

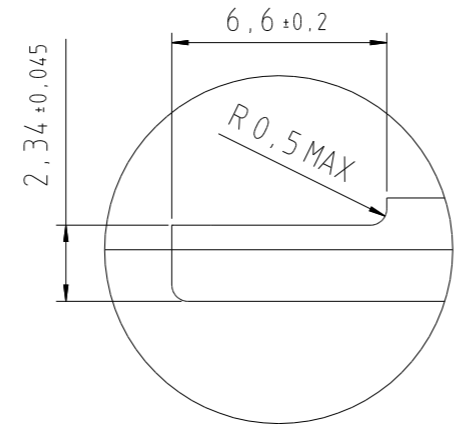
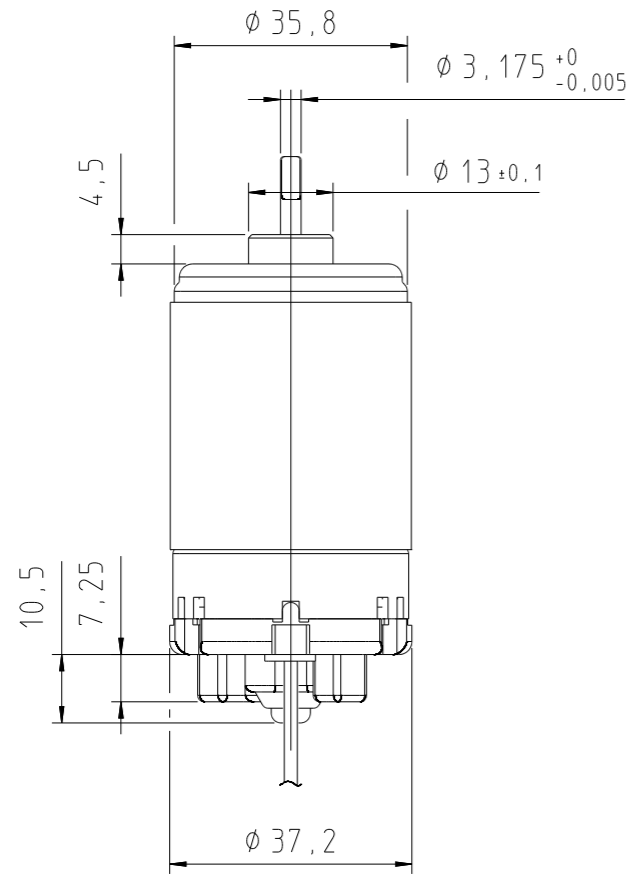
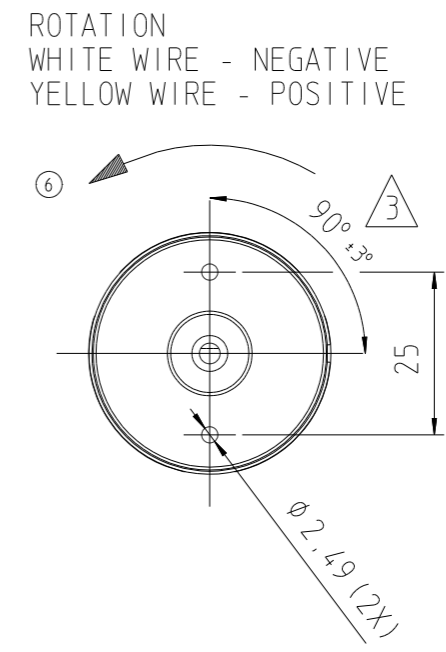
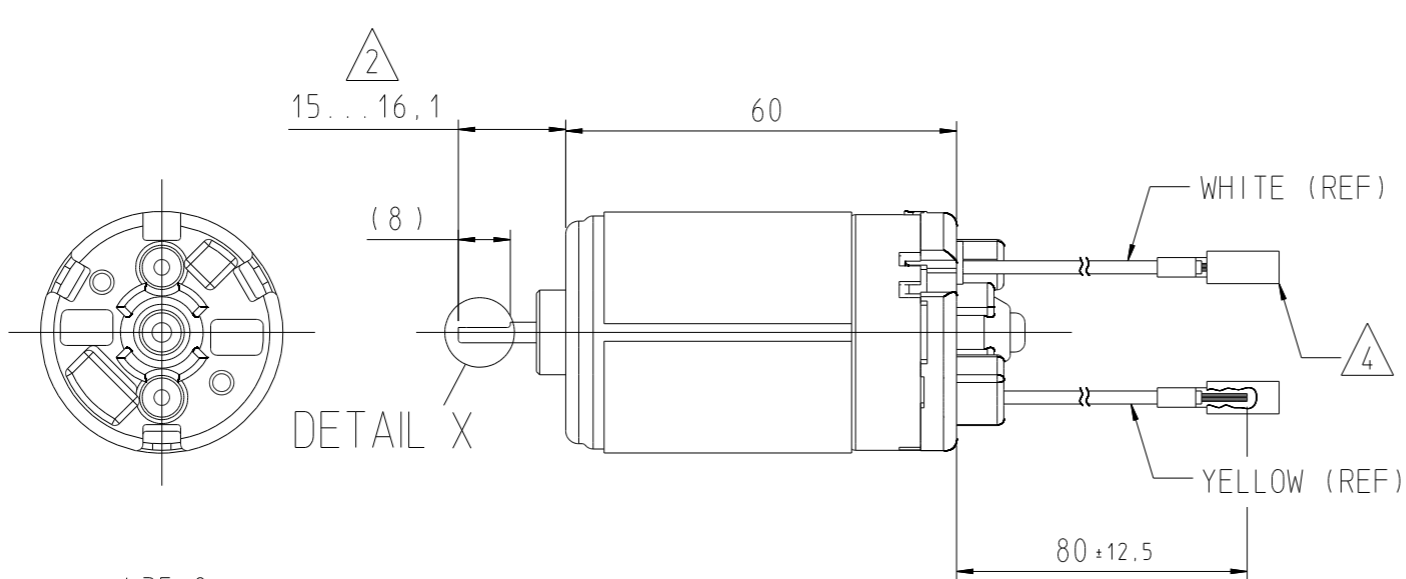
30mm

