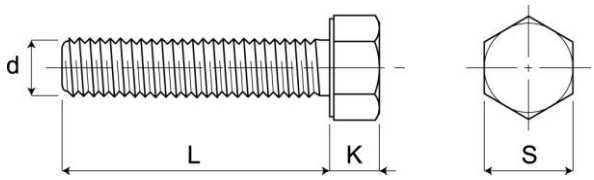
## DATI TECNICI - *TECHNICAL DATA*




**TE vite zincata cl. 4.8 / *set screw zinc plated grade 4.8***

| d | | M5 | M6 | M8 | M10 | M12 |
|---|---|---|---|---|---|---|
| L | 10 | | 19830b06010 | | | |
| | 14 | 19830b05014 | | 19830b08014 | | |
| | 16 | 19830b05016 | 19830b06016 | 19830b08016 | | |
| | 20 | 19830b05020 | 19830b06020 | 19830b08020 | 19830b10020 | 19830b12020 |
| | 25 | 19830b05025 | 19830b06025 | 19830b08025 | 19830b10025 | |
| | 30 | 19830b05030 | 19830b06030 | 19830b08030 | 19830b10030 | 19830b12030 |
| | 35 | | | 19830b08035 | 19830b10035 | 19830b12035 |
| | 40 | 19830b05040 | 19830b06040 | 19830b08040 | 19830b10040 | 19830b12040 |
| | 45 | | | 19830b08045 | 19830b10045 | |
| | 50 | 19830b05050 | 19830b06050 | 19830b08050 | 19830b10050 | 19830b12050 |
| | 60 | 19830b05060 | 19830b06060 | 19830b08060 | 19830b10060 | 19830b12060 |
| | 70 | | 19830b06070 | 19830b08070 | 19830b10070 | 19830b12070 |
| | 80 | | 19830b06080 | 19830b08080 | 19830b10080 | 19830b12080 |
| | 90 | | 19830b06090 | 19830b08090 | 19830b10090 | 19830b12090 |
| | 100 | | 19830b06100 | 19830b08100 | 19830b10100 | 19830b12100 |
| | 110 | | 19830b06110 | 19830b08110 | 19830b10110 | 19830b12110 |
| | 120 | | 19830b06120 | 19830b08120 | 19830b10120 | 19830b12120 |
| | 130 | | 19830b06130 | 19830b08130 | 19830b10130 | 19830b12130 |
| **S** | | 8 | 10 | 13 | 17 | 19 |
| **K** | | 3,5 | 4 | 5,3 | 6,4 | 7,5 |

**TE vite interamente filettata zincata cl. 8.8 / *set screw fully threaded zinc plated grade 8.8***

| d | | M5 | M6 | M8 | M10 | M12 | M14 |
|---|---|---|---|---|---|---|---|
| L | 10 | 19850b05010 | 19850b06010 | 19850b08010 | | | |
| | 12 | 19850b05012 | 19850b06012 | 19850b08012 | | | |
| | 16 | 19850b05016 | 19850b06016 | 19850b08016 | 19850b10016 | | |
| | 20 | 19850b05020 | 19850b06020 | 19850b08020 | 19850b10020 | | |
| | 25 | 19850b05025 | 19850b06025 | 19850b08025 | 19850b10025 | 19850b12025 | |
| | 30 | 19850b05030 | 19850b06030 | 19850b08030 | 19850b10030 | 19850b12030 | 19850b14030 |
| | 35 | 19850b05035 | 19850b06035 | 19850b08035 | 19850b10035 | | |
| | 40 | 19850b05040 | 19850b06040 | 19850b08040 | 19850b10040 | 19850b12040 | 19850b14040 |
| | 45 | | | 19850b08045 | 19850b10045 | | |
| | 50 | | 19850b06050 | 19850b08050 | 19850b10050 | 19850b12050 | 19850b14050 |
| | 60 | | 19850b06060 | 19850b08060 | 19850b10060 | 19850b12060 | 19850b14060 |
| | 70 | | 19850b06070 | 19850b08070 | 19850b10070 | 19850b12070 | 19850b14070 |
| | 80 | | 19850b06080 | 19850b08080 | 19850b10080 | 19850b12080 | 19850b14080 |
| | 90 | | | | 19850b10090 | 19850b12090 | |
| | 100 | | 19850b06100 | 19850b08100 | 19850b10100 | 19850b12100 | 19850b14100 |
| | 120 | | | | 19850b10120 | 19850b12120 | 19850b14120 |
| **S** | | 8 | 10 | 13 | 17 | 19 | 22 |
| **K** | | 3,5 | 4 | 5,3 | 6,4 | 7,5 | 8,8 |

