

MINI-SERVO

QE3760

CE

Type

P360MSE

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, 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.

Parameter numbers in acute brackets; e.g. <105>, mean the value (content) set for the parameter in question.

Example:

107 Speed for front backtack when <106> = I

I limited by <105>

II limited by <607>

Explanation:

Parameter 107 is valid only the the value (content) of parameter <106> = I.

If parameter 107 is set to I (<107> = I), then the speed for the front backtack is limited by parameter 105, e.g. <105> = 1500. If parameter 107 is set to II (<107> = II), then the speed for the front backtack is limited by the value of parameter 607, e.g. <607> = 4000.

11.3 Parameter survey P360MSE (2A_360_8.ENO)

Function	Abbrev'n	Parameter	Input Output	Connection Socket/Contacts
Accelerate	DRZAN	722		
Auxiliary drive	ZUSAN	805/808		
Backtack	RIE	102/103/107 108/109/110 523/584/834		
Backtack inversion	RIV	419/617		
Backtack suppression	RIUNT	419		
Blower	BLA	668		
Brake	DRZAB	723/758		
Catcher	FANG	707		
Control	REG	758/880/881 884/885/886 887/889/890 891/990		
Decorative backtack	ZRIE	505/506/507 508/522/523 530/775		
Defect search	HWT	797		
Delay	VERZ	623/642/643 730/731/732 733/739/740 791/864/958		
Direction of rotation	DRR	800/805/808		
End backtack	ER	108/109/110 149/604/731 732/740		
Feed reverse	TUM	643/721/733	E1	X1:3
Front backtack	AR	102/103/105 106/107/148 739/791		
Hardware test	HWT	797		
Inverse rotation	RDR	618/623/801		
Machine class	MAKL	799		
Needle position	NAPO	522/700/701 702/703/705 706/707/710 832/833		

Needle position change-over	NPW	616	E2	X1:8
Needle up without trimming	NHOS	616/710		
Photocell	LS	111/113/199 615		
Plus Line		493/844/845 846/847/849	PLUSL	298/299/492
Presser foot	PF	554/624/642 651/719/729 730	A4	X1:13
Program	PR	114/206/221 492/493/554		
Programming level C	EBC	798		
Repeat backtack	WRIE	731/740		
Residual brake	STBR	718		
Seam end	NE	114/206/602		
Single stitch	EST	617	E3 E13	X1:3 X2:8
Soft start	SANL	116/117		
Speed	DRZ	105/106/107 110/117/199 221/530/605 606/607/608 609/676/901		
Speed decrease	DRZAB	723/758		
Speed increase	DRZAN	722		
Speed limitation	DB	221/676		
Start	START	113/603		
Start delay	STVERZ	729		
Starting block	ANLSP	624/665		
Stepper motor	SMOT	805/808/832 833/834/855 856/858/861 862/863/864 870/871/873 879/956/957 958/976/977		
Stitch condensation	STVD	102/105/106 107/108/110 419/617/739		
Stitchlength	STL	834/835		

Stop	STOP	114/206/624 665	E6	X1:6
Stop time	STOPZ	775		
Stroke adjustment	HV	720		
Target stitch	PEIPO	653/789		
Thread monitor	FW	660/760		
Thread puller	FZ	761		
Thread tension release	FSL	707/761	A8	X1:4
Thread trimming	SN	601/604/609 705/706/732 901		
Thread wiper	WI	668/715		
Time needed to switch on	EINZ	715/889		
Timing output	TA	719/720/721		

