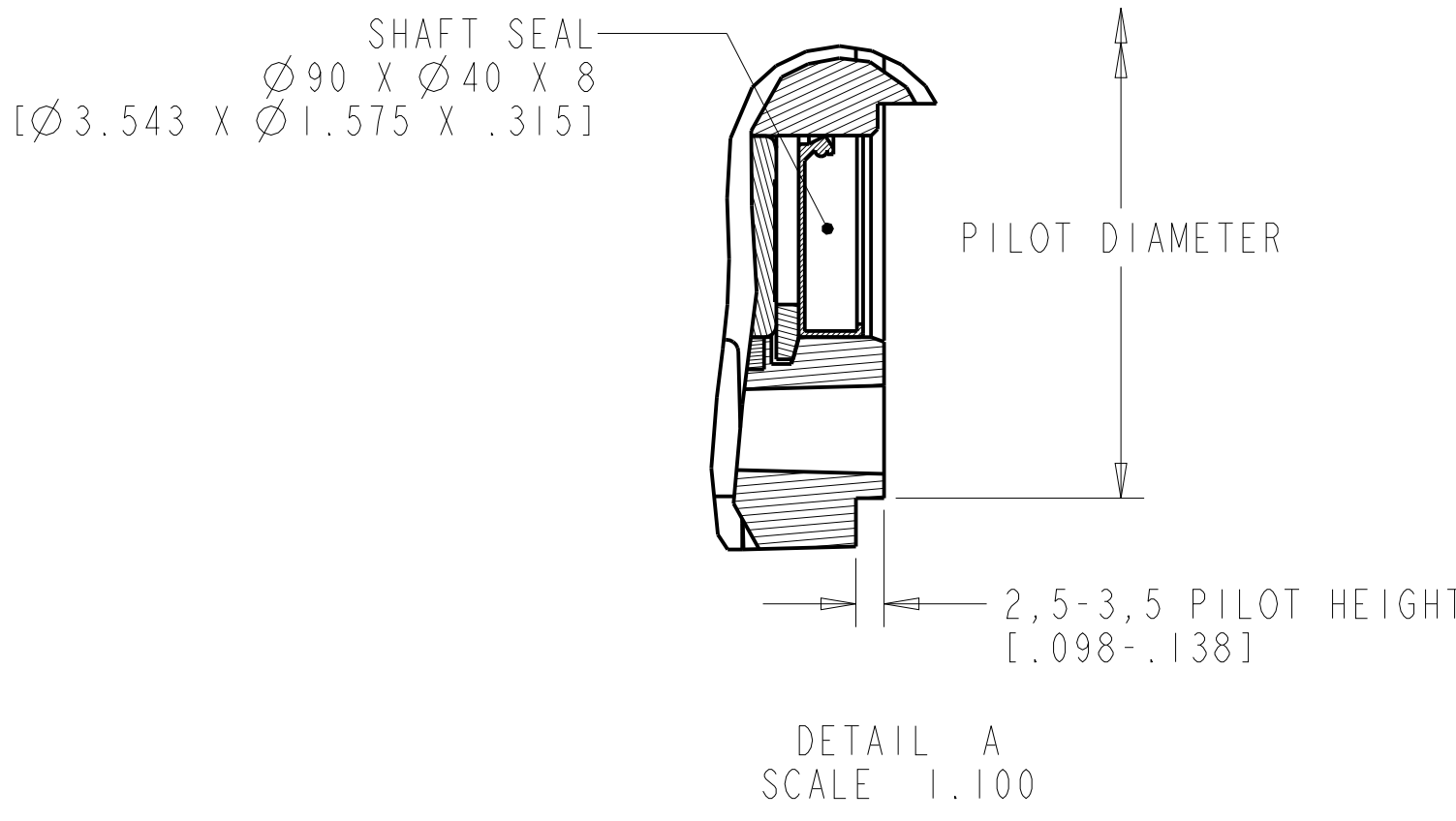
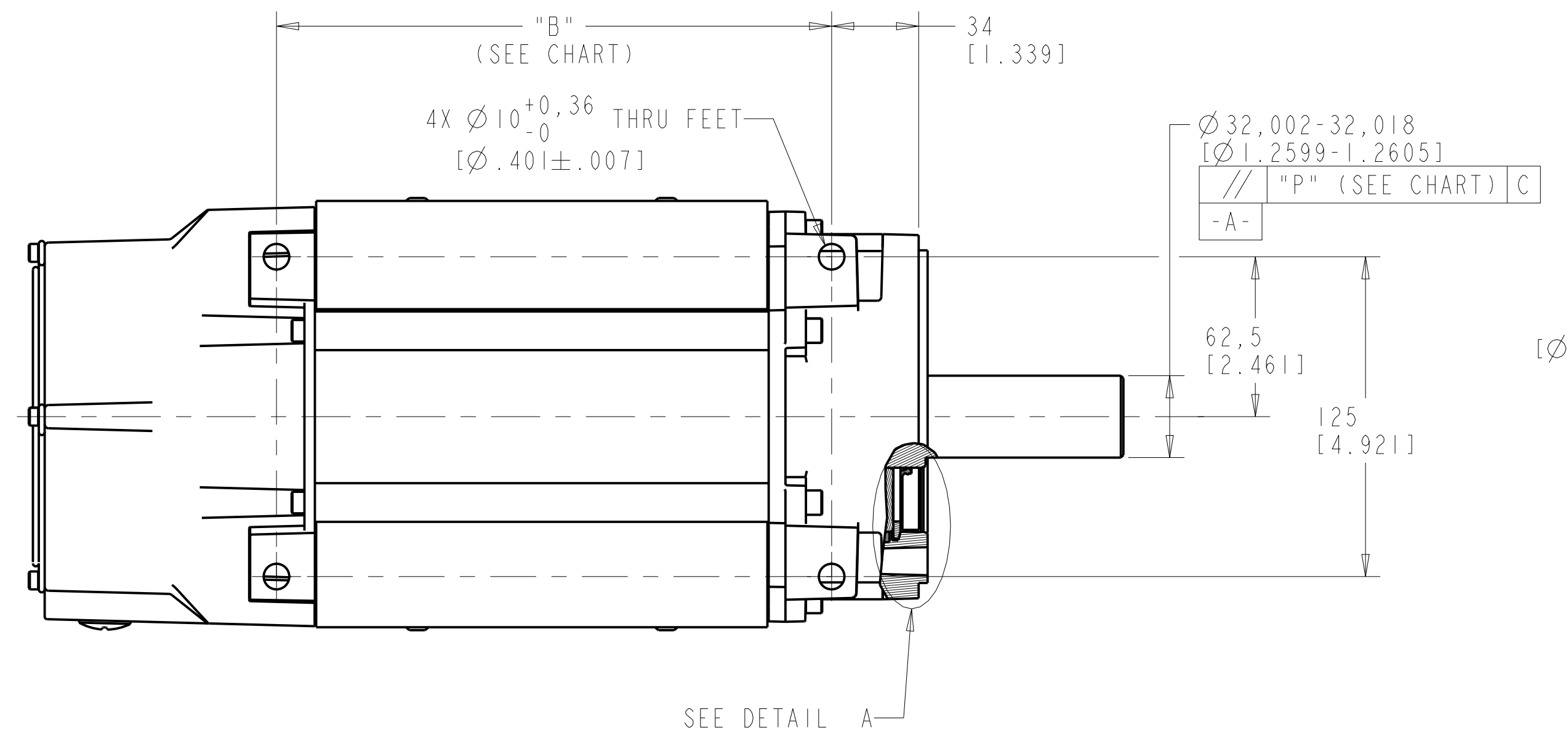
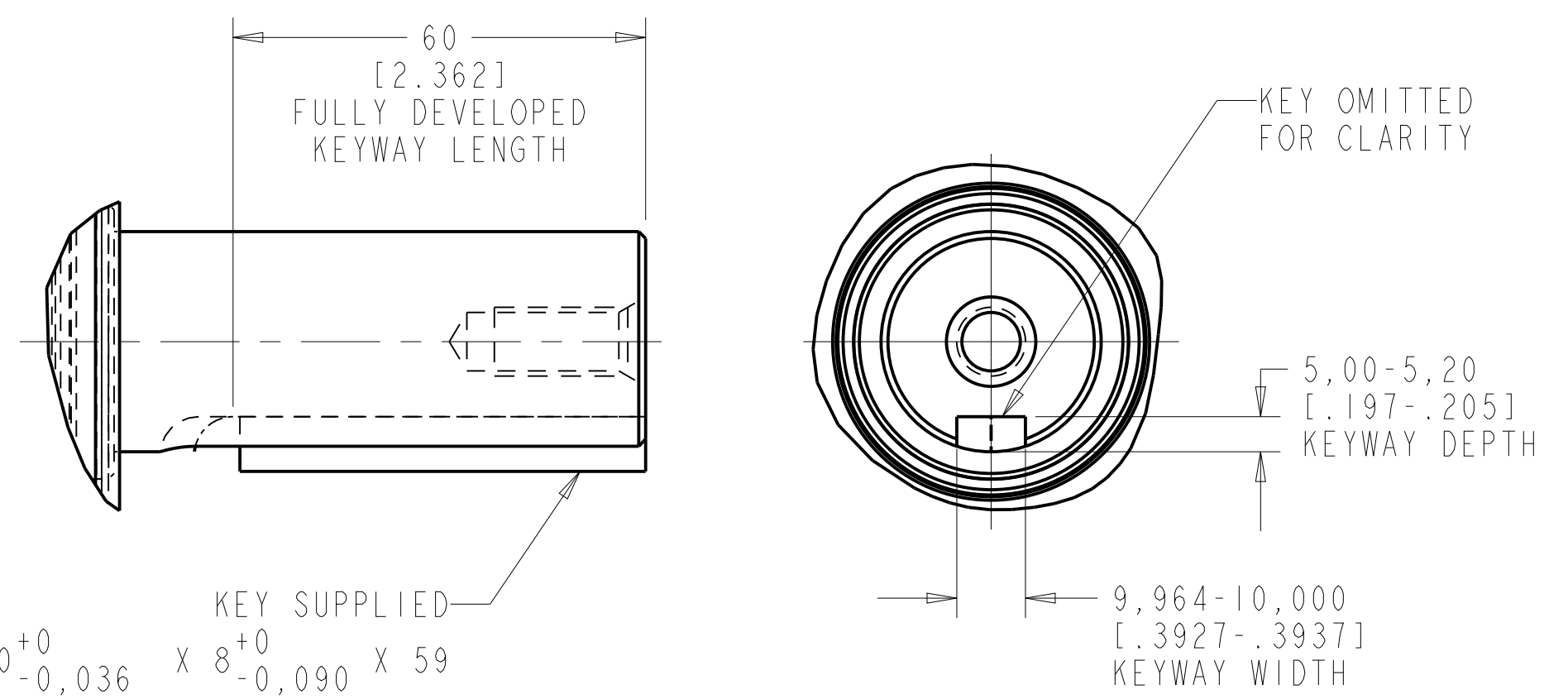
