



Projectors | 176-264 V AC /176-280 V DC | 1 arrayLED 23 W DC - 26 W AC | CRI 90 | Angle Max
81989W85

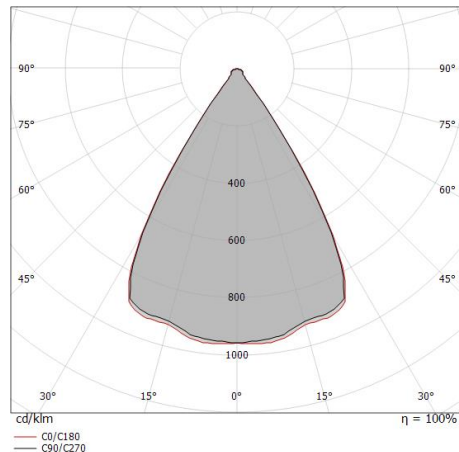
Single emission projectors for indoor application. The warm white LED light source with a adjustable focus light distribution is composed of 1 arrayed LEDs with CCT of 3000 K and a CRI 90; the source luminous flux is 3287 lm, with a 142.9 lm/W nominal luminous efficacy.

The device body is made of die-cast aluminium en ab - 46100 and features a white finish, processed by means of powder coating. The ingress protection degree is IP20; the total weight is of 0.735 kg.

The total absorbed power is 26 W.

The device features protection class II and can be ceiling-mounted.

Compliant with the EN 60598-1 standard and its specific provisions.



Distance [m]	Cone diameter [m]	illuminance [lx]
0.5	0.63 0.63	E(0°) 5468 E(C90) 1670 E(C0) 1680
1.0	1.26 1.26	E(0°) 1367 E(C90) 417 E(C0) 420
1.5	1.89 1.90	E(0°) 608 E(C90) 186 E(C0) 187
2.0	2.52 2.53	E(0°) 342 E(C90) 104 E(C0) 105
2.5	3.15 3.16	E(0°) 219 E(C90) 67 E(C0) 67
3.0	3.78 3.79	E(0°) 152 E(C90) 46 E(C0) 47

— C0/C180 (Half-peak divergence: 64.6°)
 — C90/C270 (Half-peak divergence: 64.4°)

Energy efficiency class

This product contains a light source of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	43 %
Source lumens	3287 lm
Delivered lumens	1428 lm
Consumption	26 W
Luminaire efficacy	54 lm/W
Colour temperature	3000 K
Standard Deviation of Colour Matching	2 Step MacAdam
Colour rendering index	90 Ra
Colour Rendering Index	60 R9
Black Body Locus	On
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

L70 B10 C0 252000h (at Tj 65 Ta 25)

UGR

UGR axial	24.3
UGR transversal	24.3
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C0/C180 optics	64°
Light distribution simmetry	Symmetrical

COLOR VECTOR GRAPHIC





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Min

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The device body is made of die-cast aluminium en ab - 46100 and features a white finish, processed by means of powder coating. The ingress protection degree is IP20; the total weight is of 0.735 kg.

The total absorbed power is 26 W.

The device features protection class II and can be ceiling-mounted.

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains a light source of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	18 %
Source lumens	3287 lm
Delivered lumens	611 lm
Consumption	26 W
Luminaire efficacy	23 lm/W
Colour temperature	3000 K
Standard Deviation of Colour Matching	2 Step MacAdam
Colour rendering index	90 Ra
Colour Rendering Index	60 R9
Black Body Locus	On
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

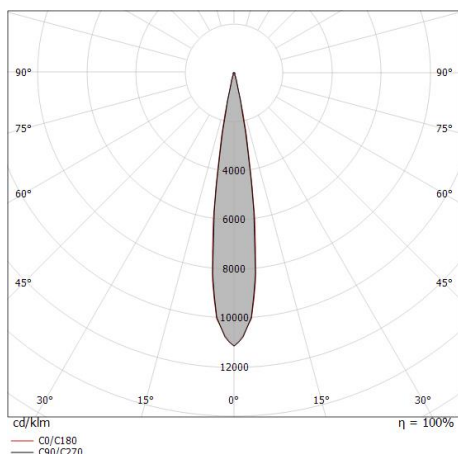
L70 B10 C0 252000h (at Tj 65 Ta 25)

