January 2015

## Type SA/2 Pressure Stabilizer

#### **SUMMARY**

Introduction	1
Characteristics	1
Labelling	2
Dimensions and Weight	2
Installation	3
Periodic Checks	3
SEP Statement	3
ATEX Requirements	3
Maintenance	3
Waste Disposal Requirements	3
Parts Lists	4
Schematic Assemblies	5



Figure 1. Type SA/2 Pressure Stabilizer

### INTRODUCTION

## **Scope of Manual**

This manual provides installation, maintenance, and spare parts for the Type SA/2 pressure stabilizer.

#### **Product Description**

Type SA/2 is a pressure stabilizer unit equipped with a 5µ filtering degree filter and is suitable for heating.

Type SA/2 unit is installed on the feeding line to the PRX Series pilots.

This product has been designed to be used with fuel gases of 1st and 2nd family according to EN 437, and with other non aggressive and non fuel gases. For any other gases, other than natural gas, please contact your local sales agent.

### **CHARACTERISTICS**

Table 1. Technical Features

TYPE	ALLOWABLE PRESSURE PS, bar	ALLOWABLE TEMPERATURE RANGE TS	SUPPLIED PRESSURE	BODY AND COVERS MATERIAL
SA/2	100	Class 1 -10 to 60°C	3 bar + Downstream	Steel
	SAIZ	100	Class 2 -20 to 60°C	pressure

<sup>1/4</sup> NPT female threaded connections.

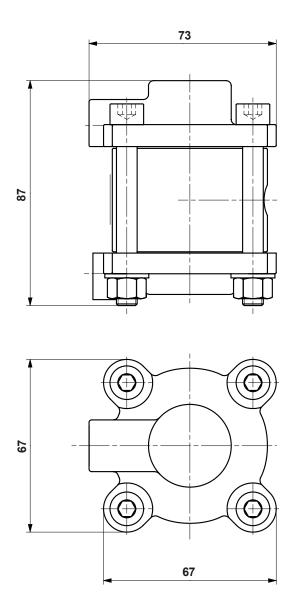


## **LABELLING**



Figure 2. Label for Type SA/2 Pressure Stabilizer

## **DIMENSIONS AND WEIGHT**



TYPE SA/2 PRESSURE STABILIZER WEIGHT: 1.5 kg

Figure 3. Type SA/2 Pressure Stabilizer Dimensions, mm

#### **INSTALLATION**

- a. Check that data on the pressure stabilizer plate are compatible with actual working conditions.
- b. Install in accordance with pilot instruction manual.

#### PERIODIC CHECKS

Slowly close the outlet slam-shut and check line pressure between it and regulator. A slight increase in pressure should be detected: this results from overload due to closing, and is followed by pressure stabilization. If, however, outlet pressure continues to rise, then seal is defective. Check if leak is coming from regulator, pilot or pressure stabilizer and service.

#### **SEP STATEMENT**

Emerson Process declares this product conforms to Pressure Equipment Directive (PED) 2014/68/EU.

Article 4 section 3 and was designed and manufactured in accordance with sound engineering practice (SEP).

Per Article 4 section 3, this "SEP" product must not bear the CE marking.

#### ATEX REQUIREMENTS



If the provisions of EN 12186 and EN 12279, national regulations, if any, and specific manufacturer recommendations are not put into practice before installation and if purge by inert gas is not carried out before equipment's start-up and shut-down operations, a potential external and internal explosive atmosphere can be present in equipment and gas pressure regulating/measuring stations/installations.

If a presence of foreign material in the pipelines is foreseen and purge by inert gas is not carried out, the following procedure is recommended to avoid any possible external ignition source inside the equipment due to mechanical generated sparks:

 drainage to safe area via drain lines of foreign materials, if any, by inflow of fuel gas with low velocity in the pipe-work (5m/sec)

In any case,

- provisions of Directive 1999/92/EC and 2009/104/CE shall be enforced by gas pressure regulating/measuring station/ installation's end user
- with a view to preventing and providing protection against explosions, technical and/or organizational measures appropriate to the nature of the operation shall be taken (e.g.: filling/exhausting of fuel gas of internal volume of the isolated part/entire installation with vent lines to safe area in accordance with EN 12186 and EN 12279; monitoring of settings with further exhaust of fuel gas to safe area; connection of isolated part/entire installation to

- downstream pipeline)
- provision related to tests indicated in EN 12186 and 12279, shall be enforced by pressure regulating/measuring station/ installation's end user
- external tightness test shall be carried out after each reassembly at installation site using testing pressure in accordance with national rules
- periodical check/maintenance for surveillance shall be carried out complying with national regulations, if any, and specific manufacturer recommendations.

#### **MAINTENANCE**



Servicing should be carried out by qualified, skilled personnel only. For further information, please contact our Technical Support Representatives or our authorized dealers.

Before servicing, cut off regulator inlet and outlet and release any trapped pressurized gas.

Use suds to check that there are no leaks.

