

Product brochure

RailPipe® system



The system for ideal railway track drainage with manufacturer-related product qualification (HPQ) for all pressure ranges



RailPipe® System – the all-rounder

The RailPipe system, consisting of drainage pipe and flushing and inspection shaft, is the first structured-wall pipe system to meet all the standards and requirements of Deutsche Bahn AG (DBS 918064 - 08/2022). It features manufacturer-related product qualification (HPQ) for **use in all pressure ranges** of the roadbed and track.

With RailControl and RailPipe, we now offer a sustainable and efficient overall system for all pressure ranges and applications in track drainage. The system convinces with highest quality standards and satisfies all requirements in terms of static capacity, safety, and long-term exposure to stress.

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RailPipe® system

Highest reliability with the RailPipe® system

With RailPipe and RailControl, FRÄNKISCHE has developed a perfect complete system for all requirements in track drainage. The pipe and shaft boast the highest quality standards and satisfy all requirements in terms of long-term exposure to stress, static capacity and safety.

The RailControl flushing and inspection shaft specifically designed for railway traffic requirements is the ideal addition to the practice-proven RailPipe drainage pipe. Both components have been ideally matched and form a homogeneous and efficient overall system providing highest functional reliability for planning engineers, users, and builders.

RailPipe and RailControl meet all technical requirements of DBS 918064 (08/2022) and feature the HPQ manufacturer-related product qualification for all pressure ranges.

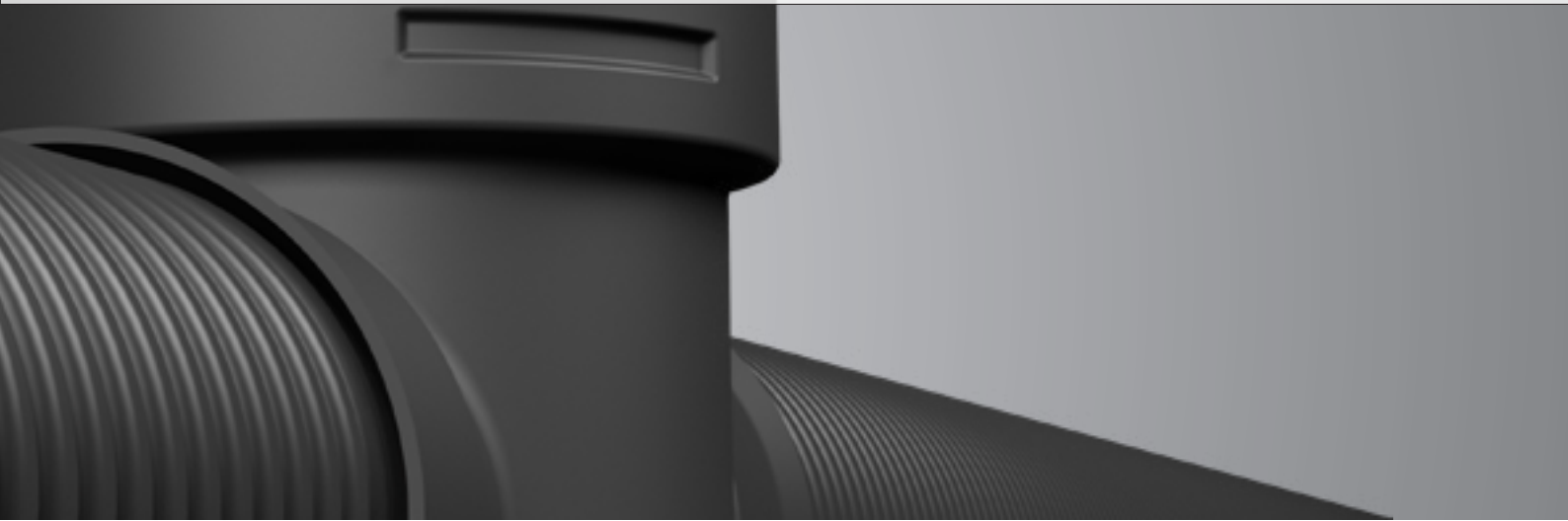
Approvals



NB

According to DBS 918064 (08/2022), the manufacturer-related product qualification for the internal pressure range will replace the EBA certification.





