



Ramazzini Egidlio S.r.l.

MECCANICA DI PRECISIONE DAL 1967

www.omz.it



OFFICINA MECCANICA DI PRECISIONE
COSTRUZIONE MANUTENZIONE REVISIONE MACCHINE UTENSILI

CARATTERISTICHE TECNICHE

CENTRO DI LAVORO AD ASSE ORIZZONTALE OMZ M400

CONTROLLO NUMERICO:

FANUC 0i model D

CORSE:

Corsa asse X mm. 560

Corsa asse Y mm. 500

Corsa asse Z mm. 500

AVANZAMENTI:

Rapido asse X m/min.30

Rapido asse Y m/min.30

Rapido asse Z m/min.30

Avanzamento massimo di taglio m/min.20

PRECISIONE DI POSIZIONAMENTO:

Precisione di posizionamento con encoder +/- 0,015

Precisione di posizionamento con riga ottica +/- 0,008

Precisione di ripetibilità +/- 0,005

TAVOLA GIREVOLE IN CONTINUO

Portata massima Kg. 300

Tempo di rotazione da 0° a 180° Sec.2,2

Precisione di posizionamento Sec°. 8

Tempo di cambio pallet Sec. 6

Dimensioni pallet mm. 400x400

Diametro foro central pallet mm.50H6

Numero fori sul pallet N°.36 M12

MANDRINO

Potenza motore mandrino Kw. 7,5/11

Velocità di rotazione standard rpm 8.000

Velocità di rotazione opzional rpm. 15.000

Cono mandrino SK40-DIN 6971 HSK63A



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CAMBIO UTENSILI AUTOMATICO

Capacità magazzino	30/40/60/120
Tempo di cambio utensile	sec.2
Tempo medio truciolo/truciolo	sec.6
Diametro massimo utensili	mm.150
Lunghezza massima utensili	mm.350
Peso massimo utensili	Kg.10

POTENZA INSTALLATA

Potenza totale installata	Kw.25
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PESO

Peso totale	Kg.8.000
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INGOMBRI

Lunghezza totale	mm.4.510
Larghezza totale	mm.3.590

N.B.: I dati riportati nella presente scheda sono da ritenersi puramente indicativi.

High reliable and high cost-performance CNC

FANUC Series Oi-MODEL D
FANUC Series Oi Mate
-MODEL D

Specifications

Specifications

○:Basic ○A:Basic of Package A ○B:Basic of Package B ●:Basic option ●A:Basic option of Package A
 ●B:Basic option of Package B ☆:Option ☆A:Option of Package A ☆B:Option of Package B
 *:Function included in another option -:Not available
 (Note) Some combinations of these options are restricted.

Item	Specifications	Drawing Number	Series 0i-D		Series 0i Mate-D	
			M	T	M	T
Controlled axis						
Max. Controlled axis (Including Cs axes and PMC axes)	8 axes (total of 2 path) *2		-	○(*6)	-	-
	5 axes		○	-	-	-
	4 axes		-	○	-	-
	3 axes		-	-	○	○
Controlled path	2 path	S801#2	-	☆	-	-
	1 path		○	○	○	○
Max. Controlled axis (in each path)	5 axes		○	○(*6)	-	-
	4 axes		-	○	-	-
	3 axes		-	-	○	○
Max. Simultaneously controlled axes (in each path)	Max. 4 axes		○	○	-	-
	Max. 3 axes		-	-	○	○
Axis control by PMC	Max. 4 axes (Not available on Cs axes)		○	○	-	-
Designation of Spindle axes (each path / Total)	Max. 2 axes / 3 axes	R604	-	☆(*6)	-	-
	Max. 2 axes / 2 axes		-	○(*6)	-	-
	2 axes		○	○	-	-
	1 axis		-	-	○	○
Cs contouring control (each path / Total)	Max. 2 axes / 2 axes		-	○(*6)	-	-
	1 axis		○	○	-	○
Axis name	Basic three axes are X, Y and Z, additional axes are optional from U, V, W, A, B and C.		○	-	○	-
	In case of G code system A, basic 2 axes are X and Z, additional axes are optional from Y, A, B and C.		-	○	-	○
	In case of G code system B/C, basic 2 axes are X and Z, additional axes are optional from Y, U, V, W, A, B and C.		-	○	-	○
Synchronous/Composite control		S816	-	☆(*6)	-	-
Superimposed Control		S818	-	☆(*6)	-	-
Synchronous/Composite/Superimposed control by program command		S890	-	☆(*6)	-	-
Axis synchronous control			○	○	-	-
Angular axis control	It is possible between arbitrary axes.	J924	☆	☆	-	-
Tandem control			○	○	-	-
Tandem Disturbance Elimination Control		S660	☆	☆	-	-
Torque control			○	○	-	-
Pole Position Detection Function		S744	☆	☆	-	-
Control axis detach			○	○	○	○
Increment system	IS-A, IS-B		○	○	○	○
Increment system C	0.0001mm, 0.0001deg, 0.00001inch		○	○	○	○
Flexible feed gear	Optional DMR		○	○	○	○
Dual position feedback		J704	☆	☆	-	-
HRV2 control			○	○	○	○
HRV3 control			○	○	○	○
Inch/metric conversion			○	○	○	○
Interlock	All axes/each axis/each direction/block start/cutting block start		○	○	○	○
Machine lock	All axes/each axis		○	○	○	○
Emergency stop			○	○	○	○
Overtravel			○	○	○	○
Stored stroke check 1			○	○	○	○
Stroke limit external setting			○	-	○	-
Stored stroke check 2,3			○	○	○	○
Stroke limit check before move			○	○	○	○
Chuck and tail stock barrier			-	○	-	○
Mirror image	Each axis		○	○	○	○
Follow-up			○	○	○	○
Servo off/Mechanical handle			○	○	○	○
Chamfering on/off			-	○	-	○
Interference check for each path		J839	-	☆(*6)	-	-
Unexpected disturbance torque detection function			○	○	○	○
I/O Link β unexpected disturbance torque detection		S812	☆	☆	-	-

