



Strojírenský zkušební ústav, s.p.
(Engineering Test Institute, Public Enterprise), Authorized Body 202
Hudcova 424/56b, Brno, Czech Republic
Authorization Decision 4/2017 of 16 January 2017

CONSTRUCTION TECHNICAL CERTIFICATE

No.: **202-STO-B-00990-19**

Products: Inlet washing machine hoses
Type designation: Type 100, Type 200
Versions: see Page 2
Manufacturer: TUBI ITALIA BOHEMIA, s.r.o.
Nový Dvůr 2
Kámen
395 01
Czech Republic
Company ID No.: 62497804

Authorized Body 202 has issued this Construction Technical Certificate in accordance with the provisions of Section 12 of Act 22/1997 Coll., on technical requirements for products and on amendments to certain Acts, as amended, and Sections 2 and 3 of Government Regulation 163/2002 Coll. that lays down technical requirements for selected construction products, as amended by Government Regulation 312/2005 Coll. and Government regulation 215/2016 Coll.

By this document, the Authorized Body mentioned above defines the technical characteristics of the products with respect to the essential requirements for constructions, depending on the function which the products concerned are meant to fulfil within the construction project.

The technical data are stated on the following pages that form an integral part of this Construction Technical Certificate.

The Construction Technical Certificate has been issued for Task Reg. No. 30-14176.


The Construction Technical Certificate is valid **until 2022-03-31**, on condition that the circumstances under which it has been issued continue to exist.

This document may be copied in its entirety without written consent of the Authorized Body. Partial copies are subject to approval.

Compiler of this Construction Technical Certificate: Bc. Petr Kuběna.

Brno, 2019-03-06




Ing. Aleš Onderek
Deputy Director

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Identification and description of the products, definition of application of the products within construction:

The inlet washing machine hoses with connectors, type 100 and type 200, are used to connect washing machines and dishwashers to the water mains in which the static pressure of cold water (25 °C) does not exceed 1 MPa (10 bar). The hose is coupled after the valve, which is equipped with a check valve, i.e. with a device preventing the backflow. The hose-set comprises a flexible hose and two connectors with union nuts. The versions differ in the hose length and the type of connectors (direct, angled). Details are included in the Manufacturer's technical documentation.

Basic technical data:

Type designation:	Type 100	Type 200
Rated pressure:	10 bar	
Fault pressure:	30 bar	
Smallest bending radius:	180°	
Medium temperature:	Max. +25 °C	
Medium:	Water not meant for human consumption	
Materials and construction:		
Inner layer:	Softened PVC Thermal stabilization CaZn Hardness ShA 79 ±2	
Reinforcement:	High-strength polyester fibre Number: 14 + 14 + 1 longitudinal Number: 10 + 10 + 1 longitudinal Thickness: 1100 dtex	
Outer layer:	Softened PVC, 10 % CaCO ₃ loaded Thermal stabilization on CaZn basis Hardness ShA 68 ±2 Hardness ShA 65 ±2	
Bonding of individual layers:	Infrared tunnel; temperature: 600 °C	
Hose inside diameter:	ND 10 ±0.3 mm	
Hose outside diameter:	ND 15.8 ±0.3 mm	ND 14.5 ±0.3 mm
Connectors:	Nipple, elbow, nut: nylon 66 Sleeve: aluminium Pressed by automated eccentric press, pressure 5 t	

Technical characteristics of the products in relation to essential requirements for constructions:

No.	Observed characteristic	Method	Level required
1 Robustness and stability			
1.1	Hydrostatic testing	Verification by testing as per ČSN EN ISO 1402:2010 Art. 8.1 ČSN EN ISO 7751:2017Art. 4	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
1.2	Fault pressure	Verification by testing as per ČSN EN ISO 1402:2010 Art. 8.3 ČSN EN ISO 7751:2017Art. 5	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
2 Fire safety			Not applicable
3 Hygiene, protection of health and of the environment			Not applicable
4 Safety in use			

