Global Variables

Related articles
PLC
Global Variables Description

Variable Name	Variable Address	Comments
GVARIABLE_USER_SPACE_START	3500	Custom user variables (also can use global variables below #2000). Read more in Global Variables Description
GVARIABLE_USER_SPACE_END	3900	
GVAR_MODAL_G0_G3	4001	Modal state of G00, G01, G02, G03 - motion
GVAR_MODAL2_G17_G19	4002	Modal state of G17, G18, G19 - plane selection
GVAR_MODAL3_G90_G91	4003	Modal state of G90, G91 - distance mode
GVAR_MODAL5_G93_G94	4005	Modal state of G93, G94 - spindle speed mode
GVAR_MODAL_G20_G21	4006	Modal state of G20, G21 - units
GVAR_MODAL_G40_G42	4007	Modal state of G40, G41, G42 - cutter diameter
GVAR_MODAL8_G43_G49	4008	Modal state of G43, 49 - tool length offset
GVAR_MODAL_G22_G23	4009	Modal state of G22, G23
GVAR_MODAL10_G98_G99	4010	Modal state of G98, G99 - return mode in canned cycles
GVAR_MODAL12_G54_G59	4012	Modal state of G54, G55, G56, G57, G58, G59, G59.1, G59.2, G59.3 - coordinate system selection
GVAR_MODAL_G54_G59	4014	Modal state of G54-G59
GVAR_MODAL_G17_G19	4016	Modal state of G17-G19
GVAR_TOOL_1_X_CORRECTION	4600	(+98) Tool correction (small value corrections in the x direction)
GVAR_TOOL_1_Z_CORRECTION	4700	(+98) Tool correction (small value corrections) in the z direction)
~~GVAR_RUNNING_STOP~~	4800	
~~GVAR_CURRENT_BLOCK_END_POSITION~~	5001	(+8) program position at the end of current block

Variable Name	Variable Address	Comments
GVAR_CURRENT_MACHINE_POSITION	5021	(+8) Current position in Machine coordinates 5021 - Machine Position X 5022 - Machine Position Y 5023 - Machine Position Z 5024 - Machine Position A 5025 - Machine Position B 5026 - Machine Position C 5027 - Machine Position U 5028 - Machine Position V 5029 - Machine Position W
GVAR_CURRENT_PROGRAM_POSITION	5041	(+8) Current position in Work coordinates 5041 - Work Position X 5042 - Work Position Y 5043 - Work Position Z 5044 - Work Position A 5045 - Work Position B 5046 - Work Position C 5047 - Work Position U 5048 - Work Position V 5049 - Work Position W
GVAR_OFFSET_G38_PROBE	5061	Specifies the probe offset from the main working tool (or the offset from some coordinate that has been chosen to be the offset zero)
GVAR_G38_PROBE_RESULT	5070	Stores the result of the probe coming into contact with a surface
GVAR_SPEED_CURRENT_XYZ	5110	Current XYZ speed
GVAR_SPEED_CURRENT_ABC	5111	Current ABC speed
GVAR_OFFSET_G28	5161	Machine coordinates for G28 Home Position 5161 - G28 X Position 5162 - G28 Y Position 5163 - G28 Z Position 5164 - G28 A Position 5165 - G28 B Position 5166 - G28 C Position 5167 - G28 U Position 5168 - G28 V Position 5169 - G28 W Position
GVAR_OFFSET_G30	5181	Machine coordinates for G30 Home Position 5181 - G30 X Position 5182 - G30 Y Position 5183 - G30 Z Position 5184 - G30 A Position 5185 - G30 B Position 5186 - G30 C Position 5187 - G30 U Position 5188 - G30 V Position 5189 - G30 W Position

Variable Name	Variable Address	Comments
~~GVAR_OFFSET_G92~~	5211	
GVAR_COORD_SYSTEM_NUMBER	5220	Register keeps **Current Coordinates System** number 1- G54, 2- G55, 3- G56, 4- G57, 5- G58, 6- G59, 7- G59.1, 8- G59.2, 9- G59.3
GVAR_OFFSET_G54_DATA	5221	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #1 (G54) #5221 - G54 Offset X, #5222 - G54 Offset Y, #5223 - G54 Offset Z, #5224 - G54 Offset A, #5225 - G54 Offset B, #5226 - G54 Offset C, #5227 - G54 Offset U, #5228 - G54 Offset V, #5229 - G54 Offset W
GVAR_OFFSET_G55_DATA	5241	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #2 (G55) #5241 - G55 Offset X, #5242 - G55 Offset Y, #5243 - G55 Offset Z, #5244 - G55 Offset A, #5245 - G55 Offset B, #5246 - G55 Offset C, #5247 - G55 Offset U, #5248 - G55 Offset V, #5249 - G55 Offset W
GVAR_OFFSET_G57_DATA	5261	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #3 (G56) #5261 - G56 Offset X, #5262 - G56 Offset Y, #5263 - G56 Offset Z, #5264 - G56 Offset A, #5265 - G56 Offset B, #5266 - G56 Offset C, #5267 - G56 Offset U, #5268 - G56 Offset V, #5269 - G56 Offset W

Variable Name	Variable Address	Comments
GVAR_OFFSET_G57_DATA	5281	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #4 (G57) #5281 - G57 Offset X, #5282 - G57 Offset Y, #5283 - G57 Offset Z, #5284 - G57 Offset A, #5285 - G57 Offset B, #5286 - G57 Offset C, #5287 - G57 Offset U, #5288 - G57 Offset V, #5289 - G57 Offset W
GVAR_OFFSET_G58_DATA	5301	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #5 (G58) #5301 - G58 Offset X, #5302 - G58 Offset Y, #5303 - G58 Offset Z, #5304 - G58 Offset A, #5305 - G58 Offset B, #5306 - G58 Offset C, #5307 - G58 Offset U, #5308 - G58 Offset V, #5309 - G58 Offset W
GVAR_OFFSET_G59_DATA	5321	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #6 (G59) #5321 - G59 Offset X, #5322 - G59 Offset Y, #5323 - G59 Offset Z, #5924 - G59 Offset A, #5325 - G59 Offset B, #5326 - G59 Offset C, #5327 - G59 Offset U, #5328 - G59 Offset V, #5329 - G59 Offset W
GVAR_OFFSET_G591_DATA	5341	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #7 (G59.1) #5341 - G59.1 Offset X, #5342 - G59.1 Offset Y, #5343 - G59.1 Offset Z, #5344 - G59.1 Offset A, #5345 - G59.1 Offset B, #3426 - G59.1 Offset C, #5347 - G59.1 Offset U, #5348 - G59.1 Offset V, #5349 - G59.1 Offset W

Variable Name	Variable Address	Comments
GVAR_OFFSET_G592_DATA	5361	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #8 (G59.2) #5361 - G59.2 Offset X, #5362 - G59.2 Offset Y, #5363 - G59.2 Offset Z, #5364 - G59.2 Offset A, #5365 - G59.2 Offset B, #5366 - G59.2 Offset C, #5367 - G59.2 Offset U, #5368 - G59.2 Offset V, #5369 - G59.2 Offset W
GVAR_OFFSET_G593_DATA	5381	(+8) Offsets between **Machine** and **Work** coordinates for Coordinates system #9 (G59.3) #5381 - G59.3 Offset X, #5382 - G59.3 Offset Y, #5383 - G59.3 Offset Z, #5384 - G59.3 Offset A, #5385 - G59.3 Offset B, #5386 - G59.3 Offset C, #5387 - G59.3 Offset U, #5388 - G59.3 Offset V, #5389 - G59.3 Offset W
GVAR_CHECK_TOOL_MISMATCH	5397	Checks if the tools present correspond to the specified number of tools that are supposed to be used / if any tool mismatch is present
GVAR_CHECK_TOOL_BREAKAGE	5398	A register contains Tool integrity flag. It's supposed a Tool integrity procedure will write “1” to this register is a Tool Breakage is detected. A “0” value is written when the broken tool is replaced (tool is intact).
GVAR_CURRENT_TOOL_NUMBER	5400	Current Tool Number (that is being used by the machine at the moment) is stored in this register
GVAR_CURRENT_TOOL_OFFSET	5401	Offset values. +8 for all axes
	5403	Tool length (in mm) is stored in this register (z-axis tool offset)
GVAR_SCHEDULED_TOOL_NUMBER	5409	The register stores the tool number that is going to be next in tool holder. ATC procedure uses both #5400 and #5409 registers to find where to put a current tool and where from to get the new one.
GVAR_CURRENT_TOOL_DIAMETER	5410	The register stores the diameter of the Current Tool. Register value is updated from Tool table when the Current Tool number (#5400) is changed.
GVAR_TOOL_FRONTANGLE	5411	Register reserved for future implementation (tool front angle)

