

# **SERVO-TOP**

**QE5542**

**CE**

## **Type**

# **L104SE**

## **Instruction Manual**

### **Part 3**

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## 11. Survey and List of Parameters

### 11.1 Explanation of Parameter Survey

The parameter survey is designed as an aid for finding parameters quickly. It is a summary of references for the parameter list. Listed behind each reference are all parameters which exert an influence on the function described by the reference.

The parameter survey is divided into five columns:

Column 1 shows the references (functions) to which parameters are assigned.

Column 2 shows the abbreviations of the respective functions.

Column 3 shows all parameters (setting numbers) belonging to the respective reference.

Column 4 shows, for each function (reference) which controls inputs or outputs, the applicable indications such as Ex or Ax which can also be found on the connections diagram.

Column 5 shows, for each function (control inputs (Ex) or control outputs (Ax)), the respective plugs with the number of contacts (see connections diagram).

Example for searching a parameter:

Keyword (function): inverse rotation

The parameter survey shows in column 3 the parameter numbers 618, 623, 801.

Suppose that the inverse rotation function is to be enabled. The parameter list shows this function under parameter number 618.

### 11.2 Explanation of Parameter List

The parameter list is divided into 5 columns. These comprise, in

column 1: the parameter number,

column 2: is the explanation (meaning) of the parameters and the coding system of row 1 of the keys of the mini operator's panel, used when the parameter concerned can be programmed with the mini operator's panel,

column 3: the programming level (A, B, C) on which the parameter in question can be accessed,

column 4: the range of values within which the parameter in question can be set,

column 5: the value of the parameter in question is set on delivery ex factory.

Parameters having "either/or" validity (software switches) can merely be set to value I or II. In the case of such parameters, column 4 is empty.

### 11.3 Parameter survey L104SE (2z\_954\_O.hex)

Function	Abbrev'n	Parameter	Input Output	Connection Socket/Contacts
Accelerate	DRZAN	722		
Affichage	ANZ	180/605		
Brake	DRZAB	723/851		
Burner	BREN	913/914/915 925		
Control	REG	884/885/886 887/889/890 891/894		
Defect search	HWT	797		
Delay	VERZ	190/191/380 581/730/911 913/914/915 919/925/931 932/941		
Direction of rotation	DRR	800		
Display	ANZ	180/605		
Hardware test	HWT	797		
Machine class	MAKL	790/799		
Needle position	NAPO	942/946		
Number of stitches	STZA	944/949		
ON period	EINZ	190/191/582 749/889/927 948		
Presser foot	PF	719/729/730		
Program	PR	851		
Programming level C	EBC	798		
Pulse seam end	IMPNE	929		
Residual brake	STBR	718		
Seam end	NE	143/929/949		
Soft start	SANL	116/117		
Speed	DRZ	117/143/605 607/850/928		
Speed decrease	DRZAB	723/851		
Speed increase	DRZAN	722		

Speed limitation	DB	928
Start delay	STVERZ	729
Stitchcounter	STZ	944/949
Thread clamp	FK	581/582/935 941/942/949
Thread monitor	FW	620/660/944 945/946
Thread puller	FZ	581/582
Thread tension release	FSL	749
Time needed to switch on	EINZ	190/191/582 749/889/927 948
Timing output	TA	719
Units	STUZ	180
Vacuum	SAUG	918/919/931 948

