

14-6807-6011-A2 Aircraft Tire Pressure Gauge

This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur.

WARNING!



1. The maximum operating pressure for this gauge assembly is 300 psi (20.7 bar)
2. This gauge assembly is NOT Skydrol resistant
3. Pressure relief set at 90 psi (6.0 bar)

GAUGE CALIBRATION: The pressure gauge is to be calibrated annually or as required. Reference Instrument Certification Notice.

GUARANTEES/LIMITATION OF LIABILITY

Tronair products are warranted to be free of manufacturing or material defects for a period of one year after shipment to the original customer. This is solely limited to the repair or replacement of defective components. This warranty does not cover the following items:

- a) Parts required for normal maintenance
- b) Parts covered by a component manufacturers warranty
- c) Replacement parts have a 90-day warranty from date of shipment

If you have a problem that may require service, contact Tronair immediately. Do not attempt to repair or disassemble a product without first contacting Tronair, any action may affect warranty coverage. When you contact Tronair be prepared to provide the following information:

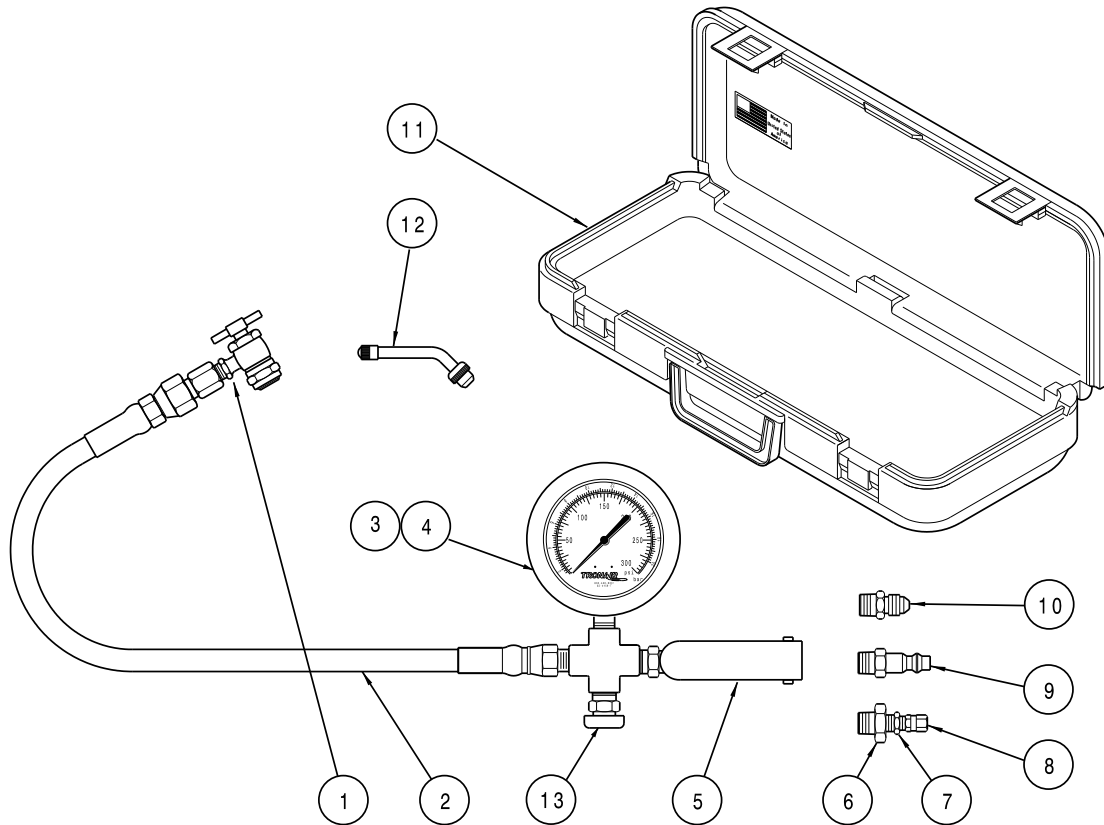
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

If warranty coverage is approved, either replacement parts will be sent or the product will have to be returned to Tronair for repairs. If the product is to be returned, a Return Material Authorization (RMA) number will be issued for reference purposes on any shipping documents. Failure to obtain a RMA in advance of returning an item will result in a service fee. A decision on the extent of warranty coverage on returned products is reserved pending inspection at Tronair. Any shipments to Tronair must be shipped freight prepaid. Freight costs on shipments to customers will be paid by Tronair on any warranty claims only. Any unauthorized modification of the Tronair products or use of the Tronair products in violation of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied.

