

iglidur® Knife edge rollers



Standard range from stock

Complete freedom from the lubricant of the belt deflection

Low driving power

Tight deflection radii

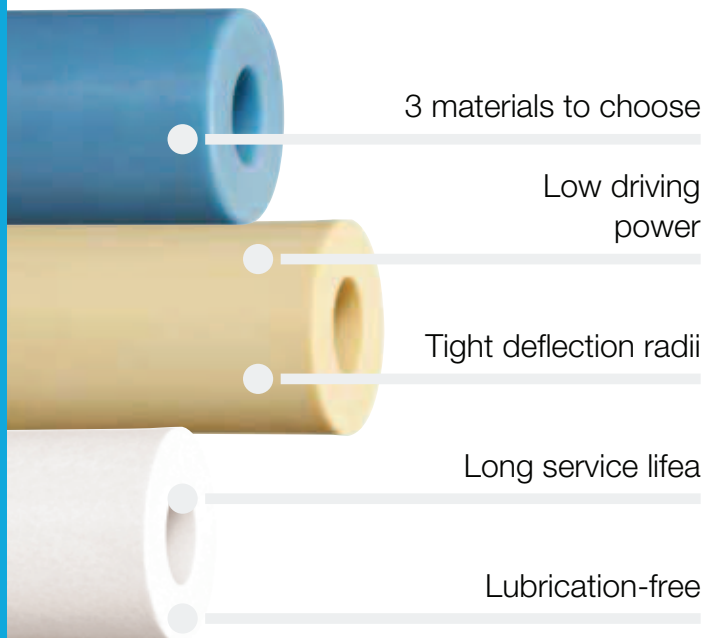
Long service life of the belt

Cost-effective

High holding times

iglidur® Knife edge rollers

Precise and lubricant-free deflection. igus® has developed its own knife-edge conveyor pulleys to implement conveyor belt deflection for conveyor technology applications. The first standard product range has three iglidur® materials available: the universal iglidur® P210 and the FDA compliant iglidur® A180 (up to 90 °C) and iglidur® A350 (up to 180 °C). The iglidur® solution is characterized by tight deflection radii and low essential driving power.



When to use it?

- When a maintenance free guiding of conveyors belt is required
- When a tight and precise guiding is required
- When a cost-effective and economical solution is sought



When not to use it?

- When highs speeds occur
- When high forces are applied on the belts
- When a static knife edge is required



Material

iglidur® A180 ► page 411

iglidur® A350 ► page 447

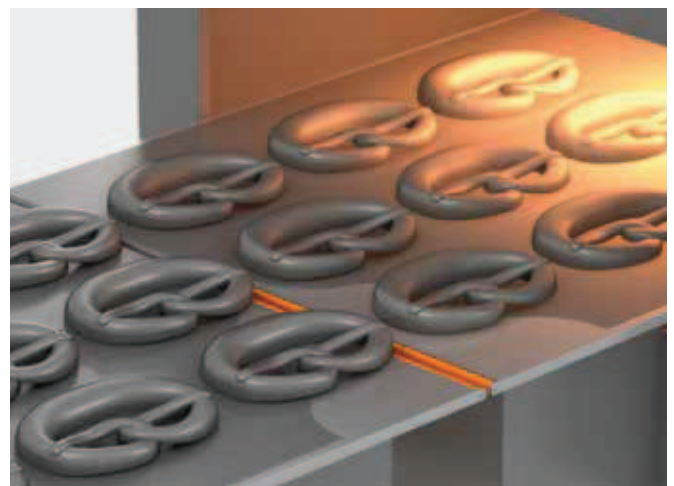
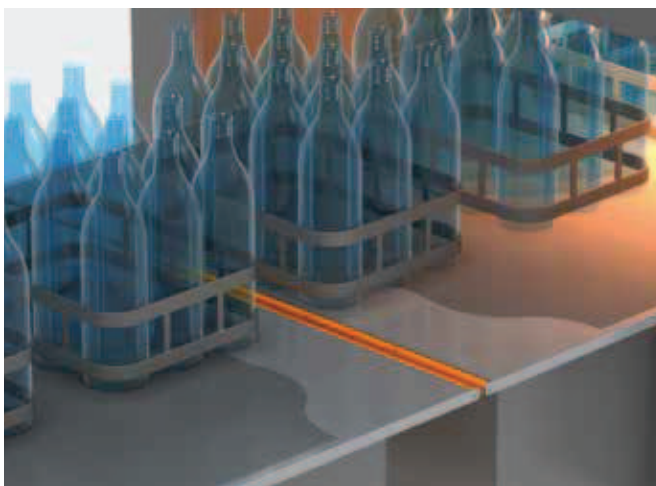
iglidur® P210 ► page 207

