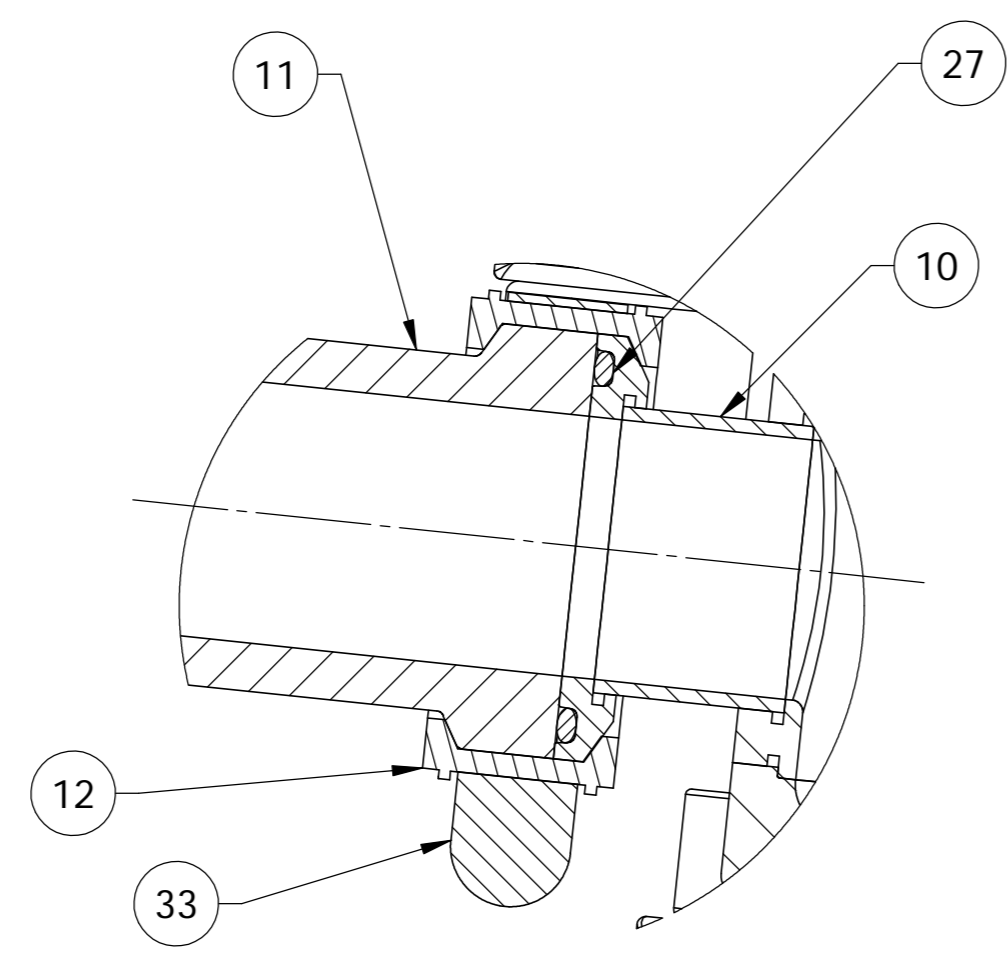
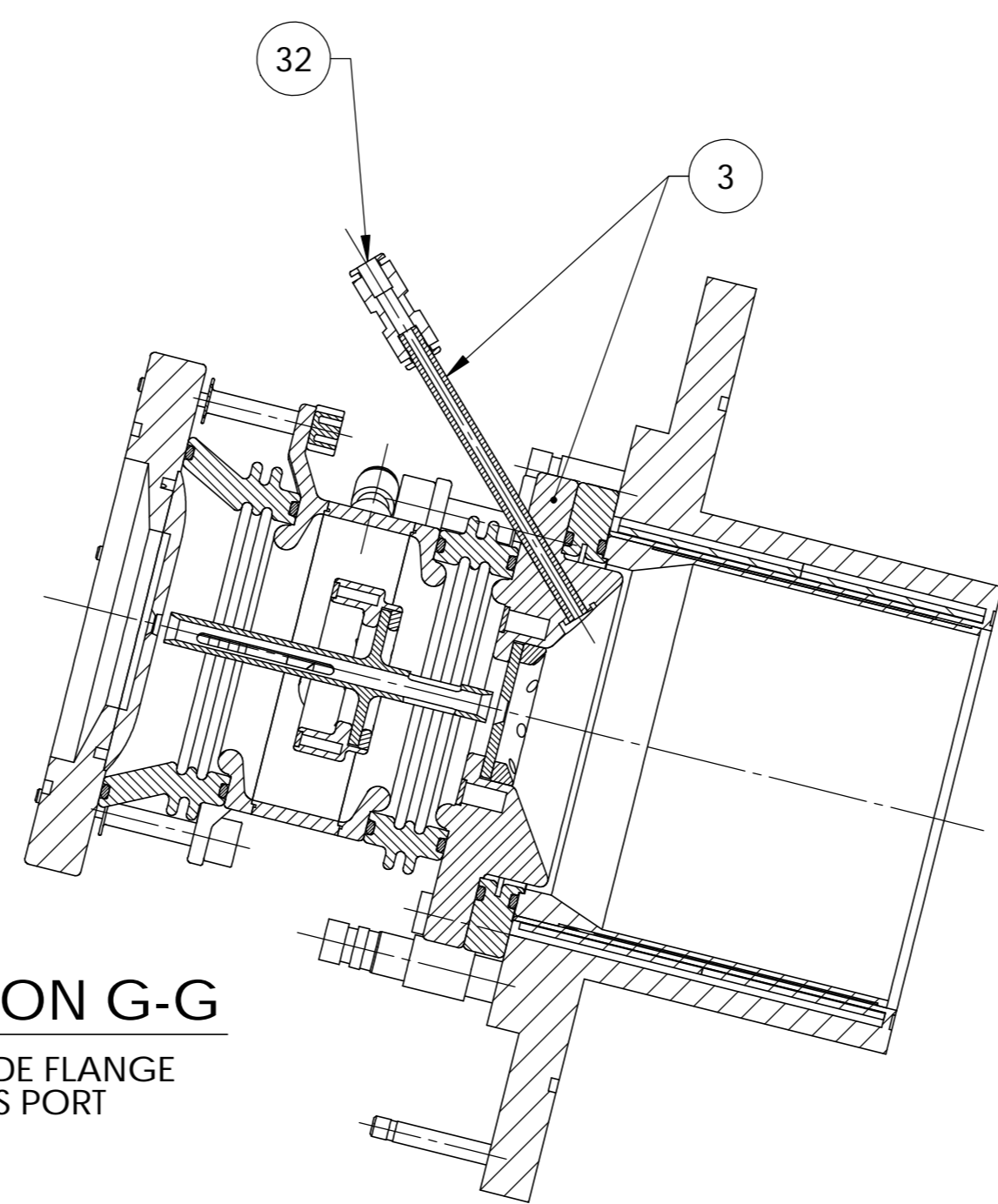


