

1			2			3			
TOLERANCES UNLESS OTHERWISE STATED			FILLET RADIUS AND CHAMFER HEIGHT			SURFACE FINISH		DIMENSION	TOLERANCE
UP TO 6	OVER 6 UP TO 30	OVER 30 UP TO 120	UP TO 3	OVER 3 UP TO 6	OVER 6 UP TO 30	$\sqrt{R_z}$ -		-	-
±0.1	±0.2	±0.3	±0.2	±0.5	±1			-	-

SUPPLIER MUST CONFORM TO QAR-200 INCLUDING QAR-200 SPECIAL QUALITY REQUIREMENTS (SQR).

 CHARACTERISTICS IDENTIFIED BY THIS SYMBOL HAVE SPECIAL QUALITY REQUIREMENTS AS IDENTIFIED BY THE ACCOMPANYING QAR-200 SPECIAL QUALITY REQUIREMENT DOCUMENT. NOT APPLICABLE

 PARAMETERS IDENTIFIED BY THIS SYMBOL ARE SPECIAL CHARACTERISTICS.

NOTES:

4.0 MOTOR CONSTANTS AND SERVO PARAMETERS (REFERENCE)

4.1	RATED VOLTAGE	Vt	12	VDC
4.2	TORQUE CONSTANT	Kt	1,2	Ncm/A
4.3	VOLTAGE CONSTANT	Ke	1,28	V/KRPM (REF)
4.4	SPEED REGULATION CONSTANT	Rm	7540	RPM/Ncm (REF)
4.5	MOTOR CONSTANT	Km	0,35	Ncm/SqrW (REF)
4.6	STALL TORQUE	Ts	1,2	Ncm (REF)
4.7	STALL CURRENT	Is	1,1	A (REF)
4.8	TERMINAL RESISTANCE	Rt	11,4	OHMS
4.9	DAMPING CONSTANT (INFINITE SOURCE)	Fi	0,002	Ncm/KRPM
4.10	DAMPING CONSTANT (ZERO SOURCE)	Fo	0,13	Ncm/KRPM
4.11	DYNAMIC FRICTION TORQUE	Tfd	0,057	Ncm

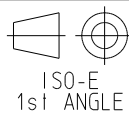

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DRAWING CREATED WITH ISO STANDARDS

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30mm

						MATERIAL		INTERNAL	
				ISO-E 1st ANGLE		-		B X	
				MATERIAL NUMBER		-		X X	
				 BUEHLER MOTOR INC. CARY, NC 27512		DATE	19FEB96	SUBSTITUTED FOR	
						DRAWN	HERRING	-	
						CHECKED	JEH	REPLACED BY	
						APPROVAL		-	
				TITLE				A4	
				DRAWING NUMBER				7.13.018.KN	
				SCALE				N/A	
				SHEET				2	
				OF				2	
2	REVISED PER ECO 4113-8	11MAY00	PDL	EXPERIMENTAL NUMBER				EX.XXX.XXXXX	
1	RELEASED PER ECO 3663-4	19FEB96	JEH						
DI	CHANGE ONLY WITH CAD	DATE	NAME	USE	16.11	-	-	-	-

1			2			3		
TOLERANCES UNLESS OTHERWISE STATED			FILLET RADIUS AND CHAMFER HEIGHT			SURFACE FINISH		
UP TO 6	OVER 6 UP TO 30	OVER 30 UP TO 120	UP TO 3	OVER 3 UP TO 6	OVER 6 UP TO 30	$\sqrt{R_z}$ -	-	-
±0.1	±0.2	±0.3	±0.2	±0.5	±1		-	-

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NOTES:

1.0 GENERAL

THE FOLLOWING VALUES ARE VALID AT AMBIENT TEMPERATURES OF 20 TO 25° C. THE MEASUREMENTS SHALL BE DONE FAST ENOUGH TO EXCLUDE ANY HEATING EFFECTS. THE MEASUREMENTS SHALL BE TAKEN WITH MOTOR SHAFT IN A HORIZONTAL POSITION.

2.0 MECHANICAL DIMENSIONS

- 2.1 DIMENSIONS ACCORDING TO DRAWING 7.27.001.KN
- 2.2 DIRECTION OF ROTATION ACCORDING TO DRAWING 7.27.001.KN
- 2.3 AXIAL AND RADIAL PLAY ACCORDING TO DRAWING 7.27.001.KN
- 2.4 MOTOR SURFACE AND SHAFT TO BE FREE OF CORROSION.

3.0 MOTOR CHARACTERISTICS

3.1 LOAD CONDITION

Vt = 12.0 VDC
 No = 9200 RPM ± 12%
 Io = 100 ma MAX

3.2 LOAD CONDITION

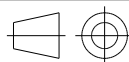
Vt = 12.0 VDC
 TL = 0.70 Ncm
 NL = 3400 RPM ± 30%
 IL = 740 mA MAX

3.3 HI-POT TEST

MOTOR MUST WITHSTAND 150 VRMS BETWEEN MOTOR HOUSING AND ANY TERMINAL FOR 1 SECOND WITHOUT BREAKDOWN.

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ISO-E
1st ANGLE



BUEHLER MOTOR
INC.
CARY, NC 27512

MATERIAL	-		INTERNAL
MATERIAL NUMBER	-		B X
DATE	19FEB96	SUBSTITUTED FOR	
DRAWN	HERRING	-	
CHECKED	JEH	REPLACED BY	
APPROVAL	-		

TITLE		MOTOR SPECIFICATION		A4	
2	REVISED PER ECO 4113-8	11MAY00	PDL	DRAWING NUMBER	7.13.018.KN
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