.0 | 170.0 | 0.11 |
| 963.7373 | 7x8 | 6.0 | 6.0 | 12.0 | 14.0 | 170.0 | 0.10 |
| 963.7374 | 7x9 | 7.0 | 7.0 | 15.0 | 18.0 | 170.0 | 0.10 |
| 963.7375 | 8x9 | 7.0 | 7.0 | 15.0 | 18.0 | 170.0 | 0.10 |
| 963.7376 | 8x10 | 7.0 | 7.0 | 15.0 | 18.0 | 180.0 | 0.14 |
| 963.7377 | 9x10 | 7.0 | 7.0 | 15.0 | 18.0 | 180.0 | 0.13 |
| 963.7378 | 9x11 | 8.0 | 8.0 | 17.0 | 20.0 | 180.0 | 0.14 |
| 963.7379 | 10x11 | 8.0 | 8.0 | 17.0 | 20.0 | 180.0 | 0.15 |
| 963.7380 | 10x12 | 8.0 | 8.0 | 17.0 | 20.0 | 180.0 | 0.14 |
| 963.7381 | 10x13 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7382 | 10x14 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.17 |
| 963.7383 | 11x13 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.19 |
| 963.7384 | 11x14 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7385 | 12x13 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7386 | 12x14 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7387 | 13x14 | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7388 | 13x15 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.24 |
| 963.7389 | 13x16 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.24 |
| 963.7390 | 13x17 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.25 |
| 963.7391 | 14x15 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.25 |
| 963.7392 | 14x16 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.24 |
| 963.7393 | 14x17 | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.23 |
| 963.7394 | 16x17 | 10.0 | 10.0 | 24.0 | 26.0 | 230.0 | 0.24 |
| 963.7395 | 16x18 | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.42 |
| 963.7396 | 17x19 | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.40 |
| 963.7397 | 17x22 | 12.0 | 13.0 | 26.0 | 35.0 | 280.0 | 0.38 |
| 963.7398 | 18x19 | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.40 |
| 963.7399 | 18x20 | 13.0 | 13.0 | 30.0 | 35.0 | 280.0 | 0.39 |
| 963.7400 | 18x21 | 13.0 | 13.0 | 30.0 | 35.0 | 280.0 | 0.39 |
| 963.7401 | 19x22 | 13.0 | 13.0 | 30.0 | 35.0 | 280.0 | 0.37 |
| 963.7402 | 19x24 | 14.0 | 14.0 | 35.0 | 37.0 | 290.0 | 0.53 |
| 963.7403 | 20x22 | 13.0 | 13.0 | 30.0 | 35.0 | 280.0 | 0.38 |
| 963.7404 | 21x23 | 14.0 | 14.0 | 35.0 | 37.0 | 290.0 | 0.51 |
| 963.7405 | 21x24 | 14.0 | 14.0 | 35.0 | 37.0 | 300.0 | 0.51 |
| 963.7406 | 22x24 | 14.0 | 14.0 | 35.0 | 37.0 | 300.0 | 0.51 |
| 963.7407 | 22x27 | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.65 |
| 963.7408 | 23x26 | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.67 |
| 963.7409 | 24x26 | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.68 |
| 963.7410 | 24x27 | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.67 |
| 963.7411 | 24x30 | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 0.93 |
| 963.7412 | 25x28 | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.66 |
| 963.7413 | 26x29 | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 1.00 |
| 963.7414 | 27x29 | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 1.00 |
| 963.7415 | 27x30 | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 0.90 |
| 963.7416 | 27x32 | 16.0 | 16.0 | 46.0 | 50.0 | 370.0 | 0.90 |
| 963.7417 | 30x32 | 16.0 | 16.0 | 46.0 | 50.0 | 370.0 | 0.86 |
| 963.7418 | 30x34 | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 0.85 |
| 963.7419 | 30x36 | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.30 |
| 963.7420 | 32x34 | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.30 |
| 963.7421 | 32x36 | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.30 |
| 963.7422 | 34x36 | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.25 |
| 963.7423 | 35x38 | 18.0 | 18.0 | 54.0 | 56.0 | 450.0 | 1.40 |
| 963.7424 | 36x38 | 18.0 | 18.0 | 54.0 | 56.0 | 450.0 | 1.45 |
| 963.7425 | 36x41 | 20.0 | 20.0 | 56.0 | 62.0 | 450.0 | 1.45 |
| 963.7426 | 38x42 | 20.0 | 20.0 | 54.0 | 62.0 | 450.0 | 1.45 |
| 963.7427 | 41x46 | 20.0 | 20.0 | 63.0 | 68.0 | 460.0 | 1.80 |
| 963.7428 | 46x50 | 24.0 | 24.0 | 69.0 | 74.0 | 480.0 | 2.10 |
| 963.7429 | 50x55 | 23.0 | 23.0 | 72.0 | 83.0 | 540.0 | 3.00 |
| 963.7430 | 50x60 | 23.0 | 23.0 | 72.0 | 90.0 | 540.0 | 2.80 |
| 963.7431 | 55x60 | 24.0 | 24.0 | 80.0 | 90.0 | 540.0 | 2.80 |
| 963.7432 | 60x65 | 25.0 | 25.0 | 90.0 | 98.0 | 690.0 | 4.20 |
| 963.7433 | 65x70 | 25.0 | 25.0 | 98.0 | 105.0 | 690.0 | 4.20 |
| 963.7434 | 70x80 | 27.0 | 27.0 | 105.0 | 115.0 | 770.0 | 6.00 |
| 963.7435 | 75x80 | 27.0 | 27.0 | 110.0 | 115.0 | 790.0 | 6.60 |
| 963.7436 | 85x90 | 30.0 | 30.0 | 115.0 | 120.0 | 800.0 | 7.00 |

| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | kg |
|----------|----------------|----------|----------|----------|----------|---------|------|
| 963.7438 | 1/4x5/16" | 6.0 | 6.0 | 12.0 | 14.0 | 170.0 | 0.11 |
| 963.7439 | 5/16x3/8" | 6.0 | 6.0 | 12.0 | 14.0 | 170.0 | 0.10 |
| 963.7440 | 3/8x7/16" | 8.0 | 8.0 | 17.0 | 20.0 | 180.0 | 0.14 |
| 963.7441 | 7/16x1/2" | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.19 |
| 963.7442 | 1/2x9/16" | 9.0 | 9.0 | 20.0 | 23.0 | 195.0 | 0.18 |
| 963.7443 | 1/2x19/32" | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.24 |
| 963.7444 | 9/16x5/8" | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.25 |
| 963.7445 | 19/32x11/16" | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.23 |
| 963.7446 | 5/8x11/16" | 10.0 | 10.0 | 22.0 | 26.0 | 230.0 | 0.24 |
| 963.7447 | 5/8x3/4" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.40 |
| 963.7448 | 11/16x3/4" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.40 |
| 963.7449 | 11/16x25/32" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.38 |
| 963.7450 | 3/4x25/32" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.36 |
| 963.7451 | 3/4x7/8" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.37 |
| 963.7452 | 13/16x7/8" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.38 |
| 963.7453 | 25/32x13/16" | 12.0 | 12.0 | 26.0 | 30.0 | 280.0 | 0.35 |
| 963.7454 | 7/8x15/16" | 14.0 | 14.0 | 35.0 | 37.0 | 300.0 | 0.51 |
| 963.7455 | 7/8x1" | 14.0 | 14.0 | 35.0 | 37.0 | 300.0 | 0.50 |
| 963.7456 | 7/8x1.1/16" | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.65 |
| 963.7457 | 15/16x1" | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.67 |
| 963.7458 | 1x1.1/8" | 15.0 | 15.0 | 38.0 | 42.0 | 330.0 | 0.66 |
| 963.7459 | 1.1/16x1.1/8" | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 1.00 |
| 963.7460 | 1.1/16x1.1/4" | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 0.90 |
| 963.7461 | 1.1/8x1.5/16" | 15.0 | 15.0 | 42.0 | 47.0 | 370.0 | 0.88 |
| 963.7462 | 1.3/16x1.5/16" | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 0.85 |
| 963.7463 | 1.1/4x1.5/16" | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.20 |
| 963.7464 | 1.1/4x1.3/8" | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.30 |
| 963.7465 | 1.1/4x1.7/16" | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.30 |
| 963.7466 | 1.5/16x1.1/2" | 18.0 | 18.0 | 52.0 | 54.0 | 430.0 | 1.20 |
| 963.7467 | 1.3/8x1.1/2" | 18.0 | 18.0 | 54.0 | 56.0 | 450.0 | 1.40 |
| 963.7468 | 1.7/16x1.5/8" | 18.0 | 18.0 | 54.0 | 56.0 | 450.0 | 1.45 |
| 963.7469 | 1.5/8x1.13/16" | 20.0 | 20.0 | 63.0 | 68.0 | 460.0 | 1.80 |
| 963.7470 | 1.11/16x1.7/8" | 20.0 | 20.0 | 63.0 | 68.0 | 460.0 | 1.80 |
| 963.7471 | 1.13/16x2" | 24.0 | 24.0 | 69.0 | 74.0 | 480.0 | 2.10 |
| 963.7472 | 1.3/4x2.1/16" | 24.0 | 24.0 | 69.0 | 74.0 | 480.0 | 2.00 |
| 963.7473 | 2x2.3/16" | 24.0 | 24.0 | 80.0 | 90.0 | 540.0 | 3.00 |
| 963.7474 | 2 x2.3/8" | 24.0 | 24.0 | 80.0 | 90.0 | 540.0 | 2.80 |
| 963.7475 | 2.3/16x2.3/8" | 24.0 | 24.0 | 80.0 | 90.0 | 540.0 | 2.80 |
| 963.7476 | 2.1/4x2.7/16" | 24.0 | 24.0 | 80.0 | 90.0 | 540.0 | 2.70 |



BRONZEplus double ring ended spanner set

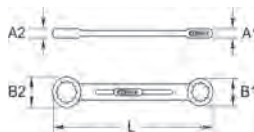
- FlankTraction profile
- In accordance to DIN 838 / ISO 1085 / ISO 10104 / ISO 3318
- Ring head 75° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | kg |
|----------|--|------|
| 963.7437 | 12 pcs 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm | 4.10 |
| 963.7477 | 8 pcs 1/4"x5/16" - 3/8"x7/16" - 7/16"x1/2" - 1/2"x9/16" - 9/16"x5/8" - 8/5"x11/16" - 3/4"x7/8" - 15/16x1" | 2.10 |

BRONZEplus double ring ended spanner, straight

- FlankTraction profile
- In accordance to DIN 838
- Straight form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | kg |
|----------|-------|----------|----------|----------|----------|---------|------|
| 963.7478 | 6x7 | 6.0 | 6.0 | 12.0 | 14.0 | 100.0 | 0.01 |
| 963.7479 | 8x9 | 7.0 | 7.0 | 15.0 | 18.0 | 115.0 | 0.02 |
| 963.7480 | 8x10 | 7.0 | 7.0 | 15.0 | 18.0 | 120.0 | 0.02 |
| 963.7481 | 9x11 | 8.0 | 8.0 | 17.0 | 20.0 | 125.0 | 0.02 |
| 963.7482 | 10x11 | 8.0 | 8.0 | 17.0 | 20.0 | 130.0 | 0.02 |
| 963.7483 | 10x13 | 9.0 | 9.0 | 20.0 | 23.0 | 130.0 | 0.02 |
| 963.7484 | 12x13 | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 0.04 |
| 963.7485 | 12x14 | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 0.05 |
| 963.7486 | 13x14 | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 0.05 |
| 963.7487 | 13x15 | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 0.05 |
| 963.7488 | 13x17 | 10.0 | 10.0 | 22.0 | 26.0 | 155.0 | 0.05 |
| 963.7489 | 14x15 | 10.0 | 10.0 | 22.0 | 26.0 | 155.0 | 0.05 |
| 963.7490 | 14x17 | 10.0 | 10.0 | 22.0 | 26.0 | 155.0 | 0.05 |
| 963.7491 | 16x17 | 12.0 | 12.0 | 26.0 | 30.0 | 170.0 | 0.07 |
| 963.7492 | 16x18 | 12.0 | 12.0 | 26.0 | 30.0 | 170.0 | 0.07 |
| 963.7493 | 17x19 | 12.0 | 12.0 | 26.0 | 30.0 | 190.0 | 0.08 |
| 963.7494 | 18x19 | 12.0 | 12.0 | 26.0 | 30.0 | 190.0 | 0.08 |
| 963.7495 | 19x22 | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 0.12 |
| 963.7496 | 19x24 | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 0.12 |
| 963.7497 | 20x22 | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 0.12 |
| 963.7498 | 21x23 | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 0.12 |
| 963.7499 | 22x24 | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 0.12 |
| 963.7500 | 24x26 | 15.0 | 15.0 | 38.0 | 42.0 | 210.0 | 0.14 |
| 963.7501 | 24x27 | 15.0 | 15.0 | 38.0 | 42.0 | 210.0 | 0.13 |
| 963.7502 | 24x30 | 16.0 | 16.0 | 42.0 | 47.0 | 255.0 | 0.19 |
| 963.7503 | 25x28 | 16.0 | 16.0 | 42.0 | 47.0 | 255.0 | 0.20 |
| 963.7504 | 26x28 | 16.0 | 16.0 | 42.0 | 47.0 | 255.0 | 0.19 |
| 963.7505 | 27x29 | 16.0 | 16.0 | 42.0 | 47.0 | 255.0 | 0.19 |
| 963.7506 | 27x32 | 16.0 | 16.0 | 46.0 | 50.0 | 265.0 | 0.23 |
| 963.7507 | 30x32 | 16.0 | 16.0 | 46.0 | 50.0 | 265.0 | 0.23 |
| 963.7508 | 30x36 | 18.0 | 18.0 | 52.0 | 54.0 | 285.0 | 0.28 |
| 963.7509 | 32x36 | 18.0 | 18.0 | 52.0 | 54.0 | 285.0 | 0.28 |
| 963.7510 | 36x41 | 20.0 | 20.0 | 54.0 | 64.0 | 460.0 | 0.33 |
| 963.7511 | 41x46 | 21.0 | 21.0 | 63.0 | 68.0 | 432.0 | 0.81 |
| 963.7512 | 46x50 | 24.0 | 24.0 | 69.0 | 74.0 | 477.0 | 1.04 |

| | | A1 mm | A2 mm | B1 mm | B2 mm | L mm | kg |
|----------|---------------|----------|----------|----------|----------|---------|-----|
| 963.7513 | 1/4x5/16" | 6.0 | 6.0 | 12.0 | 14.0 | 100.0 | 12 |
| 963.7514 | 5/16x3/8" | 7.0 | 7.0 | 15.0 | 18.0 | 115.0 | 16 |
| 963.7515 | 3/8x7/16" | 8.0 | 8.0 | 17.0 | 20.0 | 125.0 | 22 |
| 963.7516 | 7/16x9/16" | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 45 |
| 963.7517 | 1/2x5/8" | 10.0 | 10.0 | 22.0 | 26.0 | 155.0 | 50 |
| 963.7518 | 1/2x19/32" | 9.0 | 9.0 | 20.0 | 23.0 | 140.0 | 45 |
| 963.7519 | 9/16x11/16" | 10.0 | 10.0 | 22.0 | 26.0 | 155.0 | 50 |
| 963.7520 | 5/8x25/32" | 12.0 | 12.0 | 26.0 | 30.0 | 190.0 | 80 |
| 963.7521 | 11/16x3/4" | 12.0 | 12.0 | 26.0 | 30.0 | 190.0 | 80 |
| 963.7522 | 3/4x7/8" | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 120 |
| 963.7523 | 13/16x15/16" | 14.0 | 14.0 | 35.0 | 37.0 | 200.0 | 120 |
| 963.7524 | 15/16x1.1/16" | 15.0 | 15.0 | 38.0 | 42.0 | 210.0 | 130 |
| 963.7525 | 1x1.1/8" | 16.0 | 16.0 | 42.0 | 47.0 | 255.0 | 200 |
| 963.7526 | 1.3/16x1.1/4" | 16.0 | 16.0 | 46.0 | 50.0 | 265.0 | 228 |





BRONZEplus single-end box wrench, straight

- FlankTraction profile
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A mm | B mm | L mm | kg |
|----------|----|---------|---------|---------|------|
| 963.7527 | 14 | 10.5 | 24.0 | 140.0 | 0.13 |
| 963.7528 | 15 | 10.5 | 24.0 | 140.0 | 0.13 |
| 963.7529 | 16 | 11.5 | 29.0 | 155.0 | 0.15 |
| 963.7530 | 17 | 11.5 | 29.0 | 155.0 | 0.15 |
| 963.7531 | 18 | 12.0 | 30.0 | 170.0 | 0.25 |
| 963.7532 | 19 | 12.0 | 30.0 | 170.0 | 0.28 |
| 963.7533 | 20 | 13.5 | 35.0 | 190.0 | 0.28 |
| 963.7534 | 21 | 13.5 | 35.0 | 190.0 | 0.30 |
| 963.7535 | 22 | 13.5 | 35.0 | 190.0 | 0.30 |
| 963.7536 | 23 | 14.5 | 38.0 | 215.0 | 0.30 |
| 963.7537 | 24 | 14.5 | 38.0 | 215.0 | 0.40 |
| 963.7538 | 25 | 16.0 | 42.0 | 230.0 | 0.43 |
| 963.7539 | 26 | 16.0 | 42.0 | 230.0 | 0.45 |
| 963.7540 | 27 | 16.0 | 42.0 | 230.0 | 0.50 |
| 963.7541 | 28 | 17.0 | 48.0 | 265.0 | 0.52 |
| 963.7542 | 29 | 17.0 | 48.0 | 265.0 | 0.51 |
| 963.7543 | 30 | 17.0 | 48.0 | 265.0 | 0.50 |
| 963.7544 | 32 | 17.0 | 51.0 | 265.0 | 0.45 |
| 963.7545 | 33 | 17.0 | 51.0 | 265.0 | 0.43 |
| 963.7546 | 34 | 17.5 | 51.0 | 290.0 | 0.67 |
| 963.7547 | 35 | 17.5 | 51.0 | 290.0 | 0.66 |
| 963.7548 | 36 | 17.5 | 55.0 | 290.0 | 0.65 |
| 963.7549 | 37 | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7550 | 38 | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7551 | 41 | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7552 | 42 | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7553 | 46 | 23.0 | 72.0 | 365.0 | 1.10 |
| 963.7554 | 47 | 23.0 | 72.0 | 365.0 | 1.10 |
| 963.7555 | 50 | 24.5 | 79.0 | 400.0 | 1.40 |
| 963.7556 | 52 | 26.0 | 87.0 | 430.0 | 1.80 |
| 963.7557 | 54 | 26.0 | 87.0 | 430.0 | 1.70 |
| 963.7558 | 55 | 26.5 | 87.0 | 445.0 | 1.65 |
| 963.7559 | 56 | 27.5 | 93.0 | 465.0 | 1.80 |
| 963.7560 | 58 | 27.5 | 93.0 | 465.0 | 1.80 |
| 963.7561 | 60 | 27.5 | 93.0 | 465.0 | 2.00 |
| 963.7562 | 63 | 29.0 | 100.0 | 500.0 | 2.30 |
| 963.7563 | 65 | 29.0 | 100.0 | 500.0 | 2.10 |
| 963.7564 | 67 | 29.0 | 100.0 | 500.0 | 2.00 |
| 963.7565 | 70 | 30.0 | 107.0 | 550.0 | 3.00 |
| 963.7566 | 71 | 30.0 | 107.0 | 550.0 | 2.80 |
| 963.7567 | 75 | 32.0 | 115.0 | 620.0 | 5.00 |
| 963.7568 | 77 | 32.0 | 115.0 | 620.0 | 5.00 |
| 963.7569 | 80 | 32.0 | 125.0 | 620.0 | 4.50 |
| 963.7570 | 82 | 32.0 | 125.0 | 620.0 | 4.30 |
| 963.7571 | 85 | 35.0 | 130.0 | 650.0 | 5.00 |
| 963.7572 | 88 | 37.0 | 138.0 | 650.0 | 4.80 |
| 963.7573 | 90 | 37.0 | 138.0 | 650.0 | 4.20 |
| 963.7574 | 94 | 39.0 | 145.0 | 700.0 | 5.20 |
| 963.7575 | 95 | 39.0 | 145.0 | 700.0 | 5.20 |

| | | A mm | B mm |
|--|--|---------|---------|
|--|--|---------|---------|



| |  | A mm | B mm | L mm |  |
|----------|---|------|-------|-------|---|
| 963.7593 | 1.3/8" | 17.5 | 51.0 | 290.0 | 0.66 |
| 963.7594 | 1.7/16" | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7595 | 1.1/2" | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7596 | 1.9/16" | 21.0 | 65.0 | 325.0 | 0.85 |
| 963.7597 | 1.5/8" | 21.0 | 65.0 | 325.0 | 0.90 |
| 963.7598 | 1.11/16" | 21.0 | 65.0 | 325.0 | 0.85 |
| 963.7599 | 1.3/4" | 23.0 | 72.0 | 365.0 | 1.20 |
| 963.7600 | 1.13/19" | 23.0 | 72.0 | 365.0 | 1.10 |
| 963.7601 | 1.7/8" | 23.0 | 72.0 | 365.0 | 1.10 |
| 963.7602 | 2" | 24.5 | 79.0 | 400.0 | 1.40 |
| 963.7603 | 2.1/16" | 26.0 | 87.0 | 430.0 | 1.80 |
| 963.7604 | 2.1/8" | 26.0 | 87.0 | 430.0 | 1.70 |
| 963.7605 | 2.3/16" | 26.5 | 87.0 | 445.0 | 1.65 |
| 963.7606 | 2.1/4" | 27.5 | 93.0 | 465.0 | 1.80 |
| 963.7607 | 2.5/16" | 27.5 | 93.0 | 465.0 | 1.80 |
| 963.7608 | 2.3/8" | 27.5 | 93.0 | 465.0 | 2.00 |
| 963.7609 | 2.7/16" | 29.0 | 100.0 | 500.0 | 2.10 |
| 963.7610 | 2.1/2" | 29.0 | 100.0 | 500.0 | 2.00 |
| 963.7611 | 2.9/16" | 29.0 | 100.0 | 500.0 | 2.10 |
| 963.7612 | 2.3/4" | 30.0 | 107.0 | 550.0 | 3.00 |
| 963.7613 | 2.15/16" | 32.0 | 115.0 | 620.0 | 5.00 |
| 963.7614 | 3" | 32.0 | 115.0 | 620.0 | 5.00 |
| 963.7615 | 3.1/8" | 32.0 | 115.0 | 620.0 | 4.50 |
| 963.7616 | 3.3/8" | 35.0 | 130.0 | 650.0 | 5.00 |
| 963.7617 | 3.1/2" | 37.0 | 138.0 | 650.0 | 4.80 |
| 963.7618 | 3.3/4" | 39.0 | 145.0 | 700.0 | 5.20 |



NON SPARKING IMPACT SPANNERS



BRONZE^{plus} slogging open ended spanner

- In accordance to DIN 133
- Jaw 15° offset
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| |  | A mm | B mm | L mm |  |
|----------|---|------|-------|-------|---|
| 963.7619 | 14 | 11.0 | 30.0 | 180.0 | 0.35 |
| 963.7620 | 17 | 11.0 | 36.0 | 125.0 | 0.12 |
| 963.7621 | 19 | 12.0 | 40.0 | 120.0 | 0.13 |
| 963.7622 | 22 | 13.0 | 44.0 | 135.0 | 0.15 |
| 963.7623 | 24 | 14.0 | 46.0 | 150.0 | 0.20 |
| 963.7624 | 27 | 16.0 | 55.0 | 180.0 | 0.38 |
| 963.7625 | 28 | 16.0 | 55.0 | 180.0 | 0.37 |
| 963.7626 | 29 | 17.0 | 63.0 | 190.0 | 0.36 |
| 963.7627 | 30 | 17.0 | 63.0 | 190.0 | 0.35 |
| 963.7628 | 32 | 17.0 | 64.0 | 210.0 | 0.68 |
| 963.7629 | 33 | 19.0 | 70.0 | 210.0 | 0.67 |
| 963.7630 | 34 | 19.0 | 70.0 | 210.0 | 0.66 |
| 963.7631 | 35 | 20.0 | 75.0 | 210.0 | 0.65 |
| 963.7632 | 36 | 20.0 | 75.0 | 210.0 | 0.64 |
| 963.7633 | 38 | 21.0 | 80.0 | 210.0 | 0.63 |
| 963.7634 | 41 | 21.0 | 85.0 | 220.0 | 0.79 |
| 963.7635 | 42 | 21.0 | 85.0 | 220.0 | 0.75 |
| 963.7636 | 46 | 22.0 | 97.0 | 250.0 | 1.15 |
| 963.7637 | 47 | 22.0 | 97.0 | 255.0 | 1.20 |
| 963.7638 | 50 | 23.0 | 105.0 | 275.0 | 1.35 |
| 963.7639 | 52 | 23.0 | 105.0 | 275.0 | 1.50 |
| 963.7640 | 54 | 25.0 | 115.0 | 300.0 | 1.90 |
| 963.7641 | 55 | 25.0 | 115.0 | 290.0 | 1.60 |
| 963.7642 | 56 | 25.0 | 125.0 | 290.0 | 1.55 |
| 963.7643 | 58 | 25.0 | 125.0 | 290.0 | 1.50 |
| 963.7644 | 60 | 26.0 | 125.0 | 320.0 | 2.60 |
| 963.7645 | 63 | 27.0 | 135.0 | 330.0 | 3.00 |
| 963.7646 | 65 | 27.0 | 135.0 | 330.0 | 3.00 |
| 963.7647 | 67 | 28.0 | 135.0 | 380.0 | 4.20 |
| 963.7648 | 70 | 28.0 | 135.0 | 380.0 | 3.80 |
| 963.7649 | 71 | 28.0 | 135.0 | 380.0 | 3.70 |
| 963.7650 | 75 | 30.0 | 155.0 | 380.0 | 3.60 |

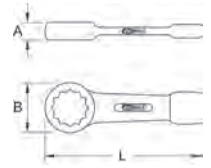
| |  | A mm | B mm | L mm |  |
|----------|---|------|-------|-------|---|
| 963.7651 | 77 | 30.0 | 155.0 | 380.0 | 5.00 |
| 963.7652 | 80 | 32.0 | 165.0 | 370.0 | 4.80 |
| 963.7653 | 82 | 32.0 | 165.0 | 370.0 | 4.70 |
| 963.7654 | 85 | 32.0 | 170.0 | 370.0 | 4.50 |
| 963.7655 | 88 | 34.0 | 185.0 | 430.0 | 7.20 |
| 963.7656 | 90 | 34.0 | 185.0 | 430.0 | 7.00 |
| 963.7657 | 94 | 36.0 | 200.0 | 430.0 | 6.90 |
| 963.7658 | 95 | 36.0 | 200.0 | 430.0 | 6.80 |
| 963.7659 | 100 | 38.0 | 215.0 | 470.0 | 9.50 |
| 963.7660 | 105 | 38.0 | 215.0 | 470.0 | 9.30 |
| 963.7661 | 110 | 40.0 | 235.0 | 510.0 | 14.10 |
| 963.7662 | 115 | 40.0 | 235.0 | 510.0 | 13.30 |
| 963.7663 | 120 | 42.0 | 250.0 | 545.0 | 16.40 |
| 963.7664 | 125 | 42.0 | 250.0 | 545.0 | 15.50 |
| 963.7665 | 130 | 45.0 | 270.0 | 575.0 | 19.80 |
| 963.7666 | 135 | 45.0 | 270.0 | 575.0 | 19.20 |
| 963.7667 | 140 | 45.0 | 282.0 | 575.0 | 19.00 |
| 963.7668 | 145 | 48.0 | 295.0 | 640.0 | 27.00 |
| 963.7669 | 150 | 48.0 | 302.0 | 640.0 | 26.80 |
| 963.7670 | 155 | 48.0 | 320.0 | 640.0 | 26.50 |
| 963.7671 | 160 | 48.0 | 320.0 | 640.0 | 26.30 |
| 963.7672 | 165 | 50.0 | 340.0 | 715.0 | 39.50 |
| 963.7673 | 170 | 50.0 | 340.0 | 715.0 | 38.50 |
| 963.7674 | 175 | 55.0 | 355.0 | 715.0 | 37.00 |
| 963.7675 | 180 | 55.0 | 367.0 | 715.0 | 36.00 |
| 963.7676 | 185 | 55.0 | 390.0 | 715.0 | 35.80 |
| 963.7677 | 190 | 55.0 | 390.0 | 715.0 | 38.50 |
| 963.7678 | 195 | 55.0 | 390.0 | 715.0 | 38.50 |
| 963.7679 | 200 | 55.0 | 400.0 | 715.0 | 38.00 |
| 963.7680 | 205 | 55.0 | 400.0 | 715.0 | 37.50 |
| 963.7681 | 210 | 55.0 | 410.0 | 715.0 | 37.00 |
| 963.7682 | 220 | 55.0 | 410.0 | 715.0 | 36.50 |
| 963.7683 | 230 | 55.0 | 410.0 | 715.0 | 36.50 |



| |  | A mm | B mm | L mm |  |
|----------|---|------|-------|-------|---|
| 963.7684 | 1" | 14.0 | 46.0 | 150.0 | 0.20 |
| 963.7685 | 1.1/16" | 16.0 | 55.0 | 180.0 | 0.38 |
| 963.7686 | 1.1/8" | 16.0 | 55.0 | 180.0 | 0.37 |
| 963.7687 | 1.3/16" | 17.0 | 63.0 | 190.0 | 0.35 |
| 963.7688 | 1.1/4" | 17.0 | 64.0 | 210.0 | 0.68 |
| 963.7689 | 1.5/16" | 19.0 | 70.0 | 210.0 | 0.67 |
| 963.7690 | 1.3/8" | 19.0 | 70.0 | 210.0 | 0.65 |
| 963.7691 | 1.7/16" | 20.0 | 75.0 | 210.0 | 0.64 |
| 963.7692 | 1.1/2" | 20.0 | 75.0 | 210.0 | 0.63 |
| 963.7693 | 1.9/16" | 21.0 | 85.0 | 220.0 | 0.75 |
| 963.7694 | 1.5/8" | 21.0 | 85.0 | 220.0 | 0.79 |
| 963.7695 | 1.11/16" | 21.0 | 85.0 | 220.0 | 0.75 |
| 963.7696 | 1.3/4" | 22.0 | 97.0 | 250.0 | 1.10 |
| 963.7697 | 1.13/16" | 22.0 | 97.0 | 250.0 | 1.15 |
| 963.7698 | 1.7/8" | 22.0 | 97.0 | 255.0 | 1.20 |
| 963.7699 | 2" | 23.0 | 105.0 | 275.0 | 1.35 |
| 963.7700 | 2.1/16" | 23.0 | 105.0 | 275.0 | 1.50 |
| 963.7701 | 2.1/8" | 25.0 | 115.0 | 300.0 | 1.90 |
| 963.7702 | 2.3/16" | 25.0 | 115.0 | 290.0 | 1.60 |
| 963.7703 | 2.1/4" | 25.0 | 115.0 | 290.0 | 1.50 |
| 963.7704 | 2.5/16" | 25.0 | 115.0 | 290.0 | 1.50 |
| 963.7705 | 2.3/8" | 26.0 | 125.0 | 320.0 | 2.60 |
| 963.7706 | 2.7/16" | 27.0 | 135.0 | 330.0 | 3.00 |
| 963.7707 | 2.1/2" | 27.0 | 135.0 | 330.0 | 3.00 |
| 963.7708 | 2.9/16" | 27.0 | 135.0 | 330.0 | 3.00 |
| 963.7709 | 2.5/8" | 28.0 | 155.0 | 380.0 | 4.20 |
| 963.7710 | 2.3/4" | 28.0 | 155.0 | 380.0 | 3.80 |
| 963.7711 | 2.13/16" | 28.0 | 155.0 | 380.0 | 3.70 |
| 963.7712 | 2.15/16" | 30.0 | 155.0 | 380.0 | 3.50 |
| 963.7713 | 3" | 30.0 | 155.0 | 380.0 | 4.00 |
| 963.7714 | 3.1/8" | 32.0 | 165.0 | 370.0 | 4.80 |
| 963.7715 | 3.1/4" | 32.0 | 165.0 | 370.0 | 4.70 |
| 963.7716 | 3.3/8" | 32.0 | 165.0 | 370.0 | 4.50 |
| 963.7717 | 3.1/2" | 34.0 | 185.0 | 430.0 | 7.20 |
| 963.7718 | 3.5/8" | 34.0 | 185.0 | 430.0 | 7.00 |
| 963.7719 | 3.3/4" | 36.0 | 200.0 | 430.0 | 6.80 |
| 963.7720 | 3.7/8" | 36.0 | 200.0 | 430.0 | 6.60 |
| 963.7721 | 4" | 37.0 | 210.0 | 470.0 | 9.50 |
| 963.7722 | 4.1/8" | 37.0 | 210.0 | 470.0 | 9.50 |
| 963.7723 | 4.1/2" | 40.0 | 235.0 | 510.0 | 13.30 |



