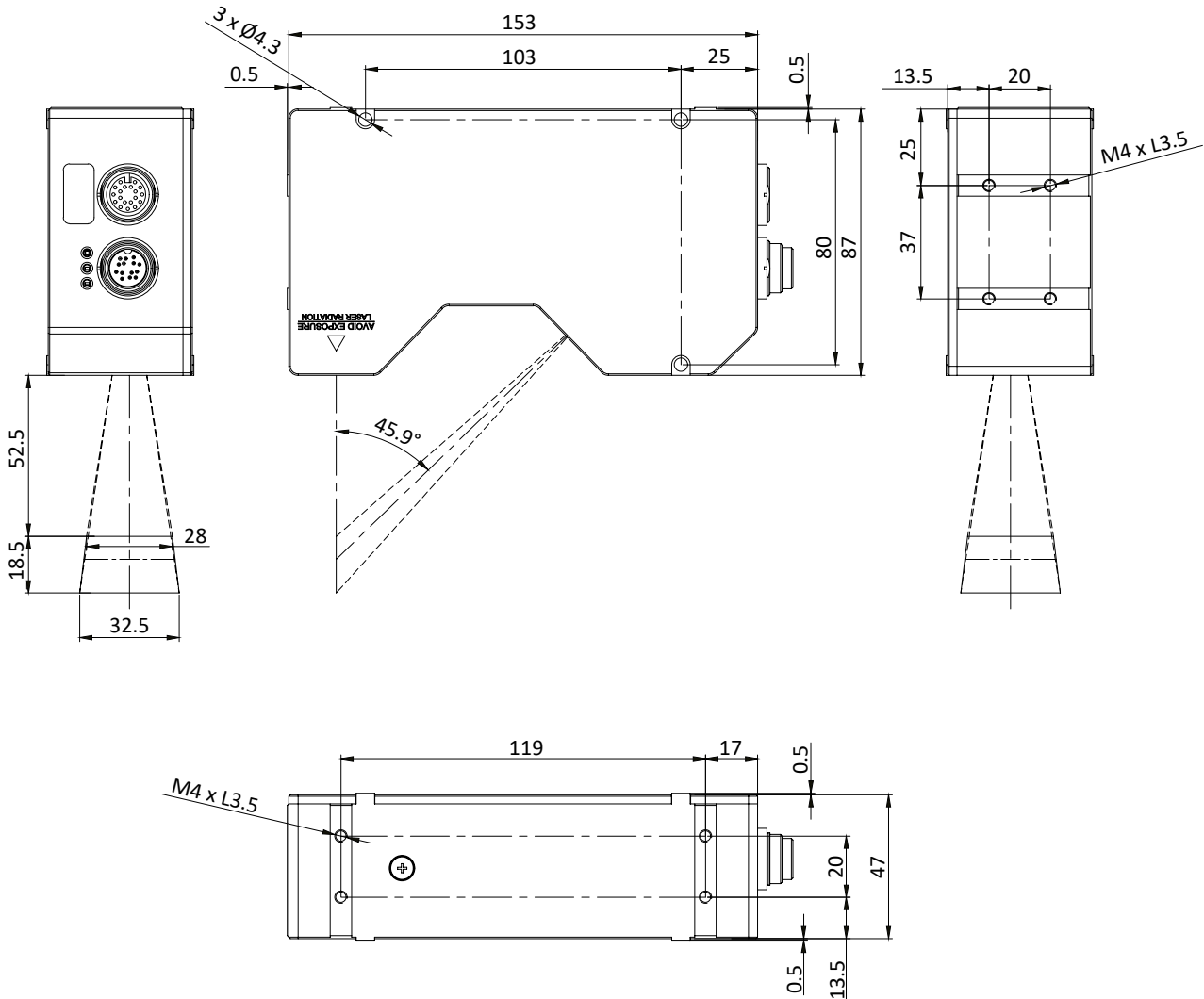


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OPTICAL DATA

<b>WORKING RANGE Z</b>	52.5 ... 71 mm	<b>MEASUREMENT RANGE Z</b>	18.5 mm
<b>MEASUREMENT RANGE X</b>	28 ... 32.5 mm	<b>LINEARITY Z (+/- % OF MR)</b>	0.02%
<b>RESOLUTION X</b>	8.8 ... 10.2 $\mu$ m	<b>REPEATABILITY Z</b>	0.2 $\mu$ m
<b>LIGHT SOURCE</b>	Laser (blue)	<b>WAVELENGTH</b>	405 nm
<b>LASER CLASS</b>	2M - 3R	<b>DATA POINTS</b>	3200

APPROVALS



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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>	1500 ... 20000 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>	153.5 x 87.5 x 48 mm	<b>WEIGHT</b>	0.67 Kg
<b>CONNECTION</b>	M16 ; 14 - pin M16 ; 19 - pin	<b>TEMPERATURE CHARACTERISTICS</b>	0.01 %

COMPLEMENTARY PRODUCTS

**SYNCHRONOUS CONTROLLER**

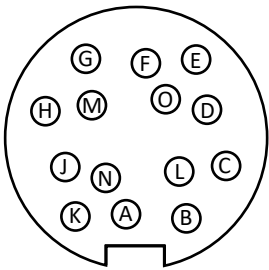
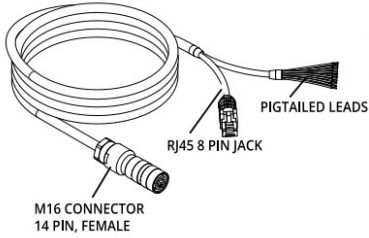
**SOFTWARE**

