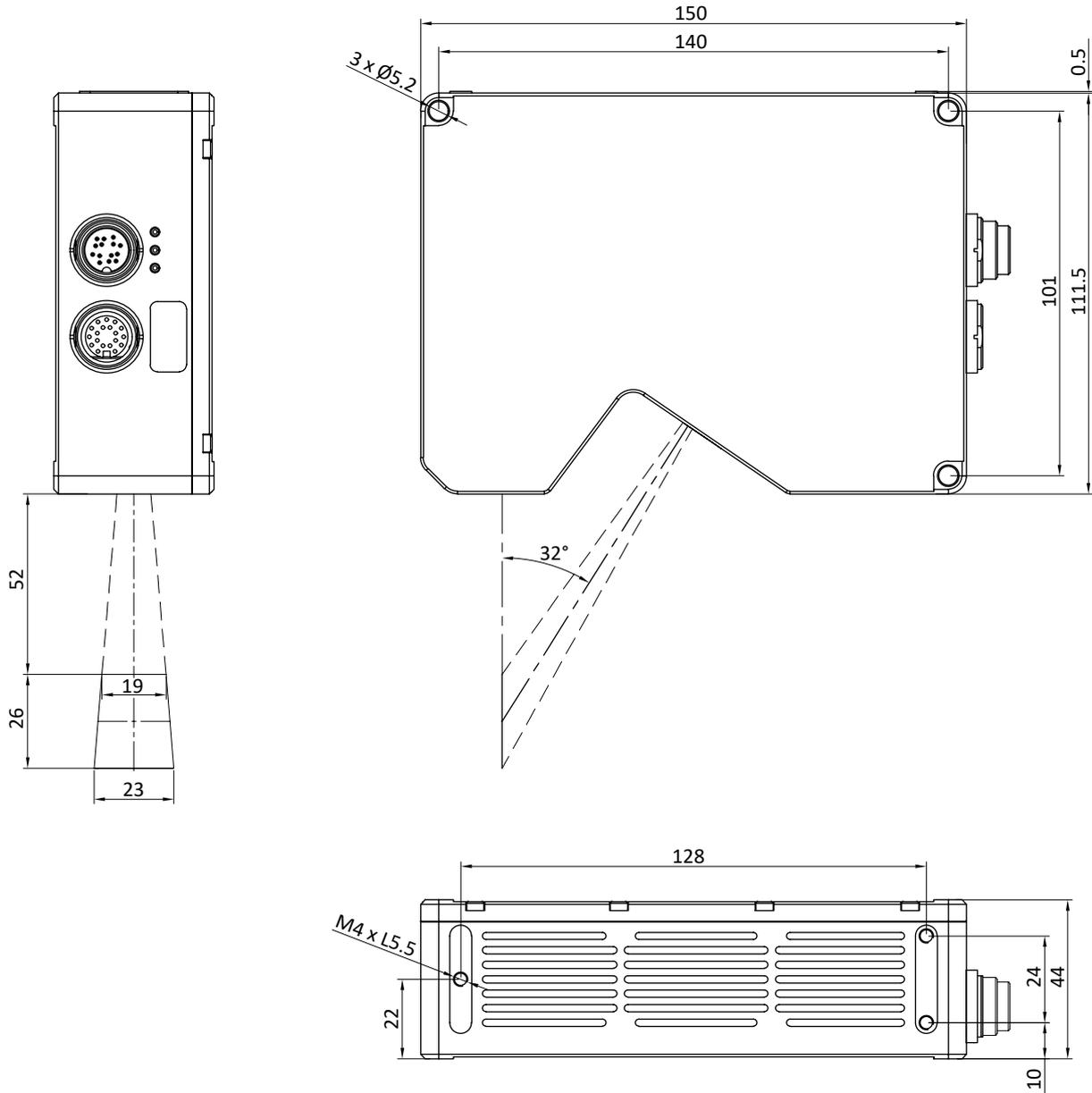


LVM2120



OPTICAL DATA

<b>WORKING RANGE Z</b>	52 ... 78 mm	<b>MEASUREMENT RANGE Z</b>	26 mm
<b>MEASUREMENT RANGE X</b>	19 ... 23 mm	<b>LINEARITY Z (+/- % OF MR)</b>	0.01%
<b>RESOLUTION X</b>	13.1 - 15.8 µm	<b>REPEATABILITY Z</b>	0.5 µm
<b>LIGHT SOURCE</b>	Laser (blue)	<b>WAVELENGTH</b>	405 nm
<b>LASER CLASS</b>	2, 3R	<b>DATA POINTS</b>	1456