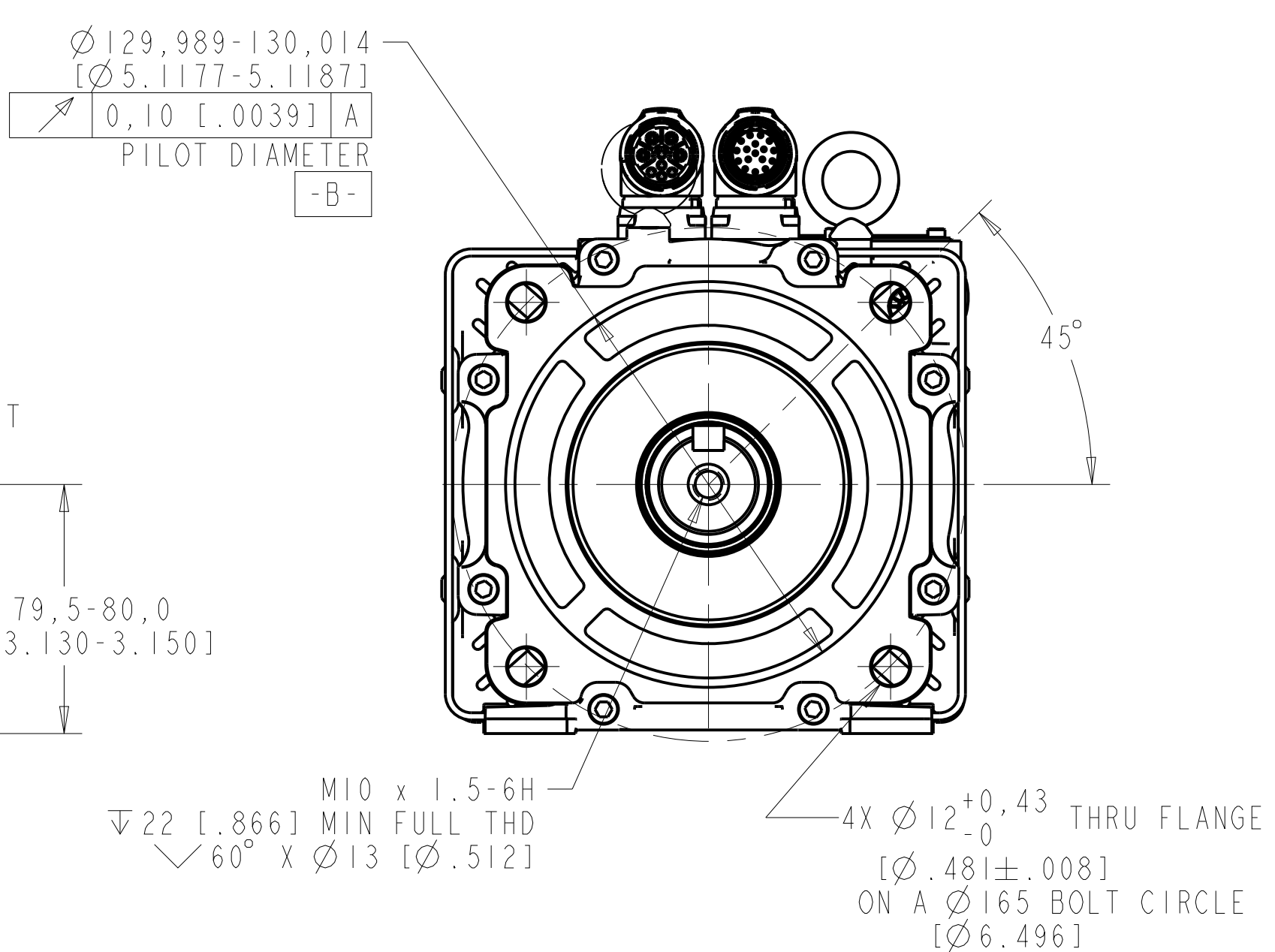
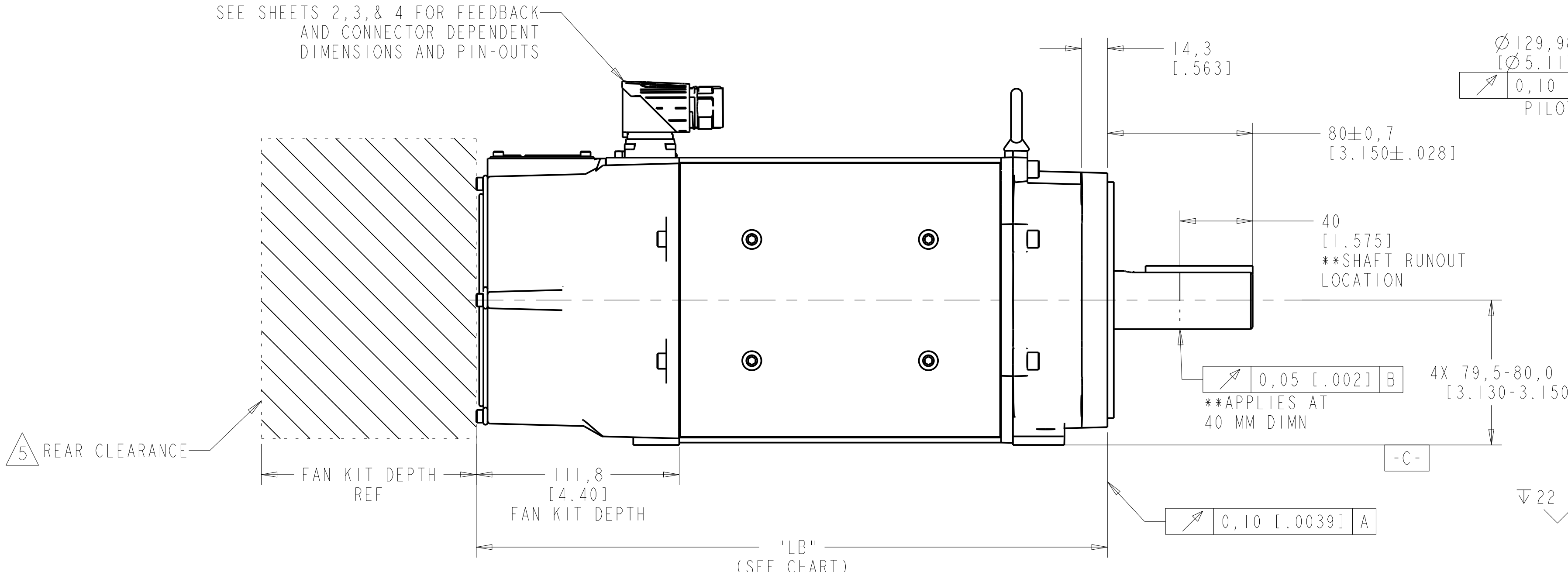
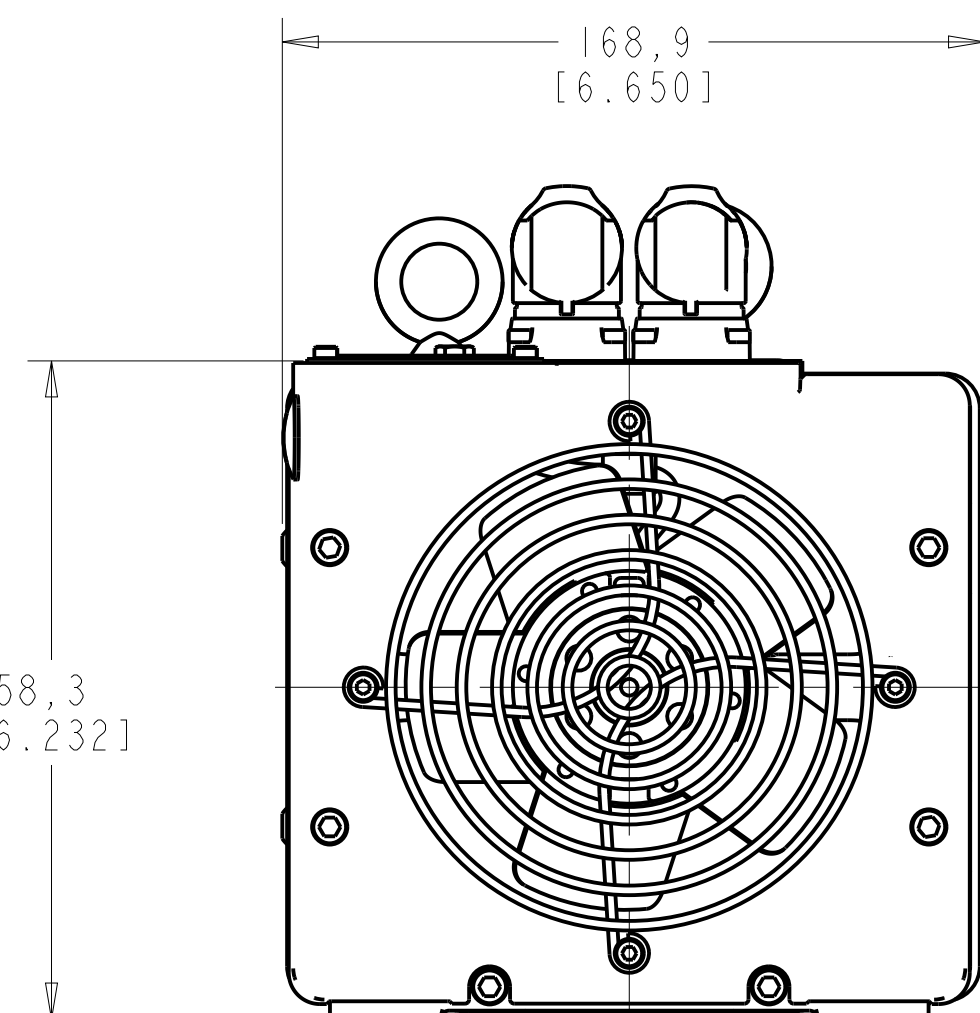


