



## SPEED + FORCE LINEARSYSTEM

**NEU  
NEW**

## Vorteile des SPEED + FORCE LINEARSYSTEMS

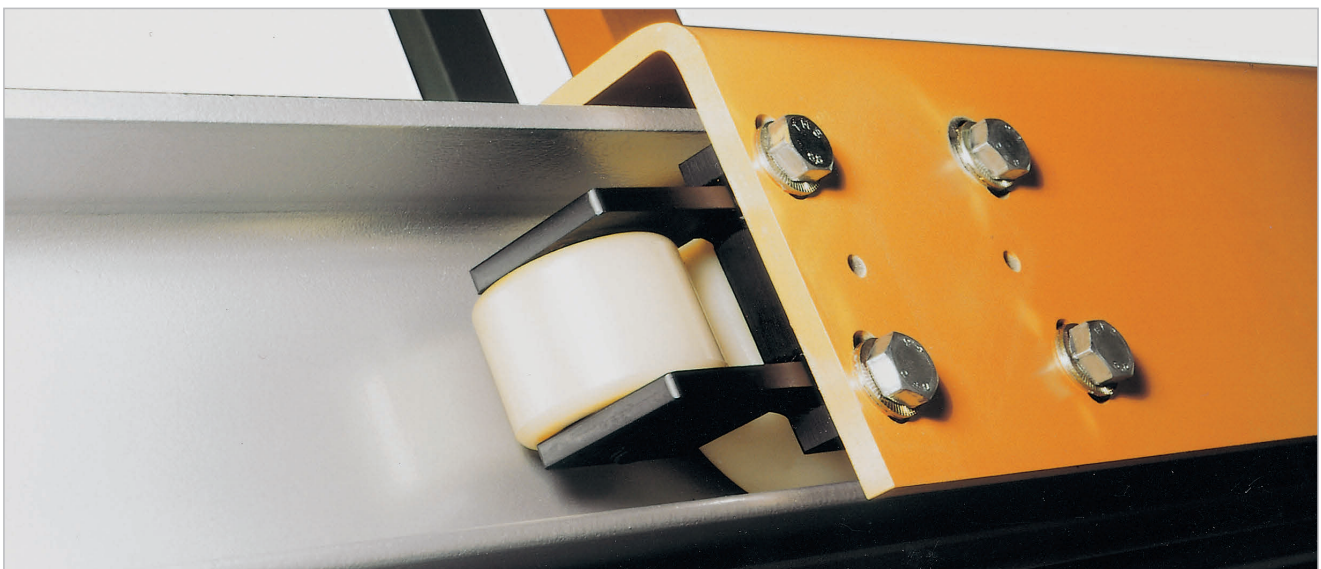
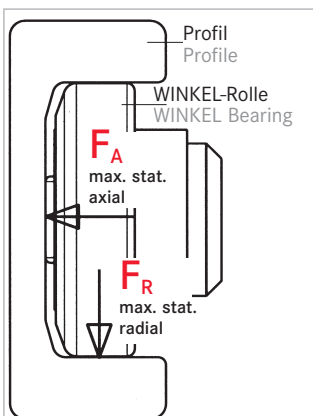
- Geräuscharmer Lauf durch POLYAMID-Beschichtung
- Verfahrensgeschwindigkeiten bis 5 m/sec
- Geringer Rollwiderstand durch Präzisionskugellager in 2RS-Abdichtung
- Ausgezeichnete Abrieb- und Verschleißfestigkeit

CAD Download in 2D/3D unter [www.winkel.de](http://www.winkel.de)

## SPEED + FORCE LINEARSYSTEM

## Advantage of the SPEED + FORCE LINEARSYSTEM

- Silent run by POLYAMIDE coated bearings
- Travel speed up to 16 ft/sec
- Low friction by precision ball bearings in 2RS version
- Runs wear-resistant

CAD download in 2D/3D at [www.winkel.de](http://www.winkel.de)Belastungswerte für  
POLYAMID WINKEL-RollenLoad capacities for  
POLYAMIDE WINKEL Bearings

