

# BIRCOlight NW 200 AS triloc

## New size, new locking principle for fast maintenance

The BIRCOlight System in nominal width 200 AS a light and robust concrete channel for higher hydraulic requirements. Thanks to the BIRCOtriloc locking principle, the cover is locked into place quickly, easily and in a shift-proof manner. The sophisticated spring concept ideally connects the cover and the channel and even permits an optional bolt fastening, which can also be applied retrospectively.



#### BIRCOlight NW 200 AS triloc Facts

- + Channel system: NW 200 with and without internal inbuilt falls
- + With anchoring system (AS)
- + No crossbars
- + Construction length: 0.5, 1.0 metres
- + Load class: A 15 D 400
- + Ductile iron slotted grating with BIRCOtriloc, also for bolt fastening
- + Mesh grating, hot-dipped galvanised, with bolt fastening

## BIRCOlight NW 200 AS triloc | Applications

- Gardening & lanscaping construction +
- + Residential and town construction
- + Private building owner
- + Parking lots
- Entrance and exit areas

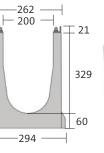
# BIRCOlight NW 200 AS triloc

New size, new locking principle for fast maintenance

#### **Channel elements with anchoring system** | 0.5 % internal inbuilt fall

- + Hot-dipped galvanised solid steel angle
- + BIRCOtriloc locking principle stainle steel / Mat. No. 1.4310
- + Alternatively with bolt fastening (Art.-No. with f) 310
- + Safety sealing joint

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	21	410	
	229	410	
67	60		67
294			ŀ
No. 0/0			





No. 20/0

Description	Length	Width at top/ at ground	Construction height at groove/tongue	Weight	Load class DIN EN 1433	Article No. with bolt fastening	Article No. with BIRCOtriloc
Channel No. 1	1000 mm	262/294 mm	310/315 mm	93.3 kg	A 15 – D 400	2021201f	2021201
Channel No. 2	1000 mm	262/294 mm	315/320 mm	94.1 kg	A 15 – D 400	2021202f	2021202
Channel No. 3	1000 mm	262/294 mm	320/325 mm	94.8 kg	A 15 – D 400	2021203f	2021203
Channel No. 4	1000 mm	262/294 mm	325/330 mm	95.5 kg	A 15 – D 400	2021204f	2021204
Channel No. 5	1000 mm	262/294 mm	330/335 mm	96.3 kg	A 15 – D 400	2021205f	2021205
Channel No. 6	1000 mm	262/294 mm	335/340 mm	97.0 kg	A 15 – D 400	2021206f	2021206
Channel No. 7	1000 mm	262/294 mm	340/345 mm	97.8 kg	A 15 – D 400	2021207f	2021207
Channel No. 8	1000 mm	262/294 mm	345/350 mm	98.5 kg	A 15 – D 400	2021208f	2021208
Channel No. 9	1000 mm	262/294 mm	350/355 mm	99.2 kg	A 15 – D 400	2021209f	2021209
Channel No. 10	1000 mm	262/294 mm	355/360 mm	100.0 kg	A 15 – D 400	2021210f	2021210

#### **Channel elements with anchoring system** | without internal inbuilt fall

- + Hot-dipped galvanised solid steel angle
- + BIRCOtriloc locking principle stainless steel / Mat. No. 1.4310
- + Alternatively with bolt fastening (Art.-No. with f)
- + Safety sealing joint

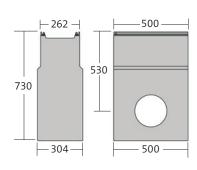
Description	Length	Width at top/ at ground	Construction height at groove/tongue	Weight	Load class DIN EN 1433	Article No. with bolt fastening	Article No. with BIRCOtriloc
Channel No. 0/0	500 mm	262/294 mm	310/310 mm	47.0 kg	A 15 – D 400	2021231f	2021231
Channel No. 0/0	1000 mm	262/294 mm	310/310 mm	93.0 kg	A 15 – D 400	2021226f	2021226
Channel No. 5/0	1000 mm	262/294 mm	330/330 mm	98.1 kg	A 15 – D 400	2021227f	2021227
Channel No. 10/0	1000 mm	262/294 mm	360/360 mm	100.3 kg	A 15 – D 400	2021228f	2021228
Channel No. 20/0	1000 mm	262/294 mm	410/410 mm	107.7 kg	A 15 – D 400	2021230f	2021230



Description	Width	For construction height	Weight	Article No.
End cap, galvanised, No. 0/0 – 4	260 mm	310 – 330 mm	1.1 kg	2021240
End cap, galvanised, No. 5/0 – 8	260 mm	330 – 350 mm	1.2 kg	2021241
End cap, galvanised, No. 9 – 10	260 mm	350 – 360 mm	1.2 kg	2021242
End cap, galvanised, No. 20/0	260 mm	410 mm	1.4 kg	2021244
End cap with outlet DN 200, galvanised, No. 0/0	260 mm	310 mm	1.7 kg	2021245
End cap with outlet DN 200, galvanised, No. 5/0	260 mm	330 mm	1.8 kg	2021246
End cap with outlet DN 200, galvanised, No. 10/0	260 mm	360 mm	1.8 kg	2021247
End cap with outlet DN 200, galvanised, No. 20/0	260 mm	410 mm	2.0 kg	2021248

