

535 SIZE

10 GPM/ 300 SCFM

535 SIZE

TABLE 1 - PRESSURE

TABLE 2 - PORT SIZE, TYPE

45	5000 psi	32	1/4"-18 FNPT
45	6000 psi	35	1/2"-14 FNPT
145**	10000 psi	25	3/4"-14 FNPT
345**	15000 psi	16N	1"-11.5 FNPT
545**	20000 psi	4S	1/4" SAE AS5202-04
*10K, 15K, & 20K ONLY	6S	3/8" SAE AS5202-06	
	45S	1/2" SAE AS5202-08	
	75S	3/4" SAE AS5202-12	
	16S	1" SAE AS5202-16	
	4J	1/4" SAE J-1926/1-4	
	6J	3/8" SAE J-1926/1-6	
	45J	1/2" SAE J-1926/1-8	
	75J	3/4" SAE J-1926/1-12	
	16J	1" SAE J-1926/1-16	
	250	1/4" MEDIUM PRESSURE*	
	375	3/8" MEDIUM PRESSURE*	
	562	9/16" MEDIUM PRESSURE*	
	750	3/4" MEDIUM PRESSURE*	
	1.00	1" MEDIUM PRESSURE*	

SEE TABLE 2a

SOCKET WELD PER ASME B16.11
BUTT WELD PER ASME B16.25

**NFC 145, 345, 545 Series Filters are designed for high pressure (up to 20,000 psi), port and accessory options may limit MAX Pressure.

TABLE 2a - WELD SPECIFICATION

PORT SIZE, X/16 SCALE	PIPE SCHEDULE	SOCKET/BUTT WELD SW/BW
5358	40	SW, BW
	80	
	160	
	XX	
53512	40	SW, BW
	80	
	160	
	XX	
53516	40	SW, BW
	80	
	160	
	XX	
	CODE	
	XX-YYYYZW	
EXAMPLE:	5358-160BW	

TABLE 3 - HOUSING MATERIAL

	ALUMINUM	5K
A	303 STAINLESS	6K
G	17-4	10K, 15K, 20K
T	316 STAINLESS	6K, 10K, 15K
P	17-4	10K, 15K, 20K
B	BRASS	CALL FACTORY
M	MONEL	6K, 10K, 15K
D	DUPLEX	6K, 10K, 15K
S	SUPER DUPLEX	10K, 15K, 20K

TABLE 4 - ELEMENT CODE

A	CELLULOSE
F	GLASS FIBER
G	316 STAINLESS WIRE MESH
P	316 SINTERED
R	316 RANDOM METAL FIBER™
N	NICKEL 200/201 SINTERED
W	NICKEL 200/201 WIRE MESH
B	SINTERED TIN/BRONZE

Registered trademark of BEKIPOR

TABLE 8 - ACCESSORIES

DR-1	1/8"-27 FNPT BOWL DRAIN*
DR-2	1/4"-18 FNPT BOWL DRAIN*
DR-3	SAE AS5202-02 BOWL DRAIN*
DR-4	SAE AS5202-04 BOWL DRAIN*
DRCT4	1/4" MP BOWL DRAIN
DRCT6	3/8" MP BOWL DRAIN
DR-8	1/2" FNPT BOWL DRAIN†
SEE TABLE 8a	ELECTRICAL INDICATOR***
SEE TABLE 8a/c	ELEC. INDICATOR + BYPASS VALVE***
SEE TABLE 8c	BYPASS VALVE**
S1	1/8"-27 FNPT DP PORTS*
S2	1/4"-18 FNPT DP PORTS*
S3	SAE AS5202-02 DP PORTS*
S4	SAE AS5202-04 DP PORTS*
SCT4	1/4" MP DP PORTS
SCT6	3/8" MP DP PORTS
SCT9	9/16" MP DP PORTS
SEE TABLE 8c	VISUAL INDICATOR***
SEE TABLE 8b/c	VISUAL INDICATOR + BYPASS VALVE***

*Not available on 20K
†MAWP per ASME B31.3 4900 psi. NFC Standard 4:1 Burst does not apply
** Seal Kit Available see Table 8a/b/c for code

