

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	√Rz -	-	:
±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:

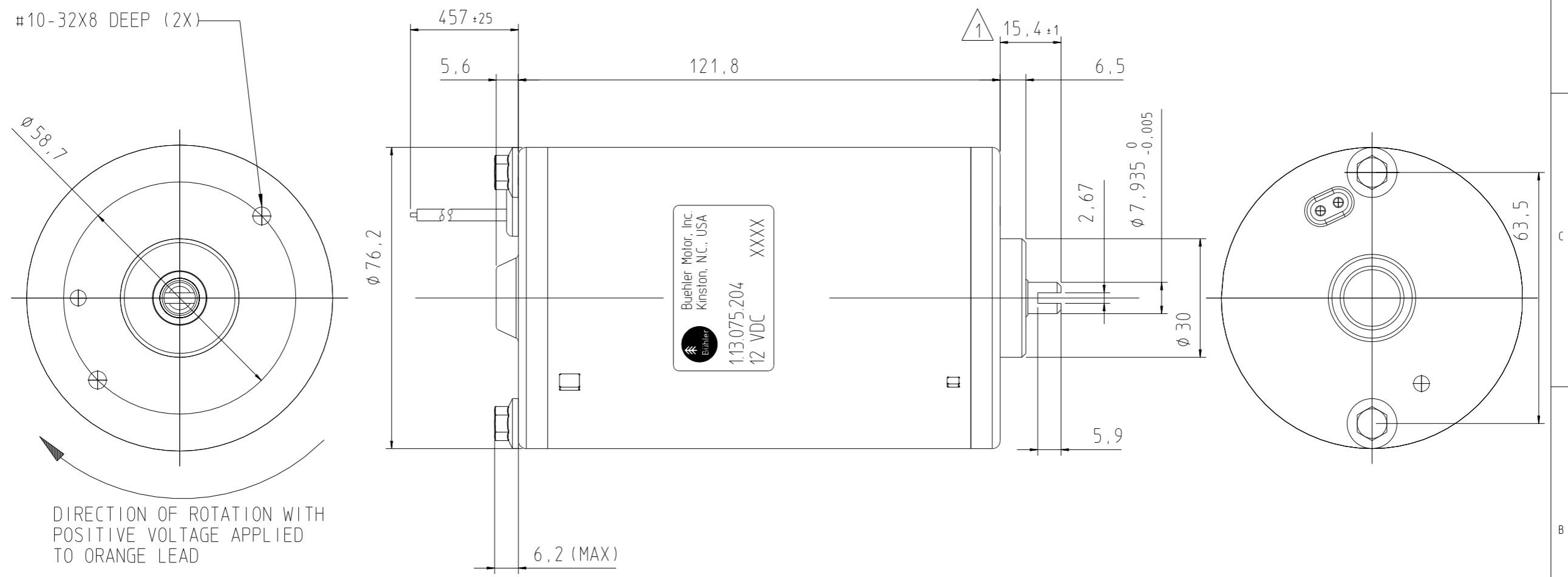
1. AXIAL ENDPLAY: 1,1 (MAX) WITH OUTPUT SHAFT BIASED TOWARD BRUSH END.

30mm

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DRAWING CREATED WITH ISO STANDARDS

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7.27.853.204 SH 1 OF 1 A3

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INTERNAL	
B	X
X	X

MATERIAL		DATE		18SEP01		SUBSTITUTED FOR	
-		DRAWN		SALUJA		-	
MATERIAL NUMBER		CHECKED		RS		REPLACED BY	
-		APPROVAL		-		-	
BUEHLER MOTOR INC. CARY, NC 27512		Buehler					
TITLE						A3	
DRAWING NUMBER						SCALE	
7.27.853.KN						1:1	
1 RELEASED PER ECO 4200-1						SHEET	
18SEP01 RS EXPERIMENTAL NUMBER						1	
EX.XXX.XXXXX						OF	
DI CHANGE ONLY WITH CAD						1	
DATE	NAME	USE	13.75	-	-	-	-

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	$\sqrt{R_z}$ -		-	-
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5.0 MOTOR PARAMETERS

