Engineering motordata (WIN 1609)		
DC bus voltage	48	V DC
Nominal AC voltage	33	V AC (rms)
Rated voltage	24	V AC (rms)
Rated power	346	W
Rated speed	3000	rpm
Rated torque	1.10	Nm
Rated current	11.14	A (rms)
Peak torque	4.94	Nm
Peak current	53.7	A (rms)
Stall torque	1.3	Nm
Stall current	11.4	A (rms)
No load speed	4740	rpm
EMF constant ±10%	6.91	V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.114	Nm / A (rms)
Torque constant ±10% @ rated load	0.099	Nm / A (rms)
Number of poles	10	
Electrical time constant	1.20	ms
Winding terminal resistance	0.275	Ω
Rotary field terminal inductance	0.33	mH

Customs info	
HS Code	85015100

Mechanical motor data (setting 48)		
Max mechanical speed	12000	rpm
Mech. time constant	1.82	ms
Thermal time constant	24	min
Rotor inertia	0.5	kgcm²
Protection	IP64	
Color	RAL 9005	
Cooling	Convection	

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

Brake		
Braking torque	4.50	Nm
Voltage	24	V DC
Power @20°C	12.0	W
Current @20°C	0.50	A
Inertia	0.20	kgcm²
Mass	0.47	kg

Gearbox engineering data		
Gear ratio	40	
Efficiency*	89	%
Torsional stiffness	2.5	Nm/arcmin
Number of stages	2	
Rated output torque	34	Nm
Cycling output torque	40	Nm
Max output torque	61	Nm
Emergency output torque	80	Nm
Rated input speed	4500	rpm
Max input speed	13000	rpm
Operating temperature	<-25; 90>	°C
Max. backlash	< 18	arcmin
Service life	20000	h

** at rated speed & torque*

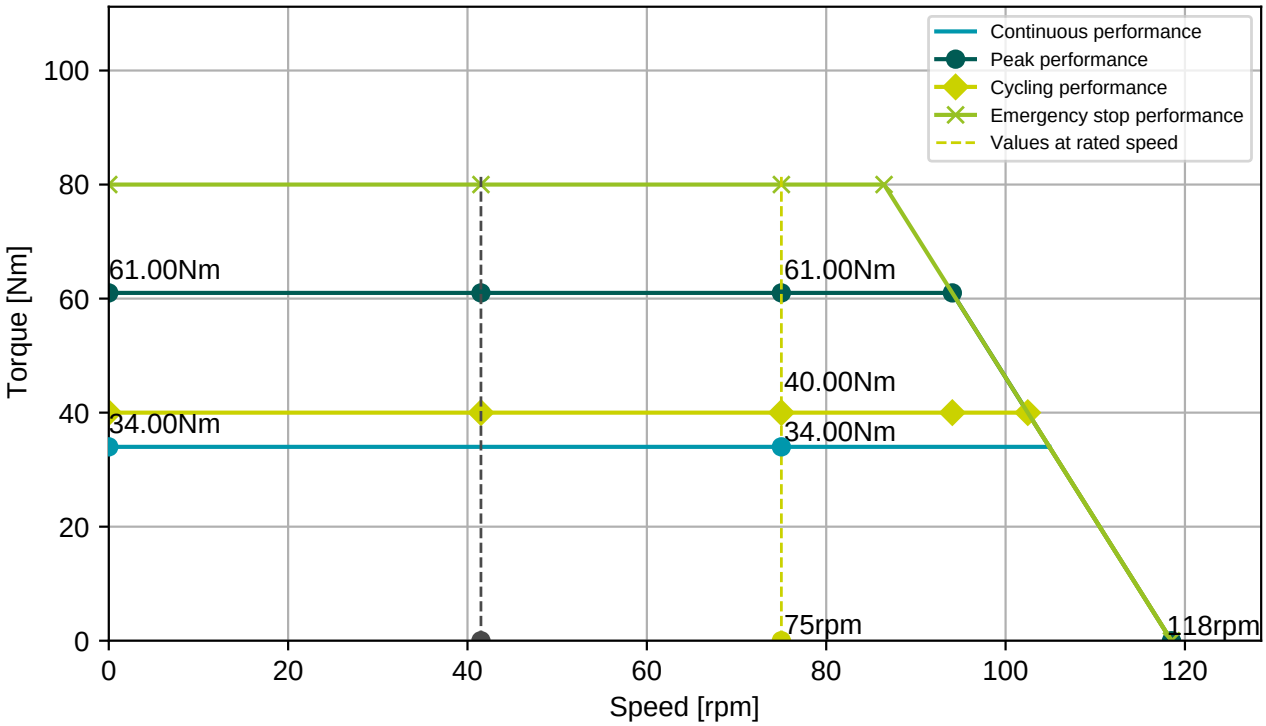
Lubrication	
Type	Standard
Lubricant	Grease (lifetime lubrication)