11.4 List of Parameters P360MSE (2A_360_8.EN)

No.	Function (Meaning)	Level	Range Values	of Value	Standard
102	(AR/RIE/STVD) Front backtack stitches forward (00000001)	C	0 - 9	3	Kl. 1, 2
103	(AR/RIE) Front backtack stitches backward	C	0 - 9	3	Kl. 1, 2
105	(AR/DRZ/STVD) Speed for front backtack / stitch condensation (00000011)	B,C	100 - 800	800	Kl. 1, 2
106	(AR/DRZ/STVD) Speed for front backtack / stitch condensation I variable (treadle-controlled) II constant (corresponding to <105>)	C		II	Kl. 1, 2
107	(AR/RIE/DRZ/STVD) Speed for front backtack / stitch condensation when <106> = I I limited by <105> II limited by <607>	C		II	Kl. 1, 2
108	(ER/RIE/STVD) End backtack stitches backward	C	0 - 9	3	Kl. 1, 2
109	(ER/RIE) End backtack stitches forward (00000101)	C	0 - 9	3	Kl. 1, 2
110	(ER/RIE/DRZ/STVD) Speed for end backtack / stitch condensation	B,C	100 - 800	800	Kl. 1, 2
111	(LS) Light barrier compensation stitches 1 (stitches from light barrier clear to seam end)	A,B,C	1 - 255	6	Kl. 1, 2
113	(LS/START) Start with light barrier I when light barrier is dark only II also when light barrier is clear	B,C		I	Kl. 1, 2
114	(PR/STOP/NE) Stop before seam end after stitch count (last seam section) I yes II no	C		II	Kl. 1, 2
116	(SANL) Soft start stitches (00000111)	A,B,C	0 - 10	2	Kl. 1, 2
117	(SANL/DRZ) Speed for soft start stitches	B,C	30 - 550	400	Kl. 1, 2
148	(AR) Front backtack I double II single	A,B,C		I	Kl. 1, 2
149	(ER) End backtack I double II single	A,B,C		I	Kl. 1, 2
199	(DRZ/LS) Speed for light barrier compensation stitches	B,C	300 - 1000	800	Kl. 1, 2
206	(NE/PR/STOP) Interrupt/discontinue seam sections at speed = constant (<203> = II) I with treadle -2 II with treadle 0	C			II Kl. 1, 2
221	(PR/DB/DRZ) Speed limitation for sewing programs (or sewing program 1)	B,C	300 - 5000	4500	Kl. 1, 2
298	(PLUSL) Number of shortened stitches	A,B,C	1 - 3	1	Kl. 1, 2
299	(PLUSL) Ruled edge margin for manual sewing (0.1mm)	A,B,C		185	Kl. 1, 2
419	(RIV/RIUNT/STVD) Function of external key I backtack / stitch condensation inversion II backtack / stitch condensation suppression (flip-flop function)	C		I	Kl. 1, 2
492	(PR/PLUSL) Number of programs	B,C	1 - 99	15	Kl. 1, 2

493	(PR/PLUSL) Number of sewing routes per program	B,C	1 - 15	15	Kl. 1, 2
505	(ZRIE) Number of stitches for front decorative backtack forward (stitch in stitch, speed = <530>) (00001001)	C	0 - 9	3	Kl. 1, 2
506	(ZRIE) Number of stitches for front decorative backtack backward (stitch in stitch, speed = <530>)	C	0 - 9	3	Kl. 1, 2
507	(ZRIE) Number of stitches for end decorative backtack backward (stitch in stitch, speed = <530>) (00001011)	C	0 - 9	3	Kl. 1, 2
508	(ZRIE) Number of stitches for end decorative backtack forward (stitch in stitch, speed = <530>)	C	0 - 9	3	Kl. 1, 2
522	(NAPO/ZRIE) Needle position when stop occurs during decorative backtack (stitch in stitch) I position 2 (up) II position 1 (down) (00001101)	C		II	Kl. 1, 2
523	(RIE/ZRIE) Backtack I decorative backtack (stitch in stitch) II standard backtack	C		II	Kl. 1, 2
530	(DRZ/ZRIE) Speed (max.) for decorative backtack (00001111)	C	100 - 500	300	Kl. 1, 2
554	(PF/PR) Presser foot position after seam section stitch count and treadle position > +1 I up II down	C		I	Kl. 1, 2
584	(RIE) Backtack I four times II double	C		II	Kl. 1, 2
601	(SN) Trimming I yes II no	B,C		I	Kl. 1, 2
602	(NE) Seam end at treadle position I slightly heeled (-1) II fully heeled (-2)	C		II	Kl. 1, 2
603	(START) Start after seam end I after treadle 0 only II immediate start of operation	C		I	Kl. 1, 2
604	(SN/ER) Trimming after single end backtack I forward II backward	C		I	Kl. 1, 2
605	(DRZ) Actual speed in display I yes II no	B,C		II	Kl. 1, 2
606	(DRZ) Speed: level 1 (min.) (00010001)	B,C	30 - 550	180	Kl. 1, 2
607	(DRZ) Speed: level 12 (max.)	B,C	300 - 5000	4500	Kl. 1, 2
608	(DRZ) Speed level curve (treadle characteristic) I linear II not linear	C		I	Kl. 1, 2
609	(SN/DRZ) Trimming speed 1 (00010011)	B,C	60 - 300	180	Kl. 1, 2
615	(LS) End recognition when photocell goes I from light to dark II from dark to light	C		II	Kl. 1, 2

