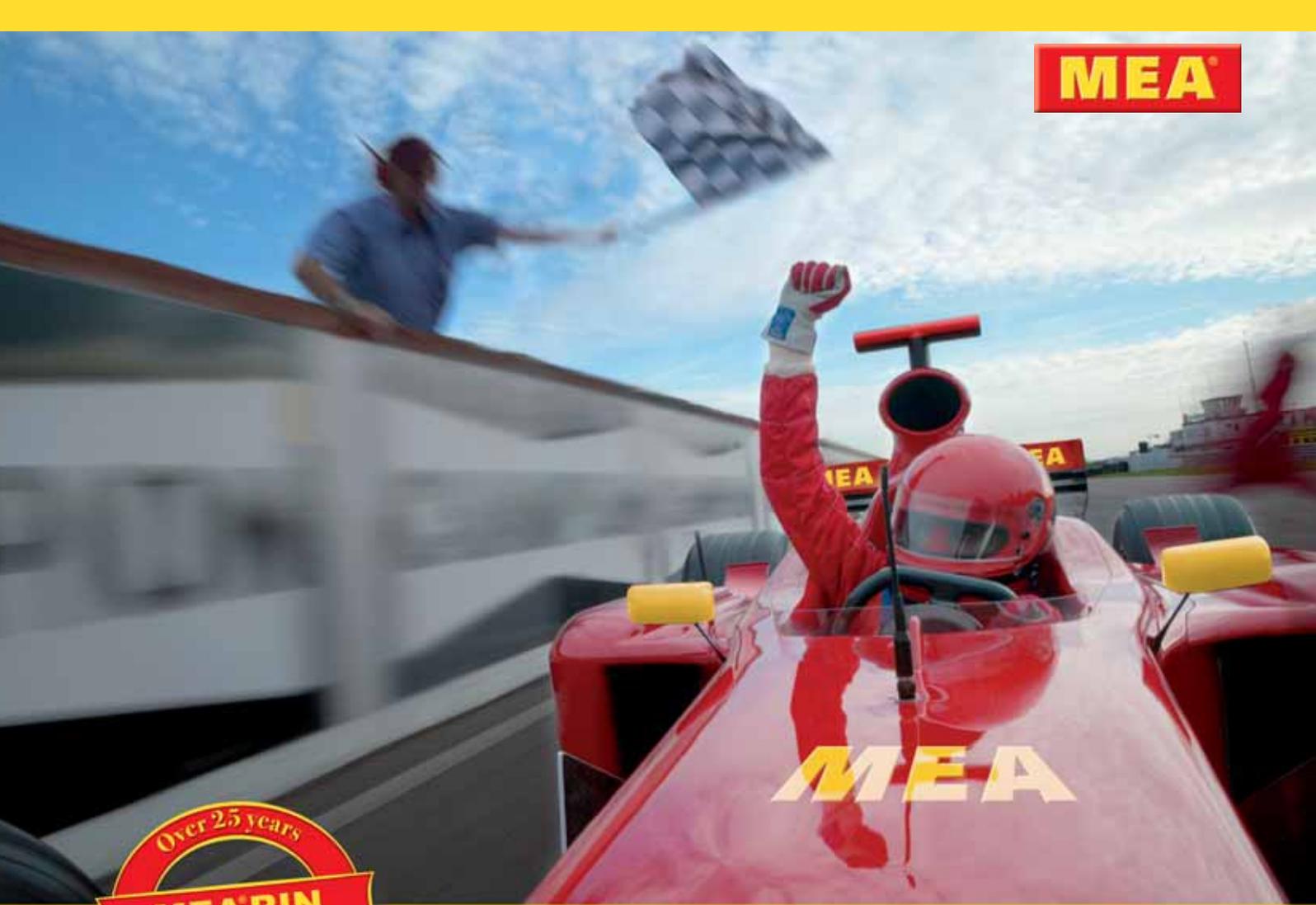


MEA®



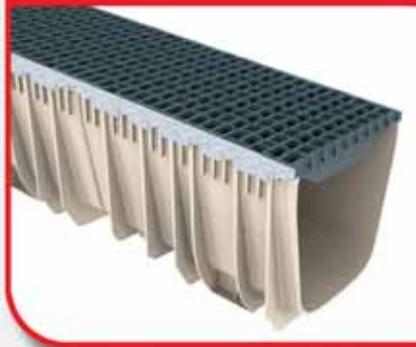
Experience the MEA®RIN formula

MEA®RIN Plus and Expert always give you the winning edge!

MEA®RIN Plus



MEA®RIN Expert



Drainage Systems

Innovation and experience – the drivers of success!

The MEA®RIN formula for your drainage systems

Strong. Robust. Effective.