Variable Name	Variable Address	Comments
GVAR_TOOL_BACKANGLE	5412	Register reserved for future implementation (tool back angle)
GVAR_TOOL_ORIENTATION	5413	Register reserved for future implementation (tool orientation)
GVAR_TOOL_HOLDER_ORIENTATION	5415	Register reserved for future implementation (orientation values for the tool holder)
GVAR_SOFT_LIMITS_MIN	5421	(+8) Soft Limits Minimum Position 5421 - Soft Limit Minimum X Position 5422 - Soft Limit Minimum Y Position 5423 - Soft Limit Minimum Z Position 5424 - Soft Limit Minimum A Position 5425 - Soft Limit Minimum B Position 5426 - Soft Limit Minimum C Position 5427 - Soft Limit Minimum U Position 5428 - Soft Limit Minimum V Position 5429 - Soft Limit Minimum W Position
GVAR_SOFT_LIMITS_MAX	5431	(+8) Soft Limits Maximum Position 5431 - Soft Limit Maximum X Position 5432 - Soft Limit Maximum Y Position 5433 - Soft Limit Maximum Z Position 5434 - Soft Limit Maximum A Position 5435 - Soft Limit Maximum B Position 5436 - Soft Limit Maximum C Position 5437 - Soft Limit Maximum U Position 5438 - Soft Limit Maximum V Position 5439 - Soft Limit Maximum W Position
GVAR_OFFSET_G282	5441	Offsets - G28.2, G28.3 and G28.4 are used to record the current machine position coordinate for a certain axis. The syntax for that will be “G28.2 X0”, for example, noting that only the x-axis value is to be recorded. NOTE: The recorded value will NOT be zero in this case, but rather the current x-axis position. The number after the axis symbol is IGNORED. The G28.5,G28.6 and G28.7 will then be used to retrieve these axis values.
GVAR_HOME_AFTER_POSITION	5451	(+8) Registers contain values that used by Homing macros to initialize Machine Position after Homing done 5451 - Machine Position X after Homing 5452 - Machine Position Y after Homing 5453 - Machine Position Z after Homing 5454 - Machine Position A after Homing 5455 - Machine Position B after Homing 5456 - Machine Position C after Homing 5457 - Machine Position U after Homing 5458 - Machine Position V after Homing 5459 - Machine Position W after Homing

Variable Name	Variable Address	Comments
GVAR_CURRENT_NUM_LINE	5480	Stores the current program line number. This global variable is used in the percent/estimated time calculations.
GVAR_CURRENT_NUM_NC	5460	Stores the current NC block number (command number)
GVAR_CURRENT_NC_POSITION	5461	(+8) Registers keeps Toolpath Work coordinates when Job running was stopped (Paused). This registers are used by the “Back to Path” procedure to return the tool to the toolpath position 5461 - Current NC Position X 5462 - Current NC Position Y 5463 - Current NC Position Z 5464 - Current NC Position A 5465 - Current NC Position B 5466 - Current NC Position C 5467 - Current NC Position U 5468 - Current NC Position V 5469 - Current NC Position W
GVAR_TOOL_SENSOR_POSITION	5471	Stores the position of the tool sensor (+8)
GVAR_SURFACE_SENSOR_WIDTH	5490	Specifies the sensor width in mm to be used for the distance calculation between the sensor position and the actual work position
GVAR_PIERCE_HEIGHT	5491	Specifies the pierce height
GVAR_OFFSETZ_MANUAL	5492	Specifies a manual z-axis offset
GVAR_OFFSETZ_THC	5493	Z-axis offset for THC
GVAR_SURFACE_SENSOR_NUMBER	5494	Specifies sensor number
GVAR_SURFACE_SENSOR_TYPE	5495	Specifies sensor type - open or closed
GVAR_SHEET_THICKNESS	5496	Specifies the thickness of the working material
GVAR_OFFSET_G283	5501	Similar to 5441 (G282), stores the position.
GVAR_OFFSET_G284	5511	+9. See 5441 (G282) for description.
GVAR_END_SENSORS_IGNORE	5521	Writing “1” to this register will turn off Hardware Limit Sensors control temporarily.
GVAR_JOG_STEP_SIZE	5522	Specifies the jog step size. This variable can be written to (and is what the user should be interacting with rather than the 7381/7382/etc variables)
GVAR_JOG_STEP_FLOAT	5523	Obsolete global variable to set a float value for the jog step using the on-screen buttons. Has since been replaced, only used on old profile versions.

Variable Name	Variable Address	Comments
GVAR_SPINDLE_SPEED	5524	Register represents given Spindle Speed. It's equal to “Default Spindle Speed” by default. If G-code program “S”-code with new spindle speed settings executed, the value will be changed accordingly.
GVAR_SOFT_LIMITS_IGNORE	5525	Writing “1” to this register will turn off Software Limits control temporarily. Writing a value larger than 2 will initialize a timer (timer will begin after the macro is complete).
GVAR_M30_SCHEDULED_REWIND	5526	The scheduled rewind allows the user to move back to the beginning of the program after the program run has completed. After moving back to the beginning, this variable is set to 0, so the M30 command needs to be added to the file every time the rewind is required (not on by default)
GVAR_SHOW_NCMESSAGE	5527	Reserved for future development to be able to display a line of text from the G-code file
GVAR_SIMULATION_MODE	5528	Indicates that the machine will be in drawing mode to be able to draw/etch on the working material
GVAR_SHOCK_SENSOR_IGNORE	5529	Ignores shock sensor data (useful when utilizing the sensors for procedures other than shock information gathering)
GVAR_STEP_PER_UNIT	5530	(+6) Specifies the steps per unit value - X axis. Requires a recent firmware (minimum Nov 2025)
GVAR_STEP_PER_UNIT+1	5531	Steps per unit - Y
GVAR_STEP_PER_UNIT+2	5532	Steps per unit - Z
GVAR_STEP_PER_UNIT+3	5533	Steps per unit - A
GVAR_STEP_PER_UNIT+4	5534	Steps per unit - B
GVAR_STEP_PER_UNIT+5	5535	Steps per unit - C
GVAR_SET_PLC_MOVE_VERSION	5539	A new version of g0moveA, calculated entirely inside the controller, saving the pause time that would otherwise be present for the command to be processed software-side
~~GVAR_PARKING1~~	5541	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates
~~GVAR_PARKING2~~	5551	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates
~~GVAR_PARKING3~~	5561	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates

Variable Name	Variable Address	Comments
~~GVAR_PARKING4~~	5571	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates
~~GVAR_PARKING5~~	5581	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates
~~GVAR_PARKING6~~	5591	(+8) Registers are obsolete since another address space is reserved to ge up to 20 parking coordinates
GVAR_CURRENT_TOOLCHANGER_TYPE	5600	Allows to select the toolchanger type (whether it is off/linear/rotary/manual tool change)
GVAR_TOOLCHANGER_UNLOAD_OFFSET	5601	+8
GVAR_TOOLCHANGER_BLOW_OFF_OFFSET	5610	(+8) The offset for the machine to position itself if the tool will be blown out by the compressed air, done for safety reasons
GVAR_MYDEV_MSG_COUNTER	5630	+64 till 5694. Allows for a quick display of the number of messages in the UDP message counter field in the Network tab

GVAR_TECHNOLOGY_CFG	5701	`0- flexible;`
		`1- plasma;`
		`2- gas;`
		`3- mill;`
		`4- lathe;`
		`5- laser engraving`
		`enum{`
		`TECH5701_FLEX=0,`
		`TECH5701_PLASMA, //1`
		`TECH5701_GAS, //2`
		`TECH5701_MILL, //3`
		`TECH5701_LATHE, //4`
		`TECH5701_LASER_ENG //5`
		`};`

GVAR_THC_ENABLE	5702	THC toggle, 0- disable; 1- enable
GVAR_IHC_ENABLE	5703	IHC toggle, 0- disable; 1- enable
~~GVAR_ET5_SLOW_PID_ENABLE~~	5705	ET5 SLOW PID: 0- disable; 1- enable
GVAR_CV_MODE	5710	Enables or disables the Constant Velocity mode (0 - disable, 1 - enable)
GVAR_CV_TOLERANCE	5711	This stores the constant velocity tolerance, as described in the Constant Velocity Mode (CV) manual
GVAR_SOFT_LIMITS_CHECKER	5714	Checks whether the machine is within or outside the software limits
GVAR_LATHE_GEARS	5715	Gear ratios can be used on lathe machines. In order to allow for constant surface speed while changing gears, the gear ratio is used. This global variable stores the value of the gear ratio to be used to calculate CSS

Variable Name	Variable Address	Comments
GVAR_MODE_SINGLE_BLOCK	5720	Writing “1” into this register will make the program run in single blocks (single lines). In this mode, the program runs through a single next line of code before stopping again. Useful for safety evaluations when running through the entire program can be dangerous.
GVAR_POSITION_LOG_DATA	5730	Height map logging. If Logging is stopped, writing to this register does not have an effect. If the Logging is started, writing any value to this register will add current position to the Log data array. Beside of storing into the Log Array, the Log position is stored into Global Variables 5731-5736 as well (5731 - X, 5732 - Y, 5733 - Z, 5734 - A, 5735 - B, 5736 - C)
GVAR_POSITION_LOG_CMD	5740	Begin/Eng Height Map Log. Writing “1” to this register will start logging. Writing “0” to this register will stop logging and save the data which will be stored in a log file with a given filename and time stamp. Writing “100” into this global variable will load the data from the log file. Example: 3D Height Mapping
GVAR_POSITION_STORED	5900	This register stores the flag (0 or 1) for whether the current position has been saved in flash memory. This is done every few seconds after the movement has been stopped in order to conserve the number of write operations onto flash memory. The variable flag visualization can be seen in the Diagnostics window in the bottom-right corner next to the stop button (grey for not saved - 0, red for saved - 1)
GVAR_CURRENT_MOTION_CODE	6060	Specifies the current motion code (useful to wait until motion has finished, for example).
GVAR_CURRENT_MOTION_WORK_PTR	6061	Motion controller work command pointer
GVAR_CURRENT_MOTION_LAST_PTR	6062	Motion controller work command pointer (last)
GVAR_CURRENT_NC_LINE	6063	Current line number within the control program
GVAR_TOTAL_NC_LINES	6064	Stores the total number of lines of the control program
GVAR_SYSTEM_JOB_RUN	6065	Denotes whether program is currently running
GVAR_JOB_PROGRESS	6067	Denotes the current job progress in percentage of total lines done from the control program (useful for time estimation)