MODEL SHOWN ON THIS SHEET IS VPC-BI652x-xJ72FS



FRAME-STACKS	BRAKE OPTION	MOTOR DIMENSIONS			RATED SPEED	FEEDBACK TYPE		
		LB	B	P		S	Q	Y
165-2	2	347,6 [13.69]	216,9 [8.54]	0,8 [0.03]	A	SEE FIGURE 3, SH 3	SEE FIGURE 1, SH 2	SEE FIGURE 3, SH 3
	4	403,1 [15.87]	272,4 [10.72]	1,0 [0.04]	D	SEE FIGURE 3, SH 3	SEE FIGURE 1, SH 2	N/A
165-3	2	403,1 [15.87]	272,4 [10.72]	1,0 [0.04]	A	SEE FIGURE 3, SH 3	SEE FIGURE 1, SH 2	SEE FIGURE 3, SH 3
	4	443,6 [17.46]	312,9 [12.32]	1,0 [0.04]	D	SEE FIGURE 3, SH 3	SEE FIGURE 1, SH 2	N/A
165-4	2	443,6 [17.46]	312,9 [12.32]	1,0 [0.04]	A	SEE FIGURE 4, SH 4	SEE FIGURE 2, SH 2	SEE FIGURE 4, SH 4
	4	484,1 [19.06]	353,4 [13.91]	1,0 [0.04]	D	SEE FIGURE 4, SH 4	SEE FIGURE 2, SH 2	N/A

NOTES:

- DXF OF THIS DRAWING MUST BE SCALED TO LENGTH. SEE MOTOR DIMENSIONS CHART.
- 3D STEP (.stp) FILES ARE AVAILABLE FOR ALL MOTOR CONFIGURATIONS.
- FOR ADDITIONAL SPECIFICATIONS SEE ESE DRAWING DIR 10001892617.
- VPC CATALOG STRING CODES:
 BRAKE: 2 = NO BRAKE, 4 = BRAKE
 RATED SPEED: A = 1500 RPM, D = 3000 RPM
 FEEDBACK TYPE: S = 21 BIT SINGLE-TURN (HIPERFACE), Q = 23 BIT MULTI-TURN (HIPERFACE DSL), Y = 25 BIT MULTI-TURN (ENDAT 2.2)

5. FOR SUFFICIENT AIRFLOW AND SPACE FOR FAN KIT REMOVAL AND INSTALLATION, ENSURE THERE IS SPACE GREATER THAN OR EQUAL TO THAT OF THE FAN KIT DEPTH BEYOND THE REAR OF THE MOTOR (SHOWN).

UNLESS OTHERWISE SPECIFIED
 DO NOT SCALE DRAWING DIMENSIONS ARE IN MILLIMETERS WITH INCHES REFERENCED (X1) UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 3RD ANGLE PROJECTION

Rockwell Automation

VPC, F165, ESM

Drawn by: SWLARSON Date: 10-25-2016

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Sheet 1 Of 4

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FIGURE #1

MODEL SHOWN IN FIGURE #1
IS VPC-B1652x-QJ12FS

CHART #1 (FOR FIGURE #1)			
FRAME-STACKS	BRAKE OPTION	MOTOR DIMENSIONS	
		LD	LE
165-2	2	251,9 [9.92]	211,9 [8.34]
	4	307,4 [12.10]	267,4 [10.53]
165-3	2	307,4 [12.10]	267,4 [10.53]
	4	347,9 [13.70]	307,9 [12.12]

SINGLE M23 CONNECTOR
PIN-OUTS (FIGURE #1)

NON-BRAKE MOTOR BRAKE OPTION "2"	
M923 SINGLE CONNECTOR	
PIN ID	FUNCTION
A	U
B	V
C	W
⊕	GND
E	DSL +
F	-
G	-
H	DSL -
L	-
APPLICABLE CATALOG STRINGS	
VPC-B1652x-Qx12Fx	
VPC-B1653x-Qx12Fx	