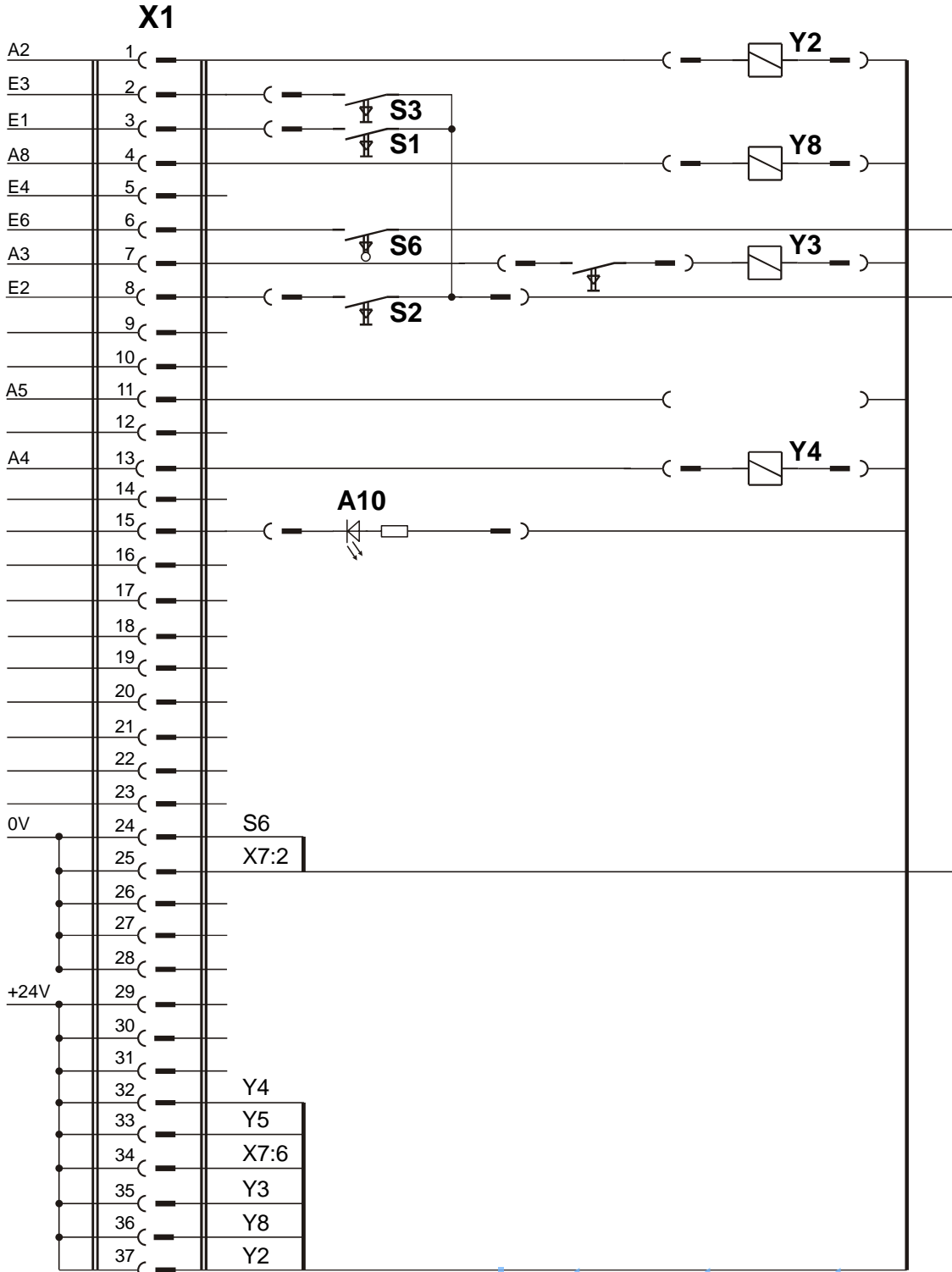
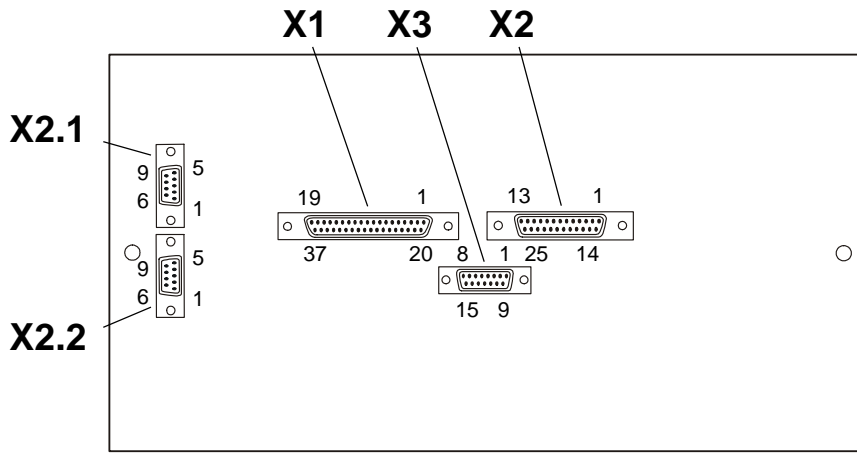
616	(NPW/NHOS) Function of external key (input E2) I needle position change-over (NPW) II needle up without trimming (NHOS)	C		II		Kl. 1, 2
617	(EST/RIV/STVD) Function of external key (input E3) I single stitch (EST) II backtack / stitch condensation inverted (RIV)	C		I		Kl. 1, 2
618	(RDR) Inverse rotation after seam end I yes II no	C		II		Kl. 1, 2
623	(RDR/VERZ) Delay in start-up time (ms) for inverse rotation	C	0 - 2550	30		Kl. 1, 2
624	(ANLSP/STOP/PF) Function of external key (input E4) I stop / safety switch no run II presser foot	C		II		Kl. 1, 2
642	(PF/VERZ) presser foot time from switch-on to voltage reduction (cycling)	C	10 - 200	100		Kl. 1, 2
643	(TUM/VERZ) feed reverse time from switch-on to voltage reduction (cycling)	C	10 - 200	100		Kl. 1, 2
651	(PF) Presser foot with automatic descent on machine stop I yes II no	C		I		Kl. 1, 2
653	(PEIPO) Target stitch before sewing I yes II no	B,C		II		Kl. 1, 2
660	(FW) Bobbin thread monitoring 0 without 1 via a sensor 2 by a stitch count (00011111)	A,B,C	0 - 2	0		Kl. 1, 2
665	(ANLSP/STOP) Run locking/stop I contact closed II contact open	C		II		Kl. 1, 2
668	(BLA/WI) Thread wiper/thread clearer I yes II no (00010101)	B,C		I		Kl. 1, 2
676	(DRZ/DB) Speed adjustment via potentiometer possible I yes II no	C		I		Kl. 1, 2
700	(NAPO) Needle position 0 (reference position of the needle)	B,C	0 - 127	0		Kl. 1, 2
701	(NAPO) Angular adjustment I with handwheel (teach-in) II by keys (+/-)	C		I		Kl. 1, 2
702	(NAPO) Needle position 1 (needle down) (00010111)	B,C	0 - 127	15		Kl. 1, 2
703	(NAPO) Needle position 2 (thread take-up lever up)	B,C	0 - 127	113		Kl. 1, 2
705	(NAPO/SN) Needle position 5 (end of trimming signal 1) (00011001)	B,C	0 - 127	98		Kl. 1, 2
706	(NAPO/SN) Needle position 6 (start trimming signal 2)	B,C	0 - 127	68		Kl. 1, 2
707	(NAPO/FSL/FANG) Needle position 9 (thread tension release or thread catcher start)	B,C	0 - 127	70		Kl. 1, 2
710	(NAPO/NHOS) Needle position 3 (needle up) (00011011)	B,C	0 - 127	106		Kl. 1, 2

