



Water Management Solutions

for Europe, Middle East & Africa

Professional Drainage

**Your knowledgeable and trusted partner
for the best in water management solutions**



www.norma-watermanagement.com



A close-up, high-speed photograph of water splashing, creating numerous droplets and ripples. The water is a deep, vibrant blue, and the background is a soft, out-of-focus gradient of light blue and white, suggesting a bright, airy environment. The overall composition is clean and modern, emphasizing the fluidity and clarity of water.

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NORMA Group – Customer Value through Innovation



NORMA Group is a global market and technology leader with strong growth prospects in attractive niche markets for engineered joining technologies. The company manufactures and sells a wide range of high-quality engineered joining technology solutions in the following water management categories: professional drainage, drip irrigation, landscape, valve and meter boxes, clamping, connecting and fixing solutions. These are often mission-critical for the performance, reliability and quality of the respective customer end products. NORMA Water Management solutions provide the highest user experience thanks to easy tool-free installation, reduced need for maintenance and excellence product performance.

Headquartered in Maintal, Germany, NORMA Group has a global network, which includes 29 manufacturing facilities as well as numerous sales and distribution sites across Europe, the Americas and Asia-Pacific. The company offers more than 35,000 high-quality products and solutions to customers in 100 countries in a wide range of industries.



NDS® – We put water in its place



Since 1972, NDS has produced plastic drainage and landscape products. From the beginning, our commitment to leading the industry has been unwavering, leading to remarkable innovations and state-of-the-art products that fit every environment, every schedule, every need.

NORMA Group acquired NDS in 2014 and represents another important step toward expanding its global position in the area of water management, by expanding its product portfolio and geographic presence in response to the megatrend of water scarcity.

Today, our commitment to providing one-source solutions has led to the development of superior quality drainage and landscape products, fittings, valve and meter boxes, as well as drip and micro irrigation products. No product is added to our line without meeting exhaustive testing and extensive research requirements.

"NDS products have been a reliable and trusted choice for use on over 500 projects. Never a problem, never a failure."

David Silver, AAA Landscape Specialists, Inc. President and CEO



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NDS[®] Professional **Drainage**

From your backyard patio to the neighborhood aquatic center, from the factory floor to a professional sports facility, NDS offers the right drainage solutions. Our product range includes: channel and trench drains with grates, catch basins with grates, drainage connectors, pop-up drainage emitters and subsurface drainage and infiltration solutions.







SUSTAINABLE SURFACE WATER SOLUTIONS



NDS offers the S5 system for the sustainable management of surface water. The system consist of products covering 5 water management areas: capture, filtration, conveyance, detention & infiltration and overflow. Components of the S5 system can be flexibly configured to meet a wide variety of residential and commercial applications.

Sustainable Surface Water Solutions



S5 by NDS™ offers a comprehensive solution in line with Low Impact Development policies by managing surface water as close to its source as possible through runoff reduction and quality enhancement at the site scale. The S5 system is built around known and trusted components, providing solutions that offer five key benefits:



- 1 Conservation of water resources to improve our well-being
- 2 Management of surface water at the source to reduce downstream impact
- 3 Flexibility of system footprint to allow for adaptive implementation
- 4 Mitigation of pollution and erosion to protect water systems
- 5 Replenishment of groundwater to help ensure future supply

A single-source solution, S5 by NDS is easy to specify and offers up to **250% more detention volume than traditional gravel systems.**

Design Your S5 System

An effective on-site surface water system can be designed in five easy steps:

- 1 **Identify Sources** – Surface water runoff may come from point sources like downspouts, as sheet flow from parking lots, irregularly through drainage ways in the landscape or even as elevated groundwater.
- 2 **Select Method of Capture** – Each runoff source has a practical method of capture for conveyance to the detention and infiltration area.
- 3 **Determine Peak Flow and Detention Volume** – The quantity of runoff for a given rainfall event over a defined area is easily calculated when surface type and rainfall intensity are known by using the Rational Method formula $Q = CiA$. Applicable regulations generally provide guidance on the rainfall intensity to use for a given set of circumstances.
- 4 **Size the System** – Detention and infiltration devices have measured holding capacities. Select the appropriate quantity and arrangement of devices to handle the predetermined runoff volume calculated above. Also consider the capacity of conveyance and overflow piping.
- 5 **Determine Field Layout** – Site constraints including setbacks, landform, soil types, fixed objects and open space, among others, will inform the location and arrangement of system components. Each element of runoff capture, filtration, conveyance, detention, infiltration and overflow must be considered.

Design Your S5 System

CAPTURE

Catch basins receive runoff from downspouts and landscaped areas. **Channel drains** accept sheet flows from paved walks and parking.

FILTRATION

Basins and channel grates provide a front line of debris filtration; adding fabric **filters** contributes further removal of fines from surface water, extending system life.

CONVEYANCE

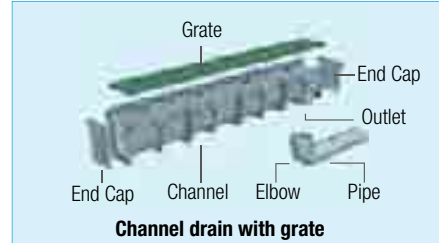
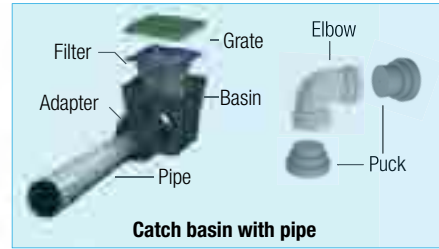
Smooth-wall and corrugated pipe with compatible fittings and adapters convey surface water from the point of capture to the detention and infiltration area. Select pipe type and set pipe slope to handle the anticipated runoff volumes based on established pipe-flow characteristics. Using EZflow for conveyance may reduce the footprint of downstream detention and infiltration areas.

DETENTION & INFILTRATION

- **Flo-Well**® manufactured dry wells provide 189.25 liters of detention volume. Each unit has multiple connection points including sidewall and top-cover knock outs to receive 7.62 cm to 20.32 cm pipes. Flo-Wells are stackable and can be arranged in multiple configurations.
- **EZflow**® engineered French drains are 3 m bundles of Poly-Rock aggregate with or without corrugated drain pipe. Bundles are available in 17.78 cm, 25.4 cm and 38.1 cm diameters, with or without 7.62 cm, 10.16 cm or 15.24 cm pipe, respectively. A standard infiltration trench consists of a 3 m bundle with 10.16 cm pipe atop two 38.1 cm aggregate-only bundles, providing over 378.54 liters of detention volume.

OVERFLOW

Pop-up emitters allow excess runoff beyond system capacity to discharge in a safe location.





SUSTAINABLE SURFACE WATER SOLUTIONS

NDS S5 components can be configured to meet a wide variety of residential and commercial applications.

CAPTURE

S5 offers several options to collect surface water from various sources.

- **Catch basins** effectively function as area drains and for downspouts from roofs
- **Channel drains** intercept sheet flow from paved surfaces
- **Permeable grass and gravel paver systems** with underdrains collect surface water from walkways and parking areas when used as alternatives to traditional impermeable solutions

FILTER

Prevent debris and other suspended solids in surface water from impairing system function.

- **Basin** and **channel grates** provide a front line of mechanical filtration
- **Fabric filters** contribute further to the removal of fines from surface water, extending system life
- **Grass and gravel paver systems** naturally filter and clean surface water while flowing through the S5 permeable paver solutions

CONVEY

Move surface water from its sources to downstream detention, infiltration and overflow components.

- Smooth-wall and corrugated **pipe with appropriate fittings** and **adapters** have proven flow characteristics to get the job done
- Using **EZflow®** for conveyance will also increase system detention and infiltration, effectively reducing the footprint of the downstream detention area

DETAIN

S5 detention components provide efficient volume to minimize runoff and maximize infiltration.

- **Flo-Well®** dry wells and **EZflow®** infiltration-trench arrangements have defined volumes for this purpose
- **Flo-Well®** has **250% more detention volume** than traditional stone-filled dry wells

INFILTRATE

Arrange **Flo-Well®** dry wells and **EZflow®** infiltration trenches in customizable configurations and at depths suitable to existing site conditions, soil types and groundwater elevations.

- **Flo-Well®** has an open bottom and side knockouts to allow direct infiltration
- **EZflow®** maximizes soil-contact area for effective infiltration

OVERFLOW

Allow for excess surface water beyond the design storm to overflow from the system in a safe, suitable downstream location.

FILTER
Basin and channel grates
Fabric filters in basins
Grass and gravel pavers

CAPTURE
Catch basins
Channel drains

CONVEY & INFILTRATE
Pipes and fittings
EZflow®
Flo-Well®

DETAIN & INFILTRATE
EZflow®
Flo-Well®

THE NDS SOLUTION

Whether you need a dry well, French drain or infiltration trench, NDS has you covered with innovative and proven subsurface drainage and surface water infiltration products. The EZflow® French drain system and Flo-Well® dry well provide trusted performance for multiple applications and are lightweight and easy to install. These engineered solutions are proven time-and-labor savers that outperform traditional systems in flow-through and storage capacity. When performance and sustainability matter, NDS solutions are the preferred choice of contractors, engineers and landscape architects. EZflow® and Flo-Well® are made in the US and are designed to protect the environment when used together as a water management system, by increasing system efficiency and by contributing to the proportion of recycled materials.



CAPTURE

Catch basins
Channel drains
Grass and gravel pavers



CAPTURE

Grass and gravel pavers



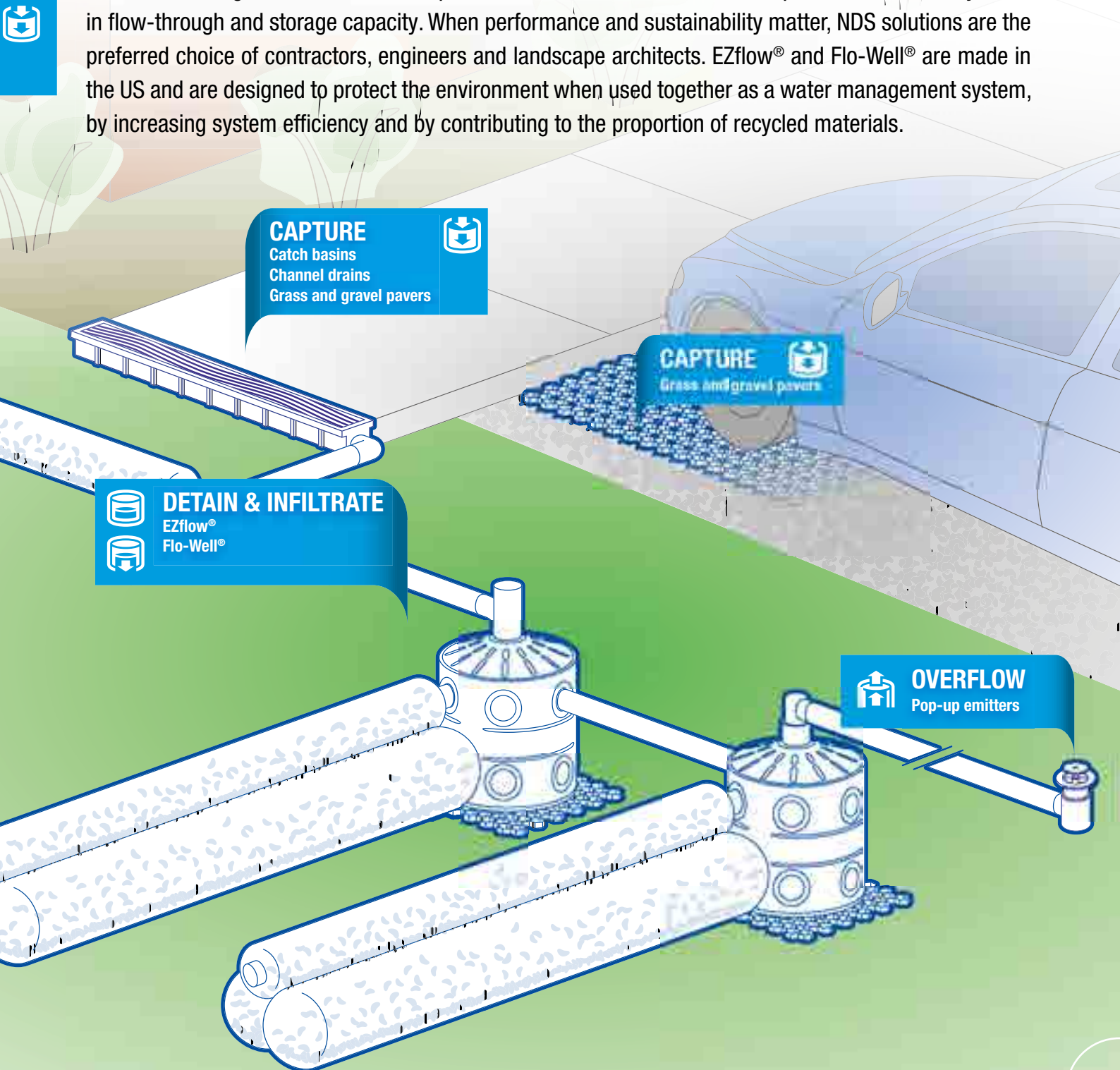
DETAIN & INFILTRATE

EZflow®
Flo-Well®



OVERFLOW

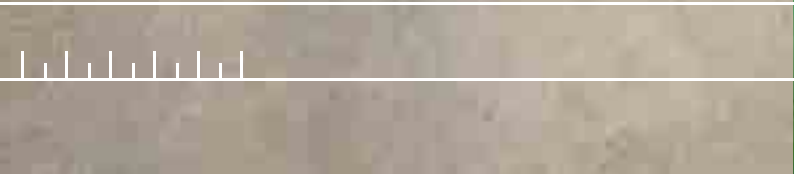
Pop-up emitters



RANGE OVERVIEW

NDS offers a comprehensive product range for both residential and commercial applications, including: driveways, tennis courts, parking lots, sidewalks, warehouses, patios, swimming pools & spas, sports facilities, washdown areas, nurseries & greenhouses, running tracks, manufacturing facilities, loading docks, plazas, courtyards and landings. Our product range covers channel and trench drains with grates, catch basins with grates, drainage connectors, pop-up drainage emitters and subsurface drainage & infiltration.







Micro



Mini



Spee-D®

MICRO CHANNEL™ PROFILE DRAINS

- "3 m" channels with slotted openings*
- Efficient draining performance
- Greater draining surface than Micro and Mini Channel™
- Multiple colors and decorative patterns of grates available
- Easy and precise installation
- Can be cut to size (plastic elements)

MINI CHANNEL™ PROFILE DRAINS

- "1.8 m" long channels with "30.5 cm" and "91.4 cm" long grates*
- Very good draining performance at low cost
- Greater draining surface than Micro Channel™ and lower price than Spee-D® Channel
- Multiple colors and decorative patterns available
- Easy and precise installation
- Can be cut to size (plastic elements)

SPEE-D® CHANNEL PROFILE DRAINS

- "1.2 m" or "3 m" long channels with "61 cm" long grates*
- Excellent draining performance
- Greater draining surface than Micro and Mini Channel™
- Multiple colors and decorative patterns of grates available
- Easy and precise installation
- Can be cut to size (plastic elements)

* Dimensions mentioned are orientational. Check the drawings or technical datasheets for exact dimensions.

PROFILE CHANNEL DRAINS – MICRO, MINI AND SPEE-D®

Unique patented flying buttress design provides load-bearing support from both sides as well as underneath.

Available in three sizes

- Micro Channel™ for residential pools and spas
- Mini Channel™ for landscapes, pools, decks and garage driveways
- Spee-D® Channel for driveways, large decks and commercial areas

Unique flanges on the bottom of the channel provide an anchoring lip for straight installation and preventing floating.

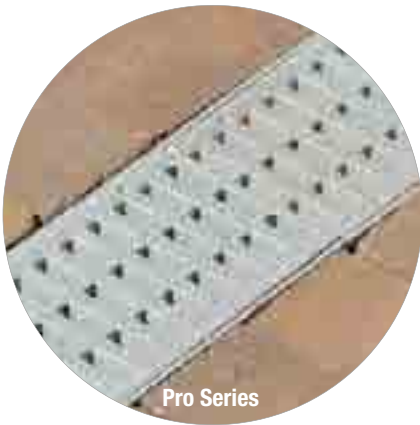


MATERIALS AND STANDARDS

- Only channels made of PVC can be cut to any length and solvent-welded, such as PVC pipe
- Grates available in six colors with decorative options – see individual products for details
- Mini Channel™ Grate also available in solid brass
- Channel system offers choice of bottom, end or side outlets
- Concrete is not required under some channels for light vehicular applications. Standards vary per product.

MINI AND SPEE-D® CHANNEL GRATES





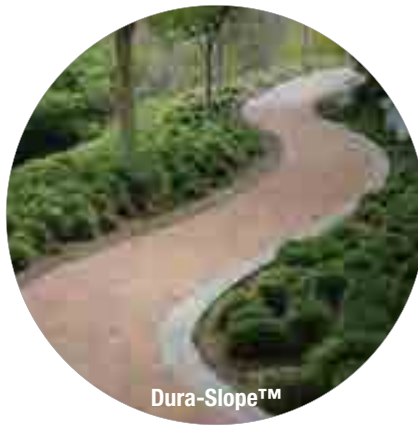
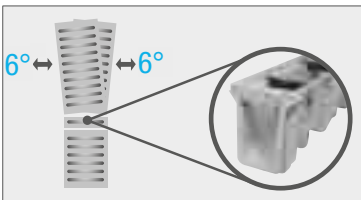
Pro Series

PRO SERIES CHANNEL™ DRAINS

The Pro Series range is a lightweight PVC 125 mm-wide channel with a variety of gratings including cast or ductile iron and a HDPE colored range (Light Grey, Sand, Green, White, Black and Brick Red) ideal for use in pedestrian landscaped, light commercial and paved areas. As Channels are supplied separately, it is a simple task to combine the channel with a ductile iron grate to upgrade the loading to C-250.

It is available in shallow and deep profiles and also in larger widths of 200 mm and 300 mm for areas with particularly excessive runoff. Grates come in various colors and materials.

By using the **Quik-Turn™ Radius Coupling**, Pro-Series can be curved to follow the contours of a winding path, running track or swimming pool.



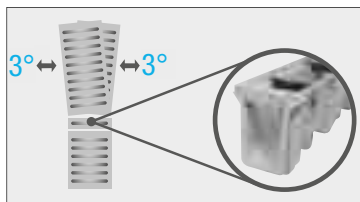
Dura-Slope™

DURA SLOPE™ TRENCH DRAIN

Unique pre-sloped construction – built-in 0.7% slope (no natural slope needed!) to enable proper flow rate. Manufactured from molded, structural foam HDPE with UV inhibitors – a durable alternative to concrete channels that will save time, reduce installation costs and can be supplied either level invert or with a built-in fall. Interlocking tongue and groove joints secure alignment and easy installation – no extra screws or clamps needed and the Duraloc integral joints lock to prevent movement.

It can be supplied with a range of slotted/mesh gratings in cast or ductile iron, galvanized or stainless steel and HDPE in various colors and design patterns.

The **EZ-Track™ Radius Couplings** makes bends and curves easy and allowing radii of between 24-36 meters.

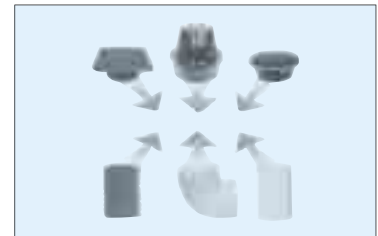


Catch basins

CATCH BASINS

Available in a range of sizes from 150 mm round to 600 mm square with a variety of grating options including brass, galvanized steel and in colored HDPE either slotted or decorative, for use in light commercial and residential applications.

Basins are available either solid or with a choice of outlets plus riser to increase depth, universal adaptors and various filter options.



Small Grates



Large Catch Basin



Adapter

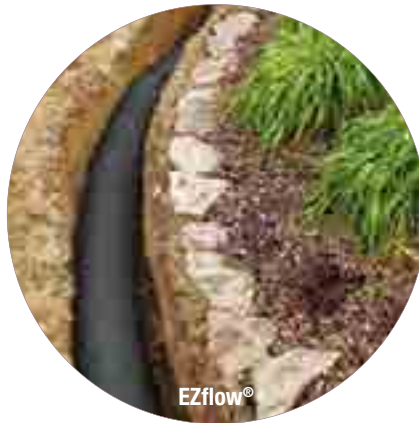
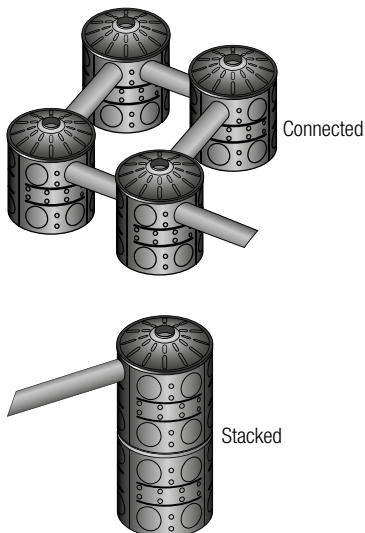


Flo-Well®

FLO-WELL® – ENGINEERED DRY WELL

Flo-Well® engineered dry well presents an easy to install and sustainable solution for managing surface water runoff. Flo-Well® is a gravel-free alternative to a traditional dry well with up to 250% more detention volume. Used independently or as part of a larger system, Flo-Well® units collect and detain surface water allowing for ground-water recharge. Units are modular and can be connected in series or stacked to meet a variety of project needs.

- Up to 189.3 liters of detention volume per unit
- Connect units in series for larger volumes or stack for reduced footprint
- Fast and easy installation with no heavy equipment or gravel needed
- Manufactured from 100% recycled materials

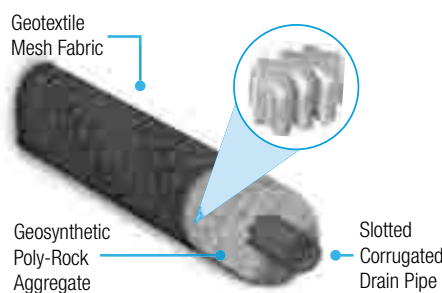


EZflow®

EZFLOW® – ENGINEERED FRENCH DRAIN

EZflow® drainage systems are appropriate for a wide range of applications and are a convenient alternative to traditional gravel and pipe drainage and as storage for infiltration systems. Ideal for the following applications.

- Rainwater run-offs/soakaways in municipal parks and gardens
- Sports fields, tennis courts, golf courses, football, rugby and cricket pitches
- Children’s play areas
- Land and Agricultural drainage
- In conjunction with SUD’s infiltration systems for handling run-offs of surface water
- As a French drain in retaining walls – keeps foundations dry and free from any build-up of trapped water or surface flooding. Can be built into a hill side to form a retaining wall and French drainage system all in one easy fix
- Very popular around older stone built properties where there may well be no damp proof course
- As a drainage solution in crawler space or against footings



Grates – Standard, Decorative & Metal

GRATES – STANDARD, DECORATIVE & METAL

NDS offers a variety of grates in sizes, patterns, colors and design options to fit all products and enhance any landscape.

Our solid cast brass grates are secured to a PVC collar with solid brass screws for aesthetics and reliability. The PVC collar can be solvent welded into sewer and drain fittings or pipe where permanent, anti-theft installation is desired. The grate can still be removed for easy cleanout.

STRONG – PRACTICAL – FUNCTIONAL

- A unique mix of beauty and function
- Recommended for highly-visible entry areas in hotels, malls, office buildings, country clubs and estates
- Exceptional construction and fine finish also make these grates ideal for deck areas, walkways, swimming pools and spas



Capacity Recommendations – Channel & Trench Drains

Product	Size	Applications	Capacity
Micro Channel™	3.18 cm Wide*	Small Patio	Small Capacity
Mini Channel™	6.99 cm Wide*	Small Pool Deck and Patios	Small Capacity
Spee-D® Channel	10.16 cm Wide*	Pool Decks and Patios	Medium Capacity
Pro 764 Series Channel	7.62 cm Wide*	Patio, Pool Decks and Driveways	Small Capacity
Pro 864 Series Channel	12.7 cm Wide*	Patio, Pool Decks and Driveways	Large Capacity
Pro Series Channel	20.32 cm & 30.48 cm Wide*	Patio, Pool Decks and Driveways	Large Capacity
Dura Slope™ Trench Drain	15.24 cm Wide*	Pre-sloped for Driveways, Warehouses, Loading Docks and Larger Commercial Projects	Large Capacity

* Dimensions mentioned are orientational. Check the drawings or technical datasheets for exact dimensions.

Load Recommendation Guide – Grates (US Standards)

Class A

- Loads of 1-413 kPa.
- Recommended for pedestrians, bicycles and wheelchair traffic.



Class B

- Loads of 414-1206 kPa.
- Recommended for medium-duty pneumatic tire traffic, cars and light trucks at speeds less than 32 kph.



Class C

- Loads of 1207-2241 kPa.
- Recommended for heavy-duty pneumatic tire forklifts and tractor-trailers at speeds less than 32 kph, H-20 rated.



Class D

- Loads of 2242-3965 kPa.
- Recommended for heavy-duty hard tire forklifts at speeds less than 32 kph, H-20 rated.



Notes: Some installations may require a concrete collar to meet load rating. Load ratings are based on encasing product in concrete. Product must be installed using NDS instructions.

Cast iron grates will oxidize over time and rust, forming an iron-oxide patina. The iron-oxide layer begins red-orange in color and ages to a deep, rich brown. This patina is tightly adhered and protects the iron beneath it from further oxidation. Iron grates with a rust patina are structurally sound and will last for decades.