## **Replacing Filter**

 Remove screws (key 2), cover (key 11); replace felt (key 12) and O-ring (key 13). Reassemble in reverse order the above sequence.

#### Replacing Stabilizer Diaphragm and Seal Pad

- a. Remove cover (key 19); spring (key 1) and diaphragm assembly (key 21, 20, 3, 4, 18, and 17). Replace diaphragm if necessary.
- b. Unscrew seat (key 5), replace pad holder (key 15) and O-ring (key 6).
- c. Reassemble in reverse order the above sequence.

#### WASTE DISPOSAL REQUIREMENTS

The disposal of waste and e-waste from packaging, spare parts, lubricants, whole equipment/systems and produced in occasion of on-site surveillance activities (during service life and/or at the end of their service life), shall be carried out in accordance with the requirements of applicable local regulation (laws and rules).

# Type SA/2

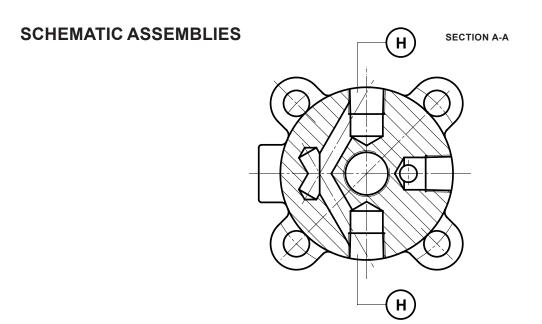
## **PARTS LISTS**

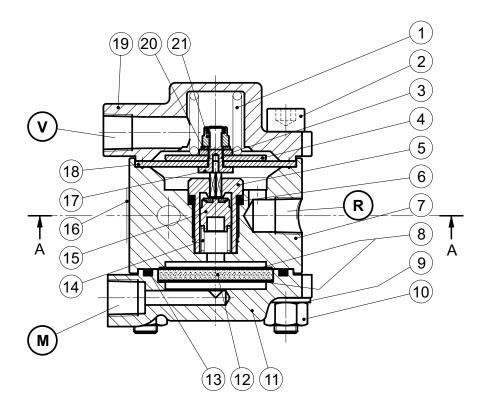
## Type SA/2 Stabilizer Filter

тур	e SA/2 Stabilizer Filter				
Item	Description				
1	Spring				
2	Screw				
3	Washer				
4	Plate				
5	Seat				
6*	O-ring				
7	Body				
8	Net				
9	Washer				
10	Nut				
11	Filter cover				
12*	Felt				
13*	O-ring				
14	Spring				
15	Pad holder unit				
16	Data plate				
17	Screw plate unit				
18*	Diaphragm				
19	Upper cover				
20	Washer				
21	Nut				
Rubber parts marked with (*) are supplied in the "spare parts					

Rubber parts marked with (\*) are supplied in the "spare parts kit", recommended as stock.

To order the kit it is necessary to communicate to us the pressure stabilizer serial number.





Type SA/2 Pressure Stabilizer Connections

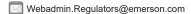
CODE	CONNECTIONS	
Н	Water inlet/outlet	
M	Upstream of the regulator	
R	To the pilot feed	
V	Downstream of the regulator	

LM/1162

Figure 4. Type SA/2 Pressure Stabilizer Assembly

# Type SA/2

## Type SA/2



Tartarini-NaturalGas.com

Facebook.com/EmersonAutomationSolutions

in LinkedIn.com/company/emerson-automation-solutions

Twitter.com/emr\_automation

#### Emerson

#### Americas

McKinney, Texas 75070 USA T +1 800 558 5853 +1 972 548 3574

#### Europe

Bologna 40013, Italy T +39 051 419 0611

#### Asia Pacific

Singapore 128461, Singapore T +65 6770 8337

#### Middle East and Africa

Dubai, United Arab Emirates T +971 4 811 8100

D103653X012 © 2015, 2024 Emerson Process Management Regulator Technologies, Inc. All rights reserved. 06/24.
The Emerson logo is a trademark and service mark of Emerson Electric Co.

All other marks are the property of their prospective owners.  $\label{thm:condition} \mbox{Tartarini}^{\mbox{\scriptsize TM}} \mbox{ is a mark owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co.}$ 

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson Process Management Regulator Technologies, Inc does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson Process Management Regulator Technologies, Inc. product remains solely with the purchaser.

#### Emerson Process Management s.r.l.

Emerson Automation Solutions - Stabilimento di/Site of: Castel Maggiore - Bologna Sede Legale/Legal Entity: Piazza Meda 5, 20121 Milano, Italy
Sede Amministrativa/Administrative Headquarters: OMT Tartarini, Via Clodoveo Bonazzi 43, 40013 Castel Maggiore (Bologna), Italy C.F. - P.I. e R.I. di MI 13186130152 - REA di MI/n.1622916

Direz. e Coord. (art. 2497 bis CC): EMERSON ELECTRIC CO. St. Louis (USA) Socio Unico