715	(EINZ/WI) Duration (ms) of thread wiper	B,C	0 - 2550	120	Kl. 1, 2
718	(STBR) Timing of residual brake (0 = brake off)	B,C	0 - 100	0	Kl. 1, 2
719	(PF/TA) Timing output A4 (0 = 100% switching on)	B,C	0 - 100	40	Kl. 1, 2
720	(HV/TA) Timing output A6 (0 = 100% switching on)	B,C	0 - 40	10	Kl. 1 Kl. 2
721	(TUM/TA) Timing output A5 (0 = 100% switching on)	C	0 - 100	40	Kl. 1, 2
722	(DRZAN) Acceleration ramp 1 gradual 50 steep	C	1 - 50	50	Kl. 1, 2
723	(DRZAB) Brake ramp 1 gradual 50 steep	C	4 - 50	50	Kl. 1, 2
729	(STVERZ/PF) Start delay after lowering presser foot	B,C	0 - 2550	120	Kl. 1, 2
730	(PF/VERZ) Lift delay for presser foot after seam end	B,C	0 - 2550	50	Kl. 1, 2
731	(ER/WRIE/VERZ) Delay before stitch counting for end backtack (ERV)	C	0 - 2550	70	Kl. 1, 2
732	(SN/ER/VERZ) Delay (ms) for trimming after single end backtack	C	0 - 2550	30	Kl. 1, 2
733	(TUM/VERZ) time lag between feeder change enable and motor start	C	0 - 200	30	Kl. 1, 2
739	(AR/STVD/VERZ) Delay (ms) for speed after front backtack / stitch condensation	C	0 - 2550	200	Kl. 1, 2
740	(ER/WRIE/VERZ) Delay before stitch counting for end backtack backward	C	0 - 2550	60	Kl. 1, 2
758	(REG/DRZAB) Deceleration ramp I braking as per <723> II braking with maximal moment	C		I	Kl. 1, 2
760	(FW) Pre-adjustable number of stitches for bobbin thread monitor (max.)	A,B,C	0 - 25000	500	Kl. 1, 2
761	(FSL/FZ) Prolongation Thread tension release / Thread puller	B,C	0 - 2550	0	Kl. 1, 2
775	(ZRIE/STOPZ) Stop time (ms) with stitch in stitch backtack (decorative backtack)	C		0 - 2550	100 Kl. 1, 2
789	(PEIPO) Needle position 10 (target stitch)	B,C	0 - 127	120	Kl. 1, 2
791	(AR/VERZ) Delay before stitch counting (ms) for front backtack	C	0 - 2550	30	Kl. 1, 2
797	(HWT) Hardware test I yes II no	B,C		II	Kl. 1, 2
798	(EBC) Programming level C I yes II no	B,C		II	Kl. 1, 2
799	(MAKL) Machine class which has been selected	C	1 - 2	1 2	Kl. 1 Kl. 2
800	(DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation	C		I	Kl. 1, 2
801	(RDR) Reverse rotation angle after seam end	C	5 - 106	16	Kl. 1, 2
805	(DRR/ZUSAN/SMOT) Rotational direction of auxiliary drive I lefthand rotation II righthand rotation	C		II	Kl. 1, 2
808	(DRR/ZUSAN/SMOT) Rotating direction of auxiliary drive 2 I lefthand rotation II righthand rotation	C		I	Kl. 1, 2