Imperial to Metric Conversion Table

Imperial	Metric
1' (foot)	0.30 m (meter)
1" (inch)	2.54 cm (centimeter)
1 PSI (pound per square inch)	6.895 kPa
1 gpm (gallon per minute)	3.785 lpm (liters per minute)
1 square inch	6.45 square centimeters

Channel Drain Outlet Connectors – Sizes and Piping Range

MICRO CHANNEL™

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US
8001	0800 6111 024	10' long (3 m) Micro Channel – Including 1 Coupling, white color	n/a	n/a	No adapter needed
8002	0800 6111 025	10' long (3 m) Micro Channel – Including 1 Coupling, sand color	n/a	n/a	No adapter needed
8003	0800 6111 026	10' long (3 m) Micro Channel – Including 1 Coupling, grey color	n/a	n/a	No adapter needed
8461	0800 6113 019	1.5" (38 mm) Micro Channel Spigot End Outlet	38 mm	110	38 mm waste pipe (not in our offer)

MINI CHANNEL™

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
500	0800 6111 036	Mini Channel Drain 6' long (1.8 m)	No bottom outlet	n/a	No adapter needed	No adapter needed	-
546	0800 6113 048	Spigot End Outlet For 2" (5.1 cm) Pipe Fitting	60 mm OD	110	56-42	0800 7670 024	117-106 to 63-57
550	0800 6113 040	3' long (91.4 cm) Mini Channel Drain with 2" (5.1 cm) Spigot Bottom Outlet	60 mm OD	110	56-42	0800 7670 024	117-106 to 63-57

CATCH BASINS OUTLETS

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
1241	0800 6160 008	3" & 4" (7.6 cm x 10.2 cm) Universal Adapter with 4" (10.2 cm) Spigot	127 mm	110	02-44	0800 7670 005	140-126 to 117-106
1242	0800 6150 095	3" & 4" (7.6 cm x 10.2 cm) Universal Outlet with 4" (10.2 cm) Spigot	127 mm	110	02-44	0800 7670 005	140-126 to 117-106
1243	0800 6150 096	3" & 4" (7.6 cm x 10.2 cm) Universal Locking Outlet	124 mm	110	51-44	0800 7670 013	126-107 to 117-106
1245	0800 6150 097	3" & 4" (7.6 cm x 10.2 cm) Offset Universal Outlet	124 mm	110	51-44	0800 7670 013	126-107 to 117-106
1266	0800 6150 098	6" (15.2 cm) Universal Outlet	184 mm	110	02-64	0800 7670 006	196-178 to 117-106
1266	0800 6150 098	6" (15.2 cm) Universal Outlet	184 mm	160	02-66	0800 7670 007	196-178 to 170-154
1230	0800 6150 046	12" (30.5 cm) Square Low Profile Spigot Adapter	128 mm	110	02-44	0800 7670 005	140-126 to 117-106

SPEE-D® CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
400	0800 6111 059	4' long (1.2 m) Spee-D Channel Drain	No bottom outlet	n/a	No adapter needed	No adapter needed	-
400-10	0800 6111 071	10' long (3 m) Spee-D Channel Drain	No bottom outlet	n/a	No adapter needed	No adapter needed	-
249	0800 6113 055	3" to 4" (7.6 cm to 10.2 cm) Offset End Outlet	107 mm	110	56-44	0800 7670 026	118-107 to 118-107
234	0800 6113 058	2' long (61 cm) fabricated 3" & 4" (7.6 cm & 10.2 cm) Spigot Spee-D Bottom Outlet with Strainer	111.25 mm	110	56-44	0800 7670 026	118-107 to 118-107
2351	0800 6113 061	7" long (17.8 cm) Spee-D Channel Fabricated Grate and 4" (7.6 cm) Bottom Outlet with Grate	111.25 mm	110	56-44	0800 7670 026	118-107 to 118-107

3" (7.6 CM) PRO SERIES CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
710	0800 6112 005	3" (7.6 cm) x 1 m long Pro Series Channel with bottom outlet	82.6 mm	110	56-43	0800 7670 026	117-106 to 89-81
713	0800 6112 003	3" (7.6 cm) Pro Series End Cap/End Outlet	76 mm	110	56-44	0800 7670 026	118-107 to 118-107

Channel Drain Outlet Connectors – Sizes and Piping Range (Continued)

5" (12.7 CM) PRO SERIES CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
800	0800 6112 024	5" (12.7 cm) x 40" (1m) long Pro Series Deep Profile Channel drain	No adapter needed	n/a	Fits EN 1401 pipes & fittings		-
820	0800 6112 025	5" (12.7 cm) x 20" (50.8 cm) long Pro Series Shallow Profile Channel drain	No adapter needed	n/a	Fits EN 1401 pipes & fittings		-
821	0800 6112 023	5" (12.7 cm) Pro Series Shallow Profile End Cap/ Knock Out End Outlet	21.3 mm OD	110	n/a		-
811	0800 6112 022	5" (12.7 cm) Pro Series Deep Profile 3" (7.6 cm) S&D Pipe Hub and 4" (10.2 cm) S&D Fitting SPT End Outlet	No adapter needed	n/a	Fits EN 1401 pipes & fittings		

8" (20.3 CM) PRO SERIES CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
830	0800 6112 030	8" (20.3 cm) x 20" (50.8 cm) long Pro Series Shallow Profile Channel Drain	No adapter needed	n/a	Fits EN 1401 pipes & fittings		-
831	0800 6112 031	8" (20.3 cm) Pro Series Deep Profile End Cap / 3" & 4" (7.6 cm & 10.2 cm) S&D SPT Knockout End Outlet	110 ID	110	51-44	0800 7670 013	126-107 to 117-106

12" (30.5 CM) PRO SERIES CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
840	0800 6112 038	12" (30.5 cm) x 20" (50.8 cm) long Pro Series Shallow Profile Channel Drain	No bottom outlet	n/a	n/a		-
841	0800 6112 039	12" (30.5 cm) Pro Series Channel Shallow Profile End Cap 4" (10.5 cm) S&D SPT Knockout End Outlet	112.6 mm*	110	56-44	0800 7670 026	118-107 to 118-107

* The flange outlet has adapter glued to it . New pipe would have to be placed over the adapter to enable connection to be made as there is no fitting available for its OD

DURA-SLOPE™ CHANNEL

Part No. US	Part No. EMEA	Product Description	Outlet Ø [mm]	Connecting pipes Ø [mm]	Connector Part No. US	Connector Part No. EMEA	Max/min Ø of pipes connected
DS-090-DS-114	0800 6190 006-038	4' (1.2 m) long Dura Slope Channel Drains with Bottom Outlet 112mm OD	112 mm	110	56-44	0800 7670 026	118-107 to 118-107
DS-227	0800 6113 007	Dura Slope Universal End Outlet	119 mm	110	51-44	0800 7670 013	126-114 to 117-106

ID = Inner Diameter
OD = Outer Diameter



NDS[®] CHANNEL AND TRENCH DRAIN SYSTEMS

NDS Channel and Trench Drain Systems provide durable and proven solutions for sheet-flow drainage in applications ranging from light foot traffic to heavy vehicular traffic.

- ▶ Driveways
- ▶ Tennis Courts
- ▶ Parking Lots
- ▶ Sidewalks
- ▶ Warehouses
- ▶ Patios
- ▶ Swimming Pools & Spas
- ▶ Sports Facilities
- ▶ Washdown Areas
- ▶ Nurseries & Greenhouses
- ▶ Running Tracks
- ▶ Manufacturing Facilities
- ▶ Loading Docks
- ▶ Plazas
- ▶ Courtyards
- ▶ Landings



Durable

Designed for maximum durability, drainage and performance, NDS Channel and Trench Drains are a proven alternative to traditional concrete drains. UV inhibitors in the plastic grate, channel and component parts prevent fading and cracking from the sun. All plastic grate and channel components are chemically resistant, rustproof and maintenance-free.

Simple

NDS Channel and Trench Drains are lightweight and easy to install. Grates are removable for easy clean out and replacement. Grates may be held in place with screws or hold-down clips. A complete line of accessories is available for each Channel and Trench Drain System. Our "Profile Series" of channel drains connect like PVC pipe. Our "Modular Pro Series" Injection Molded Channel has mechanical interlocking joints. Our "Dura Slope" Trench Drain System is injection-molded, modular, has mechanical interlocking joints and a built-in slope (no natural slope required!). All NDS Channel and Trench Drain Systems easily connect to sewer and drain pipes and fittings.

Versatile

To blend with surrounding surfaces, our plastic Channel Grates are available in colors, some with decorative options, as well as solid brass for the Mini Channel™. Cast iron and rolled steel grates are available for the Dura Slope™ and Pro Series Channel. A ductile iron frame is also available. NDS Channel and Trench Drains also offer a choice of outletting locations: bottom, end and side options available.

Efficient

Channel and Trench Drains eliminate the need for grading a deck surface to a low area. Instead, the deck is gradually sloped in one direction or plane, and the channel drain acts as a perimeter drain at the edge of the slope to receive sheet-flow runoff. Channel and Trench Drain Systems provide more overall open surface area than conventional area grates.



MICRO CHANNEL™





MICRO CHANNEL™ – BENEFITS AT A GLANCE

Efficient draining performance at lowest possible cost thanks to:

- Unique design
- Shortened installation time

Supports aesthetic concept of the landscape and allow for perfect blend-in thanks to:

- Small dimensions of the channel – only 3.2 cm of width
- Different colors available: white, sand and grey

Easy and precise installation thanks to:

- Lightweight elements
- 2-in-1 construction – channel integrated with grate
- Possibility of cutting the channel exactly to size



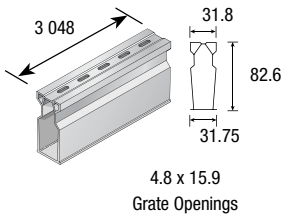
MICRO CHANNEL™

Micro Channel™ Drains – Designed for residential applications including swimming pools, spas and patios.

Efficient performance at lowest possible cost. Unique design, features grate openings parallel to channel length and recessed grate for strength and effective runoff capture. Reduced installation time combined with attractive price, increases cost efficiency of this drainage 2-in-1 solution.

Micro Channel™ Drains

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.

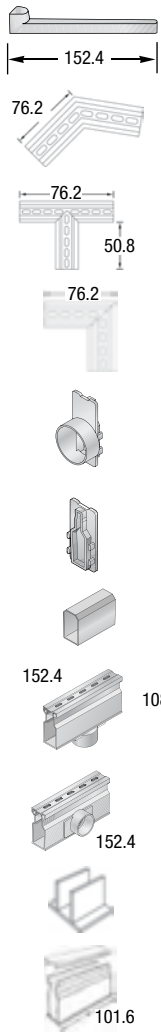


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
8001	0800 6111 024	3 m Long Micro Channel	White	10	2.25	0052063780016
8002	0800 6111 025	3 m Long Micro Channel	Sand	10	2.25	0052063780023
8003	0800 6111 026	3 m Long Micro Channel	Gray	10	2.25	0052063680033
		Includes 1 coupling. Heel-proof. See Class Load Rate Table on page 21.				
PLASTIC		Specification: Micro Channel with Recessed Reinforced Grate Area, Parallel Drain Slots with UV inhibitor. Open surface area 6.5 square inch per linear 30.5 cm. 11.36 LPM per 30.5 cm. PVC. Class A load rating.				



Micro Channel™ Accessories

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
230	0800 6113 009	15.2 cm Channel Installation Stake	Gray	1	0.02	0052063302300
8301	0800 6113 010	Micro Channel 45° Elbow	White	5	0.14	0052063683010
8302	0800 6113 011	Micro Channel 45° Elbow	Sand	5	0.14	0052063683027
8303	0800 6113 012	Micro Channel 45° Elbow	Gray	5	0.14	0052063683034
8371	0800 6113 013	Micro Channel Tee	White	5	0.18	0052063783710
8372	0800 6113 014	Micro Channel Tee	Sand	5	0.18	0052063783727
8373	0800 6113 015	Micro Channel Tee	Gray	5	0.18	0052063683737
8381	0800 6113 016	Micro Channel 90° Elbow	White	5	0.18	0052063683812
8382	0800 6113 017	Micro Channel 90° Elbow	Sand	5	0.18	0052063683829
8383	0800 6113 018	Micro Channel 90° Elbow	Gray	5	0.18	0052063683836
8461	0800 6113 019	38.1 cm Micro Channel Spigot End Outlet	White	10	0.05	0052063084619
8462	0800 6113 020	38.1 cm Micro Channel Spigot End Outlet	Sand	10	0.05	0052063084626
8463	0800 6113 021	38.1 cm Micro Channel Spigot End Outlet	Gray	10	0.05	0052063684635
8471	0800 6113 022	Micro Channel End Plug	White	20	0.02	0052063084718
8472	0800 6113 023	Micro Channel End Plug	Sand	20	0.02	0052063084725
8473	0800 6113 024	Micro Channel End Plug	Gray	20	0.02	0052063684734
8481	0800 6113 025	Micro Channel Couplings only	White	20	0.05	0052063684819
8501	0800 6113 026	38.1 cm Micro Channel Spigot Bottom Outlet	White	10	0.16	0052063785011
8502	0800 6113 027	38.1 cm Micro Channel Spigot Bottom Outlet	Sand	10	0.16	0052063785028
8503	0800 6113 028	38.1 cm Micro Channel Spigot Bottom Outlet	Gray	10	0.16	0052063685038
8511	0800 6113 029	38.1 cm Micro Channel Spigot Side Outlet	White	10	0.16	0052063785110
8512	0800 6113 030	38.1 cm Micro Channel Spigot Side Outlet	Sand	10	0.16	0052063785127
8513	0800 6113 031	38.1 cm Micro Channel Spigot Side Outlet	Gray	10	0.16	0052063785134
8601	0800 6113 032	Micro Channel Hold-Down Clips	White	20	0.05	0052063786018
8651	0800 6113 033	Micro Channel Cleanout	White	10	0.14	0052063786513
8652	0800 6113 034	Micro Channel Cleanout	Sand	10	0.14	0052063786520
8653	0800 6113 035	Micro Channel Cleanout	Gray	10	0.14	0052063786537



MINI CHANNEL™





MINI CHANNEL™ DRAINS – BENEFITS AT A GLANCE

Very good draining performance at low cost thanks to:

- Quick-fix design
- Greater draining surface than Micro Channel and lower price than Spee-D® Channel

Supports aesthetic concept of the landscape and allow for perfect blend-in thanks to:

- Multiple colors available: black, white, grey, green, sand and brick red, satin brass and polished brass
- Decorative patterns available: botanical and wave

Easy and precise installation thanks to:

- Lightweight elements
- Quick fix design
- Possibility of cutting the channel and plastic grates exactly to size



MINI CHANNEL™ DRAINS

Mini Channel™ Drains – Excellent for light-duty applications including residential pools, concrete and paver patios, spas and tennis courts.

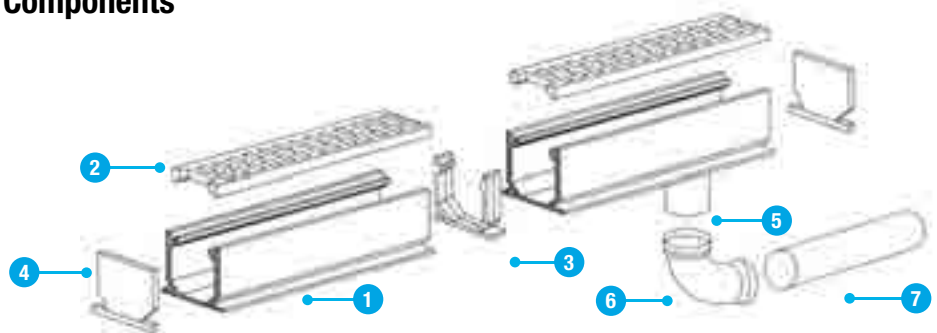
Mini Channel™ Drain acts as a perimeter drain, quickly removing water from hardscapes and directing it away from building structures. It is ideal for residential or non-residential applications that anticipate moderate amounts of drainage water and is a low-cost alternative to the NDS Spee-D® Channel. It offers a greater surface area than the Micro Channel™. Mini Channel™ is available with brass and in a range of colored plastic grates. Mini Channel™ Couplings must be used to connect to Mini Channel™ Fittings.

Product Features

- Durable polyolefin parts are lightweight and easy to install
- Component parts snap together easily for speedy installation
- System components are chemically resistant and rustproof
- UV inhibitors in the grate

Mini Channel™ System Components

- 1 Channel
- 2 Grate
- 3 Coupling
- 4 End Cap or End Outlet
- 5 Channel Bottom Outlet
- 6 Sewer and Drain Fitting
- 7 Drain Pipe



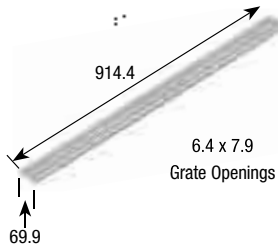
Mini Channel™ Paver Installation

NDS Mini Channel™ and grates are dimensionally compatible with standard 6 cm clay and concrete paving systems. Both decorative and standard grate options make Mini Channel™ an ideal choice for drainage on paver parking courts, patios and plazas.



Mini Channel™ Drains

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



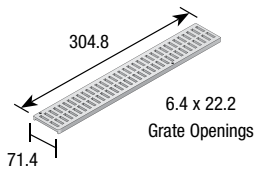
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
540	0800 6111 028	91.4 cm Mini Channel Grate	White	16	0.30	0052063505404
541	0800 6111 029	91.4 cm Mini Channel Grate	Gray	16	0.30	0052063505411
542	0800 6111 030	91.4 cm Mini Channel Grate	Green	16	0.30	0052063505428
543	0800 6111 031	91.4 cm Mini Channel Grate	Black	16	0.30	0052063505435
544	0800 6111 032	91.4 cm Mini Channel Grate	Sand	16	0.30	0052063505442
551	0800 6111 033	91.4 cm Mini Channel Grate	Brick Red	16	0.30	0052063505510
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296



Requires 4 screws per Grate. Heel-proof. See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin Channel Grate with UV inhibitor. Open surface area 63.9 square centimeters per 30.5 cm. 114.7 LPM per 30.5 cm. Class B load rating.



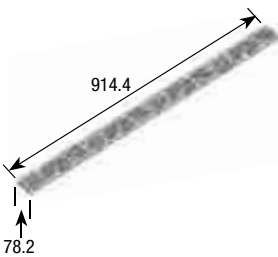
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
552B	0800 6180 095	30.5 cm Brass Mini Channel Grate	Satin Brass	12	0.56	0052063505527
553PB	0800 6180 096	30.5 cm Brass Mini Channel Grate	Polished Brass	12	0.56	0052063505534



Fits 0800 6111 036 Mini Channel. Heel-proof. See Class Load Rate Table on page 21.

SOLID BRASS

Specification: Mini Channel Solid Brass Grate with brass screws. Open surface area 23.4 square centimeters per 30.5 cm. 106.5 LPM per 30.5 cm. Class A load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
554S	0800 6111 045	91.4 cm Mini Botanical Pattern Channel Grate	Sand	16	0.40	0052063031316
554GR	0800 6111 043	91.4 cm Mini Botanical Pattern Channel Grate	Green	16	0.40	0052063031323
554GY	0800 6111 044	91.4 cm Mini Botanical Pattern Channel Grate	Gray	16	0.40	0052063031309
554	0800 6111 038	91.4 cm Mini Botanical Pattern Channel Grate	Black	16	0.40	0052063031293
846	0800 6111 003	Stainless Steel Screws. 4 x 1"	Steel	1	0.05	0052063056487



Fits 0800 6111 036 Mini Channel. See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin botanical pattern Channel Grate with UV inhibitor. Open surface area 35.1 square centimeters per 0.3 m. 63 LPM per 0.3 m. Class B load rating

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
554CI	0800 6111 042	30.5 cm Cast Iron Mini Botanical Pattern Channel Grate	Raw Iron	5	0.82	0052063031415
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296



Fits 0800 6111 036 Mini Channel. See Class Load Rate Table on page 21.

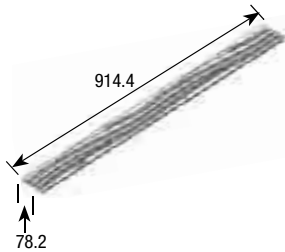
CAST IRON

Specification: Mini Channel botanical Cast Iron Channel Grate. Open surface area 34.8 square centimeters per 0.3 m. 62.4 LPM per 0.3 m. Class B load rating.



Mini Channel™ Drains (Continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



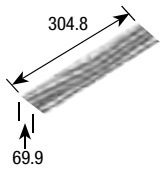
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
555S	0800 6111 049	91.4 cm Mini Wave Pattern Channel Grate	Sand	16	0.40	0052063031354
555GR	0800 6111 047	91.4 cm Mini Wave Pattern Channel Grate	Green	16	0.40	0052063031361
555GY	0800 6111 048	91.4 cm Mini Wave Pattern Channel Grate	Gray	16	0.40	0052063031347
555	0800 6111 001	91.4 cm Mini Wave Pattern Channel Grate	Black	16	0.40	0052063031330
846	0800 6111 003	Stainless Steel Screws. 4 x 1"	Steel	1	0.05	0052063056487



See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin wave pattern Channel Grate with UV inhibitor. Open surface area 37 square centimeters per 30.5 cm. 66.4 LPM per 30.5 cm.



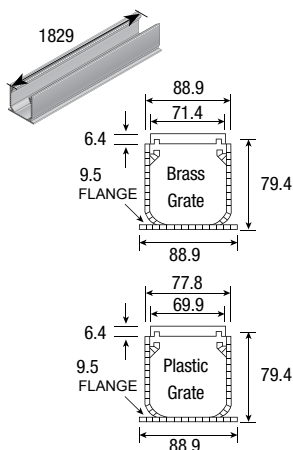
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
555CI	0800 6111 042	30.5 cm Cast Iron Mini Wave Pattern Channel Grate	Raw Iron	5	0.82	0052063031415
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296



Fits 0800 6111 036 Mini Channel. See Class Load Rate Table on page 21.

CAST IRON

Specification: Mini Channel Wave Cast Iron Channel Grate. Open surface area 26.5 square centimeters per 30.5 cm. 47.9 LPM per 30.5 cm. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
500	0800 6111 036	1.8 m Mini Channel Drain	Gray	8	1.47	0052063605005

Grate should be recessed 0.32 cm below finish grade in non-traffic applications.
Grate should be recessed 0.64 cm in traffic applications.

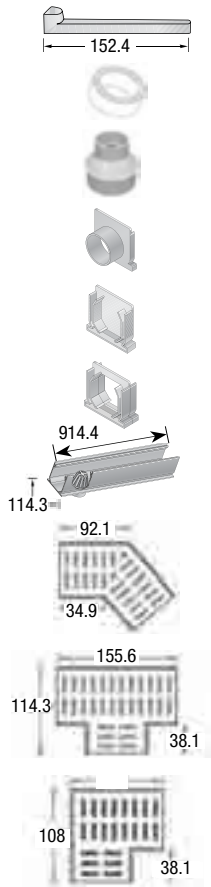
PLASTIC

Specification: Mini Channel Drain with inverse flying-buttress design, bottom flange, patented honeycomb reinforced walls and UV inhibitor.



Mini Channel™ Accessories

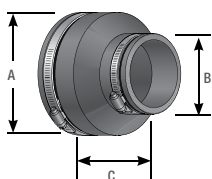
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
230	0800 6113 009	15.2 cm Channel Installation Stake	Gray	1	0.02	0052063302300
532	0800 6113 049	5 cm to 7.6 cm Mini Channel Reducer	White	20	0.06	0052063505329
533	0800 6113 050	5 cm to 10.1 cm Mini Channel Reducer	White	20	0.15	0052063505336
546	0800 6113 048	5 cm Mini Channel End Outlet	Gray	10	0.07	0052063505466
547	0800 6113 037	7.6 cm Mini Channel End Cap	Gray	20	0.05	0052063505473
548	0800 6113 036	7.6 cm Mini Channel Coupling	Gray	20	0.05	0052063505480
550	0800 6113 040	91.4 cm Long Channel with Spigot Bottom Outlet	Gray	6	0.98	0052063505503
5300	0800 6113 042	Fabricated 45° Mini Channel Elbow with Grate	Gray	1	0.18	0052063505305
5303	0800 6113 043	Fabricated 45° Mini Channel Elbow with Grate	Sand	1	0.18	0052063503035
5370	0800 6113 044	Fabricated Mini Channel Tee with Grate	Gray	1	0.23	0052063505374
5372	0800 6113 045	Fabricated Mini Channel Tee with Grate	Black	1	0.23	0052063503721
5380	0800 6113 046	Fabricated Mini Channel 90° Elbow with Grate	Gray	1	0.18	0052063505381
5383	0800 6113 047	Fabricated Mini Channel 90° Elbow with Grate	Sand	1	0.18	0052063503837
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-42	08007670024	4" X 2" CI/PVC	4.38	111	2.4	60	4.00	101	30	0.42	052063049366

For more details about connection, see page 22.

SPEE-D[®] CHANNEL DRAINS





SPEE-D® CHANNEL DRAINS – BENEFITS AT A GLANCE

Excellent performance thanks to:

- Quick-fix design
- Greater draining surface than Micro and Mini Channel

Supports aesthetic concept of the landscape and allows for perfect blend-in thanks to:

- Multiple colors of grates available: black, white, grey, green, sand and brick red for PVC, raw iron for cast iron material
- Decorative grate patterns available: botanical and wave

Easy and precise installation thanks to:

- Lightweight elements
- Quick-fix design
- Possibility of cutting the channel and plastic grates exactly to size



SPEE-D® CHANNEL DRAINS

Spee-D® Channel Drains – Ideal for residential and commercial applications. Effective in everything from patios, swimming pools and spas to light vehicular traffic areas.

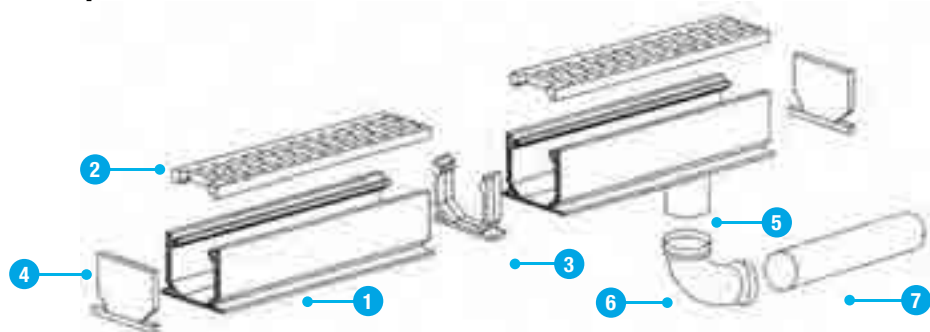
The Spee-D® Channel systems are lightweight and easy to install and provide a quick and simple alternative to traditional concrete channels. The Spee-D® channel drains are available in "1.2" or "3 m" lengths to easily adapt to any job (Dimensions mentioned are orientational. Check the drawings or technical datasheets for exact dimensions). Each channel has available accessories that easily connect to a variety of pipe types and sizes, such as end outlets, bottom outlets, 90s and tees. This flexibility allows you to easily create a customized drainage system. The channel snaps together easily for a smoother installation with flanges on the bottom of the channel providing a lip for anchoring, which ensures a straight installation and prevents floating. The NDS Spee-D® Channel grates are available in seven colors, making it easy to match to the surrounding surfaces.

Product Features

- Durable PVC parts are lightweight and easy to install
- Component parts snap together easily for a speedy installation
- System components are chemically resistant and rustproof
- UV inhibitors in the grates and channel

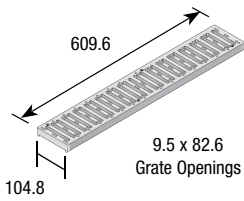
Spee-D® Channel System Components

- 1 Channel
- 2 Grate
- 3 Coupling
- 4 End Cap or End Outlet
- 5 Channel Bottom Outlet
- 6 Sewer and Drain Fitting
- 7 Drain Pipe



Spee-D® Channel Drains

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
240	0800 6111 051	61 cm Spee-D® Channel Grate	White	12	0.60	0052063422404
241	0800 6111 052	61 cm Spee-D® Channel Grate	Gray	12	0.60	0052063001715
242	0800 6111 053	61 cm Spee-D® Channel Grate	Green	12	0.60	0052063001722
243	0800 6111 054	61 cm Spee-D® Channel Grate	Black	12	0.60	0052063001739
244	0800 6111 055	61 cm Spee-D® Channel Grate	Sand	12	0.60	0052063001746
251	0800 6111 056	61 cm Spee-D® Channel Grate	Brick Red	12	0.64	0052063422510
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298



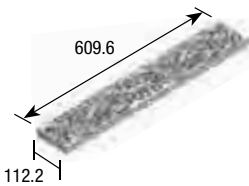
See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin Secured Channel Grate with UV inhibitor. Open surface area 108.1 square centimeters per 30.5 cm. 194.1 LPM per 30.5 cm. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
252S	0800 6111 019	61 cm Spee-D® Channel Botanical Pattern Grate	Sand	12	0.78	0052063031231
252GR	0800 6111 017	61 cm Spee-D® Channel Botanical Pattern Grate	Green	12	0.78	0052063031248
252GY	0800 6111 018	61 cm Spee-D® Channel Botanical Pattern Grate	Gray	12	0.78	0052063031224
252	0800 6111 014	61 cm Spee-D® Channel Botanical Pattern Grate	Black	12	0.78	0052063031194
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

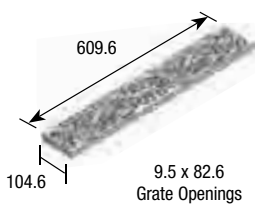


See Class Load Rate Table on page 21. Class B load rating..

PLASTIC

Specification: Structural Foam Polyolefin botanical pattern Channel Grate with UV inhibitor. Open surface area 35.1 square centimeters per 0.3 m. 63 LPM per 0.3 m.

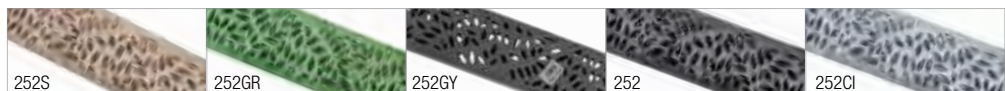
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
252CI	0800 6111 016	61 cm Cast Iron Spee-D® Channel Botanical Pattern Grate	Raw Iron	1	3.18	0052063031392
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298



See Class Load Rate Table on page 21.

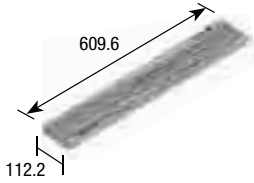
CAST IRON

Specification: Cast iron decorative botanical Channel Grate. Open surface area 57.9 square centimeters per 30.5 cm. 104.1 LPM per 30.5 cm. Class B load rating.



Spee-D® Channel Drains (Continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



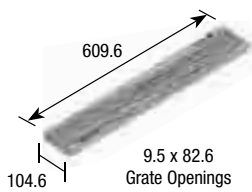
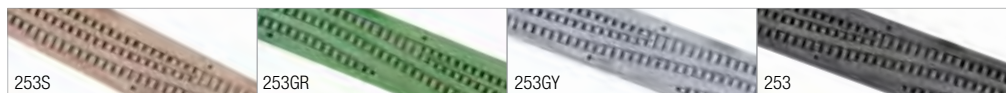
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
253S	0800 6111 023	61 cm Spee-D® Channel Wave Pattern Grate	Sand	12	0.83	0052063031279
253GR	0800 6111 021	61 cm Spee-D® Channel Wave Pattern Grate	Green	12	0.83	0052063031286
253GY	0800 6111 022	61 cm Spee-D® Channel Wave Pattern Grate	Gray	12	0.83	0052063031262
253	0800 6111 012	61 cm Spee-D® Channel Wave Pattern Grate	Black	12	0.83	0052063031255
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295



See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin decorative wave Channel Grate with UV inhibitor. Open surface area 50.1 square centimeters per 30.5 cm. 90.1 LPM per 30.5 cm. Class B load rating.