Type Modelo	Artikel-Nr. Article no.	F <sub>R</sub> max. stat. Radial	F <sub>A</sub> max. stat. Axial	Reduzierung der Belastungswerte bei Reduction of load capacity at			Gewicht/kg Weight/kg	Profil Profile
				1m/sec	2m/sec	3m/sec		
PA 4000 AP	231.218.001	1000 N	400 N	0%	-20%	-30%	0,18	A
PA 5250 AP	231.219.001	1400 N	400 N	0%	-20%	-30%	0,25	S
PA 6250 AP	231.220.001	2300 N	600 N	0%	-20%	-30%	0,72	O / M
PA 6250 P-AP	231.222.001	2300 N	600 N	0%	-20%	-30%	0,60	O / M
PA 1012 AP	231.200.000	2500 N	900 N	0%	-20%	-30%	1,60	V / V-L
PA 1250 AP	231.201.000	6000 N	1300 N	0%	-20%	-30%	4,00	R / R-L
PA 1432 AP	231.202.000	8000 N	3000 N	0%	-20%	-30%	9,20	W / W-L
PA 1792 AP	231.203.000	15000 N	3000 N	0%	-20%	-30%	12,20	X / X-L
PA 1800 AP	231.204.000	18000 N	6000 N	0%	-20%	-30%	12,50	Std 8 NbV

Max. Umgebungstemperatur 40 °C | Max. working temperature 40 °C.

POLYAMID WINKEL-Rollen | POLYAMIDE WINKEL Bearings



Typ | Type  
PA 4000  
PA 4000 AP



Typ | Type  
PA 5250  
PA 5250 AP



Typ | Type  
PA 6250 AP



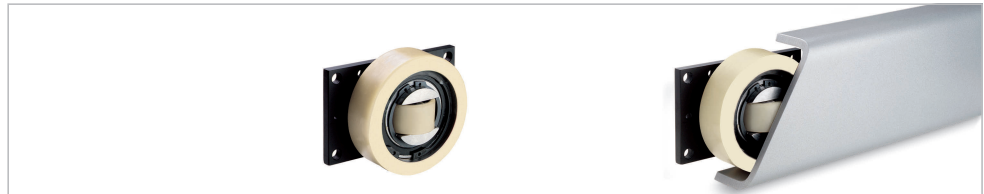
Typ | Type  
PA 6250 P  
PA 6250 P-AP



Typ | Type  
PA 1012 AP



Typ | Type  
PA 1250 AP



Typ | Type  
PA 1432 AP



Typ | Type  
PA 1792 AP



Typ | Type  
PA 1800 AP



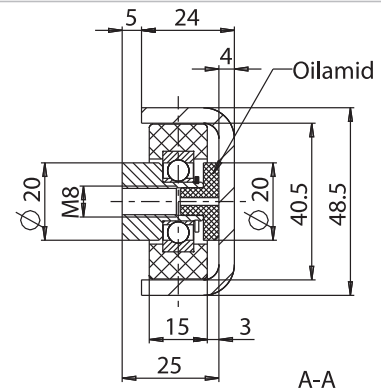
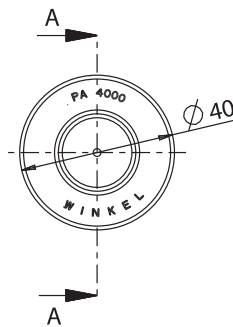


**POLYAMID® WINKEL-Rollen | POLYAMID WINKEL Bearings**

Typ | Type **PA 4000**

Artikel-Nr. | Article no. 231.218.003

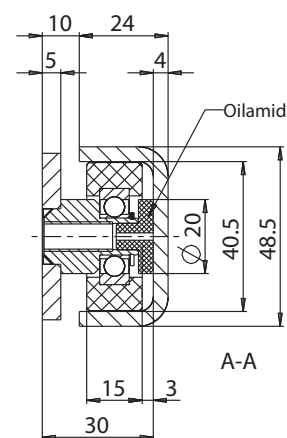
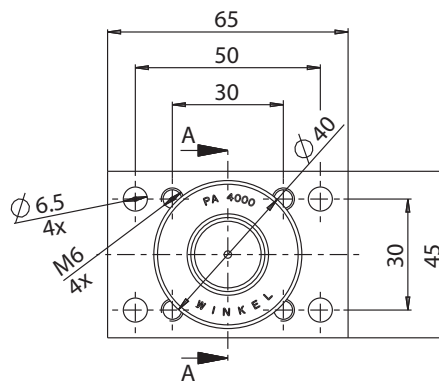
Gewicht | Weight 0,08 kg



