

4900 ASSEMBLY

REVISIONS			
DRAWING REV.	DESCRIPTION	DATE	APPROVED
G	ECO 1755: UPDATED MATERIAL AND GLASS FIBER B RATING NOTE ON MICRON RATINGS TABLE.	10/11/18	JB
H	ECO 1988: UPDATED FITTING CODES FOR AS5202-32 AND ALL SOCKET WELD PORTS	3/4/2019	JS
I	ECO 2739: ADDED MATERIAL OPTION 17-4 STAINLESS STEEL	2/20/2020	JB
II	ECO 2788: UPDATED TEFLON TO PTFE	6/19/20	TJ

FITTING CODE	FITTING TYPE
98	1" NPT FEMALE
88	1 1/4" NPT FEMALE
24	1 1/2" NPT FEMALE
32	2" NPT FEMALE
76	AS5202-16 (1" SAE)
80	AS5202-20 (1 1/4" SAE)
78	AS5202-24 (1 1/2" SAE)
32S	AS5202-32 (2" SAE)
98SW	1" SOCKET WELD*
24SW	1 1/2" SOCKET WELD*
32SW	2" SOCKET WELD*

*Socket weld ports available for stainless steel housings only
Tubing socket weld ports are also available per special order

HOUSING CODE	MATERIAL	PRESSURE RATING*
P	17-4 STAINLESS STEEL	10000 psi
T	316/316L STAINLESS STEEL	8000 psi
A	7075 ALUMINUM	6000 psi

*Pressure rating based on filter head and body; depending on port size selection, the filter assembly pressure rating may decrease

ELEMENT MEDIA	MATERIAL	MICRON '3a' CODE	RATING		ELEMENT '3b' CODE
			NOM	ABS	
WIRE MESH	316 S.S. WIRE MESH	2X	2	10	G
		05	5	18	
		10	10	25	
		20	20	40	
		40	40	75	
		75	75	100	
		100	100	200	
RMF*	316 RANDOM METAL FIBER	1	-	1	R
		3	-	3	
		5	-	5	
		10	-	10	
		20	-	20	
		100	-	100	
GLASS FIBER β RATING ≥ 200	GLASS FIBER	B1	-	1	F
		B3	-	3	
		B5	-	5	
		B10	-	10	
		B25	-	25	
CELLULOSE	CELLULOSE	03	3	-	A
		10	10	-	
		25	25	-	

O-RING CODE	MATERIAL
M	PTFE
M1	PTFE per AMS 3678C-1-B
E	EPR
E1	V138-95
S	SILICONE
L	BUNA, 70 DUROMETER
K	BUNA, 90 DUROMETER
HNBR	HNBR
H	4079 KALREZ
N	VITON
MN	PTFE COATED VITON

ELEMENT MEDIA	MATERIAL	MICRON '3a' CODE	RATING		ELEMENT '3b' CODE
			GAS ABS	LIQUID ABS	
SINTERED 316/NICKEL	SINTERED 316 S.S OR SINTERED NICKEL	0.2	0.2	1.4	P
		0.5	0.3	2.2	
		1	0.7	3.3	
		2	2	9	
		5	5	13	
		10	13	20	
		20	20	35	
SINTERED BRASS	SINTERED BRASS	10	10	15	B
		20	20	27	
		40	40	52	
		100	100	100	

ACC. CODE	DESCRIPTION
DR1	1/8"-27 NPT BOWL DRAIN
DR2	1/4"-18 NPT BOWL DRAIN
DR3	AS5202-2 (1/8" SAE) BOWL DRAIN
DR4	AS5202-4 (1/4" SAE) BOWL DRAIN
EE	40 psid ELEC. SWITCH
R*	50 psid BYPASS PORT
V	40 psid VISUAL INDICATOR
VR	VISUAL INDICATOR + BYPASS PORT
EER	ELEC. SWITCH + BYPASS PORT
HD†	BOWL HANDLES
S1	1/8"-27 NPT DP PORTS
S2	1/4"-18 NPT DP PORTS
S3	AS5202-02 (1/8" SAE) DP PORTS
S4	AS5202-04 (1/4" SAE) DP PORTS

*SEE BYPASS BOM ON SHEET 5 FOR REQUIRED PARTS
†OPTION ONLY AVAILABLE FOR 316

ASSEMBLY: 49 - -

EXAMPLE: 49 - -

REPLACEMENT ELEMENT: 549 -

EXAMPLE: 549 -

RATING CODE	RATING
D	4500 psi WIRE MESH
E	4500 psi RMF
A	300 psi GLASS FIBER
C	3250 psi GLASS FIBER
P	150 psi CELLULOSE
R	300 psi CELLULOSE
F	2000 psi 316 SINTERED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ON:
2 PLACE DECIMAL: .XX +/-0.01
3 PLACE DECIMAL: .XXX +/-0.005
ANGULAR: +/- 0.5°