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Position switch			○	○	○	○
Linear scale I/F with absolute address reference mark		J670	☆	☆	—	—
Linear scale I/F expansion with absolute address reference mark		S730	☆	☆	—	—
Temporary absolute coordinate setting		J786	☆	☆	—	—

Operation

Automatic operation (memory)			○	○	○	○
MDI operation			○	○	○	○
DNC operation	Reader/puncher interface is required		○	○	○	○
DNC operation with memory card	CF card and PCMCIA Card Attachment is required		○	○	○	○
Schedule function			○	○	○	○
Program number search			○	○	○	○
Sequence number search			○	○	○	○
Sequence number comparison and stop			○	○	○	○
Program restart			○	○	○	○
Manual intervention and return			○	○	○	○
Wrong operation prevention			○	○	○	○
Retraction for Rigid tapping			○	—	○	—
Buffer register			○	○	○	○
Dry run			○	○	○	○
Single block			○	○	○	○
JOG feed			○	○	○	○
Manual reference position return			○	○	○	○
Reference position setting without DOG			○	○	○	○
Reference position setting with mechanical stopper			○	○	○	○
Reference position return speed set			○	○	○	○
Reference position shift			○	○	○	○
Manual handle feed	M: Max. 3 units T: Max. 2 units		○	○	○	○
Manual handle feed rate	×1, ×10, ×m, ×n m: 0~127, n: 0~1000		○	○	○	○
Manual handle interruption			○	○	○	○
FANUC SERVO MOTOR β series with I/O Link Manual handle interface		S722	☆	☆	☆	☆
Incremental feed	×1, ×10, ×100, ×1000, ×10000		○	○	○	○
Jog and handle simultaneous mode			○	○	○	○
Retrace		J730	☆	—	—	—
Manual handle retrace		J998	☆	☆	—	—

Interpolation functions

Nano interpolation			○	○	—	—
Positioning	G00 (Linear interpolation type positioning is possible)		○	○	○	○
Single direction positioning	G60		○	—	○	—
Exact stop mode	G61		○	○	○	○
Tapping mode	G63		○	○	○	○
Cutting mode	G64		○	○	○	○
Exact stop	G09		○	○	○	○
Linear interpolation			○	○	○	○
Circular interpolation			○	○	○	○
Dwell	Dwell in seconds and dwell in revolution		○	○	○	○
Polar coordinate interpolation			—	○	—	○
Cylindrical interpolation			○	○	—	○
Helical interpolation	Circular interpolation plus max. 2 axes linear interpolation	J819	○	☆	○	—
Thread cutting, synchronous cutting			○	○	○	○
Multi threading			—	○	—	○
Thread cutting retract			—	○	—	○
Continuous threading			—	○	—	○
Variable lead thread cutting			—	○	—	○
Polygon turning			—	○	—	—
Polygon machining with two spindles			—	○	—	—
Skip	G31		○	○	○	○
Multi-step skip		J849	*	*	☆	☆
High-speed skip	Input signal is 4 point		○	○	○	○
Torque limit skip			○	○	○	○
Reference position return	G28		○	○	○	○