TABLE 6 - COLLAPSE 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
K	NICKEL SINTERED
X	BRASS SINTERED

TABLE 7 - O-RING MATERIAL

M	PTFE
M1	PTFE PER AMS 3678C-1-B
E	ETHYLENE PROPYLENE
E1	V1238-95
S	SILICONE
L	BUNA-N
K	90 DUROMETER NITRILE
HNBR	HNBR
H	4079 KALREZ™
N	VITON
MN	PTFE COATED VITON

TABLE 5 - MICRON CODE

	CODE XX	NOM.	ABS.	ELEMENT CODE	
WIRE MESH	2X	2	10	G	
	02	2	12		
	05	5	18		
	RMF	10	10	25	G,W
		20	20	40	G
		40	40	75	
		75	75	100	
100		100	200	G,W	
GLASS FIBER β Rating ≥ 200	200	200	300	G	
	1	-	1	R	
	3	-	3		
	5	-	5		
	10	-	10		
20	-	20			
100	-	100			
CELLULOSE	B1	-	1	F	
	B3	-	3		
	B5	-	5		
	B10	-	10		
B25	-	25			
SINTERED	03	3	-	A	
	10	10	-		
	25	25	-		
SINTERED	316	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	
	NICKEL	20	20	35	N
		2	2	9	
		5	5	13	
	BRASS	10	13	20	B
		10	10	15	
		20	20	27	
		40	40	52	
		100	100	100	

ASSEMBLY: 1 2/2a 3 4 5 6 7 8/8a/b/c

EXAMPLE: 45 75S T G 20 D N EER

REPLACEMENT ELEMENT: 535 G 20 D N

EXAMPLE: 535 G 20 D N

SEAL KIT: KIT - 45 -535- N - EER

EXAMPLE: KIT - 45 -535- N - EER

TABLE 8a		TABLE 8b		TABLE 8c	
CODE	ACTIVATION PRESSURE	CODE	ACTIVATION PRESSURE	CODE	ACTIVATION PRESSURE
EE	40 PSID	V	40 PSID	R	50 PSID
EE20	20 PSID	V15	15 PSID	R25	25 PSID
EE75	75 PSID	V80	80 PSID	R150	150 PSID
		V120	120 PSID		

FOR COMBINATION ACCESSORIES SEE EXAMPLES BELOW

EXAMPLE: EE75R150 V120R150

REVISIONS			
DRAWING REV.	DESCRIPTION	DATE	APPROVED
0	ECO 2347: ADDED MEDIA GRADE 02	9/25/19	JB
01	ECO 2786: UPDATED MICRON RATING OPTIONS	3/10/20	JB
02	ECO 2788: UPDATED TEFLON TO PTFE	6/19/20	TJ

