

AIR BEARING LENS TURNING SPINDLE 09421

CONTACT LENS TURNING

ENCODER INTERPOLATIONS

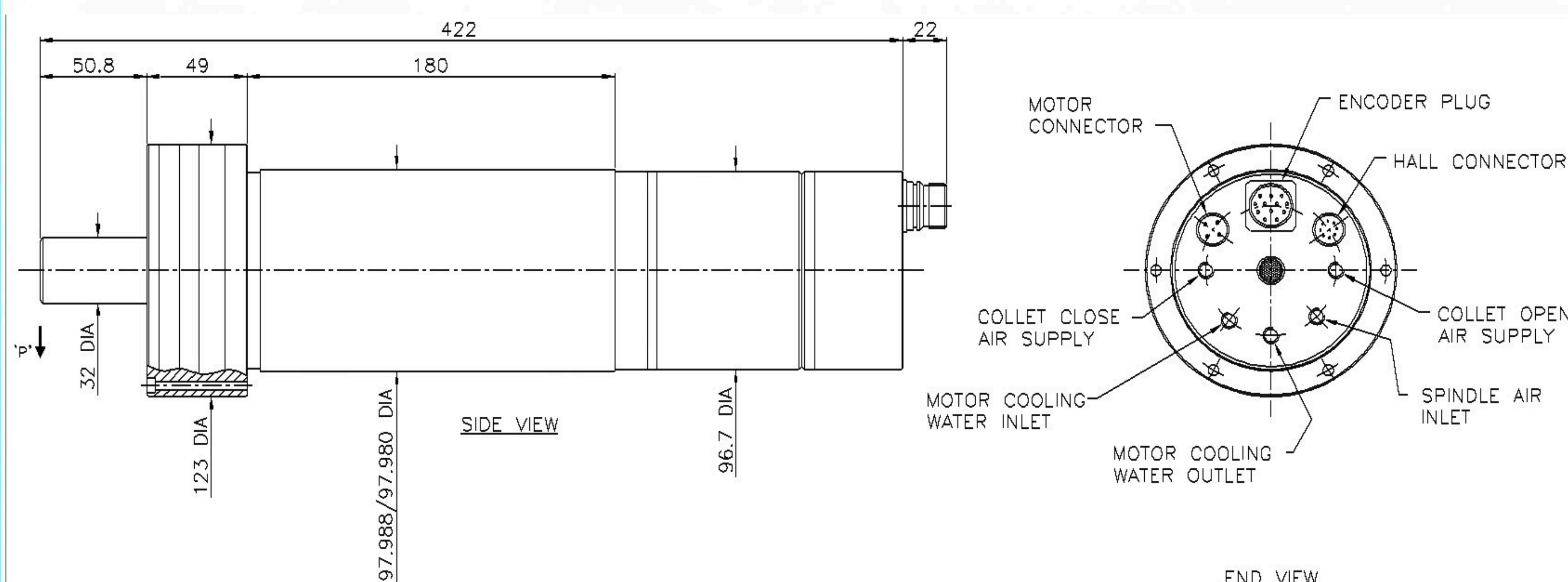
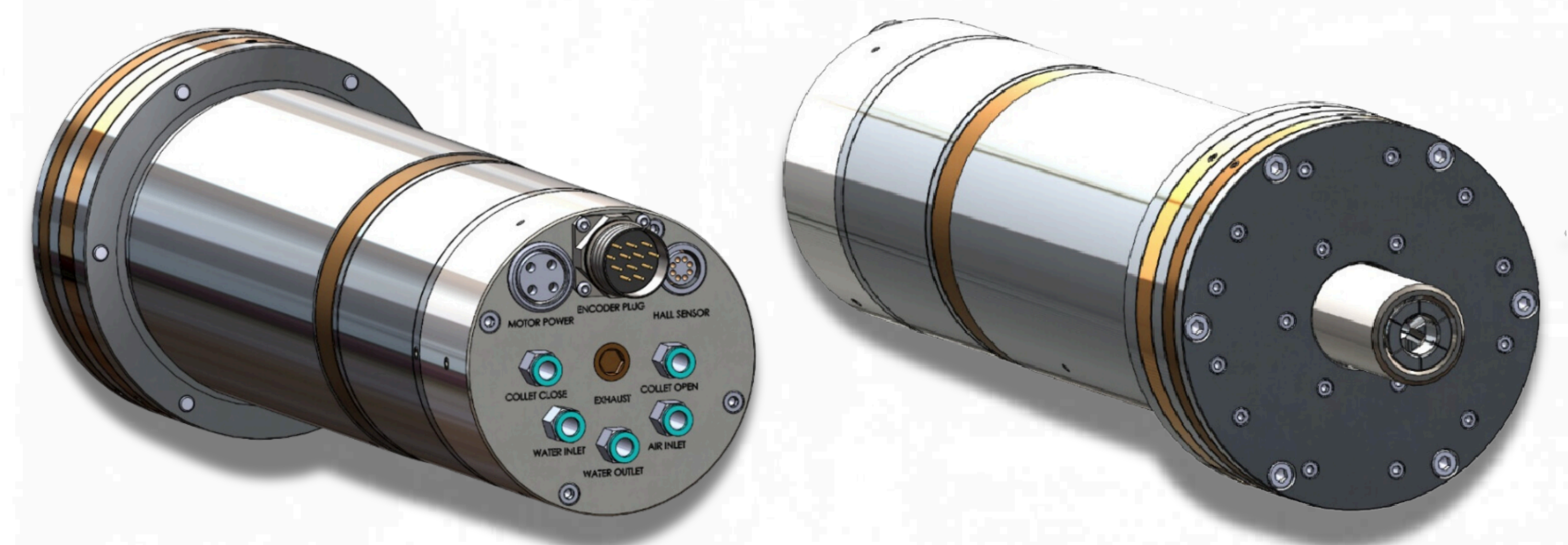
AUTO COLLET

