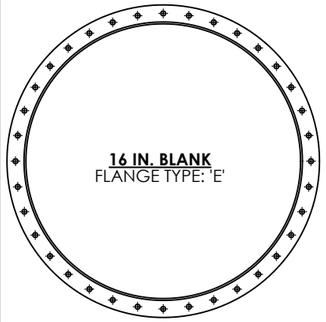
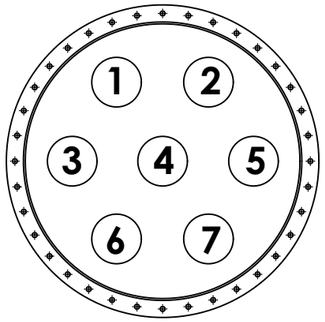
REV.	DATE	DCN #	DRAWING TREE #
v1	06 SEP 2011	-	-
v8	10 OCT 2024	E2400371-x0	-
v10	2 DEC 2024	E2400371-v1	-

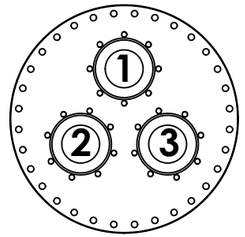


16 IN. BLANK
FLANGE TYPE: 'E'



16 IN. W/ SUBFLANGE MT. HOLES
P/N 93-00859
(NOR-CAL PRODUCTS INC.)

12 IN. CF, BLANK
P/N D2000227
(CP40487CA, SOLID SEALING TECH.)



12 IN. W/ SUBFLANGE MT. HOLES
P/N D2000226
(CP40479CA, SOLID SEALING TECH.)
OR
P/N 93-00858 (NOR-CAL PRODUCTS INC.)

FEEDTHROUGH / PORT/ CONNECTOR-DESIGNATION: ANATOMY

THE NAMING CONVENTION FOR ALL BSC AND HAM CHAMBER FEEDTHROUGHS
IS DEFINED BASED ON CHAMBER PORT DESIGNATION / FLANGE TYPE / SUBFLANGE CONBINATION.

IDENTIFIES THE BSC OR HAM PORT DESIGNATION TO WHICH A PARTICULAR FLANGE ATTACHES TO AS DEFINED BY LIGO-D980226 AND D980227

5 WAY CROSS SUBFLANGE DESIGNATION

IDENTIFIES SUBFLANGE TYPE

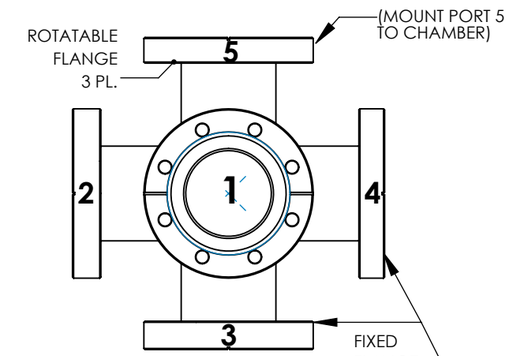
X X-X(5WxX)X X

IDENTIFIES A SUBFLANGE MT. HOLE ON A 16 IN. OR 12 IN. FLANGE

USE ONLY FOR 5 WAY CROSS

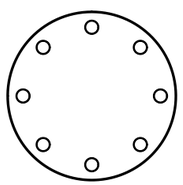
CONNECTOR REFERENCE DESIGNATION

Example : D6-1(5Wx3)C2 =
- Cable connects to the 2nd port of a type C 4.5in feedthrough
- Type C feedthrough mounts on the 3rd port of the 5 way cross
- Cross is mounted on the 1st port of a 12in(or 16) subflange
- 12in subflange mounted on D6 chamber flange.



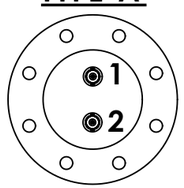
TYPE '5WX'

5 WAY CROSS/ 4.5 IN. SUBFLANGE
(AUXILIARY FLANGE TYPE / SIZE / SLOT DESIGNATION)

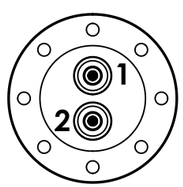


4.5 IN. SUBFLANGE
TYPE 'BLANK'
SCALE 1 : 4
P/N D2000221
(CP40714CA, SOLID SEALING TECH.)
OR
P/N 450-000N
(NOR-CAL PRODUCTS, INC)

TYPE 'A'

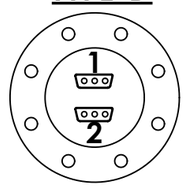


4.5 IN. SUBFLANGE
DUAL BNC CONNECTORS
P/N 960132-1
(WINCHESTER INTERCONNECT HERMETICS)

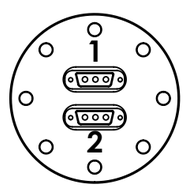


4.5 IN. SUBFLANGE
DUAL SMA CONNECTORS
P/N D2100065
(FA41629, SOLID SEALING TECH.)

TYPE 'B'

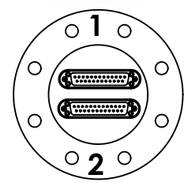


4.5 IN. SUBFLANGE
DUAL 3PWR CONNECTOR
P/N 960100-1
(WINCHESTER INTERCONNECT HERMETICS)

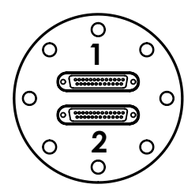


4.5 IN. SUBFLANGE
DUAL 3 PIN POWER CONNECTORS
P/N D2000222
(FA40477CA, SOLID SEALING TECH.)

TYPE 'C'