BRAKE MOTOR BRAKE OPTION "4"	
M923 SINGLE CONNECTOR	
PIN ID	FUNCTION
A	U
B	V
C	W
⊕	GND
E	DSL +
F	MBRK +
G	MBRK -
H	DSL -
L	-
APPLICABLE CATALOG STRINGS	
VPC-B1652x-Qx14Fx	
VPC-B1653x-Qx14Fx	

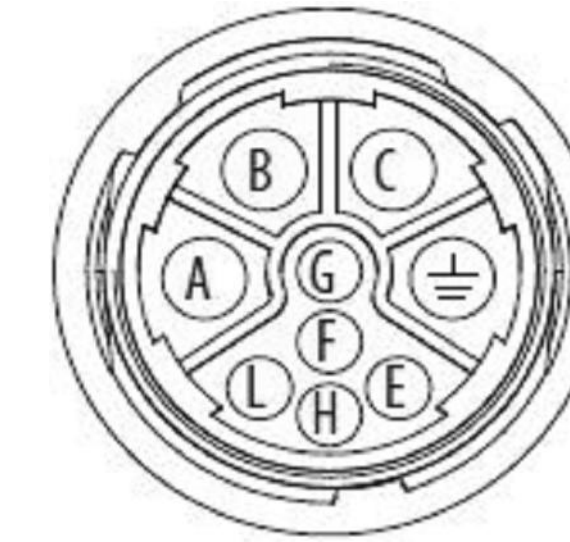
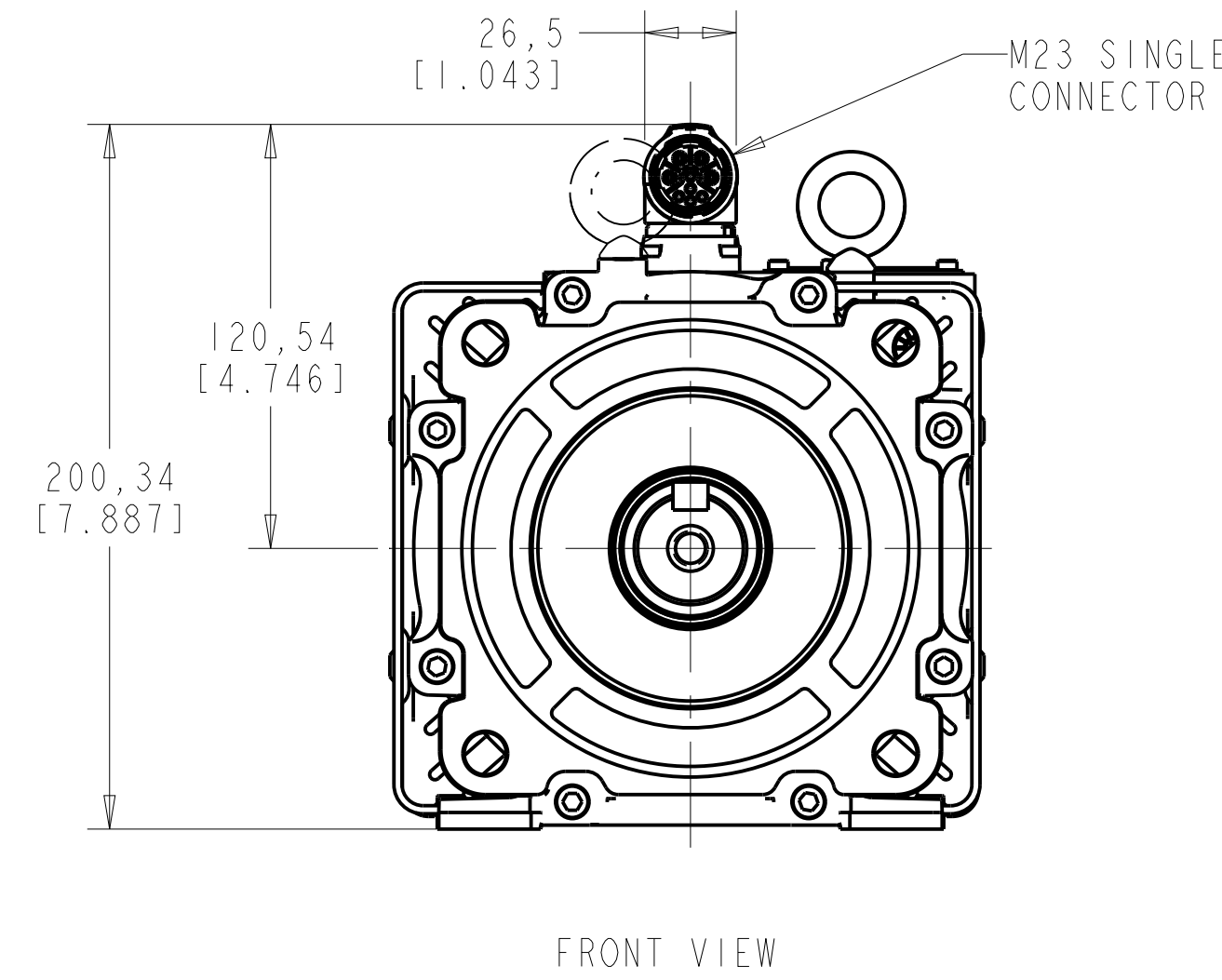
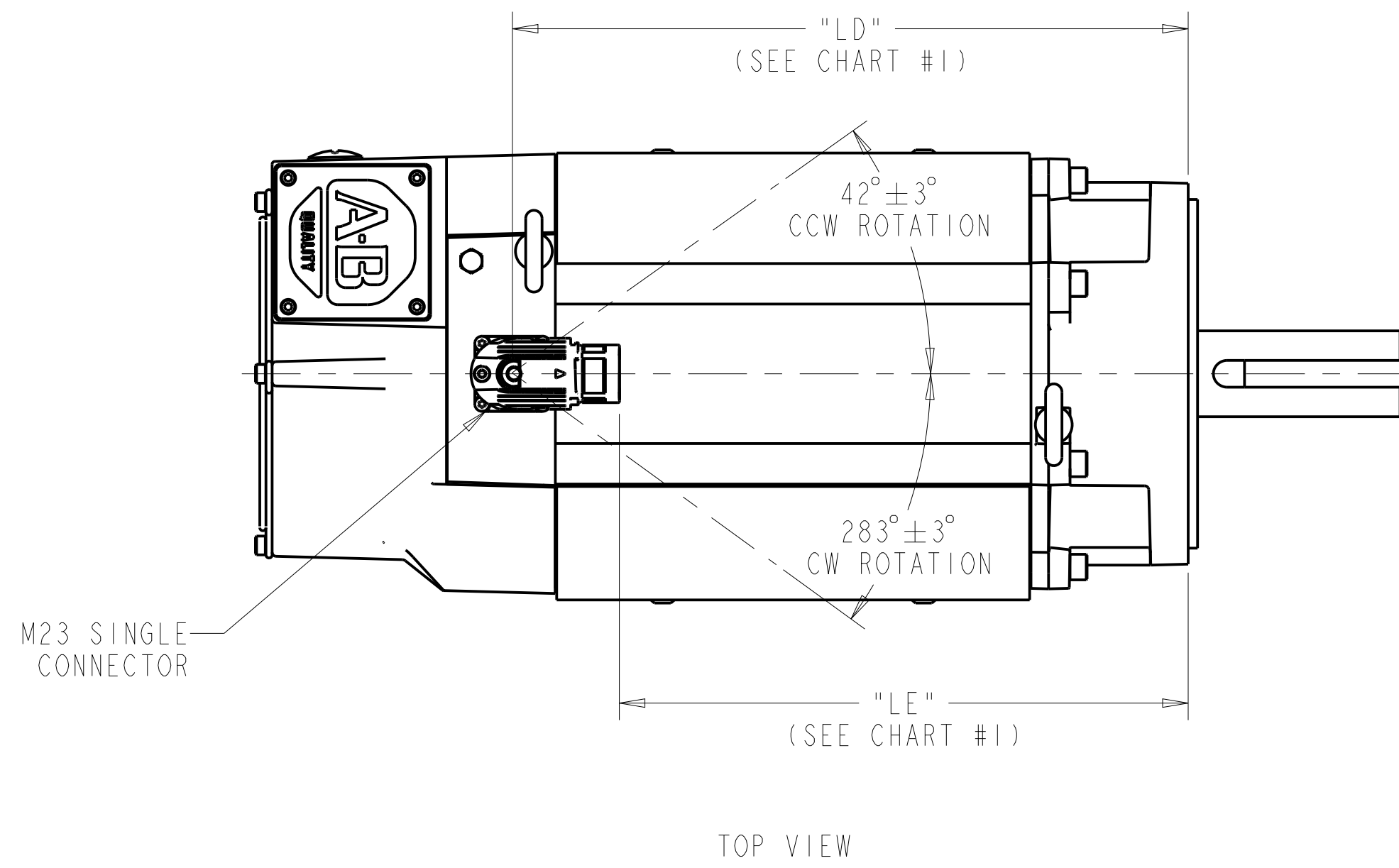


