

BIRCOslim®

The lightweight channel with strong features



In landscaping, the materials should be light, but also stable and durable. Installation must be simple and quick. The new BIRCOslim® has all this. High-quality concrete of grade C40/50 and yet a weight from 12.9 kg per running metre of drainage channel. The slim flanks of the BIRCOhyperbola design make it possible. And we have changed something else: the BIRCOslim® is one of the first drainage channels from BIRCO to offer steel angles with a Magnelis® coating (zinc, aluminium, magnesium). An unbeatable protection against corrosion.

In addition to the BIRCOslim® drainage channels, we also offer a high-performance outfall unit, attractive gratings, end caps and the BIRCO service for drilling and cutting. A valuable system with a low weight and excellent drainage performance.

HIGHEST QUALITY STANDARDS

100% made in our own production facility

BIRCO is dedicated to developing first-class drainage solutions made from high-quality, robust concrete. This material gives our channels and systems exceptional durability - even under the toughest conditions. The concrete impresses with minimal water absorption, excellent abrasion resistance and resistance to frost and de-icing salt, which makes our products unrivalled in terms of lateral stability.

The high quality of our materials, coupled with the sophisticated design of BIRCO channel systems, guarantees optimum operating conditions on any construction site and promises efficient, cost-effective installation. Our solutions not only stand for the highest safety standards and long-term investment protection, but also fulfil the strict requirements of BS EN 1433 standard. With our in-depth understanding of customer needs and project requirements, BIRCO products not only deliver outstanding quality and performance, but also future-oriented, sustainable drainage concepts.



FACTS

- + Channel system: NW 100 and 150 without slope
- + NW 100 also available as a shallow channel
- + Lengths: 0.50 and 1.00 meter
- + With continuous anchoring system
- + BIRCOhyperbola construction for long-lasting stability
- + Best corrosion resistance: Steel angles with zinc/aluminium/magnesium coating (Magnelis®) (significantly better than galvanised steel)
- + Self-regeneration effect for cut edges, scratches and minor surface damage
- + Range of gratings made of galvanised steel and black dip-coated DI
- + In-line outfall unit with excellent drainage capacity
- + CE/UKCA compliant. As per BS EN1433 M Type
- + Load class: A 15 – C250 (load class tested without concrete surrounding)

APPLICATION AREAS

- + Landscaping
- + Housing and urban development
- + Private builders

- + Lightweight channel system with excellent drainage performance for public and private areas

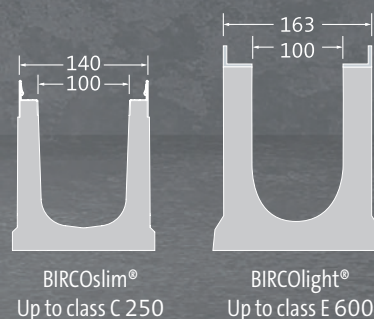


A 15 to C 250

BIRCOslim® | STABILITY DESPITE THIN SIDES

Thin but stable through BIRCOhyperbola construction form.

Here compared to a BIRCOLight® channel.



1 LIGHT AND STURDY CONSTRUCTION

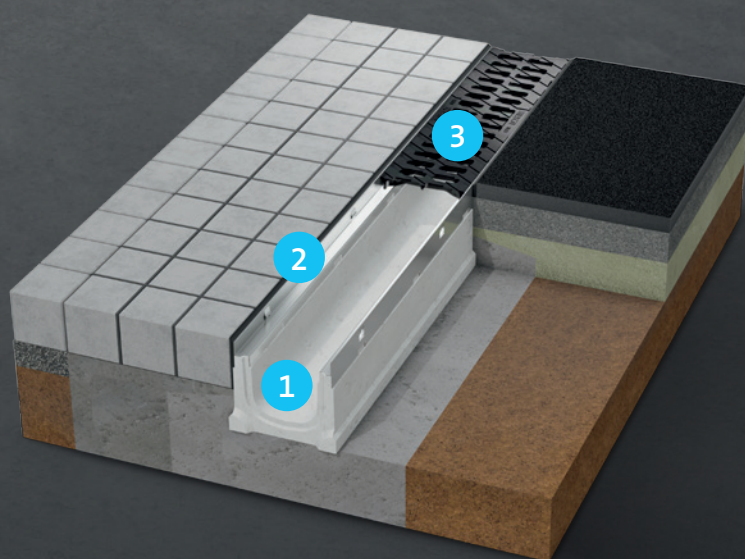
- + High-quality C 40/50 concrete
- + BIRCOhyperbola construction form for long-lasting stability
- + From 12.9 kg per meter