APPROVALS



The information contained in this data sheet was compiled with the greatest possible care. Liability for correctness, completeness and topicality is limited to gross negligence.  
 ELCO Industrie Automation GmbH | Zentrale Europa | Benzstraße 7 | 71720 Oberstenfeld / Germany | Phone +49 7062 6599-260 | EN | Creation date: 15.07.24 | DS\_LVM\_2120\_V1.0\_EN

LVM2120

ENVIRONMENTAL CONDITIONS

<b>AMBIENT TEMPERATURE</b>	0 ... +50 °C
<b>STORAGE TEMPERATURE</b>	-30 ... +70 °C
<b>WORKING HUMIDITY</b>	20 % - 85 %RH
<b>MAX.AMBIENT LIGHT</b>	10000 Lux
<b>EMC</b>	EN 61326-1:2013(GB/T18268) EN 55011:2007-11(GB4824,group 1,A class) EN 61000-6-2:2006-03(GB/T17799.2)
<b>SHOCK RESISTANCE</b>	15 g/11 ms, positive and negative for X, Y and Z directions
<b>VIBRATION RESISTANCE</b>	10 to 55 Hz, 1.5 mm double amplitude in X, Y and Z directions, 2 hours per direction

ELECTRICAL DATA

<b>SUPPLY VOLTAGE</b>	24 ... 48 V DC	<b>POWER</b>	15 W
<b>MEASURING RATE</b>	270 - 5000 Hz	<b>INPUTS</b>	Differential Encoder, Laser Safety Enable, Trigger
<b>OUTPUTS</b>	2 x Digital Output, RS-485 Serial, 1 x Analog Output	<b>INTERFACE</b>	Modbus TCP/Profinet/ASCII

MECHANICAL DATA

<b>HOUSING MATERIAL</b>	Aluminium	<b>PROTECTION CLASS</b>	IP67 inserted and tightened
<b>DIMENSIONS</b>	44 x 111.5 x 150 mm	<b>WEIGHT</b>	0.89 kg
<b>CONNECTION</b>	M16 ; 14 - pin M16 ; 19 - pin	<b>TEMPERATURE CHARACTERISTICS</b>	0.01 %

COMPLEMENTARY PRODUCTS

**SYNCHRONOUS CONTROLLER**

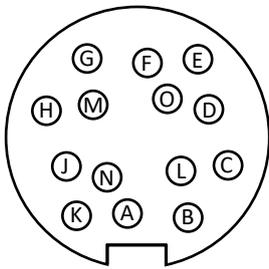
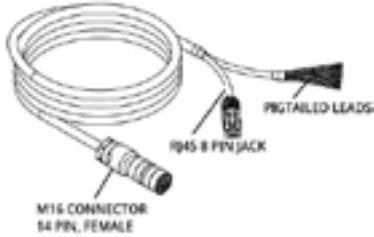
**SOFTWARE**

**CONNECTION CABLES**

ARTICLE NUMBER OF CONNECTION CABLES

<b>POWER &amp; ETHERNET CABLES</b>	<b>I/O CABLES</b>
LVM-CP-2	LVM-CD-2
LVM-CP-5	LVM-CD-5
LVM-CP-10	LVM-CD-10
LVM-CP-15	LVM-CD-15