| d | | M16 | M18 | M20 | M22 | M24 |
|---|---|---|---|---|---|---|
| | 30 | 19850b16030 | | | | |
| | 35 | 19850b16035 | | | | |
| | 40 | 19850b16040 | 19850b18040 | 19850b20040 | | |
| | 50 | 19850b16050 | 19850b18050 | 19850b20050 | | |
| | 60 | 19850b16060 | 19850b18060 | 19850b20060 | 19850b22060 | 19850b24060 |
| | 70 | 19850b16070 | 19850b18070 | 19850b20070 | 19850b22070 | 19850b24070 |
| | 80 | 19850b16080 | 19850b18080 | 19850b20080 | 19850b22080 | 19850b24080 |
| | 90 | 19850b16090 | 19850b18090 | | 19850b22090 | 19850b24090 |
| | 100 | 19850b16100 | 19850b18100 | 19850b20100 | 19850b22100 | 19850b24100 |
| | 120 | 19850b16120 | | 19850b20120 | 19850b22120 | 19850b24120 |
| | 140 | | | | | 19850b24140 |
| **S** | | 24 | 27 | 30 | 32 | 36 |
| **K** | | 10 | 11,5 | 12,5 | 14 | 15 |



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**TE vite parzialmente filettata zincata cl. 8.8 / *set screw partially threaded zinc plated grade 8.8***

| d | | M5 | M6 | M8 | M10 | M12 |
|---|---|---|---|---|---|---|
| L | 30 | 19950b05030 | 19950b06030 | 19950b08030 | | |
| | 35 | | 19950b06035 | 19950b08035 | 19950b10035 | |
| | 40 | 19950b05040 | 19950b06040 | 19950b08040 | 19950b10040 | 19950b12040 |
| | 45 | 19950b05045 | 19950b06045 | 19950b08045 | 19950b10045 | |
| | 50 | 19950b05050 | 19950b06050 | 19950b08050 | 19950b10050 | 19950b12050 |
| | 60 | 19950b05060 | 19950b06060 | 19950b08060 | 19950b10060 | 19950b12060 |
| | 70 | | 19950b06070 | 19950b08070 | 19950b10070 | 19950b12070 |
| | 80 | | 19950b06080 | 19950b08080 | 19950b10080 | 19950b12080 |
| | 90 | | 19950b06090 | 19950b08090 | 19950b10090 | |
| | 100 | | 19950b06100 | 19950b08100 | 19950b10100 | 19950b12100 |
| | 110 | | | 19950b08110 | 19950b10110 | 19950b12110 |
| | 120 | | | 19950b08120 | 19950b10120 | 19950b12120 |
| | 130 | | | 19950b08130 | 19950b10130 | 19950b12130 |
| | 140 | | | 19950b08140 | 19950b10140 | 19950b12140 |
| | 150 | | | 19950b08150 | 19950b10150 | 19950b12150 |
| | 160 | | | | 19950b10160 | 19950b12160 |
| | 170 | | | | 19950b10170 | 19950b12170 |
| | 180 | | | | 19950b10180 | 19950b12180 |
| S | | 8 | 10 | 13 | 17 | 19 |
| K | | 3,5 | 4 | 5,3 | 6,4 | 7,5 |

