

**P U E H L**

**PRODUKTÜBERSICHT**

STAND JUNI 2024

# INHALTSVER- ZEICHNIS

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## DIN 1052



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 1052

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 13                                    | 49       | 5      | 50                    | -                                      | 68,81                        | -           | 1052-130-01                            | -                     | -                     |
| 12                 | 14                                    | 58       | 6      | 50                    | 8.000                                  | 92,04                        | 1052-140-00 | 1052-140-01                            | 1052-140-02           | -                     |
| 16                 | 18                                    | 68       | 6      | 50                    | 6.000                                  | 159,07                       | 1052-180-00 | 1052-180-01                            | 1052-180-02           | -                     |
| 20                 | 22                                    | 80       | 8      | 25                    | 4.000                                  | 291,80                       | 1052-220-00 | 1052-220-01                            | 1052-220-02           | -                     |
| 22                 | 25                                    | 92       | 8      | 25                    | 3.000                                  | 386,64                       | 1052-250-00 | 1052-250-01                            | -                     | -                     |
| 24                 | 27                                    | 105      | 8      | 20                    | 2.000                                  | 507,83                       | -           | 1052-270-01                            | -                     | -                     |

## DIN 125 A 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-250 HV

### Scheiben / Washers DIN 125 A 200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 39                 | 40                                    | 72       | 6      | 50                    | 6.000                                  | 132,85                       | 125A-400-00-200HV | 125A-400-01-200HV                      | 125A-400-02-200HV     | -                     |
| 42                 | 43                                    | 78       | 7      | 50                    | -                                      | 182,77                       | 125A-430-00-200HV | 125A-430-01-200HV                      | 125A-430-02-200HV     | -                     |

## DIN 125 A 300 HV



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers DIN 125 A 300 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 42                 | 43                                    | 78       | 7      | 50                    | -                                      | 182,77                       | 125A-430-00-300HV | -                                      | -                     | -                     |

## DIN 125 B 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-250 HV

### Scheiben / Washers DIN 125 B 200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 39                 | 40                                    | 72       | 6      | 50                    | -                                      | 132,58                       | 125B-400-00-200HV | 125B-400-01-200HV                      | -                     | -                     |
| 42                 | 43                                    | 78       | 7      | 50                    | -                                      | 182,77                       | 125B-430-00-200HV | 125B-430-01-200HV                      | -                     | -                     |
| 45                 | 46                                    | 85       | 7      | 25                    | -                                      | 220,49                       | 125B-460-00-200HV | 125B-460-01-200HV                      | -                     | -                     |
| 48                 | 50                                    | 92       | 8      | 25                    | -                                      | 294,16                       | 125B-500-00-200HV | 125B-500-01-200HV                      | 125B-500-02-200HV     | -                     |
| 52                 | 54                                    | 98       | 8      | 25                    | -                                      | 329,78                       | 125B-540-00-200HV | 125B-540-01-200HV                      | 125B-540-02-200HV     | -                     |
| 56                 | 58                                    | 105      | 9      | 20                    | -                                      | 425,10                       | 125B-580-00-200HV | 125B-580-01-200HV                      | 125B-580-02-200HV     | -                     |
| 58                 | 60                                    | 110      | 9      | 15                    | -                                      | 471,65                       | 125B-600-00-200HV | -                                      | -                     | -                     |
| 60                 | 62                                    | 110      | 9      | 20                    | -                                      | 458,11                       | 125B-620-00-200HV | 125B-620-01-200HV                      | -                     | -                     |
| 64                 | 66                                    | 115      | 9      | 20                    | -                                      | 492,13                       | 125B-660-00-200HV | 125B-660-01-200HV                      | -                     | -                     |
| 68                 | 70                                    | 120      | 10     | 10                    | -                                      | 585,71                       | 125B-700-00-200HV | -                                      | -                     | -                     |
| 72                 | 74                                    | 125      | 10     | 10                    | -                                      | 625,72                       | 125B-740-00-200HV | -                                      | -                     | -                     |

## DIN 125 B 300 HV



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers DIN 125 B 300 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 42                 | 43                                    | 78       | 7      | 50                    | -                                      | 182,77                       | 125B-430-00-300HV | -                                      | -                     | -                     |
| 45                 | 46                                    | 85       | 7      | 25                    | -                                      | 220,49                       | 125B-460-00-300HV | -                                      | -                     | -                     |
| 48                 | 50                                    | 92       | 8      | 25                    | -                                      | 294,16                       | 125B-500-00-300HV | -                                      | -                     | -                     |
| 52                 | 54                                    | 98       | 8      | 25                    | -                                      | 329,78                       | 125B-540-00-300HV | -                                      | -                     | -                     |
| 56                 | 58                                    | 105      | 9      | 20                    | -                                      | 425,10                       | 125B-580-00-300HV | -                                      | -                     | -                     |
| 58                 | 60                                    | 110      | 9      | 15                    | -                                      | 471,65                       | 125B-600-00-300HV | -                                      | -                     | -                     |
| 60                 | 62                                    | 110      | 9      | 20                    | -                                      | 458,11                       | 125B-620-00-300HV | -                                      | -                     | -                     |
| 64                 | 66                                    | 115      | 9      | 20                    | -                                      | 492,13                       | 125B-660-00-300HV | -                                      | -                     | -                     |

## DIN 134



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 140-250 HV

### Scheiben / Washers DIN 134

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,3                                   | 12       | 1      | 1.000                 | -                                      | 0,72                         | -     | 134-053-01                             | -                     | -                     |
| 6                  | 6,4                                   | 14       | 1,5    | 1.000                 | 500.000                                | 1,43                         | -     | 134-064-01                             | -                     | -                     |
| 8                  | 8,4                                   | 18       | 2      | 1.000                 | 300.000                                | 3,13                         | -     | 134-084-01                             | -                     | -                     |
| 10                 | 10,5                                  | 22       | 2,5    | 1.000                 | 200.000                                | 5,76                         | -     | 134-105-01                             | -                     | -                     |
| 12                 | 13                                    | 28       | 3      | 500                   | 100.000                                | 11,38                        | -     | 134-130-01                             | -                     | -                     |
| 14                 | 15                                    | 28       | 3      | 500                   | -                                      | 10,34                        | -     | 134-150-01                             | -                     | -                     |
| 16                 | 17                                    | 34       | 3      | 500                   | 50.000                                 | 16,04                        | -     | 134-170-01                             | -                     | -                     |
| 18                 | 19                                    | 40       | 4      | 200                   | -                                      | 30,56                        | -     | 134-190-01                             | -                     | -                     |
| 20                 | 21                                    | 40       | 4      | 200                   | -                                      | 28,58                        | -     | 134-210-01                             | -                     | -                     |

## DIN 126



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250HV

### Scheiben / Washers DIN 126

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank      | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain      | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,6                                   | 12       | 1,6    | 200                   | -                                      | 0,99                         | -          | 126-066-01                             | -                     | -                     |
| 8                  | 9                                     | 16       | 1,6    | 200                   | -                                      | 1,73                         | 126-090-00 | 126-090-01                             | 126-090-02            | -                     |
| 10                 | 11                                    | 20       | 2      | 200                   | -                                      | 3,44                         | 126-110-00 | 126-110-01                             | 126-110-02            | -                     |
| 12                 | 13,5                                  | 24       | 2,5    | 200                   | -                                      | 6,07                         | 126-135-00 | 126-135-01                             | 126-135-02            | -                     |
| 14                 | 15,5                                  | 28       | 2,5    | 200                   | -                                      | 8,38                         | 126-155-00 | 126-155-01                             | 126-155-02            | -                     |
| 16                 | 17,5                                  | 30       | 3      | 200                   | -                                      | 10,98                        | 126-175-00 | 126-175-01                             | 126-175-02            | -                     |
| 20                 | 22                                    | 37       | 3      | 200                   | -                                      | 16,37                        | 126-220-00 | 126-220-01                             | 126-220-02            | -                     |
| 22                 | 24                                    | 39       | 3      | 200                   | -                                      | 17,48                        | 126-240-00 | 126-240-01                             | 126-240-02            | -                     |
| 24                 | 26                                    | 44       | 4      | 200                   | -                                      | 31,07                        | 126-260-00 | 126-260-01                             | 126-260-02            | -                     |
| 27                 | 30                                    | 50       | 4      | 200                   | -                                      | 39,46                        | 126-300-00 | 126-300-01                             | 126-300-02            | -                     |
| 30                 | 33                                    | 56       | 4      | 100                   | -                                      | 50,48                        | 126-330-00 | 126-330-01                             | 126-330-02            | -                     |
| 33                 | 36                                    | 60       | 5      | 100                   | -                                      | 71,03                        | 126-360-00 | 126-360-01                             | 126-360-02            | -                     |
| 36                 | 39                                    | 66       | 5      | 100                   | -                                      | 87,39                        | 126-390-00 | 126-390-01                             | 126-390-02            | -                     |
| 39                 | 42                                    | 72       | 6      | 50                    | -                                      | 126,51                       | 126-420-00 | 126-420-01                             | 126-420-02            | -                     |
| 42                 | 45                                    | 78       | 7      | 50                    | -                                      | 175,18                       | 126-450-00 | 126-450-01                             | 126-450-02            | -                     |
| 45                 | 48                                    | 85       | 7      | 25                    | -                                      | 212,38                       | 126-480-00 | 126-480-01                             | -                     | -                     |
| 48                 | 52                                    | 92       | 8      | 25                    | -                                      | 259,24                       | 126-520-00 | 126-520-01                             | 126-520-02            | -                     |
| 52                 | 56                                    | 98       | 8      | 25                    | -                                      | 319,02                       | 126-560-00 | 126-560-01                             | 126-560-02            | -                     |
| 56                 | 62                                    | 105      | 9      | 20                    | -                                      | 398,46                       | 126-620-00 | 126-620-01                             | 126-620-02            | -                     |
| 60                 | 66                                    | 110      | 9      | 20                    | -                                      | 429,70                       | 126-660-00 | -                                      | -                     | -                     |
| 64                 | 70                                    | 115      | 9      | 20                    | -                                      | 461,94                       | 126-700-00 | -                                      | -                     | -                     |

## EN 14399-6



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers EN 14399-6

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank          | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|----------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain          | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 12                 | 13                                    | 24       | 3      | 200                   | 120.000                                | 7,53                         | 14399-6-120-00 | 14399-6-120-01                         | 14399-6-120-02        | -                     |
| 14                 | 15                                    | 28       | 3      | 200                   | -                                      | 10,38                        | 14399-6-140-00 | 14399-6-140-01                         | 14399-6-140-02        | -                     |
| 16                 | 17                                    | 30       | 4      | 200                   | 60.000                                 | 15,07                        | 14399-6-160-00 | 14399-6-160-01                         | 14399-6-160-02        | -                     |
| 18                 | 19                                    | 34       | 4      | 200                   | -                                      | 19,61                        | 14399-6-180-00 | -                                      | 14399-6-180-02        | -                     |
| 20                 | 21                                    | 37       | 4      | 200                   | 40.000                                 | 22,89                        | 14399-6-200-00 | 14399-6-200-01                         | 14399-6-200-02        | -                     |
| 22                 | 23                                    | 39       | 4      | 200                   | -                                      | 24,46                        | 14399-6-220-00 | -                                      | -                     | -                     |
| 24                 | 25                                    | 44       | 4      | 200                   | 25.000                                 | 32,33                        | 14399-6-240-00 | 14399-6-240-01                         | 14399-6-240-02        | -                     |
| 27                 | 28                                    | 50       | 5      | 100                   | 20.000                                 | 52,90                        | 14399-6-270-00 | -                                      | 14399-6-270-02        | -                     |
| 30                 | 31                                    | 56       | 5      | 100                   | 15.000                                 | 67,05                        | 14399-6-300-00 | 14399-6-300-01                         | 14399-6-300-02        | -                     |
| 33                 | 34                                    | 60       | 5      | 50                    | 10.000                                 | 75,34                        | 14399-6-330-00 | -                                      | 14399-6-330-02        | -                     |
| 36                 | 37                                    | 66       | 6      | 50                    | 8.000                                  | 110,50                       | 14399-6-360-00 | 14399-6-360-01                         | 14399-6-360-02        | -                     |
| 39*                | 40,4                                  | 72       | 6      | 50                    | -                                      | 131,39                       | 14399-6-390-00 | -                                      | 14399-6-390-02        | -                     |
| 42*                | 43,4                                  | 78       | 8      | 25                    | -                                      | 207,18                       | 14399-6-420-00 | 14399-6-420-01                         | 14399-6-420-02        | -                     |
| 45*                | 46,4                                  | 85       | 8      | 25                    | -                                      | 250,17                       | 14399-6-450-00 | -                                      | 14399-6-450-02        | -                     |
| 48*                | 49,4                                  | 92       | 8      | 25                    | -                                      | 297,10                       | 14399-6-480-00 | -                                      | 14399-6-480-02        | -                     |
| 52*                | 54                                    | 98       | 8      | 25                    | -                                      | 329,87                       | 14399-6-520-00 | -                                      | 14399-6-520-02        | -                     |
| 56*                | 58                                    | 105      | 10     | 20                    | -                                      | 472,33                       | 14399-6-560-00 | -                                      | 14399-6-560-02        | -                     |
| 64*                | 66                                    | 115      | 10     | 15                    | -                                      | 546,81                       | 14399-6-640-00 | -                                      | 14399-6-640-02        | -                     |

\*gem. DAST-Richtlinie 0212

## DIN 1440



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 1440

| Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Palettenmenge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|---------------------------------------|----------|--------|-----------------------|-----------------------------------|------------------------------|-------------|--|-----------------------|-----------------------|
| ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                 | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                                    | 20       | 2,5    | 1.000                 | -                                 | 4,62                         | 1440-100-00 | 1440-100-01                            | -                     | -                     |
| 12                                    | 25       | 3      | 500                   | -                                 | 8,90                         | 1440-120-00 | 1440-120-01                            | -                     | -                     |
| 13                                    | 25       | 3      | 500                   | -                                 | 8,43                         | -           | 1440-130-01                            | -                     | -                     |
| 14                                    | 28       | 3      | 500                   | -                                 | 10,88                        | 1440-140-00 | 1440-140-01                            | -                     | -                     |
| 16                                    | 28       | 3      | 500                   | -                                 | 9,77                         | 1440-160-00 | 1440-160-01                            | -                     | -                     |
| 18                                    | 30       | 4      | 500                   | -                                 | 14,21                        | -           | 1440-180-01                            | -                     | -                     |
| 20                                    | 32       | 4      | 200                   | -                                 | 15,39                        | 1440-200-00 | 1440-200-01                            | -                     | -                     |
| 22                                    | 34       | 4      | 200                   | -                                 | 16,57                        | -           | 1440-220-01                            | -                     | -                     |
| 25                                    | 40       | 4      | 200                   | -                                 | 24,05                        | 1440-250-00 | 1440-250-01                            | -                     | -                     |
| 26                                    | 40       | 5      | 100                   | -                                 | 28,48                        | -           | 1440-260-01                            | -                     | -                     |
| 28                                    | 42       | 5      | 100                   | -                                 | 30,21                        | 1440-280-00 | 1440-280-01                            | -                     | -                     |
| 30                                    | 45       | 5      | 100                   | -                                 | 34,68                        | 1440-300-00 | 1440-300-01                            | -                     | -                     |
| 32                                    | 50       | 5      | 100                   | -                                 | 45,50                        | 1440-320-00 | 1440-320-01                            | -                     | -                     |
| 35                                    | 52       | 6      | 100                   | -                                 | 54,71                        | -           | 1440-350-01                            | -                     | -                     |
| 36                                    | 52       | 6      | 100                   | -                                 | 52,08                        | 1440-360-00 | 1440-360-01                            | -                     | -                     |
| 40                                    | 58       | 6      | 50                    | -                                 | 65,25                        | 1440-400-00 | 1440-400-01                            | -                     | -                     |
| 50                                    | 68       | 8      | 50                    | -                                 | 104,76                       | -           | 1440-500-01                            | -                     | -                     |
| 60                                    | 80       | 9      | 25                    | -                                 | 155,37                       | 1440-600-00 | 1440-600-01                            | -                     | -                     |
| 70                                    | 95       | 10     | 25                    | -                                 | 254,32                       | -           | 1440-700-01                            | -                     | -                     |



