

Test Report: Nr.: 412.408-1 Date: 2014-04-07

Compression fittings "Fibre-Line" out of polycarbonate (PC)

Client:	Franz Elkuch AG Burstried 9 9465 Salez SWITZERLAND
Subject:	Compression fittings with the trade name "Fibre-Line" out of polycarbonate (PC) in the dimension 12 mm
Task:	Determination of burst pressure, leak tightness and pull-out strength
Order:	Written dated on 2014-03-04
Date of sampling:	---
Location of sampling:	---
Receipt of samples:	2014-03-17
Ref:	DI (FH) Ker / Vyc

1 SCOPE OF WORK

According to the order the burst pressure, leak tightness and pull-out strength of compression fittings with the trade name "Fibre-Line" out of polycarbonate (PC) in the dimension 12 mm was evaluated.

2 SCOPE OF APPLICATION

The results given in this test report have been obtained under the specific conditions of the individual tests. They shall serve as a proof for the client of the performance of those samples tested, according to the standard(s) agreed on.

3 SAMPLE MATERIAL

The samples listed in Table 1 had been sent by the client to the OFI Technologie & Innovation GmbH (subsequently OFI) for the purpose of testing.

Table 1: Description of samples

Sample	Description of samples
1	15 pieces of compression fittings (couplers) in the dimension 12 mm
2	5 m pipes in 12x2,0 mm

4 TESTS

All tests were carried out between 2014-03-17 and 2014-04-07 in the individual technical departments within the scope of competence of the authorised signatories according to the OFI QM-Manual.

4.1 BURST-PRESSURE

Compression fittings (couplers) were connected with pipes with a length of 200 mm each. An increasing internal pressure at a temperature of 20 °C with water as a pressure medium was applied on the samples.

The burst-pressures were determined on the samples with 15.45 bar, 14.51 bar and 25.56 bar (average value of burst-pressure of 18.5 bar).

4.2 LEAK TIGHTNESS

Three compression fittings (couplers) were connected with pipes with a length of 200 mm each into one arrangement. The arrangement was applied with an internal pressure of 15 bar over a period of 30 min at a temperature of 20 °C with water as a pressure medium.

After the 30 min did pass, the pressure was detected and the pressure supply stopped for 1 h. After that period the remaining pressure was noticed. The pressure drop during that time was 1.05 bar.

4.3 PULL-OUT STRENGTH

Compression fittings (couplers) were connected with pipes (12x2.0 mm) with a length of 200 mm each and subjected to the determination of the pull-out strength using a tensile testing machine. The tests were performed at 20 °C and 50 % r.h. with a testing speed of 100 mm/min,

The pull-out strength was determined on the samples with 406 N, 468 N and 432 N (average value of the pull-out strength of 435 N).

This test report no. **412.408-1**

comprises 4 sheet(s) 1 table(s), 0 figure(s), 0 enclosure(s).

Testing staff

Director in charge
Department piping systems



Patrick Vycudilik



DI (FH) Martin Kerschenbauer

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Included test results only relate to the samples tested.

Inspections are subject to a quality assurance programme according to EN ISO/IEC 17025:2012.

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