Tender text

**PE100 fittings with REINOGRIP pull-resistant push-fit coupler**

**General preliminary remark**

The fittings to be offered must be manufactured from material in compliance with the PE100+ Association and according to DIN EN 12201 with respect to dimensions, tolerances and quality requirements. Proof must be provided that they were manufactured on the basis of a quality assurance system in accordance with DIN EN ISO 9001. For all fittings a certificate in accordance with DIN EN 10204 must be submitted by the manufacturer. The body of the fitting must be manufactured in the injection moulding process or alternatively, in the case of more complex structures, from a piece of homogeneous semi-finished material so as to ensure the required reinforcement and therefore high stability of the fitting. Semi-finished materials manufactured from wound rods or the subsequent application of other forms of reinforcing are not permitted.

The pull-resistant push-fit couplers must have grip elements with at least 5 grip teeth respectively made of high-strength plastic and that are arranged on spring-loaded supports. The self-activation of the grip must be ensured by an elastomer ring. At the push-fit coupler inlet an elastomer profile ring must be arranged as a wiper that prevents the penetration of dirt. A system 3S pressure-tight lip seal of drinking water quality must be fitted as a media seal.

Spigots on the fittings must have a long shape to enable push-fitting as well as HE butt welding or HW welding.

Flange connection dimensions must comply with DIN EN 1092-1.

Flange connections must be of either the loose-flange type or the fixed-flange type (same nominal diameter) depending on the counterflange type. The backing flanges must be manufactured from corrosion-free, fibre-reinforced plastic. The stub and flange must interlock in a positive fit at their connecting surfaces and the flange must provide additional support to the stub from outside so as to counteract deformation. As a result, the flange connection is fully pressure-resistant according to the pipe dimensioning. The backing flange is permanently connected to the welding stub. If no other gasket is present for system-inherent reasons, the use of a profile gasket for flat-sealing stubs is recommended.

Hydrant connection flanges must have an outwardly reinforced weld seam area designed for the hydrant load; N 80 -> 110 mm outer diameter and DN 100 -> 135 mm outer diameter. The backing flange is manufactured from corrosion-free, fibre-reinforced plastic, supports the PE stub from outside and provides a plate spring function that maintains the pretension after the bolts have been tightened.

Optionally available versions: Flange with O-ring seal, socket for smooth spigot or bayonet spigot (sockets for hydrants) at the outlet of the hydrant fittings, version for PVC-U, PP-R or PP-H pipes.

**Standards/guidelines**

DIN EN 12201, DIN EN 1092-1, DVS 2207, DVS 2210, DIN EN 10204, DIN EN ISO 9001, DIN EN ISO 50001, DVGW W 400-2, DVGW GW 335

**Permits/certificates**

DVGW: DW-8616CP0454, DV-8606BT0423, DV-8611BT0424

Acceptance test certificate 3.1 according to DIN EN ISO 10204 for the semi-finished material from the processed raw material with indication of MFR and OIT; only PE100 material in compliance with PE100+ Association

Manufacturer certified according to ISO 9001:2015 and ISO 50001:2011

**Manufacturer:**

Reinert-Ritz GmbH or equivalent

**Performance specification:**

1. PE100 double coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD [d1] …

SDR …

Operating pressure … bar

1. PE100 bend 1 x d, with push-fit coupling on both sides, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD [d1] …

SDR …

… degrees

Operating pressure … bar

1. PE100 bend 1 x d, with push-fit coupler on one side, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD [d1] …

SDR …

… degrees

Operating pressure … bar

1. PE100 tee, with all-round push-fit coupling, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD1 [d1] …

DN/OD2 [d2] …

SDR …

Operating pressure … bar

1. PE100 tee with HP flange outlet, with push-fit couplers in the run pipe, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD [d1] …

SDR …

DN …

PN … drilled

Operating pressure … bar

1. PE100 concentric reducer, with push-fit coupling on both sides, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for PE100 pipe of the size

