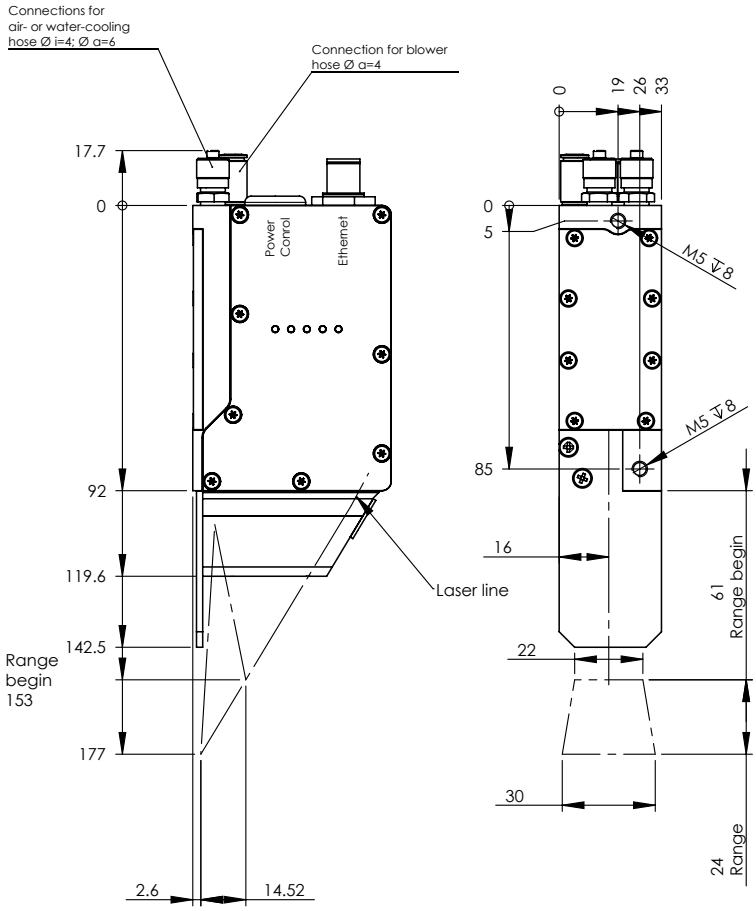
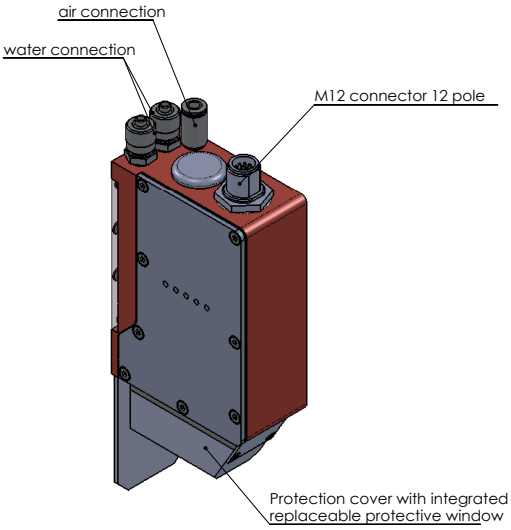
# M2-iLAN-1-WSL-24/22/30

## Laser Scanner

For seam tracking and robotic welding

- Connections for air- and water-cooling
- Air blown off system to remove smoke
- Small design
- No additional controller necessary
- LAN connection
- Blue laser optionally







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## Specifications

| M2-iLAN-1-WSL-24/22/30 | |
|---|---|
| Range Z | 24 mm |
| Working range Z | 61 ... 85 mm |
| Range begin X | 22 mm |
| End of range X | 30 mm |
| Resolution Z * | 0.05 mm |
| Resolution X * | 0.05 mm |
| Light source | Laser red visible (658 nm) or blue visible (450 nm) |
| Laser protection class | Red laser: 2M, laser power ≤1mW; blue laser: 3B, laser power ≤ 500 mW |
| Linearity | 0.2 % of range |
| Sampling rate | 100 Hz |
| Specials | Connections for air- or water-cooling, air blown off system, feeler gage, elapsed hour counter, serial number and sensor data readable |
| Ambient light | 5,000 Lux (approx. 40 mm next to weld spot) |
| Operating time | Laser diode: 50,000 h |
| Max. vibration | 5 g up to 1 kHz |
| Operating temperature | 0 °C ... +40 °C (up to 200 °C ambient temperature with water cooling) |
| Max. operating pressure | Water: 2 bar; air: 3 bar |
| Storage temperature | -20 °C ... +70 °C |
| Humidity | < 90% RH |
| Protection class | IP 64 |
| Connectors | M12 12-pole, optionally 2 connectors: M12 4-pole and M12 8-pole |
| Power supply | 12 - 30 V, $P_w$ = 15 W |
| Measured surface | white to black, matt to glossy |

* Measurement on matt white, diffusely reflecting surface

## Pin Assignment - 1 connector

| Connection cable - M12, 12 pole, A-coded | | |
|---|---|---|
| **Pin** | **Signal** | **Comment** |
| 1 | 12-30 V | Power supply |
| 2 | Input 1 | Incremental encoder A + B |
| 3 | GND | |
| 4 | Input 2 | |
| 5 | Sync out | For synchronization of sensors |
| 6 | Sync in | |
| 7 | TxD | RS232 diagnostic interface |
| 8 | min. 5 V | Laser out |
| 9 | Tx+ | Transmission data Ethernet + |
| 10 | Rx+ | Received data Ethernet + |
| 11 | Tx- | Transmission data Ethernet - |
| 12 | Rx- | Received data Ethernet - |



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