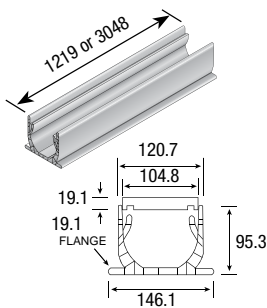
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
253CI	0800 6111 020	61 cm Cast Iron Spee-D® Channel Wave Pattern Grate	Raw Iron	1	3.38	0052063031408
229	0800 6111 050	Stainless Steel Screws, 8 x 1"	Steel	1	0.03	0052063812298



See Class Load Rate Table on page 21.

CAST IRON

Specification: Cast Iron decorative wave Channel Grate. Open surface area 47.8 square centimeters per 30.5 cm. 85.8 LPM per 30.5 cm. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
400	0800 6111 059	1.2 m Spee-D® Channel Drain	Gray	6	2.17	0052063404004
400-10	0800 6111 071	3 m Spee-D® Channel Drain	Gray	6	4.95	0052063140117

Grate should be recessed 0.32 cm below finish grade in non-traffic applications. Grate should be recessed 0.64 cm in traffic applications.

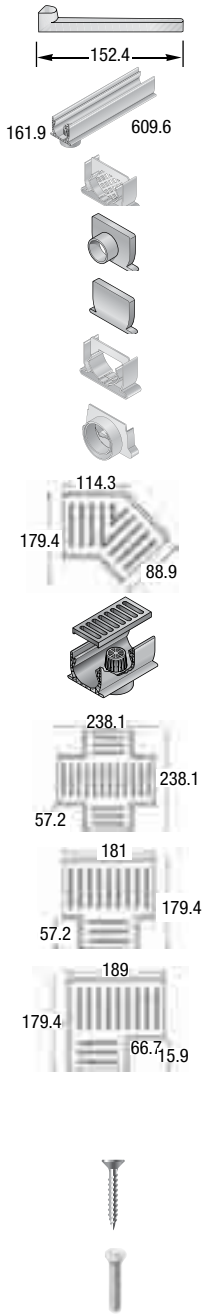
PLASTIC

Specification: PVC Spee-D® Channel Drain with inverse flying-buttress design, bottom flange, patented honeycomb reinforced walls and UV inhibitor.



Spee-D® Channel Accessories

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

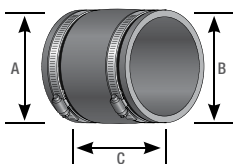


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
230	0800 6113 009	15.2 cm Channel Installation Stake	Gray	1	0.02	0052063302300
234	0800 6113 058	61 cm long fabricated Spee-D® Bottom Outlet with Strainer	Gray	12	1.20	0052063422343
245	0800 6113 056	Channel Strainer Spee-D® Coupling	Gray	20	0.16	0052063422459
246	0800 6113 054	5 cm Spee-D® End Outlet	Gray	10	0.18	0052063422466
247	0800 6113 052	End Cap Spee-D® Channel	Gray	10	0.18	0052063402475
248	0800 6113 053	Coupling Spee-D® Channel	Gray	20	0.18	0052063402482
249	0800 6113 055	Offset Spee-D® End Outlet	Gray	10	0.23	0052063402499
2301	0800 6113 060	Fabricated 45° Spee-D® Elbow with Grate	Gray	1	0.90	0052063027319
2351	0800 6113 061	17.8 cm Fabricated Grate 10.2 cm Bottom Spee-D® Outlet with Grate	Gray	3	0.77	0052063027326
2361	0800 6113 062	Fabricated Spee-D® Cross and Grate	Gray	1	1.35	0052063422619
2370	0800 6113 063	Fabricated Spee-D® Tee with Grate	White	1	1.35	0052063422374
2371	0800 6113 064	Fabricated Spee-D® Tee with Grate	Gray	1	1.35	0052063027272
2372	0800 6113 065	Fabricated Spee-D® Tee with Grate	Green	1	1.35	0052063423722
2381	0800 6113 066	Fabricated 90° Spee-D® Elbow with Grate	Gray	1	1.35	0052063027289

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298
629	0800 6111 002	Stainless Steel Screws. 20 x 1-1/2"	Metal	1	n/a	0052063041438
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-44	08007670026	4" X 4" CI/PVC	4.42	112	4.42	112	4.00	101	24	0.75	052063010113

For more details about connection, see page 22.





PRO SERIES CHANNEL™ DRAINS





PRO SERIES CHANNEL™ – BENEFITS AT A GLANCE

Excellent draining performance thanks to:

- Extensive draining surface
- High quality and robustness of materials

Easy and precise installation of solid professional drainage systems thanks to:

- Channel-to-channel clips for reduced motion during installation
- Rebar clips instead of lower mount clips for easier installation

- Side ribs for increased strength
- Lay-flat design to stabilize channel during installation
- Thicker channel walls for additional strength
- Lightweight elements
- Possibility of cutting the channel and plastic grates exactly to size

Available as pre-assembled channels with grates for even quicker and cheaper installation.

Suitable for residential and commercial applications.



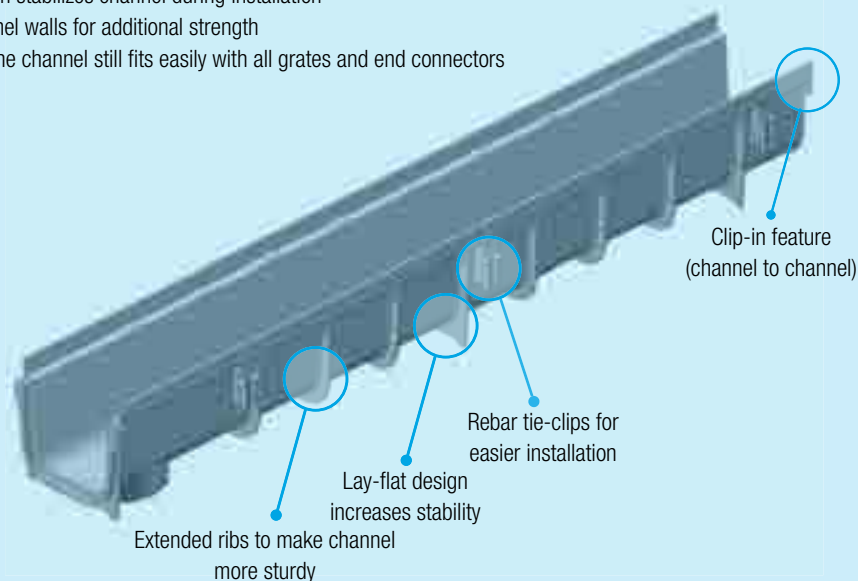
PRO SERIES CHANNEL™ DRAINS

The NDS Pro Series modular design offers flexibility as each section of channel can be snapped together for longer runs or divided down to lengths as short as 10.16 cm for smaller, interlocking sections. Lightweight parts connect easily to sewer and drain pipe and fittings or Sch 40 pipe and fittings, and side and bottom outlets can be connected anywhere along the channel run.

Most hardscapes experience more runoff than landscapes due to the lack of water absorption. NDS Channel Drain systems are an effective and popular solution when perimeter drains are needed for hardscaped areas. The NDS Pro Series is a lightweight Channel drain system with interlocking joints, so connections are made quickly and easily. The modular design offers flexibility as each section of channel can be snapped together for longer runs or divided down to lengths as short as 10 cm for smaller, interlocking sections. Lightweight parts connect easily to sewer and drain pipe and fittings or SCH 40 pipe and fittings, and side and bottom outlets can be connected anywhere along the channel run. The Pro series channel drains come in a variety of sizes to meet all of your drainage needs. Common applications for the NDS Pro Series channel drains include pools, spas, patios, tennis courts and athletic fields.

Unique design and related benefits

- ▶ Channel-to-channel clips for reduced motion during installation
- ▶ Rebar clips instead of lower mount clips for an easier install
- ▶ Side ribs for increased strength
- ▶ Lay-flat design stabilizes channel during installation
- ▶ Thicker channel walls for additional strength
- ▶ All this, and the channel still fits easily with all grates and end connectors



Product Features & Benefits

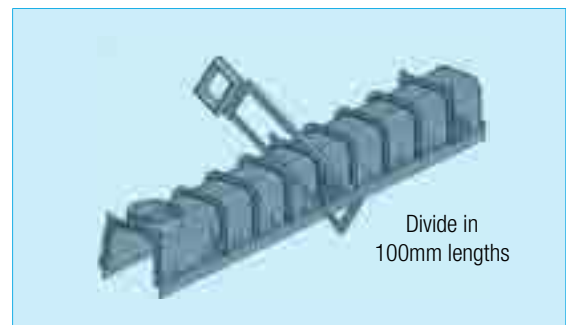
- Create a channel as long as you need, or reduce to lengths as short as 10.16 cm for smaller, interlocking sections
- End cap / knockout end and outlet fitting simplify assembly and installation
- Flexible and easy: side and bottom outlets can be inserted at any location along the channel run
- Available in four widths: 7.62 cm (3"), 12.7 cm (5"), 20.32 cm (8") and 30.48 cm (12"). (Dimensions mentioned are orientational. Check the drawings or technical datasheets for exact dimensions.)
- Available in two depths: deep for heavy flows, shallow for slabs or where little fall depth is available
- Modular design comes in 1/2-meter and 1-meter pieces with interlocking end joints
- Joints eliminate couplings and are specially designed to withstand concrete expansion and contraction

Materials & Standards

- Polypropylene (7.62 cm and 12.7 cm channels) and polyvinyl chloride (20.32 cm and 30.48 cm channels) create a structurally-compact, watertight channel
- All parts contain UV inhibitors to prevent fading and cracking

Load Recommendations

- Pedestrian Grates offer heel-proof pattern
- Polyolefin Light Vehicular Grate for use in areas with passenger vehicles and light trucks with speeds less than 32 kph
- Load Star or Ductile Channel Grates for heavy-duty traffic
- See individual products for details



Pre-Assembled Channel Drain Systems

Our Modular Pro Series channel drains also come in pre-assembled kits to decrease installation time. They act as perimeter drains, quickly removing water from hardscapes and directing it away from building structures.

The 7.62 cm and 12.7 cm wide pre-assembled channel drain kits include a one-meter channel drain and grate, end outlet, and end cap.

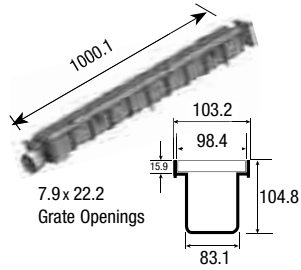
A bottom outlet is built into each channel section. This allows for easy ordering and less inventorying, as everything is included under one part number.

Our unique Pro Series interlocking channel design allows each channel to securely lock to the next for a secure, tight fit, with no couplings required. The pre-assembled Pro Series channel drains are a great solution for your drainage needs.

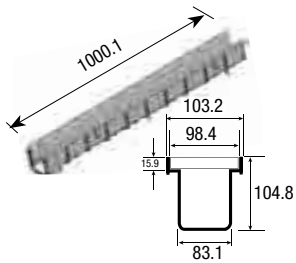


7.62 cm (3") Pro Series Channel™ Drains

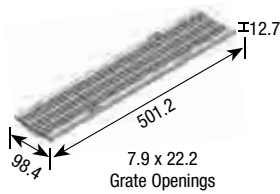
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
764	0800 6112 006	7.6 cm x 1 m Pro Series Light Traffic Channel Grate & Channel Drain Kit	Light Gray	10	1.58	0052063076409
764DISP	0800 6112 007	7.6 cm x 1 m Pro Series Channel Display (16 Kits)		1	47.25	0052063013558
Includes 1 end outlet (0800 6112 003) and 1 end cap (0800 6112 002). Bottom outlet fits 7.62 cm S&D fittings. Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> Light Traffic Channel Grate and Channel Drain with mechanical interlocking joints and UV inhibitors. Open surface area 152.4 square centimeters per 30.5 cm. 290.9 LPM per 30.5 cm. Class B load rating.						



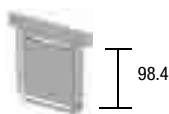
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
710	0800 6112 005	7.6 cm x 1 m Pro Series Channel Drain	Light Gray	12	0.86	0052063071008
Bottom outlet fits 7.62 cm S&D fittings. Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 7.62 cm in traffic applications. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> Light Traffic Channel with mechanical interlocking joints and UV inhibitors. Polypropylene. Class B load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
714	0800 6112 004	7.6 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Light Gray	16	0.32	0052063071404
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298
Requires 4 #229 screws. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> Light Traffic Channel Grate. Open surface area 152.4 square centimeters per 30.5 cm. 273.6 LPM per 30.5 cm. Polypropylene. Class B load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
713	0800 6112 003	7.6 cm Pro Series End Cap with End Outlet function. Fits 7.6 cm Fittings	Light Gray	12	0.05	0052063071305
Fits 7.62 cm Fittings.						
<i>Specification:</i> Channel End Cap/End Outlet. Polypropylene.						



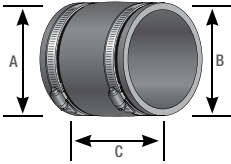
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
712	0800 6112 002	7.6 cm Pro Series End Cap	Light Gray	20	0.02	0052063071206
<i>Specification:</i> Channel End Cap. Polypropylene.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



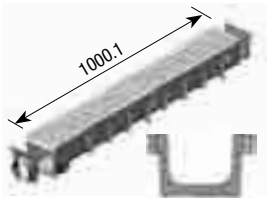
Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-44	0800 7670 026	4" X 4" CI/PVC	4.42	112	4.42	112	4.00	101	24	0.75	052063010113

To check more details about connection, see page 22.

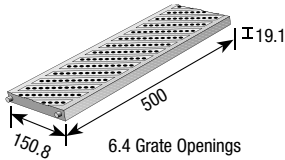
12.7 cm (5") Pro Series Channel™ Drains

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



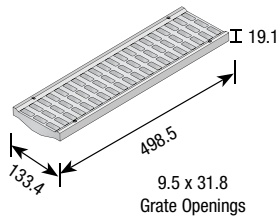
9.5 x 31.8 Grate Openings

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
864	0800 6112 018	12.7 cm x 1 m Pro Series Light Traffic Kit. Includes 1 end outlet & 1 end cap	Light Gray	9	2.55	0052063018645
864DISP	0800 6112 019	12.7 cm x 1 m Pro Series Channel Display (20 Kits)		1	51.03	0052063030319
		Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 7.62 cm in traffic applications. Bottom outlet fits 7.62 cm and 10.16 cm S&D fittings. See Class Load Rate Table on page 21.				
PLASTIC		Specification: Light Traffic Channel Grate and Channel Drain with mechanical interlocking joints and UV inhibitors. Open surface area 151.7 square centimeters per 30.5 cm. 272.4 LPM per 30.5 cm. Class B load rating.				



6.4 Grate Openings

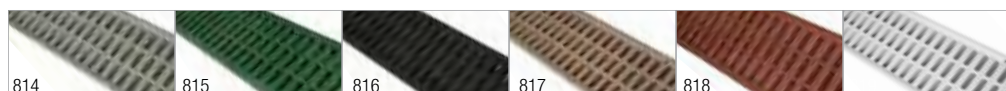
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
826	0800 6112 015	12.7 cm x 50.8 cm Pro Series Pedestrian Traffic Channel Grate	Light Gray	10	0.45	0052063808260
		Requires #829 screws. See Class Load Rate Table on page 21.				
PLASTIC		Specification: UV-protected Structural Foam Polyolefin Pedestrian Traffic Channel Grate. Open surface area 31.35 square centimeters per 30.5 cm. 91.8 LPM per 30.5 cm. Class A load rating.				



9.5 x 31.8 Grate Openings

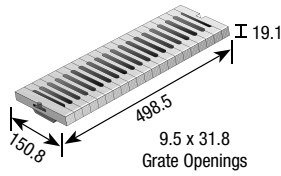
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
814	0800 6112 009	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Light Gray	10	0.52	0052063808147
815	0800 6112 010	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Green	10	0.52	0052063808154
816	0800 6112 011	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Black	10	0.52	0052063808161
817	0800 6112 012	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Sand	10	0.52	0052063808178
818	0800 6112 008	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Brick Red	10	0.52	0052063808185
819	0800 6112 013	12.7 cm x 50.8 cm Pro Series Light Traffic Channel Grate	White	10	0.52	0052063808192
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

		Requires #829 screws. See Class Load Rate Table on page 21.				
PLASTIC		Specification: Structural Foam Polyolefin Light Traffic Channel Grate with UV inhibitors. Open surface area 151.7 square centimeters per 30.5 cm. 272.4 LPM per 30.5 cm. Class B load rating.				

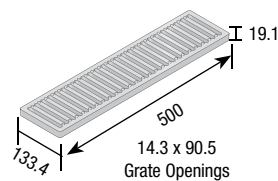


12.7 cm (5") Pro Series Channel™ Drains (Continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



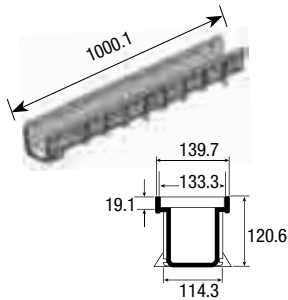
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
828	0800 6112 016	12.7 cm x 50.8 cm Pro Series Load Star Heavy Traffic Channel Grate	Gray	300	1.06	0052063808284
Requires 4 screws per grate. Requires #829 screws. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> UV-protected high- impact glass-reinforced nylon Heavy Traffic Channel Grate. Open surface area 102.7 square centimeters per 30.5 cm. 184.3 LPM per 30.5 cm. Class C load rating.						



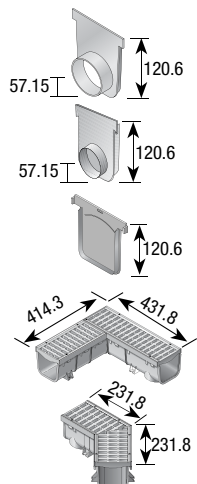
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
823	0800 6112 014	12.7 cm x 50.8 cm Pro Series Ductile Iron Channel Grate	Black	11	5.54	0052063039312
See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> heavy-duty Ductile Heavy Traffic Channel Grate. Open surface area 147.7 square centimeters per 30.5 cm. 265.2 LPM per 30.5 cm. Class D load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295



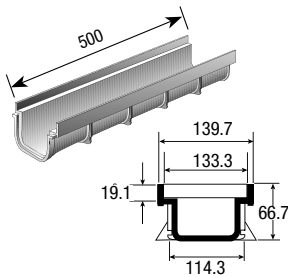
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
800	0800 6112 024	12.7 cm x 1 m Deep Pro Series Profile Channel Drain	Light Gray	10	1.80	0052063080000
Integrated knockout bottom outlet fits 7.62 cm and 10.16 cm S&D fittings. Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC <i>Specification:</i> Deep Profile Channel Drain with mechanical interlocking joints, integrated knockout bottom outlet. Polypropylene.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
811	0800 6112 022	12.7 cm Deep Pro Series Profile End Outlet	Light Gray	10	0.18	0052063808116
813	0800 6112 021	12.7 cm Deep Profile End Cap/End Outlet	Light Gray	10	0.18	0052063808130
812	0800 6112 020	12.7 cm Deep Profile End Cap	Light Gray	10	0.06	0052063808123
861	0800 6112 027	12.7 cm Deep Pro Series Profile Grate & Channel Drain 90° Elbow	Light Gray	2	1.55	0052063808611
862	0800 6112 028	12.7 cm Deep Pro Series Profile Grate & Channel Drain 45° Elbow	Light Gray	2	1.55	0052063808628

12.7 cm (5") Pro Series Channel™ Drains (Continued)

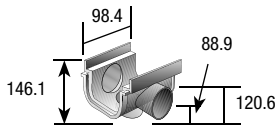
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
820	0800 6112 025	12.7 cm x 50.8 cm Pro Series Shallow Profile Channel Drain	Light Gray	10	0.61	0052063808208
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC	Specification: Shallow Profile UV-protected high-impact PVC Channel Drain with mechanical interlocking joint.					



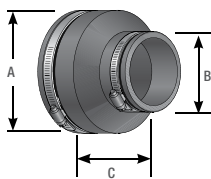
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
821	0800 6112 023	12.7 cm Pro Series Shallow Profile End Outlet	Light Gray	1	0.07	0052063808215
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
822	0800 6112 026	12.7 cm Pro Series Shallow Profile Bottom Outlet / Side Outlet	Light Gray	1	0.27	0052063808222
12.7 cm Shallow Profile 7.62 cm S&D SPT Bottom Outlet/1½" Sch. 40 SPT Side Outlet						

NDS Flexible Coupling Sizing Chart

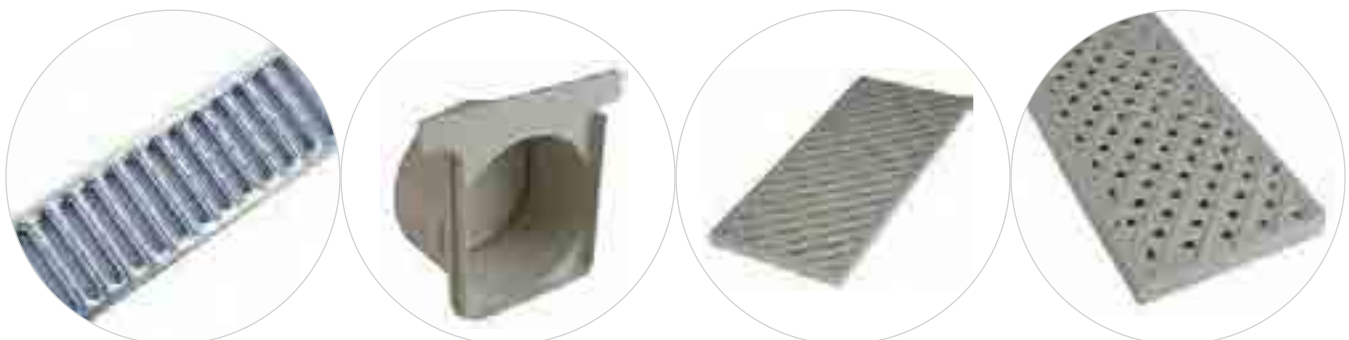
- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Asbestos cement, fibre, or ductile iron to cast iron or plastic

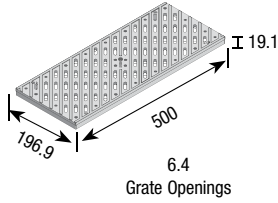
Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
51-44	0800 7670 013	4" AC/DI X 4" CI/PVC	4.75	120	4.38	111	4.00	101	24	0.49	052063010106

For more details about connection, see page 23.

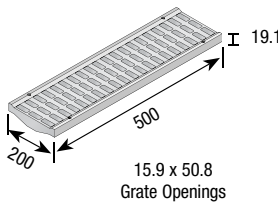


20.32 cm (8") Pro Series Channel™ Drains

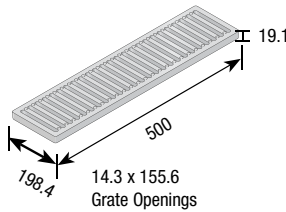
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



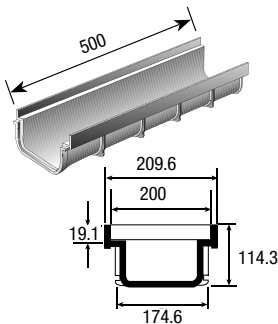
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
836	0800 6112 035	20.3 cm x 50.8 cm Pro Series Pedestrian Traffic Channel Grate	Light Gray	1	0.70	0052063808369
Requires #829 screws. 4 screws per grate. Heel-proof. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> UV-protected Structural Foam Polyolefin Pedestrian Traffic Channel Grate. Open surface area 89.1 square centimeters per 30.5 cm. 160 LPM per 30.5 cm. Class A load rating.						



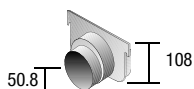
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
837	0800 6112 036	20.3 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Light Gray	1	1.35	0052063808376
Requires #829 screws. 4 screws per grate. Heel-proof. See Class Load Rate Table on page 21.						
PLASTIC <i>Specification:</i> UV-protected Structural Foam Polyolefin Light Traffic Channel Grate. Open surface area 195.3 square centimeters per 30.5 cm. 350.6 LPM per 30.5 cm. Class B load rating.						



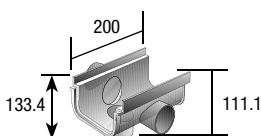
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
888	0800 6112 037	20.3 cm x 50.8 cm Pro Series Ductile Iron Channel Grate	Black	1	10.01	0052063039381
#829 screws may be used. 4 screws per grate. See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> Heavy-duty Ductile Heavy Traffic Channel Grate. Open surface area 153.5 square centimeters per 30.5 cm. 269.8 LPM per 30.5 cm. Class C load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
830	0800 6112 030	20.3 cm x 50.8 cm Pro Series Shallow Profile Channel Drain	Light Gray	1	0.90	0052063808307
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC <i>Specification:</i> Shallow Profile high-impact PVC Channel Drain with mechanical interlocking joints and UV inhibitors.						



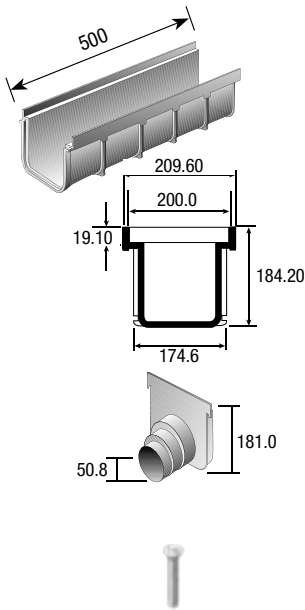
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
831	0800 6112 031	20.3 cm Pro Series Shallow Profile End Cap/ End Outlet	Light Gray	1	0.22	0052063808314



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
832	0800 6112 032	20.3 cm Pro Series Shallow Profile Side Outlet	Light Gray	17	0.62	0052063808321
Bottom outlet fits 10.16 cm S&D pipe, 7.62 cm S&D fittings.						

20.32 cm (8") Pro Series Channel™ Drains (Continued)

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



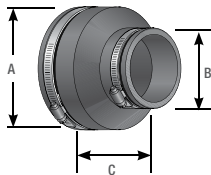
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
833	0800 6112 033	20.3 cm x 50.8 cm Pro Series Deep Profile Channel Drain	Light Gray	1	1.26	0052063808338
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC		Specification: Deep Profile high-impact PVC Channel Drain with mechanical interlocking joints and UV inhibitors.				

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
834	0800 6112 034	20.3 cm Pro Series Deep Profile End Cap/ End Outlet	Light Gray	10	0.23	0052063808345

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



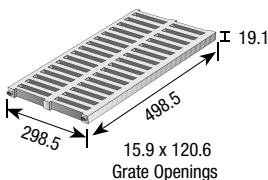
Asbestos cement, fiber or ductile iron to cast iron or plastic

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
51-44	0800 7670 013	4" AC/DI X 4" CI/PVC	4.75	120	4.38	111	4.00	101	24	0.49	052063010106

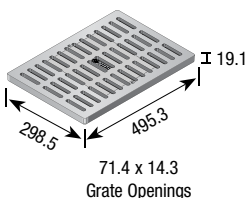
For more details about connection, see page 23.

30.48 cm (12") Pro Series Channel™ Drains

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



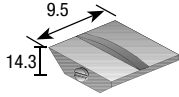
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
847	0800 6112 043	30.5 cm x 50.8 cm Pro Series Light Traffic Channel Grate	Gray	1	2.09	0052063808475
		See Class Load Rate Table on page 21.				
PLASTIC		Specification: UV-protected high-impact PVC Light Traffic Channel Grate. Open surface area 314.6 square centimeters / 30.5. 564.7 LPM per 30.5 cm. Class B load rating.				



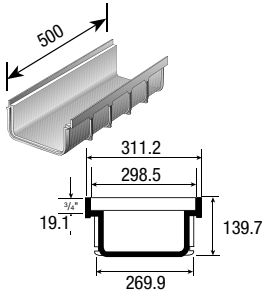
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
845	0800 6112 042	30.5 cm x 50.8 cm Pro Series Cast Iron Heavy Traffic Channel Grate	Black	1	12.60	0052063039367
		See Class Load Rate Table on page 21.				
CAST IRON		Specification: Cast Iron Heavy Traffic Channel Grate. Open surface area 301.2 square centimeters per 30.5 cm. 540.9 LPM per 30.5 cm. Class C load rating.				

30.48 cm (12") Pro Series Channel™ Drains (Continued)

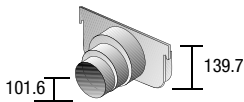
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



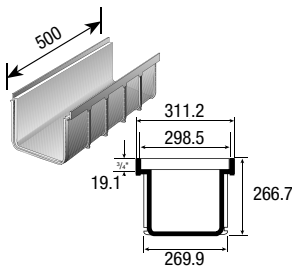
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
849	0800 6112 045	Grate Security Pro Series Clip	Gray	10	0.18	0052063808499
For use with 0800 6112 042 and 0800 6112 043 grates and 0800 6112 038 or 0800 6112 040 channels only (2 per grate). Mounts inside channel drain and secures grate. Screw and nut included.						