PART TO BE FREE OF BURRS
REMOVE SHARP EDGES (FILLET 0.005" - 0.020") MEASUREMENT NOT REQUIRED
SURFACE FINISH 125 Ra UNLESS NOTED, VISUAL INSPECTION ONLY REQUIRED
IF PART REVISION IS NOT SPECIFIED, PART REV. MATCHES DRAWING REV.
NFC WORKMANSHIP STANDARD DMF01-24 APPLIES



TITLE: 4900 ASSEMBLY

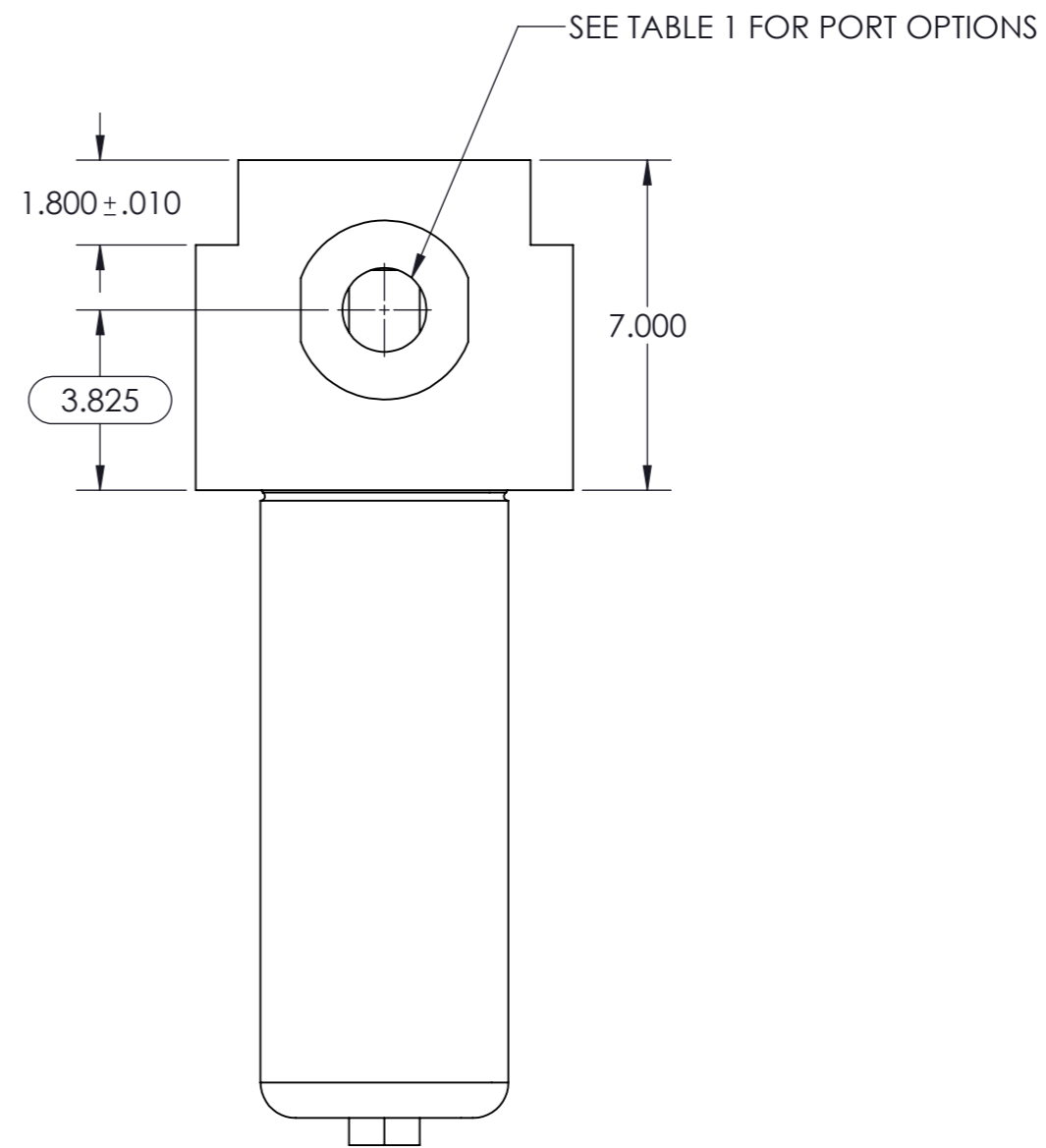
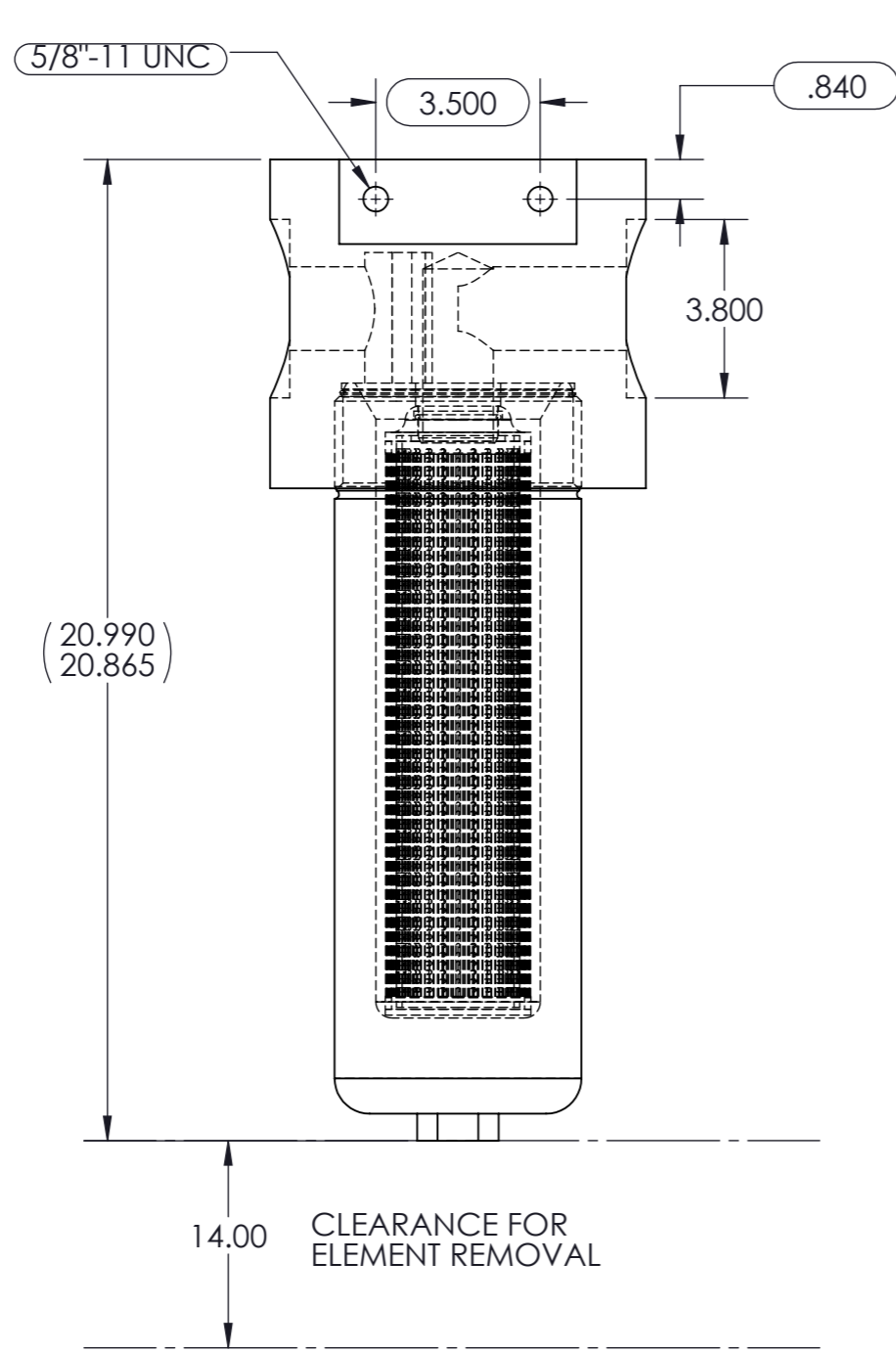
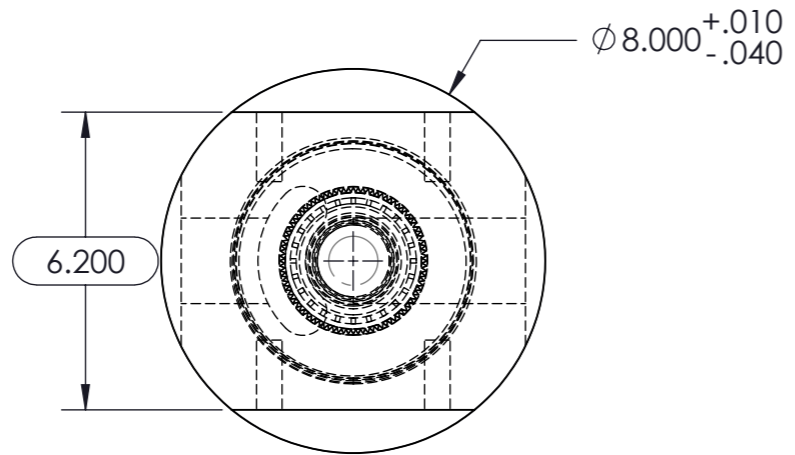
PART NUMBER: TABULATED

