

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

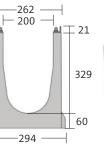
BIRCOlight NW 200 AS triloc

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

| ess | | _ | - |
|---------|-----|-----|----|
| | 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

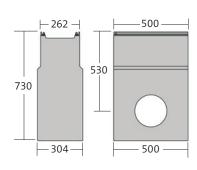
| Description | Length | Width at top/ at ground | Construction height at groove/tongue | Weight | Load class DIN EN 1433 | Article No. with bolt fastening | Article No. with BIRCOtriloc |
|------------------|---------|----------------------------|--------------------------------------|----------|---------------------------|---------------------------------|---------------------------------|
| 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)





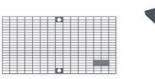
| Description | Length | Width | Height | Weight | Inlet opening | Inlet cross section | | Article No. with bolt fastening | |
|-------------|--------|--------|--------|--------|---------------|------------------------|--------------|------------------------------------|---------|
| black | 500 mm |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

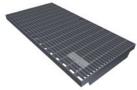
SW = slot width

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 | 378.1 cm ² |
| No. 5/0 | 23.8 l/sec | 427.9 cm ² |
| No. 10/0 | 26.5 l/sec | 477.7 cm ² |
| No. 20/0 | 32.1 l/sec | 577.3 cm ² |

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

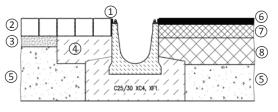
| 200 mm | DN 200* | DN 200 |
|---------------|----------------------------------|--------------------------------|
| Nominal width | Bore hole, horizontal maximal | Bore hole, vertical maximal |

* 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.

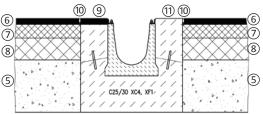
Installation examples

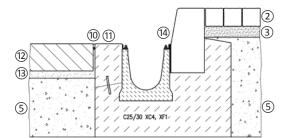
Load class A 15 to C 250, Type M Drawing no. 19109



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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