

Data sheet

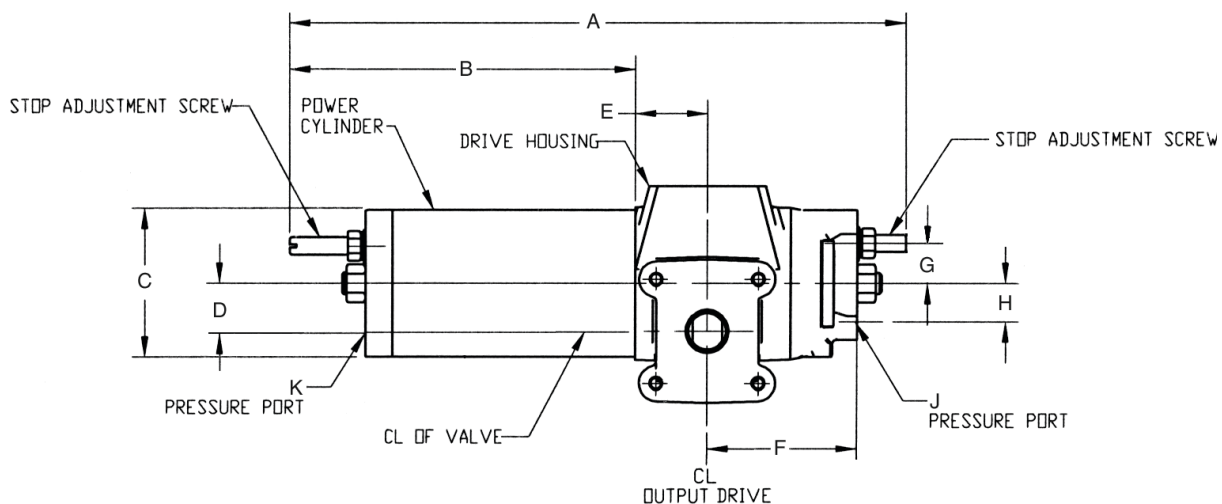
Sheet No.: CBPI 3.01 Rev. C

Date: April 2018

CBB-Series

Dimensions – (Pneumatic) In.

Double-Acting Actuators CBBXXX



Actuator Model	A	B	C	D	E	F	G	H	J/K	L	M	N
CBB315	14.16	7.38	3.25	1.00	1.88	3.46	0.94	0.94	1/4" NPT	.313-18 UNC	0.38	2.250
CBB420	16.43	8.57	4.25	1.44	2.13	4.37	1.10	1.10	3/8" NPT	.375-16 UNC	0.50	3.000
CBB520	16.46	8.63	5.38	1.44	2.07	4.37	1.10	1.10	3/8" NPT	.375-16 UNC	0.50	3.000
CBB525	19.22	9.88	5.38	1.44	2.56	5.00	1.25	1.25	3/8" NPT	.500-13 UNC	0.50	3.500
CBB725	19.40	10.24	7.50	1.75	2.53	5.00	1.25	1.25	3/8" NPT	.500-13 UNC	0.50	3.500

Actuator Model	P	Q	R	S	T	U	V	W	X	Y	Z	AA
CBB315	.313-18 UNC	1.125	2.91	5.81	0.75	2.22	5.18	0.614 0.620	1.03	3.75	1.09	0.873 0.875
CBB420	.375-16 UNC	1.500	3.35	6.69	0.75	2.81	6.25	0.864 0.870	1.03	4.63	1.38	1.123 1.125
CBB520	.375-16 UNC	1.500	3.35	6.69	0.75	2.81	6.25	0.864 0.870	1.03	4.63	1.38	1.121 1.125
CBB525	.500-13 UNC	1.750	4.38	8.75	1.12	3.50	7.58	1.115 1.121	1.50	5.75	1.69	1.498 1.500
CBB725	.500-13 UNC	1.750	4.38	8.75	1.12	3.50	7.58	1.115 1.121	1.50	5.75	1.69	1.498 1.500

Note: Not Certified dimensional drawings. Such drawings available on request.
Contact factory with correct model designation and serial number.
All dimensions are expressed in inches.