| d | | M14 | M16 | M20 | M24 |
|---|---|---|---|---|---|
| | 50 | 19950b14050 | 19950b16050 | | |
| | 60 | 19950b14060 | 19950b16060 | | |
| | 70 | | 19950b16070 | | |
| | 80 | 19950b14080 | 19950b16080 | | |
| | 90 | 19950b14090 | 19950b16090 | | |
| | 100 | 19950b14100 | 19950b16100 | | |
| | 120 | 19950b14120 | 19950b16120 | 19950b20120 | 19950b24120 |
| | 140 | 19950b14140 | 19950b16140 | 19950b20140 | 19950b24140 |
| | 150 | | | | 19950b24150 |
| | 160 | | 19950b16160 | 19950b20160 | |
| | 180 | | | 19950b20180 | |
| | 200 | | 19950b16200 | 19950b20200 | |
| S | | 22 | 24 | 30 | 36 |
| K | | 8,8 | 10 | 12,5 | 15 |

**TE vite inox A2-70 / *set screw stainless steel A2-70***

| d | | M4 | M5 | M6 | M8 | M10 | M12 | M16 |
|---|---|---|---|---|---|---|---|---|
| L | 16 | 19850x04016 | 19850x05016 | 19850x06016 | 19850x08016 | | | |
| | 20 | 19850x04020 | 19850x05020 | 19850x06020 | 19850x08020 | 19850x10020 | 19850x12020 | |
| | 25 | 19850x04025 | 19850x05025 | 19850x06025 | 19850x08025 | 19850x10025 | 19850x12025 | |
| | 30 | 19850x04030 | 19850x05030 | 19850x06030 | 19850x08030 | 19850x10030 | 19850x12030 | |
| | 35 | | | | 19850x08035 | 19850x10035 | | |
| | 40 | 19850x04040 | 19850x05040 | 19850x06040 | 19850x08040 | 19850x10040 | 19850x12040 | 19850x16040 |
| | 50 | 19850x04050 | 19850x05050 | 19850x06050 | 19850x08050 | 19850x10050 | 19850x12050 | 19850x16050 |
| | 60 | | | 19850x06060 | 19850x08060 | 19850x10060 | 19850x12060 | 19850x16060 |
| | 70 | | | | 19850x08070 | 19850x10070 | | 19850x16070 |
| | 80 | | | 19850x06080 | 19850x08080 | 19850x10080 | 19850x12080 | 19850x16080 |
| | 90 | | | | | | | 19850x16090 |
| | 100 | | | 19850x06100 | 19850x08100 | 19850x10100 | 19850x12100 | 19850x16100 |
| | 120 | | | | | | 19850x12120 | |
| S | | 7 | 8 | 10 | 13 | 17 | 19 | 24 |
| K | | 2,9 | 3,5 | 4 | 5,3 | 6,4 | 7,5 | 10 |

Nota: valori quote espressi in millimetri / *Dimensions are stated in millimeters.*



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## CARATTERISTICHE PRODOTTO - *PRODUCT FEATURES*

| **Tipo vite** *Screw type* | **Norma** *Standard* | **Materiale** *Material* | **Rivestimento** *Coating* |
|---|---|---|---|
| **TE zincata cl. 4.8** *TE zinc plated grade 4.8* | DIN 558 | acciaio cl.4.8 norma ISO 898-1 *steel grade 4.8 ISO 898-1* | zincatura bianca ≥ 5µm ISO4042 *white zinc plated ≥ 5µm ISO4042* |
| **TE zincata cl. 8.8 – parzialmente filettata** *TE zinc plated grade 8.8 – partially threaded* | DIN 931 | acciaio cl.8.8 norma ISO 898-1 *steel grade 8.8 ISO 898-1* | zincatura bianca ≥ 5µm ISO4042 *white zinc plated ≥ 5µm ISO4042* |
| **TE zincata cl. 8.8 – interamente filettata** *TE zinc plated grade 8.8 – fully threaded* | DIN 933 | acciaio cl.8.8 norma ISO 898-1 *steel grade 8.8 ISO 898-1* | zincatura bianca ≥ 5µm ISO4042 *white zinc plated ≥ 5µm ISO4042* |
| **TE inox A2 70** *TE stainless steel A2 70* | | inox A2-70 norma ISO 3506-1 *stainless steel grade A2-70 ISO 3506-1* | - |