The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied and Tronair disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse.**

Parts List

When ordering Replacement Parts/Kits, please specify Model, Color and Serial Number of your Unit



Item	Part Number	Description	Qty
1	PC-1007	Connector, High Pressure	1
2	H-2016-06	Hose, 18 inches (45 cm) long	1
3	H-2016-01	Gauge, 0-300 psi (20.7 bars) with Rubber Boot	1
4	H-2153	Boot, Gauge	1
5	H-2016-09	Valve, Hand Trigger	1
6	N-2210-02-S	Reducer, Pipe Thread (1/4 x 1/8)	1
7	PC-1073	Valve, High Pressure Strut	1
8	PC-1074	Cap, High Pressure Strut Valve	1
9	H-2016-10	Disconnect, Quick	1
10	N-2009-04-S	Connector, Male	1
11	H-2262-05	Assembly, Replacement Box	1
12	PC-1101	Extension, Bent Metal	1
13	PC-1132	Valve, Pressure Relief (set @ 90 psi)	1

Instrument Certification Notice

The gauge Certificates of Calibration supplied for the gauge(s) on this unit contain the calibration data for the actual instrument calibrated, along with the calibration date of the standard used to perform the calibration check.

The due date for re-calibration of the instrument should be based upon the date the instrument was placed in service in your facility. Re-calibration should be done on a periodic basis as dictated by the end user's quality system or other overriding requirements.

Note that Tronair, Inc. does not supply certificates of calibration on flow meters or pyrometers unless requested at the time of placed order. These instruments are considered reference indicators only and are not critical to the test(s) being performed on the aircraft.

**For Spare Parts, Operations & Service Manuals or Service Needs
Scan the QR code or visit Tronair.com/aftermarket**





Statement of Compliance

Tronair has assessed the equipment described below against the Requirements of the Directive listed below. Based on Article 4, Section 3 of the directive, the equipment shall not carry the CE mark.

This equipment has been designed and manufactured in accordance with Sound Engineering Practice.

This statement of compliance is issued under the sole responsibility of the manufacturer.

Model Number(s) 14-6807-6011-A2

Product Type/Name: Aircraft Tire Pressure Gauge

Directive: Pressure Equipment Directive 2014/68/EU, Article 4: Section 3
Without prejudice to other applicable Union harmonization legislation providing for its affixing, such equipment or assemblies shall not bear the CE marking.

Identification of person empowered to sign on behalf of the Manufacturer:

Patrick Finch
Quality Assurance Representative





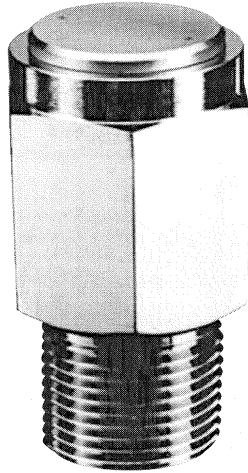
APPENDIX I

500 Series Relief Valves



500 Series

Adjustable Popoff & Inline Relief Valves
0.5 to 150 psig (10 bar)



Features

- Popoff or inline valves
- Adjustable crack pressure
- Zero leakage
- Optional factory preset
- Accurate set pressure
- Wide range of cracking pressure
- Tamper-proof adjustment
- 100% seat leakage tested
- PED certifications and CE marking available for most models

Applications

- System overpressure protection
- Storage tanks
- Freon® recovery systems
- Medical equipment
- Refrigeration & heating equipment
- Measuring & dispensing pumps
- Communications equipment
- Process control instruments
- R & D pilot plants
- Vacuum pump safety

Technical Data

Body Construction Materials	Aluminum, brass, 303 or 316 stainless steel
O-ring Materials	Buna N, ethylene propylene, neoprene, silicone, Teflon®, or Viton®
Spring Materials	302 stainless steel or 17-7 PH stainless steel
Operating Pressure	Vacuum to 200 psig (14 bar)
Inline Valve Proof Pressure	400 psig (28 bar)
Inline Valve Burst Pressure	Above 500 psig (34 bar)
Temperature Range	-320° F to +400° F (-196° C to +204° F) <i>Based on o-ring & body material, see "How to Order"</i>
Connection Sizes	1/8 inch to 1 1/4 inch

Note: Proper filtration is recommended to prevent damage to sealing surfaces.

