



SIMONA® PE 100 FM-Line

Pipes and fittings for firefighting water supply

SIMONA® PE 100 FM-Line A global benchmark





Certificate of Compliance

This certificate is issued for the following:

High Density Polyethylene (PE100) Pipe and Fittings, SDR11 Sizes DN90 through DN630 (as shown in attached listing)

Prepared for:

Simona AG Teichweg 16 D55606 Kirn Ianufactured at:

Simona AG Gewerbestraβe 1-2 D77975 Ringsheim Germany

FM Approvals Class: 1613

Approval Identification: 3051354 Approval Granted: November 17, 2014 Reissue Report: December 3, 2014

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.



Richard B. Dunne
Manager of Fire Protection
FM Approvals
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The SIMONA® PE 100 FM-Line range of pipes and fittings with FM certification offers a superior standard of safety and quality for use in subterranean fire extinguishing systems. What is more, SIMONA is the first plastics manufacturer worldwide to supply "FM APPROVED" pipes and fittings in sizes up to d 630 mm.

FM Global (Factory Mutual) is the world's largest industrial insurance company specialising in property and plant protection. It has defined exacting standards when it comes to testing the interior and exterior stress resistance and durability of specific products. These provisions go beyond those determined by national inspection and certification bodies.

Streamlining costs with SIMONA® FM-Line

Many industrial companies use underground piping systems for the supply of firefighting water in buildings. In this context, demand for FM-approved systems has increased significantly.

FM-approved products meet the highest standards in terms of quality and safety, as a result of which the costs generally associated with property insurance can be reduced dramatically wherever such products are deployed.

Given their outstanding properties, PE-based piping systems are a perfect choice for the supply of fire extinguishing water; they are capable of outperforming piping systems made of other materials.

Among the key benefits of PE pipes used in underground fire-fighting systems are high corrosion resistance, long service life and cost-effective operation.

Certifications

FM certification for SIMONA products applies to PE 100 pipes and fittings in sizes from d 90 to d 630 mm (SDR 11). They are approved for an operating pressure of 12 bar/175 psi at 20 °C/68 °F in accordance with FM Class Number 1613.

SIMONA® PE 100 FM-Line Product range and properties

Product range		
SDR 11	d (mm)	Operating pressure (bar/psi)
Pipes		
Pressure pipes	90 - 630	12/175
Fittings		
Elbows 90°, 45°	90 - 315	12/175
Bends, seamless 90° - 11°	90 - 630	12/175
Tees	90 - 500	12/175
Tees with reduced branch	140 - 630	12/175
Stub flanges	90 - 630	12/175
Reducers	110 - 630	12/175
End caps	90 - 630	12/175
Electrofusion sockets	90 - 630	16/232
langes		
Blind flanges	90 - 400	12/175
Loose flanges	90 - 630	12/175
Special flanges	250 - 560	12/175



SIMONA® PE 100 FM-Line test specimens

Highest quality and safety standard

Thanks to the FM certification of SIMONA® PE pipes and fittings, plant operators are assured of a consistently high quality standard that is recognised around the globe. The approved products meet the strict safety requirements of insurers. For plant operators, excellence in this area translates into more favourable insurance policies.

Extensive product range

SIMONA offers a comprehensive product range consisting of pipes, short/elongated fittings and flanges up to d 630 mm – all engineered from premium-quality PE 100. Combining excellent stress crack resistance with high impact strength, PE is the perfect material for use in subsurface water supply systems designed for firefighting purposes, an area in which products are generally exposed to extreme strain and stress.

Independent third-party monitoring

In addition to being subject to ongoing monitoring by SIMONA Quality Assurance, all products are independently tested and assessed as part of annual audits conducted by FM Global.

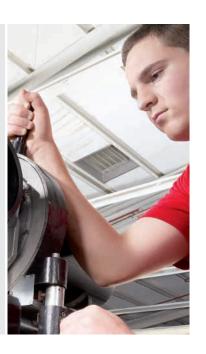


Welcome to SIMONA – Delivering quality and expertise

SIMONA is acknowledged as one of the leading producers and development partners in the field of thermoplastics. Drawing on our outstanding abilities in process engineering, we specialise in the production of sheets, finished parts, profiles, welding rods, rods, pipes, fittings and valves tailored to the most exacting standards.

Certified quality

Our products and services are designed to deliver the very best quality imaginable. The management systems operated by SIMONA AG with regard to quality, the environment and energy resources are certified in accordance with DIN EN ISO 9001, DIN EN ISO 14001 and DIN EN ISO 50001.



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