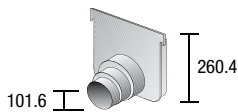
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
840	0800 6112 038	30.5 cm x 50.8 cm Pro Series Shallow Profile Channel Drain	Light Gray	1	1.80	0052063030036
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC		Specification: Shallow Profile UV-protected high-impact PVC Channel Drain with mechanical interlocking joints.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
841	0800 6112 039	30.5 cm Pro Series Shallow Profile End Cap/End Outlet	Light Gray	1	0.45	0052063808413



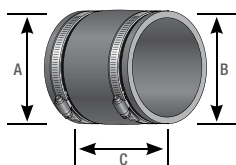
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
843	0800 6112 040	30.5 cm x 50.8 cm Pro Series Deep Profile Channel Drain	Light Gray	1	2.70	0052063808437
Grate should be recessed 0.32 m below finish grade in non-traffic applications. Grate should be recessed 0.64 m in traffic applications.						
PLASTIC		Specification: Deep Profile UV-protected high- impact PVC Channel Drain with mechanical interlocking joints.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
844	0800 6112 041	30.5 cm Pro Series Deep Profile End Cap/End Outlet	Light Gray	24	0.72	0052063808444

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-44	0800 7670 026	4" X 4" CI/PVC	4.42	112	4.42	112	4.00	101	24	0.75	052063010113

For more details about connection, see page 23.

QUIK-TURN™ RADIUS COUPLING – BENEFITS AT A GLANCE

Allow six degrees of deflection between trench drain sections, making an adjustable radius easily achievable for standard tracks and other curving applications.

Excellent for curving drainage applications, e.g. running tracks, curving landscape paths, swimming pools and spas.



QUIK-TURN™ RADIUS COUPLING

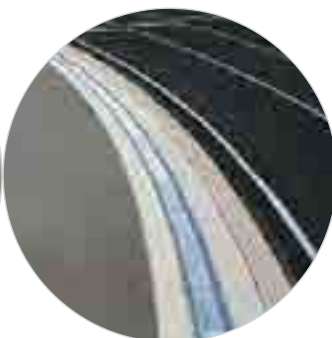
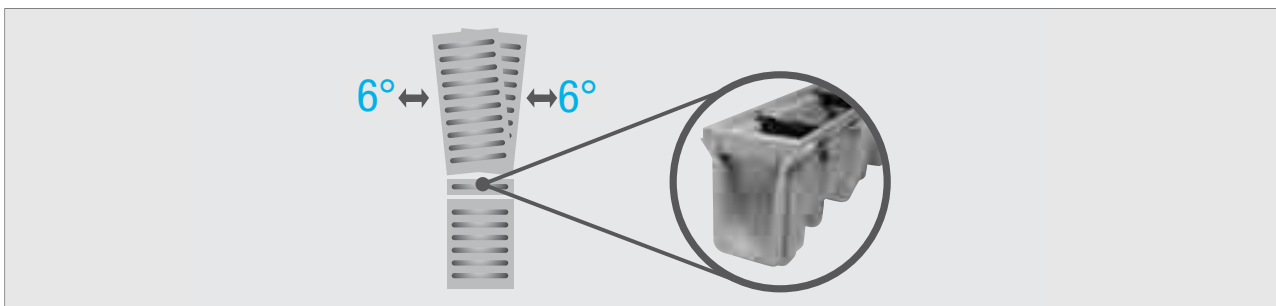
Quik-Turn™ Radius Couplings allow six degrees of deflection between trench drain sections, making an adjustable radius easily achievable for all kind of curving applications. High durability makes it an excellent alternative to polymere concrete products and prevents product from cracking or breaking like concrete products. Can be combined with straight Pro Series channel to attain a curved section. The individual couplings can also be connected to each other for tight curved sections.

Quik-Turn™ Radius Coupling

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
PSRC-864	0800 6112 029	Quik-Turn™ 12.7 cm Deep Pro Series Radius Coupling Provides a 6 degree bend left or right	Light Gray	9	0.14	0052063031019



DURA SLOPE™ TRENCH DRAIN



DURA SLOPE™ TRENCH DRAIN, PRE-SLOPED – BENEFITS AT A GLANCE

Revolutionary drainage system for run up to 40.2 m thanks to:

- Unique pre-sloped construction – build-in 0.7% slope (no natural slope needed) to enable proper flow rate
- Versatile grates available, including decorative patterns in various colors
- Secure channel-to-channel connections

Easy and quick installation thanks to:

- Pre-sloped construction
- Channel-to-channel tongues and joints for easy and secure connections
- **DuraLoc™** integral joint lock for extra stability
- **LevelLoc™** re-bar supports with integral protruding knob for easy levelling of the channel
- **ProFit™** locking system to support product during installation and lock grate to integral frame
- Lightweight elements

Supports aesthetic concept of the landscape and allows for perfect blend-in thanks to:

- Multiple colors of grates available: green, blue, orange, black, white, grey, brown, silver, bronze
- Multiple decorative grate patterns available: wave, diamond, tile, brick, deco

Ideal for a variety of drainage solutions, including driveways, parking areas, warehouses, loading docks, pools, wash down areas and other areas for the interception and collection of surface runoff.



DURA SLOPE™ TRENCH DRAIN – Pre-Sloped

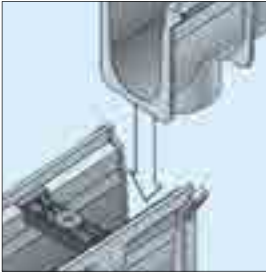
The NDS Dura Slope™ trench drain system consists of 33 channel sections; 24 pre-sloped sections with 0.7% built-in slope and nine neutral sections. The system also has a catch basin assembly. All Dura Slope™ channel sections are 121.92 cm long, grip #3 and #4 rebar and support 15.24 cm (6") wide grates. Dura Slope™ channel sections are also available in depths from 10.16 cm to 30.48 cm.

The sloped channel sections enable the Dura Slope™ system to extend to a length of 29.3 m with continuous slope. The neutral channel sections can be used for non-sloped system runs or can be used in conjunction with the pre-sloped channel sections for an extended system run of 40.24 m. By incorporating central collection using the catch basin assembly, the Dura Slope™ trench drain system can be extended up to 81 m. The ProFit™ locking system maintains structural integrity during installation, and is a locking device and support for the grates. Each channel section ships with ProFit™, Blank Grate Inserts and grate screws installed.

Product Features & Benefits – Overview

- Lightweight 1.22 m modular sections
- Easier handling and installation
- Lower freight costs
- 5.1 cm radius bottom minimizes debris build-up
- Polyethylene material
- Durable and inexpensive
- Less breakage versus concrete
- High chemical resistance
- Bottom outlet on each channel section
- System versatility
- Requires fewer accessories
- 0.7% built-in slope
- Maintains optimum flow rates throughout system

Product Features & Benefits – Details



Interlocking tongue and groove joints

- Secures alignment
- Ensures straight channel runs
- Easy assembly and installation



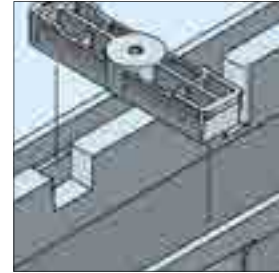
DuraLoc™ integral joint lock

- Prevents joint movement during installation
- No extra clamps or screws needed



LevelLoc™ re-bar supports with integral protruding knob

- Levels channel and grips re-bar
- Requires fewer accessories



ProFit™ locking system

- Locks grate to integral frame
- Supports product in shipping and installation (included)

Various grating options

- ADA compliant, Heel-Proof options
- Plastic grates:
 - Array of colors
 - Pedestrian and light traffic rated
- Galvanized & stainless steel:
 - Pedestrian & heavy traffic rated
- Cast & ductile iron:
 - Class D heavy traffic rated (with frame)
- Decorative grates (ductile iron):
 - Standard black electrostatic coating
 - or raw iron Class C traffic rated

Smooth HDPE interior

- Virtually no water absorption

HDPE material

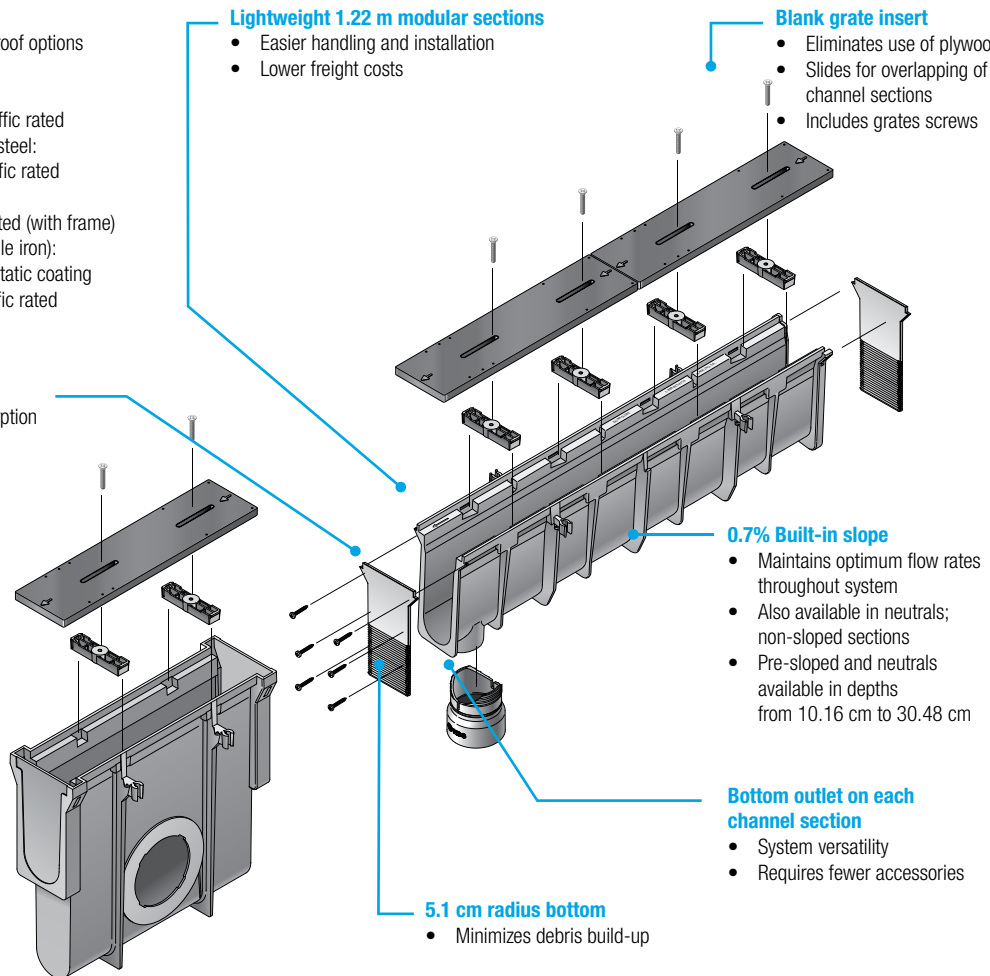
- Durable
- Inexpensive:
 - Less breakage versus concrete
- Chemical resistance

Lightweight 1.22 m modular sections

- Easier handling and installation
- Lower freight costs

Blank grate insert

- Eliminates use of plywood
- Slides for overlapping of channel sections
- Includes grates screws



0.7% Built-in slope

- Maintains optimum flow rates throughout system
- Also available in neutrals; non-sloped sections
- Pre-sloped and neutrals available in depths from 10.16 cm to 30.48 cm

Bottom outlet on each channel section

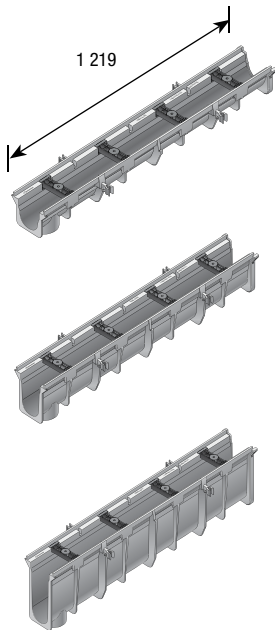
- System versatility
- Requires fewer accessories

5.1 cm radius bottom

- Minimizes debris build-up

Dura Slope™ Channel Drain Sections

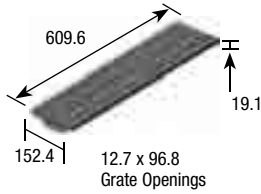
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-090N	0800 6190006	10.1 cm Deep Neutral Dura Slope™ Channel	Light Gray	24	3.35	0052063008547
DS-091	0800 6190007	10.1 cm to 10.9 cm Deep Dura Slope™ Channel	Light Gray	24	3.38	0052063008615
DS-091N	0800 6190008	10.9 cm Deep Neutral Dura Slope™ Channel	Light Gray	24	3.51	0052063008721
DS-092	0800 6190009	10.9 cm to 11.9 cm Deep Dura Slope™ Channel	Light Gray	24	3.56	0052063008783
DS-093	0800 6190010	11.9 cm to 12.7 cm Deep Dura Slope™ Channel	Light Gray	20	3.72	0052063008868
DS-094	0800 6190011	12.7 cm to 13.5 cm Deep Dura Slope™ Channel	Light Gray	20	3.89	0052063009056
DS-094N	0800 6190012	13.5 cm Deep Neutral Deep Dura Slope™ Channel	Light Gray	20	4.02	0052063009117
DS-095	0800 6190013	13.5 cm to 14.4 cm Deep Dura Slope™ Channel	Light Gray	20	4.05	0052063009124
DS-096	0800 6190014	14.4 cm to 15.2 cm Deep Dura Slope™ Channel	Light Gray	16	4.21	0052063009162
DS-097	0800 6190015	15.2 cm to 16.1 cm Deep Dura Slope™ Channel	Light Gray	16	4.38	0052063008790
DS-097N	0800 6190016	16.1 cm Deep Neutral Dura Slope™ Channel	Light Gray	16	4.52	0052063009223
DS-098	0800 6190017	16.1 cm to 17 cm Deep Dura Slope™ Channel	Light Gray	16	4.55	0052063009230
DS-099	0800 6190018	17 cm to 17.8 cm Deep Dura Slope™ Channel	Light Gray	16	4.72	0052063008523
DS-100	0800 6190019	17.8 cm to 18.6 cm Deep Dura Slope™ Channel	Light Gray	16	4.89	0052063049830
DS-100N	0800 6190020	18.6 cm Deep Neutral Dura Slope™ Channel	Light Gray	16	5.02	0052063049847
DS-101	0800 6190021	18.6 cm to 19.53 cm Deep Dura Slope™ Channel	Light Gray	16	5.05	0052063049854
DS-102	0800 6190022	19.53 cm to 20.5 cm Deep Dura Slope™ Channel	Light Gray	16	5.22	0052063049861
DS-103	0800 6190023	20.5 cm to 21.12 cm Deep Dura Slope™ Channel	Light Gray	12	5.39	0052063049878
DS-103N	0800 6190024	21.12 cm Deep Neutral Dura Slope™ Channel	Light Gray	12	5.52	0052063049885
DS-104	0800 6190025	21.12 cm to 22.1 cm Deep Dura Slope™ Channel	Light Gray	12	5.55	0052063049892
DS-105	0800 6190026	22.1 cm to 22.9 cm Deep Dura Slope™ Channel	Light Gray	12	5.72	0052063049908
DS-106	0800 6190027	22.9 cm to 23.6 cm Deep Dura Slope™ Channel	Light Gray	12	5.88	0052063049915
DS-106N	0800 6190028	23.6 cm Deep Neutral Dura Slope™ Channel	Light Gray	12	6.03	0052063049922
DS-107	0800 6190029	23.6 cm to 24.6 Deep Dura Slope™ Channel	Light Gray	12	6.03	0052063049939
DS-108	0800 6190030	24.6 cm to 25.4 cm Deep Dura Slope™ Channel	Light Gray	12	6.22	0052063049946
DS-109	0800 6190031	25.4 cm to 26.4 cm Deep Dura Slope™ Channel	Light Gray	12	6.39	0052063049953
DS-109N	0800 6190032	26.4 cm Deep Neutral Dura Slope™ Channel	Light Gray	12	6.53	0052063049960
DS-110	0800 6190033	26.4 cm to 27.2 cm Deep Dura Slope™ Channel	Light Gray	12	6.56	0052063049977
DS-111	0800 6190034	27.2 cm to 28.1 cm Deep Dura Slope™ Channel	Light Gray	12	6.73	0052063049984
DS-112	0800 6190035	28.1 cm to 29 cm Deep Dura Slope™ Channel	Light Gray	12	6.89	0052063049991
DS-112N	0800 6190036	29 cm Deep Neutral Dura Slope™ Channel	Light Gray	8	7.02	0052063010816
DS-113	0800 6190037	29 cm to 29.7 cm Deep Dura Slope™ Channel	Light Gray	8	7.06	0052063009247
DS-114	0800 6190038	29.7 cm to 30.6 cm Deep Dura Slope™ Channel	Light Gray	8	7.23	0052063008592

Standard Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
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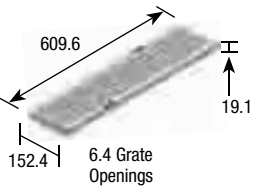
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
660	0800 6180 075	61 cm Dura Slope™ Channel Grate	White	12	1.27	0052063626604
661	0800 6180 076	61 cm Dura Slope™ Channel Grate	Dark Gray	12	1.27	0052063606613
661LG	0800 6180 081	61 cm Dura Slope™ Channel Grate	Light Gray	12	1.27	0052063012865
662	0800 6180 077	61 cm Dura Slope™ Channel Grate	Green	12	1.27	0052063606620
663	0800 6180 074	61 cm Dura Slope™ Channel Grate	Black	12	1.27	0052063606637
664	0800 6180 078	61 cm Dura Slope™ Channel Grate	Sand	12	1.27	0052063606644
665	0800 6180 079	61 cm Dura Slope™ Channel Grate	Brick Red	12	1.27	0052063606651
629	0800 6111 002	Stainless Steel Screws. 20 x 1-1/2"	Steel	1	0.32	0052063041438



Use with Dura Slope Drains. See Class Load Rate Table on page 21.

PLASTIC

Specification: Structural Foam Polyolefin, secured Channel Grate with UV inhibitor. Open surface area 163.8 square centimeters per 30.5 cm. 294.1 LPM per 30.5 cm. Class B load rating.



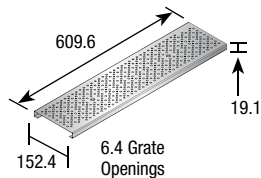
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-670	0800 6180 087	61 cm Plastic Perforated Channel Grate	Light Gray	12	1.26	0052063003153
DS-671	0800 6180 088	61 cm Plastic Perforated Channel Grate	White	12	1.26	0052063018805



Use with Dura Slope Drains. Heel-proof. See Class Load Rate Table on page 21. Requires #629 screws.

PLASTIC

Specification: Structural Foam Polyolefin, secured Channel Grate with UV inhibitor, light traffic rated, heelproof, Open surface area 56.4 square centimeters per 30.5 cm. 101.3 LPM per 30.5 cm. Class B load rating.



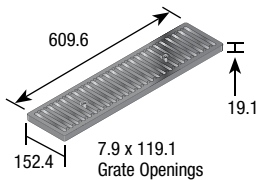
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-226	0800 6180 083	61 cm Stainless Steel Perforated Channel Grate, Heelproof	Steel	12	1.42	0052063003115
DS-228	0800 6180 084	61 cm Galvanized Steel Perforated Channel Grate, Heelproof	Steel	12	1.72	0052063013435



Use with Dura Slope Drains. Heel-proof. See Class Load Rate Table on page 21. Requires #629 screws.

STAINLESS STEEL

Specification: Perforated Metal Grate, pedestrian traffic rated, heelproof, ADA compliant. Open surface area 49.2 square centimeters per 30.5 cm. 88.35 LPM per 30.5 cm. Class A load rating.



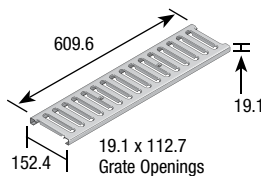
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-231	0800 6180 085	61 cm Cast Iron Channel Grate	Black	1	8.51	0052063011677
DS-232	0800 6180 086	61 cm Ductile Iron	Black	1	6.84	0052063011684



Use with Dura Slope Drains. Heel-proof. See Class Load Rate Table on page 21. Must be used with 0800 6113 005 to achieve Class D Load Rating. Requires #629 screws.

CAST IRON DUCTILE IRON

Specification: Heavy-duty Iron Channel Grate. Open surface area 134.5 square centimeters per 30.5 cm. 241.4 LPM per 30.5 cm. Class D load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-221	0800 6180 082	61 cm Dura Slope™ Galvanized Steel Channel Grate	Steel	12	2.99	0052063011660



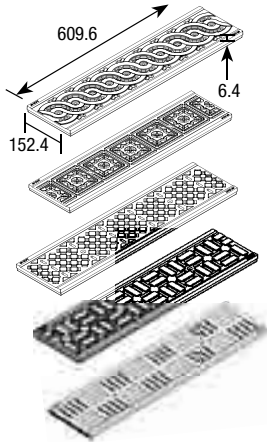
Use with Dura Slope Drains. Includes bracket to attach grate to channel and screws. See Class Load Rate Table on page 21. Requires # 629 screws.

GALVANIZED STEEL

Specification: Galvanized Rolled Steel Grate. Open surface area 148.9 square centimeters per 30.5 cm. 267.4 LPM per 30.5 cm. Class C load rating.

Decorative Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-601	0800 6180 089	61 cm Wave Pattern Ductile Iron Grate	Raw Iron	1	6.53	0052063019840
DS-602	0800 6180 090	61 cm Diamond Pattern Ductile Iron Grate	Raw Iron	1	6.44	0052063019864
DS-603	0800 6180 091	61 cm Tile Pattern Ductile Iron Grate	Raw Iron	1	6.62	0052063019871
DS-604	0800 6180 092	61 cm Brick Pattern Ductile Iron Grate	Raw Iron	1	6.44	0052063019901
DS-609	0800 6180 093	61 cm Deco Slot Ductile Iron Grate	Raw Iron	1	6.53	0052063019918
229	0800 6111 050	Stainless Steel Screws. 8 x 1"	Steel	1	0.03	0052063812298



Use with Dura Slope Drains, decorative grates are made of ductile iron. Uncoated raw iron will develop a rust patina over time. Additional powder-coat colors available: Black (K), White (W), Silver (S), Bronze (Z), Green (G), Blue (B), Orange (O), Gray (Y), Brown (N). Please contact us to check exact lead time for color versions.
Heel-proof. See Class Load Rate Table on page 21. Must be used with 0800 6113 005 to achieve Class D Load Rating.
Must be used with DS-200H to achieve Class D Load Rating.

DUCTILE IRON

Specification: Ductile iron decorative grate. Open surface area 43.5 square centimeters per 30.5 cm. 78.2 LPM. Class D load rating.

Available in the following colors ▶

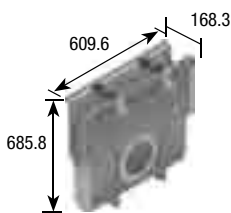
Raw Iron (K)	Black (K)	White (W)	Silver (S)	Bronze (S)	Green (G)	Blue (B)	Orange (O)	Gray (Y)	Brown (N)
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In-Line Catch Basin

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

The NDS Dura Slope™ in-line catch basin is designed to fit all depth ranges of the Dura Slope™ trench drain sections. Catch basin inlets are designed to be sized as required to accept the Dura Slope™ trench drain section. The Dura Slope™ catch basin is 0.6 m long and 0.6 m deep with an outlet on both sides of the basin. One Universal Adapter Plug, one blank grate insert and two grate screws are included with each Dura Slope™ in-line catch basin. The NDS universal basin outlets and PVC Flexible Couplings are used to adapt the catch basin to any kind of pipes used on the market.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-340	0800 6150 115	61 cm x 15.2 cm Dura Slope™ In-Line Catch Basins	Light Gray	1	5.40	0052063010847

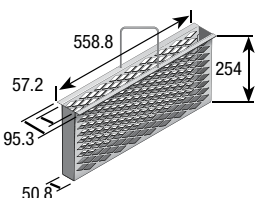


Available for use of one or two outlets.
Use 0800 6150 094, 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 099. Universal Outlets (see page 82).

Trash Bucket

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

Dura Slope™ Trash Bucket is made to fit inside the Dura Slope™ Catch Basin (part number 0800 6150 115). It has a handle for easy removal to clean leaves and debris; it requires removal of the grate. Made of zinc-plated steel, it is durable to climatic conditions. The Trash Bucket is not intended for use with any of the Dura Slope™ Channels. Note: 0800 6150 114 Trash Bucket is not for use with the 0800 6113 005 Ductile Iron Frame.

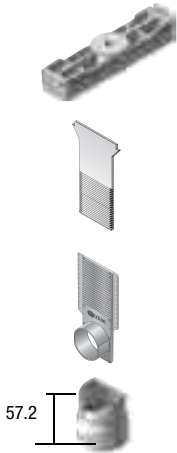


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-240	0800 6150 114	Trash Bucket for Dura Slope™ Trench Drain	Steel Zinc-Plated Steel	1	2.25	0052063014630

ZINC PLATED STEEL

Accessories

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



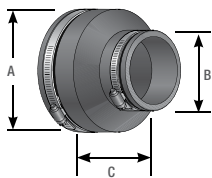
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-122	0800 6113 002	ProFit Grate Lock for Dura Slope™ Trench Drain	Black	8	0.36	0052063042305
Universal End Outlet downstream for (male) end. Use to attach 0800 6113 005 Ductile Iron Frame to Channel.						
DS-224	0800 6113 006	Universal End Cap for Dura Slope™ Trench Drain	Gray	8	0.28	0052063010823
Suitable for 0800 6190 037 or deeper channels. Slides into upstream (female) end. Requires 0800 6113 003 screws on downstream (male) end.						
DS-227	0800 6113 007	Universal End for Dura Slope™ Trench Drain	Gray	6	0.34	0052063010830
Suitable for 0800 6190 037 or deeper channels. Requires 0800 6113 003 screws for use on downstream (male) end.						
DS-126	0800 6113 004	Bottom Outlet Adapter for Dura Slope™ Trench Drain	Gray	6	0.24	0052063042312
Fits to 10.16 cm (4") Sewer and Drain Pipes. 0800 6113 004 not required for Sch. 40 connection. Use with Grate 0800 6180 085, 0800 6180 086, 0800 6180 087, 0800 6180 081, 0800 6180 083 and 0800 6180 075-079. Use to secure grates in applications without 0800 6113 005 Ductile Iron Frame. Drill bit included with each package.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-123	0800 6113 003	Frame & End Cap Screws for Dura Slope™ Trench Drain	Steel	1	0.00	0052063012391
629	0800 6111 002	Stainless Steel Screws. 20 x 1-1/2"	Steel	1	0.32	0052063041438
DS-650	0800 6113 008	Flat Drilled Spanner End Cap Screws for Dura Slope™ Trench Drain	Steel	1	0.45	0052063020402

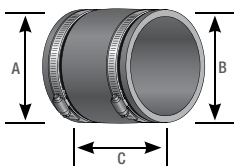
NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Asbestos cement, fibre, or ductile iron to cast iron or plastic

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
51-44	0800 7670 013	4" AC/DI X 4" CI/PVC	4.75	120	4.38	111	4.00	101	24	0.49	052063010106



Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-44	0800 7670 026	4" X 4" CI/PVC	4.42	112	4.42	112	4.00	101	24	0.75	052063010113

To check more details about connection, see page 23.

Ductile Iron Frame

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

Dura Slope Ductile Iron Frame provides a Class D load rating of 2248-3965 kPa and is suitable for heavy-duty hard tire equipment at speeds less than 32 kph. The DS-200H Ductile Iron Frame is recommended for use with pneumatic tire traffic such as fork lifts. The ductile iron frame can be used with the cast and ductile iron grates.

Note: 0800 6113 003 screws must be ordered to secure frame to the channel.

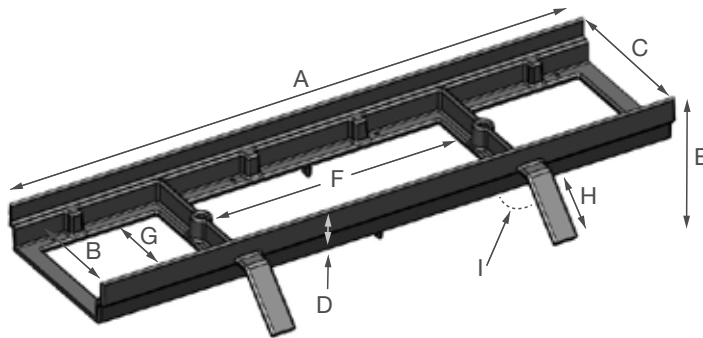
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-200H	0800 6113 005	Ductile Iron Frame for Dura Slope™ Trench Drain	Black	1	3.38	0052063058016



Use with Dura Slope Drains. To be used with 0800 6180 085 or 0800 6180 086 grates.
New Feature: 1/4" Brass Nuts to secure channel inserted. Heel-proof when used with 0800 6180 085 or 0800 6180 086. See Class Load Rate Table on page 21.

