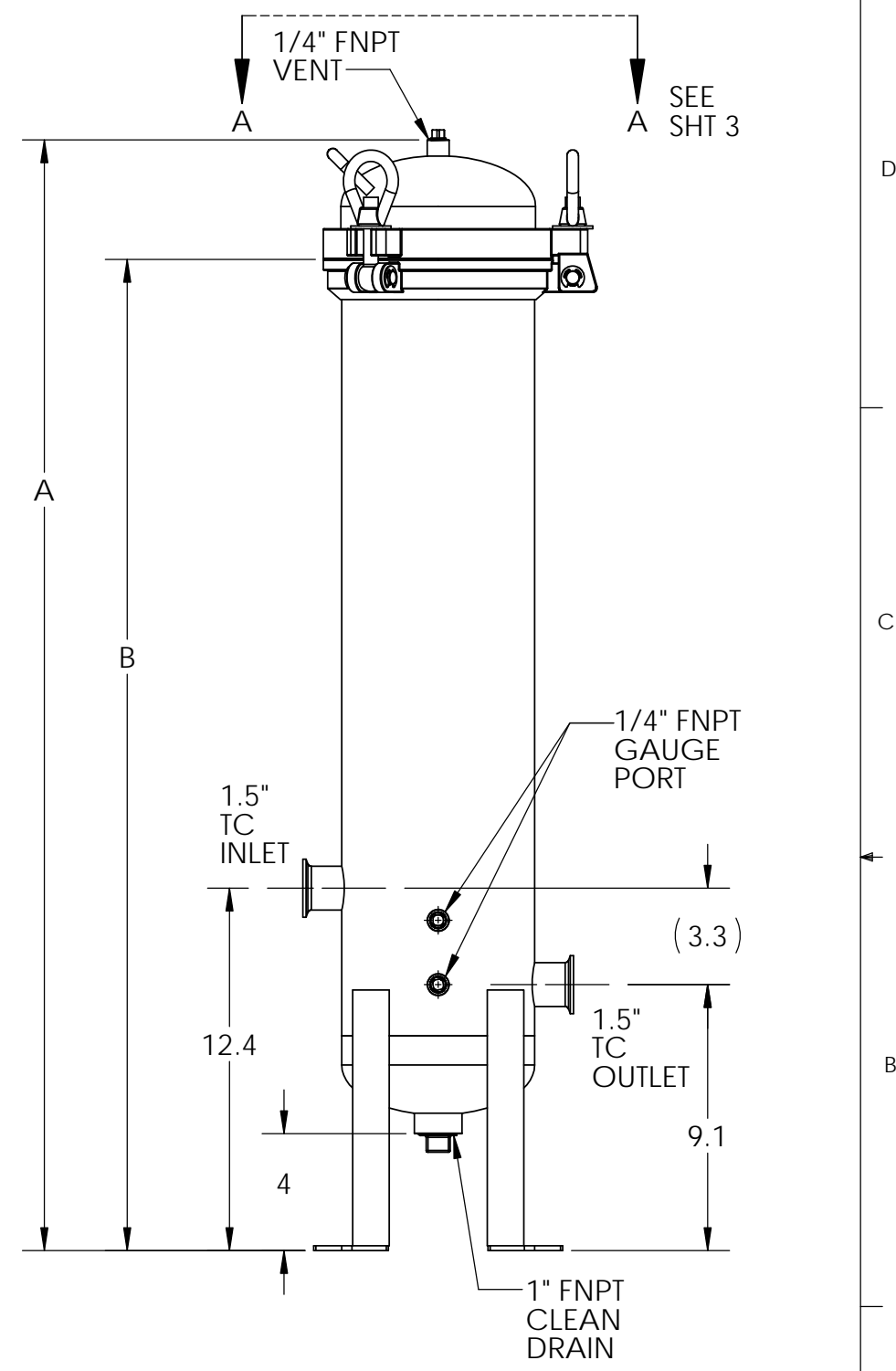
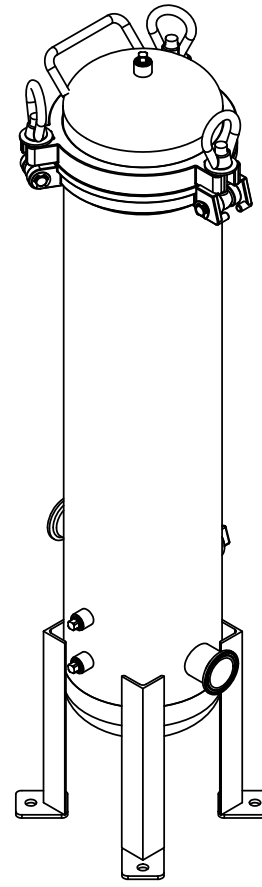


