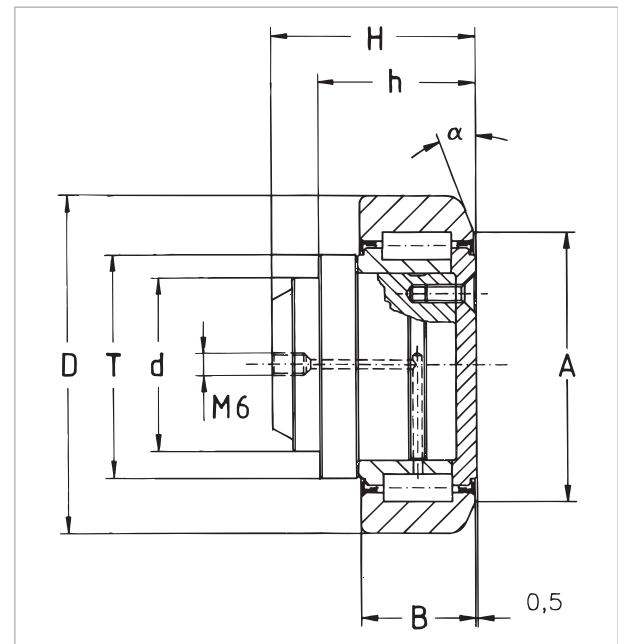




WINKEL-Radiallager



WINKEL Radial Bearing



Technische Daten:

- die Außenringe sind aus Einsatzstahl
UNI 16 CrNi 4 gehärtet 62+2 HRC
- die Innenringe sind aus Stahl
DIN 100 Cr 6 gehärtet 62-2 HRC
- flachköpfige Rollen aus Stahl
DIN 100 Cr 6 gehärtet 59 – 64 HRC
- Anschweißbolzen aus Stahl C22E (Werkstoff-Nr. 1.1151)
- Bolzentoleranz – 0,05 mm
- Nachschmierbarkeit für Rollen 2.054 – 2.063
- Radiallager werden bei der Montage mit Schmierfett
Grad 3 (z.B. Shell Alvania 3, Esso Beacon 3) befestet

Technical characteristics:

- outer rings are made from case-hardened steel
UNI 16 CrNi 4 hardened at 62+2HRC
- inner rings are made from bearing steel
En 31-SAE 52100 hardened at 62-2 HRC
- cylindrical rollers have flat ground heads, made from
En 31-SAE 52100 steel hardened at 59 – 64 HRC
- welding bolts are made from C22E (Material no. 1.1151)
- bolt tolerance – 0.05 mm
- bearings from 2.054 to 2.063 are relubricateable
- bearings are lubricated with grease grade 3
(e.g. Shell Alvania 3, Esso Beacon 3)