## CARATTERISTICHE MECCANICHE - *MECHANICAL FEATURES*

| | **d** | **SEZIONE** *AREA* $As_{nom}$ [mm²] | **TRAZIONE** *TENSILE* $N_{rk,s}$ (1) [kN] | **TAGLIO PURO** *SHEAR* $V_{rk,s}$ (1) [kN] | **MOMENTO FLETTENTE** *BENDING MOMENT* $M_{rk,s}$ (1) [Nm] | **SERRAGGIO** *TORQUE* $T_{inst}$ (2) [Nm] |
|---|---|---|---|---|---|---|
| **zincata cl. 4.8** ***zinc ptd gr. 4.8*** | M5 | 14,2 | 6,0 | 3,0 | 3 | 3 |
| | M6 | 20,1 | 8,4 | 4,2 | 6 | 5,5 |
| | M8 | 36,6 | 15,4 | 7,5 | 15 | 12,5 |
| | M10 | 58 | 24 | 12 | 30 | 25 |
| | M12 | 84,3 | 35 | 18 | 50 | 45 |
| **zincata cl. 8.8** ***zinc ptd. gr. 8.8*** | M5 | 14,2 | 11 | 5,5 | 6 | 6 |
| | M6 | 20,1 | 16 | 8 | 12 | 10 |
| | M8 | 36,6 | 29 | 15 | 30 | 25 |
| | M10 | 58 | 46 | 23 | 60 | 50 |
| | M12 | 84,3 | 67 | 34 | 105 | 80 |
| | M14 | 115 | 92 | 46 | 160 | 130 |
| | M16 | 157 | 125 | 63 | 266 | 200 |
| | M18 | 192 | 159 | 79 | 350 | 280 |
| | M20 | 245 | 203 | 101 | 519 | 400 |
| | M22 | 303 | 252 | 126 | 720 | 550 |
| | M24 | 353 | 293 | 146 | 896 | 690 |
| **inox A2-70** ***stainless steel A2-70*** | M4 | 8,78 | 6 | 3 | 3 | 2,5 |
| | M5 | 14,2 | 10 | 5 | 5 | 4,5 |
| | M6 | 20,1 | 14 | 7 | 10 | 8 |
| | M8 | 36,6 | 26 | 13 | 26 | 20 |
| | M10 | 58 | 41 | 20 | 52 | 40 |
| | M12 | 84,3 | 59 | 30 | 92 | 70 |
| | M16 | 157 | 110 | 55 | 232 | 180 |

1 kN = 100 kgf

(1) I valori riportati sono carichi caratteristici di rottura conformi alla classe 4.8 o 8.8 secondo norma ISO 898-1 per la versione zincata o alla classe A2-70 secondo norma ISO 3506-1 per la versione inox / *The above values are characteristic failure loads conforming to grade 4.8 or 8.8 in accordance with the ISO 898-1 standard for the zinc plated version or conforming to grade A2-70 in accordance with the ISO 3506-1 standard for the stainless steel version.*

(2) Serraggio nominale consigliato, utilizzare un dado di classe minima: cl.5-DIN555 zincato per la versione cl. 4.8 zincata,
cl.8-DIN934 zincato per la versione classe 8.8 zincata;
cl.A2 70-DIN934 per la versione inox A2 70.

*Recommended nominal torque, use a nut of minimum grade : gr.l.5-DIN555 for the zinc plated gr. 4.8 version*
*gr.8-DIN 934 for the zinc plated gr. 8.8 version*
*gr. A2 70-DIN934 for the stainless steel A2 70 version.*

In assenza di regolamentazioni nazionali diverse utilizzare i coefficienti di sicurezza riportati sui pertinenti Eurocodici ER / *In the absence of nationalregulations use safety factors cited in relevant ER Eurocodes.*