DN/OD1 [d1] …

DN/OD2 [d2] …

SDR …

Operating pressure … bar

1. PE100 concentric reducer, with coupler on one side, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, second side long for HW welding , for PE100 pipe of the size

DN/OD1 [d1] …

DN/OD2 [d2] …

SDR …

Operating pressure … bar

1. PE100 repair coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and bolt preload for secure fixing, for pipes of the size

Material 1: □ PE100 □ PVC □ PP

DN/OD1 [d1] …

SDR …

Material 2: □ PE100 □ PVC □ PP

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 push-fit socket, consisting of push-fit coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, and HP flange for PE100 pipe of the size

DN/OD1 [d1] …

SDR …

DN …

PN …

Operating pressure … bar

1. PE100 telescope repair set, with push-fit coupling on both sides, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, for pipes of the size

Material 1: □ PE100 □ PVC □ PP

DN/OD1 [d1] …

SDR …

Material 2: □ PE100 □ PVC □ PP

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 duckfoot bend for connection to hydrant, reinforced design, with push-fit coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with adapter for hydrants with bayonet spigot, for pipes of the size

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 hydrant end piece for service line connection, reinforced design, with push-fit coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with adapter for hydrants with bayonet spigot, for pipes of the size

DN/OD1 [d1] …

SDR …

DN/OD3 [d3] …

SDR …

Operating pressure … bar

1. PE100 tee for connection to hydrant, reinforced design, with push-fit coupler on both sides, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with adapter for hydrants with bayonet spigot, for pipes of the size

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 cross for connection to hydrant, reinforced design, with all-round push-fit coupling,, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with adapter for hydrants with bayonet spigot, for pipes of the size

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 X-cross for connection to hydrant, reinforced design, with all-round push-fit coupling,, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with adapter for hydrants with bayonet spigot, for pipes of the size

DN/OD1 [d1] …

SDR …

Operating pressure … bar

1. PE100 duckfoot bend for connection to hydrant, reinforced design, with push-fit coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with special flange connection (VP flange) of the same nominal diameter with fibre-reinforced backing flange at outlet, drilled according to DIN EN 1092-1, with spring effect for continuous bolt preload, for pipes of the size

DN/OD1 [d1] …

SDR …

DN …

Operating pressure … bar

1. PE100 hydrant end piece for service line connection, reinforced design,with push-fit coupler, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with special flange connection (VP flange) of the same nominal diameter with a fibre-reinforced backing flange at the outlet, drilled according to DIN EN 1092-1, with spring effect for continuous bolt preload, for pipes of the sizes

DN/OD1 [d1] …

SDR …

DN …

DN/OD3 [d3] …

SDR …

Operating pressure … bar

1. PE100 tee for connection to hydrant, reinforced design, with push-fit coupler on both sides, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with special flange connection (VP flange) of the same nominal diameter with fibre-reinforced backing flange at outlet, drilled according to DIN EN 1092-1, with spring effect for continuous bolt preload, for pipes of the sizes

DN/OD1 [d1] …

SDR …

DN …

Operating pressure … bar

1. PE100 cross for connection to hydrant, reinforced design, with all-round push-fit coupling, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with special flange connection (VP flange) of the same nominal diameter with fibre-reinforced backing flange at outlet, drilled according to DIN EN 1092-1, with spring effect for continuous bolt preload, for pipes of the sizes

DN/OD1 [d1] …

SDR …

DN …

Operating pressure … bar

1. PE100 X-cross for connection to hydrant, reinforced design, with all-round push-fit coupling, pull-resistant according to DVGW, pressure class-compatible, with EPDM lip seal and dirt-repellent profile ring, with special flange connection (VP flange) of the same nominal diameter with fibre-reinforced backing flange at outlet, drilled according to DIN EN 1092-1, with spring effect for continuous bolt preload, for pipes of the sizes

DN/OD1 [d1] …

SDR …

DN …

Operating pressure … bar

**Proof of delivery:**

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