What's been proven in motor racing only just makes the grade for MEA® RIN

Have you ever asked yourself what a drainage system has in common with motor racing? More than you might think, since many high-tech materials and state-of-the-art technologies can be found in both fields. Close-knit teams and precisely coordinated procedures are also paramount wherever high-precision performance is required under extraordinary conditions.

Discover for yourself, what makes MEARIN channel systems so special. **Experience the MEARIN formula.**

- 1 Extremely stable, yet lightweight high-tech material of GRP – proven in aircraft, ship and racing car construction
- 2 High resistance to breakage and an extraordinarily high load-bearing capacity guarantee a wide range of applications
- 3 Extremely resistant to abrasion and chemicals
- 4 25 years of ongoing, hands-on development by an innovative team of experts
- 5 Maximum discharge rates – even for low water levels – due to an improved cross-section shape
- 6 Intelligently-designed accessories down to the last screw guarantee consistently high quality
- 7 High temperature stability and resistance to ageing provide for an extended service life
- 8 Expert advice from experienced application engineers
- 9 First complete and sealable channel system in GRP to EN 1433 with CE conformity
- 10 Available with different grating options: i.e. slotted and mesh gratings in galvanized steel design gratings in galvanized and stainless steel, as well as ductile iron slotted gratings

GRP – A material given the chequered flag



Strong, resistant and dimensionally stable

Even the best racing driver will be hard pressed to win if he's denied the use of a competitive car. The development and use of modern, high-tech materials are becoming increasingly important factors in success and defeat – and not only in motor racing.

Extraordinarily robust, extremely resistant yet also surprisingly light; these are only some of the diverse properties that characterise glass-fibre reinforced polyester (GRP). The material has revolutionised the most diverse industries and has become indispensable in today's world. Its applications are wide and varied: rotor blades for helicopters, bodywork in motor racing, yachts and aircraft. In fact, glass-fibre reinforced polyester is used wherever extreme conditions prevail and special degrees of durability and rigidity are called for. Precisely as in MEA's drainage solutions.

As a material, MEA uses glass-fibre reinforced polyester in the form of SMC (sheet moulding compound) – a composite of polyester resin, mineral fillers, additives and glass-fibre mats. SMC is the most tried and tested GRP material and is compelling, particularly with the thermosetting matrix in the used variant, on account of its extremely high strength and dimensional stability. This results in extreme rigidity and only minimal longitudinal expansion, even for wide temperature fluctuations. In contrast to thermoplastic polymers, SMC cannot be reshaped and remains dimensionally stable permanently, once hardening or cross-linkage of its matrix has taken place.

Key advantages of the high-tech material GRP:

- Shatterproof and extremely resistant to abrasion
- Frost, rust and heat resistant
- Extremely low in weight
- Capillary-free structure with a smooth surface
- Resistant to chemicals
- Resistant to oil, petrol, hot asphalt, liquid manure and tartaric acid
- Free of halogens, asbestos and toxic heavy metals
- Able to be used flexibly
- Extremely good cost-performance relationship





Professionals with material expertise – a team of experts in development and fabrication

MEA has successfully fabricated a range of building products from glass-fibre reinforced polyester for over 30 years now and already developed its first drainage system in GRP in 1981. Since then, an innovative team of researchers and material experts has focused its efforts on the continual development of both the material and new product solutions. Two professional channel systems – MEARIN Plus and MEARIN Expert – represent a compelling outcome of this high level of material expertise.

To guarantee a consistently high material quality, production of this high-tech material takes place in MEA's own plant in France. The on-site development laboratories here create new GRP variants in line with requirements, i.e. fire-resistant, sound-absorbing or conductive materials.

MEA continually optimises its production-related processes, thereby creating the ideal conditions for

efficient and first-class fabrication. At temperatures of 150 degrees Celsius, the composite material is moulded into the desired shape under high pressure. On cooling, the resulting prefabricated constructional elements are used for a wide variety of tasks and applications such as light wells and drainage channels – always conforming to the most stringent requirements concerning quality and strength.