Variable Name	Variable Address	Comments
GVAR_OIL_LENGTH_COUNTER	6080	Oil system counter which stores the distance that the lathe has travelled.
GVAR_OIL_REVERSE_COUNTER	6081	Oil system counter which stores the number of direction changes for the machine system (as those require more frequent lubrication). Both the length and the reverse counter are used in the lubrication process
GVAR_SOFT_LIMITS_CONTROL	6083	Enables or disables software limits (this can otherwise be set through the check mark in Settings > Config > Inputs/Outputs/Sensors > Limits)
GVAR_OIL_SERVICE_COUNTER_X	6090	Mileage/oil change X-direction trips counter
GVAR_OIL_SERVICE_COUNTER_Y	6091	Mileage/oil change Y-direction trips counter
GVAR_OIL_SERVICE_COUNTER_Z	6092	Mileage/oil change Z-direction trips counter
GVAR_TOOLCHANGER_POSITION	6101	Specifies the tool changer position on the machine (+8 axes)
GVAR_TOOLCHANGER_NEXT_POSITION	6111	+6
GVAR_TOOLPOT_01_TIME	6120	Current work time, in s, for tool pot 1 (+10 for every subsequent pot)
GVAR_TOOLPOT_1_POSITION	6121	+6. Registers 6121-6271 specify the positions for the tool pots
GVAR_TOOLPOT_2_POSITION	6131	+6
GVAR_TOOLPOT_3_POSITION	6141	+6
GVAR_TOOLPOT_4_POSITION	6151	+6
GVAR_TOOLPOT_5_POSITION	6161	+6
GVAR_TOOLPOT_6_POSITION	6171	+6
GVAR_TOOLPOT_7_POSITION	6181	+6
GVAR_TOOLPOT_8_POSITION	6191	+6
GVAR_TOOLPOT_9_POSITION	6201	+6
GVAR_TOOLPOT_10_POSITION	6211	+6
GVAR_TOOLPOT_11_POSITION	6221	+6
GVAR_TOOLPOT_12_POSITION	6231	+6
GVAR_TOOLPOT_13_POSITION	6241	+6
GVAR_TOOLPOT_14_POSITION	6251	+6
GVAR_TOOLPOT_15_POSITION	6261	+6
GVAR_TOOLPOT_16_POSITION	6271	+6
GVAR_OIL_SERVICE_LIMIT_X	6890	Mileage/oil change X-direction limit
GVAR_OIL_SERVICE_LIMIT_Y	6891	Mileage/oil change Y-direction limit
GVAR_OIL_SERVICE_LIMIT_Z	6892	Mileage/oil change Z-direction limit
GVAR_TOOL_CHANGE_SPEED	6970	Specifies the speed during the tool changing phase
GVAR_TAGENTKNIFE_ANGLE	7001	Current angle of the tangential knife
GVAR_TAGENTKNIFE_POSITION	7002	Current position of the tangential knife

Variable Name	Variable Address	Comments
GVAR_FEEDRATE_UNIT	7003	Sets the unit which the feedrate will be using (mm or inch)
GVAR_ROTATERATE_UNIT	7004	Sets the angular rotation unit (degrees/rad/grad)
GVAR_TANGENTKNIFE_ENABLE	7005	Register represents Automatic Tangential Knife control. If the register value is “0”, tangential control is disabled. If the register value is “1”, tangential knife control is enabled
GVAR_PLC_MOVE_PROCESS	7006	Obsolete global variable - used on old control boards
GVAR_THC_PWMSPEED	7009	Obsolete global variable, previously used with a separate Torch Height Control board
GVAR_THC_ARC_VOLTAGE	7010	Current arc voltage value is stored here
GVAR_THC_ARC_VOLTAGE_REF	7011	Reference arc voltage for torch height control is stored in this register
GVAR_THC_ARC_VOLTAGE_ADJ	7012	Obsolete global variable
GVAR_SAFE_HEIGHT (GVAR_TOOL_LIFT)	7020	Spindle lift height, in mm. This specifies a height value for safe XY motion (no obstructions at that height).
GVAR_CREEP_SPEED	7021	Safe speed while motion down to path position - allows to increase initial plasma arc stability while cutting materials of a higher than normal thickness
GVAR_FEED_SPEED	7030	Feed Speed for the machine (+9)
GVAR_FEED_SPEED_X	7030	Feed Speed for the X axis
GVAR_RAPID_SPEED	7040	+9. Specifies the rapid speed for the machine (all axes)
GVAR_RAPID_SPEED_X	7041	Rapid Speed for the X axis
GVAR_JOG_SPEED	7050	+9. Specifies the machine jog speed (all axes).
GVAR_JOG_SPEED_X	7050	Jog Speed for the X axis
GVAR_MARKING_SPEED	7060	Specifies the marking speed for the machine.
GVAR_SIMULATION_SPEED	7061	Specifies the machine's simulation speed (use global variable 7530 to turn simulation mode on/off for a test run through a control program).
GVAR_JOG_STEP_UNLIMITED	7070	the value is “1” if Current Jog Mode is “Unlimited”, otherwize is “0” (integer). This is a read-only register (useful for user panel displays, etc)
GVAR_JOG_LOCKED	7071	the value is “1” if Jogging is Locked, otherwize is “0” (integer)
GVAR_MOTION_OVERSPEED	7072	Register represents Motion Overrate percentage.

Variable Name	Variable Address	Comments
GVAR_SPINDLE_OVERSPEED	7073	Register represents Spindle Overrate percentage. Actual Spindle speed will be Actual_Speed=Default_Speed * Spindle_Overspeed/100 Default Spindle Speed defined by “Default Spindle Speed” variable and can be chaned in G-code program with S-code.
GVAR_JOG_OVERSPEED	7074	The jog overspeed value is directly edited through this global variable (5-150 safe range on ET6, ET7, ET10)
GVAR_PROBE_SENSOR_DIAMETER	7075	Specifies the probe sensor diameter in mm
GVAR_PROBE_SENSOR_XOFFSET	7076	X-axis offset for the probe sensor in millimeters
GVAR_PROBE_SENSOR_YOFFSET	7077	Y-axis offset for the probe sensor
GVAR_MOTION_OVERSPEED_G0	7079	Sets the overspeed value for G0 movement (rapid move)
GVAR_PLC_MOVE_SPEED	7080	Allows to set a certain speed to be used in PLC commands (for example: gvarset(7080,speed_z);. *NOTE: Global variable 8632 (GVAR_G0PLC_SPEED_UNITS) is recommended instead on recent software versions (as of 2024). See gvariables 8632 and 8631 below.*
GVAR_PLC_MOVE_ACCELERATION	7081	Stores PLC movement acceleration value
GVAR_PLC_RESET_COORDINATES	7082	Allows to reset the coordinates to 0 using a PLC command
GVAR_CAMERA_READY	7090	Variable denotes the camera state (gvarset(7090); denotes that the camera is ready)
GVAR_MULTIDEV_MASK	7100	Allows for multi-device control directly using global variables. Typically not used, as multi-dev configuration is done through the myCNC software.
GVAR_MULTIDEV_ENABLE1	7101	Denotes whether device 1 is ON. Typically, global variables 7101-7132 are only used for edge cases when direct global variable control is required for a multi-device setup. + 31
GVAR_MULTIDEV_ENABLE32	7132	Multi-device control is reserved for up to 32 devices
GVAR_MD_MASTER_MOTION_CODE	7140	Used for multi-device setups (master motion)
GVAR_M1_CONDITIONAL_STOP	7150	Allows to use the M01 conditional stop (motion break) command which can be located in Hardware PLC

Variable Name	Variable Address	Comments
GVAR_LATHE_THREAD_PULLOUT	7154	Specifies whether to perform a chamfer at the end of a thread (1) or not (0). This will be using the M23/M24 commands, which are described here
GVAR_SPINDLE_ORIENTATION	7155	Reserved for future development in order to specify spindle orientation
GVAR_PLASMA_PROCESS_CURRENT	7156	The value for plasma current is stored in this register
GVAR_ALIGN_CHECK	7170	Reserved for future development regarding the gantry alignment procedure
GVAR_HW_INPUTS0	7180	Stores the input value in 32 bit increments. In this way, Input0 is 31-0, Input1 is 63-32, etc. More here: Global variables for hardware I/O (#7180-7187)
GVAR_HW_INPUTS1	7181	
GVAR_HW_INPUTS2	7182	
GVAR_HW_INPUTS3	7183	
GVAR_HW_OUTPUTS0	7184	Stores the output value (can be both read and written to) similar to input values 7180-7183. more here: Global variables for hardware I/O (#7180-7187)
GVAR_HW_OUTPUTS1	7185	Stores the output value (can be both read and written to)
GVAR_HW_OUTPUTS2	7186	Stores the output value (can be both read and written to)
GVAR_HW_OUTPUTS3	7187	Stores the output value (can be both read and written to)
GVAR_HW_INPUTS4	7188	
GVAR_HW_INPUTS5	7189	
GVAR_HW_INPUTS6	7190	
GVAR_HW_INPUTS7	7191	
GVAR_HW_OUTPUTS4	7192	Stores the output value (can be written/read)
GVAR_HW_OUTPUTS5	7193	
GVAR_HW_OUTPUTS6	7194	
GVAR_HW_OUTPUTS7	7195	
GVAR_HW_ADC0	7196	Stores the ADC value to be read
GVAR_HW_ADC1	7197	
GVAR_HW_ADC2	7198	
GVAR_HW_ADC3	7199	
GVAR_HW_ADC4	7200	
GVAR_HW_ADC5	7201	
GVAR_HW_ADC6	7202	
GVAR_HW_ADC7	7203	

