

**Coppie coniche ad assi normali - tipo A / Bevel gear pairs with usual axes - type A**  
**Kegelräder mit Normalachsen - Typ A / Couples coniques avec essieux normaux - type A**  
**Engranajes conicos a ejes normales - tipo A**

**Angolo di pressione 20°**  
**Materiale C45E**  
**UNI EN 10083-1**

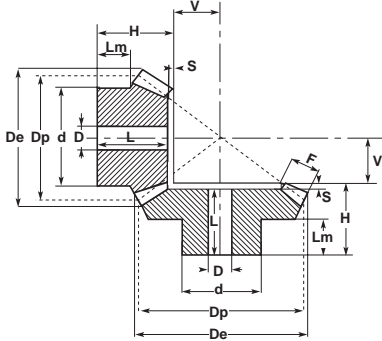
**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

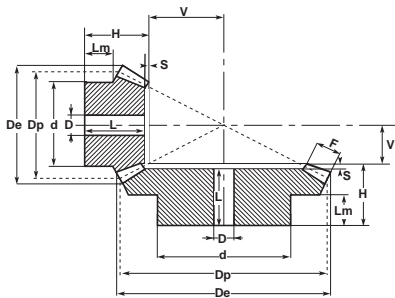
**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Rapporto 1:1 / Ratio 1:1 / Untersetzung 1:1 / Rapport 1:1 / Relaciones 1:1**  
**UNI 6588**



| M   | Z  | cod.    | De    | Dp    | H    | F  | d     | D  | V     | L    | Lm    | S   |
|-----|----|---------|-------|-------|------|----|-------|----|-------|------|-------|-----|
| 1,5 | 16 | C27A161 | 26,1  | 24,0  | 18,9 | 6  | 20,3  | 8  | 7,10  | 16,9 | 12,00 | 2,0 |
|     | 20 | C27A201 | 32,1  | 30,0  | 20,0 | 10 | 22,0  | 10 | 7,40  | 18,0 | 8,50  | 2,0 |
|     | 22 | C27A221 | 35,1  | 33,0  | 20,0 | 10 | 25,0  | 10 | 8,75  | 18,0 | 8,25  | 2,0 |
|     | 25 | C27A251 | 39,6  | 37,5  | 23,0 | 10 | 28,0  | 10 | 11,09 | 21,0 | 12,00 | 2,0 |
|     | 30 | C27A301 | 47,1  | 45,0  | 25,0 | 12 | 30,0  | 12 | 13,35 | 22,5 | 12,00 | 2,5 |
| 2   | 16 | C28A161 | 34,8  | 32,0  | 23,5 | 8  | 25,3  | 10 | 9,50  | 20,5 | 14,00 | 3,0 |
|     | 20 | C28A201 | 42,8  | 40,0  | 25,0 | 12 | 32,0  | 10 | 10,78 | 22,0 | 12,00 | 3,0 |
|     | 22 | C28A221 | 46,8  | 44,0  | 25,0 | 12 | 36,0  | 10 | 12,70 | 22,0 | 11,70 | 3,0 |
|     | 25 | C28A251 | 52,8  | 50,0  | 28,0 | 14 | 40,0  | 12 | 14,28 | 25,0 | 12,30 | 3,0 |
|     | 30 | C28A301 | 62,8  | 60,0  | 30,0 | 16 | 50,0  | 12 | 17,78 | 27,0 | 12,80 | 3,0 |
| 2,5 | 16 | C29A161 | 43,5  | 40,0  | 28,1 | 10 | 30,3  | 12 | 11,90 | 24,6 | 15,00 | 3,5 |
|     | 20 | C29A201 | 53,5  | 50,0  | 30,5 | 12 | 40,0  | 12 | 15,43 | 27,0 | 16,00 | 3,5 |
|     | 22 | C29A221 | 58,5  | 55,0  | 30,5 | 12 | 45,0  | 12 | 17,80 | 27,0 | 15,90 | 3,5 |
|     | 25 | C29A251 | 66,0  | 62,5  | 33,5 | 15 | 50,0  | 15 | 19,48 | 30,0 | 16,00 | 3,5 |
|     | 30 | C29A301 | 78,5  | 75,0  | 35,5 | 18 | 55,0  | 15 | 23,63 | 32,0 | 16,00 | 3,5 |
| 3   | 16 | C30A161 | 52,2  | 48,0  | 31,7 | 12 | 40,3  | 15 | 14,30 | 27,7 | 18,00 | 4,0 |
|     | 20 | C30A201 | 64,2  | 60,0  | 35,0 | 18 | 45,0  | 15 | 16,00 | 31,0 | 13,60 | 4,0 |
|     | 22 | C30A221 | 70,2  | 66,0  | 35,0 | 18 | 50,0  | 15 | 19,00 | 31,0 | 13,00 | 4,0 |
|     | 25 | C30A251 | 79,2  | 75,0  | 38,0 | 20 | 55,0  | 15 | 22,00 | 34,0 | 16,00 | 4,0 |
|     | 30 | C30A301 | 94,2  | 90,0  | 40,0 | 22 | 60,0  | 20 | 28,00 | 36,0 | 17,00 | 4,0 |
| 3,5 | 16 | C35A161 | 60,9  | 56,0  | 36,4 | 14 | 45,3  | 15 | 16,60 | 31,9 | 20,00 | 4,5 |
|     | 20 | C35A201 | 74,9  | 70,0  | 40,5 | 22 | 55,0  | 15 | 18,13 | 36,0 | 17,00 | 4,5 |
|     | 22 | C35A221 | 81,9  | 77,0  | 40,5 | 22 | 60,0  | 15 | 21,50 | 36,0 | 18,00 | 4,5 |
|     | 25 | C35A251 | 92,4  | 87,5  | 43,5 | 26 | 65,0  | 20 | 23,97 | 39,0 | 18,00 | 4,5 |
|     | 30 | C35A301 | 109,9 | 105,0 | 48,0 | 30 | 70,0  | 20 | 30,02 | 43,5 | 19,00 | 4,5 |
| 4   | 16 | C31A161 | 69,6  | 64,0  | 44,3 | 15 | 50,3  | 15 | 19,70 | 39,3 | 25,00 | 5,0 |
|     | 20 | C31A201 | 85,6  | 80,0  | 43,0 | 25 | 60,0  | 18 | 20,74 | 38,0 | 18,00 | 5,0 |
|     | 22 | C31A221 | 93,6  | 88,0  | 43,0 | 25 | 65,0  | 18 | 24,70 | 38,0 | 18,00 | 5,0 |
|     | 25 | C31A251 | 105,6 | 100,0 | 45,0 | 28 | 70,0  | 20 | 28,50 | 40,0 | 18,00 | 5,0 |
|     | 30 | C31A301 | 125,6 | 120,0 | 48,0 | 32 | 80,0  | 25 | 35,67 | 43,0 | 16,00 | 5,0 |
| 4,5 | 16 | C45A161 | 78,3  | 72,0  | 46,3 | 18 | 55,3  | 18 | 21,70 | 40,3 | 25,00 | 6,0 |
|     | 20 | C45A201 | 96,3  | 90,0  | 48,0 | 28 | 65,0  | 20 | 23,41 | 42,0 | 18,00 | 6,0 |
|     | 22 | C45A221 | 105,3 | 99,0  | 48,0 | 28 | 70,0  | 20 | 27,80 | 42,0 | 18,00 | 6,0 |
|     | 25 | C45A251 | 118,8 | 112,5 | 50,0 | 32 | 75,0  | 20 | 31,76 | 44,0 | 18,00 | 6,0 |
|     | 30 | C45A301 | 141,3 | 135,0 | 53,0 | 35 | 90,0  | 25 | 40,82 | 47,0 | 17,00 | 6,0 |
| 5   | 16 | C32A161 | 87,0  | 80,0  | 48,9 | 18 | 60,3  | 20 | 25,10 | 42,4 | 24,19 | 6,5 |
|     | 20 | C32A201 | 107,1 | 100,0 | 50,5 | 30 | 70,0  | 20 | 26,86 | 44,0 | 18,50 | 6,5 |
|     | 22 | C32A221 | 117,1 | 110,0 | 50,5 | 30 | 80,0  | 20 | 31,70 | 44,0 | 18,50 | 6,5 |
|     | 25 | C32A251 | 132,1 | 125,0 | 53,5 | 34 | 90,0  | 20 | 36,36 | 47,0 | 18,00 | 6,5 |
|     | 30 | C32A301 | 157,1 | 150,0 | 56,5 | 38 | 110,0 | 30 | 45,97 | 50,0 | 18,00 | 6,5 |