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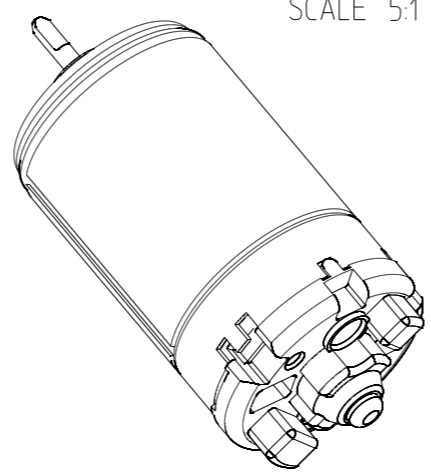
DRAWING CREATED WITH ISO STANDARDS

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Tolerances Unless Otherwise Stated			Tolerances of Angle (Shortside of Angle)			Surface Finish	Dimension	Tolerance
up to 6	over 6 up to 30	over 30 up to 120	up to 10	over 10 up to 50	over 50 up to 100			
±0.1	±0.2	±0.3	±1°	±30'	±20'			



DETAIL X  
SCALE 5:1



(LEAD WIRES NOT SHOWN)

NOTES:

- 1. ENDPLAY 0,0...0,3 MAX.
- 2 MEASURE WITH SHAFT BIASED TOWARD BRUSH END.
- 3 ANGLE BETWEEN MOUNTING HOLES AND GAP IN FLUX RING.
- 4 AMP PN 640923-2.

B	075
PI	KN

		ISO-E		Internal	
		Material Number		B	X
				X	X
		Date		21MAR01	Substituted For
		Drawn		SALUJA	-
		Check		RS	Replaced By
		Appr.		-	-
6	REVISED PER ECO 4095-14	29MAY03	PDL	Title MOTOR DIMENSIONS	
5	REVISED PER ECO 3865-228, PI-B	18FEB03	PDL	Scale 1:1	
4	REVISED PER ECO 3865-216	01FEB02	WCE	5:1	
3	REVISED PER ECO 3865-213, PI-A	13DEC01	PDL	Motor No. 1.13.057.075	
2	REVISED PER ECO 3865-211	14NOV01	PDL	Drawing Number 7.27.294.KN (3)	
1	RELEASED PER ECO 3865-195	21MAR01	RS	13.57	Sheet 1 of 1
DI	Change Only With CAD	Date	Name	Use	

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.