BRONZE^{plus} slogging ring spanner

- FlankTraction profile (12 point)
- In accordance to DIN 7444
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

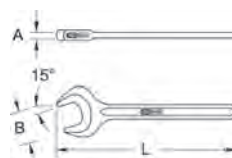


| |  | A mm | B mm | L mm |  |
|----------|---|------|-------|-------|---|
| 963.7724 | 17 | 15.0 | 38.0 | 150.0 | 0.40 |
| 963.7725 | 19 | 15.0 | 38.0 | 150.0 | 0.40 |
| 963.7726 | 22 | 15.0 | 38.0 | 150.0 | 0.35 |
| 963.7727 | 24 | 15.0 | 38.0 | 150.0 | 0.35 |
| 963.7728 | 27 | 18.0 | 45.0 | 190.0 | 0.60 |
| 963.7729 | 28 | 18.0 | 45.0 | 190.0 | 0.58 |
| 963.7730 | 29 | 19.0 | 50.0 | 190.0 | 0.56 |
| 963.7731 | 30 | 19.0 | 50.0 | 190.0 | 0.55 |
| 963.7732 | 32 | 19.0 | 53.0 | 190.0 | 0.58 |
| 963.7733 | 33 | 19.0 | 53.0 | 190.0 | 0.57 |
| 963.7734 | 34 | 21.0 | 58.0 | 210.0 | 0.68 |
| 963.7735 | 35 | 21.0 | 58.0 | 210.0 | 0.70 |
| 963.7736 | 36 | 21.0 | 58.0 | 210.0 | 0.69 |
| 963.7737 | 37 | 21.0 | 58.0 | 210.0 | 0.68 |
| 963.7738 | 38 | 21.0 | 63.0 | 230.0 | 1.10 |
| 963.7739 | 41 | 21.0 | 63.0 | 230.0 | 1.00 |
| 963.7740 | 42 | 21.0 | 63.0 | 230.0 | 1.00 |
| 963.7741 | 46 | 23.0 | 70.0 | 240.0 | 1.25 |
| 963.7742 | 47 | 23.0 | 70.0 | 240.0 | 1.27 |
| 963.7743 | 50 | 27.0 | 77.0 | 255.0 | 1.40 |
| 963.7744 | 52 | 27.0 | 77.0 | 255.0 | 1.40 |
| 963.7745 | 54 | 27.0 | 85.0 | 255.0 | 1.35 |
| 963.7746 | 55 | 27.0 | 85.0 | 255.0 | 1.34 |
| 963.7747 | 56 | 27.0 | 85.0 | 255.0 | 1.33 |
| 963.7748 | 57 | 27.0 | 85.0 | 255.0 | 1.30 |
| 963.7749 | 58 | 29.0 | 92.0 | 280.0 | 2.50 |
| 963.7750 | 60 | 29.0 | 92.0 | 280.0 | 2.40 |
| 963.7751 | 63 | 30.0 | 104.0 | 295.0 | 2.90 |
| 963.7752 | 65 | 30.0 | 104.0 | 295.0 | 2.80 |
| 963.7753 | 67 | 30.0 | 104.0 | 295.0 | 2.70 |
| 963.7754 | 70 | 33.0 | 110.0 | 320.0 | 3.40 |
| 963.7755 | 71 | 33.0 | 110.0 | 320.0 | 3.30 |
| 963.7756 | 75 | 35.0 | 115.0 | 320.0 | 3.20 |
| 963.7757 | 76 | 35.0 | 115.0 | 320.0 | 3.10 |
| 963.7758 | 77 | 35.0 | 115.0 | 320.0 | 3.00 |
| 963.7759 | 80 | 37.0 | 120.0 | 355.0 | 3.60 |
| 963.7760 | 82 | 37.0 | 120.0 | 355.0 | 3.50 |
| 963.7761 | 85 | 42.0 | 125.0 | 365.0 | 5.00 |
| 963.7762 | 88 | 44.0 | 135.0 | 360.0 | 4.80 |
| 963.7763 | 9 | | | | |

| | | A mm | B mm | L mm | |
|----------|----------|------|-------|-------|------|
| 963.7788 | 11/16" | 15.0 | 38.0 | 150.0 | 0.40 |
| 963.7789 | 3/4" | 15.0 | 38.0 | 150.0 | 0.40 |
| 963.7790 | 25/32" | 15.0 | 38.0 | 150.0 | 0.39 |
| 963.7791 | 13/16" | 15.0 | 38.0 | 150.0 | 0.38 |
| 963.7792 | 7/8" | 15.0 | 38.0 | 150.0 | 0.35 |
| 963.7793 | 15/16" | 15.0 | 38.0 | 150.0 | 0.35 |
| 963.7794 | 1" | 15.0 | 38.0 | 150.0 | 0.34 |
| 963.7795 | 1.1/16" | 19.0 | 50.0 | 190.0 | 0.70 |
| 963.7796 | 1.1/8" | 19.0 | 50.0 | 190.0 | 0.58 |
| 963.7797 | 1.1/4" | 19.0 | 50.0 | 190.0 | 0.58 |
| 963.7798 | 1.3/16" | 19.0 | 50.0 | 190.0 | 0.55 |
| 963.7799 | 1.5/16" | 20.0 | 55.0 | 190.0 | 0.57 |
| 963.7800 | 1.3/8" | 21.0 | 58.0 | 210.0 | 0.70 |
| 963.7801 | 1.7/16" | 21.0 | 58.0 | 210.0 | 0.69 |
| 963.7802 | 1.1/2" | 21.0 | 63.0 | 230.0 | 1.10 |
| 963.7803 | 1.9/16" | 21.0 | 63.0 | 230.0 | 1.00 |
| 963.7804 | 1.5/8" | 21.0 | 63.0 | 230.0 | 1.00 |
| 963.7805 | 1.11/16" | 21.0 | 63.0 | 230.0 | 1.00 |
| 963.7806 | 1.3/4" | 23.0 | 70.0 | 240.0 | 1.20 |
| 963.7807 | 1.13/16" | 23.0 | 70.0 | 240.0 | 1.25 |
| 963.7808 | 1.7/8" | 23.0 | 70.0 | 240.0 | 1.27 |
| 963.7809 | 2" | 27.0 | 77.0 | 255.0 | 1.40 |
| 963.7810 | 2.1/16" | 27.0 | 77.0 | 255.0 | 1.40 |
| 963.7811 | 2.1/8" | 27.0 | 85.0 | 255.0 | 1.35 |
| 963.7812 | 2.3/16" | 27.0 | 85.0 | 255.0 | 1.34 |
| 963.7813 | 2.1/4" | 27.0 | 85.0 | 255.0 | 1.30 |
| 963.7814 | 2.5/16" | 29.0 | 92.0 | 280.0 | 2.50 |
| 963.7815 | 2.3/8" | 29.0 | 92.0 | 280.0 | 2.40 |
| 963.7816 | 2.7/16" | 30.0 | 104.0 | 295.0 | 2.70 |
| 963.7817 | 2.1/2" | 30.0 | 104.0 | 295.0 | 2.90 |
| 963.7818 | 2.9/16" | 30.0 | 104.0 | 295.0 | 2.80 |
| 963.7819 | 2.5/8" | 30.0 | 104.0 | 295.0 | 2.70 |
| 963.7820 | 2.3/4" | 33.0 | 110.0 | 320.0 | 3.20 |
| 963.7821 | 2.13/16" | 33.0 | 110.0 | 320.0 | 3.30 |
| 963.7822 | 2.7/8" | 33.0 | 110.0 | 320.0 | 3.30 |
| 963.7823 | 2.15/16" | 35.0 | 115.0 | 320.0 | 3.20 |
| 963.7824 | 3" | 35.0 | 115.0 | 320.0 | 3.10 |
| 963.7825 | 3.1/8" | 37.0 | 120.0 | 355.0 | 3.60 |
| 963.7826 | 3.1/4" | 37.0 | 120.0 | 355.0 | 3.50 |
| 963.7827 | 3.3/8" | 43.0 | 125.0 | 365.0 | 5.00 |
| 963.7828 | 3.1/2" | 44.0 | 135.0 | 360.0 | 4.80 |
| 963.7829 | 3.5/8" | 44.0 | 135.0 | 360.0 | 4.50 |
| 963.7830 | 3.3/4" | 45.0 | 145.0 | 360.0 | 4.50 |
| 963.7831 | 3.7/8" | 46.0 | 150.0 | 360.0 | 4.30 |
| 963.7832 | 4" | 46.0 | 150.0 | 360.0 | 4.20 |
| 963.7833 | 4.1/8" | 46.0 | 150.0 | 360.0 | 3.90 |
| 963.7834 | 4.1/2" | 47.0 | 167.0 | 450.0 | 8.10 |

BRONZEplus open ended spanner 15°

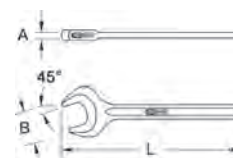
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A mm | B mm | L mm | |
|----------|----|------|-------|-------|------|
| 963.7854 | 22 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7855 | 23 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7856 | 24 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7857 | 25 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7858 | 26 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7859 | 27 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7860 | 28 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7861 | 29 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7862 | 30 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7863 | 32 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7864 | 33 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7865 | 34 | 13.0 | 74.0 | 450.0 | 1.00 |
| 963.7866 | 35 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7867 | 36 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7868 | 37 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7869 | 38 | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.7870 | 41 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7871 | 42 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7872 | 46 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7873 | 47 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7874 | 50 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7875 | 52 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7876 | 54 | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.7877 | 55 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7878 | 56 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7879 | 58 | 19.0 | 130.0 | 800.0 | 5.60 |
| 963.7880 | 60 | 19.0 | 130.0 | 800.0 | 5.60 |

BRONZEplus open ended spanner 45°

- Jaw 45° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | A mm | B mm | L mm | |
|----------|----|------|-------|-------|------|
| 963.7881 | 22 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7882 | 23 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7883 | 24 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7884 | 25 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7885 | 26 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7886 | 27 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7887 | 28 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7888 | 29 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7889 | 30 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7890 | 32 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7891 | 33 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7892 | 34 | 13.0 | 74.0 | 450.0 | 1.00 |
| 963.7893 | 35 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7894 | 36 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7895 | 37 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7896 | 38 | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.7897 | 41 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7898 | 42 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7899 | 46 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7900 | 47 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7901 | 50 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7902 | 52 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7903 | 54 | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.7904 | 55 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7905 | 56 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7906 | 58 | 19.0 | 130.0 | 800.0 | 5.60 |
| 963.7907 | 60 | 19.0 | 130.0 | 800.0 | 5.60 |

BRONZEplus slogging ring spanner, offset

- FlankTraction profile (12 point)
- In accordance to DIN 7444
- Ring head 75° offset
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



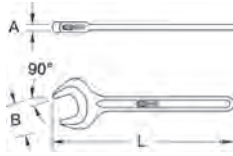
| | | A mm | B mm | H mm | L mm | |
|----------|-----|------|-------|------|-------|-------|
| 963.7835 | 27 | 17.0 | 42.0 | 45.0 | 245.0 | 1.10 |
| 963.7836 | 30 | 18.0 | 53.0 | 50.0 | 270.0 | 1.50 |
| 963.7837 | 32 | 18.0 | 55.0 | 50.0 | 270.0 | 1.50 |
| 963.7838 | 36 | 20.0 | 60.0 | 55.0 | 280.0 | 1.60 |
| 963.7839 | 41 | 22.0 | 67.0 | 60.0 | 310.0 | 2.10 |
| 963.7840 | 46 | 23.0 | 70.0 | 65.0 | 320.0 | 2.50 |
| 963.7841 | 50 | 27.0 | 77.0 | 65.0 | 320.0 | 2.50 |
| 963.7842 | 55 | 27.0 | 85.0 | 65.0 | 320.0 | 2.60 |
| 963.7843 | 60 | 29.0 | 92.0 | 70.0 | 355.0 | 3.20 |
| 963.7844 | 65 | 30.0 | 104.0 | 72.0 | 380.0 | 3.80 |
| 963.7845 | 70 | 33.0 | 110.0 | 75.0 | 400.0 | 4.60 |
| 963.7846 | 75 | 35.0 | 115.0 | 80.0 | 420.0 | 5.70 |
| 963.7847 | 80 | 37.0 | 120.0 | 85.0 | 440.0 | 6.60 |
| 963.7848 | 85 | 43.0 | 125.0 | 85.0 | 440.0 | 7.00 |
| 963.7849 | 90 | 44.0 | 135.0 | 85.0 | 440.0 | 9.30 |
| 963.7850 | 95 | 45.0 | 145.0 | 85.0 | 440.0 | 10.00 |
| 963.7851 | 100 | 46.0 | 150.0 | 90.0 | 440.0 | 11.70 |
| 963.7852 | 110 | 47.0 | 167.0 | 90.0 | 440.0 | 13.40 |
| 963.7853 | 115 | 47.0 | 167.0 | 90.0 | 440.0 | 14.50 |

| | | A mm | B mm | L mm | |
|----------|----------|------|-------|-------|------|
| 963.7935 | 13/16" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7936 | 7/8" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7937 | 15/16" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7938 | 31/32" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7939 | 1" | 11.5 | 60.0 | 380.0 | 0.60 |
| 963.7940 | 1.1/16" | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7941 | 1.1/8" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7942 | 1.3/16" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7943 | 1.1/4" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7944 | 1.5/16" | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7945 | 1.3/8" | 12.5 | 70.0 | 450.0 | 1.40 |
| 963.7946 | 1.7/16" | 13.5 | 80.0 | 450.0 | 1.40 |
| 963.7947 | 1.1/2" | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.7948 | 1.9/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7949 | 1.5/8" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7950 | 1.11/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7951 | 1.3/4" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.7952 | 1.13/16" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.7953 | 1.7/8" | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7954 | 2" | 17.0 | 110.0 | 600.0 | 3.20 |
| 963.7955 | 2.1/16" | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7956 | 2.1/8" | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.7957 | 2.3/16" | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.7958 | 2.1/4" | 19.0 | 130.0 | 730.0 | 4.40 |
| 963.7959 | 2.5/16" | 19.0 | 130.0 | 730.0 | 5.60 |
| 963.7960 | 2.3/8" | 19.0 | 130.0 | 800.0 | 5.60 |

| | | A mm | B mm | L mm | |
|----------|----------|------|-------|-------|------|
| 963.7961 | 13/16" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7962 | 7/8" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7963 | 15/16" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7964 | 31/32" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7965 | 1" | 11.5 | 60.0 | 380.0 | 0.60 |
| 963.7966 | 1.1/16" | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7967 | 1.1/8" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7968 | 1.3/16" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7969 | 1.1/4" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7970 | 1.5/16" | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7971 | 1.3/8" | 12.5 | 70.0 | 450.0 | 1.40 |
| 963.7972 | 1.7/16" | 13.5 | 80.0 | 450.0 | 1.40 |
| 963.7973 | 1.1/2" | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.7974 | 1.9/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7975 | 1.5/8" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7976 | 1.11/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.7977 | 1.3/4" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.7978 | 1.13/16" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.7979 | 1.7/8" | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7980 | 2" | 17.0 | 110.0 | 600.0 | 3.20 |
| 963.7981 | 2.1/16" | 17.0 | 110.0 | | |

BRONZEplus open ended spanner 90°

- Jaw 90° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



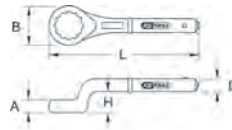
| | mm | A mm | B mm | L mm | kg |
|----------|----|------|-------|-------|------|
| 963.7908 | 22 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7909 | 23 | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7910 | 24 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7911 | 25 | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7912 | 26 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7913 | 27 | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7914 | 28 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7915 | 29 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7916 | 30 | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7917 | 32 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7918 | 33 | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7919 | 34 | 13.0 | 74.0 | 450.0 | 1.00 |
| 963.7920 | 35 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7921 | 36 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7922 | 37 | 13.5 | 80.0 | 500.0 | 1.40 |
| 963.7923 | 38 | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.7924 | 41 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7925 | 42 | 15.0 | 90.0 | 550.0 | 1.80 |
| 963.7926 | 46 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7927 | 47 | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.7928 | 50 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7929 | 52 | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.7930 | 54 | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.7931 | 55 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7932 | 56 | 18.0 | 120.0 | 730.0 | 4.40 |
| 963.7933 | 58 | 19.0 | 130.0 | 800.0 | 5.60 |
| 963.7934 | 60 | 19.0 | 130.0 | 800.0 | 5.60 |

| | mm | A mm | B mm | L mm | kg |
|----------|----------|------|-------|-------|------|
| 963.7987 | 13/16" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7988 | 7/8" | 10.5 | 48.0 | 320.0 | 0.45 |
| 963.7989 | 15/16" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7990 | 31/32" | 11.0 | 52.0 | 350.0 | 0.60 |
| 963.7991 | 1" | 11.5 | 60.0 | 380.0 | 0.60 |
| 963.7992 | 1.1/16" | 11.5 | 60.0 | 380.0 | 0.85 |
| 963.7993 | 1.1/8" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7994 | 1.3/16" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7995 | 1.1/4" | 12.0 | 65.0 | 420.0 | 1.00 |
| 963.7996 | 1.5/16" | 12.5 | 70.0 | 450.0 | 1.00 |
| 963.7997 | 1.3/8" | 12.5 | 70.0 | 450.0 | 1.40 |
| 963.7998 | 1.7/16" | 13.5 | 80.0 | 450.0 | 1.40 |
| 963.7999 | 1.1/2" | 15.0 | 90.0 | 500.0 | 1.40 |
| 963.8000 | 1.9/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.8001 | 1.5/8" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.8002 | 1.11/16" | 15.0 | 90.0 | 500.0 | 1.80 |
| 963.8003 | 1.3/4" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.8004 | 1.13/16" | 16.0 | 100.0 | 550.0 | 2.50 |
| 963.8005 | 1.7/8" | 16.0 | 100.0 | 600.0 | 2.50 |
| 963.8006 | 2" | 17.0 | 110.0 | 600.0 | 3.20 |
| 963.8007 | 2.1/16" | 17.0 | 110.0 | 660.0 | 3.20 |
| 963.8008 | 2.1/8" | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.8009 | 2.3/16" | 18.0 | 120.0 | 660.0 | 4.40 |
| 963.8010 | 2.1/4" | 19.0 | 130.0 | 730.0 | 4.40 |
| 963.8011 | 2.5/16" | 19.0 | 130.0 | 730.0 | 5.60 |
| 963.8012 | 2.3/8" | 19.0 | 130.0 | 800.0 | 5.60 |



BRONZEplus Offset single ring spanner

- FlankTraction Profile
- Ring head 75° offset
- With shaft for snap-on handle
- With locking pin
- Heavy duty to deliver maximum torque
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | A mm | B mm | D mm | H mm | L mm | kg |
|----------|-----|------|-------|------|------|-------|--------|
| 963.8013 | 22 | 19.0 | 36.0 | 15.5 | 31.0 | 260.0 | 1 0.96 |
| 963.8014 | 24 | 19.0 | 36.0 | 15.5 | 31.0 | 260.0 | 1 1.00 |
| 963.8015 | 27 | 19.0 | 40.0 | 15.5 | 31.0 | 260.0 | 1 0.96 |
| 963.8016 | 30 | 19.0 | 45.0 | 15.5 | 33.0 | 260.0 | 1 0.95 |
| 963.8017 | 32 | 19.5 | 48.0 | 21.7 | 33.0 | 260.0 | 1 0.94 |
| 963.8018 | 33 | 19.5 | 48.0 | 21.7 | 33.0 | 260.0 | 1 0.92 |
| 963.8019 | 34 | 20.0 | 53.0 | 21.7 | 35.0 | 260.0 | 1 0.91 |
| 963.8020 | 35 | 20.0 | 53.0 | 21.7 | 35.0 | 260.0 | 1 0.91 |
| 963.8021 | 36 | 20.0 | 53.0 | 21.7 | 35.0 | 260.0 | 1 0.91 |
| 963.8022 | 37 | 20.0 | 53.0 | 21.7 | 35.0 | 270.0 | 1 1.20 |
| 963.8023 | 38 | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.90 |
| 963.8024 | 41 | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.10 |
| 963.8025 | 42 | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.10 |
| 963.8026 | 46 | 24.0 | 66.0 | 21.7 | 43.0 | 300.0 | 2 1.50 |
| 963.8027 | 47 | 24.0 | 66.0 | 21.7 | 43.0 | 300.0 | 2 1.50 |
| 963.8028 | 50 | 28.0 | 72.0 | 21.7 | 46.0 | 300.0 | 2 1.70 |
| 963.8029 | 52 | 28.0 | 72.0 | 21.7 | 46.0 | 350.0 | 2 2.60 |
| 963.8030 | 54 | 30.0 | 79.0 | 21.7 | 49.0 | 350.0 | 2 2.50 |
| 963.8031 | 55 | 30.0 | 79.0 | 21.7 | 49.0 | 300.0 | 2 1.90 |
| 963.8032 | 56 | 30.0 | 79.0 | 21.7 | 49.0 | 350.0 | 2 2.60 |
| 963.8033 | 58 | 36.0 | 86.0 | 21.7 | 57.0 | 350.0 | 2 2.50 |
| 963.8034 | 60 | 36.0 | 86.0 | 21.7 | 57.0 | 370.0 | 3 2.50 |
| 963.8035 | 63 | 36.0 | 86.0 | 21.7 | 57.0 | 370.0 | 3 2.50 |
| 963.8036 | 65 | 38.0 | 93.0 | 21.7 | 60.0 | 400.0 | 3 3.20 |
| 963.8037 | 67 | 38.0 | 93.0 | 21.7 | 60.0 | 400.0 | 3 3.10 |
| 963.8038 | 70 | 41.0 | 103.0 | 21.7 | 62.0 | 400.0 | 3 3.00 |
| 963.8039 | 71 | 41.0 | 103.0 | 21.7 | 62.0 | 400.0 | 3 2.80 |
| 963.8040 | 75 | 43.0 | 109.0 | 21.7 | 67.0 | 400.0 | 3 2.70 |
| 963.8041 | 77 | 43.0 | 109.0 | 21.7 | 67.0 | 400.0 | 3 2.60 |
| 963.8042 | 80 | 43.0 | 119.0 | 21.7 | 68.0 | 410.0 | 3 5.00 |
| 963.8043 | 82 | 43.0 | 119.0 | 21.7 | 68.0 | 410.0 | 3 5.00 |
| 963.8044 | 85 | 45.0 | 128.0 | 21.7 | 72.0 | 410.0 | 3 5.10 |
| 963.8045 | 90 | 45.0 | 135.0 | 21.7 | 72.0 | 410.0 | 3 5.01 |
| 963.8046 | 95 | 45.0 | 142.0 | 21.7 | 72.0 | 410.0 | 3 4.79 |
| 963.8047 | 100 | 45.0 | 150.0 | 21.7 | 75.0 | 412.0 | 3 4.55 |

| | mm | A mm | B mm | D mm | H mm | L mm | kg |
|----------|----------|------|-------|------|------|-------|--------|
| 963.8051 | 1.3/16" | 19.0 | 36.0 | 15.5 | 31.0 | 260.0 | 1 0.95 |
| 963.8052 | 1.1/4" | 19.5 | 48.0 | 21.7 | 33.0 | 260.0 | 1 0.94 |
| 963.8053 | 1.5/16" | 19.5 | 48.0 | 21.7 | 33.0 | 260.0 | 1 0.92 |
| 963.8054 | 1.3/8" | 20.0 | 53.0 | 21.7 | 35.0 | 260.0 | 1 0.91 |
| 963.8055 | 1.7/16" | 20.0 | 53.0 | 21.7 | 35.0 | 260.0 | 1 0.91 |
| 963.8056 | 1.1/2" | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.90 |
| 963.8057 | 1.9/16" | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.20 |
| 963.8058 | 1.5/8" | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 1 1.10 |
| 963.8059 | 1.11/16" | 21.0 | 59.0 | 21.7 | 40.0 | 270.0 | 2 1.10 |
| 963.8060 | 1.3/4" | 24.0 | 66.0 | 21.7 | 43.0 | 270.0 | 2 1.00 |
| 963.8061 | 1.13/16" | 24.0 | 66.0 | 21.7 | 43.0 | 300.0 | 2 1.50 |
| 963.8062 | 1.7/8" | 24.0 | 66.0 | 21.7 | 43.0 | 300.0 | 2 1.50 |
| 963.8063 | 2" | 28.0 | 72.0 | 21.7 | 46.0 | 300.0 | 2 1.70 |
| 963.8064 | 2.1/16" | 28.0 | 72.0 | 21.7 | 46.0 | 350.0 | 2 2.60 |
| 963.8065 | 2.1/8" | 30.0 | 79.0 | 21.7 | 49.0 | 350.0 | 2 2.40 |
| 963.8066 | 2.3/16" | 30.0 | 79.0 | 21.7 | 49.0 | 300.0 | 2 1.90 |
| 963.8067 | 2.1/4" | 36.0 | 86.0 | 21.7 | 57.0 | 350.0 | 2 2.50 |
| 963.8068 | 2.5/16" | 36.0 | 86.0 | 21.7 | 57.0 | 350.0 | 3 2.50 |
| 963.8069 | 2.3/8" | 36.0 | 86.0 | 21.7 | 57.0 | 370.0 | 3 2.50 |
| 963.8070 | 2.7/16" | 36.0 | 86.0 | 21.7 | 57.0 | 370.0 | 3 2.50 |
| 963.8071 | 2.1/2" | 38.0 | 93.0 | 21.7 | 60.0 | 370.0 | 3 2.50 |
| 963.8072 | 2.9/16" | 38.0 | 93.0 | 21.7 | 60.0 | 400.0 | 3 3.20 |
| 963.8073 | 2.5/8" | 38.0 | 93.0 | 21.7 | 60.0 | 400.0 | 3 3.10 |
| 963.8074 | 2.3/4" | 41.0 | 103.0 | 21.7 | 62.0 | 400.0 | 3 3.00 |

| | mm | A mm | B mm | D mm | H mm | L mm | kg |
|----------|----------|------|-------|------|------|-------|--------|
| 963.8075 | 2.13/16" | 41.0 | 103.0 | 21.7 | 62.0 | 400.0 | 3 2.80 |
| 963.8076 | 2.15/16" | 43.0 | 109.0 | 21.7 | 67.0 | 400.0 | 3 2.70 |
| 963.8077 | 3" | 43.0 | 109.0 | 21.7 | 67.0 | 400.0 | 3 2.50 |
| 963.8078 | 3.1/8" | 43.0 | 119.0 | 21.7 | 68.0 | 410.0 | 3 4.90 |
| 963.8079 | 3.1/4" | 43.0 | 119.0 | 21.7 | 68.0 | 410.0 | 3 5.00 |
| 963.8080 | 3.3/8" | 45.0 | 128.0 | 21.7 | 72.0 | 410.0 | 3 5.10 |

BRONZEplus Snap-on handle for single ring spanner

- Three different sizes
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | # | kg |
|----------|--------|----------------|------|-------|--------|
| 963.8048 | 22-42 | 1.3/16-1.5/8" | 22.0 | 600.0 | 1 1.10 |
| 963.8049 | 46-58 | 1.11/16-2.1/4" | 25.0 | 750.0 | 2 2.80 |
| 963.8050 | 60-100 | 2.5/16-3.3/8" | 30.0 | 850.0 | 3 3.80 |

BRONZEplus Offset single ring spanner set

- FlankTraction Profile
- Ring head 75° offset
- With shaft for snap-on handle
- With locking pin
- Heavy duty to deliver maximum torque
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | kg |
|----------|--|-------|
| 963.8081 | 18 pcs 24 - 27 - 30 - 32 - 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 mm | 40.20 |
| 15 x | 24 - 27 - 30 - 32 - 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 mm | |
| 3 x | 22-42 - 46-58 - 60-100 mm | |



NON SPARKING INSTALLATION WRENCH

BRONZEplus Installation open end spanner with mandrel

- Practical combination of open ended spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



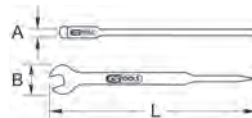
| | Ø mm | A mm | B mm | L mm | kg |
|----------|------|------|-------|-------|------|
| 963.8082 | 17 | 11.0 | 35.0 | 320.0 | 0.27 |
| 963.8083 | 18 | 11.0 | 35.0 | 320.0 | 0.27 |
| 963.8084 | 19 | 12.0 | 40.0 | 350.0 | 0.47 |
| 963.8085 | 20 | 12.0 | 40.0 | 350.0 | 0.47 |
| 963.8086 | 21 | 13.0 | 46.0 | 350.0 | 0.47 |
| 963.8087 | 22 | 13.0 | 46.0 | 350.0 | 0.47 |
| 963.8088 | 23 | 15.0 | 49.0 | 370.0 | 0.65 |
| 963.8089 | 24 | 15.0 | 49.0 | 370.0 | 0.65 |
| 963.8090 | 25 | 16.0 | 54.0 | 370.0 | 0.65 |
| 963.8091 | 26 | 16.0 | 54.0 | 370.0 | 0.65 |
| 963.8092 | 27 | 16.0 | 54.0 | 370.0 | 0.65 |
| 963.8093 | 28 | 17.0 | 62.0 | 400.0 | 0.95 |
| 963.8094 | 29 | 17.0 | 62.0 | 400.0 | 0.95 |
| 963.8095 | 30 | 17.0 | 62.0 | 400.0 | 0.95 |
| 963.8096 | 32 | 18.0 | 65.0 | 400.0 | 0.95 |
| 963.8097 | 33 | 18.0 | 65.0 | 400.0 | 0.95 |
| 963.8098 | 34 | 18.0 | 65.0 | 400.0 | 0.95 |
| 963.8099 | 35 | 20.0 | 75.0 | 430.0 | 1.40 |
| 963.8100 | 36 | 20.0 | 75.0 | 430.0 | 1.40 |
| 963.8101 | 37 | 20.0 | 75.0 | 430.0 | 1.40 |
| 963.8102 | 38 | 21.0 | 85.0 | 430.0 | 1.40 |
| 963.8103 | 41 | 21.0 | 85.0 | 470.0 | 1.90 |
| 963.8104 | 42 | 21.0 | 85.0 | 470.0 | 1.90 |
| 963.8105 | 46 | 22.0 | 95.0 | 500.0 | 2.70 |
| 963.8106 | 47 | 22.0 | 95.0 | 500.0 | 2.70 |
| 963.8107 | 50 | 24.0 | 105.0 | 530.0 | 3.55 |

| | Ø | A mm | B mm | L mm | kg |
|----------|----------|------|-------|-------|------|
| 963.8108 | 11/16" | 11.0 | 35.0 | 320.0 | 0.27 |
| 963.8109 | 3/4" | 12.0 | 40.0 | 350.0 | 0.27 |
| 963.8110 | 25/32" | 12.0 | 40.0 | 350.0 | 0.47 |
| 963.8111 | 13/16" | 12.0 | 40.0 | 350.0 | 0.47 |
| 963.8112 | 7/8" | 13.0 | 46.0 | 350.0 | 0.47 |
| 963.8113 | 15/16" | 15.0 | 49.0 | 370.0 | 0.47 |
| 963.8114 | 31/32" | 15.0 | 49.0 | 370.0 | 0.65 |
| 963.8115 | 1" | 16.0 | 54.0 | 370.0 | 0.65 |
| 963.8116 | 1.1/16" | 16.0 | 54.0 | 370.0 | 0.65 |
| 963.8117 | 1.1/8" | 16.0 | 54.0 | 400.0 | 0.65 |
| 963.8118 | 1.3/16" | 17.0 | 62.0 | 400.0 | 0.65 |
| 963.8119 | 1.1/4" | 18.0 | 65.0 | 400.0 | 0.95 |
| 963.8120 | 1.5/16" | 18.0 | 65.0 | 400.0 | 0.95 |
| 963.8121 | 1.3/8" | 20.0 | 75.0 | 430.0 | 0.95 |
| 963.8122 | 1.7/16" | 20.0 | 75.0 | 430.0 | 1.40 |
| 963.8123 | 1.1/2" | 21.0 | 85.0 | 430.0 | 1.40 |
| 963.8124 | 1.9/16" | 21.0 | 85.0 | 470.0 | 1.40 |
| 963.8125 | 1.5/8" | 21.0 | 85.0 | 470.0 | 1.90 |
| 963.8126 | 1.11/16" | 21.0 | 85.0 | 470.0 | 1.90 |
| 963.8127 | 1.3/4" | 22.0 | 95.0 | 500.0 | 1.90 |
| 963.8128 | 1.13/16" | 22.0 | 95.0 | 500.0 | 2.70 |
| 963.8129 | 1.7/8" | 22.0 | 95.0 | 500.0 | 2.70 |
| 963.8130 | 2" | 24.0 | 105.0 | 530.0 | 3.55 |