PART REV: I

DWG NO. 4900

CAGE CODE 59165

SIZE A3



14.00 CLEARANCE FOR ELEMENT REMOVAL

NORMAN FILTERS
NORMAN FILTER COMPANY
 9850 SOUTH INDUSTRIAL DRIVE - BRIDGEVIEW, IL 60455
 PHONE (708)430-4000 - FAX (708)430-5961

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES

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 2 PLACE DECIMAL: .XX +/-0.01
 3 PLACE DECIMAL: .XXX +/-0.005
 ANGULAR: +/- 0.5°

 PART TO BE FREE OF BURRS
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 NFC WORKMANSHIP STANDARD DMF01-24 APPLIES

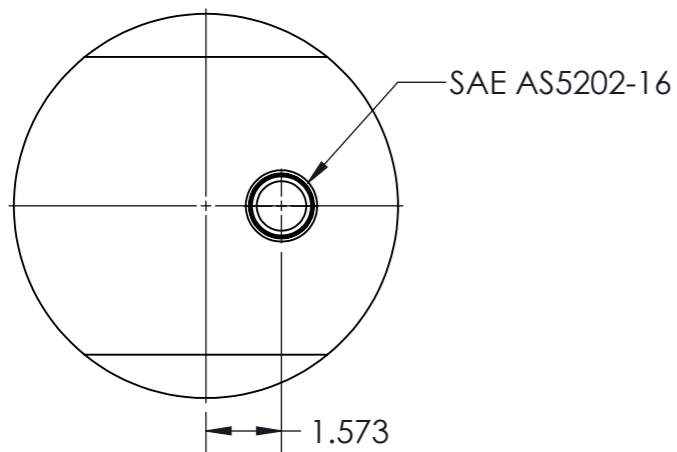
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PART NUMBER: TABULATED		
DWG NO. 4900	CAGE CODE 59165	SIZE A3