#### In-line outfall unit with anchoring system | 1-piece

- + 1- or 2-sided channel connection until No. 20/0
- + PP silt bucket
- + Integrated sockets for DN 200 pipe connection
- + without odour trap
- + Hot-dipped galvanised solid steel angle
- + BIRCOtriloc locking principle stainless steel / Mat. No. 1.4310
- + Alternatively with bolt fastening (Art.-No. with f)





Description	Length at top/ at ground	Width at top/ at ground	Construction height	Weight	Load class DIN EN 1433	Article No. with bolt fastening	Article No. with BIRCOtriloc
In-line outfall unit	500/500 mm	262/304 mm	730 mm	126.0 kg	A 15 – D 400	2021235f	2021235

#### Ductile iron slotted grating

- + Black immersion lacquered
- + Also available in galvanised treatment
- + 4-point per metre BIRCOtriloc locking
- + 4-point per metre M8 bolt fastening (alternatively - Art.-No. with f)





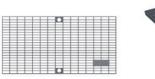
Description	Length	Width	Height	Weight	Inlet opening	Inlet cross section		Article No. with bolt fastening	
black	500 mm	250 mm	20 mm	6.9 kg	SW 93/17,5 mm	947 cm²/m	A 15 – D 400	2021274f	2021274

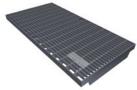
SW = slot width

Constructed in accordance with RSTO using non-settling frost-free sub-bases. Exception up to D 400: Not for use across the carriage- way of highways or motorways.

#### Mesh grating

- + Hot-dipped galvanised
- + 4 point per metre M8 bolt connection





Description	Length	Width	Height	Weight	Inlet opening	Inlet cross section	Load class DIN EN 1433	Article No. with bolt fastening
Hot-dipped galvanised	500 mm	250 mm	20 mm	4,3 kg	SW 30/10 mm	1839 cm²/m	A 15 – B 125	2021263f
Hot-dipped galvanised	1000 mm	250 mm	20 mm	8,4 kg	SW 30/10 mm	1815 cm²/m	A 15 – B 125	2021253f

# Drainage capacities

BIRCO channel systems provide outstanding drainage performance. BIRCO offers a calculation service in addition to this diagram.

#### BIRCOlight NW 200 AS triloc

CL = 1000 mm	Drainage capacity at the channel end	Cross-sectional area at the channel end
No. 0/0	21.0 l/sec	<b>378.1</b> cm <sup>2</sup>
No. 5/0	23.8 l/sec	<b>427.9</b> cm <sup>2</sup>
No. 10/0	26.5 l/sec	<b>477.7</b> cm <sup>2</sup>
No. 20/0	32.1 l/sec	577.3 cm <sup>2</sup>

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

# Hole drilling

We can fit BIRCO channels with horizontal or vertical bore holes for directly fitting feed an drainage lines according to you plans. The diameters are matched with channel base pipes; different pipes are available upon request.

### BIRCOlight NW 200 AS triloc | Max. bore hole diameter

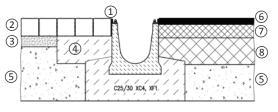
200 mm	DN 200*	DN 200
Nominal width	Bore hole, horizontal maximal	Bore hole, vertical maximal

#### \* Until channel No. 10/0 max. DN 150

Bore holes must be at a distance of at least 100 mm away from the end of the channel.

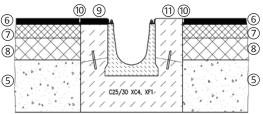
# Installation examples

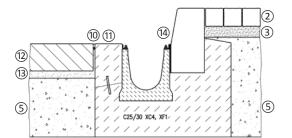
### Load class A 15 to C 250, Type M Drawing no. 19109



## Load class D 400, Type M

Drawing no. 19109





Joint approx. 10 mm
 Block paving
 Bedding
 Mortar bedding
 Sub-base
 Wearing course
 Base course

8 Bituminous sub-base
9 2-layered cast asphalt
10 Movement joint min. 30/10, cast
11 C35/45 XC4, XD3, XF4, XM2
12 Concrete slab
13 Min. 3 cm split
14 Bitum. grouting compound

The planning of movement joints must be conducted from on the basis of engeneering considerations. When laying the channel line in a full concrete surround, movement joints at right angles to the channel line must be installed every 12 m. Constructed in accordance with RSTO using non-settling frost-free sub-bases. Exception up to D 400: Not for use across the carriage-way of highways or motorways.

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