**Rapporto 1:2 / Ratio 1:2 / Untersetzung 1:2 / Rapport 1:2 / Relaciones 1:2**  
**UNI 6588**



| M   | Z  | cod.     | De    | Dp  | H    | F  | d   | D  | V     | L  | Lm   | S    |
|-----|----|----------|-------|-----|------|----|-----|----|-------|----|------|------|
| 1,5 | 16 | C27A322  | 26,7  | 24  | 19,5 | 8  | 21  | 10 | 16,33 | 18 | 11,3 | 1,5  |
|     | 32 |          | 49,3  | 48  | 20,0 | 8  | 32  | 12 | 7,45  | 17 | 10,0 | 3,0  |
| 2   | 16 | C28 A322 | 35,6  | 32  | 23,0 | 10 | 26  | 10 | 22,41 | 21 | 12,2 | 2,0  |
|     | 32 |          | 65,8  | 64  | 25,0 | 10 | 40  | 12 | 10,21 | 21 | 10,0 | 4,0  |
| 2,5 | 16 | C29 A322 | 44,4  | 40  | 27,5 | 12 | 34  | 12 | 28,38 | 25 | 14,4 | 2,5  |
|     | 32 |          | 82,2  | 80  | 26,0 | 12 | 50  | 15 | 13,10 | 20 | 10,0 | 6,0  |
| 3   | 16 | C30A322  | 53,4  | 48  | 28,0 | 15 | 40  | 15 | 33,64 | 25 | 11,6 | 3,0  |
|     | 32 |          | 98,7  | 96  | 30,0 | 15 | 60  | 15 | 15,31 | 24 | 10,0 | 6,0  |
| 3,5 | 16 | C35A322  | 62,3  | 56  | 33,5 | 18 | 48  | 15 | 38,83 | 30 | 14,4 | 3,5  |
|     | 32 |          | 115,1 | 112 | 31,0 | 18 | 70  | 20 | 17,77 | 24 | 10,0 | 7,0  |
| 4   | 16 | C31A322  | 71,1  | 64  | 36,0 | 20 | 50  | 20 | 44,81 | 32 | 13,4 | 4,0  |
|     | 32 |          | 131,6 | 128 | 32,0 | 20 | 80  | 20 | 20,42 | 24 | 10,0 | 8,0  |
| 4,5 | 16 | C45A322  | 80,1  | 72  | 39,5 | 22 | 60  | 20 | 51,00 | 35 | 15,4 | 4,5  |
|     | 32 |          | 148,0 | 144 | 36,0 | 22 | 90  | 25 | 23,21 | 27 | 10,0 | 9,0  |
| 5   | 16 | C32A322  | 88,9  | 80  | 50,0 | 25 | 60  | 20 | 56,06 | 45 | 21,1 | 5,0  |
|     | 32 |          | 164,5 | 160 | 38,0 | 25 | 100 | 25 | 25,52 | 28 | 10,0 | 10,0 |

**Coppie coniche ad assi normali - tipo A / Bevel gear pairs with usual axes - type A**  
**Kegelräder mit Normalachsen - Typ A / Couples coniques avec essieux normaux - type A**  
**Engranajes conicos a ejes normales - tipo A**

**Angolo di pressione 20°**  
**Materiale C45E**  
**UNI EN 10083-1**

**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

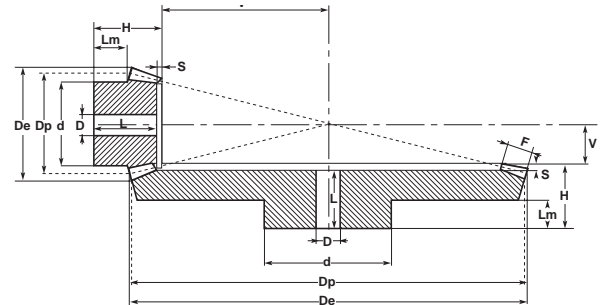
**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**