FIGURE #2

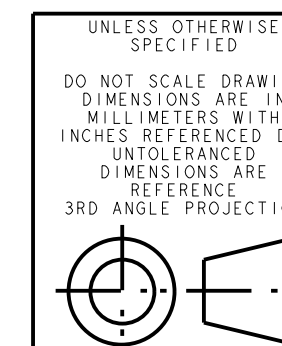
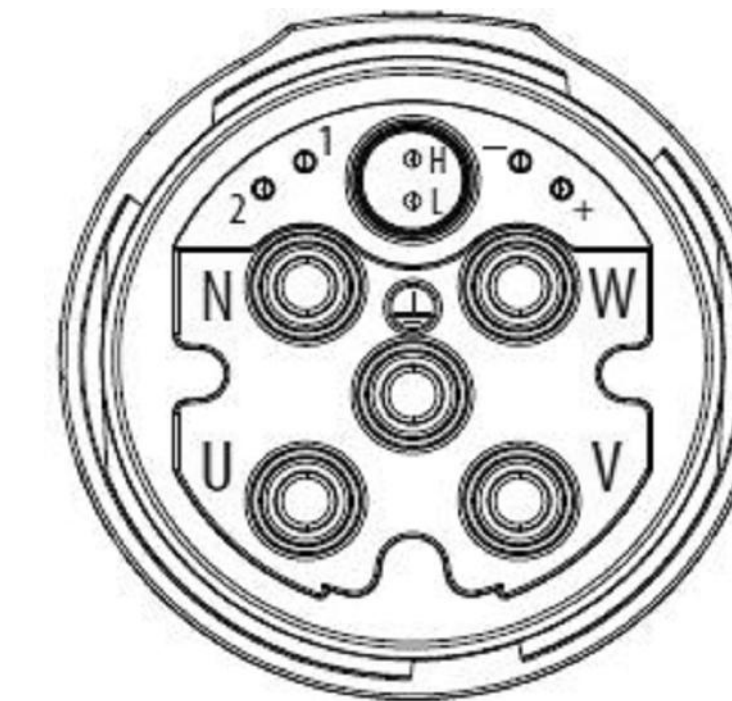
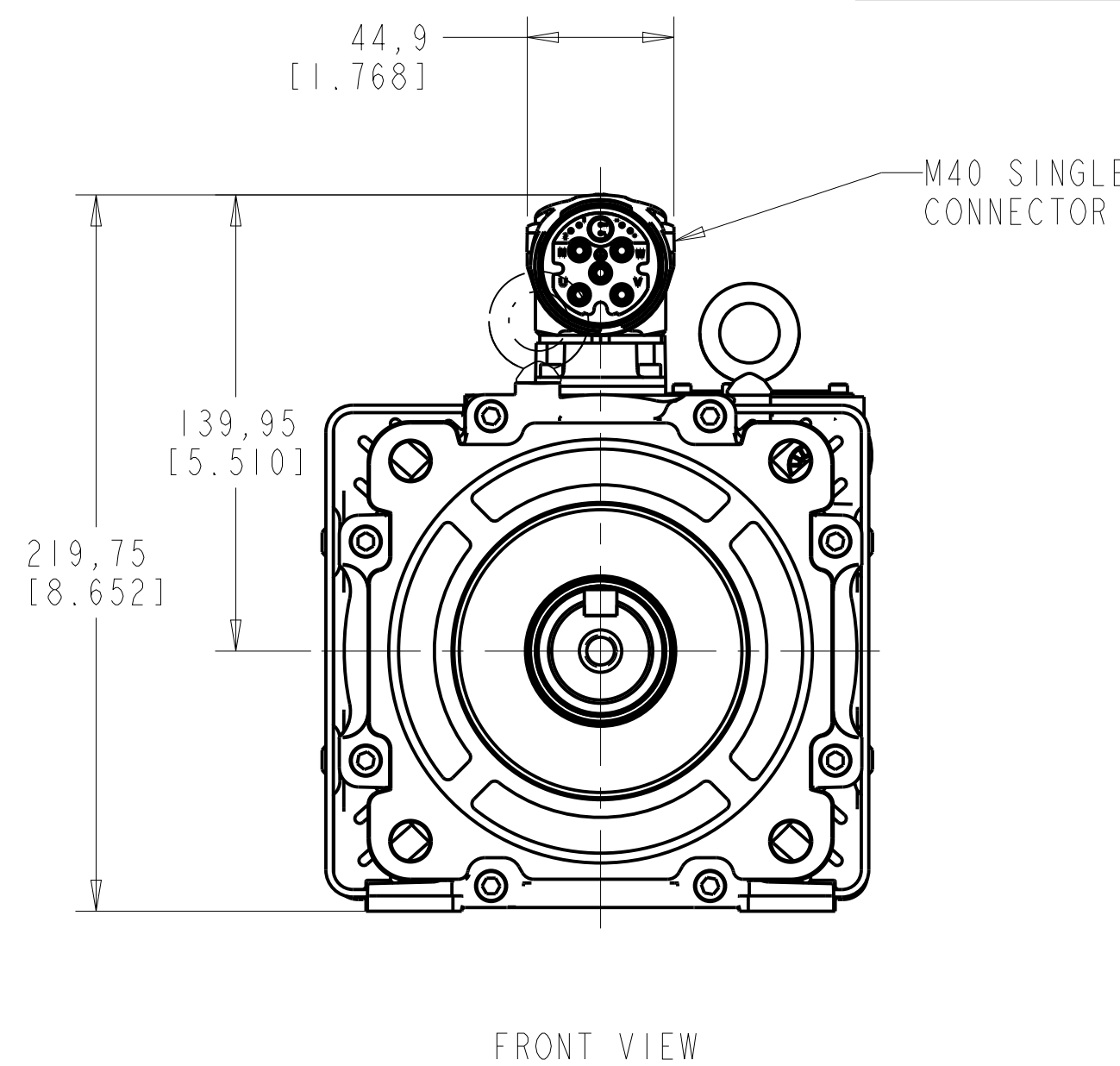
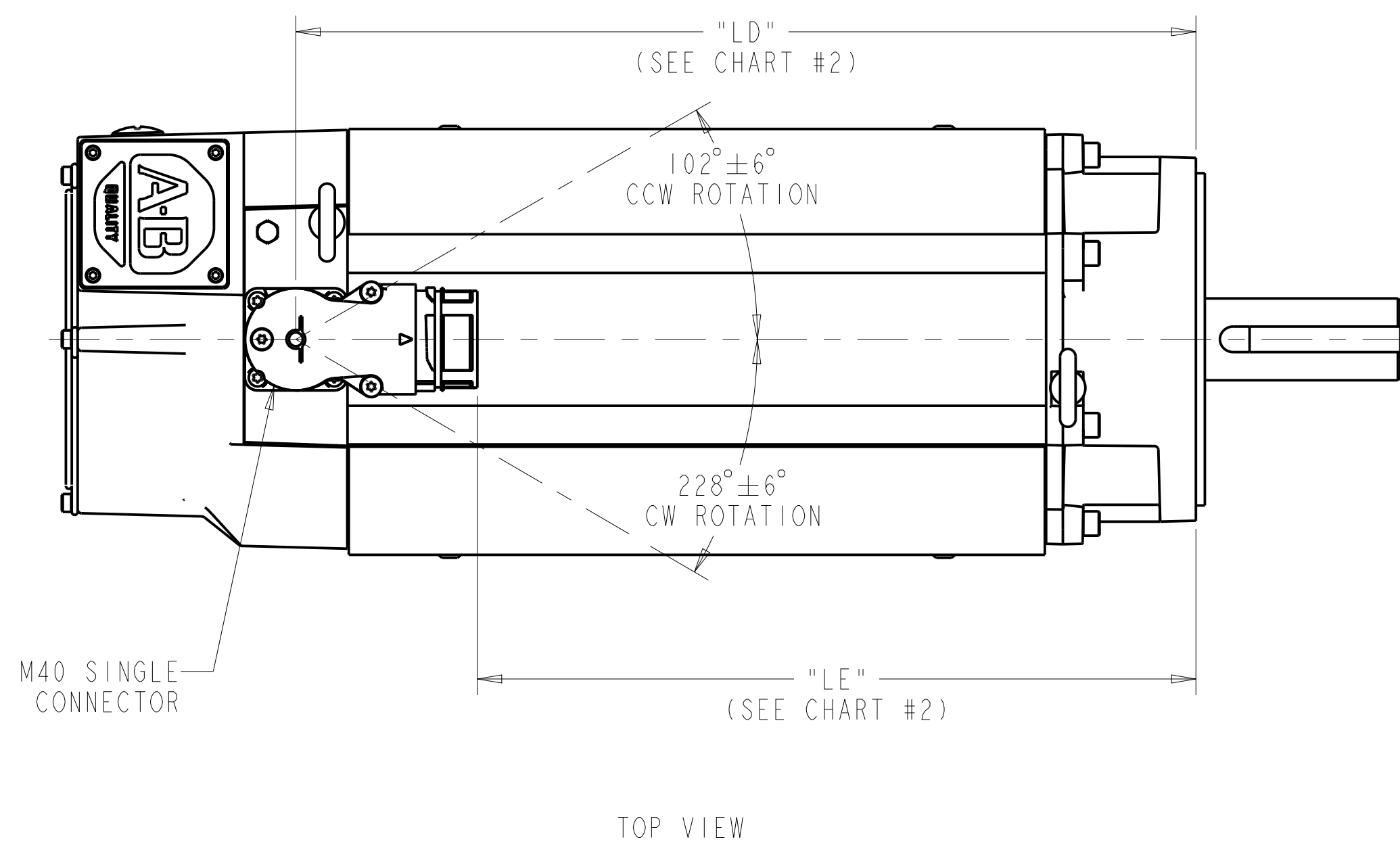
MODEL SHOWN IN FIGURE #2
IS VPC-B1654x-QJ12FS

