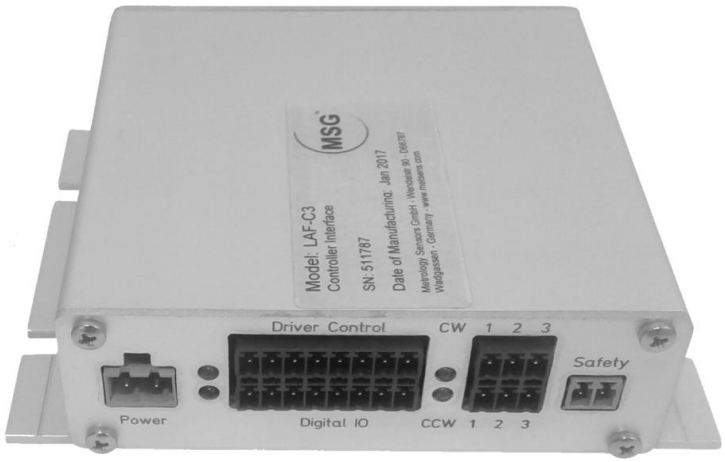
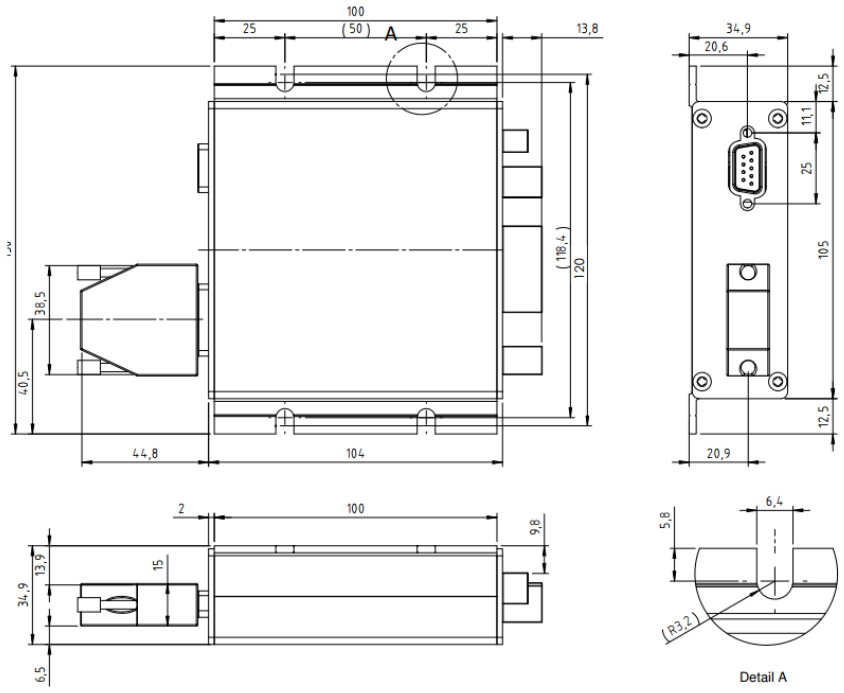
LAF-C2

Motor Interface for LAF Auto Focus & Tracking System





- Single connection to LAFsensor, all connections from MSG Autofocus to your machine going through the LAF-C3
- 2 directions pulse output, current source to drive opto-isolator of stepper/servo drive
- Enables Hybrid Laser/Image auto focus function (license required)
- Analog output for measurement quality signal output
  Configurable:
  Analog output giving a distance Signal or a configurable Speed signal with a future firmware release (control servo drives)
- Inputs for Limit switches and safety stop
- RS232 for sensor communication with PC

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IO Specifications

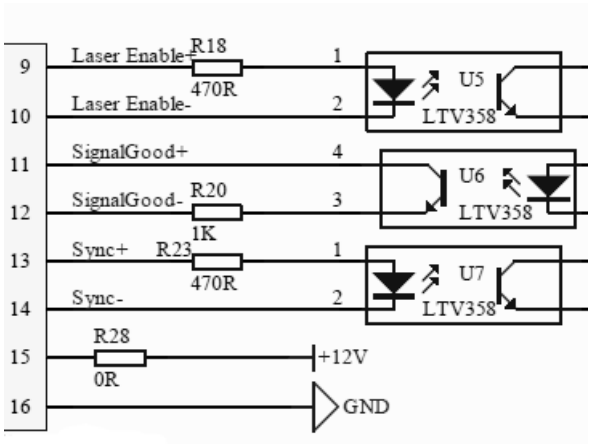
RS232	PIN	SIGNAL	**RS232**
9 PIN D-SUB FEMALE			
	2	TxD	RS 232 Level
	3	RxD	RS 232 Level
	5	RS232 Ground	
SENSOR	PIN	SIGNAL	**Sensor**
15 PIN D-SUB MALE			
	1-15	-----	LAF sensor cable

DRIVER POWER	PIN	SIGNAL	
V in	1	+24V to +48V, less than 7W, less than 20W for LAF-C3	
V in	2	0V Return	

DRIVER CONTROL	PIN	SIGNAL
Motor current on +	1	Pin 1, 3 & 5 = +12V via series resistor for short circuit protection Pin 2,4,6,8 & 8 = 10mA current sink to drive photo coupler Connect the photo coupled input pairs of the motor driver to the according +/- signals.
Motor current on -	2	
Motor direction +	3	
Motor direction -	4	
Motor Pulse +	5	

Motor Pulse 1 -	6	
Motor Pulse 2 -	7	
Motor Pulse -	8	

DIGITAL IO	PIN	SIGNAL
Laser enable+	9	Optoisolated LASER ON or SYNC Signal 3-48V input, 5mA current
Laser enable -	10	
Signal Good +	11	-Optoisolated (NPN Transistor output) Signal Quality output, max 5mA
Signal Good -	12	
Sync +	13	
Sync -	14	
+12V	15	
GND	16	



CW LIMITSWITCH	PIN	SIGNAL
Limit switch CW V in	1	V in on Pin 1 is the 24..48V operating voltage via a short circuit protection resistor, can be used for operating photo interrupters.
Limit switch CW input	2	GND is the signal ground also via a short circuit protection resistor.
Limit switch CW GND	3	For switching between NC (normally closed = default shipping state) or NO (normally open) limit switch operation mode 0R resistors need to be changed inside the LAF-C2 as shown in figure 18.

CCW LIMIT SWITCH	PIN	SIGNAL
Limit switch CWW V in	4	V in on Pin 4 is the 24..48V operating voltage via a short circuit protection resistor, can be used for operating photo interrupters. GND is the signal ground also via a short circuit protection resistor. For switching between NC (normally closed = default shipping state) or NO (normally open) limit switch operation mode 0R resistors need to be changed inside the LAF-C2 as shown in figure 18.
Limit switch CWW input	5	
Limit switch CWW GND	6	
SAFETY STOP	PIN	SIGNAL
	1	Connect a normally closed safety switch. Current is between 2-5mA. If this connection is left open it indicates a safety stop, so the laser will be off and motor will not move.
	2	