



4014  
2013

ISO 4014:2011  
Hexagon head bolts — Product grades A and  
(IDT)

27 2002 . 184- « — 1.0—2004 « », -  
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2 229 « » -

3 28 2013 . 572- -

4 4014:2011 « -  
» (ISO 4014:2011 «Hexagon head bolts — Product grade A and -  
B»). -  
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5 50796-95 ( 4014—88) -

1 ) « 1.0—2012 ( 8).  
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(gosf.ru)

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|---------|---------|-------|-----------|-------|-------|--------|---------|--------|--------|---|
|         |         |       | 4014:2011 |       |       |        |         |        |        | * |
|         | :       |       |           |       |       |        |         |        |        |   |
| a)      |         |       | (         | 4014. | 4015, | 4016,  | 8765);  |        |        |   |
| b)      |         |       | (         | 4017, | 4018. | 8676): |         |        |        |   |
| c)      |         |       | (         | 4032. | 4033, | 4034.  | 4035,   | 4036.  | 7040,  |   |
| 7041,   | 7042.   | 7719, |           | 7720. | 8673. | 8674,  | 8675.   | 10511. | 10512, |   |
| 10513); |         |       |           |       |       |        |         |        |        |   |
| d)      |         |       |           | (     | 4162. | 15071  | 15072); |        |        |   |
| e)      |         |       | (         | 4161. | 7043. | 7044,  | 10663.  | 12125, |        |   |
| 12126   | 21670). |       |           |       |       |        |         |        |        |   |

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|          | 1. | -  | *<br>s'<br>/ . /," | \$<br>/ . /     |
|          |    |    |                    |                 |
|          |    | *  |                    |                 |
| / - 380. |    | /. |                    |                 |
|          | 2. | -  | 362,85<br>/ . « /  | 382,85<br>/ . * |

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| $d_4$ |  | 4 |  |

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|         | ,   | - |        |       |
|         | 14  | - | 23.26  | 23.36 |
|         | ,   | - |        |       |
|         | ,   | - |        |       |
| 3.5     |     |   | 11,715 | 2.525 |
|         | s,  | - |        |       |
|         | 3.5 | - | 26.67  | 5.82  |
|         | s,  | - |        |       |
|         | 14  | - | 33.38  | 20.67 |
|         | /5  | , |        |       |
| / = 320 | 45  |   | 11.5   | 182.5 |

( 5 2015 . )

## Hexagon head bolts. Product grades A and

—2014—07—01

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104 1.6 64 , 1.6 24 24  
 150 , ,  
 104 150 ,  
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 888. 898\*1, 965-1. 3506-1. 4753 4759-1. 724.

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(ISO 225. Fasteners — Bolts, screws, studs and nuts — Symbols and description of dimensions)  
 724 ISO (ISO 724, ISO general-purpose metric screw threads — Basic dimensions)  
 898-1  
 1.  
 (ISO 898\*1. Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread)  
 CO 965\*1 ISO 1.  
 (ISO 965\*2. ISO general-purpose metric screw threads — Tolerances — Part 1: Principles and basic data)  
 3269 (ISO 3269. Fasteners — Acceptance inspection)  
 3506\*1  
 1. (ISO 3506-1, Mechanical properties of corrosion-resistant stainless-steel fasteners — Part 1: Bolts, screws and studs)  
 4017 (ISO 4017, Hexagon head screws — Product grades A and B)  
 4042 (ISO 4042. Fasteners — Electroplated coatings)  
 4753 (ISO 4753. Fasteners — Ends of parts with external ISO metric thread)  
 4759-1 1.  
 (ISO 4759-1. Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A and C)  
 6157-1 1.  
 (ISO 6157-1. Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general requirements)

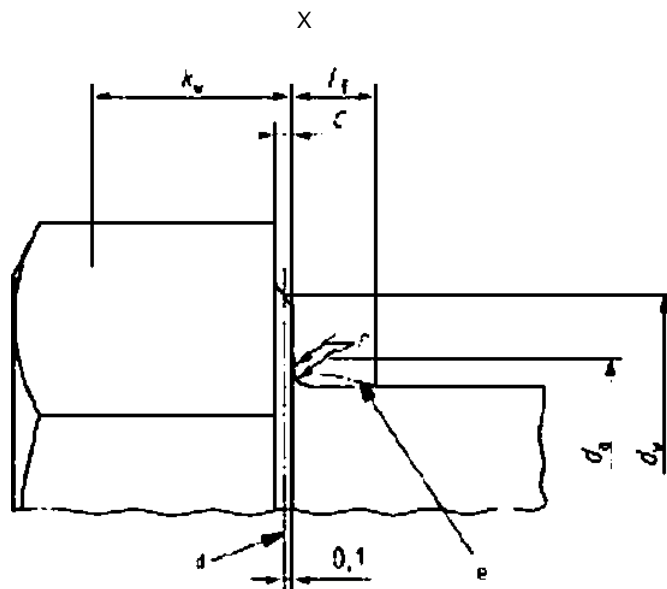
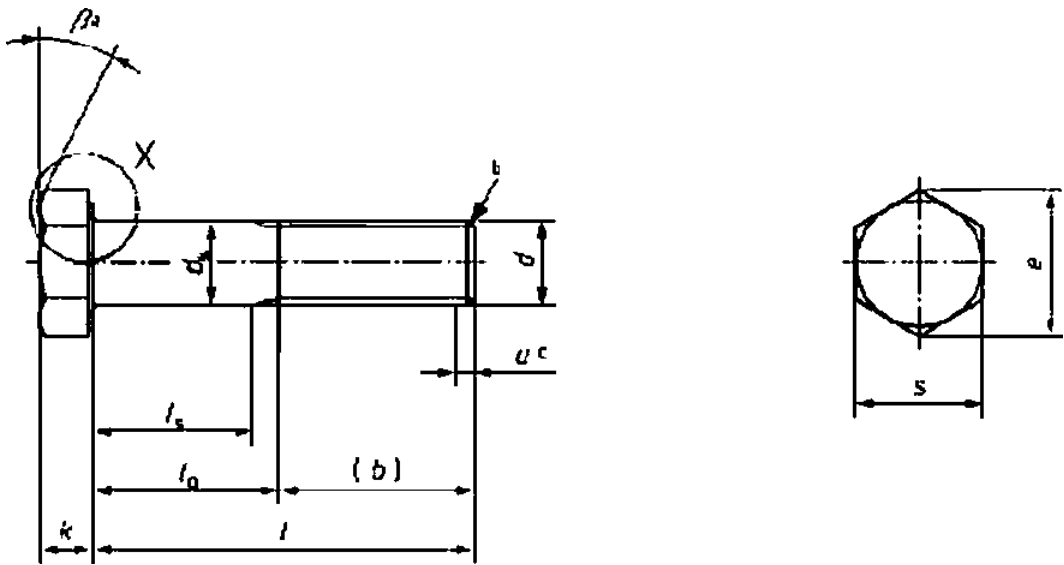
8839  
 (ISO 8839, Mechanical properties of fasteners — Bolts, screws, studs and nuts made of non-ferrous metals)