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: 535 ASSEMBLY

PART NUMBER: TABULATED

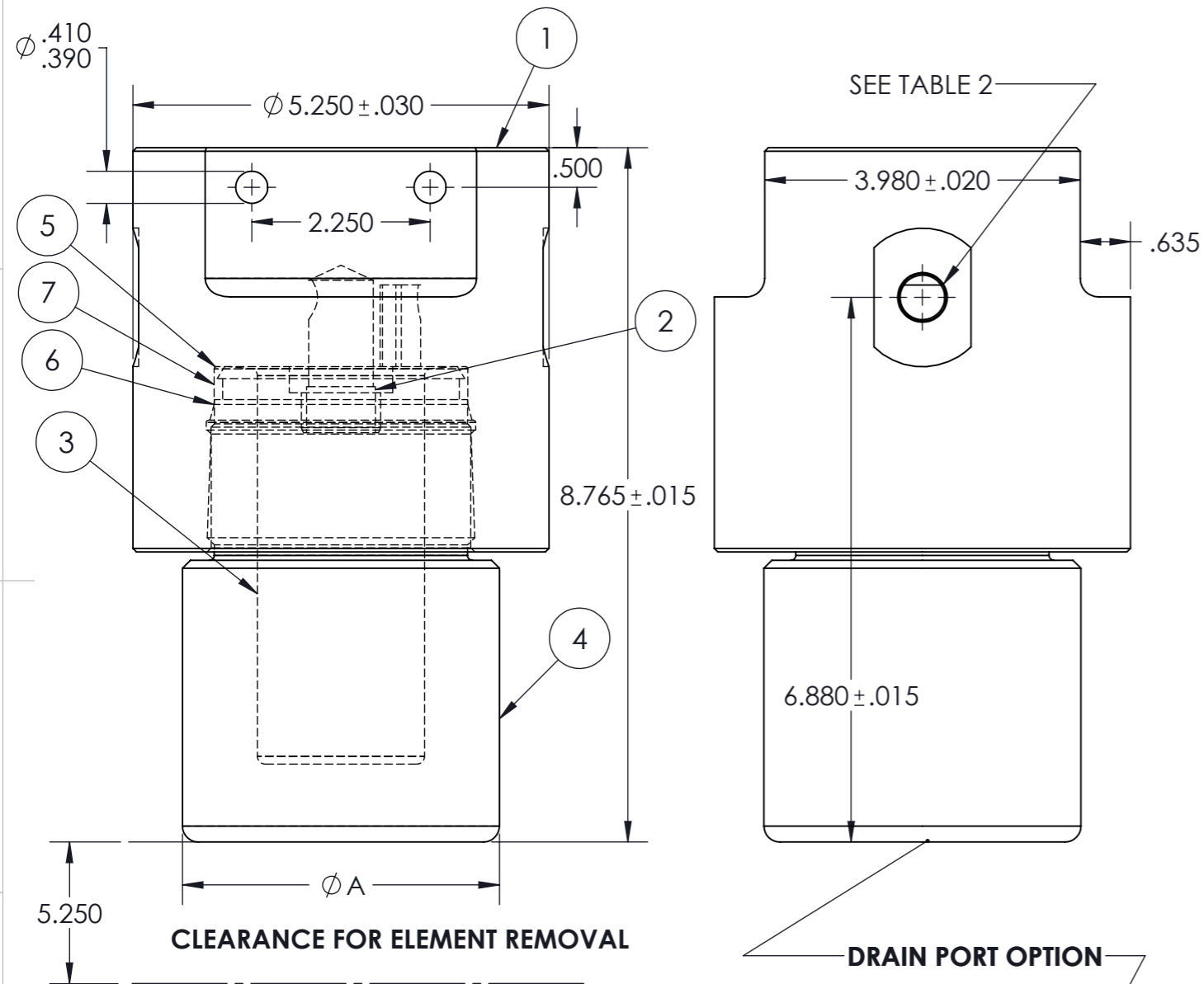
DWG NO. 535_ASSEMBLY

CAGE CODE 59165

PART REV: 0

SIZE A3

14500, 34500, 54500



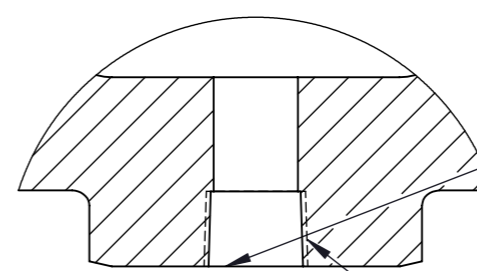
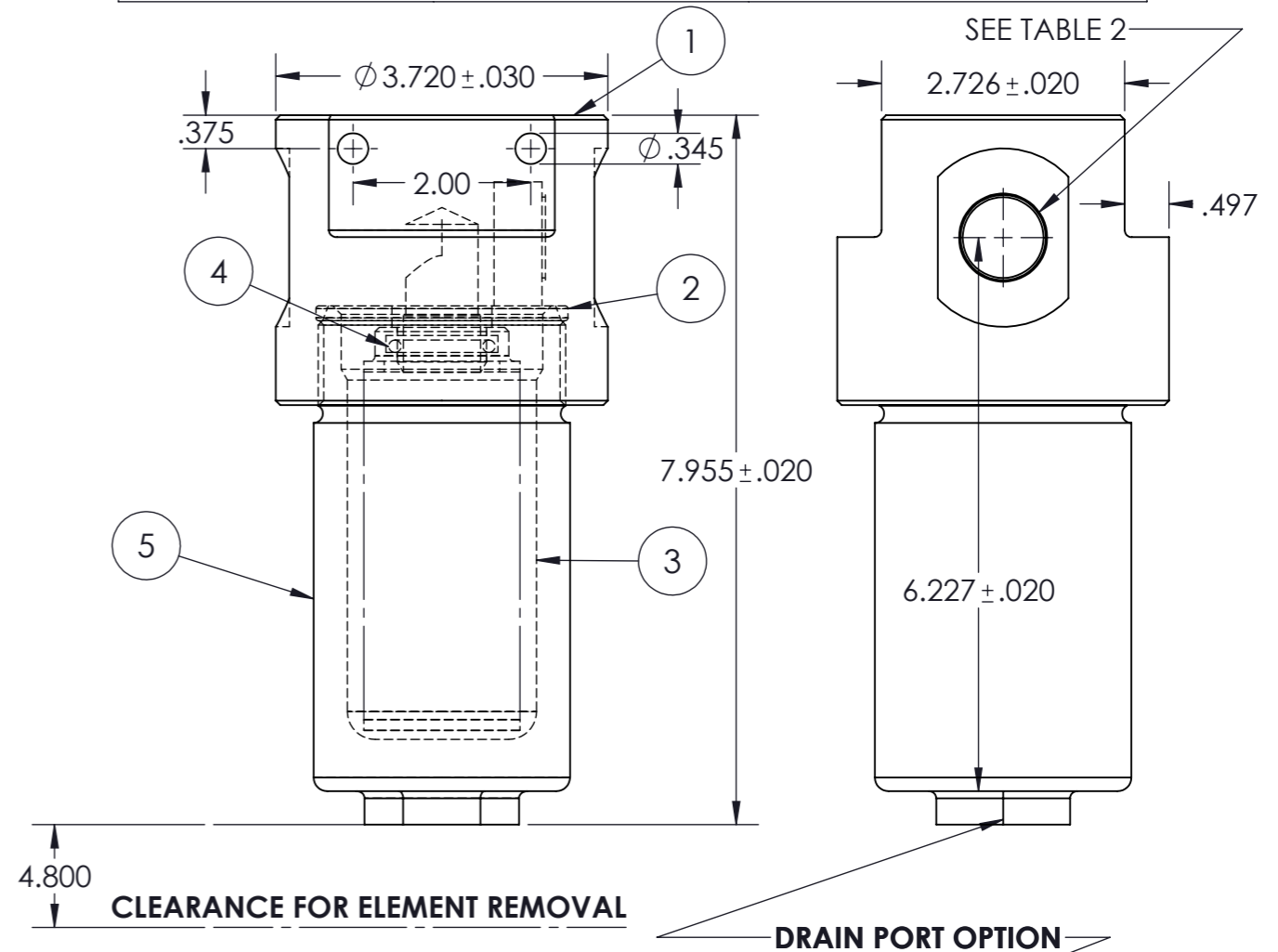
PRESSURE	BOWL DIAMETER A	MINIMUM WALL THICKNESS "T"
10K	4.00	.635
15K	4.25	
20K	4.50	

SEE TABLE 8

4500

	BRASS	ALL OTHER MATERIALS
A	2.00 ± .01	1.992 ± .005
B	4.250 ± .005	3.720 ± .030
C	7.945 ± .015	7.975 ± .015
D	6.240 ± .020	6.217 ± .020

MINIMUM WALL THICKNESS "T" .274



SEE TABLE 8

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: 535 ASSEMBLY		PART REV: O
PART NUMBER: TABULATED	DWG NO. 535_ASSEMBLY	CAGE CODE 59165
SCALE:1:4		SIZE A3

DO NOT SCALE DRAWING

SCALE:1:4

SHEET 2 OF 5

1 4500, 34500, 54500 Bill of Material

4500 Bill of Material

TABLE A - O-RING TYPE		
Filter Assembly Code	O-Ring Material	O-Ring Part # Code XX
M	PTFE	01
M1	PTFE per AMS 3678C-1-B	02
E	EPR	03
E1	V1238-95	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

CONTINUING THE EXAMPLE FROM SHEET 1

Item #	Part #	DESCRIPTION	Material	Qty.
1	4575SI	HEAD, FILTER	316 STAINLESS STEEL	1
2	523118	O-RING, HOUSING	VITON	1
3	535G-20DN	ELEMENT, FILTER	316 STAINLESS WIRE MESH	1
4	521418	O-RING, ELEMENT	VITON	1
5	45623I	BOWL, FILTER	316 STAINLESS STEEL	1

