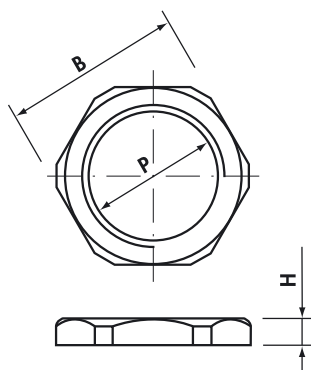


**LOCKNUTS NICKEL PLATED BRASS**

**Metric thread M 1.5 pitch CEI EN 60423**

| Ref.<br>Nickel<br>Plated Brass | P       | B<br>Spanner<br>(mm) | H<br>(mm) | Quantity<br>Box/Bag |
|--------------------------------|---------|----------------------|-----------|---------------------|
| 2033M12N                       | M12X1,5 | 16                   | 2,8       | 2.000/100           |
| 2033M16N                       | M16X1,5 | 19                   | 2,8       | 1.000/100           |
| 2033M20N                       | M20X1,5 | 24                   | 3         | 600/100             |
| 2033M25N                       | M25X1,5 | 30                   | 4,0       | 400/50              |
| 2033M32N                       | M32X1,5 | 36                   | 4         | 250/25              |
| 2033M40N                       | M40X1,5 | 45                   | 5,0       | 150/10              |
| 2033M50N                       | M50X1,5 | 60                   | 5         | 100/10              |
| 2033M63N                       | M63X1,5 | 70                   | 5,5       | 50/5                |

**Pg thread DIN 40 430 - Dimensions DIN 46 320**

| Ref.<br>Nickel<br>Plated Brass | P      | B<br>Spanner<br>(mm) | H<br>(mm) | Quantity<br>Box/Bag |
|--------------------------------|--------|----------------------|-----------|---------------------|
| 2032007N                       | Pg 7   | 16*                  | 2,8       | 1.500/100           |
| 2032009N                       | Pg 9   | 18                   | 2,8       | 1.500/100           |
| 2032011N                       | Pg11   | 21                   | 3         | 1.000/100           |
| 2032013N                       | Pg13,5 | 23                   | 3         | 1.000/100           |
| 2032016N                       | Pg16   | 26                   | 3         | 600/100             |
| 2032021N                       | Pg21   | 32                   | 3,5       | 500/100             |
| 2032029N                       | Pg29   | 41                   | 4         | 300/100             |
| 2032036N                       | Pg36   | 51                   | 5         | 100/10              |
| 2032042N                       | Pg42   | 60                   | 5         | 50/10               |
| 2032048N                       | Pg48   | 64                   | 5,5       | 50/10               |

\*Different dimension to DIN 46320

**Technical details:**

**MATERIAL :**  
CuZn39Pb3 Nickel Plated

**NICKEL PLATING THICKNESS :**  
2 ÷ 4 µm

**TEMPERATURE RANGE :**  
-25°C ÷ +100°C (continuous)

**RESISTANCE TO CHEMICALS:**  
See Annexe A  
(R=Resistant; LR= Low Resistance;  
NR= Not Resistant)

**BSP thread ISO 228/1**

| Ref.<br>Plain<br>Brass | P      | B<br>Spanner<br>(mm) | H<br>(mm) | Quantity<br>Box/Bag |
|------------------------|--------|----------------------|-----------|---------------------|
| 2031014                | G1/4"  | 16                   | 3         | 2.400/100           |
| 2031038                | G3/8"  | 19                   | 3         | 2.000/100           |
| 2031012                | G1/2"  | 24                   | 3,5       | 1.000/100           |
| 2031058                | G5/8"  | 26                   | 4         | 500/50              |
| 2031034                | G3/4"  | 30                   | 4         | 500/50              |
| 2031100                | G1"    | 37                   | 4         | 250/25              |
| 2031118                | G1"1/8 | 41                   | 4,5       | 100/25              |
| 2031114                | G1"1/4 | 45                   | 4,5       | 200/20              |
| 2031112                | G1"1/2 | 52                   | 5,5       | 100/20              |
| 2031200                | G2"    | 64                   | 7         | 50/10               |
| 2031212                | G2"1/2 | 80                   | 7         | 20/5                |
| 2031300                | G3"    | 95                   | 8         | 20/5                |

