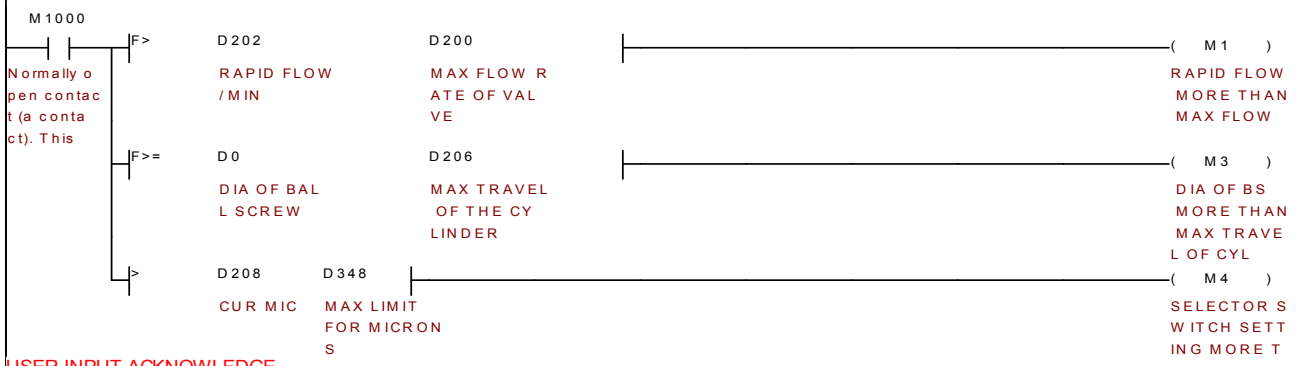
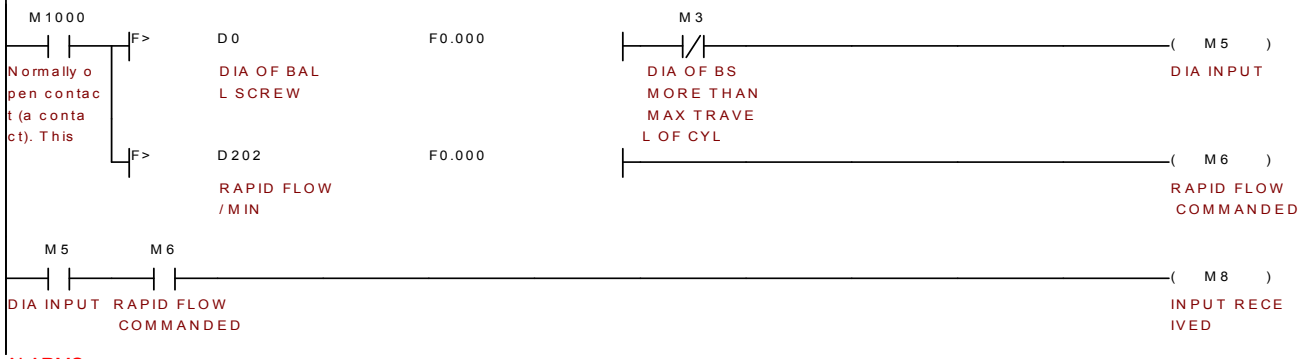
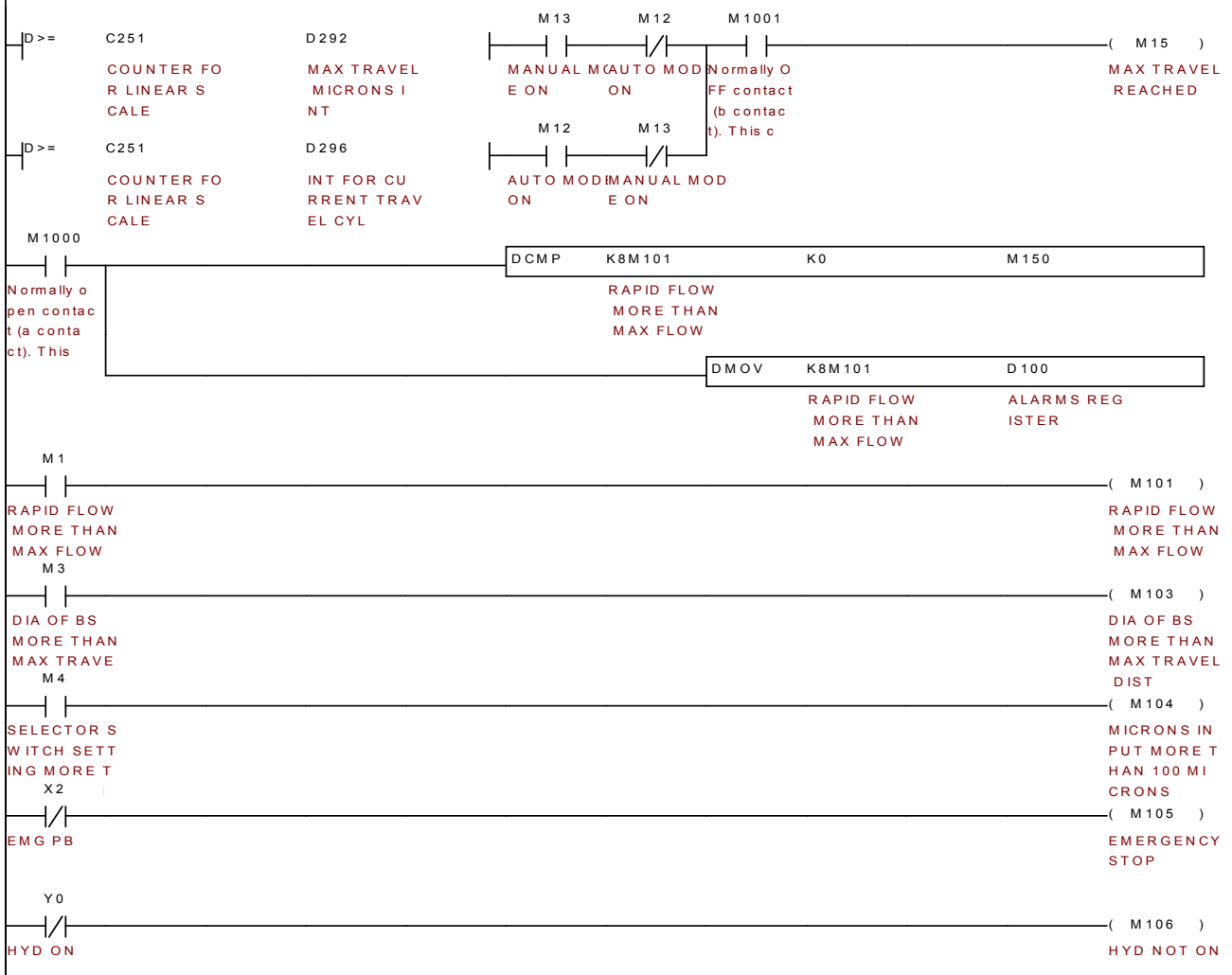
USER INPUT ERROR CHECK



