

Axis parameter

Command	Data type	Description	PS	AX	RW	Range
M_SSEC_AXISPRM_HWOTN	T_CHAR	H/W OT	O	O	RW	0x00 to 0xFF
M_SSEC_AXISPRM_INDEXX	T_CHAR	Index table indexing axis	O	O	RW	0,1
M_SSEC_AXISPRM_G0INPS	T_SHORT	G0 in-position width (G0inps)	O	O	RW	0 to 32767
M_SSEC_AXISPRM_G1INPS	T_SHORT	G1 in-position width (G1inps)	O	O	RW	0 to 32767
M_SSEC_AXISPRM_CHCOMP	T_SHORT	Chopping compensation amount (Parameter value) (chcomp)	O	O	RW	0 to 10
M_SSEC_AXISPRM_CHWID	T_LONG	Chopping compensation amount calculation minimum value (chwid)	O	O	RW	0.000 to 10.000
M_SSEC_AXISPRM_CHCLSP	T_LONG	Maximum chopping speed (chclsp)	O	O	RW	0 to 60000
M_SSEC_AXISPRM_A_RSTAX	T_CHAR	Return order of automatic restart position return axis	O	O	RW	0 to 8
M_SSEC_AXISPRM_G60_AX	T_CHAR	Unidirectional positioning operation selection	O	O	RW	0,1
M_SSEC_AXISPRM_SYNCNT	T_CHAR	Synchronization super-imposition control setting for each axis (syncnt)	O	O	RW	0 to FF
M_SSEC_AXISPRM_BSAX_SY	T_STR	Base axis for synchronization control (bsax_sy)	O	O	RW	2 letters
M_SSEC_AXISPRM_BSAX_PL	T_STR	Base axis for super-imposition control (bsax_pl)	O	O	RW	2 letters
M_SSEC_AXISPRM_PLRAPID	T_LONG	Rapid traverse rate for super-imposition control (plrapid)	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_PLCLAMP	T_LONG	Cutting feed clamp speed for super-imposition control (plclamp)	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_PLG0TL	T_SHORT	G0 time constant for super-imposition control - Linear (plG0tL)	O	O	RW	1 to 4000
M_SSEC_AXISPRM_PLG0T1	T_SHORT	G0 time constant for super-imposition control - Primary delay (plG0t1)	O	O	RW	1 to 5000
M_SSEC_AXISPRM_PLG1TL	T_SHORT	G1 time constant for super-imposition control - Linear (plG1tL)	O	O	RW	1 to 4000

M_SSEC_AXISPRM_PLG1T1	T_SHORT	G1 time constant for super-imposition control - Primary delay (pLG0tI)	O	O	RW	1 to 5000
M_SSEC_AXISPRM_CRNCSP	T_LONG	Minimum corner deceleration speed	O	O	RW	0 to 1000000
M_SSEC_AXISPRM_TLMSUBLN	T_FLOATBIN/T_DOUBLE	Sub side tool setter - direction sensor	O	O	RW	±99999.999
M_SSEC_AXISPRM_TLMSUBLP	T_FLOATBIN/T_DOUBLE	Sub side tool setter + direction sensor	O	O	RW	±99999.999
M_SSEC_AXISPRM_LSKPT	T_SHORT	Skip time constant (Linear)	O	O	RW	1 to 4000
M_SSEC_AXISPRM_SKPT	T_SHORT	Skip time constant (Primary delay)	O	O	RW	1 to 5000
M_SSEC_AXISPRM_INDEX_UNIT	T_SHORT	Indexing unit	O	O	RW	0 to 360
M_SSEC_AXISPRM_RAPID_HIMOD	T_LONG	Rapid traverse rate for high-accuracy control mode	O	O	RW	0 to 10000000
M_SSEC_AXISPRM_CLAMP_HIMOD	T_LONG	Cutting feed clamp speed for high-accuracy control mode	O	O	RW	0 to 10000000
M_SSEC_AXISPRM_BLF_VALID	T_UCHAR	Quadrant protrusion compensation enabled	O	O	RW	0 to 1
M_SSEC_AXISPRM_BLF_MI	T_LONG	Motor inertia	O	O	RW	1 to 32000
M_SSEC_AXISPRM_BLF_VF	T_LONG	Viscous friction	O	O	RW	1 to 32767
M_SSEC_AXISPRM_BLF_FWDG	T_LONG	Compensation FF gain	O	O	RW	0 to 1000
M_SSEC_AXISPRM_BLF_ST	T_LONG	Motor stall torque	O	O	RW	1 to 16000
M_SSEC_AXISPRM_SSCDRSEL	T_SHORT	Speed monitor Door selection	O	O	RW	0000 to 0003
M_SSEC_AXISPRM_BKVALID	T_UCHAR	Variable backlash disabled/enabled/continuous/Variable backlash II enabled	O	O	RW	0 to 3
M_SSEC_AXISPRM_G0BACKP	T_LONG	G0 + area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_G0BACKC	T_LONG	G0 centre area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_G0BACKM	T_LONG	G0 - area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_G1BACKP	T_LONG	G1 + area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_G1BACKC	T_LONG	G1 centre area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_G1BACKM	T_LONG	G1 - area compensation amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_BKFE1	T_LONG	i¼\$1 compensation amount switch speed 1	O	O	RW	0 to 480000
M_SSEC_AXISPRM_BKFE2	T_LONG	i¼\$1 compensation amount switch speed 2	O	O	RW	0 to 480000
M_SSEC_AXISPRM_BKDIS1	T_FLOATBIN/T_LONG	i¼\$1 compensation amount switch distance 1	O	O	RW	-999999.999 to 999999.999