Typ | Type **PA 4000 AP**

Artikel-Nr. | Article no. 231.218.001

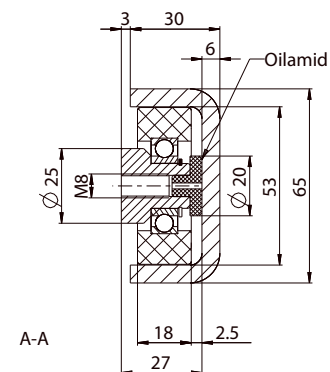
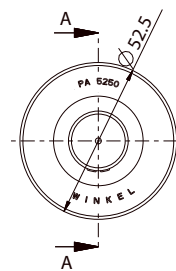
inkl. Anschraubplatte | incl. flange plate  
Gewicht | Weight 0,18 kg



Typ | Type **PA 5250**

Artikel-Nr. | Article no. 231.219.003

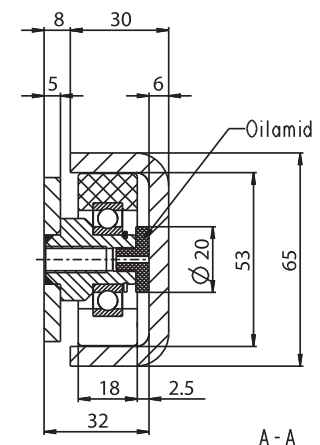
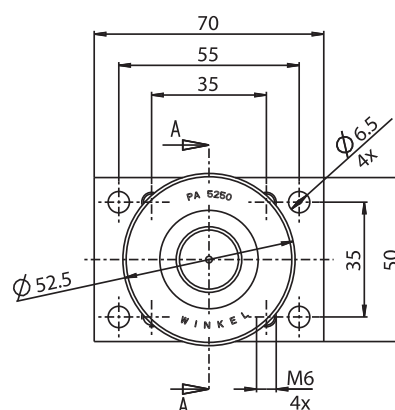
Gewicht | Weight 0,125 kg



Typ | Type **PA 5250 AP**

Artikel-Nr. | Article no. 231.219.001

inkl. Anschraubplatte | incl. flange plate  
Gewicht | Weight 0,25 kg



**POLYAMID® WINKEL-Rollen | POLYAMID WINKEL Bearings**



Typ | Type

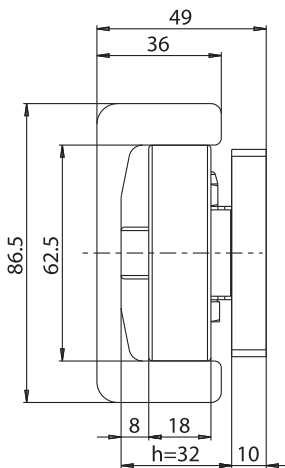
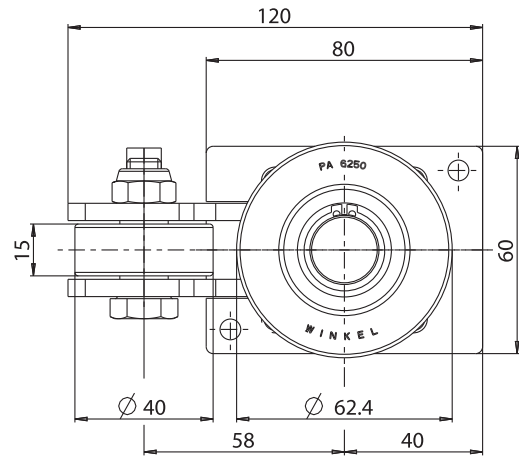
**PA 6250 AP**

Artikel-Nr.  
Article no.