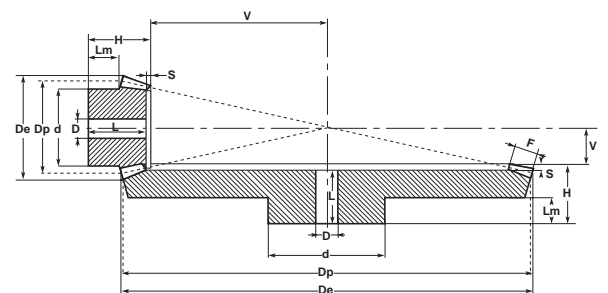
**Rapporto 1:3 / Ratio 1:3 / Untersetzung 1:3 / Rapport 1:3 / Relaciones 1:3**  
**UNI 6588**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F  | d   | D  | V     | L    | L <sub>m</sub> | S    |
|-----|----|---------|----------------|----------------|------|----|-----|----|-------|------|----------------|------|
| 1,5 | 16 | C27A483 | 26,9           | 24             | 24,0 | 12 | 20  | 10 | 24,30 | 23,0 | 11,95          | 1,0  |
|     | 48 |         | 72,9           | 72             | 20,0 | 12 | 50  | 15 | 7,27  | 17,0 | 10,00          | 3,0  |
| 2   | 16 | C28A483 | 35,8           | 32             | 28,5 | 15 | 26  | 12 | 33,26 | 27,0 | 12,40          | 1,5  |
|     | 48 |         | 97,3           | 96             | 23,0 | 15 | 60  | 15 | 9,90  | 19,0 | 10,00          | 4,0  |
| 2,5 | 16 | C29A483 | 44,7           | 40             | 32,0 | 18 | 32  | 12 | 42,41 | 30,0 | 13,00          | 2,0  |
|     | 48 |         | 121,6          | 120            | 26,0 | 18 | 70  | 20 | 13,23 | 21,0 | 10,00          | 5,0  |
| 3   | 16 | C30A483 | 53,7           | 48             | 32,0 | 18 | 40  | 15 | 54,25 | 30,0 | 12,10          | 2,0  |
|     | 48 |         | 145,9          | 144            | 29,0 | 18 | 80  | 20 | 16,20 | 23,0 | 10,00          | 6,0  |
| 3,5 | 16 | C35A483 | 62,6           | 56             | 38,0 | 22 | 48  | 15 | 62,29 | 35,5 | 15,00          | 2,5  |
|     | 48 |         | 170,2          | 168            | 31,0 | 22 | 90  | 20 | 18,48 | 24,0 | 10,00          | 7,0  |
| 4   | 16 | C31A483 | 71,6           | 64             | 41,5 | 25 | 55  | 20 | 71,23 | 38,5 | 15,20          | 3,0  |
|     | 48 |         | 194,5          | 192            | 33,0 | 25 | 100 | 22 | 21,20 | 25,0 | 10,00          | 8,0  |
| 4,5 | 16 | C45A483 | 80,6           | 72             | 53,0 | 28 | 60  | 20 | 80,27 | 50,0 | 23,40          | 3,0  |
|     | 48 |         | 218,6          | 216            | 49,0 | 28 | 100 | 25 | 23,93 | 40,0 | 18,00          | 9,0  |
| 5   | 16 | C32A483 | 89,5           | 80             | 60,0 | 35 | 60  | 20 | 85,61 | 57,0 | 22,50          | 3,0  |
|     | 48 |         | 243,1          | 240            | 50,0 | 35 | 150 | 28 | 25,45 | 40,0 | 20,00          | 10,0 |

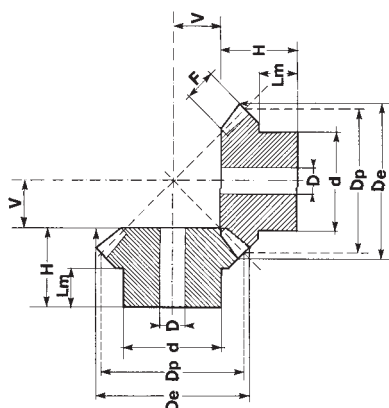


**Rapporto 1:4 / Ratio 1:4 / Untersetzung 1:4 / Rapport 1:4 / Relaciones 1:4**  
**UNI 6588**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F  | d   | D  | V      | L    | L <sub>m</sub> | S   |
|-----|----|---------|----------------|----------------|------|----|-----|----|--------|------|----------------|-----|
| 1,5 | 16 | C27A644 | 26,9           | 24             | 25,0 | 12 | 18  | 10 | 36,02  | 24,0 | 12,20          | 1,0 |
|     | 64 |         | 96,7           | 96             | 22,0 | 12 | 70  | 15 | 8,53   | 19,0 | 10,00          | 3,0 |
| 2   | 16 | C28A644 | 35,9           | 32             | 24,0 | 15 | 25  | 12 | 49,07  | 23,0 | 8,17           | 1,0 |
|     | 64 |         | 129,0          | 128            | 24,0 | 15 | 80  | 20 | 10,83  | 20,0 | 10,00          | 4,0 |
| 2,5 | 16 | C29A644 | 44,9           | 40             | 30,5 | 18 | 30  | 15 | 61,99  | 29,0 | 11,70          | 1,5 |
|     | 64 |         | 161,2          | 160            | 29,0 | 18 | 90  | 20 | 13,77  | 24,0 | 10,00          | 5,0 |
| 3   | 16 | C30A644 | 53,8           | 48             | 34,0 | 22 | 40  | 15 | 74,05  | 32,0 | 11,00          | 2,0 |
|     | 64 |         | 193,5          | 192            | 30,0 | 22 | 100 | 20 | 16,41  | 24,0 | 10,00          | 6,0 |
| 3,5 | 16 | C35A644 | 62,8           | 56             | 45,0 | 25 | 48  | 15 | 87,13  | 43,0 | 19,10          | 2,0 |
|     | 64 |         | 225,7          | 224            | 50,0 | 25 | 100 | 25 | 19,32  | 43,0 | 22,00          | 7,0 |
| 4   | 16 | C31A644 | 71,7           | 64             | 50,0 | 30 | 50  | 20 | 98,21  | 48,0 | 18,50          | 2,0 |
|     | 64 |         | 257,9          | 256            | 50,0 | 30 | 120 | 28 | 21,72  | 42,0 | 20,00          | 8,0 |
| 4,5 | 16 | C45A644 | 80,7           | 72             | 53,0 | 32 | 55  | 20 | 112,08 | 50,5 | 19,00          | 2,5 |
|     | 64 |         | 290,1          | 288            | 53,0 | 32 | 130 | 30 | 24,83  | 44,0 | 23,00          | 9,0 |
| 5   | 16 | C32A644 | 89,7           | 80             | 58,0 | 35 | 60  | 20 | 125,06 | 55,5 | 20,60          | 2,5 |
|     | 64 |         | 322,4          | 320            | 58,0 | 35 | 150 | 30 | 27,65  | 48,0 | 25,00          | 2,5 |