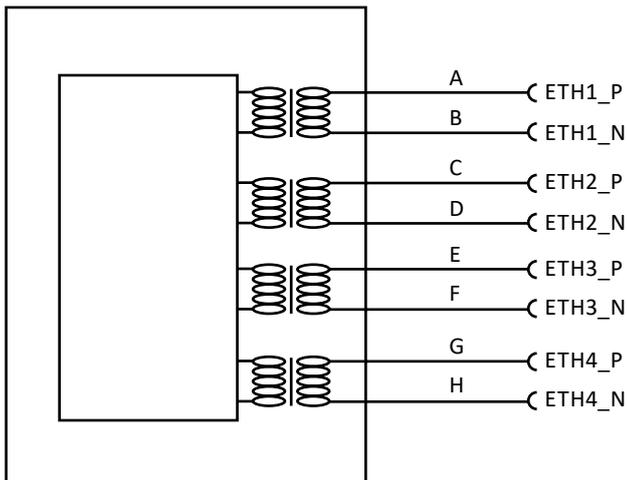
LVM2120



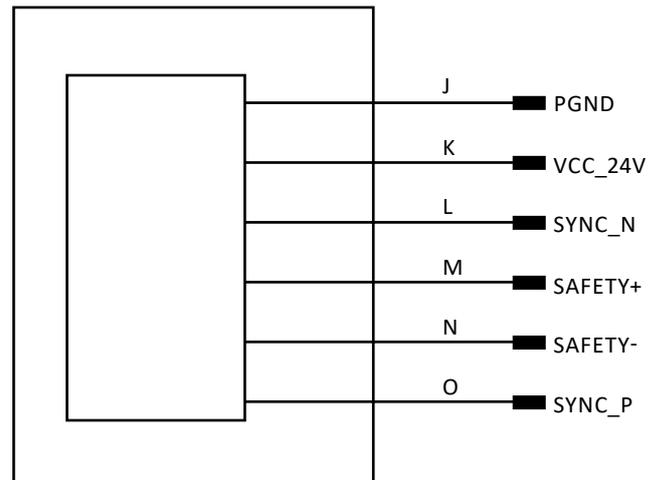
THE POWER & ETHERNET CORDSET

MARK	PIN	COLOR	DESCRIPTION
ETH1_P	A	Red	Gigabit Ethernet interface
ETH1_N	B	Red/White	
ETH2_P	C	Blue	
ETH2_N	D	Blue/Black	
ETH3_P	E	Black	
ETH3_N	F	Black/White	
ETH4_P	G	Green	
ETH4_N	H	Green/Black	
PGND	J	Brown Brown/Black	Power-
VCC_24V	K	White White/Black	Power+
SYNC_N	L	Orange	Reserved interface
SYNC_P	O	Orange/Black	Reserved interface
SAFETY+	M	Yellow	Laser safety+
SAFETY-	N	Yellow/Black	Laser safety-

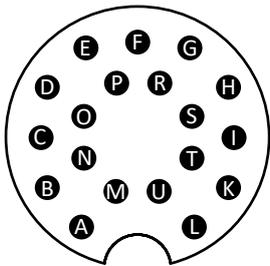
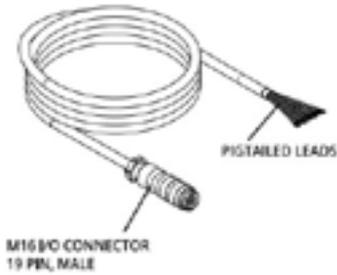
CONNECTION DIAGRAM, ETHERNET



CONNECTION DIAGRAM, POWER SUPPLY



LVM2120



INPUT & OUTPUT CORDSET			
MARK	PIN	COLOR	RESERVED INTERFACE
OUT1-	A	Red	Digital 1-
OUT1+	B	Red/White	Digital 1+
OUT2-	C	Blue	Digital 2-
OUT2+	D	Blue/Black	Digital 2+
IOUT+	E	Black	4-20mA analogue
IOUT-	F	Black/White	Gnd
EZ_N	G	Green	Encoder EZ-
EZ_P	H	Green/Black	Encoder EZ+
EB_P	I	Yellow	Encoder EB+
EB_N	K	Yellow	Encoder EB-
SERIAL2_P	M	Brown	Serial 2 input+
SERIAL2_N	N	Brown/Black	Serial 2 input-
TRIG-	O	White	Trigger signal-
TRIG+	P	White/Black	Trigger signal+
EA_P	R	Purple	Encoder EA+
EA_N	S	Purple/Black	Encoder EA-
SERIAL1_P	T	Grey	Serial 1 output+
SERIAL1_N	U	Grey/Black	Serial 1 output-

CONNECTION DIAGRAM, INPUT & OUTPUT