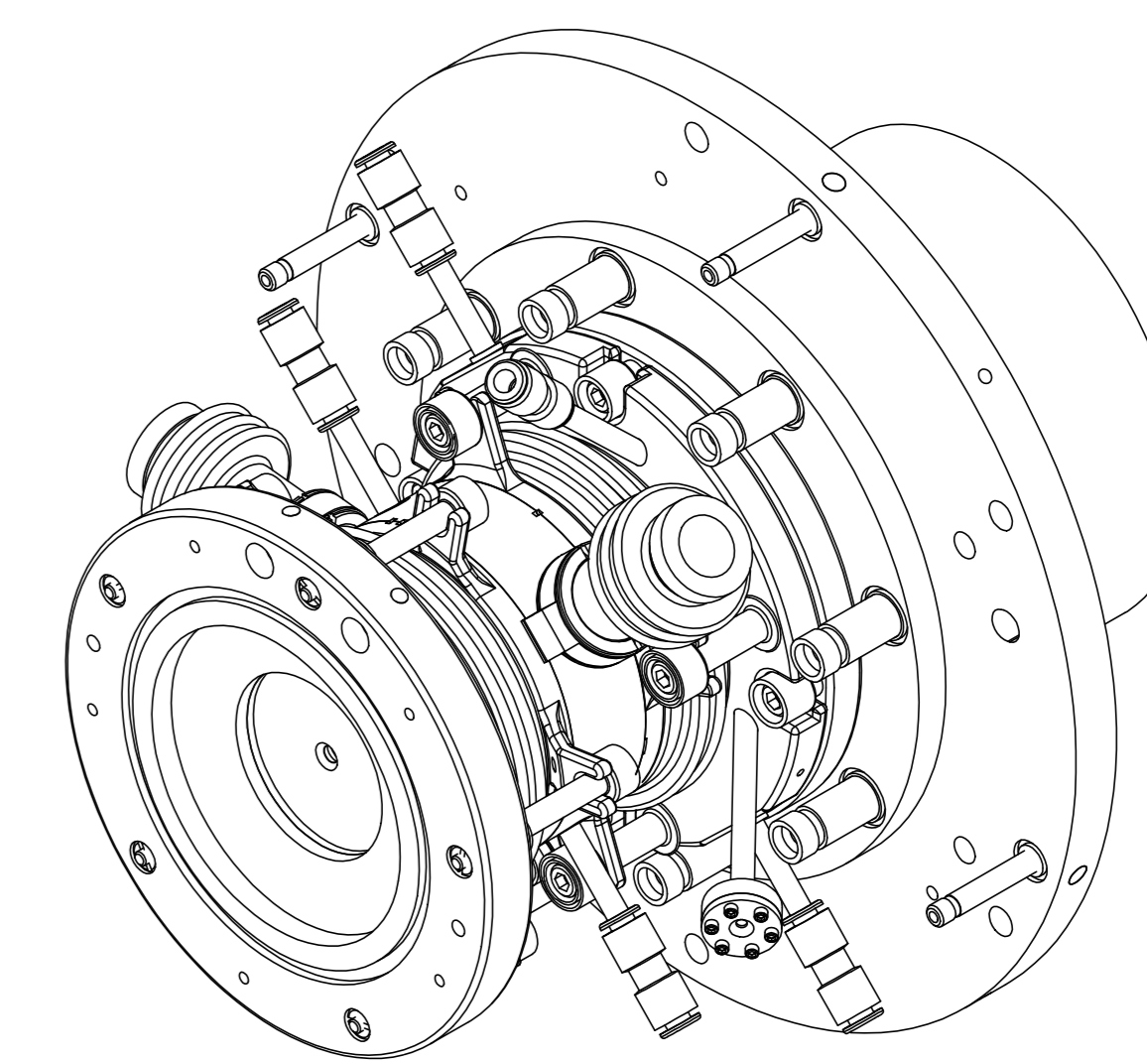
SECTION B-B
CATHODE VACUUM
PORTS, 2PL



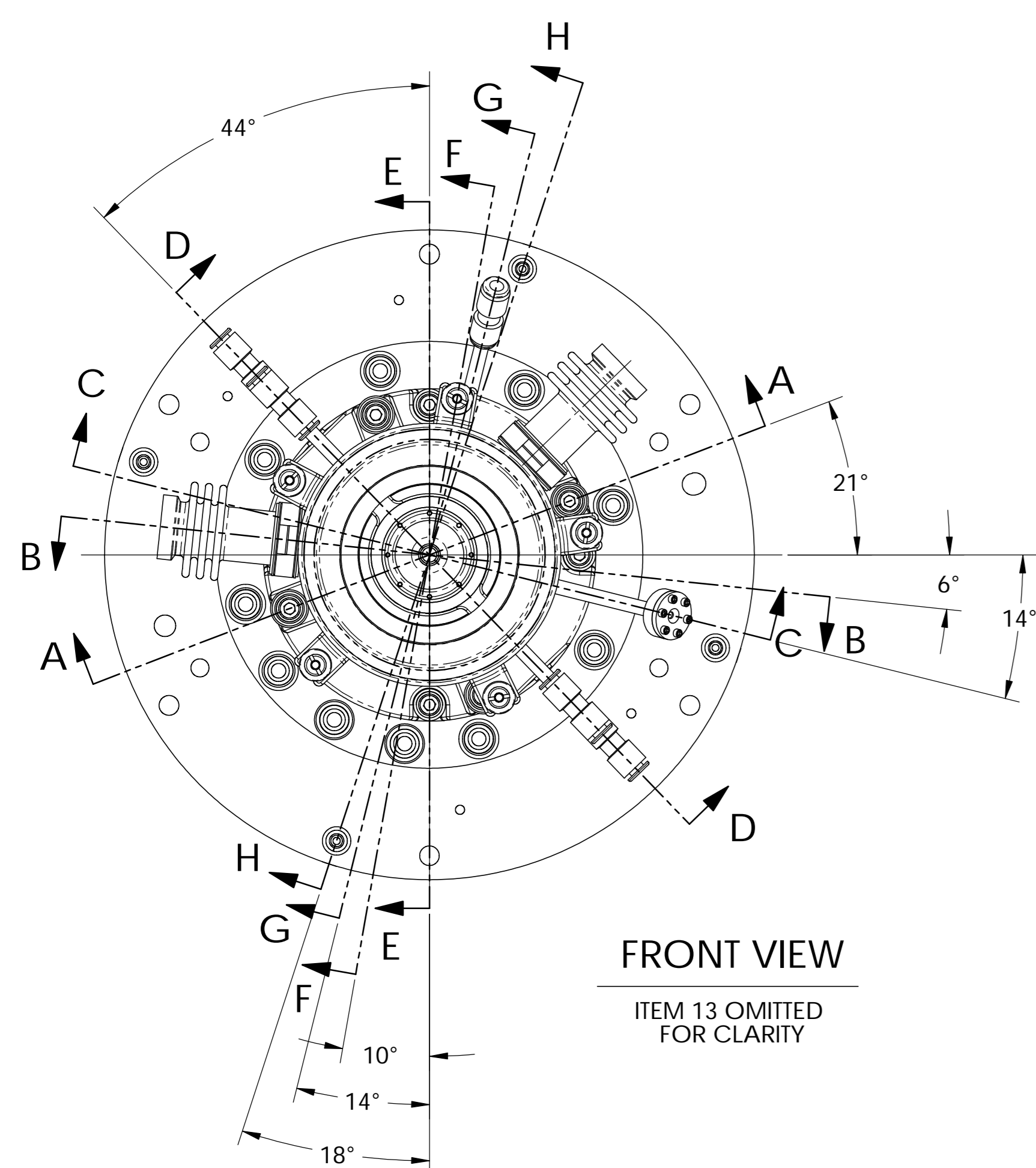
DETAIL K
SCALE 2 : 1



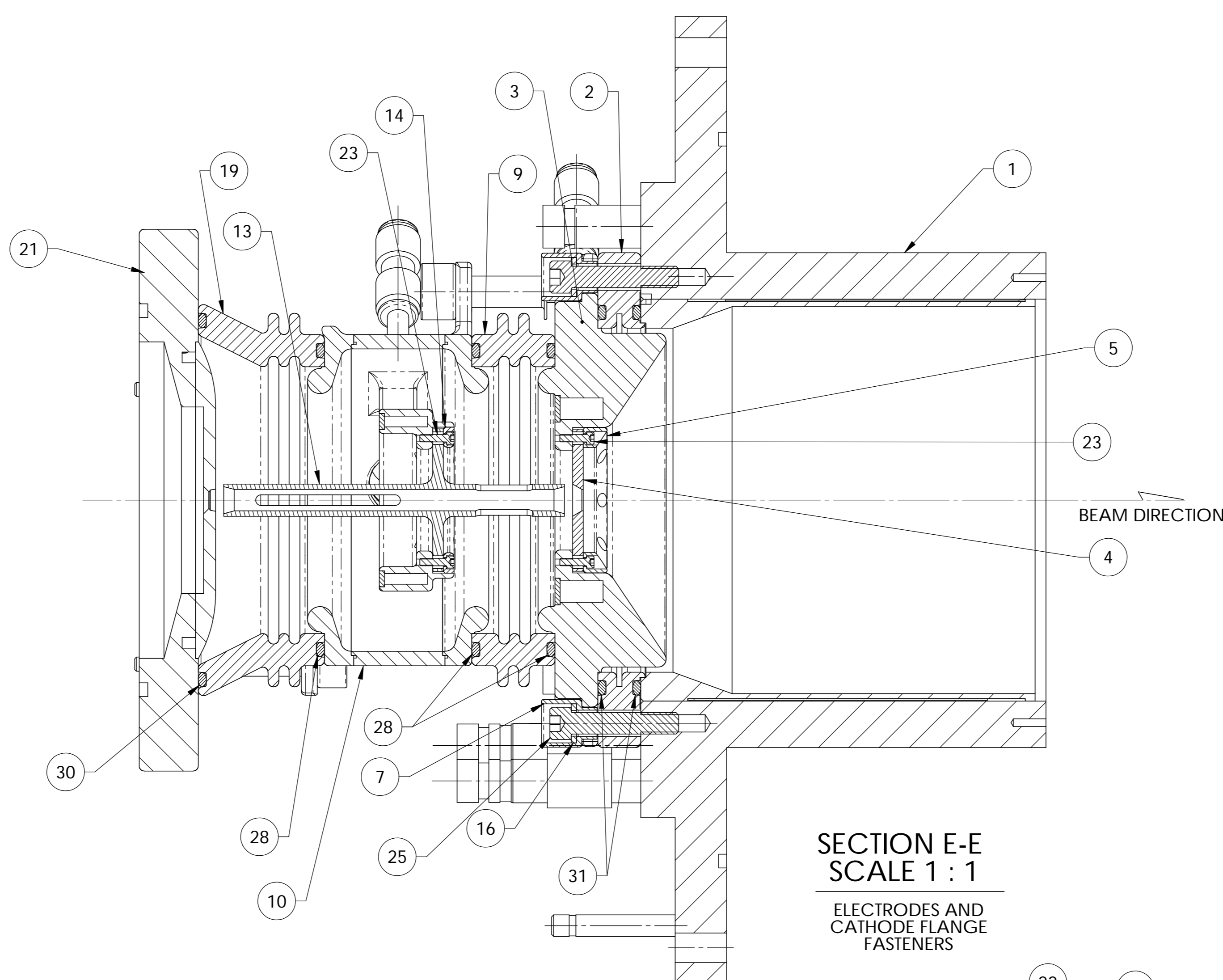
SECTION G-G
CATHODE FLANGE
GAS PORT



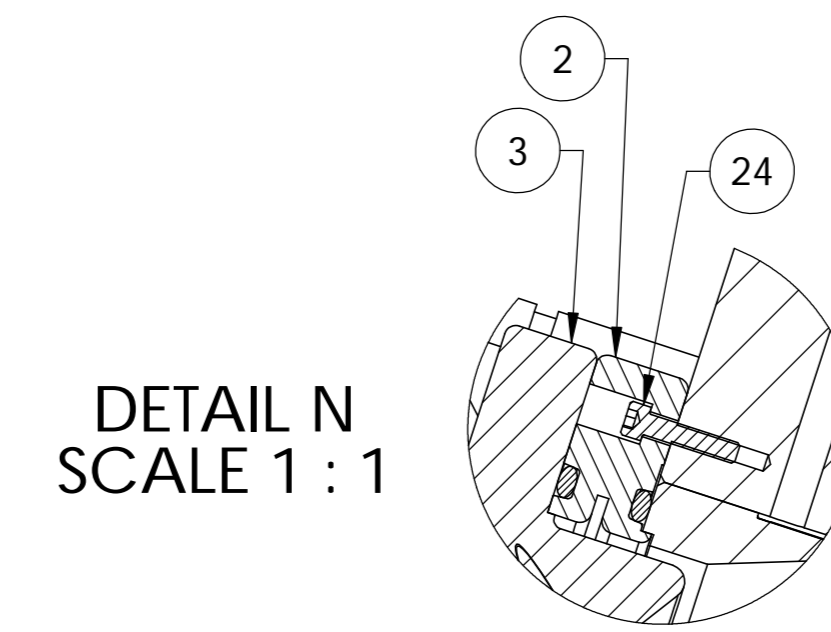
AUXILIARY VIEW



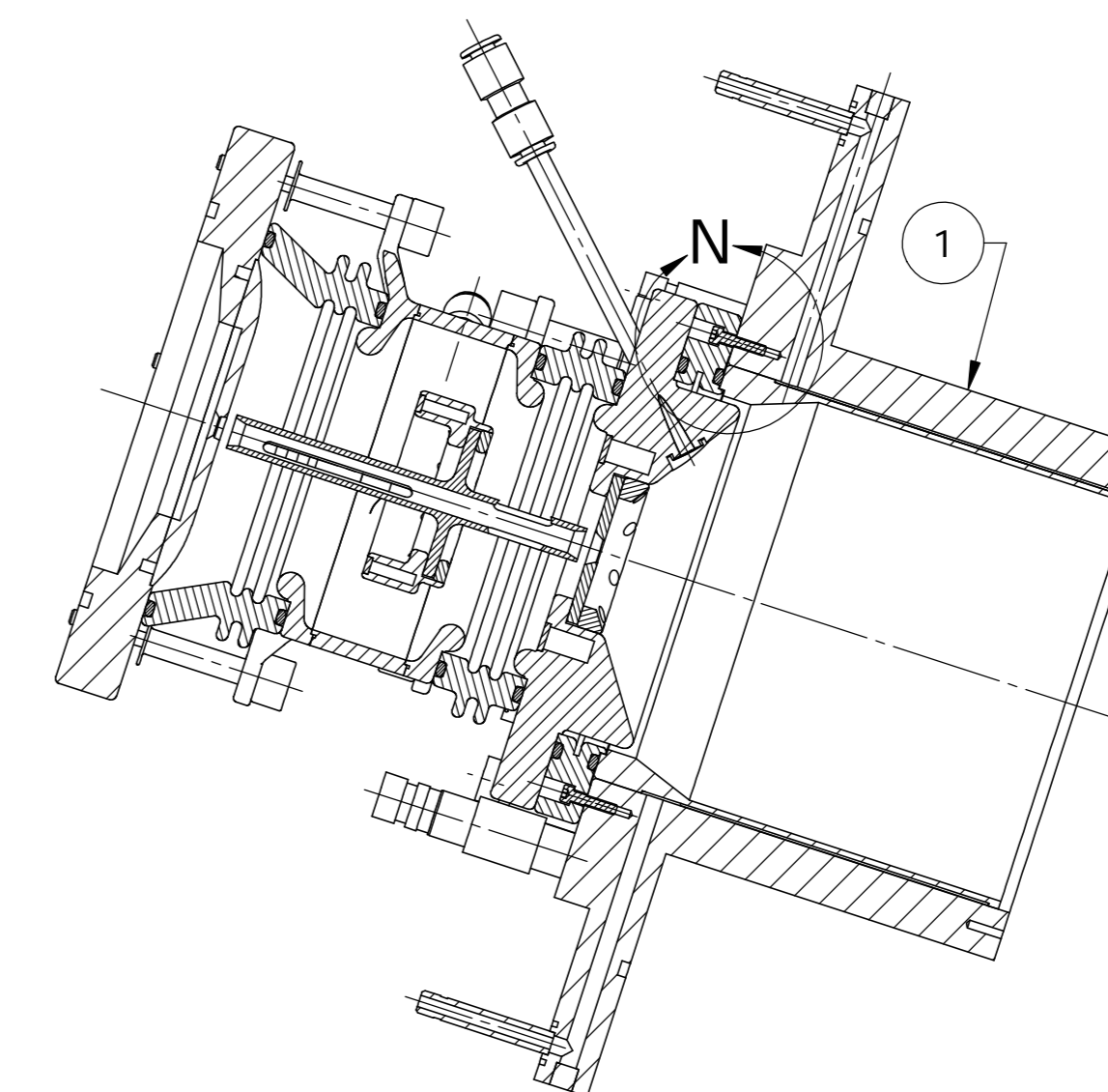
FRONT VIEW
ITEM 13 OMITTED
FOR CLARITY



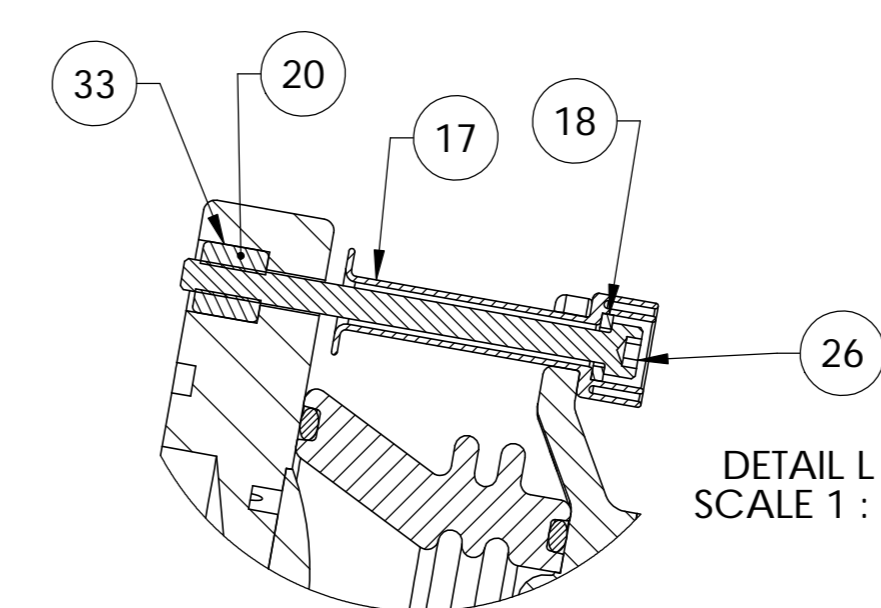
SECTION E-E
SCALE 1 : 1
ELECTRODES AND
