DIN EN 12842:2012-11 (E)

Ductile iron fittings for PVC-U or PE piping systems - Requirements and test methods

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 5

3 Terms and definitions 5

4 Technical requirements 8
4.1 General 8
4.2 Dimensional requirements 10
4.3 Material characteristics 12
4.4 Coatings 13
4.5 Marking 14
4.6 Leak tightness 14

5 Performance requirements for joints 14
5.1 General 14
5.2 Leak tightness of flexible joints 15
5.3 Long term hydrostatic strength test 17
5.4 Flanged joints 19

6 Test methods 19
6.1 Tensile testing for ductile iron 19
6.2 Brinell hardness for ductile iron 20
6.3 Works leak tightness test 21

7 Performance tests 21
7.1 Leak tightness of joints to internal hydrostatic pressure 21
7.2 Leak tightness of joints to negative internal pressure 23
7.3 Leak tightness of joints to dynamic internal pressure 24
7.4 Long term hydrostatic strength test for joints of fittings for PE pipes 24
7.5 Pull out test at 25 °C for restrained joints for PE pipes 25
7.6 Long term hydrostatic strength test for joints of fittings for PVC-U pipe 25

8 Tables of dimensions 26
8.1 Dimensions of sockets for push-in flexible joints 26
8.2 Dimensions of sockets for mechanical flexible joints 28
8.3 Dimensions of fittings 29

9 Evaluation of conformity 44
9.1 General 44
9.2 Initial performance testing 45
9.3 Factory production control (FPC) 46

Bibliography 49