

MarForm MMQ 400-2

Versions



Type A



Type B



Type C

Measuring station
Order No.

Instruments
Order No.

Type A
MarForm MMQ 400 measuring station
with Z = 350 mm and X = 180 mm

MMQ 400-2 5440770
MMQ 400-2 CNC 5440780

Type B
MarForm MMQ 400 measuring station
with Z=500 mm and X=280 mm
and large machine volume

MMQ 400-2 5440771
MMQ 400-2 CNC 5440781

Type C
MarForm MMQ 400
with Z = 900 mm and X = 280 mm

MMQ 400-2 CNC 5440782
MMQ 400-2 CNC WL 5440787

x = standard
o = optional
- = not provided

Manual centering and tilting table	CNC centering and tilting table	X-axis, motor-driven measuring axis	Z-axis, motor-driven measuring axis	Linear scale in Z and X	EasyForm evaluation software	AdvancedForm evaluation software	ProfessionalForm evaluation software	T20W probe	T7W probe	Motorized tailstock
x	-	x	x	x	x	x	o	x	o	-
-	x	x	x	x	x	x	o	-	x	-
x	-	x	x	x	x	x	o	x	o	-
-	x	x	x	x	x	x	o	-	x	-
-	x	x	x	x	x	x	o	-	x	-
-	x	x	x	x	x	x	o	-	x	x

MarForm MMQ 400-2

Overview of Standard Form Measuring Machines



Formtester	MMQ 400-2 Z = 350 mm X = 180 mm	MMQ 400-2 Z = 500 mm X = 280 mm	MMQ 400-2 Z = 900 mm X = 280 mm
Order No.:	5440770 5440780	5440771 5440781	5440782
Roundness measuring device, C-axis			
Roundness deviation ($\mu\text{m}+\mu\text{m}/\text{mm}$ meas. height)**	0.02 + 0.0005	0.02 + 0.0005	0.02 + 0.0005
Roundness deviation ($\mu\text{m}+\mu\text{m}/\text{mm}$ meas. height)*	0.01 + 0.00025	0.01 + 0.00025	0.01 + 0.00025
Axial run-out deviation ($\mu\text{m}+\mu\text{m}/\text{mm}$ meas. radius)**	0.04 + 0.0002	0.04 + 0.0002	0.04 + 0.0002
Axial run-out deviation ($\mu\text{m}+\mu\text{m}/\text{mm}$ meas. radius)*	0.02 + 0.0001	0.02 + 0.0001	0.02 + 0.0001
Centering and tilting table			
Table diameter (mm)	285	285	285
Table load capacity, centric (N)	600	600	400***
Rotational speed (rpm)	0.2 to 15	0.2 to 15	0.2 to 15
Angle resolution (scale)	32,768,000	32,768,000	32,768,00
Vertical unit, Z-axis			
Motor-driven, measuring path length (mm)	350	500	900
Straightness deviation / 100 mm meas. path (μm)**	0.15	0.15	0.15
Straightness deviation / total meas. path (μm)**	0.3	0.4	0.9
Parallelism deviation Z/C-axis in tracing direction (μm)	0.5	0.8	2
Measuring speed (mm/s)	<0.1 to 10	<0.1 to 10	<0.1 to 10
Positioning speed (mm/s)	<0.5 to 100	<0.5 to 100	<0.5 to 100
Linear resolution (μm)	0.005	0.005	0.005
Horizontal unit, X-axis			
Motor-driven, measuring path length (mm)	180	280	280
Straightness deviation / 100 mm middle meas. path (μm)**	0.4	0.5	0.5
Straightness deviation / total meas. path (μm)**	0.8	1.5	1.5
Perpendicularity X/C-axis (μm)	1	2	2
Measuring speed (mm/s)	<0.1 to 10	<0.1 to 10	<0.1 to 10
Positioning speed (mm/s)	<0.5 to 30	<0.5 to 30	<0.5 to 30
Linear resolution (μm)	0.005	0.005	0.005
Instrument volume			
Distance C/Z - max. interference radius (mm)	220	364	364
Max. test radius external (mm)***	-45 to 135	-15 to 265	-15 to 265
Meas. height external with T20W/T7W (mm)***	361 (475)	511 (625)	911 (1025)
Dimensions/connection data			
Height x width x depth (mm)	1080 x 840 x 550	1330 x 840 x 550	1630 x 840 x 550
Weight (kg)	245	260	300
Mains connection	115 - 230 V +6% -10% 50 / 60 Hz - 60 VA	115 - 230 V +6% -10% 50 / 60 Hz - 60 VA	115 - 230 V + 6% -10% 50 / 60 Hz - 60 VA

* Values as maximum deviation from reference circle LSC, filter 15 upr.

** All values to DIN ISO 1101 at 20 °C $\pm$ 1 °C in oscillation-neutral environment; filter 15 upr LSC or 2.5 mm in LSS, 5 rpm or 5 mm/s (0.2"/s) and standard probe arm with ball dia. 3 mm (0.12"). Tested on a standard using compensation algorithms.

*** Workpiece length max. 900 mm, diameter max. 285 mm, center of gravity below the middle
We reserve the right to change technical data.