Striking advantages

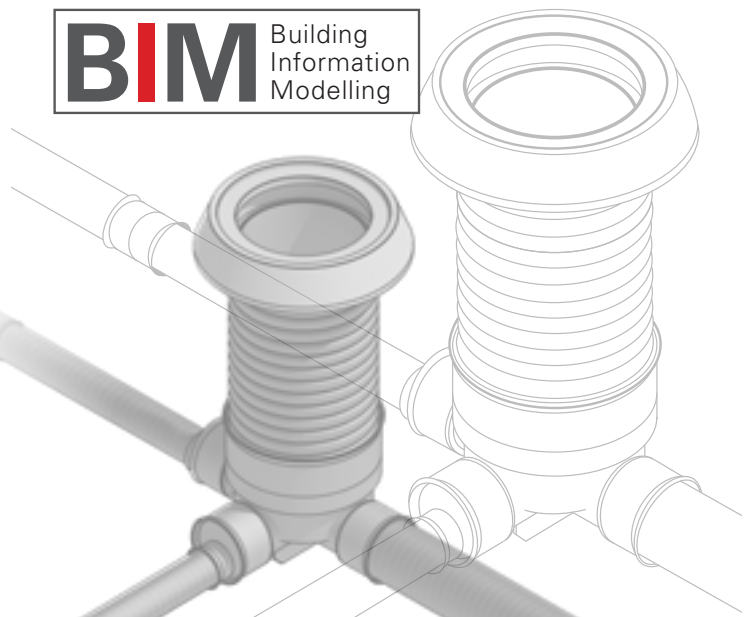
- One system – pipe and shaft – for all applications
- Can be used in all pressure ranges (outside the pressure range, external and internal pressure range)
- Satisfies highest requirements in terms of safety and stability
- Highest degree of planning security
- Solution matching the requirements of construction sites
- Simple, inexpensive and space-saving construction site logistics
- BIM data available

BIM – Building Information Modelling

3D visualisations, simulations, and documentation: Using Building Information Modelling, construction projects can be modelled in detail during the planning process, the construction phase, and across the entire life cycle. The model-based concepts are becoming more and more important also in civil engineering and constitute an important step towards digitisation.

From now on, our BIM data for the RailPipe system will support virtual planning of your projects.

BIM Building
Information
Modelling



www.fraenkische.com/en/bim

RailPipe® – drainage pipe

Tried-and-tested for ideal track drainage

Drainage pipes must withstand extreme stresses in the drainage of railway tracks. Using high-quality polypropylene and optimised profile geometry, FRÄNKISCHE offers an extremely hard-wearing drainage pipe for track drainage.

The RailPipe drainage pipe is the first structured-wall pipe to meet all the standards and requirements of Deutschen Bahn AG and features manufacturer-related product qualification (HPQ) for use in all pressure ranges of the roadbed and track.

The pipe is 100 % recyclable. The black outside guarantees high UV protection.

