

Solution details for

3242G012BX4

Your comments

Your Requirements

Load transmission	Direct rotational	
Ambient temperature	22	°C
Available diameter	100	mm
Available length	400	mm
Available supply voltage	48	V
Available current	20	A
Efficiency, min.	10	%
Required load speed	5.500	1/min
Required load torque	0,028	Nm

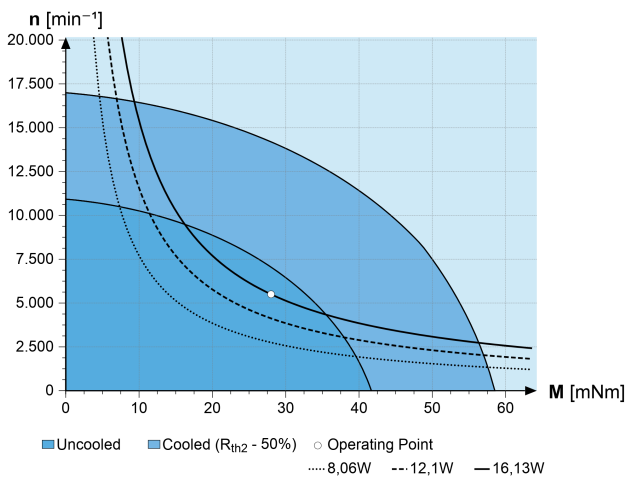
Results of the Load Calculation

Load current	1,61	A
Load voltage	13,06	V
Motor winding temperature	67,73	°C
Motor housing temperature	61,31	°C
Required motor torque	28	mNm
Required motor speed	5.500	1/min
Output power	16,13	W
Efficiency (over all)	76,91	%

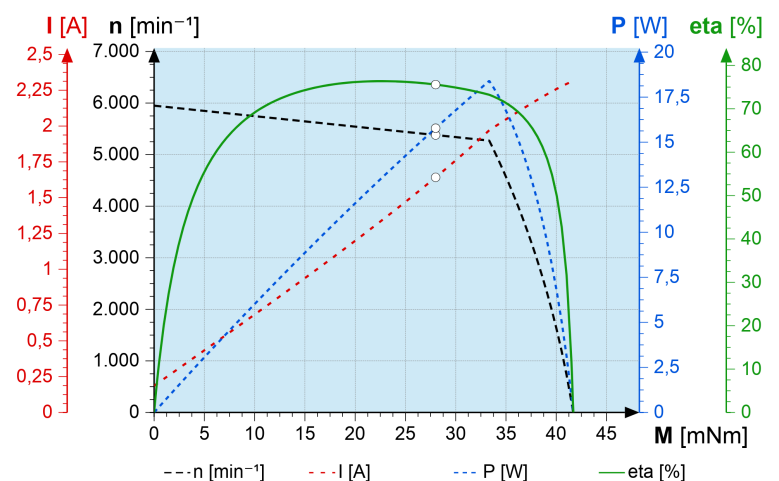
Overall Dimensions

Diameter	32	mm
Length	44,2	mm
Mass	179	g

Operating Area



Characteristic curves



Motor Characteristic Data

Nominal voltage	U_N	12	V
Terminal resistance	R	920	m Ω
Torque constant	k_M	20,7	mNm/A
No load speed	n_0	5.600	1/min
Stall torque	M_H	268,7	mNm
Speed constant	k_n	461	1/min/V
Rotor inductance	L	60	μ H
Slope of n-M curve	$\Delta n/\Delta M$	20,5	1/min/mNm
Rotor inertia	J	30	gcm ²
Mechanical time constant	τ	6,4	ms
Efficiency max.	η_{max}	78	%

Contact

Do you have any questions regarding FAULHABER Products, our Services, or other Drive System related issues?
Please contact your local representative or fill out our contact form.
<https://www.faulhaber.com/contact/>

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