DUCTILE IRON

Specification: Ductile Iron Frame with brass nuts to secure channel inserted. Class D load rating.



Dimension Key		
A	Length	60.96 cm
B	Inner Width	15.24 cm
C	Outer Width	16.19 cm
D	Added Profile	2.54 cm Height
E	Total Height	6.99 cm
F	Opening Length	27.3 cm
G	Opening Width	11.43 cm
H	Length of Anchor	6.67 cm
I	Angle of Anchor	30°

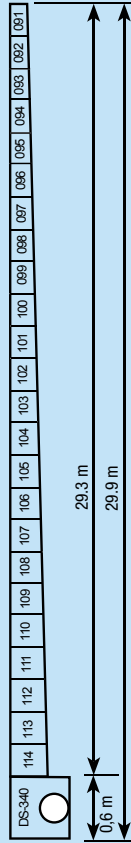
Dura Slope™ System Profiles

Neutral run

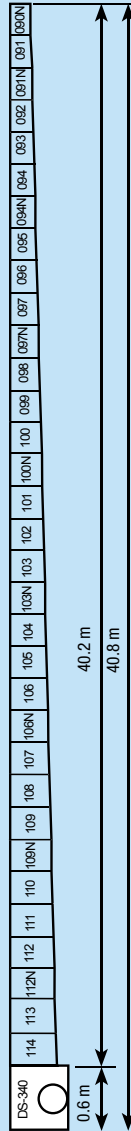


*Any neutral channel can be used in this application.

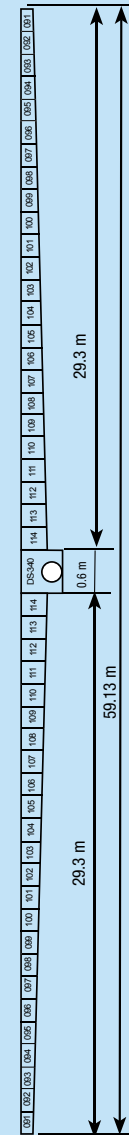
Linear fall without neutrals



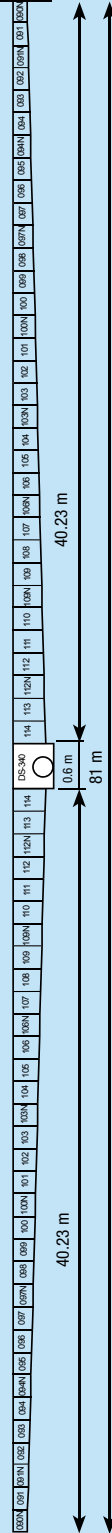
Linear fall with neutrals



Counter-directional fall without neutrals



Counter-directional fall with neutrals



Note: Drawings are not to scale. See previous pages for actual product dimensions.

EZ-TRACK™ RADIUS COUPLING & GRATES – BENEFITS AT A GLANCE

Allow 3 degrees of deflection between trench drain sections, making an adjustable radius easily achievable for standard tracks and other curving applications.

Excellent for curving drainage applications, e.g. running tracks, curving panscape paths, swimming pools and spas.

Easy and quick installation – no tools required.



EZ-TRACK™ RADIUS COUPLING & GRATES

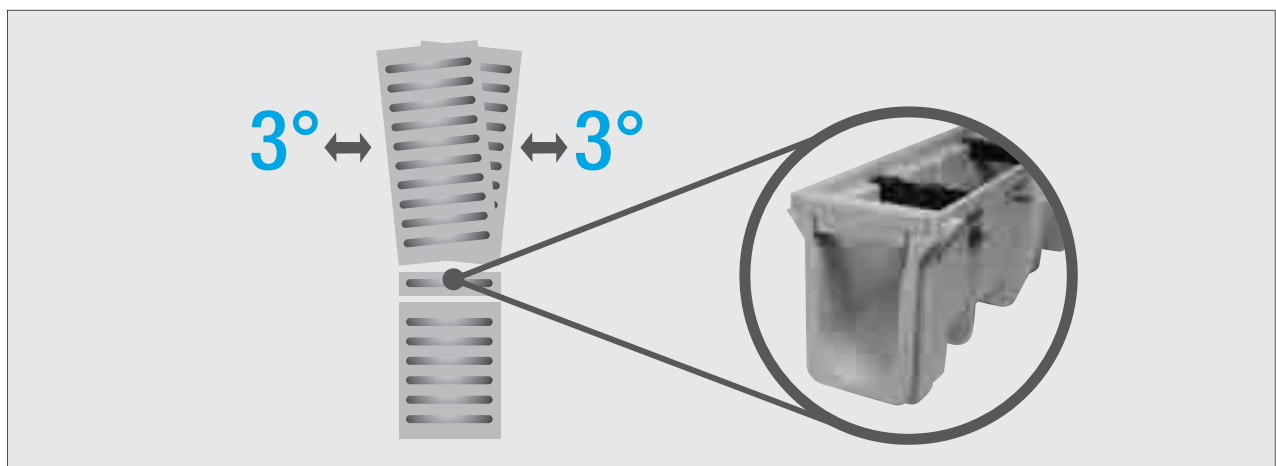
Designed specifically for draining 400-meter running tracks, Dura Slope™ Radius Couplings allow three degrees of deflection between trench drain sections, making an adjustable radius easily achievable for standard tracks and other curving applications.

Product Features & Benefits

- Achieves a 24.4 m-36.6 m radius
- Heavy-duty HDPE trench drain
- No special tools required – components snap into place
- Four depths available: 16.1 cm, 18.7 cm, 21.3 cm & 23.8 cm
- Grate options: standard & slotted



Flexible Radius Coupling



EZ-Track™ Radius Coupling & Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DSRC-097	0800 6114 011	16.1 cm Deep Neutral Dura Slope™ EZ-Track™ Radius Coupling	Light Gray	6	0.36	0052063026190
DSRC-100	0800 6114 012	18.7 cm Deep Neutral Dura Slope™ EZ-Track™ Radius Coupling	Light Gray	6	0.37	0052063026206
DSRC-103	0800 6114 013	21.3 cm Deep Neutral Dura Slope™ EZ-Track™ Radius Coupling	Light Gray	6	0.37	0052063026275
DSRC-106	0800 6114 014	23.8 cm Deep Neutral Dura Slope™ EZ-Track™ Radius Coupling	Light Gray	6	0.38	0052063026282
PLASTIC		Specification: 3 degree max. deflection per coupling. Minimum inside radius of 66 cm.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-660MG	0800 6114 004	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	White	6	0.07	0052063026404
DS-661MG	0800 6114 006	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Dark Gray	6	0.07	0052063026398
DS-661LGMG	0800 6114 005	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Light Gray	6	0.07	0052063026305
DS-662MG	0800 6114 007	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Green	6	0.07	0052063026374
DS-663MG	0800 6114 008	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Black	6	0.07	0052063026367
DS-664MG	0800 6114 009	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Sand	6	0.07	0052063026343
DS-665MG	0800 6114 010	3.2 cm Plastic Slotted Dura Slope™ EZ-Track™ Radius Coupling Grate	Brick Red	6	0.07	0052063026336
PLASTIC		Specification: Structural Foam Polyolefin Radius Coupling Channel Grate with UV inhibitor. Open surface area 12.1 square centimeters per grate. 21.8 LPM per grate.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-232MG	0800 6114 003	3.2 cm Ductile Iron Dura Slope™ EZ-Track™ Radius Coupling Grate	Black	6	0.42	0052063026114
DUCTILE IRON		Specification: Ductile Iron Radius Coupling Channel Grate. Open surface area 12.1 square centimeters per grate. 21.8 LPM per grate.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-226MG	0800 6114 002	3.2 cm Perforated Stainless Steel Dura Slope™ EZ-Track™ Radius Coupling Grate	Steel	10	0.11	0052063030883
STAINLESS STEEL		Specification: Stainless Steel Radius Coupling Channel Grate. Open surface area 5.5 square centimeters per grate. 9.96 LPM per grate.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-221MG	0800 6114 001	3.2 cm Galvanized Steel Dura Slope™ EZ-Track™ Radius Coupling Grate	Steel	10	0.15	0052063030906
GALVANIZED STEEL		Specification: Galvanized Steel Coupling Channel Grate. Open surface area 8.45 square centimeters per grate. 15.15 LPM per grate.				

NDS® CATCH BASINS

NDS catch basins and grates collect surface water while minimizing the amount of debris entering the system. Equipped with fabric filters, system life is extended by contributing to the further removal of fines from surface water. Available in a range of sizes from 15.24 cm round to 60.96 cm square, and with various grating and filter options for commercial and residential systems. Grates available in multiple colors and decorative design patterns.





CATCH BASINS – BENEFITS AT A GLANCE

Collect surface water and minimize amount of debris entering the system.

Catch basin **filter** helps **prevent** dirt and debris **from clogging** the drainage system.

Cost-effective, cleanable, easy to install and maintain as opposed to the expensive repair or replacement of drainage system elements.



CATCH BASINS

NDS offers a complete line of catch basins and grates for residential and commercial surface water management solutions. NDS catch basins have sump areas that collect debris and prevent clogging of the pipeline. Grates are available in a variety of patterns and colors to blend in with surrounding surfaces. Depending on the size of the round, square or atrium grates, they may fit directly into a riser of pipe, sewer and drain fitting, or our catch basins. To check Flexible PVC Couplings and adapt products to different pipe sizes, see page 86.



Small Grates



Large Catch Basin



Adapter

ROLE OF THE FILTER

Clogged pipes reduce the effectiveness of drainage systems, resulting in standing water and damage to property. Adding a filter is a simple solution to keep water flowing through a drainage system and a cost-effective alternative to expensive repair or replacement.

The NDS catch basin filter is removable and cleanable, making it easy to maintain. The filter contains a bypass feature that allows water to flow to the catch basin even if the filter is full or after a heavy storm water event. The filter comes pre-assembled, making it easy to install: unscrew the grate, drop in the filter and reinstall the grate. The filter bag is made out of nonwoven, spun-bonded, polypropylene geotextile fabric that provides superior filtration, is inert to biological degradation and is resistant to naturally encountered chemicals, alkalis and acids. The bag can hold up to 18 kg without tearing and is UV resistant.

Product Features & Benefits

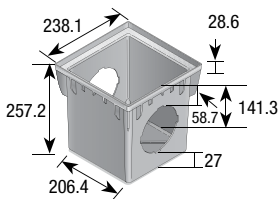
- Prevents dirt and debris from clogging your system
- Available in four sizes, 22.9 cm (9"), 30.5 cm (12"), 45.72 cm (18") and 60.96 cm (24").
Dimensions mentioned are orientational. Check the drawings or technical datasheets for exact dimensions.
- Made from spun-bonded, geotextile fabric
- Unique bypass feature allows for water flow to the catch basin even if the basin is full of leaves, fines, soot, etc.
- Grates available in multiple colors and decorative design patterns

22.86 cm (9") Catch Basin Series

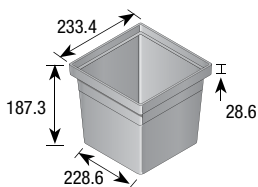
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



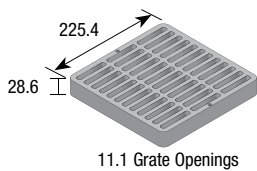
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
900FF	0800 6150 021	22.9 cm Catch Basin Filter	Blue Frame/Black Bag	8	0.03	0052063058191
Compatible with these basins: 22.9 cm x 22.9 cm NDS Catch Basins, Risers and Kits						
Specification: Polypropylene Frame Black Bag Fabric is nonwoven geotextile 956 PM/SF.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
900BLKIT	0800 6150 020	22.9 cm x 22.9 cm Catch Basin Kit. Includes: 1 catch basin, 1 grate, 2 outlets, 1 plug and 2 openings.	Black Grate	4	2.21	0052063030975
900GRKIT	0800 6150 022	22.9 cm x 22.9 cm Catch Basin Kit. Includes: 1 catch basin, 1 grate (green), 2 outlets, 1 plug and 2 openings.	Green Grate	4	2.21	0052063030982
900KITDISP	0800 6150 023	22.9 cm x 22.9 cm Catch Basin Kit. Includes: 1 catch basin, 1 grate (green), 2 outlets, 1 plug, 2 openings and a display box.	Black Grate	1	17.64	0052063030968
900	0800 6150 006	22.9 cm x 22.9 cm Catch Basin 2-opening	Black	4	0.98	0052063909004
900-4	0800 6150 019	22.9 cm x 22.9 cm Catch Basin 4-opening	Black	4	0.90	0052063949000
Use with 22.9 cm x 22.9 cm Catch Basin Series. Stacks on top of 22.9 cm catch basins to add up to 15.24 cm to top of basin. Can be cut to size. For Flexible Universal Outlets, see page 82 and PVC Couplings see page 86.						
PLASTIC		Specification: Tapered Catch Basin. Polypropylene.				

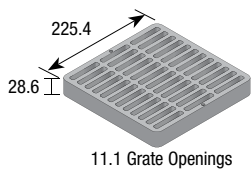


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
916	0800 6150 009	22.9 cm x 22.9 cm Catch Basin Extension	Black	4	0.79	0052063909165
Use with 22.9 cm x 22.9 cm Catch Basin Series. Stacks on top of 22.9 cm catch basins to add up to 15.24 cm to top of basin. Can be cut to size.						
PLASTIC		Specification: 15.24 cm Extension for 22.9 cm x 22.9 cm Catch Basin. Styrene.				



11.1 Grate Openings

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
980	0800 6150 014	22.9 cm Square Grate	Black	8	0.68	0052063909806
990	0800 6150 016	22.9 cm Square Grate	Green	8	0.68	0052063909905
999	0800 6150 018	22.9 cm Square Grate	Gray	8	0.68	0052063909998
999S	0800 6150 025	22.9 cm Square Grate	Sand	8	0.68	0052063919997
Use with 22.9 cm x 22.9 cm Catch Basin Series. Class A Load Rated. See Class Load Rate Table on page 21.						
PLASTIC		Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 241.8 square centimeters. 434.2 LPM.				

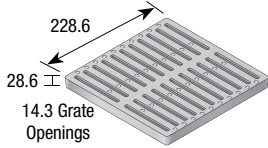


11.1 Grate Openings

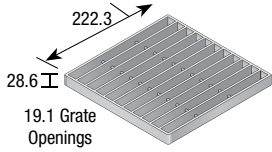
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
930B	0800 6150 024	22.9 cm Square Brass Grate	Brass	3	2.30	0052063018072
Class B Load Rate. See Class Load Rate Table on page 21.						
BRASS		Specification: Open surface area 219.3 square centimeters. 393.7 LPM. Includes SS Screws.				

22.86 cm (9") Catch Basin Series (continued)

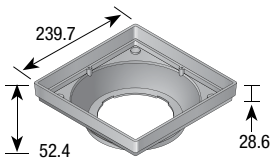
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
913	0800 6150 007	22.9 cm Square Ductile Iron Grate	Black	4	3.55	0052063009131
Use with 22.9 cm x 22.9 cm Catch Basin Series. Class C Load Rated. See Class Load Rate Table on page 21.						
DUCTILE IRON Specification: Square Heavy-Duty Ductile Iron Grate. Open surface area 140 square centimeters. 251.3 LPM.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
915	0800 6150 008	22.9 cm Square Galvanized Steel Grate	Galvanized Steel	1	1.71	0052063009155
Use with 22.9 cm x 22.9 cm Catch Basin Series. Class C Load Rated. See Class Load Rate Table on page 21.						
GALVINIZED STEEL Specification: Square Heavy-Duty Galvanized Steel Bar Grate. Open surface area 61.94 square centimeters. 399.5 LPM.						



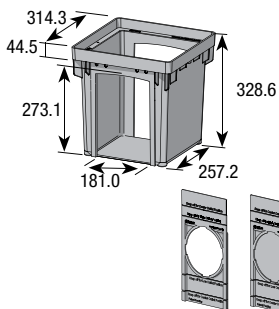
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
930	0800 6150 010	22.9 cm x 22.9 cm Low-Profile Adapter	Black	8	0.34	0052063090301
Requires 0800 6150 096, 0800 6150 097, 0800 6150 098, 0800 6150 100 Universal Outlets to connect pipes – see page 82. For Flexible PVC Couplings, see page 86.						
Specification: Low-Profile Adapter. Styrene.						

30.48 cm (12") Catch Basin Series

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



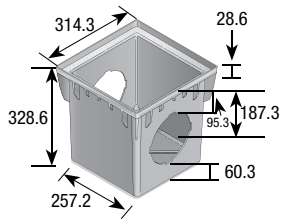
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1200FF	0800 6150 052	30.5 cm Catch Basin Filter	Blue Frame / Black Bag	8	0.05	0052063058214
Compatible with these basins: 0800 6150 028, 0800 6150 055, 0800 6150 029, 0800 6150 038, 0800 6150 039, 0800 6150 045 Catch Basins & Kits.						
Specification: Polypropylene Frame Fabric is nonwoven geotextile 956 PM/SF.						



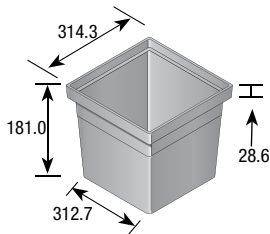
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1200NGBKIT	0800 6150 056	30.5 cm x 30.5 cm Catch Basin. 2 Open Slides	Black	4	2.09	0052063012261
1200NGB	0800 6150 055	30.5 cm x 30.5 cm Catch Basin	Black	4	1.55	0052063012247
1207	0800 6150 031	30.5 cm x 30.5 cm Catch Basin Open Slide	Black	8	0.27	0052063011851
1208	0800 6150 032	30.5 cm x 30.5 cm Catch Basin Closed Slide	Black	8	0.34	0052063011936

30.48 cm (12") Catch Basin Series

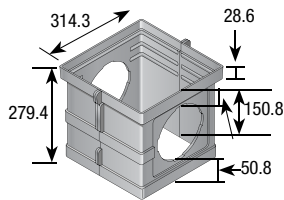
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1200BLKIT	0800 6150 049	30.5 cm x 30.5 cm Catch Basin. 2 Open Slides. Includes 2-opening Catch Basin, Grate, 2 Outlets and 1 Plug.	Black Grate	4	3.42	0052063027746
1200GRKIT	0800 6150 053	30.5 cm x 30.5 cm Catch Basin. 2 Open Slides. Includes 2-opening Catch Basin, Grate, 2 Outlets and 1 Plug.	Green Grate	4	3.42	0052063030999
1200KITDISP	0800 6150 054	30.5 cm x 30.5 cm Catch Basin. 2 Open Slides. Includes 2-opening Catch Basin, Grate, 2 Outlets, 1 Plug and a display box	Black Grate	1	3.42	0052063031002
1200DGBLKITWH	0800 6150 050	30.5 cm Basin with Wave Decorative Grate. Includes 2-opening Catch Basin, Grate, 2 Outlets and 1 Plug.	Black Grate	4	3.42	0052063058085
1200DGGKITWH	0800 6150 051	30.5 cm Basin with Botanical Decorative Grate. Includes 2-opening Catch Basin, Grate, 2 Outlets and 1 Plug.	Green Grate	4	3.42	0052063058078
1200	0800 6150 028	30.5 cm x 30.5 cm Catch Basin. 2 Openings	Black	4	1.91	0052063012100
1203	0800 6150 029	30.5 cm x 30.5 cm Catch Basin. 3 Openings	Black	4	1.69	0052063012032
1204	0800 6150 030	30.5 cm x 30.5 cm Catch Basin. 4 Openings	Black	4	1.69	0052063012049
Requires either 0800 6150 094, 0800 6150 095, 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 100 Universal Outlet to connect pipe to basin (see pages 82-83). Bottom cutout can be removed. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Tapered Catch Basin. Polypropylene.				



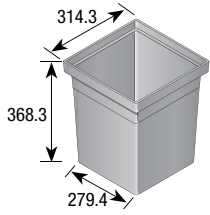
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1216	0800 6150 038	30.5 cm x 30.5 cm Catch Basin Extension	Black	8	1.24	0052063012162
Use with 30.48 cm x 30.48 cm (12") Catch Basin Series. Stacks on top of 30.48 cm (12") catch basins to add up to 15.24 cm to top of basin. Can be cut to size.						
PLASTIC		Specification: Extension for Catch Basin. Styrene.				



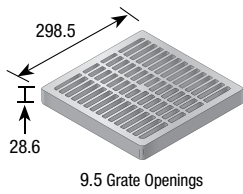
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1217	0800 6150 039	30.5 cm x 30.5 cm Extension with 2 Openings	Black	4	1.80	0052063012179
Nests on top of 30.48 cm Catch Basin Series for shallow outlets and 30.48 cm Sump Box for more sump area. Requires either 0800 6150 094, 0800 6150 095, 0800 6150 096, 0800 6150 097, 0800 6150 098, 0800 6150 100 Universal Outlet to connect pipe to riser. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Extension for Catch Basin with 2 Openings. Styrene.				

30.48 cm (12") Catch Basin Series (continued)

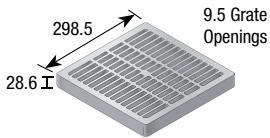
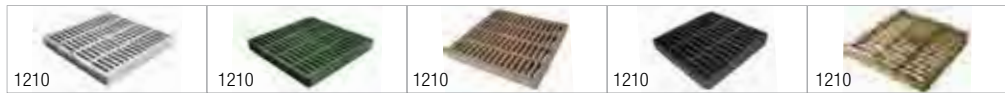
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



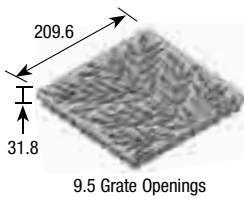
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1225	0800 6150 045	30.5 cm x 30.5 cm Sump Box	Black	4	3.04	0052063012254
Use with 30.48 cm x 30.48 cm Grate or 0800 6150 041 Valve Box Cover.						
PLASTIC		Specification: One-piece Sump Box. Styrene.				



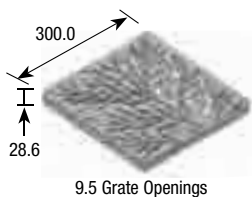
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1210	0800 6150 033	30.5 cm x 30.5 cm Square Grate	Gray	8	1.05	0052063012001
1211	0800 6150 034	30.5 cm x 30.5 cm Square Grate	Black	8	1.05	0052063112619
1212	0800 6150 035	30.5 cm x 30.5 cm Square Grate	Green	8	1.05	0052063012124
1212S	0800 6150 057	30.5 cm x 30.5 cm Square Grate	Sand	8	1.05	0052063011127
See Class Load Rate Table on page 21. Class B load rating.						
PLASTIC		Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 371.52 square centimeters. 587.8 LPM.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1230B	0800 6150 066	30.5 cm Square Brass Grate	Brass	4	4.16	0052063019307
See Class Load Rate Table on page 21.						
BRASS		Specification: Open surface area 276.5 square centimeters. 496.3 LPM. Includes SS Screws. Class B load rating.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1218S	0800 6150 061	30.5 cm x 30.5 cm Square Botanical Grate	Sand	8	1.47	0052063031132
1218GR	0800 6150 059	30.5 cm x 30.5 cm Square Botanical Grate	Green	8	1.47	0052063031149
1218GY	0800 6150 060	30.5 cm x 30.5 cm Square Botanical Grate	Gray	8	1.47	0052063031125
1218	0800 6150 040	30.5 cm x 30.5 cm Square Botanical Grate	Black	8	1.47	0052063031118
839	0800 6150 027	Stainless Steel Screws. 20x1-3/4"	Metal	1	n/a	0052063056494
See Class Load Rate Table on page 21.						
PLASTIC		Specification: Square Structural Foam Polyolefin Botanical Grate with UV inhibitor. Open surface area 157.64 square centimeters. 283 LPM. Class B load rating.				

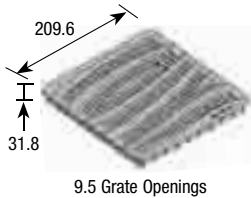


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1218CI	0800 6150 058	30.5 cm x 30.5 cm Square Botanical Cast Iron Grate	Raw Iron	1	5.70	0052063031378
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295
See Class Load Rate Table on page 21.						
CAST IRON		Specification: Square Cast Iron Botanical Grate. Open surface area 157.64 square centimeters. 283 LPM. Class B load rating.				



30.48 cm (12") Catch Basin Series (continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



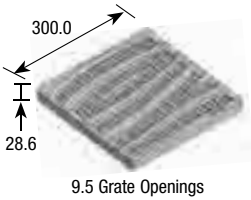
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1224S	0800 6150 065	30.5 cm x 30.5 cm Square Wave Grate	Sand	8	1.21	0052063031170
1224GR	0800 6150 063	30.5 cm x 30.5 cm Square Wave Grate	Green	8	1.21	0052063031187
1224GY	0800 6150 064	30.5 cm x 30.5 cm Square Wave Grate	Gray	8	1.21	0052063031163
1224	0800 6150 044	30.5 cm x 30.5 cm Square Wave Grate	Black	8	1.21	0052063031156
839	0800 6150 027	Stainless Steel Screws. 20x1-3/4	Metal	1	n/a	0052063056494



See Class Load Rate Table on page 21.

PLASTIC

Specification: Square Structural Foam Polyolefin Wave Grate with UV inhibitor. Open surface area 165.6 square centimeters. 297.3 LPM. Class B load rating.



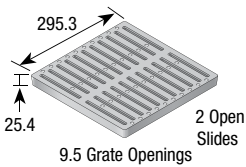
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1224CI	0800 6150 062	30.5 cm x 30.5 cm Square Wave Cast Iron Grate	Raw Iron	1	6.26	0052063031385
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295



See Class Load Rate Table on page 21.

CAST IRON

Specification: Square Cast Iron Wave Grate. Open surface area 167.4 square centimeters. 296.4 LPM. Class B load rating.



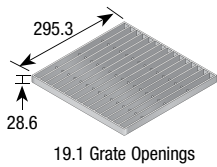
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1213	0800 6150 036	30.5cm x 30.5cm Square Ductile Iron Grate	Black	1	6.89	0052063012131



Use with 30.48 cm x 30.48 cm Catch Basin Series. See Class Load Rate Table on page 21.

DUCTILE IRON

Specification: Square Heavy-Duty Ductile Iron Grate. Open surface area 239.94 square centimeters. 430.8 LPM. Class C load rating



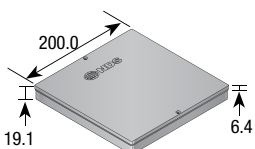
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1215	0800 6150 037	30.5cm x 30.5cm Square Galvanized Steel Grate	Galvanized Steel	1	2.63	0052063012155



Use with 30.48 cm x 30.48 cm Catch Basin Series. See Class Load Rate Table on page 21.

GALVANIZED STEEL

Specification: Square Heavy-Duty Galvanized Steel Bar Grate. Open surface area 733.9 square centimeters. 1 318 LPM. Class C load rated



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1220	0800 6150 041	30.5cm x 30.5cm Sump Pump Solid Catch Basin Box Cover	Black	8	1.00	0052063012209

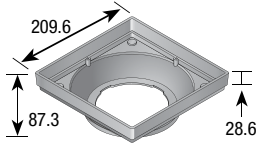
Use with 30.48 cm x 30.48 cm Catch Basin Series.

PLASTIC

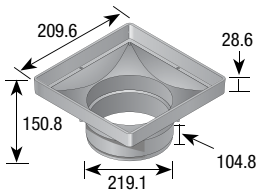
Specification: Square Structural Foam Polyolefin. Solid cover.