UGR

UGR axial	14.4
UGR transversal	14.8
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

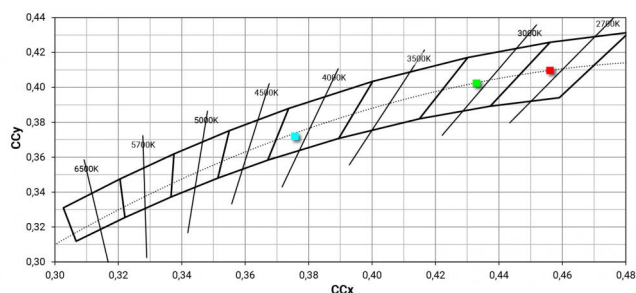
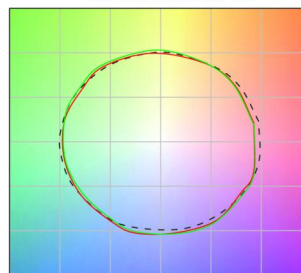
C0/C180 optics	16°
Light distribution simmetry	Symmetrical



Distance [m]	Cone diameter [m]	illuminance [lx]
0.5	0.15 0.15	E(0°) 27171 E(C90) 8.1° 13259 E(C0) 8.3° 13235
1.0	0.28 0.29	E(0°) 6793 E(C90) 8.1° 3315 E(C0) 8.3° 3309
1.5	0.43 0.44	E(0°) 3019 E(C90) 8.1° 1473 E(C0) 8.3° 1471
2.0	0.57 0.58	E(0°) 1698 E(C90) 8.1° 829 E(C0) 8.3° 827
2.5	0.71 0.73	E(0°) 1087 E(C90) 8.1° 530 E(C0) 8.3° 529
3.0	0.85 0.88	E(0°) 755 E(C90) 8.1° 368 E(C0) 8.3° 368

— C0/C180 (Half-peak divergence: 16.6°)
— C90/C270 (Half-peak divergence: 16.2°)


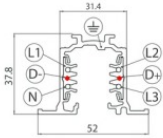
COLOR VECTOR GRAPHIC


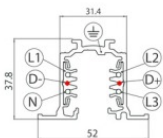



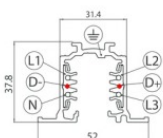



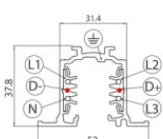
		<p>Track Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>83336</td> </tr> </tbody> </table>	Finish	Code	White	83336
Finish	Code						
White	83336						
		<p>Track Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>83337</td> </tr> </tbody> </table>	Finish	Code	White	83337
Finish	Code						
White	83337						
		<p>Track Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>83338</td> </tr> </tbody> </table>	Finish	Code	White	83338
Finish	Code						
White	83338						
		<p>Track Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83339</td> </tr> </tbody> </table>	Finish	Code	Black	83339
Finish	Code						
Black	83339						
		<p>Track Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83340</td> </tr> </tbody> </table>	Finish	Code	Black	83340
Finish	Code						
Black	83340						
		<p>Track Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83341</td> </tr> </tbody> </table>	Finish	Code	Black	83341
Finish	Code						
Black	83341						
		<p>Track - Three-phase Recessed White DALI Track, 1 m (9000-1/W-R) Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>80990</td> </tr> </tbody> </table>	Finish	Code	White	80990
Finish	Code						
White	80990						
		<p>Track - Three-phase Recessed White DALI Track, 2 m (9000-2/W-R) Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>80991</td> </tr> </tbody> </table>	Finish	Code	White	80991
Finish	Code						
White	80991						