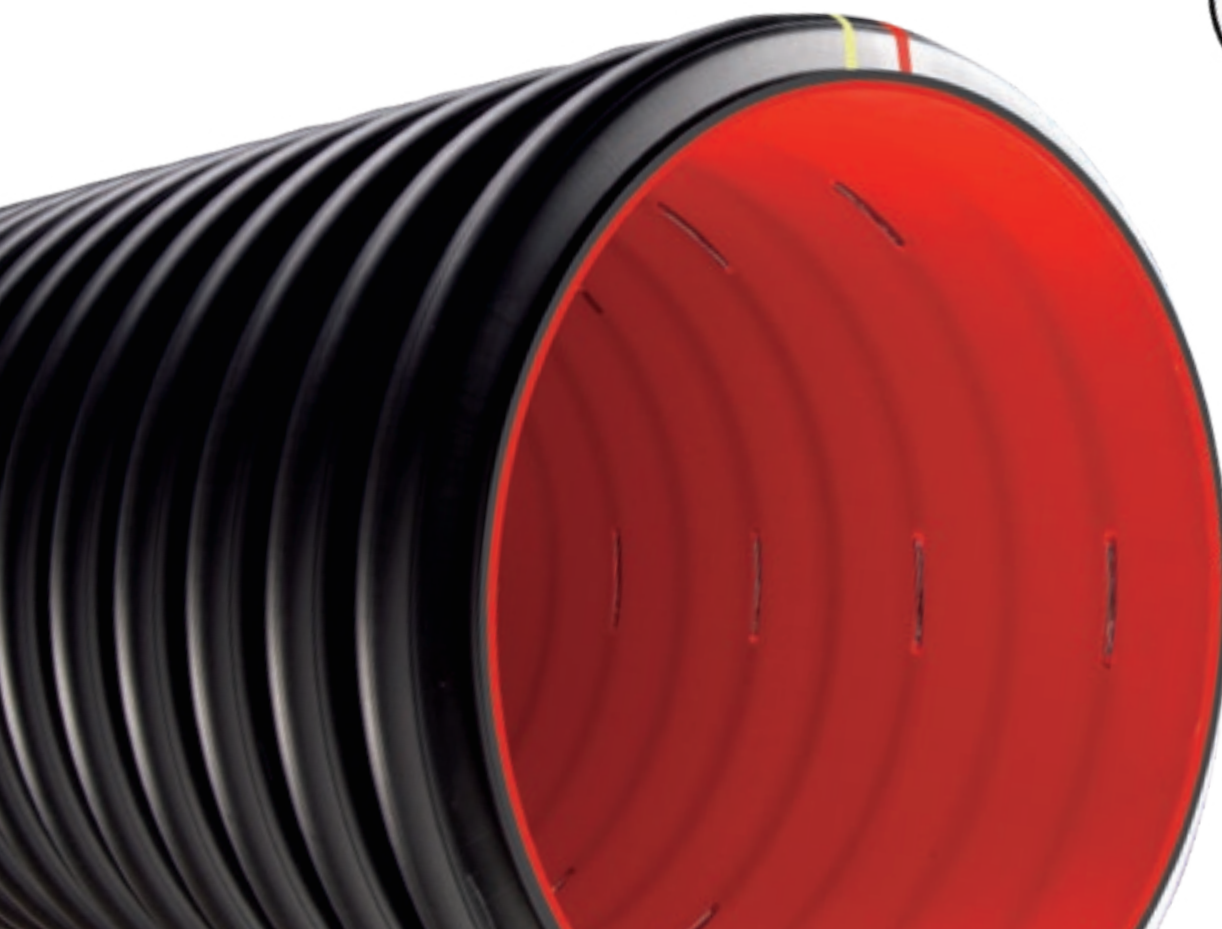
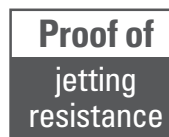
RailPipe is delivered in straight lengths of 6 m, including coupling and sealing ring. It can be cut to length as desired, and remaining pieces can be reused by means of couplings.

RailPipe complies with the extremely demanding requirements of Deutsche Bahn AG in terms of impact strength and flexural fatigue strength. Its round shape and smooth inside create a cross-section which is beneficial in terms of hydraulics and maintenance.

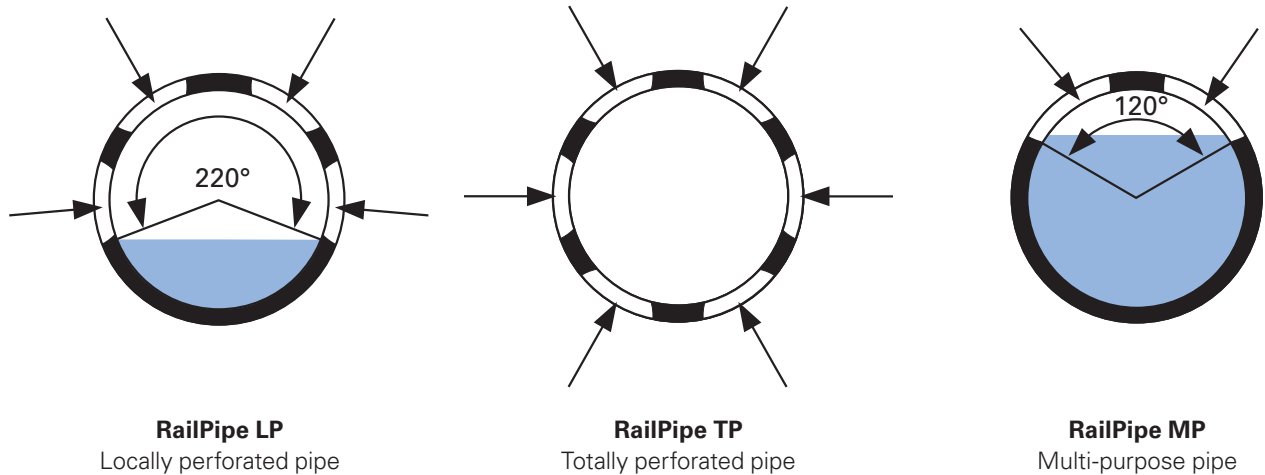
We guarantee RailPipe's continuous quality with permanent internal quality assurance and external quality control through the official testing centre of MFPA Leipzig.