## DIN 1441



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 1441

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 11                                    | 20       | 2,5    | 200                   | -                                      | 4,30                         | 1441-110-00 | 1441-110-01                            | -                     | -                     |
| 12                 | 13                                    | 25       | 3      | 200                   | -                                      | 8,43                         | -           | 1441-130-01                            | -                     | -                     |
| 16                 | 17                                    | 28       | 3      | 200                   | -                                      | 9,16                         | -           | 1441-170-01                            | -                     | -                     |
| 18                 | 19                                    | 30       | 4      | 200                   | -                                      | 13,29                        | 1441-190-00 | 1441-190-01                            | -                     | -                     |
| 20                 | 21                                    | 32       | 4      | 200                   | -                                      | 14,38                        | 1441-210-00 | 1441-210-01                            | -                     | -                     |
| 24                 | 25                                    | 38       | 4      | 200                   | -                                      | 20,20                        | 1441-250-00 | 1441-250-01                            | -                     | -                     |
| 25                 | 26                                    | 40       | 4      | 200                   | -                                      | 22,79                        | -           | 1441-260-01                            | -                     | -                     |
| 30                 | 31                                    | 45       | 5      | 200                   | -                                      | 32,80                        | 1441-310-00 | 1441-310-01                            | -                     | -                     |
| 35 / 36            | 37                                    | 52       | 6      | 100                   | -                                      | 49,39                        | 1441-370-00 | 1441-370-01                            | -                     | -                     |
| 40                 | 41                                    | 58       | 6      | 50                    | -                                      | 62,26                        | 1441-410-00 | 1441-410-01                            | -                     | -                     |
| 45                 | 46                                    | 62       | 7      | 50                    | -                                      | 74,58                        | 1441-460-00 | 1441-460-01                            | -                     | -                     |
| 50                 | 51                                    | 68       | 8      | 50                    | -                                      | 99,78                        | 1441-510-00 | 1441-510-01                            | -                     | -                     |
| 55                 | 56                                    | 75       | 9      | 50                    | -                                      | 138,11                       | 1441-560-00 | 1441-560-01                            | -                     | -                     |
| 60                 | 62                                    | 80       | 9      | 25                    | -                                      | 141,38                       | -           | 1441-620-01                            | -                     | -                     |

## DIN 434



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 434

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank  | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt | zinklamelle<br>silber |   |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|--------|--|---------------|-----------------------|---|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |                              |        |  |               |                       | à |
|                    |                                       | a        | b      |                       |  |                              |        |  |               |                       |   |
| 8                  | 9                                     | 22       | 22     | 3,8                   | 200                                    | -                            | 9,57   | -                                      | 434-090-01    | 434-090-02            | - |
| 10                 | 11                                    | 22       | 22     | 3,8                   | 200                                    | -                            | 8,85   | -                                      | 434-110-01    | 434-110-02            | - |
| 12                 | 13,5                                  | 26       | 30     | 4,9                   | 200                                    | 40.000                       | 18,20  | 434-135-00                             | 434-135-01    | 434-135-02            | - |
| 16                 | 17,5                                  | 32       | 36     | 5,9                   | 100                                    | 25.000                       | 31,40  | 434-175-00                             | 434-175-01    | 434-175-02            | - |
| 20                 | 22                                    | 40       | 44     | 7                     | 100                                    | 15.000                       | 56,90  | 434-220-00                             | 434-220-01    | 434-220-02            | - |
| 24                 | 26                                    | 56       | 56     | 8,5                   | 50                                     | 5.000                        | 128,00 | 434-260-00                             | 434-260-01    | 434-260-02            | - |
| 27                 | 30                                    | 56       | 56     | 8,5                   | 50                                     | -                            | 119,00 | 434-300-00                             | 434-300-01    | 434-300-02            | - |

## DIN 435



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 435

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt | zinklamelle<br>silber |   |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|---------------|-----------------------|---|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |                              |       |  |               |                       | à |
|                    |                                       | a        | b      |                       |  |                              |       |  |               |                       |   |
| 8                  | 9                                     | 22       | 22     | 4,6                   | 200                                    | -                            | 10,20 | -                                      | 435-090-01    | 435-090-02            | - |
| 10                 | 11                                    | 22       | 22     | 4,6                   | 200                                    | -                            | 9,40  | -                                      | 435-110-01    | 435-110-02            | - |
| 12                 | 13,5                                  | 26       | 30     | 6,2                   | 200                                    | 40.000                       | 20,10 | 435-135-00                             | 435-135-01    | 435-135-02            | - |
| 16                 | 17,5                                  | 32       | 36     | 7,5                   | 100                                    | 25.000                       | 35,60 | 435-175-00                             | 435-175-01    | 435-175-02            | - |

## DIN 436



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 436

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank      | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain      | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 8                  | 9                                     | 30       | 3      | 100                   | 70.000                                 | 19,70                        | 436-090-00 | 436-090-01                             | 436-090-02            | -                     |
| 10                 | 11                                    | 30       | 3      | 100                   | 50.000                                 | 18,96                        | 436-110-00 | 436-110-01                             | 436-110-02            | -                     |
| 12                 | 13,5                                  | 40       | 4      | 100                   | 22.000                                 | 45,75                        | 436-135-00 | 436-135-01                             | 436-135-02            | -                     |
| 16                 | 17,5                                  | 50       | 5      | 100                   | 12.000                                 | 88,68                        | 436-175-00 | 436-175-01                             | 436-175-02            | -                     |
| 20                 | 22                                    | 60       | 5      | 50                    | 8.000                                  | 126,38                       | 436-220-00 | 436-220-01                             | 436-220-02            | -                     |
| 22                 | 24                                    | 70       | 6      | 50                    | -                                      | 209,48                       | 436-240-00 | 436-240-01                             | 436-240-02            | -                     |
| 24                 | 26                                    | 80       | 6      | 25                    | 4.000                                  | 276,43                       | 436-260-00 | 436-260-01                             | 436-260-02            | -                     |
| 27                 | 30                                    | 90       | 6      | 25                    | -                                      | 348,22                       | 436-300-00 | 436-300-01                             | 436-300-02            | -                     |
| 30                 | 33                                    | 95       | 6      | 15                    | -                                      | 384,79                       | 436-330-00 | 436-330-01                             | 436-330-02            | -                     |
| 33                 | 36                                    | 100      | 6      | 15                    | -                                      | 423,06                       | -          | -                                      | 436-360-02            | -                     |

## DIN 440 R



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250HV

### Scheiben / Washers DIN 440R

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,5                                   | 18       | 2,0    | 200                   | 300.000                                | 3,62                         | -           | 440R-055-01                            | -                     | -                     |
| 6                  | 6,6                                   | 22       | 2,0    | 200                   | 200.000                                | 5,43                         | 440R-066-00 | 440R-066-01                            | -                     | -                     |
| 8                  | 9                                     | 28       | 3,0    | 200                   | 70.000                                 | 13,00                        | 440R-090-00 | 440R-090-01                            | 440R-090-02           | -                     |
| 10                 | 11                                    | 34       | 3,0    | 200                   | 50.000                                 | 19,14                        | 440R-110-00 | 440R-110-01                            | 440R-110-02           | -                     |
| 12                 | 13,5                                  | 44       | 4,0    | 200                   | 22.000                                 | 43,25                        | 440R-135-00 | 440R-135-01                            | 440R-135-02           | -                     |
| 16                 | 17,5                                  | 56       | 5,0    | 100                   | 12.000                                 | 87,20                        | 440R-175-00 | 440R-175-01                            | 440R-175-02           | -                     |
| 20                 | 22                                    | 72       | 6,0    | 50                    | 6.000                                  | 173,86                       | 440R-220-00 | 440R-220-01                            | 440R-220-02           | -                     |
| 24                 | 26                                    | 85       | 6,0    | 25                    | 4.000                                  | 242,26                       | 440R-260-00 | 440R-260-01                            | 440R-260-02           | -                     |
| 27                 | 30                                    | 98       | 6,0    | 25                    | -                                      | 321,98                       | 440R-300-00 | 440R-300-01                            | -                     | -                     |
| 30                 | 33                                    | 105      | 6,0    | 25                    | -                                      | 367,56                       | 440R-330-00 | 440R-330-01                            | -                     | -                     |
| 33                 | 36                                    | 112      | 6,0    | 10                    | -                                      | 416,09                       | -           | 440R-360-01                            | -                     | -                     |
| 36                 | 39                                    | 125      | 8,0    | 10                    | -                                      | 695,65                       | 440R-390-00 | 440R-390-01                            | -                     | -                     |

## DIN 440 V



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-200 HV

### Scheiben / Washers DIN 440 V

| Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6,6                                   | 22       | 2      | 200                   | -                                      | 5,43                         | -           | 440V-066-01                            | -                     | -                     |
| 9                                     | 28       | 3      | 200                   | -                                      | 13,00                        | -           | 440V-090-01                            | -                     | -                     |
| 11                                    | 34       | 3      | 200                   | -                                      | 19,14                        | -           | 440V-110-01                            | -                     | -                     |
| 14                                    | 44       | 4      | 200                   | -                                      | 42,91                        | 440V-140-00 | 440V-140-01                            | -                     | -                     |
| 18                                    | 56       | 5      | 100                   | -                                      | 86,69                        | 440V-180-00 | 440V-180-01                            | -                     | -                     |
| 22                                    | 68       | 6      | 50                    | -                                      | 153,15                       | 440V-220-00 | 440V-220-01                            | -                     | -                     |

## DIN 6319 C



Werkstoff / Material: C15, Härte / Hardness: 550+100 HV 10

### Kugelscheiben / Spherical Washers DIN 6319-C

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | phosphatiert | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--------------|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | phosphated   | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,4                                   | 12       | 2,3    | 200                   | -                                      | 0,90                         | -     | 6319C-064-10 | -                     | -                     |
| 8                  | 8,4                                   | 17       | 3,2    | 200                   | -                                      | 2,50                         | -     | 6319C-084-10 | -                     | -                     |
| 10                 | 10,5                                  | 21       | 4      | 200                   | -                                      | 4,70                         | -     | 6319C-105-10 | -                     | -                     |
| 12                 | 13                                    | 24       | 4,6    | 100                   | -                                      | 7,10                         | -     | 6319C-130-10 | -                     | -                     |
| 16                 | 17                                    | 30       | 5,3    | 100                   | -                                      | 12,30                        | -     | 6319C-170-10 | -                     | -                     |
| 20                 | 21                                    | 36       | 6,3    | 100                   | -                                      | 20,80                        | -     | 6319C-210-10 | -                     | -                     |
| 24                 | 25                                    | 44       | 8,2    | 100                   | -                                      | 42,00                        | -     | 6319C-250-10 | -                     | -                     |
| 30                 | 31                                    | 56       | 11,2   | 50                    | -                                      | 87,00                        | -     | 6319C-310-10 | -                     | -                     |

## DIN 6319 D



Werkstoff / Material: C15, Härte / Hardness: 550+100 HV 10

### Kegelpfannen / Conical Seats DIN 6319-D

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | phosphatiert | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--------------|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | phosphated   | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 7,1                                   | 12       | 2,8    | 200                   | -                                      | 1,4                          | -     | 6319D-071-10 | -                     | -                     |
| 8                  | 9,6                                   | 17       | 3,5    | 200                   | -                                      | 3,8                          | -     | 6319D-096-10 | -                     | -                     |
| 10                 | 12                                    | 21       | 4,2    | 200                   | -                                      | 6,50                         | -     | 6319D-120-10 | -                     | -                     |
| 12                 | 14,2                                  | 24       | 5      | 100                   | -                                      | 10,60                        | -     | 6319D-142-10 | -                     | -                     |
| 16                 | 19                                    | 30       | 6,2    | 100                   | -                                      | 18,70                        | -     | 6319D-190-10 | -                     | -                     |
| 20                 | 23,2                                  | 36       | 7,5    | 100                   | -                                      | 32,00                        | -     | 6319D-232-10 | -                     | -                     |
| 24                 | 28                                    | 44       | 9,5    | 100                   | -                                      | 63,00                        | -     | 6319D-280-10 | -                     | -                     |
| 30                 | 35                                    | 56       | 12     | 50                    | -                                      | 133,00                       | -     | 6319D-350-10 | -                     | -                     |

## DIN 6340



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 350+80 HV 30

### Scheiben / Washers DIN 6340

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,4                                   | 17       | 3      | 200                   | -                                      | 4,59                         | 6340-064-00 | 6340-064-01                            | -                     | -                     |
| 8                  | 8,4                                   | 23       | 4      | 200                   | -                                      | 11,31                        | 6340-084-00 | 6340-084-01                            | -                     | -                     |
| 10                 | 10,5                                  | 28       | 4      | 200                   | -                                      | 16,62                        | 6340-105-00 | 6340-105-01                            | -                     | -                     |
| 12                 | 13                                    | 35       | 5      | 100                   | -                                      | 32,55                        | 6340-130-00 | 6340-130-01                            | 6340-130-02           | -                     |
| 14                 | 15                                    | 40       | 5      | 100                   | -                                      | 42,39                        | 6340-150-00 | 6340-150-01                            | -                     | -                     |
| 16                 | 17                                    | 45       | 6      | 100                   | -                                      | 64,22                        | 6340-170-00 | 6340-170-01                            | 6340-170-02           | -                     |
| 18                 | 19                                    | 45       | 6      | 100                   | -                                      | 61,56                        | 6340-190-00 | 6340-190-01                            | -                     | -                     |
| 20                 | 21                                    | 50       | 6      | 100                   | -                                      | 76,17                        | 6340-210-00 | 6340-210-01                            | 6340-210-02           | -                     |
| 22                 | 23                                    | 50       | 6      | 50                    | -                                      | 72,91                        | 6340-230-00 | 6340-230-01                            | -                     | -                     |
| 24                 | 25                                    | 60       | 8      | 50                    | -                                      | 146,74                       | 6340-250-00 | 6340-250-01                            | -                     | -                     |
| 30                 | 31                                    | 68       | 10     | 25                    | -                                      | 225,84                       | 6340-310-00 | 6340-310-01                            | -                     | -                     |
| 36                 | 38                                    | 80       | 10     | 25                    | -                                      | 305,56                       | 6340-380-00 | 6340-380-01                            | -                     | -                     |