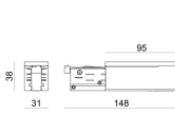



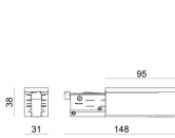
		<p>Track - Three-phase Recessed White DALI Track, 3 m (9000-3/W-R) Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<p>Finish</p> <div style="border: 1px solid black; padding: 2px;">White</div>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">80992</div>


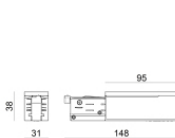
		<p>Track - Three-phase Recessed Grey DALI Track, 1 m (9000-1/B-R) Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<p>Finish</p> <div style="background-color: black; color: white; padding: 2px;">Black</div>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">80993</div>


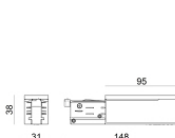
		<p>Track - Three-phase Recessed Black DALI Track, 2 m (9000-1/B-R) Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<p>Finish</p> <div style="background-color: black; color: white; padding: 2px;">Black</div>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">80994</div>

		<p>Track - Three-phase Recessed Black DALI Track, 3 m (9000-3/B-R) Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<p>Finish</p> <div style="background-color: black; color: white; padding: 2px;">Black</div>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">80995</div>

		<p>Power supply - White Right power supply header (9001/W) Material:PC, colour:white.</p>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">81033</div>

		<p>Power supply - Black Right power supply header (9001/B) Material:PC, colour:black.</p>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">81034</div>

		<p>Power supply - White left power supply header (9002/W) Material:PC, colour:white.</p>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">81036</div>

		<p>Power supply - Black left power supply header (9002/B) Material:PC, colour:black.</p>	<p>Code</p> <div style="border: 1px solid black; padding: 2px;">81037</div>



		<p>Junction - White power supply junction - central (9010/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81042</p>
		<p>Junction - Black power supply junction - centrale (9010/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81043</p>
		<p>Junction - Flexible white junction (9018/W) Type flexible curve. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81066</p>
		<p>Junction - Flexible black junction (9018/B) Type flexible curve. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81067</p>
		<p>Junction - Left white T junction - external (9013/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81051</p>
		<p>Junction - Black left T junction - external (9013/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81052</p>
		<p>Junction - Right white T junction - external (9014/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81054</p>
		<p>Junction - Right black T junction - external (9014/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81055</p>



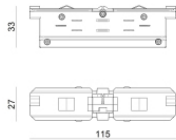
Closing cap - White end cap 9004/W
Material:PC, colour:white.

Code
80999



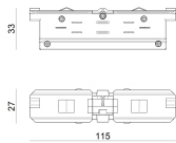
Closing cap - Black end cap 9004/B
Material:PC, colour:black.

Code
81000



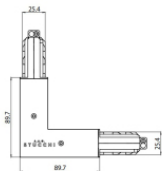
Junction - White electrical junction - internal (9003/W)
Type linear.
Material:PC, colour:white.

Finish
White **Code**
81039



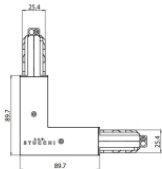
Junction - Black electrical junction - internal (9003/B)
Type linear.
Material:PC, colour:black.

Finish
Black **Code**
81040



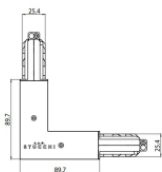
Junction - White L junction - internal (9011/W)
Type linear.
Material:PC, colour:white.

Finish
White **Code**
81045



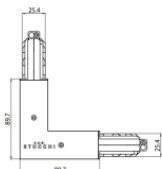
Junction - Black L junction - internal (9011/B)
Type linear.
Material:PC, colour:black.

Finish
Black **Code**
81046



Junction - White L junction - external (9012/W)
Type linear.
Material:PC, colour:white.

Finish
White **Code**
81048



Junction - Black L junction - external (9012/B)
Type linear.
Material:PC, colour:black.