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			M	T	M	T
Reference position return check	G27		○	○	○	○
2nd reference position return			○	○	○	○
3rd/4th reference position return			○	○	○	○
Normal direction control			○	—	—	—
Balanced cutting		J834	—	☆(*6)	—	—
Index table indexing			○	—	—	—
General purpose retract			○	○	○	○

Feed function

Rapid traverse rate (Increment system B)	Max. 999.999m/min (1mm)		○	○	○	○
Rapid traverse rate (Increment system C)	Max. 99.9999m/min (0.1mm)		○	○	○	○
Rapid traverse override	Fo, 25, 50, 100% or 0~100%(1% Step)		○	○	○	○
Feed per minute			○	○	○	○
Feed per revolution			○	○	○	○
Without position coder feed per revolution			○	○	○	○
Without position coder constant surface speed control			○	○	○	○
Tangential speed constant control			○	○	○	○
Cutting feedrate clamp			○	○	○	○
Automatic acceleration/deceleration	Rapid traverse: linear Cutting feed: exponential, linear		○	○	○	○
Rapid traverse bell-shaped acceleration/deceleration			○	○	○	○
Linear acceleration/deceleration after cutting feed interpolation			○	○	○	○
Bell-type acceleration/ deceleration after cutting feed interpolation		J829	☆	—	—	—
Feedrate override	0~254%		○	○	○	○
One-digit F code feed			○	—	○	—
Inverse time feed			○	—	—	—
Jog override	0~655.34%		○	○	○	○
Override cancel			○	○	○	○
Manual per revolution feed			—	○	—	○
External deceleration			○	○	○	○
Automatic corner deceleration			○	—	○	—
Feedrate control with acceleration in circular interpolation			○	—	○	—
Rapid traverse block overlap			○	○	○	○
Error detection			—	○	—	○
Advanced preview control		J701	—	☆	—	—
AI advanced preview control			○	—	○	—
AI contour control		J665	☆A	—	—	—
Bell-type acceleration/deceleration before look ahead interpolation		J977	☆A	—	—	—
Rigid tapping bell-shaped acceleration/deceleration		S702	☆	—	—	—
Optimum acceleration/deceleration for rigid tapping		R533	☆	☆	—	—

Program input

Tape code	EIA/ISO		○	○	○	○
Label skip			○	○	○	○
Parity check	Horizontal and vertical parity		○	○	○	○
Control in/out			○	○	○	○
Optional block skip	9		○	○	○	○
Max. programmable dimension	±9 digit		○	○	○	○
Program number	O4 digit		○	○	○	○
External memory and sub program calling function			○	○	○	○
Sequence number	N5 digit		○	○	○	○
Absolute/incremental programming	Combined use in the same block		○	○	○	○
Decimal point programming/ pocket calculator type decimal point programming			○	○	○	○
Input unit 10 time multiply			○	○	○	○
Diameter/radius programming			○	○	○	○
Plane selection	G17, G18, G19		○	○	○	○
Rotary axis designation			○	○	—	○
Rotary axis roll-over			○	○	—	○
Polar coordinate command			○	—	○	—
Coordinate system setting			○	○	○	○
Automatic coordinate system setting			○	○	○	○

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Workpiece coordinate system	G52~G59		○	○	○	○
Workpiece coordinate system preset			○	○	○	○
Addition of workpiece coordinate system pair	48 pairs		○	—	○	—
Direct input of workpiece origin offset value measured			○	○	○	○
Manual absolute on and off			○	○	○	○
Direct drawing dimension programming			—	○	—	○
G code system	A/B/C		—	○	—	○
Chamfering/corner R			—	○	—	○
Optional chamfering/corner R			○	—	○	—
Programmable data input	G10		○	○	○	○
Programmable parameter input			○	○	○	○
Sub program call	10 folds nested		○	○	○	○
Custom macro			○	○	○	○
Addition of custom macro common variables	#100~#199, #500~#999		○	○	○	○
Custom macro common variables between each path			—	○(*6)	—	—
Interruption type custom macro			○	○	○	○
Canned cycles			—	○	—	○
Multiple repetitive cycle			—	○	—	○
Multiple repetitive cycle II	Pocket profile		—	○	—	—
Canned cycles for drilling			○	○	○	○
Circular interpolation by R programming	9 digit		○	○	○	○
Mirror image for double turret			—	○	—	—
Automatic corner override			○	—	○	—
Scaling			○	—	○	—
Coordinate system rotation			○	—	○	—
Programmable mirror image			○	—	○	—
Tape format for FANUC Series 10/11			○	○	○	○
Macro executor		J888	☆(512KB/2MB/4MB) In 2 path control of T series, up to 2MB if MGi is attached.		☆(512KB)	
C language executor		J734	☆(2MB/4MB/6MB)		—	—
Touch panel C	This function includes custom software size 6M bytes.	S881	☆	☆	—	—
Custom software	512KB	J738#512K	☆	☆	☆	☆
(Total amount of each path)	1MB	J738#1M	—	☆(*6)	—	—
	2MB	J738#2M	☆	☆	—	—
	3MB	J738#3M	—	☆(*6)	—	—
	4MB	J738#4M	☆	☆	—	—
	5MB	J738#5M	—	☆(*6)	—	—
	6MB	J738#6M	☆(*8)	☆(*9)	—	—
	8MB	J738#8M	—	☆(*6)	—	—
Coordinate system shift			—	○	—	○
Direct input of coordinate system shift			—	○	—	○
Small-hole peck drilling cycle			○	—	○	—
Pattern data input			○	○	○	○
Conversational programming with graphic function			○	○	○	○