Variable Name	Variable Address	Comments
GVAR_HW_INP_TCOUNT0	7206	Only for ET10, special purpose global variables. On the ET10 controller, there are two ports which allow to count impulse signals sent on these ports and which can then be used as a timer. These timer values are set in to the myCNC program on the host computer with a period of 32 ms
GVAR_HW_INP_TCOUNT1	7207	Only the first two registers (7207 and 7208) are currently used on the existing ET10 controller. Registers 7208 and 7209 have been reserved for future development.
GVAR_HW_INP_TCOUNT2	7208	Reserved for future development
GVAR_HW_INP_TCOUNT3	7209	Reserved for future development
GVAR_PARKING_LAST	7210	Data for the last machine parking location is stored in this register
GVAR_RTCP_DEBUG_X	7211	RTCP correction data for X axis is stored in this register for debug purpose. This register is read-only
GVAR_RTCP_DEBUG_Y	7212	RTCP correction data for Y axis is stored in this register for debug purpose. This register is read-only
GVAR_RTCP_DEBUG_Z	7213	RTCP correction data for Z axis is stored in this register for debug purpose. This register is read-only
GVAR_RTCP_SHOULDER	7215	Shoulder Length (in units) for RTCP correction calculations (calculating the correction value for the rotation). Note that the shoulder length is measured from the pivot to the end of the shoulder, and not for the entire shoulder length should it extend past the pivot point.
GVAR_HCONTROL2_VREF	7228	System-reserved global variable for reference voltage.
GVAR_HCONTROL_VREF	7229	A global variable reserved for system usage (specifies the reference voltage). For user-facing THC interactions, the 7011 global variable should be used instead of 7228 and 7229.
GVAR_PLC_USER_DATA	7230	(+32) Allows to specify the PLC user data not through var00/etc, but through global variables. This is an older PLC implementation which can still be used by the controller.
GVAR_PLC_USER_DATA_LAST	7261	Stores the last PLC user global variable data for easy retrieval.
GVAR_HW_DAC0	7270	Stores the DAC 0 value to be read
GVAR_HW_DAC1	7271	Stores the DAC 1 value to be read
GVAR_HW_DAC2	7272	Stores the DAC 2 value to be read

Variable Name	Variable Address	Comments
GVAR_HW_DAC3	7273	Stores the DAC 3 value to be read
GVAR_HW_DAC4	7274	Stores the DAC 4 value to be read
GVAR_HW_DAC5	7275	Stores the DAC 5 value to be read
GVAR_HW_DAC6	7276	Stores the DAC 6 value to be read
GVAR_HW_DAC7	7277	Stores the DAC 7 value to be read
GVAR_HW_PWM0	7278	Stores the PWM 0 value to be read
GVAR_HW_PWM1	7279	Stores the PWM 1 value to be read
GVAR_HW_PWM2	7280	Stores the PWM 2 value to be read
GVAR_HW_PWM3	7281	Stores the PWM 3 value to be read
GVAR_HW_PWM4	7282	Stores the PWM 4 value to be read
GVAR_HW_PWM5	7283	Stores the PWM 5 value to be read
GVAR_HW_PWM6	7284	Stores the PWM 6 value to be read
GVAR_HW_PWM7	7285	Stores the PWM 7 value to be read
GVAR_GOTO_PROGRAMMING	7290	Specifies absolute/incremental programming modes. Reserved for certain custom myCNC profiles, and should not be used by most default profile configurations. The selected mode will specify how the machine will move to the GOTO_POSITION described in register 7291 below.
GVAR_GOTO_POSITION	7291	+16. These describe the position to which the machine will be moving. Not used on most default profile configurations.
GVAR_REFERENCE_POSITION	7311	+16. Specifies a reference position on some custom myCNC profiles (to be used separately from the zero position). This allows to set a reference work location somewhere on the machine (for example, at the point where the multiple axes of the machine are all at zero, etc) and to refer to that position during the work process.
GVAR_PRG_RECT_P	7330	+16. P=plus (positive direction). Allows to draw a rectangle to specify certain sizes in the visualization window, etc by specifying one of the three-dimensional points to be used as a corner.
GVAR_PRG_RECT_M	7350	+16. M=minus (negative direction). Allows to draw a rectangle by specifying the second of the three-dimensional points to be used.
GVAR_PLC_SPINDLE_STATE	7370	Specifies the spindle state (OFF or ON) by writing 0 or 1 into the variable field (for example, gvarset(7370,0); will specify that the spindle is OFF)
GVAR_PLC_SPINDLE_SPEED	7371	Variable stores the spindle speed
GVAR_PLC_COOLANT_STATE	7372	Variable stores the coolant state

Variable Name	Variable Address	Comments
GVAR_PLC_MIST_STATE	7373	Mist state is stored (0 for OFF, 1 for ON)
GVAR_JOG_STEP_SIZE	5522	Prepresents current jog step size (double)
GVAR_JOG_STEP_0_0001	7381	the value is “1” if Current Jog Step Size is “0.0001”, otherwize is “0” (integer). These values can only be read, not written to.
GVAR_JOG_STEP_0_001	7382	the value is “1” if Current Jog Step Size is “0.001”, otherwize is “0” (integer)
GVAR_JOG_STEP_0_01	7383	the value is “1” if Current Jog Step Size is “0.01”, otherwize is “0” (integer)
GVAR_JOG_STEP_0_1	7384	the value is “1” if Current Jog Step Size is “0.1”, otherwize is “0” (integer)
GVAR_JOG_STEP_1_0	7385	the value is “1” if Current Jog Step Size is “1.0”, otherwize is “0” (integer)
GVAR_JOG_STEP_10	7386	the value is “1” if Current Jog Step Size is “10”, otherwize is “0” (integer)
GVAR_JOG_SHIFT_STATE	7388	Writing “1” to simulate a Shift key press in order to change the overspeed (using the overspeed value from Panel/Pendant > Hotkeys > Jog Overspeed)
GVAR_JOG_CTRL_STATE	7389	Writing “1” to simulate a Control key press in order to change the overspeed
GVAR_SYSTEM_CONFIGURED	7390	Specifies that homing has been performed for all axes and that the system is configured and ready to use
GVAR_HOMING_X_RESET	7391	The register value is used as a flag that Homing X needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - X Servo Driver not ready event received The register can be used for either Mandatory Homing Handler procedure or just to display information about possible X position lost

Variable Name	Variable Address	Comments
GVAR_HOMING_Y_RESET	7392	The register value is used as a flag that Homing Y needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - Y Servo Driver not ready event received The register can be used either for Mandatory Homing Handler procedure or just to display information about possible Y position lost
GVAR_HOMING_Z_RESET	7393	The register value is used as a flag that Homing Z needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - Z Servo Driver not ready event received The register can be used for either Mandatory Homing Handler procedure or just to display information about possible Z position lost
GVAR_HOMING_A_RESET	7394	The register value is used as a flag that Homing A needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - A Servo Driver not ready event received The register can be used for either Mandatory Homing Handler procedure or just to display information about possible A position lost
GVAR_HOMING_B_RESET	7395	The register value is used as a flag that Homing B needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - B Servo Driver not ready event received The register can be used for either Mandatory Homing Handler procedure or just to display information about possible B position lost

Variable Name	Variable Address	Comments
GVAR_HOMING_C_RESET	7396	The register value is used as a flag that Homing C needed. The value is automatically set to “1” is - CNC control software just loaded - Emergency button pressed - C Servo Driver not ready event received The register can be used for either Mandatory Homing Handler procedure or just to display information about possible C position lost
GVAR_PRG_EXTREMA_P	7400	+16. Functionally a duplicate of the 7330 global variable
GVAR_PRG_EXTREMA_M	7420	+16. Functionally a duplicate of the 7350 global variable
GVAR_CURRENT_FEEDRATE	7440	Stores the current feedrate value
GVAR_TUBE_DIAMETER	7450	Stores tube diameter (in mm)
GVAR_HT_CURRENT_SETPOINT GVAR_PLASMA_PROCESS_CURRENT		Same as the GVAR_PLASMA_PROCESS_CURRENT 7156 global variable. Sets the current for the plasma cutting process.
GVAR_HT_PLASMA_PREFLOW	7461	Specifies the plasma preflow pressure value (HT = Hypertherm parameter)
GVAR_HT_PLASMA_CUTFLOW	7462	Specifies the plasma cutflow pressure value (Hypertherm parameter)
GVAR_HT_SHIELD_PREFLOW	7463	Specifies the shield preflow pressure value (Hypertherm)
GVAR_HT_SHIELD_CUTFLOW	7464	Specifies the shield cutflow pressure (Hypertherm)
GVAR_HT_PLASMA_GAS_TYPE	7465	Sets the gas type used for cutting
GVAR_HT_SHIELD_GAS_TYPE	7466	Sets the gas type used for shielding
GVAR_HT_GAS_MIXING_SETPOINT	7467	Hypertherm parameter for gas mixing that will be read from the cutcharts (typically not edited by the user directly by using a global variable but rather by editing the cutcharts file if needed)
GVAR_HT_SYSTEM_ERROR	7468	Register for the Hypertherm system error
GVAR_HT_SYSTEM_STATUS	7469	Hypertherm register for system status
GVAR_HT_PUMP_CONTROL	7470	Hypertherm register for storing the pump control value
GVAR_HT_FIRMWARE_VERSION	7471	Hypertherm firmware version register
GVAR_HT_TEST_CUTFLOW_GASES	7472	Cutflow test gases variable for Hypertherm consoles
GVAR_HT_TEST_PREFLOW_GASES	7473	Preflow test gases variable for Hypertherm consoles
GVAR_HT_LINE_VOLTAGE	7474	Line voltage value (Hypertherm)
GVAR_HT_CHOPPER_CURRENT	7475	Chopper current value (Hypertherm)

