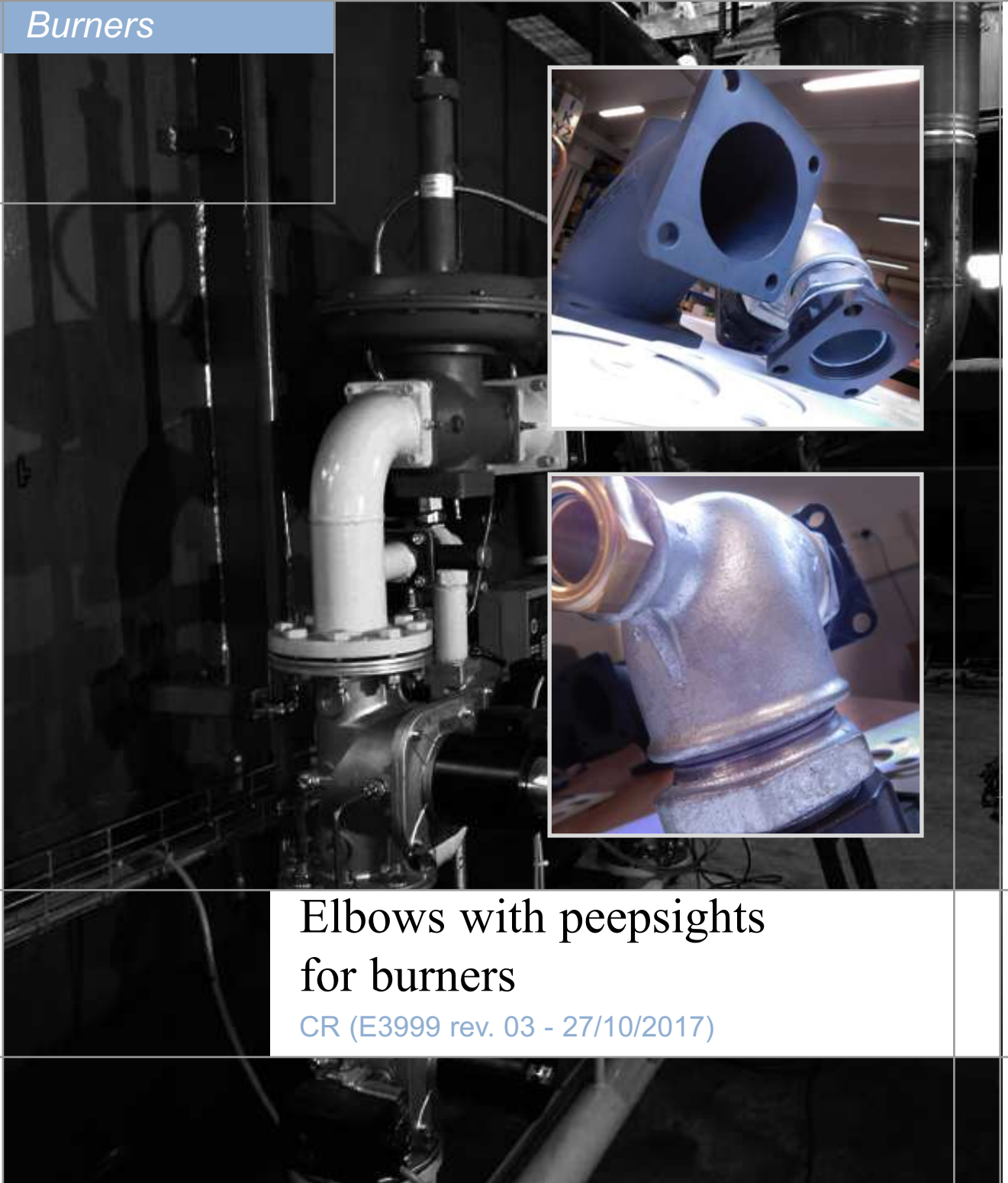


Burners



**Elbows with peepsights
for burners**

CR (E3999 rev. 03 - 27/10/2017)

GENERAL WARNINGS:



■ All installation, maintenance, ignition and setting must be performed by qualified staff, respecting the norms present at the time and place of the installation.