## SPANNSCHEIBEN DIN 6796



Werkstoff / Material: Federstahl / Spring Steel, Härte / Hardness: 420-490 HV

### Spannscheiben / Conical Spring Washers DIN 6796

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank       | mechanisch verzinkt<br>10-12µm | feuerverzinkt | zinklamelle<br>silber             |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-------------|--------------------------------|---------------|-----------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à           | à                              | plain         | mechanical zinc plated<br>10-12µm |
| 4                  | 4,3                                   | 9        | 1      | 1.000                 | -                                      | 0,39  | -           | 6796-040-07                    | -             | -                                 |
| 5                  | 5,3                                   | 11       | 1,2    | 1.000                 | -                                      | 0,69  | 6796-050-00 | 6796-050-07                    | -             | -                                 |
| 6                  | 6,4                                   | 14       | 1,5    | 1.000                 | -                                      | 1,43  | 6796-060-00 | 6796-060-07                    | -             | -                                 |
| 8                  | 8,4                                   | 18       | 2      | 1.000                 | -                                      | 3,13  | 6796-080-00 | 6796-080-07                    | -             | -                                 |
| 10                 | 10,5                                  | 23       | 2,5    | 500                   | -                                      | 6,45  | 6796-100-00 | 6796-100-07                    | -             | -                                 |
| 12                 | 13                                    | 29       | 3      | 500                   | -                                      | 12,43   | 6796-120-00 | 6796-120-07                    | -             | -                                 |
| 14                 | 15                                    | 35       | 3,5    | 500                   | -                                      | 21,58   | -           | 6796-140-07                    | -             | -                                 |
| 16                 | 17                                    | 39       | 4      | 200                   | -                                      | 30,38   | 6796-160-00 | 6796-160-07                    | -             | -                                 |
| 20                 | 21                                    | 45       | 5      | 100                   | -                                      | 48,83   | 6796-200-00 | 6796-200-07                    | -             | -                                 |
| 24                 | 25                                    | 56       | 6      | 50                    | -                                      | 92,89   | 6796-240-00 | 6796-240-07                    | -             | -                                 |
| 27                 | 28                                    | 60       | 6,5    | 50                    | -                                      | 112,85  | 6796-270-00 | -                              | -             | -                                 |
| 30                 | 31                                    | 70       | 7      | 50                    | -                                      | 170,00  | 6796-300-00 | 6796-300-07                    | -             | -                                 |

## EN ISO 7089 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-300 HV

### Scheiben / Washers EN ISO 7089-200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank             | galvanisch<br>verzinkt Chrom<br>6 frei<br>zinc plated<br>chrome 6 free | feuerverzinkt<br>hot dip<br>galvanized | zinklamelle<br>silber<br>zinc flake<br>silver |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-------------------|--|--|---|
| M                  | ID                                    | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs                                 | plain             | zinc plated<br>chrome 6 free   | hot dip<br>galvanized                  | zinc flake<br>silver                          |
| 2,5                | 2,7                                   | 6        | 0,5    | 10.000                | -                                      | 0,09  | -                 | 7089-025-01-200HV  | -                                      | -   |
| 3                  | 3,2                                   | 7        | 0,5    | 1.000                 | -                                      | 0,12  | 7089-030-00-200HV | 7089-030-01-200HV  | -                                      | -   |
| 3,5                | 3,7                                   | 8        | 0,5    | 1.000                 | -                                      | 0,16  | -                 | 7089-035-01-200HV  | -                                      | -   |
| 4                  | 4,3                                   | 9        | 0,8    | 1.000                 | -                                      | 0,31  | 7089-040-00-200HV | 7089-040-01-200HV  | -                                      | -   |
| 5                  | 5,3                                   | 10       | 1      | 1.000                 | -                                      | 0,44  | 7089-050-00-200HV | 7089-050-01-200HV*   | -                                      | -   |
| 6                  | 6,4                                   | 12       | 1,6    | 1.000                 | 1.000.000                              | 1,02  | 7089-060-00-200HV | 7089-060-01-200HV*   | 7089-060-02-200HV                      | -   |
| 8                  | 8,4                                   | 16       | 1,6    | 1.000                 | 500.000                                | 1,83  | 7089-080-00-200HV | 7089-080-01-200HV*   | 7089-080-02-200HV                      | 7089-080-04-200HV                             |
| 10                 | 10,5                                  | 20       | 2      | 1.000                 | 300.000                                | 3,57  | 7089-100-00-200HV | 7089-100-01-200HV*   | 7089-100-02-200HV                      | 7089-100-04-200HV                             |
| 12                 | 13                                    | 24       | 2,5    | 500                   | 150.000                                | 6,27  | 7089-120-00-200HV | 7089-120-01-200HV*   | 7089-120-02-200HV                      | 7089-120-04-200HV                             |
| 14                 | 15                                    | 28       | 2,5    | 500                   | -                                      | 8,62  | 7089-140-00-200HV | 7089-140-01-200HV*   | 7089-140-02-200HV                      | -   |
| 16                 | 17                                    | 30       | 3      | 500                   | 80.000                                 | 11,30   | 7089-160-00-200HV | 7089-160-01-200HV*   | 7089-160-02-200HV                      | 7089-160-04-200HV                             |
| 18                 | 19                                    | 34       | 3      | 500                   | -                                      | 14,70   | 7089-180-00-200HV | 7089-180-01-200HV  | 7089-180-02-200HV                      | -   |
| 20                 | 21                                    | 37       | 3      | 200                   | 50.000                                 | 17,16   | 7089-200-00-200HV | 7089-200-01-200HV*   | 7089-200-02-200HV                      | 7089-200-04-200HV                             |
| 22                 | 23                                    | 39       | 3      | 200                   | -                                      | 18,35   | 7089-220-00-200HV | 7089-220-01-200HV  | 7089-220-02-200HV                      | -   |
| 24                 | 25                                    | 44       | 4      | 200                   | 30.000                                 | 29,07   | 7089-240-00-200HV | 7089-240-01-200HV*   | 7089-240-02-200HV                      | -   |
| 27                 | 28                                    | 50       | 4      | 100                   | 20.000                                 | 42,32   | 7089-270-00-200HV | 7089-270-01-200HV  | 7089-270-02-200HV                      | -   |
| 30                 | 31                                    | 56       | 4      | 100                   | 15.000                                 | 53,64   | 7089-300-00-200HV | 7089-300-01-200HV  | 7089-300-02-200HV                      | -   |
| 33                 | 34                                    | 60       | 5      | 100                   | 10.000                                 | 75,34   | 7089-330-00-200HV | 7089-330-01-200HV  | 7089-330-02-200HV                      | -   |
| 36                 | 37                                    | 66       | 5      | 100                   | 10.000                                 | 92,08   | 7089-360-00-200HV | 7089-360-01-200HV  | 7089-360-02-200HV                      | -   |
| 39                 | 42                                    | 72       | 6      | 50                    | -                                      | 126,51  | 7089-390-00-200HV | 7089-390-01-200HV  | 7089-390-02-200HV                      | -   |
| 42                 | 45                                    | 78       | 8      | 50                    | -                                      | 200,20  | 7089-420-00-200HV | 7089-420-01-200HV  | 7089-420-02-200HV                      | -   |

\*auch klein verpackt á 100 / also small packed á 100



## EN ISO 7089 300 HV



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers EN ISO 7089-300 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt     | zinklamelle<br>silber        |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-------------------|--|-------------------|------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à                 | à                                      | plain             | zinc plated<br>chrome 6 free |
| 5                  | 5,3                                   | 10       | 1      | 1.000                 | -                                      | 0,44  | -                 | 7089-050-01-300HV                      | -                 | -                            |
| 6                  | 6,4                                   | 12       | 1,6    | 1.000                 | 1.000.000                              | 1,02  | -                 | 7089-060-01-300HV                      | -                 | -                            |
| 8                  | 8,4                                   | 16       | 1,6    | 1.000                 | 500.000                                | 1,83  | 7089-080-00-300HV | 7089-080-01-300HV                      | -                 | -                            |
| 10                 | 10,5                                  | 20       | 2      | 1.000                 | 300.000                                | 3,57  | 7089-100-00-300HV | 7089-100-01-300HV                      | 7089-100-02-300HV | -                            |
| 12                 | 13                                    | 24       | 2,5    | 500                   | 150.000                                | 6,27  | 7089-120-00-300HV | 7089-120-01-300HV                      | 7089-120-02-300HV | -                            |
| 14                 | 15                                    | 28       | 2,5    | 500                   | -                                      | 8,62  | 7089-140-00-300HV | 7089-140-01-300HV                      | -                 | -                            |
| 16                 | 17                                    | 30       | 3      | 500                   | 80.000                                 | 11,30   | 7089-160-00-300HV | 7089-160-01-300HV                      | 7089-160-02-300HV | -                            |
| 20                 | 21                                    | 37       | 3      | 200                   | 50.000                                 | 17,16   | 7089-200-00-300HV | 7089-200-01-300HV                      | 7089-200-02-300HV | -                            |
| 24                 | 25                                    | 44       | 4      | 200                   | 30.000                                 | 29,07   | 7089-240-00-300HV | 7089-240-01-300HV                      | 7089-240-02-300HV | -                            |
| 27                 | 28                                    | 50       | 4      | 100                   | 20.000                                 | 42,32   | 7089-270-00-300HV | 7089-270-01-300HV                      | -                 | -                            |
| 30                 | 31                                    | 56       | 4      | 100                   | 15.000                                 | 53,64   | 7089-300-00-300HV | 7089-300-01-300HV                      | 7089-300-02-300HV | -                            |
| 33                 | 34                                    | 60       | 5      | 100                   | 10.000                                 | 75,34   | 7089-330-00-300HV | -                                      | -                 | -                            |
| 36                 | 37                                    | 66       | 5      | 100                   | 10.000                                 | 92,08   | 7089-360-00-300HV | 7089-360-01-300HV                      | 7089-360-02-300HV | -                            |
| 39                 | 42                                    | 72       | 6      | 50                    | -                                      | 126,51  | 7089-390-00-300HV | -                                      | 7089-390-02-300HV | -                            |
| 42                 | 45                                    | 78       | 8      | 50                    | -                                      | 200,20  | 7089-420-00-300HV | -                                      | 7089-420-02-300HV | -                            |
| 48                 | 52                                    | 92       | 8      | 25                    | -                                      | 261,91  | 7089-480-00-300HV | -                                      | 7089-480-02-300HV | -                            |
| 56                 | 62                                    | 105      | 10     | 10                    | -                                      | 415,06  | 7089-560-00-300HV | -                                      | 7089-560-02-300HV | -                            |
| 64                 | 70                                    | 115      | 10     | 10                    | -                                      | 513,27  | 7089-640-00-300HV | -                                      | 7089-640-02-300HV | -                            |

## EN ISO 7090 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-300 HV

### Scheiben / Washers EN ISO 7090-200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |     |     | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|-----|-----|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID                                    | AD  | S   | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,3                                   | 10  | 1   | 1.000                 | -                                      | 0,44                         | -                 | 7090-050-01-200HV                      | -                     | -                     |
| 6                  | 6,4                                   | 12  | 1,6 | 1.000                 | 1.000.000                              | 1,02                         | 7090-060-00-200HV | 7090-060-01-200HV                      | -                     | -                     |
| 8                  | 8,4                                   | 16  | 1,6 | 1.000                 | 500.000                                | 1,83                         | 7090-080-00-200HV | 7090-080-01-200HV                      | -                     | -                     |
| 10                 | 10,5                                  | 20  | 2   | 1.000                 | 300.000                                | 3,57                         | 7090-100-00-200HV | 7090-100-01-200HV                      | 7090-100-02-200HV     | -                     |
| 12                 | 13                                    | 24  | 2,5 | 500                   | 150.000                                | 6,27                         | 7090-120-00-200HV | 7090-120-01-200HV                      | 7090-120-02-200HV     | -                     |
| 14                 | 15                                    | 28  | 2,5 | 500                   | -                                      | 8,62                         | 7090-140-00-200HV | 7090-140-01-200HV                      | -                     | -                     |
| 16                 | 17                                    | 30  | 3   | 500                   | 80.000                                 | 11,30                        | 7090-160-00-200HV | 7090-160-01-200HV                      | 7090-160-02-200HV     | -                     |
| 18                 | 19                                    | 34  | 3   | 500                   | -                                      | 14,70                        | 7090-180-00-200HV | 7090-180-01-200HV                      | -                     | -                     |
| 20                 | 21                                    | 37  | 3   | 200                   | 50.000                                 | 17,16                        | 7090-200-00-200HV | 7090-200-01-200HV                      | 7090-200-02-200HV     | -                     |
| 22                 | 23                                    | 39  | 3   | 200                   | -                                      | 18,35                        | 7090-220-00-200HV | 7090-220-01-200HV                      | -                     | -                     |
| 24                 | 25                                    | 44  | 4   | 200                   | 30.000                                 | 32,33                        | 7090-240-00-200HV | 7090-240-01-200HV                      | 7090-240-02-200HV     | -                     |
| 27                 | 28                                    | 50  | 4   | 100                   | 20.000                                 | 42,32                        | 7090-270-00-200HV | 7090-270-01-200HV                      | 7090-270-02-200HV     | -                     |
| 30                 | 31                                    | 56  | 4   | 100                   | 15.000                                 | 53,64                        | 7090-300-00-200HV | 7090-300-01-200HV                      | 7090-300-02-200HV     | -                     |
| 33                 | 34                                    | 60  | 5   | 100                   | 10.000                                 | 75,34                        | 7090-330-00-200HV | 7090-330-01-200HV                      | 7090-330-02-200HV     | -                     |
| 36                 | 37                                    | 66  | 5   | 100                   | 10.000                                 | 92,08                        | 7090-360-00-200HV | 7090-360-01-200HV                      | 7090-360-02-200HV     | -                     |
| 39                 | 42                                    | 72  | 6   | 50                    | -                                      | 126,51                       | 7090-390-00-200HV | 7090-390-01-200HV                      | -                     | -                     |
| 42                 | 45                                    | 78  | 8   | 50                    | -                                      | 200,20                       | 7090-420-00-200HV | 7090-420-01-200HV                      | 7090-420-02-200HV     | -                     |
| 48                 | 52                                    | 92  | 8   | 25                    | -                                      | 284,10                       | 7090-480-00-200HV | 7090-480-01-200HV                      | 7090-480-02-200HV     | -                     |
| 52                 | 56                                    | 98  | 8   | 25                    | -                                      | 319,02                       | 7090-520-00-200HV | 7090-520-01-200HV                      | -                     | -                     |
| 56                 | 62                                    | 105 | 10  | 10                    | -                                      | 442,74                       | 7090-560-00-200HV | 7090-560-01-200HV                      | 7090-560-02-200HV     | -                     |
| 64                 | 70                                    | 115 | 10  | 10                    | -                                      | 513,27                       | 7090-640-00-200HV | 7090-640-01-200HV                      | -                     | -                     |

## EN ISO 7090 300 HV



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers EN ISO 7090-300 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt     | zinklamelle<br>silber        |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-------------------|--|-------------------|------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à                 | à                                      | plain             | zinc plated<br>chrome 6 free |
| 10                 | 10,5                                  | 20       | 2      | 1.000                 | 300.000                                | 3,57  | 7090-100-00-300HV | 7090-100-01-300HV                      | -                 | -                            |
| 12                 | 13                                    | 24       | 2,5    | 500                   | 150.000                                | 6,27  | 7090-120-00-300HV | 7090-120-01-300HV                      | -                 | -                            |
| 16                 | 17                                    | 30       | 3      | 500                   | 80.000                                 | 11,30   | 7090-160-00-300HV | 7090-160-01-300HV                      | 7090-160-02-300HV | -                            |
| 20                 | 21                                    | 37       | 3      | 200                   | 50.000                                 | 17,16   | 7090-200-00-300HV | 7090-200-01-300HV                      | 7090-200-02-300HV | -                            |
| 24                 | 25                                    | 44       | 4      | 200                   | 30.000                                 | 32,33   | 7090-240-00-300HV | 7090-240-01-300HV                      | -                 | -                            |
| 30                 | 31                                    | 56       | 4      | 100                   | 15.000                                 | 53,64   | 7090-300-00-300HV | 7090-300-01-300HV                      | 7090-300-02-300HV | -                            |
| 33                 | 34                                    | 60       | 5      | 100                   | 10.000                                 | 75,34   | 7090-330-00-300HV | -                                      | -                 | -                            |
| 36                 | 37                                    | 66       | 5      | 100                   | 10.000                                 | 92,08   | 7090-360-00-300HV | 7090-360-01-300HV                      | 7090-360-02-300HV | -                            |
| 42                 | 45                                    | 78       | 8      | 50                    | -                                      | 200,20  | 7090-420-00-300HV | -                                      | 7090-420-02-300HV | -                            |
| 48                 | 52                                    | 92       | 8      | 25                    | -                                      | 284,10  | 7090-480-00-300HV | 7090-480-01-300HV                      | 7090-480-02-300HV | -                            |
| 52                 | 56                                    | 98       | 8      | 25                    | -                                      | 319,02  | 7090-520-00-300HV | -                                      | -                 | -                            |
| 56                 | 62                                    | 105      | 10     | 10                    | -                                      | 442,74  | 7090-560-00-300HV | -                                      | 7090-560-02-300HV | -                            |
| 64                 | 70                                    | 115      | 10     | 10                    | -                                      | 513,27  | 7090-640-00-300HV | -                                      | 7090-640-02-300HV | -                            |