**Coppie coniche ad assi normali - tipo B - esecuzione speciale**  
**Bevel gear pairs with usual axes - type B - special execution**  
**Kegelräder mit Normalachsen - Typ B - Spezialausführung**  
**Couples coniques avec essieux normaux - type B - exécution spéciale**  
**Engranajes conicos a ejes normales - tipo B - ejecución especial**



**Angolo di pressione 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Rapporto 1:1 / Ratio 1:1 / Untersetzung 1:1 / Rapport 1:1 / Relaciones 1:1**

| M   | Z  | cod.    | De    | Dp    | H     | F    | d    | D  | V     | Lm   |
|-----|----|---------|-------|-------|-------|------|------|----|-------|------|
| 1   | 16 | C26B161 | 17,4  | 16,0  | 11,20 | 4,0  | 13,3 | 4  | 4,80  | 6,5  |
|     | 19 | C26B191 | 20,4  | 19,0  | 11,80 | 4,0  | 15,3 | 4  | 6,20  | 6,5  |
|     | 22 | C26B221 | 23,4  | 22,0  | 12,80 | 4,7  | 16,3 | 5  | 7,20  | 6,5  |
|     | 26 | C26B261 | 27,4  | 26,0  | 13,30 | 5,5  | 20,3 | 5  | 8,70  | 7,0  |
|     | 30 | C26B301 | 31,4  | 30,0  | 16,00 | 6,4  | 20,3 | 5  | 10,00 | 8,0  |
| 1,5 | 16 | C27B161 | 26,1  | 24,0  | 18,90 | 6,0  | 20,3 | 8  | 7,10  | 12,0 |
|     | 19 | C27B191 | 30,6  | 28,5  | 21,30 | 7,0  | 20,3 | 8  | 8,70  | 12,0 |
|     | 22 | C27B221 | 35,1  | 33,0  | 22,50 | 7,5  | 25,3 | 8  | 10,50 | 12,0 |
|     | 26 | C27B261 | 41,1  | 39,0  | 23,20 | 8,5  | 28,3 | 8  | 12,80 | 12,0 |
|     | 30 | C27B301 | 47,1  | 45,0  | 27,20 | 10,0 | 30,3 | 12 | 14,80 | 12,0 |
| 2   | 16 | C28B161 | 34,8  | 32,0  | 23,50 | 8,0  | 25,3 | 8  | 9,50  | 14,0 |
|     | 19 | C28B191 | 40,8  | 38,0  | 24,20 | 9,0  | 25,3 | 8  | 11,80 | 12,0 |
|     | 22 | C28B221 | 46,8  | 44,0  | 27,90 | 10,0 | 30,3 | 12 | 14,10 | 14,0 |
|     | 26 | C28B261 | 54,8  | 52,0  | 31,40 | 12,0 | 35,3 | 12 | 16,60 | 14,0 |
|     | 30 | C28B301 | 62,8  | 60,0  | 34,10 | 13,0 | 40,3 | 14 | 19,90 | 17,0 |
| 2,5 | 16 | C29B161 | 43,5  | 40,0  | 28,10 | 10,0 | 30,3 | 12 | 11,90 | 15,0 |
|     | 19 | C29B191 | 51,0  | 47,5  | 27,10 | 11,0 | 35,3 | 12 | 14,90 | 13,0 |
|     | 22 | C29B221 | 58,5  | 55,0  | 30,10 | 12,0 | 45,3 | 16 | 17,90 | 16,0 |
|     | 26 | C29B261 | 68,5  | 65,0  | 33,20 | 15,0 | 45,3 | 16 | 20,80 | 16,0 |
|     | 30 | C29B301 | 78,5  | 75,0  | 39,00 | 16,0 | 50,3 | 16 | 25,00 | 20,0 |
| 3   | 16 | C30B161 | 52,5  | 48,0  | 31,70 | 12,0 | 40,3 | 12 | 14,30 | 18,0 |
|     | 19 | C30B191 | 61,2  | 57,0  | 36,00 | 13,0 | 40,3 | 14 | 18,00 | 17,0 |
|     | 22 | C30B221 | 70,2  | 66,0  | 36,90 | 15,0 | 50,3 | 16 | 21,10 | 17,0 |
|     | 26 | C30B261 | 82,2  | 78,0  | 38,40 | 17,0 | 50,3 | 16 | 25,60 | 18,0 |
|     | 30 | C30B301 | 94,2  | 90,0  | 43,80 | 19,0 | 60,3 | 20 | 30,20 | 22,0 |
| 3,5 | 16 | C35B161 | 60,9  | 56,0  | 36,40 | 14,0 | 45,3 | 16 | 16,60 | 20,0 |
|     | 19 | C35B191 | 71,5  | 66,5  | 37,80 | 15,0 | 50,3 | 18 | 21,00 | 19,0 |
|     | 22 | C35B221 | 81,9  | 77,0  | 39,10 | 17,0 | 55,3 | 20 | 24,90 | 18,0 |
|     | 26 | C35B261 | 96,0  | 91,0  | 43,35 | 20,0 | 62,3 | 20 | 29,70 | 20,0 |
|     | 30 | C35B301 | 110,0 | 105,0 | 47,10 | 23,0 | 70,3 | 20 | 34,90 | 22,0 |
| 4   | 16 | C31B161 | 69,7  | 64,0  | 44,30 | 15,0 | 50,3 | 16 | 19,70 | 25,0 |
|     | 19 | C31B191 | 81,7  | 76,0  | 44,40 | 18,0 | 55,3 | 20 | 23,60 | 22,0 |
|     | 22 | C31B221 | 93,7  | 88,0  | 45,90 | 20,0 | 60,3 | 20 | 28,10 | 22,0 |
|     | 26 | C31B261 | 109,7 | 104,0 | 48,00 | 23,0 | 70,3 | 20 | 34,00 | 22,0 |
|     | 30 | C31B301 | 125,7 | 120,0 | 54,20 | 26,0 | 80,3 | 25 | 39,80 | 25,0 |
| 4,5 | 16 | C45B161 | 78,4  | 72,0  | 46,30 | 17,5 | 55,3 | 20 | 21,70 | 25,0 |
|     | 19 | C45B191 | 91,8  | 85,5  | 49,00 | 20,0 | 62,3 | 20 | 26,57 | 25,0 |
|     | 22 | C45B221 | 105,3 | 99,0  | 50,10 | 22,0 | 70,3 | 20 | 31,90 | 25,0 |
|     | 26 | C45B261 | 123,0 | 117,0 | 54,70 | 25,0 | 75,3 | 20 | 38,60 | 26,0 |
|     | 30 | C45B301 | 141,4 | 135,0 | 60,00 | 29,0 | 80,3 | 25 | 45,00 | 28,0 |
| 5   | 16 | C32B161 | 87,1  | 80,0  | 48,90 | 18,0 | 60,3 | 20 | 25,10 | 25,0 |
|     | 19 | C32B191 | 102,1 | 95,0  | 52,20 | 22,0 | 60,3 | 20 | 29,80 | 25,0 |
|     | 22 | C32B221 | 117,1 | 110,0 | 58,20 | 24,0 | 80,3 | 25 | 35,80 | 30,0 |
|     | 26 | C32B261 | 137,1 | 130,0 | 62,70 | 29,0 | 80,3 | 25 | 42,30 | 30,0 |
|     | 30 | C32B301 | 157,1 | 150,0 | 68,90 | 32,0 | 80,3 | 30 | 50,10 | 35,0 |

