

PROTOCOL

ON THE ASSESSMENT OF PERFORMANCE OF THE PRODUCT

Registration No. 1017 – CPR – 13.506.318, Revision No. 1

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, and in compliance with Commission Delegated Regulation (EU) No 568/2014, this protocol is issued for the construction product:

Lifting plants for faecal-free wastewater

Type: BlueBox

**Type range: BlueBox 60; BlueBox 90; BlueBox 150; BlueBox 250;
BlueBox 500**

Trade name: HomeBox

ZENIT Italia S.r.l.

**Via dell'Industria 11, I-41018 San Cesario sul Panaro, Modena, Italy
Company registration No: IT03098700366**

Places of production (manufacturing plants):

- 1) ZENIT Italia S.r.l., Via dell'Industria 11, I-41018 San Cesario s. P., Modena, Italy
- 2) Zenit Pumps (China) Co., Ltd, 49 Pingsheng Road, Suzhou Industrial Park, Jiangsu Province, China
- 3) Zenit Europe, 31 Zone Artisanale "Op Zaemer" L-4959 Bascharage, Luxembourg

On the basis of testing, calculations, tabulated values and documentation within system 3 according to Annex V 1.4 CPR, TÜV SÜD Czech s.r.o. assessed the relevant characteristics of the product described in Annex ZA of the standard

EN 12050-2:2000

The number of pages of this Protocol inclusive the title-page: 3

Essential characteristics	Performance	Harmonised technical specification
Watertightness	Passed	EN 12050-1:2001, Art. 4.2
Odourtightness	Passed	EN 12050-1:2001, Art. 4.2
Lifting effectiveness	Passed	EN 12050-1:2001, Art. 5
Mechanical resistance	Passed	EN 12050-1:2001, Art. 4.2, 5.2, 5.9, 6
Durability	Passed	EN 12050-1:2001, Art. 4.2, 5.2, 5.9, 6 Annex B
Noise level	<70 dB	EN 12050-1:2001, Annex A

This protocol is a revision No. 1 of the protocol No. 1017 – CPR – 13.506.318, issued 15.04.2021.

Prague, date 27.03.2024




on behalf of Notified Body 1017
Pavla Nerandžicová
Head of Certification Department

1. Equipment specification

Purpose of use:	Intended for draining locations below the level of possible backflow, intended for preventing backflow into the building (internal sewage system). Wastewater is collected by gravity and then pumped into the sewer.
Limitations of use:	The limit is determined by the parameters and performance. The tanks are designed for above-ground installation only (not considered any external loads of backfill nor groundwater). Cover is not designed for loads of pedestrians.
Identification of the product:	Label according to Annex ZA.1, EN 12050-2:2000 and in accompanying documents.
Technical specifications:	Lifting plant is equipped with pumps installed inside the tank (internally). Product type has relevant trade name see the title-page (product equivalent with the same design, components and technology). Only difference is colour of the tanks. Storage volume of the tanks: 60 litres ÷ 500 litres (see below) Discharge pipe connection: DN40 ÷ DN80 Pump power: 0.55 ÷ 3.0 kW Nominal flow rates: 1.39 ÷ 120 m ³ /h
Main components:	Tank is made of polyethylene (PE) Tank capacities: 60l, 90l, 150l, 250l and 500l Used pumps: type BluePRO; series DG BluePRO xx and series GR BluePRO xx and type Grey, series DGG xx and series GRG xx; manufacturer ZENIT series DG BluePRO xx; DGG xx are not equipped with a grinder series GR BluePRO xx; GRG xx are equipped with a grinder (cutting system) Non-return check valves: type VAP, manufacturer ZENIT Control unit (panel), type SC, ZC, Q1EL and Q2EL, manufacturer ZENIT

2. Documentation submitted by the manufacturer

- Technical drawings
- Accompanying technical documentation (instructions for installation and use)
- Declaration of conformity for main components
- Wiring diagrams
- Hydraulic characteristics of used pumps
- Test report (attest) for construction material of tank (PE)
- Static calculations (structural analysis) for used tanks (using finite element method)
- Declaration of manufacturer about noise level



3. Sampling the product

Requirements	Tested samples
Watertightness, Odour tightness, Lifting effectiveness, Mechanical resistance, Durability, Noise level	Selection acc. to article 7 of EN 12050-2:2000, lifting plants BlueBox 60 with pumps DG BluePRO 75/2/G40; GRG 150/2/G40; DGG 75/2/G40

Date of sampling: 15.12.2020

Place of sampling and testing: Zenit Pumps (China) Co., Ltd; 26 Wupu Road, Shengpu District Suzhou Industrial Park 215126 - Jiangsu, P.R. China (manufacturing plant)

Sampling made by: Mr. Jan Hořák (inspector of TÜV SÜD Czech s.r.o.) in co-operation with Mr. Lijun Xu (trained inspector of TÜV SÜD Greater China, Shanghai branch)

4. Assessment of performance on the basis of tests, calculations, tabulated values, documentation

4.1. Assessment of performance on the basis of tests

Essential characteristics	Documents	Test results
Watertightness and odourtightness	Test record: ZZ 323-702-BlueBox_DG BluePRO; GRG; DGG Test report No.: 13.549.008	Tightness was tested with water at temperature of 19°C for 10 minutes. All tested samples were without any visible leakage. Relevant for all models within type series.
Lifting effectiveness	Test record: ZZ 323-702-BlueBox_DG BluePRO; GRG; DGG Test report No.: 13.549.008	Tested with silica sand - pumps DG BluePRO 75/2/G40 (added sand: 42.5 kg); GRG 150/2/G40 (added sand: 42.5 kg) and DGG 75/2/G40 (added sand: 27.5 kg), water temperature 31°C, period of each test was 60 minutes. Relevant for all models within type series.
Mechanical resistance	Test record: ZZ 323-702-BlueBox_DG BluePRO; GRG; DGG	The pump is not flooded. Relevant for all models within type series.

4.2. Assessment of performance on the basis of calculations

4.3. Assessment of performance on the basis of tabulated values or descriptive documentation

4.3.1. Durability - All construction materials and components used are in accordance with Annex B, EN 12050-2:2000.

4.3.2. Noise level - manufacturer declares noise level <70 dB

5. Annex