USER INPUT ACKNOWLEDGE



ALARMS



115
M15
MAX TRAVEL REACHED
(M107)
MAX TRAVEL REACHED

117
F= D0 F0.000
DIA OF BAL L SCREW
M12
AUTO MODE ON
(M108)
INPUT BS D IA

128
M23
EMG PRESSE D WHILE IN CYC
(M109)
HOMING REQ UIRED

130
M101
RAPID FLOW MORE THAN MAX FLOW
(M11)
ALARM PRES ENT

M103
DIA OF BS MORE THAN MAX TRAVEL

M104
MICRONS IN PUT MORE T HAN 100 MI

M105
EMERGENCY STOP

M106
HYD NOT ON

M107
MAX TRAVEL REACHED

M108
INPUT BS D IA

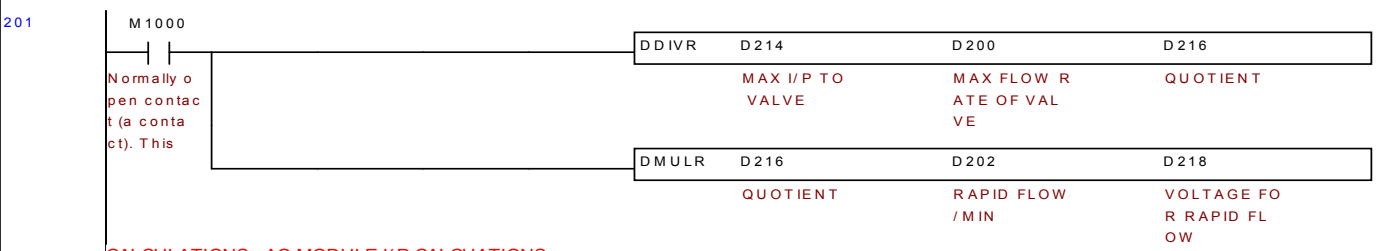
M109
HOMING REQ UIRED

CALCULATIONS - TRAVEL DISTANCE

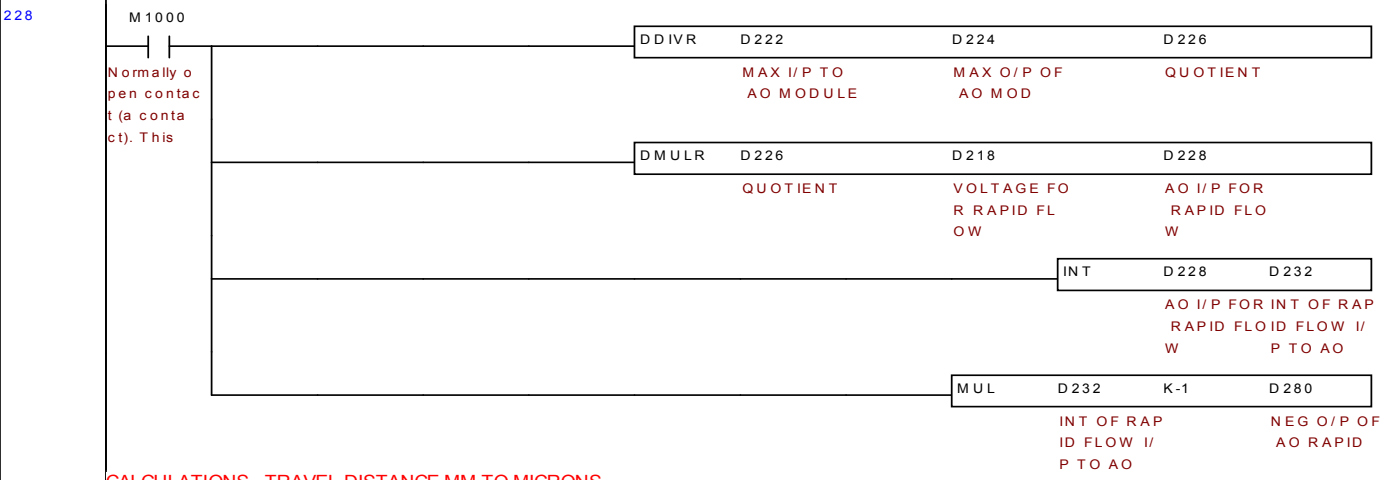
139
M1000
Normally o pen contac t (a conta ct). This

DSUBR	D206	D0	D210
	MAX TRAVEL OF THE CY LINDER	DIA OF BAL L SCREW	MAX TRAVEL - BS DIA
DADDR	D210	D286	D212
	MAX TRAVEL - BS DIA	USER INPUT MICRONS T O MM	TRAVEL DIS TANCE FOR CURR CYCLE
DADDR	D335	D212	D212
		TRAVEL DIS TANCE FOR CURR CYCLE	TRAVEL DIS TANCE FOR CURR CYCLE
DMULR	D212	F1000.000	D294
	TRAVEL DIS TANCE FOR CURR CYCLE		FLT FOR CU RRENT TRAV EL CYL
DINT	D294	D296	
	FLT FOR CU RRENT TRAV EL CYL	INT FOR CU RRENT TRAV EL CYL	

