



Reflector units

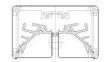
for UV medium-pressure lamps (overview)

Possible applications:

When in operation, the surface temperature of a UV medium-pressure lamp should be between 700 to 900 °C. Therefore in most cases, forced cooling is required to achieve this. Lamp cooling is usually achieved by extracting air. In this process, ozone that may be generated during the operation is also evacuated.

The UV radiation should usually be directed or focused onto the substrate. For this reason, our reflector units are equipped with reflectors made of mirror-finish anodised aluminium. For the **reflector units of the types Aachen, Köln and Ellwangen**, the focus of the reflector shells can be preset. The focus can therefore be adjusted to the distance of the reflector unit from the substrate.





The Aachen, Köln and Ellwangen reflector units can be supplied in different lengths according to customer specifications and of course to special design. Numerous optional components are available for the reflector units, such as, for example, quartz glass plates, UV transmitters, high-voltage plug-in connectors, and cold light reflectors.

If the UV lamp power is altered, the corresponding cooling air volume must be adjusted accordingly. This function is fulfilled by our exhaust air control system that comes as an easy-to-install complete set. The controller is fully programmed. If ordered in combination with a reflector unit, the latter will be supplied with a pre-installed temperature sensor.

Technical data:

Reflector units Aachen and Köl			
Photo / Designation	Art. No.	Shutter	Remarks
	5202-xxx	-	Available for the following lamp power values: Arc Length: Power: 100 – 1650 mm: 240 W/cm 1660 – 1900 mm: 200 W/cm 2000 – 2400 mm: 160 W/cm
Reflector unit Aachen			Depending on the lamp power, one or two exhaust vents DN100, DN125 or DN140 are installed on the rear of the unit. Special feature: an ignition unit can be integrated into the reflector unit on the front.
	5201-xxx	-	Available for the following lamp power values: Arc length: Power: 100 – 1650 mm: 240 W/cm 1660 – 1900 mm: 200 W/cm 2000 – 2400 mm: 160 W/cm Depending on the lamp power, one or two exhaust
Reflector unit Köln			vents DN100, DN125 or DN140 are installed on the rear of the unit.

Photo / Designation	Remarks	
		The axial-flow fan set has been designed for applications involving constant lamp power. The fan(s) is/are designed for exhaust air temperatures of up to 90 °C.
Axial-flow fan set		Wiring ready for connection.





Reflector unit Ellwangen			
Photo / Designation	Art. No.	Shutter	Remarks
Reflector unit Ellwangen (this article equipped with pneumatic shutter drive)	5220-xxx	*	Reflector unit with shutters. Available for the following lamp power values: Arc Length: Power: 100 – 580 mm: 670 240 W/cm – 830 mm: 840 – 200 W/cm 1040 mm: 1050 – 160 W/cm 1100 mm: 1250 – 140 W/cm 1450 mm: 120 W/cm Depending on the lamp power, one or two exhaust vents DN100 - DN140 are installed on the rear of the unit.

Photo / Designation	Art. No.	Remarks
	5202-1	The shutter drive includes: pneumatic cylinder or electrical servomotor, limit switch, terminal strip, three/two-way valve, stainless steel hood
		Pneumatic shutter drive:
Shutter drive,		48 bar, dimensions 225 x 180 x 56 mm, or
pneumatic		electrical shutter drive:
pricamatic		DC 24 V or AC 24 V, dimensions: 225 x 180 x 106 mm
	A000869 (DN 80)	If the UV lamp power is to be be continuously adjusted, the exhaust air required for the UV lamp must be adjusted according to the lamp power. The exhaust air control unit then controls the volume of exhaust air
	7777-0	automatically.
	(DN 100)	The complete set consists of:
The same of the sa		temperature sensor PT 100 with cable
Exhaust air control,	A001107	electronic controller (programmed ready for connection) for front
complete set	(DN 125)	panel installation, 48 x 48 mm
•	4004204	 throttle valve with mounting accessories
	A001201 (DN 140)	motor drive DC 24 V for throttle valve

Optional equipment: reflector units Aachen, Köln and Ellwangen				
Photo / Designation	Art. No.	Remarks		
Quartz glass holder		Up to a length of 500 mm, the holder of the quartz glass plate consists of two individual holders mounted on the front. For lengths of 500 mm and more, a surrounding frame is supplied which allows for the cost-effective mounting of several quartz glass plates.		
Quartz glass UV transmitter plates		Quartz glass plates: 3 mm thick as standard. Other material thicknesses on request. UV transmitters: multilayer coating on quartz glass in order to reduce the heat transfer onto the substrate.		
Cold light reflector UV Flex / Al	9000	Cold light reflector (cold mirror), L = 175 mm Other lengths on request.		
HiPro plug connection		HiPro plug connection: • 2 high-voltage contacts AC 4.5 kV (30 A to 60 °C) • 10 control contacts AC 250 V (10 A at 20 °C).		