CHART #2 (FOR FIGURE #2)			
FRAME-STACKS	BRAKE OPTION	MOTOR DIMENSIONS	
		LD	LE
165-4	2	352,1 [13.86]	281,1 [11.07]
	4	392,6 [15.46]	321,6 [12.66]

SINGLE M40 CONNECTOR
PIN-OUTS (FIGURE #2)

NON-BRAKE MOTOR BRAKE OPTION "2"	
M740 SINGLE CONNECTOR	
PIN ID	FUNCTION
U	U
V	V
W	W
⊕	GND
I	-
2	-
L	DSL +
H	DSL -
+	-
-	-
N	-
APPLICABLE CATALOG STRINGS	
VPC-B1654D-Qx12Fx	

BRAKE MOTOR BRAKE OPTION "4"	
M740 SINGLE CONNECTOR	
PIN ID	FUNCTION
U	U
V	V
W	W
⊕	GND
I	MBRK +
2	MBRK -
L	DSL +
H	DSL -
+	-
-	-
N	-
APPLICABLE CATALOG STRINGS	
VPC-B1654D-Qx14Fx	



UNLESS OTHERWISE SPECIFIED
DO NOT SCALE DRAWING DIMENSIONS ARE IN MILLIMETERS WITH INCHES REFERENCED (X1) UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
3RD ANGLE PROJECTION

Rockwell Automation

VPC, F165, ESM

Drawn by: SWLARSON Date: 10-25-2016

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Sheet 2 Of 4

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FIGURE #3

MODEL SHOWN IN FIGURE #3 IS VPC-B1652x-xJ72FS

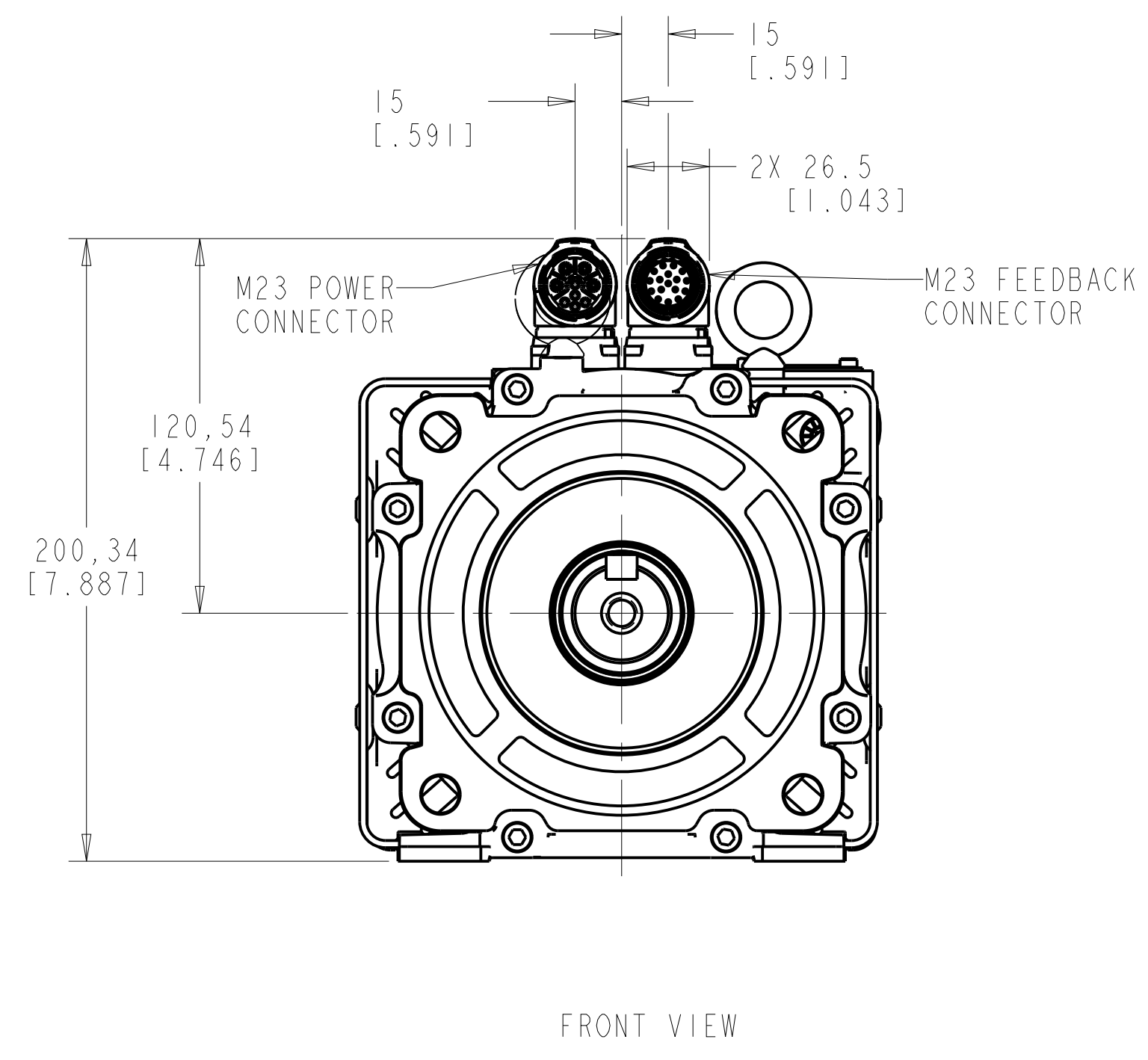
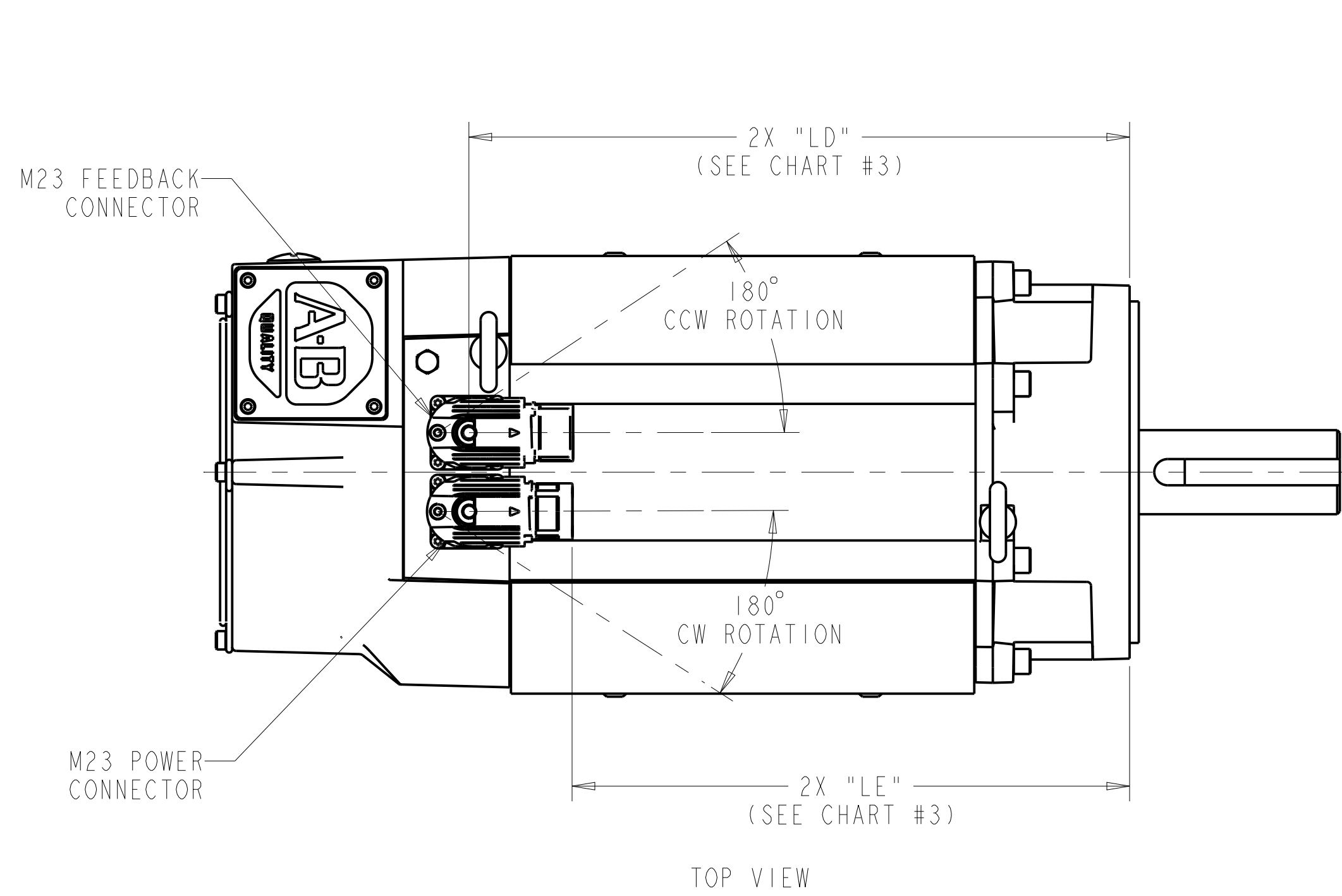
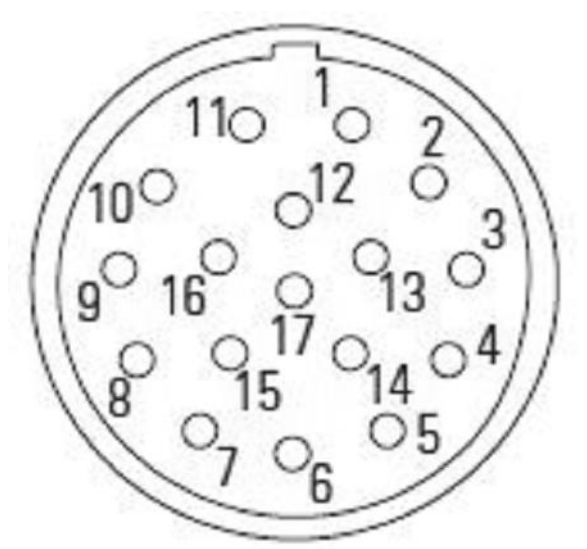