M_SSEC_AXISPRM_BKDIS2	T_FLOATBIN/T_LONG	i¼\$1 compensation amount switch distance 2	O	O	RW	-999999.999 to 999999.999
M_SSEC_AXISPRM_BKPOS1	T_FLOATBIN/T_LONG	i¼\$1 compensation amount switch end point position 1	O	O	RW	-999999.999 to 999999.999
M_SSEC_AXISPRM_BKPOS2	T_FLOATBIN/T_LONG	i¼\$1 compensation amount switch end point position 2	O	O	RW	-999999.999 to 999999.999
M_SSEC_AXISPRM_BKARCK	T_SHORT	Arc compensation coefficient	O	O	RW	0 to 300
M_SSEC_AXISPRM_BKFRE	T_CHAR	Reference position speed	O	O	RW	0 to 2
M_SSEC_AXISPRM_BKPRE	T_CHAR	Reference position end point position	O	O	RW	0 to 2
M_SSEC_AXISPRM_BKDRE	T_CHAR	Reference position entry direction	O	O	RW	0 to 1
M_SSEC_AXISPRM_BKPOSC	T_FLOATBIN/T_LONG	Continuous position centre point	O	O	RW	-999999.999 to 999999.999
M_SSEC_AXISPRM_OMRFF_OFF	T_CHAR	omrff_off (OMR-FF disabled)	O	O	RW	0, 1
M_SSEC_AXISPRM_SSCSVOFFLTR	T_SHORT	Speed monitor Error detection time during servo OFF	O	O	RW	0 to 9999
M_SSEC_AXISPRM_LCHT	T_USHORT	Chopping time constant (1st step of soft acc/dec)	O	O	RW	0 to 4000
M_SSEC_AXISPRM_CH1T	T_USHORT	Chopping time constant (2nd step of soft acc/dec)	O	O	RW	0 to 5000
M_SSEC_AXISPRM_POS_BLF_L1	T_FLOATBIN/T_DOUBLE	Reference distance for position-dependent increasing-type backlash compensation 1 (Blf_L1)	O	O	RW	0 to 999999.999999
M_SSEC_AXISPRM_POS_BLF_L2	T_FLOATBIN/T_DOUBLE	Reference distance for position-dependent increasing-type backlash compensation 2 (Blf_L2)	O	O	RW	0 to 999999.999999
M_SSEC_AXISPRM_POS_BLF_E1	T_LONG	Reference amount of position-dependent increasing-type backlash compensation 1 (Blf_E1)	O	O	RW	0 to 99999999
M_SSEC_AXISPRM_POS_BLF_E2	T_LONG	Reference amount of position-dependent increasing-type backlash compensation 2 (Blf_E2)	O	O	RW	0 to 99999999
M_SSEC_AXISPRM_ROT_LEN	T_FLOATBIN	3D machine collision check farthest distance from rotary axis center	O	O	RW	0.000 to 99999.999(mm)
M_SSEC_AXISPRM_RATEDSPD	T_DOUBLE	Rated speed	O	O	RW	0 to 1000000

