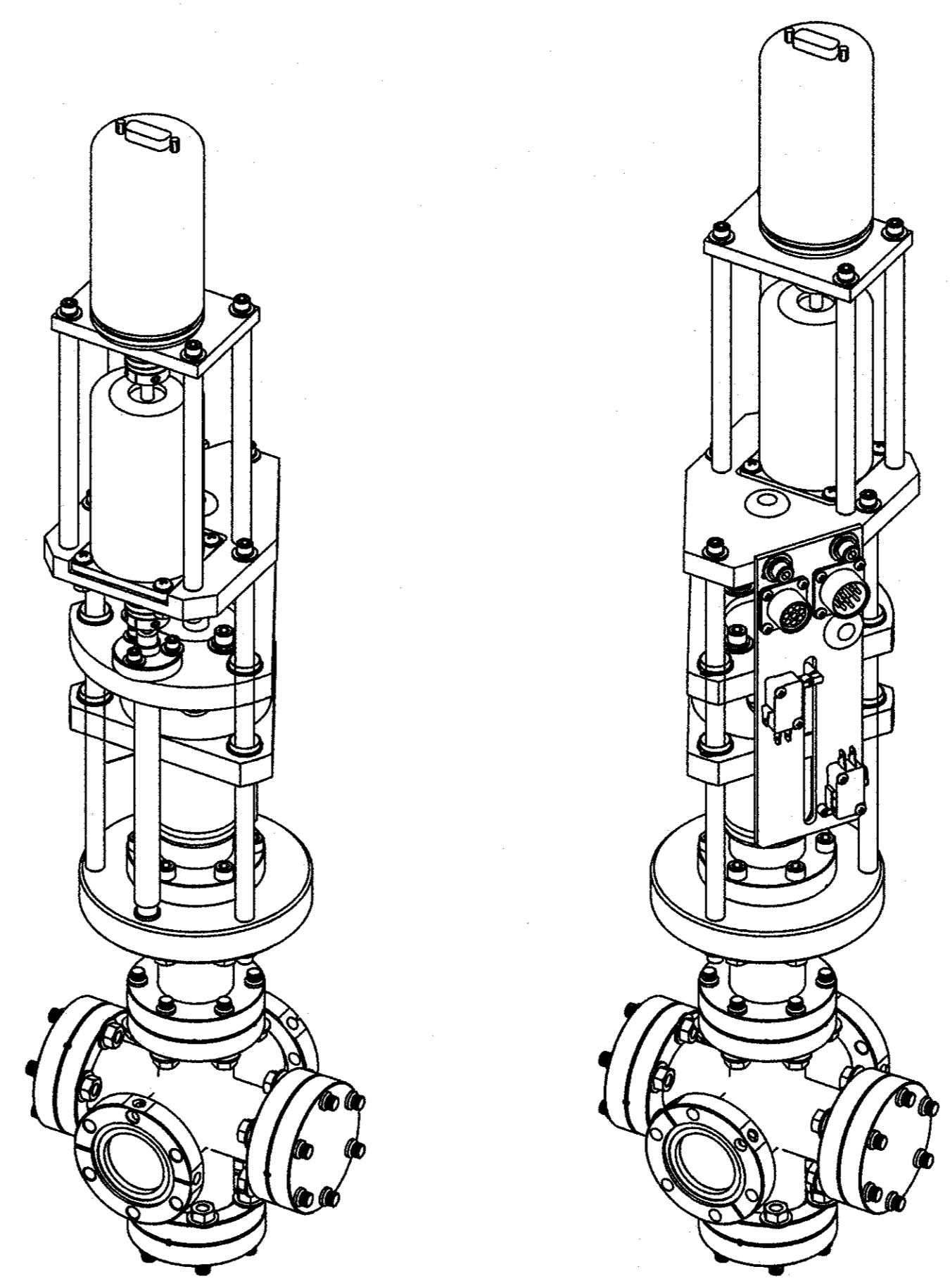
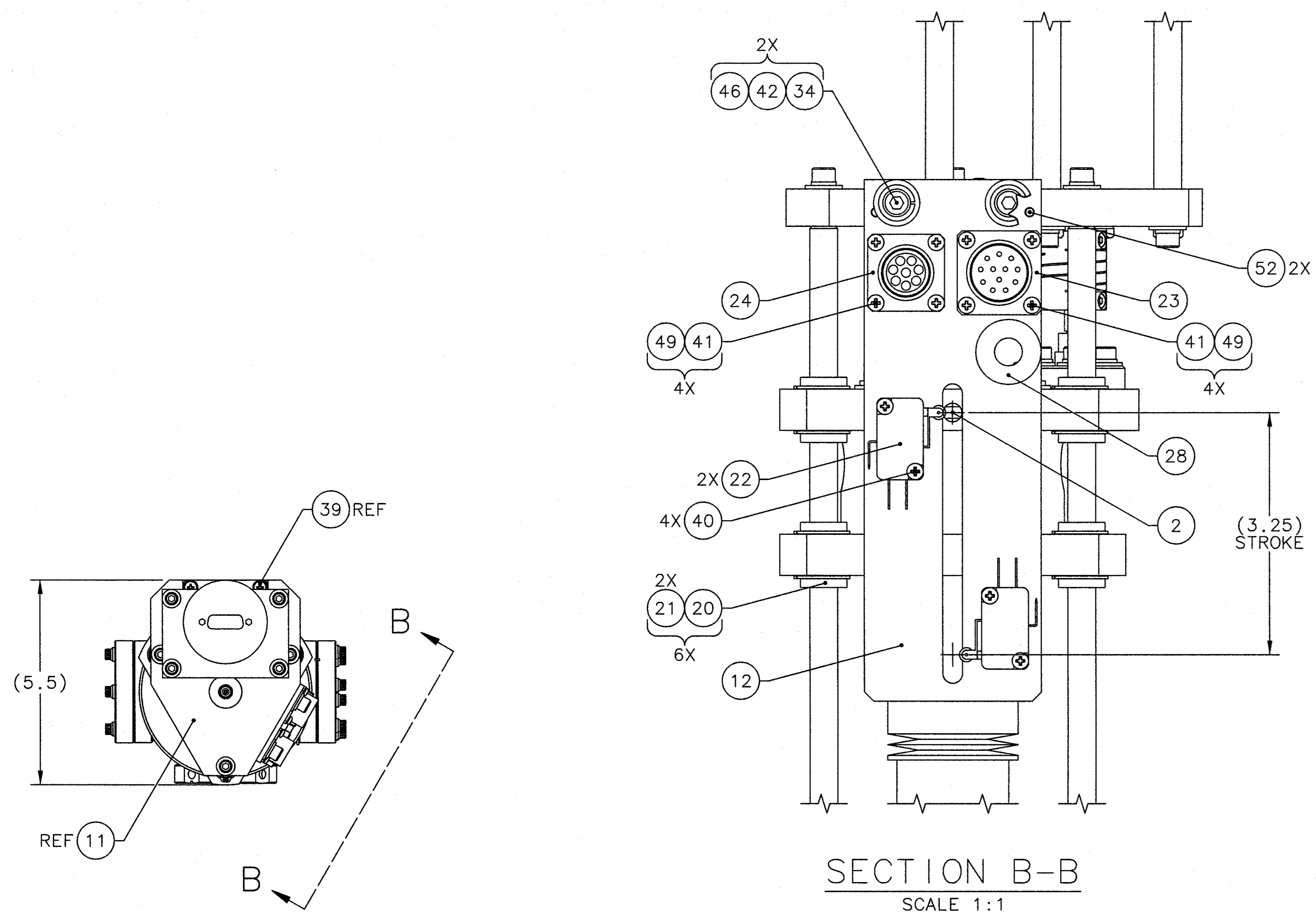


