Technical Data Sheet
optibelt HRR
PU Hollow Round Belt, Open-Ended / Endless Joined

Dimensions, Tolerances

Diameter d_1 [mm]: 4.8 / 6.3 / 8.0 / 9.5
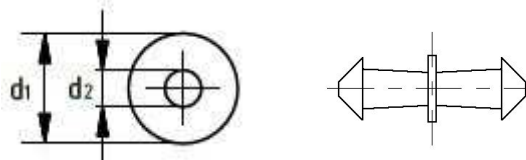Diameter d_2 [mm]: 1.8 / 2.5 / 3.2 / 3.8

Diameter Tolerances:

± 0.2mm

Construction

Polyurethane: Thermoplastic, 75 Shore A, red smooth
Connector: Brass

Belt elongation, tension, length and weight				
Diameter d_1 / d_2 [mm]	**4.8 / 1.8**	**6.3 / 2.5**	**8.0 / 3.2**	**9.5 / 3.8**
Belt tension [N] at 3% elongation, tension 1.09 N/mm²	19	34	55	77
Belt tension [N] at 6% elongation, tension 1.83 N/mm²	32	57	92	131
Belt tension [N] at 8% elongation, tension 2.15 N/mm²	37	67	108	153
Recommended pre-tension [%]	6-8	6-8	6-8	6-8
Minimum pulley diameter d_{min} [mm]	30	45	50	65
Weight per metre [g/m]	18	32	51	72
Roll length on a reel [m]	200	100	100	100

Elongation   Tension

3 % Elongation   1.09 N/mm²
6 % Elongation   1.83 N/mm²
8 % Elongation   2.15 N/mm²

Belt speed and temperature

Maximum speed v_{max}:   10 m/s
Temperature   -30°C bis +60°C

Coefficient of friction   HRR smooth

Polished steel: 0.90
Aluminium: 0.80
Polyethylene: 0.40

Calculation of assembling length L

L = L$_{nom}$ – pre-load [mm]

Nominal length L_{nom} [mm]
Selected pre-load [%]