

Spindle specification parameter

Command	Data type	Description	PS	AX	RW	Range
M_SSEC_MPSSPC_SALIM1	T_LONG	The number of limit rotation gears 00	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SALIM2	T_LONG	The number of limit rotation gears 01	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SALIM3	T_LONG	The number of limit rotation gears 10	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SALIM4	T_LONG	The number of limit rotation gears 11	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SAMAX1	T_LONG	The number of maximum rotation gears 00	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SAMAX2	T_LONG	The number of maximum rotation gears 01	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SAMAX3	T_LONG	The number of maximum rotation gears 10	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SAMAX4	T_LONG	The number of maximum rotation gears 11	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SASIFT1	T_SHORT	The number of shift rotation gears 00	--	O	RW	0 to 32767
M_SSEC_MPSSPC_SASIFT2	T_SHORT	The number of shift rotation gears 01	--	O	RW	0 to 32767
M_SSEC_MPSSPC_SASIFT3	T_SHORT	The number of shift rotation gears 10	--	O	RW	0 to 32767
M_SSEC_MPSSPC_SASIFT4	T_SHORT	The number of shift rotation gears 11	--	O	RW	0 to 32767
M_SSEC_MPSSPC_SATAP1	T_LONG	The number of tapping rotation gears 00	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP2	T_LONG	The number of tapping rotation gears 01	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP3	T_LONG	The number of tapping rotation gears 10	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP4	T_LONG	The number of tapping rotation gears 11	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATPST1	T_SHORT	Tapping time constant gear 00	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST2	T_SHORT	Tapping time constant gear 01	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST3	T_SHORT	Tapping time constant gear 10	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST4	T_SHORT	Tapping time constant gear 11	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SAORI	T_SHORT	The number of orientation rotation	--	O	RW	0 to 32767
M_SSEC_MPSSPC_ENCRATE	T_CHAR	Encoder gear ratio	--	O	RW	0 to 3

M_SSEC_MPSSPC_SMIN	T_SHORT	Smin (Minimum rotation speed possible to set)	--	O	RW	0 to 32767
M_SSEC_MPSSPC_SLIMIT		Slimit (Maximum rotation speed possible to set)				
M_SSEC_MPSSPC_SDAOUT	T_CHAR	Spindle connection	--	O	RW	0 to 5
M_SSEC_MPSSPC_ENCON	T_CHAR	Spindle encoder	--	O	RW	0 to 2
M_SSEC_MPSSPC_CSORI	T_CHAR	Coil selection specification in orientation	--	O	RW	0,1
M_SSEC_MPSSPC_CSSYN	T_CHAR	Coil selection specification in spindle synchronization (polygon)	--	O	RW	0,1
M_SSEC_MPSSPC_SPRCMM	T_LONG	Spindle forward/reverse rotation M command	--	O	RW	0 to 999999
M_SSEC_MPSSPC_TAPSEL	T_CHAR	Asynchronous tapping gear selection	--	O	RW	0,1
M_SSEC_MPSSPC_SMCP_NO	T_SHORT	Drive unit interface channel No.	--	O	RW	0x0, 0x101 to 0x107, 0x201 to 0x207
M_SSEC_MPSSPC_OUTUNIT	T_STR	Output unit (Spindle)	--	O	RW	A,B,C,D,E
M_SSEC_MPSSPC_TAPERR	T_SHORT	Synchronous tapping allowable error	--	O	RW	0 to 1000
M_SSEC_MPSSPC_SATAP2_1	T_LONG	Synchronous tapping switch spindle rotation speed 2 Gear 00	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP2_2	T_LONG	Synchronous tapping switch spindle rotation speed 2 Gear 01	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP2_3	T_LONG	Synchronous tapping switch spindle rotation speed 2 Gear 10	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATAP2_4	T_LONG	Synchronous tapping switch spindle rotation speed 2 Gear 11	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SATPST2_1	T_SHORT	Synchronous tapping switch time constant 2 gear 00	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST2_2	T_SHORT	Synchronous tapping switch time constant 2 gear 01	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST2_3	T_SHORT	Synchronous tapping switch time constant 2 gear 10	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST2_4	T_SHORT	Synchronous tapping switch time constant 2 gear 11	--	O	RW	1 to 5000