CAD Download in 2D/3D unter www.winkel.de

CAD download in 2D/3D at www.winkel.de

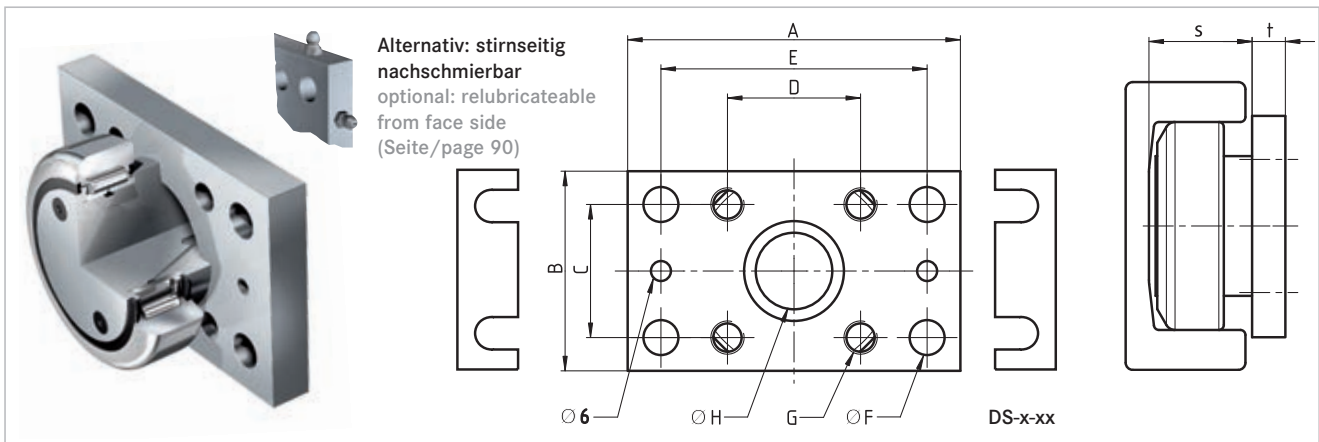


Nachschmiersysteme für WINKEL-Rollen
Lubrication systems for WINKEL bearings
(Seite/page 144)

Typ Type	Artikel-Nr. Article no.	D mm D mm	T mm T mm	d -0.05 mm d -0.05 mm	H mm H mm	h mm h mm	B mm B mm	A mm A mm	α mm α mm
2.054	205.061.000	62,5	42	30	34,5	26,5	20	50	20°
2.055	205.062.000	70,1	48	35	42,0	34,0	23	57	20°
2.056	205.063.000	77,7	53	40	45,5	34,0	23	61	20°
2.058	205.064.000	88,4	59	45	54,0	41,0	30	68	20°
2.061	205.065.000	107,7	71	60	65,5	51,5	31	82	20°
2.062	205.066.000	123,0	80	60	67,8	51,5	37	92	20°
2.063	205.067.000	149,0	103	60	74,0	54,0	45	116	15°

C = Dyn. Tragzahl Radiallager (ISO 281/1), C₀ = Stat. Tragzahl Radiallager (ISO 76),
F_r = Tragzahl Radiallager zulässige Belastung zwischen Rolle und Profil

WINKEL-Rollen | WINKEL Bearings

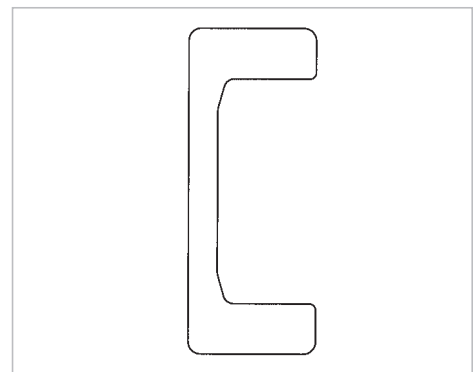
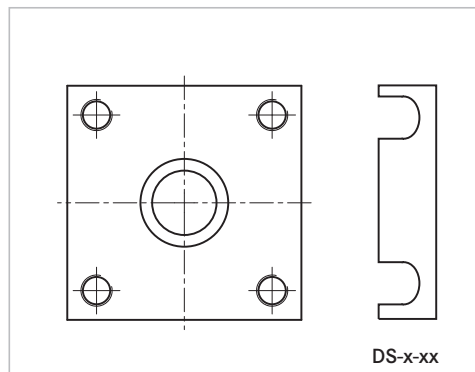
Passende Anschraubplatten
Suitable flange plates