Finish
Black **Code**
81049



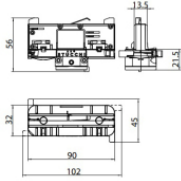
		<p>Junction - White X junction (9017/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81063</td> </tr> </tbody> </table>	Finish	Code	White	81063
Finish	Code						
White	81063						
		<p>Junction - Black X junction (9017/B) Type linear. Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81064</td> </tr> </tbody> </table>	Finish	Code	Black	81064
Finish	Code						
Black	81064						
		<p>Junction - Left white T junction - internal (9015/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81057</td> </tr> </tbody> </table>	Finish	Code	White	81057
Finish	Code						
White	81057						
		<p>Junction - Left black T junction - internal (9015/B) Type linear. Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81058</td> </tr> </tbody> </table>	Finish	Code	Black	81058
Finish	Code						
Black	81058						
		<p>Junction - Right White T junction - internal (9016/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81060</td> </tr> </tbody> </table>	Finish	Code	White	81060
Finish	Code						
White	81060						
		<p>Junction - Right black T junction - internal (9016/B) Type linear. Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81061</td> </tr> </tbody> </table>	Finish	Code	Black	81061
Finish	Code						
Black	81061						
		<p>Closing cap - Recessed white end cap 9004-R/W Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81002</td> </tr> </tbody> </table>	Code	81002		
Code							
81002							
		<p>Closing cap - Recessed black end cap 9004-R/B Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81003</td> </tr> </tbody> </table>	Code	81003		
Code							
81003							



	<p>Ceiling rose - 1.5m white pendant luminaire kit + bracket (9000-KIT5-1,5-W) Material:plastic, colour:white.</p>	<p>Code 81012</p>
	<p>Ceiling rose - 1.5m black pendant luminaire kit + bracket ((9000-KIT5-1,5-B) Material:plastic, colour:black.</p>	<p>Code 81014</p>
	<p>Ceiling rose - 5m white pendant luminaire kit + bracket (9000-KIT5-5-W) Material:plastic, colour:white.</p>	<p>Code 81013</p>
	<p>Ceiling rose - 5m black pendant luminaire kit + bracket (9000-KIT5-5-B) Material:plastic, colour:black.</p>	<p>Code 81015</p>
	<p>Suspensions - White rigid suspension 1m (S-9000-P3-W) Material:plastic, colour:white.</p>	<p>Code 81021</p>
	<p>Suspensions - Black rigid suspension 1m (S-9000-P3-B) Material:plastic, colour:black.</p>	<p>Code 81022</p>
	<p>Bracket - Anodized fixing bracket (S-9000/131) L=35mm, H=14mm, D=24mm. Material:Aluminium, colour:translucent.</p>	<p>Finish Anod. Al. Code 81086</p>
	<p>Bracket - White fixing bracket (S-9000/131-W) L=35mm, H=14mm, D=24mm. Material:Aluminium, colour:white, processing:Coating.</p>	<p>Finish White Code 81087</p>



		<p>Bracket - Black fixing braket (S-9000/131-B) L=35mm, H=14mm, D=24mm. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81088</td> </tr> </tbody> </table>	Finish	Code	Black	81088
Finish	Code						
Black	81088						
		<p>Cable cover - White recessed cover (S-9001-R/6-W) Material:PC, colour:white.</p>	<p>Code 81069</p>				
		<p>Cable cover - Black recessed cover (S-9001-R/6-B) Material:PC, colour:black.</p>	<p>Code 81070</p>				
		<p>Cable cover - White cover for recessed L junction (S-9011-R/6-W) Material:PC, colour:white.</p>	<p>Code 81075</p>				
		<p>Cable cover Material:PC, colour:black.</p>	<p>Code 81076</p>				
		<p>Cable cover - White cover for recessed X junction (S-9017-R/6-W) Material:PC, colour:white.</p>	<p>Code 81081</p>				
		<p>Cable cover - Black cover for recessed X junction (S-9017-R/6-B) Material:PC, colour:black.</p>	<p>Code 81082</p>				
		<p>White three-phase adapter (9009-4/W)</p>	<p>Code 81091</p>				



Black three-phase adapter (9009-4/B)

Code
81093



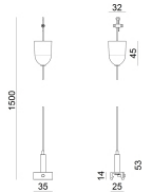
Tool - Cutter S-9000/T

Code
81005



Suspensions - 1.5m white pendant luminaire kit (9000-KIT3-1,5-W)
Material:plastic, colour:white.