BRONZEplus Installation open end spanner with mandrel, offset

- Mouth 75° offset
- Practical combination of open ended spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

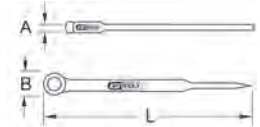


| | Ø mm | A mm | B mm | L mm | kg |
|----------|------|------|-------|-------|------|
| 963.8131 | 17 | 11.0 | 35.0 | 320.0 | 0.30 |
| 963.8132 | 18 | 12.0 | 40.0 | 320.0 | 0.30 |
| 963.8133 | 19 | 12.0 | 40.0 | 350.0 | 0.51 |
| 963.8134 | 20 | 12.0 | 40.0 | 350.0 | 0.51 |
| 963.8135 | 21 | 13.0 | 46.0 | 350.0 | 0.51 |
| 963.8136 | 22 | 13.0 | 46.0 | 350.0 | 0.51 |
| 963.8137 | 23 | 15.0 | 49.0 | 370.0 | 0.72 |
| 963.8138 | 24 | 15.0 | 49.0 | 370.0 | 0.72 |
| 963.8139 | 25 | 15.0 | 49.0 | 370.0 | 0.72 |
| 963.8140 | 26 | 16.0 | 54.0 | 370.0 | 0.72 |
| 963.8141 | 27 | 16.0 | 54.0 | 370.0 | 0.72 |
| 963.8142 | 28 | 17.0 | 62.0 | 400.0 | 1.15 |
| 963.8143 | 29 | 17.0 | 62.0 | 400.0 | 1.15 |
| 963.8144 | 30 | 17.0 | 62.0 | 400.0 | 1.15 |
| 963.8145 | 32 | 18.0 | 65.0 | 400.0 | 1.15 |
| 963.8146 | 33 | 18.0 | 65.0 | 400.0 | 1.15 |
| 963.8147 | 34 | 18.0 | 65.0 | 400.0 | 1.15 |
| 963.8148 | 35 | 20.0 | 75.0 | 430.0 | 1.54 |
| 963.8149 | 36 | 20.0 | 75.0 | 430.0 | 1.54 |
| 963.8150 | 37 | 20.0 | 75.0 | 430.0 | 1.54 |
| 963.8151 | 38 | 21.0 | 85.0 | 430.0 | 1.54 |
| 963.8152 | 41 | 21.0 | 85.0 | 470.0 | 2.09 |
| 963.8153 | 42 | 21.0 | 85.0 | 470.0 | 2.09 |
| 963.8154 | 46 | 22.0 | 95.0 | 500.0 | 2.97 |
| 963.8155 | 47 | 22.0 | 95.0 | 500.0 | 2.97 |
| 963.8156 | 50 | 24.0 | 105.0 | 530.0 | 3.90 |

| | Ø | A mm | B mm | L mm | kg |
|----------|----------|------|-------|-------|------|
| 963.8157 | 11/16" | 11.0 | 35.0 | 290.0 | 0.30 |
| 963.8158 | 7/8" | 13.0 | 46.0 | 355.0 | 0.51 |
| 963.8159 | 15/16" | 15.0 | 49.0 | 355.0 | 0.51 |
| 963.8160 | 1.1/16" | 16.0 | 54.0 | 380.0 | 0.72 |
| 963.8161 | 1.3/16" | 17.0 | 62.0 | 410.0 | 0.72 |
| 963.8162 | 1.1/4" | 18.0 | 65.0 | 380.0 | 1.15 |
| 963.8163 | 1.7/16" | 20.0 | 75.0 | 460.0 | 1.54 |
| 963.8164 | 1.1/2" | 21.0 | 85.0 | 460.0 | 1.15 |
| 963.8165 | 1.5/8" | 21.0 | 85.0 | 510.0 | 2.09 |
| 963.8166 | 1.13/16" | 22.0 | 95.0 | 550.0 | 2.97 |
| 963.8167 | 2" | 24.0 | 105.0 | 550.0 | 3.90 |

BRONZEplus Installation ring spanner with mandrel, offset

- Ring head 75° offset
- Practical combination of ring spanner and setting punch
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | A mm | B mm | L mm | kg |
|----------|------|------|------|-------|------|
| 963.8168 | 17 | 12.0 | 28.0 | 320.0 | 0.30 |
| 963.8169 | 18 | 12.0 | 28.0 | 320.0 | 0.30 |
| 963.8170 | 19 | 13.0 | 30.0 | 350.0 | 0.51 |
| 963.8171 | 20 | 13.0 | 30.0 | 350.0 | 0.51 |
| 963.8172 | 21 | 15.0 | 34.0 | 350.0 | 0.51 |
| 963.8173 | 22 | 15.0 | 34.0 | 350.0 | 0.51 |
| 963.8174 | 23 | 17.0 | 38.0 | 370.0 | 0.72 |
| 963.8175 | 24 | 17.0 | 38.0 | 370.0 | 0.72 |
| 963.8176 | 25 | 17.0 | 38.0 | 370.0 | 0.72 |
| 963.8177 | 26 | 21.0 | 43.0 | 370.0 | 0.72 |
| 963.8178 | 27 | 21.0 | 43.0 | 370.0 | 0.72 |
| 963.8179 | 28 | 23.0 | 48.0 | 400.0 | 1.15 |
| 963.8180 | 29 | 23.0 | 48.0 | 400.0 | 1.15 |
| 963.8181 | 30 | 23.0 | 48.0 | 400.0 | 1.15 |
| 963.8182 | 32 | 24.0 | 50.0 | 400.0 | 1.15 |
| 963.8183 | 33 | 24.0 | 50.0 | 400.0 | 1.15 |
| 963.8184 | 34 | 25.0 | 56.0 | 400.0 | 1.15 |
| 963.8185 | 35 | 25.0 | 56.0 | 430.0 | 1.54 |
| 963.8186 | 36 | 25.0 | 56.0 | 430.0 | 1.54 |
| 963.8187 | 37 | 25.0 | 56.0 | 430.0 | 1.54 |
| 963.8188 | 38 | 25.0 | 56.0 | 430.0 | 1.54 |
| 963.8189 | 41 | 27.0 | 62.0 | 470.0 | 2.09 |
| 963.8190 | 42 | 27.0 | 62.0 | 470.0 | 2.09 |
| 963.8191 | 46 | 29.0 | 71.0 | 500.0 | 2.97 |
| 963.8192 | 47 | 29.0 | 71.0 | 500.0 | 2.97 |
| 963.8193 | 50 | 33.0 | 76.0 | 530.0 | 3.90 |

| | Ø | A mm | B mm | L mm | kg |
|----------|----------|------|------|-------|------|
| 963.8194 | 11/16" | 12.0 | 28.0 | 290.0 | 0.30 |
| 963.8195 | 7/8" | 13.0 | 30.0 | 355.0 | 0.51 |
| 963.8196 | 15/16" | 13.0 | 30.0 | 355.0 | 0.51 |
| 963.8197 | 1.1/16" | 21.0 | 43.0 | 380.0 | 0.72 |
| 963.8198 | 1.3/16" | 23.0 | 48.0 | 410.0 | 0.72 |
| 963.8199 | 1.1/4" | 24.0 | 50.0 | 380.0 | 1.15 |
| 963.8200 | 5/7/16" | 25.0 | 56.0 | 460.0 | 1.54 |
| 963.8201 | 1.1/2" | 25.0 | 56.0 | 460.0 | 1.15 |
| 963.8202 | 1.5/8" | 27.0 | 62.0 | 510.0 | 2.09 |
| 963.8203 | 1.13/16" | 29.0 | 71.0 | 550.0 | 2.97 |
| 963.8204 | 2" | 33.0 | 76.0 | 550.0 | 3.90 |

NON SPARKING HOSE COUPLING WRENCHES & HOOK WRENCHES

BRONZEplus Coupling spanner A-B-C

- For fire brigade (Storz) couplings A - B - C
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | kg |
|----------|------|-------|-----|
| 963.8205 | 14 | 440.0 | 800 |

BRONZEplus Coupling spanner B-C

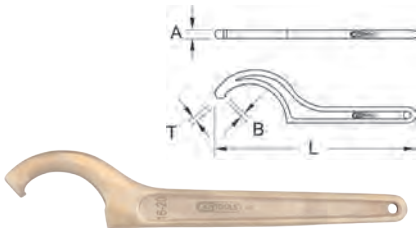
- For fire brigade (Storz) couplings B - C
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | kg |
|----------|------|-------|-----|
| 963.8206 | 12 | 280.0 | 450 |

BRONZEplus hook wrench with spigot

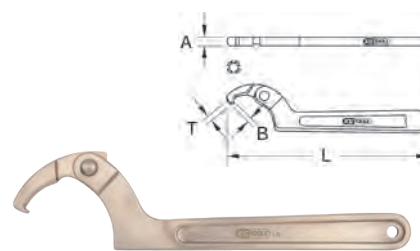
- In accordance to DIN 1810 Form B
- With spigot for for cross drilled nuts to DIN 1816
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Span width mm | A mm | B mm | L mm | T mm | kg |
|----------|---------------|------|------|-------|------|------|
| 963.8210 | 12-14 | 3.0 | 1.5 | 110.0 | 2.0 | 0.03 |
| 963.8211 | 16-20 | 3.0 | 2 | 110.0 | 2.5 | 0.03 |
| 963.8212 | 25-28 | 4.0 | 2.5 | 135.0 | 3.0 | 0.05 |
| 963.8213 | 30-32 | 4.0 | 2.5 | 135.0 | 4.0 | 0.05 |
| 963.8214 | 34-36 | 5.0 | 3 | 170.0 | 4.0 | 0.10 |
| 963.8215 | 40-42 | 5.0 | 3 | 170.0 | 4.0 | 0.10 |
| 963.8216 | 45-50 | 6.0 | 3.5 | 205.0 | 5.0 | 0.19 |
| 963.8217 | 52-55 | 6.0 | 3.5 | 205.0 | 5.0 | 0.19 |
| 963.8218 | 58-62 | 7.0 | 4 | 240.0 | 5.0 | 0.22 |
| 963.8219 | 68-75 | 7.0 | 4 | 240.0 | 6.0 | 0.20 |
| 963.8220 | 80-90 | 8.0 | 5 | 280.0 | 6.0 | 0.41 |
| 963.8221 | 95-100 | 8.0 | 5 | 280.0 | 8.0 | 0.41 |
| 963.8222 | 110-115 | 10.0 | 6 | 335.0 | 8.0 | 0.73 |
| 963.8223 | 120-130 | 10.0 | 6 | 335.0 | 8.0 | 0.73 |
| 963.8224 | 135-145 | 12.0 | 7 | 390.0 | 8.0 | 1.15 |
| 963.8225 | 155-165 | 12.0 | 7 | 390.0 | 8.0 | 1.15 |
| 963.8226 | 180-195 | 14.0 | 8 | 465.0 | 10.0 | 1.41 |
| 963.8227 | 205-220 | 14.0 | 8 | 465.0 | 10.0 | 1.39 |

BRONZEplus pivot hook wrench with pin

- In accordance to DIN 1810 Form A
- With pin for for slotted nuts to DIN 981
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Span width mm | A mm | B mm | L mm | T mm | kg |
|----------|---------------|------|------|-------|------|-----|
| 963.8207 | 32-75 | 8.0 | 6.0 | 205.0 | 5.0 | 230 |
| 963.8208 | 50-120 | 10.0 | 7.0 | 285.0 | 6.0 | 450 |
| 963.8209 | 115-170 | 12.0 | 10.0 | 310.0 | 7.0 | 500 |

NON SPARKING SPECIAL BITS

BRONZEplus Slide claw

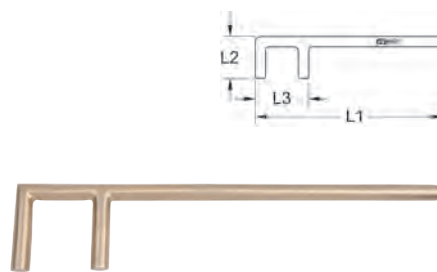
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | kg |
|----------|-------|-------|-----|
| 963.8228 | 30-40 | 500.0 | 720 |

BRONZEplus valve hook

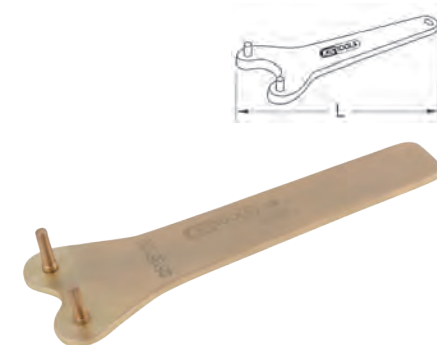
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|------|
| 963.8229 | 13 | 300.0 | 50.0 | 30.0 | 0.35 |
| 963.8230 | 13 | 350.0 | 55.0 | 35.0 | 0.60 |
| 963.8231 | 16 | 400.0 | 60.0 | 40.0 | 0.68 |
| 963.8232 | 16 | 450.0 | 65.0 | 45.0 | 1.10 |
| 963.8233 | 19 | 500.0 | 70.0 | 50.0 | 1.20 |
| 963.8234 | 22 | 600.0 | 75.0 | 60.0 | 2.00 |
| 963.8235 | 25 | 700.0 | 80.0 | 70.0 | 3.00 |
| 963.8236 | 28 | 800.0 | 85.0 | 80.0 | 5.30 |

BRONZEplus Face pin spanner

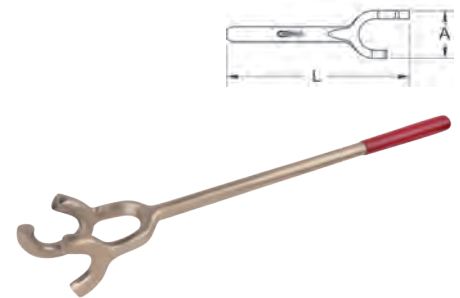
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Pin key mm | Stud Ø mm | L mm | kg |
|----------|------------|-----------|-------|-----|
| 963.8237 | 35.0 | 5.0 | 180.0 | 150 |

BRONZEplus hand key

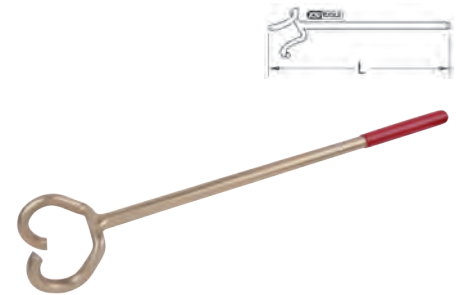
- In accordance to DIN 87311
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | A mm | L mm | kg |
|----------|--------|-------|-------|------|
| 963.8238 | 36x60 | 60.0 | 370.0 | 0.65 |
| 963.8239 | 48x80 | 80.0 | 430.0 | 2.60 |
| 963.8240 | 62x102 | 102.0 | 550.0 | 1.30 |

BRONZEplus B-hand key

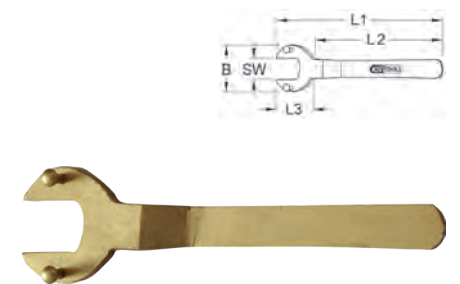
- In accordance to DIN 87311
- Handle insulated with plastic against cold
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | kg |
|----------|--------|-------|------|
| 963.8241 | 36x60 | 330.0 | 0.60 |
| 963.8242 | 48x80 | 470.0 | 1.40 |
| 963.8243 | 62x102 | 600.0 | 2.60 |

BRONZEplus Spanner for tanker valve

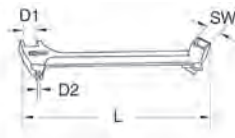
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| Type | dim mm | Stud Ø mm | B mm | L1 mm | L2 mm | L3 mm | kg |
|----------|--------|-------------|------|-------|-------|-------|------|
| 963.8244 | A | 64.0 x 32.0 | 20.0 | 90.0 | 660.0 | 500.0 | 1.80 |
| 963.8245 | B | 64.0 x 32.0 | 20.0 | 90.0 | 650.0 | 500.0 | 1.60 |
| 963.8246 | C | 95.0 x 47.5 | 20.0 | 90.0 | 690.0 | 500.0 | 2.50 |

BRONZEplus universal barrel key

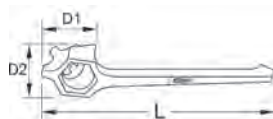
- For 22 barrel clasps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | dim mm | L mm | D1 mm | D2 mm | kg |
|----------|-----------|---------|----------|----------|------|
| 963.8270 | 18 x 22 | 380.0 | 27.0 | 6.0 | 1.25 |

BRONZEplus universal barrel key

- For current plug cover caps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D1 mm | D2 mm | L mm | kg |
|----------|----------|----------|---------|-----|
| 963.8271 | 38.0 | 52.0 | 300.0 | 600 |

BRONZEplus universal barrel key

- For current barrel clasps
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D1 mm | D2 mm | D3 mm | D4 mm | L mm | kg |
|----------|----------|----------|----------|----------|---------|------|
| 963.8272 | 70.0 | 70.0 | 65.0 | 95.0 | 400.0 | 1.70 |

BRONZEplus Sewer lid hook

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | kg |
|----------|---------|-----|
| 963.8273 | 500.0 | 770 |

BRONZEplus Sewer lid hook, reinforced

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

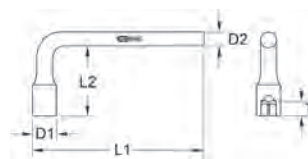


| | L mm | kg |
|----------|---------|------|
| 963.8274 | 700.0 | 1.20 |

NON SPARKING BOX SPANNERS

BRONZEplus box spanner, offset

- 4 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D1 mm | D2 mm | L1 mm | L2 mm | T mm | kg |
|----------|----|----------|----------|----------|----------|---------|-----|
| 963.8247 | 8 | 18.0 | 8.0 | 150.0 | 33.0 | 15.0 | 90 |
| 963.8248 | 9 | 20.0 | 8.0 | 160.0 | 35.0 | 15.0 | 100 |
| 963.8249 | 10 | 22.0 | 8.0 | 175.0 | 37.0 | 15.0 | 120 |
| 963.8250 | 12 | 24.0 | 10.0 | 215.0 | 42.0 | 18.0 | 220 |
| 963.8251 | 13 | 26.0 | 10.0 | 230.0 | 45.0 | 18.0 | 280 |
| 963.8252 | 14 | 27.0 | 12.0 | 240.0 | 45.0 | 18.0 | 280 |
| 963.8253 | 17 | 32.0 | 14.0 | 280.0 | 51.0 | 22.0 | 330 |



BRONZEplus socket

- 3 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D1 mm | D2 mm | L mm | kg |
|----------|----|----------|----------|---------|-----|
| 963.8254 | 6 | 16.0 | 25.0 | 40.0 | 70 |
| 963.8255 | 8 | 18.0 | 25.0 | 40.0 | 75 |
| 963.8256 | 10 | 22.0 | 25.0 | 40.0 | 80 |
| 963.8257 | 12 | 24.0 | 25.0 | 40.0 | 90 |
| 963.8258 | 16 | 30.0 | 25.0 | 50.0 | 150 |
| 963.8259 | 20 | 37.0 | 28.0 | 50.0 | 215 |
| 963.8260 | 25 | 44.0 | 32.0 | 60.0 | 435 |



BRONZEplus socket

- 3-point
- In accordance to DIN 22417
- With pushed through, movable drive handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | kg |
|----------|----|---------|------|
| 963.8261 | 4 | 95.0 | 0.08 |
| 963.8262 | 5 | 110.0 | 0.10 |
| 963.8263 | 6 | 115.0 | 0.17 |
| 963.8264 | 8 | 125.0 | 0.28 |
| 963.8265 | 10 | 140.0 | 0.39 |
| 963.8266 | 12 | 160.0 | 0.70 |
| 963.8267 | 16 | 180.0 | 0.98 |
| 963.8268 | 20 | 200.0 | 2.10 |
| 963.8269 | 24 | 220.0 | 3.10 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
i



BRONZEplus box spanner

- 6-point
- For use with tommy bar
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | | kg |
|----------|-----|-------|------|-------|
| 963.8275 | 8 | 190.0 | 1 | 0.11 |
| 963.8276 | 9 | 200.0 | 1 | 0.14 |
| 963.8277 | 10 | 215.0 | 1 | 0.16 |
| 963.8278 | 11 | 230.0 | 2 | 0.21 |
| 963.8279 | 12 | 250.0 | 2 | 0.26 |
| 963.8280 | 13 | 265.0 | 3 | 0.35 |
| 963.8281 | 14 | 265.0 | 3 | 0.35 |
| 963.8282 | 15 | 280.0 | 3 | 0.40 |
| 963.8283 | 16 | 280.0 | 3 | 0.40 |
| 963.8284 | 17 | 300.0 | 4 | 0.45 |
| 963.8285 | 18 | 300.0 | 4 | 0.45 |
| 963.8286 | 19 | 325.0 | 4 | 0.65 |
| 963.8287 | 20 | 325.0 | 4 | 0.65 |
| 963.8288 | 21 | 350.0 | 4 | 0.83 |
| 963.8289 | 22 | 350.0 | 4 | 0.83 |
| 963.8290 | 23 | 380.0 | 5 | 1.14 |
| 963.8291 | 24 | 380.0 | 5 | 1.14 |
| 963.8292 | 25 | 415.0 | 5 | 1.45 |
| 963.8293 | 26 | 415.0 | 5 | 1.45 |
| 963.8294 | 27 | 415.0 | 5 | 1.45 |
| 963.8295 | 28 | 450.0 | 6 | 1.80 |
| 963.8296 | 29 | 450.0 | 6 | 1.80 |
| 963.8297 | 30 | 450.0 | 6 | 1.80 |
| 963.8298 | 32 | 485.0 | 6 | 2.45 |
| 963.8299 | 33 | 485.0 | 6 | 2.45 |
| 963.8300 | 34 | 485.0 | 6 | 2.45 |
| 963.8301 | 35 | 530.0 | 7 | 3.30 |
| 963.8302 | 36 | 530.0 | 7 | 3.30 |
| 963.8303 | 37 | 530.0 | 7 | 3.30 |
| 963.8304 | 38 | 530.0 | 7 | 3.30 |
| 963.8305 | 41 | 580.0 | 8 | 4.00 |
| 963.8306 | 42 | 580.0 | 8 | 4.00 |
| 963.8307 | 46 | 635.0 | 8 | 4.80 |
| 963.8308 | 47 | 635.0 | 8 | 4.80 |
| 963.8309 | 50 | 320.0 | 9,10 | 4.90 |
| 963.8310 | 52 | 320.0 | 9,10 | 4.90 |
| 963.8311 | 54 | 340.0 | 9,10 | 6.50 |
| 963.8312 | 55 | 340.0 | 9,10 | 6.50 |
| 963.8313 | 56 | 340.0 | 9,10 | 6.50 |
| 963.8314 | 58 | 360.0 | 9,10 | 8.30 |
| 963.8315 | 60 | 360.0 | 9,10 | 8.30 |
| 963.8316 | 63 | 360.0 | 9,10 | 8.30 |
| 963.8317 | 65 | 380.0 | 11 | 10.50 |
| 963.8318 | 67 | 380.0 | 11 | 10.50 |
| 963.8319 | 70 | 380.0 | 11 | 10.50 |
| 963.8320 | 71 | 380.0 | 11 | 10.50 |
| 963.8321 | 75 | 400.0 | 11 | 14.30 |
| 963.8322 | 77 | 400.0 | 11 | 14.30 |
| 963.8323 | 80 | 400.0 | 11 | 14.30 |
| 963.8324 | 82 | 400.0 | 11 | 14.30 |
| 963.8325 | 85 | 425.0 | 12 | 19.20 |
| 963.8326 | 88 | 425.0 | 12 | 19.20 |
| 963.8327 | 90 | 425.0 | 12 | 19.20 |
| 963.8328 | 94 | 455.0 | 12 | 26.00 |
| 963.8329 | 95 | 455.0 | 12 | 26.00 |
| 963.8330 | 100 | 455.0 | 12 | 26.00 |

BRONZEplus Tommy bar for box spanner

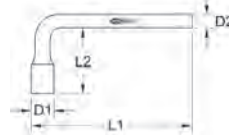
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | # | kg |
|----------|-----|------|--------|----|-------|
| 963.8331 | 10 | 6.0 | 150.0 | 1 | 0.04 |
| 963.8332 | 12 | 8.0 | 190.0 | 2 | 0.08 |
| 963.8333 | 16 | 10.0 | 190.0 | 3 | 0.09 |
| 963.8334 | 22 | 10.0 | 250.0 | 4 | 0.19 |
| 963.8335 | 27 | 12.0 | 315.0 | 5 | 0.31 |
| 963.8336 | 34 | 16.0 | 400.0 | 6 | 0.60 |
| 963.8337 | 38 | 16.0 | 500.0 | 7 | 0.92 |
| 963.8338 | 47 | 20.0 | 630.0 | 8 | 1.60 |
| 963.8339 | 63 | 24.0 | 800.0 | 9 | 3.10 |
| 963.8340 | 63 | 24.0 | 1000.0 | 10 | 3.85 |
| 963.8341 | 82 | 30.0 | 1250.0 | 11 | 7.50 |
| 963.8342 | 100 | 36.0 | 1600.0 | 12 | 15.00 |

BRONZEplus box spanner, offset

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

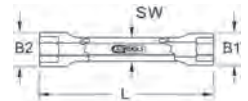


| | mm | D1 mm | D2 mm | L1 mm | L2 mm | kg |
|----------|----|-------|-------|-------|-------|------|
| 963.8343 | 8 | 16.0 | 8.0 | 175.0 | 30.0 | 0.10 |
| 963.8344 | 9 | 17.0 | 8.0 | 185.0 | 33.0 | 0.12 |
| 963.8345 | 10 | 18.0 | 8.0 | 195.0 | 37.0 | 0.14 |
| 963.8346 | 11 | 20.0 | 9.0 | 205.0 | 42.0 | 0.18 |
| 963.8347 | 12 | 21.0 | 9.0 | 220.0 | 42.0 | 0.22 |
| 963.8348 | 13 | 22.0 | 10.0 | 240.0 | 45.0 | 0.28 |
| 963.8349 | 14 | 22.0 | 10.0 | 240.0 | 45.0 | 0.28 |
| 963.8350 | 15 | 25.0 | 11.0 | 250.0 | 48.0 | 0.30 |
| 963.8351 | 16 | 25.0 | 11.0 | 250.0 | 48.0 | 0.30 |
| 963.8352 | 17 | 27.0 | 12.0 | 270.0 | 51.0 | 0.32 |
| 963.8353 | 18 | 27.0 | 12.0 | 270.0 | 53.0 | 0.32 |
| 963.8354 | 19 | 30.0 | 12.0 | 290.0 | 55.0 | 0.53 |
| 963.8355 | 20 | 30.0 | 12.0 | 290.0 | 57.0 | 0.53 |
| 963.8356 | 21 | 32.0 | 12.0 | 310.0 | 57.0 | 0.68 |
| 963.8357 | 22 | 32.0 | 12.0 | 310.0 | 59.0 | 0.68 |
| 963.8358 | 23 | 35.0 | 14.0 | 335.0 | 63.0 | 0.83 |
| 963.8359 | 24 | 35.0 | 14.0 | 335.0 | 63.0 | 0.83 |
| 963.8360 | 25 | 39.0 | 14.0 | 365.0 | 69.0 | 1.00 |
| 963.8361 | 26 | 39.0 | 14.0 | 365.0 | 69.0 | 1.00 |
| 963.8362 | 27 | 39.0 | 14.0 | 365.0 | 69.0 | 1.00 |
| 963.8363 | 28 | 43.0 | 15.0 | 395.0 | 72.0 | 1.30 |
| 963.8364 | 29 | 43.0 | 15.0 | 395.0 | 72.0 | 1.30 |
| 963.8365 | 30 | 43.0 | 15.0 | 395.0 | 72.0 | 1.30 |
| 963.8366 | 32 | 47.0 | 16.0 | 425.0 | 75.0 | 1.70 |
| 963.8367 | 33 | 47.0 | 16.0 | 425.0 | 75.0 | 1.70 |
| 963.8368 | 34 | 47.0 | 18.0 | 425.0 | 75.0 | 1.70 |
| 963.8369 | 35 | 52.0 | 18.0 | 465.0 | 80.0 | 2.80 |
| 963.8370 | 36 | 52.0 | 18.0 | 465.0 | 80.0 | 2.80 |
| 963.8371 | 37 | 52.0 | 18.0 | 465.0 | 80.0 | 2.80 |
| 963.8372 | 38 | 52.0 | 18.0 | 465.0 | 80.0 | 2.80 |
| 963.8373 | 41 | 58.0 | 20.0 | 510.0 | 85.0 | 3.60 |
| 963.8374 | 42 | 58.0 | 20.0 | 510.0 | 85.0 | 3.60 |
| 963.8375 | 46 | 65.0 | 21.0 | 555.0 | 90.0 | 4.00 |
| 963.8376 | 47 | 65.0 | 21.0 | 555.0 | 90.0 | 4.00 |
| 963.8377 | 50 | 72.0 | 22.0 | 605.0 | 93.0 | 4.80 |
| 963.8378 | 52 | 72.0 | 22.0 | 605.0 | 93.0 | 4.80 |
| 963.8379 | 54 | 76.0 | 24.0 | 660.0 | 97.0 | 6.40 |
| 963.8380 | 55 | 76.0 | 24.0 | 660.0 | 97.0 | 6.40 |

| | mm | D1 mm | D2 mm | L1 mm | L2 mm | kg |
|----------|----|-------|-------|-------|-------|-------|
| 963.8381 | 56 | 76.0 | 24.0 | 660.0 | 97.0 | 6.40 |
| 963.8382 | 58 | 84.0 | 25.0 | 730.0 | 103.0 | 8.20 |
| 963.8383 | 60 | 84.0 | 25.0 | 730.0 | 103.0 | 8.20 |
| 963.8384 | 63 | 89.0 | 25.0 | 730.0 | 103.0 | 8.20 |
| 963.8385 | 65 | 89.0 | 27.0 | 800.0 | 108.0 | 10.40 |
| 963.8386 | 67 | 95.0 | 27.0 | 800.0 | 108.0 | 10.40 |
| 963.8387 | 70 | 95.0 | 27.0 | 800.0 | 115.0 | 10.40 |
| 963.8388 | 71 | 95.0 | 27.0 | 800.0 | 115.0 | 10.40 |
| 963.8389 | 75 | 105.0 | 30.0 | 880.0 | 120.0 | 14.10 |
| 963.8390 | 77 | 105.0 | 30.0 | 880.0 | 120.0 | 14.10 |
| 963.8391 | 80 | 112.0 | 30.0 | 880.0 | 125.0 | 14.10 |
| 963.8392 | 82 | 112.0 | 30.0 | 880.0 | 125.0 | 14.10 |