Typ Type	Artikel-Nr. Article no.	A	B	C	D	E	Ø F	G	Ø H	s	t	Distanzsteckblech t=0,5mm Washer t=0.5mm	Distanzsteckblech t=1,0mm Washer t=1.0mm		
AP 0	212.003.000	100	60	40	40	80	10,5	M10	30	30,5	10	DS-0-0,5	238.020.000	DS-0-1,0	238.020.001
AP 1	212.004.000	120	80	50	50	90	12,5	M12	35	36,0	15	DS-1-0,5	238.021.000	DS-1-1,0	238.021.001
AP 2	212.005.000	120	80	50	50	90	12,5	M12	40	36,5	15	DS-2-0,5	238.021.000	DS-2-1,0	238.021.001
AP 3.1	212.006.001	160	100	60	60	120	17,0	M16	45	44,0	20	DS-3.1-0,5	238.105.000	DS-3.1-1,0	238.105.001
AP 4	212.007.001	180	120	80	80	140	17,0	M16	60	56,0	20	DS-4-0,5	238.023.000	DS-4-1,0	238.023.001
AP 6	212.008.000	200	150	100	100	160	17,0	M16	60	58,5	20	DS-6-0,5	238.024.000	DS-6-1,0	238.024.001

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Wiper page 94

Anschraubplatten quadratisch Reihe AP-Q S. 96
Flange plates square series AP-Q page 96

Profile Seite 68
Profiles page 68



Typ Type	F _R kN F _R kN	C kN C kN	C ₀ kN C ₀ kN	u/min max. r/pm max.	Gewicht kg Weight kg	Anschraubplatten Flange plates	Profile Profiles
2.054	10,30	31,0	35,5	900	0,55	AP0 AP0-Q	0 NbV
2.055	12,40	45,5	51,0	900	0,80	AP1 AP1-Q	1 NbV
2.056	12,90	48,0	56,8	800	1,05	AP2 AP2-Q	2 NbV
2.058	22,40	68,0	72,0	750	1,70	AP3.1 AP3-Q	3 NbV
2.061	23,80	81,0	95,0	650	2,90	AP4 AP4-Q	4 NbV
2.062	33,90	110,0	132,0	550	4,00	AP4 AP4-Q	5 NbV
2.063	59,20	151,0	192,0	450	6,70	AP6 AP6-Q	6 NbV

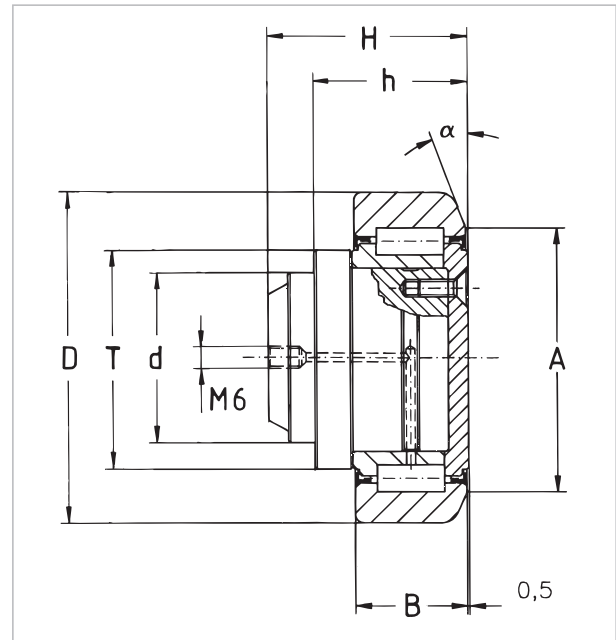
C = Dynamic load capacity radial bearing (ISO 281/1), C₀ = Static load capacity radial bearing (ISO 76),
F_R = Load capacity radial bearing max. allowable force between bearing and profile,



WINKEL-Präzisions-Radiallager Typ PR



WINKEL Precision Radial Bearing Type PR



Technische Daten:

- die Außenringe sind aus Einsatzstahl
UNI 16 CrNi 4 gehärtet 62+2 HRC
- die Innenringe sind aus Stahl
DIN 100 Cr 6 gehärtet 62-2 HRC
- flachköpfige Rollen aus Stahl
DIN 100 Cr 6 gehärtet 59 – 64 HRC
- Anschweißbolzen aus Stahl C22E (Werkstoff-Nr. 1.1151)
- Bolzentoleranz -0,05 mm
- Nachschmierbarkeit für Rollen PR 2.054 - PR 2.063
- Radiallager werden bei der Montage mit Schmierfett
Grad 3 (z.B. Shell Alvania 3, Esso Beacon 3) befestigt

