# 제품 정보

### Dimensional Metrology Mar4D PLQ 4200-T2

#### 제품 특징

Speed:

Measuring processes in production should be fast above all else. A newly developed control architecture on the Mar4D PLQ 4200 device series therefore ensures that its axes move at a unique speed, such as the C-axis at up to 120 rpm. Fast measurement is also guaranteed by the built-in sensors: the modern, high-resolution matrix camera records the measurement data optically at top speed. The tactile probes - Mahr T7W for form features and Renishaw SP25M for 3D features - also impress with their speed. Particularly with the Mar4D PLQ 4200-T4 variant with automatic centering and tilting table, you also benefit from extremely fast alignment thanks to mathematical-mechanical combination technology. Finally, the user-friendly MarWin software platform evaluates all measurement data reliably and as required. The operator can carry out several measurements in just one clamping operation, which also significantly speeds up inspections and therefore reliable quality statements.

#### Productivity:

An investment in a Mar4D PLQ 4200 is long-term and future-proof. The device saves costs, time and space in production, as it offers up to five measuring functions in one unit, meaning that our customers can use it to replace up to five other measuring systems. In addition, thanks to its multisensor technology, the Mar4D PLQ 4200 can handle a wide range of different measuring tasks, including internal measurement, extremely flexibly, quickly and precisely. Rotationally symmetrical workpieces with a diameter of up to 200 mm, a length of 1,000 mm and a weight of 50 kg can be inspected. Overall, users increase their measuring capacities while waiting times are reduced. In addition, waste is significantly reduced as several integrated environmental controls ensure consistently reliable measuring