UV Cure

High power reflector unit with shutters for uv medium pressure lamps

Typical applications are in the areas of:

- Continuous printing
- Flexo and screen printing
- Letterpress

Features of the reflector unit UV Cure:

- available with or without jaw
- rack system for lamp change
- compact dimensions
- closed system with quartz glass protection window
- integrated temperature sensor (PT 100)
- montoring of the reflector unit using temperature switch
- easy to service lamp and reflector change
- built in pneumatic shutter actuator (DC 24 V) with monitored shutter position





A006215 A006222

	UV Cure	e 360	UV Cure 450		
Art. No.	A006215	A006216	A006222	A006223	
Jaw	no	yes	no	yes	
Arc lengths	360 mm	360 mm	450 mm	450 mm	
Max. lamp power	180 W/cm	180 W/cm	180 W/cm	180 W/cm	

eLight 1

High power reflector unit with shutters for uv medium pressure lamps

Typical applications are in the areas of:

- Continuous printing
- Flexo and screen printing
- Letterpress

Features of the reflector unit eLight 1:

- for lamp power up to 240 W/cm
- cooled by air only
- · closed system with quartz glass protection window
- reflector profile with optimized radiation geometry
- integrated temperature sensor (PT 100)
- montoring of the reflector unit using temperature switch
- built in pneumatic shutter actuator (DC 24 V) with monitored shutter position
- reflector integrated high unit eLight 1 voltage connector

Photo / Designation	Art. No.	Shutter	Remarks
	5330-299	✓	Reflector unit with shutters.
	5555 =55		Available for a lamp power of 240 W/cm.
			Arc lenghth: 250 mm
ALIGHT I			Exhaust vent DN 100 on the rear of the unit.
Reflector unit eLight 1			





Reflector unit, type Mini has been designed for curing small surface areas. Typical applications for the Mini reflector unit are adhesives and small-area curing, e.g. inkjet printing. The unit has deliberately been designed to be simple and robust.

Reflector unit, type Mainz has been specifically designed as a compact device intended for the curing of small areas where the substrate is heat sensitive. The Mainz reflector unit is equipped with two quartz glass plates, one of which is a UV transmitter. This is to protect the substrate from excessive heating. The lit length of the ozone-free UV medium-pressure lamp is 70 mm with a total electrical power of 1,050 W. A typical area of application is small-area curing, e.g. for inkjet printing.

The **reflector unit of the type Stuttgart** has been developed as a replacement unit for Gallus printing presses (R160 and R200 series). Because of the higher output due to an improved reflector, this unit only requires one UV lamp and can be operated with the existing, only slightly adapted electrical system. The maintenance effort (lamp replacement, replacement of reflector plates or cleaning of the cooling plate) is minimal due to the plug connection and the possibility of simply drawing out the reflector unit towards the front. An exhaust air controller including throttle valve (80 mm) and regulator (24 V DC) are included.

Reflector units Mini, Mainz and Stuttgart			
Photo / Designation	Art. No.	Shutter	Remarks
Reflector unit Mini	A001899	-	 Fe-doped UV lamp with an electrode gap of 31 mm and a lamp power of 450 W ignition device integrated in the reflector unit axial-flow fan (230 V AC) mounted on the upper side choke ballast 230 V / 50 Hz, installed in an external metal box mirror finish anodised aluminium reflectors reflector unit: 225 x 115 x 183 mm, approx. 2.1 kg ballast: 400 x 300 x 212 mm, approx. 10 kg length of power cable with Schuko (safety) plug: 2 metres
Reflector unit Mainz	A002234	-	 mercury lamp, ozone-free, with an electrode gap of 70 mm, for a lamp power of 150 W/cm, with integrated UV transmitter and front quartz glass plate fan integrated in the case
Reflector unit Stuttgart			
	5230	✓	 replacement reflector unit for Gallus printing presses (types R160 and R200) 1 UV lamp with 120 W/cm (instead of 2 lamps, as previously fitted), delivering better curing results including exhaust air control simple installation connector plugs on the reflector unit
Reflector unit Stuttgart			for UV lamps with an electrode gap of 200 mm or 240 mm

We are pleased to supply customer-specific special designs on request.





Both the **UV floodlight 250 W** and the **UV hand-held lamp 250 W** are equipped with a black light filter as standard. Both consist of the actual floodlight with handle and the ballast; these components are connected using a cable.

The application for these lamps is small-area irradiation for paint repairs or the curing of sealing compounds. The UV floodlight 250 is selected for surface irradiation while the UV hand-held lamp has a centric focus so that a high intensity radiation point is achieved.

The **UVA spotlight** has significantly lower power. Here, the electronic ballast is integrated into the floodlight itself. The areas of application include, for example, crack detection in welds or metals, visualisation of fluorescent inks, e.g. on bank notes, in advertising and in other fields.





UV floodlight / UV hand-held lamp				
Photo / Designation	Art. No.	Remarks		
UV hand-held lamp 250 W	A002554 A002555	UV hand-held lamp 250 W, lamp for focused irradiation Mains power: 230 V, 50 Hz Electrical lamp power: 250 W with Fe-doped UV lamp with mercury (Hg) lamp		
Filter plates	A001962 A001961	Black light filter Borofloat filter		

For the technical details, please refer to the corresponding data sheets.