30.48 cm (12") Catch Basin Series (continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



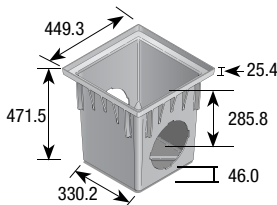
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1230	0800 6150 046	30.5cm x 30.5cm Low-Profile Adapter	Black	8	0.56	0052063012308
Requires 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 100 Universal Outlet for connection to pipes (see page 82). For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Low-Profile Adapter. Styrene				



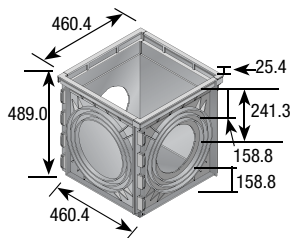
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1221	0800 6150 042	30.5cm x 30.5cm Square. Low-Profile Adapter	Black	12	0.86	0052063012216
1222	0800 6150 043	30.5cm x 30.5cm Square. Low-Profile Spigot Adapter	Black	12	0.86	0052063012223
For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Low-Profile Adapter. Styrene				

45.72 cm (18") Catch Basin Series

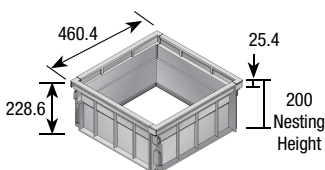
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
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Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1882	0800 6150 082	45.72 cm One-Piece Catch Basin. 2 Openings	Black	1	4.50	0052063018829
1884	0800 6150 083	45.72 cm One-Piece Catch Basin 4 Openings	Black	1	4.34	0052063018843
Requires either 0800 6150 094, 0800 6150 095, 0800 6150 096, 0800 6150 097, 0800 6150 098, 0800 6150 099 or 0800 6150 100 Universal Outlet to connect pipe to basin – see page 82. Includes 2 or 4 0800 6150 084 Reducer Rings. For Flexible PVC Couplings see page 86.						
PLASTIC		Specification: One-piece Tapered Catch Basin. Structural Foam. Polyolefin.				



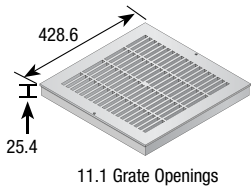
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1800	0800 6150 067	45.72 cm x 45.72 cm Expandable Catch Basin 2 Openings	Black	1	7.20	0052063018003
1804	0800 6150 068	45.72 cm x 45.72 cm Expandable Catch Basin 4 Openings	Black	1	7.20	0052063018041
Assembly Required. 0800 6150 067 includes: 2 x 0800 6150 077, 2 x 0800 6150 075, 2 x 0800 6150 084, 1 x 0800 6150 078. 0800 6150 068 includes: 4 x 0800 6150 077, 4 x 0800 6150 084, 1 x 0800 6150 078. Use 0800 6150 067 and 0800 6150 068 with 0800 6150 094, 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 099 Universal Outlets to connect pipes to basin – see page 82. Includes 2 or 4 0800 6150 084 Reducer Rings. (Note: Use Silicone to seal joints.) For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Modular Catch Basin with Locking Tabs. Styrene.				



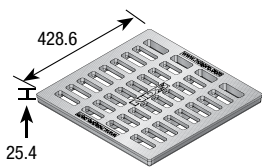
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1816	0800 6150 074	20.3 cm Extension for 45.72 cm Catch Basin	Black	1	2.70	0052063018164
Riser package includes 4 sides. 0800 6150 067, 0800 6150 068, 0800 6150 082 or 0800 6150 083.						
PLASTIC		Specification: Extension for Catch Basin. Styrene.				

45.72 cm (18") Catch Basin Series

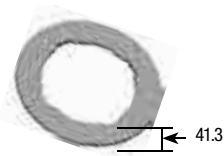
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



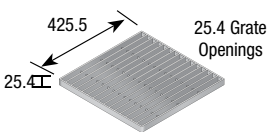
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1810	0800 6150 069	45.72 cm x 45.72 cm Square Grate	Gray	4	3.47	0052063018102
1811	0800 6150 070	45.72 cm x 45.72 cm Square Grate	Black	4	3.47	0052063018119
1812	0800 6150 071	45.72 cm x 45.72 cm Square Grate	Green	4	3.47	0052063018126
		Use with 45.72 cm x 45.72 cm Catch Basin Series. Class B load rating. See Class Load Rate Table on page 21.				
PLASTIC		Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 556.7 square centimeters. 999.5 LPM.				



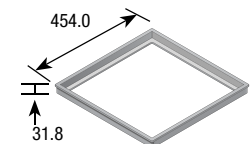
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1813	0800 6150 072	45.72 cm x 45.72 cm Cast Iron Square Grate	Black	1	20.70	0052063043913
		Use with 45.72 cm x 45.72 cm Catch Basin Series. See Class Load Rate Table on page 21. Class C load rating.				
CAST IRON		Specification: Square Heavy-Duty Cast Iron Grate. Open surface area 714 square centimeters. 1 282 LPM. H-20 Load Rating.				



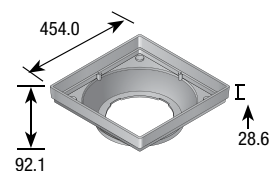
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1890	0800 6150 084	Universal Outlet Reducer Ring	Black	8	0.15	0052063018904
		Required on 0800 6150 076 basin side when using 8 cm, 10 cm or 15 cm pipe. Required on 0800 6150 076 basin side when connecting to 0800 6150 094, 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 100 Universal Outlets. For Flexible PVC Couplings, see page 86.				
PLASTIC		Specification: Styrene.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1815	0800 6150 073	45.72 cm Square Galvanized Steel Grate	Galvanized Steel	40	4.85	0052063018157
		Use with 45.72 cm x 45.72 cm Catch Basin Series. See Class Load Rate Table on page 21.				
GALVANIZED STEEL		Specification: Square Heavy-Duty Galvanized Steel Bar Grate. Open surface area 1545.5 square centimeters. 2 768 LPM. Class D load rating.				

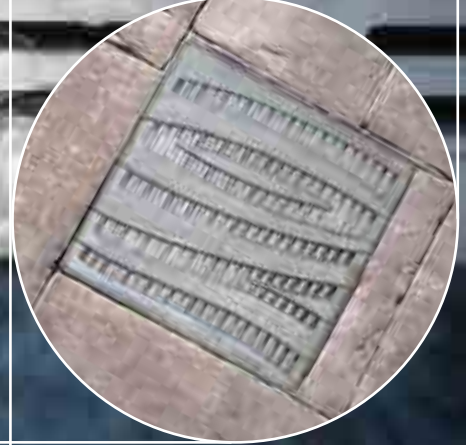


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1840	0800 6150 080	Frame to adapt 45.7 cm x 45.7 cm grate to concrete catch basin	Black	4	0.90	0052063018409
		Use with 45.72 cm x 45.72 Grates.				
PLASTIC		Specification: Styrene.				



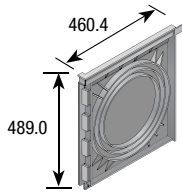
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1830	0800 6150 079	45.72 cm x 45.72 cm Low-Profile Adapter	Black	4	2.14	0052063018300
		Includes 0800 6150 084 Reducer Ring. Requires either an 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 099 Universal Outlet to connect to pipe – see page 82. For Flexible PVC Couplings, see page 86.				
PLASTIC		Specification: Low-Profile Adapter. Styrene.				



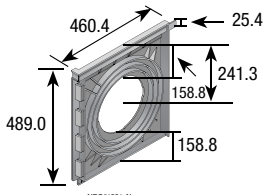


45.72 cm (18") Component Parts

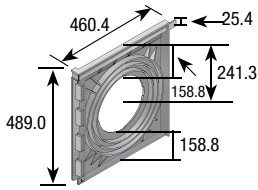
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



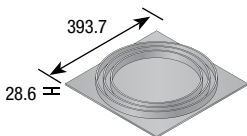
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1820	0800 6150 075	45.72 cm Catch Basin Side – No Opening	Black	4	1.80	0052063018201
PLASTIC		Specification: Catch Basin Side, No Opening. Styrene.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1821	0800 6150 076	45.72 cm Catch Basin Side – 20.3 cm Opening	Black	4	1.80	0052063018218
PLASTIC		Reducer Ring not included. Requires 0800 6150 099 Universal Outlet to fit 20 cm pipes or 0800 6150 098 Universal Outlets – see page 82. 0800 6150 100 Universal Outlet does not fit this 0800 6150 076 Basin Side. For Flexible PVC Couplings, see page 86.				
PLASTIC		Specification: Catch Basin Side, Opening. Styrene.				



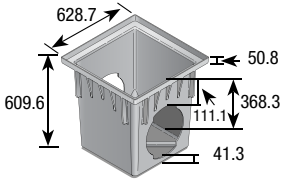
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1822	0800 6150 077	45.72 cm Catch Basin Side – 15.2 cm or 20.3 cm Opening	Black	4	1.69	0052063018225
PLASTIC		Opening using Universal Outlet. Includes 0800 6150 084 Reducer Ring. Use with 0800 6150 094, 0800 6150 096, 0800 6150 097, 0800 6150 098 or 0800 6150 099 Universal Outlets – see page 82. For Flexible PVC Couplings, see page 86.				
PLASTIC		Specification: Catch Basin Side, Opening. Styrene.				



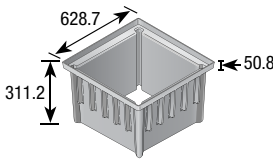
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1828	0800 6150 078	45.72 cm Catch Basin Bottom	Black	4	1.13	0052063018287
PLASTIC		Specification: Catch Basin Bottom. Styrene				

60.96 cm (24") Catch Basin Series

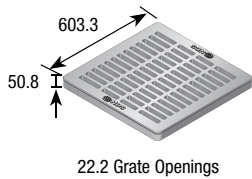
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



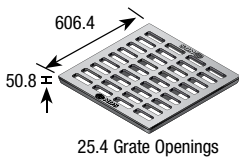
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2400	0800 6150 086	60.96 cm x 60.96 cm Catch Basin. 2 Openings	Black	1	8.10	0052063024004
2404	0800 6150 087	60.96 cm x 60.96 cm Catch Basin. 4 Openings	Black	1	6.75	0052063024042
Requires 2 or 4 0800 6150 088 Universal Outlets – see page 82.						
PLASTIC		Specification: One-Piece Tapered Catch Basin. HDPE with Structural Foam.				



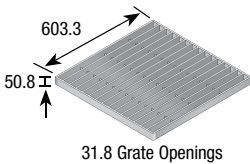
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2418	0800 6150 093	60.96 cm x 60.96 cm Catch Basin Extension (No Bottom)	Black	1	6.57	0052063024189
Use with 60.96 cm x 60.96 cm Catch Basin Series.						
PLASTIC		Specification: Extension for Catch Basin. HDPE with Structural Foam.				



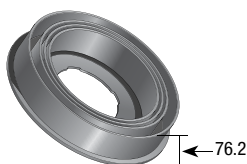
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2411	0800 6150 089	60.96 cm x 60.96 cm Square Grate	Black	1	8.89	0052063024110
2412	0800 6150 090	60.96 cm x 60.96 cm Square Grate	Green	1	8.89	0052063024127
Use with 60.96 cm x 60.96 cm Catch Basin Series. See Class Load Rate Table on page 21.						
PLASTIC		Specification: Square HDPE with Structural Foam Grate with UV inhibitor. Open surface area 1,494.4 square centimeters. 2 680 LPM. Class B load rating.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2413	0800 6150 091	60.96 cm x 60.96 cm Square Cast Iron Grate	Black	1	66.15	0052063038278
Use with 60.96 cm x 60.96 cm Catch Basin Series. See Class Load Rate Table on page 21.						
CAST IRON		Specification: Square Heavy-Duty Cast Iron Grate. Open surface area 1,270.6 square centimeters. 2,281 LPM. Structural Foam. Class C load rating.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2415	0800 6150 092	60.96 cm x 60.96 cm Square Galvanized Steel Grate	Galvanized Steel	1	28.30	0052063038285
Use with 60.96 cm x 60.96 cm Catch Basin Series. See Class Load Rate Table on page 21.						
GALVANIZED STEEL		Specification: "Square Heavy-Duty Galvanized Steel Bar Grate. Open surface area 2,724.8 square centimeters. 4 892 LPM. Structural Foam." Class D load rating.				

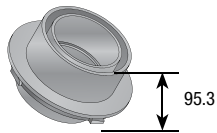


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2410	0800 6150 088	25.4 cm x 30.5 cm Universal Adapter	Black	2	1.89	0052063024103
Includes 0800 6150 084 (comes pre-assembled). Fits most 25.4 cm and 30.5 cm pipes (does not fit 25.4 Single Wall Corrugated Pipe). Reduces opening to fit most 7.62 cm (3") to 20.32 cm (8") adapters above (all except 0800 6150 100) for connecting with pipes. For Flexible PVC Couplings, see page 82. Use with 60.96 cm (24") Catch Basin Series.						
PLASTIC		Specification: Universal Adapter. HDPE.				

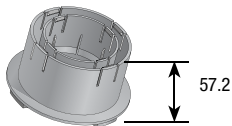
Catch Basin Universal Outlets

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

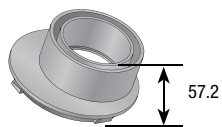
Universal Outlets and Adapters allow you to quickly connect to 7.62 cm (3") - 30.5 cm (12") drain pipes to accommodate the needs of any job. They offer greater flexibility during install saving time and money. To check Flexible PVC Couplings and adopt products to different pipe sizes see page 86.



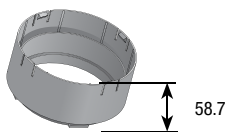
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1242	0800 6150 095	7.6 cm x 10.2 cm Universal Outlet w/10.2 cm Spigot	Black	20	0.33	0052063012421
Fits most 7.62 cm (3") and 10.16 cm (4") pipes. Allows for adjusting inlet height. Use with 22.86 cm (9"), 30.48 cm (12"), 45.72 cm (18") and 60.96 cm (24") Catch Basin Series. Use with 60.96 cm Catch Basin also requires 0800 6150 088 Adapter. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Universal Outlet. Styrene.				



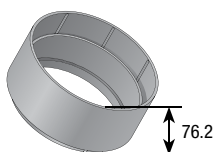
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1243	0800 6150 096	7.6 cm x 10.2 cm Universal Locking Outlet	Black	20	0.27	0052063121147
Fits most 7.62 cm (3") and 10.16 cm (4") pipes. Use with 2.86 cm (9"), 30.48 cm (12"), 45.72 cm (18") and 60.96 cm (24") Catch Basin Series and 0800 6150 010, 0800 6150 046, 0800 6150 079, 0800 6150 088 Adapters. Use with 60.96 cm Catch Basin also requires 0800 6150 088 Adapter. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Patented Universal Locking Outlet. Styrene.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1245	0800 6150 097	7.6 cm x 10.2 cm Offset Universal Outlet	Black	20	0.23	0052063012452
Fits most 7.62 cm (3") and 10.16 cm (4") pipes. Allows for adjusting inlet height. Use with 2.86 cm (9"), 30.48 cm (12"), 45.72 cm (18") and 60.96 cm (24") Catch Basin Series. Use with 60.96 cm Catch Basin also requires 0800 6150 088 Adapter. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Offset Universal Outlet. Styrene.				



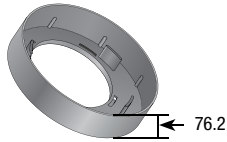
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1266	0800 6150 098	15.2 cm Universal Locking Outlet	Black	20	0.25	0052063201290
Fits most 15.24 cm (6") pipes. Use with 2.86 cm (9"), 30.48 cm (12"), 45.72 cm (18") and 60.96 cm (24") Catch Basin Series and 0800 6150 010, 0800 6150 046, 0800 6150 079 Low-Profile Adapters. Use with 60.96 cm Catch Basin also requires 0800 6150 088 Adapter. For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Universal Locking Outlet. Styrene.				



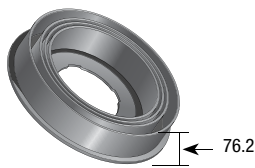
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1888	0800 6150 099	20.3 cm Universal Outlet	Black	8	0.47	0052063018881
Fits most 20.32 cm (8") pipes. Use with 45.72 cm (18") and 60.96 cm (24") Catch Basin Series. Use with 60.96 cm Catch Basin also requires 0800 6150 088 Adapter.						
PLASTIC		Specification: Universal Outlet. Styrene.				

Catch Basin Universal Outlets (Continued)

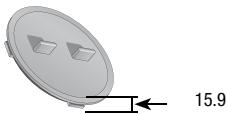
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
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Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1889	0800 6150 100	20.3 cm Offset Universal Adapter	Black	10	0.33	0052063043920
Fits most 20.32 cm (8") pipes. Use with 30.48 cm (12") and most 45.72 cm (18") Catch Basin Series. (except 0800 6150 067 and 0800 6150 068). For Flexible PVC Couplings, see page 86.						
PLASTIC		Specification: Offset Universal Adapter. Styrene.				



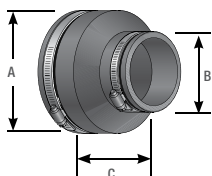
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
2410	0800 6150 088	25.4 cm x 30.5 cm Universal Adapter	Black	2	1.89	0052063024103
Includes 0800 6150 084 (comes pre-assembled). Fits most 25.4 cm and 30.5 cm pipes (does not fit 25.4 Single Wall Corrugated Pipe). Reduces opening to fit most 7.62 cm (3") to 20.32 cm (8") adapters above (all except 0800 6150 100) for connecting with pipes. For Flexible PVC Couplings, see page 86. Use with 60.96 cm (24") Catch Basin Series.						
PLASTIC		Specification: Universal Adapter. HDPE.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1206	0800 6150 094	15.2 cm Universal Adapter Plug	Black	20	0.16	0052063012063
PLASTIC		Specification: Universal Plug. Styrene.				

NDS Flexible Coupling Sizing Chart

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



Clay to cast iron or plastic

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
02-44	0800 7670 005	4" CLAY X 4" CI/PVC	5.25	133	4.38	111	4.00	110	24	0.65	052063048376
02-64	0800 7670 006	6" CLAY X 4" CI/PVC	7.38	187	4.38	111	6.00	152	12	1.1	052063048390
02-66	0800 7670 007	6" CLAY X 6" CI/PVC	7.38	187	6.38	162	6.00	152	18	1.07	052063010038

Asbestos cement, fibre, or ductile iron to cast iron or plastic

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
51-44	0800 7670 013	4" AC/DI X 4" CI/PVC	4.75	120	4.38	111	4.00	101	24	0.49	052063010106

DRAINAGE CONNECTORS

Drainage connectors provide possibility of adopting NDS products to most sizes and types of piping required for effective work of draining system. Designed to provide flexibility, leakproof seal and ensure long life of the system.





NDS® FLEXIBLE COUPLINGS – BENEFITS AT A GLANCE

High-quality couplings and connectors that **easily adapt** to any situation.

Innovative, flexible couplings for sewer, drain, waste and vent piping allow any two pipes to be connected **quickly and easily**.

Dimensional flexibility ensures **leakproof seals** with virtually any pipe material.

For utility and plumbing applications.



NDS® FLEXIBLE COUPLINGS

NDS Flexible couplings provide possibility of adopting NDS products to most sizes and types of piping required for effective drainage system functioning.

Product Features and Benefits

- Couplings and connectors fit over the ends of plain-end or spigot pipe to form a positive seal against infiltration and exfiltration in non-pressure environments
- Durable PVC construction allows couplings to flex with normal earth movement
- Completely unaffected by soil conditions and resistant to chemicals, UV rays and normal sewer gases
- Dimensional flexibility ensures quick and easy installation of leakproof seal with virtually any pipe material

Materials & Standards

- Flexible couplings are made of elastomeric polyvinyl chloride (PVC) for long-lasting performance and durability
- Bactericides and fungicides are added to PVC for extra protection
- All clamps, including the band and housing, are made from stainless steel, offering corrosion-resistant, rustproof reliability

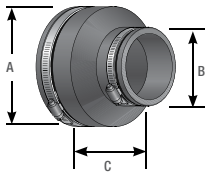
Installation

- Clamps install easily with a screwdriver, 5/16" (0.8 cm) nut driver or socket to 60 inch-lbs. torque
- All couplings are marked with size and pipe materials that the coupling will connect, eliminating guesswork on the job
- For more details about connections, see pages 22-23.

NDS Flexible Coupling Sizing Chart

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

- All dimensions given in inches and mm.
- Stainless steel clamps supplied with all couplings.
- All couplings will fit any pipe type within +/- 5% OD on chart.



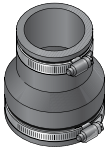
Clay to Clay

Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
01-44	0800 7670 001	4" X 4" CLAY	5.25	133	5.25	133	4.00	101	18	0.57	052063048222

Clay to cast iron or plastic

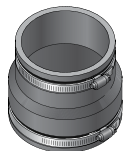
Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
02-43	0800 7670 004	4" CLAY X 3" CI/PVC	5.25	133	3.38	85	4.00	101	36	0.56	052063048369
02-44	0800 7670 005	4" CLAY X 4" CI/PVC	5.25	133	4.38	111	4.00	110	24	0.65	052063048376
02-64	0800 7670 006	6" CLAY X 4" CI/PVC	7.38	187	4.38	111	6.00	152	12	1.1	052063048390
02-66	0800 7670 007	6" CLAY X 6" CI/PVC	7.38	187	6.38	162	6.00	152	18	1.07	052063010038
02-88	0800 7670 008	8" CLAY X 8" CI/PVC	9.65	245	8.50	215	6.00	152	6	1.42	052063010045
02-1010	0800 7670 002	10" CLAY X 10" CI/PVC	11.80	299	10.60	269	6.00	152	2	1.8	052063010052
02-1212	0800 7670 003	12" CLAY X 12" CI/PVC	14.38	365	12.60	320	6.00	152	3	2.34	052063048338

Concrete to cast iron or plastic



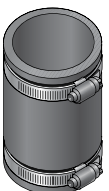
Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
06-44	0800 7670 009	4" CONCRETE X 4" CI/PVC	5.53	142	4.38	111	4.00	101	18	0.75	052063010076
06-64	0800 7670 010	6" CONCRETE X 4" CI/PVC	7.80	198	4.38	111	6.00	152	12	1.08	052063048666
06-66	0800 7670 011	6" CONCRETE X 6" CI/PVC	7.80	198	6.38	162	6.00	152	12	1.16	052063048673
06-88	0800 7670 012	8" CONCRETE X 8" CI/PVC	10.25	260	8.50	215	6.00	152	6	1.5	052063010083

Asbestos cement, fibre, or ductile iron to cast iron or plastic



Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
51-44	0800 7670 013	4" AC/DI X 4" CI/PVC	4.75	120	4.38	111	4.00	101	24	0.49	052063010106
51-66	0800 7670 014	6" AC/DI X 6" CI/PVC	7.00	177	6.38	162	6.00	152	15	1.23	052063049090

Cast iron, plastic, copper, steel or lead to cast iron, plastic, copper, steel or lead

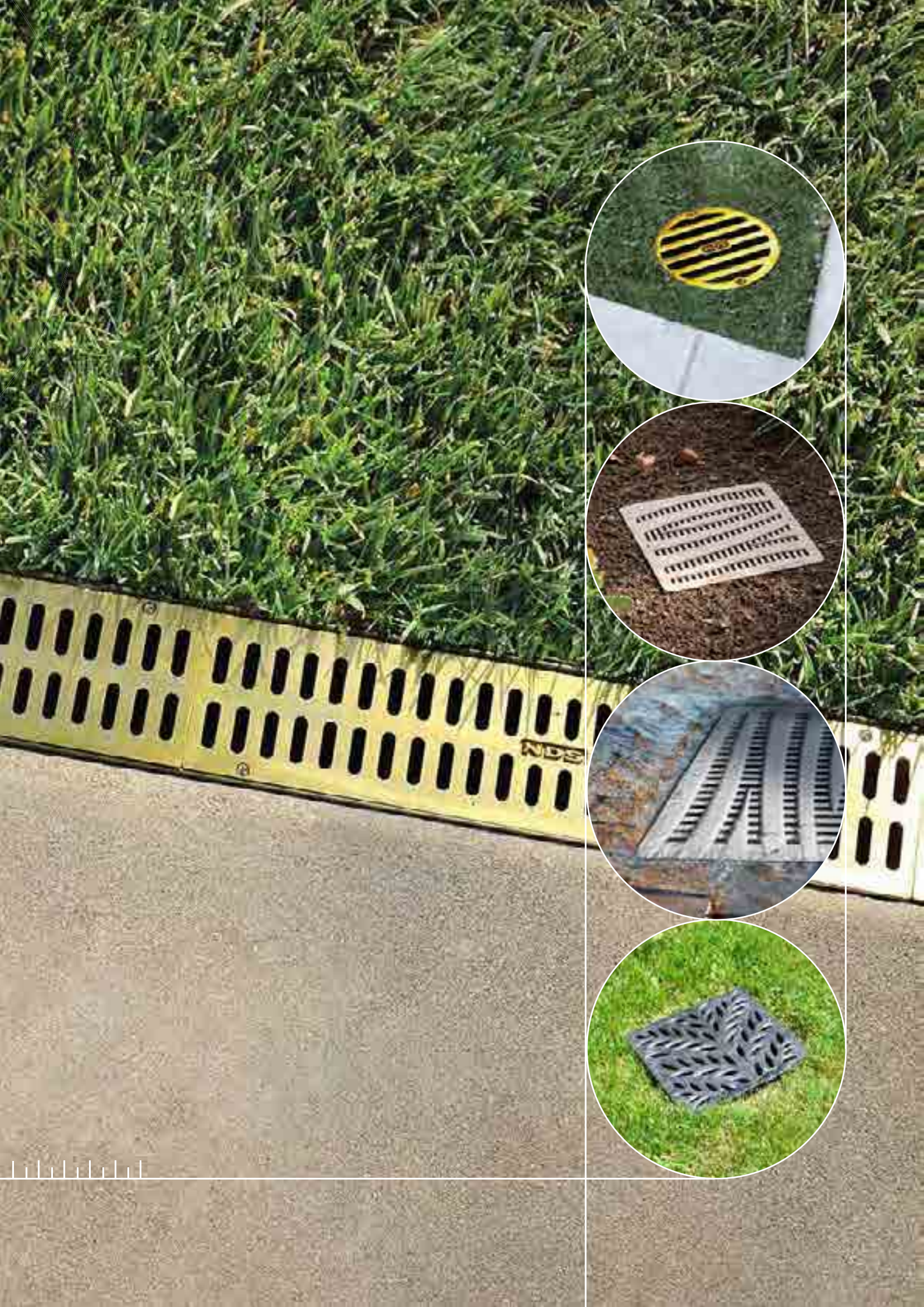


Part No. US	Part No. EMEA	Description/Connection type	Size A		Size B		Size C		Pkg. Qty.	Weight (kg)	EAN code
			Inch	mm	Inch	mm	Inch	mm			
56-125	08007670017	1 1/4" X 1 1/4" CI/PVC	1.65	40	1.65	40	4.00	101	90	0.16	052063049250
56-150	08007670018	1 1/2" X 1 1/2" CI/PVC	1.9	48	1.65	40	4.00	101	75	0.18	052063000442
56-150/125	08007670019	1 1/2" X 1 1/4" CI/PVC	1.9	48	1.9	48	4.00	101	75	0.18	052063049274
56-2150	08007670020	2" X 1 1/2" CI/PVC	2.4	60	1.9	48	4.00	101	54	0.23	052063049304
56-22	08007670021	2" X 2" CI/PVC	2.4	60	2.4	60	4.00	101	54	0.23	052063049311
56-32	08007670022	3" X 2" CI/PVC	3.38	85	2.4	60	4.00	101	45	0.32	052063049335
56-33	08007670023	3" X 3" CI/PVC	3.38	85	3.38	85	4.00	101	45	0.34	052063049342
56-42	08007670024	4" X 2" CI/PVC	4.38	111	2.4	60	4.00	101	30	0.42	052063049366
56-E43	08007670032	4" X 3" CI/PVC E	4.38	111	3.38	85	4.00	101	9	0.61	052063049564
56-43	08007670025	4" X 3" CI/PVC	4.38	111	3.38	85	4.00	101	25	0.49	052063049373
56-44	08007670026	4" X 4" CI/PVC	4.42	112	4.42	112	4.00	101	24	0.75	052063010113
56-55	08007670027	5" X 5" CI/PVC	5.62	142	5.62	142	4.00	101	18	0.62	052063049427
56-64	08007670028	6" X 4" CI/PVC	6.38	162	4.38	111	6.00	152	12	0.97	052063049441
56-66	08007670029	6" X 6" CI/PVC OR 5" X 5" CLAY	6.38	162	6.38	162	6.00	152	15	0.96	052063049472
56-86	08007670030	8" X 6" CI/PVC	8.50	215	6.38	162	6.00	152	6	1.52	052063049519
56-88	08007670031	8" X 8" CI/PVC	8.50	215	8.50	215	6.00	152	12	1.58	052063049533
56-1010	08007670015	10" X 10" CI/PVC	10.60	269	10.60	269	7.00	178	2	2.7	052063010120
56-1212	08007670016	12" X 12" CI/PVC	12.83	326	12.83	326	6.00	152	3	2.25	052063049236

NDS® GRATES – STANDARD, DECORATIVE, PLASTIC & METAL

Strong, practical, functional. NDS offers a variety of grates in sizes, patterns, colors and design options to fit all products and enhance any landscape. Suitable for NDS range of channel and trench drains and catch basins.





