

Alteration in the ATEX designation of actuator types 811, 812 and 813

1. Type of device

1. Field device / sensor

2. Signal processing device

3. Field device / actuator

4. Fieldbus component

Manufacturer: ARCA Regler GmbH Device: Pneumatic actuator

Type: 811, 812 and 813

2. Firmware /software and hardware

	Previous version	New version
Software / firmware	Software version dated n.a.	Software version dated n.a.
Hardware	Hardware version dated 05/12/2018	Hardware version dated 20/02/2023
SW/FW order code	n.a.	n.a.

Description and justification of the classification of the alteration compared to the previous version:

Diaphragms are now available for the 811, 812 and 813 actuator series which have a surface resistance of less than 1 GΩ according to EN 60079-0 section 7.4.1 and therefore do not allow electrostatic charges to build up. The use of these diaphragms thus permits the use of series actuators 811/812/813 without ventilation of the spring chamber in Zones 1 and 2 (gases and vapours).

These actuators have the designation EXG in the data sheet and are marked with:

II 2G Ex h II C 85°C Gb X

Actuators with spring chamber ventilation (designated EXD in the data sheet) can be used as before in Zones 1 and 2 (gases and vapours) and Zones 21 and 22 (dust). These actuators are marked with

II 2G Ex h II C 85°C Gb X

II 2D Ex h III C 85°C Dc X

these will be additionally equipped with a conductive diaphragm with immediate effect.

In addition to the material number (see Table 1), the conductive diaphragms of the pre-series are marked with a white dot (Fig. 1); in future, the diaphragms will be stamped with “CON” (for conductive – see Fig. 2).

Series	Size	Model code	Standard diaphragm Material No.	Ex-diaphragm (conductive) Material No.
812	MFI	812-2... / 811-2...	2101860	3174594
812	MFIII	812-3...	2177984	3174595
811	U0	811-1...	2101859	3174596
811	UI	812-2... / 811-2...	2101860	3174594
811	UIII	811-3...	2101861	3174597
811	UV	811-5...	2101862	3174599
812	MF0	812-0...	3083279	3174613

Table 1: Part numbers for standard and conductive diaphragms



Fig 1: Pre-series marking

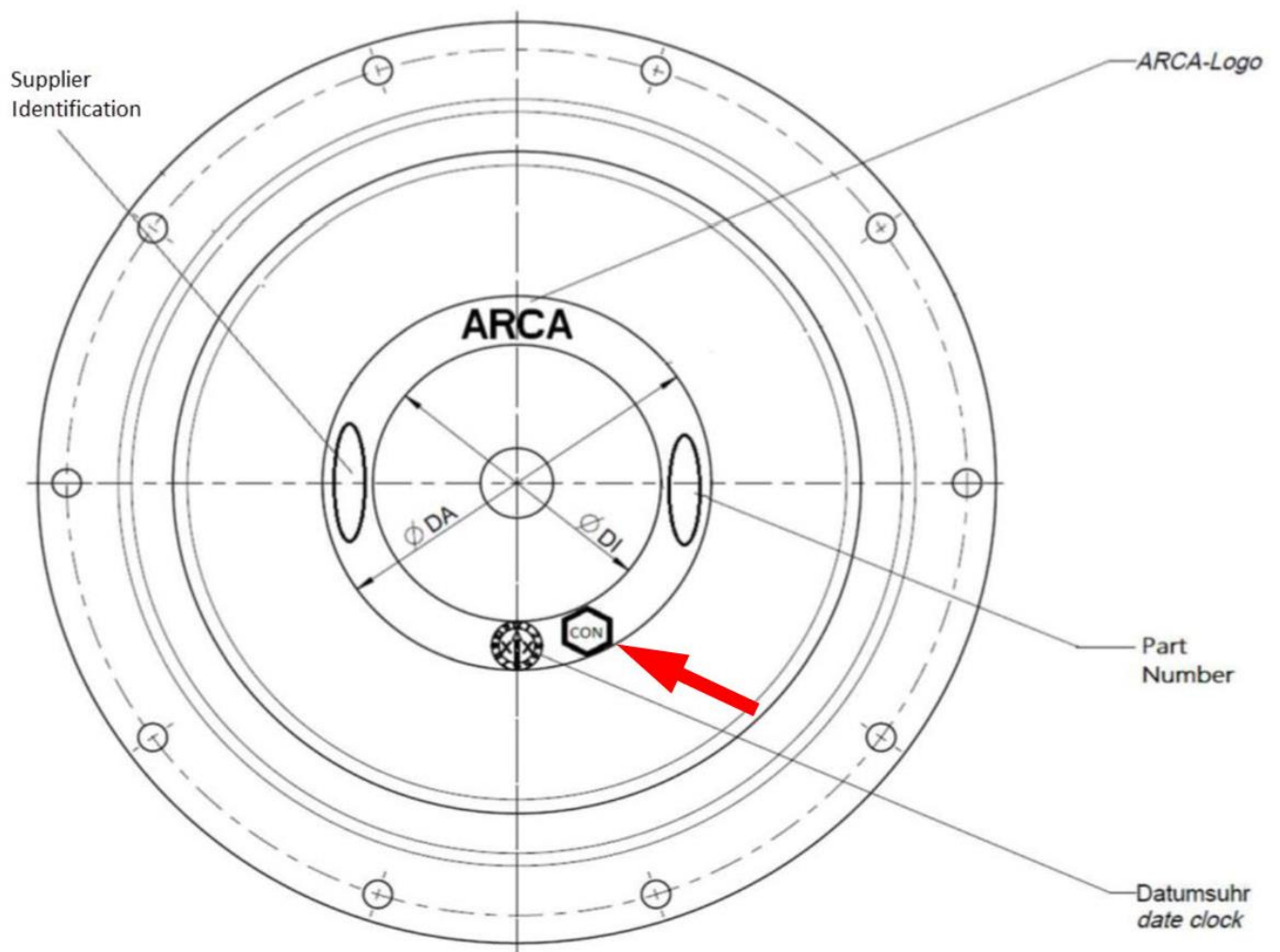


Fig 2: Series marking

3. Functional safety

Impact on functional safety

No Yes

Alterations to safety parameters?

No
 Yes → see safety manual

4. **Compatibility**

n.a.

5. **Operating manual**

Are alterations to the operating manual necessary as a result of the software/hardware alterations?

Yes/No: _____

If so, new operating manual No.: _____ dated: _____

If not, previous operating manual No.: _____ dated: _____

6. **Reporting a detected safety vulnerability**

n.a.