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Basic function		S790				
Integrated operation screen	MDI, Handle/Jog, EDIT, MEM		☆	☆	—	—
ISO code part programming	Foreground, Background		☆	☆	—	—
G-code guidance	Guidance message		☆	☆	—	—
M-code guidance	M-code menu, Guidance message		☆	☆	—	—
Contour programming	XY plane for Milling, XY/ZX/XC/ZC plane for Turning		☆	☆	—	—
Fixed form program menu	Menu for Milling and Turning		☆	☆	—	—
Work coordinate setting	Measure, +INPUT		☆	☆	—	—
Tool offset setting	Measure, +INPUT, C INPUT		☆	☆	—	—
I/O of program	I/O via memory card		☆	☆	—	—
Short cut key operations	Editing and screen selecting operations		☆	☆	—	—
Calculation of entering data	+·*/、SIN·COS·TAN·ASIN·ACOS·ATAN、SQRT、EXP、LOG、etc.		☆	☆	—	—
Graphic drawing of machining	Tool path drawing		☆	☆	—	—

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			M	T	M	T
Milling Cycle		S790				
Data entering menu	Data entering and editing in menu form		☆	☆	—	—
Drilling (Center Drilling, Drilling, Tapping, Reaming, Boring, Fine Boring, Back Boring)	Points, Line, Circle, Square, Grid		☆	☆	—	—
Surfacing (Roughing, Finishing)	Square, Circle, Track, Polygon, Free figure		☆	☆	—	—
Contouring (Roughing, Finishing)	Square, Circle, Track, Polygon, Free figure		☆	☆	—	—
Pocketing (Roughing, Finishing)	Square, Circle, Track, Polygon, Free figure		☆	☆	—	—
Grooving (Roughing, Finishing)	Square, Circle, Track, Polygon, Radius, Free figure		☆	☆	—	—
Machining on a sub spindle	Similar machining type with main spindle		☆	☆	—	—
NC Program Conversion	Conversion of Milling Cycle to standard NC command		☆	☆	—	—
Turning Cycle						
Data entering menu	Data entering and editing in menu form		—	☆	—	—
Drilling (Center Drilling, Drilling, Tapping, Reaming, Boring)			—	☆	—	—
Turning (Roughing, Semi-finishing, Finishing)	Outer, Inner, Face		—	☆	—	—
Grooving (Roughing, Finishing)	Outer, Inner, Face		—	☆	—	—
Threading (General, Metric, Unified, PT, PF)	Outer, Inner	—	☆	—	—	
Thread Repair (General, Metric, Unified, PT, PF)	Outer, Inner	—	☆	—	—	
Machining on a sub spindle	Similar machining type with main spindle	—	☆	—	—	
NC Program Conversion	Conversion of Turning Cycle to standard NC command	—	☆	—	—	
Machining simulation						
Background simulation	Animation, Tool path drawing	☆	☆	—	—	
Work-piece Form	6 types	☆	☆	—	—	
Drawing Coordinate	8 types	☆	☆	—	—	
Set-up Guidance						
Calibration	Probe position, Length, Diameter, Shift	☆	☆	—	—	
Tool Measurement	Milling tool, Lathe machining tool	☆	☆	—	—	
Work Set	Surface, Outer/Inner diameter, Width, C-axis, Angle, Corner	☆	☆	—	—	
Product Measurement	Surface, Outer/Inner diameter, Width	☆	☆	—	—	
Multi Path Lathe	For 2 spindles 2 turrets lathe	S786				
Simultaneous display and editing of all path programs	For 2 path		—	☆	—	—
Process List Editing	Waiting, moving, deleting and copying of process		—	☆	—	—