Gearbox mechanical data		
Radial force for 20'000h*	400	N
Radial force for 30'000h*	340	N
Max. radial force*	700	N
Axial force for 20'000h	500	N
Axial force for 30'000h	450	N
Max. axial force	800	N
Tilting moment for 20'000h	14	Nm
Tilting moment for 30'000h	12	Nm
Max. bending moment	12	Nm
Output shaft design	Shaft key	
Mass	1.8	kg
Input inertia	0.228	kgcm²
Protection	IP54	

** Defined for point of action at ½ output shaft length*

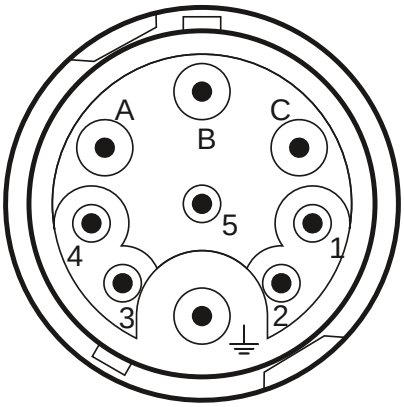
Actuator data		
Rated speed	75	rpm
Rated torque	34.00	Nm
Cycling torque	40.00	Nm
Peak torque	61.00	Nm
Emergency stop torque	80.00	Nm
EMF constant ±10%	276.4	V AC (rms) / 1000rpm
Torque constant ±10% @ rated load	3.52	Nm / A (rms)
Output inertia	1164.8	kgcm²

