

9410 - 20 Ave N.W. Edmonton, Alberta, Canada T6N 0A4

Tel: (780) 437-9100 / Fax: (780) 437-7787

August 26, 2022

Attention: Cecylia Garbacz

TECHNICAL STANDARDS & SAFETY AUTHORITY

345 CARLINGVIEW DRIVE TORONTO, ON M9W 6N9

The design submission, tracking number 2022-04659, originally received on August 17, 2022 was surveyed and accepted for registration as follows:

CRN: 0C07512.52 Accepted on: August 26, 2022

Reg Type: RENEWAL Expiry Date: June 14, 2032

**Drawing No.:** SCOPE OF REGISTRATION

Fitting type: NOVA & NOVA AP SERIES VALVES

Design registered in the name of : PARKER HANNIFIN

#### The registration is conditional on your compliance with the following notes:

\*\* The Scope of this Registration include 10-years renewal, with no design change, nor any scope change.

As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction is ASME B31.3.

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration or AB-351 Declaration of Conformity as supported by the attached data which identifies the dimensions, materials of construction, press./temp. ratings and the basis for such ratings, and the identification marking of the fittings.
- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration or AB-351 Declaration of Conformity form.
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency, and maintains a valid Certification of Authorization Permit if required by the jurisdiction where manufacturing takes place, until that date.
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3337 or fax (780) 437-7787 or e-mail Dick@absa.ca.

Sincerely,

DICK, ASHLING, P. Eng. DOP Cert. No. D00007936

Page 1 of 1 2022-04659



Technical Standards and Safety Authority 345 Carlingview Drive Toronto, Ontario M9W 6N9 www.tssa.org Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

See attached

| STATUTORY DECLAR  |   |  |  |  |
|---|---|--|--|--|
| Registration of Fitting   | S   |  |  |  |
| [,_Ken Reid, Division QA Manager  |   |  |  |  |
| (Name and Position, e.g. President, Plant Manager, Chief  | Engineer)   |  |  |  |
| of Parker Hannifin Instrumentation Products Division  |   |  |  |  |
| (Name of Manufacturer)  |   |  |  |  |
| Located at 1005 A Cleaner Way, Huntsville, AL, 35805, USA (Plant Address)   | 256-881-2040  |  |  |  |
| (Plant Address)   | (Telephone No.) (Fax No.)   |  |  |  |
| do solemnly declare that the fittings listed hereunder, which are subject to the and Pressure Vessels Regulation, comply with all of the requirements of  | Technical Standards and Safety Act, Boilers   |  |  |  |
| (Title of recognized North American Standard) which specifies the dimensions, materials of construction, pressure/temperature ratin   | gs, identification marking the fittings and service;  |  |  |  |
| or are not covered by the provisions of a recognized North American standard  Parker Engineering Standards as supported by the attached data which  pressure/temperature ratings and the basis for such ratings, the marking of the | identifies the dimensions, material of construction,  |  |  |  |
| I further declare that the manufacture of these fittings is controlled by a quality system which has been verified by the following authority, DNV-GL   | meeting the requirements of ISO 9001:2015   |  |  |  |
| The items covered by this declaration, for which I seek registration, are category C  | type fittings. In support of  |  |  |  |
| this application, the following information and/or test data are attached as follows:  See Attached Submission **   |   |  |  |  |
| (drawings, calculations, test reports, etc.)  |   |  |  |  |
| Declared before me at The UPS STORE 2433, HOUTSVILLE A Lin the ALABA  | MACONTO MADISON CONTY   |  |  |  |
| the 2ND day of DECEMBER AD 20 21.  Commissioner for Oaths: COMM: DO 17 2025   | RESCHEROLOGICAL SERVICES  |  |  |  |
| Commissioner for Oaths:   | 8   |  |  |  |
| CRYSTAL HAY MATANANIA   |   |  |  |  |
| West of the true has a land of the wife it  |   |  |  |  |
| (Signature)   | (Signature of Declarer)   |  |  |  |
| FOR OFFICE USE ONLY   |   |  |  |  |
| To the best of my knowledge and belief, the application meets the requirements of the   | 2022-04659 <b>ABSA</b>  |  |  |  |
| Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation, and  | SAFETY CODES ACT - PROVINCE OF ALBERTA  |  |  |  |
| CSA Standard B51 and is accepted for registration in Category   | ACCEPTED: 0007512 52  |  |  |  |
| CRN:  | See acceptance letter for conditions of registration.   |  |  |  |
| Registered by:  | Date: 2022-08-26 By: We Sor Tink ASHLING DICK, P. Eng.  |  |  |  |
| Dated: 2022-08-26   | This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance |  |  |  |
| NOTE: This registration expires on:   | with the Electronic Transactions Act.   |  |  |  |

<sup>\*</sup>Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.