BRONZEplus box spanner, double sided

- 6-point
- For use with open ended spanner or tommy bar
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | B1 mm | B2 mm | dim mm | L mm | | kg |
|----------|-------|-------|-------|--------|-------|---|------|
| 963.8393 | 7x8 | 14.0 | 15.0 | 10 | 95.0 | 1 | 0.05 |
| 963.8394 | 9x10 | 16.0 | 18.0 | 10 | 105.0 | 2 | 0.07 |
| 963.8395 | 10x11 | 18.0 | 19.0 | 14 | 120.0 | 2 | 0.09 |
| 963.8396 | 12x14 | 21.0 | 22.0 | 17 | 135.0 | 3 | 0.16 |
| 963.8397 | 14x17 | 24.0 | 27.0 | 17 | 150.0 | 3 | 0.21 |
| 963.8398 | 17x19 | 27.0 | 30.0 | 19 | 160.0 | 4 | 0.28 |
| 963.8399 | 19x22 | 30.0 | 32.0 | 22 | 170.0 | 4 | 0.34 |
| 963.8400 | 20x22 | 32.0 | 39.0 | 22 | 170.0 | 4 | 0.36 |
| 963.8401 | 24x26 | 35.0 | 39.0 | 24 | 180.0 | 5 | 0.48 |
| 963.8402 | 24x27 | 35.0 | 39.0 | 24 | 190.0 | 5 | 0.53 |
| 963.8403 | 27x32 | 39.0 | 47.0 | 27 | 200.0 | 6 | 0.87 |
| 963.8404 | 30x32 | 43.0 | 47.0 | 27 | 210.0 | 6 | 0.89 |
| 963.8405 | 30x36 | 43.0 | 52.0 | 30 | 220.0 | 6 | 1.08 |
| 963.8406 | 36x41 | 52.0 | 58.0 | 32 | 230.0 | 6 | 1.70 |

BRONZEplus Tommy bar for box spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



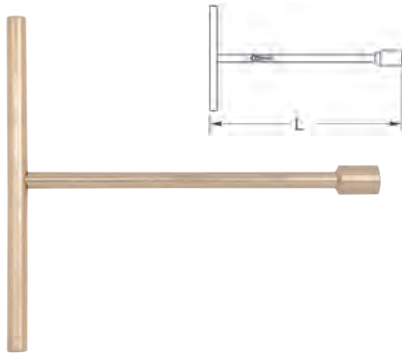
| | D mm | L mm | mm | # | kg |
|----------|------|-------|-------|---|-----|
| 963.8407 | 5.0 | 110.0 | 7x8 | 1 | 15 |
| 963.8408 | 6.0 | 150.0 | 10x11 | 2 | 40 |
| 963.8409 | 10.0 | 220.0 | 14x17 | 3 | 120 |
| 963.8410 | 12.0 | 300.0 | 20x22 | 4 | 300 |
| 963.8411 | 15.0 | 390.0 | 24x27 | 5 | 480 |
| 963.8412 | 16.0 | 500.0 | 36x41 | 6 | 750 |





BRONZEplus Hexagonal socket spanner firm sliding bar

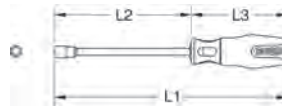
- 6-point
- With fixed drive handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | # |
|----------|----|-------|-------|
| 963.8413 | 8 | 196.0 | 0.14 |
| 963.8414 | 9 | 209.0 | 0.17 |
| 963.8415 | 10 | 223.0 | 0.19 |
| 963.8416 | 11 | 240.0 | 0.26 |
| 963.8417 | 12 | 256.0 | 0.31 |
| 963.8418 | 13 | 275.0 | 0.41 |
| 963.8419 | 14 | 275.0 | 0.41 |
| 963.8420 | 15 | 292.0 | 0.46 |
| 963.8421 | 16 | 292.0 | 0.46 |
| 963.8422 | 17 | 314.0 | 0.56 |
| 963.8423 | 18 | 314.0 | 0.56 |
| 963.8424 | 19 | 339.0 | 0.79 |
| 963.8425 | 20 | 339.0 | 0.79 |
| 963.8426 | 21 | 376.0 | 1.05 |
| 963.8427 | 22 | 376.0 | 1.05 |
| 963.8428 | 23 | 393.0 | 1.24 |
| 963.8429 | 24 | 393.0 | 1.24 |
| 963.8430 | 25 | 431.0 | 1.70 |
| 963.8431 | 26 | 431.0 | 1.70 |
| 963.8432 | 27 | 431.0 | 1.70 |
| 963.8433 | 28 | 464.0 | 2.10 |
| 963.8434 | 29 | 464.0 | 2.10 |
| 963.8435 | 30 | 464.0 | 2.10 |
| 963.8436 | 32 | 506.0 | 2.75 |
| 963.8437 | 33 | 506.0 | 2.75 |
| 963.8438 | 34 | 506.0 | 2.75 |
| 963.8439 | 35 | 550.0 | 4.00 |
| 963.8440 | 36 | 550.0 | 4.00 |
| 963.8441 | 37 | 550.0 | 4.00 |
| 963.8442 | 38 | 550.0 | 4.00 |
| 963.8443 | 41 | 600.0 | 5.40 |
| 963.8444 | 42 | 600.0 | 5.40 |
| 963.8445 | 46 | 655.0 | 6.00 |
| 963.8446 | 47 | 655.0 | 6.00 |
| 963.8447 | 50 | 345.0 | 6.30 |
| 963.8448 | 52 | 345.0 | 6.30 |
| 963.8449 | 54 | 365.0 | 8.00 |
| 963.8450 | 55 | 365.0 | 8.00 |
| 963.8451 | 56 | 365.0 | 8.00 |
| 963.8452 | 58 | 390.0 | 10.50 |
| 963.8453 | 60 | 390.0 | 10.50 |
| 963.8454 | 63 | 390.0 | 10.50 |
| 963.8455 | 65 | 410.0 | 14.00 |
| 963.8456 | 67 | 410.0 | 14.00 |
| 963.8457 | 70 | 410.0 | 14.00 |
| 963.8458 | 71 | 410.0 | 14.00 |
| 963.8459 | 75 | 430.0 | 19.00 |
| 963.8460 | 77 | 430.0 | 19.00 |
| 963.8461 | 80 | 430.0 | 19.00 |
| 963.8462 | 82 | 430.0 | 19.00 |

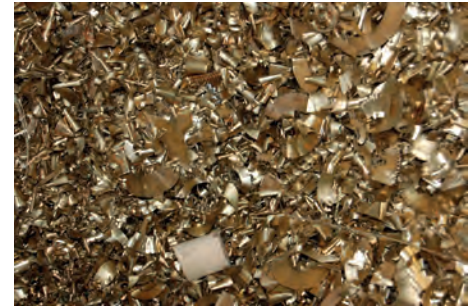
BERYLLIUMplus socket screwdriver

- 6-point
- With two component handle
- Optimal power transmission
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | L3 mm | # |
|----------|-----|-------|-------|-------|-----|
| 962.0970 | 3,5 | 175.0 | 75.0 | 100.0 | 55 |
| 962.0971 | 4,5 | 180.0 | 80.0 | 100.0 | 55 |
| 962.0972 | 5 | 180.0 | 80.0 | 100.0 | 60 |
| 962.0973 | 5,5 | 185.0 | 85.0 | 100.0 | 60 |
| 962.0974 | 6 | 190.0 | 90.0 | 100.0 | 65 |
| 962.0975 | 6,5 | 190.0 | 90.0 | 100.0 | 65 |
| 962.0976 | 7 | 190.0 | 90.0 | 100.0 | 80 |
| 962.0977 | 7,5 | 200.0 | 100.0 | 100.0 | 80 |
| 962.0978 | 8 | 200.0 | 100.0 | 100.0 | 100 |
| 962.0979 | 9 | 210.0 | 110.0 | 100.0 | 100 |
| 962.0980 | 10 | 210.0 | 110.0 | 100.0 | 115 |
| 962.0981 | 11 | 220.0 | 110.0 | 110.0 | 115 |
| 962.0982 | 12 | 220.0 | 110.0 | 110.0 | 130 |
| 962.0983 | 13 | 230.0 | 120.0 | 110.0 | 170 |
| 962.0984 | 14 | 230.0 | 120.0 | 110.0 | 210 |
| 962.0985 | 15 | 240.0 | 130.0 | 110.0 | 210 |
| 962.0986 | 16 | 240.0 | 130.0 | 110.0 | 235 |
| 962.0987 | 17 | 250.0 | 130.0 | 120.0 | 235 |

| | | L1 mm | L2 mm | L3 mm | # |
|----------|--------|-------|-------|-------|-----|
| 962.0988 | 1/8" | 175.0 | 75.0 | 100.0 | 55 |
| 962.0989 | 5/32" | 180.0 | 80.0 | 100.0 | 55 |
| 962.0990 | 3/16" | 185.0 | 85.0 | 100.0 | 60 |
| 962.0991 | 7/32" | 190.0 | 90.0 | 100.0 | 65 |
| 962.0992 | 1/4" | 190.0 | 90.0 | 100.0 | 80 |
| 962.0993 | 5/16" | 210.0 | 100.0 | 110.0 | 100 |
| 962.0994 | 3/8" | 220.0 | 110.0 | 110.0 | 115 |
| 962.0995 | 7/16" | 230.0 | 120.0 | 110.0 | 170 |
| 962.0996 | 1/2" | 230.0 | 120.0 | 110.0 | 210 |
| 962.0997 | 9/16" | 240.0 | 120.0 | 120.0 | 235 |
| 962.0998 | 5/8" | 250.0 | 130.0 | 120.0 | 235 |
| 962.0999 | 11/16" | 250.0 | 130.0 | 120.0 | 240 |



BRONZEplus Pronged wrench

- Light work in inaccessible places
- For use with tommy bar
- Jaw 90° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | # | # |
|----------|----|-------|---|------|
| 963.8463 | 13 | 160.0 | 1 | 0.10 |
| 963.8464 | 14 | 160.0 | 1 | 0.10 |
| 963.8465 | 15 | 200.0 | 1 | 0.17 |
| 963.8466 | 16 | 200.0 | 2 | 0.17 |
| 963.8467 | 17 | 200.0 | 2 | 0.17 |
| 963.8468 | 18 | 200.0 | 2 | 0.19 |
| 963.8469 | 19 | 200.0 | 3 | 0.22 |
| 963.8470 | 20 | 200.0 | 3 | 0.25 |
| 963.8471 | 21 | 200.0 | 3 | 0.26 |
| 963.8472 | 22 | 200.0 | 3 | 0.30 |
| 963.8473 | 23 | 200.0 | 4 | 0.35 |
| 963.8474 | 24 | 250.0 | 4 | 0.40 |
| 963.8475 | 25 | 250.0 | 4 | 0.40 |
| 963.8476 | 26 | 250.0 | 4 | 0.45 |
| 963.8477 | 27 | 250.0 | 4 | 0.45 |
| 963.8478 | 28 | 250.0 | 5 | 0.50 |
| 963.8479 | 29 | 250.0 | 5 | 0.55 |
| 963.8480 | 30 | 250.0 | 5 | 0.60 |
| 963.8481 | 32 | 250.0 | 5 | 0.65 |
| 963.8482 | 36 | 250.0 | 6 | 0.70 |
| 963.8483 | 41 | 315.0 | 6 | 1.15 |
| 963.8484 | 46 | 315.0 | 7 | 1.23 |
| 963.8485 | 50 | 315.0 | 7 | 1.50 |

BRONZEplus Tommy bar for pronged wrench

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | # | # |
|----------|-------|------|-------|---|------|
| 963.8486 | 13-15 | 8.0 | 160.0 | 1 | 0.07 |
| 963.8487 | 16-18 | 10.0 | 200.0 | 2 | 0.13 |
| 963.8488 | 19-22 | 12.0 | 200.0 | 3 | 0.22 |
| 963.8489 | 23-27 | 14.0 | 250.0 | 4 | 0.40 |
| 963.8490 | 28-32 | 16.0 | 250.0 | 5 | 0.60 |
| 963.8491 | 36-41 | 18.0 | 315.0 | 6 | 1.00 |
| 963.8492 | 46-50 | 20.0 | 315.0 | 7 | 1.60 |

BRONZEplus Crowfoot wrench, hexagonal

- 6 point
- With internal square drive
- For manual operation
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | T mm | g |
|----------|----|-------|------|-----|
| 963.8493 | 13 | 40.0 | 15.0 | 50 |
| 963.8494 | 14 | 40.0 | 15.0 | 50 |
| 963.8495 | 15 | 43.0 | 20.0 | 80 |
| 963.8496 | 16 | 43.0 | 20.0 | 80 |
| 963.8497 | 17 | 43.0 | 20.0 | 80 |
| 963.8498 | 18 | 49.0 | 22.0 | 110 |
| 963.8499 | 19 | 49.0 | 22.0 | 120 |
| 963.8500 | 20 | 49.0 | 22.0 | 130 |
| 963.8501 | 21 | 52.0 | 26.0 | 150 |
| 963.8502 | 22 | 52.0 | 26.0 | 170 |
| 963.8503 | 23 | 52.0 | 29.0 | 200 |
| 963.8504 | 24 | 55.0 | 29.0 | 200 |
| 963.8505 | 25 | 55.0 | 32.0 | 220 |
| 963.8506 | 26 | 59.0 | 32.0 | 220 |
| 963.8507 | 27 | 59.0 | 32.0 | 250 |
| 963.8508 | 28 | 59.0 | 32.0 | 270 |
| 963.8509 | 29 | 63.0 | 34.0 | 300 |
| 963.8510 | 30 | 63.0 | 34.0 | 320 |
| 963.8511 | 32 | 67.0 | 37.0 | 350 |
| 963.8512 | 36 | 76.0 | 42.0 | 570 |
| 963.8513 | 41 | 86.0 | 48.0 | 620 |
| 963.8514 | 46 | 97.0 | 55.0 | 750 |
| 963.8515 | 50 | 105.0 | 60.0 | 800 |

BRONZEplus Special extender for crowfoot spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | g |
|----------|-----|-------|-----|
| 963.8516 | 1/2 | 150.0 | 200 |
| 963.8517 | 1/2 | 250.0 | 400 |



NON SPARKING FRICTION RATCHETS

BRONZEplus Construction ratchet

- 6-point
- With centring point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | g |
|----------|----|-------|------|
| 963.1105 | 17 | 230.0 | 0.62 |
| 963.1106 | 19 | 240.0 | 0.65 |
| 963.1107 | 21 | 250.0 | 0.83 |
| 963.1108 | 22 | 260.0 | 0.83 |
| 963.1109 | 24 | 270.0 | 1.02 |
| 963.1110 | 26 | 280.0 | 1.05 |
| 963.1111 | 27 | 285.0 | 1.10 |
| 963.1112 | 30 | 300.0 | 1.32 |
| 963.1113 | 32 | 315.0 | 1.43 |
| 963.1114 | 35 | 325.0 | 1.63 |
| 963.1115 | 36 | 330.0 | 1.67 |
| 963.1116 | 41 | 330.0 | 1.95 |



BERYLLIUMplus Friction ratchet

- 12 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L mm | g |
|----------|----|-------|------|
| 962.0109 | 9 | 150.0 | 0.13 |
| 962.0111 | 11 | 150.0 | 0.13 |
| 962.0113 | 13 | 155.0 | 0.16 |
| 962.0114 | 14 | 155.0 | 0.16 |
| 962.0117 | 17 | 200.0 | 0.26 |
| 962.0119 | 19 | 200.0 | 0.26 |
| 962.0122 | 22 | 220.0 | 0.34 |
| 962.0124 | 24 | 220.0 | 0.34 |
| 962.0127 | 27 | 245.0 | 0.56 |
| 962.0130 | 30 | 280.0 | 0.84 |
| 962.0132 | 32 | 280.0 | 0.84 |
| 962.0136 | 36 | 290.0 | 1.18 |
| 962.0141 | 41 | 295.0 | 1.23 |
| 962.0146 | 46 | 360.0 | 2.06 |
| 962.0150 | 50 | 360.0 | 2.23 |
| 962.0155 | 55 | 440.0 | 2.90 |
| 962.0160 | 60 | 440.0 | 2.90 |

1/4" DRIVE NON SPARKING SOCKETS

BERYLLIUMplus socket

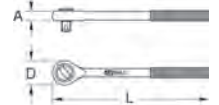
- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | D1 mm | D2 mm | L mm | g |
|-----------|------|-------|-------|------|----|
| 962.1404 | 4,0 | 10,0 | 15,0 | 25,0 | 13 |
| 962.14045 | 4,5 | 10,0 | 15,0 | 25,0 | 14 |
| 962.1405 | 5,0 | 11,0 | 15,0 | 25,0 | 14 |
| 962.14055 | 5,5 | 11,0 | 15,0 | 25,0 | 14 |
| 962.1406 | 6,0 | 12,0 | 15,0 | 25,0 | 12 |
| 962.1407 | 7,0 | 13,0 | 15,0 | 25,0 | 14 |
| 962.1408 | 8,0 | 14,0 | 15,0 | 25,0 | 17 |
| 962.1409 | 9,0 | 15,0 | 15,0 | 25,0 | 19 |
| 962.1410 | 10,0 | 16,0 | 15,0 | 25,0 | 20 |
| 962.1411 | 11,0 | 18,0 | 15,0 | 25,0 | 24 |
| 962.1412 | 12,0 | 19,0 | 15,0 | 27,0 | 29 |
| 962.1413 | 13,0 | 20,0 | 15,0 | 27,0 | 28 |
| 962.1414 | 14,0 | 22,0 | 15,0 | 27,0 | 30 |

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | A mm | D mm | L mm | g |
|----------|------|------|------|-------|-----|
| 962.1490 | 1/4" | 15.0 | 30.0 | 150.0 | 165 |

BERYLLIUMplus Ratchet handle with coupler

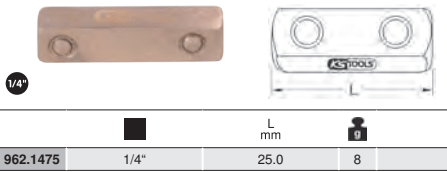
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | A mm | D mm | L mm | g |
|----------|------|------|------|-------|-----|
| 962.1491 | 1/4" | 14.0 | 36.0 | 150.0 | 320 |

BERYLLIUMplus Coupler

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | L mm | 8 |
|----------|------|------|---|
| 962.1475 | 1/4" | 25.0 | 8 |

BERYLLIUMplus Extension

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | L mm | 8 |
|----------|------|-------|-----|
| 962.1450 | 1/4" | 55.0 | 20 |
| 962.1451 | 1/4" | 100.0 | 60 |
| 962.1452 | 1/4" | 200.0 | 100 |

BERYLLIUMplus Swivel handle

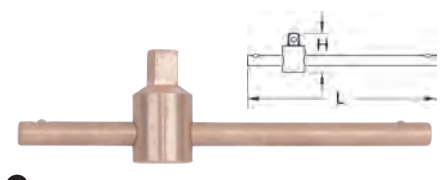
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | L mm | 8 |
|----------|------|-------|-----|
| 962.1455 | 1/4" | 165.0 | 160 |
| 962.1456 | 1/4" | 215.0 | 350 |

BERYLLIUMplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | H mm | L mm | 8 |
|----------|------|------|-------|-----|
| 962.1460 | 1/4" | 28.0 | 200.0 | 160 |

BERYLLIUMplus Square drive screwdriver

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | L1 mm | L2 mm | L3 mm | 8 |
|----------|------|-------|-------|-------|----|
| 962.1465 | 1/4" | 140.0 | 55.0 | 85.0 | 65 |

BERYLLIUMplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | 1/2" | L mm | 8 |
|----------|------|------|------|----|
| 962.1470 | 1/4" | 1/2" | 30.0 | 40 |
| 963.1280 | 1/2" | 1/4" | 40.0 | 60 |

BERYLLIUMplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | 1/4" | 1/4" | L mm | 8 |
|----------|------|------|------|----|
| 962.1480 | 1/4" | 1/4" | 55.0 | 55 |

BERYLLIUMplus Socket set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- In durable plastic storage case



| | 16 pcs | BERYLLIUMplus Socket set | 875 |
|----------|--------|---|-----|
| 962.1485 | 16 pcs | BERYLLIUMplus Socket set | 875 |
| 12 x | | 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm | |
| 1 x | | 100 mm | |
| 1 x | | 250 mm | |

1/2" DRIVE NON SPARKING SOCKETS

BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D1 mm | D2 mm | L mm | 8 |
|----------|----|-------|-------|------|-----|
| 963.1204 | 6 | 14.0 | 24.0 | 40.0 | 50 |
| 963.1205 | 7 | 14.0 | 24.0 | 40.0 | 55 |
| 963.1206 | 8 | 15.0 | 24.0 | 40.0 | 50 |
| 963.1207 | 9 | 16.0 | 24.0 | 40.0 | 50 |
| 963.1208 | 10 | 17.0 | 24.0 | 40.0 | 50 |
| 963.1209 | 11 | 19.0 | 24.0 | 40.0 | 50 |
| 963.1210 | 12 | 20.0 | 24.0 | 40.0 | 50 |
| 963.1211 | 13 | 20.0 | 24.0 | 40.0 | 50 |
| 963.1212 | 14 | 24.0 | 24.0 | 40.0 | 55 |
| 963.1213 | 15 | 25.0 | 25.0 | 40.0 | 55 |
| 963.1214 | 16 | 25.0 | 25.0 | 40.0 | 60 |
| 963.1215 | 17 | 26.0 | 26.0 | 40.0 | 65 |
| 963.1216 | 18 | 29.0 | 27.0 | 40.0 | 75 |
| 963.1217 | 19 | 30.0 | 28.0 | 40.0 | 85 |
| 963.1218 | 20 | 31.0 | 28.0 | 40.0 | 95 |
| 963.1219 | 21 | 32.0 | 28.0 | 40.0 | 100 |
| 963.1220 | 22 | 33.0 | 28.0 | 40.0 | 110 |
| 963.1221 | 23 | 34.0 | 31.0 | 40.0 | 120 |
| 963.1222 | 24 | 35.0 | 31.0 | 40.0 | 125 |
| 963.1223 | 25 | 36.0 | 32.0 | 40.0 | 130 |
| 963.1224 | 26 | 37.0 | 34.0 | 40.0 | 145 |
| 963.1225 | 27 | 38.0 | 34.0 | 40.0 | 150 |
| 963.1226 | 28 | 40.0 | 36.0 | 40.0 | 175 |
| 963.1227 | 29 | 42.0 | 36.0 | 40.0 | 185 |
| 963.1228 | 30 | 43.0 | 40.0 | 40.0 | 195 |
| 963.1229 | 32 | 45.0 | 42.0 | 42.0 | 240 |
| 963.1230 | 34 | 48.0 | 42.0 | 50.0 | 300 |
| 963.1231 | 36 | 50.0 | 42.0 | 50.0 | 380 |
| 963.1341 | 41 | 57.0 | 44.0 | 50.0 | 450 |

| | mm | D1 mm | D2 mm | L mm | 8 |
|----------|---------|-------|-------|------|-----|
| 963.1249 | 1/4" | 15.0 | 24.0 | 40.0 | 50 |
| 963.1250 | 5/16" | 15.0 | 24.0 | 40.0 | 50 |
| 963.1251 | 11/32" | 16.0 | 24.0 | 40.0 | 50 |
| 963.1252 | 3/8" | 17.0 | 24.0 | 40.0 | 50 |
| 963.1253 | 13/32" | 18.0 | 24.0 | 40.0 | 50 |
| 963.1254 | 7/16" | 19.0 | 24.0 | 40.0 | 50 |
| 963.1255 | 1/2" | 21.0 | 24.0 | 40.0 | 50 |
| 963.1256 | 9/16" | 23.0 | 24.0 | 40.0 | 55 |
| 963.1257 | 19/32" | 24.0 | 24.0 | 40.0 | 55 |
| 963.1258 | 5/8" | 26.0 | 26.0 | 40.0 | 60 |
| 963.1259 | 11/16" | 28.0 | 26.0 | 40.0 | 65 |
| 963.1260 | 3/4" | 29.0 | 26.0 | 40.0 | 85 |
| 963.1261 | 25/32" | 31.0 | 26.0 | 40.0 | 95 |
| 963.1262 | 13/16" | 32.0 | 26.0 | 40.0 | 95 |
| 963.1263 | 7/8" | 33.0 | 28.0 | 40.0 | 110 |
| 963.1264 | 15/16" | 35.0 | 31.0 | 40.0 | 120 |
| 963.1265 | 1" | 36.0 | 34.0 | 40.0 | 130 |
| 963.1266 | 1.1/16" | 39.0 | 34.0 | 40.0 | 150 |
| 963.1267 | 1.1/8" | 41.0 | 36.0 | 40.0 | 175 |
| 963.1268 | 1.3/16" | 43.0 | 40.0 | 40.0 | 195 |
| 963.1269 | 1.1/4" | 45.0 | 42.0 | 42.0 | 240 |



BRONZEplus socket, long

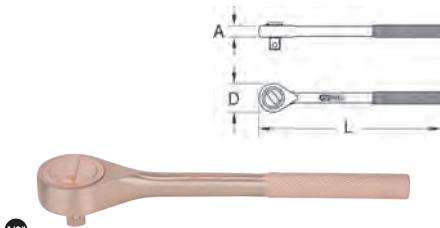
- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D1 mm | D2 mm | L mm | g |
|----------|----|-------|-------|------|-----|
| 963.1232 | 10 | 19.0 | 25.0 | 77.0 | 110 |
| 963.1233 | 12 | 20.0 | 25.0 | 77.0 | 135 |
| 963.1234 | 13 | 21.0 | 25.0 | 77.0 | 105 |
| 963.1235 | 14 | 22.0 | 25.0 | 77.0 | 110 |
| 963.1236 | 15 | 25.0 | 25.0 | 77.0 | 120 |
| 963.1237 | 16 | 25.0 | 25.0 | 77.0 | 125 |
| 963.1238 | 17 | 27.0 | 27.0 | 77.0 | 140 |
| 963.1239 | 18 | 28.0 | 28.0 | 82.0 | 145 |
| 963.1240 | 19 | 30.0 | 28.0 | 82.0 | 180 |
| 963.1241 | 21 | 32.0 | 28.0 | 82.0 | 205 |
| 963.1242 | 22 | 33.0 | 28.0 | 82.0 | 210 |
| 963.1243 | 24 | 36.0 | 30.0 | 82.0 | 250 |
| 963.1244 | 27 | 40.0 | 30.0 | 82.0 | 285 |
| 963.1245 | 30 | 44.0 | 32.0 | 82.0 | 345 |
| 963.1246 | 32 | 46.0 | 32.0 | 82.0 | 375 |
| 963.1247 | 34 | 48.0 | 34.0 | 82.0 | 415 |
| 963.1248 | 36 | 50.0 | 34.0 | 82.0 | 425 |

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D mm | L mm | g |
|----------|------|------|-------|-----|
| 962.1290 | 23.0 | 54.0 | 250.0 | 590 |

BERYLLIUMplus Ratchet handle with coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D mm | L mm | g |
|----------|------|------|-------|-----|
| 962.1291 | 17.0 | 45.0 | 250.0 | 430 |

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|------|----|
| 963.1281 | 36.5 | 46 |

BRONZEplus extension

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|-------|-----|
| 963.1270 | 100.0 | 180 |
| 963.1271 | 200.0 | 315 |
| 963.1272 | 250.0 | 360 |

BRONZEplus flexi drive handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|-------|-----|
| 963.1273 | 215.0 | 350 |
| 963.1274 | 250.0 | 560 |
| 963.1275 | 300.0 | 920 |
| 963.1276 | 380.0 | 590 |

BRONZEplus sliding T-handle

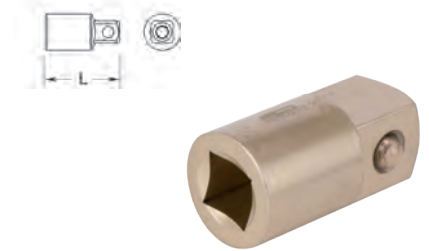
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | H mm | L mm | g |
|----------|------|-------|-----|
| 963.1277 | 46.0 | 250.0 | 450 |
| 963.1278 | 46.0 | 320.0 | 550 |

BRONZEplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|------|-----|
| 963.1279 | 22.0 | 120 |
| 963.1280 | 40.0 | 60 |

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|------|-----|
| 963.1282 | 70.0 | 135 |

BRONZEplus L-Handle

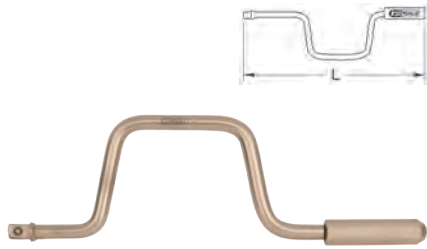
- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|-------|-----|
| 963.1283 | 220.0 | 260 |
| 963.1284 | 260.0 | 400 |

BRONZEplus Speed brace

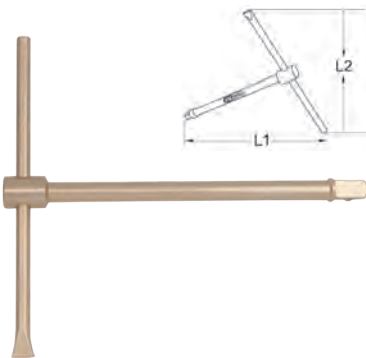
- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| 963.1285 | 1/2" | L mm | g |
|----------|------|-------|-----|
| | | 410.0 | 615 |

BRONZEplus T-handle

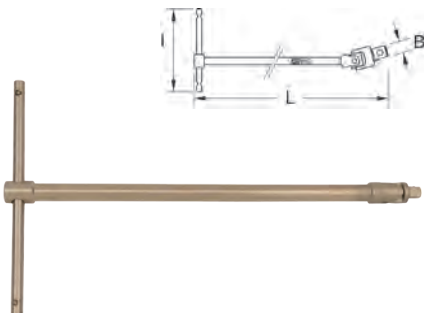
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| 963.1286 | 1/2" | 245.0 | 220.0 | 500 |
|----------|------|-------|-------|-----|
| | | | | |

BRONZEplus T-handle

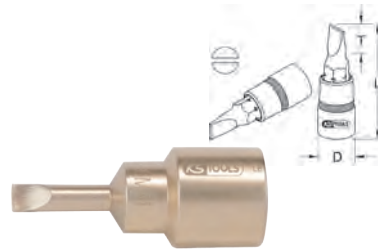
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3122 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| 963.1287 | 1/2" | B mm | I mm | L mm | g |
|----------|------|------|-------|-------|-----|
| | | 12.5 | 250.0 | 460.0 | 755 |

BRONZEplus Bit socket for slotted screws

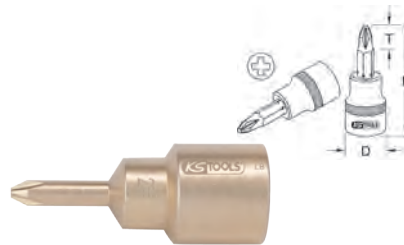
- Slotted
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | T mm | g |
|----------|------|------|------|------|-----|
| 963.1292 | 4.0 | 25.0 | 60.0 | 9.0 | 140 |
| 963.1293 | 6.0 | 25.0 | 60.0 | 9.0 | 140 |
| 963.1294 | 8.0 | 25.0 | 60.0 | 9.0 | 140 |
| 963.1295 | 10.0 | 25.0 | 60.0 | 9.0 | 140 |