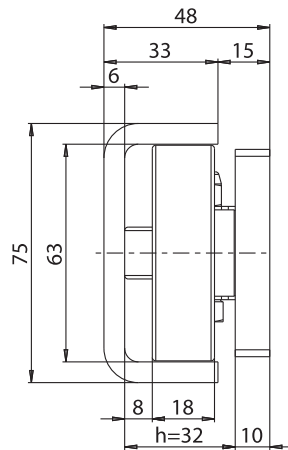
231.220.001

inkl. Anschraubplatte  
incl. flange plate

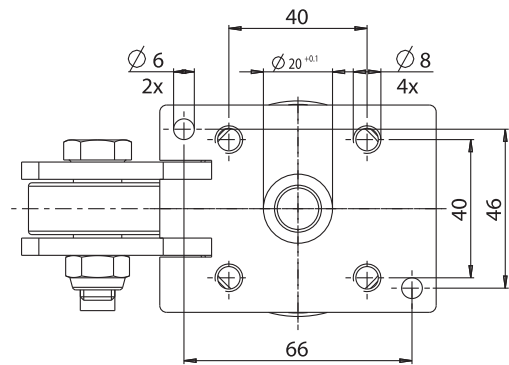
Gewicht 0,72 kg  
Weight



für Profil Std. 0 NbV  
for Profile Std. 0 NbV



für Profil Std. M  
for Profile Std. M



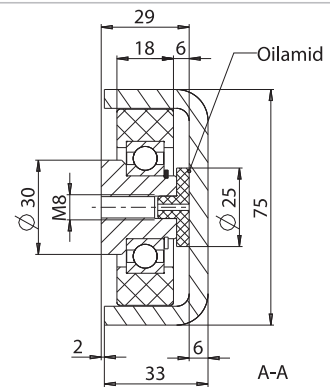
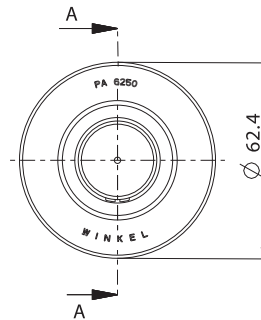
Typ | Type

**PA 6250 P**

Artikel-Nr.  
Article no.

231.222.002

Gewicht | Weight 0,20 kg



Typ | Type

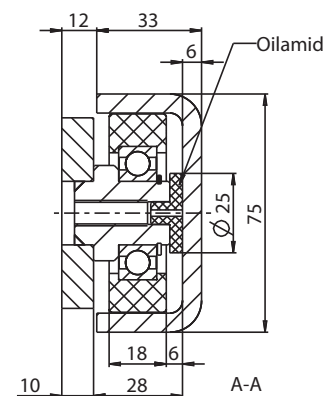
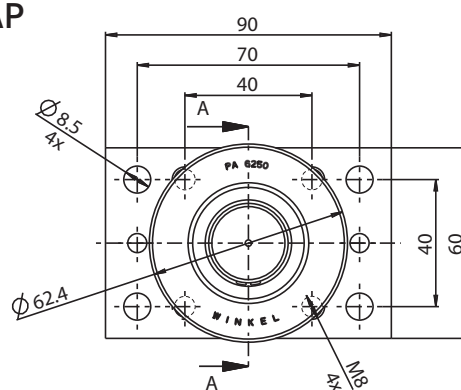
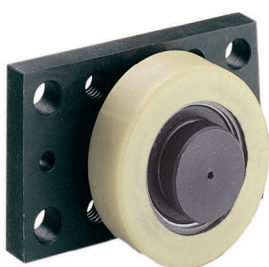
**PA 6250 P AP**

Artikel-Nr.  
Article no.

231.222.001

inkl. Anschraubplatte | incl. flange plate

Gewicht | Weight 0,60 kg







**POLYAMID WINKEL-Rollen | POLYAMIDE WINKEL Bearings**

**Typ | Type PA 1012 AP**

Artikel-Nr. 231.200.000

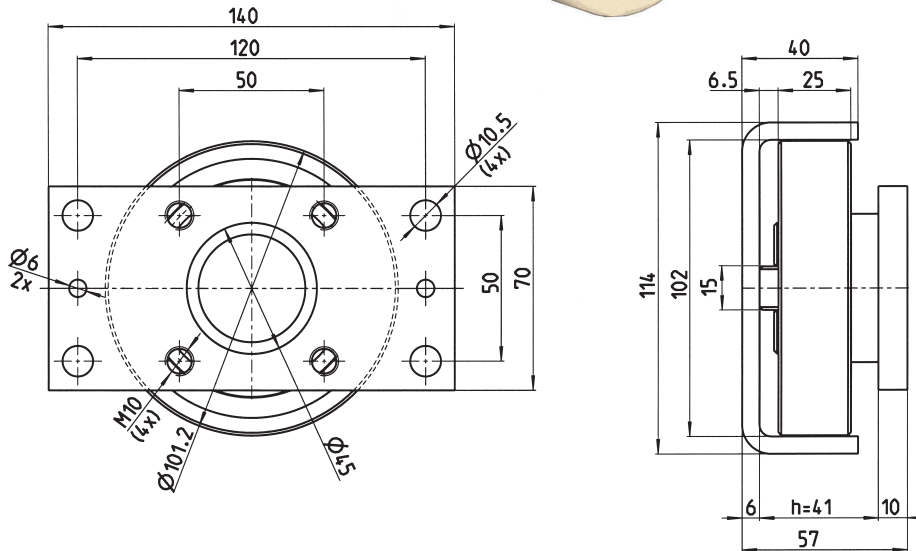
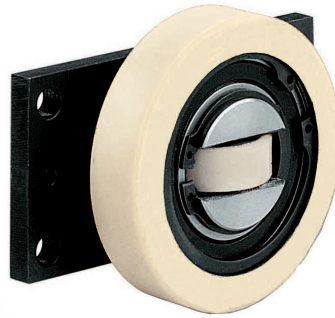
Article no.