## EN ISO 7092



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-300 HV

### Scheiben / Washers EN ISO 7092

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt | zinklamelle<br>silber        |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-------------------|--|---------------|------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à                 | à                                      | plain         | zinc plated<br>chrome 6 free |
| 3                  | 3,2                                   | 6        | 0,5    | 1.000                 | -                                      | 0,08  | -                 | 7092-030-01-200HV                      | -             | -                            |
| 4                  | 4,3                                   | 8        | 0,5    | 1.000                 | -                                      | 0,14  | -                 | 7092-040-01-200HV                      | -             | -                            |
| 5                  | 5,3                                   | 9        | 1      | 1.000                 | -                                      | 0,33  | -                 | 7092-050-01-200HV                      | -             | -                            |
| 6                  | 6,4                                   | 11       | 1,6    | 1.000                 | -                                      | 0,62  | 7092-060-00-200HV | 7092-060-01-200HV                      | -             | -                            |
| 8                  | 8,4                                   | 15       | 1,6    | 1.000                 | -                                      | 1,52  | 7092-080-00-200HV | 7092-080-01-200HV                      | -             | -                            |
| 10                 | 10,5                                  | 18       | 1,6    | 1.000                 | -                                      | 2,11  | 7092-100-00-200HV | 7092-100-01-200HV                      | -             | -                            |
| 12                 | 13                                    | 20       | 2      | 500                   | -                                      | 2,85  | 7092-120-00-200HV | 7092-120-01-200HV                      | -             | -                            |
| 14                 | 15                                    | 24       | 2,5    | 500                   | -                                      | 5,41  | 7092-140-00-200HV | 7092-140-01-200HV                      | -             | -                            |
| 16                 | 28                                    | 17       | 2,5    | 500                   | -                                      | 7,63  | 7092-160-00-200HV | 7092-160-01-200HV                      | -             | -                            |
| 18                 | 19                                    | 30       | 3      | 500                   | -                                      | 8,31  | 7092-180-00-200HV | 7092-180-01-200HV                      | -             | -                            |
| 20                 | 21                                    | 34       | 3      | 200                   | -                                      | 13,23   | 7092-200-00-200HV | 7092-200-01-200HV                      | -             | -                            |
| 24                 | 25                                    | 39       | 4      | 200                   | -                                      | 22,10   | 7092-240-00-200HV | 7092-240-01-200HV                      | -             | -                            |
| 30                 | 31                                    | 50       | 4      | 200                   | -                                      | 37,95   | 7092-300-00-200HV | 7092-300-01-200HV                      | -             | -                            |

## EN ISO 7093-1 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-300 HV

### Scheiben / Washers EN ISO 7093-1-200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank               | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|---------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain               | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 9        | 0,8    | 1.000                 | -                                      | 0,35                            | -                   | 7093-1-030-01-200HV                    | -                     | -                     |
| 4                  | 4,3                                   | 12       | 1      | 1.000                 | -                                      | 0,77                            | -                   | 7093-1-040-01-200HV                    | -                     | -                     |
| 5                  | 5,3                                   | 15       | 1      | 1.000                 | -                                      | 1,21                            | -                   | 7093-1-050-01-200HV                    | -                     | -                     |
| 6                  | 6,4                                   | 18       | 1,6    | 200                   | 300.000                                | 2,79                            | 7093-1-060-00-200HV | 7093-1-060-01-200HV                    | 7093-1-060-02-200HV   | -                     |
| 8                  | 8,4                                   | 24       | 2      | 200                   | 150.000                                | 6,23                            | 7093-1-080-00-200HV | 7093-1-080-01-200HV                    | 7093-1-080-02-200HV   | 7093-1-080-04-200HV   |
| 10                 | 10,5                                  | 30       | 2,5    | 200                   | 80.000                                 | 12,17                           | 7093-1-100-00-200HV | 7093-1-100-01-200HV                    | 7093-1-100-02-200HV   | 7093-1-100-04-200HV   |
| 12                 | 13                                    | 37       | 3      | 100                   | 30.000                                 | 22,20                           | 7093-1-120-00-200HV | 7093-1-120-01-200HV                    | 7093-1-120-02-200HV   | 7093-1-120-04-200HV   |
| 14                 | 15                                    | 44       | 3      | 100                   | -                                      | 31,65                           | 7093-1-140-00-200HV | 7093-1-140-01-200HV                    | -                     | -                     |
| 16                 | 17                                    | 50       | 3      | 100                   | 20.000                                 | 40,90                           | 7093-1-160-00-200HV | 7093-1-160-01-200HV                    | 7093-1-160-02-200HV   | -                     |
| 20                 | 21                                    | 60       | 4      | 100                   | 15.000                                 | 77,91                           | 7093-1-200-00-200HV | 7093-1-200-01-200HV                    | 7093-1-200-02-200HV   | -                     |
| 24                 | 25                                    | 72       | 5      | 50                    | -                                      | 140,54                          | 7093-1-240-00-200HV | 7093-1-240-01-200HV                    | 7093-1-240-02-200HV   | -                     |
| 30                 | 33                                    | 92       | 6      | 25                    | -                                      | 272,82                          | 7093-1-300-00-200HV | 7093-1-300-01-200HV                    | -                     | -                     |
| 36                 | 39                                    | 110      | 8      | 15                    | -                                      | 521,79                          | 7093-1-360-00-200HV | 7093-1-360-01-200HV                    | -                     | -                     |

## EN ISO 7093-1 300 HV



Werkstoff / Material: Vergütungsstahl / Carbon Steel, Härte / Hardness: 300-370 HV

### Scheiben / Washers EN ISO 7093-1-300 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank               | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|---------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain               | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 8                  | 8,4                                   | 24       | 2      | 200                   | 150.000                                | 6,23                            | 7093-1-080-00-300HV | -                                      | -                     | -                     |
| 10                 | 10,5                                  | 30       | 2,5    | 200                   | 80.000                                 | 12,17                           | 7093-1-100-00-300HV | -                                      | -                     | -                     |
| 12                 | 13                                    | 37       | 3      | 100                   | 30.000                                 | 22,20                           | 7093-1-120-00-300HV | -                                      | -                     | -                     |
| 16                 | 17                                    | 50       | 3      | 100                   | 20.000                                 | 40,90                           | 7093-1-160-00-300HV | -                                      | -                     | -                     |

## DIN 7349 100 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 7349 100 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank       | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain       | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 20                 | 21                                    | 44       | 8      | 100                   | 10.000                                 | 73,74                        | 7349-210-00 | 7349-210-01                            | 7349-210-02           | -                     |
| 22                 | 23                                    | 50       | 8      | 100                   | -                                      | 97,22                        | 7349-230-00 | 7349-230-01                            | -                     | -                     |
| 24                 | 25                                    | 50       | 10     | 50                    | 8.000                                  | 115,60                       | 7349-250-00 | 7349-250-01                            | 7349-250-02           | -                     |
| 27                 | 28                                    | 60       | 10     | 50                    | 6.000                                  | 173,62                       | 7349-280-00 | 7349-280-01                            | 7349-280-02           | -                     |
| 30                 | 31                                    | 68       | 10     | 50                    | 5.000                                  | 225,84                       | 7349-310-00 | 7349-310-01                            | 7349-310-02           | -                     |

## DIN 7349 200 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200-300 HV

### Scheiben / Washers DIN 7349 200 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 9        | 1      | 200                   | -                                      | 0,44                         | -                 | 7349-032-01-200HV                      | -                     | -                     |
| 4                  | 4,3                                   | 12       | 1,6    | 200                   | -                                      | 1,24                         | 7349-043-00-200HV | 7349-043-01-200HV                      | -                     | -                     |
| 5                  | 5,3                                   | 15       | 2      | 200                   | 300.000                                | 2,43                         | 7349-053-00-200HV | 7349-053-01-200HV                      | -                     | -                     |
| 6                  | 6,4                                   | 17       | 3      | 200                   | 200.000                                | 4,59                         | 7349-064-00-200HV | 7349-064-01-200HV                      | -                     | -                     |
| 8                  | 8,4                                   | 21       | 4      | 200                   | 120.000                                | 9,14                         | 7349-084-00-200HV | 7349-084-01-200HV                      | 7349-084-02-200HV     | -                     |
| 10                 | 10,5                                  | 25       | 4      | 200                   | 80.000                                 | 12,70                        | 7349-105-00-200HV | 7349-105-01-200HV                      | 7349-105-02-200HV     | -                     |
| 12                 | 13                                    | 30       | 6      | 100                   | 40.000                                 | 27,04                        | 7349-130-00-200HV | 7349-130-01-200HV                      | 7349-130-02-200HV     | -                     |
| 14                 | 15                                    | 36       | 6      | 100                   | -                                      | 39,62                        | 7349-150-00-200HV | 7349-150-01-200HV                      | -                     | -                     |
| 16                 | 17                                    | 40       | 6      | 100                   | 20.000                                 | 48,50                        | 7349-170-00-200HV | 7349-170-01-200HV                      | 7349-170-02-200HV     | -                     |

## DIN 7989 C



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben Gestanzte Ausführung / Washers Stamped Version DIN 7989-C

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank        | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|--------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain        | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 11                                    | 21       | 8      | 200                   | -                                      | 15,78                           | 7989C-100-00 | 7989C-100-01                           | 7989C-100-02          | -                     |
| 12                 | 13,5                                  | 24       | 8      | 200                   | 40.000                                 | 19,42                           | 7989C-120-00 | 7989C-120-01                           | 7989C-120-02          | -                     |
| 16                 | 17,5                                  | 30       | 8      | 200                   | 30.000                                 | 19,99                           | 7989C-160-00 | 7989C-160-01                           | 7989C-160-02          | -                     |
| 20                 | 22                                    | 37       | 8      | 100                   | 20.000                                 | 33,86                           | 7989C-200-00 | 7989C-200-01                           | 7989C-200-02          | -                     |
| 22                 | 24                                    | 39       | 8      | 100                   | -                                      | 46,61                           | 7989C-220-00 | 7989C-220-01                           | 7989C-220-02          | -                     |
| 24                 | 26                                    | 44       | 8      | 100                   | 12.000                                 | 62,15                           | 7989C-240-00 | 7989C-240-01                           | 7989C-240-02          | -                     |
| 27                 | 30                                    | 50       | 8      | 100                   | 10.000                                 | 78,92                           | 7989C-270-00 | 7989C-270-01                           | 7989C-270-02          | -                     |
| 30                 | 33                                    | 56       | 8      | 50                    | 8.000                                  | 100,96                          | 7989C-300-00 | 7989C-300-01                           | 7989C-300-02          | -                     |
| 33                 | 36                                    | 60       | 8      | 50                    | -                                      | 113,64                          | 7989C-330-00 | -                                      | 7989C-330-02          | -                     |
| 36                 | 39                                    | 66       | 8      | 50                    | -                                      | 139,83                          | 7989C-360-00 | 7989C-360-01                           | 7989C-360-02          | -                     |

## DIN 7989 A



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben Gedrehte Ausführung / Washers Turned Version DIN 7989-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank        | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|--------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain        | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 11                                    | 20       | 8      | 200                   | -                                      | 13,76                        | 7989A-100-00 | -                                      | -                     | -                     |
| 12                 | 13,5                                  | 24       | 8      | 200                   | -                                      | 19,42                        | 7989A-120-00 | -                                      | -                     | -                     |
| 16                 | 17,5                                  | 30       | 8      | 200                   | -                                      | 29,29                        | 7989A-160-00 | -                                      | -                     | -                     |
| 20                 | 22                                    | 37       | 8      | 100                   | -                                      | 43,65                        | 7989A-200-00 | -                                      | -                     | -                     |
| 24                 | 26                                    | 44       | 8      | 100                   | -                                      | 62,15                        | 7989A-240-00 | -                                      | -                     | -                     |
| 30                 | 33                                    | 56       | 8      | 50                    | -                                      | 100,96                       | 7989A-300-00 | -                                      | -                     | -                     |

## DIN 9021 100 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 100-250 HV

### Scheiben / Washers DIN 9021 100 HV Tol. ISO 4759-3-C (ISO 4759-3:2000)

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 8                  | 8,4                                   | 24       | 2      | 200                   | 150.000                                | 6,23                         | 9021-084-00-100HV | 9021-084-01-100HV                      | 9021-084-02-100HV     | -                     |
| 10                 | 10,5                                  | 30       | 2,5    | 200                   | 80.000                                 | 12,17                        | 9021-105-00-100HV | 9021-105-01-100HV                      | 9021-105-02-100HV     | -                     |
| 12                 | 13                                    | 37       | 3      | 100                   | 30.000                                 | 22,20                        | 9021-130-00-100HV | 9021-130-01-100HV                      | 9021-130-02-100HV     | -                     |
| 14                 | 15                                    | 44       | 3      | 100                   | -                                      | 31,65                        | 9021-150-00-100HV | 9021-150-01-100HV                      | 9021-150-02-100HV     | -                     |
| 16                 | 17                                    | 50       | 3      | 100                   | 20.000                                 | 40,90                        | 9021-170-00-100HV | 9021-170-01-100HV                      | 9021-170-02-100HV     | -                     |
| 18                 | 20                                    | 56       | 4      | 100                   | 15.000                                 | 67,47                        | 9021-200-00-100HV | 9021-200-01-100HV                      | 9021-200-02-100HV     | -                     |
| 20                 | 22                                    | 60       | 4      | 100                   | 15.000                                 | 76,85                        | 9021-220-00-100HV | 9021-220-01-100HV                      | 9021-220-02-100HV     | -                     |
| 24                 | 26                                    | 72       | 5      | 50                    | -                                      | 138,97                       | 9021-260-00-100HV | 9021-260-01-100HV                      | 9021-260-02-100HV     | -                     |
| 30                 | 33                                    | 92       | 6      | 25                    | -                                      | 272,82                       | 9021-330-00-100HV | 9021-330-01-100HV                      | 9021-330-02-100HV     | -                     |
| 36                 | 39                                    | 110      | 8      | 20                    | -                                      | 521,79                       | 9021-390-00-100HV | 9021-390-01-100HV                      | 9021-390-02-100HV     | -                     |