5.0 MOTOR PARAMETERS

RATED VOTAGE	(Vt)	12	VDC	(ref)
TORQUE CONSTANT	(Kt)	3.0	Ncm/A	±15%
TERMINAL RESISTANCE	(Rt)	3.7	Ohms	±15%
NO LOAD SPEED	(No)	3600	rpm	±15%
NO LOAD CURRENT	(Io)	0.25	A	(max)
SPEED REGULATION CONSTANT	(Rm)	380	rpm/Ncm	(ref)
MOTOR CONSTANT	(Km)	1.6	Ncm/√W	(ref)
STALL TORQUE	(Ts)	9	Ncm	(ref)
STALL CURRENT	(Is)	3,3	A	(ref)
DYNAMIC FRICTION TORQUE	(Tfd)	0.4	Ncm	(ref)
DAMPING COEFF. (INF. SOURCE Z)	(Fi)	0.015	Ncm/krpm	(ref)
DAMPING COEFF. (ZERO SOURCE Z)	(Fo)	2.5	Ncm/krpm	(ref)
ARMATURE MOMENT OF INERTIA	(Ja)	40	gcm <sup>2</sup>	(ref)

6.0 LIFE / RELIABILITY

6.1 40,000 CYCLES MINIMUM WITH 12 SECONDS ON / 36 SECONDS OFF AT RATED VOLTAGE AND 4.24 Ncm FRICTION LOAD WITH REVERSING CYCLE 6 sec CW, 6 sec CCW.

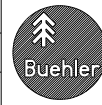
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-	075
PI	KN



MATERIAL	-		INTERNAL	
MATERIAL NUMBER	-		B	X
	X	X		
BUEHLER MOTOR INC.	DATE	21MAR01	SUBSTITUTED FOR	
CARY, NC 27512	DRAWN	SALUJA	-	
	CHECKED	RS	REPLACED BY	
	APPROVAL	-	-	

TITLE	SPECIFICATIONS			A4
DRAWING NUMBER	7.13.212.KN			SCALE N/A SHEET 2 OF 2
1	RELEASED PER ECO 3865-195	21MAR01	RS	EXPERIMENTAL NUMBER EX.XXX.XXXXX

DI	CHANGE ONLY WITH CAD	DATE	NAME	USE	13.57	-	-	-	-	-	-	-	-
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30mm

Fuer diese Zeichnung behalten wir uns alle Rechte nach DIN 34 for.

DRAWING CREATED WITH ISO STANDARDS

1			2			3		
Tolerances Unless Otherwise Stated			Tolerances of Angle (Shortside of Angle)			Surface Finish		
up to 6	over 6 up to 30	over 30 up to 120	up to 10	over 10 up to 50	over 50 up to 100	Dimension		
+0.1	+0.2	+0.3	+1°	+30'	+20'	Tolerance		

1.0 GENERAL

THIS SPECIFICATION DESCRIBES A PERMANENT MAGNET DC MOTOR INTENDED FOR USE IN A LINEAR ACTUATOR. CHANGES IN MATERIAL, PROCESS OR DESIGN WHICH MAY AFFECT FORM, FIT OR FUNCTION MUST BE APPROVED BY THE CUSTOMER.

2.0 ENVIRONMENTAL

2.1 OPERATING TEMPERATURE RANGE: -30 TO +65 DEGREES C

2.2 STORAGE TEMPERATURE RANGE: -40 TO +85 DEGREES C

3.0 MECHANICAL


3.1 DIRECTION OF ROTATION, AXIAL ENDPLAY, MOTOR DIMENSIONS PER 7.27.294.075

4.0 ELECTRICAL

4.1 DIELECTRIC STRENGTH : MOTOR MUST WITHSTAND 500 VRMS 50/60 HZ BETWEEN EACH LEAD AND MOTOR CASE FOR 1 SECOND WITHOUT BREAKDOWN.

-	075
PI	KN

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				ISO-E		Material Number		Internal	
								B	X
								X	X
				 BÜHLER MOTOR INC. CARY, NC 27512		Date	21MAR01	Substituted For	
						Drawn	SALUJA	-	
						Check	RS	Replaced By	
						Appr.		-	
				Title		SPECIFICATION			Scale
									-
				Motor No.		1.13.057.075			-
				Drawing Number		7.13.212.075 (4)			Sheet 1
									of 2
1	RELEASED PER EC03865-195	21MAR01	RS	13.57	-	-	-	-	-
DI	Change Only With CAD	Date	Name	Use					