NB

According to DBS 918064 (08/2022), the manufacturer-related product qualification for the internal pressure range will replace the EBA certification.



Designs



Characteristics

- Inside wall thickness larger than or equal to 3.5 mm for all nominal diameters
- Ring stiffness SN 16
- 2.5 mm perforation width for all nominal diameters
- PP material (new item)
- Structured-wall design (smooth inside, corrugated outside)
- Proof of jetting resistance according to DIN 19523 (material test)
- High infiltration rate thanks to perfectly arranged perforations and low water infiltration resistance
- PP structured-wall pipe according to DIN EN 13476 and DIN 4262-1, and DBS 918064 (08/2022)
- Continuous crown marking (red) and mark for coupling insertion depth

Application

Pressure ranges	RailPipe LP (DN 150–DN 600)	RailPipe TP (DN 150–DN 600)	RailPipe MP (DN 200–DN 600)
Outside	✓	✓	✓
External	✓	✓	✓
Internal	✓	✓	✓

RailControl – flushing and inspection shaft

The ideal addition to RailPipe®

The RailControl flushing and inspection shaft meets all the standards and requirements of Deutsche Bahn AG and features the manufacturer-related product qualification (HPQ) for use in all pressure ranges of the roadbed and track.

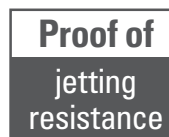
RailControl is available both as 180° shaft in two basic designs (each with inlet and outlet in nominal connection diameters of DN 250 and DN 400) and as 90° wye shaft 3/250. Standard nominal diameters ranging from DN 150 to DN 300 can be connected using reducers.

The one-piece PE shaft bottom features the known advantages of this material: optimum chemical resistance and impact resistance.

RailControl, with its modular design comprising shaft bottom and extension pipe, was specifically developed according to the specifications of DBS 918064. It also features a fully-fledged raceway.

The shaft's continuous inside diameter of DN 600 allows for easy inspection and flushing of the connected pipe systems.

The concrete support ring (BARD ring) included with the set allows easy connection of conventional standard covers 625 mm.



NB

According to DBS 918064 (08/2022), the manufacturer-related product qualification for the internal pressure range will replace the EBA certification.



RailControl 3/250



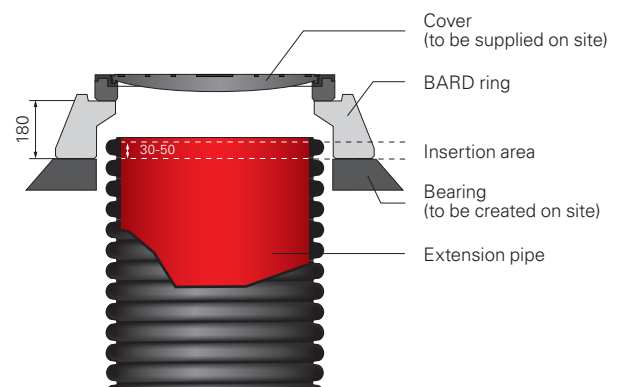
RailControl 2/400
(also available in nominal connection diameter 2/250)

Characteristics

- Inside diameter of shaft bottom and extension pipe DN/ID 600
- Resistant to acids, bases, oils, and greases according to DIN 8075, supplementary sheet 1
- UV-resistant, longer periods of storage outside possible
- Temperature resistant from -40 to +80 °C
- Extremely robust
- Extension pipe SN 16, black outside, red inside
- Statically substantiated, structural test by MFPA Leipzig
- Connection of conventional standard covers 625 mm using a BARD ring (class D concrete support ring)
- Height adjustment thanks to extension pipe which can be cut to length as required
- Easy construction site handling
- Fully-fledged raceway in the shaft bottom
- Proof of jetting resistance according to DIN 19523 (material test)