DO NOT SCALE DRAWING

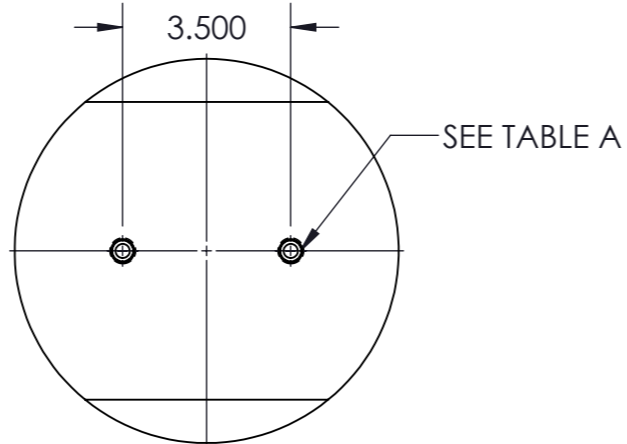
SCALE:1:8

SHEET 2 OF 5

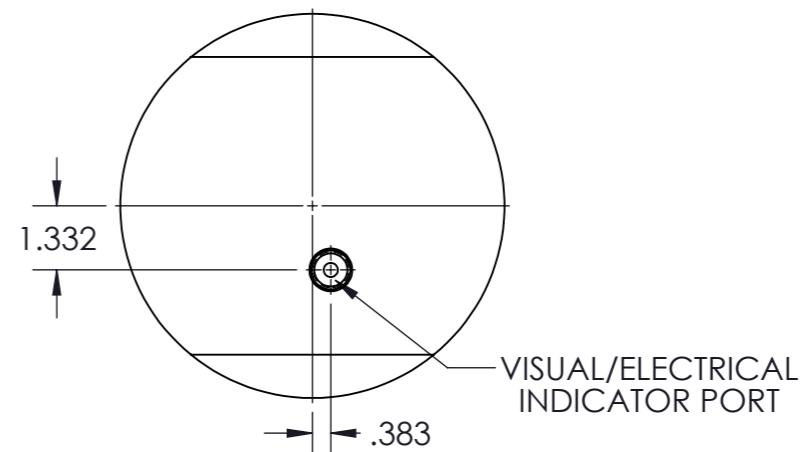
BYPASS RELIEF
DO NOT USE WITH S-PORTS



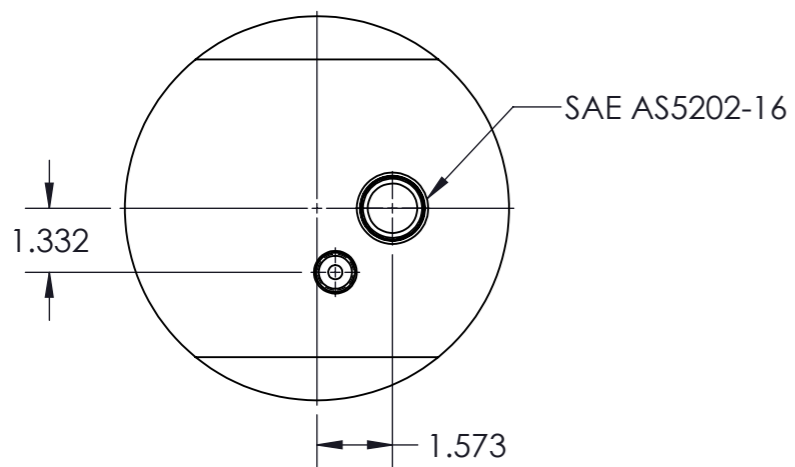
DP PORTS



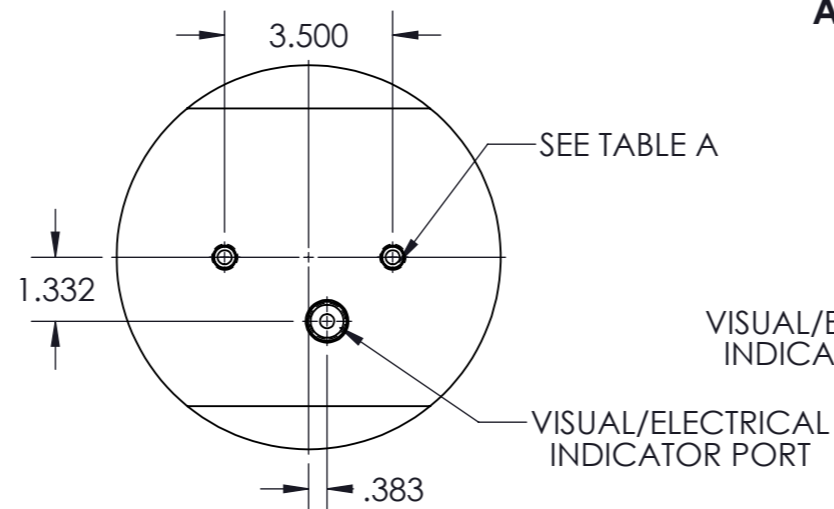
VISUAL INDICATOR



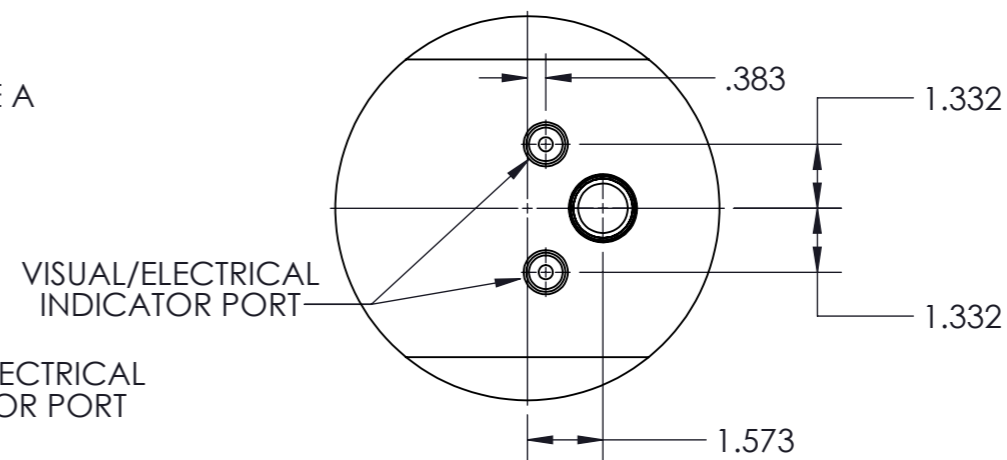
BYPASS RELIEF AND VISUAL INDICATOR



VISUAL INDICATOR AND DP PORTS



BYPASS RELIEF, ELECTRICAL INDICATOR AND VISUAL INDICATOR



BYPASS RELIEF WITH S-PORTS

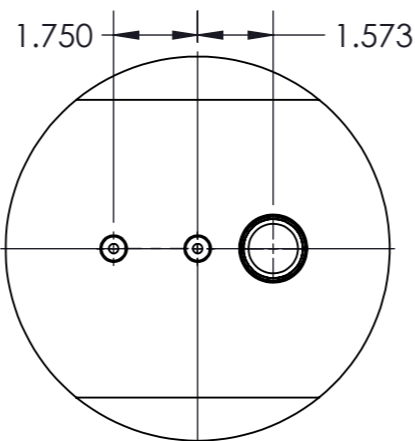