GRATES: STANDARD, DECORATIVE & METAL – BENEFITS AT A GLANCE

Made of solid materials, including cast and ductile iron as well as galvanized steel for higher load demand.

Supports aesthetic concept of the landscape and allow for perfect blend-in thanks to:

- multiple colors available: blue, orange, black, white, grey, silver, bronze, brown, green, sand, brick red
- decorative grate patterns available: regular, botanical, wave, diamond, tile, brick, deco

Versatile flow rate features.



GRATES: STANDARD, DECORATIVE & METAL

Our solid cast brass grates are secured to a PVC collar with solid brass screws for aesthetics and reliability. The PVC collar can be solvent welded into sewer and drain fittings or pipe where permanent, anti-theft installation is desired. The grate can still be removed for easy cleanout.

Product Features & Benefits

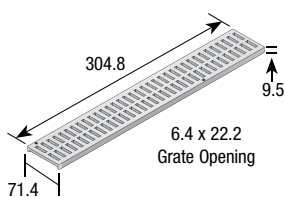
- Strong
- Practical
- Functional
- A unique mix of beauty and function
- Recommended for highly-visible entry areas in hotels, malls, office buildings, country clubs and estates
- Exceptional construction and fine finish also make these grates ideal for deck areas, walkways, swimming pools and spas

Materials & Standards – Brass & Chrome Grates

- Made with the highest-quality solid brass
- Brushed Satin and Polished Chrome finishes are protected by a clear plastic film that prevents damage to the finish during shipping and installation

Brass & Chrome Grates

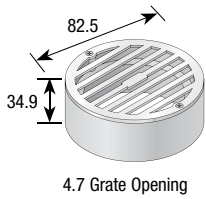
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



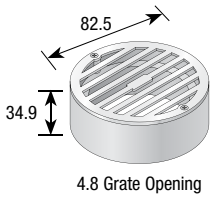
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
552B	0800 6180 095	30.5 cm Brass Channel Grate	Satin Brass	12	0.56	0052063505527
553PB	0800 6180 096	30.5 cm Brass Channel Grate	Polished Brass	12	0.56	0052063505534
		Fits 0800 6111 036 and 0800 6113 040 Mini Channels. (see page 30). Heel-proof. See Class Load Rate Table on page 21.				
BRASS		Specification: Mini Channel Solid Brass Grate with brass screws. Open surface area 23.4 square centimeters per 30.5 cm. 106.5 LPM per 30.5 cm. Class A load rating.				

Brass & Chrome Grates

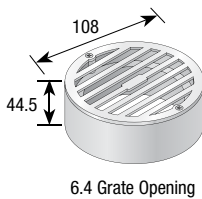
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



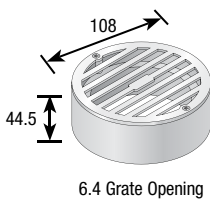
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
909B	0800 6180 101	7.6 cm Round Brass Grate w/PVC Collar	Satin Brass	20	0.18	0052063390994
905PB	0800 6180 098	7.6 cm Round Brass Grate w/PVC Collar	Polished Brass	20	0.18	0052063390550
Fits 7.62 cm (3") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
BRASS Specification: Round Solid Brass Grate and brass screws with PVC collar. Open surface area 17.5 square centimeters. 8.20 LPM. Class A load rating.						



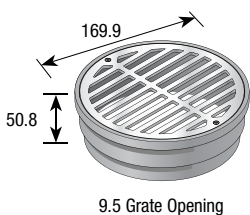
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
915SC	0800 6180 106	7.6 cm Round Chrome Grate w/PVC Collar	Satin Chrome	20	0.18	0052063309156
Fits 7.62 cm (3") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
CHROME Specification: Round Solid Chrome Grate and screws with PVC collar. Open surface area 17.3 square centimeters. 31.04 LPM. Class A load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
910B	0800 6180 103	10.2 cm Round Brass Grate w/PVC Collar	Satin Brass	20	0.29	0052063491004
906PB	0800 6180 099	10.2 cm Round Brass Grate w/PVC Collar	Polished Brass	20	0.29	0052063490663
Fits 7.62 cm (3") Sewer & Drain Pipes and 10.16 cm (4") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
BRASS Specification: Round Solid Brass Grate and brass screws with PVC collar. Open surface area 33.9 square centimeters. 60.8 LPM. Class A load rating.						



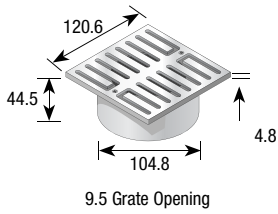
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
917SC	0800 6180 107	10.2 cm Round Chrome Grate w/PVC Collar	Satin Chrome	20	0.30	0052063409177
908PC	0800 6180 100	10.2 cm Round Chrome Grate w/PVC Collar	Polished Chrome	20	0.30	0052063490885
Fits 7.62 cm (3") Sewer & Drain Pipes and 10.16 cm (4") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
CHROME Specification: Round Chrome Grate and screws with PVC collar. Open surface area 33.9 square centimeters. 60.8 LPM. Class A load rating.						



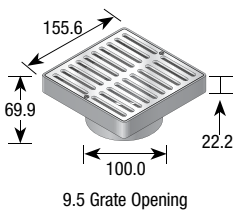
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
918B	0800 0180 015	15.2 cm Round Brass Grate w/Styrene Collar	Satin Brass	8	0.62	0052063409184
919PB	0800 6180 109	15.2 cm Round Brass Grate w/Styrene Collar	Polished Brass	8	0.62	0052063409191
Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
BRASS Specification: Round Solid Brass Grate and brass screws with styrene collar. Open surface area 84.5 square centimeters. 151.7 LPM. Class A load rating.						

Brass & Chrome Grates (continued)

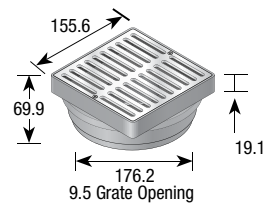
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



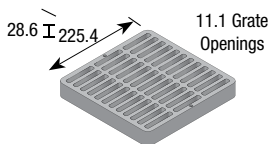
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
913B	0800 6180 104	12.7 cm Square Brass Grate w/PVC Collar	Satin Brass	10	0.54	0052063591308
914PB	0800 6180 105	12.7 cm Square Brass Grate w/PVC Collar	Polished Brass	10	0.54	0052063591407
		Fits 10.16 cm (4") Sewer and Drain Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.				
BRASS		Specification: Square Solid Brass Grate with brass screws and PVC collar. Open surface area 16.125 square centimeters. 29 LPM. Class A load rating.				



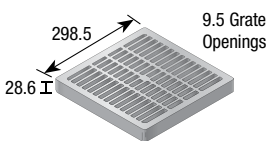
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
920B	0800 6180 110	15.2 cm Square Brass Grate w/Styrene Adapter	Satin Brass	8	0.74	0052063309200
923PB	0800 6180 113	15.2 cm Square Brass Grate w/Styrene Adapter	Polished Brass	8	0.74	0052063409238
		Fits 7.62 cm (3") and 10.16 cm (4") Sewer and Drain Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.				
BRASS		Specification: Square Solid Brass Grate with brass-colored styrene low-profile adapter and brass screws. Open surface area 74.82 square centimeters. 134.3 LPM. Class A load rating.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
921B	0800 6180 111	15.2 cm Square Brass Grate w/Styrene Adapter	Satin Brass	8	0.77	0052063409214
922PB	0800 6180 112	15.2 cm Square Brass Grate w/Styrene Adapter	Polished Brass	8	0.77	0052063409221
		Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.				
BRASS		Specification: Square Solid Brass Grate with brass-colored styrene low-profile adapter and brass screws. Open surface area 74.82 square centimeters. 134.3 LPM. Class A load rating.				



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
930B	0800 6150 024	22.9 cm Square Brass Grate	Brass	3	2.30	0052063018072
		See Class Load Rate Table on page 21.				
BRASS		Specification: Open surface area 219.3 square centimeters. 393.7 LPM. Includes SS Screws. Class B load rating.				

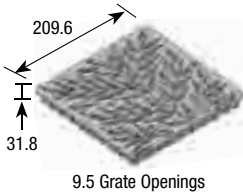


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1230B	0800 6150 066	30.5 cm Square Brass Grate	Brass	4	4.16	0052063019307
		See Class Load Rate Table on page 21.				
BRASS		Specification: Open surface area 276.5 square centimeters. 496.3 LPM. Includes SS Screws. Class B load rating.				

Catch Basin Plastic & Metal Decorative Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

Fits 30.48 cm (12") Catch Basins. Available in Botanical and Wave designs, in multiple colors or in cast iron. Plastic grates are "T-top" and overlap basin edge. Iron grates sit flush.

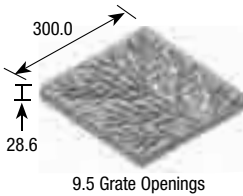


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1218S	0800 6150 061	30.5 cm x 30.5 cm Square Botanical Grate	Sand	8	1.47	0052063031132
1218GR	0800 6150 059	30.5 cm x 30.5 cm Square Botanical Grate	Green	8	1.47	0052063031149
1218GY	0800 6150 060	30.5 cm x 30.5 cm Square Botanical Grate	Gray	8	1.47	0052063031125
1218	0800 6150 040	30.5 cm x 30.5 cm Square Botanical Grate	Black	8	1.47	0052063031118
839	0800 6150 027	Stainless Steel Screws. 20x1-3/4	Metal	1	n/a	0052063056494



See Class Load Rate Table on page 21.

PLASTIC **Specification:** Square Structural Foam Polyolefin Botanical Grate with UV inhibitor. Open surface area 157.64 square centimeters. 283 LPM. Class B load rating.

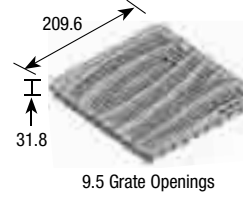


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1218CI	0800 6150 058	30.5 cm x 30.5 cm Square Botanical Cast Iron Grate	Raw Iron	1	5.70	0052063031378
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295



See Class Load Rate Table on page 21.

CAST IRON **Specification:** Square Cast Iron Botanical Grate. Open surface area 157.64 square centimeters. 283 LPM. Class B load rating.

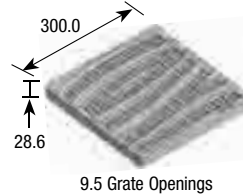


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1224S	0800 6150 065	30.5 cm x 30.5 cm Square Wave Grate	Sand	8	1.21	0052063031170
1224GR	0800 6150 063	30.5 cm x 30.5 cm Square Wave Grate	Green	8	1.21	0052063031187
1224GY	0800 6150 064	30.5 cm x 30.5 cm Square Wave Grate	Gray	8	1.21	0052063031163
1224	0800 6150 044	30.5 cm x 30.5 cm Square Wave Grate	Black	8	1.21	0052063031156
839	0800 6150 027	Stainless Steel Screws. 20x1-3/4	Metal	1	n/a	0052063056494



See Class Load Rate Table on page 21.

PLASTIC **Specification:** Square Structural Foam Polyolefin Wave Grate with UV inhibitor. Open surface area 165.6 square centimeters. 297.3 LPM. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1224CI	0800 6150 062	30.5 cm x 30.5 cm Square Wave Cast Iron Grate	Raw Iron	1	6.26	0052063031385
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295



See Class Load Rate Table on page 21.

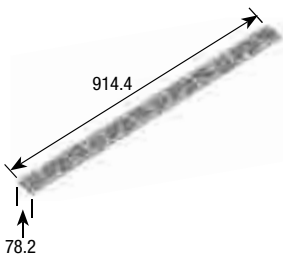
CAST IRON **Specification:** Square Cast Iron Wave Grate. Open surface area 167.4 square centimeters. 296.4 LPM. Class B load rating.



Mini Channel™ Plastic & Metal Decorative Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

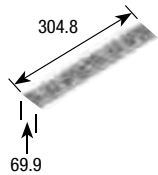
Fits Mini Channel™. Available in Botanical and Wave designs, in multiple colors or in cast iron. Plastic grates are "T-top" and overlap basin edge. Iron grates sit flush.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
554S	0800 6111 045	91.4 cm Mini Botanical Pattern Channel Grate	Sand	16	0.40	0052063031316
554GR	0800 6111 043	91.4 cm Mini Botanical Pattern Channel Grate	Green	16	0.40	0052063031323
554GY	0800 6111 044	91.4 cm Mini Botanical Pattern Channel Grate	Gray	16	0.40	0052063031309
554	0800 6111 038	91.4 cm Mini Botanical Pattern Channel Grate	Black	16	0.40	0052063031293
846	0800 6111 003	Stainless Steel Screws. 4 x 1"	Steel	1	0.05	0052063056487

Fits 0800 6111 036 Mini Channel - see page 30. See Class Load Rate Table on page 21.

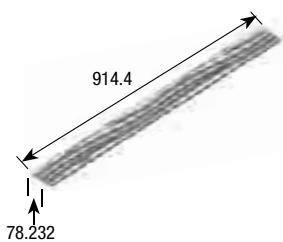
PLASTIC **Specification:** Structural Foam Polyolefin botanical pattern Channel Grate with UV inhibitor. Open surface area 35.1 square centimeters per 0.3 m. 63 LPM per 0.3 m.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
554CI	0800 6111 042	30.5 cm Cast Iron Mini Botanical Pattern Channel Grate	Raw Iron	5	0.82	0052063031415
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296

Fits 0800 6111 036 Mini Channel - see page 30. See Class Load Rate Table on page 21.

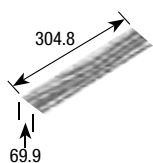
CAST IRON **Specification:** Mini Channel botanical Cast Iron Channel Grate. Open surface area 34.8 square centimeters per 0.3 m. 62.4 LPM per 0.3 m. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
555S	0800 6111 049	91.4 cm Mini Wave Pattern Channel Grate	Sand	16	0.40	0052063031354
555GR	0800 6111 047	91.4 cm Mini Wave Pattern Channel Grate	Green	16	0.40	0052063031361
555GY	0800 6111 048	91.4 cm Mini Wave Pattern Channel Grate	Gray	16	0.40	0052063031347
555	0800 6111 001	91.4 cm Mini Wave Pattern Channel Grate	Black	16	0.40	0052063031330
846	0800 6111 003	Stainless Steel Screws. 4 x 1"	Steel	1	0.05	0052063056487

See Class Load Rate Table on page 21.

PLASTIC **Specification:** Structural Foam Polyolefin wave pattern Channel Grate with UV inhibitor. Open surface area 37 square centimeters per 30.5 cm. 66.4 LPM per 30.5 cm.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
555CI	0800 6111 046	30.5 cm Mini Wave Pattern Cast Iron Channel Grate	Raw Iron	5	0.59	0052063031422
529	0800 6113 041	Stainless Steel Screws. 4 x 5/8"	Steel	1	0.05	0052063605296

See Class Load Rate Table on page 21.

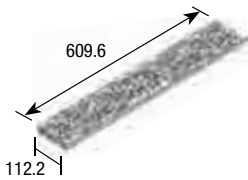
CAST IRON **Specification:** Mini Channel Wave Cast Iron Channel Grate. Open surface area 26.5 square centimeters per 30.5 cm. 47.9 LPM per 30.5 cm. Class B load rating.



Spee-D® Channel Plastic & Metal Decorative Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

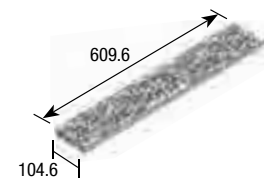
Fits Spee-D® Channel. Available in Botanical and Wave designs, in multiple colors or in cast iron. Plastic grates are "T-top" and overlap basin edge. Iron grates sit flush.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
252S	0800 6111 019	61 cm Spee-D® Channel Botanical Pattern Grate	Sand	12	0.78	0052063031231
252GR	0800 6111 017	61 cm Spee-D® Channel Botanical Pattern Grate	Green	12	0.78	0052063031248
252GY	0800 6111 018	61 cm Spee-D® Channel Botanical Pattern Grate	Gray	12	0.78	0052063031224
252	0800 6111 014	61 cm Spee-D® Channel Botanical Pattern Grate	Black	12	0.78	0052063031194
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

See Class Load Rate Table on page 21.

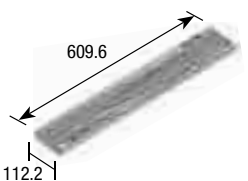
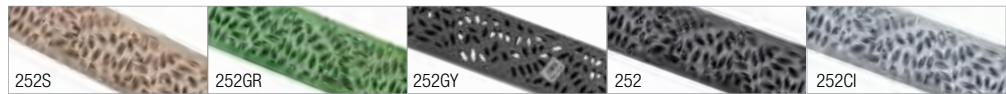
PLASTIC **Specification:** Structural Foam Polyolefin botanical pattern Channel Grate with UV inhibitor. Open surface area 35.1 square centimeters per 0.3 m. 63 LPM per 0.3 m.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
252CI	0800 6111 016	61 cm Cast Iron Mini Channel Botanical Pattern Grate	Raw Iron	1	3.18	0052063031392
229	0800 6111 050	Stainless Steel Screws, 8 x 1"	Steel	1	0.03	0052063812298

See Class Load Rate Table on page 21.

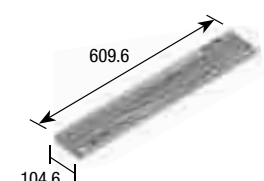
CAST IRON **Specification:** Cast Iron decorative botanical Channel Grate. Open surface area 57.9 square centimeters per 30.5 cm. 104.1 LPM per 30.5 cm. Class B load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
253S	0800 6111 023	61 cm Spee-D® Channel Wave Pattern Grate	Sand	12	0.83	0052063031279
253GR	0800 6111 021	61 cm Spee-D® Channel Wave Pattern Grate	Green	12	0.83	0052063031286
253GY	0800 6111 022	61 cm Spee-D® Channel Wave Pattern Grate	Gray	12	0.83	0052063031262
253	0800 6111 012	61 cm Spee-D® Channel Wave Pattern Grate	Black	12	0.83	0052063031255
829	0800 6111 015	Stainless Steel Screws, 6 x 1-1/4"	Steel	1	n/a	0052063008295

See Class Load Rate Table on page 21.

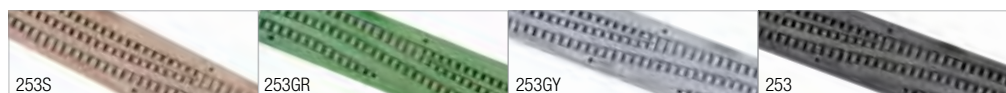
PLASTIC **Specification:** Structural Foam Polyolefin decorative wave Channel Grate with UV inhibitor. Open surface area 50.1 square centimeters per 30.5 cm. 90.1 LPM per 30.5 cm.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
253CI	0800 6111 020	61 cm Cast Iron Channel Wave Pattern Grate	Raw Iron	1	3.38	0052063031408
229	0800 6111 050	Stainless Steel Screws, 8 x 1"	Steel	1	0.03	0052063812298

See Class Load Rate Table on page 21.

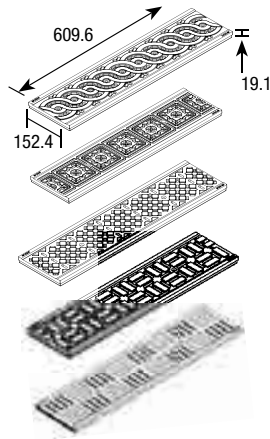
CAST IRON **Specification:** Cast Iron decorative wave Channel Grate. Open surface area 47.8 square centimeters per 30.5 cm. 85.8 LPM per 30.5 cm. Class B load rating.



Dura Slope™ Metal Decorative Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

Fits Dura Slope™ Channel. Available in multiple colors or in cast iron. Fits all Dura Slope™ channels. Available in five designs: Weave, Tile, Brick, Diamond and Slot. Ductile iron material, class D load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
DS-601	0800 6180 089	61 cm Wave Pattern Ductile Iron Grate	Raw Iron	1	6.53	0052063019840
DS-602	0800 6180 090	61 cm Diamond Pattern Ductile Iron Grate	Raw Iron	1	6.44	0052063019864
DS-603	0800 6180 091	61 cm Tile Pattern Ductile Iron Grate	Raw Iron	1	6.62	0052063019871
DS-604	0800 6180 092	61 cm Brick Pattern Ductile Iron Grate	Raw Iron	1	6.44	0052063019901
DS-609	0800 6180 093	61 cm Deco Slot Ductile Iron Grate	Raw Iron	1	6.53	0052063019918



Use with Dura Slope Drains (page 60). Decorative grates are made of ductile iron. Uncoated raw iron will develop a rust patina over time. Additional powder-coat colors available: Black (K), White (W), Silver (S), Bronze (Z), Green (G), Blue (B), Orange (O), Gray (Y), Brown (N). Please contact us to check exact lead time for color versions.
Heel-proof. See Class Load Rate Table on page 21. Must be used with 0800 6113 005 to achieve Class D Load Rating.
Must be used with DS-200H to achieve Class D Load Rating.

DUCTILE IRON

Specification: Ductile iron decorative grate. Open surface area 43.5 square centimeters per 30.5 cm. 78.2 LPM. Class D load rating.

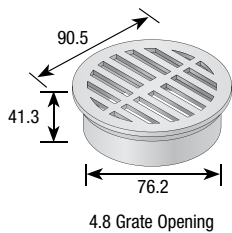
Available in the following colours ▶

Raw Iron (K)	Black (K)	White (W)	Silver (S)	Bronze (S)	Green (G)	Blue (B)	Orange (O)	Gray (Y)	Brown (N)
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Round Grates

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



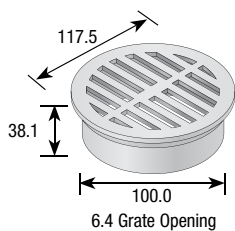
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
14	0800 6180 005	7.6 cm Round Grate	Black	40	0.06	0052063300146
15	0800 6180 006	7.6 cm Round Grate	Gray	40	0.06	0052063300154
16	0800 6180 007	7.6 cm Round Grate	Green	40	0.06	0052063300160
16P	0800 6180 024	7.6 cm Round Grate	Purple	40	0.06	0052063300890
16S	0800 6180 025	7.6 cm Round Grate	Sand	40	0.06	0052063310169



Fits 7.62 cm (3") Sewer and Drain Fittings. Heel-proof. See Class Load Rate Table on page 21.
For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 16.8 square centimeters. 30.1 LPM. Class A load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
11	0800 6180 002	10.2 cm Round Grate	Black	25	0.08	0052063400112
12	0800 6180 003	10.2 cm Round Grate	Gray	25	0.08	0052063000121
13	0800 6180 004	10.2 cm Round Grate	Green	25	0.08	0052063400136
13P	0800 6180 022	10.2 cm Round Grate	Purple	25	0.08	0052063010786
13S	0800 6180 023	10.2 cm Round Grate	Sand	25	0.08	0052063410135



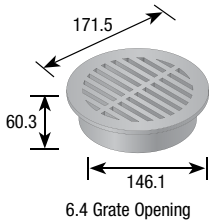
Fits 10.16 cm (4") Sewer and Drain Pipes and Fittings. Heel-proof. See Class Load Rate Table on page 21.
For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Fits 10.16 cm Sewer and Drain Pipe & Fittings, 10.16 cm Corrugated Pipe, and 10.16 cm Triple Wall Pipe. Heel-proof.

Round Grates

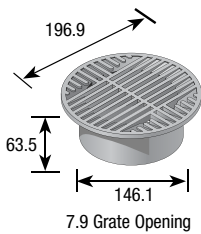
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
40	0800 6180 010	15.2 cm Round Grate	Black	10	0.22	0052063600406
50	0800 6180 011	15.2 cm Round Grate	Green	10	0.22	0052063606507
60	0800 6180 012	15.2 cm Round Grate	Gray	10	0.22	0052063606606
60S	0800 6180 028	15.2 cm Round Grate	Sand	10	0.22	0052063616605

Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

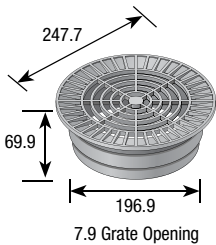
PLASTIC Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 58.7 square centimeters. 105.4 LPM.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
10	0800 6180 001	20.3 cm Round Grate	Black	10	0.27	0052063800103
20	0800 6180 008	20.3 cm Round Grate	Green	10	0.27	0052063800202
30	0800 6180 009	20.3 cm Round Grate	Gray	10	0.27	0052063800301
30S	0800 6180 027	20.3 cm Round Grate	Sand	10	0.27	0052063801308

Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

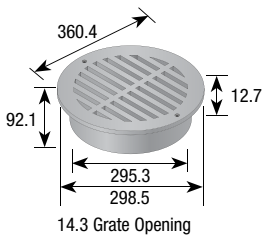
PLASTIC Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 74.2 square centimeters. 133.2 LPM. Class A load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1040	0800 6180 013	25.4 cm Round Grate	Black	10	0.45	0052063110400
1050	0800 6180 014	25.4 cm Round Grate	Green	10	0.45	0052063110509
1060	0800 6180 015	25.4 cm Round Grate	Gray	10	0.45	0052063110608
1060S	0800 6180 021	25.4 cm Round Grate	Sand	10	0.45	0052063010601

Fits 20.32 cm (8") Sewer and Drain Pipes and Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 139.1 square centimeters. 249.8 LPM. Class A load rating.



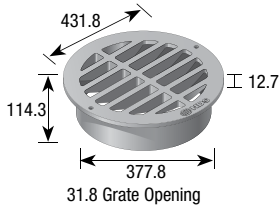
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1240	0800 6180 016	30.5 cm Round Grate	Black	6	1.10	0052063012605
1250	0800 6180 017	30.5 cm Round Grate	Green	6	1.10	0052063012506
1260	0800 6180 018	30.5 cm Round Grate	Gray	6	1.10	0052063112602

Fits 30.48 cm (12") Sewer and Drain Pipes. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

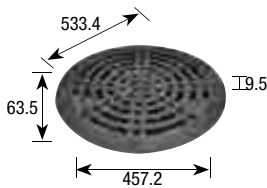
PLASTIC Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 296.7 square centimeters. 532.7 LPM. Class B load rating.

Round Grates (continued)

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



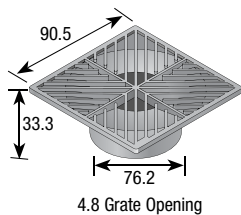
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1511	0800 6180 019	38.1 cm Round Grate	Black	1	3.10	0052063015118
1512	0800 6180 020	38.1 cm Round Grate	Green	1	3.10	0052063015125
Fits 38.1 cm (15") Sewer and Drain Fittings. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
PLASTIC Specification: Round Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 552.12 square centimeters. 991.2 LPM. Class B load rating.						



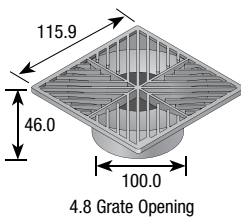
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1801SDG	0800 6180 026	45.7 cm Round Grate	Green	1	3.38	0096942740609
Fits 45.72 cm (18") Sewer and Drain Fittings. See Class Load Rate Table on page 21.						
PLASTIC Specification: Round Polypropylene Grate. Open surface area 487.3 square centimeters. 874.8 LPM. Includes lag bolts. Class B load rating.						

Square Grates

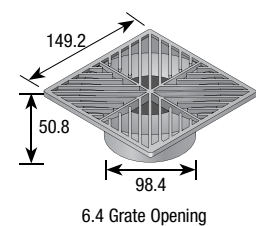
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1	0800 6180 042	10.2 cm Square Grate	Green	40	0.05	0052063400013
2	0800 6180 043	10.2 cm Square Grate	Black	40	0.05	0052063402024
3	0800 6180 044	10.2 cm Square Grate	Gray	40	0.05	0052063300030
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
PLASTIC Specification: Square Structural Foam Polyolefin Grate with diagonally converging pattern with UV inhibitor. Open surface area 22.3 square centimeters. 39.9 LPM. Class A load rating.						



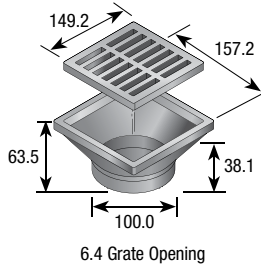
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
7	0800 6180 048	12.7 cm Square Grate	Green	25	0.09	0052063500072
8	0800 6180 049	12.7 cm Square Grate	Black	25	0.09	0052063500089
9	0800 6180 050	12.7 cm Square Grate	Gray	25	0.09	0052063500058
Fits 10.16 cm (4") Sewer and Drain Pipes and Fittings. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
PLASTIC Specification: Square Structural Foam Polyolefin Grate with diagonally converging pattern with UV inhibitor. Open surface area 27.4 square centimeters. 49.2 LPM. Class A load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
4	0800 6180 045	15.2 cm Square Grate	Black	10	0.18	0052063600048
5	0800 6180 046	15.2 cm Square Grate	Green	10	0.18	0052063600055
6	0800 6180 047	15.2 cm Square Grate	Gray	10	0.18	0052063600062
06S	0800 6180 065	15.2 cm Square Grate	Sand	10	0.18	0052063610061
Fits 7.62 cm (3") or 10.16 cm (4") Sewer and Drain Pipes. Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.						
PLASTIC Specification: Square Structural Foam Polyolefin Grate with diagonally converging pattern with UV inhibitor. Open surface area 67.1 square centimeters. 120.4 LPM. Class A load rating.						

