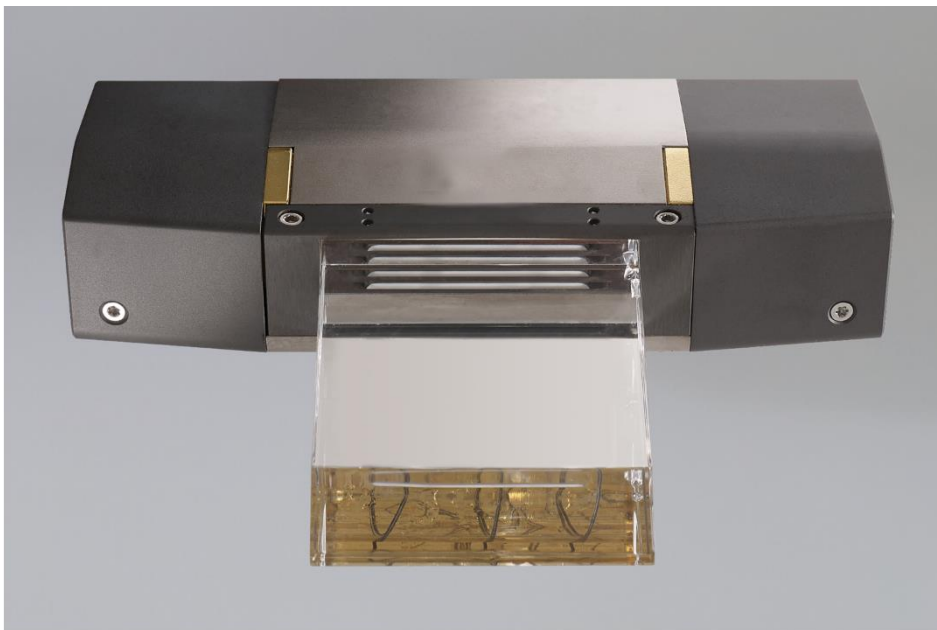


hum3® Discovery

Datasheet



hum3® Main Cabinet and Chiller



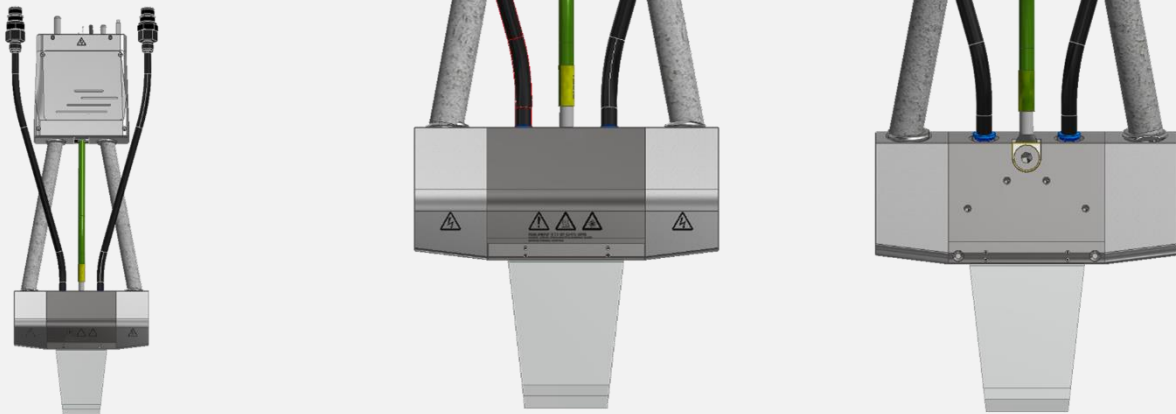
hum3® Lamp Head

1. Main Cabinet	
1.1 Characteristics	
Dimensions	1500 x 800 x 500mm (H x W x D)
Weight	225kg or 250kg Dependant on voltage variant. See System Schematic.
Cooling Method	Air - Cooled
Ambient Working Temperature	15 – 35 °C
Control Interfaces	HMI
1.2 Power Output	
Rated Electrical Output Power	10kW - Limited by head module, refer to section 4.1
1.3 Input Requirements	
1.3.1 Power	
Rated Input Voltage	400V/480V 3Ph+E 50/60 Hz
Maximum input power	20kVA
External fuse protection	Install to local regulations
External Hardwired Interface cable	10m (36 cores)
External Interface	Hardwired, Profinet (optional upgrade)
1.3.2 Safety	
Performance level	Performance Level “D”
E-Stop	Front door and on remote HMI. Ready to interface with external E-Stop.
Safeguard Interlock	Ready to interface with external safeguard

2. Chiller Cabinet	
2.1 Characteristics	
Dimensions	775 x 510 x 850mm (H x W x D)
Weight	125kg
Cooling Capacity	17L/Min
Tank Capacity	11L
Noise	75dB ± 10%
Conductivity	< 5µS/cm
Other features	Non-return, solenoid valve
Consumables	Inline DI cartridge and particulate filters
2.2 Requirements	
Water quality	Deionised Water
Water connection	Dry disconnection flow and return to optical module
Control	'Plug and play' power and signal connections
<i>Direct sun radiation and rapid temperature changes are to be avoided. Good room illumination is recommended.</i>	

3. System	
3.1 Environmental data	
System heat dissipation	ca. 5kW
Noise level, without processing	75db ± 10%
Electromagnetic compatibility	EN 61000
3.2 Artificial Optical Radiation	
This equipment is an intense source of radiation. Operators should take the appropriate eye and skin protection in accordance with EN62471:2008 and / or Machinery Directive 2006/42/EC and / or any local directives that could apply.	

4. Head (optical) module (HHM0032/2" heated width)



4.1 Characteristics

Rated max electrical power at head	6.1kW
Module dimensions	171 x 37.5 x 185mm (H x D x W)
Optical process area	Scalable 25-52mm
Head mounting	4 x M4 holes on rear
Distance to connection box	500-1000mm
2 x cable OD/bend radius	ø21mm / 65mm
2 x hose OD/ bend radius	ø10mm / 50mm

5. Lamp head - Umbilical Assembly



5.1 Umbilical Cable (Combined Power and Signal) Specifications

OD	30 mm
Length	7,9,10m
Weight	2 kg/m
Bend radius	150mm minimum

5.2 Hose Connection Specifications

Coolant Line Length	Up to 10m
OD	27mm
Hose Bend Radius	75mm

6. Control interface

The humm3® discovery is supplied with a 10” wired Human Machine Interface (HMI) which interfaces with the applications PLC to set the operating parameters, modulating pulse energy, width, and frequency of the flashlamp in response to input(s) from the robot.

6.1 Characteristics

Dimensions	223.5 x 30.7 x 90mm (H x W x D)
Weight	1.6kg
Connection length	8, 10, 15 and 25m Available

All information herein is indicative only and is subject to change without any notice at any time.

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