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Basic function		S772				
ISO code part programming			☆	☆	☆	☆
Process data	Feedrate, M code and Offset number input screen		☆	☆	☆	☆
G-code assistance			☆	☆	☆	☆
M-code assistance			☆	☆	☆	☆
Contour programming	XY plane for M system, ZX plane for T system, Auxiliary calculation		☆	☆	☆	☆
Milling Cycle						
Data entering menu	Data entering and editing in menu form		☆	—	☆	—
Drilling (Center Drilling, Drilling, Tapping, Reaming, Boring, Fine Boring, Back Boring)	Points, Line, Circle, Square, Grid		☆	—	☆	—
Surfacing (Roughing, Finishing)	Square, Circle		☆	—	☆	—
Pocketing (Drilling, Roughing, Finishing)	Square, Circle, Track		☆	—	☆	—
Grooving (Drilling, Roughing, Finishing, Chamfering)	Radial line		☆	—	☆	—
Turning Cycle						
Data entering menu	Data entering and editing in menu form		—	☆	—	☆
Drilling (Center Drilling, Drilling, Tapping, Reaming, Boring)		—	☆	—	☆	
Turning (Roughing, Finishing)	Outer, Inner, Face	—	☆	—	☆	
Grooving (Roughing, Finishing)	Outer, Inner, Face	—	☆	—	☆	
Threading (General, Metric, Unified, PT, PF)	Outer, Inner	—	☆	—	☆	

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TURN MATE *i*

Basic function						
NC program-less turning	Single and sequential operation of cycle	S792 S793	-	☆(*7)	-	☆
Manual turning operation	Handle, Jog		-	☆(*7)	-	☆
Manual turning operation with limited area	Handle, Jog		-	☆(*7)	-	☆
Work coordinate setting	Measure		-	☆(*7)	-	☆
Tool offset setting	Measure, +INPUT		-	☆(*7)	-	☆
Spindle speed setting	Constant surface speed control, Gear number		-	☆(*7)	-	☆
Feedrate setting			-	☆(*7)	-	☆
Calculation of entering data	+*/、SIN·COS·TAN·ASIN·ACOS·ATAN、 SQRT、EXP、LOG、etc.		-	☆(*7)	-	☆
Data input/output	Via memory card		-	☆(*7)	-	☆
Touch panel operation			-	☆(*7)	-	☆
Turning Cycle						
Data entering menu	Data entering and editing in menu form		-	☆(*7)	-	☆
Drilling (Center Drilling, Tapping)			-	☆(*7)	-	☆
Turning (Roughing, Finishing)	Outer, Inner, Face		-	☆(*7)	-	☆
Threading	Outer, Inner		-	☆(*7)	-	☆
Thread Repair	Outer, Inner		-	☆(*7)	-	☆
Grooving (Roughing, Finishing)	Outer, Inner, Face		-	☆(*7)	-	☆
Expanded function						
MDI key operation function		S794	-	☆(*7)	-	☆
NC program conversion function		S795	-	☆(*7)	-	☆
Expansion of machining cycle		S796	-	☆(*7)	-	☆

Auxiliary/Spindle speed function

Auxiliary function	M8 digit		○	○	○	○
2nd auxiliary function	B8 digit		○	○	○	○
Auxiliary function lock			○	○	○	○
High-speed M/S/T/B interface			○	○	○	○
Waiting function			-	○(*6)	-	-
Multiple command of auxiliary function	3		○	○	○	○
Spindle speed function	S5 digit , binary output		○	○	○	○
Spindle serial output	S5 digit , serial output		○	○	○	○
Spindle analog output	S5 digit , analog output		○	○	○	○
Constant surface speed control			○	○	○	○
Spindle override	0~254%		○	○	○	○
Actual spindle speed output			-	○	-	○
Spindle orientation	1 spindle		○	○	○	○
2nd spindle orientation			○	○	-	-
Spindle output switching function	1 spindle		○	○	-	-
2nd spindle output switching function			○	○	-	-
Spindle synchronous control			○	○	-	-
Simple spindle synchronous control		J748	☆	-	-	-
Multi spindle control		J859	☆	○	-	-
Spindle positioning			-	○	-	○
Rigid tapping			○	○	○	○
Spindle speed fluctuation detection			-	○	-	-
Spindle control with servo motor		J978	☆	☆	-	-