Technical characteristics:

- outer rings are made from case-hardened steel
UNI 16 CrNi 4 hardened at 62+2HRC
- inner rings are made from bearing steel
En 31-SAE 52100 hardened at 62-2 HRC
- cylindrical rollers have flat ground heads, made from
En 31-SAE 52100 steel hardened at 59 – 64 HRC
- welding bolts are made from C22E (Material no. 1.1151)
- bolt tolerance -0.05 mm
- bearings from PR 2.054 to PR 2.063 are relubricateable
- bearings are lubricated with grease grade 3
(e.g. Shell Alvania 3, Esso Beacon 3)



Nachschmiersysteme für WINKEL-Rollen
Lubrication systems for WINKEL bearings
(Seite/page 144)

Typ Type	Artikel-Nr. Article no.	D mm D mm	T mm T mm	d -0.05 mm d -0.05 mm	H mm H mm	h mm h mm	B mm B mm	A mm A mm	α mm α mm
PR 2.054	205.071.000	64,8	42	30	34,5	26,5	20	50	20°
PR 2.055	205.072.000	73,8	48	35	42,0	34,0	23	57	20°
PR 2.056	205.073.000	81,8	53	40	45,5	34,0	23	61	20°
PR 2.058	205.074.000	92,8	59	45	54,0	41,0	30	68	20°
PR 2.061	205.075.000	111,8	71	60	65,5	51,5	31	82	20°
PR 2.062	205.076.000	127,8	80	60	67,8	51,5	37	92	20°
PR 2.063	205.077.000	153,8	103	60	74,0	54,0	45	116	15°

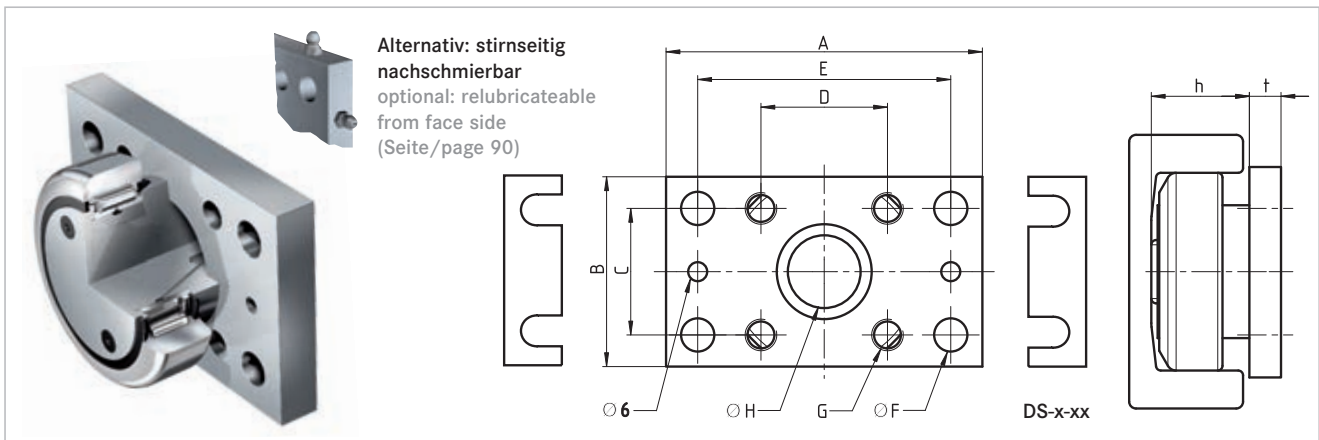
C = Dyn. Tragzahl Radiallager (ISO 281/1), C₀ = Stat. Tragzahl Radiallager (ISO 76)
F_r = Tragzahl Radiallager zulässige Belastung zwischen Rolle und Profil