## 11.4 List of Parameters L104SE (2z\_954\_O.hex)

No.	Function (Meaning)	Level	Range Values	of Value	Standard
116	(SANL) Soft start stitches (00000111)	B,C	0 - 30	2	Kl. 1
117	(SANL/DRZ) Speed for soft start stitches	B,C		400	Kl. 1
143	(DRZ/NE) Speed for seam end	B,C		400	Kl. 1
180	(STUZ/ANZ) Units displayed I yes II no	B,C		I	Kl. 1
190	(VERZ/EINZ) Delay/on time t2	B,C	0 - 10	2	Kl. 1
191	(VERZ/EINZ) Delay/on time t3	B,C	0 - 25	5	Kl. 1
380	(VERZ) Wait time until deleting „bobbin thread error 8" is possible	B,C	0 - 255	60	Kl. 1
417	(SONST) Display mode I mode 1 II mode 2	B,C		II	Kl. 1
581	(FK/FZ/VERZ) Delay in start-up time (ms) for thread clamp or thread puller	B,C	0 - 2550	150	Kl. 1
582	(EINZ/FK/FZ) Duration (ms) of thread clamp or thread puller	B,C	0 - 2550	200	Kl. 1
605	(DRZ/ANZ) Actual speed in display I yes II no	A,B,C		II	Kl. 1
607	(DRZ) Speed: level 12 (max.)	C		1000	Kl. 1
620	(FW) Thread monitor function I yes II no	B,C		I	Kl. 1
660	(FW) Bobbin thread monitoring 0 without (= *II*) 1 via a sensor (= **I*) 2 by a stitch count	C		II	Kl. 1
718	(STBR) Timing of residual brake (0 = brake off)	C	0 - 100	3	Kl. 1
719	(PF/TA) Timing output A4 (0 = 100% switching on)	B,C	0 - 40	20	Kl. 1
722	(DRZAN) Acceleration ramp 1 gradual 50 steep	C		18	Kl. 1
723	(DRZAB) Brake ramp 1 gradual 50 steep	C		28	Kl. 1
729	(STVERZ/PF) Start delay after lowering presser foot	B,C	0 - 1000	50	Kl. 1
730	(PF/VERZ) Lift delay for presser foot after seam end	B,C	0 - 250	0	Kl. 1
749	(EINZ/FSL) Duration (ms) of thread tension release	B,C	0 - 2550	300	Kl. 1
790	(MAKL) Program selection for machine classes by operators box	C	1 - 2	1	Kl. 1
797	(HWT) Hardware test I yes II no	B,C		II	Kl. 1
798	(EBC) Programming level C I yes II no	B,C		II	Kl. 1
799	(MAKL) Machine class which has been selected (00011101)	C	1 - 1	1	Kl. 1

800	(DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation	C		I	Kl. 1
850	(DRZ) Maximum motor speed	C	200 - 3000	2800	Kl. 1
851	(PR/DRZAB) Brake ramp for stitch-count seams I steep II gradual	C		I	Kl. 1
884	(REG) Proportional amplification of the speed control (in general)	B,C	4 - 50	30	Kl. 1
885	(REG) Integral amplification of the speed control	C	0 - 150	100	Kl. 1
886	(REG) Proportional amplification of the order controllers	C	1 - 50	20	Kl. 1
887	(REG) Differential amplification of the order controllers	C	1 - 100	30	Kl. 1
889	(EINZ/REG) Time required for order controlling (0 = always)	C	0 - 1000	400	Kl. 1
890	(REG) Proportional amplification of the superior order controllers for the residual brake	C	1 - 50	25	Kl. 1
891	(REG) Proportional amplification of the lower speed controllers for the residual brake	C	1 - 50	20	Kl. 1
894	(REG) Rotational direction of motor and synchronizer I different II same	C		I	Kl. 1
911	(VERZ) Time until start-lever is off	C	0 - 239	120	Kl. 1
913	(VERZ/BREN) time until burner advances	B,C	0 - 2550	300	Kl. 1
914	(VERZ/BREN) enable time for burner advance	B,C	0 - 2550	250	Kl. 1
915	(VERZ/BREN) time between burner return and thread deflector return	B,C	0 - 2550	200	Kl. 1
918	(UINZ/SAUG) enable time for thread suction	B,C	0 - 2550	600	Kl. 1
919	(VERZ/SAUG) time lag for thread suction (A7) off	B,C	0 - 2550	500	Kl. 1
925	(VERZ/BREN) time lag for burner heating on	B,C	0 - 2550	200	Kl. 1
927	(EINZ) enable time for punch	B,C	0 - 2550	50	Kl. 1
928	(DRZ/DB) speed reduction at seam end I yes II no	B,C		I	Kl. 1
929	(NE/IMPNE) punch pulse at seam end I yes II no	B,C		II	Kl. 1
931	(VERZ/SAUG) time lag for thread suction (A2) off	B,C	0 - 2550	600	Kl. 1
932	(VERZ) time lag for thread deflector on	B,C	0 - 2550	50	Kl. 1
933	(SONST) Display change-over I diagnosis II normal display	C		II	Kl. 1
935	(FK) operation with bottom thread gripper I yes II no	B,C		I	Kl. 1
941	(VERZ/FK) time lag for bottom thread gripper	B,C	0 - 2550	100	Kl. 1
942	(FK/NAPO) disable position for bottom thread gripper	B,C	0 - 239	180	Kl. 1
943	(SONST) clothing unit - interrogate I yes II no	B,C		II	Kl. 1

944	(FW/STZ/STZA) stitches for monitoring bottom thread feeler	B,C	0 - 255	10	Kl. 1
945	(FW) detection range (increments) for bottom thread feeler	B,C	0 - 255	10	Kl. 1
946	(FW/NAPO) position for detecting bottom thread feeler	B,C	0 - 239	70	Kl. 1
948	(SAUG/EINZ) enable time for thread suction at start	B,C	0 - 2550	0	Kl. 1
949	(STZ/NE/FK/STZA) stitches to seam end for enabling gripper	B,C	0 - 10	2	Kl. 1