Code
81006



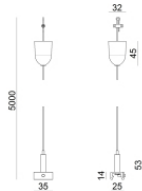
Suspensions - 1.5m black pendant luminaire kit (9000-KIT3-1,5-B)
Material:plastic, colour:black.

Code
81008



Suspensions - 5m white pendant luminaire kit (9000-KIT3-5-W)
Material:plastic, colour:white.

Code
81007



Suspensions - 5m black pendant luminaire kit (9000-KIT3-5-B)
Material:plastic, colour:black.

Code
81009



Suspensions - White rigid suspension clip (S-9000-P2-W)
Material:plastic, colour:white.

Code
81018



Suspensions - Black rigid suspension clip (S-9000-P2-B)
Material:plastic, colour:black.

Code
81019

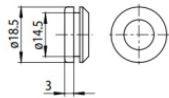


		<p>Bracket - Anodized stiffening bracket (S-9000/333) L=180mm, H=24mm, D=26mm. Material:Aluminium, colour:Anodised Aluminium, processing:Anodisation.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td></td> <td>81024</td> </tr> </tbody> </table>	Finish	Code		81024
Finish	Code						
	81024						
		<p>Bracket - White stiffening bracket (S-9000/333-W) L=180mm, H=24mm, D=20mm. Material:Aluminium, colour:white RAL 9010, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td></td> <td>81025</td> </tr> </tbody> </table>	Finish	Code		81025
Finish	Code						
	81025						
		<p>Bracket - Black stiffening bracket (S-9000/333-B) L=180mm, H=24mm, D=20mm. Material:Aluminium, colour:black RAL 9005, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td></td> <td>81026</td> </tr> </tbody> </table>	Finish	Code		81026
Finish	Code						
	81026						
		<p>Cable cover - White cover for recessed junction (S-9010-R/6-W) Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81072</td> </tr> </tbody> </table>	Code	81072		
Code							
81072							
		<p>Cable cover - Black cover for recessed junction (S-9010-R/6-B) Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81073</td> </tr> </tbody> </table>	Code	81073		
Code							
81073							
		<p>Cable cover - White cover for recessed T junction (S-9013-R/6-W) Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81078</td> </tr> </tbody> </table>	Code	81078		
Code							
81078							
		<p>Cable cover - Black cover for recessed T junction (S-9013-R/6-B) Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>81079</td> </tr> </tbody> </table>	Code	81079		
Code							
81079							
		<p>Cable cover Material:white.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>83249</td> </tr> </tbody> </table>	Code	83249		
Code							
83249							



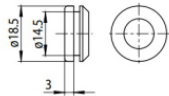
Cable cover
 Material:black, colour:black.

Code
83250



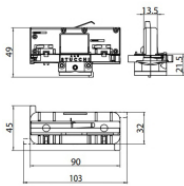
Closing cap - White gasket (S-9001/115-W)
 Material:white.

Code
81084



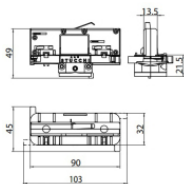
Closing cap - Black gasket (S-9001/115-B)
 Material:black, colour:black.

Code
81085



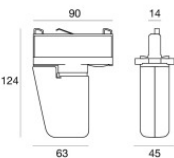
White three-phase/DALI adapter (9009/W)

Code
81094



Black three-phase/DALI adapter (9009/B)

Code
81095



Electronic accessory - TWIL-DALI controller for devices with DALI protocol installed on three-phase track.
 installation position: ceiling L=90mm, H=124mm, D=45mm.
 Material:ABS Plastic, colour:black.

Code
C-E700008