BETTIS™

EMERSON™

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:
America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810

Data sheet

Sheet No.: CBPI 3.02 Rev. C

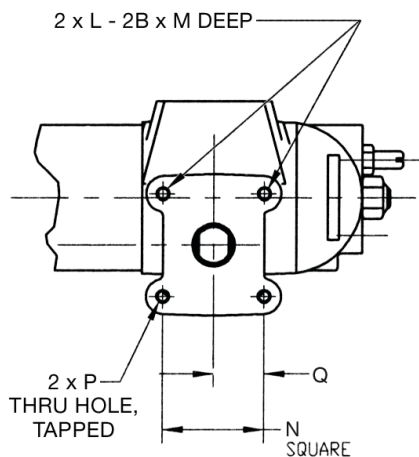
Date: April 2018

CBB-Series

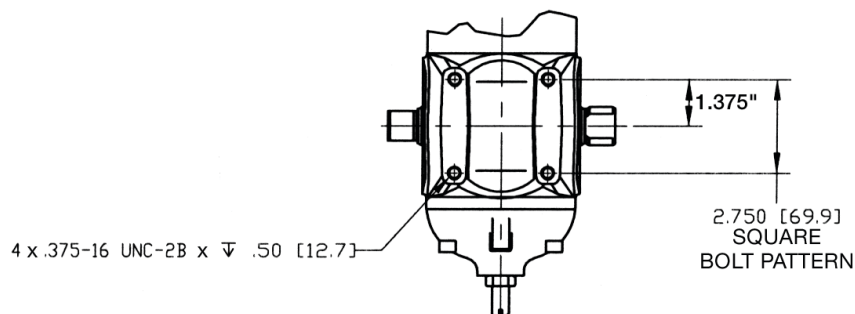
Dimensions – (Pneumatic) In.

Double-Acting Actuators CBBXXX (cont.)

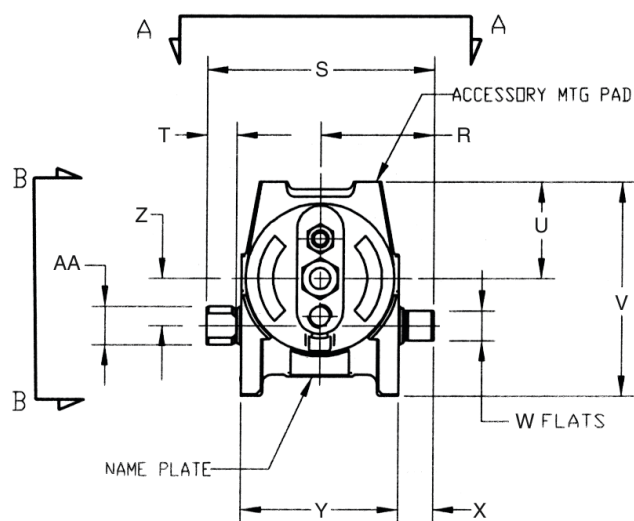
ACTUATORS SHOWN ROTATED
TO FULL CLOCKWISE POSITION



VIEW B-B
VALVE MTG SURFACE
TYP BOLT PATTERN BOTH SIDES
NOTE OPPOSING OUTPUT
SHAFT ORIENTATION



VIEW A-A
ACCY MTG PAD



END VIEW REPRESENTATIVE
OF ALL MODELS

Note: Not Certified dimensional drawings. Such drawings available on request.
Contact factory with correct model designation and serial number.
All dimensions are expressed in inches.