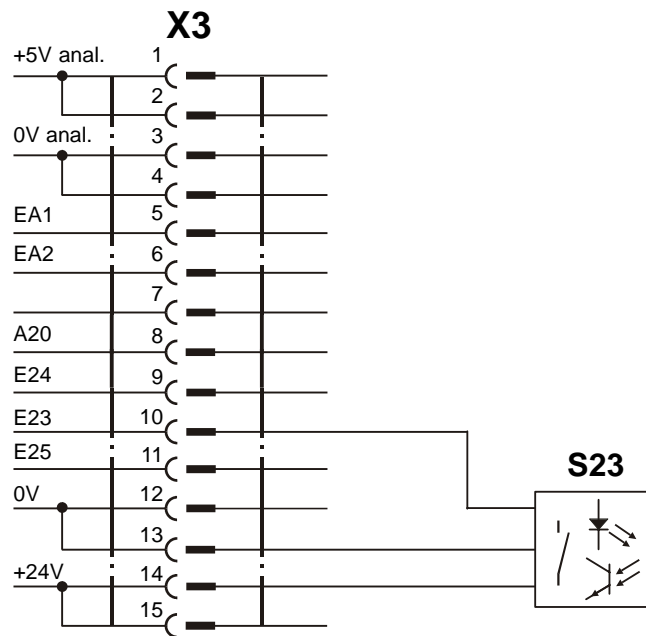
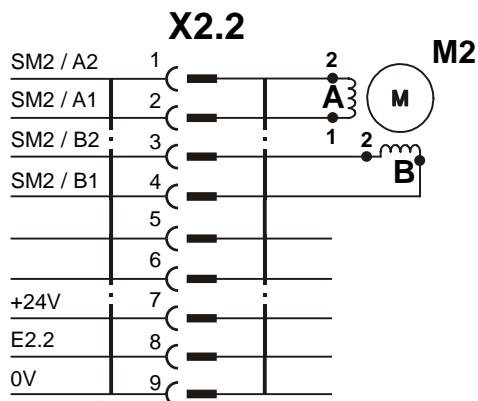
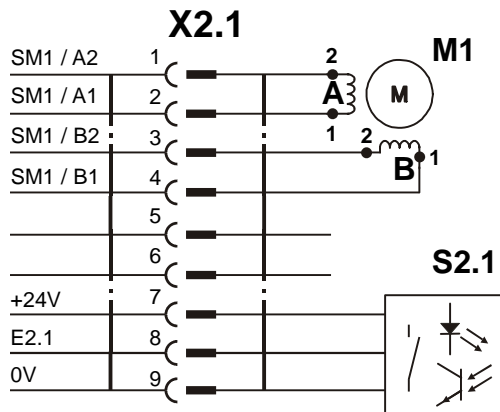
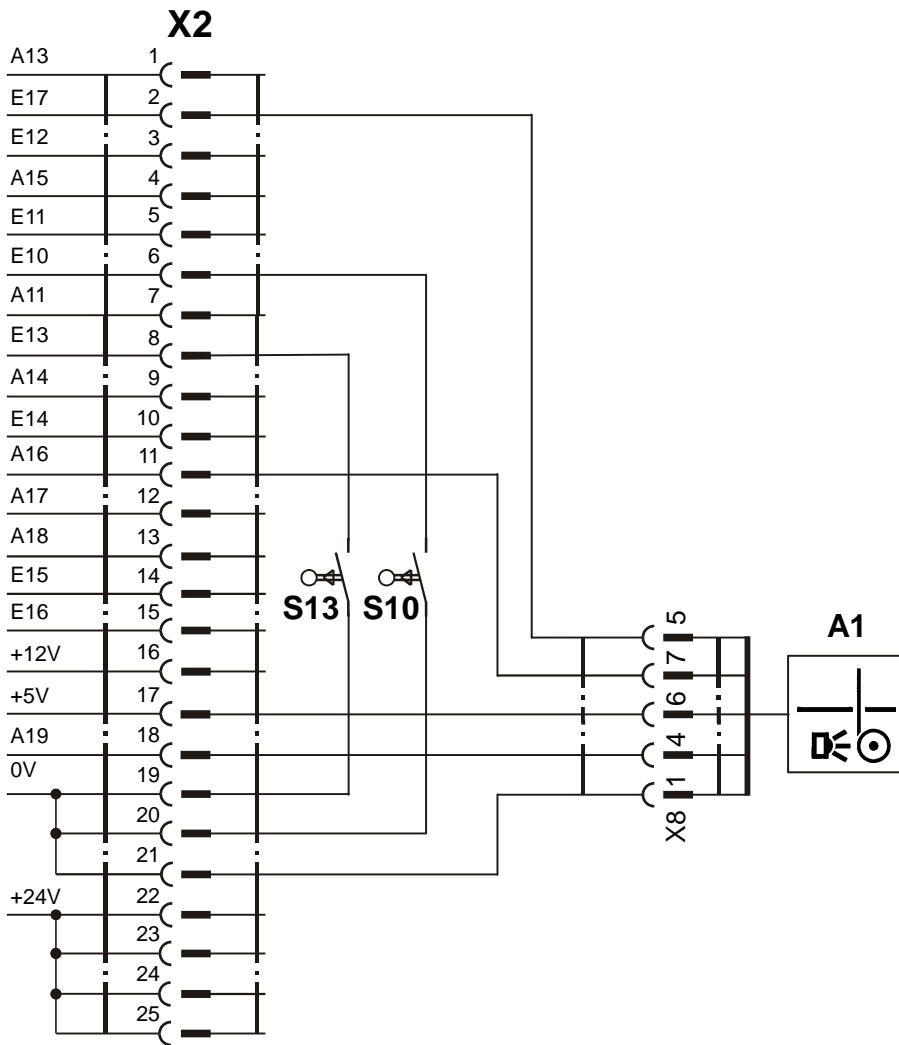
832	(SMOT/NAPO) needle position (angle) for feed start	B,C	0 - 127	10	Kl. 1 80 Kl. 2
833	(SMOT/NAPO) needle position (angle) for feeder end	B,C	0 - 127	67 127	Kl. 1 Kl. 2
834	(SMOT/STL/RIE) stitch length compensating steps	B,C	0 - 255	0	Kl. 1, 2
835	(STL) shortened stitch	A,B,C	0 - 100	50	Kl. 1, 2
844	(PLUSL) Spacing sensor to needle	A,B,C		10000	Kl. 1, 2
845	(PLUSL) Speed-dependent stitch length adaptation (% per 1000 rev/min)	B,C	0 - 10	5	Kl. 1, 2
846	(PLUSL) Adaptation of stitch plate characteristic for positive stitch lengths (%)	B,C		100	Kl. 1, 2
847	(PLUSL) Adaptation of stitch plate characteristic for negative stitch lengths (%)	B,C		100	Kl. 1, 2
849	(PLUSL) Limitation of stitch length (0.1mm steps)	A,B,C	0 - 60	35	Kl. 1, 2
855	(SMOT) maximum speed of stepping motor 2	C		100 - 9900	8000 Kl. 1, 2
856	(SMOT) Start-/stopping speed of stepping motor 2	C	100 - 9900	700	Kl. 1, 2
858	(SMOT) acceleration of stepping motor 2	C	0 - 100	5	Kl. 1, 2
861	(SMOT) braking increments of stepping motor 2	C	0 - 100	4	Kl. 1, 2
862	(SMOT) maximum current of stepping motor 2 (255 = 3.6 A)	C	0 - 100	48	Kl. 1, 2
863	(SMOT) stationary current of stepping motor 2 (255 = 3.6 A)	C	0 - 50	16	Kl. 1, 2