Inside view of shaft with raceway



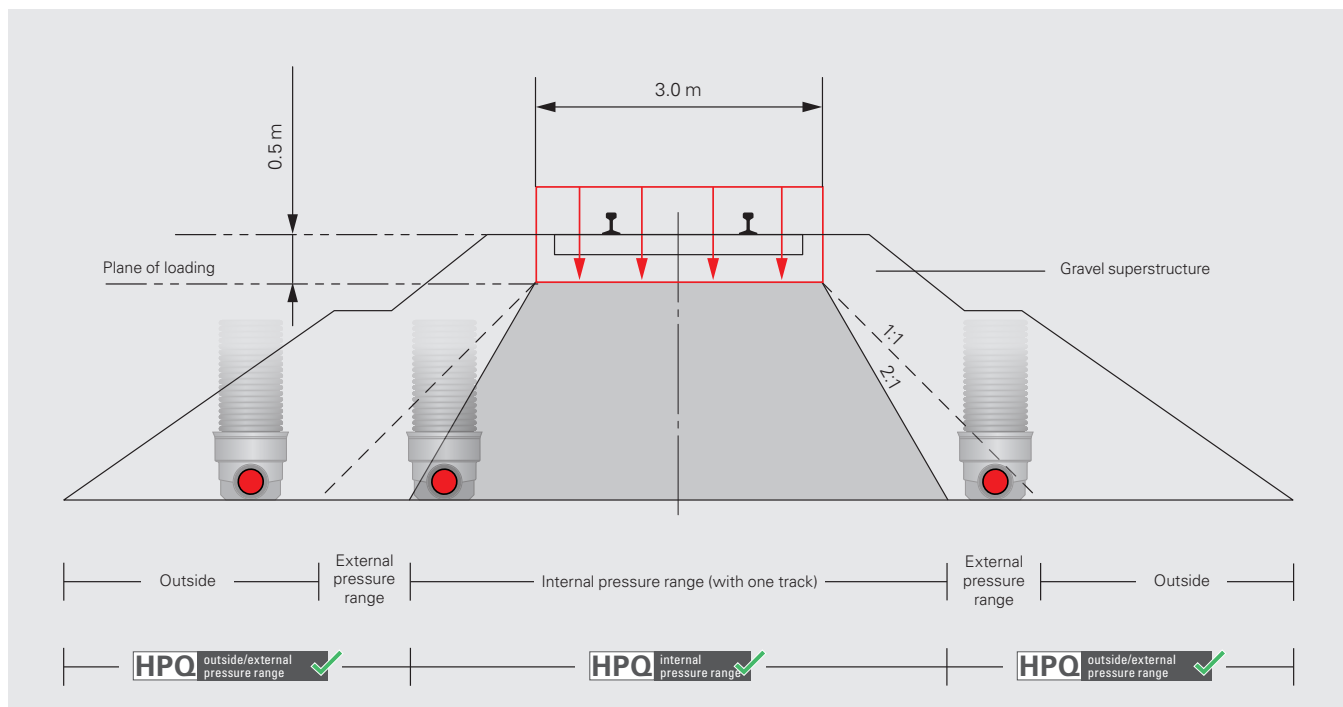
Shaft cover

Application

Pressure ranges	RailControl 2/250	RailControl 3/250	RailControl 2/400
Outside	✓	✓	✓
External	✓	✓	✓
Internal	✓	✓	✓