2 ROBUST STEEL ANGLES

- + With Magnelis® coating (zinc, aluminium, magnesium) for unbeatable corrosion protection – significantly better than galvanised steel
- + Self-regeneration effect for cut edges, scratches and minor surface damage

3 ATTRACTIVE DESIGN

- + Range of gratings made of galvanised steel and black dip-coated DI



BIRCOslim® | NW 100

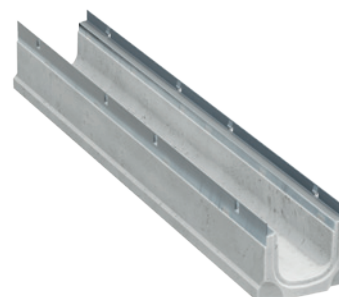
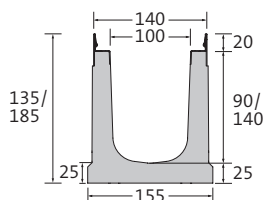


The lightweight channel with strong features

CHANNEL ELEMENTS WITH ANCHORING SYSTEM | WITHOUT INBUILT FALL

AQUA*

- + High-quality C 40/50 concrete
- + Steel angles with zinc/aluminium/magnesium coating (Magnelis® etc.)
- + BIRCOhyperbola construction form for long-lasting stability
- + Reservation for sealing joint
- + With shift protection of the grating

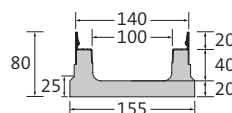


DESCRIPTION	LENGTH	LENGTH AT TOP/ AT GROUND	WEIGHT	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
Channel No. 0/0	500 mm	135/135 mm	11.5 kg	C 250	30 units	4112031 •
Channel No. 0/0	1000 mm	135/135 mm	22.1 kg	C 250	30 units	4112026 •
Channel No. 0/0 with outlet	1000 mm	135/135 mm	20.0 kg	C 250	30 units	4112023 •
Channel No. 10/0	1000 mm	185/185 mm	27.7 kg	C 250	20 units	4112028 •

SHALLOW CHANNEL | WITHOUT INBUILT FALL

AQUA*

- + High-quality C 40/50 concrete
- + Steel angles with zinc/aluminium/magnesium coating (Magnelis® etc.)
- + BIRCOhyperbola construction form for long-lasting stability
- + Reservation for sealing joint
- + With shift protection of the grating

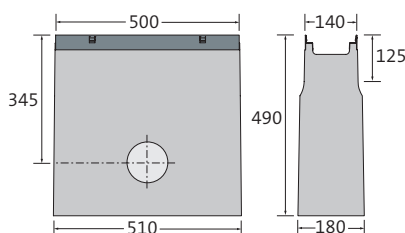


DESCRIPTION	LENGTH	LENGTH AT TOP/ AT GROUND	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
Height 80 mm	1000 mm	80/80 mm	12.9 kg	C 250	40 units	4112030 •

IN-LINE OUTFALL UNIT | 1-PIECE

AQUA*

- + High-quality C 40/50 concrete
- + Steel angles with zinc/aluminium/magnesium coating (Magnelis® etc.)
- + 1 or 2-sided channel connection up to no. 10/0
- + Internal odour trap for DN 110 PP and PCV pipe connection
- + Integrated socket for DN 110 pipe connection
- + Incl. PP silt bucket
- + With shift protection of the grating



DESCRIPTION	LENGTH AT TOP/ AT GROUND	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
In-line outfall unit	500/510 mm	490 mm	53.3 kg	C 250	8 units	4112035 •

• On stock, * BIRCO product group
Dimensions and weights may vary slightly.