Variable Name	Variable Address	Comments
GVAR_HT_WORK_LEAD_CURRENT	7476	Lead current
GVAR_HT_CHOPPER_TEMPERATURE	7477	Chopper temperature value (Hypertherm)
GVAR_HT_TRANS_TEMPERATURE	7478	Hypertherm temperature value
GVAR_HT_GAS_PRESSURE	7479	Gas pressure value for Hypertherm machines is stored in this register
GVAR_HT_COOLANT_FLOW_RATE	7480	Coolant flow rate (Hypertherm)
GVAR_HT_CURRENT_ACTUAL	7481	The real current value for a Hypertherm machine is stored in this register
GVAR_OXYFUEL_PREHEAT_COUNTDOUN	7490	Oxyfuel preheat countdown value
GVAR_OXYFUEL_PREHEAT_COUNTDOUN_V2	7491	The preheat countdown which is set by default (the preheat can then be turned off by the operator if they consider the process to be complete prior to the countdown end)
GVAR_PROBE_SENSOR_CORRECTION_XMINUS	7501	Edge sensing correction values for the probe: this register specifies the negative-x correction value
GVAR_PROBE_SENSOR_CORRECTION_XPLUS	7502	Positive x probe correction value
GVAR_PROBE_SENSOR_CORRECTION_YMINUS	7503	Negative y probe correction value
GVAR_PROBE_SENSOR_CORRECTION_YPLUS	7504	Positive y probe correction value
GVAR_PROBE_SENSOR_CORRECTION_CENTERX	7505	Stores the value for the X-position of the probe sensor's center
GVAR_PROBE_SENSOR_CORRECTION_CENTERY	7506	Stores the value for the Y-position of the probe sensor's center
GVAR_CUTTING_FROM_EDGE	7520	Specifies whether the Edge Cutting mode is used for plasma/oxy-fuel machines (this mode allows for easier cuts on thicker material).
GVAR_MIST_PULSE_WIDTH	7521	NS-CNC Pulse Mist Mode. Sets the pulse width for mist control
GVAR_MIST_PULSE_PAUSE	7522	Specifies the pause for the pulse mist mode (the cycle consists of mist-pause-mist-pause).
GVAR_GANTRY_CORRECTION	7525	Register used for gantry alignment procedure. If the sensors are not aligned perfectly level, and if it is possible to measure exactly what the distance between Sensor 1 and Sensor 2 is (in the machine movement axis), then this value will be stored here and will specify how far the machine should align
GVAR_DRAWING_FAST	7530	Allows to move over a part in a drawing process to check the movement path at a speed higher than the normal cutting speed. Useful for plasma/gas setups with a lower cutting speed. Writing 0 will disable fast drawing, writing 1 will enable fast drawing. The fast drawing speed is set in Global Variable 7061.

Variable Name	Variable Address	Comments
GVAR_SHOW2D_AXISA_RADIUS	7540	Used on certain tube-cutting machine setups to unfold the a-axis for easier visualization. The radius of the tube is set in this register. This should only be used if the user does not want the 4-axis visualization
GVAR_ASSIGN_TOOL_OFFSET_X	7515	This register specifies the x-axis tool offset
GVAR_ASSIGN_TOOL_OFFSET_Z	7517	This register specifies the z-axis tool offset
GVAR_LATHE_TOOL_LENGTH_CORRECTION_X	7511	Specifies the x-axis tool length correction for lathes
GVAR_LATHE_TOOL_LENGTH_CORRECTION_Z	7513	Specifies the y-axis tool length correction for lathes
GVAR_LATHE_TOOL_OFFSET_CORRECTION_X	7514	Specifies the z-axis tool length correction for lathes
GVAR_SAW_WIDTH	7550	Specifies the saw width. The saw configuration is used on certain custom user profiles, and alterations to suit a particular machine are available upon request.
GVAR_SAW_POSTION_START	7551	Starting position for a saw setup
GVAR_SAW_POSTION_END	7552	End position for a saw setup
GVAR_SAW_SLOT_L	7553	
GVAR_SAW_SLOT_L1	7554	
GVAR_SAW_GROOVE_L	7555	
GVAR_SAW_GROOVE_T	7556	
GVAR_SAW_Z_SAFE	7557	Flag to show that the saw is safe to operate
GVAR_SAW_Z_WORK	7558	
GVAR_SAW_CUT_WIDTH	7559	Specifies the cut width for the saw
GVAR_SAW_DIAMETER	7560	Specifies the circular saw diameter
THC Control variables		
THC #0		
GVAR_THC0_CONTROL	7570	THC API
GVAR_THC0_INPUT	7571	THC API
GVAR_THC0_VREF	7572	THC API
GVAR_THC0_OFFSETZ	7573	THC API
GVAR_THC0_ENABLED	7574	THC API
THC #1		
GVAR_THC1_CONTROL	7575	THC API
GVAR_THC1_INPUT	7576	THC API
GVAR_THC1_VREF	7577	THC API
GVAR_THC1_OFFSETZ	7578	THC API
GVAR_THC1_ENABLED	7579	THC API
THC #		
GVAR_THC2_CONTROL	7580	THC API

Variable Name	Variable Address	Comments
GVAR_THC2_INPUT	7581	THC API
GVAR_THC2_VREF	7582	THC API
GVAR_THC2_OFFSETZ	7583	THC API
GVAR_THC2_ENABLED	7584	THC API
THC #3		
GVAR_THC3_CONTROL	7585	THC API
GVAR_THC3_INPUT	7586	THC API
GVAR_THC3_VREF	7587	THC API
GVAR_THC3_OFFSETZ	7588	THC API
GVAR_THC3_ENABLED	7589	THC API
GVAR_KNIFE_FLAG	7587	PLC/Software controlled variable. Tool change PLC procedure writes “1” to the register when Tool number changed to Tangential Knife Tool, otherwise writes “0”.
Cutchart variables		
GVAR_CUTPROCESS_ID	7600	Specifies the cut process ID from the cutchart
GVAR_CUTPROCESS_KERF	7601	Specifies the kerf value for the cutchart
GVAR_CUTPROCESS_MATERIAL_THICKNESS	7602	Specifies the material thickness
GVAR_CUTPROCESS_TIME_PREHEAT	7603	Preheat time for the cut process
GVAR_CUTPROCESS_TIME_SOFT_OXY_START	7604	Cutchart - time value for the oxyfuel cutting start
GVAR_CUTPROCESS_CUTSPEED	7605	Specifies the cutting speed
GVAR_CUTPROCESS_CUTSPEED_LOW	7606	Low cutting speed for arcs/holes
GVAR_CUTPROCESS_FLAG_SLOWSPEED	7607	
GVAR_CUTPROCESS_MARKSPEED	7608	
GVAR_CUTPROCESS_CUTSPEED_LOW_P	7609	Low cutting speed (arc cutting) as % of regular speed on arcs/holes
Oxy Fuel cutting, Automatic Gas Console		
GVAR_CUTPROCESS_AGC_IGNITION_FUEL	7610	Automatic gas console ignition fuel variable
GVAR_CUTPROCESS_AGC_IGNITION_OXY_HEAT	7611	Automatic gas console ignition heating flow
GVAR_CUTPROCESS_AGC_PREHEAT_FUEL	7612	AGC preheat fuel
GVAR_CUTPROCESS_AGC_PIERCE_FUEL	7613	AGC pierce fuel
GVAR_CUTPROCESS_AGC_PIERCE_OXY_CUT	7614	
GVAR_CUTPROCESS_AGC_PIERCE_OXY_HEAT	7615	
GVAR_CUTPROCESS_AGC_CUTTING_FUEL	7616	
GVAR_CUTPROCESS_AGC_CUTTING_OXY_HEAT	7617	
GVAR_CUTPROCESS_AGC_CUTTING_OXY_CUT	7618	
GVAR_CUTPROCESS_AGC_PILOT_FUEL	7619	
GVAR_CUTPROCESS_AGC_PILOT_OXY_HEAT	7620	
GVAR_CUTPROCESS_GAS_SELECT1	7621	
GVAR_CUTPROCESS_GAS_SELECT2	7622	