Date: October 11, 2021

Reference: Parker Logo Markings

Primary
 Corporate Signature
 Minimum Size 5/4"



2 Small Size Corporate Signature Maximum Size \( \frac{1}{2} \) "



3 Linear Corporate Signature



4 Straight Type Identification— Helvetica Light Parker

5 Small Size "P" Maximum Size ¾6"



6 Linear "P"



7 Straight Type "P" Identification— Helvetica Light



This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.



## CRN Renewal: 0C7512.5

NOVA and NOVA AP Series Valves

Parker Hannifin Corporation Instrumentation Products Division Huntsville, Alabama

Initial: November 29, 2021

Revised: June 8, 2022





## THIS IS PART OF CRN 0C7512.5R3

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program

#### **Parker Hannifin Corporation**

Instrumentation Products Division 1005 A Cleaner Way Huntsville, AL 35805 USA Phone (256) 881-2040

#### **Scope of Registration:**

Pressure Regulators: NOVA and NOVA AOP Series Valves

Parker is requesting a renewal of CRN 0C7512.5Add2. There are no changes to the design and scope of registration under this renewal.

The products listed above currently have active registrations in Canada – Canadian Registration Number (CRN) 0C7512.5ADD2 issued March 29, 2018. This scope of registration is in support of an application to renew the CRN for the named products.

#### Attached are:

- The CRN Report for the NOVA and NOVA AOP Series Valves
- A copy of the previous approved design submission
- The Quality certification for the one (1) manufacturing locations
- Appendix A: Scope of Registration
- Appendix B: Catalog Pages

If there are any questions, concerns or you need additional information please contact me on 256-881-2040.

Respectfully,

Laura C. Veal Quality Engineer

Laura C. Vml

Parker Hannifin Corporation Instrumentation Products Division 1005 A Cleaner Way Huntsville, AL 35805 USA Phone (256) 881-2040 Fax Number (256) 881-5730



### **Appendix A: Scope of Registration**

**NOVA Valves** 

**Product Specification Summary:** 

Materials of Construction:

360 Brass, ASTM B16 C36000 316L Stainless Steel, ASTM A276 S31603 Monel 405, ASTM B164 N04405

**Operation Conditions:** 

Temperature -15°F to 150°F

MAWP 3500 psig max

Pressure Rating: Refer to Attachment B

Connections: Refer to Attachment B

Code of Registration:

Parker Engineering Specifications as noted in the TSSA Statutory Declaration

THIS IS PART OF CRN 0C7512.5R3

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety

Program





**Appendix B: Catalog Pages** 

## Diaphragm Valve, Manual and Air Actuated

General Purpose • Stainless Steel



## Value Proposition:

The NOVA Series valves are economical, general purpose diaphragm valves for regulator outlet valves, gas control panels, & analyzer sampling system applications. Standard construction includes a 316L Stainless Steel body, various seat materials, and an Elgiloy® diaphragm with metal-to-metal external seal for leak integrity.

The NOVA AOP Series Air Actuated Diaphragm Valve is a derivative of the NOVA manually operated valve and is available in normally open (NO) or normally closed (NC) configurations. A choice of two line pressures are available: 250 psig and 500 psig.