FROM TABLE D(SHEET 5) AND 3 (SHEET 1)

SHEET 1 REPLACEMENT ELEMENT

FROM TABLE 3

FROM TABLE A

Item #	Part #	DESCRIPTION	Material	Qty.
1	345XXY	HEAD, FILTER	TABLE 3 (SHEET 1) AND TABLE C (SHEET 4)	1
2	5214XX	ELEMENT O-RING	TABLE A (SHEET 3)	1
3	535X-XXX	ELEMENT, FILTER	REPLACEMENT ELEMENT (SHEET 1)	1
4	345623Y-NS-XXK	BOWL, FILTER	TABLE 3 (SHEET 1) AND TABLE B (SHEET 2)	1
5	5234XX	BOWL O-RING	TABLE A (SHEET 3) ^A	1
6	523402 ^B	PTFE BACKUP BOWL O-RING	PTFE	1
7	8-234 ^B	PARBACK BACKUP BOWL O-RING	BUNA, 90 DUROMETER	1

Item #	Part #	DESCRIPTION	Material	Qty.
1	45XXY	HEAD, FILTER	TABLE D(SHEET 5) and 3(SHEET 1)	1
2	5231XX	O-RING, HOUSING	TABLE A	1
3	535X-XXX	ELEMENT, FILTER	SHEET 1 REPLACEMENT ELEMENT	1
4	5214XX	O-RING, ELEMENT	TABLE A	1
5	45623Y	BOWL, FILTER	TABLE 3	1

^ASOLID PTFE O-RINGS ARE NOT TO BE USED ON BOWLS.
PTFE COATED VITON O-RINGS MAY BE USED.

^BALWAYS THE SAME



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

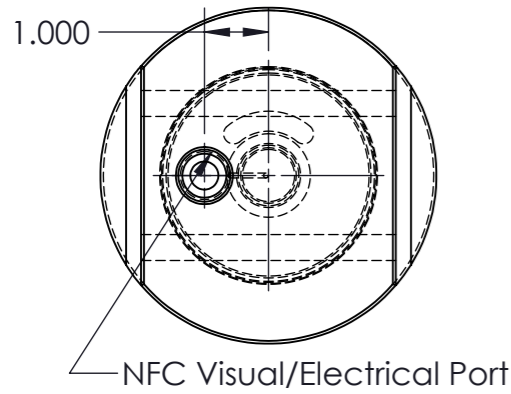
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PART NUMBER: TABULATED		DWG NO. 535_ASSEMBLY
CAGE CODE 59165	SIZE A3	

DO NOT SCALE DRAWING

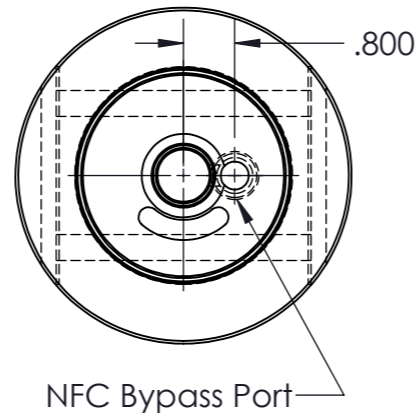
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SHEET 3 OF 5