## DIN 9021 140 HV



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 140-250HV

### Scheiben / Washers DIN 9021 140 HV

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank             | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|-------------------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain             | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,3                                   | 15       | 1,2    | 1.000                 | -                                      | 1,46                            | 9021-053-00-140HV | 9021-053-01-140HV                      | -                     | -                     |
| 6                  | 6,4                                   | 18       | 1,6    | 200                   | 300.000                                | 2,79                            | 9021-064-00-140HV | 9021-064-01-140HV                      | -                     | -                     |
| 8                  | 8,4                                   | 24       | 2      | 200                   | 150.000                                | 6,23                            | 9021-084-00-140HV | 9021-084-01-140HV                      | 9021-084-02-140HV     | -                     |
| 10                 | 10,5                                  | 30       | 2,5    | 200                   | 80.000                                 | 12,17                           | 9021-105-00-140HV | 9021-105-01-140HV                      | 9021-105-02-140HV     | -                     |
| 12                 | 13                                    | 37       | 3      | 100                   | 30.000                                 | 22,20                           | 9021-130-00-140HV | 9021-130-01-140HV                      | 9021-130-02-140HV     | -                     |
| 14                 | 15                                    | 44       | 3      | 100                   | -                                      | 31,65                           | 9021-150-00-140HV | 9021-150-01-140HV                      | -                     | -                     |
| 16                 | 17                                    | 50       | 3      | 100                   | 20.000                                 | 40,90                           | 9021-170-00-140HV | 9021-170-01-140HV                      | 9021-170-02-140HV     | -                     |

## KAROSSERIE-SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Karosserie-Scheiben / Carbody Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 10       | 0,8    | 10.000                | -                                      | 0,44                            | -     | 8-0100-0320-0080-01-A                  | -                     | -                     |
| 4                  | 4,3                                   | 12       | 1,25   | 5.000                 | -                                      | 0,97                            | -     | 8-0120-0430-0125-01-A                  | -                     | -                     |
| 4                  | 4,3                                   | 15       | 1,25   | 5.000                 | -                                      | 1,59                            | -     | 8-0150-0430-0125-01-A                  | -                     | -                     |
| 4                  | 4,3                                   | 15       | 1,5    | 5.000                 | -                                      | 1,91                            | -     | 8-0150-0430-0150-01-A                  | -                     | -                     |
| 5                  | 5,3                                   | 15       | 1,25   | 5.000                 | -                                      | 1,52                            | -     | 8-0150-0530-0125-01-A                  | -                     | -                     |
| 5                  | 5,3                                   | 15       | 1,5    | 5.000                 | -                                      | 1,82                            | -     | 8-0150-0530-0150-01-A                  | -                     | -                     |
| 6                  | 6,4                                   | 15       | 1,25   | 5.000                 | -                                      | 1,42                            | -     | 8-0150-0640-0125-01-A                  | -                     | -                     |
| 6                  | 6,4                                   | 15       | 1,5    | 5.000                 | -                                      | 1,70                            | -     | 8-0150-0640-0150-01-A                  | -                     | -                     |
| 6                  | 6,4                                   | 18       | 1,5    | 3.000                 | -                                      | 2,62                            | -     | 8-0180-0640-0150-01-A                  | -                     | -                     |
| 3                  | 3,2                                   | 20       | 1,25   | 2.000                 | 300.000                                | 3,00                            | -     | 8-0200-0320-0125-01-A                  | -                     | -                     |
| 4                  | 4,3                                   | 20       | 1,25   | 2.000                 | 300.000                                | 2,94                            | -     | 8-0200-0430-0125-01-A                  | -                     | -                     |

## KAROSSERIE-SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Karosserie-Scheiben / Carbody Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank<br>plain | galvanisch<br>verzinkt Chrom<br>6 frei<br>zinc plated<br>chrome 6 free | feuerverzinkt<br>hot dip<br>galvanized | zinklamelle<br>silber<br>zinc flake<br>silver |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|----------------|--|--|---|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs                                 | plain          | zinc plated<br>chrome 6 free   | hot dip<br>galvanized                  | zinc flake<br>silver                          |
| 4                  | 4,3                                   | 20       | 1,5    | 2.000                 | 300.000                                | 3,53  | -              | 8-0200-0430-0150-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 20       | 1,25   | 2.000                 | 300.000                                | 2,87  | -              | 8-0200-0530-0125-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 20       | 1,5    | 2.000                 | 300.000                                | 3,44  | -              | 8-0200-0530-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 20       | 1,25   | 2.000                 | 300.000                                | 2,77  | -              | 8-0200-0640-0125-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 20       | 1,5    | 2.000                 | 300.000                                | 3,32  | -              | 8-0200-0640-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 20       | 2      | 2.000                 | -                                      | 4,43  | -              | 8-0200-0640-0200-01-A  | -                                      | -   |
| 7                  | 7,4                                   | 20       | 1,25   | 2.000                 | 300.000                                | 2,66  | -              | 8-0200-0740-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 20       | 1,25   | 2.000                 | 300.000                                | 2,54  | -              | 8-0200-0840-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 20       | 1,5    | 2.000                 | 300.000                                | 3,05  | -              | 8-0200-0840-0150-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 20       | 2      | 2.000                 | -                                      | 4,06  | -              | 8-0200-0840-0200-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 20       | 1,25   | 2.000                 | 300.000                                | 2,23  | -              | 8-0200-1050-0125-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 20       | 1,5    | 2.000                 | 300.000                                | 2,68  | -              | 8-0200-1050-0150-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 20       | 2      | 1.000                 | -                                      | 3,57  | -              | 8-0200-1050-0200-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 20       | 2,5    | 500                   | -                                      | 4,47  | -              | 8-0200-1050-0250-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 24       | 1,25   | 2.000                 | -                                      | 3,90  | -              | 8-0240-0840-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 24       | 3      | 500                   | -                                      | 9,35  | -              | 8-0240-0840-0300-01-A  | -                                      | -   |
| 4                  | 4,3                                   | 25       | 1,25   | 2.000                 | 200.000                                | 4,67  | -              | 8-0250-0430-0125-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 25       | 1,25   | 2.000                 | 200.000                                | 4,60  | -              | 8-0250-0530-0125-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 25       | 1,5    | 2.000                 | 200.000                                | 5,52  | -              | 8-0250-0530-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 25       | 1,25   | 2.000                 | 200.000                                | 4,50  | -              | 8-0250-0640-0125-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 25       | 1,5    | 2.000                 | 200.000                                | 5,40  | -              | 8-0250-0640-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 25       | 3      | 500                   | -                                      | 10,80   | -              | 8-0250-0640-0300-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 25       | 1,25   | 2.000                 | 200.000                                | 4,27  | -              | 8-0250-0840-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 25       | 1,5    | 2.000                 | 200.000                                | 5,13  | -              | 8-0250-0840-0150-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 25       | 2      | 1.000                 | -                                      | 6,84  | -              | 8-0250-0840-0200-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 25       | 3      | 500                   | -                                      | 10,26   | -              | 8-0250-0840-0300-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 25       | 1,25   | 2.000                 | 200.000                                | 3,97  | -              | 8-0250-1050-0125-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 25       | 1,5    | 2.000                 | 200.000                                | 4,76  | -              | 8-0250-1050-0150-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 25       | 3      | 500                   | -                                      | 9,52  | -              | 8-0250-1050-0300-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 25       | 4      | 500                   | -                                      | 12,70   | -              | 8-0250-1050-0400-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 30       | 1,25   | 1.000                 | 120.000                                | 6,72  | -              | 8-0300-0530-0125-01-A  | -                                      | -   |
| 5                  | 5,3                                   | 30       | 1,5    | 1.000                 | 120.000                                | 8,06  | -              | 8-0300-0530-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 30       | 1,25   | 1.000                 | 120.000                                | 6,62  | -              | 8-0300-0640-0125-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 30       | 1,5    | 1.000                 | 120.000                                | 7,94  | -              | 8-0300-0640-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 30       | 2      | 500                   | -                                      | 10,59   | -              | 8-0300-0640-0200-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 30       | 1,25   | 1.000                 | 120.000                                | 6,39  | -              | 8-0300-0840-0125-01-A  | -                                      | -   |

## KAROSSERIE-SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Karosserie-Scheiben / Carbody Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank<br>plain | galvanisch<br>verzinkt Chrom<br>6 frei<br>zinc plated<br>chrome 6 free | feuerverzinkt<br>hot dip<br>galvanized | zinklamelle<br>silber<br>zinc flake<br>silver |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|----------------|--|--|---|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs                                 | plain          | zinc plated<br>chrome 6 free   | hot dip<br>galvanized                  | zinc flake<br>silver                          |
| 8                  | 8,4                                   | 30       | 1,5    | 1.000                 | 120.000                                | 7,67  | -              | 8-0300-0840-0150-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 30       | 2      | 500                   | -                                      | 10,23   | -              | 8-0300-0840-0200-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 30       | 2,5    | 500                   | -                                      | 12,79   | -              | 8-0300-0840-0250-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 30       | 3      | 500                   | -                                      | 15,34   | -              | 8-0300-0840-0300-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 30       | 1,25   | 1.000                 | 120.000                                | 6,09  | -              | 8-0300-1050-0125-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 30       | 1,5    | 1.000                 | 120.000                                | 7,30  | -              | 8-0300-1050-0150-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 30       | 2      | 500                   | -                                      | 9,74  | -              | 8-0300-1050-0200-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 30       | 3      | 500                   | -                                      | 14,61   | -              | 8-0300-1050-0300-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 30       | 4      | 500                   | -                                      | 19,48   | -              | 8-0300-1050-0400-01-A  | -                                      | -   |
| 12                 | 13                                    | 30       | 1,25   | 1.000                 | 120.000                                | 5,63  | -              | 8-0300-1300-0125-01-A  | -                                      | -   |
| 12                 | 13                                    | 30       | 1,5    | 1.000                 | 120.000                                | 6,76  | -              | 8-0300-1300-0150-01-A  | -                                      | -   |
| 12                 | 13                                    | 30       | 2,5    | 500                   | -                                      | 11,27   | -              | 8-0300-1300-0250-01-A  | -                                      | -   |
| 12                 | 13                                    | 30       | 3      | 500                   | -                                      | 13,52   | -              | 8-0300-1300-0300-01-A  | -                                      | -   |
| 12                 | 13                                    | 30       | 4      | 500                   | -                                      | 18,03   | -              | 8-0300-1300-0400-01-A  | -                                      | -   |
| 14                 | 15                                    | 30       | 1,5    | 1.000                 | 120.000                                | 6,24  | -              | 8-0300-1500-0150-01-A  | -                                      | -   |
| 12                 | 13                                    | 32       | 1,5    | 1.000                 | -                                      | 7,91  | -              | 8-0320-1300-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 35       | 1,25   | 500                   | 100.000                                | 9,13  | -              | 8-0350-0640-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 35       | 1,25   | 500                   | 100.000                                | 8,90  | -              | 8-0350-0840-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 35       | 1,5    | 500                   | 100.000                                | 10,68   | -              | 8-0350-0840-0150-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 35       | 1,25   | 500                   | 100.000                                | 8,59  | -              | 8-0350-1050-0125-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 35       | 1,5    | 500                   | 100.000                                | 10,31   | -              | 8-0350-1050-0150-01-A  | -                                      | -   |
| 12                 | 13                                    | 35       | 1,25   | 500                   | 100.000                                | 8,14  | -              | 8-0350-1300-0125-01-A  | -                                      | -   |
| 12                 | 13                                    | 35       | 1,5    | 500                   | 100.000                                | 9,77  | -              | 8-0350-1300-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 40       | 1,25   | 500                   | 80.000                                 | 12,02   | -              | 8-0400-0640-0125-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 40       | 1,5    | 500                   | 80.000                                 | 14,42   | -              | 8-0400-0640-0150-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 40       | 2      | 500                   | -                                      | 19,22   | -              | 8-0400-0640-0200-01-A  | -                                      | -   |
| 6                  | 6,4                                   | 40       | 3      | 200                   | -                                      | 28,84   | -              | 8-0400-0640-0300-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 40       | 1,25   | 200                   | 80.000                                 | 11,79   | -              | 8-0400-0840-0125-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 40       | 1,5    | 500                   | 80.000                                 | 14,14   | -              | 8-0400-0840-0150-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 40       | 2      | 200                   | -                                      | 18,86   | -              | 8-0400-0840-0200-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 40       | 3      | 200                   | -                                      | 28,29   | -              | 8-0400-0840-0300-01-A  | -                                      | -   |
| 8                  | 8,4                                   | 40       | 4      | 200                   | -                                      | 37,72   | -              | 8-0400-0840-0400-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 40       | 1,25   | 500                   | 80.000                                 | 11,48   | -              | 8-0400-1050-0125-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 40       | 1,5    | 500                   | 80.000                                 | 13,78   | -              | 8-0400-1050-0150-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 40       | 2      | 500                   | -                                      | 18,37   | -              | 8-0400-1050-0200-01-A  | -                                      | -   |
| 10                 | 10,5                                  | 40       | 3      | 200                   | -                                      | 27,56   | -              | 8-0400-1050-0300-01-A  | -                                      | -   |

## KAROSSERIE-SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Karosserie-Scheiben / Carbody Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 10,5                                  | 40       | 4      | 200                   | -                                      | 36,74                        | -     | 8-0400-1050-0400-01-A                  | -                     | -                     |
| 12                 | 13                                    | 40       | 1,25   | 500                   | 80.000                                 | 11,03                        | -     | 8-0400-1300-0125-01-A                  | -                     | -                     |
| 12                 | 13                                    | 40       | 1,5    | 500                   | 80.000                                 | 13,23                        | -     | 8-0400-1300-0150-01-A                  | -                     | -                     |
| 12                 | 13                                    | 40       | 2      | 500                   | -                                      | 17,65                        | -     | 8-0400-1300-0200-01-A                  | -                     | -                     |
| 12                 | 13                                    | 40       | 4      | 200                   | -                                      | 35,29                        | -     | 8-0400-1300-0400-01-A                  | -                     | -                     |
| 14                 | 15                                    | 40       | 2      | 500                   | -                                      | 16,96                        | -     | 8-0400-1500-0200-01-A                  | -                     | -                     |
| 14                 | 15                                    | 40       | 4      | 200                   | -                                      | 33,91                        | -     | 8-0400-1500-0400-01-A                  | -                     | -                     |
|                    | 16                                    | 40       | 2      | 200                   | -                                      | 16,57                        | -     | 8-0400-1600-0200-01-A                  | -                     | -                     |
| 16                 | 17                                    | 40       | 2      | 500                   | -                                      | 14,36                        | -     | 8-0400-1700-0200-01-A                  | -                     | -                     |
| 14                 | 15                                    | 45       | 2      | 200                   | -                                      | 22,20                        | -     | 8-0450-1500-0200-01-A                  | -                     | -                     |
| 16                 | 17                                    | 45       | 4      | 200                   | -                                      | 42,81                        | -     | 8-0450-1700-0400-01-A                  | -                     | -                     |
| 8                  | 8,4                                   | 50       | 1,5    | 500                   | -                                      | 22,47                        | -     | 8-0500-0840-0150-01-A                  | -                     | -                     |
| 10                 | 10,5                                  | 50       | 1,5    | 500                   | -                                      | 22,10                        | -     | 8-0500-1050-0150-01-A                  | -                     | -                     |
| 10                 | 10,5                                  | 50       | 2      | 200                   | -                                      | 29,47                        | -     | 8-0500-1050-0200-01-A                  | -                     | -                     |
| 10                 | 10,5                                  | 50       | 3      | 200                   | -                                      | 44,20                        | -     | 8-0500-1050-0300-01-A                  | -                     | -                     |
| 12                 | 13                                    | 50       | 1,25   | 200                   | -                                      | 17,96                        | -     | 8-0500-1300-0125-01-A                  | -                     | -                     |
| 12                 | 13                                    | 50       | 1,5    | 500                   | -                                      | 21,56                        | -     | 8-0500-1300-0150-01-A                  | -                     | -                     |
| 12                 | 13                                    | 50       | 2      | 200                   | -                                      | 28,74                        | -     | 8-0500-1300-0200-01-A                  | -                     | -                     |
| 12                 | 13                                    | 50       | 2,5    | 200                   | -                                      | 35,93                        | -     | 8-0500-1300-0250-01-A                  | -                     | -                     |
| 12                 | 13                                    | 50       | 4      | 100                   | -                                      | 57,49                        | -     | 8-0500-1300-0400-01-A                  | -                     | -                     |
| 14                 | 15                                    | 50       | 2,5    | 200                   | -                                      | 35,07                        | -     | 8-0500-1500-0250-01-A                  | -                     | -                     |
| 16                 | 17                                    | 50       | 2      | 200                   | -                                      | 27,26                        | -     | 8-0500-1700-0200-01-A                  | -                     | -                     |
| 16                 | 17                                    | 50       | 3      | 100                   | -                                      | 40,90                        | -     | 8-0500-1700-0300-01-A                  | -                     | -                     |
| 16                 | 17                                    | 50       | 4      | 100                   | -                                      | 54,53                        | -     | 8-0500-1700-0400-01-A                  | -                     | -                     |