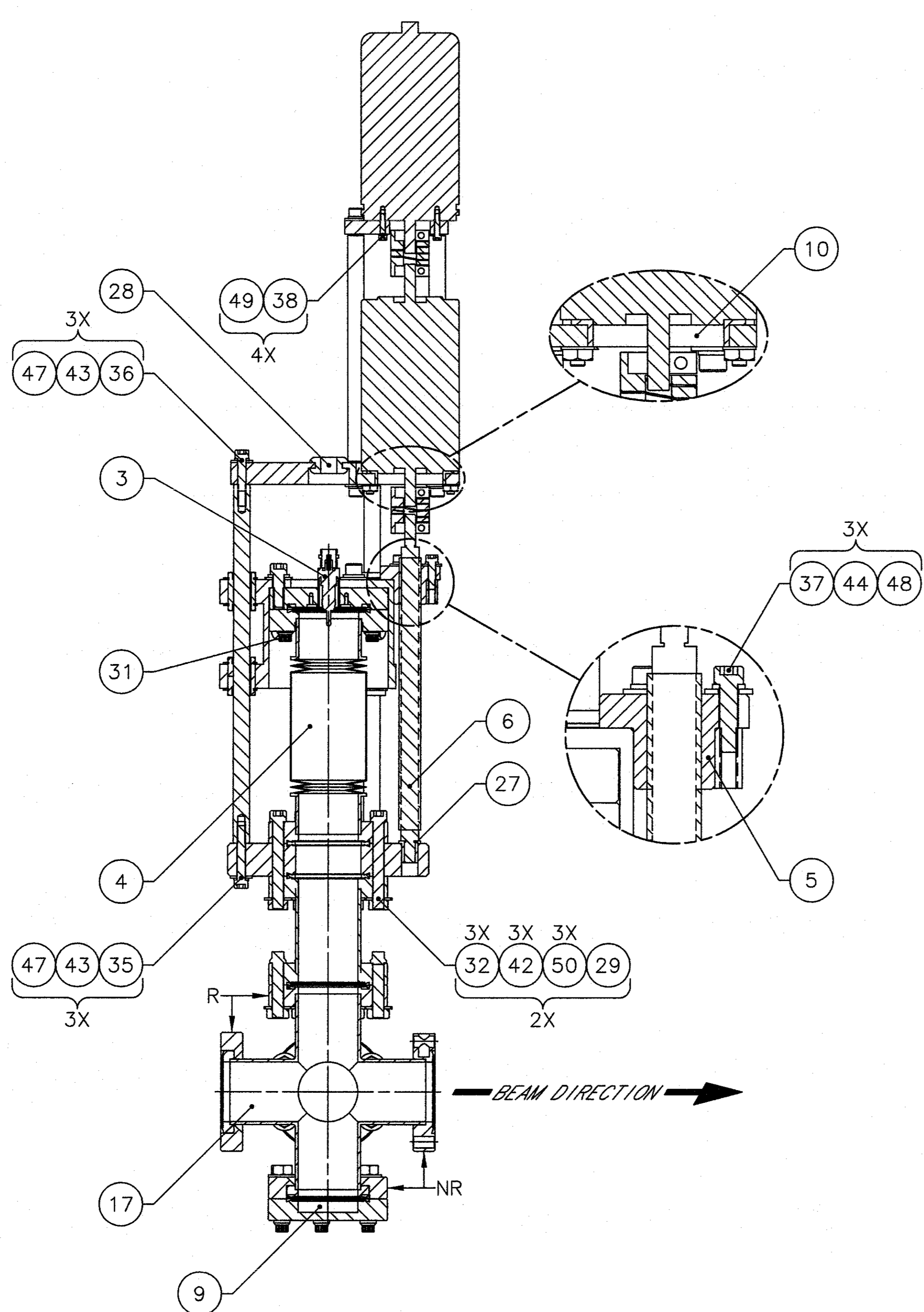
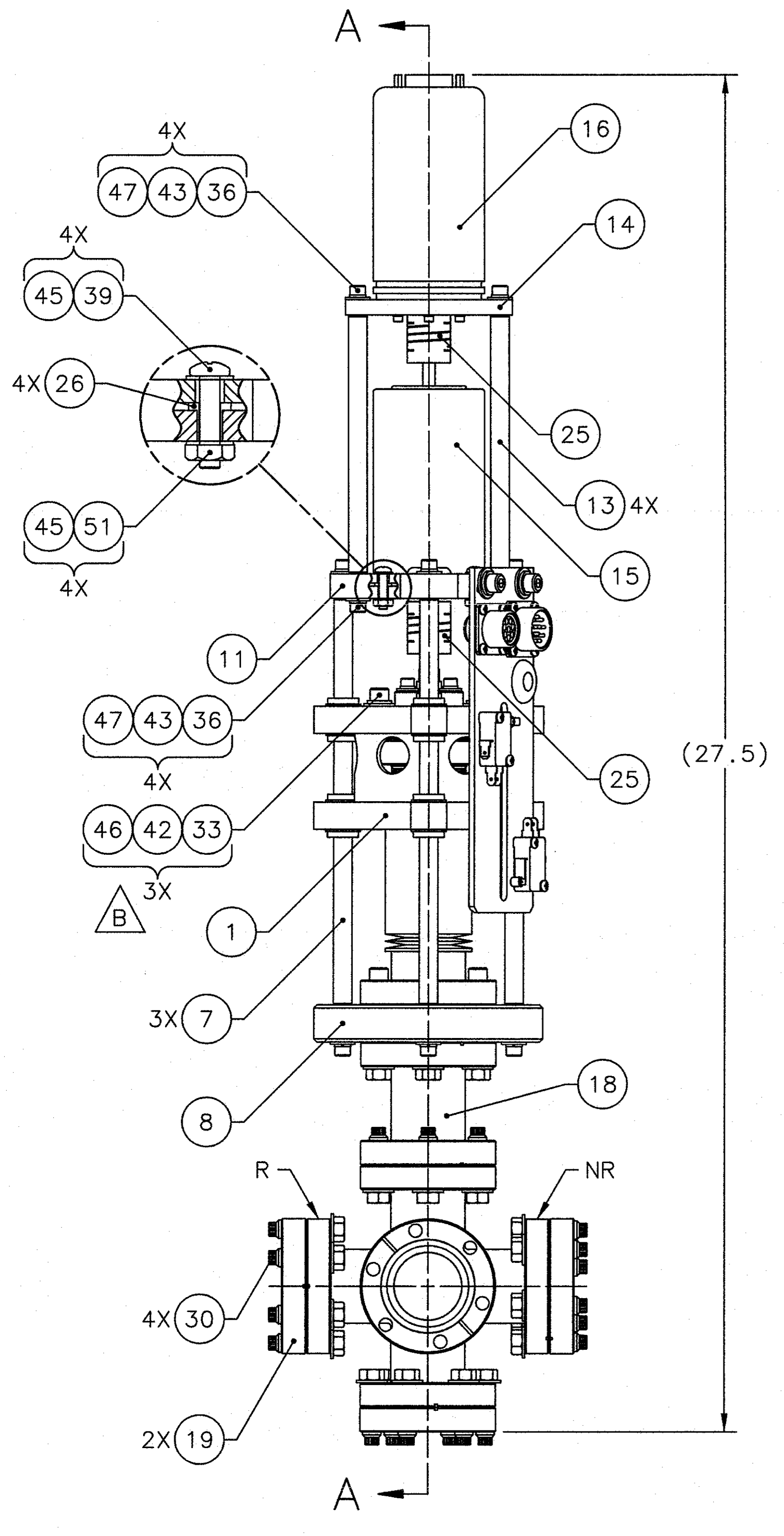
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A1	A	REVISED DRAWING NAME. ADDED USED ON ASSY NUMBER.	06/09/11 06/09/11	LADT MLI
C8 E1	B	REVISED MATERIAL CALLOUT FOR ITEM 33.	8/29/11 8/29/11	MLI-c LADT