How it Works

<p>Closed Resilient seal design prevents leakage. Sealing efficiency increase with increased pressure up to cracking pressure. Metal-to-metal poppet stop supports spring load, prevents sticking.</p>	<p>Open When system pressure overcomes spring force, poppet opens. As pressure continues to rise, variable orifice between poppet and body increases, allowing greater flow.</p>	<p>Reseating Resilient seal automatically establishes line of contact with spherical seat. Seal provides zero leakage at reseal.</p>

Circle Seal Controls

2301 Wardlow Circle, Corona, CA 92880
Phone (951) 270-6200 Fax (951) 270-6201
www.circle-seal.com

500 Series

Flow at Cracking Pressure

Elastomeric seals: 5cc/min
 Teflon®: 0.02 scfm

Cracking Pressure Tolerance: ±5%

Cracking pressure on initial crack may be higher than cracking pressure tolerance due to inherent characteristics of seals. Cracking pressure tolerance will be greater than ±5% if set pressure is ≤ 1 psi. (Consult factory)

Leakage, Ascending Pressure

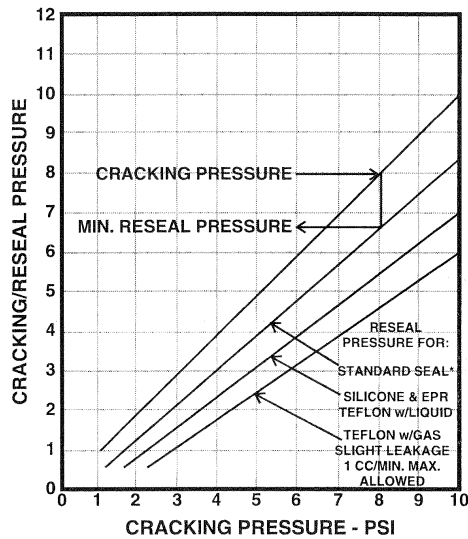
Standard seals: 0 to 95% of cracking pressure
 Silicon & EPR: 0 to 80% of cracking pressure
 Teflon®:

Cracking pressures up to 2.4 psi: 4cc/min at 0 to 50% of cracking pressure
 Cracking pressures 2.5 psi and higher: 1cc/min at 0 to reseal pressure, 10cc/min from reseal to 90% of cracking pressures

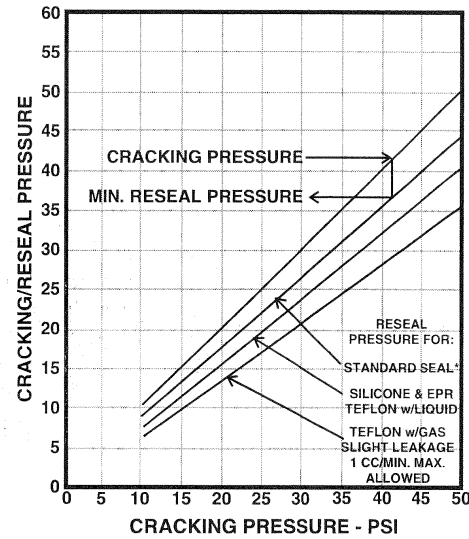
Leakage at Reseat Pressure

All elastomeric seals: Zero
 Teflon®: 1cc/min for cracking pressures 2.5 psi and higher