## VIERKANT-SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Vierkant-Scheiben / Square Washers Tol. ISO 4759 - 3 - C (ISO 4759 - 3 : 2000)

| Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank                 | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-----------------------|--|-----------------------|-----------------------|
| ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain                 | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 9                                     | 25       | 3      | 100                   | -                                      | 13,22                        | -                     | 9-0250-0900-0300-01-C                  | 9-0250-0900-0300-02-C | -                     |
| 11                                    | 40       | 4      | 100                   | -                                      | 47,26                        | 9-0400-1100-0400-00-C | 9-0400-1100-0400-01-C                  | 9-0400-1100-0400-02-C | -                     |
| 18                                    | 40       | 4      | 50                    | -                                      | 42,25                        | -                     | -                                      | 9-0400-1800-0400-02-C | -                     |
| 11                                    | 50       | 5      | 50                    | -                                      | 94,40                        | 9-0500-1100-0500-00-C | -                                      | 9-0500-1100-0500-02-C | -                     |
| 14                                    | 50       | 5      | 50                    | -                                      | 92,08                        | 9-0500-1400-0500-00-C | 9-0500-1400-0500-01-C                  | 9-0500-1400-0500-02-C | -                     |
| 21                                    | 50       | 5      | 50                    | -                                      | 84,53                        | -                     | -                                      | 9-0500-2100-0500-02-C | -                     |
| 18                                    | 60       | 6      | 50                    | -                                      | 157,58                       | -                     | -                                      | 9-0600-1800-0600-02-C | -                     |
| 21                                    | 60       | 6      | 50                    | -                                      | 153,25                       | -                     | -                                      | 9-0600-2100-0600-02-C | -                     |
| 18                                    | 75       | 7,5    | 25                    | -                                      | 316,19                       | -                     | -                                      | 9-0750-1800-0750-02-C | -                     |
| 21                                    | 75       | 7,5    | 25                    | -                                      | 310,78                       | -                     | -                                      | 9-0750-2100-0750-02-C | -                     |
| 28                                    | 75       | 7,5    | 25                    | -                                      | 294,92                       | -                     | -                                      | 9-0750-2800-0750-02-C | -                     |
| 18                                    | 80       | 6      | 25                    | -                                      | 289,45                       | 9-0800-1800-0600-00-C | -                                      | -                     | -                     |

## NFE 25513 SERIE M



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 160-250 HV

### Scheiben / Washers NFE 25513 Serie M

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank    | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|----------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain    | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 8        | 0,8    | 1.000                 | -                                      | 0,27                         | -        | M-030-01                               | -                     | -                     |
| 4                  | 4,3                                   | 10       | 0,8    | 500                   | -                                      | 0,40                         | -        | M-040-01                               | -                     | -                     |
| 5                  | 5,3                                   | 12       | 1      | 500                   | -                                      | 0,72                         | M-050-00 | M-050-01                               | -                     | -                     |
| 6                  | 6,4                                   | 14       | 1,2    | 200                   | -                                      | 1,15                         | M-060-00 | M-060-01                               | -                     | -                     |
| 7                  | 7,4                                   | 16       | 1,5    | 200                   | -                                      | 1,86                         | -        | M-070-01                               | -                     | -                     |
| 8                  | 8,4                                   | 18       | 1,5    | 200                   | -                                      | 2,34                         | M-080-00 | M-080-01                               | -                     | -                     |
| 10                 | 10,5                                  | 22       | 2      | 200                   | -                                      | 4,61                         | M-100-00 | M-100-01                               | M-100-02              | -                     |
| 12                 | 13                                    | 27       | 2,5    | 200                   | -                                      | 8,63                         | M-120-00 | M-120-01                               | M-120-02              | -                     |
| 14                 | 15                                    | 30       | 2,5    | 200                   | -                                      | 10,40                        | M-140-00 | M-140-01                               | M-140-02              | -                     |
| 16                 | 17                                    | 32       | 3      | 100                   | -                                      | 13,60                        | M-160-00 | M-160-01                               | M-160-02              | -                     |
| 18                 | 19                                    | 36       | 3      | 100                   | -                                      | 17,29                        | M-180-00 | M-180-01                               | M-180-02              | -                     |
| 20                 | 21                                    | 40       | 3      | 100                   | -                                      | 21,44                        | M-200-00 | M-200-01                               | -                     | -                     |
| 22                 | 23                                    | 45       | 3      | 100                   | -                                      | 27,67                        | -        | M-220-01                               | -                     | -                     |
| 24                 | 25                                    | 50       | 4      | 50                    | -                                      | 46,24                        | M-240-00 | M-240-01                               | M-240-02              | -                     |
| 27                 | 28                                    | 55       | 4      | 50                    | -                                      | 55,27                        | M-270-00 | M-270-01                               | -                     | -                     |
| 30                 | 31                                    | 60       | 4      | 50                    | -                                      | 65,08                        | M-300-00 | M-300-01                               | M-300-02              | -                     |
| 33                 | 34                                    | 65       | 5      | 50                    | -                                      | 94,61                        | M-330-00 | -                                      | -                     | -                     |
| 36                 | 37                                    | 70       | 5      | 50                    | -                                      | 108,85                       | M-360-00 | M-360-01                               | -                     | -                     |
| 39                 | 40                                    | 75       | 6      | 50                    | -                                      | 148,89                       | -        | M-390-01                               | -                     | -                     |
| 42                 | 43                                    | 80       | 6      | 50                    | -                                      | 168,35                       | M-420-00 | -                                      | -                     | -                     |
| 48                 | 50                                    | 90       | 7      | 25                    | -                                      | 241,68                       | M-480-00 | M-480-01                               | -                     | -                     |
| 52                 | 54                                    | 100      | 8      | 25                    | -                                      | 349,40                       | -        | M-520-01                               | -                     | -                     |

## NFE 25513 SERIE L



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 160-250 HV

### Scheiben / Washers NFE 25513 Serie L

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank    | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|----------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain    | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 12       | 0,8    | 500                   | -                                      | 0,66                         | -        | L-030-01                               | -                     | -                     |
| 4                  | 4,3                                   | 14       | 0,8    | 500                   | -                                      | 0,88                         | -        | L-040-01                               | -                     | -                     |
| 5                  | 5,3                                   | 16       | 1      | 500                   | -                                      | 1,41                         | -        | L-050-01                               | -                     | -                     |
| 6                  | 6,4                                   | 18       | 1,2    | 200                   | -                                      | 2,09                         | L-060-00 | L-060-01                               | -                     | -                     |
| 7                  | 7,4                                   | 20       | 1,5    | 200                   | -                                      | 3,19                         | -        | L-070-01                               | -                     | -                     |
| 8                  | 8,4                                   | 22       | 1,5    | 200                   | -                                      | 3,82                         | L-080-00 | L-080-01                               | -                     | -                     |
| 10                 | 10,5                                  | 27       | 2      | 200                   | -                                      | 7,63                         | L-100-00 | L-100-01                               | -                     | -                     |
| 12                 | 13                                    | 32       | 2,5    | 200                   | -                                      | 13,18                        | L-120-00 | L-120-01                               | -                     | -                     |
| 14                 | 15                                    | 36       | 2,5    | 200                   | -                                      | 16,51                        | -        | L-140-01                               | -                     | -                     |
| 16                 | 17                                    | 40       | 3      | 100                   | -                                      | 24,25                        | -        | L-160-01                               | L-160-02              | -                     |
| 18                 | 19                                    | 45       | 3      | 100                   | -                                      | 30,78                        | -        | L-180-01                               | -                     | -                     |
| 20                 | 21                                    | 50       | 3      | 100                   | -                                      | 38,08                        | L-200-00 | L-200-01                               | -                     | -                     |
| 24                 | 25                                    | 60       | 4      | 50                    | -                                      | 73,37                        | L-240-00 | L-240-01                               | L-240-02              | -                     |
| 30                 | 31                                    | 70       | 4      | 50                    | -                                      | 97,14                        | L-300-00 | L-300-01                               | -                     | -                     |

## NFE 25513 SERIE LL



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 160-250 HV

### Scheiben / Washers NFE 25513 Serie LL

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank     | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt | zinklamelle<br>silber        |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|-----------|--|---------------|------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à         | à                                      | plain         | zinc plated<br>chrome 6 free |
| 3                  | 3,2                                   | 14       | 0,8    | 500                   | -                                      | 0,92  | -         | LL-030-01                              | -             | -                            |
| 4                  | 4,3                                   | 16       | 0,8    | 500                   | -                                      | 1,17  | -         | LL-040-01                              | -             | -                            |
| 5                  | 5,3                                   | 20       | 1      | 200                   | -                                      | 2,29  | -         | LL-050-01                              | -             | -                            |
| 6                  | 6,4                                   | 24       | 1,2    | 200                   | -                                      | 3,96  | -         | LL-060-01                              | -             | -                            |
| 8                  | 8,4                                   | 30       | 1,5    | 200                   | -                                      | 7,67  | -         | LL-080-01                              | -             | -                            |
| 10                 | 10,5                                  | 36       | 2      | 200                   | -                                      | 14,62   | LL-100-00 | LL-100-01                              | -             | -                            |
| 12                 | 13                                    | 40       | 2,5    | 100                   | -                                      | 22,06   | -         | LL-120-01                              | -             | -                            |
| 14                 | 15                                    | 45       | 2,5    | 100                   | -                                      | 27,74   | -         | LL-140-01                              | -             | -                            |
| 16                 | 17                                    | 50       | 3      | 100                   | -                                      | 40,90   | -         | LL-160-01                              | -             | -                            |
| 18                 | 19                                    | 55       | 3      | 100                   | -                                      | 49,27   | -         | LL-180-01                              | -             | -                            |
| 24                 | 25                                    | 70       | 4      | 50                    | -                                      | 105,43  | -         | LL-240-01                              | -             | -                            |



## NFE 25513 SERIE Z



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 160-250 HV

### Scheiben / Washers NFE 25513 Serie Z

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank    | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|----------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain    | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 6        | 0,8    | 1.000                 | -                                      | 0,13                         | -        | Z-030-01                               | -                     | -                     |
| 4                  | 4,3                                   | 8        | 0,8    | 1.000                 | -                                      | 0,22                         | -        | Z-040-01                               | -                     | -                     |
| 5                  | 5,3                                   | 10       | 1      | 500                   | -                                      | 0,44                         | -        | Z-050-01                               | -                     | -                     |
| 6                  | 6,4                                   | 12       | 1,2    | 200                   | -                                      | 0,76                         | -        | Z-060-01                               | -                     | -                     |
| 7                  | 7,4                                   | 14       | 1,5    | 200                   | -                                      | 1,30                         | -        | Z-070-01                               | -                     | -                     |
| 8                  | 8,4                                   | 16       | 1,5    | 200                   | -                                      | 1,71                         | -        | Z-080-01                               | -                     | -                     |
| 10                 | 10,5                                  | 20       | 2      | 200                   | -                                      | 3,57                         | -        | Z-100-01                               | -                     | -                     |
| 12                 | 13                                    | 24       | 2,5    | 200                   | -                                      | 6,27                         | -        | Z-120-01                               | -                     | -                     |
| 14                 | 15                                    | 27       | 2,5    | 200                   | -                                      | 7,77                         | -        | Z-140-01                               | -                     | -                     |
| 16                 | 17                                    | 30       | 3      | 200                   | -                                      | 11,30                        | -        | Z-160-01                               | -                     | -                     |
| 20                 | 21                                    | 36       | 3      | 100                   | -                                      | 15,81                        | -        | Z-200-01                               | -                     | -                     |
| 24                 | 25                                    | 45       | 4      | 50                    | -                                      | 34,53                        | -        | Z-240-01                               | -                     | -                     |
| 30                 | 31                                    | 52       | 4      | 50                    | -                                      | 42,98                        | Z-300-00 | Z-300-01                               | -                     | -                     |



Werkstoff / Material: Stahl / Steel, Härte / Hardness: 200 HB

## Scheiben / Washers BRB Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank      | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt | zinklamelle<br>silber        |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---|------------|--|---------------|------------------------------|
|                    | ID<br>ID                              | AD<br>OD | S<br>T |                       |  |   | à          | à                                      | plain         | zinc plated<br>chrome 6 free |
| 4                  | 4,3                                   | 8        | 0,8    | 500                   | -                                      | 0,22  | -          | BRB-043-01                             | -             | -                            |
| 5                  | 5,3                                   | 10       | 1      | 500                   | -                                      | 0,44  | -          | BRB-053-01                             | -             | -                            |
| 6                  | 6,4                                   | 12       | 1,5    | 200                   | -                                      | 0,95  | -          | BRB-064-01                             | -             | -                            |
| ¼"                 | 6,7                                   | 14       | 1,5    | 200                   | -                                      | 1,40  | -          | BRB-067-01                             | -             | -                            |
| 8                  | 8,4                                   | 16       | 1,5    | 200                   | -                                      | 1,72  | -          | BRB-084-01                             | BRB-084-02    | -                            |
| 3/8"               | 10                                    | 18       | 2      | 200                   | -                                      | 2,76  | -          | BRB-100-01                             | -             | -                            |
| 10                 | 10,5                                  | 22       | 2      | 200                   | -                                      | 4,61  | -          | BRB-105-01                             | BRB-105-02    | -                            |
| 7/6"               | 12                                    | 22       | 2      | 200                   | -                                      | 4,19  | -          | BRB-120-01                             | -             | -                            |
| 12                 | 13                                    | 24       | 2      | 200                   | -                                      | 5,02  | BRB-130-00 | BRB-130-01                             | BRB-130-02    | -                            |
| ½"                 | 13,5                                  | 24       | 2      | 200                   | -                                      | 4,86  | -          | BRB-135-01                             | BRB-135-02    | -                            |
| 14                 | 15                                    | 26       | 2      | 100                   | -                                      | 5,56  | -          | BRB-150-01                             | -             | -                            |
| 16                 | 17                                    | 30       | 3      | 100                   | -                                      | 11,30   | BRB-170-00 | BRB-170-01                             | BRB-170-02    | -                            |
| 18                 | 19                                    | 34       | 3      | 100                   | -                                      | 14,70   | -          | BRB-190-01                             | -             | -                            |
| ¾"                 | 20                                    | 36       | 3      | 100                   | -                                      | 16,57   | -          | BRB-200-01                             | -             | -                            |
| 20                 | 21                                    | 36       | 3      | 100                   | -                                      | 15,81   | -          | BRB-210-01                             | BRB-210-02    | -                            |
| 24                 | 25                                    | 45       | 4      | 100                   | -                                      | 34,53   | -          | BRB-250-01                             | BRB-250-02    | -                            |
| 1"                 | 26                                    | 45       | 4      | 100                   | -                                      | 33,27   | -          | BRB-260-01                             | -             | -                            |



