

Engineering motordata (WIN 978)

DC bus voltage	48 V DC
Nominal AC voltage	33 V AC (rms)
Rated voltage	25 V AC (rms)
Rated power	160 W
Rated speed	3000 rpm
Rated torque	0.51 Nm
Rated current	6.01 A (rms)
Peak torque	2.16 Nm
Peak current	27.5 A (rms)
Stall torque	0.54 Nm
Stall current	6 A (rms)
No load speed	5930 rpm
EMF constant ±10%	5.5 V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.09 Nm / A (rms)
Torque constant ±10% @ rated load	0.08 Nm / A (rms)
Number of poles	6
Electrical time constant	1.21 ms
Winding terminal resistance	0.99 Ω
Rotary field terminal inductance	1.2 mH

Customs info

HS Code	85015100
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Mechanical motor data (setting 48)

Max mechanical speed	12000 rpm
Mech. time constant	1.45 ms
Thermal time constant	12 min
Rotor inertia	0.07 kgcm ²
Protection	IP64
Color	RAL 9005
Cooling	Convection
Motor-only mass	0.9 kg
Max. axial force 20kh	45 N
Max. radial force 20kh	234 N*
Max. axial force 100kh	26 N
Max. radial force 100kh	137 N*

* Defined for point of action at ½ output shaft length

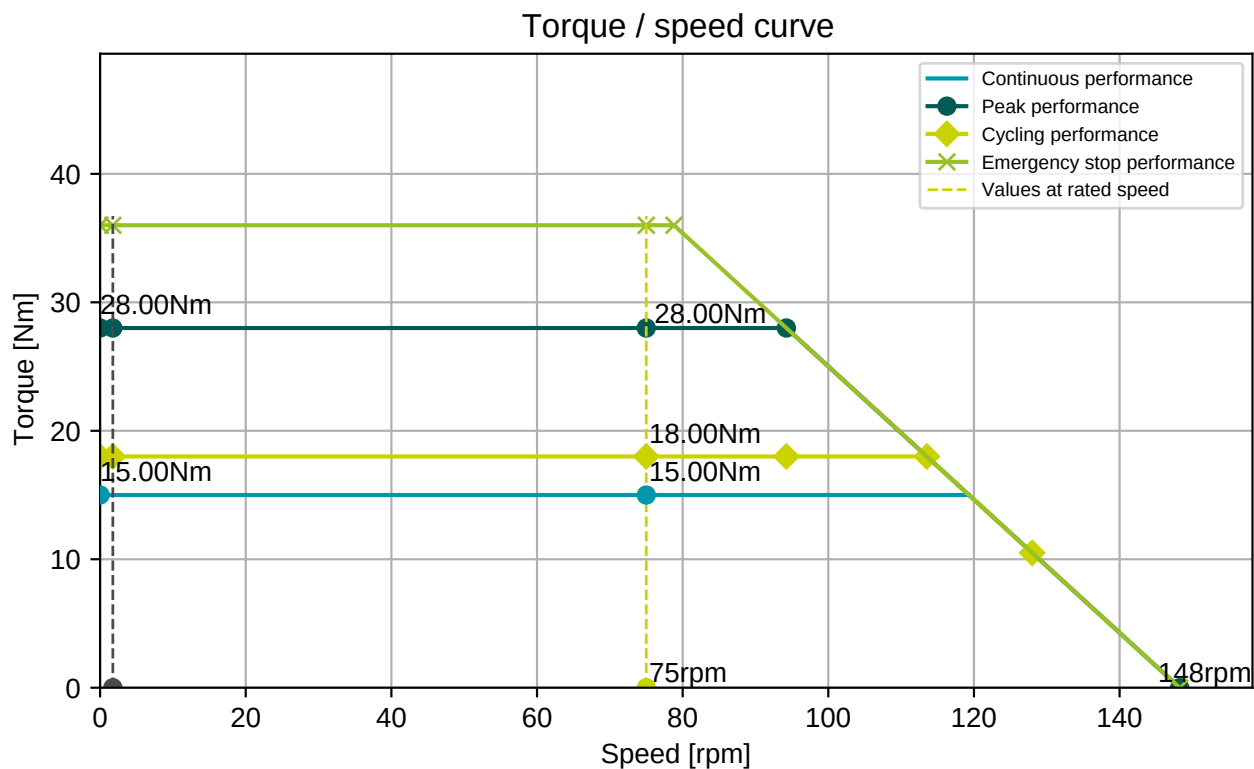
Sensors

Temperature	PT1000 {PT1000}
Feedback	EEM37 (HDSL) multi-turn, 17+12 bits

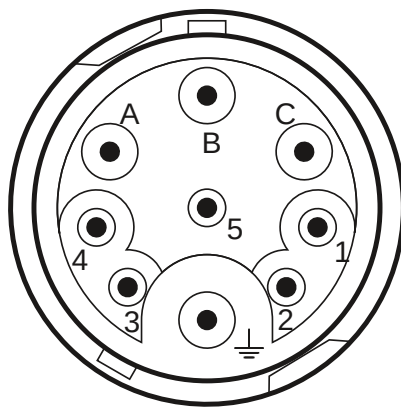
