



**Strojirenský zkušební ústav, s.p.**  
**(Engineering Test Institute, Public Enterprise), Authorized Body 202**  
**Hudcova 424/56b, Brno, Czech Republic**  
Authorization Decision 27/2006 of 2006-08-29

# PRODUCT CERTIFICATE

**AO 202/C5/2014/Reg. No.: B-30-00231-14**

In compliance with the provisions of Section 5 (2) of Government 163/2002 Coll., laying down technical requirements for selected construction products, as amended, the Authorized Body hereby confirms that for the following construction products

1. Compression fittings with O-ring for PE pipes
2. Internal reinforcement

Type designation: COBRARING  
Versions: see Pages 2 to 8

Manufacturer: TIEMME RACCORDERIE S.p.A.  
Via Cavallera, 6/A, 25045 Castegnato (BS)  
Italy

it has reviewed the background materials submitted by the Manufacturer, carried out initial product type testing on a sample, assessed factory production control system and has ascertained that the said products fulfil the essential requirements of Government Regulation 163/2002 Coll., as amended.  
In assessing the conformity, the Authorized Body has made use of

Technical Construction Certificate STO-30-00227-14 of 2014-02-14, valid until 2017-02-28.

The Authorized Body has ascertained that the factory production control system is consistent with relevant technical documentation pursuant to Section 5 (1) (d) and assures that the products placed on the market fulfil the requirements set out in the aforesaid Technical Construction Certificate and technical regulations and that they are consistent with the technical documentation pursuant to Section 4 (3).

An integral part of the present Certificate is Final Report 30-12267 of 2014-03-31, which contains the conclusions drawn from the ascertainment and verifications, test results, and essential description and images necessary for identification of the certified products.

The present Certificate shall remain valid for the validity period of the Technical Construction Certificate and for the period in which the requirements set out in the technical regulations and the Technical Construction Certificate, to which reference is made, and the production conditions at the manufacturing plant or the factory production control system remain substantially unchanged.

At least once every 12 months, the Authorized Body performs surveillance of proper operation of the factory production control system at the manufacturing plant, takes samples of the products at the manufacturing plant, tests these samples and assesses whether the characteristics of the products comply with technical regulations and the Technical Construction Certificate, pursuant to the provisions of Section 5 (4) of the abovementioned Government Regulation.

Should the Authorized Body identify any deficiencies, it shall be authorized to cancel or modify the present Certificate.

Brno, 2014-03-31



  
Ing. Jiří Rozsíval, MBA  
Deputy Director

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**Basic technical data:**

Maximum operating pressure:	Water:	PN 10 (1.0 MPa)
	Gas:	MOP 5 (0.5 MPa)
Ambient temperature:	Water:	Up to 110 °C
		Up to 80 °C for POM compression rings
	Gas:	From -20 °C to 60 °C

**Individual versions:****1. Compression fittings with O-ring for PE pipes****Art. 3460W ÷ 3465W; 3467W ÷ 3469W**

Operating fluid: Water, incl. water meant for human consumption pursuant to Ministry of Health Decree 409/2005 Coll., heating water, non-corrosive fluids, compressed air, non-aggressive gases

**Connections:**

Outside diameter of PE pipes (D):	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Thread size (G):	½	¾	1	1 ¼	1 ½	2
Corresponds to nominal size DN	15	20	25	32	40	50

**Materials:**

- Body, nut, compression and support rings: Brass CW617N (CuZn40Pb2)
- O-ring: NBR rubber

Art.	Design	Throughway connection	Branch connection	Illustration
3460W	Straight, reducer PE x external thread (ISO 228-1)	20 x ½ up to 63 x 2	---	
3461W	Straight, coupling PE x PE	20 up to 63	---	
3462W	Straight, reducer PE x internal thread (ISO 228-1)	20 x ½ up to 63 x 2	---	
3463W	Elbow, coupling PE x PE	20 up to 63	---	
3464W	Elbow, reducer PE x external thread (ISO 228-1)	20 x ½ up to 63 x 2	---	
3465W	Elbow, reducer PE x internal thread (ISO 228-1)	20 x ½ up to 63 x 2	---	





Art.	Design	Throughway connection	Branch connection	Illustration
3467W	T-shape, coupling PE	20 up to 63	20 up to 63	
3468W	T-shape, throughway coupling PE, branch reducer external thread (ISO 228-1)	20 up to 63	½ up to 2	
3469W	T-shape, throughway coupling PE, branch reducer internal thread (ISO 228-1)	20 up to 63	½ up to 2	

