

**REGISTRATION OF A PRESSURE FITTING DESIGN**

04-Oct-22

TSSA  
345 Carlingview Drive  
Toronto, Ontario  
M9W 6N9**Attention: Cecylia Garbacz****File Number: 13286 [ 0 F]****Re: Manufacturer: Parker Hannifin Corporation - Instrumentation Products Div.****Item: NOVA & NOVA AOP Series Valves****Catalog or Drawing: Per Scope of Registration & Catalog 4255-PA (04/19)**

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

**OC7512.53****Expiry Date: June 14, 2032**

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,

Athan Syrgiannis, P.Eng.  
Codes and Standards Compliance**Remarks:**

A valid quality control program must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

The scope of this registration includes the 10-year renewal - previously registered in Saskatchewan through CSA.

**NOTE: You cannot save the DATA you entered on this form, you must print a copy and FAX it or MAIL it!**



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 DECLARATION Registration of Fittings

I, 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

(Telephone No.)

(Fax No.)

☐ do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

☒ or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with Parker Engineering Standards as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001:2015 which has been verified by the following authority, DNV-GL

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, HUNTSVILLE, AL in the ALABAMA of MADISON COUNTY

the 2ND day of DECEMBER AD 2021

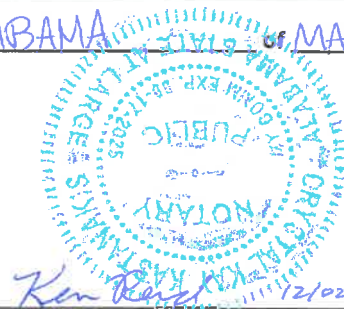
Commissioner for Oaths: COMM: 89117/2025

CRYSTAL KAY KOSTANAKIS

(Printed name)

Crystal Kay Kostanakis 12/02/2021

(Signature)



Ken Reid 12/02/2021

(Signature of Declarer)

### FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category \_\_\_\_\_

CRN: \_\_\_\_\_

Registered by: \_\_\_\_\_

Dated: \_\_\_\_\_

		<b>Technical Safety Authority of Saskatchewan</b>
Registration No.	<u>0C7512.53</u>	
File No.	<u>13286</u>	
	<div>Registered</div>	
Date:	<u>October 4, 2022</u>	
Expiry Date:	<u>June 14, 2032</u>	
Codes & Standards Compliance Office		

**NOTE: This registration expires on:** \_\_\_\_\_

*\*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

- 1 Primary  
Corporate Signature  
Minimum Size  $\frac{5}{8}$ "



- 2 Small Size  
Corporate Signature  
Maximum Size  $\frac{5}{8}$ "



- 3 Linear  
Corporate Signature



- 4 Straight Type  
Identification—  
Helvetica Light

Parker

- 5 Small Size "P"  
Maximum Size  $\frac{3}{16}$ "



- 6 Linear "P"



- 7 Straight Type "P"  
Identification—  
Helvetica Light

P



Technical  
Safety Authority  
of Saskatchewan

Registration No. 0C7512.53

File No. 13286

Registered

Date: October 4, 2022

Expiry Date: June 14, 2032

Codes & Standards Compliance Office



**Date:**     October 11, 2021

**Reference:** Parker Manufacturing Locations

**Manufacturing Locations:**

- 1. Parker Hannifin, Instrumentation Products Division**  
**1005 A Cleaner Way**  
**Huntsville, Alabama, 35805**  
**USA**

	<b>Technical Safety Authority of Saskatchewan</b>
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Codes & Standards Compliance Office	



## **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



**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,

A handwritten signature in cursive script that reads 'Laura C. Veal'.

Laura C. Veal  
Quality Engineer

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

	<b>Technical Safety Authority of Saskatchewan</b>
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**Appendix B: Catalog Pages**