inkl. Anschraubplatte

incl. flange plate

Gewicht 1,60 kg

Weight



**Typ | Type PA 1250 AP**

Artikel-Nr. 231.201.000

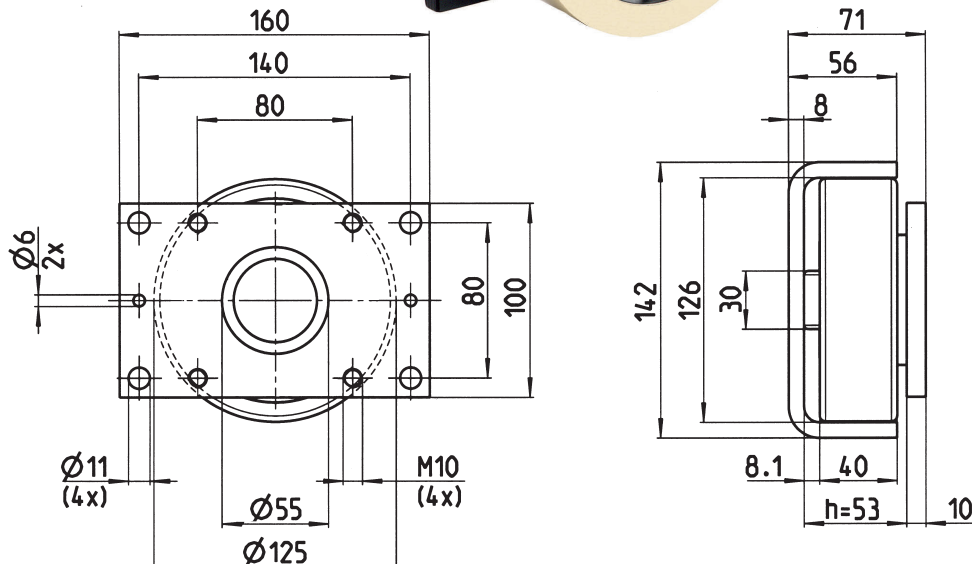
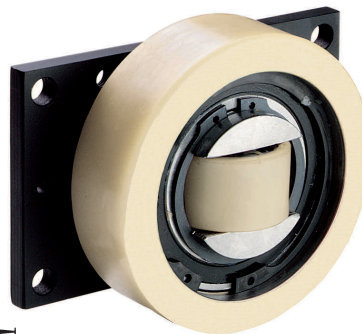
Article no.