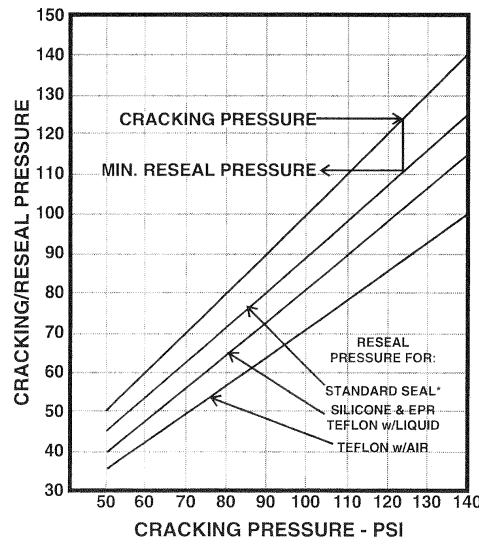
0 to 10 psi (0.7 bar)



10 to 50 psi (0.7 - 3 bar)



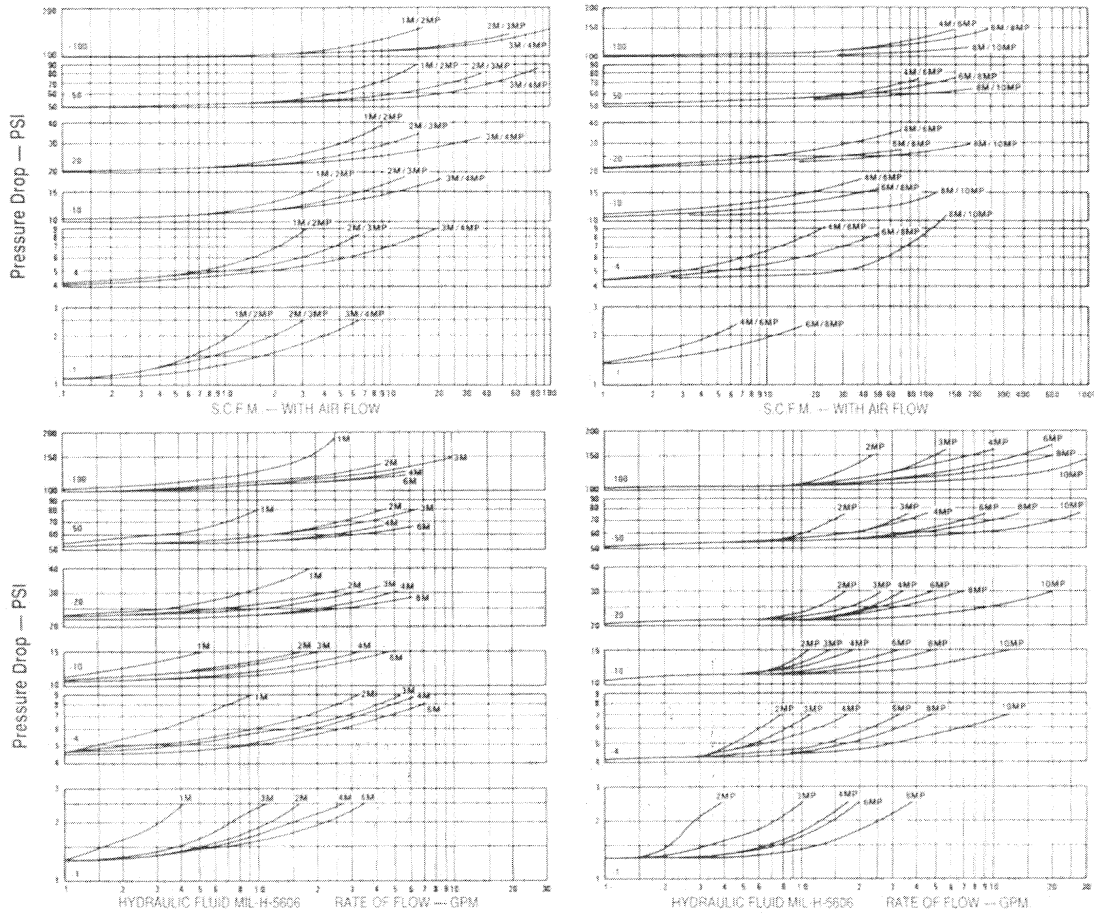
50 to 140 psi (3 - 10 bar)



