

# Piro Collar PC

# 30 MM FIREPROOF COLLARS FOR FIRE PROTECTION: PLASTIC PIPES, INSULATED METAL PIPES, CABLES AND CABLE BUNDLES

PRODUCT OFFICIAL DOCUMENTS					
European Technical Approval:	ETA-17/1063				
Certificate of Constancy of Performance:	1488-CPR-0725/W				
National Declaration of Performance:	PIRO/08-2018-09-10				

PRODUCT TECHNICAL DATA				
Fire resistance class:	up to El 180 C/U, U/C			
Reaction to fire:	B-s2, d0			
Color:	silver			
Environment class:	<b>Z1, Z2</b>			
Storage temperature range:	from +5°C to +30°C			
Shelf life:	no limit, no longer than 24 months			
Packaging:	1 piece			



30 MM SMOOTH COVER

30 MM SEGMENT COVER







#### TECHNICAL DESCRIPTION:

Piro Collar PC fireproof collar is a metal cylindrical flexible clamping ring with an intumescent insert inside. Piro Collar PC is mounted on pipes or cables cylindrical shape or on pipe elbows - U-shape. Depending on the assembly techniques, Piro Collar PC have steel covers: Smooth - cover made of continuous sheet steel with a height of 60 mm, Slim - cover made of continuous sheet steel with a height of 30 mm collar ready for assembly, Segment - segmental sheet steel cover with a height of 60 mm or 30 mm, the collar requires self-assembly. The intumescent insert consists of one or more layers of tape. Under fire conditions, the intumescent insert increases its volume and seals the penetration. The size of the intumescent insert depends on the pipe diameter and its intended use. The steel cover is equipped with a clamp, used to fasten the collar and stabilize it on the pipe, and with mounting brackets through which expansion anchor bolts are led, fixing fireproof collar to the partition. Fireproof collar is delivered as a ready-made product or in the form of an assembly set for self-preparation and assembly during work on the site. Fireproof collars can be 30, 60, 180 mm high. Piro Collar PC with a height of 30 mm, with a continuous cover, with a diameter of up to 160 mm, can be used interchangeably with collars with a height of 60 mm and a diameter of up to 160 mm. Piro Collar PC with a height of 60 mm and a diameter of up to 110 mm.

## INTENDED USE:

Piro Collar PC fireproof collar is a product intended for fireproof sealing of service penetrations and mixed penetrations in walls and floors of plastic pipes without or with FEF or PE foam insulation, metal pipes insulated with FEF or PE foam, electric cables. The possible fire resistance class ranges from EI 30 to EI 180. With the use of Piro Collar PC fireproof collars, it is possible to seal single pipes or pipe bundles, pipes in groups of e.g. 4 pieces, cable bundles, pipe bends that are mounted just below the floor. The necessary information can be found in the ETA. Good fireproof properties make Piro Collar PC applicable for sealing pipes with particularly large diameters and where large thicknesses of flammable insulation on steel pipes are required. The product is intended for professional



#### TECHNICAL CHARACTERISTICS OF PIRO COLLAR PC

PIPE DIAMETER (MM)	COLLAR TYPE	COLLAR OUTER DIAMETER (MM)	DISTANCE OF FASTENING ELEMENTS FROM THE CENTER OF THE COLLAR (MM)	NUMBER OF FASTENING ELEMENTS	DIAMETER AND LENGTH OF EXPANSION ANCHOR BOLT
55	PC-55	72	57	3	M6x60
68	PC-68	80	61	3	M8x80
75	PC-75	88	71	3	M8x80
82	PC-82	100	75	3	M8x80
90	PC-90	109	79	4	M8x80
110	PC-110	117	89	4	M8x80
125*	PC-125	137	106	4	M8x80
160*	PC-160	234	136	4	M8x80

<sup>\*</sup>diameters refer to collars with smooth cover

For insulated pipes, always use Piro Collar PC with a diameter greater or equal to the outer diameter of the insulation. For metal pipes, the minimum thickness of FEF insulation is 10 mm and the maximum thickness is 50 mm.

### INSTALLATION OF PIRO COLLAR PC ON PLASTIC PIPE



Fill the space between the pipe wall and the aperture tightly. Use cement mortar. Double check that the area around the pipe is flat and free of irregularities, if necessary, flatten it using Piro Coat A



Remove the cotter pin securing the collar and place the fire collar on the pipe



Pull the securing pin of the clamping buckle through the securing slot on the other end of the fireproof collar and fold it 180 ° backwards so that the collar locks firmly on the pipe



Attach the collar to the wall with expansion anchor bolts



Mark the completed penetration seal with the label attached to the collar. Mark **Piro Collar** PC fireproof collar on the label, enter the date and the name