inkl. Anschraubplatte

incl. flange plate

Gewicht 4,0 kg

Weight



POLYAMID WINKEL-Rollen | POLYAMIDE WINKEL Bearings



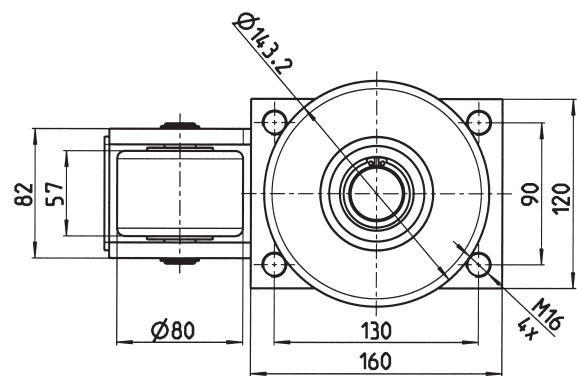
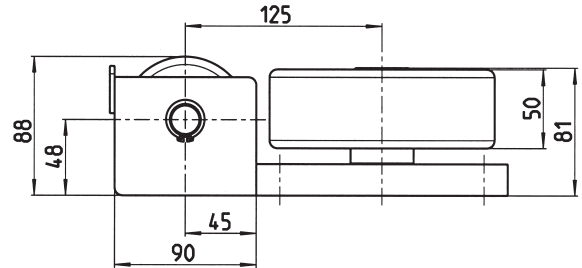
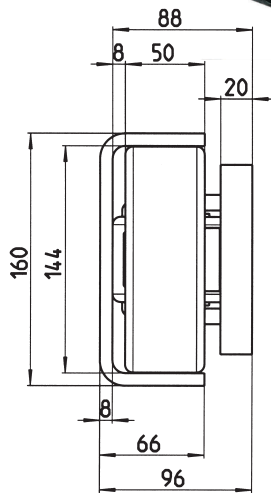
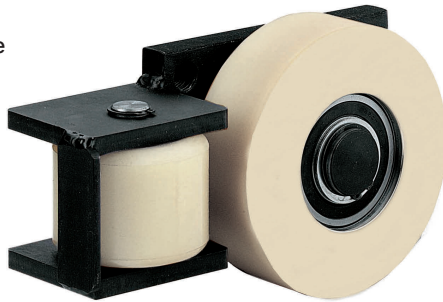
Typ | Type PA 1432 AP

Artikel-Nr. 231.202.000

Article no.

inkl. Anschraubplatte  
incl. flange plate

Gewicht 9,2 kg  
Weight



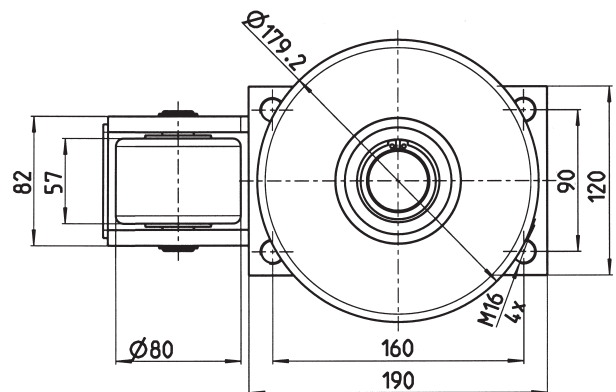
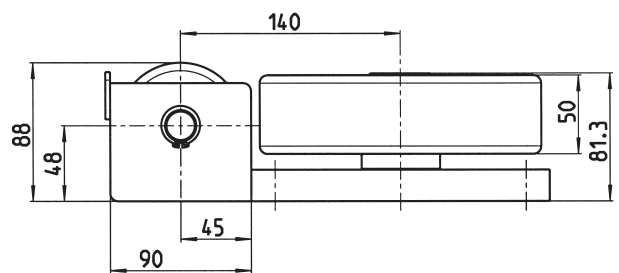
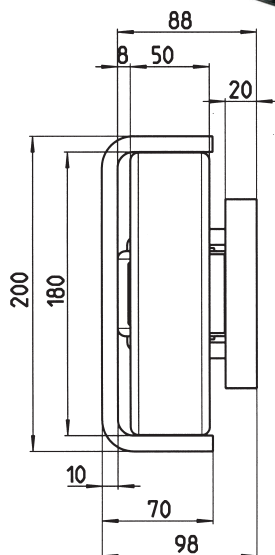
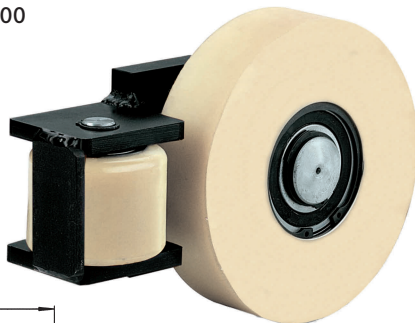
Typ | Type PA 1792 AP

Artikel-Nr. 231.203.000

Article no.