Gearbox engineering data		Gearbox mechanical data	
Gear ratio	40	Radial force for 20'000h	200 N*
Efficiency	94 %*	Radial force for 30'000h	160 N*
Torsional stiffness	0.95 Nm/arcmin	Max. radial force	200 N*
Number of stages	2	Axial force for 20'000h	200 N
Rated output torque	15 Nm	Axial force for 30'000h	160 N
Cycling output torque	18 Nm	Max. axial force	240 N
Max output torque	28 Nm	Tilting moment for 20'000h	6 Nm
Emergency output torque	36 Nm	Tilting moment for 30'000h	4 Nm
Rated input speed	5000 rpm	Max. bending moment	4.5 Nm
Max input speed	18000 rpm	Output shaft design	Shaft key
Operating temperature	<-25; 90> °C	Mass	0.44 kg
Max. backlash	< 19 arcmin	Input inertia	0.022 kgcm ²
Service life	20000 h	Protection	IP54
* at rated speed & torque		* Defined for point of action at ½ output shaft length	

Lubrication	
Type	Standard
Lubricant	Grease (lifetime lubrication)

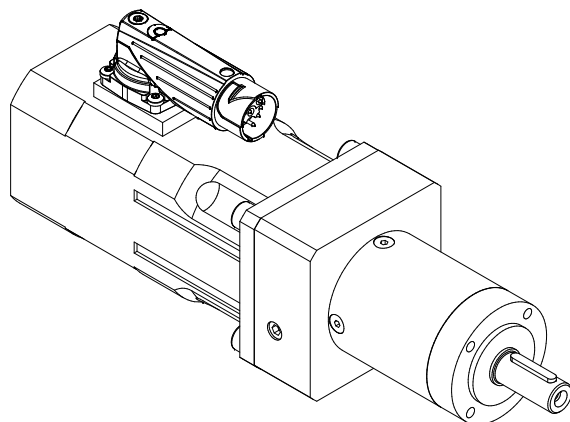
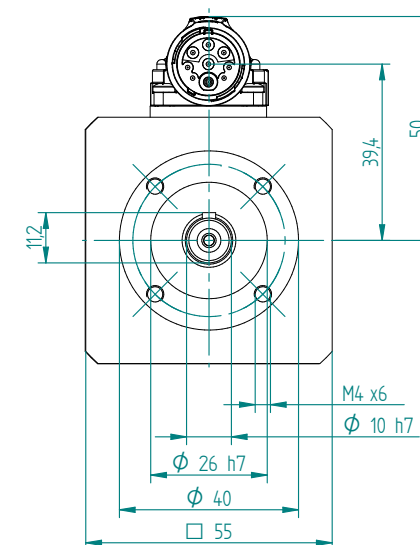
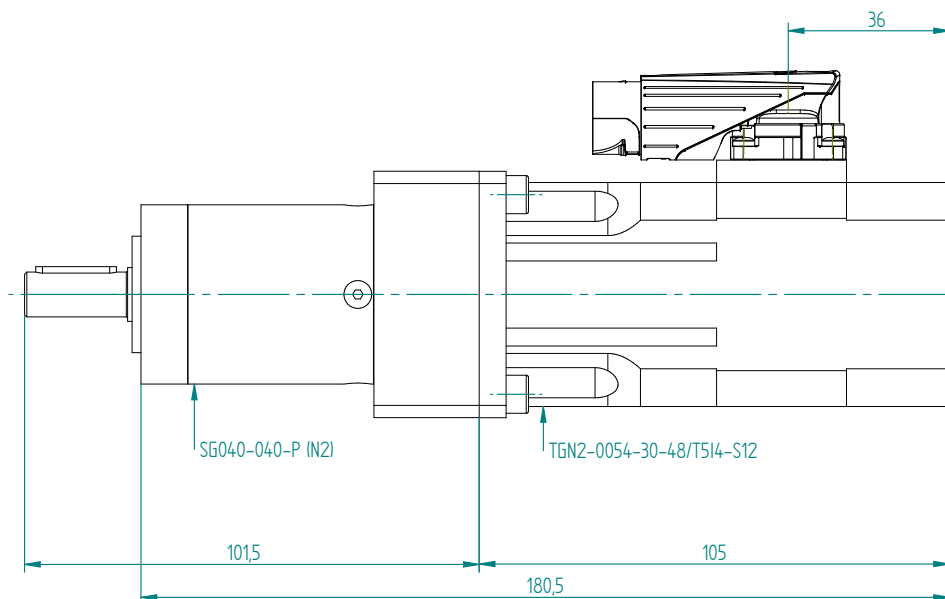
Actuator data	
Rated speed	75 rpm
Rated torque	15.00 Nm
Cycling torque	18.00 Nm
Peak torque	28.00 Nm
Emergency stop torque	36.00 Nm
EMF constant ±10%	220.0 V AC (rms) / 1000rpm
Torque constant ±10% @ rated load	3.19 Nm / A (rms)
Total mass	1.34 kg
Output inertia	147.2 kgcm ²