TABLE A - HEAD ACCESSORY PORT OPTIONS

PN CODE	DESCRIPTION
R	50 psid BYPASS PORT
V	40 psid VISUAL INDICATOR
VR	VISUAL INDICATOR + BYPASS PORT
SX	DP PORTS, SEE TABLE B FOR 'X'
VSX	VISUAL INDICATOR + DP PORTS

TABLE B - DP PORT SIZING OPTIONS

'X' CODE	DESCRIPTION
1	1/8"-27 NPT DP PORTS
2	1/4"-18 NPT DP PORTS
3	AS5202-08 (1/8" SAE) DP PORTS
4	AS5202-04 (1/4" SAE) DP PORTS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

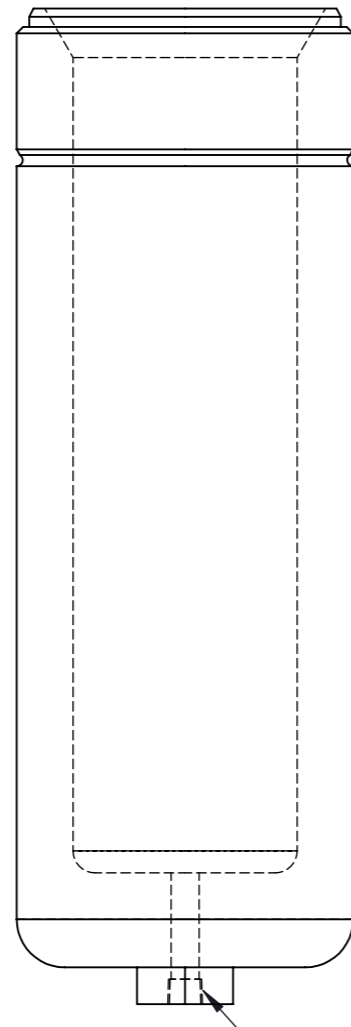
TOLERANCES ON:
2 PLACE DECIMAL: .XX +/-0.01
3 PLACE DECIMAL: .XXX +/-0.005
ANGULAR: +/- 0.5°

