

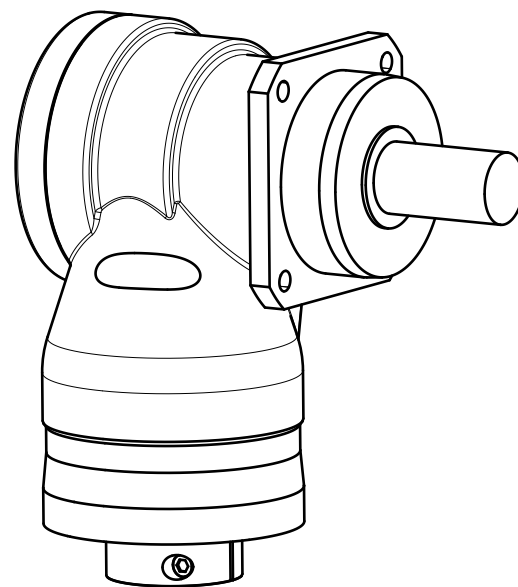
#### Materials / Surfaces:


Input flange: Aluminum / Untreated  
 Angle housing: Aluminum / Anodized (black)  
 Output flange: Steel / Untreated

#### Hints:

Please pay attention to the operating and mounting instructions.  
 Subject to modifications.

Variables on the drawing are dependent upon the motor.  
 The given dimensions are exemplary.



	Scale: 1:2	DIN A3	ISO
	Revision status: N from: 05/2020		
	Changed revision status: M from: 09/2018		
General tolerance DIN ISO 2768-cl	W PLN115-aii-SSSB3AF-R(D20)		
Neugart GmbH Keltenstr. 16 D-77971 Kippenheim			Sheet 1/2

General gearbox data	Character	Unit	
Bevel gearbox – gearing type	-	-	Hypoid teeth
Rotation direction	-	-	Input and output in opposite directions
Number of stages	p	-	1-stage
Output shaft bearing	-	-	Tapered roller bearing
Service Life (L10h)	t <sub>L</sub>	h	20.000
Max. operating temperature	T <sub>min</sub> / T <sub>max</sub>	°C	-25 / +90
Protection class	-	-	IP 65
Lubrication (lifetime lubrication)	-	-	Standard lubrication (Castrol Optigear Synthetic 800)
Installation position	-	-	Any
Max. bending moment based on the gearbox input flange (for motor weight) (1)	M <sub>b</sub>	Nm	53
Motor shaft concentricity / Coaxiality and axial runout Motor flange	-	-	0,015 / 0,03 (Measuring methods according to DIN EN 50347)
Required motor shaft tolerance	-	-	j6; k6
Min. permissible motor shaft length	L <sub>20min</sub>	mm	14
Reference operating mode	-	-	S1
Reference operating factor	K <sub>A</sub>	-	1
Reference speed	n <sub>2</sub>	rpm	100
Reference ambient temperature	T <sub>Amb</sub>	°C	20
Radial force for output bearing based on shaft center after L10h=20.000h with Fa=0N	F <sub>r 20.000h</sub>	N	6000
Axial force for output bearing based on gearbox axis after L10h=20.000h with Fr=0N	F <sub>a 20.000h</sub>	N	7000
Radial force for output bearing based on shaft center after L10h=30.000h with Fa=0N	F <sub>r 30.000h</sub>	N	6000
Axial force for output bearing based on gearbox axis after L10h=30.000h with Fr=0N	F <sub>a 30.000h</sub>	N	6100
Maximum radial force based on shaft center and T2=0Nm	F <sub>r Max</sub>	N	6000
Maximum axial force based on gearbox axis and T2=0Nm	F <sub>a Max</sub>	N	7000

(1) Max. motor weight\* in kg = 
$$\frac{0,2 \times M_b}{\text{motor length in m}}$$

- \* with symmetrically distributed motor weight
- \* with horizontal and stationary mounting

Ratio-dependent gearbox data	Character	Unit					
Ratio	aii	-	4	5	7	8	10
Nominal output torque	T <sub>2N</sub>	Nm	160	140	91	90	75
Max. output torque for 30.000 output shaft rotations	T <sub>2max</sub>	Nm	256	224	145	144	120
Emergency stop torque permitted 1000 times	T <sub>2Stop</sub>	Nm	400	400	300	300	300
Average idle torque for n1=3.000 rpm and 20 °C gearbox temperature	T <sub>0</sub>	Nm	6,85	6,5	6,2	6,1	6
Average thermal input speed at 50% T2N, S1, and T_Amb Operating temperature may not be exceeded!	n <sub>1N 50%</sub>	rpm	1150	1250	1400	1450	1500
Average thermal input speed at 100% T2N, S1, and T_Amb Operating temperature may not be exceeded!	n <sub>1N 100%</sub>	rpm	900	1050	1300	1300	1400
Max. mechanical input speed Operating temperature may not be exceeded!	n <sub>1 Limit</sub>	rpm	9500	9500	9500	9500	9500
Torsional backlash based on output shaft	j <sub>t</sub>	arcmin	< 5	< 5	< 5	< 5	< 5
Torsional stiffness based on output shaft	c <sub>g</sub>	Nm/arcmin	13,5	12,8	11,9	11,1	10,1
Efficiency at T2N, gearbox temperature 70 °C and n1=1.000rpm	η	%	95	94	89	89	86
Running noise at n1=3.000 rpm without load at a distance of 1m	Q <sub>g</sub>	dB(A)	68	68	68	68	68
Gearbox weight	m <sub>G</sub>	kg	9,8	9,8	9,8	9,8	9,8
Mass moment of inertia based on clamping system diameter input	J	kgcm <sup>2</sup>	5,875	5,366	4,951	4,879	4,767



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