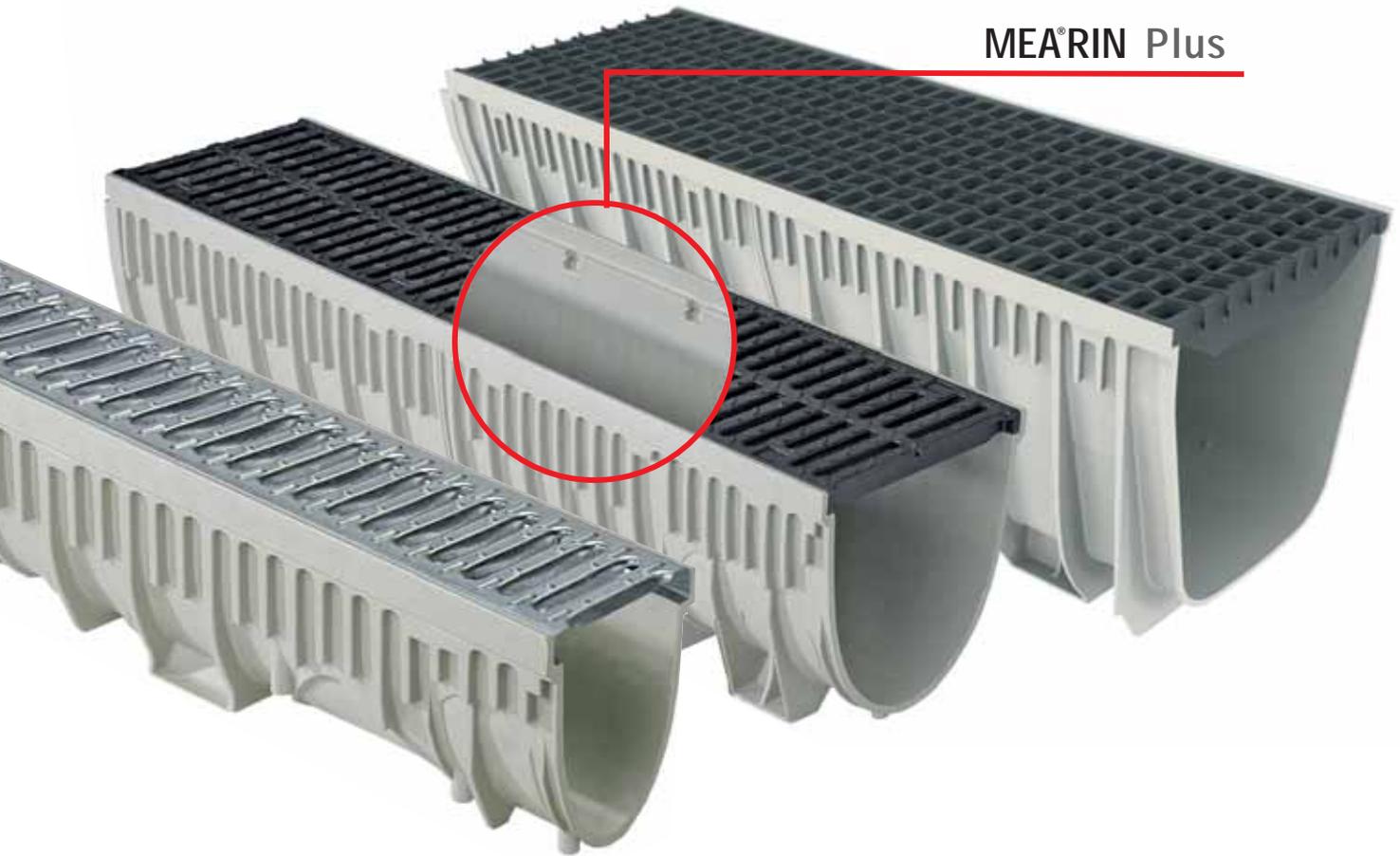
Fabricators from the construction industry, the automotive industry, but also companies active in medical technology and other fields place their trust in the many years of experience of the GRP experts at MEA. Depending on the application or field of use, the MEA team is able to develop customer-specific components in GRP that precisely meet design specifications.

MEA – The proven name for quality:

- Experience and material expertise for over 30 years
- Continuous research and product development
- An innovative team of experts for specific requirements
- Own plant ensures consistently high quality
- Proven a million times over in MEA and third-party products



The MEA[®]RIN channel system:

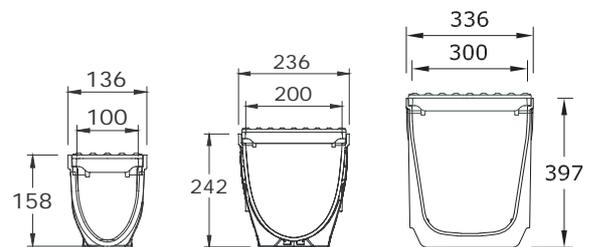


MEARIN Plus

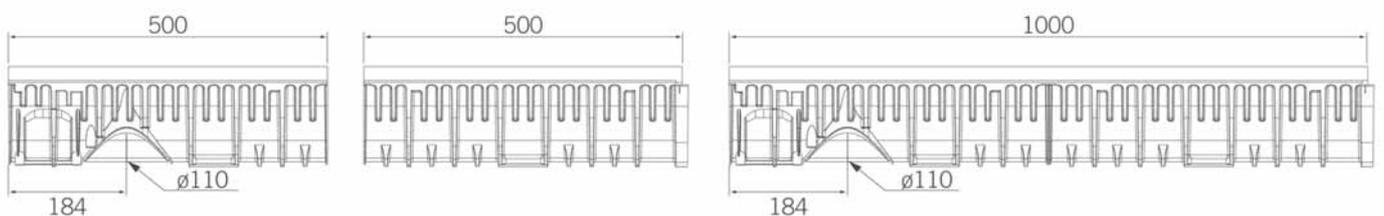
MEA[®]RIN Plus

- Channel body and edge entirely in GRP
- Available in nominal widths 100, 200 and 300
- Steel and ductile iron grating options
- Application fields: public areas, car parks, garden and landscape design
- Loading class to D400

MEARIN Plus cross-section
Nominal width 100, 200 and 300

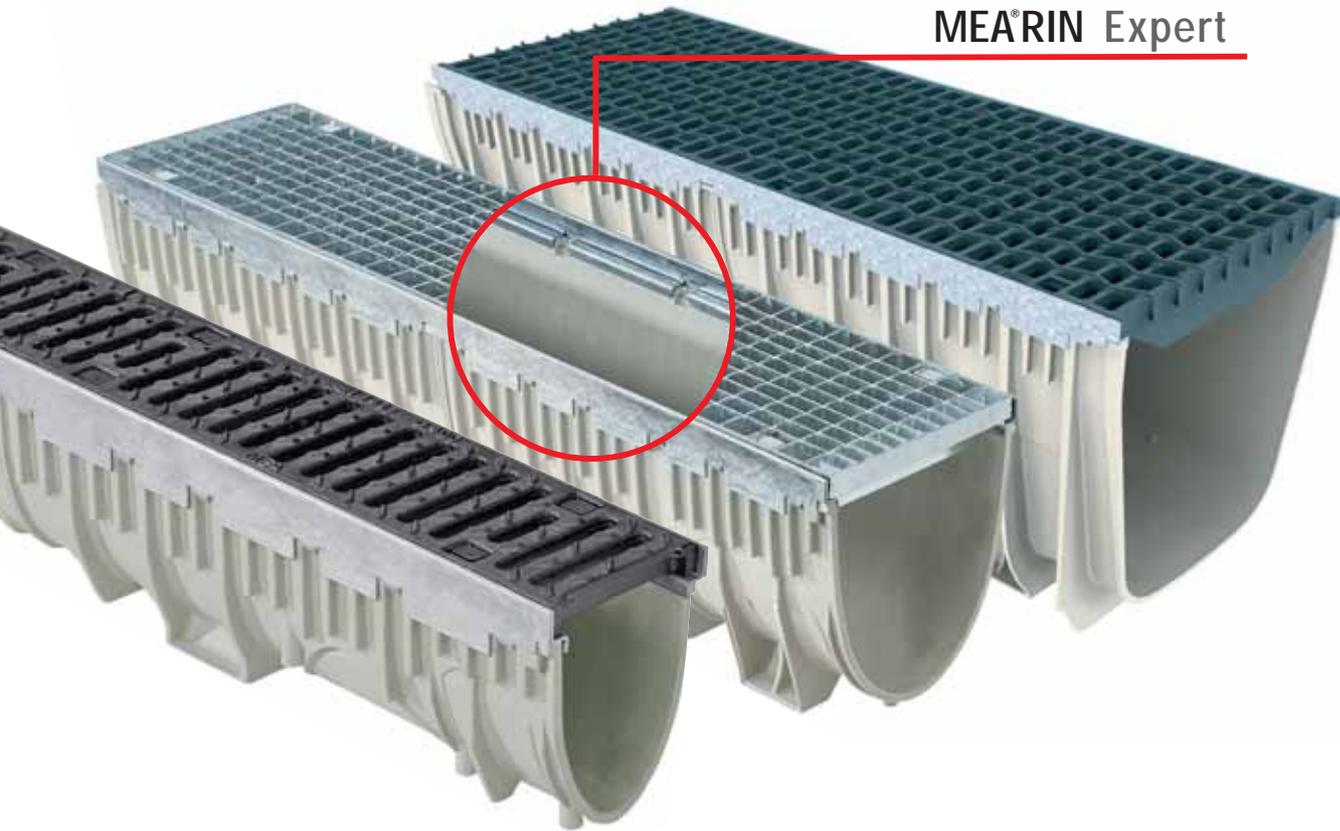


Side view, MEARIN Plus and Expert nominal width 100

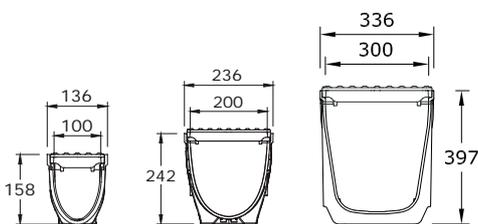


A strong team for your success!