■ To avoid damage to people and things, it is essential to observe all the points indicated in this handbook. The reported indications do not exonerate the Client/User from observing general or specific laws concerning accidents and environmental safeguarding.

■ The operator must wear proper DPI clothing (shoes, helmets...) and respect the general safety, prevention and precaution norms.

■ To avoid the risks of burns or high voltage electrocution, the operator must avoid all contact with the burner and its control devices during the ignition phase and while it is running at high temperatures.

■ All ordinary and extraordinary maintenance must be performed when the system is stopped.

■ To assure correct and safe use of the combustion plant, it is of extreme importance that the contents of this document be brought to the attention of and be meticulously observed by all personnel in charge of controlling and working the devices.

■ The functioning of a combustion plant can be dangerous and cause injuries to persons or damage to equipment. Every burner must be provided with certified combustion safety and supervision devices.

■ The burner must be installed correctly to prevent any type of accidental/undesired heat transmission from the flame to the operator or the equipment.

■ The performances indicated in this technical document regarding the range of products are a result of experimental tests carried out at ESA-PYRONICS. The tests have been performed using ignition systems, flame detectors and supervisors developed by ESA-PYRONICS. The respect of the above mentioned functioning conditions cannot be guaranteed if equipment, which is not present in the ESA-PYRONICS catalogue, is used.

DISPOSAL:



To dispose of the product, abide by the local legislations regarding it.

GENERAL NOTES:



■ In accordance to the internal policy of constant quality improvement, ESA-PYRONICS reserves the right to modify the technical characteristics of the present document at any time and without warning.

■ It is possible to download technical sheets which have been updated to the latest revision from the **www.esapyronics.com** website.

■ The CR products have been designed, manufactured and tested according to the most correct construction practices and following the applicable requirements described in **UNI EN 746-2-2010** 'Industrial heating process equipment - Part 2: Safety requirements for combustion and for the handling and processing of fuels'. We emphasize that the burners described in this data sheet **are provided as independent units and are excluded from the scope of the Machine Directive 2006/42/EC** not having any mobile items that are not exclusively manual.

■ Certified in conformity with the **UNI EN ISO 9001** Norm by DNV GL.

CERTIFICATIONS:



The products conform to the requests for the Euroasia market (Russia, Belarus and Kazakhstan).

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The code CR identifies a series of elbows, which are accompanied by a peepsight and mounted on the ESA PYRONICS burners to allow easy inspection of the flame status inside your refractory block. The choice of peepsights is based on the dimensional values of the connection on the burner, differentiated by characteristics and two conformation sets: one designed for medium-small sizes and one for larger sizes.

CHARACTERISTICS

8 / 12 / 16 CR

GENERAL:

- Maximum operating temperature: 120 ° C
- Maximum working pressure: 200 mbar
- Compact structure mounted in axis to the burner

MATERIAL COMPOSITION:

- Elbow body and nipples: Fe
- PSLT peepsight body: brass
- Peepsight glass: pyrex
- Connection flange: cast iron
- Gasket *: AFM34 24/32/48 CR

24 / 32 / 48 CR

GENERAL:

- Maximum operating temperature: 120 ° C
- Maximum working pressure: 200 mbar
- Compact structure mounted in axis to the burner

COMPOSIZIONE MATERIALI:

- Elbow body: cast iron
- Plug: Fe
- PSLT peepsight body: brass
- Peepsight glass: pirex
- Gasket *: AFM34

* The supply includes only one gasket for connection to the burner. If you also need a second gasket for connection to the gas line, please specify it when ordering.