DYNAMIC RUNOUT SUB 20NM

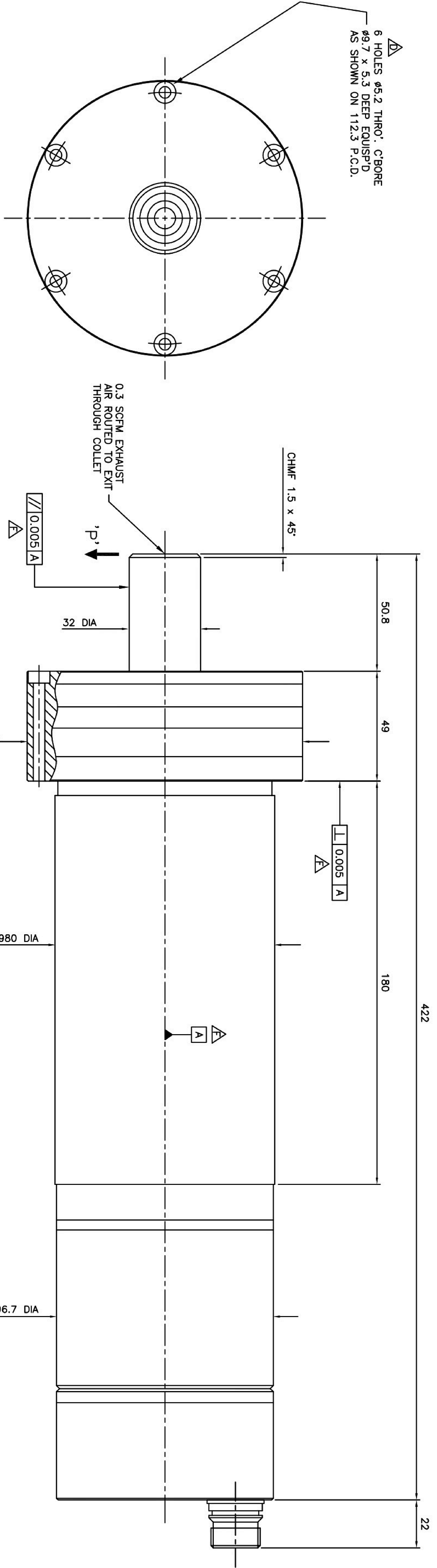
Speed Range	1000—10,000 RPM
Motor Type	Brushless DC—8 Pole
Motor Power	450 Watts
Continuous Torque	0.45 Nm
Axial Stiffness	≥ 6 Kg/um
Radial Stiffness	≥ 1.3 Kg/um
Axial Load Capacity	≥ 45 Kg
Radial Load Capacity	≥ 19.8 Kg
Noise at 10,000 rpm	< 75 dBa
Asynchronous Error Motion (Axial)	≤ 20 nm
Synchronous Error Motion (Axial)	≤ 20 nm
Feedback	Directly coupled rotary encoder
Encoder Line Count	1024/1800 Lines
Velocity Ripple	< 0.1% @10,000 rpm
Air Supply Pressure	0.55 MPa
Air Consumption	≤ 80 L/min
Cooling Water Flow	2 L/min
Weight (Approx)	1.5 Kg
Body Diameter (Nominal)	45 mm