**Coppie coniche ad assi normali - tipo B - esecuzione speciale**  
**Bevel gear pairs with usual axes - type B - special execution**  
**Kegelräder mit Normalachsen - Typ B - Spezialausführung**  
**Couples coniques avec essieux normaux - type B - exécution spéciale**  
**Engranajes conicos a ejes normales - tipo B - ejecución especial**

**Angolo di pressione 20°**  
**Materiale C45E**  
**UNI EN 10083-1**

**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

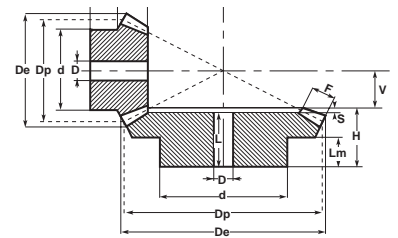
**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**

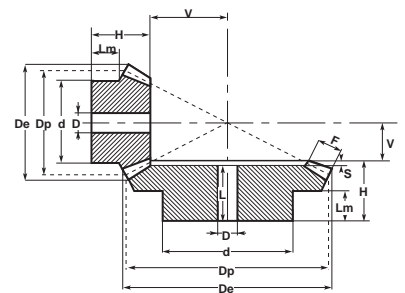
**Rapporto 1:1,5 / Ratio 1:1,5 / Untersetzung 1:1,5 / Rapport 1:1,5 / Relaciones 1:1,5**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F    | d    | D  | V    | L    | Lm   | S   |
|-----|----|---------|----------------|----------------|------|------|------|----|------|------|------|-----|
| 1   | 16 | C26B240 | 18,1           | 16             | 12,0 | 4,3  | 13,3 | 4  | 8,0  |      | 7,0  |     |
|     | 24 |         | 24,8           | 24             | 14,8 | 4,3  | 20,3 | 5  | 5,2  | 13,3 | 9,3  | 1,5 |
| 1,5 | 16 | C27B240 | 27,1           | 24             | 20,3 | 8,0  | 20,3 | 8  | 10,7 |      | 11,8 |     |
|     | 24 |         | 37,2           | 36             | 24,9 | 8,0  | 28,3 | 8  | 7,1  | 22,7 | 16,0 | 2,2 |
| 2   | 16 | C28B240 | 36,2           | 32             | 25,2 | 10,0 | 25,3 | 8  | 14,8 |      | 13,8 |     |
|     | 24 |         | 49,7           | 48             | 27,2 | 10,0 | 32,3 | 8  | 9,8  | 24,7 | 16,0 | 2,5 |
| 2,5 | 16 | C29B240 | 45,2           | 40             | 30,8 | 13,0 | 32,3 | 12 | 18,2 |      | 16,4 |     |
|     | 24 |         | 62,1           | 60             | 34,0 | 13,0 | 45,3 | 16 | 12,0 | 30,8 | 20,0 | 3,2 |
| 3   | 16 | C30B240 | 54,3           | 48             | 32,4 | 14,5 | 40,3 | 12 | 22,6 |      | 16,4 |     |
|     | 24 |         | 74,5           | 72             | 36,2 | 14,5 | 55,3 | 16 | 14,8 | 32,0 | 20,0 | 4,2 |
| 3,5 | 16 | C35B240 | 63,3           | 56             | 40,4 | 18,0 | 45,3 | 16 | 25,6 |      | 20,4 |     |
|     | 24 |         | 86,9           | 84             | 44,2 | 18,0 | 55,3 | 20 | 16,8 | 40,0 | 25,0 | 4,2 |
| 4   | 16 | C31B240 | 72,4           | 64             | 46,8 | 18,0 | 50,3 | 16 | 31,2 |      | 25,4 |     |
|     | 24 |         | 99,3           | 96             | 45,5 | 18,0 | 60,3 | 20 | 20,5 | 40,0 | 25,0 | 5,5 |
| 4,5 | 16 | C45B240 | 81,4           | 72             | 47,6 | 20,0 | 60,3 | 20 | 35,4 |      | 25,1 |     |
|     | 24 |         | 111,7          | 108            | 57,8 | 20,0 | 80,3 | 25 | 23,2 | 51,3 | 35,0 | 6,5 |
| 5   | 16 | C32B240 | 90,5           | 80             | 54,1 | 24,0 | 60,3 | 25 | 37,9 |      | 25,4 |     |
|     | 24 |         | 124,1          | 120            | 61,1 | 24,0 | 80,3 | 30 | 24,9 | 54,5 | 35,0 | 6,6 |