# NOVA & NOVA AOP Series

## 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.

Valves

### 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

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# NOVA / NOVA AOP Series

## NOVA Series Specifications:

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

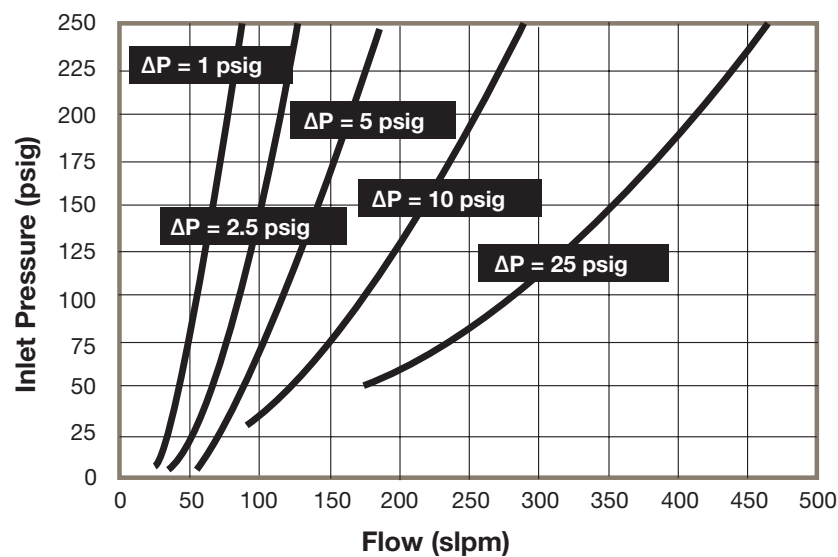
Maximum Actuation Air Pressure	
AOP1 (normally closed)	65 psig (4.5 bar)
AOP2 (normally closed)	75 psig (5.2 bar)
AOP3 (normally closed)	40 psig (2.8 bar)
AOPNO (normally open)	50 psig (3.5 bar)

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

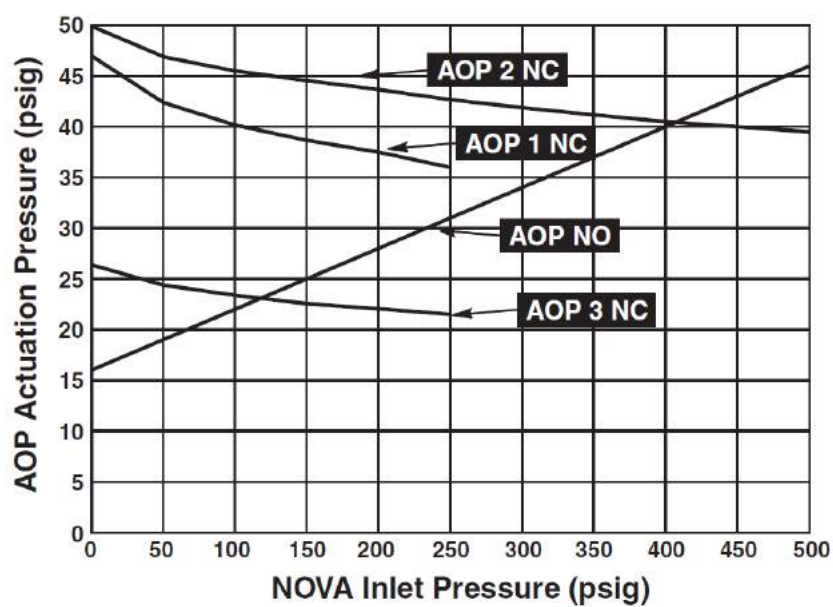
Elgiloy® is a registered trademark of Elgiloy Company  
Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C.  
PEEK™ is a registered trademark of Victrex plc.

# NOVA / NOVA AOP Series

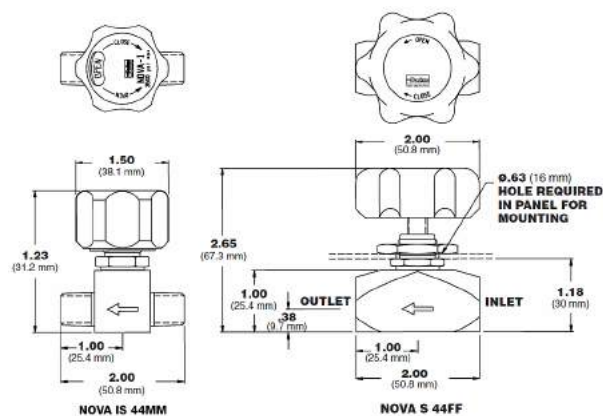
## NOVA Series Flow Curves:



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

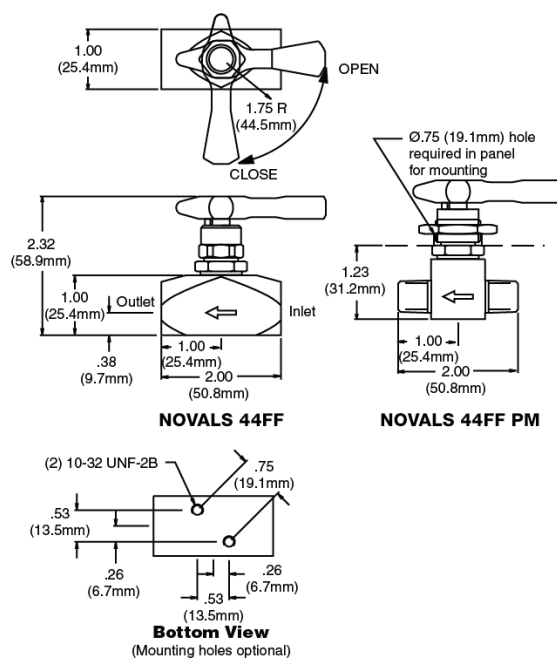
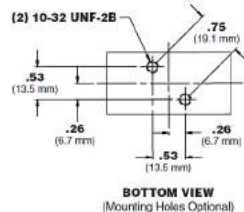


## NOVALS Dimensional Drawing:

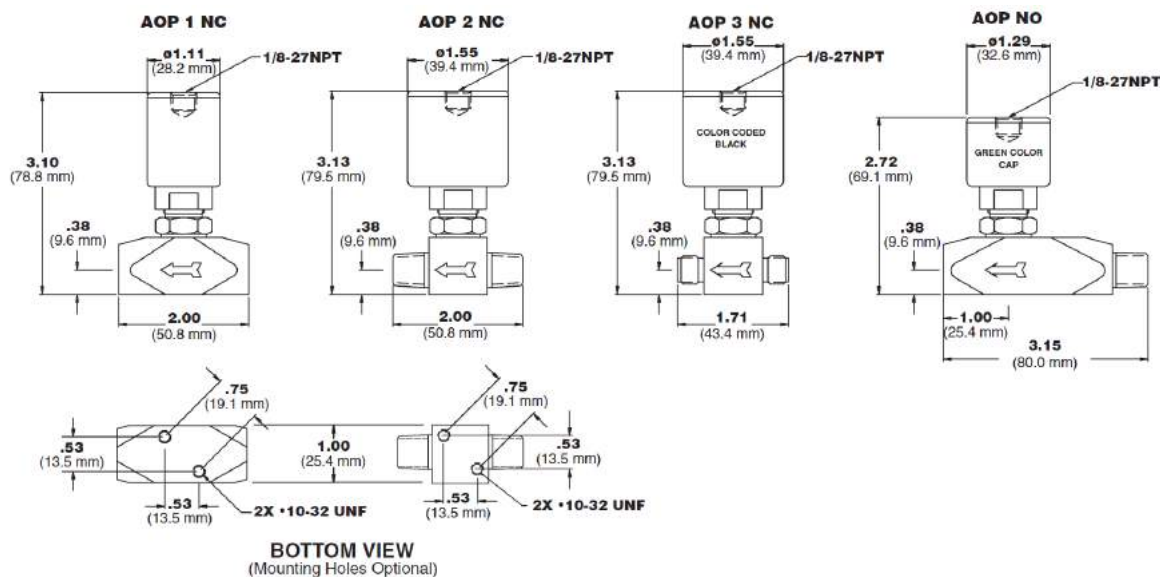


Connection	End to End Dimension
44TT	1.71
44FF	2.00
44MM	2.00
44MF	3.15

Dimensions for the Compression Fitting Connection do not include nuts and ferrules.



### NOVA AOP Dimensional Drawing:



# NOVA / NOVA AOP Series

## NOVA Series Ordering Information:

Building a Part Number: *Example: NOVAS44FF*

Example Part Number:	NOVA	S	44FF	
Ordering Parameters/Options:	Series	Material	Connections	Options
Table Reference: (see below)	A	B	C	D

### A - Series

NOVA	Multi-Turn Handwheel
NOVAI	Indicating Knob
NOVAL	Lever

### B - Material

S	316L Stainless Steel
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### 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

MH	Mounting Holes
PM	Panel Mount
PEEK	PEEK™ Seat
VESP	Vespe® Seat

#### Notes:

Panel Mount Option is not available with Indicating Knob  
 Vespe® 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

Valves

## NOVA AOP Series Ordering Information:

Building a Part Number: *Example: NOVAAOP1S44TT*

Example Part Number:	NOVAAOP	1	S	44TT	
Ordering Parameters/Options:	Series	Style	Material	Connections	Options
Table Reference: (see below)	A	B	C	D	E

### A - Series

NOVAAOP	Air Operated
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### 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	Vespe® Seat

#### Notes:

Vespe® 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