KEY BENEFITS

- WITH ENCODER TECHNOLOGY TO MAXIMISE PRECISION AND SMOOTHNESS OF ROTATION FOR IMPROVED SPEED CONTROL AND LENS FINISH
- INTERCHANGEABLE, COLLET SYSTEM
- RANGE OF COLLET SIZES AVAILABLE ALLOWING MAXIMUM PRODUCTION FLEXIBILITY
- PNEUMATIC AUTOMATIC TOOL CHANGE SYSTEM ALLOWS RAPID COMPONENT CHANGES OR AUTOMATED ROBOT LOADING.



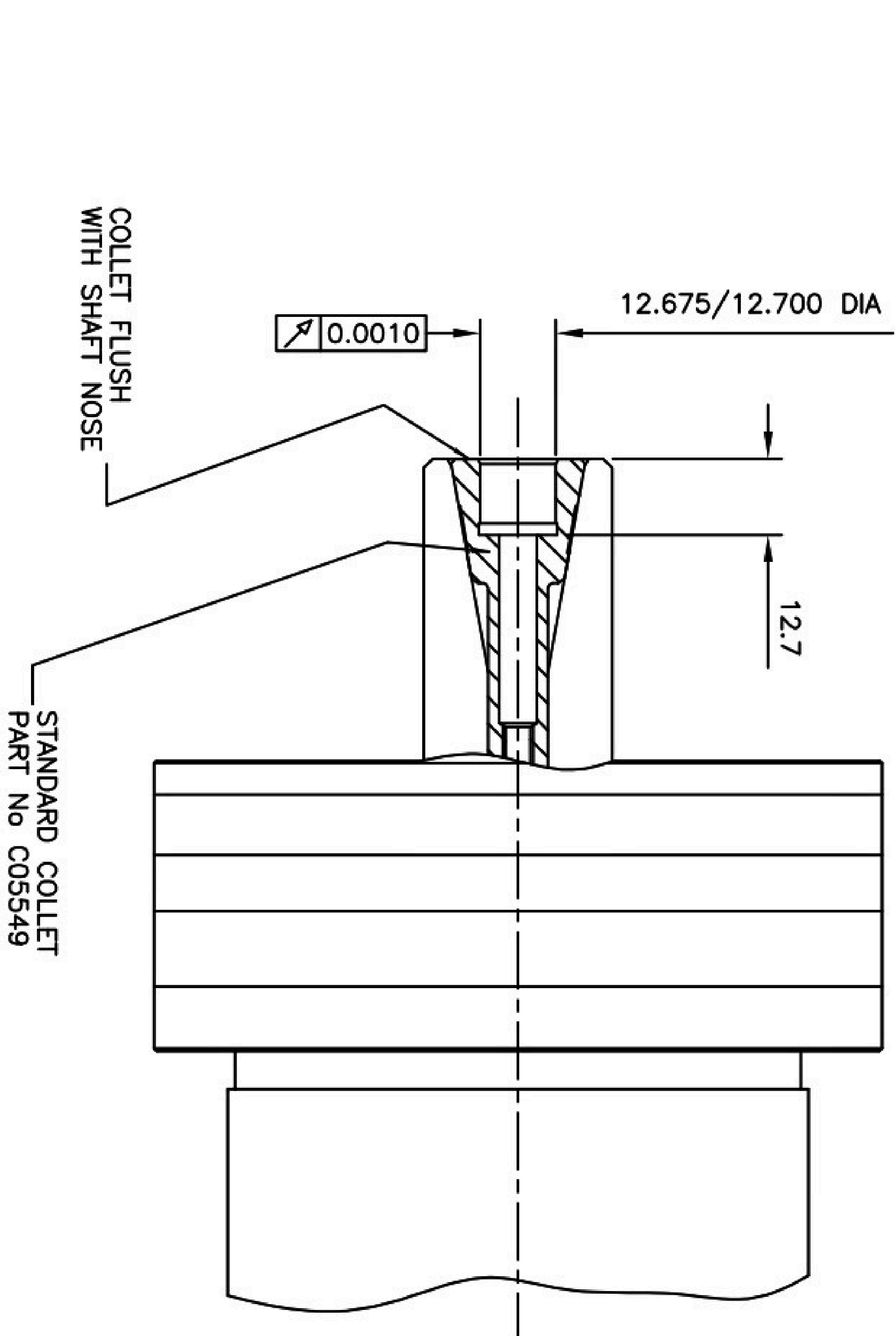
6 HOLES $\phi 5.2$ THRO', C'BORE
 $\phi 9.7 \times 5.3$ DEEP EQUISP'D
 AS SHOWN ON 112.3 P.C.D.