Square Grates (continued)

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



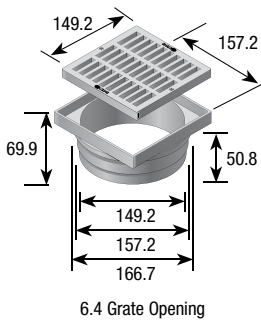
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
640	0800 6180 053	15.2 cm x 15.2 cm x 10.2 cm Square Grate & Adapter	Black	8	0.37	0052063606408
641	0800 6180 054	15.2 cm x 15.2 cm x 10.2 cm Square Grate & Adapter	Green	8	0.37	0052063606415
642	0800 6180 055	15.2 cm x 15.2 cm x 10.2 cm Square Grate & Adapter	Gray	8	0.37	0052063606422



Fits 7.62 cm (3") or 10.16 cm (4") Sewer and Drain Pipes and Fittings.
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Square Structural Foam Polyolefin Grate with diagonally converging pattern with UV inhibitor and stainless steel screws. Open surface area 93.2 square centimeters. 167.2 LPM. Class A load rating.



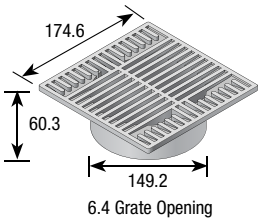
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
637	0800 6180 051	15.2 cm x 15.2 cm x 15.2 cm Square Grate & Adapter	Black	8	0.40	0052063536378
639	0800 6180 052	15.2 cm x 15.2 cm x 15.2 cm Square Grate & Adapter	Gray	8	0.40	0052063536392



Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings.
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Square Structural Foam Polyolefin Grate with diagonally converging pattern with UV inhibitor and stainless steel screws. Open surface area 93.2 square centimeters. 167.2 LPM. Class A load rating.



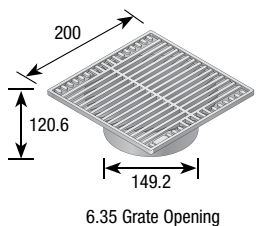
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
771	0800 6180 056	17.8 cm Square Grate	Black	10	0.29	0052063677101
772	0800 6180 057	17.8 cm Square Grate	Green	10	0.29	0052063677200
773	0800 6180 058	17.8 cm Square Grate	Gray	10	0.29	0052063677309
773S	0800 6180 066	17.8 cm Square Grate	Sand	10	0.29	0052063617305



Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings.
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 87.72 square centimeters. 157.5 LPM. Class A load rating.



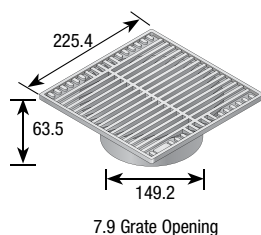
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
881	0800 6180 059	20.3 cm Square Grate	Black	10	0.36	0052063608815
882	0800 6180 060	20.3 cm Square Grate	Green	10	0.36	0052063608822
883	0800 6180 061	20.3 cm Square Grate	Gray	10	0.36	0052063608839
883S	0800 6180 067	20.3 cm Square Grate	Sand	10	0.36	0052063008837



Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings.
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC

Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 110.7 square centimeters. 198.7 LPM. Class A load rating.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
950	0800 6180 062	22.9 cm Square Grate	Green	10	0.50	0052063909509
960	0800 6180 063	22.9 cm Square Grate	Gray	10	0.50	0052063909608
970	0800 6180 064	22.9 cm Square Grate	Black	10	0.50	0052063909707
970S	0800 6180 068	22.9 cm Square Grate	Sand	10	0.50	0052063909714



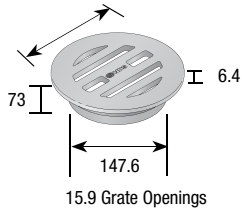
Fits Spee-D® Basin and 15.24 cm (6") Sewer and Drain Pipes and Fittings.
Heel-proof. See Class Load Rate Table on page 21. For Flexible PVC Couplings, see page 86.

PLASTIC

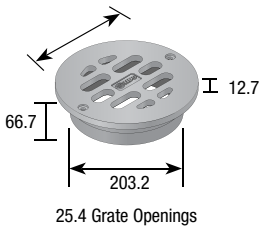
Specification: Square Structural Foam Polyolefin Grate with UV inhibitor. Open surface area 183.18 square centimeters. 329 LPM. Class A load rating.

Duracast™ In-Line Grates

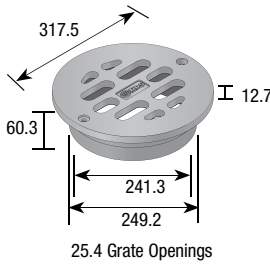
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



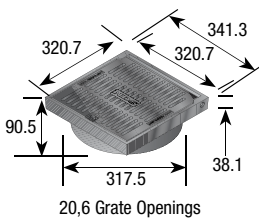
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
D6	0800 6180 072	15.2 cm Round Grate	Black	1	3.29	0052063684826
Fits 15.24 cm (6") Sewer and Drain Pipes. Fits SPEE-D® Basin. See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> Round Heavy-Duty Ductile Grate with Black Paint. Open surface area 45.5 square centimeters. 81.7 LPM. Class D load rating.						



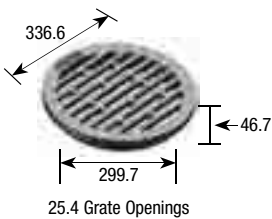
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
D8	0800 6180 073	20.3 cm Round Grate	Black	1	6.57	0052063047867
Fits 20.32 cm (8") Sewer and Drain Pipes. See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> Round Heavy-Duty Ductile Grate with Black Paint. Open surface area 90.2 square centimeters. 162 LPM. Bolt holes for higher security. Class D load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
D10	0800 6180 069	25.4 cm Round Grate	Black	1	9.27	0052063045054
Fits 25.4 cm (10") Sewer and Drain Pipes. See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> Round Heavy-Duty Ductile Grate with Black Paint. Open surface area 173 square centimeters. 310.4 LPM. Bolt holes for higher security. Class D load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
D12H-W0	0800 6180 071	30.5 cm Square Hinged Cast Iron Grate without Adapter	Black	1	21.60	0052063011547
Fits 30.48 cm (12") Sewer and Drain Pipes. See Class Load Rate Table on page 21.						
CAST IRON <i>Specification:</i> Square Heavy-Duty Hinged Cast Iron Grate with Black Paint. Open surface area 311.5 square centimeters. 559.3 LPM. Bolt holes for higher security. Class D load rating.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
D12	0800 6180 070	30.5 cm Round Grate	Black	1	7.20	0052063045528
Fits 30.48 cm (12") Sewer and Drain Pipes. See Class Load Rate Table on page 21.						
DUCTILE IRON <i>Specification:</i> Round Heavy-Duty Ductile Grate with Black Paint. Open surface area 355.8 square centimeters. 643.5 LPM. Bolt holes for higher security. Class D load rating.						



POP-UP DRAINAGE EMITTERS

The Pop-up Drainage Emitter is an easy, safe and efficient solution that allows water to be diverted and released to water-safe areas away from structures, erosion-prone landscapes and poor drainage areas. Its special design allows the Emitter to open with even the smallest flows, close during dry weather to prevent debris and rodents from entering the pipes and automatically close to prevent damage from lawn mowers.





POP-UP DRAINAGE EMITTER – BENEFITS AT A GLANCE

Allows water to be **diverted** and **released** in **desired spot**.

Opens under **minimal** hydrostatic **pressure**.

Prevents debris and rodents **from entering** drain pipes.

Automatically retracts to prevent damage from lawn mowers.



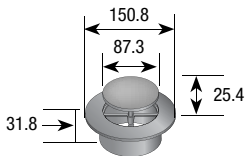
POP-UP DRAINAGE EMITTER

Allows water to be diverted and released to water-safe areas away from structures, erosion-prone landscapes, and poor drainage areas. The special patented design allows the emitter to open with a negligible amount of pressure.

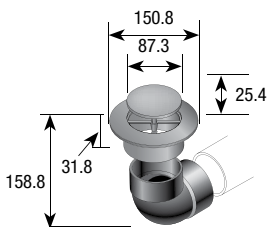
Pop-up Drainage Emitters allow water captured by grates, catch basins, channel drains, Flo-Well, EZflow, downspouts and roof gutter systems to flow through drainage pipe and away from structural foundations to safe or useful areas. For example, water can be routed from a low area next to a foundation to a water-safe area in the landscape, or a curbside drainage system where allowed. The emitter opens under minimal hydrostatic pressure from water through upstream drainage pipes; the emitter closes as flow diminishes. The special patented design allows the Emitter to open with even the smallest flows. Since the Emitter is closed during dry weather, debris and rodents cannot enter the drain pipes. Spring automatically retracts – closes and prevents damage from lawn mowers. Its flat profile blends discreetly into the surrounding landscapes. For Flexible PVC Couplings and to adapt products to different pipe sizes, see page 86.

7.62 cm (3") and 10.16 cm (4") Pop-up Drainage Emitter

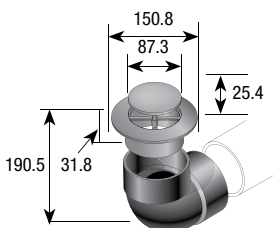
Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
420	0800 6160 002	7.6 cm & 10.2 cm Pop-up Drainage Emitter with Elbow	Green	20	0.13	0052063404202
Fits most 7.62 cm (3") and 10.16 cm (4") Sewer and Drain Pipes. Ideal for discharging excess water from surface water management system. Spring automatically retracts. For Flexible PVC Couplings, see page 86.						
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor. 151 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						



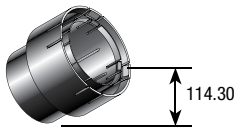
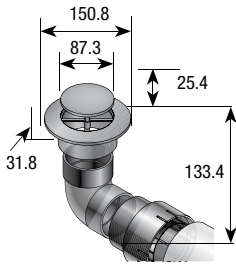
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
321	0800 6160 001	7.6 cm Pop-up Drainage Emitter with Elbow	Green	25	0.27	0052063303215
Fits most 7.62 cm (3") Sewer and Drain Pipes. Ideal for discharging excess water from surface water management system. Spring automatically retracts. For Flexible PVC Couplings, see page 86.						
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor. 7.62 cm styrene 90 degree elbow with 0.64 cm drain hole. 151 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
421	0800 6160 003	10.2 cm Pop-up Drainage Emitter with Elbow	Green	20	0.38	0052063404219
Fits most 7.62 cm (3") and 10.16 cm (4") Sewer and Drain Pipes. Ideal for discharging excess water from surface water management system. Spring automatically retracts. For Flexible PVC Couplings, see page 86.						
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor. 10.16 cm styrene 90 degree elbow with 0.64 cm drain hole. 151 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						

7.6 cm (3") & 10.2 cm (4") Pop-up Drainage Emitter (Continued)

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.

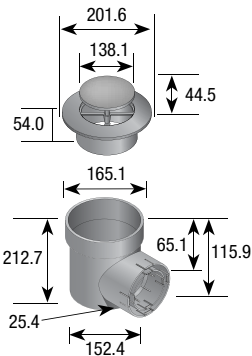
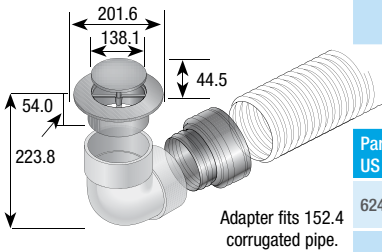
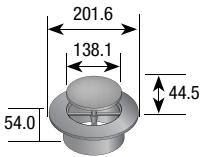


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
430	0800 6160 004	7.6 cm Pop-up Drainage Emitter with Elbow and Universal Adapter	Green	20	0.45	0052063003146
Universal Adapter fits most 7.62 cm (3") and 10.16 cm (4") pipes. Ideal for discharging excess water from surface water management system. Spring automatically retracts. For Flexible PVC Couplings, see page 86.						
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor. 7.62 cm styrene 90 degree elbow with 0.64 cm drain hole and universal pipe adapter. 151 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
1241	0800 6160 008	7.6 cm x 10.2 cm Universal Adapter w/10.2 cm Spigot	Black	20	0.32	0052063003139
Fits most 7.62 cm (3") and 10.16 cm (4") pipes. Use with 7.62 cm (3") and 10.16 cm (4") sewer and drain fittings.						
Specification: Patented Universal Adapter. Styrene.						

15.24 cm (6") Pop-up Drainage Emitter

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.



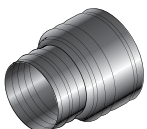
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
620	0800 6160 005	15.2 cm Pop-up Drainage Emitter	Green	15	0.27	0052063003092
Can be used with Flo-Well to relieve overflow.						
Specification: Polyolefin spring-loaded Pop-up. Drainage Emitter with UV inhibitor. 333 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
624	0800 6160 006	15.2 cm Pop-up Emitter with Elbow and Corrugated Pipe Adapter	Green	10	1.55	0052063003108
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor, 15.24 cm styrene 90-degree elbow with 0.635 cm drain hole and corrugated pipe adapter. 333 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						

Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
625	0800 6160 007	15.2 cm Pop-up Emitter with Spee-D® Basin	Green	8	0.99	0052063003665
Specification: Polyolefin spring-loaded Pop-up Drainage Emitter with UV inhibitor and Spee-D® basin. 333 LPM capacity. 0.003 bar or 2.54 cm of head to raise top.						

Corrugated Adapter

Dimensions mentioned in tables are orientational. Check the drawings or technical datasheets for exact dimensions. All measures shown in drawings are in mm, unless stated otherwise.

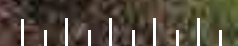


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
351	0800 6170 007	7.6 cm Polyethylene Corrugated Drainage Adapter	Black	50	0.05	0052063303512
451	0800 6170 008	10.2 cm Polyethylene Corrugated Drainage Adapter	Black	25	0.09	0052063404516
651	0800 6170 009	15.2 cm Polyethylene Corrugated Drainage Adapter	Black	12	0.11	0052063606514

FLO-WELL®

Flo-Well® is a gravel-free alternative to a traditional dry well with up to 250% more detention volume. Can be used independently or as part of a larger system. Flo-Well® units collect and detain surface water allowing for groundwater recharge. Units are modular and can be connected in series or stacked to meet a variety of project needs. Flo-Well® is a key component in the NDS S5 system for sustainable surface water management.





FLO-WELL® ENGINEERED DRY WELL – BENEFITS AT A GLANCE

Flo-Well® allows **water to be discharged** into the subsoil **rapidly** and **easily** with the following advantages over traditional solutions:

- **Not required:** piping to transport surface water to a far-off discharge point
- **Not required:** large heavy equipment, considerable excavation of current landscaped areas
- **Not required:** large labor costs related to installation of traditional systems

Flo-Well is a key component of the NDS S5 system for sustainable management of surface water.



FLO-WELL® ENGINEERED DRY WELL



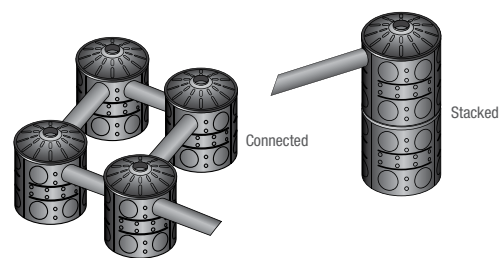
OPTIONS

Larger 22.86 cm or 30.48 cm grates can be added to Flo-Well to manage surface water.	Ideal as a stand-alone drain:	Ideal as a stand-alone reservoir:
This option is ideal for draining:	Disturbs only 0.37 square meters of turf to install	Collect and hold rainwater for lawn and garden irrigation (used with a pump connected to a garden hose)
Golf course areas prone to puddling	Requires less than 0.28 cubic meters of soil removed to bury	Connect Flo-Well to rain gutters using a catch basin & grate below each downspout (see drawing)
Playground areas under slides and swings	Measures only 60.96 cm in diameter by 73 cm high	Ideal solution for arid areas impacted by drought
Outdoor drinking fountain runoff	Weighs only 9.9 kg	Reservoir for pond and waterfall recirculation pumps
Outdoor showers at beaches	Holds over 180.19 liters. Or, connect to existing system for increased drainage capabilities	
Wash-down areas		

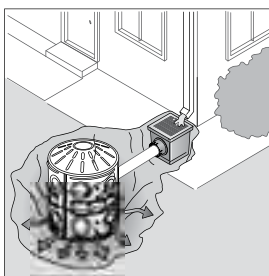


Stackable & Expandable

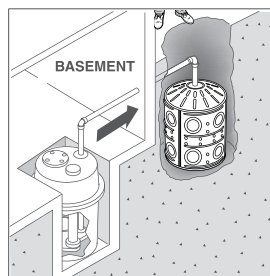
Flo-Well® can be used individually, connected in series or in any array, and can be stacked up to 4 units high (with center support pipe). For Flexible PVC Couplings and to adapt products to different pipe sizes, see page 86.



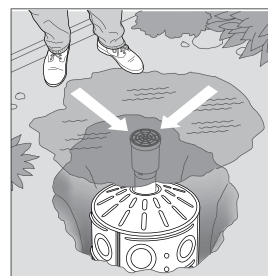
Applications



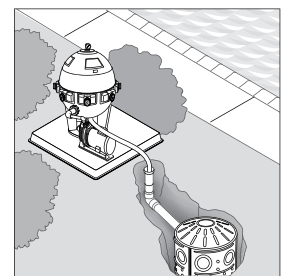
For gutters and downspouts



Install with sump pumps



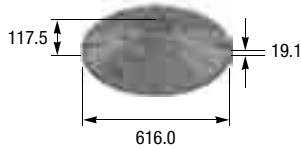
Eliminates puddles



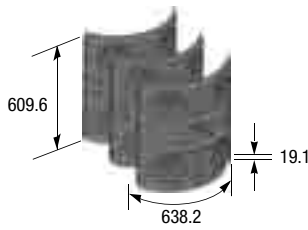
Backwash tank

FLO-WELL® ENGINEERED DRY WELL

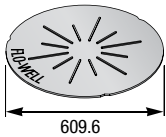
Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



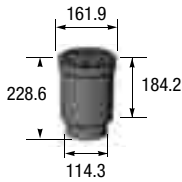
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
FWAS24CWH	0800 6140 002	61 cm Flo-Well® Cover	Black	2	2.66	0052063030760
FWAS24C	0800 0140 001	61 cm Flo-Well® Cover	Black	2	2.66	0052063003214
Specification: Structural foam polyolefin round drywell system cover with UV inhibitors. 189.25 l storage capacity						



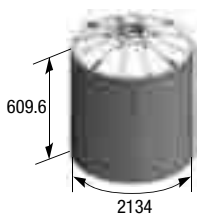
Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
FWSPS3WH	0800 6140 006	Flo-Well® 3 Side Panels (assemble into 1 round drywell. no bottom)	Black	1	1.96	0052063030777
Specification: Structural foam polyolefin side panels with UV inhibitors, knockout leaching ports and knockout inlet/outlet ports per panel. 1.9 cm lip for firm stacking.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
FWBP24	0800 6140 003	61 cm Flo-Well® Bottom	Black	5	1.53	0052063003221
Specification: Structural foam polyolefin round Flo-Well® bottom with UV inhibitors. Six leaching ports. Collects debris for easy cleanout.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
FWSD69	0800 6140 005	10.2 cm Surface Drain Inlet with Grate	Black	8	0.83	0052063003245
Specification: Structural foam polyolefin grate with inlet with UV inhibitors. Open surface area 53 square centimeters, 95.2 lpm.						



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
FWFF67	0800 6140 004	Porous Filter Fabric Wrap for Flo-Well®	Black	1	0.16	0052063003238
Specification: For surrounding Flo-Well® Drywell System. Nonwoven fabric. Mullen burst 1,206 kPa. 757 LPM flow-through.						

EZFLOW® ENGINEERED FRENCH DRAIN

NDS EZflow® is a revolutionary gravel-free French drain product, which provides up to 50% of labor savings over traditional systems. It is a key component in the NDS S5 system for sustainable surface water management.





EZFLOW® DRAINAGE BUNDLES – BENEFITS AT A GLANCE

Gravel-free installation provides up to **50% labor savings** over traditional systems.

Better flow through and **detention volume** than traditional systems.

Durable with a **100-year lifespan**.

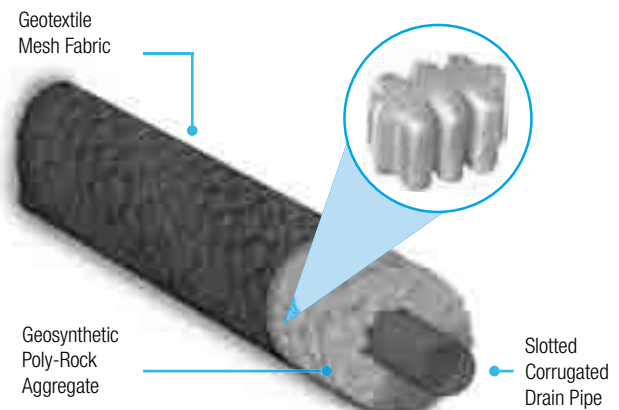
EZflow® is a key component of the NDS S5 system for sustainable management of surface water.



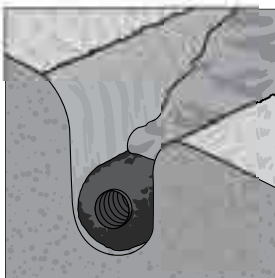
EZFLOW® DRAINAGE BUNDLES



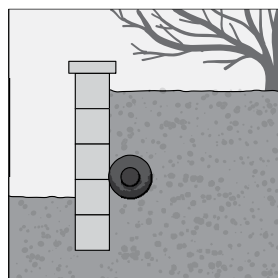
EZflow® drainage bundles are 3 meters in length with a slotted pipe surrounded by expanded polystyrene aggregate and enclosed in geotextile mesh. Configurations are available in 17.78 cm bundles with or without a 7.62 cm pipe, 25.4 cm bundles with or without a 10.16 cm pipe, and 38.1 cm bundles with or without a 15.24 cm pipe. Accessories include 7.62 cm, 10.16 cm and 15.24 cm internal couplers and end caps. EZflow® bundles can also be used with internal tees, and internal wyes. The 38.1 cm bundles are available with the pipe located in the center or bottom of the bundle for varying applications. Unless specifically required by code or other requirement, the pipe can be either centered or at the bottom of the bundle. Multiple panels and rolls easily connect together with a series of locking joints. EZ Roll Grass Pavers have an ultimate compression load rating of 282.6 t/m² "empty."



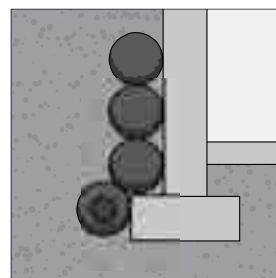
Applications



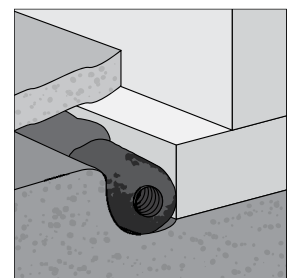
French/Interceptor Drains



Planter/Retaining Walls



Foundation Drains



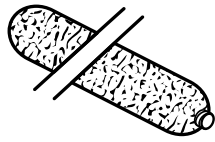
Basement/Crawlspace

EZflow® drainage systems are appropriate for a wide range of applications and are a convenient alternative to traditional stone and pipe drainage, storage and infiltration systems. EZflow® drainage systems can be used as a substitute for stone in most applications where the stone is not utilized for structural support. A professional engineer, landscape architect or other qualified design professional should be consulted for complex applications.

Product selection is relative to the desired application and benefits from establishing anticipated flow into, through and out of a proposed drainage system configuration. Selection considerations include: bundle sizing and storage volume, the presence or absence of pipe, pipe size and location within the bundle, and arrangement of bundles. Design factors may include: length of system, watershed area, soil type and permeability, groundwater levels and system discharge opportunities. EZflow® drainage storage volumes and pipe discharge rates are listed on the next page.

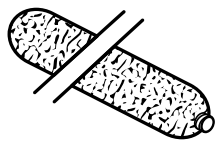
EZflow® Gravel-Free French Drain

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.



Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
EZ-0701F	0800 6170 010	17.8 cm EZflow® mesh with 7.6 cm slotted pipe (center)	Black	27.4 m (Bundle size/ linear meters)	14.58	0052063025261
EZ-1001F	0800 6170 011	25.4 cm EZflow® mesh with 10.2 cm slotted pipe (center)	Black	15.2 m (Bundle size/ linear meters)	13.28	0052063025278
EZ-1501F	0800 6170 012	38.1 cm EZflow® mesh with 15.2 cm slotted pipe (center)	Black	6.1 m (Bundle size/ linear meters)	11.70	0052063027302

Specification: Polyethylene slotted drain pipe surrounded by 100% recycled polystyrene aggregate and enclosed in 30-sieve Polyethylene geotextile mesh.

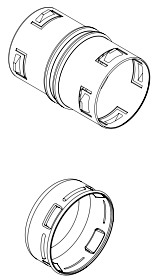


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
EZ-0701A	0800 6170 013	17.8 cm EZflow® mesh without pipe – aggregate only	Black	27.4 m (Bundle size/ linear meters)	8.10	0052063025285
EZ-1001A	0800 6170 014	25.4 cm EZflow® mesh without pipe – aggregate only	Black	15.2 m (Bundle size/ linear meters)	6.08	0052063025292
EZ-1501A	0800 6170 015	38.1 cm EZflow® mesh without pipe – aggregate only	Black	6.1 m (Bundle size/ linear meters)	5.58	0052063027296

Specification: Segment of 100% recycled polystyrene aggregate only, enclosed in 30-sieve polyethylene geotextile mesh.

EZflow® Internal Couplings & End Caps

Dimensions mentioned in tables are orientational.
Check the drawings or technical datasheets for exact dimensions.
All measures shown in drawings are in mm, unless stated otherwise.

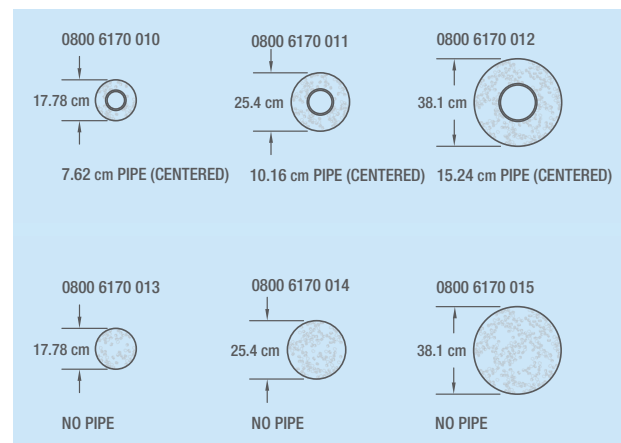


Part No. US	Part No. EMEA	Description	Color	Pkg. Qty.	Wt. Ea. (kg)	EAN Code
3C05	0800 6170 001	7.6 cm EZflow® Corrugated Internal Coupling	Black	30	0.14	0052063020198
4C07	0800 6170 004	10.2 cm EZflow® Corrugated Internal Coupling	Black	36	0.14	0052063024868
6C07	0800 6170 006	15.2 cm EZflow® Corrugated Internal Coupling	Black	8	0.36	0052063024875
3C06	0800 6170 002	7.6 cm EZflow® Corrugated End Cap	Black	20	0.14	0052063020372
4C06	0800 6170 003	10.2 cm EZflow® Corrugated End Cap	Black	30	0.23	0052063020242
6C06	0800 6170 005	15.2 cm EZflow® Corrugated End Cap	Black	10	0.23	0052063020259

Storage & Flow for EZflow® Drainage Bundles (45% void space among consolidated EPS aggregate)

PIPE BUNDLES			
Part No. US	Part No. EMEA	Storage Volume (liters/3 m bundle)	Flow Capacity (LPM @ 1% slope)
EZ-0701F	0800 6170 010	43.15	305.83
EZ-1001F	0800 6170 011	81.38	495.5
EZ-1501F	0800 6170 012	173.35	1,305.83

AGGREGATE-ONLY BUNDLES			
Part No. US	Part No. EMEA	Storage Volume (liters/3 m bundle)	Flow Capacity (LPM @ 1% slope)
EZ-0701A	0800 6170 013	33.31	140.42
EZ-1001A	0800 6170 014	65.10	286.52
EZ-1501A	0800 6170 015	138.15	644.59



45% void space among consolidated EPS aggregate





NORMA Group

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