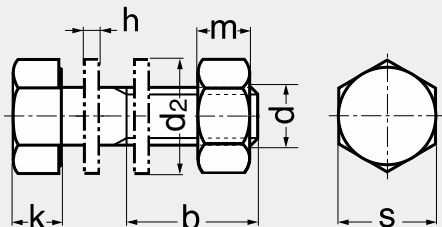


# BOULON HV PRECONTRAIT

NF EN 14399-4-6-K1

ACIER CLASSE 10.9 GALVANISE A CHAUD

Modèle  
**21804**



## RÉFÉRENCES MEMENTO TECHNIQUE

- Environnement de la boulonnerie de construction métallique
- Normes boulonnerie de construction métallique
- Caractéristiques et bases de calcul pour la boulonnerie de structure HV



HV HIGHT-STRENGTH STRUCTURAL BOLTING FOR PRELOADING SYSTEM HV 10.9 CLASS HOT DIP GALVANIZED

BULON CON APRIETE CONTROLADO HV ACERO CALIDAD 10.9 GALVANISADO

BULLONE SERRAGGIO CONTROLLATO HV ACCIAIO CLASSE 10.9 ZINCATO A CALDO



ECROU PAL  
DIN 7967 GAC  
Modèle 72704  
Page C 39



VISSEUSE ELEC.  
TONE® POUR  
BOULONS HR  
Modèle  
88135GSR  
Page O 19

| d nominal           | M12  | M16   | M20  | M22  | M24  | M27  | M30   | M36   |
|---------------------|------|-------|------|------|------|------|-------|-------|
| d <sub>2</sub> (mm) | 24   | 30    | 37   | 39   | 44   | 50   | 56    | 66    |
| m (mm)              | 10   | 13    | 16   | 18   | 20   | 22   | 24    | 29    |
| h (mm)              | 3    | 4     | 4    | 4    | 4    | 5    | 5     | 6     |
| k max. (mm)         | 8,45 | 10,75 | 13,9 | 14,9 | 15,9 | 17,9 | 20,05 | 24,05 |
| s max. (mm)         | 22   | 27    | 32   | 36   | 41   | 46   | 50    | 60    |
| b (mm)              | 23   | 28    | 33   | 34   | 39   | 41   | 44    | 52    |

K1 = serrage en méthode combinée obligatoire

| Référence  | d x L (mm) |
|------------|------------|
| 2180412X35 | 12X35      |
| 2180412X40 | 12X40      |
| 2180412X45 | 12X45      |
| 2180412X50 | 12X50      |
| 2180412X55 | 12X55      |
| 2180412X60 | 12X60      |
| 2180412X65 | 12X65      |
| 2180412X70 | 12X70      |
| 2180412X75 | 12X75      |
| 2180412X80 | 12X80      |
| 2180412X85 | 12X85      |
| 2180412X90 | 12X90      |

| Référence   | d x L (mm) |
|-------------|------------|
| 2180412X95  | 12X95      |
| 2180412X100 | 12X100     |
| 2180412X110 | 12X110     |
| 2180412X120 | 12X120     |
| 2180416X40  | 16X40      |
| 2180416X45  | 16X45      |
| 2180416X50  | 16X50      |
| 2180416X55  | 16X55      |
| 2180416X60  | 16X60      |
| 2180416X65  | 16X65      |
| 2180416X70  | 16X70      |
| 2180416X75  | 16X75      |

| Référence   | d x L (mm) |
|-------------|------------|
| 2180416X80  | 16X80      |
| 2180416X85  | 16X85      |
| 2180416X90  | 16X90      |
| 2180416X95  | 16X95      |
| 2180416X100 | 16X100     |
| 2180416X105 | 16X105     |
| 2180416X110 | 16X110     |
| 2180416X115 | 16X115     |
| 2180416X120 | 16X120     |
| 2180416X130 | 16X130     |
| 2180420X40  | 20X40      |
| 2180420X45  | 20X45      |

| Référence   | d x L (mm) |
|-------------|------------|
| 2180420X50  | 20X50      |
| 2180420X55  | 20X55      |
| 2180420X60  | 20X60      |
| 2180420X65  | 20X65      |
| 2180420X70  | 20X70      |
| 2180420X75  | 20X75      |
| 2180420X80  | 20X80      |
| 2180420X85  | 20X85      |
| 2180420X90  | 20X90      |
| 2180420X95  | 20X95      |
| 2180420X100 | 20X100     |
| 2180420X105 | 20X105     |

| Référence   | d x L (mm) |
|-------------|------------|
| 2180420X110 | 20X110     |
| 2180420X115 | 20X115     |
| 2180420X120 | 20X120     |
| 2180420X125 | 20X125     |
| 2180420X130 | 20X130     |
| 2180420X135 | 20X135     |
| 2180420X140 | 20X140     |
| 2180420X145 | 20X145     |
| 2180420X150 | 20X150     |
| 2180420X155 | 20X155     |
| 2180420X160 | 20X160     |
| 2180420X170 | 20X170     |