BRONZEplus Bit socket for phillips head screws PH

- PH
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | D mm | L mm | T mm | g |
|----------|------|------|------|------|-----|
| 963.1296 | PH 1 | 25.0 | 60.0 | 8.0 | 140 |
| 963.1297 | PH 2 | 25.0 | 60.0 | 8.0 | 140 |
| 963.1298 | PH 3 | 25.0 | 60.0 | 8.0 | 140 |
| 963.1299 | PH 4 | 25.0 | 60.0 | 8.0 | 140 |

BRONZEplus Bit socket for hexagon screws

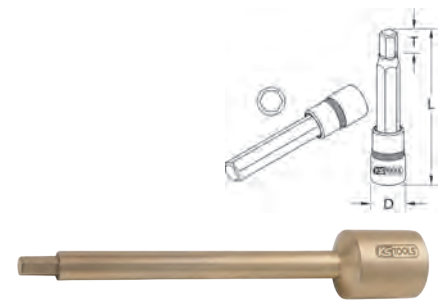
- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | T mm | g |
|----------|----|------|------|------|-----|
| 963.1300 | 4 | 25.0 | 60.0 | 12.0 | 65 |
| 963.1301 | 5 | 25.0 | 60.0 | 12.0 | 70 |
| 963.1302 | 6 | 25.0 | 60.0 | 12.0 | 70 |
| 963.1303 | 7 | 25.0 | 60.0 | 12.0 | 75 |
| 963.1304 | 8 | 25.0 | 60.0 | 12.0 | 80 |
| 963.1305 | 9 | 25.0 | 60.0 | 12.0 | 85 |
| 963.1306 | 10 | 25.0 | 60.0 | 12.0 | 95 |
| 963.1307 | 12 | 25.0 | 60.0 | 12.0 | 115 |
| 963.1308 | 14 | 25.0 | 60.0 | 12.0 | 145 |
| 963.1309 | 17 | 25.0 | 60.0 | 12.0 | 205 |
| 963.1310 | 19 | 25.0 | 60.0 | 12.0 | 230 |

BRONZEplus Bit socket for hexagon screws, long

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | T mm | g |
|----------|----|------|-------|------|-----|
| 963.1311 | 5 | 25.0 | 90.0 | 12.0 | 90 |
| 963.1312 | 5 | 25.0 | 180.0 | 12.0 | 125 |
| 963.1313 | 6 | 25.0 | 90.0 | 12.0 | 80 |
| 963.1314 | 6 | 25.0 | 140.0 | 12.0 | 120 |
| 963.1315 | 6 | 25.0 | 160.0 | 12.0 | 135 |
| 963.1316 | 7 | 25.0 | 100.0 | 12.0 | 90 |
| 963.1317 | 8 | 25.0 | 90.0 | 12.0 | 90 |
| 963.1318 | 8 | 25.0 | 120.0 | 12.0 | 105 |
| 963.1319 | 10 | 25.0 | 140.0 | 12.0 | 150 |
| 963.1320 | 12 | 25.0 | 140.0 | 12.0 | 190 |
| 963.1321 | 14 | 25.0 | 140.0 | 12.0 | 250 |

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



| 963.1288 | 11 pcs | BRONZEplus Socket set | 5.30 |
|----------|--------|---|------|
| 9 x | | 10 - 11 - 13 - 14 - 15 - 17 - 19 - 22 - 24 mm | |
| 1 x | | 100 mm | |
| 1 x | | 250 mm | |

| 963.1289 | 23 pcs | BRONZEplus Socket set | 4.10 |
|----------|--------|---|------|
| 22 x | | 10-11-12-13-14-15-16-17-19-20-21-22-23-24-25-26-27-28-29-30-32 mm | |
| 1 x | | 250 mm | |

| | | | |
|----------|--------|---|------|
| | | | |
| 963.1290 | 24 pcs | BRONZEplus Socket set | 2.00 |
| 22 x | | 10-11-12-13-14-15-16-17-19-20-21-22-23-24-25-26-27-28-29-30-32 mm | |
| 1 x | | 250 mm | |
| 1 x | | 250 mm | |

| | | | |
|----------|--------|---|------|
| | | | |
| 963.1291 | 26 pcs | BRONZEplus Socket set | 4.10 |
| 22 x | | 10-11-12-13-14-15-16-17-19-20-21-22-23-24-25-26-27-28-29-30-32 mm | |
| 1 x | | 250 mm | |
| 1 x | | 250 mm | |
| 1 x | | 320 mm | |
| 1 x | | 380 mm | |

BRONZEplus Bit socket set for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | | |
|----------|-------|--|------|
| | | | |
| 963.1322 | 9 pcs | BRONZEplus Bit socket set for hexagon screws | 1.24 |
| 9 x | | 1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm | |

| | | | |
|----------|--------|--|------|
| | | | |
| 963.1323 | 11 pcs | BRONZEplus Bit socket set for hexagon screws | 2.99 |
| 1 x | | 1/2" | |
| 1 x | | 1/2": 250 mm | |
| 9 x | | 1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm | |

| | | | |
|----------|--------|--|------|
| | | | |
| 963.1324 | 15 pcs | BRONZEplus Bit socket set for hexagon screws | 2.79 |
| 9 x | | 1/2": 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14 - 17 mm | |
| 6 x | | 1/2": 5/90 - 6/90 - 8/90 - 10/140 - 12/140 - 14/140 mm | |



3/4" DRIVE NON SPARKING SOCKETS

BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



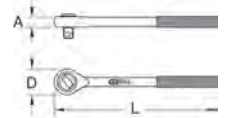
| | | D1 mm | D2 mm | L mm | |
|----------|----|-------|-------|------|------|
| 963.3405 | 18 | 31.0 | 36.0 | 60.0 | 180 |
| 963.3406 | 19 | 32.0 | 36.0 | 60.0 | 180 |
| 963.3407 | 21 | 34.0 | 36.0 | 60.0 | 180 |
| 963.3408 | 22 | 36.0 | 36.0 | 60.0 | 180 |
| 963.3409 | 24 | 38.0 | 36.0 | 55.0 | 350 |
| 963.3410 | 25 | 39.0 | 36.0 | 55.0 | 350 |
| 963.3411 | 26 | 40.0 | 36.0 | 50.0 | 330 |
| 963.3412 | 27 | 41.0 | 36.0 | 50.0 | 300 |
| 963.3413 | 28 | 42.0 | 38.0 | 50.0 | 300 |
| 963.3414 | 29 | 43.0 | 38.0 | 50.0 | 300 |
| 963.3415 | 30 | 45.0 | 38.0 | 50.0 | 310 |
| 963.3416 | 32 | 48.0 | 40.0 | 60.0 | 375 |
| 963.3417 | 33 | 50.0 | 40.0 | 60.0 | 450 |
| 963.3418 | 34 | 50.0 | 40.0 | 60.0 | 465 |
| 963.3419 | 35 | 51.0 | 44.0 | 55.0 | 400 |
| 963.3420 | 36 | 52.0 | 44.0 | 60.0 | 430 |
| 963.3421 | 38 | 55.0 | 46.0 | 60.0 | 490 |
| 963.3422 | 41 | 64.0 | 50.0 | 65.0 | 560 |
| 963.3423 | 42 | 64.0 | 50.0 | 65.0 | 600 |
| 963.3424 | 46 | 68.0 | 50.0 | 65.0 | 655 |
| 963.3425 | 50 | 72.0 | 55.0 | 70.0 | 785 |
| 963.3426 | 55 | 80.0 | 60.0 | 70.0 | 900 |
| 963.3427 | 58 | 80.0 | 60.0 | 60.0 | 950 |
| 963.3428 | 60 | 82.0 | 60.0 | 70.0 | 1290 |

| | | D1 mm | D2 mm | L mm | |
|----------|----------|-------|-------|------|-----|
| 963.3429 | 7/8" | 36.0 | 36.0 | 60.0 | 180 |
| 963.3430 | 15/16" | 39.0 | 36.0 | 55.0 | 350 |
| 963.3431 | 1" | 39.0 | 36.0 | 55.0 | 350 |
| 963.3432 | 1.1/16" | 41.0 | 36.0 | 50.0 | 300 |
| 963.3433 | 1.1/8" | 41.0 | 36.0 | 50.0 | 300 |
| 963.3434 | 1.1/4" | 48.0 | 40.0 | 60.0 | 375 |
| 963.3435 | 1.5/16" | 50.0 | 40.0 | 60.0 | 400 |
| 963.3436 | 1.3/8" | 52.0 | 44.0 | 55.0 | 400 |
| 963.3437 | 1.7/16" | 55.0 | 46.0 | 60.0 | 430 |
| 963.3438 | 1.1/2" | 55.0 | 46.0 | 60.0 | 490 |
| 963.3439 | 1.9/16" | 55.0 | 46.0 | 60.0 | 490 |
| 963.3440 | 1.5/8" | 64.0 | 50.0 | 65.0 | 560 |
| 963.3441 | 1.11/16" | 64.0 | 50.0 | 65.0 | 560 |
| 963.3442 | 1.3/4" | 68.0 | 50.0 | 65.0 | 600 |
| 963.3443 | 1.13/16" | 68.0 | 50.0 | 65.0 | 655 |
| 963.3444 | 1.7/8" | 68.0 | 50.0 | 65.0 | 655 |
| 963.3445 | 2" | 72.0 | 55.0 | 70.0 | 700 |



BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | A mm | D mm | L mm | |
|----------|------|------|------|-------|------|
| 962.3490 | 3/4" | 22.0 | 59.0 | 300.0 | 1.90 |

BERYLLIUMplus Ratchet handle with coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | A mm | D mm | L mm | |
|----------|------|------|------|-------|------|
| 962.3491 | 3/4" | 22.0 | 60.0 | 500.0 | 1.80 |

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | L mm | |
|----------|------|------|-----|
| 963.3457 | 3/4" | 51.5 | 135 |

BRONZEplus extension

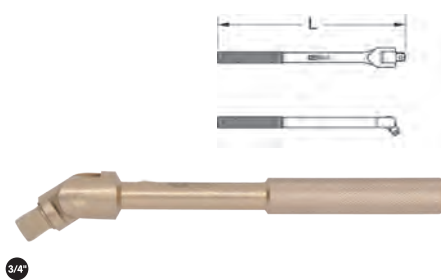
- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|------|-------|------|
| 963.3446 | 3/4" | 100.0 | 0.35 |
| 963.3447 | 3/4" | 250.0 | 0.70 |
| 963.3448 | 3/4" | 380.0 | 1.67 |
| 963.3449 | 3/4" | 430.0 | 1.50 |

BRONZEplus flexi drive handle

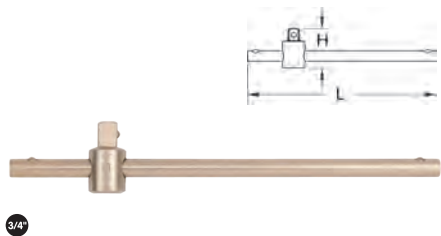
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|------|-------|------|
| 963.3450 | 3/4" | 380.0 | 0.76 |
| 963.3451 | 3/4" | 460.0 | 1.30 |
| 963.3452 | 3/4" | 550.0 | 1.95 |

BRONZEplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|------|------|-------|
| 963.3453 | 3/4" | 65.0 | 260.0 |
| 963.3454 | 3/4" | 65.0 | 500.0 |

BRONZEplus adaptor and reducing adaptor

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | ■ | L mm | kg |
|----------|------|------|------|-----|
| 963.3455 | 3/4" | 1" | 61.0 | 325 |
| 963.3456 | 3/4" | 1/2" | 57.0 | 165 |

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | ■ | L mm | kg |
|----------|------|------|-------|-----|
| 963.3458 | 3/4" | 3/4" | 85.0 | 550 |
| 963.3459 | 3/4" | 3/4" | 106.0 | 570 |

BRONZEplus L-Handle

- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|------|-------|-----|
| 963.3460 | 3/4" | 300.0 | 800 |

BRONZEplus Speed brace

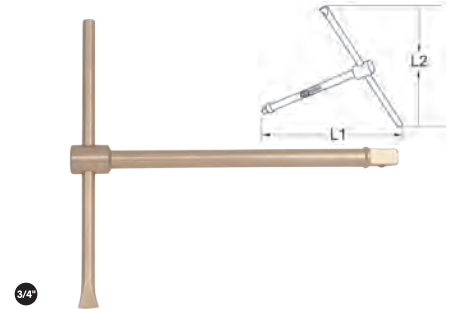
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|------|-------|------|
| 963.3461 | 3/4" | 380.0 | 1.25 |

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-----|
| 963.3462 | 3/4" | 260.0 | 250.0 | 850 |

BRONZEplus T-handle

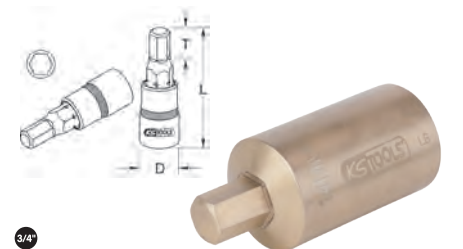
- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3122 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | B mm | I mm | L mm | kg |
|----------|------|------|-------|-------|------|
| 963.3463 | 3/4" | 20.0 | 300.0 | 560.0 | 1.20 |

BRONZEplus Bit socket for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | T mm | kg |
|----------|----|------|------|------|-----|
| 963.3465 | 14 | 36.0 | 80.0 | 18.0 | 350 |
| 963.3466 | 17 | 36.0 | 80.0 | 18.0 | 390 |
| 963.3467 | 19 | 36.0 | 80.0 | 18.0 | 435 |
| 963.3468 | 22 | 36.0 | 80.0 | 18.0 | 480 |
| 963.3469 | 24 | 36.0 | 80.0 | 18.0 | 520 |
| 963.3470 | 27 | 36.0 | 80.0 | 18.0 | 550 |
| 963.3471 | 30 | 36.0 | 80.0 | 18.0 | 570 |
| 963.3472 | 32 | 36.0 | 80.0 | 18.0 | 590 |
| 963.3473 | 36 | 36.0 | 80.0 | 18.0 | 620 |
| 963.3474 | 41 | 36.0 | 90.0 | 18.0 | 720 |
| 963.3475 | 46 | 36.0 | 90.0 | 18.0 | 820 |

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



3/4"

| | | | | kg |
|----------|--------|-------------------------------------|--|-------|
| 963.3464 | 12 pcs | BRONZEplus Socket set | | 12.70 |
| 7 x | | 36 - 38 - 41 - 46 - 50 - 55 - 60 mm | | |
| 1 x | | 380 mm | | |
| 1 x | | 300 mm | | |
| 1 x | | 500 mm | | |
| 1 x | | 380 mm | | |

1" DRIVE NON SPARKING SOCKETS

BRONZEplus socket

- 6 point
- In accordance to DIN 3124 / ISO 2725-1
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



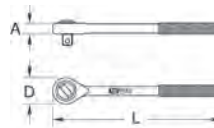
1"

| | mm | D1 mm | D2 mm | L mm | kg |
|----------|-----|-------|-------|------|------|
| 963.1005 | 32 | 50.0 | 50.0 | 60.0 | 0.51 |
| 963.1006 | 36 | 52.0 | 50.0 | 65.0 | 0.55 |
| 963.1007 | 41 | 63.0 | 50.0 | 70.0 | 0.73 |
| 963.1008 | 42 | 63.0 | 50.0 | 65.0 | 0.71 |
| 963.1009 | 46 | 67.0 | 52.0 | 65.0 | 0.71 |
| 963.1010 | 50 | 72.0 | 52.0 | 70.0 | 0.93 |
| 963.1011 | 55 | 78.0 | 60.0 | 75.0 | 1.13 |
| 963.1012 | 60 | 83.0 | 60.0 | 75.0 | 1.35 |
| 963.1013 | 65 | 90.0 | 65.0 | 75.0 | 1.50 |
| 963.1014 | 70 | 98.0 | 75.0 | 85.0 | 1.75 |
| 963.1015 | 75 | 104.0 | 75.0 | 85.0 | 2.30 |
| 963.1016 | 80 | 110.0 | 85.0 | 85.0 | 2.50 |
| 963.1017 | 85 | 116.0 | 85.0 | 90.0 | 2.80 |
| 963.1018 | 90 | 120.0 | 90.0 | 85.0 | 4.40 |
| 963.1019 | 95 | 130.0 | 95.0 | 85.0 | 4.50 |
| 963.1020 | 100 | 136.0 | 95.0 | 85.0 | 4.60 |

| | | D1 mm | D2 mm | L mm | kg |
|----------|----------|-------|-------|------|------|
| 963.1021 | 1.7/16" | 52.0 | 50.0 | 65.0 | 0.55 |
| 963.1022 | 1.1/2" | 54.0 | 50.0 | 65.0 | 0.68 |
| 963.1023 | 1.5/8" | 63.0 | 50.0 | 70.0 | 0.73 |
| 963.1024 | 1.11/16" | 65.0 | 50.0 | 65.0 | 0.71 |
| 963.1025 | 1.13/16" | 68.0 | 52.0 | 65.0 | 0.71 |
| 963.1026 | 1.7/8" | 69.0 | 52.0 | 65.0 | 0.73 |
| 963.1027 | 2" | 70.0 | 52.0 | 70.0 | 0.93 |
| 963.1028 | 2.1/16" | 73.0 | 60.0 | 70.0 | 0.95 |
| 963.1029 | 2.3/16" | 77.0 | 60.0 | 75.0 | 1.13 |
| 963.1030 | 2.3/8" | 82.0 | 65.0 | 75.0 | 1.13 |
| 963.1031 | 2.1/4" | 80.0 | 65.0 | 75.0 | 1.35 |
| 963.1032 | 2.7/16" | 83.0 | 65.0 | 75.0 | 1.40 |
| 963.1033 | 2.9/16" | 90.0 | 70.0 | 75.0 | 1.50 |
| 963.1034 | 2.5/8" | 91.0 | 70.0 | 75.0 | 1.55 |
| 963.1035 | 2.3/4" | 96.0 | 75.0 | 85.0 | 1.75 |
| 963.1036 | 2.13/16" | 98.0 | 75.0 | 85.0 | 1.75 |
| 963.1037 | 2.15/16" | 103.0 | 80.0 | 85.0 | 2.30 |
| 963.1038 | 3" | 104.0 | 80.0 | 85.0 | 2.35 |
| 963.1039 | 3.1/8" | 110.0 | 80.0 | 85.0 | 2.50 |
| 963.1040 | 3.3/8" | 116.0 | 85.0 | 90.0 | 2.80 |
| 963.1041 | 3.1/2" | 120.0 | 90.0 | 90.0 | 4.40 |
| 963.1042 | 3.3/4" | 130.0 | 95.0 | 90.0 | 4.50 |
| 963.1043 | 3.7/8" | 135.0 | 95.0 | 90.0 | 4.60 |
| 963.1044 | 4.1/4" | 113.0 | 85.0 | 90.0 | 5.00 |

BERYLLIUMplus reversible ratchet

- In accordance to DIN 3122 / 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Reversible
- Gearing with 45 teeth
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



1"

| | | A mm | D mm | L mm | kg |
|----------|----|------|------|-------|-----|
| 962.1090 | 1" | 30.0 | 72.0 | 550.0 | 340 |



BERYLLIUMplus Ratchet handle with coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



1"

| | | A mm | D mm | L mm | kg |
|----------|----|------|------|-------|------|
| 962.1091 | 1" | 23.0 | 72.0 | 550.0 | 3.50 |

BRONZEplus Coupler

- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



1"

| | | L mm | kg |
|----------|----|------|-----|
| 963.1051 | 1" | 68.0 | 325 |

BRONZEplus extension

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

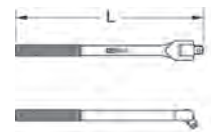


1"

| | | | |
|----------|----|-------|------|
| 963.1045 | 1" | 100.0 | 0.80 |
| 963.1046 | 1" | 250.0 | 1.40 |
| 963.1047 | 1" | 400.0 | 2.09 |

BRONZEplus flexi drive handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



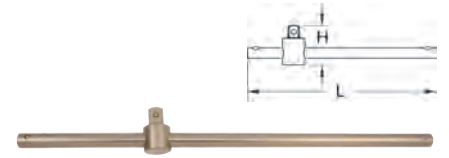
1"

| | | L mm | kg |
|----------|----|-------|------|
| 963.1048 | 1" | 380.0 | 1.20 |



BRONZEplus sliding T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | H mm | L mm | kg |
|----------|----|------|-------|------|
| 963.1049 | 1" | 76.0 | 700.0 | 3.99 |

BRONZEplus reducing adaptor

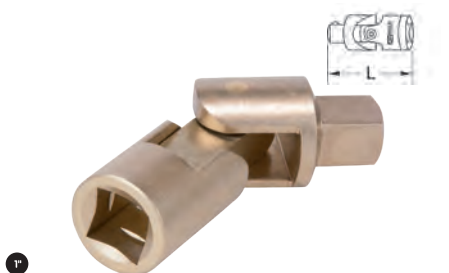
- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | □ | ■ | L mm | kg |
|----------|----|------|------|-----|
| 963.1050 | 1" | 3/4" | 75.0 | 540 |

BRONZEplus universal joint

- In accordance to DIN 3123 / ISO 3316
- Square drive in accordance to DIN 3120 / ISO 1174 with ball reception
- Internal square in accordance to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | □ | ■ | L mm | kg |
|----------|----|----|-------|------|
| 963.1052 | 1" | 1" | 141.0 | 1.45 |

BRONZEplus L-Handle

- In accordance to DIN ISO 2936
- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|----|-------|------|
| 963.1053 | 1" | 300.0 | 1.00 |

BRONZEplus Speed brace

- Square drive in accordance to DIN 3120 / ISO 1174 with ball lock
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | L mm | kg |
|----------|----|-------|------|
| 963.1054 | 1" | 380.0 | 1.40 |

BRONZEplus T-handle

- In accordance to DIN 3122 / ISO 3315
- Square drive in accordance to DIN 3122 / ISO 1174 with ball lock
- With flexible head
- For difficult to access areas
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | ■ | B mm | I mm | L mm | kg |
|----------|----|------|-------|-------|------|
| 963.1055 | 1" | 25.0 | 400.0 | 660.0 | 1.70 |



BRONZEplus Bit socket for hexagon screws

- Hexagon socket
- In accordance with DIN 7422
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | D mm | L mm | T mm | kg |
|----------|----|------|-------|------|------|
| 963.1056 | 17 | 47.0 | 90.0 | 23.0 | 0.58 |
| 963.1057 | 19 | 47.0 | 90.0 | 23.0 | 0.67 |
| 963.1058 | 22 | 47.0 | 90.0 | 23.0 | 0.71 |
| 963.1059 | 24 | 47.0 | 90.0 | 23.0 | 0.77 |
| 963.1060 | 27 | 47.0 | 90.0 | 23.0 | 0.86 |
| 963.1061 | 30 | 47.0 | 90.0 | 23.0 | 0.91 |
| 963.1062 | 32 | 47.0 | 90.0 | 23.0 | 0.95 |
| 963.1063 | 36 | 47.0 | 90.0 | 23.0 | 0.99 |
| 963.1064 | 41 | 47.0 | 100.0 | 23.0 | 1.20 |
| 963.1065 | 46 | 47.0 | 100.0 | 23.0 | 1.40 |

BRONZEplus Socket set

- 6 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In durable plastic storage case



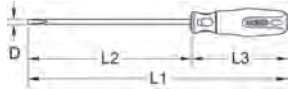
| | | kg |
|----------|---|-------|
| 963.1066 | 23 pcs BRONZEplus Socket set | 33.10 |
| 10 x | 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 mm | |
| 10 x | 1.1/2" - 1.5/8" - 1.7/8" - 2" - 2.1/16" - 2.1/4" - 2.3/8" - 2.9/16" - 2.3/4" - 3" | |
| 2 x | 250 - 400 mm | |
| 1 x | 550 mm | |

| | | kg |
|----------|--|-------|
| 963.1067 | 13 pcs BRONZEplus Socket set | 21.10 |
| 10 x | 36 - 41 - 46 - 50 - 55 - 60 - 65 - 70 - 75 - 80 mm | |
| 2 x | 250 - 400 mm | |
| 1 x | 550 mm | |

NON SPARKING SCREWDRIVERS

BERYLLIUM^{plus} screwdriver for slotted screws

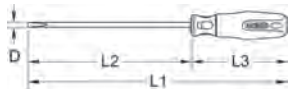
- Slotted
- In accordance to DIN ISO 2380-2 / 2380-1 Form A
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | L3 mm | ⚖️ |
|----------|------|-------|-------|-------|-----|
| 962.0911 | 3,0 | 165,0 | 75,0 | 90,0 | 30 |
| 962.0912 | 4,5 | 200,0 | 100,0 | 100,0 | 55 |
| 962.0913 | 4,5 | 250,0 | 150,0 | 100,0 | 60 |
| 962.0914 | 6,0 | 200,0 | 100,0 | 100,0 | 80 |
| 962.0915 | 6,0 | 250,0 | 150,0 | 100,0 | 85 |
| 962.0916 | 8,0 | 260,0 | 150,0 | 110,0 | 145 |
| 962.0917 | 10,0 | 320,0 | 200,0 | 120,0 | 185 |
| 962.0918 | 10,0 | 420,0 | 300,0 | 120,0 | 230 |

BERYLLIUM^{plus} screwdriver for slotted screws, parallel blade

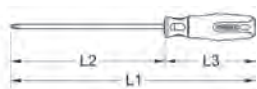
- With parallel blade
- Slotted
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | L3 mm | ⚖️ |
|----------|------|-------|-------|-------|-----|
| 962.0920 | 3,0 | 165,0 | 75,0 | 90,0 | 25 |
| 962.0921 | 4,0 | 240,0 | 150,0 | 100,0 | 55 |
| 962.0922 | 5,0 | 250,0 | 150,0 | 100,0 | 75 |
| 962.0923 | 6,0 | 300,0 | 200,0 | 100,0 | 110 |
| 962.0924 | 6,5 | 400,0 | 300,0 | 100,0 | 150 |

BERYLLIUM^{plus} screwdriver for Phillips screws PH

- PH
- In accordance to DIN 5262 / ISO 8764-1
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | L1 mm | L2 mm | L3 mm | ⚖️ |
|----------|------|-------|-------|-------|-----|
| 962.0900 | PH 0 | 150,0 | 60,0 | 90,0 | 35 |
| 962.0901 | PH 1 | 170,0 | 80,0 | 90,0 | 60 |
| 962.0902 | PH 2 | 200,0 | 100,0 | 100,0 | 90 |
| 962.0903 | PH 3 | 250,0 | 150,0 | 100,0 | 165 |
| 962.0904 | PH 4 | 310,0 | 200,0 | 110,0 | 270 |

BERYLLIUM^{plus} screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | | ⚖️ |
|----------|-------|---|-----|
| 962.0805 | 4 pcs | BERYLLIUM ^{plus} screwdriver set | 315 |
| 4 x | | 3 (75 mm) - 4,5 (100 mm) - 6 - 8 (150 mm) | |

BERYLLIUM^{plus} screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | | ⚖️ |
|----------|-------|---|-----|
| 962.0808 | 4 pcs | BERYLLIUM ^{plus} screwdriver set | 585 |
| 4 x | | PH1 - PH2 - PH3 - PH4 | |

BERYLLIUM^{plus} screwdriver set

- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | | ⚖️ |
|----------|-------|---|-----|
| 962.0806 | 6 pcs | BERYLLIUM ^{plus} screwdriver set | 515 |
| 4 x | | 4,5 - 6 (100 mm) - 6 - 8 (150 mm) | |
| 2 x | | PH1 - PH2 | |

BERYLLIUM^{plus} screwdriver set

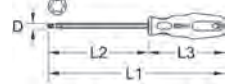
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | | ⚖️ |
|----------|--------|---|------|
| 962.0807 | 10 pcs | BERYLLIUM ^{plus} screwdriver set | 1.20 |
| 6 x | | 4,5 - 6 (100 mm) - 4,5 - 6 - 8 (150 mm) - 10 (200 mm) | |
| 4 x | | PH1 - PH2 - PH3 - PH4 | |

BERYLLIUM^{plus} screwdriver for TX screws

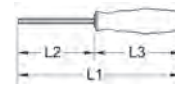
- TX
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | L1 mm | L2 mm | L3 mm | ⚖️ |
|----------|-----|-------|-------|-------|-----|
| 962.0930 | T5 | 160,0 | 70,0 | 90,0 | 30 |
| 962.0931 | T6 | 160,0 | 70,0 | 90,0 | 32 |
| 962.0932 | T7 | 160,0 | 70,0 | 90,0 | 32 |
| 962.0933 | T8 | 160,0 | 70,0 | 90,0 | 32 |
| 962.0934 | T9 | 160,0 | 70,0 | 90,0 | 32 |
| 962.0935 | T10 | 170,0 | 80,0 | 90,0 | 41 |
| 962.0936 | T15 | 170,0 | 80,0 | 90,0 | 45 |
| 962.0937 | T20 | 190,0 | 90,0 | 100,0 | 48 |
| 962.0938 | T25 | 190,0 | 90,0 | 100,0 | 52 |
| 962.0939 | T27 | 210,0 | 110,0 | 100,0 | 78 |
| 962.0940 | T30 | 210,0 | 110,0 | 100,0 | 84 |
| 962.0941 | T40 | 220,0 | 120,0 | 100,0 | 115 |
| 962.0942 | T45 | 230,0 | 120,0 | 110,0 | 136 |
| 962.0943 | T50 | 230,0 | 120,0 | 110,0 | 150 |

BRONZE^{plus} screwdriver for hexagon screws

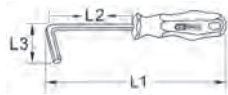
- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



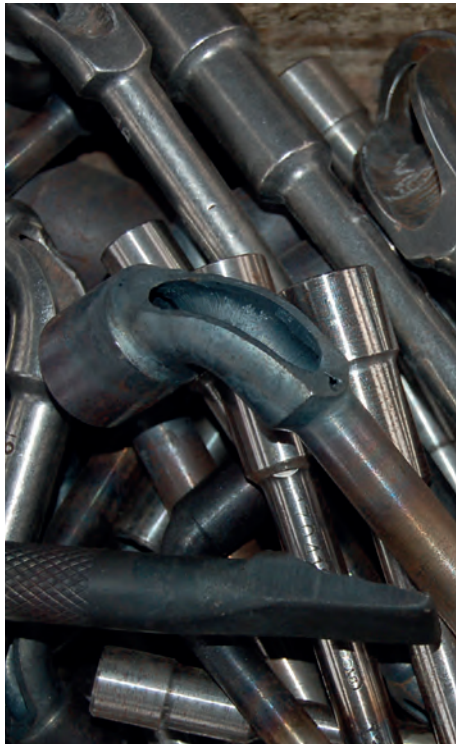
| | | mm | L1 mm | L2 mm | L3 mm | ⚖️ |
|----------|--|------|-------|-------|-------|-----|
| 963.1068 | | 3,0 | 190,0 | 100,0 | 90,0 | 35 |
| 963.1069 | | 4,0 | 190,0 | 100,0 | 90,0 | 50 |
| 963.1070 | | 5,0 | 200,0 | 100,0 | 100,0 | 60 |
| 963.1071 | | 6,0 | 225,0 | 125,0 | 100,0 | 90 |
| 963.1072 | | 8,0 | 260,0 | 150,0 | 110,0 | 140 |
| 963.1073 | | 10,0 | 260,0 | 150,0 | 110,0 | 210 |
| 963.1074 | | 12,0 | 280,0 | 150,0 | 130,0 | 280 |

