**Performance**

- **Power consumption**: Approx. 350 W using a typical program
- **Collaboration operation**: 17 advanced adjustable safety functions incl. elbow monitoring. Remote Control according to ISO 10218
- **Certifications**: EN ISO 13849-1, Cat.3, PL d, and EN ISO 10218
- **F/T Sensor - Force, x-y-z**: F/T Sensor - Torque, x-y-z
- **Range**: 100 N
- **Resolution**: 2.0 N
- **Accuracy**: 5.5 N
- **Humidity**: 90% RH (non-condensing)

**Specification**

- **Payload**: 10 kg / 22 lbs
- **Reach**: 1300 mm / 51.2 in
- **Degrees of freedom**: 6 rotating joints DOF
- **Programming**: Polyscope graphical user interface on 12 inch touchscreen with mounting

**Movement**

- **Pose Repeatability**: +/- 0.05 mm, with payload, per ISO 9283
- **Base**: ± 360° ±120°/Sec.
- **Shoulder**: ± 360° ±120°/Sec.
- **Elbow**: ± 360° ±180°/Sec.
- **Wrist 1**: ± 360° ±180°/Sec.
- **Wrist 2**: ± 360° ±180°/Sec.
- **Wrist 3**: ± 360° ±180°/Sec.
- **Typical TCP speed**: 1 m/Sec. / 39.4 in/Sec.

**Features**

- **IP classification**: IP54
- **ISO Class Cleanroom**: 5
- **Noise**: Less than 65 dB(A)
- **Robot mounting**: Any Orientation
- **I/O Ports**: Digital in 2, Digital out 2, Analog in 2, Analog out 0, UART interface (9.6k-5Mbps)
- **I/O power supply in tool**: 12V/24V 600mA continuous, 2A for shorter periods

**Physical**

- **Footprint**: Ø 190 mm
- **Materials**: Aluminium, Plastic, Steel
- **Tool (end-effector) connector type**: M8 | M8 8-pin
- **Cable length robot arm**: 6 m / 236 in
- **Weight including cable**: 33.5 kg / 73.9 lbs

**Control box**

- **Performance**
  - **IP classification**: IP44
  - **ISO Class Cleanroom**: 6
  - **Ambient temperature range**: 0-50°C
  - **I/O Ports**: Digital in 16, Digital out 16, Analog in 2, Analog out 2, 500 Hz control, 4 separated high speed quadrature digital inputs
  - **I/O power supply**: 24V 2A
  - **Communication**: Control frequency: 500 Hz, ModbusTCP: 500 Hz signal frequency, Profinet and EthernetIP: 500 Hz signal frequency, USB ports: 1 USB 2.0, 1 USB 3.0
  - **Power source**: 100-240 VAC, 47-440Hz
  - **Humidity**: 100-240 VAC, 47-440Hz

**Physical**

- **Control box size (WxHxD)**: 475 mm x 423 mm x 268 mm
  - 18.7 in x 16.7 in x 10.6 in
- **Weight**: Max 13.6 kg / 30.0 lbs
- **Materials**: Steel

**Teach pendant**

- **Features**
  - **IP classification**: IP54
  - **Humidity**: 90% RH (non-condensing)
  - **Display resolution**: 1280 x 800 pixels

**Physical**

- **Materials**: Plastic
- **Weight including 1m of TP cable**: 1.6 kg / 3.5 lbs
- **Cable length**: 4.5 m / 177.17 in