

Reflector extrusion profile for air cooling

for holding replaceable reflector sheets

The reflector profile for air cooling is designed for use as a fixed or swivelling reflector in reflector units where the UV lamp is cooled exclusively by means of a forced air flow. The robust construction allows permanent use under harsh industrial conditions up to 240 W/cm.

The extruded aluminium profile is designed in such a way that reflector sheets are fastened with screws using a mounting bracket (optional). Due to the simple exchangeability of the reflector sheets, simple maintenance by the customer is ensured. The reflector profile has proven itself over the past decades in our reflector units of the types Aachen, Köln, Ellwangen and Koblenz.



Advantages

- robust extruded profile that can also be used for high performance applications
- designed for air cooling only
- wartungsfreundlicher Tausch der Reflektor-Einlegebleche
- available up to a length of 5 m or as cut to size according to customer requirements
- optional accessories for mounting reflector sheets available, see below

Reflector extrusion profile for air cooling	
Art. No.	9990 (5 m pc. Reflector extrusion)
	Cutting to desired lengths is possible on request.
Weight	2.285 kg per running metre
Material	Aluminium
Complete sets:	
9900	Reflector profile air-cooled, complete set (pair) with reflector inserts and all fixing material. Cutting to desired lengths is possible on request.
9948	Complete set of fixing material (L-shaped fixing and thread strips with screws and snorkel washers)
Accessories:	
9001	Reflector sheets for air cooled reflector profile, length = 2 m .
	higly polished on the inside; protective film on the inside
9002	Pair of reflector sheets for air-cooled profile, length = cut to size according to customer
	requirements;
	higly polished on the inside; protective film on the inside
A008430	Cold mirror on aluminium sheet for air cooled reflector profile, length = 175 mm
A008431	Cold mirror on aluminium sheet for air cooled reflector profile, length = 300 mm
9950	L-shaped fixing 10 x 3 mm for reflector sheets, length = 1 m,
	Cutting to desired lengths is possible on request.
9948-2	Fixing screws for reflector sheets, stainless steel M 2.5 x 8 with snorkel washers 2.5 mm
9949-1	Thread strips with screws and snorkel washers, length = 431 mm
	Cutting to desired lengths is possible on request.



Reflector profil with optional accessories



Dimensions





UV light distribution depending on focusing

A UV reflector usually consists of two reflector profiles (half shells) which are positioned around the UV lamp. The reflected UV light is thus directed in the direction of the substrate to be cured and produces a wide, uniform irradiation distribution (1) due to the large reflector geometry.

By slightly tilting both reflector profiles, a slight focusing can be achieved depending on the distance to the substrate (2).

- 1) UV light path in normal position
 - → uniform UV light distribution







Opening width C vs distance D between lower edge of the reflector unit and the substrate





Assembly instruction for air cooled reflector profile

- 1. Reflector profile Cut to the desired length (if not already ordered).
- 2. Thread strips Cut to the desired length and slide into the groove of the reflector profile ①.
 - For lengths greater than 431 mm, assemble from several thread strips.
- 3. Reflector sheets Cut to the length of reflector profile minus 2...3 mm (heat expansion) and Insert into groove of reflector profile ②. Please remove the protective film first.
- 4. L-shaped fixing
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 5. Cut to the length of the reflector profile minus 2...3 mm (if not already ordered) and use the screws (M2.5) and the snorkel washers on every third hole to insert the mounting bracket ③.

For lengths greater than 1 m, assemble from several parts.

Tighten the screws from left to right in two passes. This is necessary in order to press the refector plates against the profile for good heat dissipation.



Replacing reflector sheets

Loosen the screws (M2.5) on both edges of the reflector, but do not unscrew them completely. Loosen the angle strips and remove the old reflector sheets.

First lift off the protective film on both long sides of the new reflector sheets to a width of approx. 5 mm so that the protective film is not jammed during installation. Now first insert the reflector sheet behind the uv lamp into the groove of the reflector profile (see above) and then tilt it outwards into its final position. Then the reflector sheets are fastened again with the L-shaped fixing strips. Starting from the left or right, tighten the screws in two passes so that the reflector sheet is pressed firmly enough into the profile and a large-area contact between the reflector sheet and reflector profile is ensured for good heat dissipation.