Product range

3 materials

Ø 9–20 mm

more dimensions on request



delivery time from stock



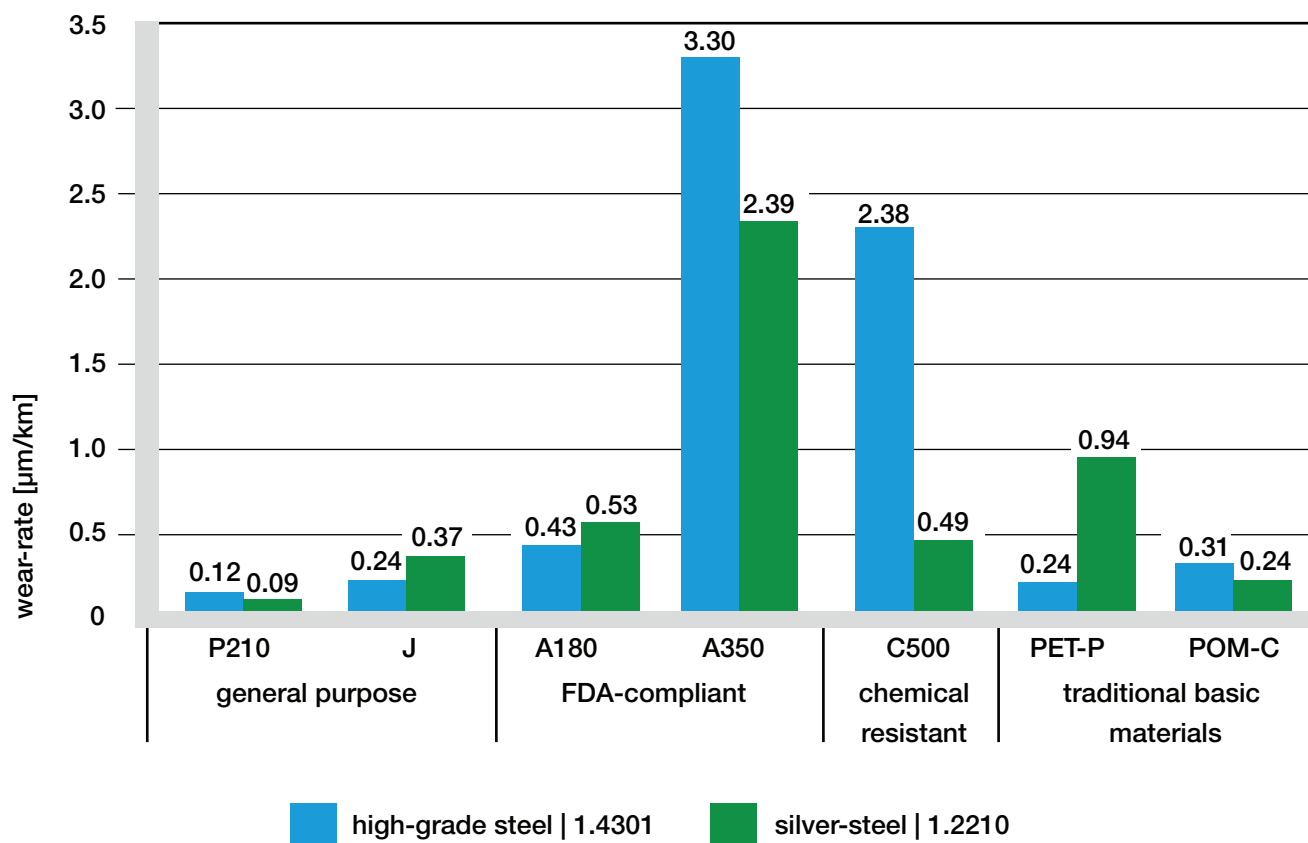
prices price list online
www.igus.eu/knifeedge

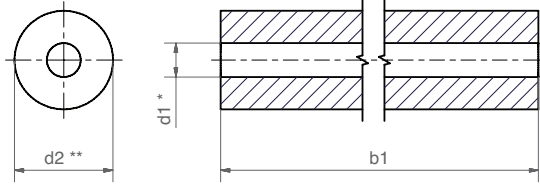
iglidur® Knife edge rollers | Technical Data