Tool function/Tool compensation

Tool function	T7+1/T6+2(Tool selection + Tool offset number)		-	○	-	○
	T8 digit		○	-	○	-
Tool offset pairs (Note)	99-pairs		-	○	-	○
Specify total of tool offset pairs of each path.	200-pairs		-	○(*6)	-	-
	400-pairs		○	-	○	-
Tool offset memory C	Distinction between geometry and wear, or between cutter and tool length compensation.		○	-	○	-
Common offset memory between each path			-	○(*6)	-	-
Tool length offset			○	-	○	-
Tool offset			○	○	○	○
Y-axis offset			-	○	-	-
Tool radius/Tool nose radius compensation			○	○	○	○
Tool geometry/wear compensation			-	○	-	○

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 *: Function included in another option —: Not available
 (Note) Some combinations of these options are restricted.

Item	Specifications	Drawing Number	Series 0i-D		Series 0i Mate-D	
			M	T	M	T
Tool offset value counter input			—	○	—	○
Tool length measurement			○	—	○	—
Automatic tool length measurement			○	—	○	—
Automatic tool offset			—	○	—	—
Direct input of tool offset value measured			—	○	—	○
Direct input of tool offset value measured B			—	○	—	○
Tool life management			○	○	○	○
Extended tool life management			○	○	○	○
Automatic alteration of tool position compensation		J690	—	☆	—	—

Accuracy compensation function

Backlash compensation			○	○	○	○
Backlash compensation for each rapid traverse and cutting feed			○	○	○	○
Smooth backlash compensation		S638	☆	☆	—	—
Stored pitch error compensation			○	○	○	○
Bi-directional pitch error compensation		S656	☆	☆	—	—
Inclination compensation		J981	☆	☆	—	—
Simple straightness compensation		J799	☆	—	—	—

Electric gear box

Electric gear box		J779	☆	—	—	—
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Grinding function

Grinding function A	Multi-step skip, Canned cycles for grinding, Continuous dressing, Infeed control	S682	☆	—	—	—
	Multi-step skip, Canned cycles for grinding		—	☆	—	—
Grinding function B	Angular axis control is available in addition to the functions included in Grinding function A.	S683	☆	☆	—	—

Editing operation

Part program storage size *3 (Note) Specify total of part program storage size of each path.	320Kbyte		○B	○B	—	—
	512Kbyte		○A	○A	○	○
	1Mbyte		—	○(*6)	—	—
	2Mbyte	J948	☆	—	—	—
Number of registerable programs	400		○	○	○	○
	800 (Total of each path)		—	○(*6)	—	—
Part program editing			○	○	○	○
Program protect			○	○	○	○
Password function			○	○	○	○
Extended part program editing			○	○	○	○
Playback			○	○	○	○
Background editing			○	○	○	○
Memory card program edit & operation	Max 63 programs. The tool on PC is required to convert and store files to memory card		○	○	○	○

Setting and display

Status display			○	○	○	○
Clock function			○	○	○	○
Current position display			○	○	○	○
Program comment display	Program name 31 characters		○	○	○	○
Parameter setting and display			○	○	○	○
Parameter check sum function			○	○	○	○
Alarm display			○	○	○	○
Alarm history display			○	○	○	○
Operator message history display			○	○	○	○
Operation history display			○	○	○	○
Remote diagnostic	Machine remote diagnosis package and Fast Ethernet are required.		*	*	—	—
Run hour and parts count display			○	○	○	○
Actual cutting feedrate display			○	○	○	○
Display of spindle speed and T code at all screens			○	○	○	○
Directory display of floppy cassette			○	○	○	○
Directory display and punch for each group			○	○	○	○
Optional path name display			—	○(*6)	—	—
Operating monitor screen			○	○	○	○

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 (Note) Some combinations of these options are restricted.