M_SSEC_MPSSPC_SATPST3_1	T_SHORT	Synchronous tapping switch time constant 3 gear 00	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST3_2	T_SHORT	Synchronous tapping switch time constant 3 gear 01	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST3_3	T_SHORT	Synchronous tapping switch time constant 3 gear 10	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SATPST3_4	T_SHORT	Synchronous tapping switch time constant 3 gear 11	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SPT	T_SHORT	Spindle synchronous acceleration/deceleration time constant	--	O	RW	0 to 9999
M_SSEC_MPSSPC_DPRLV	T_SHORT	Spindle synchronous rotation speed reach level	--	O	RW	0 to 4095
M_SSEC_MPSSPC_SPPLV	T_SHORT	Spindle synchronous phase reach level	--	O	RW	0 to 4095
M_SSEC_MPSSPC_SPPLR	T_CHAR	Spindle control flag 1 BIT0: spindle motor / spindle, relative polarity	--	O	RW	0,1
M_SSEC_MPSSPC_SPPST	T_LONG	Spindle synchronous phase shift	--	O	RW	0 to 359999
M_SSEC_MPSSPC_SPTC1	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed1	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPTC2	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed2	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPTC3	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed3	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPTC4	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed4	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPTC5	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed5	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPTC6	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed6	--	O	RW	0 to 99999

M_SSEC_MPSSPC_SPTC7	T_LONG	Spindle Synchronous multi-step acceleration/deceleration time constant switch speed7	--	O	RW	0 to 99999
M_SSEC_MPSSPC_SPDIV1	T_CHAR	Scale at time constant switch speed 1 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV2	T_CHAR	Scale at time constant switch speed 2 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV3	T_CHAR	Scale at time constant switch speed 3 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV4	T_CHAR	Scale at time constant switch speed 4 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV5	T_CHAR	Scale at time constant switch speed 5 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV6	T_CHAR	Scale at time constant switch speed 6 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SPDIV7	T_CHAR	Scale at time constant switch speed 7 (1/n)	--	O	RW	0 to 127
M_SSEC_MPSSPC_SYMTM1	T_SHORT	Spindle synchronization stationary time 1 before phase alignment	--	O	RW	0 to 9999
M_SSEC_MPSSPC_SYMTM2	T_SHORT	Spindle synchronization stationary time 2 after phase alignment	--	O	RW	0 to 9999
M_SSEC_MPSSPC_SYPRT	T_CHAR	Spindle synchronization phase alignment deceleration rate	--	O	RW	0 to 100
M_SSEC_MPSSPC_SSCDRSELSP	T_SHORT	Speed monitor Door selection	-	O	RW	0000 to 0003
M_SSEC_MPSSPC_SSCSVOFFLTRSP	T_SHORT	Speed monitor Error detection time during servo OFF	-	O	RW	0 to 9999
M_SSEC_MPSSPC_SPTS1	T_SHORT	Time constant for spindle rotation with S command (Gear: 00)	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SPTS2	T_SHORT	Time constant for spindle rotation with S command (Gear: 01)	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SPTS3	T_SHORT	Time constant for spindle rotation with S command (Gear: 10)	--	O	RW	1 to 5000
M_SSEC_MPSSPC_SPTS4	T_SHORT	Time constant for spindle rotation with S command (Gear: 11)	--	O	RW	1 to 5000

