

Del Aerospace, Inc.



Capability Overview

Del Aerospace Inc.
330 S. Kellogg Avenue
Suite J
Goleta, CA 93117
Contact: Chuck Randall
805.486.1610
Chuck@DelAerospace.com
DelAerospace.com



Space Flight Qualified Gas Flow Restrictors (He, H, O, Ni)

Selected Del Aerospace Standard Flow Restrictor Characteristics										
Del P/N	Inlet Pressure	Flow (SCIM)	Tol +/- (SCIM)	Min. Flow	Max. Flow	Customer P/N	Operating Pressure (psig)	Proof Pressure (psig)	Burst Pressure (psig)	Surge Pressure (psig)
10380-1	450	120	6	114	126	58-80032-1	535	1070	1605	
10380-3	450	50	2.5	47.5	52.5	58-80032-3	535	1070	1605	
10380-5	450	100	5	95	105	58-80032-5	535	1070	1605	
10380-7	450	200	10	190	210	58-80032-7	535	1070	1605	
10380-9	450	25	2	23	27	58-80032-9	535	1070	1605	
10376-1	457	51.84	5.2	46.7	57	1G02470-1	457	915	4950	650, 1 sec
10376-501	457	103.68	10.4	93.3	114	1G02470-501	457	915	4950	650, 1 sec
10376-503	650	103.68	10.4	93.3	114	1G02470-503	650	1300	4950	650, 1 sec
10376-505	650	207.36	20.7	186.6	228	1G02470-505	650	1300	4950	650, 1 sec
10376-507	457	5	1	4	6	1G02470-507	457	915	4950	650, 1 sec
10376-509	457	10	1	9	11	1G02470-509	457	915	4950	650, 1 sec
10379-1	In-3000 Out-750	302.4	28.8	273.6	331	ST57D193-1	3000	4500	6000	
Add'l Req't	In-2000 Out-750	172.8	17.28	155.52	190	"	2000	"	"	
10379-2	In-750 Out-100	144	14.4	129.6	158	ST57D193-3	750	4500	6000	



Customers:

- United Launch Alliance (ULA)
- Boeing
- Lockheed Martin
- McDonnell Douglas
- Aerojet/Rocketdyne
- B/E Aerospace

Many other standard and custom designs available with various form factors, pressures and flow characteristics

Various Sizes and Configurations of Space Flight and Ground Support Flow Restrictors Available



Burst Diaphragm Assemblies



- Various burst disk and burst diaphragm assembly designs for critical pressure relief applications
- Precision actuation at specified pressure or vacuum with tight tolerances
- Standard and custom designs available
- Customers:
NASA,
Aerojet/Rocketdyne,
Boeing, Lockheed Martin,
Pratt & Whitney, Northrop
Grumman

Del Aerospace Inc.

Custom, Spaceflight Qualified Burst Diaphragms

Various Pressure Relief Burst Diaphragm Assemblies



Custom Gas and Liquid Filter Assemblies (He, RP1 etc.)



Del Aerospace 37° JIC Fitting Conical Seals



Del Aerospace 37° JIC Fitting Conical Seals



**Precision Oxygen Cleaning and
Special Packaging Available**




**Large Inventory of All Sizes and
Materials Available for Immediate
Delivery**

Del Aerospace 37° JIC Fitting Conical Seals

THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF DEL AEROSPACE. NO PORTION OF THIS DATA SHALL BE RELEASED, DISCLOSED, USED OR DUPLICATED FOR USE IN PROCUREMENT OR MANUFACTURING WITHOUT SPECIFIC WRITTEN PERMISSION FROM DEL AEROSPACE.

DASH NO.	TUBE SIZE OD
-2	1/8
-3	3/16
-4	1/4
-5	5/16
-6	3/8
-7	7/16
-8	1/2
-9	9/16
-10	5/8
-11	11/16
-12	3/4
-14	7/8
-16	1
-18	1-1/8
-20	1-1/4
-24	1-1/2
-28	1-3/4
-32	2
-40	2-1/2
-48	3



EXAMPLE OF PART NO.

DY90-A-B


— CLEANING CODE

— DASH NO. FOR TUBE SIZE (SEE TAB.)

— BASIC NUMBER

- A = ALUM. ALLOY
- AT = ALUM. ALLOY, TIN PLATED
- C = COPPER
- T = COPPER, TIN PLATED
- N = NICKEL
- S = STAINLESS STEEL

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	CHANGED QQ-A-561 TO QQ-A-250/1E	7-7-83	MT
B	CHANGED COMPANY NAME FROM DEL MFG CO. TO DEL AEROSPACE INC	8-24-84	RN
C	ADDED -7,-18,-40,-48 ADDED LOX CLEANING ADDED STAINLESS MAT'L.	6-5-86	JP
D	ADDE TIN PLATED ALUM.	8-15-87	JP
E	ADDED 4 FLATS (OPTIONAL)	3-14-89	JP



5. REMOVE ALL SHARP EDGES AND BURRS.

4. FINISH: ALUM. ALLOY: TIN PLATE, PER AMS 2408-2 OR MIL-T-10727, TYPE II OR BARE AS CODED.
NICKEL: NONE
COPPER: TIN PLATE, PER AMS 2408-2 OR MIL-T-10727, OR BARE AS CODED.
STAINLESS: NONE

3. ALUM. ALLOY 1100, TEMPER "O" PER QQ-A-250/1 OR QQ-A-1876
OXYGEN FREE COPPER, ANNEALED, PER QQ-C-576 OR AMS 4500
LOW-CARBON NICKEL, ANNEALED, PER ASTM B162 OR AMS 5553
STAINLESS STEEL AISI 305 PER AMS 5514 OR QQ-S-766.

2. ALL SEALS WILL BE CLEANED PRIOR TO PACKAGING. PARTS CODE "L" AFTER DASH NUMBER WILL BE LOX CLEANED AND PACKAGED IN ACCORDANCE WITH CUSTOMER LOX CLEAN SPEC.

1. MINOR CENTS, OUT OF ROUNDNESS, AND OTHER DEFORMATIONS THAT DO NOT AFFECT THE FUNCTION OF THE SEAL, SHALL NOT CONSTITUTE CAUSE FOR REJECTION.

NOTES: UNLESS OTHERWISE SPECIFIED

QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES * 1/2	
			CONTRACT NO.	DEL AEROSPACE INC. OXNARD, CA 93030
			APPROVALS	DATE
			DRAWN AMCA	7-5-63
			CHECKED GR	7-5-63
			ISSUED MMD	7-5-63
			SIZE FSCM NO.	DWG. NO.
			B 64162	DY90
			SCALE NONE	SHEET 1 OF 1