864	(SMOT/VERZ) delay time from stop until switch-on of stationary current of stepping motor 2 (ms)	C	0 - 1000	100	Kl. 1, 2
870	(SMOT) maximum speed of stepping motor 1	C	100 - 9900	5000	Kl. 1, 2
871	(SMOT) Start-/stopping speed of stepping motor 1	C	100 - 9900	500	Kl. 1, 2
873	(SMOT) acceleration of stepping motor 1	C	0 - 100	25	Kl. 1, 2
879	(SMOT) braking increments of stepping motor 1	C	0 - 100	5	Kl. 1, 2
880	(REG) Starting current max. [A]	C	1 - 10	5	Kl. 1, 2
881	(REG) adaption of positioning characteristics of motor to machine to avoid vibration	C	1 - 12	6	Kl. 1, 2
884	(REG) Proportional amplification of the speed control (in general)	C	1 - 255	15	Kl. 1, 2
885	(REG) Integral amplification of the speed control	C	0 - 255	35	Kl. 1, 2
886	(REG) Proportional amplification of the order controllers	C	1 - 255	30	Kl. 1, 2
887	(REG) Differential amplification of the order controllers	C	1 - 255	30	Kl. 1, 2
889	(EINZ/REG) Time required for order controlling (0 = always)	C	0 - 2550	200	Kl. 1, 2
890	(REG) Proportional amplification of the superior order controllers for the residual brake	C	1 - 255	25	Kl. 1, 2
891	(REG) Proportional amplification of the lower speed controllers for the residual brake	C	1 - 255	20	Kl. 1, 2
901	(DRZ/SN) Trimming release speed	C	30 - 500	300	Kl. 1, 2
956	(SMOT) maximum current of stepping motor 1 (255 = 3.6 A)	C	0 - 255	220	Kl. 1, 2
957	(SMOT) stationary current of stepping motor 1 (255 = 3.6 A)	C	0 - 255	100	Kl. 1, 2