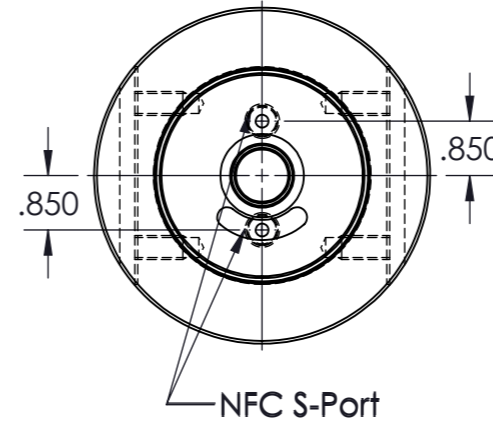
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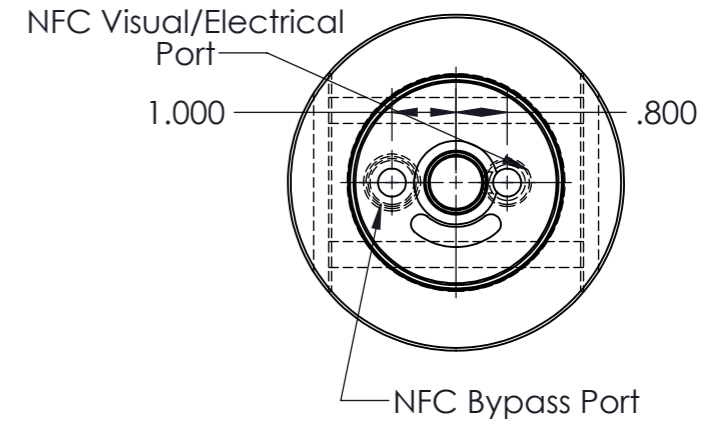
#2 Bypass



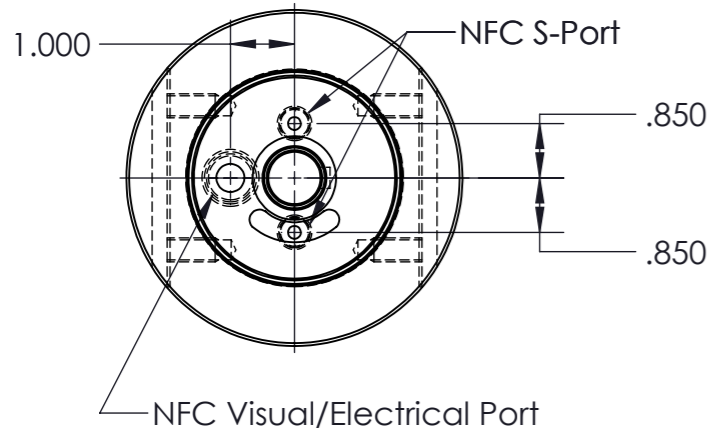
#3 S-Ports



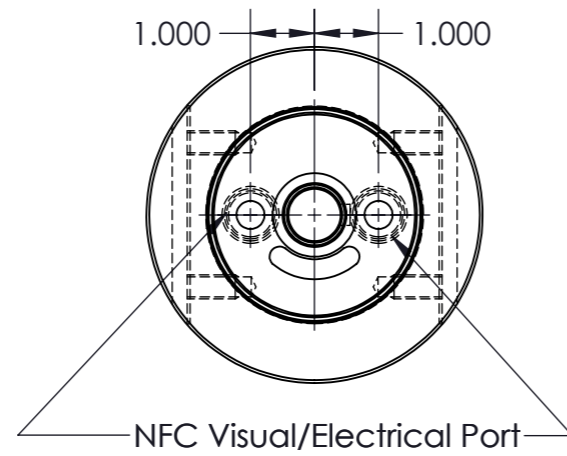
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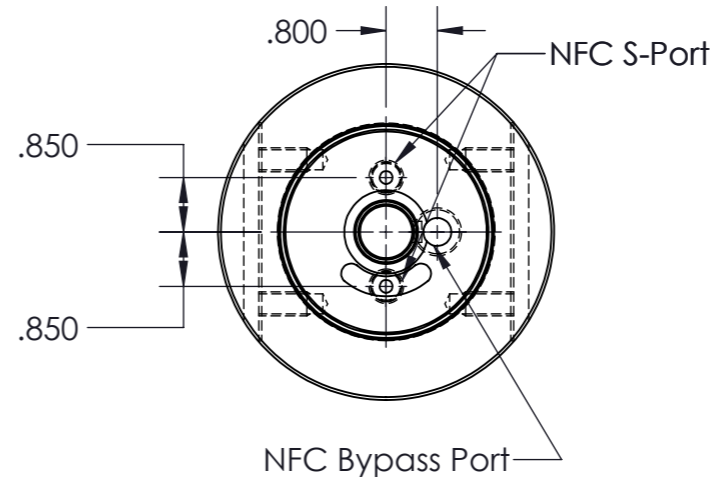
#5 Visual/Electrical and S-Ports