Torque / speed curve

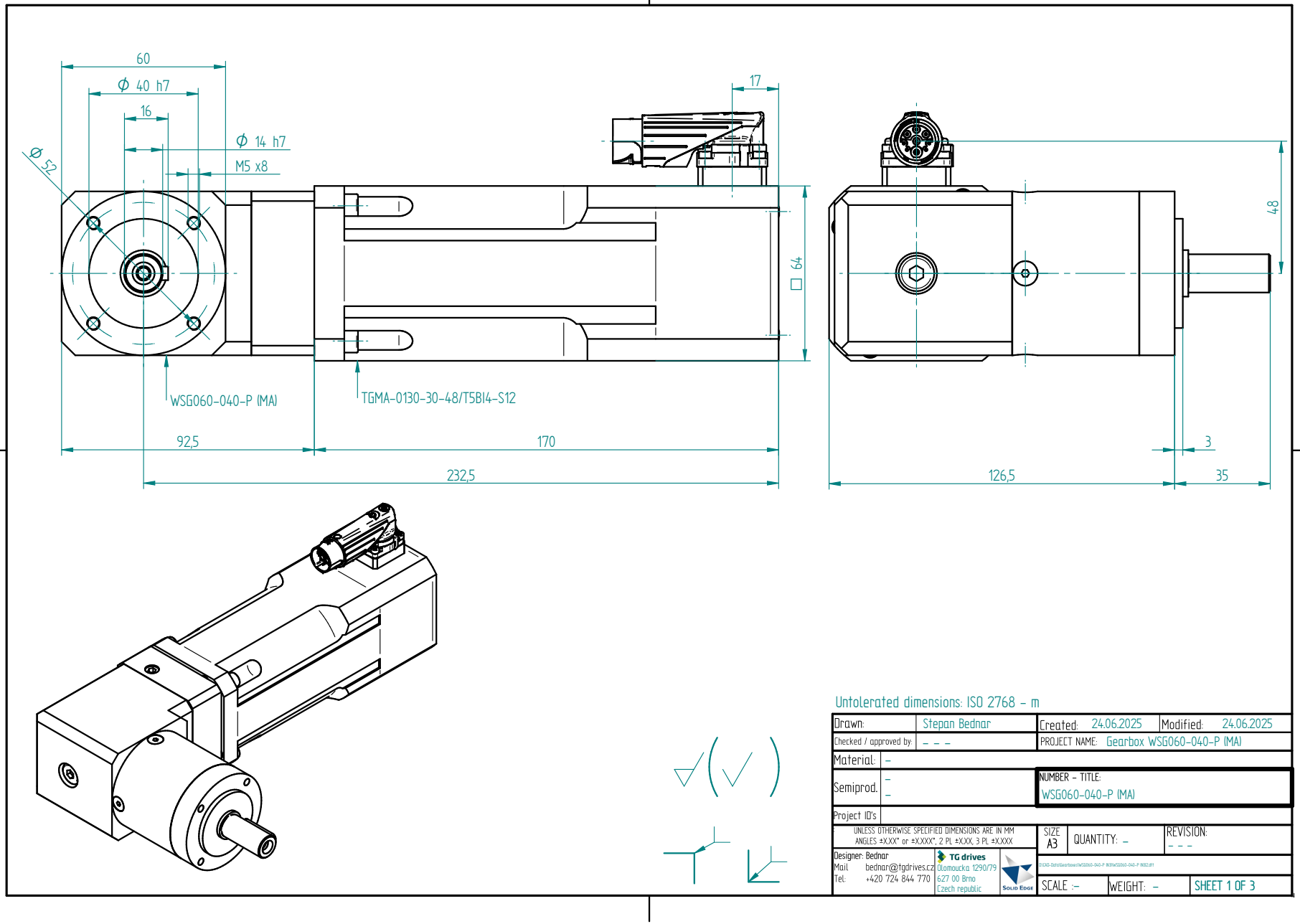


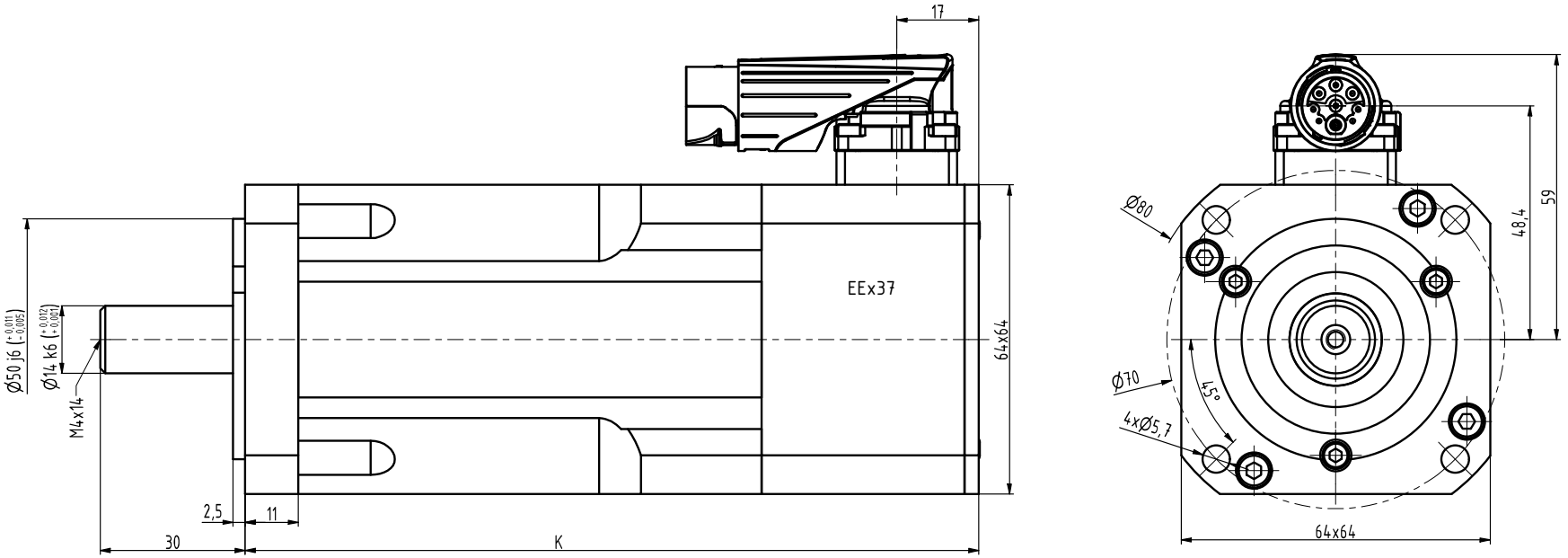
EGA201N00000800000

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-


60
Φ 40 h7
16
Φ 14 h7
M5 x8
Ø 52
17
□ 64
48
WSG060-040-P (MA)
TGMA-0130-30-48/T5BI4-S12
92,5
170
232,5
126,5
3
35
Untolerated dimensions: ISO 2768 - m
Drawn: Stepan Bednar
Created: 24.06.2025
Modified: 24.06.2025
Checked / approved by: - - -
PROJECT NAME: Gearbox WSG060-040-P (MA)
Material: -
Semiprod. -
-
NUMBER - TITLE:
WSG060-040-P (MA)
Project ID's
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM
ANGLES ±X,XX° or ±X,XXX", 2 PL ±X,XX, 3 PL ±X,XXX
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
SCALE :-
WEIGHT: -
SHEET 1 OF 3