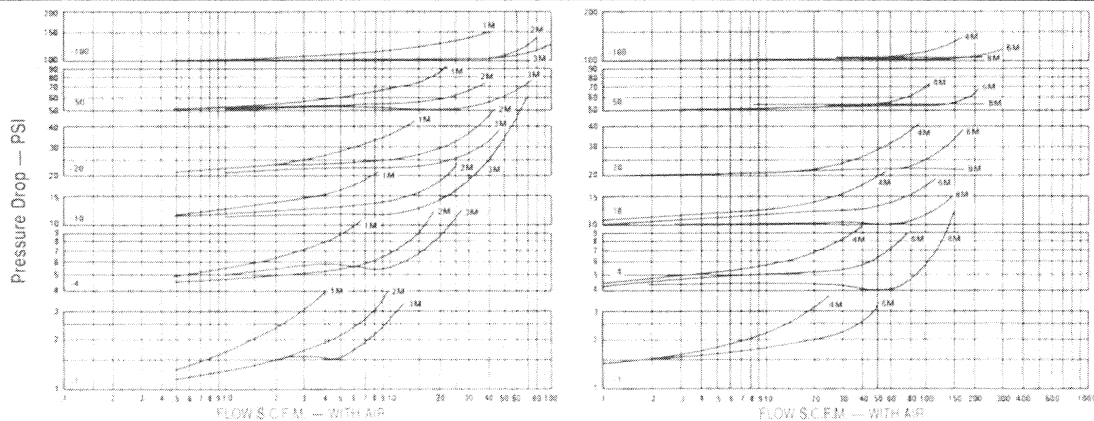
* Standard seals:
 Buna N (559)
 Viton® (532)
 Neoprene (533)

500 Series

Air and Hydraulic Flow Curves (500-M and -MP) Relief Valves



Air Flow Curves (D500-M) Popoff Relief Valves



500 Series

Air Flow Rates (500-M and -MP)

M = Popoff valves, 1/8"–3/8"; MP = Inline valves, 1/4"–1/2"

Crack Pressure PSIG	Percent Over Pressure Beyond Cracking (SCFM air at room temperature)								
	10%			25%			50%		
	1M/2MP	2M/3MP	3M/4MP	1M/2MP	2M/3MP	3M/4MP	1M/2MP	2M/3MP	3M/4MP
0.5	.08	.08	.08	.12	.17	.45	.14	.60	1.1
1	.10	.10	.10	.17	.35	.65	.20	.80	1.6
1.5	.12	.12	.15	.25	.46	.90	.40	1.0	2.0
2	.15	.14	.20	.34	.62	1.2	.63	1.4	2.5
2.5	.17	.17	.30	.42	.75	1.5	.80	1.8	3.1
3	.20	.21	.40	.50	.85	1.7	1.1	2.2	3.6
4	.23	.24	.50	.70	1.05	2.0	1.5	3.0	5.4
5	.28	.30	.50	.86	1.3	2.2	1.7	3.7	6.0
10	.60	.70	.60	1.65	3.2	3.8	3.2	7.0	11
15	.80	1.2	1.6	2.3	4.2	8.5	4.2	8.5	20
20	1.1	1.5	2.5	2.9	5.0	11.5	5.2	10	28
25	1.2	2.0	3.0	3.4	7.9	15	6.0	14	33
30	1.6	2.4	4.0	4.0	10.1	19.5	7.0	18	36
40	1.9	3.5	7.0	5.1	13	24.5	8.8	26	53
50	2.3	4.4	9.0	6.0	15	29	10.6	32	60
60	2.5	5.4	9.8	6.7	18	33	11.6	39	69
70	2.9	6.6	10.9	7.5	22.5	38	12.7	47	79
80	3.2	7.6	12	8.2	26	43	13.8	56	91
90	3.6	8.7	13.5	9.0	30.5	47	14.9	66	101
100	4.0	9.5	15	9.8	34	52	15.8	75	108
110	4.4	11.3	17.5	10.2	38	53.5	17.0	77.5	114
120	4.8	13.2	20.8	10.6	42.5	56.5	18.3	80	122
130	5.2	14.9	24	11	47	58.5	19.6	83	131
140	5.6	16.5	27.5	11.5	51	61.5	20.9	87	138
150	6.0	18	30	12	56	63	22.0	90	145