EGA201N00000800000

M15, 9 poles, rotary


Connector 1 (304)

A	U
B	V
C	W
PE	PE
1	Brake+
2	Brake-
3	+Us/DSL+
4	GND/DSL-



Bill of materials			
Part Name	Quantity	Type	Tools
Screw_DIN 912_A4 - 70_M5x16	4	A4 - 70	inbus - M5

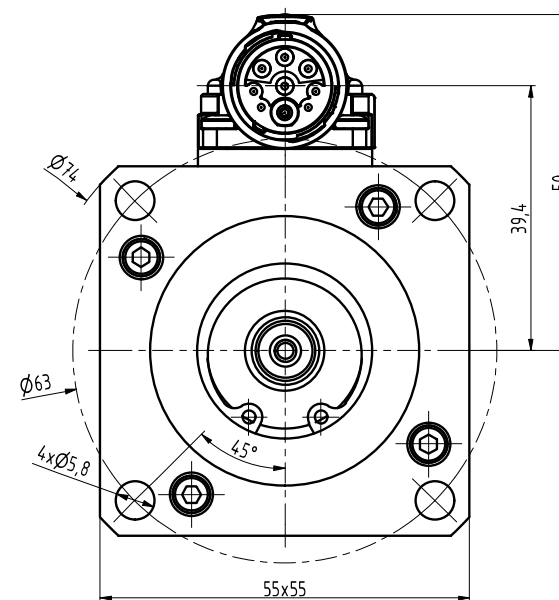
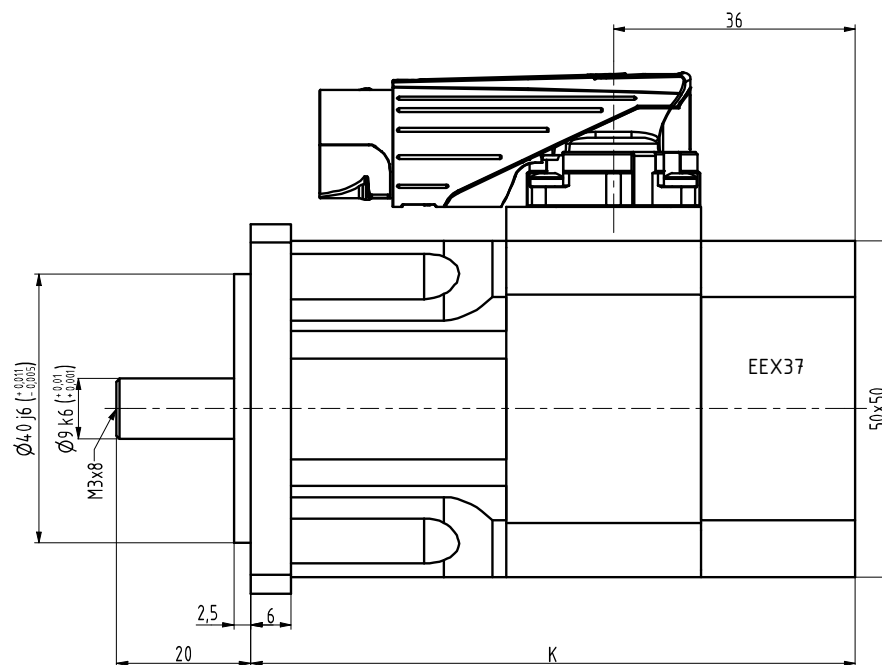
Untolerated dimensions: ISO 2768 – m

Drawn:	Stepan Bednar	Created:	23.06.2025	Modified:	23.06.2025
Checked / approved by:	- - -	PROJECT NAME:	Gearbox SG040-040-P (N2)		

Material:	-	
Semiprod.	-	NUMBER - TITLE: SG040-040-P (IN2)