Werkstoff / Material: Stahl / Steel

## Scheiben / Washers SRKB Tol. ISO 4759-3-C (ISO 4759-3:2000)

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| ¼"                 | 7                                     | 19       | 1,5    | 200                   | -                                      | 2,89                         | -     | 5-SRKB-190715-01                       | -                     | -                     |
| ¼"                 | 7                                     | 22       | 1,5    | 200                   | -                                      | 4,02                         | -     | 5-SRKB-220715-01                       | -                     | -                     |
| 3/16"              | 5,5                                   | 25       | 1,5    | 200                   | -                                      | 5,50                         | -     | 5-SRKB-250515-01                       | -                     | -                     |
| ¼"                 | 7                                     | 25       | 1,5    | 200                   | -                                      | 5,33                         | -     | 5-SRKB-250715-01                       | -                     | -                     |
| ¼"                 | 7                                     | 28       | 2      | 100                   | -                                      | 9,06                         | -     | 5-SRKB-280720-01                       | -                     | -                     |
| 5/16"              | 9                                     | 28       | 2      | 100                   | -                                      | 8,67                         | -     | 5-SRKB-280920-01                       | -                     | -                     |
| 3/8"               | 11                                    | 28       | 2      | 100                   | -                                      | 8,18                         | -     | 5-SRKB-281120-01                       | -                     | -                     |
| 7/16"              | 12,5                                  | 28       | 2      | 100                   | -                                      | 7,74                         | -     | 5-SRKB-281220-01                       | -                     | -                     |
| ¼"                 | 7                                     | 35       | 2      | 100                   | -                                      | 14,50                        | -     | 5-SRKB-350720-01                       | -                     | -                     |
| ¼"                 | 7                                     | 35       | 3      | 100                   | -                                      | 21,75                        | -     | 5-SRKB-350730-01                       | -                     | -                     |
| 5/16"              | 9                                     | 35       | 2      | 100                   | -                                      | 14,11                        | -     | 5-SRKB-350920-01                       | -                     | -                     |
| 5/16"              | 9                                     | 35       | 3      | 100                   | -                                      | 21,16                        | -     | 5-SRKB-350930-01                       | -                     | -                     |
| 3/8"               | 11                                    | 35       | 2      | 100                   | -                                      | 13,61                        | -     | 5-SRKB-351120-01                       | -                     | -                     |
| 3/8"               | 11                                    | 35       | 3      | 100                   | -                                      | 20,42                        | -     | 5-SRKB-351130-01                       | -                     | -                     |
| 7/16"              | 12,5                                  | 35       | 2      | 100                   | -                                      | 13,18                        | -     | 5-SRKB-351220-01                       | -                     | -                     |
| 7/16"              | 12,5                                  | 35       | 3      | 100                   | -                                      | 19,77                        | -     | 5-SRKB-351230-01                       | -                     | -                     |
| 5/8"               | 17,5                                  | 50       | 3      | 100                   | -                                      | 40,58                        | -     | 5-SRKB-501730-01                       | -                     | -                     |



Werkstoff / Material: Stahl / Steel

## Nietscheiben / Rivet Washers NB Tol. ISO 4759-3-C (ISO 4759-3:2000)

| Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                                     | 13       | 1      | 200                   | -                                      | 0,89                         | -     | 5-NB-130510-01                         | -                     | -                     |
| 5                                     | 16       | 1      | 200                   | -                                      | 1,42                         | -     | 5-NB-160510-01                         | -                     | -                     |
| 6                                     | 16       | 1      | 200                   | -                                      | 1,36                         | -     | 5-NB-160610-01                         | -                     | -                     |
| 5                                     | 19       | 1      | 200                   | -                                      | 2,07                         | -     | 5-NB-190510-01                         | -                     | -                     |
| 6                                     | 19       | 1      | 200                   | -                                      | 2,00                         | -     | 5-NB-190610-01                         | -                     | -                     |
| 8                                     | 19       | 1,5    | 200                   | -                                      | 2,75                         | -     | 5-NB-190815-01                         | -                     | -                     |
| 6                                     | 22       | 1,5    | 200                   | -                                      | 4,14                         | -     | 5-NB-220615-01                         | -                     | -                     |
| 8                                     | 22       | 1,5    | 200                   | -                                      | 3,88                         | -     | 5-NB-220815-01                         | -                     | -                     |
| 6                                     | 25       | 1,5    | 200                   | -                                      | 5,45                         | -     | 5-NB-250615-01                         | -                     | -                     |
| 8                                     | 25       | 1,5    | 200                   | -                                      | 5,19                         | -     | 5-NB-250815-01                         | -                     | -                     |
| 10                                    | 25       | 1,5    | 200                   | -                                      | 4,86                         | -     | 5-NB-251015-01                         | -                     | -                     |



Werkstoff / Material: Stahl / Steel

## Scheiben / Washers TBRB

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 8                  | 8,4                                   | 16       | 3      | 200                   | -                                      | 3,43                         | -     | TBRB-084-01                            | -                     | -                     |
| 12                 | 13                                    | 24       | 4      | 200                   | -                                      | 10,04                        | -     | TBRB-130-01                            | -                     | -                     |
| 16                 | 17                                    | 30       | 6      | 100                   | -                                      | 22,60                        | -     | TBRB-170-01                            | -                     | -                     |
| 20                 | 21                                    | 36       | 6      | 100                   | -                                      | 31,63                        | -     | TBRB-210-01                            | -                     | -                     |
| 24                 | 25                                    | 45       | 8      | 50                    | -                                      | 69,05                        | -     | TBRB-250-01                            | -                     | -                     |

## TBR SB



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers TBR SB

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,4                                   | 22       | 4      | 200                   | -                                      | 10,93                        | -     | TBR SB-064-01                          | -                     | -                     |
| 8                  | 8,4                                   | 26       | 5      | 200                   | -                                      | 18,66                        | -     | TBR SB-084-01                          | -                     | -                     |
| 10                 | 10,5                                  | 28       | 6      | 200                   | -                                      | 24,92                        | -     | TBR SB-105-01                          | -                     | -                     |
| 12                 | 13                                    | 36       | 6      | 100                   | -                                      | 41,69                        | -     | TBR SB-130-01                          | -                     | -                     |
| ½"                 | 13,5                                  | 36       | 6      | 100                   | -                                      | 41,20                        | -     | TBR SB-135-01                          | -                     | -                     |
| 16                 | 17                                    | 42       | 8      | 100                   | -                                      | 72,75                        | -     | TBR SB-170-01                          | -                     | -                     |
| 20                 | 21                                    | 52       | 8      | 50                    | -                                      | 111,62                       | -     | TBR SB-210-01                          | -                     | -                     |
| 24                 | 25                                    | 58       | 10     | 50                    | -                                      | 168,87                       | -     | TBR SB-250-01                          | -                     | -                     |
| 1"                 | 26                                    | 65       | 10     | 25                    | -                                      | 218,81                       | -     | TBR SB-260-01                          | -                     | -                     |

## RUNDE SCHEIBEN DK



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Tol ISO 4759-3-C (ISO 4759-3:2000)

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000<br>Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|---------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs       | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 11                                    | 40       | 4      | 50                    | -                                      | 36,47                           | -     | 8-0400-1100-0400-01-C                  | 8-0400-1100-0400-02-C | -                     |
| 12                 | 14                                    | 40       | 4      | 50                    | -                                      | 34,63                           | -     | -                                      | 8-0400-1400-0400-02-C | -                     |
| 16                 | 18                                    | 40       | 4      | 50                    | -                                      | 31,47                           | -     | -                                      | 8-0400-1800-0400-02-C | -                     |
| 10                 | 11                                    | 50       | 4      | 50                    | -                                      | 58,67                           | -     | 8-0500-1100-0400-01-C                  | 8-0500-1100-0400-02-C | -                     |
| 12                 | 14                                    | 50       | 4      | 50                    | -                                      | 56,82                           | -     | -                                      | 8-0500-1400-0400-02-C | -                     |
| 16                 | 18                                    | 50       | 4      | 50                    | -                                      | 53,66                           | -     | -                                      | 8-0500-1800-0400-02-C | -                     |
| 16                 | 18                                    | 65       | 4      | 50                    | -                                      | 96,21                           | -     | -                                      | 8-0650-1800-0400-02-C | -                     |
| 12                 | 14                                    | 75       | 4      | 50                    | -                                      | 133,89                          | -     | 8-0750-1400-0400-01-C                  | 8-0750-1400-0400-02-C | -                     |

## PLANE SCHEIBEN



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Tol. ISO 4759-3-C (ISO 4759-3:2000)

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,3                                   | 13       | 1      | 1.000                 | -                                      | 0,87                         | -     | plane-053-01                           | -                     | -                     |
| 6                  | 6,5                                   | 16       | 1      | 1.000                 | -                                      | 1,32                         | -     | plane-065-01                           | -                     | -                     |
| 8                  | 8,4                                   | 18       | 1,25   | 1.000                 | -                                      | 1,95                         | -     | plane-084-01                           | -                     | -                     |
| 10                 | 10,5                                  | 22       | 1,25   | 1.000                 | -                                      | 2,88                         | -     | plane-105-01                           | -                     | -                     |
| 12                 | 13,5                                  | 28       | 1,5    | 500                   | -                                      | 5,57                         | -     | plane-135-01                           | -                     | -                     |
| 16                 | 17                                    | 34       | 2      | 100                   | -                                      | 10,69                        | -     | plane-170-01                           | -                     | -                     |

## SCHEIBEN MIT FASE / WITH CHAMFER



Werkstoff / Material: Stahl / Steel

### Scheiben mit Fase / Washers with chamfer Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 10                 | 10,5                                  | 21       | 2      | 500                   | -                                      | 4,08                         | -     | 5-fase-211020-01                       | -                     | -                     |

## SESCO



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Sesco Tol ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 5                  | 5,3                                   | 12       | 1,5    | 5.000                 | -                                      | 1,07                         | -     | Sesco-053-01                           | -                     | -                     |
| 6                  | 6,4                                   | 15       | 1,5    | 3.000                 | -                                      | 1,70                         | -     | Sesco-064-01                           | -                     | -                     |
| 8                  | 8,4                                   | 20       | 2,5    | 1.000                 | -                                      | 5,08                         | -     | Sesco-084-01                           | -                     | -                     |
| 10                 | 10,5                                  | 25       | 2,5    | 500                   | -                                      | 7,93                         | -     | Sesco-105-01                           | -                     | -                     |
| 12                 | 13                                    | 31       | 3      | 500                   | -                                      | 15,81                        | -     | Sesco-130-01                           | -                     | -                     |
| 16                 | 17                                    | 42       | 4      | 200                   | -                                      | 36,38                        | -     | Sesco-170-01                           | -                     | -                     |

## HALBSTARKE CH



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 3                  | 3,2                                   | 13       | 0,5    | 10.000                | -                                      | 0,49                         | -     | 5-halbstarke-130305-01                 | -                     | -                     |
| 4                  | 4,3                                   | 14       | 0,8    | 10.000                | -                                      | 0,88                         | -     | 5-halbstarke-140408-01                 | -                     | -                     |

## KAROSSERIE-SCHEIBEN CH



Werkstoff / Material: Stahl / Steel

### Karosserie-Scheiben / Carbody Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,4                                   | 25       | 1,8    | 1.000                 | -                                      | 6,48                         | -     | 5-Karo CH-250618-01                    | -                     | -                     |
| 8                  | 8,4                                   | 25       | 1,8    | 1.000                 | -                                      | 6,15                         | -     | 5-Karo CH-250818-01                    | -                     | -                     |
| 7                  | 7,4                                   | 30       | 2      | 500                   | -                                      | 10,42                        | -     | 5-Karo CH-300720-01                    | -                     | -                     |
| 8                  | 8,4                                   | 30       | 2      | 500                   | -                                      | 10,23                        | -     | 5-Karo CH-300820-01                    | -                     | -                     |
| 10                 | 10,5                                  | 30       | 2      | 500                   | -                                      | 9,74                         | -     | 5-Karo CH-301020-01                    | -                     | -                     |
| 8                  | 8,4                                   | 35       | 2,5    | 500                   | -                                      | 17,79                        | -     | 5-Karo CH-350825-01                    | -                     | -                     |
| 10                 | 10,5                                  | 35       | 2,5    | 500                   | -                                      | 17,18                        | -     | 5-Karo CH-351025-01                    | -                     | -                     |
| 9                  | 9,4                                   | 40       | 2,5    | 250                   | -                                      | 23,30                        | -     | 5-Karo CH-400925-01                    | -                     | -                     |
| 10                 | 10,5                                  | 40       | 2,5    | 250                   | -                                      | 22,96                        | -     | 5-Karo CH-401025-01                    | -                     | -                     |
| 12                 | 13                                    | 45       | 2,5    | 250                   | -                                      | 28,61                        | -     | 5-Karo CH-451325-01                    | -                     | -                     |

## RUNDE BAUSCHEIBEN CH



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Tol. ISO 4759-3-C (ISO 4759-3:2000)

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 16                 | 17                                    | 58       | 5      | 100                   | -                                      | 94,79                        | -     | 5-runde CH-581750-01                   | -                     | -                     |



## STARKE CH



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 6                  | 6,4                                   | 16       | 1,6    | 2.500                 | -                                      | 2,12                         | -     | 5-starke-160616-01                     | -                     | -                     |
| 8                  | 8,4                                   | 20       | 2      | 2.000                 | -                                      | 4,06                         | -     | 5-starke-200820-01                     | -                     | -                     |
| 10                 | 10,5                                  | 25       | 2      | 1000                  | -                                      | 6,35                         | -     | 5-starke-251020-01                     | -                     | -                     |
| 12                 | 13                                    | 30       | 3      | 500                   | -                                      | 13,52                        | -     | 5-starke-301330-01                     | -                     | -                     |
| 14                 | 15                                    | 35       | 3      | 500                   | -                                      | 18,50                        | -     | 5-starke-351530-01                     | -                     | -                     |
| 16                 | 17                                    | 40       | 3      | 200                   | -                                      | 24,25                        | -     | 5-starke-401730-01                     | -                     | -                     |
| 18                 | 19                                    | 50       | 4      | 100                   | -                                      | 52,75                        | -     | 5-starke-501940-01                     | -                     | -                     |
| 20                 | 21                                    | 55       | 4      | 100                   | -                                      | 63,73                        | -     | 5-starke-552140-01                     | -                     | -                     |

## VSM



Werkstoff / Material: Stahl / Steel

### Scheiben / Washers VSM 13904 Tol. ISO 4759-3-A

| Metrisch<br>metric | Abmessungen in mm<br>dimensions in mm |          |        | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | feuerverzinkt         | zinklamelle<br>silber |
|--------------------|---------------------------------------|----------|--------|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| M                  | ID<br>ID                              | AD<br>OD | S<br>T | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | hot dip<br>galvanized | zinc flake<br>silver  |
| 12                 | 13                                    | 28       | 4      | 500                   | -                                      | 15,17                        | -     | VSM-130-01                             | -                     | -                     |
| 20                 | 21                                    | 39       | 4      | 250                   | -                                      | 26,63                        | -     | VSM-210-01                             | -                     | -                     |

