

Technical Data Sheet

optibelt RR

PU Round Belt, Open-Ended, Endless Joined



Dimensions, Tolerances

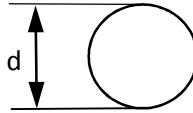
Diameter: 2 - 20 mm

Diameter Tolerances:

2 - 7 mm: ± 0.2mm
 8 - 12 mm: ± 0.3mm
 13 - 20 mm: ± 0.5 mm

Construction

Polyurethane: Thermoplastic, 92 Shore A, white



Belt elongation, tension, length and weight						
Diameter d [mm]	2 ¹	3	4	5	6	7 ¹
Belt tension [N] at 3% elongation, tension 1.95 N/mm ²	6	14	24	38	55	75
Belt tension [N] at 6% elongation, tension 3.10 N/mm ²	10	22	39	61	88	119
Belt tension [N] at 8% elongation, tension 3.80 N/mm ²	12	27	48	75	107	146
Recommended pre-tension [%]	5-6	5-6	5-6	5-6	3-5	3-5
Minimum pulley diameter d _{min} [mm]	25	30	40	50	60	70
Weight per metre [g/m]	3.4	8.2	14.8	23.0	33.6	45.2
Roll length on a reel [m]	200	200	200	200	100	100
Minimum belt length, joined [mm]	200	200	200	200	200	300

Elongation, belt tension, belt length, belt weight					
Diameter d [mm]	8 ¹	9 ¹	10 ¹	12 ¹	15
Belt tension [N] at 3% elongation, tension 1.95 N/mm ²	98	124	153	220	344
Belt tension [N] at 6% elongation, tension 3.10 N/mm ²	156	197	243	350	548
Belt tension [N] at 8% elongation, tension 3.80 N/mm ²	191	242	298	430	672
Recommended pre-tension [%]	3-5	3-5	3-5	2-4	2-4
Minimum pulley diameter d _{min} [mm]	80	90	100	120	150
Weight per metre [g/m]	59.2	76.1	93	133.0	210.3
Roll length on a reel [m]	100	100	100	50	50
Minimum belt length, joined [mm]	300	300	300	400	400

¹ Non-stock item, minimum order quantity on request. Intermediate size possible on request.

Elongation

3 % Elongation
 6 % Elongation
 8 % Elongation

Tension

1.95 N/mm²
 3.10 N/mm²
 3.80 N/mm²

Belt speed and temperature

Maximum speed v_{max}: 20 m/s
 Temperature: applicable from -20°C to +90°C

Coefficient of friction

Polished steel:
 Aluminium:
 Polyethylene:

RR smooth

0.70
 0.75
 0.30

Calculation of assembling length L

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