BETTIS™



EMERSON™

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:
America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810

Data sheet

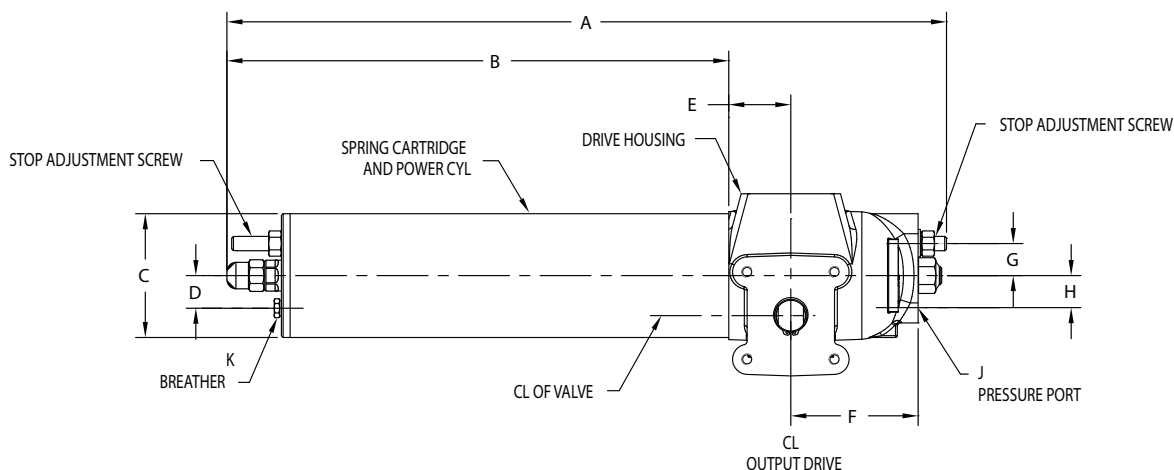
Sheet No.: CBPI 3.03 Rev. C

Date: April 2018

CBB-Series

Dimensions – (Pneumatic) In.

Spring-Return Actuators CBB XXX-SRX



Actuator Model	A	B	C	D	E	F	G	H	J/K	L
CBB315-SRX	20.80	14.40	3.25	0.94	1.88	3.46	0.94	0.94	1/4" NPT	.313-18 UNC
CBB415-SRX	20.95	14.46	4.25	1.12	1.88	3.46	0.94	0.94	1/4" NPT	.313-18 UNC
CBB420-SRX	24.71	17.23	4.25	1.12	2.13	4.37	1.10	1.10	3/8" NPT	.375-16 UNC
CBB520-SRX	24.88	17.44	5.38	1.25	2.07	4.37	1.10	1.10	3/8" NPT	.375-16 UNC
CBB525-SRX	28.21	19.35	5.38	1.25	2.56	5.00	1.25	1.25	3/8" NPT	.500-13 UNC
CBB725-SRX	28.09	19.42	7.50	2.50	2.53	5.00	1.25	1.25	3/8" NPT	.500-13 UNC

Actuator Model	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA
CBB315-SRX	0.38	2.250	.313-18 UNC	1.125	2.91	5.81	0.75	2.22	5.18	0.614 0.620	1.03	3.75	1.09	0.873 0.875
CBB415-SRX	0.38	2.250	.313-18 UNC	1.125	2.91	5.81	0.75	2.22	5.18	0.614 0.620	1.03	3.75	1.09	0.871 0.875
CBB420-SRX	0.50	3.000	.375 -16 UNC	1.500	3.35	6.69	0.75	2.81	6.25	0.864 0.870	1.03	4.63	1.38	1.123 1.125
CBB520-SRX	0.50	3.000	.375 -16 UNC	1.500	3.35	6.69	0.75	2.81	6.25	0.864 0.870	1.03	4.63	1.38	1.121 1.125
CBB525-SRX	0.50	3.500	.500 -13 UNC	1.750	4.38	8.75	1.12	3.50	7.58	1.115 1.121	1.50	5.75	1.69	1.498 1.500
CBB725-SRX	0.50	3.500	.500 -13 UNC	1.750	4.38	8.75	1.12	3.50	7.58	1.115 1.121	1.50	5.75	1.69	1.498 1.500

Note: Not Certified dimensional drawings. Such drawings available on request.

Contact factory with correct model designation and serial number.

All dimensions are expressed in inches.