| PART NO. | DESCRIPTION | GLOBAL FILTER MODEL NO. | GLOBAL FILTER ERP NO. |
|----------|--|-------------------------|-----------------------|
| CS021-01 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 304 SS, GB, CODE | GTCH321.5T2415GBU | |
| CS021-02 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 304 SS, GB | GTCH321.5T2415GB | |
| CS021-03 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 304 SS, GB, CODE | GTCH331.5T2415GBU | |
| CS021-04 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 304 SS, GB | GTCH331.5T2415GB | |
| CS021-05 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 304 SS, GB, CODE | GTCH341.5T2415GBU | |
| CS021-06 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 304 SS, GB | GTCH341.5T2415GB | |
| CS021-07 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 316 SS, GB, CODE | GTCH321.5T2615GBU | |
| CS021-08 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 316 SS, GB | GTCH321.5T2615GB | |
| CS021-09 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 316 SS, GB, CODE | GTCH331.5T2615GBU | |
| CS021-10 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 316 SS, GB | GTCH331.5T2615GB | |
| CS021-11 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 316 SS, GB, CODE | GTCH341.5T2615GBU | |
| CS021-12 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 316 SS, GB | GTCH341.5T2615GB | |
| CS021-13 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 304 SS, EP, CODE | GTCH321.5T2415EPU | |
| CS021-14 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 304 SS, EP | GTCH321.5T2415EP | |
| CS021-15 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 304 SS, EP, CODE | GTCH331.5T2415EPU | |
| CS021-16 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 304 SS, EP | GTCH331.5T2415EP | |
| CS021-17 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 304 SS, EP, CODE | GTCH341.5T2415EPU | |
| CS021-18 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 304 SS, EP | GTCH341.5T2415EP | |
| CS021-19 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 316 SS, EP, CODE | GTCH321.5T2615EPU | |
| CS021-20 | FLTR HSG ASSY, GTCH3 SER, 20", 1.5TC, 316 SS, EP | GTCH321.5T2615EP | 7-16113 |
| CS021-21 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 316 SS, EP, CODE | GTCH331.5T2615EPU | |
| CS021-22 | FLTR HSG ASSY, GTCH3 SER, 30", 1.5TC, 316 SS, EP | GTCH331.5T2615EP | |
| CS021-23 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 316 SS, EP, CODE | GTCH341.5T2615EPU | |
| CS021-24 | FLTR HSG ASSY, GTCH3 SER, 40", 1.5TC, 316 SS, EP | GTCH341.5T2615EP | |
| CS021-25 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 304 SS, GB, CODE | GTCH311.5T2415GBU | |
| CS021-26 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 304 SS, GB | GTCH311.5T2415GB | |
| CS021-27 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 316 SS, GB, CODE | GTCH311.5T2615GBU | |
| CS021-28 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 316 SS, GB | GTCH311.5T2615GB | |
| CS021-29 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 304 SS, EP, CODE | GTCH311.5T2415EPU | |
| CS021-30 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 304 SS, EP | GTCH311.5T2415EP | |
| CS021-31 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 316 SS, EP, CODE | GTCH311.5T2615EPU | |
| CS021-32 | FLTR HSG ASSY, GTCH3 SER, 10", 1.5TC, 316 SS, EP | GTCH311.5T2615EP | |



SHIPPING WEIGHT AND SIZE MAY DIFFER FROM STATED VALUES DUE TO PALLETIZING AND QUANTITY CONSIDERATIONS

| VESSEL SIZE | BOXED WEIGHT (LBS) | BOX SIZE (INCHES) |
|-------------|--------------------|-------------------|
| GTCH31- | 54 | 14 x 14 x 30 |
| GTCH32- | 59 | 14 x 14 x 40 |
| GTCH33- | 64 | 14 x 14 x 50 |
| GTCH34- | 69 | 14 x 14 x 60 |

| DIMENSIONS | | |
|------------|--------|--------|
| MODEL NO. | A (in) | B (in) |
| GTCH31- | 28 | 23.9 |
| GTCH32- | 38 | 33.9 |
| GTCH33- | 48 | 43.9 |
| GTCH34- | 58 | 53.9 |