PART TO BE FREE OF BURRS
REMOVE SHARP EDGES (FILLET 0.005" - 0.020") MEASUREMENT NOT REQUIRED
SURFACE FINISH 125 Ra UNLESS NOTED, VISUAL INSPECTION ONLY REQUIRED
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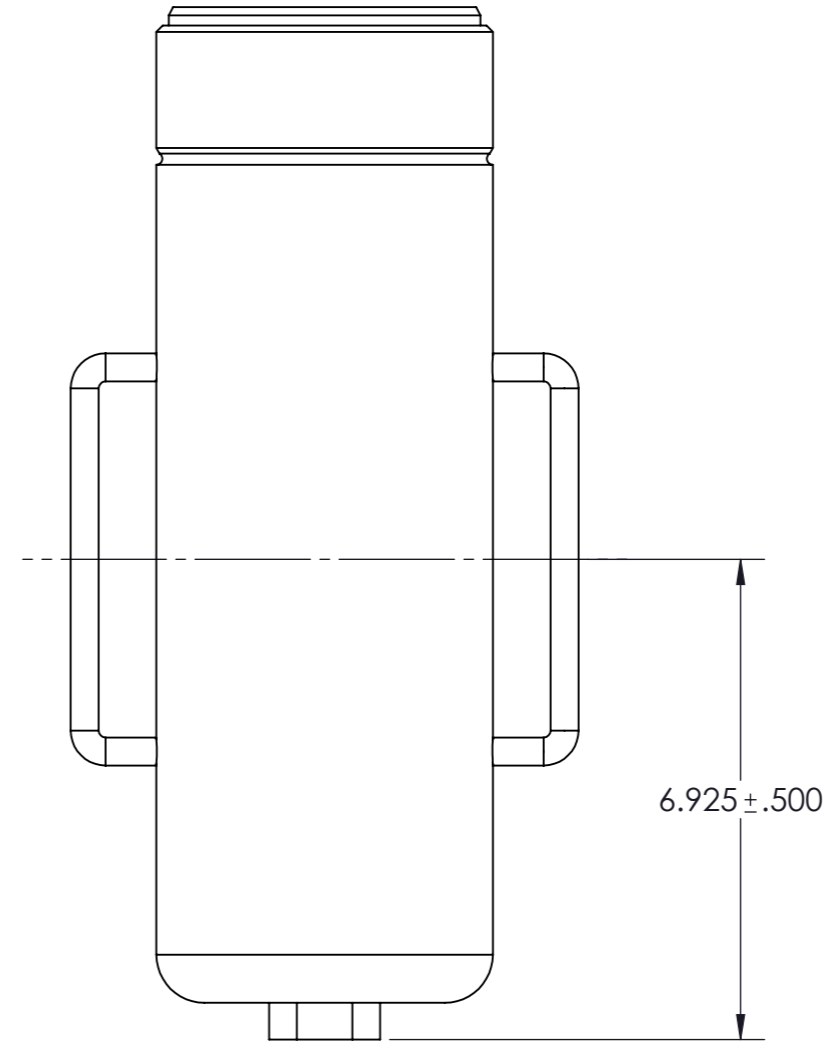
TITLE: 4900 ASSEMBLY		PART REV: I
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DRAIN PORT OPTION



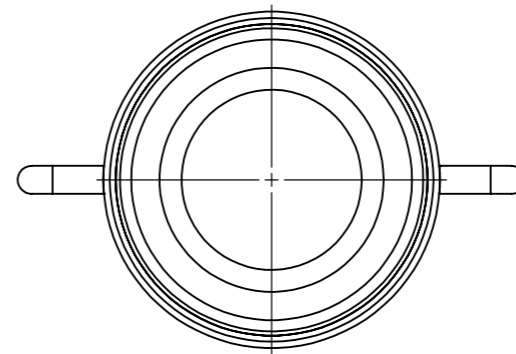
SEE TABLE C

BOWL WITH OPTIONAL HANDLES



6.925 ± .500

TABLE C - BOWL DRAIN SIZING OPTIONS	
CODE	DESCRIPTION
DR1	1/8"-27 NPT BOWL DRAIN
DR2	1/4"-18 NPT BOWL DRAIN
DR3	AS5202-2 (1/8" SAE) BOWL DRAIN
DR4	AS5202-4 (1/4" SAE) BOWL DRAIN



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TOLERANCES ON:
 2 PLACE DECIMAL: .XX +/-0.01
 3 PLACE DECIMAL: .XXX +/-0.005
 ANGULAR: +/- 0.5°