BRONZEplus screwdriver for hexagon screws, angled

- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

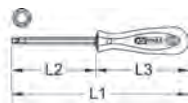


| | mm | L1 mm | L2 mm | L3 mm | Weight |
|----------|------|-------|-------|-------|--------|
| 963.1505 | 3,0 | 153,0 | 75,0 | 20,0 | 25 |
| 963.1506 | 4,0 | 153,0 | 75,0 | 25,0 | 40 |
| 963.1507 | 5,0 | 180,0 | 80,0 | 28,0 | 50 |
| 963.1508 | 6,0 | 180,0 | 80,0 | 32,0 | 75 |
| 963.1509 | 8,0 | 240,0 | 120,0 | 36,0 | 140 |
| 963.1510 | 10,0 | 240,0 | 120,0 | 40,0 | 220 |
| 963.1511 | 12,0 | 240,0 | 120,0 | 45,0 | 290 |



BERYLLIUMplus screwdriver for hexagon screws with ball end

- 6 point
- With hanging hole
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

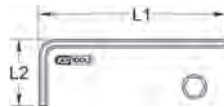


| | mm | L1 mm | L2 mm | L3 mm | Weight |
|----------|------|-------|-------|-------|--------|
| 962.0950 | 3,0 | 190,0 | 100,0 | 90,0 | 35 |
| 962.0951 | 4,0 | 190,0 | 100,0 | 90,0 | 50 |
| 962.0952 | 5,0 | 200,0 | 100,0 | 100,0 | 60 |
| 962.0953 | 6,0 | 225,0 | 125,0 | 100,0 | 90 |
| 962.0954 | 8,0 | 260,0 | 150,0 | 110,0 | 140 |
| 962.0955 | 10,0 | 260,0 | 150,0 | 110,0 | 210 |
| 962.0956 | 12,0 | 280,0 | 150,0 | 130,0 | 280 |

NON SPARKING OFFSET SCREWDRIVERS

BRONZEplus key wrench for hexagon socket screws, short

- 6 point
- Short version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

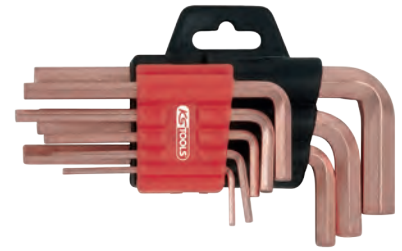


| | mm | mm | L1 mm | L2 mm | Weight |
|-----------|------|---------|-------|-------|--------|
| 962.04015 | 1,5 | | 55,0 | 13,0 | 0,01 |
| 962.0402 | 2,0 | | 55,0 | 13,0 | 0,01 |
| 962.04025 | 2,5 | | 55,0 | 13,0 | 0,01 |
| 963.1519 | 3,0 | | 60,0 | 25,0 | 0,01 |
| 963.1520 | 4,0 | | 70,0 | 30,0 | 0,01 |
| 963.1521 | 5,0 | | 80,0 | 32,0 | 0,02 |
| 963.1522 | 6,0 | | 90,0 | 37,0 | 0,03 |
| 963.1523 | 7,0 | | 95,0 | 43,0 | 0,05 |
| 963.1524 | 8,0 | | 100,0 | 44,0 | 0,07 |
| 963.1525 | 9,0 | | 105,0 | 44,0 | 0,09 |
| 963.1526 | 10,0 | | 115,0 | 45,0 | 0,10 |
| 963.1527 | 11,0 | | 119,0 | 48,0 | 0,13 |
| 963.1528 | 12,0 | | 125,0 | 52,0 | 0,17 |
| 963.1529 | 13,0 | | 132,0 | 54,0 | 0,20 |
| 963.1530 | 14,0 | | 140,0 | 58,0 | 0,25 |
| 963.1531 | 17,0 | | 160,0 | 65,0 | 0,41 |
| 963.1532 | 18,0 | | 170,0 | 69,0 | 0,50 |
| 963.1533 | 19,0 | | 180,0 | 72,0 | 0,57 |
| 963.1534 | 22,0 | | 200,0 | 77,0 | 0,95 |
| 963.1535 | 24,0 | | 224,0 | 82,0 | 1,25 |
| 963.1536 | 27,0 | | 250,0 | 93,0 | 1,80 |
| 963.1537 | 30,0 | | 280,0 | 105,0 | 2,50 |
| 963.1538 | 32,0 | | 315,0 | 116,0 | 3,10 |
| 963.1539 | 36,0 | | 355,0 | 128,0 | 4,50 |
| 963.1540 | 41,0 | | 400,0 | 140,0 | 5,30 |
| 962.0420 | | 3/64" | 55,0 | 13,0 | 0,01 |
| 962.0421 | | 1/16" | 55,0 | 13,0 | 0,01 |
| 962.0422 | | 5/64" | 55,0 | 13,0 | 0,01 |
| 962.0423 | | 3/32" | 55,0 | 13,0 | 0,01 |
| 962.0424 | | 1/8" | 60,0 | 24,0 | 0,01 |
| 962.0425 | | 5/32" | 70,0 | 30,0 | 0,01 |
| 963.1541 | | 3/16" | 80,0 | 31,0 | 0,02 |
| 963.1542 | | 7/32" | 80,0 | 37,0 | 0,02 |
| 963.1543 | | 1/4" | 90,0 | 37,0 | 0,03 |
| 963.1544 | | 5/16" | 100,0 | 44,0 | 0,07 |
| 963.1545 | | 3/8" | 120,0 | 45,0 | 0,10 |
| 963.1546 | | 7/16" | 119,0 | 48,0 | 0,13 |
| 963.1547 | | 1/2" | 125,0 | 55,0 | 0,17 |
| 963.1548 | | 9/16" | 140,0 | 58,0 | 0,25 |
| 963.1549 | | 5/8" | 140,0 | 63,0 | 0,27 |
| 963.1550 | | 11/16" | 160,0 | 65,0 | 0,41 |
| 963.1551 | | 3/4" | 180,0 | 73,0 | 0,57 |
| 963.1552 | | 7/8" | 200,0 | 77,0 | 0,95 |
| 963.1553 | | 1" | 224,0 | 85,0 | 1,26 |
| 963.1554 | | 1.1/16" | 216,0 | 93,0 | 3,08 |
| 963.1555 | | 1.1/8" | 230,0 | 95,0 | 3,30 |
| 963.1556 | | 1.1/4" | 230,0 | 116,0 | 3,30 |
| 963.1557 | | 1.5/16" | 235,0 | 116,0 | 3,52 |
| 963.1558 | | 1.3/8" | 235,0 | 128,0 | 3,52 |
| 963.1559 | | 1.7/16" | 241,0 | 128,0 | 3,74 |
| 963.1560 | | 1.1/2" | 241,0 | 128,0 | 3,74 |
| 963.1561 | | 1.5/8" | 241,0 | 140,0 | 3,74 |



BRONZEplus Hexagon key wrench set in a folding holder, short

- 6 point
- Short version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Weight | Weight |
|----------|--------|--------|
| 963.1512 | 8 pcs | 245 |
| 963.1513 | 9 pcs | 205 |
| 963.1514 | 10 pcs | 178 |

BRONZEplus key wrench for hexagon socket screws, extra long

- 6 point
- Extra long version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | Weight |
|----------|------|-------|-------|--------|
| 963.1562 | 3,0 | 126,0 | 25,0 | 6 |
| 963.1563 | 4,0 | 142,0 | 30,0 | 12 |
| 963.1564 | 5,0 | 160,0 | 32,0 | 18 |
| 963.1565 | 6,0 | 180,0 | 37,0 | 30 |
| 963.1566 | 8,0 | 200,0 | 44,0 | 70 |
| 963.1567 | 10,0 | 205,0 | 45,0 | 120 |
| 963.1568 | 12,0 | 250,0 | 52,0 | 190 |
| 963.1569 | 14,0 | 280,0 | 58,0 | 300 |
| 963.1570 | 17,0 | 320,0 | 65,0 | 380 |
| 963.1571 | 19,0 | 360,0 | 72,0 | 490 |

BRONZEplus Hexagon key wrench set in a folding holder, extra long

- 6 point
- Long version
- In accordance to DIN ISO 2936
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Weight | Weight |
|----------|--------|--------|
| 963.1515 | 8 pcs | 400 |
| 963.1516 | 9 pcs | 464 |

BERYLLIUMplus key wrench for hexagon socket screws with ball end, short

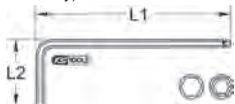
- 6 point
- Short version
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-----|
| 962.0440 | 1,5 | 45,0 | 13,0 | 4 |
| 962.0441 | 2,0 | 50,0 | 16,0 | 3 |
| 962.0442 | 2,5 | 55,0 | 18,0 | 5 |
| 962.0443 | 3,0 | 63,0 | 20,0 | 7 |
| 962.0444 | 4,0 | 70,0 | 25,0 | 12 |
| 962.0445 | 5,0 | 80,0 | 28,0 | 20 |
| 962.0446 | 6,0 | 90,0 | 32,0 | 32 |
| 962.0447 | 7,0 | 95,0 | 34,0 | 42 |
| 962.0448 | 8,0 | 100,0 | 36,0 | 60 |
| 962.0449 | 10,0 | 115,0 | 40,0 | 106 |
| 962.0450 | 12,0 | 130,0 | 45,0 | 205 |
| 962.0451 | 14,0 | 140,0 | 48,0 | 255 |

BERYLLIUMplus key wrench for hexagon socket screws with ball end, extra long

- 6 point
- Extra long version
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-----|
| 962.0460 | 3,0 | 126,0 | 20,0 | 8 |
| 962.0461 | 4,0 | 140,0 | 25,0 | 18 |
| 962.0462 | 5,0 | 160,0 | 28,0 | 31 |
| 962.0463 | 6,0 | 180,0 | 32,0 | 51 |
| 962.0464 | 7,0 | 190,0 | 34,0 | 75 |
| 962.0465 | 8,0 | 200,0 | 36,0 | 101 |
| 962.0466 | 10,0 | 224,0 | 40,0 | 176 |
| 962.0467 | 12,0 | 250,0 | 45,0 | 292 |
| 962.0468 | 14,0 | 290,0 | 48,0 | 370 |

BRONZEplus Hexagon key wrench set in a folding holder, with ball end, long

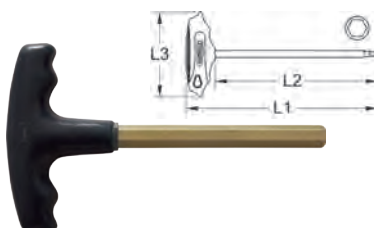
- 6 point
- Long execution
- In accordance to DIN ISO 2936
- With ball head on the long end
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | kg |
|----------|---|-----|
| 963.1517 | 8 pcs 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm | 250 |
| 963.1518 | 9 pcs 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm | 260 |

BRONZEplus T-handle hexagon key wrench

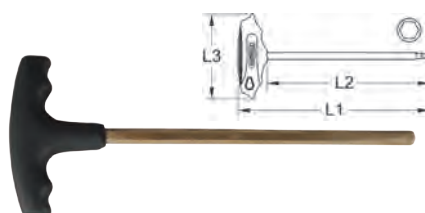
- 6 point
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|-----|
| 963.1572 | 3,0 | 143,0 | 100,0 | 75,0 | 31 |
| 963.1573 | 4,0 | 143,0 | 100,0 | 75,0 | 38 |
| 963.1574 | 5,0 | 155,0 | 100,0 | 91,0 | 61 |
| 963.1575 | 6,0 | 155,0 | 100,0 | 91,0 | 71 |
| 963.1576 | 8,0 | 155,0 | 100,0 | 91,0 | 97 |
| 963.1577 | 10,0 | 155,0 | 100,0 | 91,0 | 157 |
| 963.1578 | 12,0 | 155,0 | 100,0 | 91,0 | 198 |
| 963.1579 | 14,0 | 155,0 | 100,0 | 91,0 | 246 |

BRONZEplus T-handle hexagon key wrench, long

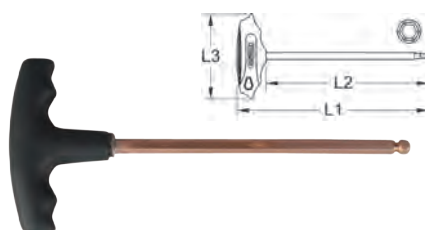
- 6 point
- Extra long execution
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|-----|
| 963.1580 | 3,0 | 195,0 | 150,0 | 75,0 | 34 |
| 963.1581 | 4,0 | 195,0 | 150,0 | 75,0 | 43 |
| 963.1582 | 5,0 | 205,0 | 150,0 | 91,0 | 69 |
| 963.1583 | 6,0 | 205,0 | 150,0 | 91,0 | 83 |
| 963.1584 | 8,0 | 205,0 | 150,0 | 91,0 | 118 |
| 963.1585 | 10,0 | 205,0 | 150,0 | 91,0 | 191 |
| 963.1586 | 12,0 | 205,0 | 150,0 | 91,0 | 247 |
| 963.1587 | 14,0 | 205,0 | 150,0 | 91,0 | 312 |

BERYLLIUMplus T-handle hexagon key wrench with ball end

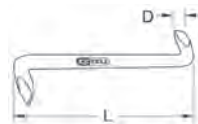
- 6 point
- One component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|-----|
| 962.0960 | 3,0 | 145,0 | 100,0 | 75,0 | 31 |
| 962.0961 | 4,0 | 145,0 | 100,0 | 75,0 | 38 |
| 962.0962 | 5,0 | 205,0 | 150,0 | 91,0 | 69 |
| 962.0963 | 6,0 | 205,0 | 150,0 | 91,0 | 83 |
| 962.0964 | 8,0 | 205,0 | 150,0 | 91,0 | 118 |
| 962.0965 | 10,0 | 255,0 | 200,0 | 91,0 | 225 |
| 962.0966 | 12,0 | 255,0 | 200,0 | 91,0 | 295 |
| 962.0967 | 14,0 | 255,0 | 200,0 | 91,0 | 380 |

BRONZEplus Key wrench

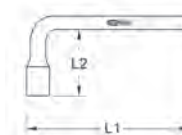
- Slotted
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | L mm | kg |
|----------|------|-------|-----|
| 963.1588 | 4,0 | 125,0 | 25 |
| 963.1589 | 6,0 | 130,0 | 35 |
| 963.1590 | 10,0 | 140,0 | 90 |
| 963.1591 | 13,0 | 190,0 | 240 |

BRONZEplus offset screwdriver for square head screws

- 4 point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



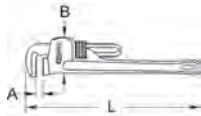
| | mm | L1 mm | L2 mm | kg |
|----------|----|-------|-------|------|
| 963.1592 | 10 | 200,0 | 37,0 | 0.20 |
| 963.1593 | 11 | 200,0 | 37,0 | 0.20 |
| 963.1594 | 12 | 200,0 | 42,0 | 0.20 |
| 963.1595 | 13 | 200,0 | 45,0 | 0.20 |
| 963.1596 | 14 | 220,0 | 45,0 | 0.40 |
| 963.1597 | 15 | 220,0 | 48,0 | 0.40 |
| 963.1598 | 16 | 220,0 | 48,0 | 0.40 |
| 963.1599 | 17 | 250,0 | 51,0 | 0.60 |
| 963.1600 | 18 | 250,0 | 53,0 | 0.60 |
| 963.1601 | 19 | 250,0 | 55,0 | 0.60 |
| 963.1602 | 20 | 300,0 | 57,0 | 1.00 |
| 963.1603 | 21 | 300,0 | 57,0 | 1.00 |
| 963.1604 | 22 | 300,0 | 59,0 | 1.00 |
| 963.1605 | 24 | 360,0 | 63,0 | 1.60 |
| 963.1606 | 25 | 360,0 | 63,0 | 1.60 |
| 963.1607 | 27 | 360,0 | 69,0 | 1.60 |
| 963.1608 | 28 | 440,0 | 69,0 | 3.20 |
| 963.1609 | 30 | 440,0 | 75,0 | 3.20 |
| 963.1610 | 32 | 440,0 | 81,0 | 3.20 |



NON SPARKING PLIERS

BRONZEplus one handed pipe wrench

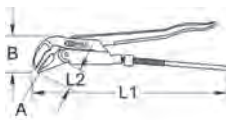
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | A mm | B mm | L mm | kg |
|----------|-------|------|-------|------|
| 963.1705 | 38.0 | 50.0 | 240.0 | 0.42 |
| 963.1706 | 45.0 | 50.0 | 240.0 | 0.47 |
| 963.1707 | 48.0 | 53.0 | 290.0 | 0.78 |
| 963.1708 | 58.0 | 64.0 | 350.0 | 1.00 |
| 963.1709 | 65.0 | 64.0 | 350.0 | 1.20 |
| 963.1710 | 70.0 | 75.0 | 425.0 | 1.60 |
| 963.1711 | 80.0 | 80.0 | 500.0 | 2.20 |
| 963.1712 | 105.0 | 90.0 | 575.0 | 3.70 |

BERYLLIUMplus swedish pipe wrench

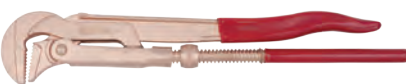
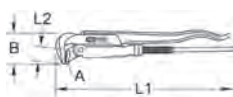
- In accordance to DIN 5234
- 45° angled
- S-shaped jaw
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A | B mm | L1 mm | L2 mm | kg |
|----------|--------|-------|-------|-------|------|
| 962.4005 | 1" | 60.0 | 200.0 | 38.0 | 0.82 |
| 962.4006 | 1.1/2" | 70.0 | 300.0 | 50.0 | 1.57 |
| 962.4007 | 2" | 72.0 | 350.0 | 65.0 | 3.20 |
| 962.4008 | 3" | 100.0 | 600.0 | 75.0 | 4.10 |
| 962.4009 | 4" | 122.0 | 900.0 | 100.0 | 6.20 |

BERYLLIUMplus adjustable pipe wrench

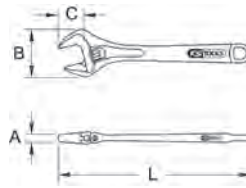
- In accordance to DIN 5234
- 90° angled
- S-shaped jaw
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A | B mm | L1 mm | L2 mm | kg |
|----------|--------|------|-------|-------|------|
| 962.4015 | 1.1/2" | 80.0 | 435.0 | 50.0 | 1.57 |
| 962.4016 | 2" | 95.0 | 540.0 | 65.0 | 3.20 |

BERYLLIUMplus adjustable spanner

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | mm | A mm | B mm | C mm | L mm | kg |
|----------|----|------|-------|------|-------|------|
| 962.1108 | 18 | 9.0 | 45.0 | 18.0 | 150.0 | 0.10 |
| 962.1109 | 26 | 10.0 | 55.0 | 20.0 | 200.0 | 0.20 |
| 962.1110 | 30 | 11.0 | 65.0 | 30.0 | 250.0 | 0.40 |
| 962.1111 | 36 | 12.0 | 83.0 | 34.0 | 300.0 | 0.70 |
| 962.1112 | 46 | 15.0 | 105.0 | 47.0 | 380.0 | 1.40 |
| 962.1113 | 53 | 17.0 | 123.0 | 51.0 | 450.0 | 2.70 |
| 962.1114 | 67 | 19.0 | 145.0 | 62.0 | 600.0 | 5.10 |

BRONZEplus chain pipe wrench

- Function is similar to a ratchet
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | kg |
|----------|------|--------|------|
| 963.1713 | 50 | 600.0 | 1.70 |
| 963.1714 | 100 | 600.0 | 2.50 |
| 963.1715 | 150 | 600.0 | 3.00 |
| 963.1716 | 450 | 1600.0 | 8.00 |

BRONZEplus chain pipe wrench

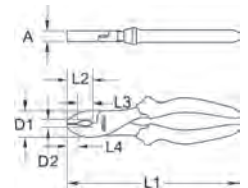
- Function is similar to a ratchet
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | kg |
|----------|------|--------|-------|
| 963.1717 | 38 | 510.0 | 2.65 |
| 963.1718 | 65 | 685.0 | 4.50 |
| 963.1719 | 100 | 915.0 | 11.50 |
| 963.1720 | 300 | 1830.0 | 30.30 |

BERYLLIUMplus pipe wrench

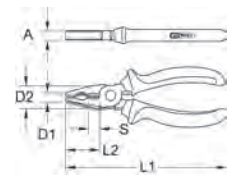
- With PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D1 mm | D2 mm | L1 mm | L2 mm | L3 mm | L4 mm | Ø |
|----------|------|-------|-------|-------|-------|-------|-------|-----|
| 962.0607 | 12.0 | 30.0 | 15.0 | 210.0 | 40.0 | 25.0 | 15.0 | 370 |

BERYLLIUMplus combination pliers

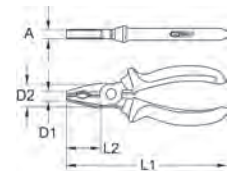
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



| | A mm | D1 mm | D2 mm | L1 mm | L2 mm | S mm | kg |
|----------|------|-------|-------|-------|-------|------|-----|
| 962.0620 | 10.0 | 7.0 | 24.0 | 160.0 | 33.0 | 12.0 | 350 |
| 962.0621 | 14.0 | 9.0 | 29.0 | 200.0 | 38.0 | 16.0 | 425 |

BERYLLIUMplus combination pliers, adjustable

- With two component handle
- Adjustable
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

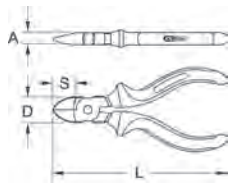


| | A mm | D1 mm | D2 mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-------|-------|-----|
| 962.0623 | 14.0 | 9.0 | 29.0 | 200.0 | 38.0 | 340 |



BERYLLIUMplus side cutters

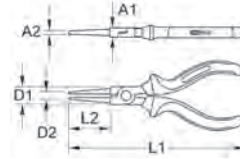
- In accordance to DIN ISO 5749
- With two component handle
- For different wire types
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D mm | L mm | S mm | g |
|----------|---------|---------|---------|---------|-----|
| 962.0616 | 10.0 | 23.0 | 165.0 | 20.0 | 200 |

BERYLLIUMplus round nosed pliers

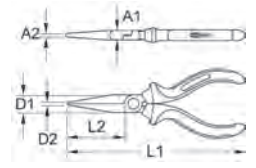
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- Substantial through joint
- With two component handle



| | A1 mm | A2 mm | D1 mm | D2 mm | L1 mm | L2 mm | g |
|----------|----------|----------|----------|----------|----------|----------|-----|
| 962.0625 | 3.0 | 10.0 | 20.0 | 3.0 | 160.0 | 36.0 | 90 |
| 962.0626 | 5.0 | 12.0 | 25.0 | 4.0 | 200.0 | 54.0 | 160 |

BERYLLIUMplus flat pliers

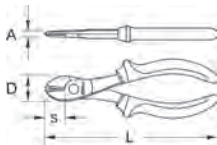
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



| | A1 mm | A2 mm | D1 mm | D2 mm | L1 mm | L2 mm | g |
|----------|----------|----------|----------|----------|----------|----------|-----|
| 962.0630 | 9.0 | 2.5 | 18.0 | 3.2 | 160.0 | 48.0 | 50 |
| 962.0631 | 11.0 | 4.0 | 21.0 | 5.0 | 200.0 | 85.0 | 150 |

BERYLLIUMplus high leverage side cutter

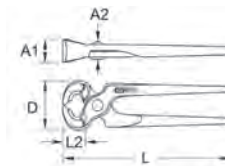
- In accordance to DIN ISO 5749
- With two component handle
- For different wire types
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D mm | L mm | S mm | g |
|----------|---------|---------|---------|---------|-----|
| 962.0617 | 14.0 | 30.0 | 190.0 | 24.0 | 290 |

BERYLLIUMplus pincers

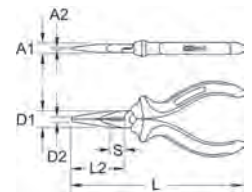
- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A1 mm | A2 mm | D mm | L1 mm | L2 mm | g |
|----------|----------|----------|---------|----------|----------|-----|
| 962.0640 | 16.0 | 14.0 | 43.0 | 175.0 | 19.0 | 430 |
| 962.0641 | 20.0 | 18.0 | 53.0 | 200.0 | 23.0 | 520 |

BERYLLIUMplus telephone pliers

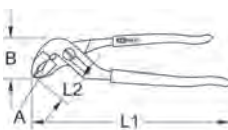
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)
- With two component handle



| | A1 mm | A2 mm | D1 mm | D2 mm | L1 mm | L2 mm | S mm | g |
|----------|----------|----------|----------|----------|----------|----------|---------|-----|
| 962.0610 | 11.0 | 3.0 | 22.0 | 4.0 | 180.0 | 60.0 | 10.0 | 300 |

BERYLLIUMplus waterpump pliers

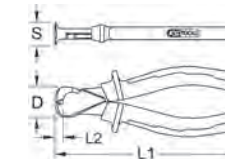
- In accordance to DIN ISO 8976
- With dipped covered handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | B mm | L1 mm | L2 mm | g |
|----------|---------|---------|----------|----------|-----|
| 962.0605 | 30.0 | 53.0 | 250.0 | 33.0 | 350 |

BERYLLIUMplus side cutter

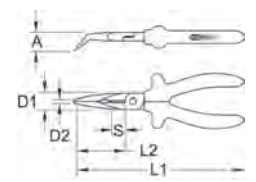
- Strong version
- PVC dipped handle
- Non-sparking
- Anti-magnetic
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | S mm | g |
|----------|---------|----------|----------|---------|-----|
| 962.0615 | 30.0 | 175.0 | 9.0 | 28 | 260 |

BERYLLIUMplus telephone pliers, offset

- 45° angled tips
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)

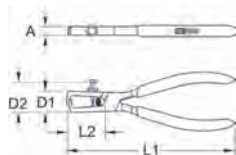


| | A mm | D1 mm | D2 mm | L1 mm | L2 mm | S mm | g |
|----------|---------|----------|----------|----------|----------|---------|-----|
| 962.0612 | 9.0 | 20.0 | 4.0 | 180.0 | 50.0 | 9.0 | 245 |



BERYLLIUMplus wire stripper

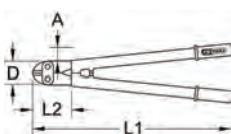
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D1 mm | D2 mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-------|-------|-----|
| 962.0635 | 10.0 | 25.0 | 28.0 | 170.0 | 40.0 | 260 |

BERYLLIUMplus Bolt cutters

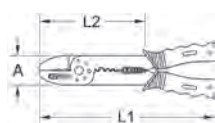
- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 962.0619 | 62.0 | 78.0 | 620.0 | 140.0 | 3.40 |

BERYLLIUMplus Crimping pliers

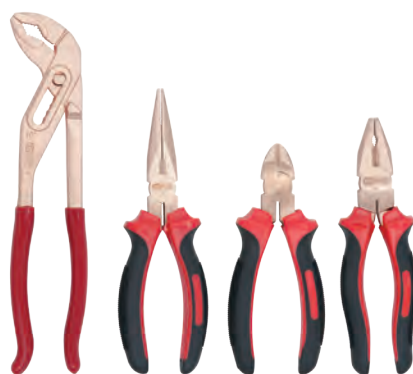
- PVC dipped handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | A mm | kg |
|----------|-------|-------|------|-----|
| 962.0636 | 200.0 | 120.0 | 40.0 | 120 |

BERYLLIUMplus plier set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



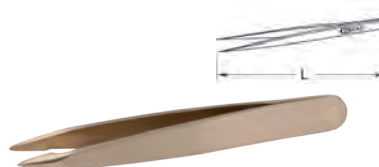
| | | | kg |
|----------|-------|-------------------------|------|
| 962.0650 | 4 pcs | BERYLLIUMplus plier set | 1.50 |
| 1 x | | 200 mm | |
| 1 x | | 165 mm | |
| 1 x | | 180 mm | |
| 1 x | | 250 mm | |



NON SPARKING TWEEZERS

BRONZEplus tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | kg |
|----------|-------|----|
| 963.5604 | 100.0 | 15 |

BRONZEplus neat tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | kg |
|----------|-------|----|
| 963.5605 | 150.0 | 30 |

BRONZEplus flat nose tweezers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | kg |
|----------|-------|----|
| 963.5606 | 100.0 | 30 |

NON SPARKING DRILLS

BERYLLIUMplus twist drill

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | Content | kg |
|----------|------|-------|-------|---------|-----|
| 962.9606 | 6.0 | 100.0 | 60.0 | 1 | 20 |
| 962.9607 | 7.0 | 120.0 | 70.0 | 1 | 30 |
| 962.9608 | 8.0 | 140.0 | 80.0 | 1 | 50 |
| 962.9609 | 9.0 | 160.0 | 100.0 | 1 | 75 |
| 962.9610 | 10.0 | 180.0 | 120.0 | 1 | 100 |
| 962.9611 | 11.0 | 200.0 | 130.0 | 1 | 120 |
| 962.9612 | 12.0 | 220.0 | 150.0 | 1 | 170 |
| 962.9613 | 13.0 | 240.0 | 160.0 | 1 | 220 |
| 962.9614 | 14.0 | 260.0 | 180.0 | 1 | 280 |
| 962.9615 | 15.0 | 280.0 | 200.0 | 1 | 360 |
| 962.9616 | 16.0 | 300.0 | 220.0 | 1 | 440 |
| 962.9617 | 17.0 | 300.0 | 220.0 | 1 | 500 |
| 962.9618 | 18.0 | 320.0 | 230.0 | 1 | 600 |
| 962.9619 | 19.0 | 320.0 | 230.0 | 1 | 700 |
| 962.9620 | 20.0 | 330.0 | 240.0 | 1 | 800 |

BERYLLIUMplus twist drill set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | | | kg |
|----------|--------|--|------|
| 962.9630 | 15 pcs | 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20mm | 4.00 |

NON SPARKING SAWS

BRONZEplus hack saw frame

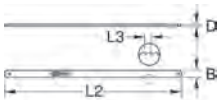
- For saw blade length 300 mm
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | H mm | g |
|----------|---------|---------|------|
| 963.5108 | 300 | 200 | 0.90 |

BERYLLIUMplus hack saw blade for hack saw frame

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L2 mm | L3 mm | B mm | D mm | g |
|----------|----------|----------|---------|---------|----|
| 962.9034 | 300.0 | 1,0-1,3 | 12.0 | 0,6 | 30 |

BERYLLIUMplus hand saw

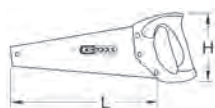
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | H mm | g |
|----------|---------|---------|-----|
| 962.9035 | 370.0 | 90.0 | 500 |

BERYLLIUMplus hand saw, heavy duty

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | H mm | g |
|----------|---------|---------|-----|
| 962.9036 | 700.0 | 120.0 | 770 |

NON SPARKING WIRE BRUSHES

BRONZEplus tin bronze wire brush, curled

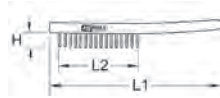
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | g |
|----------|---------|---------|-----|
| 963.9580 | 180.0 | 70.0 | 300 |

BRONZEplus tin bronze wire brush, curled

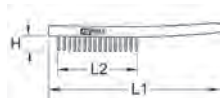
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | rows | H mm | L1 mm | L2 mm | g |
|----------|------|---------|----------|----------|-----|
| 963.9581 | 3 | 30.0 | 350.0 | 120.0 | 190 |
| 963.9582 | 4 | 30.0 | 350.0 | 120.0 | 210 |
| 963.9583 | 5 | 30.0 | 350.0 | 120.0 | 230 |

BRONZEplus tin bronze wire handbrush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | rows | H mm | L1 mm | L2 mm | g |
|----------|------|---------|----------|----------|-----|
| 963.9584 | 3 | 30.0 | 290.0 | 120.0 | 110 |
| 963.9585 | 4 | 30.0 | 290.0 | 120.0 | 130 |
| 963.9586 | 5 | 30.0 | 290.0 | 120.0 | 150 |

BRONZEplus tin bronze wire hand broom, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | g |
|----------|----------|----------|-----|
| 963.9587 | 310.0 | 150.0 | 320 |

BRONZEplus scrubbing broom

- Without handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | g |
|----------|---------|---------|---------|-----|
| 963.9590 | 245.0 | 40.0 | 65.0 | 480 |

BRONZEplus round wire broom

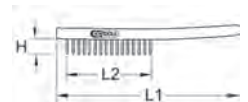
- With handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | g |
|----------|---------|---------|---------|------|
| 963.9591 | 300.0 | 70.0 | 100.0 | 1.50 |