Add to Ref: N for NICKEL PLATED BRASS

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**LOCKNUTS NICKEL PLATED BRASS**
**Annexe A:**

| Element                       | Evaluation of the resistance to chemical agents |      |            |              |
|-------------------------------|-------------------------------------------------|------|------------|--------------|
|                               | Excellent                                       | Good | Sufficient | Insufficient |
| Acetylene                     |                                                 |      |            |              |
| Vinegar                       |                                                 |      |            |              |
| Acetone                       |                                                 |      |            |              |
| Acetic acid                   |                                                 |      |            |              |
| Benzoic acid                  |                                                 |      |            |              |
| Boric acid                    |                                                 |      |            |              |
| Hydrobromic acid              |                                                 |      |            |              |
| Carbolic acid (phenol)        |                                                 |      |            |              |
| Hydrogen cyanide Anhydrous    |                                                 |      |            |              |
| Hydrogen cyanide wet          |                                                 |      |            |              |
| Citric Acid                   |                                                 |      |            |              |
| Chloroacetic acid             |                                                 |      |            |              |
| Hydrochloric acid             |                                                 |      |            |              |
| Chromium acid                 |                                                 |      |            |              |
| Hydrofluoric acid Anhydrous   |                                                 |      |            |              |
| Hydrofluoric acid wet         |                                                 |      |            |              |
| Hexafluorosilicic acid        |                                                 |      |            |              |
| Formic acid                   |                                                 |      |            |              |
| Phosphoric acid,              |                                                 |      |            |              |
| Lactic acid                   |                                                 |      |            |              |
| Nitric acid                   |                                                 |      |            |              |
| Oleic acid                    |                                                 |      |            |              |
| Oxalic acid                   |                                                 |      |            |              |
| Palmitic acid                 |                                                 |      |            |              |
| Hydrogen sulfide Anhydrous    |                                                 |      |            |              |
| Hydrogen sulfide wet          |                                                 |      |            |              |
| Sulphuric acid 40%            |                                                 |      |            |              |
| Sulphuric acid 80-90%         |                                                 |      |            |              |
| Sulfurous acid                |                                                 |      |            |              |
| Stearic acid                  |                                                 |      |            |              |
| Tannic acid                   |                                                 |      |            |              |
| Tartaric acid                 |                                                 |      |            |              |
| Trichloroacetic acid          |                                                 |      |            |              |
| Seawater                      |                                                 |      |            |              |
| Hydrogen peroxide (up to 10%) |                                                 |      |            |              |
| Hydrogen peroxide (above 10%) |                                                 |      |            |              |
| Drinking water                |                                                 |      |            |              |
| Water, condensate             |                                                 |      |            |              |
| Blackwaters                   |                                                 |      |            |              |
| Acid underground water        |                                                 |      |            |              |
| Wetting                       |                                                 |      |            |              |
| Alkanes                       |                                                 |      |            |              |
| Alcohol                       |                                                 |      |            |              |
| Furfuraldehyde                |                                                 |      |            |              |
| Aldehyde                      |                                                 |      |            |              |
| Alumina                       |                                                 |      |            |              |

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**LOCKNUTS NICKEL PLATED BRASS**
**Annexe A:**

|                                |  |  |  |  |
|--------------------------------|--|--|--|--|
| Aluminium chloride             |  |  |  |  |
| Aluminium hydroxide            |  |  |  |  |
| Alluminium sulfate and alum    |  |  |  |  |
| Ammonia anhydrous              |  |  |  |  |
| Ammonia wet                    |  |  |  |  |
| Ammonium chloride              |  |  |  |  |
| Ammonio idrossido              |  |  |  |  |
| ammonium nitrate               |  |  |  |  |
| Ammonium sulfate               |  |  |  |  |
| Carbon dioxide anhydrous       |  |  |  |  |
| Carbon dioxide wet             |  |  |  |  |
| Sulfur trioxide anhydrous      |  |  |  |  |
| Sulfur dioxide anhydrous       |  |  |  |  |
| Sulfur dioxide wet             |  |  |  |  |
| Aniline and aniline dye        |  |  |  |  |
| Asphalt                        |  |  |  |  |
| Industrial atmosphere          |  |  |  |  |
| Sea Atmosphere                 |  |  |  |  |
| Country atmosphere             |  |  |  |  |
| Barium carbonate               |  |  |  |  |
| Barium chloride                |  |  |  |  |
| Barium hydroxide               |  |  |  |  |
| Barium sulfate                 |  |  |  |  |
| Gasoline and benzene           |  |  |  |  |
| Carbonated beverages           |  |  |  |  |
| Beer                           |  |  |  |  |
| Borax                          |  |  |  |  |
| Bromine anhydrous              |  |  |  |  |
| Bromine wet                    |  |  |  |  |
| Butane                         |  |  |  |  |
| Lime sulphoric                 |  |  |  |  |
| Quicklime                      |  |  |  |  |
| Calcium bisulphate             |  |  |  |  |
| Calcium chloride               |  |  |  |  |
| Calcium hydroxide              |  |  |  |  |
| Calcium hypochlorite           |  |  |  |  |
| Carbon tetrachloride anhydrous |  |  |  |  |
| Carbon tetrachloride wet       |  |  |  |  |
| Kerosene                       |  |  |  |  |
| Ketone                         |  |  |  |  |
| Chlorine anhydrous             |  |  |  |  |
| Chlorine wet                   |  |  |  |  |
| Chloroform anhydrous           |  |  |  |  |
| Ferric chloride                |  |  |  |  |
| Ferrous chloride               |  |  |  |  |
| Glue                           |  |  |  |  |
| Colophony                      |  |  |  |  |
| Lithium compounds              |  |  |  |  |
| Creosote                       |  |  |  |  |
| Dowterm A (diathermic oil)     |  |  |  |  |

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Prepared by: Marketing dept.