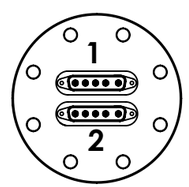
4.5 IN. SUBFLANGE
DUAL 25 P CONNECTOR
P/N 960099-1
(WINCHESTER INTERCONNECT HERMETICS)



4.5 IN. SUBFLANGE
DUAL 25 PIN D-SUB
P/N D2000223
(FA40716CA, SOLID SEALING TECH.)

TYPE 'D'

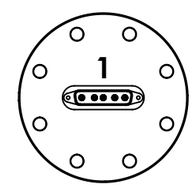
4.5 IN. SUBFLANGE
DUAL 5-WAY COAX
P/N 960107-1
(WINCHESTER INTERCONNECT HERMETICS)
FOR FUTURE ORDERS TYPE 'D' 5-PIN COAX (BELOW) IS PREFERRED



4.5 IN. SUBFLANGE
DUAL 5-PIN COAX
P/N D2400338
(100522, ACCU-GLASS PRODUCTS INC.)

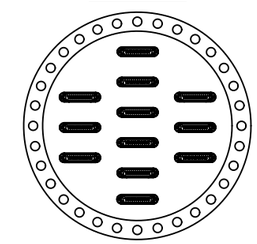
TYPE 'E'

4.5 IN. SUBFLANGE
SINGLE 5-WAY COAX
P/N 960140-1
(WINCHESTER INTERCONNECT HERMETICS)
FOR FUTURE ORDERS USE DUAL CONNECTORS (TYPE 'D' 5-PIN COAX PREFERRED)

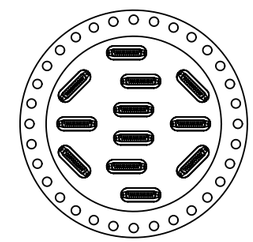


4.5 IN. SUBFLANGE
SINGLE 5-PIN COAX
P/N D1600167
(100520, ACCU-GLASS PRODUCTS INC.)
FOR FUTURE ORDERS USE DUAL CONNECTORS (TYPE 'D' 5-PIN COAX PREFERRED)

TYPE 'F'

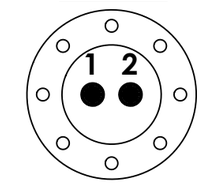


12 IN. SUBFLANGE
MULTI-25P SUB D CONNECTORS
P/N 960104-1
(WINCHESTER INTERCONNECT HERMETICS)



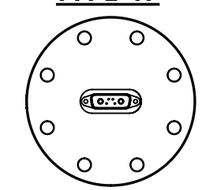
12 IN. SUBFLANGE
12-25P SUB D CONNECTORS
P/N D2000225
(FA40485CA, SOLID SEALING TECH.)

TYPE 'G'



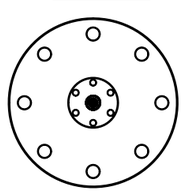
4.5 IN. SUBFLANGE
DUAL TRIAXIAL CONNECTOR
P/N 960103-1[Rev B]
P/N D2100604
(WINCHESTER INTERCONNECT HERMETICS)

TYPE 'H'



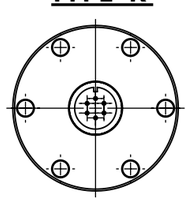
4.5 IN. SUBFLANGE
2 Thermocouple Pairs/2 Power Pins
P/N D1600090
(100800, ACCU-GLASS PRODUCTS INC.)

TYPE 'J'



4.5 IN. SUBFLANGE
ZERO LENGTH REDUCER
P/N E2300345
(DIAMOND FIBER V-FT 1064nm)

TYPE 'K'



2.75 IN. SUBFLANGE
(ON A4.75 ZERO LENGTH REDUCER)
P/N D2400339
110630, SUBFLANGE, ACCU-GLASS PRODUCTS INC.
200309, REDUCER, ACCU-GLASS PRODUCTS INC.

TYPICAL SUBFLANGE TYPE / SIZE / CONNECTOR DESIGNATION

(AS VIEWED FROM OUTSIDE THE CHAMBER)

1. SEE CHAMBER FLANGE LISTING, ALIGO D1002892 FOR REFERENCE.
2. aLIGO ICS
3. A+ ICS
4. REFER TO T2400300 FOR SITE FEEDTHROUGH INVENTORY.
5. REFER TO FEEDTHROUGH DCC DRAWING FOR SPECIFC INSTRUCTIONS ON SCRIBING.

BEST PRACTICE IS TO HAVE A LIGO DCC AND LIGO S/N ENGRAVED ON THE EDGE OF THE FLANGE.

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

MATERIAL: N/A
FINISH: N/A µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY / MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: SYS
NEXT ASSY: MULTIPLE

PART NAME: aLIGO, ELECTRICAL FEEDTHROUGH TYPES AND TYP. SUB-FLANGES

DESIGNER	E.SANCHEZ	06 SEP 2011
DRAFTER	E.SANCHEZ	06 SEP 2011
CHECKER	SEE DCC	SEE DCC
APPROVAL	SEE DCC	SEE DCC

SIZE: B — DWG. NO.: D1101775 — REV.: v10
SCALE: 1:8 — PROJECTION: — SHEET 1 OF 1

PART PDM VERSION: y-003
DWG PDM VERSION: y-011
D1101775 ALIGO, FEEDTHROUGH TYPES, TYPICAL SUBFLANGES, AND PORT CONFIGURATIONS