8 / 12 / 16 CR



F3999103

24 / 32 / 48 CR



F3999104

WARNINGS

- Before installation, check the integrity of the elbow, the peepsight and any components, making sure that they are not damaged and that the sight glass is not chipped,
- and that the elbow and the threads are free of any impurities.

INSTALLATION

- The elbow must be installed on the axis of the burner.
■ Interpose the appropriate gasket between the burner and the elbow for high-temperature process.
- Insert the screws into the appropriate holes, securing them with nuts, gradually tightening them crosswise.

MAINTENANCE

It is not possible to repair the elbow or its components. In case of damage, proceed to simple replacement of the damaged piece.

It is therefore highly recommended to buy spare parts in advance in order to intervene quickly.

GENERAL MAINTENANCE PLAN

Operation	Type (*)	Advised time	Notes
Gasket integrity	O	yearly	Make sure there are no gas leaks towards the outside.
Bolt tightening	S	yearly	Reduce to every six months in applications with vibrations.
Peepsight integrity check	O	every six months	Check that the glass is not chipped or dirty, in case it is cleaned with non-abrasive substances

NOTES:

Key O = ordinary / S = extraordinary

(*) it is advisable to replace the gaskets after each operation of disassembling the flanges.

EXTRAORDINARY MAINTENANCE

For correct maintenance of the CR elbows, scrupulously follow the following instructions, to be carried out with the system turned off and cold.

BOLT TIGHTENING

1 - Check that the bolts are tightened with the system turned off.

REPLACEMENT OF GASKETS

1 - Progressively unscrew the screws that fix the curve crosswise. Extract the elbow and replace the gaskets.

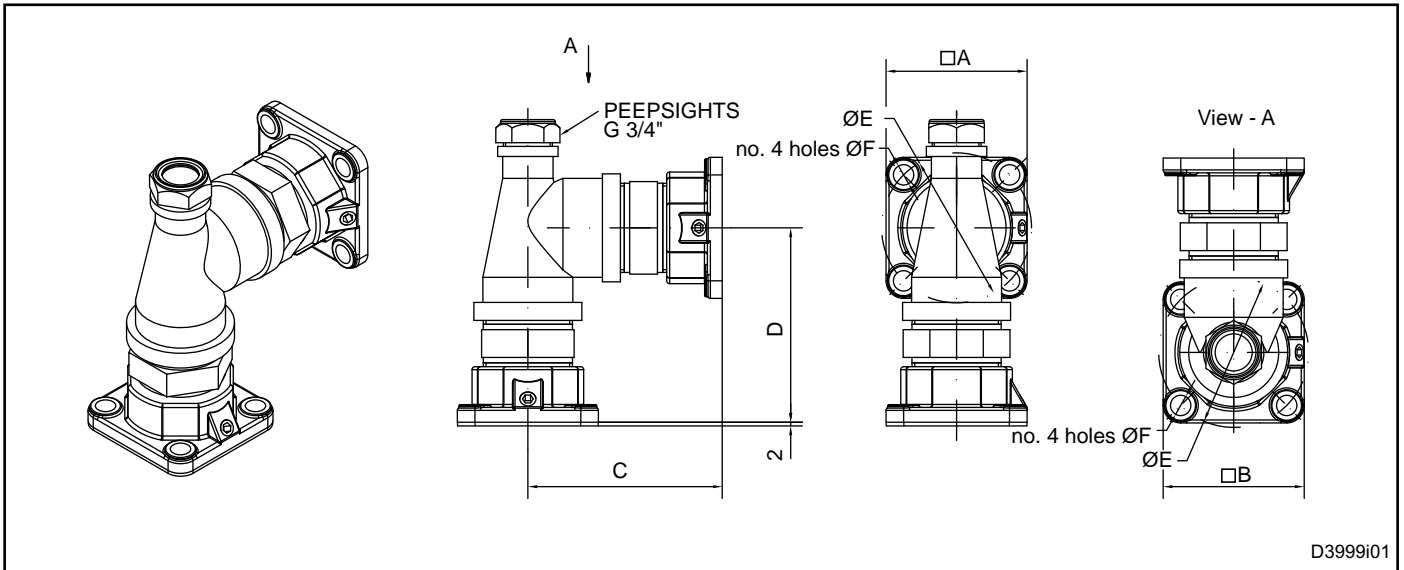
2 - Clean the inside of the elbow with a clean cloth and compressed air. Do not use tools that could damage internal parts.

