

Mach3 M codes

M-code	Functions
M0	Program stop
M1	Optional program stop
M3/M4	Rotate spindle clockwise/counterclockwise
M5	Stop spindle rotation
M6	Tool change (by two macros)
M7	Mist on
M8	Flood on
M9	Mist & flood off
M30	Program end and rewind
M47	Repeat program from first line
M48	Enable speed and feed override
M98	Call subroutine
M99	Return from subroutine/repeat

Custom M-code*	Functions
M200	Output 5 on
M201	Output 5 off
M202	Output 6 on
M203	Output 6 off
M204	Output 7 on
M205	Output 7 off
M206	Output 8 on

M207	Output 8 off
M208	Output 9 on
M209	Output 9 off
M210	Output 10 on
M211	Output 10 off
M212	Output 11 on
M213	Output 11 off
M214	Output 12 on
M215	Output 12 off

***These custom M-codes are used to control the relay outputs on the breakout board. Outputs 5-12 must be enabled with the port set to 2 and the pin set to the corresponding relay on the breakout board (R4 = pin 4).**

A	A axis of machine
B	B axis of machine
C	C axis of machine
D	Tool radius compensation number
F	Feedrate
G	See G-codes table
H	Tool length offset index
I	X axis offset for arc
	X offset in G87 canned cycle
J	Y axis offset for arcs
	Y offset in G87 canned cycle
K	Z axis offset for arcs
	Z offset in G87 canned cycle
L	Number or repetitions in canned cycles/subroutines
	L1/L2: tool offset settings / fixture offset (with G10)

M	See M-codes
N	Line number
O	Subroutine label number
P	Dwell time in a canned cycle
	Dwell time with G4
	Tool / Fixture number (with G10)
	Tool radius (with G41 / G42
Q	Feed increment in G83 canned cycle
	Repetitions of subroutine call
R	Arc radius
	Canned cycle retract level
S	Spindle speed
T	Tool selection
X	X axis of machine
Y	Y axis of machine
Z	Z axis of machine