BRONZEplus Brush, spark-plug cleaning, round wire

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | H mm | L1 mm | L2 mm | g |
|----------|---------|----------|----------|----|
| 963.9593 | 15.0 | 225.0 | 80.0 | 25 |

BRONZEplus tube brush, wire curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | g |
|----------|---------|----|
| 963.9594 | 300.0 | 42 |

BRONZEplus brush end, wire curled

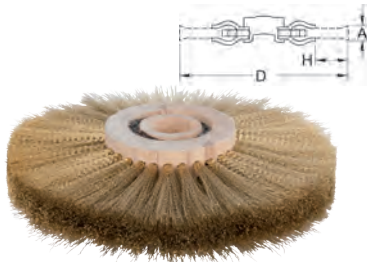
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D1 mm | D2 mm | H mm | L mm | Weight |
|----------|-------|-------|------|------|--------|
| 963.9595 | 26.0 | 6.0 | 30.0 | 80.0 | 640 |

BRONZEplus tin bronze wire wheel brush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | A mm | D mm | H mm | Weight |
|----------|------|-------|------|--------|
| 963.9596 | 45.0 | 150.0 | 20.0 | 520 |

BRONZEplus tin bronze wire cup brush, curled

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | H mm | L mm | Weight |
|----------|------|------|------|--------|
| 963.9597 | 85.0 | 20.0 | 35.0 | 700 |



NON SPARKING FILES

BERYLLIUMplus flat file

- In accordance to DIN 7261 Form A
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | Weight | B mm | L1 mm | L2 mm | Weight |
|----------|--------|------|-------|-------|--------|
| 962.7301 | 1 | 25.0 | 360.0 | 245.0 | 330 |
| 962.7302 | 3 | 25.0 | 360.0 | 245.0 | 330 |

BERYLLIUMplus half round file

- In accordance to DIN 7261 Form E
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | Weight | B mm | L1 mm | L2 mm | Weight |
|----------|--------|------|-------|-------|--------|
| 962.7101 | 1 | 22.0 | 365.0 | 250.0 | 340 |
| 962.7102 | 3 | 22.0 | 365.0 | 250.0 | 340 |

BERYLLIUMplus round file

- In accordance to DIN 7261 Form F
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | Weight | D mm | L1 mm | L2 mm | Weight |
|----------|--------|------|-------|-------|--------|
| 962.7201 | 1 | 8.0 | 360.0 | 250.0 | 175 |
| 962.7202 | 3 | 8.0 | 360.0 | 250.0 | 175 |

NON SPARKING KNIVES

BERYLLIUMplus cutter

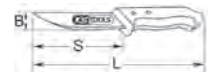
- Durable and fixed blade
- With plastic handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | B mm | L mm | S mm | Weight |
|----------|------|-------|------|--------|
| 962.9030 | 30.0 | 180.0 | 80 | 75 |

BRONZEplus cutter

- Durable and fixed blade
- With plastic handle
- Reinforced execution
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

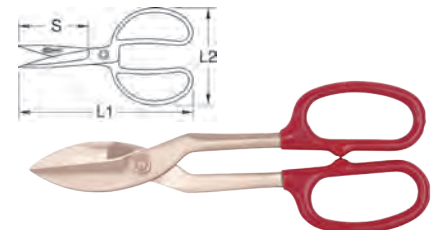


| | B mm | L mm | S mm | Weight |
|----------|------|-------|------|--------|
| 963.9510 | 30.0 | 300.0 | 200 | 300 |

NON SPARKING SHEARS

BERYLLIUMplus metal shears

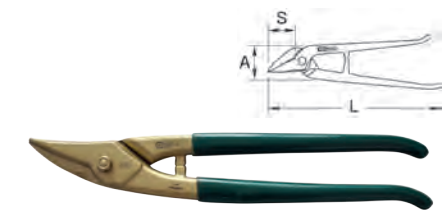
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | S mm | Weight |
|----------|-------|-------|------|--------|
| 962.9015 | 300.0 | 120.0 | 70.0 | 450 |

BERYLLIUMplus Ideal pattern

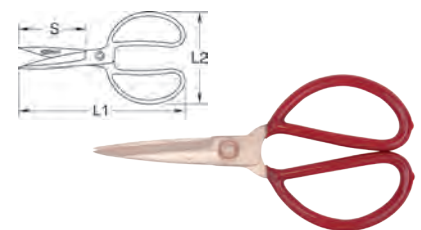
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | L mm | S mm | Weight |
|----------|------|-------|------|--------|
| 962.9016 | 35.0 | 280.0 | 50 | 520 |

BERYLLIUMplus universal shear

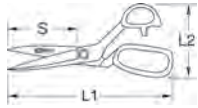
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | S mm | Weight |
|----------|-------|-------|------|--------|
| 962.9017 | 210.0 | 110.0 | 80.0 | 300 |

BERYLLIUM^{plus} universal shear

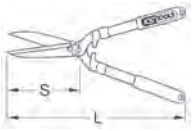
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | S mm | kg |
|----------|----------|----------|---------|-----|
| 962.9018 | 220.0 | 90.0 | 100 | 225 |

BERYLLIUM^{plus} hedge shears

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | S mm | kg |
|----------|---------|---------|------|
| 962.9033 | 520.0 | 300 | 1.40 |

NON SPARKING CUTTING TOOLS

BRONZE^{plus} reaping hook

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|----------|----------|---------|-----|
| 963.9651 | 380.0 | 220.0 | 200.0 | 800 |

BRONZE^{plus} draw knife

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | kg |
|----------|---------|---------|------|
| 963.5705 | 650.0 | 250.0 | 1.50 |

NON SPARKING SCRAPERS

BRONZE^{plus} deck scraper

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|---------|---------|-----|
| 963.9520 | 200.0 | 22.0 | 210 |
| 963.9521 | 255.0 | 45.0 | 480 |
| 963.9522 | 300.0 | 50.0 | 570 |

BRONZE^{plus} deck scraper with handle

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

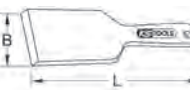
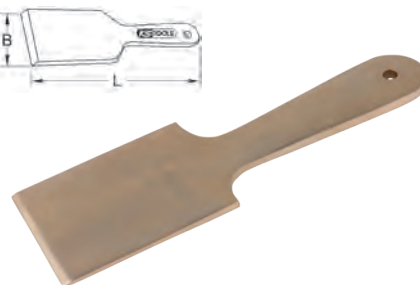


| | L1 mm | L2 mm | B mm | kg |
|----------|----------|----------|---------|-----|
| 963.9523 | 380.0 | 280.0 | 38.0 | 780 |



BRONZE^{plus} spray booth scraper

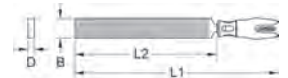
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|---------|---------|-----|
| 963.9530 | 235.0 | 75.0 | 450 |

BRONZE^{plus} flat scraper

- In accordance to DIN 8350 Form A
- Work areas ground
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | B mm | D mm | L1 mm | L2 mm | kg |
|----------|---------|---------|----------|----------|-----|
| 963.9531 | 37.0 | 6.0 | 315.0 | 205.0 | 290 |

BRONZE^{plus} triangular scraper

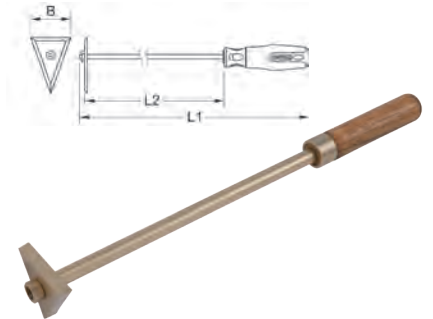
- In accordance to DIN 8350 Form C
- Work areas ground
- With two component handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | B mm | L1 mm | L2 mm | kg |
|----------|---------|----------|----------|-----|
| 963.9532 | 16.0 | 365.0 | 255.0 | 220 |

BRONZE^{plus} ship scraper

- In accordance to DIN 8350 Form C
- Work areas ground
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|----------|----------|---------|-----|
| 963.9533 | 420.0 | 100.0 | 70.0 | 650 |



BRONZEplus scraper with handle

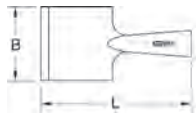
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|-------|------|-----|
| 963.9534 | 480.0 | 95.0 | 620 |

BRONZEplus scraper

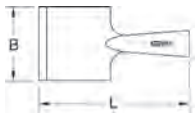
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9535 | 220.0 | 75.0 | 0.58 |
| 963.9536 | 220.0 | 100.0 | 0.83 |
| 963.9537 | 220.0 | 125.0 | 0.88 |
| 963.9538 | 220.0 | 150.0 | 1.02 |

BRONZEplus scraper, concave

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



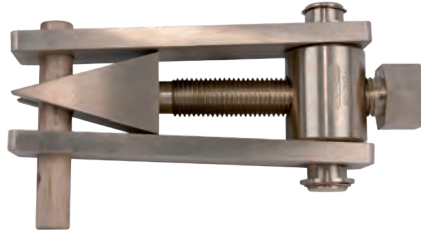
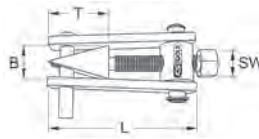
| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9539 | 240.0 | 100.0 | 0.90 |
| 963.9540 | 240.0 | 150.0 | 1.35 |



NON SPARKING FLANGE SPREADERS

BRONZEplus flange spreader

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



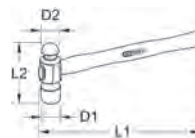
| | mm | L mm | B mm | T mm | kg |
|----------|----|-------|------|------|------|
| 963.5607 | 46 | 300.0 | 60.0 | 55.0 | 7.20 |



NON SPARKING HAMMERS

BRONZEplus ball pin hammer

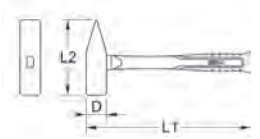
- With hickory handle
- American pattern
- Surfaces polished ground
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D1 mm | D2 mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-------|-------|------|
| 963.2105 | 100 | 20.0 | 17.0 | 310.0 | 50.0 | 0.25 |
| 963.2106 | 150 | 24.0 | 20.0 | 310.0 | 55.0 | 0.30 |
| 963.2107 | 200 | 25.0 | 21.0 | 310.0 | 60.0 | 0.35 |
| 963.2108 | 300 | 30.0 | 25.0 | 310.0 | 65.0 | 0.45 |
| 963.2109 | 400 | 34.0 | 18.0 | 340.0 | 70.0 | 0.56 |
| 963.2110 | 500 | 36.0 | 30.0 | 340.0 | 75.0 | 0.66 |
| 963.2111 | 600 | 38.0 | 32.0 | 340.0 | 80.0 | 0.76 |
| 963.2112 | 700 | 40.0 | 34.0 | 340.0 | 85.0 | 0.86 |
| 963.2113 | 800 | 42.0 | 36.0 | 380.0 | 90.0 | 0.96 |
| 963.2114 | 900 | 44.0 | 38.0 | 380.0 | 95.0 | 1.06 |
| 963.2115 | 1000 | 45.0 | 40.0 | 380.0 | 100.0 | 1.17 |
| 963.2116 | 1300 | 50.0 | 42.0 | 400.0 | 110.0 | 1.47 |
| 963.2117 | 1500 | 52.0 | 44.0 | 400.0 | 120.0 | 1.67 |
| 963.2118 | 2000 | 54.0 | 46.0 | 400.0 | 130.0 | 2.18 |

BRONZEplus ball pin hammer

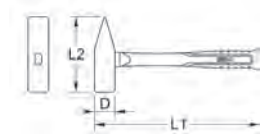
- In accordance to DIN 1041
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2005 | 100 | 15.0 | 260.0 | 82.0 | 0.22 |
| 963.2006 | 150 | 16.0 | 260.0 | 87.0 | 0.27 |
| 963.2007 | 200 | 19.0 | 280.0 | 95.0 | 0.32 |
| 963.2008 | 300 | 23.0 | 280.0 | 105.0 | 0.42 |
| 963.2009 | 400 | 25.0 | 310.0 | 112.0 | 0.52 |
| 963.2010 | 500 | 27.0 | 310.0 | 115.0 | 0.50 |
| 963.2011 | 600 | 29.0 | 310.0 | 120.0 | 0.72 |
| 963.2012 | 700 | 30.0 | 340.0 | 125.0 | 0.82 |
| 963.2013 | 800 | 33.0 | 340.0 | 128.0 | 0.93 |
| 963.2014 | 900 | 34.0 | 360.0 | 133.0 | 1.03 |
| 963.2015 | 1000 | 35.0 | 360.0 | 136.0 | 1.13 |
| 963.2016 | 1250 | 40.0 | 380.0 | 140.0 | 1.38 |
| 963.2017 | 1500 | 42.0 | 400.0 | 145.0 | 1.64 |
| 963.2018 | 2000 | 45.0 | 400.0 | 155.0 | 2.14 |

BRONZEplus ball pin hammer

- In accordance to DIN 1041
- With fiberglass handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2019 | 300 | 23.0 | 310.0 | 105.0 | 0.37 |
| 963.2020 | 400 | 25.0 | 310.0 | 112.0 | 0.47 |
| 963.2021 | 500 | 27.0 | 310.0 | 115.0 | 0.60 |
| 963.2022 | 800 | 33.0 | 340.0 | 130.0 | 0.90 |
| 963.2023 | 1000 | 35.0 | 340.0 | 135.0 | 1.13 |
| 963.2024 | 1500 | 42.0 | 400.0 | 145.0 | 1.63 |
| 963.2025 | 2000 | 45.0 | 400.0 | 155.0 | 2.15 |



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

BRONZEplus Sledge hammer

- In accordance to DIN 1042
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|-------|-------|-------|-------|-------|
| 963.2030 | 2500 | 50.0 | 900.0 | 165.0 | 2.60 |
| 963.2031 | 3000 | 55.0 | 900.0 | 175.0 | 3.15 |
| 963.2032 | 4000 | 60.0 | 900.0 | 180.0 | 4.15 |
| 963.2033 | 5000 | 68.0 | 900.0 | 185.0 | 5.15 |
| 963.2034 | 6000 | 74.0 | 900.0 | 190.0 | 6.15 |
| 963.2035 | 8000 | 78.0 | 900.0 | 195.0 | 8.15 |
| 963.2036 | 9000 | 82.0 | 900.0 | 200.0 | 9.15 |
| 963.2037 | 10000 | 85.0 | 900.0 | 210.0 | 10.15 |
| 963.2038 | 12000 | 90.0 | 900.0 | 220.0 | 12.15 |
| 963.2039 | 15000 | 100.0 | 900.0 | 230.0 | 15.15 |



BRONZEplus Sledge hammer

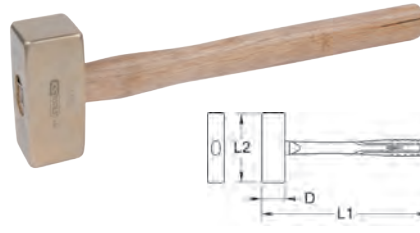
- In accordance to DIN 1041
- With fiberglass handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|-------|------|-------|-------|-------|
| 963.2040 | 3000 | 55.0 | 900.0 | 175.0 | 3.15 |
| 963.2041 | 4000 | 60.0 | 900.0 | 180.0 | 4.15 |
| 963.2042 | 5000 | 68.0 | 900.0 | 185.0 | 5.15 |
| 963.2043 | 8000 | 78.0 | 900.0 | 195.0 | 8.15 |
| 963.2044 | 10000 | 85.0 | 900.0 | 210.0 | 10.15 |

BRONZEplus club hammer

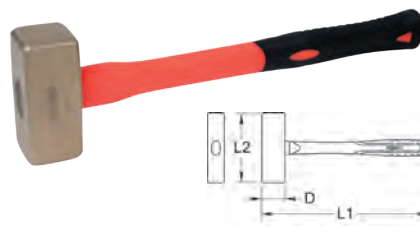
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|-------|------|-------|-------|-------|
| 963.2050 | 1000 | 40.0 | 400.0 | 95.0 | 1.15 |
| 963.2051 | 1250 | 40.0 | 400.0 | 115.0 | 1.40 |
| 963.2052 | 1500 | 45.0 | 400.0 | 115.0 | 1.70 |
| 963.2053 | 2000 | 50.0 | 400.0 | 115.0 | 2.20 |
| 963.2054 | 2500 | 55.0 | 400.0 | 130.0 | 2.70 |
| 963.2055 | 3000 | 55.0 | 900.0 | 145.0 | 3.25 |
| 963.2056 | 4000 | 60.0 | 900.0 | 150.0 | 4.25 |
| 963.2057 | 5000 | 65.0 | 900.0 | 170.0 | 5.25 |
| 963.2058 | 6000 | 70.0 | 900.0 | 170.0 | 6.25 |
| 963.2059 | 8000 | 75.0 | 900.0 | 190.0 | 8.30 |
| 963.2060 | 10000 | 80.0 | 900.0 | 210.0 | 10.30 |

BRONZEplus club hammer

- In accordance to DIN 6475
- With fiberglass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)

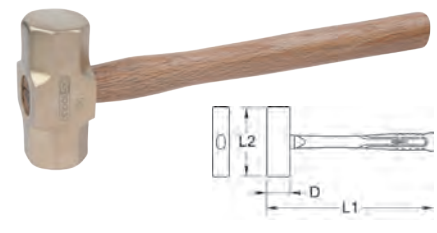


| | g | D mm | L1 mm | L2 mm | kg |
|----------|-------|------|-------|-------|-------|
| 963.2061 | 1000 | 40.0 | 400.0 | 105.0 | 1.30 |
| 963.2062 | 1250 | 42.0 | 400.0 | 110.0 | 1.60 |
| 963.2063 | 1500 | 44.0 | 400.0 | 115.0 | 1.85 |
| 963.2064 | 2000 | 48.0 | 400.0 | 130.0 | 2.35 |
| 963.2065 | 2500 | 52.0 | 400.0 | 150.0 | 2.85 |
| 963.2066 | 3000 | 54.0 | 900.0 | 155.0 | 3.40 |
| 963.2067 | 4000 | 58.0 | 900.0 | 160.0 | 4.40 |
| 963.2068 | 5000 | 64.0 | 900.0 | 165.0 | 5.40 |
| 963.2069 | 6000 | 67.0 | 900.0 | 175.0 | 6.40 |
| 963.2070 | 8000 | 75.0 | 900.0 | 190.0 | 8.40 |
| 963.2071 | 10000 | 78.0 | 900.0 | 205.0 | 10.40 |



BRONZEplus Mining hammer

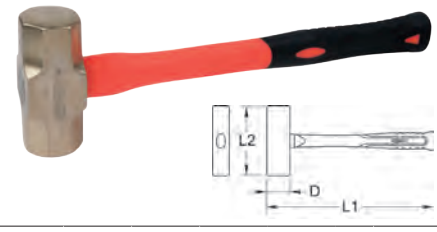
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2080 | 1000 | 40.0 | 350.0 | 115.0 | 1.40 |
| 963.2081 | 1500 | 44.0 | 400.0 | 118.0 | 1.94 |
| 963.2082 | 2500 | 55.0 | 400.0 | 150.0 | 2.94 |
| 963.2083 | 3500 | 58.0 | 900.0 | 160.0 | 3.94 |
| 963.2084 | 5000 | 65.0 | 900.0 | 175.0 | 5.45 |
| 963.2085 | 8000 | 80.0 | 900.0 | 200.0 | 8.45 |

BRONZEplus Mining hammer

- In accordance to DIN 6475
- With fiberglass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2086 | 1000 | 40.0 | 350.0 | 115.0 | 1.45 |
| 963.2087 | 1500 | 44.0 | 400.0 | 118.0 | 2.00 |
| 963.2088 | 2500 | 55.0 | 400.0 | 150.0 | 3.00 |
| 963.2089 | 3500 | 58.0 | 900.0 | 160.0 | 4.00 |
| 963.2090 | 5000 | 65.0 | 900.0 | 175.0 | 5.55 |
| 963.2091 | 8000 | 80.0 | 900.0 | 200.0 | 8.55 |

BRONZEplus Hand hammer

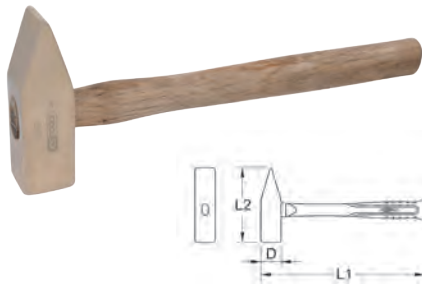
- In accordance to DIN 1041
- With hickory handle
- American form
- Surfaces polished ground
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2120 | 700 | 30.0 | 310.0 | 115.0 | 0.85 |
| 963.2121 | 1200 | 40.0 | 400.0 | 135.0 | 1.37 |
| 963.2122 | 1600 | 40.0 | 400.0 | 140.0 | 1.79 |

BRONZEplus Set hammer

- In accordance to DIN 1041
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2125 | 1500 | 42.0 | 395.0 | 145.0 | 1.64 |

BRONZEplus Hole/Drift punch

- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2130 | 1000 | 32.0 | 400.0 | 140.0 | 1.10 |
| 963.2131 | 2000 | 45.0 | 600.0 | 160.0 | 2.12 |
| 963.2132 | 3000 | 50.0 | 900.0 | 180.0 | 3.13 |
| 963.2133 | 5000 | 60.0 | 900.0 | 220.0 | 5.15 |

BRONZEplus machinist's hammer

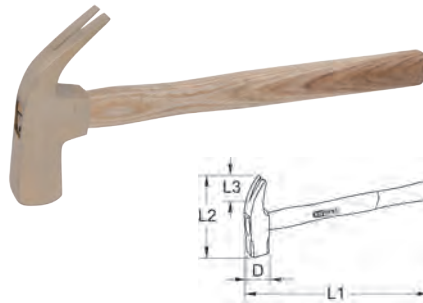
- With hickory handle
- American form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2140 | 100 | 20.0 | 310.0 | 50.0 | 0.24 |
| 963.2141 | 300 | 28.0 | 310.0 | 65.0 | 0.44 |
| 963.2142 | 500 | 32.0 | 310.0 | 80.0 | 0.64 |
| 963.2143 | 600 | 33.0 | 340.0 | 90.0 | 0.74 |
| 963.2144 | 800 | 36.0 | 340.0 | 100.0 | 0.95 |
| 963.2145 | 900 | 37.0 | 380.0 | 110.0 | 1.05 |
| 963.2146 | 1100 | 38.0 | 380.0 | 120.0 | 1.25 |

BRONZEplus claw hammer

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | L3 mm | kg |
|----------|-----|------|-------|-------|-------|-----|
| 963.2150 | 300 | 20.0 | 310.0 | 110.0 | 25.0 | 440 |
| 963.2151 | 400 | 23.0 | 340.0 | 120.0 | 30.0 | 540 |
| 963.2152 | 500 | 26.0 | 340.0 | 125.0 | 30.0 | 640 |
| 963.2153 | 600 | 28.0 | 340.0 | 135.0 | 30.0 | 740 |

BRONZEplus brick hammer

- In accordance to DIN 5108
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | S mm | kg |
|----------|------|------|-------|-------|------|------|
| 963.2160 | 600 | 27.0 | 310.0 | 120.0 | 40.0 | 0.67 |
| 963.2161 | 800 | 35.0 | 310.0 | 135.0 | 45.0 | 0.90 |
| 963.2162 | 1000 | 40.0 | 400.0 | 145.0 | 48.0 | 1.13 |

BRONZEplus brick hammer

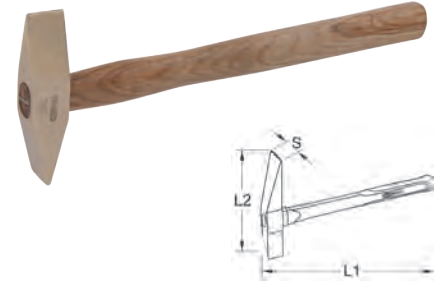
- With hickory handle
- American form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | S mm | kg |
|----------|-----|------|-------|-------|------|-----|
| 963.2163 | 700 | 22.0 | 360.0 | 170.0 | 34.0 | 840 |

BRONZEplus scaling hammer

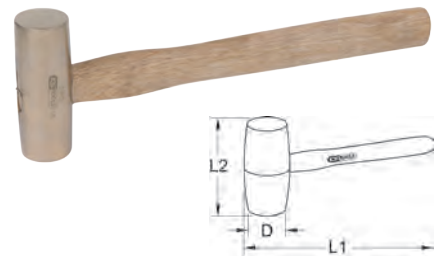
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | L1 mm | L2 mm | S mm | kg |
|----------|------|-------|-------|------|------|
| 963.2170 | 200 | 280.0 | 115.0 | 19.0 | 0.25 |
| 963.2171 | 400 | 310.0 | 125.0 | 27.0 | 0.50 |
| 963.2172 | 500 | 310.0 | 140.0 | 30.0 | 0.57 |
| 963.2173 | 600 | 310.0 | 145.0 | 32.0 | 0.70 |
| 963.2174 | 800 | 340.0 | 150.0 | 35.0 | 0.95 |
| 963.2175 | 900 | 340.0 | 155.0 | 38.0 | 1.05 |
| 963.2176 | 1400 | 380.0 | 160.0 | 45.0 | 1.57 |

BRONZEplus mallet

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|--------|-------|------|
| 963.2180 | 900 | 45.0 | 380.0 | 75.0 | 1.06 |
| 963.2181 | 1800 | 60.0 | 380.0 | 85.0 | 1.98 |
| 963.2182 | 2700 | 70.0 | 6000.0 | 90.0 | 2.90 |

BRONZEplus cutoff hammer

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2595 | 1300 | 40.0 | 400.0 | 140.0 | 1.45 |
| 963.2596 | 2100 | 45.0 | 400.0 | 155.0 | 2.25 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
i

BRONZEplus pin punch

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | g | D mm | L1 mm | L2 mm | kg |
|----------|------|------|-------|-------|------|
| 963.2405 | 800 | 8.0 | 340.0 | 140.0 | 1.00 |
| 963.2406 | 800 | 10.0 | 340.0 | 140.0 | 1.00 |
| 963.2407 | 1200 | 12.0 | 380.0 | 160.0 | 1.40 |
| 963.2408 | 1200 | 16.0 | 380.0 | 160.0 | 1.40 |

BRONZEplus securing for hammers

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | | kg |
|----------|------------|-----|
| 963.5602 | up to 2 kg | 80 |
| 963.5603 | 2 - 6 kg | 140 |



NON SPARKING AXES

BRONZEplus hoe

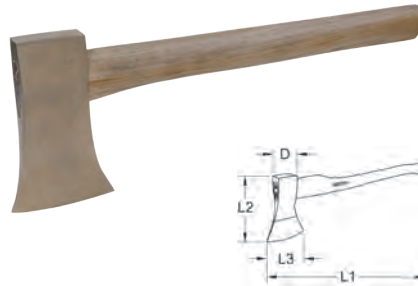
- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | S mm | L mm | kg |
|----------|-------|-------|------|
| 963.9605 | 120.0 | 950.0 | 2.30 |

BRONZEplus hatchet

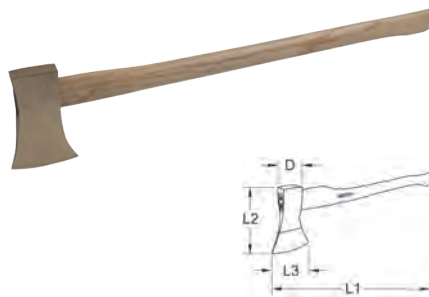
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|------|
| 963.9606 | 40.0 | 450.0 | 15.0 | 105.0 | 1.30 |
| 963.9607 | 40.0 | 450.0 | 15.0 | 105.0 | 1.50 |

BRONZEplus axe

- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | D mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|------|
| 963.9608 | 60.0 | 750.0 | 185.0 | 130.0 | 1.60 |
| 963.9609 | 60.0 | 900.0 | 185.0 | 130.0 | 2.20 |

BRONZEplus fireman's axe

- In accordance to DIN 14900
- With hickory handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | L3 mm | kg |
|----------|-------|-------|-------|------|
| 963.9610 | 800.0 | 240.0 | 100.0 | 2.60 |

BERYLLIUMplus fireman's hatchet

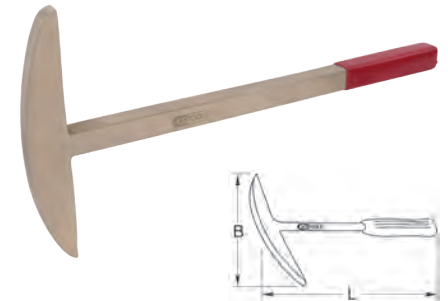
- With fiberglass handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | A mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|-----|
| 962.9032 | 27.0 | 400.0 | 200.0 | 85.0 | 900 |

BRONZEplus hand pick

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

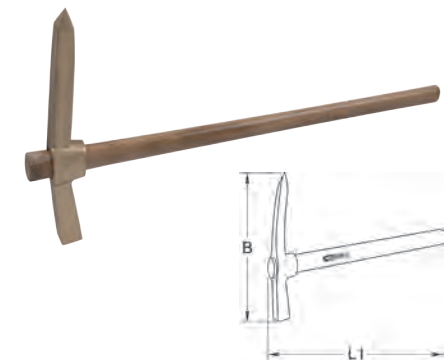


| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9611 | 420.0 | 220.0 | 2.00 |

NON SPARKING PICKS

BRONZEplus miner's pick

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9612 | 890.0 | 400.0 | 2.20 |

BRONZEplus fireman's hook

- In accordance to DIN 14851
- Without handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Width mm | kg |
|----------|-------|----------|------|
| 963.9613 | 380.0 | 176.0 | 1.80 |

BRONZEplus pick axe

- In accordance to DIN 20109
- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9620 | 800.0 | 400.0 | 2.15 |
| 963.9621 | 950.0 | 500.0 | 3.50 |
| 963.9622 | 950.0 | 550.0 | 4.00 |

BRONZEplus pick axe

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|-------|-------|------|
| 963.9623 | 950.0 | 650.0 | 4.10 |

NON SPARKING CHISELS

BRONZEplus flat chisel

- In accordance to DIN 6453
- Flat oval form
- Burr-free cutting
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | H mm | kg |
|----------|-------|------|------|-----|
| 963.2415 | 150.0 | 20.0 | 8.0 | 200 |
| 963.2416 | 200.0 | 25.0 | 8.0 | 320 |
| 963.2417 | 250.0 | 25.0 | 10.0 | 550 |
| 963.2418 | 300.0 | 25.0 | 10.0 | 560 |
| 963.2419 | 400.0 | 30.0 | 12.0 | 630 |
| 963.2420 | 450.0 | 30.0 | 12.0 | 750 |
| 963.2421 | 500.0 | 30.0 | 12.0 | 920 |

BRONZEplus slitting chisel

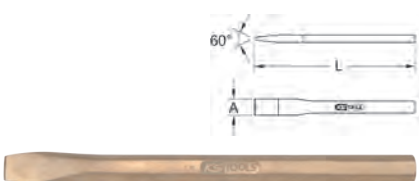
- Flat oval form
- Burr-free cutting
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | H mm | kg |
|----------|-------|------|------|-----|
| 963.2430 | 200.0 | 25.0 | 5.0 | 360 |
| 963.2431 | 250.0 | 25.0 | 5.0 | 460 |
| 963.2432 | 300.0 | 25.0 | 5.0 | 550 |