Variable Name	Variable Address	Comments
Plasma Cutting, Torch consumables		
GVAR_CUTPROCESS_SHIELD_RETAINING_CAP	7630	Specifies the state of the retaining cap
GVAR_CUTPROCESS_SHIELD	7631	Specifies shield state
GVAR_CUTPROCESS_NOZZLE_RETAINING_CAP	7632	Specifies the state of the nozzle retaining cap
GVAR_CUTPROCESS_NOZZLE	7633	Specifies the nozzle state
GVAR_CUTPROCESS_SWIRL_RING	7634	Swirl ring state
GVAR_CUTPROCESS_ELECTRODE	7635	Electrode state
GVAR_CUTPROCESS_WATER_TUBE	7636	Water tube state
Plasma Cutting, Height control settings		
GVAR_CUTPROCESS_HC_PIERCE_DELAY	7640	Pierce delay in seconds for the THC process -loaded from the cutcharts and is a separate value from the Items that set the working THC values
GVAR_CUTPROCESS_HC_IGNITION_HEIGHT	7641	Ignition height in mm for the THC process
GVAR_CUTPROCESS_HC_PIERCE_HEIGHT	7642	Pierce height in mm
GVAR_CUTPROCESS_HC_CUT_HEIGHT	7643	Cutting height in mm
GVAR_CUTPROCESS_HC_CONTROL_DELAY	7644	THC delay, in seconds
GVAR_CUTPROCESS_HC_ARC_VOLTAGE	7645	Reference arc voltage
GVAR_CUTPROCESS_HC_PIERCE_HEIGHT_FACTOR	7646	Reserved for Hypertherm consoles, denotes the factor between the pierce height and the cutting height
GVAR_CUTPROCESS_CREEP_TIME	7650	Creep time, in seconds (plasma cutting, Torch Height Control)
GVAR_CUTPROCESS_CREEP_SPEED	7651	Creep speed for the plasma cutting process
GVAR_CUTPROCESS_MIX_GAS1	7652	Register stores the mix gas data for Hypertherm consoles (gas #1)
GVAR_CUTPROCESS_MIX_GAS2	7653	Register stores the mix gas data for Hypertherm consoles (gas #2)
Plasma Cutting, Automatic Gas Console		
GVAR_CUTPROCESS_AGC_PLASMA_PREFLOW	7660	Automatic gas console preflow value
GVAR_CUTPROCESS_AGC_SHIELD_PREFLOW	7661	Shield preflow value
GVAR_CUTPROCESS_AGC_PLASMA_CUTEFLOW	7662	Plasma cutflow value
GVAR_CUTPROCESS_AGC_SHIELD_CUTEFLOW	7663	Shield cutflow value
Plasma Cutting, Manual Gas Console		
GVAR_CUTPROCESS_MGC_PLASMA_PREFLOW	7670	Manual plasma preflow value taken from the operator panel in order to display on the screen
GVAR_CUTPROCESS_MGC_SHIELD_PREFLOW	7671	Manual shield preflow value
GVAR_CUTPROCESS_MGC_PLASMA_CUTEFLOW	7672	Manual plasma cutflow value
GVAR_CUTPROCESS_MGC_SHIELD_CUTEFLOW	7673	Manual shield cutflow value
Plasma Cutting		
GVAR_CUTPROCESS_SET_PROCESS_CURRENT	7675	Register indicates the process current
GVAR_CUTPROCESS_SET_ARC_CURRENT	7676	Set the arc current

Variable Name	Variable Address	Comments
GVAR_CUTPROCESS_CORNER_REDUCTION	7677	Sets the corner reduction value in order to reduce process current and prevent overheating at the corners during the cut
GVAR_CUTPROCESS_TORCH_TYPE	7680	Sets the cutchart torch type
GVAR_CUTPROCESS_MATERIAL_TYPE	7681	Sets the material type
GVAR_CUTPROCESS_SPECIFIC_MATERIAL	7682	Sets the specific material used in the cut
GVAR_CUTPROCESS_PLASMA_SHIELD_GASES	7683	Denotes the shield gases used
GVAR_CUTPROCESS_PROCESS	7684	Denotes the particular process employed (bevel cutting, fine cutting, etc) - can be found in the Cutchart menu.
GVAR_CUTPROCESS_VENDOR	7685	Denotes the machine vendor
GVAR_CUTPROCESS_TECHNOLOGY	7686	Denotes the technology for the cutting process.
GVAR_CUTPROCESS_REVISION	7687	The cutchart version used (reserved for Hypertherm machines)
GVAR_CUTCHART_FEEDRATE_PRIORITY	7696	Indicates feedrate priority between cutcharts and F-codes in the program. More info here: Speed Priority
GVAR_BUTTON_START_COUNTER	8010	
GVAR_BUTTON_STOP_COUNTER	8011	
GVAR_BUTTON_SIMULATE_STATE	8012	
GVAR_JOB_FILENAME	8020	
SVAR_JOB_FILENAME	8020	
GVAR_CURRENT_TOOL_PROGRESS	8025	
GVAR_HCONTROL_PLUS	8030	Height Control for AxisPlus
GVAR_HCONTROL_PLUS_CHANNEL	8031	
GVAR_HCONTROL_PLUS_ACCEL	8032	
GVAR_HCONTROL_PLUS_KP_MINUS	8033	PID settings
GVAR_HCONTROL_PLUS_MAXCTL	8034	
GVAR_HCONTROL_PLUS_KP_PLUS	8035	
GVAR_HCONTROL_PLUS_KI_MINUS	8036	
GVAR_HCONTROL_PLUS_KI_PLUS	8037	
GVAR_HCONTROL_PLUS_CTL	8039	
GVAR_HCONTROL_PLUS_REF	8040	
GVAR_HCONTROL_PLUS_2REF	8041	
GVAR_PLC_IGNITION_HEIGHT	8042	PLC Ignition Height
GVAR_PLC_FHS_OFFSET	8043	PLC Floating Head Switch Offset
GVAR_PLC_IHC_SPEED	8044	
GVAR_PLC_IHC_SLOW_SPEED_PERCENT	8045	Sensing speed low
GVAR_PLC_IHC_SLOW_DISTANCE	8046	Distance sensing speed low
GVAR_PLC_PIERCE_DELAY	8047	PLC delay instead of OR after “Arc ON”
GVAR_PLC_IHC_STAGE	8048	IHC Stage
GVAR_AXPLUS_JOGSPEED	8060	
Timers		

Variable Name	Variable Address	Comments
GVAR_TIMER0_ENABLED	8100	Writing “0” to this register will disable Timer0, writing “1” will enable Timer0
GVAR_TIMER0_PORT	8101	Writing to this register will change Output pin connected to Timer0. Writing value is the Output Pin#
GVAR_TIMER0_PULSE	8102	A value written to this register specifies the Timer 0 Pulse width in milliseconds
GVAR_TIMER0_PAUSE	8103	A value written to this register specifies the Timer 0 Pause in milliseconds
GVAR_TIMER1_ENABLED	8104	Writing “0” to this register will disable Timer1, writing “1” will enable Timer1
GVAR_TIMER1_PORT	8105	Writing to this register will change Output pin connected to Timer1. Writing value is the Output Pin#
GVAR_TIMER1_PULSE	8106	A value written to this register specifies the Timer 1 Pulse width in milliseconds
GVAR_TIMER1_PAUSE	8107	A value written to this register specifies the Timer 1 Pause in milliseconds
GVAR_TIMER2_ENABLED	8108	Writing “0” to this register will disable Timer2, writing “1” will enable Timer2
GVAR_TIMER2_PORT	8109	Writing to this register will change Output pin connected to Timer2. Writing value is the Output Pin#
GVAR_TIMER2_PULSE	8110	A value written to this register specifies the Timer 2 Pulse width in milliseconds
GVAR_TIMER2_PAUSE	8111	A value written to this register specifies the Timer 2 Pause in milliseconds
GVAR_TIMER3_ENABLED	8112	Writing “0” to this register will disable Timer3, writing “1” will enable Timer3
GVAR_TIMER3_PORT	8113	Writing to this register will change the Output pin connected to Timer3. Written values specifies the Output Pin#
GVAR_TIMER3_PULSE	8114	A value written to this register specifies the Timer 3 Pulse width in milliseconds
GVAR_TIMER3_PAUSE	8115	A value written to this register specifies the Timer 3 Pause in milliseconds
	8119	A value for setting up the PWM frequency to control modulation. For example, *gvarset(8119,2000);* sets frequency to 2kHz. **NOTE:** Must be set from Hardware PLC!
GVAR_GENERATOR_FRQ_RATIO	8132	Ratio for the step-dir coolant control to convert the step motor values into the software units. Set experimentally.
GVAR_GENERATOR_FRQ	8133	Rate, in ml/hour, for the step-dir coolant control