Item	Specifications	Drawing Number	Series 0i-D		Series 0i Mate-D	
			M	T	M	T
Servo setting screen			○	○	○	○
Spindle setting screen	αi series spindle only		○	○	○	○
Servo waveform display			○	○	○	○
Maintenance information screen			○	○	○	○
Software operator's panel			○	○	○	○
Software operator's panel general purpose switch			○	○	○	○
Extended software operator's panel general purpose switch			○	○	○	○
Multi-language display	English		○	○	○	○
	Japanese (Chinese character)		○	○	○	○
	German		○	○	○	○
	French		○	○	○	○
	Spanish		○	○	○	○
	Italian		○	○	○	○
	Chinese (Traditional Chinese)		○	○	○	○
	Chinese (Simplified Chinese)		○	○	○	○
	Korean		○	○	○	○
	Portuguese		○	○	○	○
	Dutch		○	○	○	○
	Danish		○	○	○	○
	Swedish		○	○	○	○
	Hungarian		○	○	○	○
	Czech		○	○	○	○
Polish		○	○	○	○	
Russian		○	○	○	○	
Turkish		○	○	○	○	
Dynamic display language switching			○	○	○	○
Data protection key	4 types		○	○	○	○
Protection of Data at Eight Levels			○	○	○	○
Erase CRT screen display	Manual or Automatic		○	○	○	○
Parameter setting support screen			○	○	○	○
Machining condition selecting function		S637	☆	☆	☆	—
Help function			○	○	○	○
Self-diagnosis function			○	○	○	○
Periodic maintenance screen			○	○	○	○
Display of hardware and software configuration			○	○	○	○
Servo information screen			○	○	○	○
Spindle information screen			○	○	○	○
Graphic display			○	○	○	○
Dynamic graphic display		J973	☆	☆	☆	☆
Touch panel control		J682	☆	☆	—	—
External touch panel interface		J685	☆	☆	☆	☆
Virtual MDI Key		S883	☆	☆	—	—
CNC screen display	Fast Ethernet is required.		*	*	—	—
Dual screen of CNC screen display function	The display unit of 10.4" is required.	S884	☆	☆	—	—

Data input/output

Reader/puncher interface	Reader/puncher (Ch.1) interface		○	○	○	○
	Reader/puncher (Ch.2) interface		○	○	○	○
Fast data server	DNC operation is available for 1st path control only/Option board is required	S737	☆	☆	—	—
External tool offset			○	○	○	○
External machine zero point shift			○	○	○	○
External message			○	○	○	○
External data input	Including External tool offset, External tool offset, and External message.		○	○	○	○
External key input			○	○	○	○
External program input			○	○	○	○
External workpiece number search	9999		○	○	○	○
External program number search	1~9999		○	○	○	○
Memory card input/output			○	○	○	○
Screen hard copy			○	○	○	○
Power Mate CNC manager			○	○	○	○
External I/O device control			○	○	○	○

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Item	Specifications	Drawing Number	Series 0i-D		Series 0i Mate-D	
			M	T	M	T
One touch macro call		S655	☆	☆	—	—
Automatic data backup			○	○	○	○

Interface function

Embedded Ethernet			○	○	—	—
Fast Ethernet	Option board is required.	S707	☆	☆	—	—
PROFIBUS-DP master	Option board is required.	S731	☆	☆	—	—
PROFIBUS-DP slave	Option board is required.	S732	☆	☆	—	—