MEARIN Expert



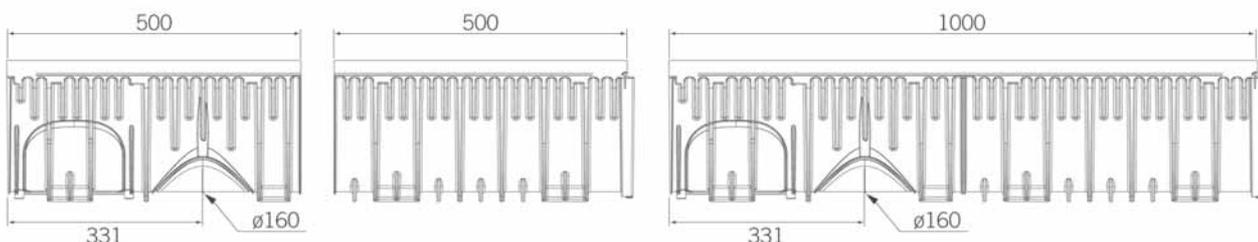
MEARIN Expert cross-section
Nominal width 100, 200 and 300



MEARIN Expert

- Channel bodies in GRP with permanently integrated edge protection in galvanized steel for extreme load-bearing capacities
- Available in nominal widths 100, 200 and 300
- Steel and ductile iron grating options
- Application fields: leisure parks, industrial areas, workshops, roads and traffic routes
- Loading class to E600

Side view, MEARIN Plus and Expert nominal width 200



The winning edge – thanks to intelligently-designed details

- The innovative STARFIX grating securement system simplifies installation and maintenance. 4-point locking prevents loose and rattling gratings, and also eliminates any longitudinal displacement. Each of the different grating types can be secured and removed quickly and easily with a single hand movement without the use of bolts or special tools. The whole process has never been as fast, or simple.

- MEARIN Expert: Permanently affixed 4-mm-thick edge protection in galvanized steel provides maximum strength. This allows MEARIN Expert to satisfy the most stringent demands and makes it the ideal solution for all drainage tasks in the heavy load sector.

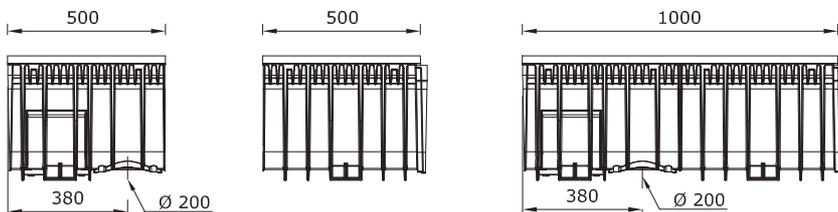


- The advanced design and extreme sturdiness of channel bodies allow for a wide range of uses extending to drainage solutions in the E600 load class.

- The optimised channel shape ensures improved discharge rates even for low water levels and an enhanced self-cleaning effect.

- The low, widely-spaced anchorage fins guarantee a permanently secure hold in the concrete bed.

Side view, MEARIN Plus and Expert nominal width 300





■ **Standardisation meets excellence:** The first complete and sealable channel system in GRP to EN 1433 with CE conformity.

■ **The channel bodies in GRP** of thermoset material quality guarantee a high load-bearing capacity. This advanced material makes channel bodies dimensionally stable and resistant to high and low temperatures, but also resistant to abrasion and chemicals.

■ **MEA®RIN Plus:** Channel body entirely in a specially-developed GRP for drainage solutions to loading class D400.

■ **The practical and easy-to-use connection system** ensures precise installation but also scope for a multitude of drainage system layouts.

Loading classes:

A 15	C 250	E 600
 <ul style="list-style-type: none"> ■ Pedestrians ■ Cyclists ■ Parks 	 <ul style="list-style-type: none"> ■ Lorries ■ Roadsides ■ Verges 	 <ul style="list-style-type: none"> ■ Industrial areas
B 125	D 400*	
 <ul style="list-style-type: none"> ■ Open and multi-storey car parks ■ Delivery vans 	 <ul style="list-style-type: none"> ■ Roadways 	

Fast, faster, STARFIX!

The patent-applied-for STARFIX system constitutes the innovative turbo when it comes to grating securement. The whole process has never been as fast, or simple: all of the different grating types can be secured and removed quickly and easily with a single hand movement without the use of bolts or special tools: Press-in! Click! Complete!