8992  
 Fasteners — General requirements for bolts, screws, studs and nuts) (ISO 8992)

10683  
 Fasteners — Non-electrolytically applied zinc flake coatings) (ISO 10683)

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|------------------|--|----|-------|-------|-------|-------|-------|------|-------|-------|-------|
|                  |  |    | 1.6   | M2    | 23    |       | 4     | 5    | U6    | 8     |       |
| *                |  |    | 0.35  | 0.4   | 0.45  |       | 0.7   | 0.8  | 1     | 125   | 1.5   |
|                  |  | 0  | 9     | 10    | 11    | 12    | 14    | 16   | 18    | 22    | 26    |
|                  |  | c  | 15    | 16    | 17    | 18    | 20    | 22   | 24    | 28    | 32    |
|                  |  | <3 | 28    | 29    | 30    | 31    | 33    | 35   | 37    | 41    | 45    |
|                  |  |    | 0.2S  | 025   | 025   | 0.40  |       |      | 0.50  | 080   | 080   |
|                  |  |    | 0.10  | 0.10  | 0.10  | 0.15  | 0.15  | 0.15 | 0.15  | 0.15  | 0.15  |
| <*«              |  |    | 2     | 28    | 3.1   | 38    | 4.7   | 5.7  | 68    | 92    | 11.2  |
| d.               |  | =  | 1.60  | 200   | 200   | 3.00  | 400   | 500  | 6.00  | 800   | 10.00 |
|                  |  |    | 1.46  | 1.66  | 2.36  | 2.66  | 3.62  | 4.82 | 5.62  | 7.78  | 9.78  |
|                  |  |    | 1,35  | 1.75  | 225   | 2.75  | 3.70  | 4.70 | 5.70  | 784   | 984   |
| d <sub>w</sub>   |  |    | 2.27  | 3.07  | 4.07  | 4.57  | 588   | 688  | 8.88  | 1183  | 14.63 |
|                  |  | 6  | 2.30  | 205   | 3.95  | 4.45  | 5.74  | 6.74 | 8.74  | 1137  | 14.47 |
| (fi*             |  |    | 3.*1  | 432   | 5.45  | 6.01  | 786   | 8.79 | 11.05 | 1438  | 17.77 |
|                  |  |    | 3.26  | 4.18  | 5.31  | 5.68  | 7.50  | 8.63 | 1089  | 1420  | 17.59 |
| h                |  |    | 08    | 08    | 1     | 1     | 12    | 1.2  | 1.4   | 2     | 2     |
|                  |  |    | 1.1   | 1.4   | 1.7   | 2     | 28    | 3.5  | 4     | 53    | 6.4   |
|                  |  |    | 1225  | 1.525 | 1.825 | 2.125 | 2.925 | 3.65 | 4.15  | 5.45  | 658   |
|                  |  |    | 0.975 | 1.275 | 1.575 | 1875  | 2.675 | 335  | 3.8S  | 5.15  | 622   |
|                  |  | D  | 13    | 1.6   | 1.9   | 22    | 3.0   | 3.74 | 4.24  | 554   | 689   |
|                  |  |    | 0.9   | 12    | 1.5   | 18    | 2.6   | 326  | 3.76  | 5.06  | 6.11  |
| k <sub>w</sub> * |  |    | 0.68  | 089   | 1.10  | 1.31  | 187   | 235  | 2.70  | 381   | 435   |
|                  |  |    | 0.63  | 084   | 105   | 1.26  | 182   | 2 28 | 2.63  | 354   | 428   |
| r                |  |    | 0.1   | 0.1   | 0.1   | 0.1   | 02    | 0.2  | 0.25  | 03    | 0.4   |
| s'               |  | «  | 3.20  | 4.00  | 5.00  | 5.50  | 7.00  | 800  | 1000  | 1300  | 16.00 |
|                  |  |    | 3.02  | 382   | 482   | 5.32  | 6.78  | 7,78 | 9.78  | 12.73 | 15.73 |
|                  |  |    | 2.90  | 3.70  | 4.70  | 5.20  | 6.64  | 7.64 | 9.64  | 12.57 | 15.57 |