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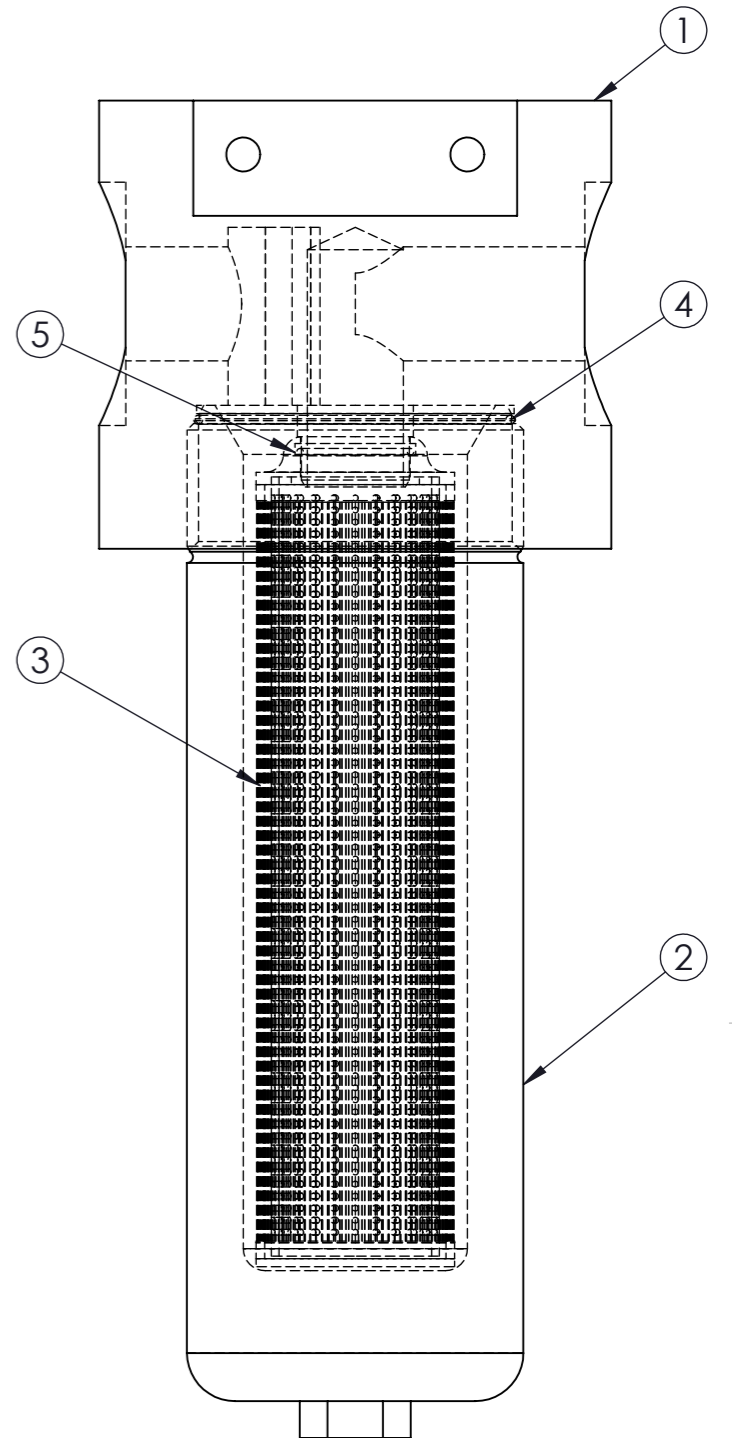
DO NOT SCALE DRAWING

TABLE D - O-RING MATERIAL		
FILTER ASSEMBLY CODE	MATERIAL	O-RING PART # XX CODE
M	PTFE	01
M1	PTFE per AMS 3678C-1-B	02
2	EPR	03
E1	V138-95	04
S	SILICONE	05
L	BUNA, 70 DUROMETER	06
K	BUNA, 90 DUROMETER	07
HNBR	HNBR	15
H	4079 KALREZ	16
N	VITON	18
MN	PTFE COATED VITON	18-01

BILL OF MATERIALS				
ITEM #	PART #	DESCRIPTION	MATERIAL	QTY
1	49XX	HEAD, FILTER	TABLE 1 AND TABLE 2; IF HEAD ACCESSORY PORTS ARE NEEDED SEE TABLE 6	1
2	49866X-S	BOWL, FILTER	TABLE 2; IF BOWL ACCESSORIES ARE NEEDED SEE TABLE 6	1
3	549X-XX	ELEMENT, FILTER	TABLE 3 CODE 3a, TABLE 3 CODE 3b, AND TABLE 4	1
4	5248X	O-RING, HOUSING	TABLE D	1
5	5924X	O-RING, ELEMENT	TABLE D	1

BOM FOR SHEET 1 EXAMPLE ASSEMBLY NUMBER				
ITEM #	PART #	DESCRIPTION	MATERIAL	QTY
1	4932T-EE	HEAD, FILTER	316/316L STAINLESS STEEL	1
2	49866T-S	BOWL, FILTER	316/316L STAINLESSS STEEL	1
3	549G-2XD	ELEMENT, FILTER	STAINLESS STEEL WIRE MESH	1
4	524818-01	O-RING, HOUSING	PTFE COATED VITON	1
5	592418-01	O-RING, ELEMENT	PTFE COATED VITON	1

BYPASS BOM				
ITEM #	PART #	DESCRIPTION	MATERIAL	QTY
1	49-REFPLG	PLUG	316/316L STAINLESS STEEL	1
2	49-RELSRING	SPRING	STAINLESS STEEL	1
3	49-RELPOP	POPPET	316/316L STAINLESS STEEL	1
4	5026XX	PLUG SEAL	SEE TABLE D FOR XX CODE	1
5	5119XX	POPPET SEAL		1



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TITLE: 4900 ASSEMBLY

PART NUMBER: TABULATED

PART REV: 1

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