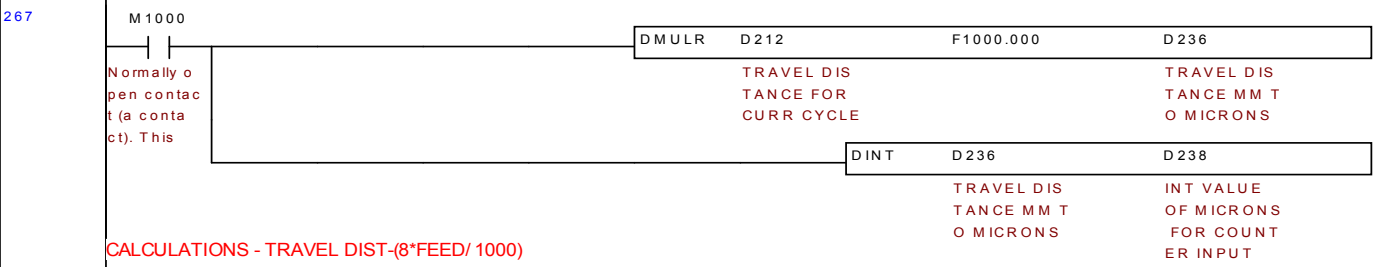
CALCULATIONS - VOLTAGE



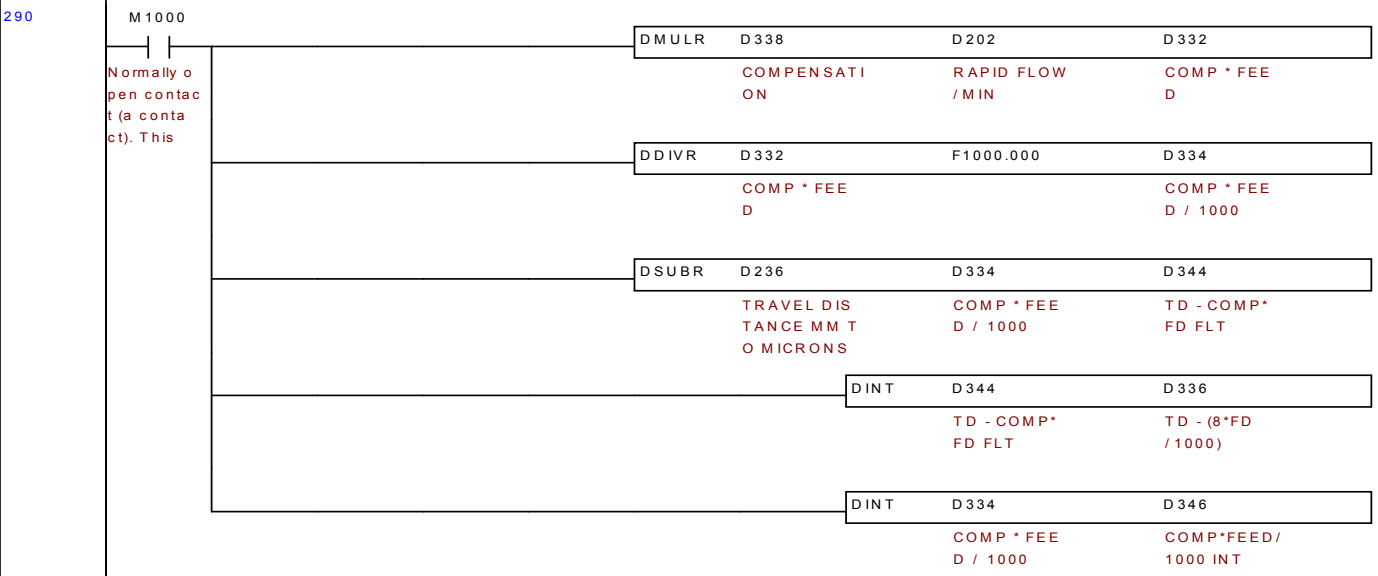
CALCULATIONS - AO MODULE I/P CALCUATIONS



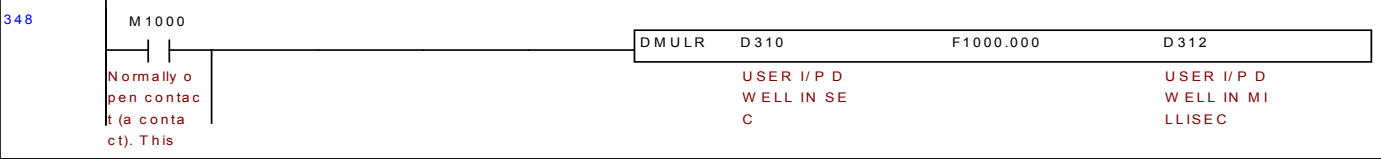
CALCULATIONS - TRAVEL DISTANCE MM TO MICRONS



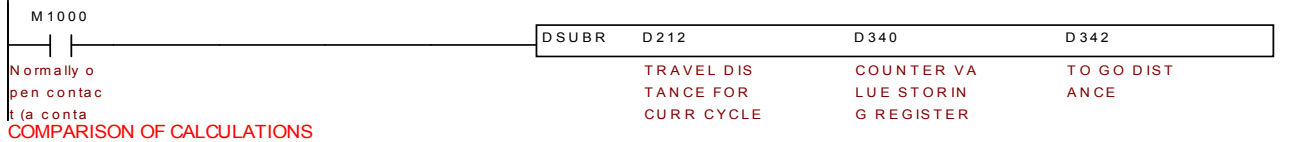
CALCULATIONS - TRAVEL DIST-(8*FEED/ 1000)



