



## YARWAY OPERATING AND SAFETY INSTRUCTIONS PNEUMATIC ACTUATOR

Before installation these instructions must be fully read and understood

*!! Read all warning labels fitted to the PDA\* before operation or maintenance !!*

*Never open, dismantle or modify the assembly whilst under pressure/temperature or other hazardous conditions.*

### WARNING

*For safety reasons, it is important to take the following precautions before you start work on the PDA\*:*

- 1. Read all labels fitted to the PDA\* and this sheet before installation, operation or maintenance.*
- 2. Use PDA\* for the intended purpose (according contract/specification).*
- 3. Remove the PDA\* carefully from its packaging, lifting by means of straps (heavy weight) around the body or use the hoisting lug.*
- 4. The hoisting lug is for the actuator only, not for the total assembly!!!*
- 5. For installation of the PDA\* use bolting material (2 half-couplings and lock nut; parts of the Desuperheater) and free of 'forces, moments and torques'.*
- 6. Additional mounting/modifications on PDA's\* are not allowed without approval from Yarway.*
- 7. The line must be depressurized, drained, vented and cooled down before installation.*
- 8. Handling of all PDA's \*, with or without accessories must be carried out by personnel trained in all aspects of manual, mechanical handling/lifting techniques and standard safety procedures, in case of doubt, consult your supervisor and/or safety officer.*
- 9. Yarway do not accept liability for site work performed under supervision of others.*
- 10. Each PDA\* air supply line should be protected with its own air filter regulator.*
- 11. Please, follow the procedure as detailed in the IOM\*\*.*
- 12. **Warning:** high spring loaded assembly (use extended bolts for dismantling).*
- 13. The surface temperature as defined in 2014/34/EC Annex II 2.2.1.2 of the Desuperheater is a function of the system it is built into. When installed, the surface temperature cannot be controlled by the manufacturer.*

### INSTALLATION

1. Place the PDA\* with its yoke flange onto the bonnet of the Desuperheater and fixed it with the lock nut.
2. Assemble the 2 half-couplings (upper and lower) through the screws.
3. Installation may be in vertical or horizontal piping (use support in case of heavy weight).
4. For installation of the positioner and the air filter regulator, following the manufacturer's recommendations.
5. Connect the lever of the positioner to the stem coupling (mechanical linkage) and adjust, if necessary, set points for air filter regulator, and valve positioner, following the manufacturer's recommendations.
6. Connection of electrical supplies and/or air piping should be in accordance with the manufacturer's instruction manual.
7. When satisfactory coordination between signals and temperature are attained, adjustment of the set-point can be made and the system transferred to automatic operation.
8. Ensure easy access of the operating mechanism (actuator, positioner, handwheel, etc.) if applicable.

### CATEGORY

PDA's\* are manufactured in accordance with 2014/68/EC - category I - gas group 2.

Pressure/temperature limits are indicated: # on the PDA\* nameplate

### NOTE

PDA\* = Pneumatic diaphragm actuator

IOM\*\* = Installation, Operation and Maintenance Manual

### FINAL INSPECTION

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Yarway PDA's\* have been tested, degreased, dried and prepared according to service application. This should be carried out in accordance with the relevant IOM\*\* and available by: Emerson, Yarway, via our website: [www.valves.emerson.com](http://www.valves.emerson.com)

### STATE OF DELIVERY / STORAGE / SELECTION / SERVICE LIFE

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#### State of delivery

Yarway's PDA's\* are delivered with protection and tested to 9.0 bar. Particular care should be exercised when removing the PDA\* from its packaging and your special attention is required to check carefully that no damage has occurred to the actuator, accessories, piping and fittings before installation. Check out IOM\*\* - instructions before proceeding.

#### Storage

For short term storage, up to 6 months, no additional preservation is necessary. Retain the PDA in its original packaging in a clean, dry indoor location. For long term storage, use only a dry indoor location. Follow instructions given in the IOM\*\* before placing the PDA into service, inspect all components to ensure correct functioning.

### Selection

Be certain that the diaphragm casing pressure does not exceed the limits listed in the specification table and identification plate. If in doubt, contact Yarway or your local representative.

Model: 20-55 (stroke 55 mm) and

Model: 20-90 (stroke 90 mm)

### Service life

Expected service life may vary upon condition of service. Check unit at least once per 8000 hours or longer intervals based upon site experience.

### SPARE PARTS

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Use only genuine Yarway components.

All PDA's\* are identified by an identification number, stamped on the identification plate.

Use this number when ordering spare parts.

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