BRONZEplus bricklayer's chisel

- In accordance to DIN 7254
- Burr-free cutting
- 6-point
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | kg |
|----------|-------|------|------|
| 963.2440 | 200.0 | 6.0 | 0.04 |
| 963.2441 | 150.0 | 8.0 | 0.04 |
| 963.2442 | 150.0 | 10.0 | 0.12 |
| 963.2443 | 150.0 | 14.0 | 0.20 |
| 963.2444 | 200.0 | 14.0 | 0.25 |
| 963.2445 | 250.0 | 14.0 | 0.30 |
| 963.2446 | 300.0 | 14.0 | 0.40 |
| 963.2447 | 150.0 | 17.0 | 0.30 |
| 963.2448 | 250.0 | 17.0 | 0.45 |
| 963.2449 | 300.0 | 17.0 | 0.55 |
| 963.2450 | 200.0 | 19.0 | 0.50 |
| 963.2451 | 250.0 | 19.0 | 0.60 |

| | L mm | A mm | kg |
|----------|-------|------|------|
| 963.2452 | 350.0 | 19.0 | 0.85 |
| 963.2453 | 400.0 | 19.0 | 1.00 |
| 963.2454 | 250.0 | 22.0 | 0.85 |
| 963.2455 | 300.0 | 22.0 | 1.00 |
| 963.2456 | 500.0 | 22.0 | 1.60 |
| 963.2457 | 600.0 | 22.0 | 2.00 |
| 963.2458 | 250.0 | 27.0 | 0.58 |
| 963.2459 | 300.0 | 32.0 | 0.85 |

BRONZEplus cross cut chisel

- In accordance to DIN 6451
- Flat oval form
- Burr-free cutting
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | H mm | kg |
|----------|-------|------|------|-----|
| 963.2470 | 150.0 | 8.0 | 18.0 | 250 |
| 963.2471 | 200.0 | 8.0 | 20.0 | 340 |
| 963.2472 | 250.0 | 8.0 | 22.0 | 480 |
| 963.2473 | 300.0 | 10.0 | 25.0 | 640 |

BRONZEplus cross cut chisel

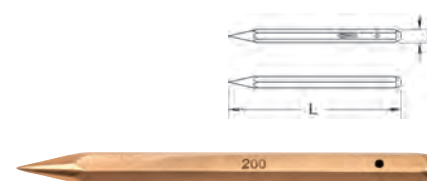
- In accordance to DIN 6451
- 6-point
- Burr-free cutting
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | kg |
|----------|-------|------|-----|
| 963.2480 | 200.0 | 14.0 | 270 |
| 963.2481 | 250.0 | 14.0 | 330 |
| 963.2482 | 300.0 | 17.0 | 550 |
| 963.2483 | 400.0 | 19.0 | 960 |

BRONZEplus pointed chisel

- In accordance to DIN 6451
- 6-point
- Burr-free cutting
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | S mm | kg |
|----------|-------|------|-----|
| 963.2490 | 200.0 | 14.0 | 270 |
| 963.2491 | 250.0 | 14.0 | 330 |
| 963.2492 | 300.0 | 17.0 | 550 |
| 963.2493 | 400.0 | 19.0 | 960 |

BRONZEplus concrete chisel

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | H mm | B mm | g |
|----------|-------|------|------|------|
| 963.2505 | 380.0 | 33.0 | 33.0 | 5.00 |

NON SPARKING PIN PUNCHES & PUNCHES

BRONZEplus scriber

- For marking of workpieces
- Straight and 70° bent tip
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Ø mm | g |
|----------|-------|------|----|
| 963.2510 | 190.0 | 4.0 | 50 |
| 963.2511 | 225.0 | 6.0 | 50 |

BRONZEplus offset pin

- For marking of workpieces
- Straight and 90° bent tip
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | Ø mm | g |
|----------|-------|-------|------|------|
| 963.2515 | 300.0 | 100.0 | 13.0 | 0.20 |
| 963.2516 | 450.0 | 150.0 | 19.0 | 1.30 |
| 963.2517 | 450.0 | 150.0 | 16.0 | 0.93 |
| 963.2518 | 450.0 | 150.0 | 24.0 | 2.00 |
| 963.2519 | 450.0 | 150.0 | 27.0 | 2.30 |
| 963.2520 | 450.0 | 150.0 | 30.0 | 3.30 |
| 963.2521 | 500.0 | 150.0 | 16.0 | 1.30 |
| 963.2522 | 600.0 | 200.0 | 20.0 | 2.40 |
| 963.2523 | 800.0 | 200.0 | 22.0 | 3.40 |



BRONZEplus square blade awl

- For piercing and widening of holes
- With two component handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | Ø mm | g |
|----------|-------|-------|------|----|
| 963.2525 | 180.0 | 100.0 | 5.0 | 80 |

BRONZEplus pin punch

- In accordance to DIN 6458
- Conical form
- Strong execution
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|-----|
| 963.2530 | 150.0 | 6.0 | 13.0 | 100 |
| 963.2531 | 150.0 | 7.0 | 17.0 | 100 |
| 963.2532 | 200.0 | 8.0 | 21.0 | 395 |
| 963.2533 | 250.0 | 12.0 | 24.0 | 645 |
| 963.2534 | 250.0 | 13.0 | 30.0 | 865 |

BRONZEplus pin punch

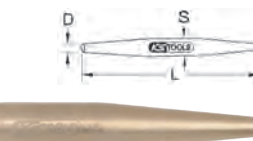
- In accordance to DIN 6458
- Conical form
- Extra strong execution
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|-----|
| 963.2535 | 220.0 | 5.0 | 16.0 | 255 |
| 963.2536 | 230.0 | 10.0 | 19.0 | 420 |
| 963.2537 | 250.0 | 13.0 | 24.0 | 880 |

BRONZEplus pin punch

- Barrel type
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|------|
| 963.2540 | 200.0 | 8.0 | 17.0 | 230 |
| 963.2541 | 200.0 | 8.0 | 21.0 | 360 |
| 963.2542 | 200.0 | 10.0 | 24.0 | 415 |
| 963.2543 | 200.0 | 13.0 | 27.0 | 630 |
| 963.2544 | 200.0 | 18.0 | 30.0 | 880 |
| 963.2545 | 200.0 | 22.0 | 32.0 | 1050 |

BRONZEplus centre punch

- In accordance to DIN 7250
- Shaft coded
- Beveled
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | g |
|----------|-------|------|-----|
| 963.2550 | 100.0 | 3.0 | 30 |
| 963.2551 | 110.0 | 4.0 | 60 |
| 963.2552 | 125.0 | 5.0 | 100 |
| 963.2553 | 150.0 | 6.0 | 200 |

BRONZEplus pin punch set

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In a plastic folding cassette



| | g |
|---|-----|
| 963.2560 6 pcs BRONZEplus pin punch set | 310 |

BRONZEplus split pin puncher set

- In accordance to DIN 6450
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)
- In a plastic folding cassette



| | g |
|--|-----|
| 963.2590 6 pcs 3 - 4 - 5 - 6 - 8 - 10 mm | 440 |

BRONZEplus split pin puncher

- In accordance to DIN 6450
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|-----|
| 963.2591 | 110.0 | 3.0 | 9.0 | 35 |
| 963.2592 | 110.0 | 4.0 | 10.0 | 40 |
| 963.2593 | 120.0 | 5.0 | 11.0 | 78 |
| 963.2594 | 120.0 | 6.0 | 12.0 | 86 |
| 963.2597 | 130.0 | 8.0 | 14.0 | 178 |
| 963.2598 | 140.0 | 10.0 | 16.0 | 205 |

BRONZEplus taper punch

- 4-point
- In accordance to DIN 6450
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|------|
| 963.2566 | 500.0 | 5.0 | 20.0 | 1.20 |

BRONZEplus straight pin

- In accordance to DIN 6451
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|-----|
| 963.2570 | 85.0 | 8.0 | 12.0 | 40 |
| 963.2571 | 90.0 | 10.0 | 14.0 | 50 |
| 963.2572 | 100.0 | 13.0 | 16.0 | 70 |
| 963.2573 | 110.0 | 16.0 | 20.0 | 100 |
| 963.2574 | 140.0 | 19.0 | 25.0 | 180 |
| 963.2575 | 160.0 | 21.0 | 28.0 | 270 |
| 963.2576 | 200.0 | 25.0 | 30.0 | 450 |
| 963.2577 | 240.0 | 29.0 | 35.0 | 630 |

BRONZEplus setting punch

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | S mm | g |
|----------|-------|------|------|------|
| 963.2580 | 180.0 | 5.0 | 12.0 | 110 |
| 963.2581 | 200.0 | 6.0 | 13.0 | 150 |
| 963.2582 | 200.0 | 8.0 | 16.0 | 220 |
| 963.2583 | 200.0 | 9.0 | 20.0 | 340 |
| 963.2584 | 230.0 | 10.0 | 22.0 | 460 |
| 963.2585 | 250.0 | 11.0 | 25.0 | 620 |
| 963.2586 | 280.0 | 12.0 | 27.0 | 870 |
| 963.2587 | 320.0 | 14.0 | 30.0 | 1260 |
| 963.2588 | 350.0 | 15.0 | 32.0 | 1570 |
| 963.2589 | 380.0 | 16.0 | 36.0 | 2230 |

BRONZEplus thread cleaning pin

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Ø mm | L mm | g |
|----------|------|-------|-----|
| 963.9505 | 6.0 | 300.0 | 75 |
| 963.9506 | 10.0 | 300.0 | 180 |
| 963.9507 | 13.0 | 300.0 | 350 |

BERYLLIUMplus caulking tool

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | B mm | L mm | g |
|----------|------|-------|-----|
| 962.0202 | 2.0 | 150.0 | 370 |
| 962.0203 | 3.0 | 160.0 | 410 |
| 962.0204 | 4.0 | 180.0 | 390 |
| 962.0205 | 5.0 | 200.0 | 520 |
| 962.0206 | 6.0 | 200.0 | 420 |
| 962.0207 | 7.0 | 220.0 | 500 |
| 962.0208 | 8.0 | 220.0 | 520 |
| 962.0209 | 9.0 | 220.0 | 520 |
| 962.0210 | 10.0 | 250.0 | 525 |
| 962.0212 | 12.0 | 250.0 | 540 |

NON SPARKING CONSTRUCTION TOOLS

BRONZEplus rust scraper

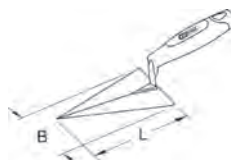
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | g |
|----------|--------|------|------|
| 963.9545 | 600.0 | 75.0 | 0.53 |
| 963.9546 | 800.0 | 75.0 | 0.62 |
| 963.9547 | 1000.0 | 75.0 | 0.74 |
| 963.9548 | 1200.0 | 75.0 | 1.16 |

BRONZEplus brick trowel

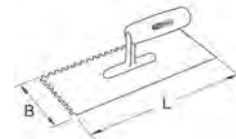
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | g |
|----------|-------|-------|-----|
| 963.9550 | 215.0 | 130.0 | 350 |
| 963.9551 | 240.0 | 135.0 | 540 |

BRONZEplus plastering trowel

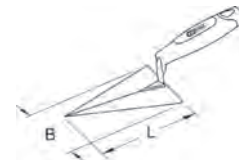
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | g |
|----------|-------|-------|-----|
| 963.9552 | 280.0 | 120.0 | 810 |

BRONZEplus pointed trowel

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

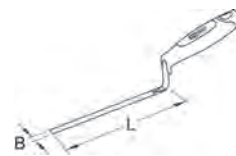


| | L mm | B mm | g |
|----------|-------|------|-----|
| 963.9553 | 180.0 | 92.0 | 180 |



BRONZEplus jointing trowel

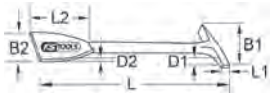
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | g |
|----------|-------|------|-----|
| 963.9554 | 100.0 | 10.0 | 113 |

BRONZEplus pick scraper

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B1 mm | B2 mm | D1 mm | D2 mm | L1 mm | L2 mm | Weight kg |
|----------|---------|----------|----------|----------|----------|----------|----------|--------------|
| 963.9565 | 480.0 | 110.0 | 70.0 | 20.0 | 10.0 | 40.0 | 125.0 | 1.20 |

BRONZEplus floor scraper

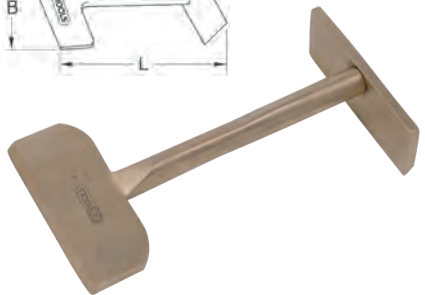
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | Weight kg |
|----------|---------|---------|--------------|
| 963.9570 | 170.0 | 150.0 | 720 |

BRONZEplus deck scraper

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | Weight kg |
|----------|---------|---------|--------------|
| 963.9575 | 150.0 | 75.0 | 500 |
| 963.9576 | 235.0 | 125.0 | 800 |



BRONZEplus rubber pusher

- With handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Weight kg |
|----------|---------|--------------|
| 963.9592 | 600.0 | 300 |

Non-sparking buckets

- With revolving stop handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant



| | Material | H mm | D mm | Weight kg |
|----------|--------------|---------|---------|--------------|
| 963.5505 | 10 brass | 270.0 | 185.0 | 1.46 |
| 963.5506 | 12 aluminium | 290.0 | 200.0 | 0.74 |

NON SPARKING SPATULAS

BRONZEplus wide scraper, stiff blade

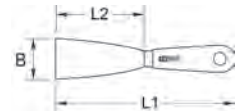
- With wooden handle
- With hanging hole
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | Weight kg |
|----------|----------|----------|---------|--------------|
| 963.9560 | 195.0 | 80.0 | 120.0 | 250 |
| 963.9561 | 195.0 | 80.0 | 140.0 | 270 |
| 963.9562 | 205.0 | 90.0 | 160.0 | 300 |
| 963.9563 | 205.0 | 90.0 | 160.0 | 350 |

BERYLLIUMplus scraper, flexible blade

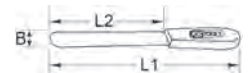
- With wooden handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | Weight kg |
|----------|----------|----------|---------|--------------|
| 962.9031 | 200.0 | 95.0 | 75.0 | 125 |

BRONZEplus spatula

- With wooden handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

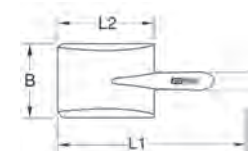


| | L1 mm | L2 mm | B mm | Weight kg |
|----------|----------|----------|---------|--------------|
| 963.9515 | 260.0 | 150.0 | 25.0 | 85 |
| 963.9516 | 350.0 | 230.0 | 40.0 | 145 |
| 963.9517 | 490.0 | 355.0 | 50.0 | 275 |

NON SPARKING SHOVELS & FORKS

BRONZEplus spades

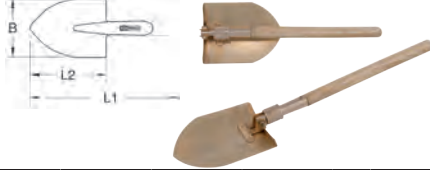
- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | Weight kg |
|----------|----------|----------|---------|---------------|
| 963.9630 | 1250.0 | 260.0 | 180.0 | T handle 3.50 |
| 963.9631 | 1250.0 | 260.0 | 180.0 | T handle 3.65 |

BRONZEplus folding spade

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|-------|-------|-------|------|
| 963.9632 | 740.0 | 320.0 | 180.0 | 1.30 |

BRONZEplus round point shovel

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | Handle | kg |
|----------|--------|-------|-------|----------|------|
| 963.9635 | 1400.0 | 340.0 | 260.0 | straight | 1.85 |
| 963.9636 | 1150.0 | 340.0 | 260.0 | T handle | 1.85 |

BRONZEplus shovel

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | Handle | kg |
|----------|--------|-------|-------|----------|------|
| 963.9637 | 1400.0 | 400.0 | 270.0 | straight | 1.95 |
| 963.9638 | 1150.0 | 400.0 | 270.0 | T handle | 1.95 |

BRONZEplus hand shovel

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|-------|-------|-------|-------|
| 963.9639 | 540.0 | 220.0 | 180.0 | 0.720 |

BRONZEplus manure fork

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|--------|-------|-------|------|
| 963.9645 | 1600.0 | 330.0 | 230.0 | 1.64 |

BRONZEplus spade fork

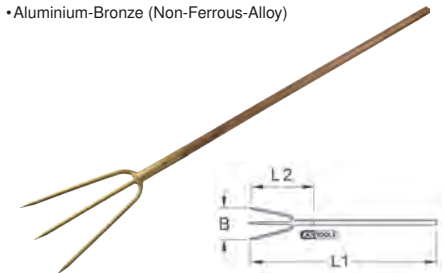
- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|--------|-------|-------|------|
| 963.9646 | 1000.0 | 290.0 | 180.0 | 1.27 |

BRONZEplus hay fork

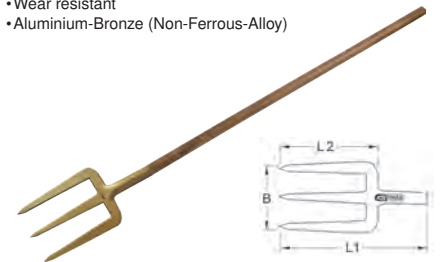
- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|--------|-------|-------|------|
| 963.9647 | 1600.0 | 290.0 | 180.0 | 1.28 |

BRONZEplus fork for gun cotton

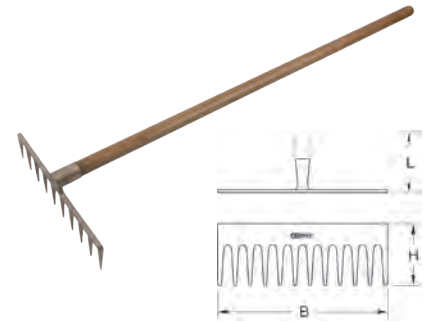
- Without handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | B mm | kg |
|----------|-------|-------|-------|------|
| 963.9648 | 200.0 | 140.0 | 90.0 | 0.60 |
| 963.9649 | 370.0 | 250.0 | 150.0 | 1.31 |

BRONZEplus rake

- With beech handle
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | kg |
|----------|--------|-------|------|------|
| 963.9650 | 1600.0 | 360.0 | 90.0 | 1.53 |

NON SPARKING WEDGES

BRONZEplus wedge

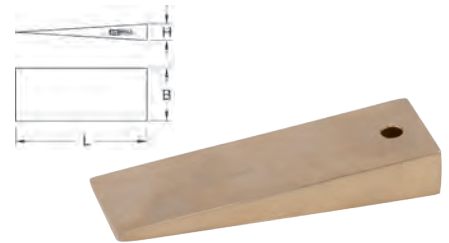
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | kg |
|----------|-------|------|------|------|
| 963.2205 | 80.0 | 15.0 | 6.0 | 0.04 |
| 963.2206 | 90.0 | 50.0 | 10.0 | 0.20 |
| 963.2207 | 100.0 | 50.0 | 10.0 | 0.21 |
| 963.2208 | 105.0 | 19.0 | 13.0 | 0.10 |
| 963.2209 | 150.0 | 25.0 | 13.0 | 0.22 |
| 963.2210 | 150.0 | 30.0 | 13.0 | 0.28 |
| 963.2211 | 150.0 | 38.0 | 19.0 | 0.40 |
| 963.2212 | 150.0 | 40.0 | 13.0 | 0.43 |
| 963.2213 | 180.0 | 32.0 | 13.0 | 0.30 |
| 963.2214 | 180.0 | 50.0 | 10.0 | 0.40 |
| 963.2215 | 180.0 | 50.0 | 19.0 | 0.70 |
| 963.2216 | 200.0 | 38.0 | 25.0 | 0.90 |
| 963.2217 | 200.0 | 38.0 | 41.0 | 1.30 |
| 963.2218 | 200.0 | 40.0 | 40.0 | 1.38 |
| 963.2219 | 200.0 | 50.0 | 19.0 | 0.80 |
| 963.2220 | 215.0 | 50.0 | 32.0 | 1.40 |
| 963.2221 | 230.0 | 40.0 | 20.0 | 1.00 |

BRONZEplus wedge with hole

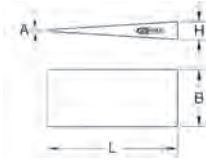
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | hole diameter | kg |
|----------|-------|------|------|---------------|-------|
| 963.2225 | 100.0 | 30.0 | 15.0 | 6 mm | 0.220 |

BRONZEplus space wedge

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | A mm | kg |
|----------|-------|------|------|------|-----|
| 963.2226 | 250.0 | 50.0 | 5.0 | 1.2 | 200 |

BRONZEplus nosekey

- for a positive connection of the shaft and hub
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



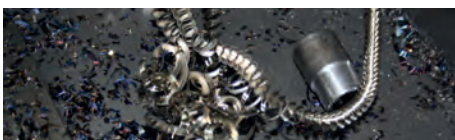
| | L mm | B mm | H mm | kg |
|----------|-------|------|------|------|
| 963.2230 | 340.0 | 20.0 | 40.0 | 2.60 |
| 963.2231 | 340.0 | 30.0 | 40.0 | 2.80 |
| 963.2232 | 400.0 | 30.0 | 40.0 | 3.50 |

BRONZEplus stone wedge

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | H mm | kg |
|----------|-------|------|------|------|
| 963.2235 | 120.0 | 50.0 | 44.0 | 1.10 |
| 963.2236 | 150.0 | 45.0 | 45.0 | 1.40 |
| 963.2237 | 190.0 | 55.0 | 47.0 | 2.00 |
| 963.2238 | 240.0 | 60.0 | 50.0 | 3.00 |



BRONZEplus straight gasket knife with mandrel

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



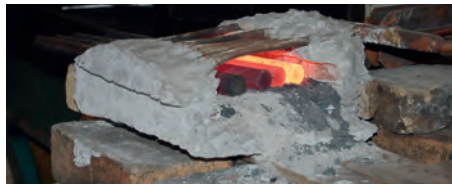
| | L mm | B mm | S mm | kg |
|----------|-------|------|------|-----|
| 963.9655 | 400.0 | 25.0 | 220 | 300 |

BRONZEplus round gasket knife

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



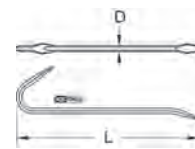
| | L mm | B mm | S mm | kg |
|----------|--------|------|------|------|
| 963.9656 | 690.0 | 30.0 | 400 | 1.20 |
| 963.9657 | 1240.0 | 40.0 | 800 | 2.00 |



NON SPARKING PRY BARS

BRONZEplus pry bar/crowbar

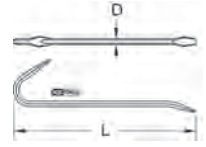
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | D mm | kg |
|----------|-------|------|------|
| 963.9705 | 300.0 | 14.0 | 0.40 |
| 963.9706 | 450.0 | 9.0 | 1.10 |
| 963.9707 | 600.0 | 19.0 | 1.50 |
| 963.9708 | 750.0 | 22.0 | 2.50 |
| 963.9709 | 900.0 | 22.0 | 3.00 |

BRONZEplus wrecking bar

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



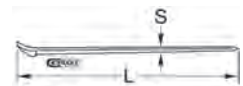
| | L mm | D mm | kg |
|----------|-------|------|------|
| 963.9715 | 300.0 | 14.0 | 0.40 |
| 963.9716 | 450.0 | 19.0 | 1.10 |
| 963.9717 | 600.0 | 19.0 | 1.50 |
| 963.9718 | 750.0 | 22.0 | 2.50 |
| 963.9719 | 900.0 | 22.0 | 3.00 |



NON SPARKING CROWBARS

BRONZEplus crowbar

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | S mm | kg |
|----------|--------|------|-------|
| 963.9720 | 450.0 | 19.0 | 1.10 |
| 963.9721 | 600.0 | 19.0 | 1.50 |
| 963.9722 | 750.0 | 22.0 | 2.50 |
| 963.9723 | 900.0 | 22.0 | 3.00 |
| 963.9724 | 1000.0 | 22.0 | 3.30 |
| 963.9725 | 1250.0 | 27.0 | 6.10 |
| 963.9726 | 1500.0 | 27.0 | 7.30 |
| 963.9727 | 1800.0 | 30.0 | 11.10 |
| 963.9728 | 2000.0 | 30.0 | 12.30 |

BRONZEplus crowbar with point and edge

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|--------|------|-------|
| 963.9730 | 1000.0 | 30 | 6.15 |
| 963.9731 | 1250.0 | 30 | 7.70 |
| 963.9732 | 1500.0 | 30 | 9.25 |
| 963.9733 | 1800.0 | 30 | 11.10 |
| 963.9734 | 2000.0 | 30 | 12.30 |

BRONZEplus crowbar with point and claw

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|--------|------|-------|
| 963.9735 | 1000.0 | 30 | 6.15 |
| 963.9736 | 1250.0 | 30 | 7.70 |
| 963.9737 | 1500.0 | 30 | 9.25 |
| 963.9738 | 1800.0 | 30 | 11.10 |
| 963.9739 | 2000.0 | 30 | 12.30 |

BRONZEplus crowbar with edge and ball end

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|--------|------|-------|
| 963.9745 | 1000.0 | 30 | 6.15 |
| 963.9746 | 1250.0 | 30 | 7.70 |
| 963.9747 | 1500.0 | 30 | 9.25 |
| 963.9748 | 1800.0 | 30 | 11.10 |
| 963.9749 | 2000.0 | 30 | 12.30 |

BRONZEplus crowbar with point and ball end

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|--------|------|-------|
| 963.9755 | 1000.0 | 30 | 6.15 |
| 963.9756 | 1250.0 | 30 | 7.70 |
| 963.9757 | 1500.0 | 30 | 9.25 |
| 963.9758 | 1800.0 | 30 | 11.10 |
| 963.9759 | 2000.0 | 30 | 12.30 |



BRONZEplus lifting rod

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | B mm | kg |
|----------|--------|------|------|
| 963.9765 | 650.0 | 20.0 | 2.00 |
| 963.9766 | 800.0 | 20.0 | 2.70 |
| 963.9767 | 1000.0 | 20.0 | 3.40 |
| 963.9768 | 1250.0 | 25.0 | 6.20 |
| 963.9769 | 1500.0 | 25.0 | 7.70 |

BRONZEplus bending lever

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | Ø mm | kg |
|----------|-------|------|------|------|
| 963.9775 | 200.0 | 5.0 | 19 | 0.66 |
| 963.9776 | 300.0 | 5.0 | 19 | 1.00 |
| 963.9777 | 400.0 | 5.0 | 19 | 1.30 |
| 963.9778 | 500.0 | 5.0 | 19 | 1.60 |
| 963.9779 | 600.0 | 5.0 | 19 | 2.00 |

BRONZEplus tyre lever

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | kg |
|----------|-------|------|-----|
| 963.9785 | 200.0 | 20.0 | 350 |
| 963.9786 | 300.0 | 25.0 | 470 |
| 963.9787 | 400.0 | 30.0 | 600 |
| 963.9788 | 500.0 | 35.0 | 770 |
| 963.9789 | 600.0 | 38.0 | 900 |

BRONZEplus tyre lever, heavy and robust execution

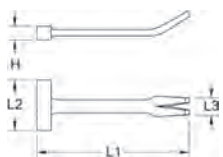
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | A mm | kg |
|----------|-------|------|------|
| 963.9790 | 600.0 | 25.0 | 1.00 |

BRONZEplus crate opener

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | H mm | L1 mm | L2 mm | L3 mm | kg |
|----------|------|-------|-------|-------|-----|
| 963.5105 | 22.0 | 230.0 | 70.0 | 30.0 | 455 |

BRONZEplus carbide drum opener

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | H mm | L1 mm | L2 mm | kg |
|----------|------|-------|-------|-----|
| 963.5106 | 10.0 | 300.0 | 75.0 | 750 |

NON SPARKING DRUM LIFTERS

BRONZEplus drum lifter

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | Max load kg | kg |
|----------|--------|-------------|------|
| 963.5107 | 1060.0 | 600 | 3.80 |

NON SPARKING SHACKLES

BERYLLIUMplus shackle

- Straight design
- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



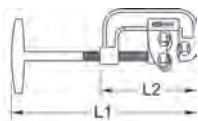
| | D mm | L mm | B mm | kg |
|----------|------|------|------|-----|
| 962.9520 | 25.0 | 40.0 | 30.0 | 100 |
| 962.9521 | 28.0 | 78.0 | 37.0 | 150 |



NON SPARKING PIPE CUTTERS

BRONZE^{plus} pipe cutter

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

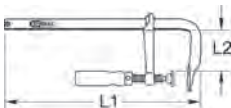


| | Ø mm | L1 mm | kg |
|----------|---------|----------|------|
| 963.5109 | 50.0 | 340.0 | 2.50 |

NON SPARKING CLAMPING TOOLS

BRONZE^{plus} tension clamp

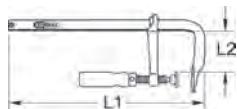
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | kg |
|----------|----------|----------|------|
| 963.5020 | 480.0 | 130.0 | 2.10 |

BRONZE^{plus} deep tension clamp

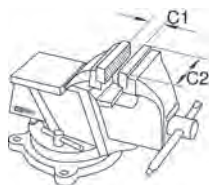
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L1 mm | L2 mm | kg |
|----------|----------|----------|------|
| 963.5021 | 480.0 | 250.0 | 3.70 |

BRONZE^{plus} bench vice

- With swivel base
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | C1 mm | C2 mm | kg |
|----------|----------|----------|-------|
| 963.5005 | 100.0 | 90.0 | 6.50 |
| 963.5006 | 130.0 | 125.0 | 15.50 |
| 963.5007 | 150.0 | 150.0 | 26.50 |
| 963.5008 | 170.0 | 170.0 | 27.40 |

NON SPARKING NEEDLES

BERYLLIUM^{plus} hearing needle

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|---------|---------|-----|
| 962.0220 | 250.0 | 6,0 | 85 |
| 962.0221 | 300.0 | 8,0 | 150 |
| 962.0222 | 400.0 | 7,0 | 160 |
| 962.0223 | 500.0 | 10,0 | 335 |

BERYLLIUM^{plus} hearing needle with ball end

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|---------|---------|-----|
| 962.0224 | 500.0 | 6,0 | 130 |

BERYLLIUM^{plus} needle

- Non-sparking
- Explosion proof
- Corrosion resistant
- Very breakage resistant
- Copper Beryllium (Non-Ferrous-Alloy)



| | L mm | Ø mm | kg |
|----------|---------|---------|----|
| 962.0225 | 180.0 | 3,0 | 15 |

NON SPARKING OIL PUMPS

BRONZE^{plus} portable manual oil pump

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | L mm | kg |
|----------|---------|------|
| 963.5805 | 1350.0 | 5.00 |

NON SPARKING HOISTS

BRONZE^{plus} hand lift truck

- Pallet truck capacity 2.0 t
- Fork length approx. 1.100 mm
- Guide rod length approx. 1.250 mm
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Load capacity kg | Total length mm | Width mm | Total depth mm | kg |
|----------|---------------------|--------------------|-------------|-------------------|--------|
| 963.5905 | 2000 | 1100.0 | 470.0 | 1250.0 | 120.00 |

BRONZE^{plus} chain hoist

- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



| | Format | Max capacity t | kg |
|----------|------------------|----------------------|--------|
| 963.9905 | 2 chains à 2.5 m | 0,5 t | 10.20 |
| 963.9906 | 2 chains à 2.5 m | 1,0 t | 13.60 |
| 963.9907 | 2 chains à 2.5 m | 1,5 t | 15.60 |
| 963.9908 | 2 chains à 2.5 m | 2,0 t | 22.00 |
| 963.9909 | 2 chains à 3 m | 3,0 t | 23.60 |
| 963.9910 | 2 chains à 3 m | 5,0 t | 36.00 |
| 963.9911 | 2 chains à 3 m | 10,0 t | 68.50 |
| 963.9912 | 2 chains à 3 m | 16,0 t | 187.00 |



KS TOOLS®

Innovation is our mission!

NON SPARKING TOOLS

BRONZE plus
BERYLLIUM plus

- Chemical industries
- Petro refineries
- Oil and gas carriages
- Pipeline business
- Drilling platforms
- Fuel service (cleaning etc.)
- Gas and electricity works
- Varnishing
- Federal armed forces, army
- Civil defence and civil protection
- Fire department

You can use it on all places where sparks create potential danger of explosion and fire. For the activities which require the use (application) of a hundred percent non-magnetic and extremely rustproof tools.