## SPLINTE DIN 94 / ISO 1234



Werkstoff / Material: Stahl / Steel + Edelstahl / Stainless Steel

### Splinte / Cotter pins DIN 94 / ISO 1234

| Abmessungen in mm<br>dimensions in mm | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank<br>plain | galvanisch<br>verzinkt Chrom<br>6 frei<br>zinc plated<br>chrome 6 free | Edelstahl A2<br>stainless<br>steel A2 | Edelstahl A4<br>stainless<br>steel A4 |
|---------------------------------------|-----------------------|--|---|----------------|--|---------------------------------------|---------------------------------------|
| 1,6 x 8                               | 1.000                 | -                                      | 0,18  | -              | 94-0160-008-01   | -                                     | -                                     |
| 1,6 x 10                              | 1.000                 | -                                      | 0,18  | -              | 94-0160-010-01   | -                                     | -                                     |
| 1,6 x 12                              | 1.000                 | -                                      | 0,21  | -              | 94-0160-012-01   | 94-0160-012-52                        | -                                     |
| 1,6 x 16                              | 1.000                 | -                                      | 0,26  | -              | 94-0160-016-01   | -                                     | -                                     |
| 1,6 x 20                              | 1.000                 | -                                      | 0,32  | -              | 94-0160-020-01   | 94-0160-020-52                        | -                                     |
| 1,6 x 25                              | 1.000                 | -                                      | 0,39  | -              | 94-0160-025-01   | -                                     | -                                     |
| 1,6 x 32                              | 1.000                 | -                                      | 0,45  | -              | 94-0160-032-01   | 94-0160-032-52                        | -                                     |
| 2 x 10                                | 1.000                 | -                                      | 0,40  | -              | 94-0200-010-01   | 94-0200-010-52                        | -                                     |
| 2 x 12                                | 1.000                 | -                                      | 0,45  | -              | 94-0200-012-01   | -                                     | -                                     |
| 2 x 16                                | 1.000                 | -                                      | 0,51  | -              | 94-0200-016-01   | 94-0200-016-52                        | -                                     |
| 2 x 20                                | 1.000                 | -                                      | 0,60  | -              | 94-0200-020-01   | 94-0200-020-52                        | -                                     |
| 2 x 25                                | 1.000                 | -                                      | 0,70  | -              | 94-0200-025-01   | -                                     | -                                     |
| 2 x 32                                | 1.000                 | -                                      | 0,85  | -              | 94-0200-032-01   | -                                     | -                                     |
| 2 x 40                                | 1.000                 | -                                      | 1,10  | -              | 94-0200-040-01   | -                                     | -                                     |
| 2,5 x 16                              | 1.000                 | -                                      | 0,93  | -              | 94-0250-016-01   | -                                     | -                                     |
| 2,5 x 20                              | 1.000                 | -                                      | 1,05  | -              | 94-0250-020-01   | -                                     | -                                     |
| 2,5 x 25                              | 1.000                 | -                                      | 1,20  | -              | 94-0250-025-01   | -                                     | -                                     |
| 2,5 x 32                              | 1.000                 | -                                      | 1,43  | -              | 94-0250-032-01   | 94-0250-032-52                        | -                                     |
| 2,5 x 36                              | 1.000                 | -                                      | 1,65  | -              | 94-0250-036-01   | 94-0250-036-52                        | -                                     |
| 2,5 x 40                              | 1.000                 | -                                      | 1,80  | -              | 94-0250-040-01   | -                                     | -                                     |
| 2,5 x 50                              | 1.000                 | -                                      | 2,50  | -              | 94-0250-050-01   | -                                     | -                                     |
| 3,2 x 14                              | 500                   | -                                      | 1,30  | -              | 94-0320-014-01   | 94-0320-014-52                        | -                                     |
| 3,2 x 16                              | 500                   | -                                      | 1,30  | -              | 94-0320-016-01   | 94-0320-016-52                        | -                                     |
| 3,2 x 18                              | 500                   | -                                      | 1,40  | -              | 94-0320-018-01   | -                                     | -                                     |
| 3,2 x 20                              | 500                   | -                                      | 1,50  | -              | 94-0320-020-01   | 94-0320-020-52                        | -                                     |
| 3,2 x 22                              | 500                   | -                                      | 1,60  | -              | 94-0320-022-01   | 94-0320-022-52                        | -                                     |
| 3,2 x 25                              | 500                   | -                                      | 1,70  | -              | 94-0320-025-01   | 94-0320-025-52                        | -                                     |
| 3,2 x 28                              | 500                   | -                                      | 1,80  | -              | 94-0320-028-01   | -                                     | -                                     |
| 3,2 x 32                              | 500                   | -                                      | 2,00  | -              | 94-0320-032-01   | 94-0320-032-52                        | -                                     |
| 3,2 x 36                              | 500                   | -                                      | 2,20  | -              | 94-0320-036-01   | 94-0320-036-52                        | -                                     |
| 3,2 x 40                              | 500                   | -                                      | 2,50  | -              | 94-0320-040-01   | 94-0320-040-52                        | -                                     |
| 3,2 x 45                              | 500                   | -                                      | 2,80  | -              | 94-0320-045-01   | -                                     | -                                     |
| 3,2 x 50                              | 500                   | -                                      | 3,00  | -              | 94-0320-050-01   | 94-0320-050-52                        | -                                     |
| 3,2 x 56                              | 500                   | -                                      | 3,30  | -              | 94-0320-056-01   | -                                     | -                                     |
| 3,2 x 63                              | 500                   | -                                      | 3,60  | -              | 94-0320-063-01   | -                                     | -                                     |
| 4 x 18                                | 500                   | -                                      | 2,50  | -              | 94-0400-018-01   | -                                     | -                                     |
| 4 x 20                                | 500                   | -                                      | 2,70  | -              | 94-0400-020-01   | 94-0400-020-52                        | -                                     |

## SPLINTE DIN 94 / ISO 1234



Werkstoff / Material: Stahl / Steel + Edelstahl / Stainless Steel

### Splinte / Cotter pins DIN 94 / ISO 1234

| Abmessungen in mm<br>dimensions in mm | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück<br>weight/kg<br>per 1000 pcs | blank<br>plain | galvanisch<br>verzinkt Chrom<br>6 frei<br>zinc plated<br>chrome 6 free | Edelstahl A2<br>stainless<br>steel A2 | Edelstahl A4<br>stainless<br>steel A4 |
|---------------------------------------|-----------------------|--|---|----------------|--|---------------------------------------|---------------------------------------|
| 4 x 22                                | 500                   | -                                      | 2,90  | -              | 94-0400-022-01   | 94-0400-022-52                        | -                                     |
| 4 x 25                                | 500                   | -                                      | 3,20  | -              | 94-0400-025-01   | 94-0400-025-52                        | 94-0400-025-53                        |
| 4 x 28                                | 500                   | -                                      | 3,40  | -              | 94-0400-028-01   | 94-0400-028-52                        | -                                     |
| 4 x 32                                | 500                   | -                                      | 3,70  | -              | 94-0400-032-01   | 94-0400-032-52                        | 94-0400-032-53                        |
| 4 x 36                                | 500                   | -                                      | 4,10  | -              | 94-0400-036-01   | 94-0400-036-52                        | 94-0400-036-53                        |
| 4 x 40                                | 500                   | -                                      | 4,60  | -              | 94-0400-040-01   | 94-0400-040-52                        | -                                     |
| 4 x 45                                | 500                   | -                                      | 5,10  | -              | 94-0400-045-01   | -                                     | -                                     |
| 4 x 50                                | 500                   | -                                      | 5,60  | -              | 94-0400-050-01   | 94-0400-050-52                        | -                                     |
| 4 x 56                                | 500                   | -                                      | 6,10  | -              | 94-0400-056-01   | 94-0400-056-52                        | -                                     |
| 4 x 63                                | 500                   | -                                      | 6,60  | -              | 94-0400-063-01   | 94-0400-063-52                        | -                                     |
| 4 x 71                                | 500                   | -                                      | 7,50  | -              | 94-0400-071-01   | -                                     | -                                     |
| 4 x 80                                | 500                   | -                                      | 8,40  | -              | 94-0400-080-01   | -                                     | -                                     |
| 5 x 22                                | 250                   | -                                      | 4,40  | -              | 94-0500-022-01   | -                                     | -                                     |
| 5 x 25                                | 250                   | -                                      | 5,00  | -              | 94-0500-025-01   | 94-0500-025-52                        | -                                     |
| 5 x 28                                | 250                   | -                                      | 5,50  | -              | 94-0500-028-01   | -                                     | -                                     |
| 5 x 32                                | 250                   | -                                      | 6,00  | -              | 94-0500-032-01   | -                                     | 94-0500-032-53                        |
| 5 x 36                                | 250                   | -                                      | 6,80  | -              | 94-0500-036-01   | -                                     | 94-0500-036-53                        |
| 5 x 40                                | 250                   | -                                      | 7,50  | -              | 94-0500-040-01   | 94-0500-040-52                        | 94-0500-040-53                        |
| 5 x 45                                | 250                   | -                                      | 8,30  | -              | 94-0500-045-01   | -                                     | -                                     |
| 5 x 50                                | 250                   | -                                      | 9,00  | -              | 94-0500-050-01   | 94-0500-050-52                        | -                                     |
| 5 x 56                                | 250                   | -                                      | 9,80  | -              | 94-0500-056-01   | -                                     | 94-0500-056-53                        |
| 5 x 63                                | 250                   | -                                      | 10,50   | -              | 94-0500-063-01   | 94-0500-063-52                        | 94-0500-063-53                        |
| 5 x 71                                | 250                   | -                                      | 12,00   | -              | 94-0500-071-01   | -                                     | 94-0500-071-53                        |
| 5 x 80                                | 250                   | -                                      | 13,50   | -              | 94-0500-080-01   | -                                     | -                                     |
| 5 x 90                                | 250                   | -                                      | 15,00   | -              | 94-0500-090-01   | -                                     | -                                     |
| 5 x 100                               | 250                   | -                                      | 16,50   | -              | 94-0500-100-01   | -                                     | 94-0500-100-53                        |
| 6,3 x 32                              | 250                   | -                                      | 9,40  | -              | 94-0630-032-01   | 94-0630-032-52                        | 94-0630-032-53                        |
| 6,3 x 36                              | 250                   | -                                      | 9,70  | -              | 94-0630-036-01   | -                                     | -                                     |
| 6,3 x 40                              | 250                   | -                                      | 10,80   | -              | 94-0630-040-01   | 94-0630-040-52                        | -                                     |
| 6,3 x 45                              | 250                   | -                                      | 11,80   | -              | 94-0630-045-01   | 94-0630-045-52                        | 94-0630-045-53                        |
| 6,3 x 50                              | 250                   | -                                      | 12,90   | -              | 94-0630-050-01   | 94-0630-050-52                        | 94-0630-050-53                        |
| 6,3 x 56                              | 250                   | -                                      | 14,00   | -              | 94-0630-056-01   | 94-0630-056-52                        | 94-0630-056-53                        |
| 6,3 x 63                              | 250                   | -                                      | 15,00   | -              | 94-0630-063-01   | 94-0630-063-52                        | 94-0630-063-53                        |
| 6,3 x 71                              | 250                   | -                                      | 17,20   | -              | 94-0630-071-01   | -                                     | 94-0630-071-53                        |
| 6,3 x 80                              | 250                   | -                                      | 19,40   | -              | 94-0630-080-01   | 94-0630-080-52                        | -                                     |
| 6,3 x 90                              | 250                   | -                                      | 21,50   | -              | 94-0630-090-01   | -                                     | -                                     |
| 6,3 x 100                             | 250                   | -                                      | 23,60   | -              | 94-0630-100-01   | 94-0630-100-52                        | 94-0630-100-53                        |

# SPLINTE DIN 94 / ISO 1234



Werkstoff / Material: Stahl / Steel + Edelstahl / Stainless Steel

## Splinte / Cotter pins DIN 94 / ISO 1234

| Abmessungen in mm<br>dimensions in mm                 | VE<br>packing<br>unit | Paletten-<br>menge<br>pallet<br>amount | Gewicht/kg<br>pro 1000 Stück | blank | galvanisch<br>verzinkt Chrom<br>6 frei | Edelstahl A2          | Edelstahl A4          |
|---|-----------------------|--|------------------------------|-------|--|-----------------------|-----------------------|
| Nenn Durchmesser / Länge<br>nominal diameter / length | à                     | à                                      | weight/kg<br>per 1000 pcs    | plain | zinc plated<br>chrome 6 free           | stainless<br>steel A2 | stainless<br>steel A4 |
| 6,3 x 112   | 250                   | -                                      | 25,70                        | -     | 94-0630-112-01                         | -                     | -                     |
| 6,3 x 125   | 100                   | -                                      | 27,80                        | -     | 94-0630-125-01                         | -                     | -                     |
| 8 x 40  | 100                   | -                                      | 22,00                        | -     | 94-0800-040-01                         | 94-0800-040-52        | -                     |
| 8 x 45  | 100                   | -                                      | 23,00                        | -     | 94-0800-045-01                         | -                     | -                     |
| 8 x 50  | 100                   | -                                      | 24,90                        | -     | 94-0800-050-01                         | 94-0800-050-52        | 94-0800-050-53        |
| 8 x 56  | 100                   | -                                      | 26,80                        | -     | 94-0800-056-01                         | 94-0800-056-52        | 94-0800-056-53        |
| 8 x 63  | 100                   | -                                      | 28,70                        | -     | 94-0800-063-01                         | 94-0800-063-52        | 94-0800-063-53        |
| 8 x 71  | 100                   | -                                      | 32,50                        | -     | 94-0800-071-01                         | 94-0800-071-52        | 94-0800-071-53        |
| 8 x 80  | 100                   | -                                      | 36,40                        | -     | 94-0800-080-01                         | 94-0800-080-52        | 94-0800-080-53        |
| 8 x 90  | 100                   | -                                      | 40,20                        | -     | 94-0800-090-01                         | -                     | -                     |
| 8 x 100   | 100                   | -                                      | 44,00                        | -     | 94-0800-100-01                         | 94-0800-100-52        | 94-0800-100-53        |
| 8 x 112   | 100                   | -                                      | 47,80                        | -     | 94-0800-112-01                         | -                     | -                     |
| 8 x 140   | 100                   | -                                      | 58,20                        | -     | 94-0800-140-01                         | -                     | -                     |
| 10 x 56   | 100                   | -                                      | 45,40                        | -     | 94-1000-056-01                         | -                     | -                     |
| 10 x 63   | 100                   | -                                      | 48,50                        | -     | 94-1000-063-01                         | -                     | -                     |
| 10 x 71   | 100                   | -                                      | 54,80                        | -     | 94-1000-071-01                         | -                     | -                     |
| 10 x 80   | 100                   | -                                      | 61,10                        | -     | 94-1000-080-01                         | -                     | -                     |
| 10 x 90   | 100                   | -                                      | 67,30                        | -     | 94-1000-090-01                         | -                     | -                     |
| 10 x 100  | 100                   | -                                      | 73,50                        | -     | 94-1000-100-01                         | -                     | -                     |
| 10 x 112  | 100                   | -                                      | 79,80                        | -     | 94-1000-112-01                         | -                     | -                     |
| 10 x 125  | 50                    | -                                      | 89,20                        | -     | 94-1000-125-01                         | -                     | -                     |
| 10 x 140  | 50                    | -                                      | 98,70                        | -     | 94-1000-140-01                         | -                     | -                     |
| 13 x 71   | 50                    | -                                      | 91,00                        | -     | 94-1300-071-01                         | -                     | -                     |
| 13 x 80   | 50                    | -                                      | 111,00                       | -     | 94-1300-080-01                         | -                     | -                     |
| 13 x 90   | 50                    | -                                      | 121,00                       | -     | 94-1300-090-01                         | -                     | -                     |
| 13 x 100  | 50                    | -                                      | 131,00                       | -     | 94-1300-100-01                         | -                     | -                     |
| 13 x 112  | 50                    | -                                      | 141,00                       | -     | 94-1300-112-01                         | -                     | -                     |
| 13 x 125  | 50                    | -                                      | 156,00                       | -     | 94-1300-125-01                         | -                     | -                     |
| 13 x 140  | 50                    | -                                      | 172,00                       | -     | 94-1300-140-01                         | -                     | -                     |
| 13 x 160  | 50                    | -                                      | 192,00                       | -     | 94-1300-160-01                         | -                     | -                     |

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