BETTIS



EMERSON

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:

America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810

Data sheet

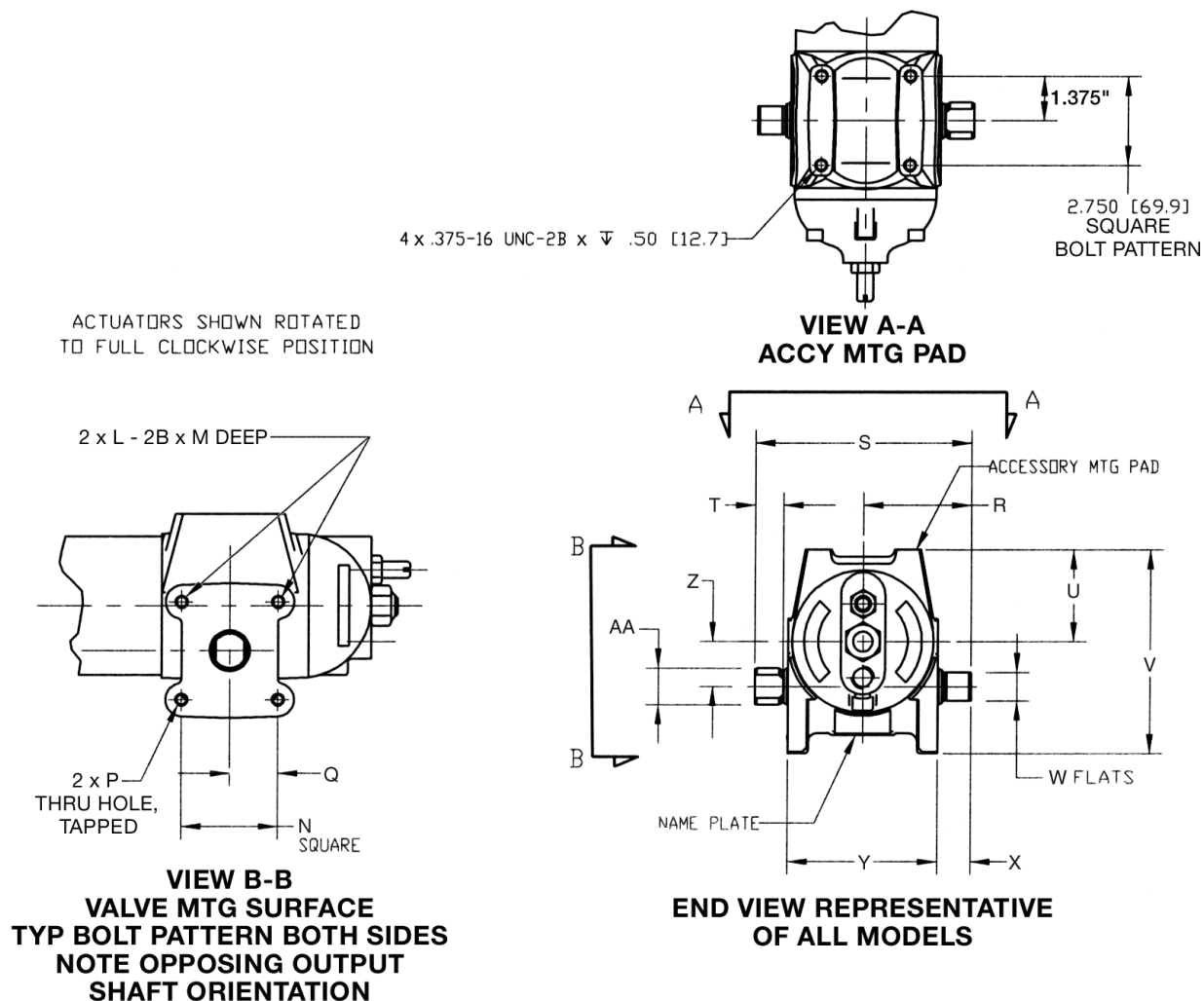
Sheet No.: CBPI 3.04 Rev. C

Date: April 2018

CBB-Series

Dimensions – (Pneumatic) In.

