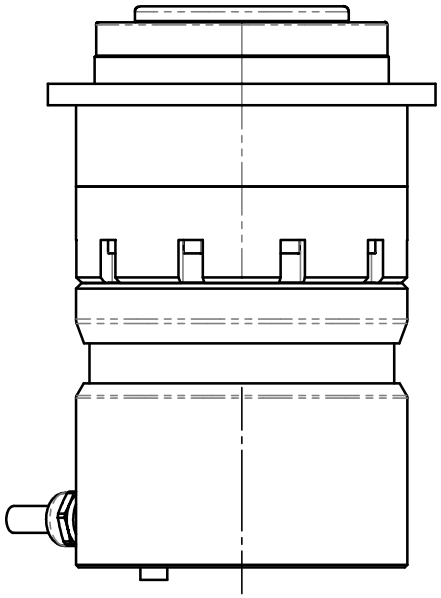


NOTES

1. ELECTRICAL SPEC..... NO. 0240
2. GENERAL ASSEMBLY SEE DRG.....5312335
3. INGRESS PROTECTION..... IP65
4. BRAKE - STATIC TORQUE (MIN) 4NM (@20°C)
5. BRAKE - OPERATIONAL VOLTAGE 24VDC (+5%/-10% VDE0580)
6. BRAKE - MAX RELEASE VOLTAGE..... 18VDC
7. MAX RADIAL LOAD: 3,675 N (APPLIED TO THE OUTPUT FLANGE CENTER)
8. MAX AXIAL LOAD: 1,838 N (APPLIED TO THE OUTPUT FLANGE CENTER)
9. TEMPERATURE SENSOR..... NTC 10K

PROVISIONAL MOTOR CONSTANTS

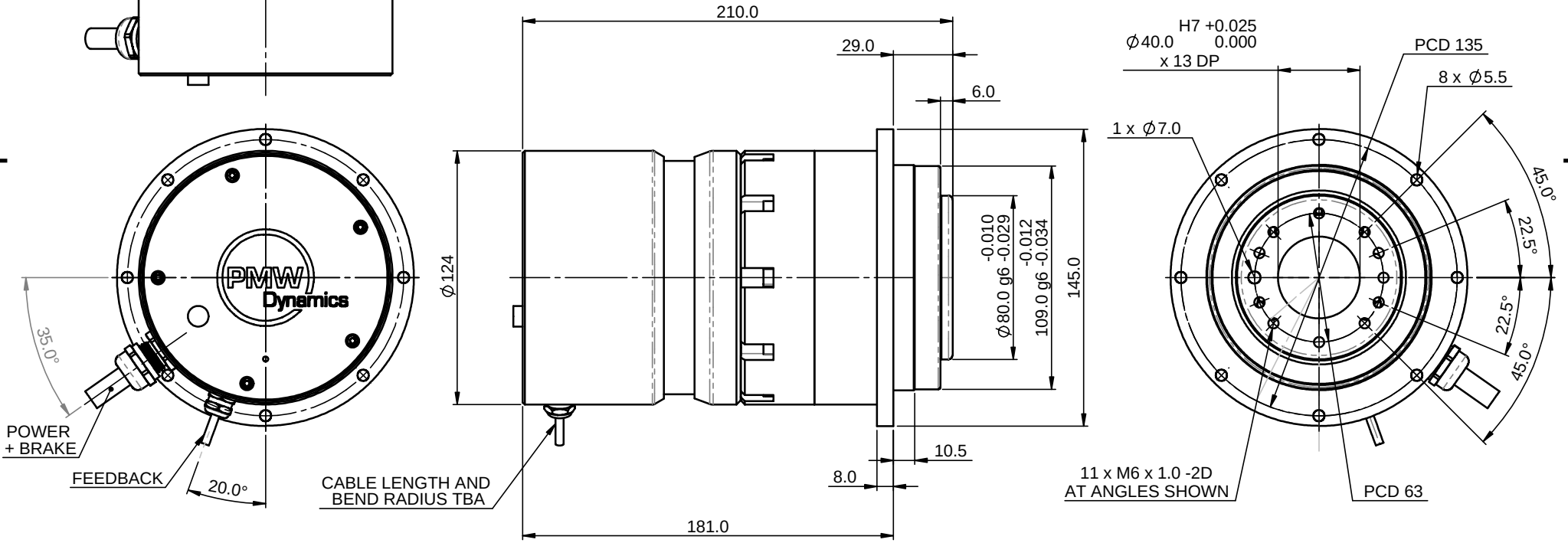
VOLTAGE.....Ke 0.118 V/1000 r.p.m
TORQUE.....Kt 0.0998 Ncm/ Amp

PROVISIONAL MOTOR RATINGS

VOLTAGE.....48VDC
CURRENT.....7.5 Amps
TORQUE.....1.0 Nm
EFFICIENCY.....90 %
POWER.....320 Watts

PROVISIONAL GEARBOX RATINGS

NOM INPUT SPEED.....2800 rpm
MAX OUTPUT SPEED.....5,500 rpm
TILTING MOMENT.....675 Nm
EFFICIENCY (FULL LOAD @ 25℃.....94%
TORSIONAL STIFFNESS.....82 Nm/min
LIFE (NOM TORQUE & SPEED).....20,000
MIN/MAX OP TEMP.....-15 ℃ / +45℃
MAX BODY TEMP.....90 ℃
NOISE LEVEL.....62Db
LUBRICATION.....GREASE



ISS.	DATE	CR No	ZONE	INITIALS
A	15/06/2023	1st Rel		DoC
01	17/08/2023	A		

UNLESS SPECIFIED
SHAFT CENTRES SHALL CONFORM TO BS.EN.ISO 6411-1997 TYPE A.
CENTRE DRILL TO CONFORM TO ISO.866
ALL METRIC THREADS TO BE COARSE CLASS 6H OR 6g

PART MARKING
INDELIBLY MARK ON PART No. WHERE MARKED

THIRD ANGLE PROJECTION

DRAWN BY DoC	DATE 23/03/2023
CHECKED BY RB	DATE 15/06/2023
APPROVED BY PK	DATE 17/08/2023

TOLERANCES UNLESS STATED
0. ± 0.4
0.0 ± 0.1
0.00 ± 0.05
ANGULAR ± 0.5°

SURFACE FINISH
Ra 1.6

DIMENSIONS mm

ESTIMATED MASS

SCALE 1:2

UNLESS SPECIFIED
ALL CHAMFERS & RADII 0.5 MAX. REMOVE BURRS & SHARP EDGES. DIMENSIONS APPLY AFTER PLATING

MATERIAL
SEE NOTE

FINISH
SEE NOTE

P M W DYNAMICS
ALTON, HAMPSHIRE, GU34 2QW, UK

TITLE
IG90EB 16:1 MOTOR GEARBOX

DO NOT SCALE.
IF IN DOUBT ASK.
BS 8888

DRAWING NUMBER
001321

SHEET
1 OF 2