#### **Product Features:**

- High Cycle Life
- Compact Size
- · Positive, consistent shutoff
- · Metal to Metal seal to atmosphere
- Low Internal volume
- · Low actuation pressure for AOP configuration

## **NOVA Series Specifications:**

|                    | Functional Performance         |
|--------------------|--------------------------------|
|                    | Pressure Ratings               |
| Operating Pressure |                                |
| Manual Valve       | Vacuum to 3500 psig (241 bar   |
| Proof Pressure     | 5,250 psi (362 bar)            |
| Burst Pressure     | 10,500 psi (724 bar)           |
|                    |                                |
| AOP1, AOP3 Valve   | Vacuum to 250 psig (17 bar)    |
| Proof Pressure     | 375 psi (26 bar)               |
| Burst Pressure     | 750 psi (52 bar)               |
|                    |                                |
| AOP2, AOPNO Valve  | Vacuum to 500 psig (34 bar)    |
| Proof Pressure     | 750 psi (52 bar)               |
| Burst Pressure     | 1,500 psi (103 bar)            |
|                    |                                |
| Seat Leakage Class | Bubble Tight                   |
| Temperature Rating | -15°F to 150°F (-26°C to 66°C) |
| Flow Capacity      | C <sub>V</sub> = 0.17          |
| Orifice Diameter   | .125 inch (3.2 mm)             |
| Internal Volume    | Less than 1.0 cc               |
| Approximate Weight | .9 oz. (0.26 kg)               |

| Maximum Actuation Air Pressure |                   |  |
|--------------------------------|-------------------|--|
| AOP1 (normally closed)         | 65 psig (4.5 bar) |  |
| AOP2 (normally closed)         | 75 psig (5.2 bar) |  |
| AOP3 (normally closed)         | 40 psig (2.8 bar) |  |
| AOPNO (normally open)          | 50 psig (3.5 bar) |  |

| Material of Construction |                             |  |  |
|--------------------------|-----------------------------|--|--|
|                          | Wetted                      |  |  |
| Body                     | 316L Stainless Steel (std)  |  |  |
| Diaphragm                | Elgiloy®                    |  |  |
| Seat                     | PCTFE (std), PEEK™, Vespel® |  |  |
|                          | Non-Wetted                  |  |  |
| Bonnet Nut               | 316 Stainless Steel         |  |  |
| Stem                     | 316 Stainless Steel         |  |  |
| Knob/Lever               | ABS/Aluminum                |  |  |
| AOP Actuator             | Aluminum                    |  |  |

Elgiloy® is a registered trademark of Elgiloy Company Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C. PEEK $^{\text{TM}}$  is a registered trademark of Victrex plc.

### THIS IS PART OF CRN

0C7512.5R3

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program

ABSA

SAFETY CODES ACT - PROMNCE OF ALBERTA

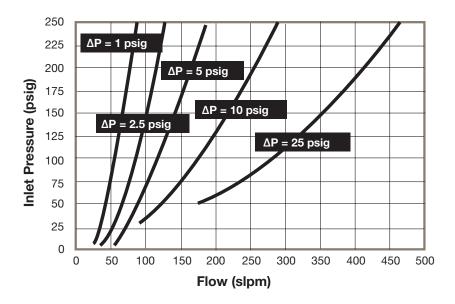
ACCEPTED: 0007512 52

See acceptance letter for conditions of registration.

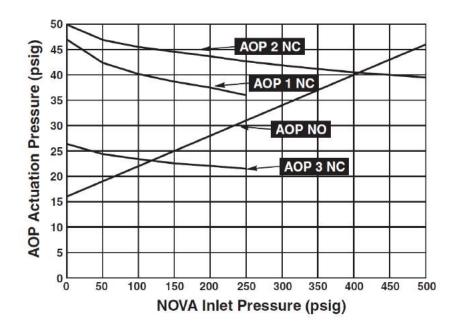
Date: 2022-08-26 By: ASHLING DICK, P. Eng. DOP: 00007508

This stamp and signature have been affixed electronically to this registered design as required by Section 2O(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.