**Rapporto 1:2 / Ratio 1:2 / Untersetzung 1:2 / Rapport 1:2 / Relaciones 1:2**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F    | d    | D  | V    | L    | Lm   | S   |
|-----|----|---------|----------------|----------------|------|------|------|----|------|------|------|-----|
| 1   | 15 | C26B300 | 17,4           | 15,0           | 11,9 | 5,0  | 13,3 | 4  | 10,1 |      | 6,5  |     |
|     | 30 |         | 30,6           | 30,0           | 15,1 | 5,0  | 20,3 | 5  | 4,9  | 13,7 | 9,0  | 1,4 |
| 1,5 | 15 | C27B300 | 26,1           | 22,5           | 21,1 | 9,0  | 19,3 | 8  | 13,9 |      | 11,9 |     |
|     | 30 |         | 45,9           | 45,0           | 25,2 | 9,0  | 32,3 | 8  | 6,8  | 23,0 | 16,0 | 2,2 |
| 2   | 15 | C28B300 | 34,8           | 30,0           | 26,0 | 11,5 | 25,3 | 8  | 19,0 |      | 14,1 |     |
|     | 30 |         | 61,2           | 60,0           | 29,8 | 11,5 | 40,3 | 14 | 9,2  | 26,8 | 18,0 | 3,0 |
| 2,5 | 15 | C29B300 | 43,5           | 37,5           | 31,8 | 15,0 | 32,3 | 12 | 23,2 |      | 16,2 |     |
|     | 30 |         | 76,5           | 75,0           | 33,7 | 15,0 | 45,3 | 16 | 11,3 | 30,0 | 20,0 | 3,7 |
| 3   | 15 | C30B300 | 52,2           | 45,0           | 37,3 | 17,0 | 40,3 | 12 | 28,7 |      | 19,9 |     |
|     | 30 |         | 91,8           | 90,0           | 42,1 | 17,0 | 55,3 | 16 | 13,9 | 38,0 | 25,0 | 4,1 |
| 3,5 | 15 | C35B300 | 60,9           | 52,5           | 46,1 | 20,5 | 45,3 | 16 | 32,9 |      | 24,7 |     |
|     | 30 |         | 107,1          | 105,0          | 45,0 | 20,5 | 60,3 | 20 | 16,0 | 40,0 | 25,0 | 5,0 |
| 4   | 15 | C31B300 | 69,6           | 60,0           | 48,6 | 22,5 | 50,3 | 20 | 38,4 |      | 24,6 |     |
|     | 30 |         | 122,3          | 120,0          | 57,3 | 22,5 | 80,3 | 25 | 18,7 | 51,9 | 35,0 | 5,4 |
| 4,5 | 15 | C45B300 | 78,3           | 67,5           | 51,4 | 26,0 | 60,3 | 20 | 42,6 |      | 24,7 |     |
|     | 30 |         | 137,6          | 135,0          | 60,3 | 26,0 | 80,3 | 30 | 20,7 | 54,3 | 35,0 | 6,0 |
| 5   | 15 | C32B300 | 87,0           | 75,0           | 57,6 | 30,0 | 60,3 | 25 | 46,4 |      | 25,3 |     |
|     | 30 |         | 152,9          | 150,0          | 62,5 | 30,0 | 80,3 | 30 | 22,5 | 56,0 | 35,0 | 6,5 |



**Coppie coniche ad assi normali - tipo B - esecuzione speciale**  
**Bevel gear pairs with usual axes - type B - special execution**  
**Kegelräder mit Normalachsen - Typ B - Spezialausführung**  
**Couples coniques avec essieux normaux - type B - exécution spéciale**  
**Engranajes conicos a ejes normales - tipo B - ejecución especial**

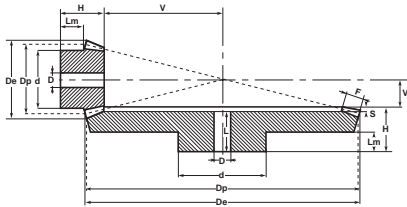
**Angolo di pressione 20°**  
**Materiale C45E**  
**UNI EN 10083-1**

**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

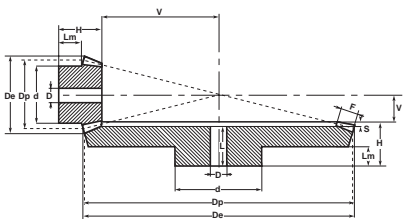
**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**