M = Popoff valves, 1/2"–1"; MP = Inline valves, 3/8"–1 1/4"

Crack Pressure PSIG	Percent Over Pressure Beyond Cracking (SCFM air at room temperature)								
	10%			25%			50%		
	4M/6MP	6M/8MP	8M/10MP	4M/6MP	6M/8MP	8M/10MP	4M/6MP	6M/8MP	8M/10MP
.5	.07	.07	—	.50	.50	—	.80	2.2	—
1	.10	.10	—	.70	.70	—	1.7	3.2	—
1.5	.30	.30	—	1.0	1.4	—	2.2	5.5	—
2	.50	.50	—	1.2	1.7	—	3.0	7.0	—
2.5	.60	.60	—	1.8	3.0	—	4.2	10.5	—
3	.80	.80	—	2.2	4.0	—	5.0	13	—
4	1.0	1.0	1.5	3.0	5.0	30	7.5	17	56
5	1.0	1.2	2.5	3.5	6.0	34	9.0	20	64
10	1.0	2.4	7.0	6.0	12	60	19	40	115
15	1.6	3.0	7.0	8.5	22	60	27	80	160
20	2.0	5.0	7.0	10	30	60	34	110	190
25	3.0	5.5	9.0	13.5	34	72	43	116	—
30	3.5	6.0	11.5	16	37	80	50	121	—
40	5.5	8.5	18	24	48	115	72	136	—
50	7.0	10	23	30	56	140	90	150	—
60	11	13	35	38	64	160	100	165	—
70	15	17	59	47	72	185	111	182	—
80	20	21	77	56	81	215	123	204	—
90	26	26	88	68	94	235	138	225	—
100	30	30	100	75	105	250	150	240	—
110	33	38	115	80	112	258	166	—	—
120	37	47	132	86	125	270	183	—	—
130	41	57	150	93	150	282	201	—	—
140	46	71	175	102	163	290	222	—	—
150	50	80	190	110	175	300	240	—	—

500 Series

Air Flow Rates (D500-M)

Popoff valves with deflector cap, 1/8"-3/8"

Crack Pressure PSIG	Percent Over Pressure Beyond Cracking (SCFM air at room temperature)								
	10%			25%			50%		
	1M	2M	3M	1M	2M	3M	1M	2M	3M
.5	.12	.20	.15	.24	.50	.50	.44	1.2	1.1
1	.21	.30	.30	.40	.85	.85	.73	2.0	1.9
1.5	.21	.30	.30	.42	1.0	1.0	.80	2.7	3.1
2	.21	.30	.30	.45	1.2	1.2	.95	3.5	5.0
2.5	.22	.30	.30	.49	1.3	1.3	1.1	4.3	6.2
3	.23	.30	.30	.52	1.6	1.6	1.25	5.4	8.0
4	.23	.30	.30	.58	2.1	2.1	1.5	7.5	12
5	.32	.30	.30	.60	2.2	4.5	1.7	8.3	14
10	.70	.34	.40	1.6	2.5	14	3.2	12.6	23
15	1.4	1.3	1.5	2.0	6.0	18	3.9	16.5	29
20	1.8	2.2	3.0	2.7	10	23	5.4	21	36
25	1.9	3.0	8.0	2.8	11.5	27	6.0	23	40
30	2.0	4.0	14	3.0	14	32	7.0	27	47
40	2.3	5.9	26	3.5	18	42	9.0	33	59
50	2.4	8.0	39	3.8	25	54	10.5	40	74
60	3.2	17	43	4.6	33	62	11.4	46	—
70	4.0	26	47	5.5	41	70	12.4	52	—
80	4.9	36	52	6.4	50	79	13.7	59	—
90	5.9	46	58	7.5	61	89	15	67	—
100	7.0	56	65	8.5	72	100	16	76	—
110	7.3	56	65	9.5	73	113	24	80	—
120	7.7	57	66	12.8	74	127	33	84	—
130	8.1	58	67	16.2	76	142	43	89	—
140	8.6	59	68	20	78	158	53	96	—
150	9.0	61	70	25	80	176	60	104	—