M_SSEC_AXISPRM_ACCRATE	T_SHORT	Acceleration rate in proportion to the maximum acceleration rate	O	O	RW	0 to 100
M_SSEC_AXISPRM_G0TRATED	T_SHORT	G0 time constant up to rated speed (multi-step acceleration/deceleration)	O	O	RW	0 to 4000
M_SSEC_AXISPRM_HOBFFG	T_USHORT	Feed forward gain for hobbing machining	O	O	RW	0 to 200
M_SSEC_AXISPRM_MM_RTNDIR	T_UCHAR	Manual measure return direction	O	O	RW	0 to 2
M_SSEC_AXISPRM_LMC1QR	T_SHORT	Lost motion compensation gain 1 for high-speed retract	O	O	RW	-1, 0 to 200
M_SSEC_AXISPRM_LMC2QR	T_SHORT	Lost motion compensation gain 2 for high-speed retract	O	O	RW	-1, 0 to 200
M_SSEC_AXISPRM_LMCDQR	T_SHORT	Lost motion compensation timing for high-speed retract	O	O	RW	0 to 2000
M_SSEC_AXISPRM_LMCKQR	T_SHORT	Lost motion compensation 3 spring constant for high-speed retract	O	O	RW	0 to 32767
M_SSEC_AXISPRM_LMCCQR	T_SHORT	Lost motion compensation 3 viscous coefficient for high-speed retract	O	O	RW	0 to 32767
M_SSEC_AXISPRM_SPRADX_RADIUS	T_FLOATBIN/T_DOUBLE	Special diameter axis (X) radius	O	O	RW	0 to 99999.999
M_SSEC_AXISPRM_SPRADX_CLAMP	T_FLOATBIN/T_DOUBLE	Clamp speed in controlling special diameter axis	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_VBL2_VG1	T_DOUBLE	Variable backlash compensation II Compensation data switch speed 1	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_VBL2_VG0	T_DOUBLE	Variable backlash compensation II Compensation data switch speed 2	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_VBL2_P1	T_DOUBLE	Variable backlash compensation II Stroke point 1	O	O	RW	-99999.999 to 99999.999
M_SSEC_AXISPRM_VBL2_P2	T_DOUBLE	Variable backlash compensation II Stroke point 2	O	O	RW	-99999.999 to 99999.999
M_SSEC_AXISPRM_VBL2_P3	T_DOUBLE	Variable backlash compensation II Stroke point 3	O	O	RW	-99999.999 to 99999.999
M_SSEC_AXISPRM_VBL2_BL11	T_LONG	Variable backlash compensation II Stroke point 3	O	O	RW	-99999999 to 99999999

M_SSEC_AXISPRM_VBL2_BL12	T_LONG	Variable backlash compensation II Switch speed 1, compensation data at stroke point 2	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_BL13	T_LONG	Variable backlash compensation II Switch speed 1, compensation data at stroke point 3	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_BL01	T_LONG	Variable backlash compensation II Switch speed 2, compensation data at stroke point 1	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_BL02	T_LONG	Variable backlash compensation II Switch speed 2, compensation data at stroke point 2	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_BL03	T_LONG	Variable backlash compensation II Switch speed 2, compensation data at stroke point 3	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_FLOAT_TC	T_SHORT	Variable backlash compensation II Time constant in calculating floating amount	O	O	RW	0 to 10000
M_SSEC_AXISPRM_VBL2_LM_MUL	T_SHORT	Variable backlash compensation II Multiplier in calculating lost motion amount	O	O	RW	0 to 10000
M_SSEC_AXISPRM_VBL2_VBOUND	T_DOUBLE	Variable backlash compensation II Speed boundary value	O	O	RW	1 to 1000000
M_SSEC_AXISPRM_VBL2_COMP_MAG	T_SHORT	Variable backlash compensation II Compensation scale	O	O	RW	0 to 300
M_SSEC_AXISPRM_VBL2_COMP_MUL	T_SHORT	Variable backlash compensation II Multiplier in calculating compensation amount	O	O	RW	0 to 10000
M_SSEC_AXISPRM_VBL2_BLE	T_LONG	Variable backlash compensation II Increasing amount	O	O	RW	-99999999 to 99999999
M_SSEC_AXISPRM_VBL2_BLL	T_DOUBLE	Variable backlash compensation II Increasing travel distance	O	O	RW	0 to 99999.999
M_SSEC_AXISPRM_AXISREMOVE	T_LONG	Axis removal	O	O	RW	0,1
M_SSEC_AXISPRM_INVALIDLIMIT	T_LONG	Soft limit disabled	O	O	RW	0,1
M_SSEC_AXISPRM_LMITCAN	T_CHAR	Soft limit temporary cancel	O	O	RW	0,1

