

iglidur[®] knife edge rollers

100 % lubrication-free

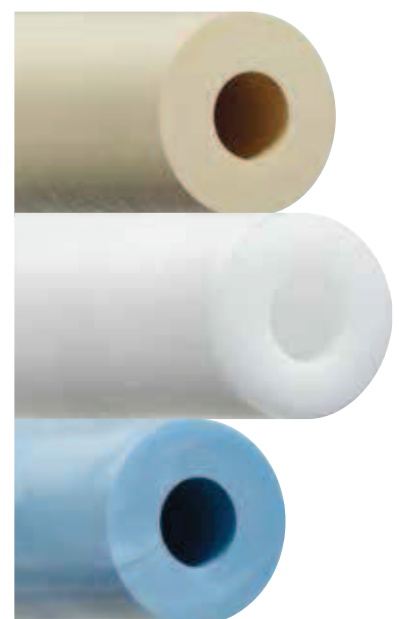
Low driving power

Tight deflection radii

Long service life of the belt

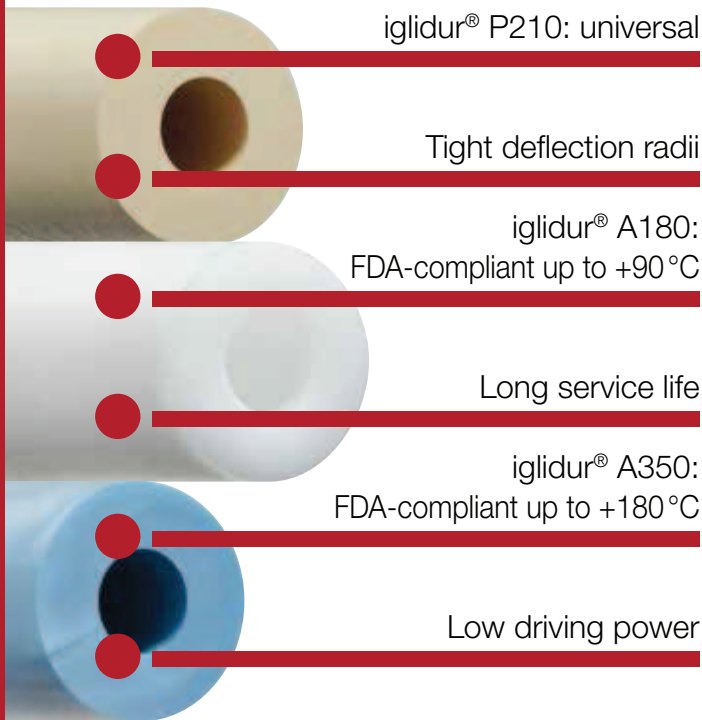
Cost-effective

Standard range from stock



iglidur® knife edge rollers | Advantages

Lubrication-free and precise deflection of conveyor belts



iglidur® P210: universal

Tight deflection radii

iglidur® A180:
FDA-compliant up to +90 °C

Long service life

iglidur® A350:
FDA-compliant up to +180 °C

Low driving power

iglidur® knife edge rollers

igus® has developed its own knife-edge rollers to deflect conveyor belts in materials handling applications. The iglidur® solution is characterised by tight deflection radii and a low level of required drive power.