품목 번호: 5554201

#### 기술 데이터

Verfahr-/Messweg X2-Achse Verfahr-/Messweg Y-Achse Pos/Meas. path Z-axis Pos/Meas. path Z-axis Positioniergeschwindigkeit C-Achse Positioniergeschwindigkeit X1-Achse Positioniergeschwindigkeit X1-Achse Positioniergeschwindigkeit X2-Achse Positioniergeschwindigkeit X2-Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Messwertauflösung Länge 0.01 - 0.0001 mm Messwertauflösung 0.01 - 0.0001 mm Messwertauflösung 0.01 - 0.0001 mm Merswertauflösung 0.01 - 0.0001 mm Merswertauflösung 0.01 - 0.0001 mm MPE ≤ (2.4 + I/200) µm with 'I' in mm  Winkelauflösung MPE ≤ (3.4 + I/200) µm with 'I' in mm  Werkstücklänge max. Vorkpiece diameter max. Vorkpiece System 20/60 Hz  전원 소모 850 W Sensorik 0ptical tactile Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H) Kamerasystem 2 Mahr TTW and/or RENISHAW SP25M Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC) Besondere Ausstattung Motorized talistock  보관 및 은 은 도 10 °C - 35 °C  보관 및 은 은 도 5 °C - 60 °C Schalldruckpegel	Verfahr-/Messweg X1-Achse	200 mm		
Pos/Meas. path Z-axis 730 mm 0.2 - 120 1/min 0.2 - 120 1/min 0.5 - 200 mm/s 0.	Verfahr-/Messweg X2-Achse	200 mm		
Positioniergeschwindigkeit C-Achse Positioniergeschwindigkeit X1-Achse Positioniergeschwindigkeit X1-Achse Positioniergeschwindigkeit X2-Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Messwertauflösung Länge Messwertauflösung Länge Mosswertauflösung Uon1 - 0.0001 mm Messwertauflösung Durchmesser Winkelauflösung Uon1 - 0.0001 mm Uon1 - 0.0001 mm Uon2 - 0.0001 mm Uon3 - 0.0001 mm Uon3 - 0.0001 mm Uon3 - 0.0001 mm Uon4 - 0.0001 mm Uon5 - 0.0001 mm Uon4 - 0.0001 mm	Verfahr-/Messweg Y-Achse	40 mm		
Rostioniergeschwindigkeit X1- Achse Positioniergeschwindigkeit X2- Achse Positioniergeschwindigkeit X2- Achse Positioniergeschwindigkeit Y- Achse Positioniergeschwindigkeit Y- Achse Positioniergeschwindigkeit Z- Achse  Messwertauflösung Länge	Pos/Meas. path Z-axis	730 mm		
Positioniergeschwindigkeit X2-Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Positioniergeschwindigkeit Z-Achse Messwertauflösung Länge 0.01 - 0.0001 mm Messwertauflösung 0.01 - 0.0001 mm Durchmesser Winkelauflösung 0.01 - 0.0001 ° Table load max. 20 kg Fehlergrenze Länge MPE ≤ (2.4 + 1/200) µm with 'l' in mm Fehlergrenze Durchmesser MPE ≤ (1.3 + d/150) µm with 'd' in mm Werkstücklänge max. 730 mm Workpiece diameter max. 210 mm Netzspannung 90 – 240 V Netzfrequenz 50/60 Hz 전원 소모 850 W Sensorik optical tactile Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H) Kamerasystem CMOS matrix camera 프로브 시스템 타입 Mahr TTW and/or RENISHAW SP25M Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC) Besondere Ausstattung Motorized tailstock 작동 온도 10 °C - 35 °C 보관 및 운송 온도 5 °C - 60 °C	g g	0.2 - 120 1/min		
Achse Positioniergeschwindigkeit Y-Achse Positioniergeschwindigkeit Z-Achse Messwertauflösung Länge Messwertauflösung Durchmesser Winkelauflösung Durchmesser WPE ≤ (2.4 + 1/200) µm with 'l' in mm  Pehlergenze Länge MPE ≤ (2.4 + 1/200) µm with 'd' in mm Werkstücklänge max. Vorkpiece diameter max. Un mm Workpiece diameter max. Un mm Netzspannung 90 – 240 V Netzfrequenz 50/60 Hz  전원 소모 850 W Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H) Kamerasystem  프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC) Besondere Ausstattung Motorized tailstock  작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	· ·	0.5 - 200 mm/s		
Achse Positioniergeschwindigkeit Z-Achse  Messwertauflösung Länge 0.01 - 0.0001 mm  Messwertauflösung Durchmesser Winkelauflösung 0.01 - 0.0001 °  Table load max. 20 kg Fehlergrenze Länge Fehlergrenze Durchmesser Werkstücklänge max. 730 mm Workstücklänge max. 210 mm Netzspannung 90 - 240 V Netzfrequenz 전원 소모 850 W Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H) Kamerasystem 프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC) Besondere Ausstattung  Notorized tailstock  本동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	•	0.5 - 200 mm/s		