NOTES:

- USE THE FOLLOWING JLAB SPECIFICATIONS:
 - a. FABRICATION OF ULTRA HIGH VACUUM EQUIPMENT: #22631-S-001 REV B
 - b. CLEANING & HANDLING OF UHV COMPONENTS: #22632-S-001 REV E
 - c. STAINLESS STEEL FLANGES FOR UHV APPLICATIONS: #23661-S-001 REV D
- PLACE PROTECTIVE COVERS OVER OPEN FLANGES DURING FABRICATION, AFTER PROCESSING, DURING STORAGE & DURING SHIPPING.
- ANY DAMAGE TO KNIFE EDGE RENDERS THE FLANGE SCRAP.
- ITEMS 1 THRU 10 ARE INTERCHANGEABLE COMPONENTS BETWEEN HARP ASSEMBLY (DIA0070200-3000) & SUPER HARP ASSEMBLY (DIA0070200-3001).
- SUGGESTED SOURCES OR JLAB APPROVED:
 - a. A&N CORPORATION
707 SW 19TH AVENUE
WILLSTON, FL 32696
(800) 352-6431
www.ancorp.com
 - b. ARROW ELECTRONICS, INC.
50 MARCUS DRIVE
MELVILLE, NY 11747
(800) 833-3557
www.arrownac.com
 - c. COMPUTER CONVERSION CORP.
6 DUNTON COURT
EAST NORTHPORT, NY 11731
(631) 261-3300
www.computerconversions.com
 - d. McMASTER-CARR
P.O. Box 740100
ATLANTA, GA 30336
(404) 346-7000
www.mcmaster.com
 - e. MOTION INDUSTRIES
1220-D FLEETWAY DRIVE
CHESAPEAKE, VA 23323
(757) 487-0311
www.motionindustries.com
 - f. KEYSTONE ELECTRONICS CORP.
31-07 20TH ROAD
ASTORIA, OR 11042
(800) 221-5510
www.keyco.com
 - g. NEWARK
4801 N. RAVENSWOOD
CHICAGO, IL 60640
(800) 463-9275
www.newark.com
 - h. STOCK DRIVE PRODUCTS
2101 JERICHO TURNPIKE
NEW HYDE PARK, NY 11105
(800) 819-8900
www.sdp-si.com
- RATINGS & SPECIFICATIONS FOR ITEMS 15 & 16:
 - a. 60mm (NEMA 23)
200 STEPS PER REVOLUTION
4 LEADS
MIN HOLDING TORQUE - 160 OZ-IN
5.66 VOLTS
1 AMP
 - b. 60mm (NEMA 23)
DUAL RESOLVER UNIT
OPERATING TEMPERATURE: -20°C TO +125°C
MAX STARTING TORQUE - 1.0 OZ-IN
MAX OPERATING SPEED - 1200 RPM
RADIATION - 10⁴ RAD
- ITEMS 3, 4, 15, 16, 22, 23 & 24 PROVIDED BY JLAB.