**Rapporto 1:2,5 / Ratio 1:2,5 / Untersetzung 1:2,5 / Rapport 1:2,5 / Relaciones 1:2,5**

| M   | Z  | cod.    | De    | Dp  | H    | F    | d    | D  | V    | L    | Lm   | S   |
|-----|----|---------|-------|-----|------|------|------|----|------|------|------|-----|
| 1   | 16 | C26B400 | 18,6  | 16  | 14,4 | 6,5  | 13,3 | 4  | 13,6 |      | 7,4  |     |
|     | 40 |         | 40,4  | 40  | 14,8 | 6,5  | 25,3 | 8  | 5,2  | 13,0 | 9,0  | 1,8 |
| 1,5 | 16 | C27B400 | 27,9  | 24  | 24,2 | 11,5 | 20,3 | 8  | 18,8 |      | 12,3 |     |
|     | 40 |         | 60,7  | 60  | 27,8 | 11,5 | 40,3 | 14 | 7,2  | 25,5 | 18,0 | 2,3 |
| 2   | 16 | C28B400 | 37,2  | 32  | 29,6 | 15,0 | 25,3 | 8  | 25,4 |      | 13,7 |     |
|     | 40 |         | 80,9  | 80  | 32,4 | 15,0 | 45,3 | 16 | 9,6  | 29,0 | 20,0 | 3,4 |
| 2,5 | 16 | C29B400 | 46,4  | 40  | 38,4 | 19,0 | 32,3 | 12 | 31,6 |      | 18,5 |     |
|     | 40 |         | 101,1 | 100 | 39,8 | 19,0 | 55,3 | 16 | 12,2 | 35,9 | 25,0 | 3,9 |
| 3   | 16 | C30B400 | 55,7  | 48  | 41,9 | 21,5 | 40,3 | 16 | 39,1 |      | 19,6 |     |
|     | 40 |         | 121,4 | 120 | 47,9 | 21,5 | 60,3 | 20 | 15,1 | 44,0 | 30,0 | 3,9 |
| 3,5 | 16 | C35B400 | 65,0  | 56  | 49,1 | 22,6 | 45,3 | 20 | 47,9 |      | 25,0 |     |
|     | 40 |         | 141,6 | 140 | 54,6 | 22,6 | 80,3 | 25 | 18,4 | 50,0 | 35,0 | 4,6 |
| 4   | 16 | C31B400 | 74,3  | 64  | 52,5 | 26,0 | 55,3 | 20 | 54,5 |      | 25,3 |     |
|     | 40 |         | 161,8 | 160 | 57   | 26,0 | 80,3 | 30 | 21,0 | 50,5 | 35,0 | 6,5 |
| 4,5 | 16 | C45B400 | 83,6  | 72  | 56,3 | 30,0 | 60,3 | 25 | 60,7 |      | 24,6 |     |
|     | 40 |         | 182,1 | 180 | 59,7 | 30,0 | 80,3 | 30 | 23,3 | 53,0 | 35,0 | 6,7 |
| 5   | 16 | C32B400 | 92,9  | 80  | 65,4 | 32,0 | 60,3 | 25 | 68,6 |      | 30,1 |     |
|     | 40 |         | 202,3 | 200 | 65,7 | 32,0 | 90,3 | 30 | 26,3 | 58,3 | 40,0 | 7,4 |



**Rapporto 1:3 / Ratio 1:3 / Untersetzung 1:3 / Rapport 1:3 / Relaciones 1:3**

| M   | Z  | cod.    | De    | Dp    | H    | F    | d    | D  | V    | L    | Lm   | S   |
|-----|----|---------|-------|-------|------|------|------|----|------|------|------|-----|
| 1   | 15 | C26B450 | 17,7  | 15,0  | 16,6 | 7,1  | 13,3 | 4  | 15,4 |      | 9,2  |     |
|     | 45 |         | 45,3  | 45,0  | 17,1 | 7,1  | 25,3 | 8  | 4,9  | 15,2 | 10,0 | 1,9 |
| 1,5 | 15 | C27B450 | 26,5  | 22,5  | 22,6 | 10,5 | 19,3 | 8  | 23,4 |      | 11,7 |     |
|     | 45 |         | 68,1  | 67,5  | 29,6 | 10,5 | 45,3 | 14 | 7,4  | 27,2 | 20,0 | 2,4 |
| 2   | 15 | C28B450 | 35,4  | 30,0  | 28,9 | 14,0 | 25,3 | 8  | 31,1 |      | 14,2 |     |
|     | 45 |         | 90,8  | 90,0  | 32,1 | 14,0 | 45,3 | 16 | 9,9  | 28,4 | 20,0 | 3,7 |
| 2,5 | 15 | C29B450 | 44,1  | 37,5  | 34,6 | 18,0 | 32,3 | 12 | 38,4 |      | 15,9 |     |
|     | 45 |         | 113,4 | 112,5 | 39,7 | 18,0 | 60,3 | 20 | 12,3 | 35,3 | 25,0 | 4,4 |
| 3   | 15 | C30B450 | 53,0  | 45,0  | 41,3 | 21,0 | 40,3 | 16 | 46,7 |      | 19,7 |     |
|     | 45 |         | 136,1 | 135,0 | 47,2 | 21,0 | 60,3 | 25 | 14,8 | 42,0 | 30,0 | 5,2 |
| 3,5 | 15 | C35B450 | 61,9  | 52,5  | 49,6 | 23,5 | 45,3 | 20 | 55,4 |      | 25,0 |     |
|     | 45 |         | 158,8 | 157,5 | 54,4 | 23,5 | 80,3 | 25 | 17,6 | 48,6 | 35,0 | 5,8 |
| 4   | 15 | C31B450 | 70,7  | 60,0  | 54,3 | 27,5 | 50,3 | 20 | 62,7 |      | 25,4 |     |
|     | 45 |         | 181,5 | 180,0 | 57,0 | 27,5 | 80,3 | 30 | 20,0 | 50,5 | 35,0 | 6,5 |
| 4,5 | 15 | C45B450 | 79,5  | 67,5  | 55,2 | 28,5 | 55,3 | 25 | 72,8 |      | 24,8 |     |
|     | 45 |         | 204,2 | 202,5 | 63,9 | 28,5 | 90,3 | 30 | 23,1 | 57,0 | 40,0 | 6,9 |
| 5   | 15 | C32B450 | 88,4  | 75,0  | 65,3 | 33,0 | 60,3 | 25 | 79,7 |      | 30,0 |     |
|     | 45 |         | 226,9 | 225,0 | 66,7 | 33,0 | 90,3 | 30 | 25,3 | 59,2 | 40,0 | 7,5 |

**Coppie coniche ad assi normali - tipo B - esecuzione speciale**  
**Bevel gear pairs with usual axes - type B - special execution**  
**Kegelräder mit Normalachsen - Typ B - Spezialausführung**  
**Couples coniques avec essieux normaux - type B - exécution spéciale**  
**Engranajes conicos a ejes normales - tipo B - ejecución especial**

**Angolo di pressione 20°**  
**Materiale C45E**  
**UNI EN 10083-1**

**Pressure angle 20°**  
**Material C45E**  
**UNI EN 10083-1**

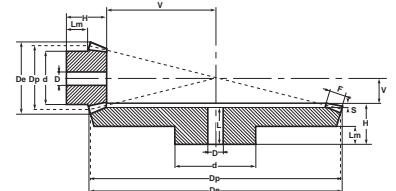
**Eingriffswinkel 20°**  
**Werkstoff C45E**  
**UNI EN 10083-1**