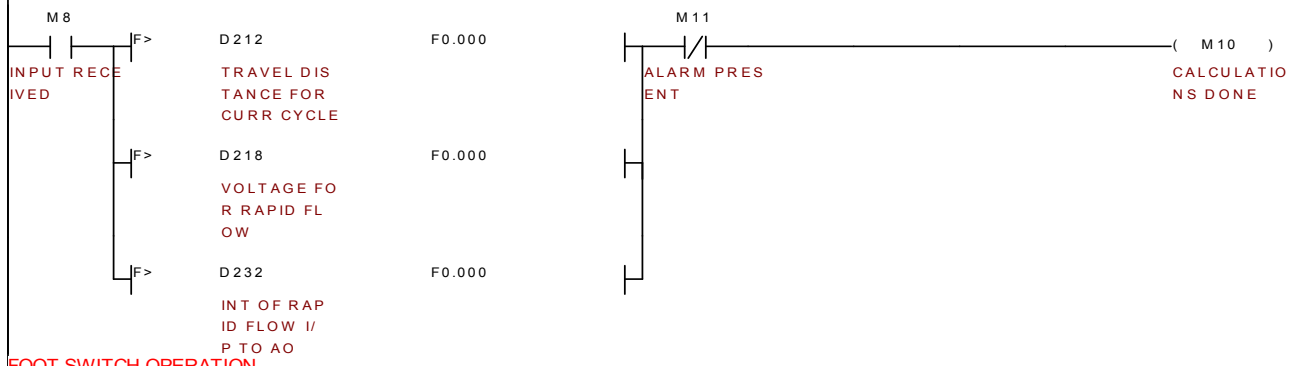
CALCULATIONS - DWELL



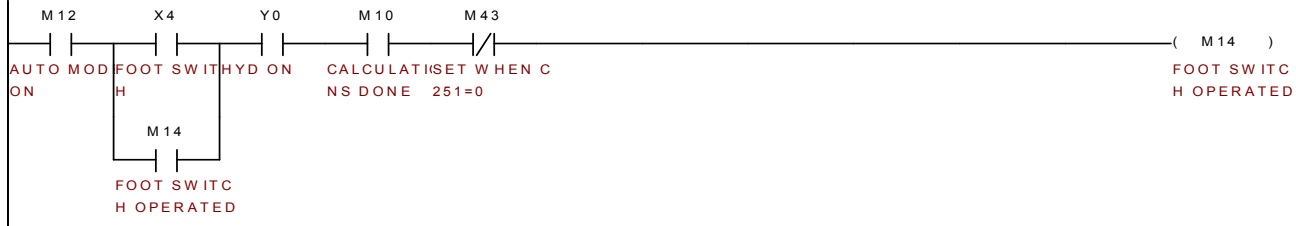
CALCULATIONS - TO GO DISTANCE

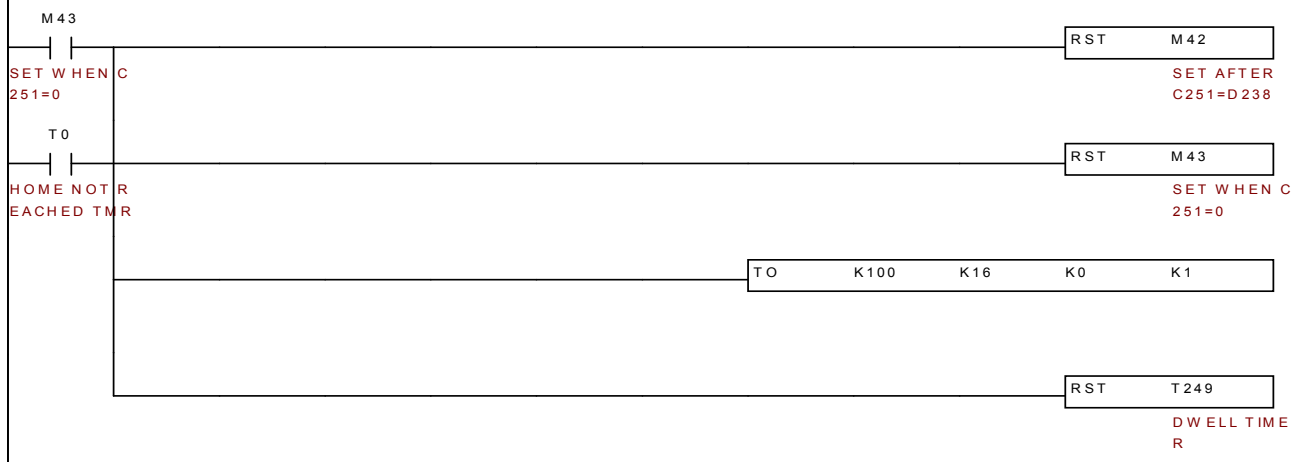


COMPARISON OF CALCULATIONS

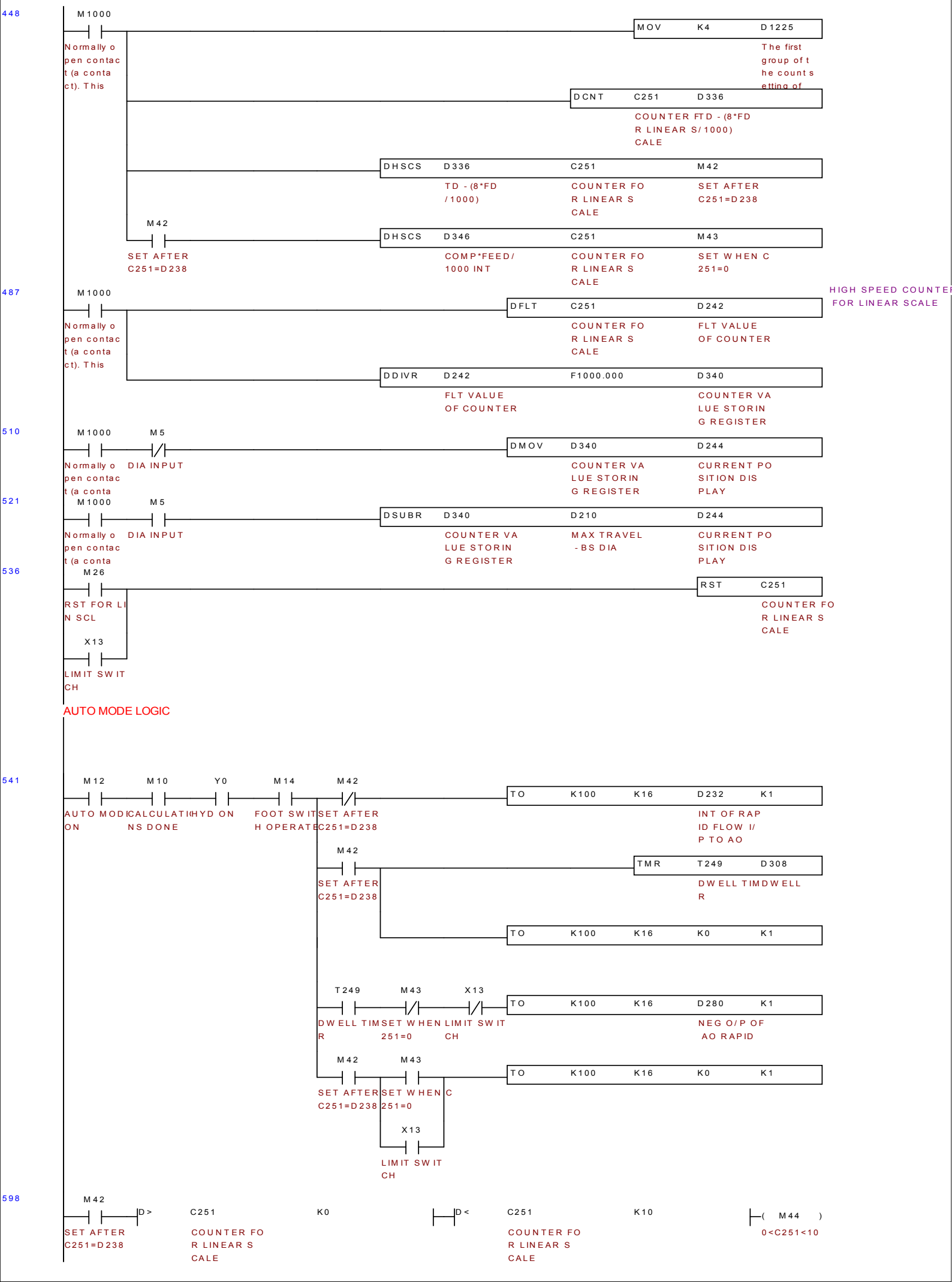


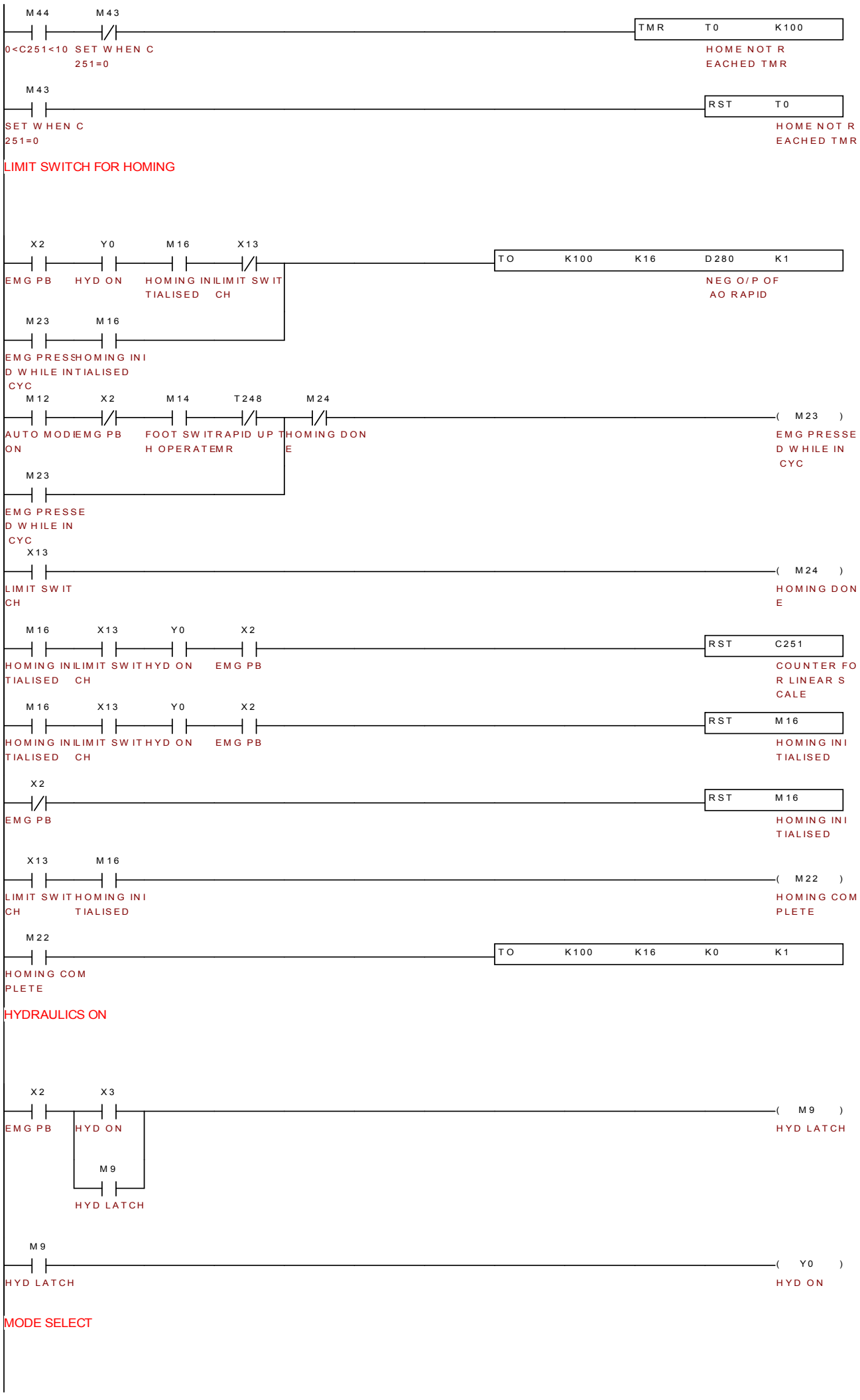
FOOT SWITCH OPERATION





LINEAR SCALE COUNTER


448
M1000
Normally o pen contac t (a conta ct). This
MOV K4 D1225
The first group of t he count s etting of
DCNT C251 D336
COUNTER FTD - (8*FD R LINEAR S/1000) CALE
DHSCS D336 C251 M42
TD - (8*FD /1000)
COUNTER FO R LINEAR S CALE
SET AFTER C251=D238
M42
SET AFTER C251=D238
DHSCS D346 C251 M43
COMP*FEED/ 1000 INT
COUNTER FO R LINEAR S CALE
SET W HEN C 251=0
487
M1000
Normally o pen contac t (a conta ct). This
HIGH SPEED COUNTE FOR LINEAR SCALE
DFLT C251 D242
COUNTER FO R LINEAR S CALE
FLT VALUE OF COUNTER
DDIVR D242 F1000.000 D340
FLT VALUE OF COUNTER
COUNTER VA LUE STORIN G REGISTER