NOTES:
1. SEE SHEET 2 FOR BILL OF MATERIALS.
2. UNLESS TOLERANCES ARE INDICATED, DIMENSIONS ARE REFERENCE.
3. ALL MODELS COMPLY WITH REQUIREMENTS FOR DESIGN AND CONSTRUCTION IN ACCORDANCE WITH THE ASME BOILER & PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1. MODELS BEARING THE "U" OR "UM" STAMP ARE REGISTERED WITH THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS.

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GLOBAL FILTER LLC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF GLOBAL FILTER LLC IS PROHIBITED.

REFERENCE ENGINEERING DRAWING 21073

| REV | | EC NUMBER | NAME | DATE | GLOBAL FILTER LLC | | |
|------------|-------------|-----------|----------------------|---------|--|----------|--------------|
| D | EC170809-01 | MATERIAL | SEE TABULATION TABLE | | TITLE: FLTR HSG ASSY, 1.5" TC SISO GTCH3 SER, TAB | | |
| C | EC161031-03 | FINISH | SEE TABULATION TABLE | | | | |
| B | EC150224-01 | DRAWN BY | ME | 5-31-13 | SIZE | DWG. NO. | REV |
| A | EC130604-01 | | ENG APPR. | EG | 6-10-13 | B | CS021 |
| EC HISTORY | | | | | SCALE: 1:6 | WEIGHT: | SHEET 1 OF 4 |

BILL OF MATERIALS

| ITEM | DESCRIPTION | CS021-xx | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | -01 QTY | -02 QTY | -03 QTY | -04 QTY | -05 QTY | -06 QTY | -07 QTY | -08 QTY | -09 QTY | -10 QTY | -11 QTY | -12 QTY | -13 QTY | -14 QTY | -15 QTY | -16 QTY | -17 QTY | -18 QTY | -19 QTY | -20 QTY | -21 QTY | -22 QTY | -23 QTY | -24 QTY |
| D 1 | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 20" 304 SS | 1 | 1 | | | | | | | | | | 1 | 1 | | | | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 30" 304 SS | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 40" 304 SS | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 20" 316 SS | | | | | | | | 1 | 1 | | | | | | | | | | 1 | 1 | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 30" 316 SS | | | | | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 40" 316 SS | | | | | | | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 10" 304 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 10" 316 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O-RING, METRIC 172 ID X 7 CS, NITRILE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 | LID WELDMNT, GTCH3 SERIES, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| | LID WELDMNT, GTCH3 SERIES, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | KIT, CLEVIS PEN w/ RETAINING RINGS | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 5 | EYE BOLT, 1/2" | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 6 | WASHER, FLAT, SS | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 7 | EYE NUT, 1/2"-13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| C 8 | V-POST, GTCHB SERIES, 20", 304 SS | 3 | 3 | | | | | | | | | | | 3 | 3 | | | | | | | | | | |
| | V-POST, GTCHB SERIES, 30", 304 SS | | | 3 | 3 | | | | | | | | | | | 3 | 3 | | | | | | | | |
| | V-POST, GTCHB SERIES, 40", 304 SS | | | | | 3 | 3 | | | | | | | | | | | 3 | 3 | | | | | | |
| | V-POST, GTCHB SERIES, 20", 316 SS | | | | | | | 3 | 3 | | | | | | | | | | | 3 | 3 | | | | |
| | V-POST, GTCHB SERIES, 30", 316 SS | | | | | | | | | 3 | 3 | | | | | | | | | | | 3 | 3 | | |
| | V-POST, GTCHB SERIES, 40", 316 SS | | | | | | | | | | | 3 | 3 | | | | | | | | | | | 3 | 3 |
| | V-POST, GTCHB SERIES, 10", 304 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| | V-POST, GTCHB SERIES, 10", 316 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| B 9 | TIE ROD, GTCH SERIES, 20", 304 SS | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | | | | | | | |
| | TIE ROD, GTCH SERIES, 30", 304 SS | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | | | | | |
| | TIE ROD, GTCH SERIES, 40", 304 SS | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | | | |
| | TIE ROD, GTCH SERIES, 20", 316 SS | | | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | | | |
| | TIE ROD, GTCH SERIES, 30", 316 SS | | | | | | | | | 1 | 1 | | | | | | | | | | | 1 | 1 | | |
| | TIE ROD, GTCH SERIES, 40", 316 SS | | | | | | | | | | | 1 | 1 | | | | | | | | | | 1 | 1 | |
| | TIE ROD, GTCH SERIES, 10", 304 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| | TIE ROD, GTCH SERIES, 10", 316 SS | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | SPRING ASSEMBLY, CARTRIDGE VESSELS, 304 SS | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | |
| | SPRING ASSEMBLY, CARTRIDGE VESSELS, 316 SS | | | | | | | | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 | 3 | 3 | 3 | 3 | |
| 11 | HOLD DOWN PLT POST w/ EXT RET RINGS KIT, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | HOLD DOWN PLT POST w/ EXT RET RINGS KIT, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | |
| 12 | HOLD DOWN PLT, CLOSED & DOE, GTCH3 SER, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | HOLD DOWN PLT, CLOSED & DOE, GTCH3 SER, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | |
| 13 | HOLD DOWN FIN CTG, GTCH3 SER, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | HOLD DOWN FIN CTG, GTCH3 SER, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | |
| 14 | TIE ROD NUT, GTCHB SERIES, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | TIE ROD NUT, GTCHB SERIES, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | |
| A 15 | PIPE PLUG, 1" HEX HEAD, 304 SS | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | PIPE PLUG, 1" HEX HEAD, 316 SS | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | |
| 16 | PIPE PLUG, 1/4" HEX HEAD, 304 SS | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | |
| | PIPE PLUG, 1/4" HEX HEAD, 316 SS | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | 3 | 3 | 3 | 3 | 3 | |