Others

Status output signal	NC ready, servo ready, automatic operation, automatic operation start lamp, feed hold, reset, NC alarm, distribution end, rewinding, inch input, cutting, inposition, thread cutting, tapping, etc.		○	○	○	○	
Control unit incorporated display unit (*1)	8.4" color LCD/MDI Horizontal type	0 slot 400(W)x200(H)x70(D)mm 2 slots 400(W)x200(H)x120(D)mm	●	●	●	●	
	8.4" color LCD/MDI Horizontal type (with touch panel) (*4)	0 slot 400(W)x200(H)x70(D)mm 2 slots 400(W)x200(H)x120(D)mm	—	●	—	●	
	8.4" color LCD/MDI Vertical type	0 slot 260(W)x300(H)x70(D)mm 2 slots 260(W)x300(H)x120(D)mm	●	●	●	●	
	8.4" color LCD/MDI Vertical type (with touch panel) (*4)	0 slot 260(W)x300(H)x70(D)mm 2 slots 260(W)x300(H)x120(D)mm	—	●	—	●	
	10.4" color LCD	0 slot 290(W)x220(H)x70(D)mm 2 slots 290(W)x220(H)x120(D)mm	●	●	—	—	
	10.4" color LCD (with touch panel)	0 slot 290(W)x220(H)x70(D)mm 2 slots 290(W)x220(H)x120(D)mm	●	●	—	—	
	MDI (Horizontal type) (for 10.4" LCD)	230(W)x220(H)x60(D)mm	●	●	—	—	
	MDI (Vertical type) (for 10.4" LCD)	290(W)x220(H)x60(D)mm	●	●	—	—	
PMC system	PMC/L function	Max. step number ladder: 5000 Max. step number ladder: 8000	○B	○B	○	○	
	PMC function	Max. step number ladder: 24000	☆B	☆B	☆	☆	
		Max. step number ladder: 32000	○A	○A	—	—	
	PMC multi-language message display function	128 Kbyte	S977#128K	☆	☆	☆	☆
	I/O Link DI/DO points	DI/DO: 256 / 256 points		—	—	○	○
		DI/DO: 1024 / 1024 points		○	○	—	—
	I/O Link expansion 2nd channel	DI/DO points: addition 1024 / 1024 points	S981	☆A	☆A	—	—
Function Block function	The option "Extended PMC ladder instruction function" is included.	R852	☆	☆	☆	☆	
Extended PMC ladder instruction function		R851	☆	☆	☆	☆	
Machine interface (I/O Link)	I/O unit for 0i		●	●	●	●	
	I/O module for power magnetics cabinet (without MPG I/F)		●	●	●	●	
	Operator's panel I/O module (with MPG I/F)		●	●	●	●	
	Operator's panel I/O module (without MPG I/F)		●	●	●	●	
	Standard operator's panel		●	●	●	●	
	Small operator's panel (Without General DI/DO)		●	●	●	●	
	Small operator's panel B (General DI/DO:24/16 points)		●	●	●	●	
	Connection panel I/O module (DI/DO module, 2A output module, Analog input module)		●	●	●	●	
	Connection panel I/O module type-2 (DI/DO module)		●	●	●	●	
	Terminal type I/O module		●	●	●	●	
	I/O Unit-MODEL A		●	●	●	●	
	I/O Unit-MODEL B		●	●	●	●	
	Additional peripheral axis (I/O Link β i servo)		☆	☆	—	—	
	Additional peripheral axis (I/O Link β i servo 1axis)		—	—	☆	☆	
I/O Link - AS-i converter			☆	☆	☆	☆	
Manual pulse generator			☆	☆	☆	☆	
Pendant type manual pulse generator	With axis selection and magnification switches		☆	☆	☆	☆	
Handy machine operator's panel			☆	☆	☆	☆	

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			M	T	M	T
Connectable servo motor	FANUC AC SERVO MOTOR αi series		●	●	—	—
	FANUC AC SERVO MOTOR βi series		●	●	●	●
Connectable spindle motor	FANUC AC SPINDLE MOTOR αi series		●	●	—	—
	FANUC AC SPINDLE MOTOR βi series		●	●	●	●
Connectable servo amplifier	FANUC SERVO AMPLIFIER αi series		●	●	—	—
	FANUC SERVO AMPLIFIER βi series		●	●	●	●
	Analog spindle interface		☆	☆	☆	☆
Separate detector interface unit (for full-closed control)	Linear / rotary encoder (A/B phase digital interface)		☆	☆	☆	☆
	Separate Pulsecoder, Linear/rotary encoder (serial interface)		☆	☆	☆	☆
	Linear/rotary encoder (Analog 1Vp-p interface)		☆	☆	☆	☆
SERVO GUIDE			☆	☆	☆	☆
Input power supply	DC24V±10%		○	○	○	○
Ambient temperature of unit	At operating: 0°C - 58°C At nonoperating: -20°C - 60°C		○	○	○	○
Ambient relative humidity	Normally: 75%RH or less (No dew, nor frost allowed) Short term (within one month): 95%RH or less(No dew, nor frost allowed)		○	○	○	○
Vibration	IEC68-2-6 conforming		○	○	○	○

Software of personal computer

Items	Specifications	Remarks
Extended library	FOCAS2 (*5)	A02B-0207-K737
Software packages	Basic operation package 2	Option(A02B-0207-K755)
	CNC screen display function	Option(A02B-0207-K776)
	Ladder editing package	Option(A02B-0207-J820)
	Program Transfer Tool	Option(A08B-9510-J513)
	CNC Setting Tool	Option(A08B-9510-J531)
	PROFIBUS Setting Tool	Option(A08B-9510-J530)

(Note) *1 : Control unit is incorporated with display unit.

*2 : The number of maximum axes is five in one path. And the total number of axes is up to eight in two paths.

*3 : The part program storage size is a value of "Maximum program size when one program is registered".

The total value of the program size that can be registered decreases when two or more programs are registered.

(The actual registrable value might changes according to the registered number of programs and the program sizes.)

*4 : Touch panel is only available for CNC with TURN MATE *i*.

*5 : FOCAS2 = FANUC Open Cnc API Specifications version 2

*6 : Only for 2 path control

*7 : Only for 1 path control

*8 : Only for C language executor

*9 : Only for 2 path control or only for C language executor

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