**Angle de pression 20°**  
**Matière C45E**  
**UNI EN 10083-1**

**Angulo de presion 20°**  
**Material C45E**  
**UNI EN 10083-1**

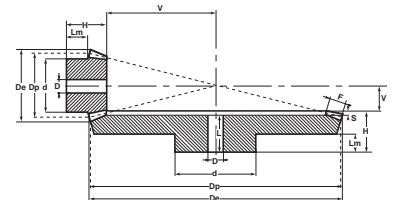
**Rapporto 1:3,5 / Ratio 1:3,5 / Untersetzung 1:3,5 / Rapport 1:3,5 / Relaciones 1:3,5**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F    | d    | D  | V    | L    | Lm   | S   |
|-----|----|---------|----------------|----------------|------|------|------|----|------|------|------|-----|
| 1   | 16 | C26B560 | 18,7           | 16             | 16,6 | 8,7  | 13,3 | 4  | 19,4 |      | 7,6  |     |
|     | 56 |         | 56,3           | 56             | 16,7 | 8,7  | 30,3 | 8  | 5,3  | 14,2 | 10,0 | 2,5 |
| 1,5 | 16 | C27B560 | 28,1           | 24             | 24,0 | 12,0 | 20,3 | 8  | 30,0 |      | 11,5 |     |
|     | 56 |         | 84,5           | 84             | 34,8 | 12,0 | 45,3 | 14 | 8,2  | 32,0 | 25,0 | 2,8 |
| 2   | 16 | C28B560 | 37,5           | 32             | 30,9 | 16,0 | 25,3 | 8  | 40,1 |      | 14,1 |     |
|     | 56 |         | 112,6          | 12             | 37,1 | 16,0 | 55,3 | 16 | 10,9 | 33,3 | 25,0 | 3,8 |
| 2,5 | 16 | C29B560 | 46,8           | 40             | 38,9 | 20,0 | 32,3 | 14 | 50,1 |      | 17,9 |     |
|     | 56 |         | 140,8          | 140            | 44,4 | 20,0 | 60,3 | 20 | 13,6 | 40,0 | 30,0 | 4,4 |
| 3   | 16 | C30B560 | 56,2           | 48             | 49,9 | 24,0 | 40,3 | 16 | 60,1 |      | 24,9 |     |
|     | 56 |         | 169,0          | 168            | 52,7 | 24,0 | 80,3 | 25 | 16,3 | 47,5 | 35,0 | 5,2 |
| 3,5 | 16 | C35B560 | 65,6           | 56             | 52,0 | 25,0 | 25,5 | 20 | 73,0 |      | 25,5 |     |
|     | 56 |         | 197,1          | 196            | 55,1 | 25,0 | 80,3 | 25 | 19,9 | 49,1 | 35,0 | 6,0 |



**Rapporto 1:4 / Ratio 1:4 / Untersetzung 1:4 / Rapport 1:4 / Relaciones 1:4**

| M   | Z  | cod.    | D <sub>e</sub> | D <sub>p</sub> | H    | F    | d    | D  | V     | L    | Lm   | S    |
|-----|----|---------|----------------|----------------|------|------|------|----|-------|------|------|------|
| 1   | 15 | C26B600 | 17,80          | 15,0           | 17,2 | 9,3  | 13,3 | 4  | 20,8  |      | 7,7  |      |
|     | 60 |         | 60,30          | 60,0           | 17,1 | 9,3  | 30,3 | 8  | 4,9   | 15,2 | 10,0 | 1,9  |
| 1,5 | 15 | C27B600 | 26,70          | 22,5           | 23,0 | 11,0 | 20,3 | 8  | 34,0  |      | 11,7 |      |
|     | 60 |         | 90,40          | 90,0           | 34,0 | 11,0 | 50,3 | 16 | 8,0   | 31,2 | 25,0 | 2,8  |
| 2   | 15 | C28B600 | 35,60          | 30,0           | 31,0 | 16,0 | 25,3 | 8  | 44,0  |      | 14,4 |      |
|     | 60 |         | 120,60         | 120,0          | 37,6 | 16,0 | 60,3 | 16 | 10,4  | 34,2 | 25,0 | 3,4  |
| 2,5 | 15 | C29B600 | 44,50          | 37,5           | 38,1 | 19,0 | 32,3 | 14 | 55,9  |      | 18,4 |      |
|     | 60 |         | 150,70         | 150,0          | 44,8 | 19,0 | 60,3 | 20 | 13,2  | 40,0 | 30,0 | 4,8  |
| 3   | 15 | C30B600 | 53,30          | 45,0           | 48,1 | 23,0 | 40,3 | 16 | 66,9  |      | 24,5 |      |
|     | 60 |         | 180,80         | 180,0          | 53,2 | 23,0 | 80,3 | 25 | 15,8  | 48,2 | 35,0 | 5,0  |
| 3,5 | 15 | C35B600 | 62,20          | 52,5           | 52,1 | 26,0 | 45,3 | 20 | 78,9  |      | 25,1 |      |
|     | 60 |         | 211,00         | 210,0          | 60,4 | 26,0 | 90,3 | 30 | 18,6  | 54,4 | 40,0 | 6,0  |
| 4   | 15 | C31B600 | 71,10          | 60,0           | 55,1 | 30,0 | 50,3 | 20 | 89,9  |      | 23,0 |      |
|     | 60 |         | 241,10         | 240,0          | 60,8 | 30,0 | 90,3 | 30 | 21,2  | 53,0 | 40,0 | 7,8  |
| 4,5 | 15 | C45B600 | 79,97          | 67,5           | 57,0 | 32,0 | 52,3 | 20 | 102,9 |      | 23,0 |      |
|     | 60 |         | 271,24         | 270,0          | 62,0 | 32,0 | 90,3 | 30 | 24,3  | 53,5 | 40,0 | 8,5  |
| 5   | 15 | C32B600 | 88,80          | 75,0           | 62,0 | 34,0 | 55,3 | 20 | 115,7 |      | 25,0 |      |
|     | 60 |         | 301,30         | 300,0          | 65,0 | 34,0 | 90,3 | 30 | 27,0  | 55,0 | 40,0 | 10,0 |



**Morskate®**



Any questions? Please contact us.

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