BILL OF MATERIALS CONTINUED ON SHEET 3

| | | |
|------------------|--------------------------|-----------------|
| SIZE B | DWG. NO. CS021 | REV D |
| SCALE: 1:1 | WEIGHT: | SHEET 2 OF 4 |

BILL OF MATERIALS (CONTINUED)

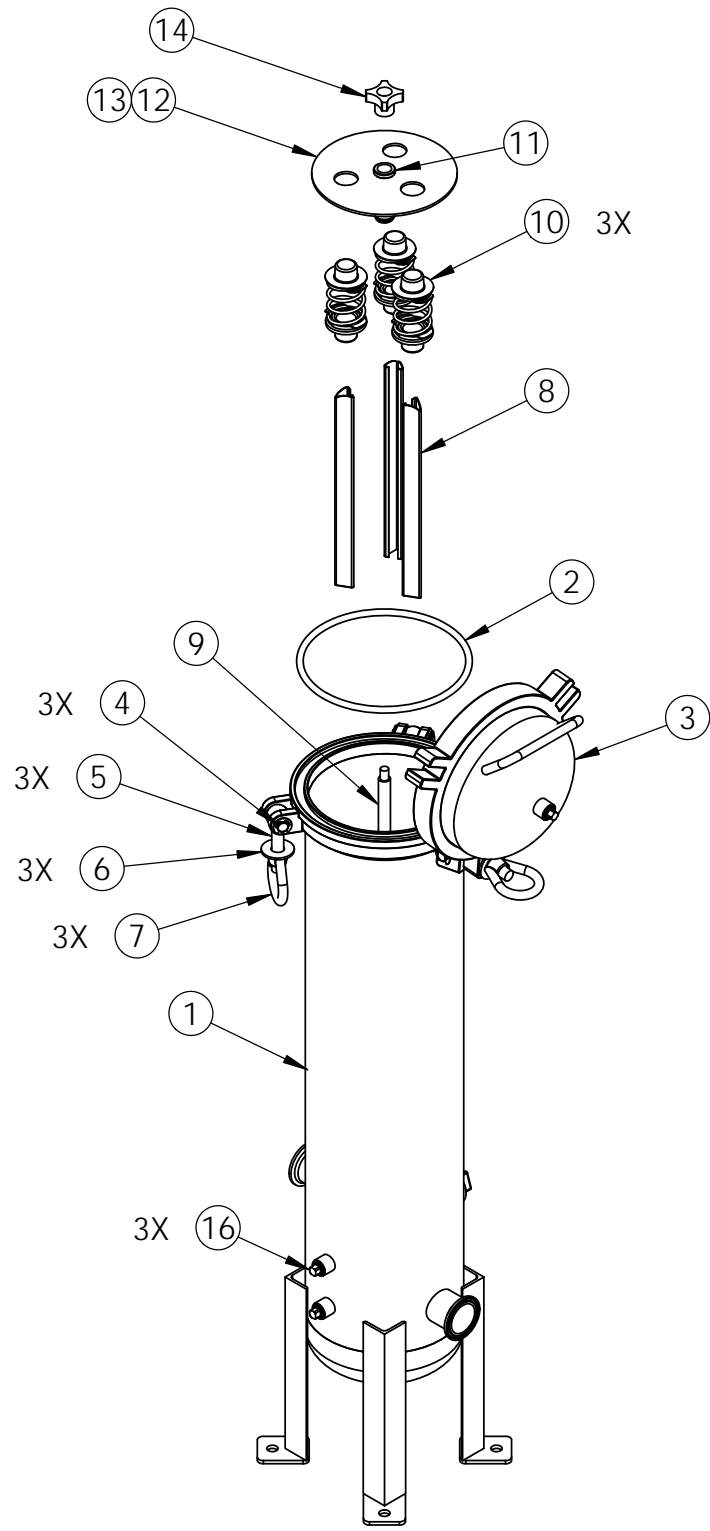
| ITEM | DESCRIPTION | -25 | -26 | -27 | -28 | -29 | -30 | -31 | -32 |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|
| | | QTY | QTY | QTY | QTY | QTY | QTY | QTY | QTY |
| 1 | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 20" 304 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 30" 304 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 40" 304 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 20" 316 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 30" 316 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 40" 316 SS | | | | | | | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 10" 304 SS | 1 | 1 | | | 1 | 1 | | |
| | FLTR HSG WLDMNT, 1.5" TC SISO GTCH3 SER, 10" 316 SS | | | 1 | 1 | | | 1 | 1 |
| 2 | O-RING, METRIC 172 ID X 7 CS, NITRILE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | LID WELDMENT, GTCH3 SERIES, 304 SS | 1 | 1 | 1 | 1 | | | | |
| | LID WELDMENT, GTCH3 SERIES, 316 SS | | | | | 1 | 1 | 1 | 1 |
| 4 | KIT, CLEVIS PEN w/ RETAINING RINGS | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 5 | EYE BOLT, 1/2" | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 6 | WASHER, FLAT, SS | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 7 | EYE NUT, 1/2"-13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 8 | V-POST, GTCHB SERIES, 20", 304 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 30", 304 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 40", 304 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 20", 316 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 30", 316 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 40", 316 SS | | | | | | | | |