REPLACEMENT OF EYE SPY

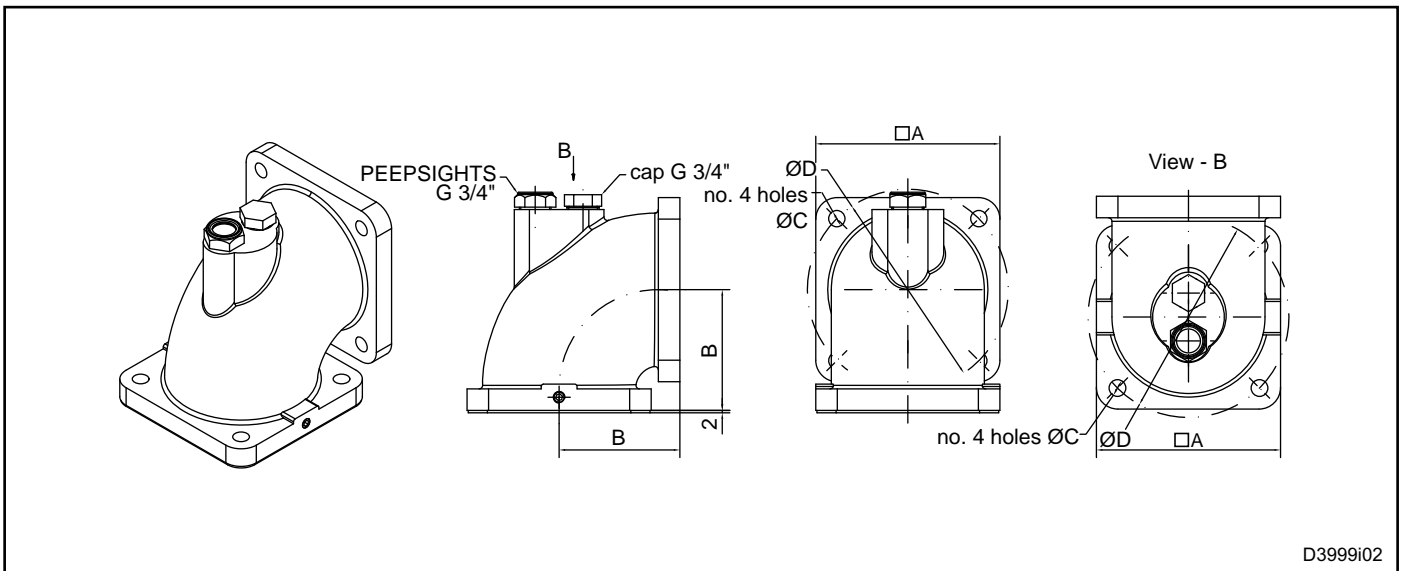
1 - If the glass of the peepsight is dirty, clean it with a non-abrasive detergent; if it is broken, replace the peepsight.

2 - In case of replacement of the peepsight, remove it with special fixed spanners, proceed with the replacement of the piece, placing the sealing paste on the thread and screwing with appropriate fixed spanners.

OVERALL DIMENSIONS - 8/12/16 CR



Model	A mm	B mm	C mm	D mm	Ø E	Ø F
8 CR	60	60	80	80	60.3	9
12 CR	76	76	105	105	81	11
16 CR	87	87	114	114	96.8	12



Model	A mm	B mm	C mm	D mm
24 CR	114	110	12	124
32 CR	154	101	14	168
48 CR	205	130	14	235