inkl. Anschraubplatte  
incl. flange plate

Gewicht 12,2 kg  
Weight



POLYAMID WINKEL-Rollen | POLYAMIDE WINKEL Bearings

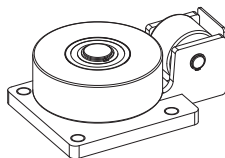
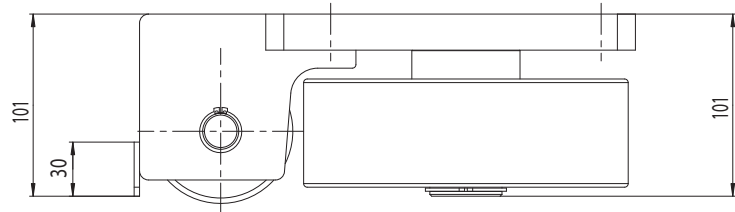
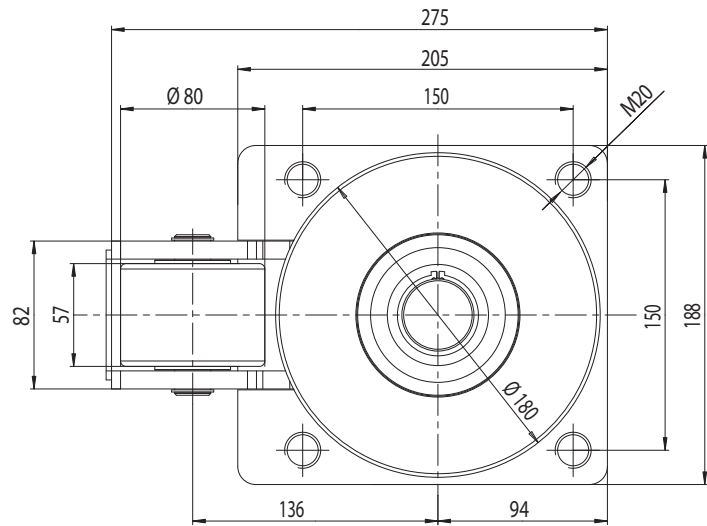
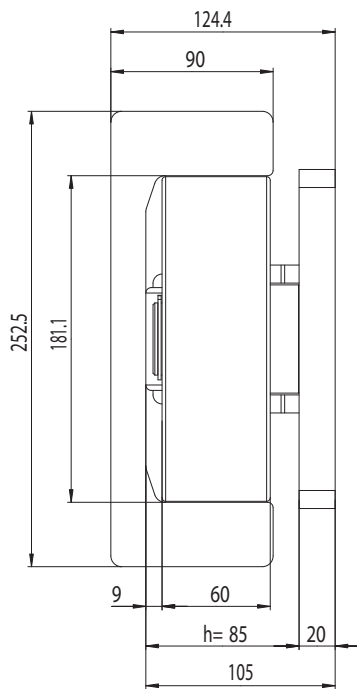
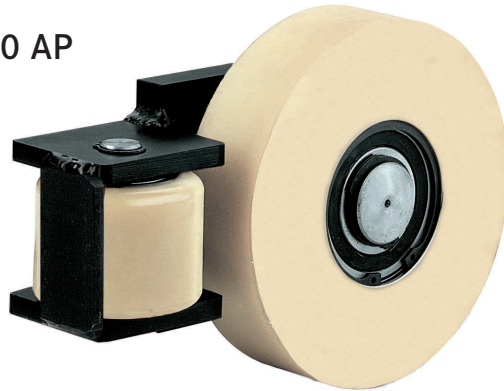


Typ | Type PA 1800 AP

Artikel-Nr. 231.204.000  
Article no.

