



A technical line drawing of a mechanical component, likely a pump or motor housing. It features a cylindrical main body with a flange at one end. A mounting bracket is attached to the side of the cylinder. The drawing is a black and white line art illustration.

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General gearbox data	Character	Unit	
Planetary gearbox - gearing type	-	-	Straight teeth
Rotation direction	-	-	Input and output in the same direction
Number of stages	p	-	1-stage
Output shaft bearing	-	-	Inclined roller bearings
Service life (L10h)	t _L	h	20.000
Max. operating temperature	T _{min} / T _{max}	°C	-25 / +90
Protection class	-	-	IP 65
Lubrication (lifetime lubrication)	-	-	Standard lubrication (Castrol Optigear Synthetic 800/150)
Installation position	-	-	Any
Max. bending moment based on the gearbox input flange (for motor weight) (1)	M _b	Nm	18
Motor shaft concentricity / Coaxiality and axial runout Motor flange	-	mm	0,015 / 0,03 (Measuring methods according to DIN EN 50347)
Required motor shaft tolerance	-	-	j6; k6
Min. permissible motor shaft length	L _{20 min}	mm	15
Reference operating mode	-	-	S1
Reference operating factor	K _A	-	1
Reference speed	n ₂	rpm	100
Reference ambient temperature	T _{Amb}	°C	20
Radial force for output bearing based on shaft end after L10h=20,000h with Fa=0N	F _{r 20.000h}	N	2150
Axial force for output bearing based on gearbox axis after L10h=20,000h with Fr=0N	F _{a 20.000h}	N	4300
Radial force for output bearing based on shaft end after L10h=30,000h with Fa=0N	F _{r 30.000h}	N	1900
Axial force for output bearing based on gearbox axis after L10h=30,000h with Fr=0N	F _{a 30.000h}	N	3800
Maximum radial force based on shaft end and T2=0Nm	F _{r Max}	N	2150
Maximum axial force based on gearbox axis and T2=0Nm	F _{a Max}	N	4300

(1) Max. motor weight* in kg =

0,2 x M_b

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 _{2N}	Nm	60	65	45	40	27
Max. output torque for 30.000 output shaft rotations	T _{2max}	Nm	96	104	72	64	43
Emergency stop torque permitted 1000 times	T _{2Stop}	Nm	120	130	90	90	90
Average idle torque for n1=3.000 rpm and 20 °C gearbox temperature	T ₀	Nm	0,7	0,55	0,4	0,35	0,3
Average thermal input speed at 50% T2N, S1, and T_Amb Operating temperature may not be exceeded!	n _{1N 50%}	rpm	2100	2450	3200	3550	4100
Average thermal input speed at 100% T2N, S1, and T_Amb Operating temperature may not be exceeded!	n _{1N 100%}	rpm	1750	2000	2800	3100	3800
Max. mechanical input speed Operating temperature may not be exceeded!	n _{1 Limit}	rpm	14000	14000	14000	14000	14000
Torsional backlash based on output shaft	j _t	arcmin	< 3	< 3	< 3	< 3	< 3
Torsional stiffness based on output shaft	c _g	Nm/arcmin	13,2	14,8	10,1	10,1	7,7
Efficiency at T2N, gearbox temperature 70 °C and n1=1.000rpm	η	%	97	97	95	95	92
Running noise at n1=3.000 rpm without load at a distance of 1m	Q _g	dB(A)	60	60	60	60	60
Gearbox weight	m _G	kg	1,5	1,5	1,5	1,5	1,5
Mass moment of inertia based on clamping system diameter input	J	kgcm ²	0,288	0,256	0,231	0,225	0,217



PLFN064-aii-SSSD3AD-Z(D20)
/(L20)/(D21)/(D22)/B5/(G3)