Application of RailPipe® and RailControl



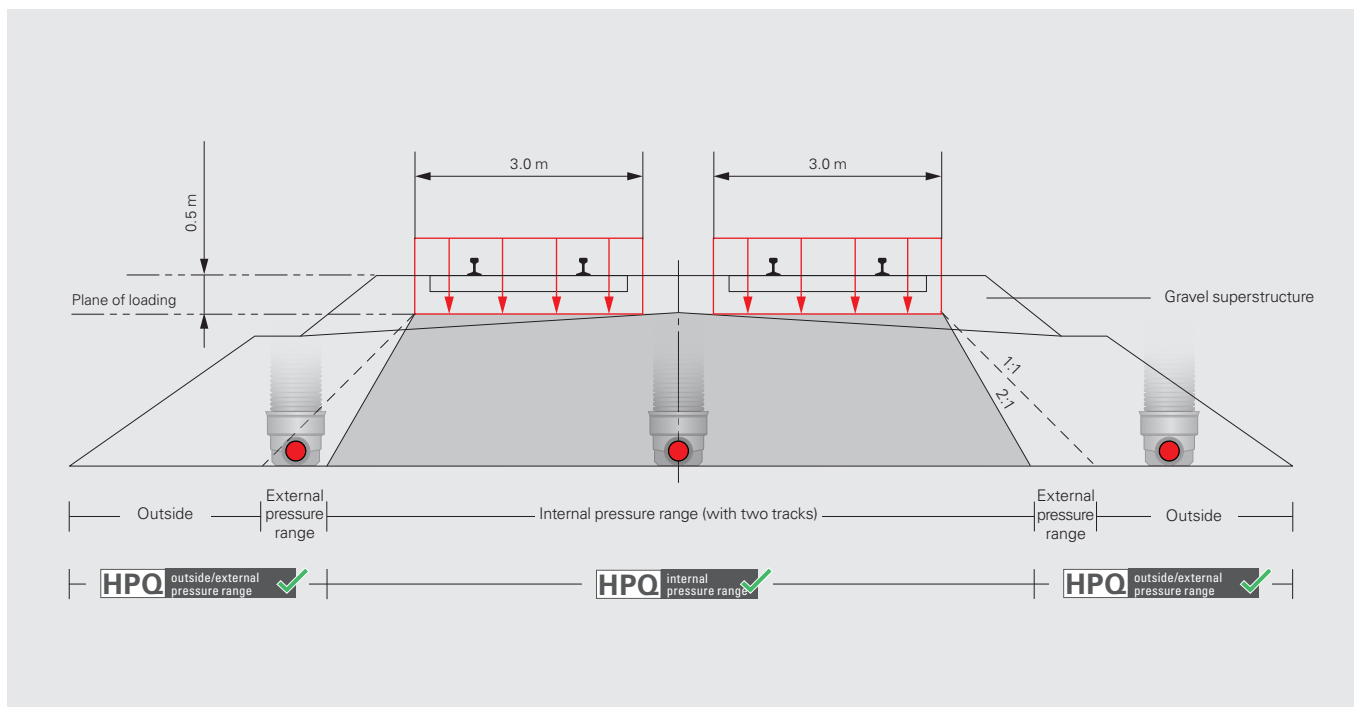
One-track system (system visualisation)

Unlimited flexibility thanks to the RailPipe® system ...

Controlled drainage of railway tracks is required for safety reasons. Accumulating infiltration water must be removed from waterbodies and soils in compliance with the protection requirements. RailPipe, the first structured-wall pipe system with all manufacturer-related product qualifications (HPQ) for track drainage, complies with the highest requirements in terms of safety and stability – also in the internal pressure range. With both manufacturer-related product qualifications, the RailPipe system offers absolute safety combined with maximum performance – not only outside of and in the external pressure range but also in the internal pressure range.



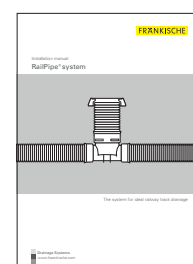
... also in the internal pressure range



Two-track system (system visualisation)

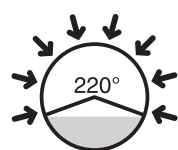
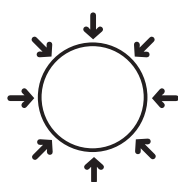
... with highest reliability and efficiency

The solution for contracting companies when it is about sustainable and efficient drainage of railway tracks. The numerous available nominal pipe diameters from DN 150 to 600 give ample scope for individual planning. Only **one** system for all applications – this does not only mean freedom in terms of planning but also reduces logistic complexity at the construction site.



Installation manual RailPipe
www.fraenkische.com/va-railpipe-en

RailPipe® and accessories product range overview



RailPipe® SN 16 drainage pipe

Locally perforated (LP), totally perforated (TP) and multi-purpose (MP) SN 16 PP pipe in proven structured-wall design (corrugated outside, smooth inside), according to DIN 4262-1, type R2 and DIN 13476. Complies with the special requirements of DBS 918064 (08/2022) of Deutsche Bahn AG. Features manufacturer-related product qualification (HPQ) for all pressure ranges.

Application: Specifically designed for track drainage (for all pressure ranges) or for applications with extreme requirements.