#### TECHNICAL DATA FOR ASSEMBLING O-SHAPED PIRO COLLAR PC SLIM WITH THE SEGMENT COVER

PIRO COLLAR PC DIAMETER	MOUNTING SET	NUMBER OF SEGMENTS REQUIRED TO ASSEMBLY THE COLLAR	THE LENGTH OF THE INTUMESCENT INSERT TO BE CUT OFF	NUMBER OF LAYERS OF 6.5 MM INTUMESCENT INSERT	NUMBER OF FASTENING ELEMENTS	SEQUENTIAL NUMBERS OF THE COVER SEGMENTS ON WHICH THE MOUNTING ELEMENTS SHOULD BE PLACED
25 mm	PC L SLIM	10	240 mm	2	2	2 and 7
32 mm	PC L SLIM	12	284 mm	2	2	3 and 9
40 mm	PC L SLIM	13	334 mm	2	2	4 and 10
48 mm	PC L SLIM	15	384 mm	2	2	3 and 10
55 mm	PC L SLIM	16	428 mm	2	3	3 , 8 and 13
68 mm	PC L SLIM	18	510 mm	2	3	5 , 11 and 17
82 mm	PC L SLIM	21	598 mm	2	3	6 , 13 and 20
90 mm	PC L SLIM	23	648 mm	2	3	4 , 12 and 20
110 mm	PC L SLIM	26	774 mm	2	4	4 , 10 , 17 and 23

For insulated pipes, always use Piro Collar PC with a diameter greater or equal to the outer diameter of the insulation. For metal pipes, the minimum thickness of FEF insulation is 10 mm and the maximum thickness is 50 mm.

### INSTALLATION OF PIRO COLLAR PC SLIM WITH THE S SEGMENT COVER ON PLASTIC PIPE



Fill the space between the pipe wall and the aperture tightly. Use cement mortar. Double check that the area around the pipe is flat and free of irregularities, if necessary, flatten it using Piro Coat A



Wrap the pipe with the intumescent insert



Place Piro Collar PC on the pipe wrapped with the intumescent insert. Pull the securing pin of the clamping buckle through the securing slot on the other end of the fireproof collar and fold it 180 ° backwards so that the collar locks firmly on the pipe



Attach the collar to the wall with expansion anchor bolts



Mark the completed penetration seal with the label attached to the collar. Mark Piro Collar PC fireproof collar on the label, enter the date and the name



#### TECHNICAL DATA FOR ASSEMBLING U-SHAPED PIRO COLLAR PC SLIM WITH THE SEGMENT COVER

PIRO COLLAR PC DIAMETER	MOUNTING SET	NUMBER OF SEGMENTS REQUIRED TO ASSEMBLY THE COLLAR	THE LENGTH OF THE INTUMESCENT INSERT TO BE CUT OFF	NUMBER OF LAYERS OF 6.5 MM INTUMESCENT INSERT	NUMBER OF FASTENING ELEMENTS	SEQUENTIAL NUMBERS OF THE COVER SEGMENTS ON WHICH THE MOUNTING ELEMENTS SHOULD BE PLACED
25 mm	PC L SLIM	10	165 mm + 139 mm	2	3	1 , 5 and 10
32 mm	PC L SLIM	12	198 mm + 172 mm	2	3	1 , 6 and 12
40 mm	PC L SLIM	13	215 mm + 189 mm	2	3	1 , 6 and 13
48 mm	PC L SLIM	15	248 mm + 222 mm	2	3	1 , 7 and 15
55 mm	PC L SLIM	16	264 mm + 238 mm	2	3	1 , 8 and 16
68 mm	PC L SLIM	18	297 mm + 271 mm	2	3	1 , 9 and 18
82 mm	PC L SLIM	21	347 mm + 321 mm	2	3	1 , 10 and 21
90 mm	PC L SLIM	23	380 mm + 354 mm	2	3	1 , 11 and 23
110 mm	PC L SLIM	26	429 mm + 403 mm	2	4	1 , 11 , 15 and 26

#### INSTALLATION OF U-SHAPED PIRO COLLAR PC SLIM WITH THE SEGMENT COVER ON PLASTIC PIPE ELBOW



Fill the space between the pipe wall and the aperture tightly. Use cement mortar. Double check that the area around the pipe is flat and free of irregularities, if necessary, flatten it using Piro Coat A



Place the fire collar on the pipe



Drill holes for expansion anchor bolts in the partition



Place expansion anchor bolts in the drilled holes and attach the **Piro Collar PC** to the partition



Mark the completed penetration seal with the label attached to the collar. Mark **Piro Collar PC** fireproof collar on the label, enter the date and the name

#### Health and safety recommendations:

The product is intended for use by professional companies in industrial conditions. Work related to the installation of the product should be carried out in accordance with the applicable health and safety and environmental protection regulations. Before starting work with the product, read the Product Safety Data Sheet.

#### Version 05.2022 replaces 06.2018

The above information is based on our current knowledge and experience. We provide them in good faith. However, due to the variety of methods and conditions of application, they should be verified in specific applications. Therefore, the manufacturer's liability and obligations beyond the conditions set out in the applicable standard are excluded.