| . 4 |       |       |        |        | 1.6 | 2  | M2.S | 3  | 4     | MS |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
|-----|-------|-------|--------|--------|-----|----|------|----|-------|----|------|----|------|----|----|----|----|----|-------|----|------|----|----|--|--|--|
| 1   |       |       |        |        |     |    |      |    |       |    |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
| »   |       |       |        |        | -   | *9 | -    | 9  | -     | '  | -    |    | -    | *9 | -  | '  | -  | *9 | -     | *  | 9    | -  | *9 |  |  |  |
| 12  | 11.65 | 1235  | -      | -      | 12  | 3  |      |    |       |    |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
| 16  | 15.65 | 1635  | -      | -      | 52  | 7  | 4    | 6  | 2.75  | 5  |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
| 20  | 19.58 | 20.42 | 18,95  | 21.05  |     |    |      | 10 | 6.75  | 9  | 53   | 8  |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
| 25  | 24.58 | 25.42 | 23.95  | 26.05  |     |    |      |    | 11.75 | 14 | 10,5 | 13 | 7.5  | 11 | 5  | 9  |    |    |       |    |      |    |    |  |  |  |
| 30  | 29.58 | 30,42 | 28.95  | 31.05  |     |    |      |    |       |    | 15.5 | 18 | 12.5 | 16 | 10 | 14 | 7  | 12 |       |    |      |    |    |  |  |  |
| 35  | 34.5  | 353   | 33.75  | 36.25  |     |    |      |    |       |    |      |    | 17.5 | 21 | 15 | 19 | 12 | 17 |       |    |      |    |    |  |  |  |
| 40  | 39.5  | 403   | 38.75  | 41.25  |     |    |      |    |       |    |      |    | 22.5 | 26 | 20 | 24 | 17 | 22 | 11.75 | 18 |      |    |    |  |  |  |
| 45  | 44.5  | 455   | 43.75  | 46.25  |     |    |      |    |       |    |      |    |      |    | 25 | 29 | 22 | 27 | 16.75 | 23 | 11.5 | 19 |    |  |  |  |
| 50  | 49.5  | 50.5  | 48.75  | 51.25  |     |    |      |    |       |    |      |    |      |    | 27 | 34 | 27 | 32 | 21.75 | 28 | 163  | 24 |    |  |  |  |
| 55  | 54.4  | 55.6  | 53.5   | 56.5   |     |    |      |    |       |    |      |    |      |    |    |    | 32 | 37 | 26.75 | 33 | 213  | 29 |    |  |  |  |
| 60  | 59.4  | 60.6  | 58.5   | 61.5   |     |    |      |    |       |    |      |    |      |    |    |    | 37 | 42 | 31.75 | 38 | 263  | 34 |    |  |  |  |
| 65  | 64,4  | 65.6  | 63.5   | 66.5   |     |    |      |    |       |    |      |    |      |    |    |    |    |    | 36.75 | 43 | 313  | 39 |    |  |  |  |
| 70  | 69.4  | 70.6  | 68.5   | 71.5   |     |    |      |    |       |    |      |    |      |    |    |    |    |    | 41.75 | 48 | 63   | 44 |    |  |  |  |
| 80  | 79.4  | 80.6  | 78.5   | 81.5   |     |    |      |    |       |    |      |    |      |    |    |    |    |    | 51.75 | 58 | 463  | 54 |    |  |  |  |
| 90  | 89.3  | 90.7  | 88.25  | 91.75  |     |    |      |    |       |    |      |    |      |    |    |    |    |    |       |    | 56.5 | 64 |    |  |  |  |
| 100 | 99.3  | 100,7 | 98.25  | 101.75 |     |    |      |    |       |    |      |    |      |    |    |    |    |    |       |    | 663  | 74 |    |  |  |  |
| 110 | 109.3 | 110.7 | 108.25 | 111.75 |     |    |      |    |       |    |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |
| 120 | 1193  | 120.7 | 11825  | 121.75 |     |    |      |    |       |    |      |    |      |    |    |    |    |    |       |    |      |    |    |  |  |  |

|    |    |  |  |       |       |        |        |       |       |       |       |       |        |
|----|----|--|--|-------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
|    |    |  |  | 12    | 16    | 20     | 24     |       | 36    | 42    | 48    | MS6   | 64     |
|    |    |  |  | 1.75  | 2     | 2.5    | 3      | 36    | 4     | 4,5   | 5     | 5.5   | 6      |
| ^  | b  |  |  | 30    | 36    | 46     | 54     | 66    | -     | -     | -     | -     | -      |
|    |    |  |  |       | <4    | 52     | 60     | 72    | 84    | 98    | 108   | -     | -      |
|    | d  |  |  | 49    | 57    | 65     | 73     | 85    | 97    | 109   | 121   | 137   | 153    |
|    |    |  |  | 0.60  | 0.6   | 0.6    | 06     | 06    | 06    | 1.0   | 1.0   | 1.0   | 10     |
|    |    |  |  | 0.15  | 0.2   | 0.2    | 0 2    | 03    | 03    | 0.3   | 0.3   | 0.3   | 03     |
| <* |    |  |  | 13.7  | 17.7  | 22.4   | 26.4   | .4    | 39.4  | 45.8  | 52.6  | 83    | 71     |
|    | .= |  |  | 12,00 | 16,00 | 20.00  | 24.00  | 30.00 | 36.00 | 42.00 | 48.00 | 56.00 | 64.00  |
|    |    |  |  | 1173  | 15.73 | 19.67  | 2367   | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 11.57 | 15.57 | 19.48  | 23.48  | 2948  | 3S38  | 41.38 | 47.38 | 55.26 | 6326   |
|    |    |  |  | 16.63 | 22.49 | 26.19  | 33.61  | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 16.47 | 22    | 27,7   | 33.25  | 42.75 | 51.11 | 59.95 | .45   | 78.66 | 88.16  |
| o' |    |  |  | 20    | 26.75 | 33.53  | 3968   | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 19.65 | 26.17 | 32.95  | 39.55  | 5065  | 60.79 | 713   | 826   | 93.56 | 104.86 |
| b  |    |  |  | 3     | 3     | 4      | 4      | 6     | 6     | 8     | 10    | 12    | 13     |
|    |    |  |  | 76    | 10    | 126    | 15     | 18.7  | 22.5  | 26    | 30    | 35    | 40     |
|    |    |  |  | 7.68  | 10.18 | 12.715 | 15.215 | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 7.32  | 962   | 12685  | 14.785 | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 7.79  | 10.29 | 12.85  | 1535   | 19.12 | 22.92 | 26.42 | 30.42 | 356   | 40.5   |
|    |    |  |  | 721   | 9.71  | 12.15  | 14.65  | 1828  | 22.06 | 25.58 | 29.58 | 346   | 39.5   |
| V  |    |  |  | 5.12  | 667   | 8.6    | 1035   | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 5.05  | 6.6   | 861    | 1036   | 12.8  | 1548  | 17.91 | 20.71 | 24.15 | 2765   |
|    |    |  |  | 0.6   | 0.6   | 0.8    | 0.8    | 1     | 1     | 1.2   | 1.6   | 2     | 2      |
| s' | .» |  |  | 1600  | 24.00 | 30.00  | 36 60  | 46    | 55.0  | 656   | 750   | 850   | 95.0   |
|    |    |  |  | 17.73 | 23.67 | 29.67  | 3538   | -     | -     | -     | -     | -     | -      |
|    |    |  |  | 17.57 | 23.16 | 29.16  | 35.00  | 45    | 53.6  | 83.1  | 73.1  | 826   | 92.8   |