CATHODE FLANGE
FASTENERS



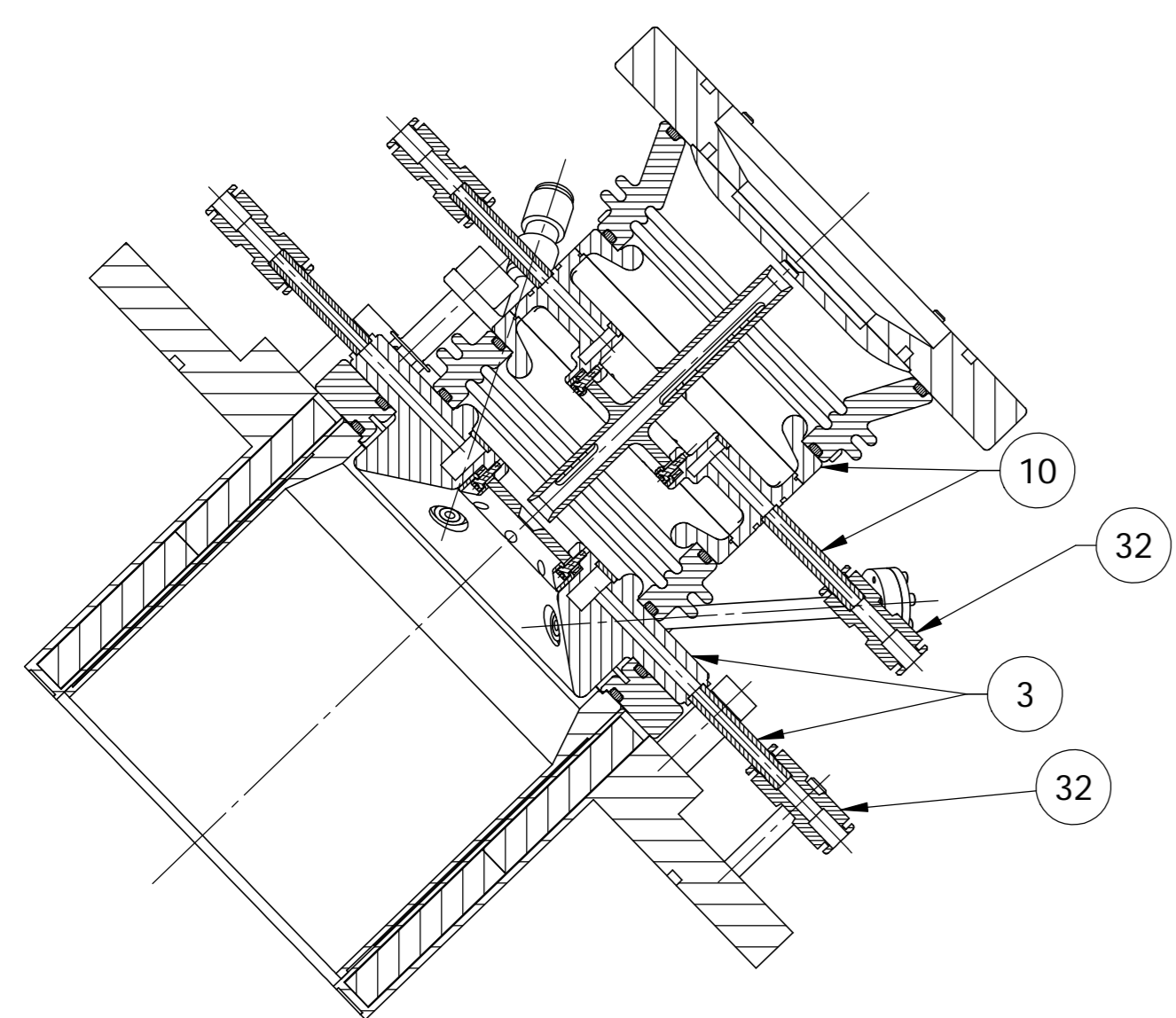
DETAIL N
SCALE 1 : 1



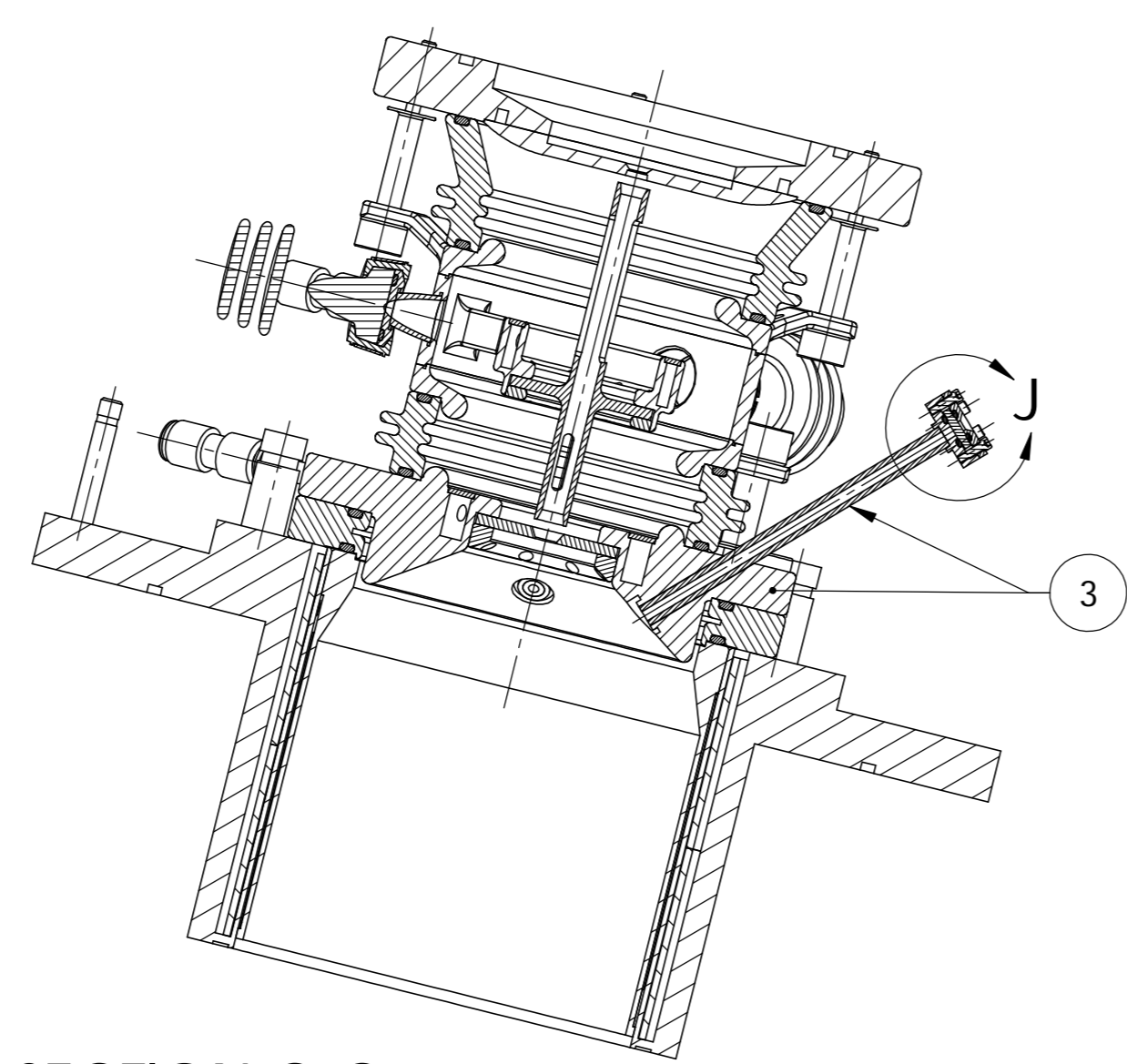
SECTION H-H
PLASMA CHAMBER
FASTENERS



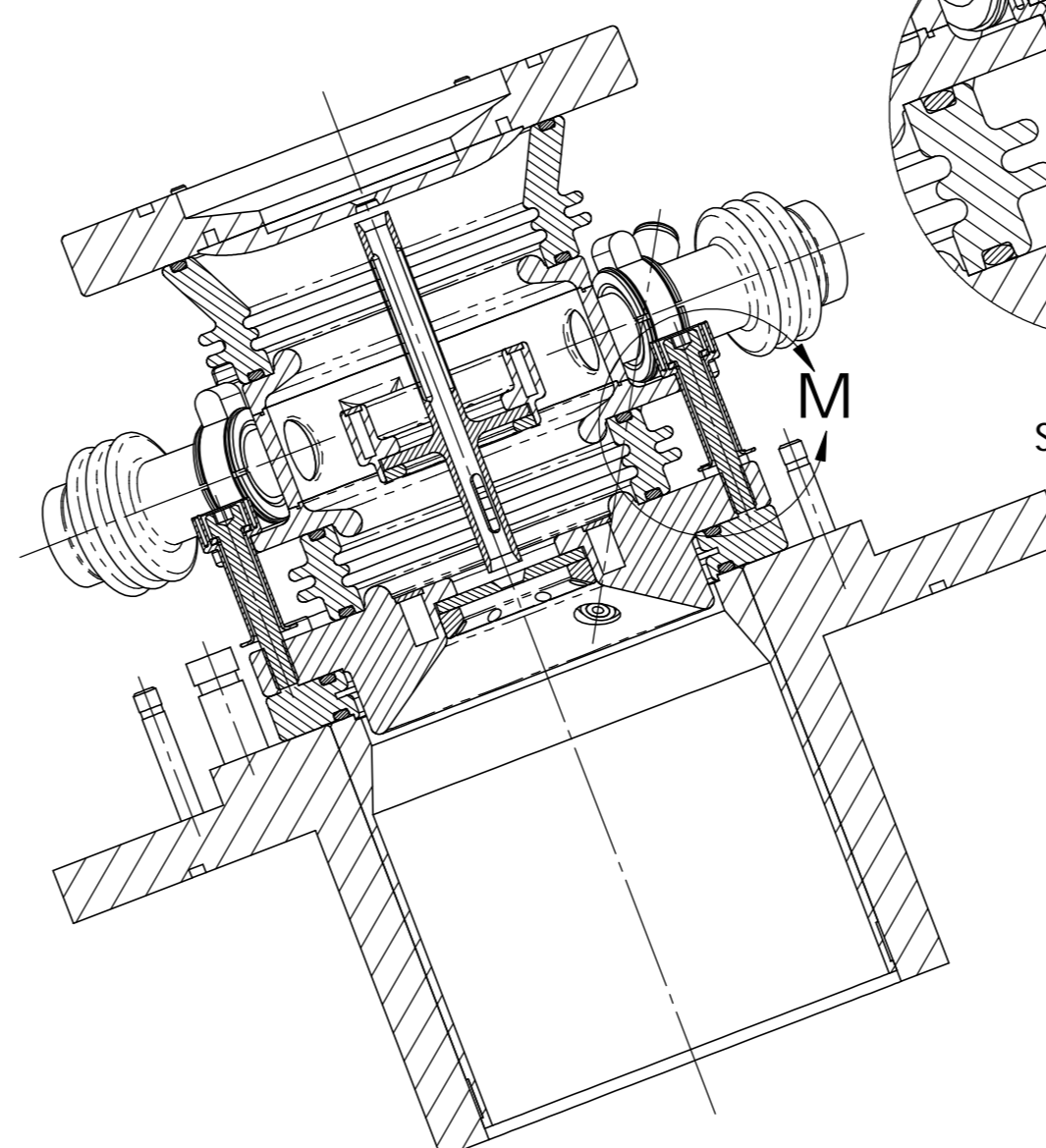
DETAIL L
SCALE 1 : 1



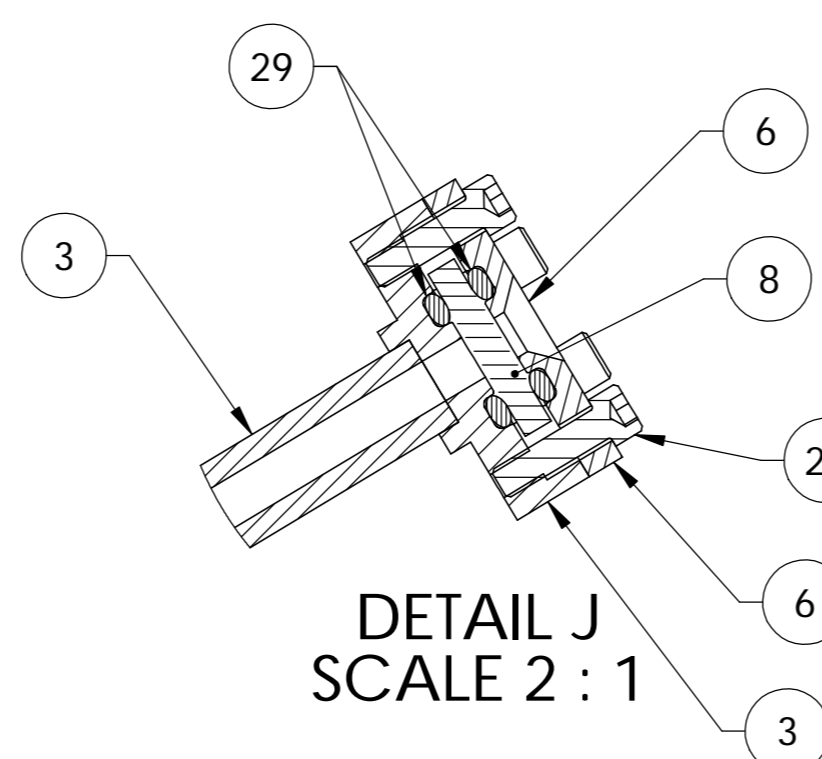
SECTION D-D
WATER COOLING,
EXTRACTOR & CATHODE
FLANGES



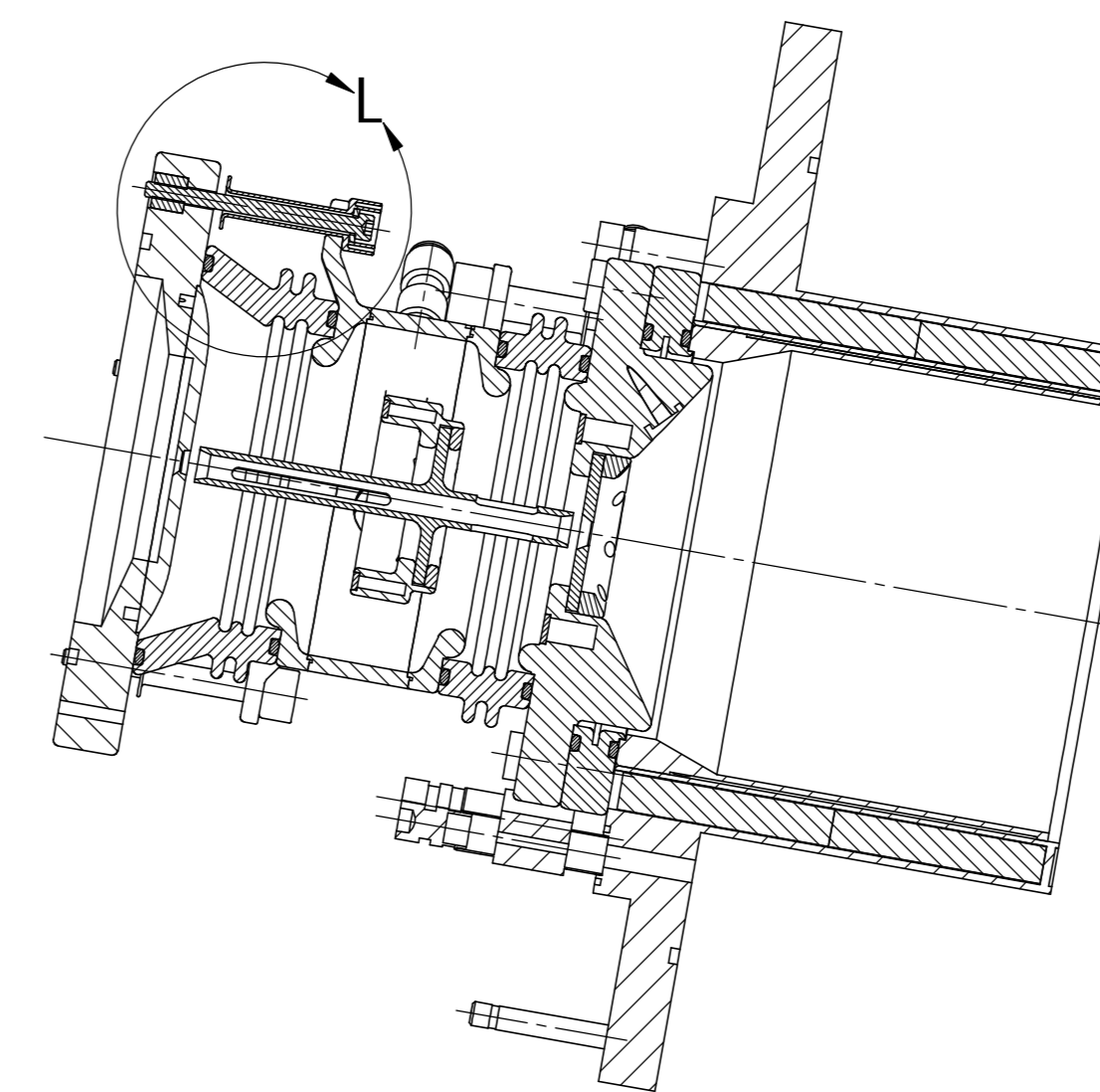
SECTION C-C
CATHODE FLANGE
VIEW PORT



SECTION A-A
EXTRACTOR