Variable Name	Variable Address	Comments
GVAR_FLY0_ZOFFSET	8140	Z correction (mm) - on-the-fly correction. This is a read-only value, writing to this register will not have an effect
GVAR_CORRECTIONX_OFFSET	8151	Register reserved for future development - analogous to flatbed correction, for x-axis
GVAR_CORRECTIONY_OFFSET	8152	Register reserved for future development - y-axis
GVAR_CORRECTIONZ_OFFSET	8153	Flatbed correction (z-axis). This value will impact the program (work) coordinate. It is a read-only value which will be retrieved from the flatbed correction table in myCNC software. Writing to this register directly by setting it through a command is not recommended.
GVAR_CURRENT_XMACHINE_POSITION	8221	(+8) Stores the current machine position for the 8 axes
GVAR_CURRENT_XWORK_POSITION	8231	(+8) Stores the current work position for the 8 axes
GVAR_CURRENT_XMACHINE_CORRECTION	8241	(+8) Stores the current machine correction for the 8 axes
PLC Move (Positioning/Jog)		
GVAR_G0PLUS_SPEED	8330	Set motion speed for AxisPlus PLC move commands in pulses/sec
GVAR_G0PLUS_TIME	8331	Set motion acceleration time for AxisPlus PLC move commands in milliseconds (0.001 sec)
GVAR_G0PLUS_STATE	8332	If reading this register returns a zero, this indicates that the AxisPlus is not active/moving. state_plus_idle=0, state_plus_g0=1, state_plus_pendant=2, state_plus_jog=3
GVAR_AXPLUS_JOG	8340	Independent Axis ("AxisPlus") Jog command.
GVAR_AXPLUS_MSPEED	8341	Set Jog speed for AxisPlus PLC move commands
GVAR_AXPLUS_MACCEL	8342	Set Jog acceleration for AxisPlus PLC move commands
Laser Cutting		
GVAR_LASER_CUT_SPEED	8411	
GVAR_LASER_CUT_DYN_POWER1	8412	
GVAR_LASER_CUT_DYN_POWER2	8413	
GVAR_LASER_CUT_DYN_FREQ1	8414	
GVAR_LASER_CUT_DYN_FREQ2	8415	
GVAR_LASER_CUT_ON_DELAY	8416	
GVAR_LASER_CUT_OFF_DELAY	8417	
GVAR_LASER_CUT_SPEED_Y	8418	
GVAR_LASER_CUT_HEIGHT	8421	

Variable Name	Variable Address	Comments
GVAR_LASER_CUT_POWER	8422	
GVAR_LASER_CUT_FREQ	8423	
GVAR_LASER_CUT_DUTY	8424	
GVAR_LASER_CUT_GAS_TYPE	8425	
GVAR_LASER_CUT_GAS_PRESSURE	8426	
GVAR_LASER_CUT_HEIGHT_Y	8427	
GVAR_LASER_PIERCE1_HEIGHT	8431	
GVAR_LASER_PIERCE1_POWER	8432	
GVAR_LASER_PIERCE1_FREQ	8433	
GVAR_LASER_PIERCE1_DUTY	8434	
GVAR_LASER_PIERCE1_GAS_TYPE	8435	
GVAR_LASER_PIERCE1_GAS_PRESSURE	8436	
GVAR_LASER_PIERCE1_TIME	8437	
GVAR_LASER_PIERCE1_SOFT_PIERCE	8438	
GVAR_LASER_PIERCE2_HEIGHT	8441	
GVAR_LASER_PIERCE2_POWER	8442	
GVAR_LASER_PIERCE2_FREQ	8443	
GVAR_LASER_PIERCE2_DUTY	8444	
GVAR_LASER_PIERCE2_GAS_TYPE	8445	
GVAR_LASER_PIERCE2_GAS_PRESSURE	8446	
GVAR_LASER_PIERCE2_TIME	8447	
GVAR_LASER_PIERCE2_SOFT_PIERCE	8448	
GVAR_LASER_PIERCE3_HEIGHT	8451	
GVAR_LASER_PIERCE3_POWER	8452	
GVAR_LASER_PIERCE3_FREQ	8453	
GVAR_LASER_PIERCE3_DUTY	8454	
GVAR_LASER_PIERCE3_GAS_TYPE	8455	
GVAR_LASER_PIERCE3_GAS_PRESSURE	8456	
GVAR_LASER_PIERCE3_TIME	8457	
GVAR_LASER_PIERCE3_SOFT_PIERCE	8458	
GVAR_LASER_PRESET_SELECT	8470	Load a set of parameters for the corresponding preset number
GVAR_LASER_PRESET_SAVE	8471	Save the current parameters as a cutting preset for the specified number
GVAR_LASER_PRESET_TAB	8472	
GVAR_LASER_PRESET_RAMP	8473	
GVAR_LASER_CURRENT_PWM	8490	
GVAR_FOCUS_STEP_PER_UNIT	8491	Step per unit value for the independent Focus axis
GVAR_FOCUS_G0_SPEED	8492	Focus axis - G0 speed
GVAR_FOCUS_G0_TIME	8493	AxisPlus
GVAR_FOCUS_MSPEED	8494	
GVAR_FOCUS_MTIME	8495	
GVAR_FOCUS_SOFTMINUS	8496	
GVAR_FOCUS_SOFTPLUS	8497	

Variable Name	Variable Address	Comments
GVAR_FOCUS_JOG	8498	
GVAR_FOCUS_G0_STATE	8499	
GVAR_FOCUS_SET_ZERO	8502	Set zero for the focus axis
GVAR_FOCUS_SET_MAX_POS	8503	Set maximum position for the focus axis
GVAR_FOCUS_SET_MIN_POS	8504	Set minimum position for the focus axis
GVAR_FOCUS_HARDLIMITS	8505	Set hardware limit port number for focus axis
GVAR_AXPLUS_STEP_PER_UNIT	8511	Steps per unit - AxisPlus AxisPlus
GVAR_AXPLUS_POSITION	8514	AxisPlus
GVAR_FOCUS_POSITION	8515	AxisPlus
GVAR_AXPLUS_LIFT	8516	
GVAR_FOCUS_LIFT	8517	
GVAR_AXPLUS_STOP	8518	
GVAR_FOCUS_STOP	8519	
GVAR_AXPLUS_SET_ZERO	8522	Writing 999999 to this register will reset the soft limits. Otherwise this allows to set a coordinate to a given value (in units of 1000 >1.000). Article: AxisPlus. For common applications, see also: Laser Cutting
GVAR_AXPLUS_SET_MAX_POS	8523	If the value of this register is equal to zero, then current position is taken as the maximum position for the axis
GVAR_AXPLUS_SET_MIN_POS	8524	If the value of this register is equal to zero, then current position is taken as the minimum position for the axis
GVAR_AXPLUS_HARDLIMITS	8525	
GVAR_AXPLUS_MPOSITION	8526	
GVAR_FOCUS_MPOSITION	8527	
GVAR_GET_PIERCE1_TIME	8541	
GVAR_GET_PIERCE2_TIME	8542	
GVAR_GET_PIERCE3_TIME	8543	
GVAR_GET_LASER_CUTHEIGHT	8548	
GVAR_GET_AXPLUS_HCREF	8549	
GVAR_LASER_BEAM_CENTER_TIME	8550	
GVAR_LASER_RESET_FLAG	8558	Clear the specified bits in the flags register
GVAR_LASER_SET_FLAG	8559	
GVAR_LASER_PULSE	8560	
GVAR_LASER_HC_SENSOR	8565	
GVAR_LASER_HC_SENS_MIN	8566	
GVAR_LASER_HC_SENS_MAX	8567	
GVAR_G0PLC_SPEED	8630	Set motion speed for PLC move commands in pulses/sec
GVAR_G0PLC_TIME	8631	Set motion acceleration time for PLC move commands in milliseconds (0.001 sec)

Variable Name	Variable Address	Comments
GVAR_G0PLC_SPEED_UNITS	8632	Set motion speed for PLC move commands in units/min
GVAR_PLC_JOGSPEED_UNITS	8634	Set motion speed for jog in units/min
GVAR_PLC_JOG	8635	
Incremental key counters		
GVAR_KEY_COUNTER_ENTER	8785	Each press of the Enter key increments the value of the corresponding counter. See example: Key counters
GVAR_KEY_COUNTER_SPACE	8786	Each press of the Space key increments the value of the corresponding counter
GVAR_KEY_COUNTER_RETURN	8787	Each press of the Return key increments the value of the corresponding counter
GVAR_KEY_COUNTER_ESCAPE	8788	Each press of the Escape key increments the value of the corresponding counter
Encoders		
GVAR_ET5_ENCODER	9000	(+16) Registers represent Encoder values. Writing to this registers does not affect anything. Selected channel Current Encoder value will be returned when reading these registers. Reading these registers from the controller Hardware PLC will return actual Encoder value. Encoder values in the software are updated about every 128ms. This delay should be counted when using Encoder values from the Software PLC. 9000 - Encoder #0 value 9001 - Encoder #1 value 9002 - Encoder #2 value 9003 - Encoder #3 value 9004 - Encoder #4 value 9005 - Encoder #5 value 9006 - Encoder #6 value 9007 - Encoder #7 value

Variable Name	Variable Address	Comments
GVAR_ET5_EXPOSITION	9016	(+16) Registers represent Motor PID Following Error (a difference between commanded and sensed position). Writing to this registers does not affect anything. A Following Error of Selected PID will be returned when reading these registers. Reading these registers from the controller Hardware PLC will return actual value of the Following Error. Following Error values in the software are updated about every 128ms. This delay should be counted when using the registers in the Software PLC. 9016 - Motor channel #0 PID Following Error 9017 - Motor channel #1 PID Following Error 9018 - Motor channel #2 PID Following Error 9019 - Motor channel #3 PID Following Error 9020 - Motor channel #4 PID Following Error 9021 - Motor channel #5 PID Following Error 9022 - Motor channel #6 PID Following Error 9023 - Motor channel #7 PID Following Error Examples FERROR implementation
GVAR_ET5_ENCODER_Z	9032	+16. Stores the values for the encoders connected to the controller. Available within the PLC controller - stores the encoder value within the cycle (value within one turn).
GVAR_ET5_ENCODER_WZ	9048	+16. Stores the absolute value for the encoder.
GVAR_ENCODER_Z_EVENT	9070	Stores info on the wheel of the encoder passing the zero mark (the zero position)
GVAR_POPUP_MESSAGE	9100	+16. Allows to assign popup messages with either 0 for OFF or 1 for ON (for example, 9103,1 to bring up message #3). Popup messages examples can be seen here.