The sturdy 4-point locking system unfailingly prevents loose or rattling gratings and offers rugged protection against longitudinal displacement.

What's more, the channel cross-section remains completely unobstructed so that discharge rates remain unaffected. But STARFIX also comes out the winner for visual impact: the flush-fitting closure with the channel upper surface for every grating type results in an attractive drainage solution that really can take pride of place.



Press-in!



Click!



Complete!

STARFIX – The innovative grating securement system without bolts

- Innovative 4-point locking inside the channel body for a solid and secure fit, without any loose or rattling parts
- Protection against longitudinal displacement of grating covers
- Long service life, as no movable parts or parts subject to wear
- No reduction of the discharge cross-section, as the complete channel cross section remains unobstructed
- Simple and fast insertion and removal of gratings with a single hand movement – without the need for special tools
- Particularly smooth and quiet thanks to the sound absorbing securement system

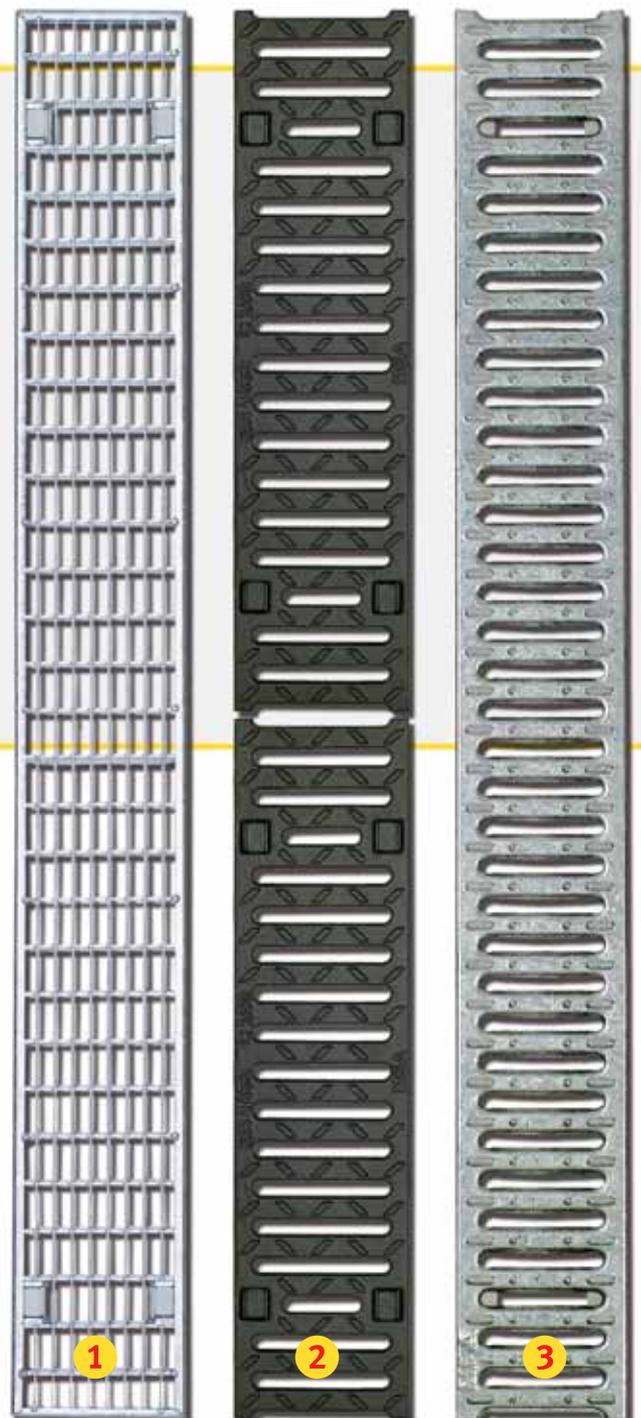
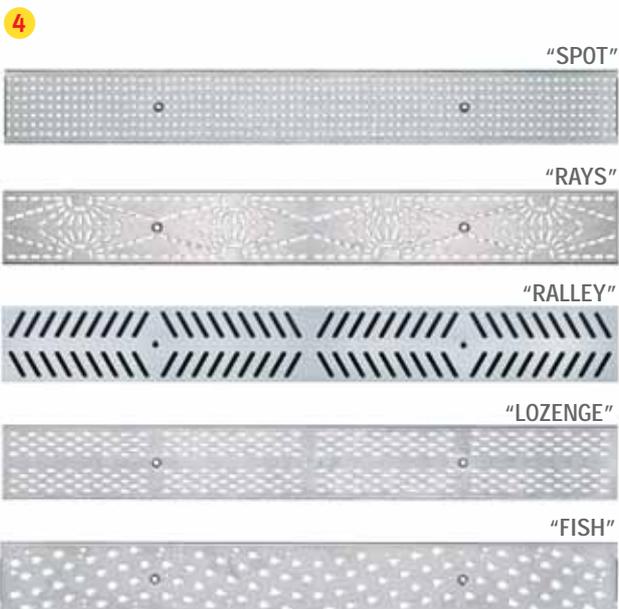
Always gripped perfectly

Gratings are to channels what tyres are to racing cars: they are the point of contact between the channel and surface, respectively between the car and track – it goes without saying then that precision but also a certain degree of adaptability are essential here.