| .tf |       |       |        |        | 12    | 1               | 20 | 24  |       |      | ∠   | 48  | 56    | 64   |     |     |       |     |     |     |       |     |     |     |
|-----|-------|-------|--------|--------|-------|-----------------|----|-----|-------|------|-----|-----|-------|------|-----|-----|-------|-----|-----|-----|-------|-----|-----|-----|
|     |       |       |        |        |       |                 |    |     |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
|     |       |       | 6      |        |       |                 |    |     |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
|     | -     | -     | -      | -      |       | '               | >* | *9  | '     | '    | '   | '   | '     | '    |     |     |       |     |     |     |       |     |     |     |
|     |       |       |        |        |       | -               | -  | -   | -     | -    | -   | -   | -     | -    |     |     |       |     |     |     |       |     |     |     |
| 50  | 49.5  | 50.5  | —      | -      | 11.25 | 20              |    |     |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 55  | 54.4  | 55.6  | 53.5   | 56.5   | 1625  | 25              |    |     |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 60  | 59.4  | 60.6  | 58.5   | 61.5   | 2125  | 30              |    |     |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 65  | 64.4  | 65.6  | 63.5   | 66.5   | 2625  | 35              | 17 | 27  |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 70  | 69.4  | 70.6  | 66.5   | 71.5   | 3125  | 40              | 22 | 32  |       |      |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 60  | 79.4  | 60.6  | 78.5   | 81.5   | 4125  | 50              | 32 | 42  | 21.5  | 34   |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| 90  | 69.3  | 90.7  | 68.25  | 91.75  | 5125  | 60              | 42 | 52  | 31.5  | 44   | 21  | 36  |       |      |     |     |       |     |     |     |       |     |     |     |
| 100 | 99.3  | 100.7 | 98.25  | 101.75 | 6125  | 70              | 52 | 62  | 41.5  | 54   | 31  | 46  |       |      |     |     |       |     |     |     |       |     |     |     |
| 110 | 109.3 | 110.7 | 108.25 | 111.75 | 7125  | 80              | 62 | 72  | 51.5  | 64   | 41  | 56  | 26.5  | 44   |     |     |       |     |     |     |       |     |     |     |
| 120 | 119.3 | 120.7 | 118.25 | 121.75 | 81.25 | 90              | 72 | 82  | 61.5  | 74   | 51  | 66  | 36.5  | 54   |     |     |       |     |     |     |       |     |     |     |
| 130 | 129.2 | 130.6 | 128    | 132    |       |                 | 76 | 66  | 65.5  | 78   | 55  | 70  | 40.5  | 56   |     |     |       |     |     |     |       |     |     |     |
| 140 | 139.2 | 140.6 | 138    | 142    |       | I <sub>86</sub> |    | 96  | 75.5  | 66   | 65  | 80  | 50.5  | 66   | 36  | 56  |       |     |     |     |       |     |     |     |
| 150 | 149.2 | 150.6 | 148    | 152    |       |                 |    | 106 | 85.5  | 98   | 75  | 90  | 60.5  | 78   | 46  | 66  |       |     |     |     |       |     |     |     |
| 160 | —     | —     | 158    | 162    |       |                 |    | 106 | 116   | 95.5 | 108 | 65  | 100   | 70.5 | 88  | 56  | 76    | 415 | 64  |     |       |     |     |     |
| 160 | —     | —     | 178    | 182    |       |                 |    |     | 115.5 | 128  | 105 | 120 | 90.5  | 108  | 76  | 96  | 61.5  | 84  | 47  | 72  |       |     |     |     |
| 200 | —     | —     | 197.7  | 202.3  |       |                 |    |     | 135.5 | 146  | 125 | 140 | 110.5 | 126  | 96  | 116 | 61.5  | 104 | 67  | 92  |       |     |     |     |
| 220 | —     | —     | 217.7  | 222.3  |       |                 |    |     |       |      | 132 | 147 | 117.5 | 135  | 103 | 123 | 88.5  | 111 | 74  | 99  | 55.5  | 83  |     |     |
| 240 | -     | -     | 237.7  | 242.3  |       |                 |    |     |       |      | 152 | 167 | 137.5 | 155  | 123 | 143 | 108.5 | 131 | 94  | 119 | 75.5  | 103 |     |     |
| 260 | —     | —     | 257.4  | 262.6  |       |                 |    |     |       |      |     |     | 157.5 | 175  | 143 | 163 | 128.5 | 151 | 114 | 139 | 95.5  | 123 | 77  | 107 |
| 260 | -     | -     | 277.4  | 282.6  |       |                 |    |     |       |      |     |     | 177.5 | 195  | 163 | 183 | 148.5 | 171 | 134 | 159 | 115.5 | 143 | 97  | 127 |
| 300 | —     | —     | 297.4  | 302.6  |       |                 |    |     |       |      |     |     | 197.5 | 215  | 163 | 203 | 166.5 | 191 | 154 | 179 | 135.5 | 163 | 117 | 147 |
| 320 | —     | —     | 317.15 | 322.65 |       |                 |    |     |       |      |     |     |       |      | 203 | 223 | 168.5 | 211 | 174 | 199 | 155.5 | 183 | 137 | 167 |
| 340 | —     | —     | 337.15 | 342.65 |       |                 |    |     |       |      |     |     |       |      | 233 | 243 | 206.5 | 231 | 194 | 219 | 175.5 | 203 | 157 | 187 |

| PejfcCa,tf |    |   |        |        | 12 | 16 | 20 | 24 |   | 36 | 42 | 48 | 56 | 64  |     |       |     |     |     |       |     |     |     |
|------------|----|---|--------|--------|----|----|----|----|---|----|----|----|----|-----|-----|-------|-----|-----|-----|-------|-----|-----|-----|
| A          |    |   |        |        |    |    |    |    |   |    |    |    |    |     |     |       |     |     |     |       |     |     |     |
|            |    |   |        |        |    |    |    |    |   |    |    |    |    |     |     |       |     |     | /   |       |     |     |     |
| MO*        | ** | * | **     | Gone*  | «  | 'g | -  | *g | ' | -  | *g | -  | :g | -   | *g  | -     | *   | -   |     |       |     |     |     |
| 360        | -  | - | 357.15 | 362,65 |    | 60 | -  | -  | - | -  | -  | -  | -  | 243 | 263 | 228.5 | 251 | 214 | 239 | 195.5 | 223 | 177 | 207 |
| 380        | -  | - | 377.15 | 362.85 |    |    |    |    |   |    |    |    |    |     |     | 248.5 | 271 | 234 | 259 | 215.5 | 243 | 197 | 227 |
| 400        | -  | - | 387.15 | 402.85 |    |    |    |    |   |    |    |    |    |     |     | 268.5 | 291 | 254 | 279 | 235.5 | 263 | 217 | 247 |
| 420        | -  | - | 41685  | 423.15 |    |    |    |    |   |    |    |    |    |     |     | 2888  | 311 | 274 | 299 | 255.5 | 283 | 237 | 267 |
| 440        | -  | - | 436 85 | 443.15 |    |    |    |    |   |    |    |    |    |     |     | 3085  | 331 | 294 | 319 | 275.5 | 303 | 257 | 287 |
| 460        | -  | - | 45685  | 463.15 |    |    |    |    |   |    |    |    |    |     |     |       |     | 314 | 339 | 2955  | 323 | 277 | 307 |
| 480        | -  | - | 476 85 | 483.15 |    |    |    |    |   |    |    |    |    |     |     |       |     | 334 | 359 | 3155  | 343 | 297 | 327 |
| 500        | -  | - | 49685  | 503.15 |    |    |    |    |   |    |    |    |    |     |     |       |     |     |     | 3355  | 363 | 317 | 347 |

l<sub>s</sub> /:

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 /\_ 5 125 ;  
 125 < 5 200 ;  
 / > 200 ;  
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 \vuaic" ^ ~ -  
 /s, h . " - p

| .d  |       |       |        | 3.5    | 14    | 1&     | 22     | 27    |      |    |      |         |    |
|-----|-------|-------|--------|--------|-------|--------|--------|-------|------|----|------|---------|----|
| °   |       |       |        | 0.6    | 2     | 2.5    | 2.5    | 3     |      |    |      |         |    |
| ^   | b     |       |        | 13     | 34    | 42     | 50     | 60    |      |    |      |         |    |
|     |       |       |        | 19     | 40    | 48     | 56     | 66    |      |    |      |         |    |
|     | d     |       |        | 32     | 53    | 61     | 69     | 79    |      |    |      |         |    |
|     |       |       |        | 0.40   | 0.60  | 0.8    | 0.8    | 0.8   |      |    |      |         |    |
|     |       |       |        | 0.15   | 0.15  | 0.2    | 0.2    | 0.2   |      |    |      |         |    |
|     |       |       |        | 4.1    | 15.7  | 20.2   | 24.4   | 30.4  |      |    |      |         |    |
| <*  | .=    |       |        | 3.50   | 14.00 | 18.00  | 22.0   | 27.00 |      |    |      |         |    |
|     |       |       |        | 3.32   | 13.73 | 17.73  | 21.67  | —     |      |    |      |         |    |
|     |       |       |        | 3.20   | 13.57 | 17.57  | 21.48  | 26.48 |      |    |      |         |    |
| *w  |       |       |        | 5.07   | 19.64 | 25.34  | 31.71  | —     |      |    |      |         |    |
|     |       |       |        | 4.95   | 19.15 | 24.85  | 31.35  | 38    |      |    |      |         |    |
|     |       |       |        | 6.58   | 23.26 | 30.14  | 37.72  | —     |      |    |      |         |    |
|     |       |       |        | 6.44   | 22.78 | 29.56  | 37.29  | 45.2  |      |    |      |         |    |
|     |       |       |        | 1      | 3     | 3      | 4      | 6     |      |    |      |         |    |
|     |       |       |        | 2.4    | 8.8   | 11.5   | 14     | 17    |      |    |      |         |    |
|     |       |       |        | 11.715 | 8.98  | 11.715 | 14.215 | —     |      |    |      |         |    |
|     |       |       |        | 2.275  | 8.62  | 11.285 | 13.785 | —     |      |    |      |         |    |
|     |       |       |        | 2.6    | 9.09  | 11.65  | 14.35  | 17,35 |      |    |      |         |    |
|     |       |       |        | 2.2    | 8.51  | 11.15  | 13.65  | 13.65 |      |    |      |         |    |
| V   |       |       |        | 1.59   | 6.03  | 7.9    | 9.65   | —     |      |    |      |         |    |
|     |       |       |        | 1.54   | 5.96  | 7.81   | 9.56   | 11.66 |      |    |      |         |    |
|     |       |       |        | 0.1    | 0.6   | 0.6    | 0.8    | 1     |      |    |      |         |    |
| s   | .=    |       |        | 6.00   | 21.00 | 27.00  | 34.00  | 41    |      |    |      |         |    |
|     |       |       |        | 26.67  | 33.38 | 26.67  | 33.38  | —     |      |    |      |         |    |
|     |       |       |        | 5.70   | 20.16 | 26.16  | 33.00  | 40    |      |    |      |         |    |
|     |       |       |        | **V9   |       |        |        |       |      |    |      |         |    |
|     | 9     | 0)    | 9      | £      | 9     | *      | «      | 9     | 99   | «  | 9    |         | 9  |
|     | £     | £     | £      | £      | £     | £      | £      | £     | £    | £  | £    | £       | £  |
|     | £     | £     | £      | £      | £     | £      | £      | £     | £    | £  | £    | £       | £  |
| 20  | 19.58 | 20.42 | —      | —      | 4     | 7      |        |       |      |    |      |         |    |
| 25  | 24.58 | 25.42 | —      | —      | 9     | 12     |        |       |      |    |      |         |    |
| 30  | 29.58 | 30.42 | —      | —      | 14    | 17     |        |       |      |    |      | 1       |    |
| 35  | 34.5  | 35.5  | —      | —      | 19    | 22     |        |       |      |    |      |         |    |
| 40  | 39.5  | 40.5  | 38.75  | 41.25  |       |        | 1      |       |      |    |      | (1 7    |    |
| 45  | 44.5  | 45.5  | 43.75  | 46.25  |       |        |        |       |      |    |      |         |    |
| 50  | 49.5  | 50.5  | 48.75  | 51.25  |       |        |        |       |      |    |      |         |    |
| 55  | 54.4  | 55.6  | 53.5   | 56.5   |       |        |        |       |      |    |      | 1       |    |
| 60  | 59.4  | 60.6  | 58.5   | 61.5   |       |        |        |       |      |    |      | 1       |    |
| 65  | 64.4  | 65.6  | 63.5   | 66.5   |       |        | !16    | 26    |      |    |      | 1       |    |
| 70  | 69.4  | 70.6  | 68.5   | 71.5   |       |        | 26     | 36    | 15.5 | 28 |      | 1       |    |
| 80  | 79.4  | 80.6  | 78.5   | 81.5   |       |        | 36     | 46    | 25.5 | 38 |      | 1       |    |
| 90  | 89.3  | 90.7  | 88.25  | 91.75  |       |        | •46    | 56    | 35.5 | 48 | 27.5 | 40 1    |    |
| 100 | 99.3  | 100.7 | 98.25  | 101.75 |       |        | 156    | 66    | 45.5 | 58 | 37.5 | 50 1 25 | 40 |
| 110 | 109.3 | 110.7 | 108.25 | 111.75 |       |        | 1 66   | 76    | 55.5 | 68 | 47.5 | 60 i 35 | 50 |