DOUBLE-SLOTTED GRATING | DI

AQUA*

- + Black dip-painted
- + 8-fold clamping per metre
- + Anti-slip classification R11/V10



LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	133 mm	20 mm	2.9 kg	2x SW 44/16 mm	440 cm ² /m	B 125	100 units	4112070 •

Also available with cathodic or RAL powder coating colour on request.

LONGITUDINAL BAR GRATING | DI

AQUA*

- + Black dip-painted
- + 8-fold clamping per metre



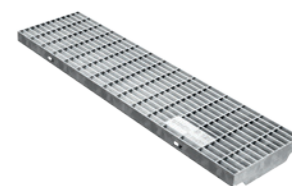
LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	133 mm	20 mm	3.7 kg	MW 29/14 mm	626 cm ² /m	C 250	100 units	4112095 •

Also available with cathodic or RAL powder coating colour on request.

MESH GRATING | HOT-DIP GALVANISED STEEL

AQUA*

- + 8-fold clamping per metre



LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	133 mm	20 mm	1.2 kg	MW 30/10 mm	956 cm ² /m	B 125	100 units	4112063 •
1000 mm	133 mm	20 mm	2.4 kg	MW 30/10 mm	976 cm ² /m	B 125	150 units	4112053 •

BIRCOslim® | NW 150

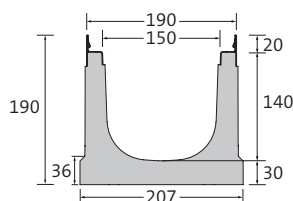


The lightweight channel with strong features

CHANNEL ELEMENTS WITH ANCHORING SYSTEM | WITHOUT INBUILT FALL

AQUA*

- + High-quality C 40/50 concrete
- + Steel angles with zinc/aluminium/magnesium coating (Magnelis® etc.)
- + BIRCOhyperbola construction form for long-lasting stability
- + Reservation for sealing joint
- + With shift protection of the grating

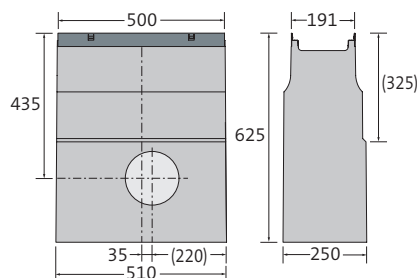


DESCRIPTION	LENGTH	LENGTH AT TOP/ AT GROUND	WEIGHT	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
Channel No. 0/0	500 mm	190/190 mm	18.1 kg	C 250	30 units	4112131 •
Channel No. 0/0	1000 mm	190/190 mm	36.2 kg	C 250	15 units	4112126 •
Channel No. 0/0 with outlet	1000 mm	190/190 mm	34.0 kg	C 250	15 units	4112123 •

OUTFALL UNIT | 1-PIECE

AQUA*

- + High-quality C 40/50 concrete
- + Steel angles with zinc/aluminium/magnesium coating (Magnelis® etc.)
- + 1 or 2-sided channel connection
- + 1 integrated socket for DN 160 pipe connection
- + PP silt bucket
- + With shift protection of the grating



DESCRIPTION	LENGTH AT TOP/ AT GROUND	WIDTH AT TOP/AT GROUND	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
Outfall unit	500/510 mm	190/250 mm	625 mm	89.5 kg	C 250	6 units	4112135 •

External odour trap for outlet DN 160 with socket on request.

DOUBLE-SLOTTED GRATING | DI

AQUA*

- + Black dip-painted
- + 8-fold clamping per metre
- + Anti-slip classification R11/V10



LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	183 mm	21 mm	4.2 kg	2x SW 66/16 mm	667 cm ² /m	B 125	100 units	4112170 •

Also available with cathodic or RAL powder coating colour on request.