Spring-Return Actuators CBB XXX-SRX (cont.)



Note: Not Certified dimensional drawings. Such drawings available on request.
Contact factory with correct model designation and serial number.
All dimensions are expressed in inches.

BETTIS™


EMERSON™

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:
America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810

Data sheet

Sheet No.: CBPI 3.05 Rev. C

Date: April 2018

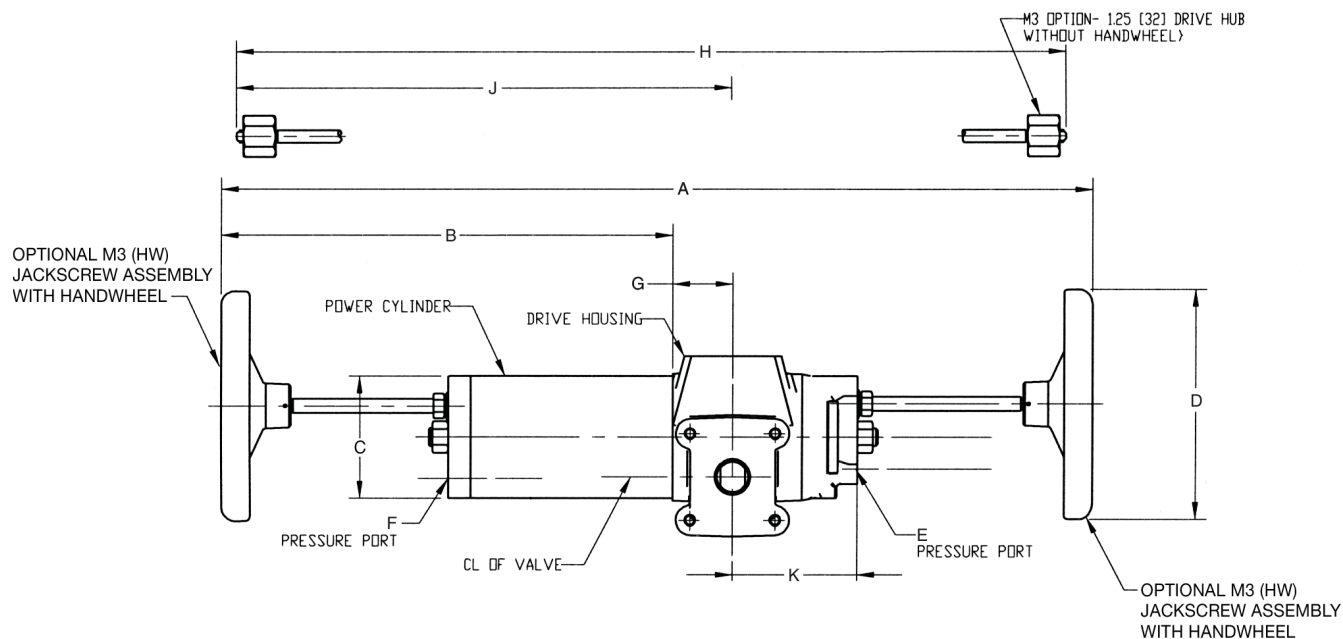
CBB-Series

Dimensions – (Pneumatic) In.

M3(HW) Override

Double-Acting Actuators

CBB XXX-M3(HW)



Actuator Model	A	B	C	D	E	F	G	H	J	K
CBB315-M3HW	26.25	13.79	3.25	6.00	1/4" NPT	1/4" NPT	1.88	25.18	15.13	3.46
CBB420-M3HW	31.20	16.15	4.25	8.00	3/8" NPT	3/8" NPT	2.13	29.21	17.28	4.37
CBB520-M3HW	31.20	16.21	5.38	8.00	3/8" NPT	3/8" NPT	2.07	29.21	17.28	4.37
CBB525-M3HW	37.23	19.44	5.38	10.00	3/8" NPT	3/8" NPT	2.56	33.90	20.08	5.00
CBB725-M3HW	37.23	19.47	7.50	10.00	3/8" NPT	3/8" NPT	2.53	34.65	20.71	5.00

Note: Not Certified dimensional drawings. Such drawings available on request.