| .<t              |         |  |      | M3.S   | Mt4   | 1      | 22     | 27    |
|------------------|---------|--|------|--------|-------|--------|--------|-------|
| *                |         |  |      | 0.6    | 2     | 2.5    | 2.5    | 3     |
| ^                | b       |  |      | 13     | 34    | 42     | 50     | 60    |
|                  | c       |  |      | 19     | 40    | 48     | 56     | 66    |
|                  | d       |  |      | 32     | 53    | 61     | 69     | 79    |
|                  |         |  |      | 0.40   | 0.60  | 0.8    | ⊙      | 0.8   |
|                  |         |  |      | 0.15   | 0.15  | 0.2    | 0.2    | 0.2   |
|                  |         |  |      | 4.1    | 15.7  | 20.2   | 24.4   | 30.4  |
| d <sub>s</sub>   | . =     |  |      | 3.50   | 14.00 | 18.00  | 22.0   | 27.00 |
|                  | AlVntfO |  |      | 3.32   | 13.73 | 17.73  | 21.67  | —     |
|                  |         |  |      | 3.20   | 13.57 | 17.57  | 21.48  | 26.48 |
| ft <sub>aW</sub> | AltfnYU |  |      | 5,07   | 19.64 | 25.34  | 31.71  | —     |
|                  |         |  |      | 4.95   | 19.15 | 24.85  | 31.35  | 38    |
|                  |         |  |      | 6.58   | 23.26 | 30.14  | 37.72  | —     |
|                  |         |  |      | 6.44   | 22.78 | 29.56  | 37.29  | 45.2  |
| U                |         |  |      | 1      | 3     | 3      | 4      | 6     |
|                  |         |  |      | 2.4    | 8.8   | 11.5   | 14     | 17    |
|                  | D       |  |      | 11.715 | 8.98  | 11,715 | 14.215 | —     |
|                  |         |  |      | 2.275  | 8.62  | 11,285 | 13.785 | —     |
|                  |         |  |      | 2.6    | 9.09  | 11.85  | 14.35  | 17.35 |
|                  |         |  |      | 2.2    | 8.51  | 11.15  | 13.65  | 13.65 |
|                  |         |  | 1.59 | 6.03   | 7.9   | 9.65   | —      |       |
|                  |         |  |      | 1.54   | 5.96  | 7.81   | 9.56   | 11.66 |
| r                |         |  |      | 0.1    | 0.6   | 0.6    | 0.8    | 1     |
| 5                | »       |  |      | 6.00   | 21.00 | 27.00  | 34.00  | 41    |
|                  |         |  |      | 26.67  | 33.38 | 26.67  | 33.38  | —     |
|                  |         |  |      | 5.70   | 20.16 | 26.16  | 33.00  | 40    |

| 1   |       |       |        |        | V* |   |    |     |       |     |       |     |     |     |  |  |  |  |  |    |
|-----|-------|-------|--------|--------|----|---|----|-----|-------|-----|-------|-----|-----|-----|--|--|--|--|--|----|
|     |       |       |        |        | k  |   |    |     |       |     |       |     |     |     |  |  |  |  |  | *g |
| 8   | 8     |       |        |        | 8  | 8 | 8  |     |       |     |       | 8   |     |     |  |  |  |  |  |    |
| X   | X     |       |        |        | X  | X | X  |     |       |     |       | X   |     |     |  |  |  |  |  |    |
| 120 | 119.3 | 120.7 | 118.25 | 121.75 |    |   | 76 | 86  | 65.5  | 78  | 57.5  | 70  | 45  | 60  |  |  |  |  |  |    |
| 130 | 129.2 | 130.8 | 128    | 132    |    |   | 80 | 90  | 69.5  | 82  | 61.5  | 74  | 49  | 64  |  |  |  |  |  |    |
| 140 | 139.2 | 140.8 | 138    | 142    |    |   | 90 | 100 | 79.5  | 92  | 71.5  | 84  | 59  | 74  |  |  |  |  |  |    |
| 150 | 149.2 | 150.8 | 148    | 152    |    |   |    |     | 189.5 | 102 | 81.5  | 94  | 69  | 84  |  |  |  |  |  |    |
| 160 | —     | —     | 158    | 162    |    |   |    |     | 99.5  | 112 | 91,5  | 104 | 79  | 94  |  |  |  |  |  |    |
| 180 | —     | —     | 178    | 182    |    |   |    |     | 119.5 | 132 | 111.5 | 124 | 99  | 114 |  |  |  |  |  |    |
| 200 | —     | —     | 197.7  | 202.3  |    |   |    |     |       |     | 131.5 | 144 | 119 | 134 |  |  |  |  |  |    |
| 220 | —     | —     | 217.7  | 222.3  |    |   |    |     |       |     | 138.5 | 151 | 126 | 141 |  |  |  |  |  |    |
| 240 | —     | —     | 237.7  | 242.3  |    |   |    |     |       |     |       |     | 146 | 161 |  |  |  |  |  |    |
| 260 | —     | —     | 257.4  | 262.6  |    |   |    |     |       |     |       |     | 166 | 181 |  |  |  |  |  |    |