M_SSEC_AXISPRM_SW_STLIM_MIN	T_FLOATBIN/T_LONG	Soft limit	O	O	RW	±99999.999
M_SSEC_AXISPRM_SW_STLIM_MAX	T_FLOATBIN/T_LONG	Soft limit+	O	O	RW	±99999.999
M_SSEC_AXISPRM_TCHPOS	T_FLOATBIN/T_LONG	Tool change	O	O	RW	±99999.999
M_SSEC_AXISPRM_NOG76G87	T_LONG	G76/G87 shift ignored	O	O	RW	0: Shift enabled 1: No shift
M_SSEC_AXISPRM_G76G87	T_LONG	G76/87 shift (-)	O	O	RW	0: Shift in (+) direction 1: Shift in (-) direction
M_SSEC_AXISPRM_G60	T_FLOATBIN/T_LONG	G60 shift amount	O	O	RW	±99999.999
M_SSEC_AXISPRM_INNERLIMIT	T_LONG	Soft limit inside	O	O	RW	0,1
M_SSEC_AXISPRM_MIRRORIMG	T_LONG	Mirror image	O	O	RW	0,1
M_SSEC_AXISPRM_ROT_TYPE	T_CHAR	Rotary axis type	O	O	RW	0 to 3
M_SSEC_AXISPRM_TLM_LENGTH	T_FLOATBIN/T_DOUBLE	TLM standard length	O	O	RW	±99999.999
M_SSEC_AXISPRM_G28TYPE	T_LONG	Type in G28 return	O	O	RW	0,1
M_SSEC_AXISPRM_CHECK_ST	T_FLOATBIN/T_DOUBLE	Check start point	O	O	RW	±99999.999
M_SSEC_AXISPRM_NAME_CHAR	T_CHAR	Axis name char	O	O	RW	0x20 to 0x7A
M_SSEC_AXISPRM_TLML	T_FLOATBIN/T_LONG	Tool length measurement reference length (tlml)	O	O	RW	±99999.999
M_SSEC_AXISPRM_TLMH	T_FLOATBIN/T_LONG	Tool length measurement reference surface height (tlmh)	O	O	RW	±99999.999
M_SSEC_AXISPRM_BIT_AXBITP	T_SHORT	Bit parameters of user parameters (axbitp)	O	O	RW	0x0000 to 0xFFFF
M_SSEC_AXISPRM_BIT_AXCONT	T_SHORT	Bit parameters of machine parameters (axcont)	O	O	RW	0x0000 to 0xFFFF
M_SSEC_AXISPRM_G0TRAPID	T_SHORT	G0 time constant up to rated speed (Multi-step acc/dec)	O	O	R	--
M_SSEC_AXISPRM_SMGST1	T_CHAR	Operation parameter group 1 Acceleration/Deceleration type	O	O	RW	1,F
M_SSEC_AXISPRM_SMGST2	T_CHAR	Operation parameter group 2 Acceleration/Deceleration type	O	O	RW	1,F
M_SSEC_AXISPRM_SMGST3	T_CHAR	Operation parameter group 3 Acceleration/Deceleration type	O	O	RW	1,F
M_SSEC_AXISPRM_SMGST4	T_CHAR	Operation parameter group 4 Acceleration/Deceleration type	O	O	RW	1,F