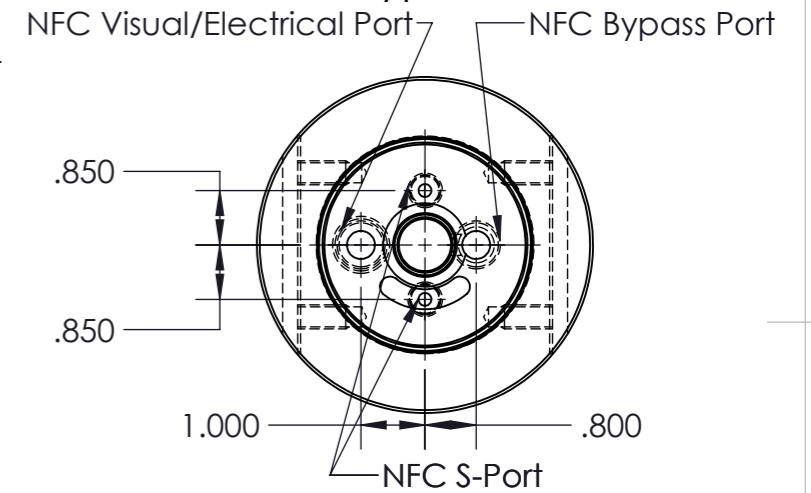
#6 Visual/Electrical x 2



#7 Bypass and S-Ports



#8 Visual Bypass and S-Ports



14500, 34500, 54500 ACCESSORY PORTS

P/N Prefix	P/N Suffix(es)	Description	Top View Figure#
345XXY	NV-NS	Visual/Electrical Indicator Ports	1
	R-NS	Bypass Port	2
	NS-S*	S-Ports	3
	NVR-NS	Visual/Electrical and Bypass Ports	4
	NV-NS-S*	Visual/Electrical and S-ports	5
	NV-NV-NS	Visual and Visual Indicator	6
	R-NS-S*	Bypass and S-ports	7
	NVR-NS-S*	Visual/Electrical Bypass and S-ports	8

Port Code 'XX'	Port Type
32	1/4"-18 FNPT
35	1/2"-14 FNPT
36	3/4"-14 FNPT
37	1"-11.5 FNPT
250	1/4" MEDIUM PRESSURE
375	3/8" MEDIUM PRESSURE
562	9/16" MEDIUM PRESSURE
750	3/4" MEDIUM PRESSURE
1.00	1" MEDIUM PRESSURE

Code 'Y'	Material
G303	303 S.S.
G	17-4 PH
T	316 S.S.

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

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

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 NFC WORKMANSHIP STANDARD DMF01-24 APPLIES