The various design and material alternatives – slotted gratings and mesh gratings in galvanized steel, design gratings in galvanized and stainless steel as well as ductile iron slotted gratings – make the MEA®RIN channel system superbly suited for every possible need and application. Whether MEA®RIN Plus or Expert, with a nominal width of 100, 200 or 300 – you'll always get the best possible combination.

Grating options

- 1 Mesh gratings:** The traditional channel grating cover comprising a hot-dip galvanized pressed grating. For loading classes A15 to D400
- 2 Ductile iron slotted gratings:** Especially suitable for extremely high loads and highly frequented surfaces. For loading classes C250 to E600
- 3 Slotted gratings in galvanized steel:** The traditional bar and slot design is a visual alternative to mesh gratings. Particularly strong and durable. For loading classes A15 to C250
- 4 Design gratings in galvanized and stainless steel:** Five different designs for clear width 100. Loading class A15.



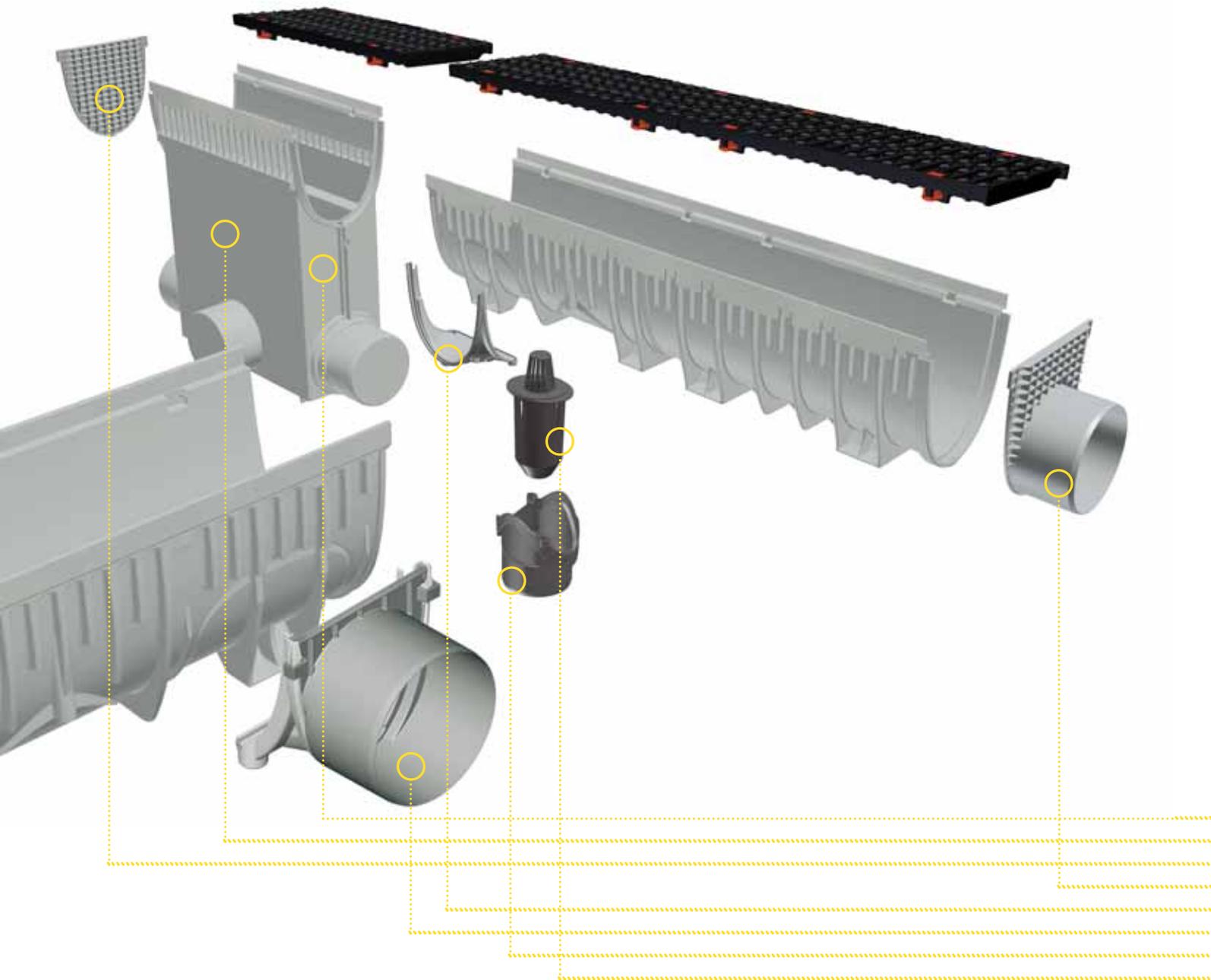
Tuning made easy – with complementary accessories that integrate perfectly