958	(SMOT/VERZ) delay time from stop until switch-on of stationary current of stepping motor 1 (ms)	C	0 - 1000	200	Kl. 1, 2
976	(SMOT) stepping motor 1 - mode 1 full step 2 half step 3 quarter step 4 eighth step	C	1 - 2	2	Kl. 1, 2
977	(SMOT) stepping motor 2 - mode 1 full step 2 half step 3 quarter step 4 eighth step	C	1 - 2	2	Kl. 1, 2
990	(REG) Distance to position at switch over from speed control to position control	C	1 - 127	32	Kl. 1, 2

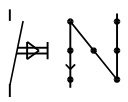
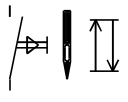

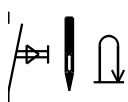
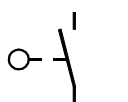
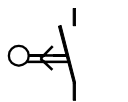
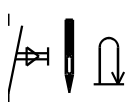
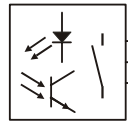

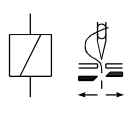
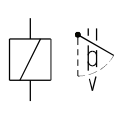
12. Electrical Connections Diagram P360MSE



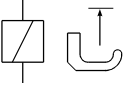
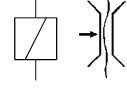