510
M1000
Normally o pen contac t (a conta
M5
DIA INPUT
DMOV D340 D244
COUNTER VA LUE STORIN G REGISTER
CURRENT PO SITION DIS PLAY
521
M1000
Normally o pen contac t (a conta
M5
DIA INPUT
DSUBR D340 D210 D244
COUNTER VA LUE STORIN G REGISTER
MAX TRAVEL - BS DIA
CURRENT PO SITION DIS PLAY
536
M26
RST FOR LI N SCL
RST C251
COUNTER FO R LINEAR S CALE
X13
LIMIT SW IT CH
AUTO MODE LOGIC
541
M12
AUTO MODI ON
M10
CALCULATI NS DONE
Y0
HYD ON
M14
FOOT SW IT H OPERATE
M42
SET AFTER C251=D238
TO K100 K16 D232 K1
INT OF RAP ID FLOW I/ P TO AO
M42
SET AFTER C251=D238
TMR T249 D308
DW ELL TIM DW ELL R
TO K100 K16 K0 K1
T249
DW ELL TIM R
M43
SET W HEN 251=0
X13
LIMIT SW IT CH
TO K100 K16 D280 K1
NEG O/P OF AO RAPID
M42
SET AFTER C251=D238
M43
SET W HEN C 251=0
TO K100 K16 K0 K1
X13
LIMIT SW IT CH
598
M42
SET AFTER C251=D238
D>
C251
COUNTER FO R LINEAR S CALE
K0
D<
C251
COUNTER FO R LINEAR S CALE
K10
M44
0<C251<10


