

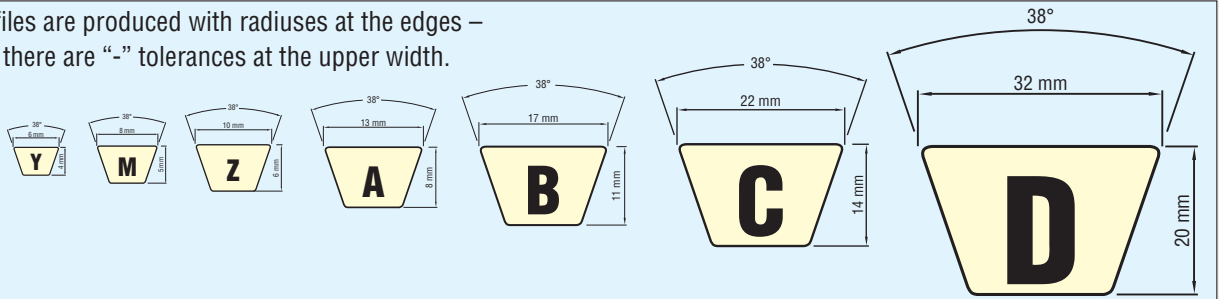
## Adhesion factor and U-belt dimensions

### Adhesion factor $\mu$

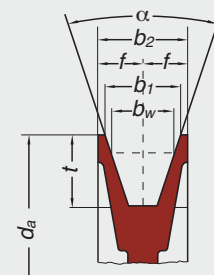
| Quality            | Al   | Steel | Glass | wood | PE – Polyethylene | HDPE – Polyethylene-Superfinish |
|--------------------|------|-------|-------|------|-------------------|---------------------------------|
| PU 65 A            | 0,90 | 0,70  | 0,60  | 0,80 | 0,40              | 0,35                            |
| PU 75 A            | 0,85 | 0,70  | 0,50  | 0,70 | 0,40              | 0,35                            |
| PU 80 A            | 0,80 | 0,65  | 0,45  | 0,65 | 0,35              | 0,30                            |
| PU 85 A            | 0,75 | 0,60  | 0,40  | 0,60 | 0,30              | 0,25                            |
| PU 90 A            | 0,70 | 0,50  | 0,30  | 0,45 | 0,30              | 0,25                            |
| PU 95 A            | 0,65 | 0,45  | 0,25  | 0,40 | 0,25              | 0,20                            |
| Polyester TPE 40 D | 0,70 | 0,50  | 0,30  | 0,45 | 0,30              | 0,25                            |
| Polyester TPE 55 D | 0,45 | 0,35  | 0,30  | 0,35 | 0,15              | 0,10                            |
| Polyester TPE 63 D | 0,45 | 0,35  | 0,30  | 0,35 | 0,15              | 0,10                            |

### U-belt dimensions according to DIN 2215/ISO

All V-profiles are produced with radiuses at the edges – therefore there are “-” tolerances at the upper width.



| Profile acc. DIN 2215  |                | 6     | 8     | 10    | 13    | 17    | 22    | 32    |
|--|----------------|-------|-------|-------|-------|-------|-------|-------|
| World standard acc. to ISO   |                | Y     | M     | Z     | A     | B     | C     | D     |
| Upper width b (mm)   |                | 6     | 8     | 10    | 13    | 17    | 22    | 32    |
| Height h (mm)  |                | 4     | 5     | 6     | 8     | 11    | 14    | 20    |
| Lower width u (mm)   |                | 3,3   | 4,55  | 5,9   | 7,5   | 9,4   | 12,35 | 18,25 |
| Calculation of the belt length La and Lw if the inner length Li is determined or known | La = Li        | +25   | +31   | +38   | +50   | +69   | +88   | +126  |
|  | La = Lw        | +10   | +12   | +16   | +20   | +29   | +30   | +51   |
|  | Lw = Li        | +15   | +19   | +22   | +30   | +40   | +58   | +75   |
|  | Lw = La        | -10   | -12   | -16   | -20   | -29   | -30   | -51   |
| Recommended belt speed max. m/s  | PU 75 A        | 10    | 10    | 10    | 10    | 10    | 10    | 10    |
|  | PU 80 A        | 10    | 10    | 10    | 10    | 10    | 10    | 10    |
|  | PU 85 A        | 15    | 15    | 15    | 15    | 15    | 15    | 15    |
|  | PU 90 A        | 15    | 15    | 15    | 15    | 15    | 15    | 15    |
|  | Polyester 55 D | 20    | 20    | 20    | 20    | 20    | 20    | 20    |
| Weight   | approx. kg/m   | 0,023 | 0,040 | 0,060 | 0,100 | 0,180 | 0,290 | 0,620 |



For BEHAbelt V-belts according to DIN 2215 V-belt pulleys according to DIN 2217 need to be used.

The production length Lf results of the effective length Lw minus pretension.

Calculation:  $v$  = belt speed (m/s)

$$v = \frac{dw \times n_1}{19100}$$

$n_1$  = speed of the smaller pulley (min. -1)

$dw$  = effective diameter of the smaller pulley (mm)