LONGITUDINAL BAR GRATING | DI

AQUA*

- + Black dip-painted
- + 8-fold clamping per metre



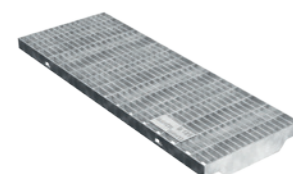
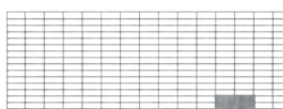
LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	183 mm	21 mm	5.5 kg	MW 29/14 mm	896 cm ² /m	C 250	100 units	4112195 •

Also available with cathodic or RAL powder coating colour on request.

MESH GRATING | HOT-DIP GALVANISED STEEL

AQUA*

- + 8-fold clamping per metre



LENGTH	WIDTH	HEIGHT	WEIGHT	INLET OPENING	INLET CROSS SECTION	LOAD CLASS EN 1433	PALLET	ARTICLE NO.
500 mm	183 mm	20 mm	2.8 kg	MW 30/10 mm	1305 cm ² /m	B 125	50 units	4112163 •
1000 mm	183 mm	20 mm	5.5 kg	MW 30/10 mm	1325 cm ² /m	B 125	60 units	4112153 •

BIRCOslim® | Accessories

The lightweight channel with strong features

END CAPS FOR NW 100 | WITH ZINC/ALUMINIUM/MAGNESIUM COATING (MAGNELIS® ETC.)

AQUA*

+ With attached outlet connection

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap, No. 0/0	140 mm	135 mm	0.3 kg	4112090 •
End cap, No. 10/0	140 mm	185 mm	0.4 kg	4112092 •
End cap for shallow channel	140 mm	80 mm	0.2 kg	4112040 •
End cap with outlet DN 110, No. 0/0	140 mm	80 mm	0.8 kg	4112045 •
End cap with outlet DN 110, No. 10/0	140 mm	185 mm	0.7 kg	4112047 •

END CAPS FOR NW 150 | WITH ZINC/ALUMINIUM/MAGNESIUM COATING (MAGNELIS® ETC.)

AQUA*

+ With attached outlet connection

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap, No. 0/0	190 mm	190 mm	0.5 kg	4112190 •
End cap with outlet DN 110, No. 0/0	190 mm	190 mm	0.8 kg	4112145 •

ODOUR TRAP FOR OUTFALL UNIT | PP

TEC*

+ Odour trap for outfall unit with socket and seal for pipe connection DN 160

DESCRIPTION	WEIGHT	ARTICLE NO.
Internal odour trap suitable for DN 160 pipe connection 160, 1-piece	0.2 kg	605002 •

ODOUR TRAP FOR CHANNEL | 3-PIECE | PP

TEC*

+ For vertical core drilling DN 92/110

DESCRIPTION	WEIGHT	ARTICLE NO.
Odour trap, 3-piece	0.35 kg	605017

BIRCOslim® Drainage performance

The channel systems from BIRCO provide excellent drainage performance.
In addition to this table, BIRCO offers a project-specific hydraulic calculation service.

BIRCOslim® NW 100

	DRAINAGE PERFORMANCE AT THE CHANNEL END	CROSS-SECTIONAL AREA AT THE CHANNEL END
Nr. 0/0	4.16 l/sec	74,85 cm ²
Nr. 10/0	6.85 l/sec	123,38 cm ²

BIRCOslim® NW 150

	DRAINAGE PERFORMANCE AT THE CHANNEL END	CROSS-SECTIONAL AREA AT THE CHANNEL END
Nr. 0/0	10.20 l/sec	183.55 cm ²

BIRCOslim® NW 100 SHALLOW CHANNEL

HEIGHT	DRAINAGE PERFORMANCE AT THE CHANNEL END	CROSS-SECTIONAL AREA AT THE CHANNEL END
80 mm	1.91 l/sec	34.31 cm ²

The tables can only give guidelines for the dimensioning. On-site conditions such as positions of manholes already installed, number of channels lines etc. cannot and have not been taken into account. We therefore recommend making use of our hydraulic calculation service for a draft proposal.