618
M44
M43
0<C251<10 SET WHEN C 251=0
TMR T0 K100
HOME NOT REACHED TMR
624
M43
SET WHEN C 251=0
RST T0
HOME NOT REACHED TMR
LIMIT SWITCH FOR HOMING
628
X2
Y0
M16
X13
EMG PB
HYD ON
HOMING INITIALISED
LIMIT SWITCH
TO K100 K16 D280 K1
NEG O/P OF AO RAPID
M23
M16
EMG PRESSED WHILE IN CYC
HOMING INITIALISED
644
M12
X2
M14
T248
M24
AUTO MODE ON
EMG PB
FOOT SWITCH OPERATED
RAPID UP TMR
HOMING DONE
(M23)
EMG PRESSED WHILE IN CYC
M23
EMG PRESSED WHILE IN CYC
651
X13
LIMIT SWITCH
(M24)
HOMING DONE
653
M16
X13
Y0
X2
HOMING INITIALISED
LIMIT SWITCH
HYD ON
EMG PB
RST C251
COUNTER FOR LINEAR SCALE
660
M16
X13
Y0
X2
HOMING INITIALISED
LIMIT SWITCH
HYD ON
EMG PB
RST M16
HOMING INITIALISED
667
X2
EMG PB
RST M16
HOMING INITIALISED
671
X13
M16
LIMIT SWITCH
HOMING INITIALISED
(M22)
HOMING COMPLETE
674
M22
HOMING COMPLETE
TO K100 K16 K0 K1
HYDRAULICS ON
684
X2
X3
EMG PB
HYD ON
M9
HYD LATCH
(M9)
HYD LATCH
689
M9
HYD LATCH
(Y0)
HYD ON
MODE SELECT

691
X5
SELECTOR SWITCH
(M12)
AUTO MODE ON

693
X5
SELECTOR SWITCH
(M13)
MANUAL MODE ON

SELECTOR SWITCH - MICRONS

695
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M17)
SEL SWITCH POS 1

699
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M18)
SEL SWITCH POS 2

703
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M19)
SEL SWITCH POS 3

707
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M20)
SEL SWITCH POS 4

711
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M27)
SEL SWITCH POSITION 5

715
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M28)
SEL SWITCH POSITION 6

719
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M29)
SEL SWITCH POSITON 7