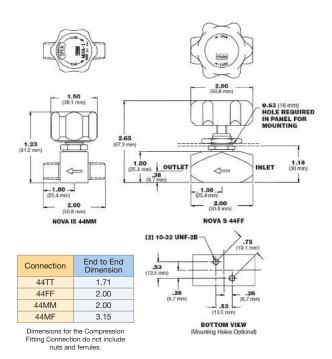
### **NOVA Series Flow Curves:**



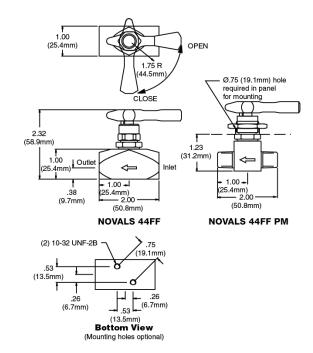
### NOVA Series Actuation Air Pressure vs. Valve Inlet Pressure:



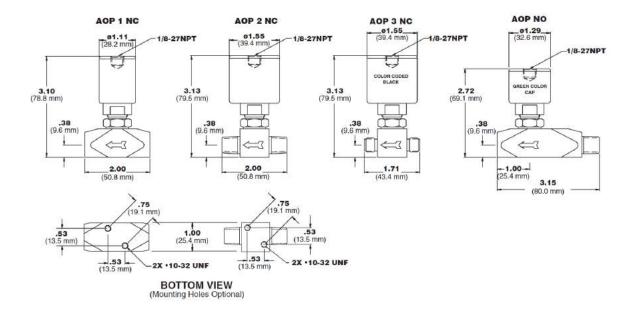
### **NOVA Dimensional Drawing:**



### **NOVALS Dimensional Drawing:**



## **NOVA AOP Dimensional Drawing:**



## **NOVA Series Ordering Information:**

| Building a Part Number: Example: NOVAS44FF |        |          |             |         |
|--|--------|----------|-------------|---------|
| Example<br>Part Number:                    | NOVA   | s        | 44FF        |         |
| Ordering<br>Parameters/Options:            | Series | Material | Connections | Options |
| Table Reference:<br>(see below)            | А      | В        | С           | D       |

| A - Series |       |                      |
|------------|-------|----------------------|
|            | NOVA  | Multi-Turn Handwheel |
|            | NOVAI | Indicating Knob      |
|            | NOVAL | Lever                |

| 3 - Material |                      |
|--------------|----------------------|
| S            | 316L Stainless Steel |

| C - Connections |  |  |
|-----------------|--|--|
| 44TT            | 1/4" Compression In and Out                |  |
| 44FF            | 1/4" Female NPT In and 1/4" Female NPT Out |  |
| 44MM            | 1/4" Male NPT In and 1/4" Male NPT Out     |  |
| 44MF            | 1/4" Male NPT In and 1/4" Female NPT Out   |  |

| D - Options |                |
|-------------|----------------|
| МН          | Mounting Holes |
| PM          | Panel Mount    |
| PEEK        | PEEK™ Seat     |
| VESP        | Vespel® Seat   |

#### Notes:

Panel Mount Option is not available with Indicating Knob Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C PEEK™ is a registered trademark of Victrex plc. Compression Ends include Nuts and Ferrules

## **NOVA AOP Series Ordering Information:**

| Building a Part Number: Example: NOVAAOP1S44TT |         |       | Г        |             |         |
|--|---------|-------|----------|-------------|---------|
| Example<br>Part Number:                        | NOVAAOP | 1     | s        | 44TT        |         |
| Ordering<br>Parameters/Options:                | Series  | Style | Material | Connections | Options |
| Table Reference:<br>(see below)                | Α       | В     | С        | D           | E       |

| NOVAAOP   | Air Operated               |
|-----------|----------------------------|
|           |                            |
| B - Style |                            |
| 1         | Normally Closed - 250 psig |
| 2         | Normally Closed - 500 psig |
| 3         | Normally Closed - 250 psig |
| NO        | Normally Open - 500 psig   |
|           |                            |

| C - Material |   |                      |
|--------------|---|----------------------|
|              | S | 316L Stainless Steel |

| D - Connections |  |
|-----------------|--|
| 44FF            | 1/4" Female NPT In and 1/4" Female NPT Out |
| 44MM            | 1/4" Male NPT In and 1/4" Male NPT Out     |
| 44MF            | 1/4" Male NPT In and 1/4" Female NPT Out   |
| 44TT            | 1/4" Compression In x 1/4" Compression Out |

| E - Options |                |
|-------------|----------------|
| MH          | Mounting Holes |
| PEEK        | PEEK™ Seat     |
| VESP        | Vespel® Seat   |

#### Notes:

Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C PEEk™ is a registered trademark of Victrex plc. Compression Ends include Nuts and Ferrules

A - Series