**CONNECTION CABLES**

ARTICLE NUMBER OF CONNECTION CABLES

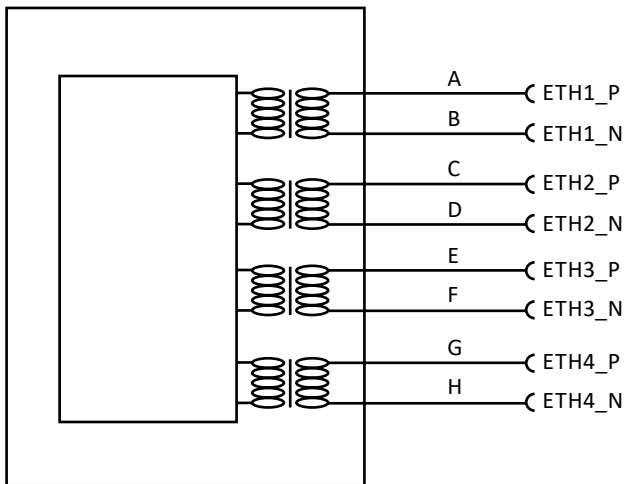
<b>POWER &amp; ETHERNET CABLES</b>	<b>I/O CABLES</b>
LVM-CP-2	LVM-CD-2
LVM-CP-5	LVM-CD-5
LVM-CP-10	LVM-CD-10
LVM-CP-15	LVM-CD-15

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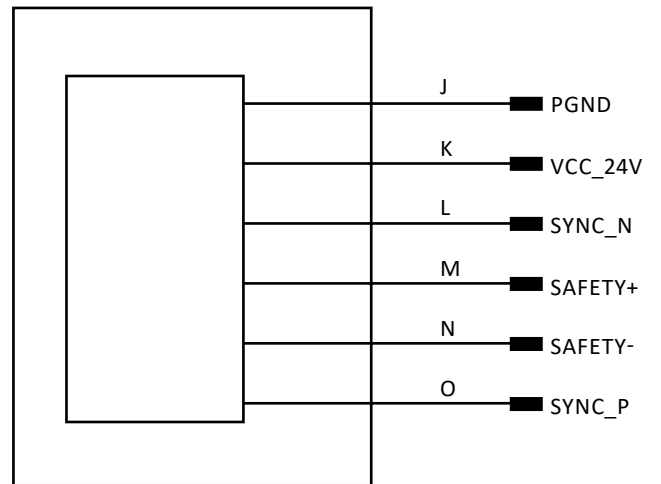


THE POWER & ETHERNET CORDSET			
MARK	PIN	COLOR	DESCRIPTION
ETH1_P	A	Red	Gigabit Ethernet interface
ETH1_N	B	Red/White	
ETH2_P	C	Blue	
ETH2_N	D	Blue/Black	
ETH3_P	E	Black	
ETH3_N	F	Black/White	
ETH4_P	G	Green	
ETH4_N	H	Green/Black	
PGND	J	Brown Brown/Black	Power-
VCC_24V	K	White White/Black	Power+
SYNC_N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

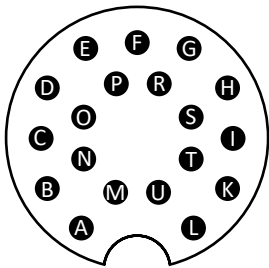
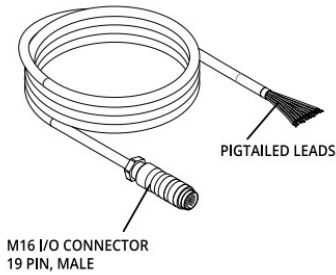
CONNECTION DIAGRAM, ETHERNET



CONNECTION DIAGRAM, POWER SUPPLY

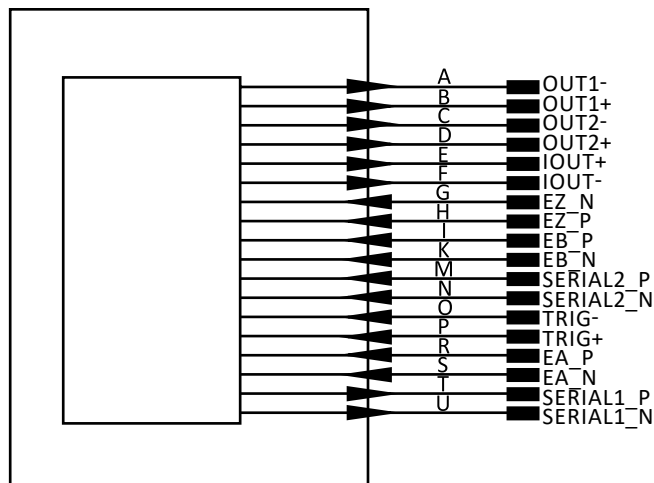


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INPUT & OUTPUT CORDSET			
MARK	PIN	COLOR	RESERVED INTERFACE
OUT1-	A	Red	Digital 1-
OUT1+	B	Red/White	Digital 1+
OUT2-	C	Blue	Digital 2-
OUT2+	D	Blue/Black	Digital 2+
IOUT+	E	Black	4-20mA analogue
IOUT-	F	Black/White	Gnd
EZ_N	G	Green	Encoder EZ-
EZ_P	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



## LVM2420

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