| | V-POST, GTCHB SERIES, 10", 304 SS | 3 | 3 | | | 3 | 3 | | |
| | V-POST, GTCHB SERIES, 10", 316 SS | | | 3 | 3 | | | 3 | 3 |
| 9 | TIE ROD, GTCH SERIES, 20", 304 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 30", 304 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 40", 304 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 20", 316 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 30", 316 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 40", 316 SS | | | | | | | | |
| | TIE ROD, GTCH SERIES, 10", 304 SS | 1 | 1 | | | 1 | 1 | | |
| | TIE ROD, GTCH SERIES, 10", 316 SS | | | 1 | 1 | | | 1 | 1 |
| 10 | SPRING ASSEMBLY, CARTRIDGE VESSELS, 304 SS | 3 | 3 | | | 3 | 3 | | |
| | SPRING ASSEMBLY, CARTRIDGE VESSELS, 316 SS | | | 3 | 3 | | | 3 | 3 |
| 11 | HOLD DOWN PLT POST w/ EXT RET RINGS KIT, 304 SS | 1 | 1 | | | 1 | 1 | | |
| | HOLD DOWN PLT POST w/ EXT RET RINGS KIT, 316 SS | | | 1 | 1 | | | 1 | 1 |
| 12 | HOLD DOWN PLT, CLOSED & DOE, GTCH3 SER, 304 SS | 1 | 1 | | | 1 | 1 | | |
| | HOLD DOWN PLT, CLOSED & DOE, GTCH3 SER, 316 SS | | | 1 | 1 | | | 1 | 1 |
| 13 | HOLD DOWN FIN CTG, GTCH3 SER, 304 SS | 1 | 1 | | | 1 | 1 | | |
| | HOLD DOWN FIN CTG, GTCH3 SER, 316 SS | | | 1 | 1 | | | 1 | 1 |
| 14 | TIE ROD NUT, GTCHB SERIES, 304 SS | 1 | 1 | | | 1 | 1 | | |
| | TIE ROD NUT, GTCHB SERIES, 316 SS | | | 1 | 1 | | | 1 | 1 |
| 15 | PIPE PLUG, 1" HEX HEAD, 304 SS | 1 | 1 | | | 1 | 1 | | |
| | PIPE PLUG, 1" HEX HEAD, 316 SS | | | 1 | 1 | | | 1 | 1 |
| 16 | PIPE PLUG, 1/4" HEX HEAD, 304 SS | 3 | 3 | | | 3 | 3 | | |
| | PIPE PLUG, 1/4" HEX HEAD, 316 SS | | | 3 | 3 | | | 3 | 3 |