Material properties table

General properties	Unit	iglidur® P210	iglidur® A180	iglidur® A350	Testing method
Density	g/cm ³	1.40	1.46	1.42	
Colour		yellow	white	blue	
Max. moisture absorption at +23 °C/50 % r.h.	% weight	0.3	0.2	0.6	DIN 53495
Max. water absorption	% weight	0.5	1.3	1.9	
Coefficient of sliding friction, dynamic against steel	μ	0.07–0.19	0.05–0.23	0.1–0.2	
pv value, max. (dry)	MPa · m/s	0.4	0.31	0.4	
Mechanical properties					
Modulus of elasticity	MPa	2,500	2,300	2,000	DIN 53457
Tensile strength at +20 °C	MPa	70	88	110	DIN 53452
Compressive strength	MPa	50	78	78	
Max. recommended surface pressure (+20 °C)	MPa	50	28	60	
Shore D hardness		75	76	76	DIN 53505
Physical and thermal properties					
Max. long term application temperature	°C	+100	+90	+180	
Max. short term application temperature	°C	+160	+110	+210	
Min. application temperature	°C	-40	-50	-100	
Thermal conductivity	W/m · K	0.25	0.25	0.24	ASTM C 177
Coefficient of thermal expansion (at +23 °C)	K ⁻¹ · 10 ⁻⁵	8	11	8	DIN 53752
Electrical properties					
Specific volume resistance	Ωcm	> 10 ¹²	> 10 ¹²	> 10 ¹¹	DIN IEC 93
Surface resistance	Ω	> 10 ¹¹	> 10 ¹¹	> 10 ¹¹	DIN 53482

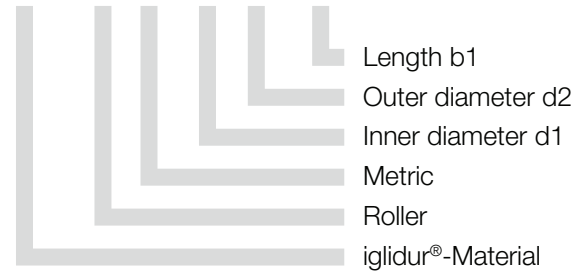
Table 01: Material properties table





Order key

A180RLM-0309-50



Knife edge rollers – Material iglidur® A180 – FDA-compliant, up to 90°C

Part number		d1 +0.1	d2 ±0.1	b1 -0.3
A180RLM-0309-50	New!	3.1	9.0	50.0
A180RLM-0409-50	New!	4.1	9.0	50.0
A180RLM-0511-70	New!	5.1	11.0	70.0
A180RLM-0514-70	New!	5.1	14.0	70.0
A180RLM-0612-70	New!	6.1	12.0	70.0
A180RLM-0614-70	New!	6.1	14.0	70.0
A180RLM-0812-70	New!	8.1	12.0	70.0
A180RLM-0814-70	New!	8.1	14.0	70.0
A180RLM-0818-70	New!	8.1	18.0	70.0
A180RLM-1020-70	New!	10.1	20.0	70.0

Knife edge rollers – Material iglidur® A350 – FDA-compliant, up to 180°C

Part number		d1 +0.1	d2 ±0.1	b1 -0.3
A350RLM-0309-50	New!	3.1	9.0	50.0
A350RLM-0409-50	New!	4.1	9.0	50.0
A350RLM-0511-70	New!	5.1	11.0	70.0
A350RLM-0514-70	New!	5.1	14.0	70.0
A350RLM-0612-70	New!	6.1	12.0	70.0
A350RLM-0614-70	New!	6.1	14.0	70.0
A350RLM-0812-70	New!	8.1	12.0	70.0
A350RLM-0814-70	New!	8.1	14.0	70.0
A350RLM-0818-70	New!	8.1	18.0	70.0
A350RLM-1020-70	New!	10.1	20.0	70.0

Knife edge rollers – Material iglidur® P210 – universal, up to 100°C

Part number		d1 +0.1	d2 ±0.1	b1 -0.3
P210RLM-0309-50	New!	3.1	9.0	50.0
P210RLM-0409-50	New!	4.1	9.0	50.0
P210RLM-0511-70	New!	5.1	11.0	70.0
P210RLM-0514-70	New!	5.1	14.0	70.0
P210RLM-0612-70	New!	6.1	12.0	70.0
P210RLM-0614-70	New!	6.1	14.0	70.0
P210RLM-0812-70	New!	8.1	12.0	70.0
P210RLM-0814-70	New!	8.1	14.0	70.0
P210RLM-0818-70	New!	8.1	18.0	70.0
P210RLM-1020-70	New!	10.1	20.0	70.0