Date: 02/12/2014

**LOCKNUTS NICKEL PLATED BRASS**
**Annexe A:**

|                                     |  |  |  |  |
|-------------------------------------|--|--|--|--|
| Ester                               |  |  |  |  |
| Ethanolamine                        |  |  |  |  |
| Ether                               |  |  |  |  |
| Formaldehyde ed aldehyde            |  |  |  |  |
| Freon                               |  |  |  |  |
| Liquefied petroleum gas and Methane |  |  |  |  |
| Diesel fuel                         |  |  |  |  |
| Gel                                 |  |  |  |  |
| Glycerol                            |  |  |  |  |
| Ethylene glycol                     |  |  |  |  |
| Glucose                             |  |  |  |  |
| Hydrocarbon                         |  |  |  |  |
| Hydrogen                            |  |  |  |  |
| Lacquer                             |  |  |  |  |
| Milck                               |  |  |  |  |
| Watewaters                          |  |  |  |  |
| Magnesium chloride                  |  |  |  |  |
| Magnesium hydroxide                 |  |  |  |  |
| Magnesium sulfate                   |  |  |  |  |
| Molasses                            |  |  |  |  |
| Mercury and Salt                    |  |  |  |  |
| Naphtha                             |  |  |  |  |
| Nickel chloride                     |  |  |  |  |
| nickel sulfate                      |  |  |  |  |
| Linseed oil                         |  |  |  |  |
| Corn oil                            |  |  |  |  |
| Castor oil                          |  |  |  |  |
| Vegetable oils                      |  |  |  |  |
| Oxygen                              |  |  |  |  |
| Paraffin                            |  |  |  |  |
| Bordeaux mixture                    |  |  |  |  |
| Whitening Powder (wet)              |  |  |  |  |
| Potash                              |  |  |  |  |
| Potassium carbonate                 |  |  |  |  |
| Potassium cyanide                   |  |  |  |  |
| Potassium chloride                  |  |  |  |  |
| Potassium dichromate                |  |  |  |  |
| Potassium sulfate                   |  |  |  |  |
| Copper(II) chloride                 |  |  |  |  |
| Copper(II) nitrate                  |  |  |  |  |
| Copper(II) sulfate                  |  |  |  |  |
| Brine                               |  |  |  |  |
| Silver nitrate                      |  |  |  |  |
| Sugarcane sirop                     |  |  |  |  |
| Beet sirop                          |  |  |  |  |
| Soda                                |  |  |  |  |
| Sodium bicarbonate                  |  |  |  |  |
| Sodium sulfate                      |  |  |  |  |
| Sodium bicarbonate                  |  |  |  |  |
| Sodium cyanide                      |  |  |  |  |

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**LOCKNUTS NICKEL PLATED BRASS**
**Annexe A:**

|                                |  |  |  |  |
|--------------------------------|--|--|--|--|
| Sodium chloride                |  |  |  |  |
| Sodium chromate                |  |  |  |  |
| Sodium dichromate              |  |  |  |  |
| Trisodium phosphate            |  |  |  |  |
| Sodium hypochlorite            |  |  |  |  |
| Sodium nitrate                 |  |  |  |  |
| Sodium peroxide                |  |  |  |  |
| Sodium silicate                |  |  |  |  |
| Sodium sulfate                 |  |  |  |  |
| Sodium sulfide and thiosulfate |  |  |  |  |
| Iron(III) sulfate              |  |  |  |  |
| Iron(II) sulfate               |  |  |  |  |
| Soaped solutions               |  |  |  |  |
| Sugar solutions                |  |  |  |  |
| Acetate solvent                |  |  |  |  |
| Lacquer solvents               |  |  |  |  |
| Toluene                        |  |  |  |  |
| Turpentine                     |  |  |  |  |
| Trichloroethylene anhydrous    |  |  |  |  |
| Trichloroethylene umido        |  |  |  |  |
| Water vapor                    |  |  |  |  |
| Paints                         |  |  |  |  |
| Whiskey                        |  |  |  |  |
| Zinc chloride                  |  |  |  |  |
| Zinc sulfate                   |  |  |  |  |
| Thionyl chloride anhydrous     |  |  |  |  |
| Thionyl chloride wet           |  |  |  |  |
| Sulfur                         |  |  |  |  |
| Solid sulfur                   |  |  |  |  |

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