Product	Technical specifications		Cat. no.
	DN/ID	Outside Ø [mm]	
RailPipe – TP (totally perforated pipe)	DN/ID 150	175	54401150
	DN/ID 200	235	54401200
	DN/ID 250	294	54401250
	DN/ID 300	347	54401300
	DN/ID 400	458	54401400
	DN/ID 500	570	54401500
RailPipe - LP (locally perforated pipe)	DN/ID 150	175	54411150
	DN/ID 200	235	54411200
	DN/ID 250	294	54411250
	DN/ID 300	347	54411300
	DN/ID 400	458	54411400
	DN/ID 500	570	54411500
RailPipe - MP (multi-purpose pipe)	DN/ID 200	235	54421200
	DN/ID 250	294	54421250
	DN/ID 300	347	54421300
	DN/ID 400	458	54421400
	DN/ID 500	570	54421500
	DN/ID 600	682	54421600
RailPipe – UP (unperforated pipe)	DN/ID 150	175	54430150
	DN/ID 200	235	54430200
	DN/ID 250	294	54430250
	DN/ID 300	347	54430300
	DN/ID 400	458	54430400
	DN/ID 500	570	54430500
RailPipe – UP (unperforated pipe)	DN/ID 600	682	54430600

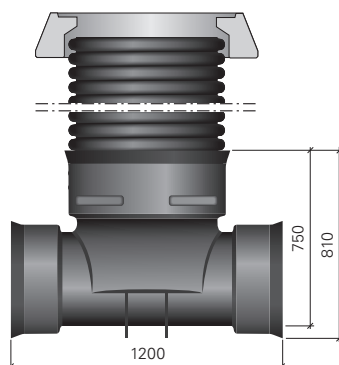
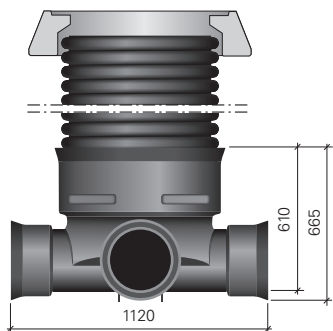
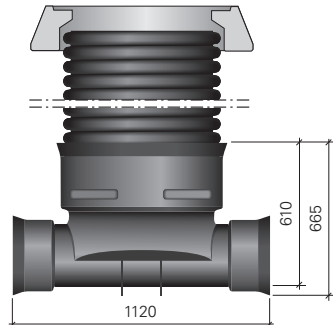
Please see the transport label on the pallet for the manufacturing date.

RailPipe® accessories

Product	Technical specifications	Cat. no.
RailPipe coupling sealing rings included	DN 150	54910150
	DN 200	54910200
	DN 250	54910250
	DN 300	54910300
	DN 400	54910400
	DN 500	54910500
RailPipe coupling sealing rings included	DN 600	54910600

Other fittings available on request.

RailControl and accessories product range overview



RailControl flushing and inspection shaft DN 600

PE/PP flushing and inspection shaft DN 600; monolithic shaft bottom with raceway; colour: black, inside of extension pipe: red; 180° shaft as an option 2/250 and 2/400; 90° wye shaft 3/250; complies with the special requirements of DBS 918064 (last modified 08/2022) of Deutsche Bahn AG; features manufacturer-related product qualification (HPQ) for all pressure ranges.

Application: Specifically designed for track drainage (for all pressure ranges) or for applications with extreme requirements.

Product	Technical specifications	Cat. no.
RailControl 2/250 (set)	180° shaft; 1 inlet / 1 outlet DN 250; consisting of shaft bottom, extension pipe DN/ID 600, 1.20 m length, sealing ring DN 600 and BARD ring	55505612
RailControl 3/250 (set)	3/250 90° wye shaft; DN 250; consisting of shaft bottom, extension pipe DN/ID 600, 1.20 m length, sealing ring DN 600 and BARD ring	55505613
RailControl 2/400 (set)	180° shaft; 1 inlet / 1 outlet DN 400; consisting of shaft bottom, extension pipe DN/ID 600, 1.20 m length, sealing ring DN 600 and BARD ring	55505652
Extension pipe	DN/ID 600; 1.2 m length	55545601
BARD ring	class D concrete support ring	55585025
Profile sealing ring	for reducer DN 250	55519254
	for extension pipe DN 600	55519604
	for reducer DN 400/DN 300	55519444
End plug	DN 250	55580254
Reducer	DN 250/DN 150	55512255
	DN 250/DN 200	55511255
	DN 400/DN 300	55512405
Support ring acc. to DIN 4034, Part 1	60/80/100 mm high	to be ordered/ supplied on site
Standard covers acc. to DIN EN 124	class A, B, C or D CW 610	to be ordered/ supplied on site
Gully gutter acc. to DIN EN 124 with bucket handle and stretched bucket (acc. to DIN 4052-A4)	class A, B, C or D CW 610	to be ordered/ supplied on site



Contact and service

Kontakt Deutschland



Für Ihre Fragen nutzen Sie unsere Ansprechpartnersuche
www.fraenkische.com/kontakt-drainage