inkl. Anschraubplatte  
incl. flange plate

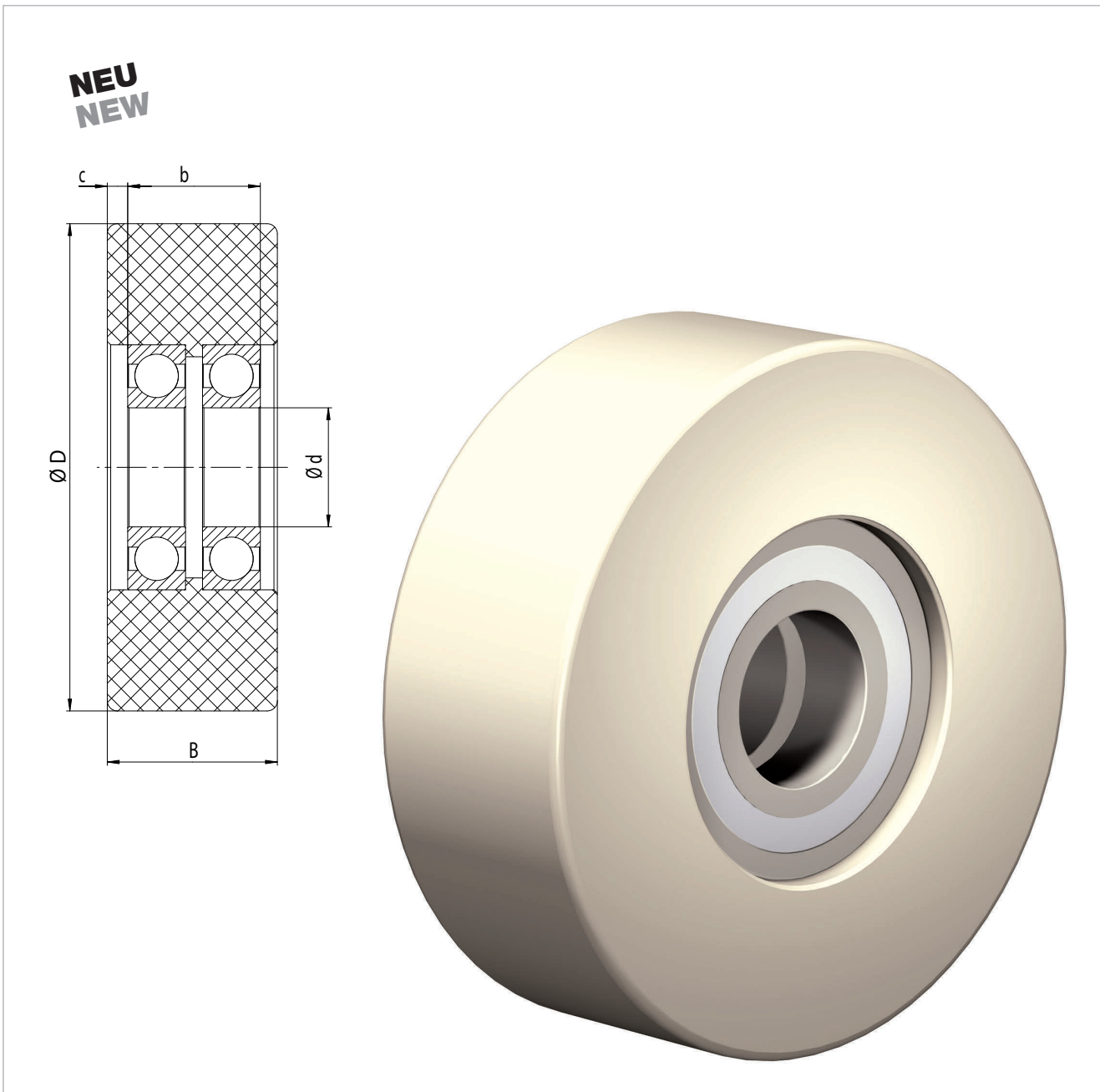
Gewicht: 12,5 kg  
Weight: 12.5 kg





## POLYAMID-Rolle

## POLYAMIDE bearing



Typ Type	Artikel-Nr. Article no.	Rollengröße Ø Bearing size Ø	Maß D Dim. D	Maß B Dim. B	Maß d Dim. d	Maß b Dim. b	Maß c Dim. c	Gewicht kg Weight kg	Tragfähigkeit Load capacity
PA 50/30	231.210.000	50,0 x 30	50,0	30	12	30	-	0,10	1300 N
PA 80/57	231.211.000	80,0 x 57	80,0	57	20	61	-	0,40	6000 N
PA 101/25	231.212.000	101,2 x 25	101,2	25	45	16	4,5	0,35	2500 N
PA 125/40	231.100.003	125,0 x 40	125,0	40	30	40	-	0,65	6000 N
PA 143/50	231.045.004	143,2 x 50	143,2	50	35	40	6,0	1,25	8000 N
PA 160/60	231.100.002	160,0 x 60	160,0	60	40	60	-	2,20	13000 N
PA 179/50	231.216.000	179,2 x 50	179,2	50	40	40	5,0	1,85	15000 N
PA 180/60	231.217.000	180,0 x 60	180,0	60	40	60	-	2,60	18000 N
PA 200/80	231.221.000	200,0 x 80	200,0	80	55	69	-	4,30	25000 N

**NEU  
NEW**

Max. Umgebungstemperatur 40 °C.  
Max. working temperature 40 °C.