CHART #3 (FOR FIGURE #3)

FRAME-STACKS	BRAKE OPTION	MOTOR DIMENSIONS	
		LD	LE
165-2	2	251,9 [9.92]	211,9 [8.34]
	4	307,4 [12.10]	267,4 [10.53]
165-3	2	307,4 [12.10]	267,4 [10.53]
	4	347,9 [13.70]	307,9 [12.12]

M23 FEEDBACK CONNECTOR PIN-OUTS (FIGURE #3)



21 BIT SINGLE-TURN
FEEDBACK OPTION "S"

M623 FEEDBACK CONNECTOR	
PIN ID	FUNCTION
1	SIN +
2	SIN -
3	COS +
4	COS -
5	DATA +
6	DATA -
7-8	-
9-10	-
11	EPWR 9V
12	ECOM
13	THERM +
14	THERM -
15-17	-

APPLICABLE CATALOG STRINGS

VPC-B1652x-Sx7xFx
VPC-B1653x-Sx7xFx

25 BIT MULTI-TURN
FEEDBACK OPTION "Y"

M623 FEEDBACK CONNECTOR	
PIN ID	FUNCTION
1-2	-
3	CLOCK +
4	CLOCK -
5	DATA +
6	DATA -
7-8	-
9	PWR 5V
10	ECOM
11-12	-
13	THERM +
14	THERM -
15-17	-

APPLICABLE CATALOG STRINGS

VPC-B1652x-Yx72Fx
VPC-B1653x-Yx72Fx

M23 POWER CONNECTOR PIN-OUTS (FIGURE #3)



NON-BRAKE MOTOR
BRAKE OPTION "2"

M923 POWER CONNECTOR	
PIN ID	FUNCTION
A	U
B	V
C	W
⊥	GND
E	-
F	-
G	-
H	-
L	-

APPLICABLE CATALOG STRINGS

VPC-B1652x-Sx72Fx
VPC-B1652x-Yx72Fx
VPC-B1653x-Sx72Fx
VPC-B1653x-Yx72Fx

BRAKE MOTOR
BRAKE OPTION "4"