| | | |
|------------------|--------------------------|-----------------|
| SIZE B | DWG. NO. CS021 | REV D |
| SCALE: 1:1 | WEIGHT: | SHEET 3 OF 4 |

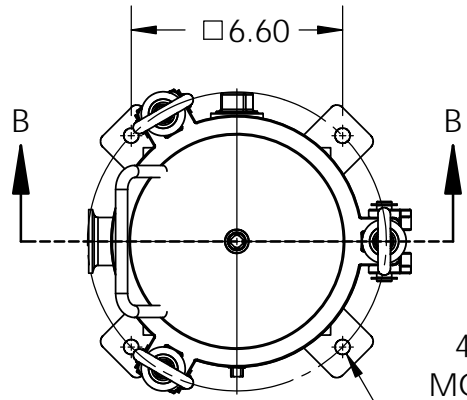
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D

D

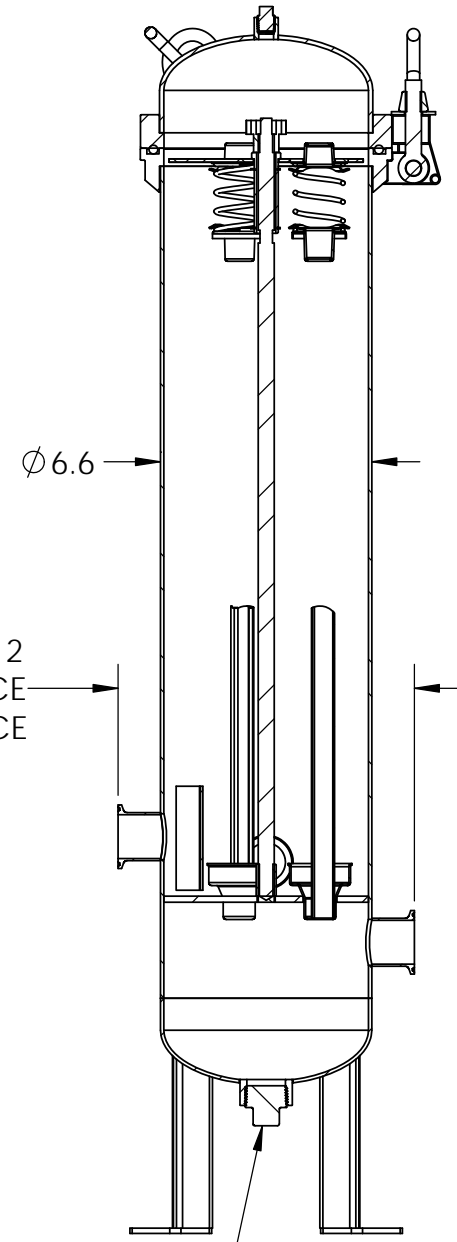


SCALE 1 : 6



VIEW A-A

4x ϕ .47
MOUNTING
HOLE ON
 ϕ 9.3 B.C.



SECTION B-B

C

C

B

B

A

A

8 7 6 5 4 3 2 1

| | | |
|------------------|--------------------------|-----------------|
| SIZE B | DWG. NO. CS021 | REV D |
| SCALE: 1:6 | WEIGHT: | SHEET 4 OF 4 |