TYP	K
MA-0075	152
MA-0130	170
MA-0175	188
MA-0220	206
MA-0300	242

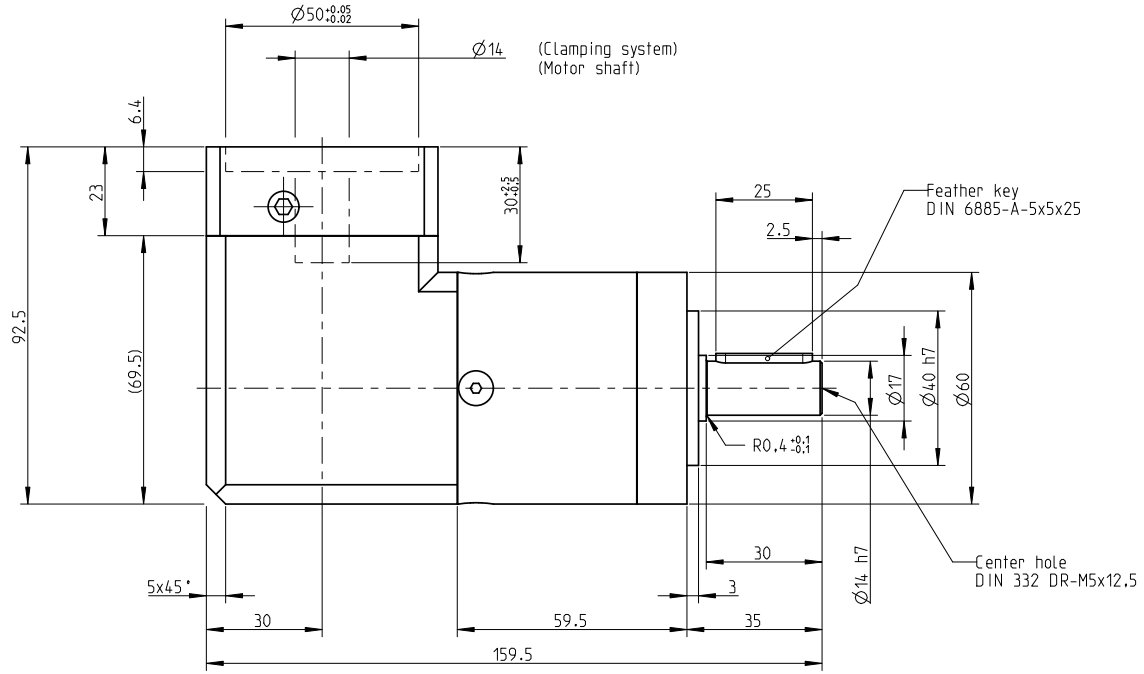
INDEX	ZMĚNA	DATUM	PODPIS

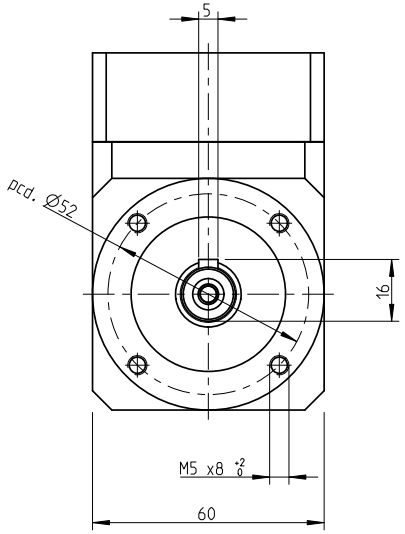
ZN.MAT.			T.O.	HMOTNOST kg	MĚŘ.
ROZM.-POLOT.					
POM. ZAŘ.				ČSN	TŘ.Č.
VYPR. Ošlejšek	NORM.REF.			POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.	SCHVÁLIL Ošlejšek	05.12.2024		STARÝ V.	Č.V.

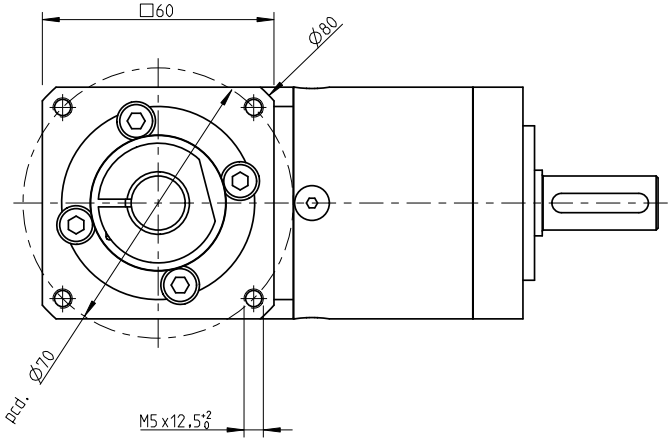
NÁZEV
Motor MA

MA007 03 B Z_I_S1

Listů List







INDEX	ZMĚNA	DATUM	PODPIS		
ZM.MAT.			T.O.	HMOTNOST kg	MĚŘ.
ROZM.-POLOT.					
ROZM. ZAŘ.				ČSN	TŘ.Č.
VYPR.		NORM. REF.		POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.		SCHVÁLIL.	12.9.2020	STARÝ V.	Č.V.

NÁZEV

Gearbox WSG060

TGMA

Listů List