M923 POWER CONNECTOR	
PIN ID	FUNCTION
A	U
B	V
C	W
⊥	GND
E	-
F	MBRK +
G	MBRK -
H	-
L	-

APPLICABLE CATALOG STRINGS

VPC-B1652x-Sx74Fx
VPC-B1653x-Sx74Fx

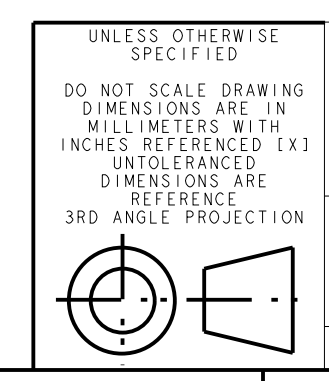


FIGURE #4

MODEL SHOWN IN FIGURE #4 IS VPC-BI654x-SJ74FS

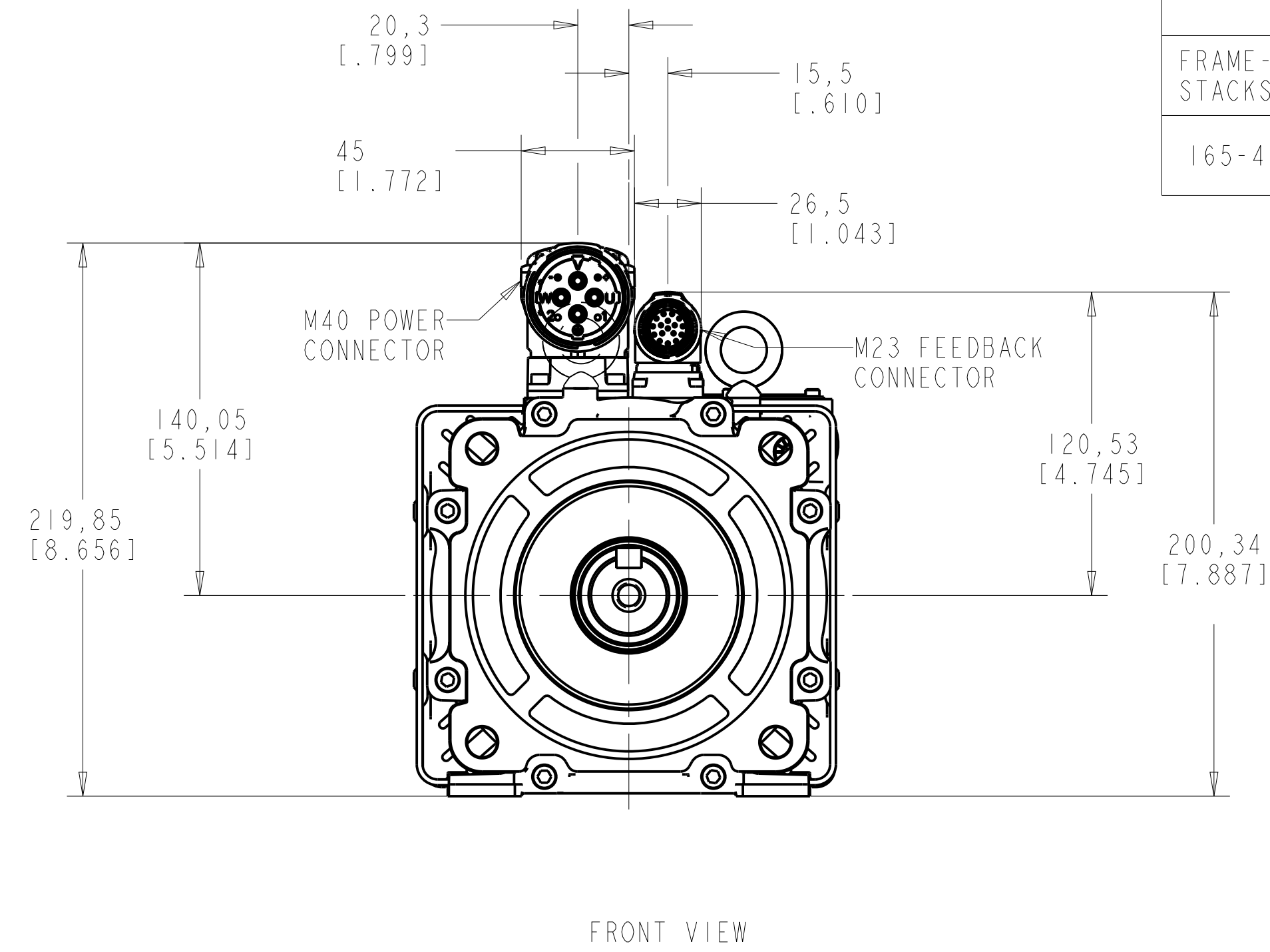
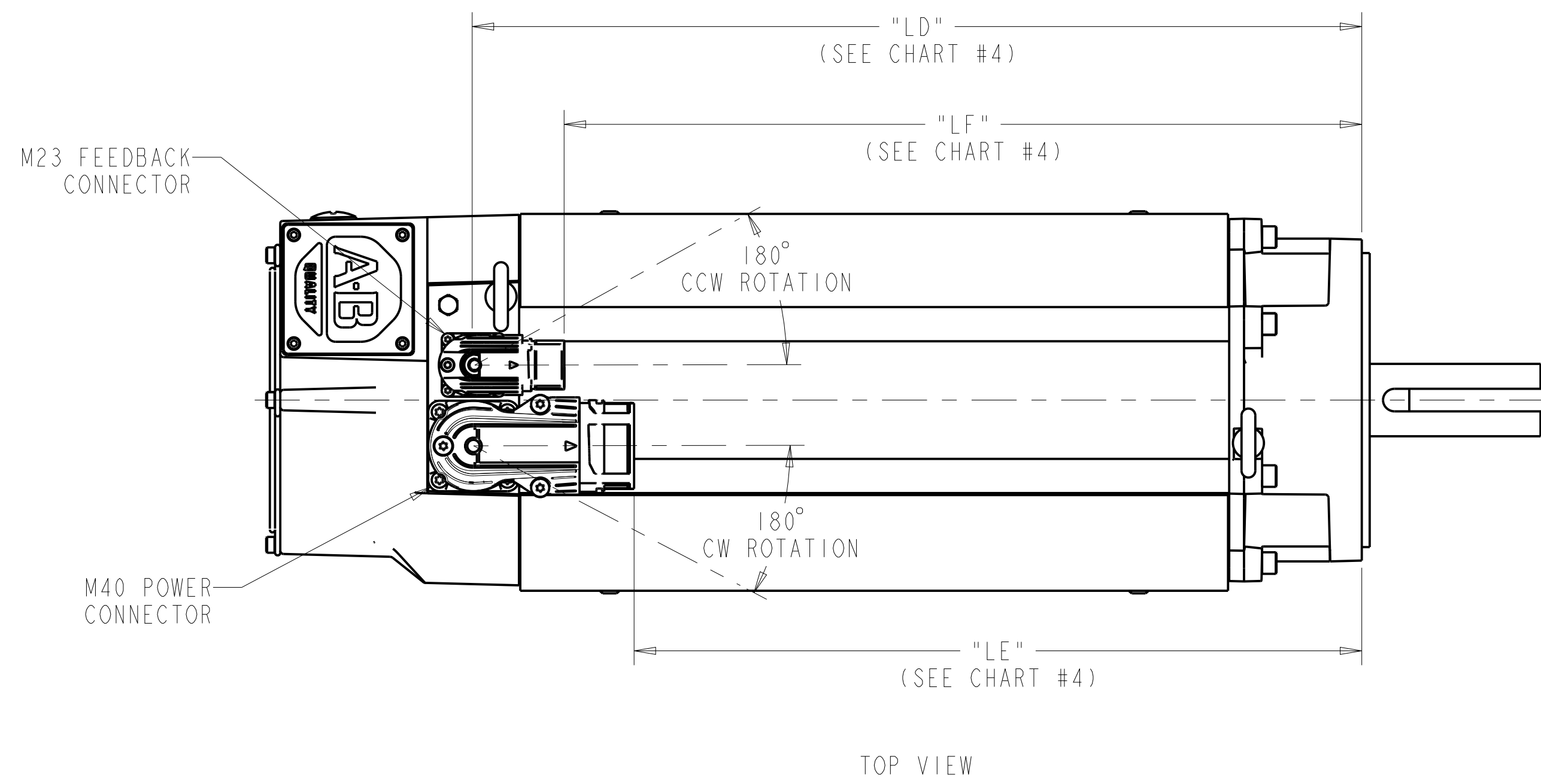


		CHART #4 (FOR FIGURE #4)		
FRAME-STACKS	BRAKE OPTION	MOTOR DIMENSIONS		
		LD	LF	LE
165-4	2	352,1 [13.86]	312,1 [12.29]	281,1 [11.07]
	4	392,6 [15.46]	352,6 [13.88]	321,6 [12.66]

M23 FEEDBACK CONNECTOR PIN-OUTS (FIGURE #4)

21 BIT SINGLE-TURN FEEDBACK OPTION "S"		25 BIT MULTI-TURN FEEDBACK OPTION "Y"	
M623 FEEDBACK CONNECTOR		M623 FEEDBACK CONNECTOR	
PIN ID	FUNCTION	PIN ID	FUNCTION
1	SIN +	1-2	-
2	SIN -	3	CLOCK +
3	COS +	4	CLOCK -
4	COS -	5	DATA +
5	DATA +	6	DATA -
6	DATA -	7-8	-
7-8	-	9	PWR 5V
9-10	-	10	ECOM
11	EPWR 9V	11-12	-
12	ECOM	13	THERM +
13	THERM +	14	THERM -
14	THERM -	15-17	-
15-17	-		
APPLICABLE CATALOG STRINGS VPC-BI654D-Sx7xFx		APPLICABLE CATALOG STRINGS VPC-BI654D-Yx72Fx	

M40 POWER CONNECTOR PIN-OUTS (FIGURE #4)

NON-BRAKE MOTOR BRAKE OPTION "2"		BRAKE MOTOR BRAKE OPTION "4"	
M940 POWER CONNECTOR		M940 POWER CONNECTOR	
PIN ID	FUNCTION	PIN ID	FUNCTION
U	U	U	U
V	V	V	V
W	W	W	W
⊥	GND	⊥	GND
+	-	+	MBRK +
-	-	-	MBRK -
1	-	1	-
2	-	2	-
APPLICABLE CATALOG STRINGS VPC-BI654D-Sx72Fx VPC-BI654D-Yx72Fx		APPLICABLE CATALOG STRINGS VPC-BI654D-Sx74Fx	