723
X10 SELECTOR W 1
X11 SELECTOR W 2
X12 SELECTOR W 3
(M30)
SEL SWITCH POSITION 8

727
M17 SEL SWITCH POS 1
MOV D272 D208
SETTING FCCUR MICR POS 1

733
M18 SEL SWITCH POS 2
MOV D274 D208
SETTING FCCUR MICR POS 2

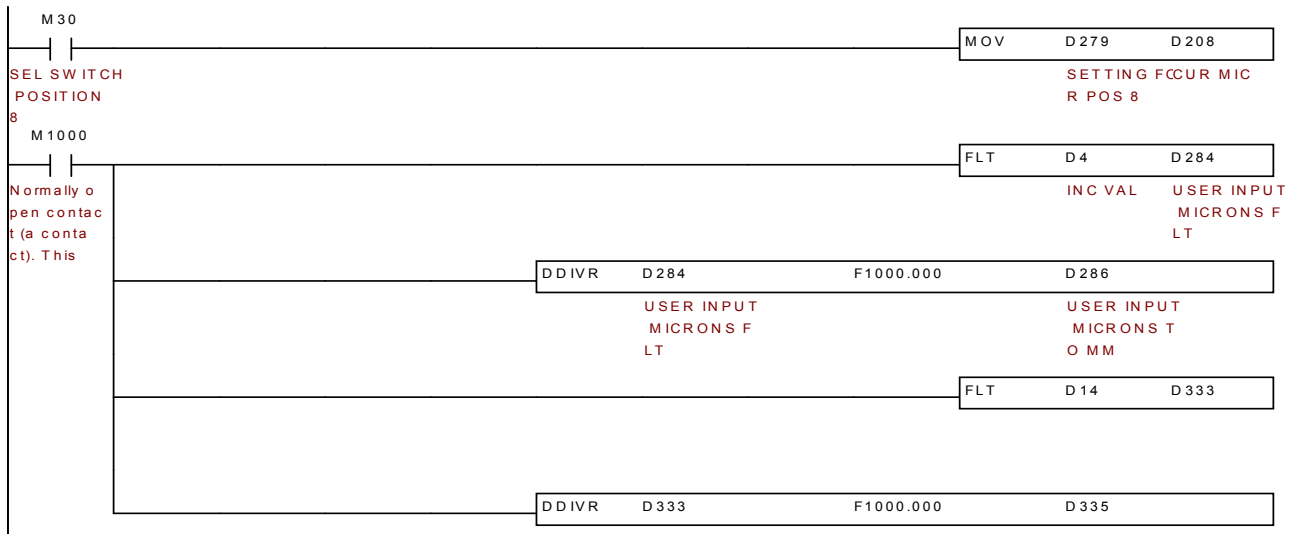
739
M19 SEL SWITCH POS 3
MOV D276 D208
SETTING FCCUR MICR POS 3

745
M20 SEL SWITCH POS 4
MOV D278 D208
SETTING FCCUR MICR POS 4

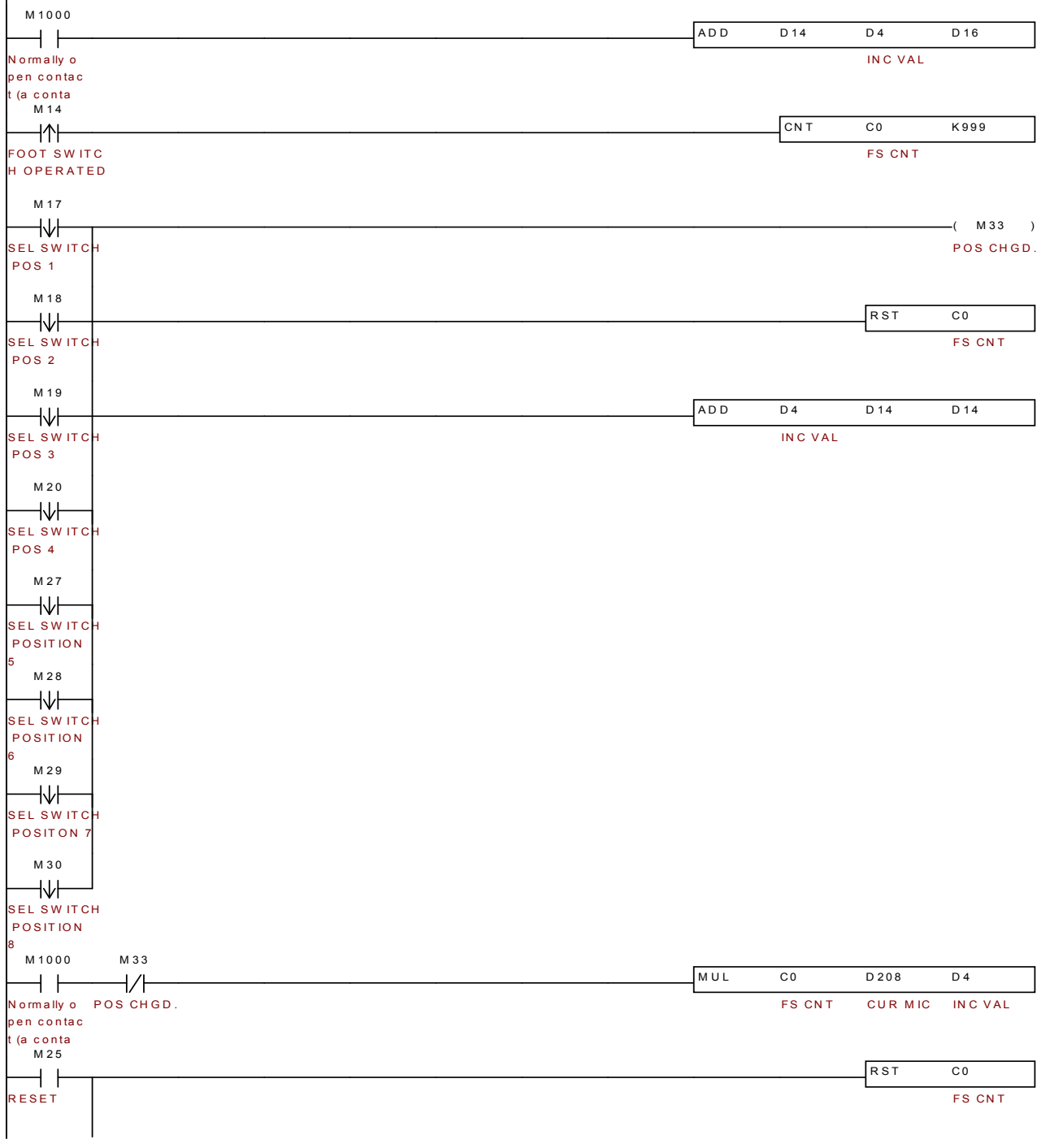
751
M27 SEL SWITCH POSITION 5
MOV D273 D208
SETTING FCCUR MICR POS 5

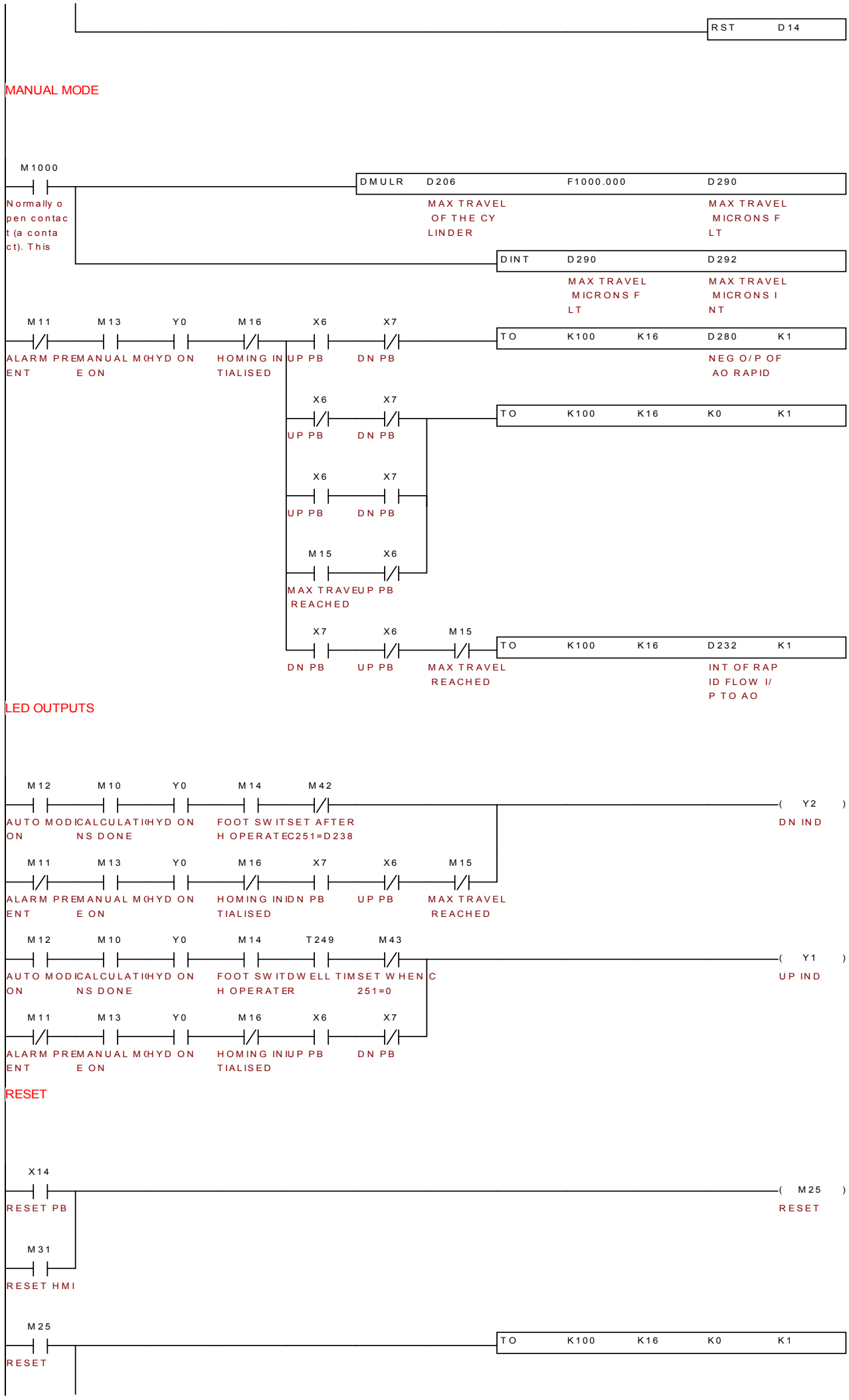
757
M28 SEL SWITCH POSITION 6
MOV D275 D208
SETTING FCCUR MICR POS 6

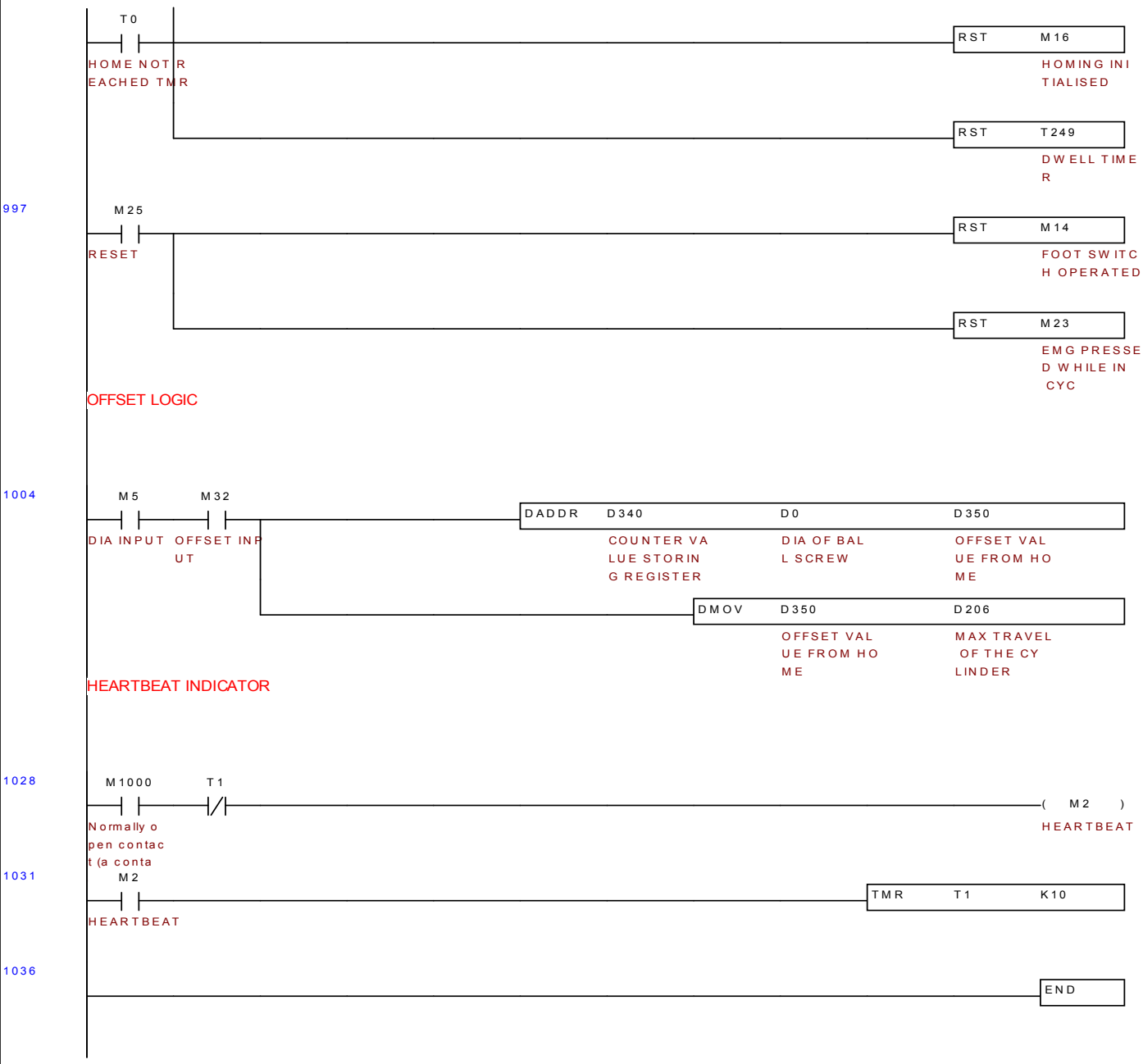
763
M29 SEL SWITCH POSITON 7
MOV D277 D208
SETTING FCCUR MICR POS 7



FOOT SWITCH COUNTER LOGIC




RST D14
MANUAL MODE
878
M1000
Normally open contact (a contact). This
DMULR D206 F1000.000 D290
MAX TRAVEL OF THE CYLINDER
MAX TRAVEL MICRONS FLT
DINT D290 D292
MAX TRAVEL MICRONS FLT
MAX TRAVEL MICRONS INT
901
M11 M13 Y0 M16 X6 X7
ALARM PRESENT
MANUAL MODE ON
HYD ON
HOMING INITIALISED
UP PB
DN PB
TO K100 K16 D280 K1
NEG O/P OF AO RAPID
X6 X7
UP PB
DN PB
TO K100 K16 K0 K1
X6 X7
UP PB