Messwertauflösung Länge  Messwertauflösung Durchmesser  Winkelauflösung Durchmesser  Winkelauflösung Durchmesser  Winkelauflösung  O.01 - 0.0001 °  Table load max.  Pehlergrenze Länge MPE ≤ (2.4 + I/200) μm with 'l' in mm  Fehlergrenze Durchmesser  MPE ≤ (1.3 + d/150) μm with 'd' in mm  Werkstücklänge max.  730 mm  Workpiece diameter max.  210 mm  Netzspannung 90 - 240 V  Netzfrequenz 50/60 Hz  전원 소모 850 W  Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem  正로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner  All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC)  Besondere Ausstattung  Motorized tailstock  작동 온도  10 °C - 35 °C  보관 및 운송 온도  5 °C - 60 °C	ğ ğ	0.5 - 50 mm/s		
Messwertauflösung Durchmesser  Winkelauflösung 0.01 - 0.0001 °  Table load max. 20 kg Fehlergrenze Länge MPE ≤ (2.4 + 1/200) µm with 'l' in mm Fehlergrenze Durchmesser MPE ≤ (1.3 + d/150) µm with 'd' in mm  Werkstücklänge max. 730 mm  Workpiece diameter max. 210 mm Netzspannung 90 - 240 V Netzfrequenz 50/60 Hz 전원 소모 850 W Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem 프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC)  Besondere Ausstattung Motorized tailstock 작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	g g	0.5 - 200 mm/s		
Durchmesser  Winkelauflösung  7 able load max. 20 kg Fehlergrenze Länge MPE ≤ (2.4 + l/200) μm with 'l' in mm Fehlergrenze Durchmesser MPE ≤ (1.3 + d/150) μm with 'd' in mm  Werkstücklänge max. 730 mm  Workpiece diameter max. 210 mm Netzspannung 90 - 240 V Netzfrequenz 50/60 Hz  전원 소모 850 W Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem  正로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner  All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC)  Besondere Ausstattung  Motorized tailstock  작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	Messwertauflösung Länge			
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Fehlergrenze Länge Fehlergrenze Durchmesser MPE ≤ (2.4 + I/200) µm with 'I' in mm  Werkstücklänge max. 730 mm  Workpiece diameter max. Netzspannung 90 – 240 V  Netzfrequenz 50/60 Hz  전원 소모 850 W  Sensorik Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem 프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC)  Besondere Ausstattung  작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	Winkelauflösung	0.01 - 0.0001 °		
Fehlergrenze Durchmesser MPE ≤ (1.3 + d/150) µm with 'd' in mm  Werkstücklänge max. 730 mm  Workpiece diameter max. 210 mm  Netzspannung 90 – 240 V  Netzfrequenz 50/60 Hz  전원 소모 850 W  Sensorik optical tactile  Optisches System Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem CMOS matrix camera  프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 loT LTSC)  Besondere Ausstattung Motorized tailstock  작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	Table load max.	20 kg		
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Optisches System  Telecentric precision optics, image field approx. 15 x 10 mm (W x H)  Kamerasystem  프로브 시스템 타입  Mahr T7W and/or RENISHAW SP25M  Messrechner  All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 IoT LTSC)  Besondere Ausstattung  Motorized tailstock  작동 온도  10 °C - 35 °C  보관 및 운송 온도  5 °C - 60 °C	전원 소모	850 W		
Kamerasystem CMOS matrix camera 프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 IoT LTSC)  Besondere Ausstattung Motorized tailstock 작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	Sensorik	optical tactile		
프로브 시스템 타입 Mahr T7W and/or RENISHAW SP25M  Messrechner All-in-one PC or industrial all-in-one PC with UPS (each incl. Microsoft Windows 10 IoT LTSC)  Besondere Ausstattung Motorized tailstock  작동 온도 10 °C - 35 °C  보관 및 운송 온도 5 °C - 60 °C	Optisches System	Telecentric precision optics, image field approx. 15 x 10 mm (W x H)		
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Windows 10 IoT LTSC)  Besondere Ausstattung Motorized tailstock 작동 온도 10 °C - 35 °C 보관 및 운송 온도 5 °C - 60 °C	프로브 시스템 타입	Mahr T7W and/or RENISHAW SP25M		
작동 온도 10 °C - 35 °C 보관 및 운송 온도 5 °C - 60 °C	Messrechner	,		
보관 및 운송 온도 5 °C - 60 °C	Besondere Ausstattung	Motorized tailstock		
	작동 온도	10 °C - 35 °C		
Schalldruckpegel <75 dB(A)	보관 및 운송 온도	5 °C - 60 °C		
	Schalldruckpegel	<75 dB(A)		

# 제품 정보

## Dimensional Metrology Mar4D PLQ 4200-T2

## 기술 데이터

습도 (텍스트)	max. 70 %; nicht kondensierend
Transportmöglichkeiten	suitable for air freight
공급 품목(텍스트)	PC holder and two 60° centering tips (ø 2 – 44 mm)

#### 부속품

주문 번호	명칭	제품 타입
Rel_Mar4D	MarWin	MarWin Mar4D