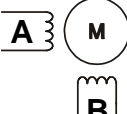
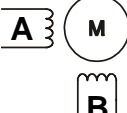
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Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
 Signification des aimants resp. solenoides et touches / Significação dos imãs e/ou as solenoidas e teclas
 Significato dei magneti, delle valvole magnetiche e dei tasti / Significación de los imanes y/o los solenoides
 y pulsadores / Betekenis van de magneten resp. magneetkleppen, toetsen

S1 	Transportumstellung / feed reverse / renversement de marche / mudança do transporte / commutazione trasporto / inversión de transporte / transportomschakeling
S2  <616> = I	Nadelpositionswechsel / needle position change-over / changement de position d'aiguille / troça de posição da agulha / cambio di posizione dell'ago / cambio de posición de aguja / naaldpositie-verwisseling
S2  <616> = II	Nadel hoch ohne Schneiden / needle up without thread trimming / aiguille en haut sans coupe / agulha para cima sem corte de linhas / ago su senza taglio / aguja arriba sin corte / naald omhoog zonder snijden
S3 	Einzelstich / single stitch / point unique / ponto individual / punto singolo / puntada individual / enkele steek
S6 	Anlaufsperr / Safety switch no run / Verrouillage de remise en marche / Bloqueio de arranque / Blocco avviamento / Bloqueo de repuesta en marcha / Startblokkering
S10 	Kantenlineal / edge ruler
S13 	Einzelstich / single stitch / point unique / ponto individual / punto singolo / puntada individual / enkele steek
S23 	Lichtschranke / light barrier / barrière lumineuse / barreira luminosa / cellula fotoeletttrica / fotocélula / foto-elektrische beveiliging
S2.1 	Lichtschranke / light barrier / barrière lumineuse / barreira luminosa / cellula fotoeletttrica / fotocélula / foto-elektrische beveiliging
Y2 I max 8 A * 	Fadenschneider / thread trimmer / coupe-fil / corte de linhas / rasafilo / cortahilos / draadsnijder
Y3 I max 8 A * 	Fadenwischer / thread wiper / écarteur de fil / retira-linhas / scartafilo / retirahilos / draadwisser

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Y4 I max 8 A * 	Presserfuß heben / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen
Y8 I max 8 A * 	Fadenspannungslösen / thread tension release / détenteur de fil / soltar tensão da linha / sbloccaggio tendifilo / detensión del hilo / verbreken van de draadspanning
A10 	Signal Unterfadenwächter / signal bobbin thread sensor
A1  A7, A16, E13	Fadenwächter / thread monitor / garde-fil / guarda da linha / controllafilo / guardahilos / draadcontrole A7: Reset A16: Zählsignal / count signal / signal de comptage / sinal de contagem / segnale conteggio / señal del contador / telsignaal E13: Spulfaden / bobbin thread / fill de bobine / fio da canilha / filo bobina / hilo de canilla / spoeldraad
M1 	Schrittmotor für Stichsteller / stepping motor for feed reverse
M2 	Schrittmotor für Kantenlineal / stepping motor for edge ruler

- * Die Summe der Lastströme aller gleichzeitig eingeschalteten Stellglieder (Magnete, Magnetventile) darf den Wert von 4A nicht überschreiten (siehe hierzu Kapitel 2. Technische Daten).
- * The total of load currents of all servos activated simultaneously (solenoids, solenoid valves) is not allowed to exceed 4 amps (see also section 2. Technical Specifications).
- * Le total des courants de charge de tous les vérins (aimants, électro-vannes) activés simultanément ne doit pas dépasser 4 A (voir aussi le chapitre 2. "caractéristiques techniques").
- * A soma das correntes sob carga de todos os actuadores ligados ao mesmo tempo (ímans, solenóides) não pode ultrapassar o valor de 4A (ver também capítulo 2. Dados Técnicos).
- * La somma delle correnti di carico di tutti gli attuatori inseriti contemporaneamente (magneti, elettrovalvole) non deve essere superiore a 4 A (vedere il capitolo 2. Dati Tecnici).
- * La suma de las corrientes bajo carga de todos los elementos de todos los componentes de regulación conectados simultáneamente (imanes, válvula magnética) no podrá sobrepasar el valor de 4A (véase también el capítulo 2. de datos técnicos).
- * De belastingsstroom van alle tegelijkertijd ingeschakelde bedieningsschakels (magneten, magneetventielen) mag in totaal niet meer dan 4 A bedragen (zie hiervoor hoofdstuk 2. Technische gegevens).

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