DN PB
M15 X6
MAX TRAVEL REACHED
UP PB
X7 X6 M15
DN PB
UP PB
MAX TRAVEL REACHED
TO K100 K16 D232 K1
INT OF RAPID FLOW I/P TO AO
LED OUTPUTS
949
M12 M10 Y0 M14 M42
AUTO MODE ON
CALCULATIONS DONE
HYD ON
FOOT SWITCH OPERATED
SET AFTER EC251=D238
(Y2)
DN IND
M11 M13 Y0 M16 X7 X6 M15
ALARM PRESENT
MANUAL MODE ON
HYD ON
HOMING INITIALISED
DN PB
UP PB
MAX TRAVEL REACHED
963
M12 M10 Y0 M14 T249 M43
AUTO MODE ON
CALCULATIONS DONE
HYD ON
FOOT SWITCH OPERATED
DWELL TIM
SET WHEN EC251=0
(Y1)
UP IND
M11 M13 Y0 M16 X6 X7
ALARM PRESENT
MANUAL MODE ON
HYD ON
HOMING INITIALISED
UP PB
DN PB
RESET
977
X14
RESET PB
(M25)
RESET
M31
RESET HMI
980
M25
RESET
TO K100 K16 K0 K1


T0
HOME NOT REACHED TMR
RST M16
HOMING INITIALISED
RST T249
DWELL TIMER
997
M25
RESET
RST M14
FOOT SWITCH OPERATED
RST M23
EMG PRESSED WHILE IN CYC
OFFSET LOGIC
1004
M5
M32
DIA INPUT
OFFSET INPUT
DADDR D340 D0 D350
COUNTER VALUE STORING REGISTER
DIA OF BALL SCREW
OFFSET VALUE FROM HOME
DMOV D350 D206
OFFSET VALUE FROM HOME
MAX TRAVEL OF THE CYLINDER
HEARTBEAT INDICATOR
1028
M1000
T1
Normally open contact (a conta
(M2)
HEARTBEAT
1031
M2
HEARTBEAT
TMR T1 K10
1036
END