TITLE:
535 ASSEMBLY

PART NUMBER:
TABULATED

DWG NO.
535_ASSEMBLY

CAGE CODE
59165

PART REV:
 ○

SIZE
A3

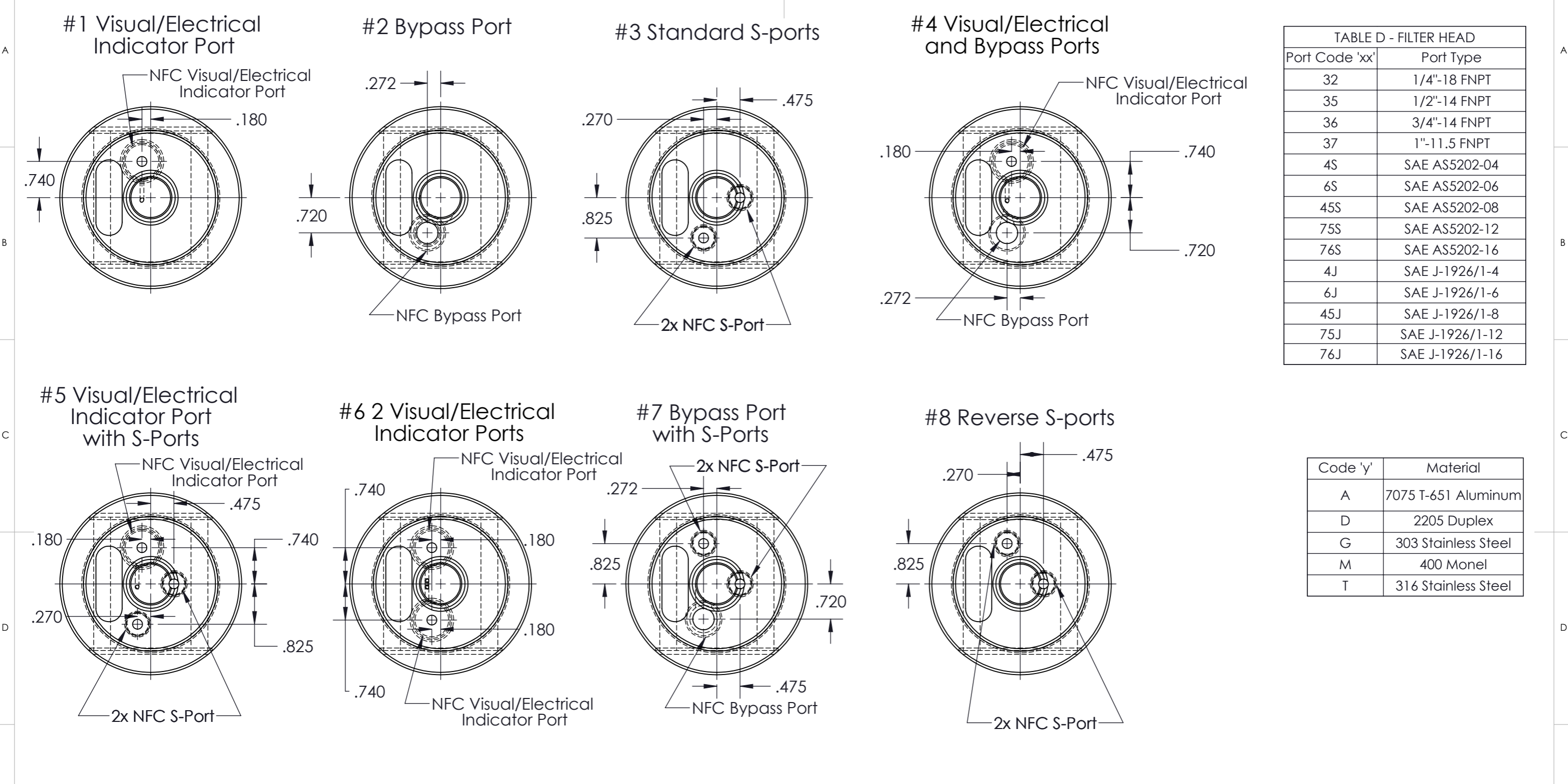


TABLE D - FILTER HEAD

Port Code 'xx'	Port Type
32	1/4"-18 FNPT
35	1/2"-14 FNPT
36	3/4"-14 FNPT
37	1"-11.5 FNPT
4S	SAE AS5202-04
6S	SAE AS5202-06
45S	SAE AS5202-08
75S	SAE AS5202-12
76S	SAE AS5202-16
4J	SAE J-1926/1-4
6J	SAE J-1926/1-6
45J	SAE J-1926/1-8
75J	SAE J-1926/1-12
76J	SAE J-1926/1-16

Code 'y'	Material
A	7075 T-651 Aluminum
D	2205 Duplex
G	303 Stainless Steel
M	400 Monel
T	316 Stainless Steel

4500 ACCESSORY PORTS

P/N Prefix	P/N Suffix(es)	Description	Top View Figure #
45xy	NV	Visual/Electrical Indicator Ports	1
	R	Bypass Ports	2
	S*	S-Ports	3
	NVR	Visual/Electrical Indicator and Bypass Ports	4
	NV-S*	Visual/Electrical and S-Ports	5
	NV-NV	Visual and Visual Indicator	6
	R-S*	Bypass and reversed S-Ports	7
	RF	Reverse Flow	Not Depicted
RF-S*	Reverse Flow with reversed S-Ports	8	

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

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NFC WORKMANSHIP STANDARD DMF01-24 APPLIES



TITLE: 535 ASSEMBLY		PART REV: O
PART NUMBER: TABULATED		DWG NO. 535_ASSEMBLY
CAGE CODE 59165	SIZE A3	