

REPORT

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Tightness testing of metal banded flexible coupling, intended for relined pipes

Test object

A metal banded flexible coupling of EPDM rubber and a plastic detail intended for relined pipes were tested.

Delivery date

2017-09-08

Dimensions and marking

The following test object was delivered to RISE: Dimension Marking

70-75/70-75 mm 8028 EPDM ISO 681-1 17 06

Hose clamp marking: 1702 ABA acidproof S50 77-95 Size-52

The purpose of the coupling is to make a smooth transition between a relined pipe and an existing pipe. One plastic detail was also delivered which should be mounted on the relined pipe.

Tests

The following tests were performed:

Requirement described in EN 16397-1 clause	Test method described in EN 16397-1 clause	Characteristics
5.4.2	6.1.2	Internal pressure
5.4.2	6.1.3	Vacuum
5.4.3	6.1.4	Deflection test

RISE Pipe Centre is not accredited for the tightness testing described in EN 16397-1:2014 clause 6. However, the testing is very similar to the testing described in EN 1053:1995 and EN 1054:1995 for which RISE Pipe Centre is accredited.

The plastic detail was mounted by RISE on a relined plastic pipe and sealed with *Sikaflex*. The hose clamps was tightened to the prescribed tightening torque 5.5 Nm.

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TEST RESULTS

Internal pressure

Dimension	Medium	Internal pressure requirement	Testing time	Pipes used for testing
		bar	minutes	
70-75/70-75 mm	Water	1.0	15	Relined plastic Ø 75 mm Plastic Ø 75 mm

No leakage was observed during the test.

Test method: EN 16397-1:2014, clause 6.1.2

Test temperature: 23 ± 5 °C Date of test: 2017-09-15

Vacuum

Dimension	Medium	Internal pressure requirement	Testing time	Pipes used for testing
		bar	minutes	
70-75/70-75 mm	Water	-0.25	15	Relined plastic Ø 75 mm Plastic Ø 75 mm

No leakage was observed during the test.

Test method: EN 16397-1:2014, clause 6.1.3

Test temperature: 23 ± 5 °C Date of test: 2017-09-15



Deflection

Dimension	Medium	Internal	Deflection	Pipes used for testing
		pressure requirement		
		bar	degrees	
70-75/70-75 mm	Water	1.0	4.6	Relined plastic Ø 75 mm Plastic Ø 75 mm

No leakage was observed during the test.

Test method: EN 16397-1:2014, clause 6.1.4

Test temperature: 23 ± 5 °C Date of test: 2017-09-15

Conclusion

The results fulfil the requirements of the tested characteristics in EN 16397-1:2014, *Flexible couplings-Performance requirements*.

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Performed by Examined by

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