|          |                |           |        |        |       |       |       |       |       |     |     |     |       |     |
|----------|----------------|-----------|--------|--------|-------|-------|-------|-------|-------|-----|-----|-----|-------|-----|
|          |                |           |        |        | 39    | 45    | MS2   |       |       |     |     |     |       |     |
|          |                |           |        | 3.5    | 4     | 4.5   | 5     | 5.5   |       |     |     |     |       |     |
| ^        |                |           |        | 78     | 90    | 102   | 116   |       |       |     |     |     |       |     |
|          | d              |           |        | 91     | 103   | 115   | 129   | 145   |       |     |     |     |       |     |
|          |                |           |        | 0.8    | 1.0   | 1.0   | 1.0   | 1.0   |       |     |     |     |       |     |
|          |                |           |        | 0.2    | 0.3   | 0.3   | 0.3   | 0.3   |       |     |     |     |       |     |
| rf       |                |           |        | 36.4   | 42.4  | 48.6  | 56.6  | 67    |       |     |     |     |       |     |
|          |                |           |        | 33.00  | 39.00 | 45.00 | 52.00 | 60.00 |       |     |     |     |       |     |
| V441W *  |                | Ht7 MVnod |        | 32.38  | 38.38 | 44.38 | 51.26 | 59.26 |       |     |     |     |       |     |
| v^nwmm   |                | HQ JMOHOD |        | 46.55  | 55.86 | 64.7  | 74.2  | 83.41 |       |     |     |     |       |     |
| 6        | 1              |           |        | 55.37  | 66.44 | 76.95 | 88.25 | 99.21 |       |     |     |     |       |     |
| f        |                |           |        | 6      | 6     |       | 10    | 12    |       |     |     |     |       |     |
|          |                |           |        | 21     | 25    | 28    | 33    | 38    |       |     |     |     |       |     |
| KffJUe 1 |                |           |        |        |       |       |       |       |       |     |     |     |       |     |
| KlIdU. i |                | D         |        | 21.42  | 25.42 | 28.42 | 33.5  | 38.5  |       |     |     |     |       |     |
|          |                |           |        | 20.58  | 24.58 | 27.58 | 32.5  | 37.5  |       |     |     |     |       |     |
| L        | N KIVW 1nnnw < |           |        | 14.41  | 17.21 | 19.31 | 22.75 | 26.25 |       |     |     |     |       |     |
|          |                |           |        | 1      | 1     | 12    | 1.6   | 2     |       |     |     |     |       |     |
|          |                |           |        | 50     | 60.0  | 70.0  | 80.0  | 90.0  |       |     |     |     |       |     |
| s        | IV KIVW 1nnnw  |           |        | 49     | 58.8  | 68.1  | 78.1  | 87.8  |       |     |     |     |       |     |
|          |                |           |        |        |       |       |       |       |       |     |     |     |       |     |
|          |                |           |        |        |       |       |       |       |       |     |     |     |       |     |
| s        |                |           |        |        |       |       |       |       |       |     |     |     |       |     |
| 1        |                |           |        | 3      | 9     | *     | 9     | *     |       |     |     |     |       |     |
| x        |                |           |        | *      |       |       | 3     | 4     |       |     |     |     |       |     |
| 130      | 129.2          | 130.8     | 128    | 132    | 34.5  | 52    |       |       |       |     |     |     |       |     |
| 140      | 139.2          | 140.8     | 138    | 142    | 44.5  | 62    |       |       |       |     |     |     |       |     |
| 150      | 149.2          | 150.8     | 148    | 152    | 54.5  | 72    | 40    | 60    | 4017  |     |     |     |       |     |
| 160      | —              | —         | 158    | 162    | 64.5  | 62    | 50    | 70    |       |     |     |     |       |     |
| 160      | —              | —         | 178    | 182    | 84.5  | 102   | 70    | 90    | 55.5  | 78  |     |     |       |     |
| 200      | —              | —         | 197.7  | 202.3  | 104.5 | 122   | 90    | 110   | 75.5  | 98  | 59  | 84  |       |     |
| 220      | —              | —         | 217.7  | 222.3  | 111.5 | 129   | 97    | 117   | 82.5  | 105 | 66  | 91  |       |     |
| 240      | —              | —         | 237.7  | 242.3  | 131.5 | 149   | 117   | 137   | 102.5 | 125 | 86  | 111 | 67.5  | 95  |
| 260      | —              | —         | 257.4  | 262.6  | 151.5 | 169   | 137   | 157   | 122.5 | 145 | 106 | 131 | 87.5  | 115 |
| 280      | —              | —         | 277.4  | 282.6  | 171.5 | 199   | 157   | 177   | 142.5 | 165 | 126 | 151 | 107.5 | 135 |
| 300      | —              | —         | 297.4  | 302.6  | 191.5 | 209   | 177   | 197   | 162.5 | 185 | 146 | 171 | 127.5 | 155 |
| 320      | —              | —         | 317.15 | 322.85 | 211.5 | 229   | 197   | 217   | 11.5  | 205 | 166 | 191 | 147.5 | 175 |
| 340      | —              | —         | 337.15 | 342.65 |       |       | 217   | 237   | 202.5 | 225 | 186 | 211 | 167.5 | 195 |
| 360      | —              | —         | 357.15 | 362.85 |       |       | 237   | 257   | 222.5 | 245 | 206 | 231 | 187.5 | 215 |
| 380      | —              | —         | 377.15 | 382.85 |       |       | 257   | 277   | 242.5 | 265 | 226 | 251 | 207.5 | 235 |

|      |    |    |        |        |       |       |       |       |       |     |     |     |       |     |
|------|----|----|--------|--------|-------|-------|-------|-------|-------|-----|-----|-----|-------|-----|
| ,d   |    |    |        | 9      | M4S   | 52    | 60    |       |       |     |     |     |       |     |
| *    |    |    |        | 3.5    | 4     | 4.5   | 5     | 5.5   |       |     |     |     |       |     |
| ^    | b  |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      | d  |    |        | 78     | 90    | 102   | 116   | —     |       |     |     |     |       |     |
|      |    |    |        | 91     | 103   | 115   | 129   | 145   |       |     |     |     |       |     |
|      |    |    |        | 0.6    | 1.0   | 1.0   | 1.0   | 1.0   |       |     |     |     |       |     |
|      |    |    |        | 0.2    | 0.3   | 0.3   | 0.3   | 0.3   |       |     |     |     |       |     |
|      |    |    |        | 36,4   | 42.4  | 48.6  | 56.6  | 67    |       |     |     |     |       |     |
|      | =  |    |        | 33.00  | 39.00 | 45.00 | 52.00 | 60.00 |       |     |     |     |       |     |
|      |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 32.38  | 38.38 | 44.38 | 51.26 | 59.26 |       |     |     |     |       |     |
| W    |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 46.55  | 55.86 | 64.7  | 74.2  | 83.41 |       |     |     |     |       |     |
|      |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 55.37  | 66.44 | 76.95 | 88.25 | 99.21 |       |     |     |     |       |     |
| *    |    |    |        | 6      | 6     |       | 10    | 12    |       |     |     |     |       |     |
|      |    |    |        | 21     | 25    | 28    | 33    | 36    |       |     |     |     |       |     |
|      |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 21.42  | 25.42 | 28.42 | 33.5  | 38.5  |       |     |     |     |       |     |
|      |    |    |        | 20.58  | 24.58 | 27.58 | 32.5  | 37.5  |       |     |     |     |       |     |
| ?    |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 14.41  | 17.21 | 19.31 | 22.75 | 26.25 |       |     |     |     |       |     |
|      |    |    |        | 1      | 1     | 1.2   | 1.6   | 2     |       |     |     |     |       |     |
| 5    | .= |    |        | 50     | 60.0  | 70.0  | 80.0  | 90.0  |       |     |     |     |       |     |
|      |    |    |        | —      | —     | —     | —     | —     |       |     |     |     |       |     |
|      |    |    |        | 49     | 58.8  | 68.1  | 78.1  | 87.8  |       |     |     |     |       |     |
| w,*8 |    |    |        |        |       |       |       |       |       |     |     |     |       |     |
|      | 8  | 01 | \$     |        | \$    | «     | \$    | v     | \$    | J   | 's  | »   | k     | '   |
|      | 1  | «  | \$     | £      | 1     | £     | 5     | £     | 5     | £   | £   | £   | \$    | «1  |
|      | £  | ¥  | £      | £      | £     | £     | £     | £     | £     | £   | £   | £   | £     | £   |
| 400  | —  | —  | 397.15 | 402.85 |       |       |       |       | 262.5 | 285 | 246 | 271 | 227.5 | 255 |
| 420  | —  | —  | 416.85 | 423.15 |       |       |       |       | 262.5 | 305 | 266 | 291 | 247.5 | 275 |
| 440  | —  | —  | 436.65 | 443.15 |       |       |       |       | 302.5 | 325 | 286 | 311 | 267.5 | 295 |
| 460  | —  | —  | 456.85 | 463.15 |       |       |       |       |       |     | 306 | 331 | 287.5 | 315 |
| 460  | —  | —  | 476.85 | 483.15 |       |       |       |       |       |     | 326 | 351 | 307.5 | 335 |
| 500  | —  | —  | 496.85 | 503.15 |       |       |       |       |       |     |     |     | 327.5 | 355 |