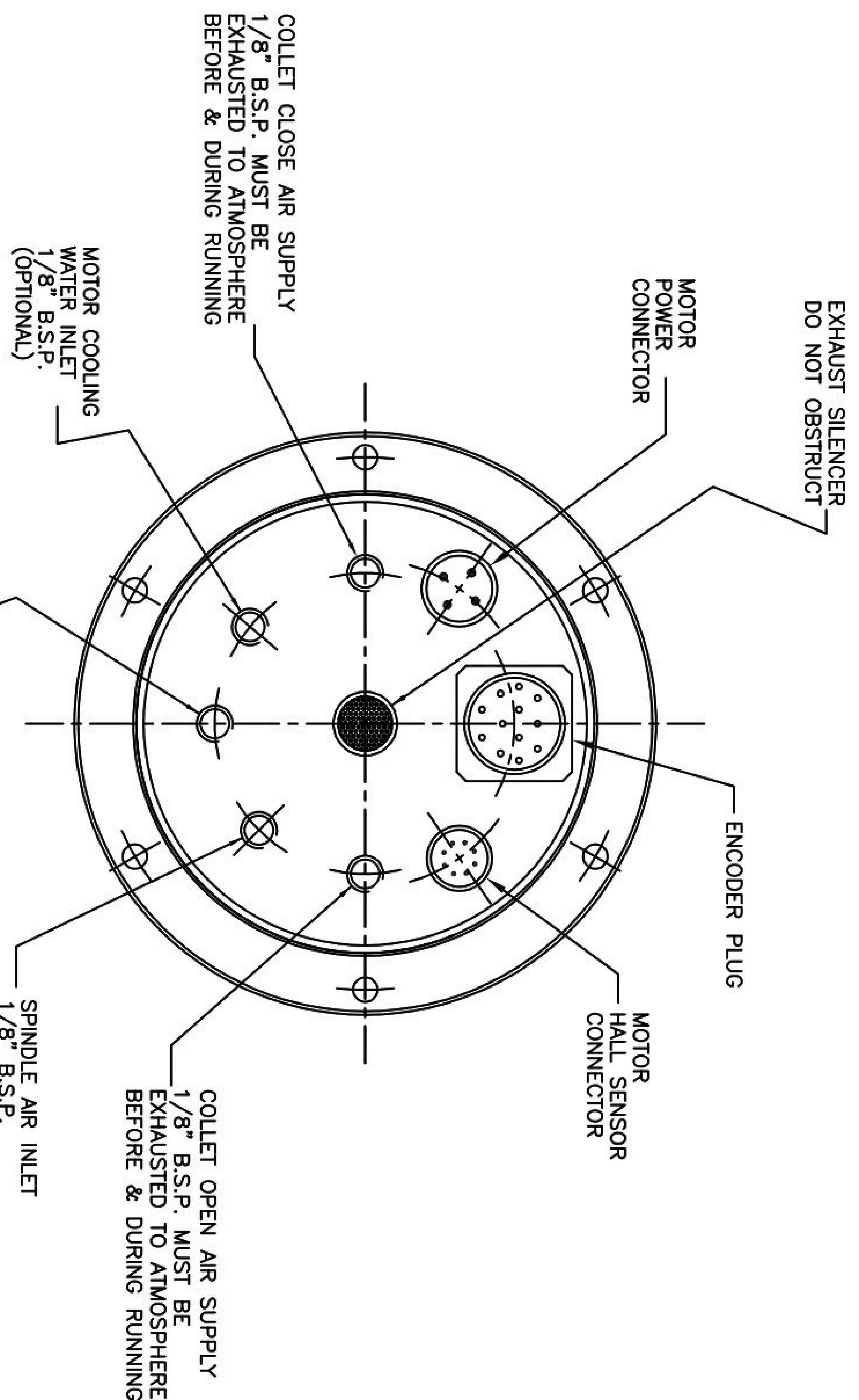
NOTE:- SPINDLE SUPPLIED WITH
 STANDARD COLLET AND MATING
 ELECTRICAL AND ENCODER CONNECTORS