No.	Observed characteristic	Method	Level required
4.1	Kinking	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.1	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.2	Low temperature	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.5	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.3	Ageing	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.6	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.4	Pulsing	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.7	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.5	Pressure	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.8	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.6	Strength of coupling nuts	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.10	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.7	Strength of coupling tubes	Verification by testing as per ČSN EN 61770 ed.2/A11:2010 Art. 9.1.11	Under the test conditions, the hose shall comply with the specified requirements and shall be watertight.
4.8	Marking	Verification by visual inspection of submitted samples	According to ČSN EN 61770 ed.2/A11:2010 Art. 9.3 Hose-sets shall be durably marked with these data: <ul style="list-style-type: none"> - name, trade mark or identification mark of the manufacturer or responsible vendor; - model or type reference; - production date code, identifiable by the manufacturer - rated pressure; - 25 °C max. and blue coloured identification such as a rim or strip, for hose-sets intended for cold water supply only; - 70 °C max. or 90 °C max. and a red coloured identification such as a rim or strip for hose-sets intended for hot water supply.





No.	Observed characteristic	Method	Level required
4.9	Technical documentation	By submitting the technical documentation.	Every delivery of the hose-sets shall include the instructions for assembly and all relevant references for application of hose-sets, the range of uses, handling and installation of hose-sets (working procedures, special tools, seals required for threaded connections)
5 Protection against noise			Not applicable
6 Conservation of energy and heat			Not applicable
7 Sustainable use of natural resources			Not applicable

Technical regulations and technical standards applied; technical documents and background materials submitted to the Authorized Body:

- Act 22/1997 Coll., on technical requirements for products and on amendment to certain Acts, as amended
- Government Regulation 163/2002 Coll., laying down technical requirements for selected construction products, as amended by Government Regulation 312/2005 Coll. and Government regulation 215/2016 Coll.
- ČSN EN 61770 ed.2/A11:2010 Electric appliances connected to the water mains – Avoidance of backsiphonage and failure of hose sets
- ČSN EN ISO 1402:2010 Rubber and plastic hoses and hose assemblies – Hydrostatic testing
- ČSN EN ISO 7751:2017 Rubber and plastic hoses and hose assemblies. Ratios of proof and burst pressure to design working pressure
- ČSN 63 5200:1985 Hoses without caps. Rubber and plastic hoses. General provisions
- Certificate, Quality Management System to ČSN EN ISO 9001:2009, number CZ003013-1, of Tubi Italia Bohemia, s.r.o., issued by Bureau Veritas Certification Deutschland GmbH, of 2016-07-27, valid until 2019-07-26
- Technical documentation, QD FORM P/H-001/2, of 28.1.2019
- Technical documentation, QD FORM P/H-200, of 28.1.2019
- Inlet washing machine hose – Instructions for use (Tubi Italia Bohemia, s.r.o.)
- Confirmation of quality – STOMIL CZ s.r.o – technical parameters of SBR bvl rubber sheet



Further-specifying requirements for assessment of the products and for assessment of the factory production control system:

Within the meaning of Section 3 (2) (b) of the said Government Regulation, the Authorized Body has defined technical characteristics of the products in relation to essential requirements and has defined their levels with respect to intended use of the product in construction works.

The Manufacturer has submitted to the Authorized Body a written declaration on not having commissioned the performance of technical findings of characteristics of the products to any other authorized body.

The products fall within the group of products referred to in Annex 2 of the said Government Regulation, List of Products 7, Group 8 (a), with specified conformity assessment procedure pursuant to Section 8.

In accordance with Section 10 of the abovementioned Government Regulation, the Manufacturer has chosen the conformity assessment procedure pursuant to Section 5.

The Authorized Body will carry out the certification of the product pursuant to Section 5 (2) (a) and (b) of the said Government Regulation. In addition, the factory production control system operated at the manufacturer's plant is the subject of the assessment within the meaning of Section 5 (2) (c) of the said Government Regulation.

Rules for using the Construction Technical Certificate:

The Construction Technical Certificate may be used for assessment of conformity only in the period for which the legislation, technical standards or technical documents used in the Construction Technical Certificate remain unchanged as regards the facts provided for in Section 3 (2) (b) of Government Regulation 163/2002 Coll., as amended by Government Regulation 312/2005 Coll. and Government regulation 215/2016 Coll., or other facts substantial as regards assessing of conformity, under which the Construction Technical Certificate has been issued. The Construction Technical Certificate may not be used as a document of conformity assessment.