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|  |   | 8992  |   |               |
|  |   | 724, 965-1  |   |               |
|  | * | $d < \quad :$<br>$SdS 39 \quad :$<br>5.6. 8.8, 9.8, 10.9<br>$d > 39 \quad :$                    | $4\$ 24 \quad : 2-70, 4-70$<br>$24 \quad < 4 S 3 9 \quad :$<br>2-50. 4-50<br>$4 > 39 \quad ; \quad -$ | 8839          |
|  |   | $3mmS \quad d \le 39mm:$<br>898-1<br>$4 < 3 \quad 4 > 39 \quad : \quad -$                       | $4 \quad 539 \quad : \quad 3506-1$<br>$4 > 39 \quad :$  |               |
|  |   | $4 \quad S \quad 24 \quad / \$ \quad 150 \quad :$<br>$d > 24 \quad / > 104 \quad 150 \quad 6 :$ |   |               |
|  |   | 4759-1  |   |               |
|  | — | $4042 \quad -$<br>$- \quad -$<br>$10683 \quad -$  |   | $-$<br>$4042$ |
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| 724                                   | MOD     | 24705—2004 ( 724:1993) « - »               |
| 898-1                                 | IDT     | 898-1—2011 « 1. »                          |
| 965-1                                 | MOO     | 16093—2004 ( 965-1:1998. 965-3:1998) « - » |
| 3269                                  | IDT     | 3269—2009 « - »                            |
| 3506-1                                | IDT     | 3506-1—2009 « 1. - »                       |
| 4017                                  | IDT     | 4017—2013 « - »                            |
| 4042                                  | IDT     | 4042—2009 « - »                            |
| 4753                                  | MOO     | 12414—94 « , . »                           |
| 4759-1                                | IDT     | 4759-1—2009 « 1. , , . »                   |
| 6157-1                                | IDT     | 6157-1—2009 « 1. , »                       |
| 8839                                  | IDT     | 8839—2009 « , , »                          |
| 8992                                  | IDT     | 8992—2011 « , , »                          |
| 10683                                 | —       |  |
| <p>— 8</p> <p>• — :</p> <p>• MOD—</p> |         |  |

- [1] ISO 888. *Bolts, screws and studs — Nominal lengths and thread lengths for general purpose bolts*
- [2] ISO 4015. *Hexagon head bolts — Product grade — Reduced shank (shank diameter approximately equal to pitch diameter)*
- [3] ISO 4016. *Hexagon head bolts — Product grade C*
- [4] ISO 4018. *Hexagon head screws — Product grade C*
- [5] ISO 4032. *Hexagon nuts, style 1 — Product grades A and*
- [6] ISO 4033. *Hexagon nuts, style 2 — Product grades A and*
- [7] ISO 4034. *Hexagon nuts — Product grade C*
- [8] ISO 4035. *Hexagon thin nuts (chamfered) — Product grades A and*
- [9] ISO 4036. *Hexagon thin nuts (unchamfered) — Product grade*
- [10] ISO 4161. *Hexagon nuts with flange— Coarse thread*
- [11] ISO 4162. *Hexagon flange Potts — Small series*
- [12] ISO 7040. *Prevailing torque type hexagon nuts (with non-metallic insert), style 1 — Property classes 5, 8 and 10*
- [13] ISO 7041. *Prevailing torque type hexagon nuts (with non-metallic insert), style 2 — Property classes 9 and 12*
- [14] ISO 7042. *Prevailing torque type all-metal hexagon nuts, style 2 — Property classes 5, 8, 10 and 12*
- [15] ISO 7043. *Prevailing torque type hexagon nuts with flange (with non-metallic insert) — Product grades A and*
- [16] ISO 7044. *Prevailing torque type all-metal hexagon nuts with flange — Product grades A and*
- [17] ISO 7719. *Prevailing torque type all-metal hexagon nuts, style 1 — Property classes 5, 8 and 10*
- [18] ISO 7720. *Prevailing torque type all-metal hexagon nuts, style 2 — Property class 9*
- [19] ISO 8673. *Hexagon nuts, style 1. with metric fine pitch thread — Product grades A and*
- [20] ISO 8674. *Hexagon nuts, style 2. with metric fine pitch thread — Product grades A and*
- [21] ISO 8675. *Hexagon thin nuts (chamfered) with metric fine pitch thread — Product grades A and*
- [22] ISO 8676. *Hexagon head screws with metric fine pitch thread — Product grades A and*
- [23] ISO 8765. *Hexagon head bolts with metric fine pitch thread — Product grades A and*
- [24] ISO 10511. *Prevailing torque type hexagon thin nuts (with non-metallic insert)*
- [25] ISO 10512. *Prevailing torque type hexagon nuts (with non-metallic insert), style 1. with metric fine pitch thread — Property classes 6, 8 and 10*
- [26] ISO 10513. *Prevailing torque type all-metal hexagon nuts, style 2. with metric fine pitch thread — Property classes 8, 10 and 12*
- [27] ISO 10663. *Hexagon nuts with flange — Fine pitch thread*
- [28] ISO 12125. *Prevailing torque type hexagon nuts with flange (with non-metallic insert) with metric fine pitch thread — Product grades A and*
- [29] ISO 12126. *Prevailing torque type all-metal hexagon nuts with flange with metric fine pitch thread — Product grades A and*
- [30] ISO 15071. *Hexagon Potts with flange — Small series — Product grade A*
- [31] ISO 15072. *Hexagon Potts with flange with metric fine pitch*
- [32] ISO 21670. *Hexagon weld nuts with flange*

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