FASTENERS



DETAIL J
SCALE 2 : 1



SECTION F-F
OUTLET FASTENERS

ITEM	QTY	PART NO.	DESCRIPTION
34	A/R		LOK-TITE
33	2	54195K24	HOSE CLAMP, 5/16 W X 15/16 I.D. 1-1/2" DIA, SST 305, MCMASTER-CARR OR EQ.
32	5		FITTING, COUPLING, LEGRIS, 1/4"
31	2		O-RING, VITON, 2-243 (1.39" X 4.109" ID)
30	1		O-RING, VITON, 2-242 (1.39" X 3.984" ID)
29	2		O-RING, VITON, 2-011 (0.70" X .301" ID)
28	3		O-RING, VITON, 2-236 (1.39" X 3.234" ID)
27	2		O-RING, VITON, 2-020 (0.70" X .864" ID)
26	5		SCR, SCH, 8-32 UNC-2A X 2.25 L, SST
25	4		SCR, SCH, 1/4-20 UNC-2A X 1.25 L, SST
24	16		SCR, SCH, 4-40 UNC-2A X .50 L, SST
23	22		SCR, SCH, 2-56 UNC-2A X 5/16 L, SST
22	4		SCR, SCH, 1/4-20 UNC-2A X 1.75 L, SST
21	1	REF	FLANGE, MICROWAVE ION SOURCE, ARGONNE
20	5	27A359	THREADED INSERT, OUTLET
19	1	27A358	INSULATOR, EXTRACTOR / OUTLET
18	5	27A357	WASHER, BUSHING, EB
17	5	27A356	BUSHING, EXTRACTOR / OUTLET