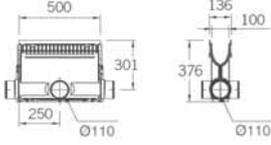
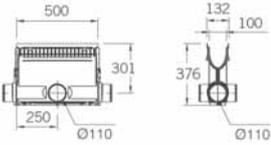
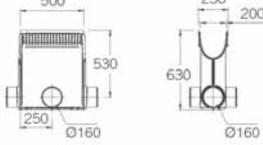
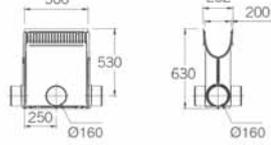
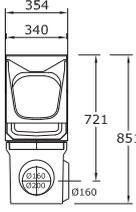
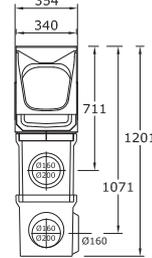
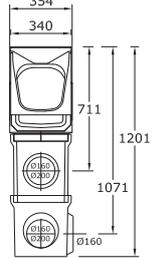
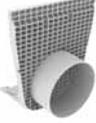
Have you ever seen a state-of-the-art racing car being held together by cheap bolts? Or a high-tech tyre fitted with conventional valves? No?

There are good reasons for this: successful systems are characterised by being well-designed down to the smallest detail and the fact that all of the system facets complement one another perfectly. The extensive accessories available for

MEARIN drainage systems facilitate user-friendly installation and extremely simple assembly. From the silt box down to the last screw – MEARIN offers a complete range of accessories from a single supplier, thereby guaranteeing a proven and consistently high quality.

MEARIN – always the best possible solution, whenever performance and precision are called for.



<p>■ Silt box NW100</p> 	<p>■ Plus NW100</p> 	<p>■ Expert NW100</p> 
<p>■ Silt box NW200</p> 	<p>■ Plus NW200</p> 	<p>■ Expert NW200</p> 
<p>■ Silt box NW300</p> 	<p>■ Plus NW300</p> 	<p>■ Expert NW300</p> 
<p>■ Silt box NW300</p> 	<p>■ Plus NW300</p> 	<p>■ Expert NW300</p> 
<p>■ End cap closed NW100/200</p> 	<p>■ End cap open NW100/200</p> 	<p>■ Corner- and T-connector NW100/200</p> 
<p>■ Outlet lateral NW100/200</p> 	<p>■ Outlet NW100/200</p> 	<p>■ Gully trap NW100/200</p> 
<p>■ End cap closed NW300</p> 	<p>■ End cap open NW300</p> 	<p>■ Corner- and T-connector NW300</p> 
<p>■ Outlet NW300</p> 	<p>■ Air trap NW300</p> 	



*For enquiries in the UK
and Ireland:*

ME A UK Limited

Rectors Lane
Pentre
Deeside
Flintshire
CH5 2DH
Telephone: 0 1244 53 44 55
Fax: 0 1244 53 44 77
uk.technical@mea.de
www.me-a-group.com
www.mearin.com

For all other enquiries:

ME A Drainage Systems

Ambachtsweg 18
7021 BT Zelhem
P.O. Box 90
7020 AB Zelhem
The Netherlands
tel: (+31) 314 62 77 62
fax: (+31) 314 62 77 77
sales.info@nl.me-a.de
www.me-a-group.com
www.mearin.com



ME A Drainage stands for tailor-made drainage solutions and, as a channel manufacturer, offers wide-ranging multi-material expertise. The three materials of concrete, polymer concrete and glass-fibre reinforced polyester cover all possible drainage requirements. The universally applicable MEARIN channel system is the compelling outcome stemming from long-standing experience and innovative concepts. **ME A Drainage** will always offer you the best-possible solution to all sorts of applications: from garden and landscape design, roads and parking areas, though to industrial areas and workshops.

See for yourself –

ME A always puts you in the fast lane

Your partner for ME A Drainage