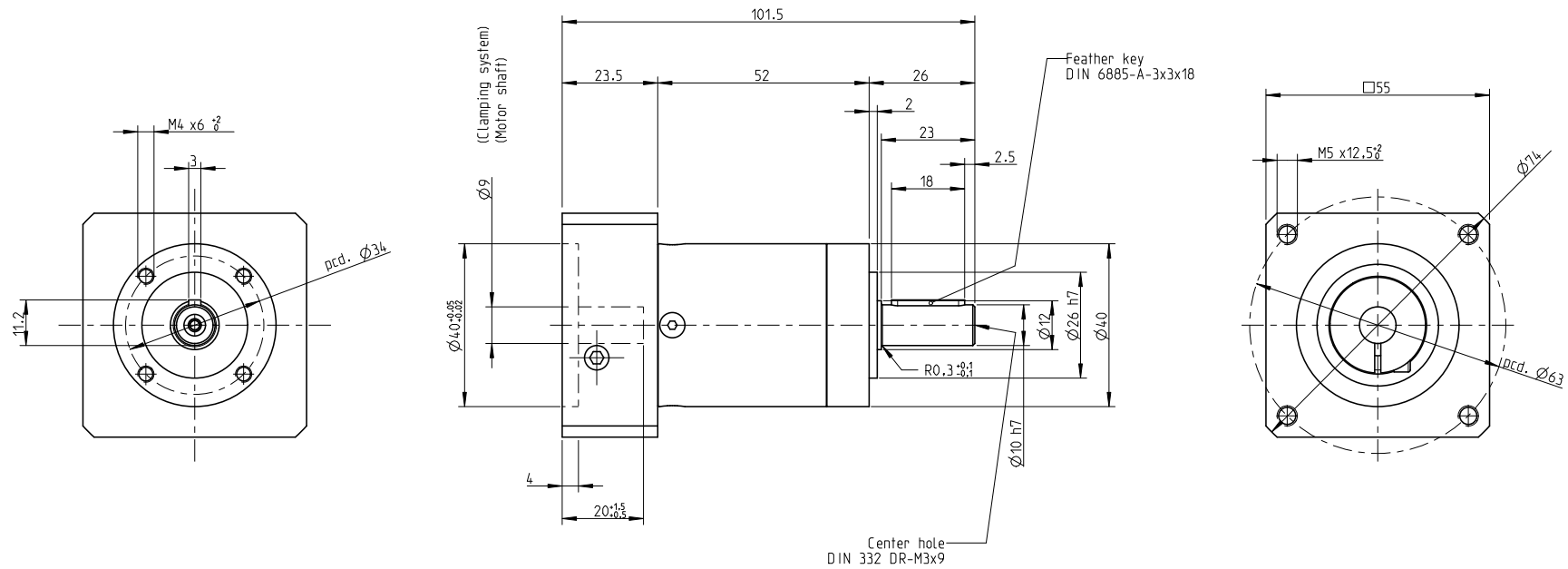
Project ID's			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM ANGLES ±XXX° or ±XXX", 2 PL ±XXX, 3 PL ±XXXX.		SIZE A3	QUANTITY: - - - -
			REVISION: - - -

Designer: Bednar Mail: bednar@tgdrives.cz Tel: +420 724 844 770	 TG drives Olomoucka 1290/79 627 00 Brno Czech republic	 SOLD EDGE	0245-DataStorage-0245-045-P 0030245-045-P 003047	SCALE :-	WEIGHT :-	SHEET 1 OF 3
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TYP	K
N2-0028	90
N2-0054	105
N2-0075	120
N2-0095	135

INDEX	ZMĚNA	DATUM	PODPIS		
ZN.MAT.			T.O.	H.MOTNOST kg	MĚR.
ROZM.-POLOT.				ČSN	TR.Č.
POM. ZAR.				POZN.	Č. KUSOVNIKU
VYPR. Ošlejšek	NORM.REF.			STARÝ V.	Č.V.
PŘEKR.					
TECHNOL.	SCHVÁLIL Ošlejšek	01.07.2021			
NÁZEV	Motor N2			N2068 05 Z_I_S1	
				Listů	List



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ZM.MAT.			T.O.	HMOTNOST kg	MĚŘ.
ROZM.-POLOT.				ČSN	TRČ.
ROZM. ZAR.				POZN.	Č. KUSOVNÍKU
VYPR.	NORM. REF.			STARÝ V.	Č.V.
PŘEKR.					
TECHNOL.	SCHVÁLIL.	12.9.2020			
NÁZEV	Gearbox SG040			TGN2, TGT2, TGH2	
				Listů	List