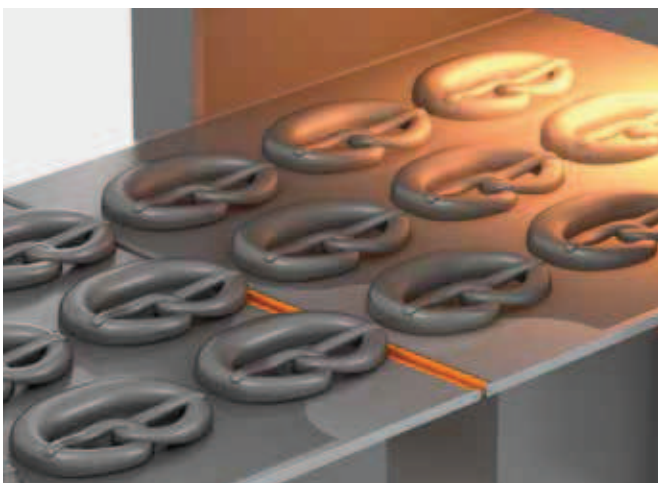
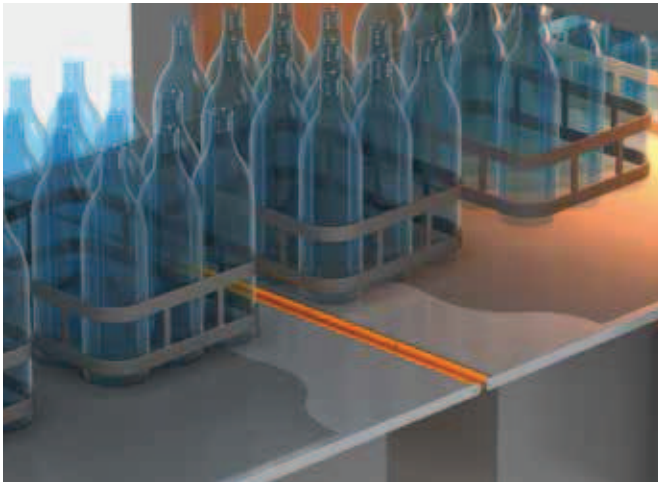
When to use it?

- When a maintenance-free conveyor belt is required
- When a precise guiding is required
- When a cost-effective and economical solution is required



When not to use it?

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



Available from stock

Detailed information about delivery time online.



Depending on material:

iglidur® P210: -40 °C up to +100 °C

iglidur® A180: -50 °C up to +90 °C

iglidur® A350: -100 °C up to +180 °C



3 Materials

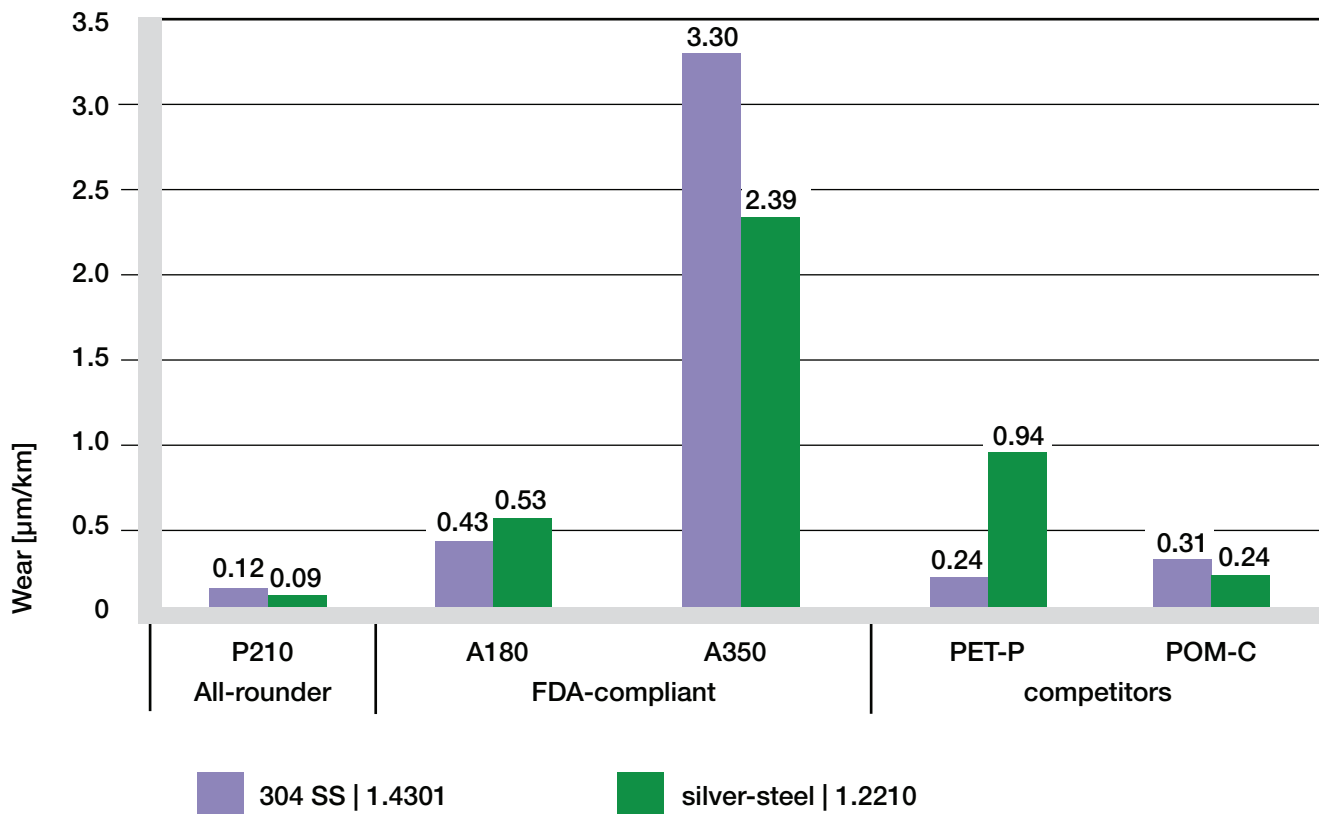
Ø 9–20 mm

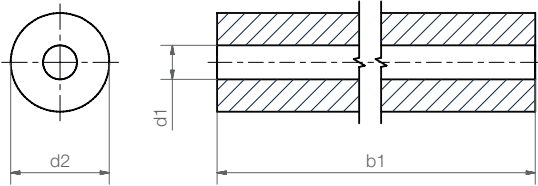
More dimensions on request

Material properties table

General properties	Unit	iglidur® P210	iglidur® A180	iglidur® A350	Testing method
Density	g/cm³	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					
Flexural modulus	MPa	2,500	2,300	2,000	DIN 53457
Flexural strength at +20 °C	MPa	70	88	110	DIN 53452
Compressive strength	MPa	50	78	78	
Max. permissible 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



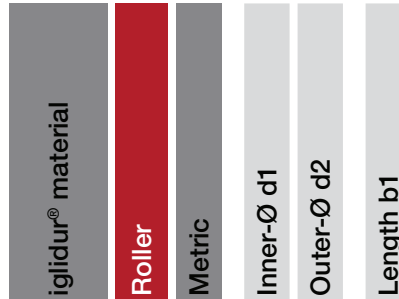


Order key

Type

Dimensions [mm]

P210 RL M -03 09-50



Options:

iglidur® material

P210: iglidur® P210

A180: iglidur® A180

A350: iglidur® A350

Knife edge rollers made from iglidur® P210 – Universal, up to +100 °C

d1 +0.1 [mm]	d2 ±0.1 [mm]	b1 -0.3 [mm]	Part No.
3.1	9.0	50.0	P210RLM-0309-50
4.1	9.0	50.0	P210RLM-0409-50
5.1	11.0	70.0	P210RLM-0511-70
5.1	14.0	70.0	P210RLM-0514-70
6.1	12.0	70.0	P210RLM-0612-70
6.1	14.0	70.0	P210RLM-0614-70
8.1	12.0	70.0	P210RLM-0812-70
8.1	14.0	70.0	P210RLM-0814-70
8.1	16.0	77.0	P210RLM-0816-77
8.1	18.0	70.0	P210RLM-0818-70
10.1	20.0	70.0	P210RLM-1020-70

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

d1 +0.1 [mm]	d2 ±0.1 [mm]	b1 -0.3 [mm]	Part No.
3.1	9.0	50.0	A180RLM-0309-50
4.1	9.0	50.0	A180RLM-0409-50
5.1	11.0	70.0	A180RLM-0511-70
5.1	14.0	70.0	A180RLM-0514-70
6.1	12.0	70.0	A180RLM-0612-70
6.1	14.0	70.0	A180RLM-0614-70
8.1	12.0	70.0	A180RLM-0812-70
8.1	14.0	70.0	A180RLM-0814-70
8.1	18.0	70.0	A180RLM-0818-70
10.1	20.0	70.0	A180RLM-1020-70

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

d1 +0.1 [mm]	d2 ±0.1 [mm]	b1 -0.3 [mm]	Part No.
3.1	9.0	50.0	A350RLM-0309-50
6.1	14.0	70.0	A350RLM-0614-70
8.1	18.0	70.0	A350RLM-0818-70