F	ECO 4537 GEO TOL ADDED/REVISED	29/08/23
E	ECO 4364 DRAWING SHEET UPDATED	17/11/22
D	C'BORE HOLES INCREASED.	10/11/2020
C	SPECIFICATION BOX UPDATED TO ACTUAL RESULTS.	18/09/2020
B	ENCODER WAS 1,024 LINES	4/4/17
A		15/10/14
NO.		DATE

MODIFICATIONS



SPECIFICATION	
Air Supply Pressure	5.5 BAR
Air Consumption	75 liters/min (FREE AIR)
Radial load at 'p'	22 kg
Radial Stiffness at 'p'	13 N/um
Axial Load	50 kg
Axial Stiffness	60 N/um
Maximum Speed	10,000 r.p.m.
Cooling Water Flow (Cools Motor Only)	0.5 liters/min
Motor	BRUSHLESS D.C. (8 pole)
ENCODER CHOICE (TTL) OR (SINUSOIDAL)	
Encoder ERO1225 (TTL)	5 Vdc, 300 Khz, 2,048 lines
Encoder ERO1285 (Sinusoidal)	5 Vdc, 180 Khz, 1,000 lines
WIRING DIAGRAM (MOTOR AND ENCODER)	TBA



VIEW ON REAR OF SPINDLE

LIMITS UNLESS STATED		DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED	
INCHES	± 0.005	INCHES	± 0.005
MILS	± 0.125	MILS	± 0.125
FRACTIONS	± 1/64	FRACTIONS	± 1/64

CHECKED	DRAWN	D.G.	MATERIAL	TITLE
DATE 15/10/14				LENS TURNING SPINDLE
SCALE 1:1				PRODUCT
UNLESS STATED				

DRAWING No. **D09421-36**

LOADPOINT

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