#### Art. 3460CR ÷ 3469CR, 3471CR

Operating fluid:

Water, incl. water meant for human consumption pursuant to Ministry of Health Decree 409/2005 Coll., heating water, non-corrosive fluids, gaseous fuels of the first, second and third family as per ČSN EN 437+A1:2009, oils, compressed air, non-aggressive gases

Connections:

- Outside diameter of PE pipes (D):	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
- Thread size (Rp):	½	¾	¾*, 1	1*, 1 ¼	1 ½	2
Corresponds to nominal size DN:	15	20	20*, 25	25*, 32	40	50







Note: \* ... Art. 3460CR only

Materials:

- Body, compression nut: Brass CW617N (CuZn40Pb2)
- Compression and support rings, union: Brass CW614N (CuZn39Pb3)
- O-ring: NBR rubber for water or gas

Art.	Design	Throughway connection	Branch connection	Illustration
3460CR	Straight, reducer PE x external thread R	20 x ½ up to 63 x 2	---	
3461CR	Straight, coupling PE x PE	20 up to 63	---	
3462CR	Straight, reducer PE x internal thread Rp	20 x ½ up to 63 x 2	---	
3463CR	Elbow, coupling PE x PE	20 up to 63	---	
3464CR	Elbow, reducer PE x external thread R	20 x ½ up to 63 x 2	---	

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Art.	Design	Throughway connection	Branch connection	Illustration
3465CR	Elbow, reducer PE x internal thread R <sub>p</sub>	20 x ½ up to 63 x 2	---	
3466CR	Elbow, wall-mounted, reducer PE x internal thread R <sub>p</sub>	20 x ½ up to 32 x 1	---	
3467CR	T-shape, coupling PE	20 up to 63	20 up to 63	
3468CR	T-shape, throughway coupling PE, branch reducer, external thread R	20 up to 63	½ up to 2	
3469CR	T-shape, throughway coupling PE, branch reducer internal thread R <sub>p</sub>	20 up to 63	½ up to 2	
3471CR	Straight, extended coupling PE x PE	32 up to 63	---	

**Art 1460 ÷ 1465, 1467, 1469**

Operating fluid:

Water, incl. water meant for human consumption pursuant to Ministry of Health Decree 409/2005 Coll., heating water, non-corrosive fluids, compressed air, non-aggressive gases



Connections:

- Outside diameter of PE pipes (D):	75 mm	90 mm	110 mm
- Thread size (G):	2", 2½"	2 ½", 3"	4"
Corresponds to nominal size DN:	50*, 65	65*, 80	100

Note: \* - Art. 1460 only

Materials:

- Body, clamp flange: Brass CW617N (CuZn40Pb2)
- Compression and support rings: Brass CW614N (CuZn39Pb3)
- O-ring: NBR rubber for water

Art.	Design	Throughway connection	Branch connection	Illustration
1460	Straight, reducer PE x external thread R	75 x 2 up to 110 x 4	---	
1461	Straight, coupling PE x PE	75, 90, 110	---	





Art.	Design	Throughway connection	Branch connection	Illustration
1462	Straight, reducer PE x internal thread R <sub>p</sub>	75 x 2½ up to 110 x 4	---	
1463	Elbow, coupling PE x PE	75	---	
1464	Elbow, reducer PE x external thread R	75 x 2½	---	
1465	Elbow, reducer PE x internal thread R <sub>p</sub>	75 x 2½	---	
1467	T-shape, coupling PE	75, 90	75, 90	
1469	T-shape, throughway coupling PE, branch reducer internal thread R <sub>p</sub>	75, 90	2, 2½	
1469	T-shape, throughway coupling PE, branch reducer external thread R	75, 90	2½, 3	

#### Art 3460 ÷ 3469

##### Operating fluid:

Water, incl. water meant for human consumption pursuant to Ministry of Health Decree 409/2005 Coll., heating water, non-corrosive fluids, gaseous fuels of the first, second and third family as per ČSN EN 437+A1:2009 (city gas, natural gas, propane-butane), oils, compressed air, non-aggressive gases

##### Connections:


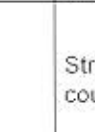
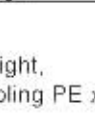