WINKEL-Rollen | WINKEL Bearings



Passende Anschraubplatten

Suitable flange plates

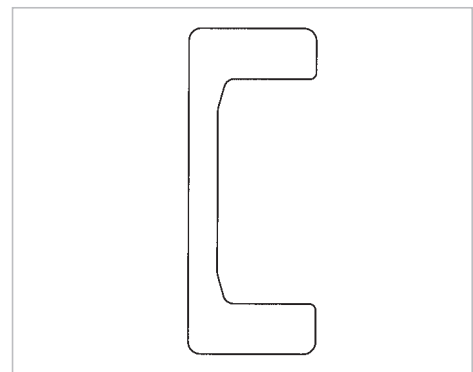
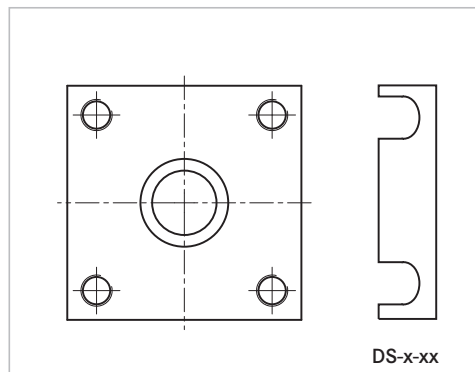


Typ Type	Artikel-Nr. Article no.	A	B	C	D	E	Ø F Ø F	G	Ø H Ø H	s	t	Distanzsteckblech t=0,5mm Washer t=0.5mm		Distanzsteckblech t=1,0mm Washer t=1.0mm	
AP 0	212.003.000	100	60	40	40	80	10,5	M10	30	30,5	10	DS-0-0,5	238.020.000	DS-0-1,0	238.020.001
AP 1	212.004.000	120	80	50	50	90	12,5	M12	35	36,0	15	DS-1-0,5	238.021.000	DS-1-1,0	238.021.001
AP 2	212.005.000	120	80	50	50	90	12,5	M12	40	36,5	15	DS-2-0,5	238.021.000	DS-2-1,0	238.021.001
AP 3.1	212.006.001	160	100	60	60	120	17,0	M16	45	44,0	20	DS-3.1-0,5	238.105.000	DS-3.1-1,0	238.105.001
AP 4	212.007.001	180	120	80	80	140	17,0	M16	60	56,0	20	DS-4-0,5	238.023.000	DS-4-1,0	238.023.001
AP 6	212.008.000	200	150	100	100	160	17,0	M16	60	58,5	20	DS-6-0,5	238.024.000	DS-6-1,0	238.024.001

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Wiper page 94

Anschraubplatten quadratisch Reihe AP-Q S. 96
Flange plates square series AP-Q page 96

Profile Seite 72
Profiles page 72



Typ Type	F _R kN F _R kN	C kN C kN	C ₀ kN C ₀ kN	u/min max. r/pm max.	Gewicht kg Weight kg	Anschraubplatten Flange plates	Profile Profiles
PR 2.054	10,30	31,0	35,5	900	0,60	AP0 AP0-Q	PR 0 NbV
PR 2.055	12,40	45,5	51,0	900	0,90	AP1 AP1-Q	PR 1 NbV
PR 2.056	12,90	48,0	56,8	800	1,10	AP2 AP2-Q	PR 2 NbV
PR 2.058	22,40	68,0	72,0	750	1,80	AP3.1 AP3-Q	PR 3 NbV
PR 2.061	23,80	81,0	95,0	650	3,05	AP4 AP4-Q	PR 4 NbV
PR 2.062	33,90	110,0	132,0	550	4,35	AP4 AP4-Q	PR 5 NbV
PR 2.063	59,20	151,0	192,0	450	7,10	AP6 AP6-Q	PR 6 NbV

C = Dynamic load capacity radial bearing (ISO 281/1), C₀ = Static load capacity radial bearing (ISO 76)
F_R = Load capacity radial bearing max. allowable force between bearing and profile