ITEM NO.	QTY	PART OR IDENTIFYING NO.	DESCRIPTION	MATERIAL SPECIFICATION	NOTES
4	40		HARDWARE	PN HEAD MACHINE SCREW, PHILLIPS DRIVE, #4-40 UNC-2A X .56 LG	300 SERIES STAINLESS STEEL
4	39		HARDWARE	PN HEAD MACHINE SCREW, PHILLIPS DRIVE, #8-32 UNC-2A X .75 LG	300 SERIES STAINLESS STEEL
4	38		HARDWARE	SOCKET HEAD CAP SCREW, #4-40 UNC-2A X .50 LG	300 SERIES STAINLESS STEEL
3	37		HARDWARE	SOCKET HEAD CAP SCREW, #8-32 UNC-2A X .63 LG	300 SERIES STAINLESS STEEL
11	36		HARDWARE	SOCKET HEAD CAP SCREW, #10-32 UNF-2A X .75 LG	300 SERIES STAINLESS STEEL
3	35		HARDWARE	SOCKET HEAD CAP SCREW, #10-32 UNF-2A X 1.25 LG	300 SERIES STAINLESS STEEL
2	34		HARDWARE	SOCKET HEAD CAP SCREW, #250-20 UNC-2A X .50 LG	300 SERIES STAINLESS STEEL
3	33		HARDWARE	SOCKET HEAD CAP SCREW, #250-20 UNC-2A X .75 LG	SILICON BRONZE
6	32		HARDWARE	SOCKET HEAD CAP SCREW, #250-20 UNC-2A X 2.00 LG	300 SERIES STAINLESS STEEL
1	31	VAC5000133-0002-03	Ø2.75 TAPPED HOLES, W/ BOLTS ASSY		
4	30	VAC5000133-0001-03	Ø2.75 THRU HOLES, W/ BOLTS ASSY		
2	29	A&N CORPORATION PN 0804024	Ø2.75 CFF, GASKET, 1.53 ID	COPPER	5a
2	28	McMASTER-CARR PN 9800K47	GROMMET, ROUND, PUSH IN, .38 ID X .88 OD X .12 THK	RUBBER	5d
1	27	McMASTER-CARR PN 2938T3	BUSHING, FLANGE SLEEVE, .25 ID X .38 OD X .50 LG	SAE 863 BRONZE	5d
4	26	KEYSTONE PN 3105	#8 SHOULDER WASHER	NYLON 6/6	5f
2	25	STOCK DRIVE PRODUCTS PN S50HAA-087H0808	HELICAL FLEXIBLE COUPLING, SPLIT PIN, Ø.250 BORE X Ø.875 OD X 1.08 LG	ALUMINUM 7075-T6	5h
1	24	PN BURNDY G081288PNE	CONNECTOR, FEMALE, 8 PIN, SHELL SIZE 12		5b, 7
1	23	PN BURNDY G081492PNE	CONNECTOR, MALE, 12 PIN, SHELL SIZE 14		5b, 7
2	22	HONEYWELL PN V7-7B17D8201	MICRO LIMIT SWITCH, ROLLER LEVER SPDT		5g, 7
12	21	THOMSON PN W-375-SS	L INEAR RETAINING RING	STAINLESS STEEL	5e
6	20	THOMSON PN A-61014-SS	L INEAR BEARING, Ø.375 BORE X Ø.625 OD X .875 LG	STAINLESS STEEL	5e
2	19	A&N CORPORATION PN 5000056	Ø2.75 CFF, BLANK	STAINLESS STEEL	5a
1	18	VAC5555000-0209-002.50	SPOOL, Ø1.50 TUBE X Ø2.75 CFF X Ø2.75 CFF (R-NR)		
1	17	A&N CORPORATION PN 5000567	SIX WAY CROSS, Ø2.75 NOMINAL	STAINLESS STEEL	5a
1	16	COMPUTER CONVERSION CORP PN MR90-64-TTB	MULTI-TURN TRANSDUCER		5c, 7
1	15	SUPERIOR ELECTRIC PN M063-LF-401E	SLO-SYN DC STEPPER MOTOR		5e, 7
1	14	DIA0070200-3022	SUPER HARP ENCODER MOUNTING PLATE		
4	13	DIA0070200-3021	SUPER HARP ENCODER SUPPORT ROD		
1	12	DIA0070200-3020	SUPER HARP SWITCH MOUNTING PLATE		
1	11	DIA0070200-3018	SUPER HARP TOP PLATE		
1	10	DIA0070200-3016	HARP/SUPER HARP ISOLATION MOTOR MOUNT		4
1	9	DIA0070200-3015	HARP/SUPER HARP MODIFIED FLANGE		4
1	8	DIA0070200-3014	HARP/SUPER HARP GUIDE ROD FLANGE		4
3	7	DIA0070200-3013	HARP/SUPER HARP GUIDE ROD		4
1	6	DIA0070200-3012	HARP/SUPER HARP ACME DRIVE SCREW		4
1	5	DIA0070200-3011	HARP/SUPER HARP ACME DRIVE NUT		4
1	4	DIA0070200-3010	HARP/SUPER HARP BELLOW ASSEMBLY		4, 7
1	3	DIA0070200-3009	HARP/SUPER HARP BNC CONNECTOR FLANGE WELDMENT		4, 7
1	2	DIA0070200-3007	HARP/SUPER HARP ACTUATOR PIN		4
1	1	DIA0070200-3006	HARP/SUPER HARP CARRIAGE		4