- Outside diameter of PE pipes (D):	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
- Thread size (G):	½	¾	¾*, 1	1*, 1 ¼	1 ½	2
Corresponds to nominal size DN:	15	20	20*, 25	25*, 32	40	50
Note: * ... Art. 3460 only						

##### Materials:

- Body, compression nut: Brass CW617N (CuZn40Pb2)
- Compression and support rings: Polyoxymethylene (POM)
- O-ring: NBR rubber for water or gas

Art.	Design	Throughway connection	Branch connection	Illustration
3460	Straight, reducer PE x external thread R	20 x ½ up to 63 x 2	---	

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Art.	Design	Throughway connection	Branch connection	Illustration
3461	Straight, coupling PE x PE	20 up to 63	---	
3462	Straight, reducer PE x internal thread R <sub>p</sub>	20 x ½ up to 63 x 2	---	
3463	Elbow, coupling PE x PE	20 up to 63	---	
3464	Elbow, reducer PE x external thread R	20 x ½ up to 63 x 2	---	
3465	Elbow, reducer PE x internal thread R <sub>p</sub>	20 x ½ up to 63 x 2	---	
3466	Elbow, wall-mounted, reducer PE x internal thread R <sub>p</sub>	20 x ½ up to 32 x 1	---	
3467	T-shape, coupling PE	20 up to 63	20 up to 63	
3468	T-shape, throughway coupling PE, branch reducer external thread R	20 up to 63	½ up to 2	
3469	T-shape, throughway coupling PE, branch reducer internal thread R <sub>p</sub>	20 up to 63	½ up to 2	

Art. 3460DR ÷ 3467DR; 3469DR; 3471DR; 3491; 3493

Operating fluid: Water, incl. water meant for human consumption pursuant to Ministry of Health Decree 409/2005 Coll., heating water, non-corrosive fluids, compressed air, non-aggressive gases

Connections:










- Outside diameter of PE pipes (D):	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
- Thread size (R <sub>p</sub> ):	½	¾	1	1 ¼	1 ½	2
Corresponds to nominal size DN:	15	20	25	32	40	50

Materials:




- Body, nut, compression and support rings: Brass CW602N (CuZn36Pb2As)
- O-ring: NBR rubber





Art.	Design	Throughway connection	Branch connection	Illustration
3460DR	Straight, reducer PE x external thread (ISO 7-1)	20 x ½ up to 63 x 2	---	
3461DR	Straight, coupling PE x PE	20 up to 63	---	
3462DR	Straight, reducer PE x internal thread (ISO 7-1)	20 x ½ up to 63 x 2	---	
3463DR	Elbow, coupling PE x PE	20 up to 63	---	
3464DR	Elbow, reducer PE x external thread (ISO 7-1)	20 x ½ up to 63 x 2	---	
3465DR	Elbow, reducer PE x internal thread (ISO 7-1)	20 x ½ up to 63 x 2	---	
3466DR	Elbow, wall-mounted, reducer PE x internal thread (ISO 7-1)	20 x ½ up to 32 x 1	---	
3467DR	T-shape, coupling PE	20 up to 63	20 up to 63	
3469DR	T-shape, throughway coupling PE, branch reducer internal thread (ISO 7-1)	20 up to 63	½ up to 2	



Art.	Design	Throughway connection	Branch connection	Illustration
3471DR	Straight, extended coupling PE x PE	32 up to 63	---	
3491	Straight, reducer PE x reducer copper pipe	40 x 2,4 – ø28	---	
3493	Elbow, reducer PE x reducer copper pipe	40 x 2,4 – ø28	---	

## 2. Internal reinforcement

### Art. 1475, 1476

Operating fluid: Gaseous fuels of the first, second and third family as per ČSN EN 437+A1:2009, compressed air, non-aggressive gases

Sizes of PE pipes:

Art. 1475 – Brass internal reinforcement for PE pipes:

- Outside diameter (D - mm):	20	25	32	40	50	63	75	90	110
- Thickness (s - mm):	2.8	3.0	3.0	3.7	4.6	5.8	6.8	8.2	10

Art. 1476 – Brass internal reinforcement with O-rings for multi-layer pipes:

- Outside diameter (D - mm):	40	50	63
- Thickness (s - mm):	3.5	4.0	4.5

Material:

- Internal reinforcement: Brass CW614N (CuZn39Pb3)
- O-rings: NBR rubber for water or gas, POM