Variable Name	Variable Address	Comments
	9200	+16. Reserved to display the encoder position on an infinite scale (no value turnover on every full encoder turn, instead the value will keep climbing indefinitely into the positives/negatives depending on where the encoder handle is spun)
	9216	+16. Reserved to display the encoder position on an infinite scale WITH the current encoder dimension (to indicate the current encoder position)
GVAR_SENSORS_ERROR	9299	Indicates whether any alarm has been triggered (by writing 0 or 1 into the global variable)

Variable Name	Variable Address	Comments
GVAR_SENSOR0_ERROR	9300	+63. Indicates whether a particular alarm sensor has been triggered. The following alarm numbers are currently available: XPlus - 0 XMinus - 1 YPlus - 2 YMinus - 3 ZPlus - 4 ZMinus - 5 Shock - 6 XNotReady - 7 X2NotReady - 8 YNotReady - 9 ZNotReady - 10 ANotReady - 11 BNotReady - 12 CNotReady - 13 Coolant - 14 Air - 15 Oxygen - 16 Emergency - 17 Emergency2 - 18 Gas - 19 MyCNC_NotPresent - 20 SafetySwitch - 21 MotorShort - 22 Spindle - 23 Y2NotReady - 24 APlus - 25 AMinus - 26 BPlus - 27 BMinus - 28 CPlus - 29 CMinus - 30 ServoAlarm - 31 MyHead_NotPresent - 32 ServoErrorX - 33 ServoErrorY - 34 ServoErrorZ - 35 ServoErrorA - 36 ServoErrorB - 37 ServoErrorC - 38 ServoErrorPlus - 39
GVAR_SELECTED_TOOL_ID	9630	Experimental - Current tool ID
GVAR_SELECTED_TOOL_NAME	9631	Current tool name
GVAR_SELECTED_TOOL_MATERIAL	9632	Experimental
GVAR_SELECTED_TOOL_DIAMETER	9633	Experimental
GVAR_SELECTED_TOOL_PROGRESS	9635	Experimental
GVAR_SELECTED_TOOL_WORK_TIME	9636	Experimental - tool work time (from ATC pots config dialog)
GVAR_SELECTED_TOOL_NUMBER	9637	Experimental - current tool #

Variable Name	Variable Address	Comments
GVAR_SELECTED_TOOL_POT	9638	Experimental
GVAR_SET_MPOSITION	9701	+20. Writing to this global variable from PLC sets machine position for the coordinates X,Y,Z,etc.
GVAR_SET_WPOSITION	9721	+20. Writing to this global variable from PLC sets the work (program) position for the coordinates X,Y,Z,etc.
GVAR_ARC_SLOW_CONTROL	9790	Controls the enabling/disabling the slow speed functionality for arcs/holes
GVAR_ARC_SLOW_DIAMETER	9791	Max diameter for the arc/hole to be used for the slow speed
	9795	Independent axis - THC low speed percentage
	9796	Independent axis - THC OFF arc radius
	9797	Independent axis - THC max speed
—	17001	Return Current PROGRAM X Position in PLC units (0.01mm)
—	17002	Return Current PROGRAM Y Position in PLC units (0.01mm)
—	17003	Return Current PROGRAM Z Position in PLC units (0.01mm)
—	17004	Return Current PROGRAM A Position in PLC units (0.01degree)
—	17005	Return Current PROGRAM B Position in PLC units (0.01degree)
—	17006	Return Current PROGRAM C Position in PLC units (0.01degree)
—	17007	Return Current PROGRAM U Position in PLC units (0.01mm)
—	17008	Return Current PROGRAM V Position in PLC units (0.01mm)
—	17009	Return Current PROGRAM W Position in PLC units (0.01mm)
—	17021	Return Current MACHINE X Position in PLC units (0.01mm)
—	17022	Return Current MACHINE Y Position in PLC units (0.01mm)
—	17023	Return Current MACHINE Z Position in PLC units (0.01mm)
—	17024	Return Current MACHINE A Position in PLC units (0.01degree)
—	17025	Return Current MACHINE B Position in PLC units (0.01degree)
—	17026	Return Current MACHINE C Position in PLC units (0.01degree)
—	17027	Return Current MACHINE U Position in PLC units (0.01mm)
—	17028	Return Current MACHINE V Position in PLC units (0.01mm)

Variable Name	Variable Address	Comments
—	17029	Return Current MACHINE W Position in PLC units (0.01mm)
	20000	+100. Debug information will be displayed in the log when a value is written to one of these variables. More info here: Debug messages
GVAR_SERVO_PID_ON	60000	Denotes that the servo PID is ON
GVAR_SERVO_PID_OFF	60001	Denotes that the servo PID is OFF
Modbus devices API		
GVAR_MODBUS_SET_ID	60010	Value written to this registed is used as Modbus ID of device to communicate with. More information on Modbus is available here.

GVAR_MODBUS_SET_PROTOCOL	60011	Writing to this register change Modbus protocol.
		`"0" - Modbus/RTU,`
		`"1" - Modbus/ASCII`

GVAR_MODBUS_SET_SPEED	60012	Writing to this register will change RS485/Modbus speed. Available speeds are
		`1200, 2400, 4800,`
		`9600, 19200, 38400,`
		`57600, 115200`

GVAR_MODBUS_SET_CONNECTION	60013	Change UART connection parameters: number of bits (8 or 7), parity (none, odd, even), number of stop bits (1, 2). Data comes in 3 low nibbles. The lowest is stop bits, then parity, then number of bits. Example:
		`0x801=8,N,1`
		`0x712=7,O,2`
		`0x822=8,E,2`

GVAR_MODBUS_SET_VALUE	60019	Writing to register will latch the value in shadow register
GVAR_MODBUS_SET_ADDRESS	60020	Writing to register will latch **Address to read** in shadow register
GVAR_MODBUS_WRITE	60030	Writing to register will send value from shadow register to Modbus devive to address given in written value
GVAR_MODBUS_READ	60031	Read from this register will send read inquiry to Modbus device (PLC controller will be in till Regiter value received from Modbus device). Writing to this register will send ready inquiry to Modbus device. The value written is used as Register address to read

Variable Name	Variable Address	Comments
GVAR_MODBUS_WRITE_BITS	60035	**Write multiple coils**. Write multiple coils command indicates the 16-bit address of first coil to write, the number of coils to write, number of bytes of coil values to follow, and the coil values. The response will be the address of the first coil and the number of coils.
GVAR_MODBUS_READ_COILS	60036	60039 is to be used instead.
GVAR_MODBUS_RAW_WRITE	60037	**Write single register**. Write single register indicates address of the holding register and the new value of the register. The response, similarly, is the address of the register and the new value.
GVAR_MODBUS_WRITE_BIT	60038	**Write single coil**. Requests the 16-bit address of the coil, and the value to write (0 for OFF, FF00 for ON)
GVAR_MODBUS_READ_INPUTS	60039	**Read multiple coils**. This will request the address of the first coil to read and the number of coils to read. The Modbus device will respond with the number of bytes to follow and the coil input values
GVAR_MODBUS_INPUT_REGS0	60060	Input register 0 (+31)
Other		
GVAR_EXT_SHOW_WIDGET	64200	Show a widget by writing an ID number (specified in the XML files as id="NUMBER") into this global variable
GVAR_EXT_HIDE_WIDGET	64201	Hide a widget by writing an ID number (specified in the XML files as id="NUMBER") into this global variable
Software PLC exclusive variables		
GVAR_EXT_REFRESH_NC	100001	Refresh nc program
GVAR_EXT_PLAYER_PLAY	100002	Play
GVAR_EXT_RESET_NC	100003	Reset nc program
GVAR_EXT_RUN_CODE	100010	Run G-code (for example, gvarset(100010,55); will switch system to G55)
GVAR_EXT_PENDANT_MOVEX	100020	Move X axis by specified distance
GVAR_EXT_PENDANT_MOVEY	100021	
GVAR_EXT_PENDANT_MOVEZ	100022	
GVAR_EXT_PENDANT_MOVEA	100023	
GVAR_EXT_PENDANT_MOVEB	100024	
GVAR_EXT_PENDANT_MOVEC	100025	
GVAR_EXT_PENDANT_MOVEU	100026	
GVAR_EXT_PENDANT_MOVEV	100027	
GVAR_EXT_DIRECT_PLC	100040	Run a Hardware PLC from Software PLC
GVAR_EXT_DIRECT_PLC_PARAM	100041	Allows to send a Param variable to the Hardware PLC

Variable Name	Variable Address	Comments
GVAR_EXT_SET_MACHINE_X	100050	Set machine coordinate from Software PLC
GVAR_EXT_SET_MACHINE_Y	100051	
GVAR_EXT_SET_MACHINE_Z	100052	
GVAR_EXT_SET_MACHINE_A	100053	
GVAR_EXT_SET_MACHINE_B	100054	
GVAR_EXT_SET_MACHINE_C	100055	
GVAR_EXT_SET_MACHINE_U	100056	
GVAR_EXT_SET_MACHINE_V	100057	

Global Variables Description

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Last update: **2025/11/04 16:44**