ITEM NO.	QTY	PART OR IDENTIFYING NO.	DESCRIPTION	MATERIAL SPECIFICATION	NOTES
2	52		HARDWARE	SPRING PIN, SLOTTED, Ø.125 X .38 LG	420 STAINLESS STEEL
4	51		HARDWARE	NUT, HEX, #8-32 UNC-2B	SILICON BRONZE
6	50		HARDWARE	NUT, HEX, #250-20 UNC-2B	SILICON BRONZE
12	49		HARDWARE	WASHER, SPRING LOCK, #4	300 SERIES STAINLESS STEEL
3	48		HARDWARE	WASHER, SPRING LOCK, #8	300 SERIES STAINLESS STEEL
14	47		HARDWARE	WASHER, SPRING LOCK, #10	300 SERIES STAINLESS STEEL
5	46		HARDWARE	WASHER, SPRING LOCK, .250	300 SERIES STAINLESS STEEL
8	45		HARDWARE	WASHER, FLAT, #8	DELRIN
3	44		HARDWARE	WASHER, FLAT, #8	300 SERIES STAINLESS STEEL
14	43		HARDWARE	WASHER, FLAT, #10	300 SERIES STAINLESS STEEL
11	42		HARDWARE	WASHER, FLAT, .250	300 SERIES STAINLESS STEEL
8	41		HARDWARE	PAN HEAD MACHINE SCREW, PHILLIPS DRIVE, #4-40 UNC-2A X .25 LG	300 SERIES STAINLESS STEEL

DOCUMENT CONTROL STAMP

UNITED STATES DEPARTMENT OF ENERGY

Jefferson Lab
Thomas Jefferson National Accelerator Facility

DIA DEVICES
INSERTION DEVICES
SUPER HARP BODY ASSEMBLY

DIA-007-0200-3001

REV B

SCALE 1:2

SHEET 1 OF 1