Contact International

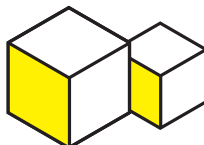


For your questions please use our contact search
www.fraenkische.com/contact-drainage



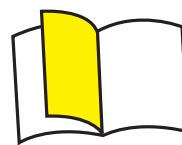
BIM data record

www.fraenkische.com/en/bim



CAD data

www.fraenkische.com



Information material

www.fraenkische.com

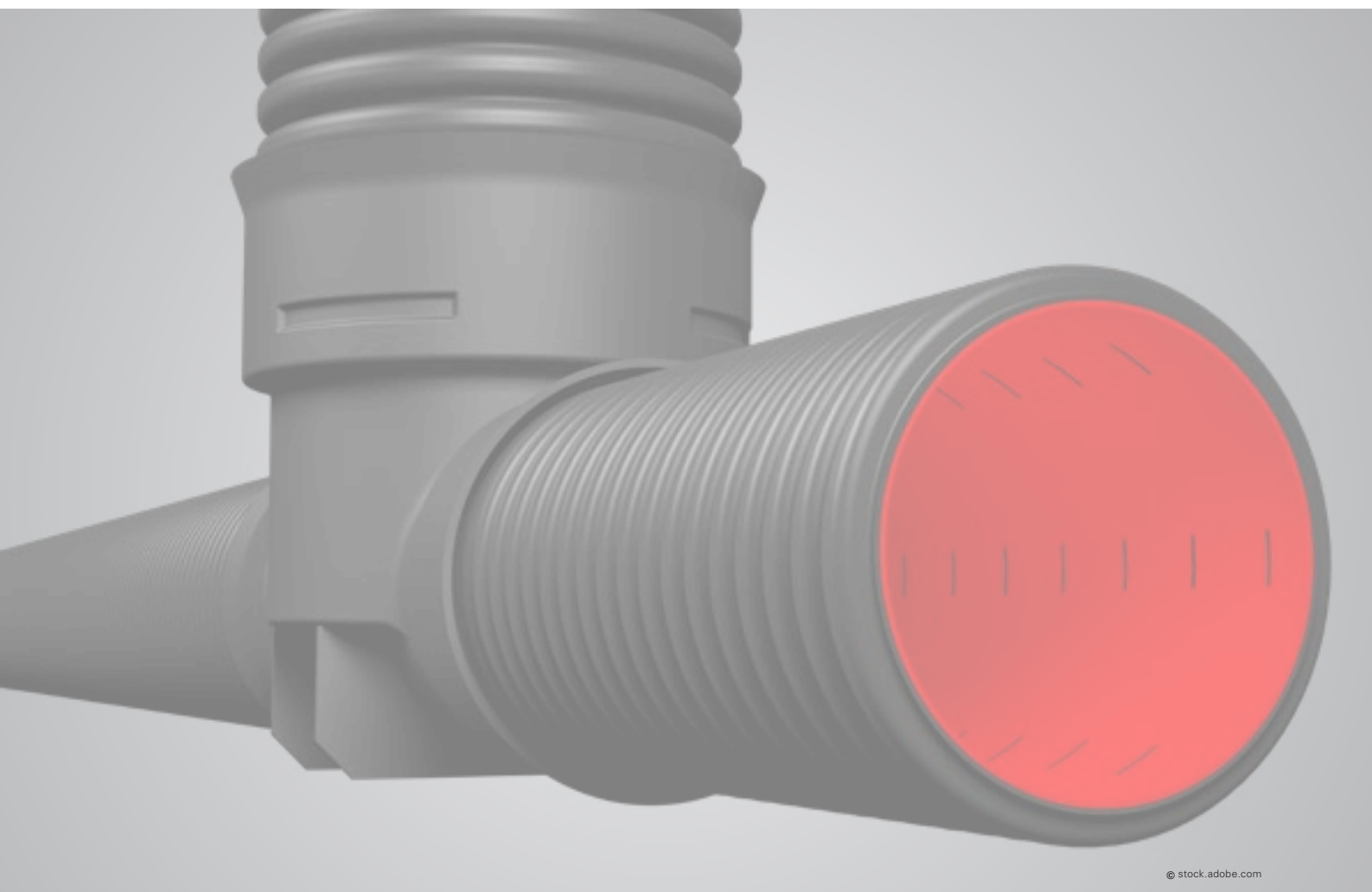
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Notes

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