Popoff valves with deflector cap, 1/2"-1"

Crack Pressure PSIG	Percent Over Pressure Beyond Cracking (SCFM air at room temperature)								
	10%			25%			50%		
	4M	6M	8M	4M	6M	8M	4M	6M	8M
.5	.15	.15	—	.30	.30	—	1.0	1.0	—
1	.30	.30	—	.50	.50	—	1.7	1.7	—
1.5	.40	.40	—	.60	1.5	—	3.2	7.5	—
2	.50	.60	—	.90	3.0	—	5.0	14.5	—
2.5	.60	.70	—	1.1	4.0	—	6.5	21	—
3	.70	1.0	—	1.4	5.5	—	9.0	29	—
4	1.0	1.5	—	3.0	9.0	—	13	45	—
5	1.0	1.8	—	4.0	13	—	15.5	49	—
10	1.5	4.0	92	10	36	115	28	75	145
15	9.0	26	127	22	66	—	42	101	—
20	18	50	170	36	100	—	58	131	—
25	21	60	173	43	112	—	65	—	—
30	25	74	177	51	128	—	74	—	—
40	33	100	188	67	158	—	91	—	—
50	42	130	200	85	195	—	110	—	—
60	49	148	225	95	220	—	—	—	—
70	56	167	251	106	247	—	—	—	—
80	64	188	278	117	275	—	—	—	—
90	73	212	308	130	305	—	—	—	—
100	85	240	340	145	340	—	—	—	—
110	89	246	355	152	347	—	—	—	—
120	93	253	372	159	355	—	—	—	—
130	98	261	390	167	363	—	—	—	—
140	103	270	415	176	375	—	—	—	—
150	110	280	440	185	390	—	—	—	—

500 Series

How to Order

D 5 59 A - 2 M - 10

VARIATION[†]

- D** Deflector cap
- K** Cryogenic service, special cleaning & testing (stainless steel only)

SEAL MATERIAL & TEMPERATURE RANGE

- 20** Teflon®
520 Series**: -100° F to +400° F (-73°C to +204°C)
K520 Series**: -320° F to +165° F (-196°C to +74°C)
- 24** Silicone*, -70° F to +450° F (-57°C to +232°C)
- 32** Viton®, -20° F to +400° F (-29°C to +204°C)
- 33** Neoprene, -40° F to +300° F (-40°C to +149°C)
- 59** Buna N, -65° F to +275° F (-54°C to +135°C)
- 62** Ethylene propylene, -65° F to +300° F (-54°C to +149°C)
- 80** Teflon®, -320° F to +165° F (-196°C to +74°C)

CRACKING PRESSURE

Specify cracking pressure setting in psig (0.5 - 150 psig)

CONNECTION

See "Valve Size & Type Codes" table, below

VALVE SIZE

Pipe sizes in 1/8" increments (see "Valve Size & Type Codes" table, below)

BODY MATERIAL

- A** Aluminum
- B** Brass
- T** 303 stainless steel†
- T1** 316 stainless steel

[†] Variation: Prefixed part number is supplied with a cap which diverts high pressure blasts from personnel and instruments, and serves as a rain and dust shield.

* Not available over 74.9 psi (5 bar)

** 520 Series: Teflon® o-ring
K520 Series: Polished Teflon® o-ring, cryogenic testing and serialization
580 Series: Polished Teflon® o-ring

† Not available for PED applications

†† Blank if not required

Valve Size & Codes

Size	Pipe Thread Male	Pipe Thread Male/Female	British Pipe Thread Male/Female	British Taper Pipe Male
1/8"	-1M	—	—	-1S
1/4"	-2M	-2MP	-2SX	-2S
3/8"	-3M	-3MP	-3SX	-3S
1/2"	-4M	-4MP	-4SX	-4S
3/4"	-6M	-6MP	-6SX	-6S
1"	-8M	-8MP	—	-8S
1 1/4"	—	-10MP	—	—

To specify PED certification, add PED prefix to the part number.