16	11	27A355	WASHER, BUSHING, 1/4"
15	4	27A354	BUSHING, EXTRACTOR / CATHODE
14	1	27A353	CLAMPING RING, ELECTRODE, EXTRACTOR
13	1	27A352	ELECTRODE, EXTRACTOR
12	2	27A351	CLAMPSHELL, CLAMP, VACUUM, EXTRACTOR
11	2	27A350	INSULATOR, EXTRACTOR VACUUM
10	1	27A343	WELDMENT, EXTRACTOR
9	1	27A342	INSULATOR, EXTRACTOR / CATHODE
8	1	27A341	GLASS, VIEW PORT
7	4	27A340	BUSHING, CATHODE / PLASMA CHAMBER
6	1	27A339	COVER, VIEW PORT, CATHODE
5	1	27A334	CLAMPING RING, ELECTRODE, CATHODE
4	1	27A333	ELECTRODE, CATHODE
3	1	27A330	WELDMENT, CATHODE FLANGE
2	1	27A329	INSULATOR, CATHODE / PLASMA CHAMBER
1	1	27C399-4	PLASMA CHAMBER WELDMENT

REV	DRAWN BY	APPVD.	DATE	DESCRIPTION	UNLESS OTHERWISE SPECIFIED X ± 1/100 INCH XX ± 0.1/100 INCH XXX ± 0.05/100 INCH FRACTIONS: 1/16 ANGLES: 0.1° / INCH MACH SURFS: 125 MICRO-INCH DO NOT SCALE DRAWING. INTERPRET PER ASME Y14.5M-1994 THREADS ARE CLASS 2 BREAK MACHINED EDGES .018 MAX REMOVE BURRS, WELD SPATTER & LOOSE SCALE.	PROJECT NAME PROJECT NUMBER NEXT ASSY. CALC. WT. SCALE: 1:2 THIRD ANGLE PROJECTION	PROJECT NUMBER NEXT ASSY. CALC. WT. SCALE: 1:2 THIRD ANGLE PROJECTION	ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA HYBRID ION SOURCE (HYBRIS)
B	PAL	R. KELLER	12/16/03	EXTRACTOR AND CATHODE EBW JOINTS CHANGED TO BRAZE				
A	PAL	R. KELLER	12/02/03	INITIAL RELEASE				
REV	DRAWN BY	APPVD.	DATE	DESCRIPTION				