M_SSEC_MPSSPC_SUT	T_CHAR	Speed reach range	--	O	RW	0 to 100
M_SSEC_MPSSPC_ORITYP	T_SHORT	Orientation specification	--	O	RW	0x0000 to 0xffff
M_SSEC_MPSSPC_ORISPD	T_LONG	Orientation speed	--	O	RW	1 to 99999
M_SSEC_MPSSPC_ORISFT	T_LONG	Orientation in-position shift amount	--	O	RW	-35999 to 35999
M_SSEC_MPSSPC_ZDETSPD	T_LONG	Initial Z phase detection speed	--	O	RW	1 to 99999
M_SSEC_MPSSPC_TAPSPD	T_LONG	Synchronous tapping reference position return speed	--	O	RW	1 to 99999
M_SSEC_MPSSPC_TAPSFT	T_USHORT	Synchronous tapping reference position return shift amount	--	O	RW	0 to 35999
M_SSEC_MPSSPC_CAXSPD	T_LONG	i%E axis reference position return speed	--	O	RW	1 to 99999
M_SSEC_MPSSPC_CAXSFT	T_LONG	C axis reference position return shift amount	--	O	RW	0 to 359999
M_SSEC_MPSSPC_CAXPARACHG	T_UCHAR	Spindle/C axis parameter switch	--	O	RW	0 to 1
M_SSEC_MPSSPC_SP2TS1	T_USHORT	Time constant in orientation/position loop reference position return (Gear: 00)	--	O	RW	1 to 20000
M_SSEC_MPSSPC_SP2TS2	T_USHORT	Time constant in orientation/position loop reference position return (Gear: 01)	--	O	RW	1 to 20000
M_SSEC_MPSSPC_SP2TS3	T_USHORT	Time constant in orientation/position loop reference position return (Gear: 10)	--	O	RW	1 to 20000
M_SSEC_MPSSPC_SP2TS4	T_USHORT	Time constant in orientation/position loop reference position return (Gear: 11)	--	O	RW	1 to 20000
M_SSEC_MPSSPC_STAPTR	T_USHORT	Time constant reduction rate in high-speed synchronous tapping	-	O	RW	0 to 100
M_SSEC_MPSSPC_TRET	T_UCHAR	Turret indexing	-	O	RW	0 to 1
M_SSEC_MPSSPC_GRC	T_USHORT	Turret side gear ratio	-	O	RW	0 to 32767
M_SSEC_MPSSPC_TRET_SPD	T_USHORT	Turret indexing speed	-	O	RW	0 to 32767
M_SSEC_MPSSPC_TRET_T	T_USHORT	Turret indexing time constant	-	O	RW	0 to 30000
M_SSEC_MPSSPC_TRET_INPOS	T_USHORT	Turret indexing in-position width	-	O	RW	0 to 32767

M_SSEC_MPSSPC_TRET_FIN_OFF	T_USHORT	Index positioning complete signal OFF timer	-	O	RW	0 to 10000
M_SSEC_MPSSPC_SPEC_SP	T_SHORT	Spindle specification	-	O	RW	0 to FFFF
M_SSEC_MPSSPC_ORI_SPEC	T_SHORT	Orientation specification	-	O	RW	0 to FFFF
M_SSEC_MPSSPC_CAX_SPEC	T_SHORT	Spindle/C axis specification	-	O	RW	0 to FFFF
M_SSEC_MPSSPC_SYN_SPEC	T_SHORT	Spindle synchronization specification	-	O	RW	0 to FFFF
M_SSEC_MPSSPC_TAP_SPEC	T_SHORT	Synchronous tapping specification	-	O	RW	0 to FFFF
M_SSEC_MPSSPC_ORI_INP2	T_USHORT	2nd in-position width for orientation	-	O	RW	0 to 32767
M_SSEC_MPSSPC_HOBERRPHS	T_USHORT	Hobbing axis delay (advance) allowable angle	-	O	RW	0 to 32767
M_SSEC_MPSSPC_HOBCMPT	T_USHORT	Primary delay time constant for hobbing axis automatic compensation	-	O	RW	0 to 32767
M_SSEC_MPSSPC_HOBFFG	T_USHORT	Feed forward gain for hobbing axis	-	O	RW	0 to 200
M_SSEC_MPSSPC_STAP_AX_OFF	T_USHORT	High-speed synchronous tapping disabled axis	--	O	RW	0x0000 to 0xFFFF