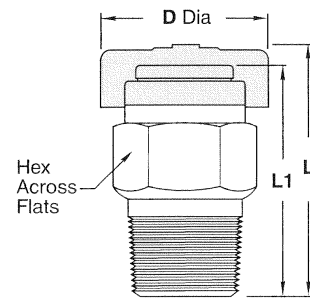
Please consult your Circle Seal Controls distributor or our factory for information on special connections, operating pressures and temperature ranges.

Repair Kits

In normal service, the only part(s) which may require replacement is(are) the seal(s). A repair kit may be ordered by placing a "K/" in front of the complete part number (i.e. K/559A-2M-10).

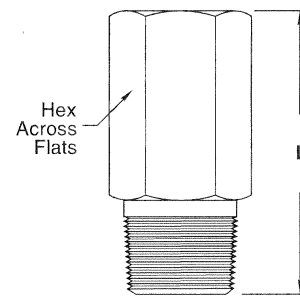
Dimensions (Inches)

Popoff



Pipe Size, Male	L	L1	Hex	D Dia. Max.
1/8"	1.14	0.98	1/2	0.63
1/4"	1.38	1.20	3/8	0.90
3/8"	1.43	1.25	3/4	1.21
1/2"	1.98	1.74	1	1.45
3/4"	2.31	2.07	1 1/8	1.45
1"	3.16	2.86	1 1/2	1.89

Inline



Pipe Size, Male & Female	L	Hex
1/4"	1.62	3/4
3/8"	2.08	7/8
1/2"	2.34	1 1/8
3/4"	2.72	1 1/4
1"	3.62	1 1/2
1 1/4"	4.67	1 3/4

For Your Safety

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

Freon® is a registered trademark of DuPont.

Viton® is a registered trademark of DuPont Dow Elastomers.

Teflon® is a registered trademark of the DuPont Company.



The Tronair Family of Ground Support Equipment
and cloud based EBis GSE Fleet Management



Cloud Based
Fleet Management

The premier global supplier of ground support equipment



The Tronair Family of GSE Product Lines

UNPARALLELED RANGE OF PRODUCTS FOR BUSINESS, COMMERCIAL AND MILITARY AIRCRAFT

LIFTING & SHORING (ATA-7)

Hydraulic Tripod Jacks
Axle Jacks
Jack Test Equipment
Stabilizing Stands & Alarms
Aircraft Recovery Dollies

LEVELING & WEIGHING (ATA-8)

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TOWING AND TAXIING (ATA-9)

Towbar Systems
Tow Vehicles & Tractors

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Chocks & Covers

SERVICING (ATA-12)

Multi-Purpose Carts
Hydraulic & Engine Oil Servicing
& Test Equipment
Lavatory Servicing Carts
Potable Water Transport Carts
Oxygen & Nitrogen Carts
Oxygen & Nitrogen Boosters

AIR CONDITIONING (ATA-21)

Air Conditioning Equipment
Coolant System Fill/Drain Carts
Cabin Pressurization Test Units

ELECTRICAL (ATA-24)

Ground Power Units
Battery Charger/Analyzer

FUEL (ATA-28)

Fuel Transfer Cart
Fuel Tools

HYDRAULIC POWER (ATA-29)

Hydraulic Power Units
Ram Air Turbine (RAT)
Hydraulic Coupling Hose Adaptors

ICE & RAIN PROTECTION (ATA-30)

Deicer Carts

AIRCRAFT TOOLING

Designed to your Specifications

LANDING GEAR (ATA-32)

Beadbreakers
Dollies - Wheel & Brake
Service Tools
Strut Service Carts
Regulators, Adaptors,
Connectors & Gauges

FUSELAGE (ATA-53)

Lifts, Cranes & Hoists
Maintenance Platforms
Access Stands
Docking Systems

PROPELLERS (ATA-61)

Propeller Stands/Slings/Tools

POWER PLANT (ATA-71)

Engine Compressor Washers
Engine Hoists, Slings & Stands

CLOUD BASED FLEET MGT.

Manage your Repair Station,
Multi Location Jet Center or
Small Operation



www.tronair.com

www.columbusjack.com | www.daeind.com | www.datcomedia.com | www.eagletugs.com | www.malabar.com

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