RATED VOLTAGE	Vt	12	VDC	(REF)
TORQUE CONSTANT	Kt	1,9	Ncm/A	±15%
TERMINAL RESISTANCE	Rt	0,08	OHMS	±15%
NO LOAD SPEED	No	6000	rpm	±15%
NO LOAD CURRENT	Io	4,8	A	MAX
SPEED REGULATION CONSTANT	Rm	19,7	rpm/Ncm	(REF)
MOTOR CONSTANT	Km	6,8	Ncm/SqrW	(REF)
STALL TORQUE	Ts	304	Ncm	(REF)
STALL CURRENT	Is	160	A	(REF)
DYNAMIC FRICTION TORQUE	Tfd	5,1	Ncm	(REF)
DAMPING COEFF.(INF.SOURCE Z)	Fi	0,48	Ncm/krpm	(REF)
DAMPING COEFF.(ZERO SOURCE Z)	Fo	48	Ncm/krpm	(REF)
ARMATURE MOMENT OF INERTIA	Ja	720	gcm(sqr)	(REF)
MECHANICAL TIME CONSTANT	Tm	---	msec	(REF)
ELECTRICAL TIME CONSTANT	Te	---	msec	(REF)
TERMINAL INDUCTANCE (@ 1kHz)	Lt	---	mH	(REF)
THERMAL RESISTANCE	Rth	3,9	°C/W	(REF)

6.0 LIFE / RELIABILITY

6.1 1,000 HOURS MINIMUM WITH RATED VOLTAGE APPLIED AND 20 NCM LOAD

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						MATERIAL		INTERNAL	
						-		B	X
						MATERIAL NUMBER		X	X
						BUEHLER MOTOR INC.		DATE	18SEP01
						CARY, NC 27512		DRAWN	SALUJA
								CHECKED	RS
								APPROVAL	-
						TITLE		SUBSTITUTED FOR	
						SPECIFICATION		-	
						DRAWING NUMBER		REPLACED BY	
						7.13.843.KN		-	
						EXPERIMENTAL NUMBER		SHEET	
						EX.XXX.XXXXX		2	
						1 RELEASED PER ECO 4200-1		OF	
						18SEP01 RS		2	
						CHANGE ONLY WITH CAD			
						DATE NAME USE			
						13.75 - - - - -			

1			2			3			
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						MATERIAL		INTERNAL		
						-		B	X	
				ISO-E 1st ANGLE		MATERIAL NUMBER		X	X	
				 BUEHLER MOTOR INC. CARY, NC 27512		DATE	18SEP01	SUBSTITUTED FOR		
						DRAWN	SALUJA	-		
						CHECKED	RS	REPLACED BY		
						APPROVAL	-	-		
				TITLE					A4	
				DRAWING NUMBER					SHEET	
				7.13.843.KN					2	
				EXPERIMENTAL NUMBER					OF	
				EX.XXX.XXXXX					2	
1	RELEASED PER ECO 4200-1	18SEP01	RS							
DI	CHANGE ONLY WITH CAD	DATE	NAME	USE	13.75	-	-	-	-	

1			2			3			
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1.0 GENERAL

THIS SPECIFICATION DESCRIBES A PERMANENT MAGNET DC MOTOR INTENDED FOR USE IN LINEAR ACTUATOR APPLICATION.

2.0 ENVIRONMENTAL

- 2.1 OPERATING TEMPERATURE RANGE: -26 TO +60° C
- 2.2 STORAGE TEMPERATURE RANGE: -40 TO +85° C

3.0 MECHANICAL

3.1 DIRECTION OF ROTATION, AXIAL ENDPLAY, MOTOR DIMENSIONS PER 7.27.853.202

4.0 ELECTRICAL

4.1 DIELECTRIC STRENGTH: MOTOR WITH NO INTERNAL NOISE SUPPRESSION MUST WITHSTAND 500 VRMS 50/60 HZ BETWEEN EACH TERMINAL AND MOTOR CASE FOR ONE SECOND WITHOUT BREAKDOWN.

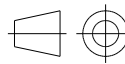
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PI	KN



ISO-E
1st ANGLE

MATERIAL	-		INTERNAL
MATERIAL NUMBER	-	B	X
		X	X



BUEHLER MOTOR
INC.
CARY, NC 27512

DATE	18SEP01	SUBSTITUTED FOR
DRAWN	SALUJA	-
CHECKED	RS	REPLACED BY
APPROVAL	-	-

TITLE	SPECIFICATION		A4
DRAWING NUMBER	7.13.843.KN		SCALE
1	RELEASED PER ECO 4200-1	18SEP01	RS
	EXPERIMENTAL NUMBER	EX.XXX.XXXXX	SHEET 1 OF 2

DI	CHANGE ONLY WITH CAD	DATE	NAME	13.75	-	-	-	-	-	-	-	-	-
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