Contact factory with correct model designation and serial number.

All dimensions are expressed in inches.

BETTIS



EMERSON

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:

America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810

Data sheet

Sheet No.: CBPI 3.06 Rev. C

Date: April 2018

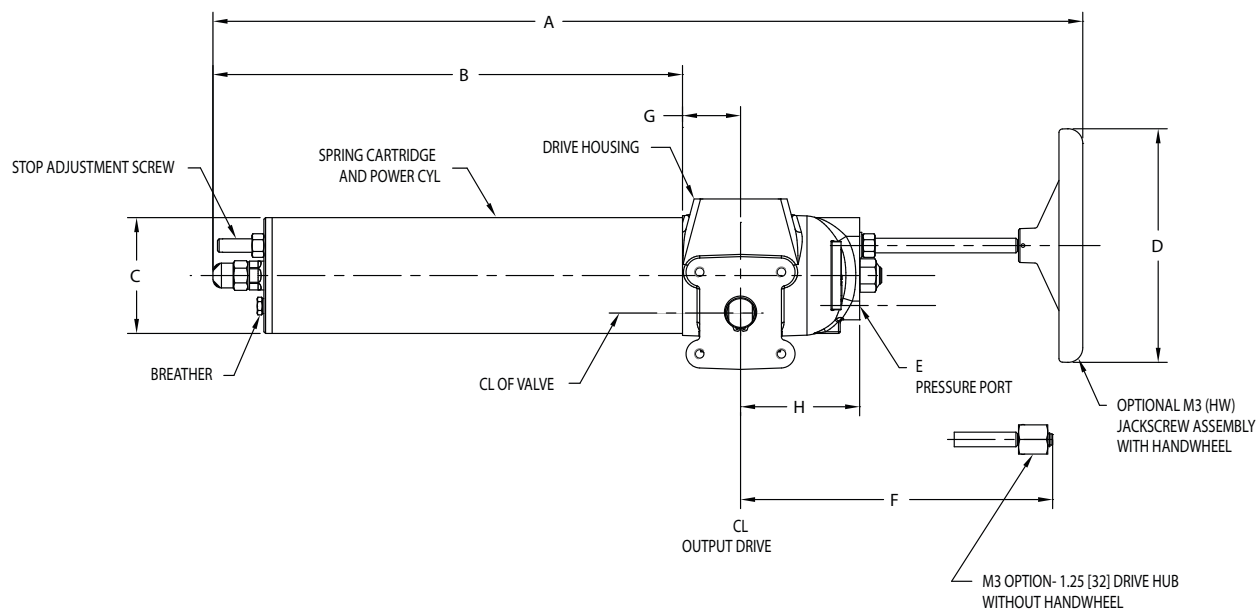
CBB-Series

Dimensions – (Pneumatic) In.

M3(HW) Override

Spring-Return Actuators

CBB XXX-SRX-M3



Actuator Model	A	B	C	D	E	F	G	H
CBB315-SR-M3HW	26.87	14.40	3.25	6.00	1/4" NPT	10.05	1.88	3.46
CBB415-SR-M3HW	26.93	14.46	4.25	6.00	1/4" NPT	10.05	1.88	3.46
CBB420-SR-M3HW	32.28	17.23	4.25	8.00	3/8" NPT	11.93	2.13	4.37
CBB420-SR-M3HW	32.43	17.44	5.38	8.00	3/8" NPT	11.93	2.07	4.37
CBB525-SR-M3HW	37.14	19.35	5.38	10.00	3/8" NPT	13.94	2.56	5.00
CBB725-SR-M3HW	37.17	19.42	7.50	10.00	3/8" NPT	13.94	2.53	5.00

Note: Not Certified dimensional drawings. Such drawings available on request.

Contact factory with correct model designation and serial number.

All dimensions are expressed in inches.

BETTIS



EMERSON

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:

America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810