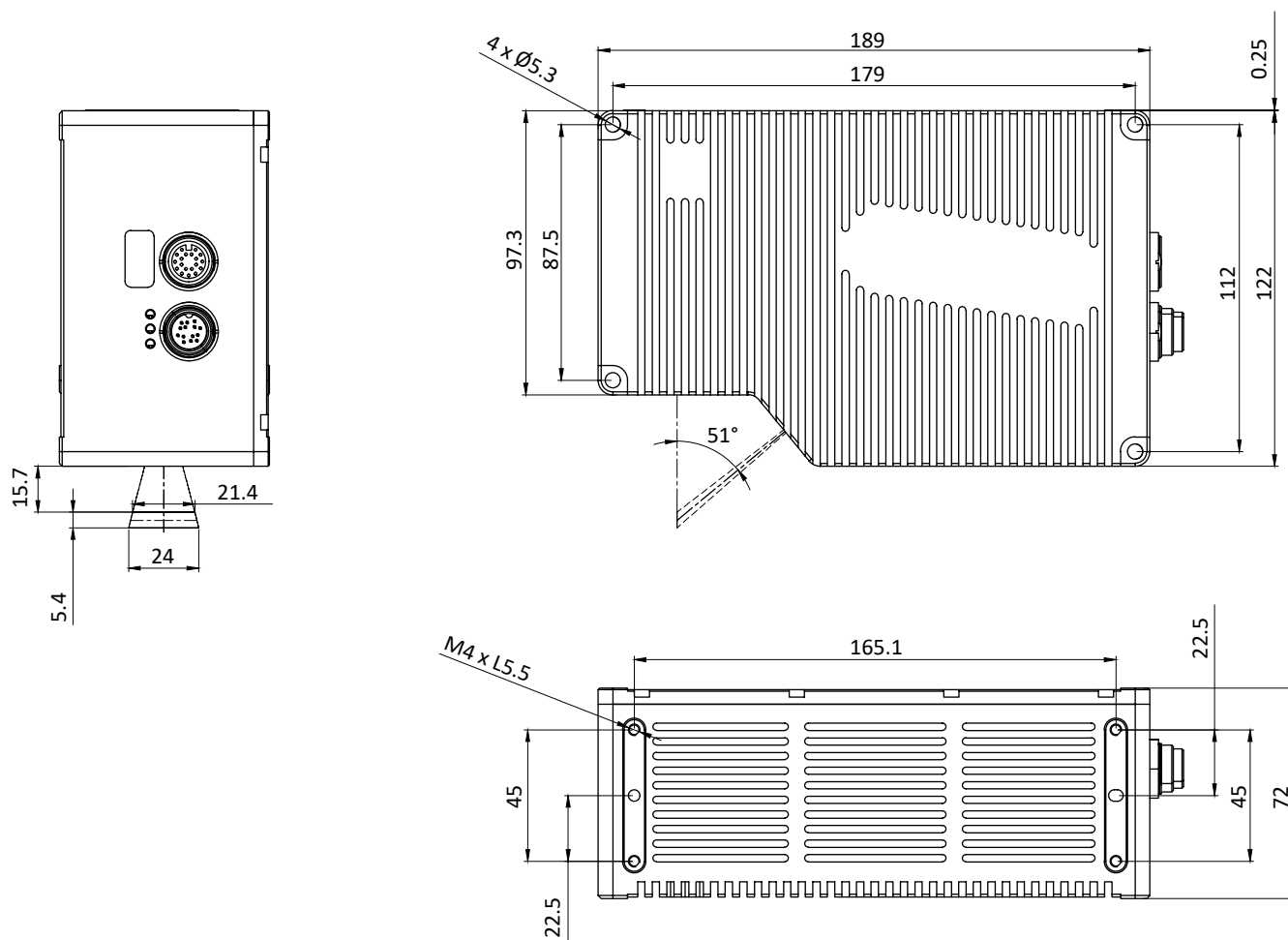


## LVM2520



## OPTICAL DATA

|                            |                   |                                  |             |
|----------------------------|-------------------|----------------------------------|-------------|
| <b>WORKING RANGE Z</b>     | 15.7 ... 21.1 mm  | <b>MEASUREMENT RANGE Z</b>       | 5.4 mm      |
| <b>MEASUREMENT RANGE X</b> | 21.4 ... 24.0 mm  | <b>LINEARITY Z (+/- % OF MR)</b> | 0.02%       |
| <b>RESOLUTION X</b>        | 5.2 - 5.8 $\mu$ m | <b>REPEATABILITY Z</b>           | 0.1 $\mu$ m |
| <b>LIGHT SOURCE</b>        | Laser (blue)      | <b>WAVELENGTH</b>                | 405 nm      |
| <b>LASER CLASS</b>         | 3B                | <b>DATA POINTS</b>               | 4096        |

## APPROVALS



## LVM2520

## 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)<br>EN 55011:2007-11(GB4824,group 1,A class)<br>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>     | 35 W                                               |
| <b>MEASURING RATE</b> | 1800-37900 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>       | 72 x 122 x 189 mm                | <b>WEIGHT</b>                      | 2.22 kg                     |
| <b>CONNECTION</b>       | M16 ; 14 - pin<br>M16 ; 19 - pin | <b>TEMPERATURE CHARACTERISTICS</b> | 0.01 %                      |

## COMPLEMENTARY PRODUCTS

## SYNCHRONOUS CONTROLLER

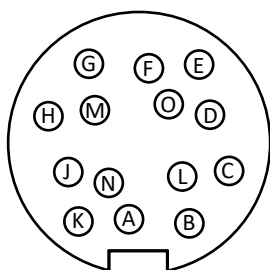
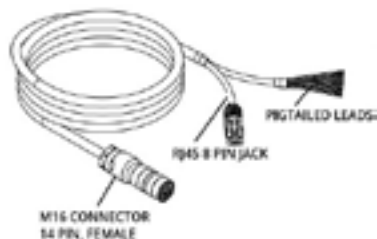
## SOFTWARE

## 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         |

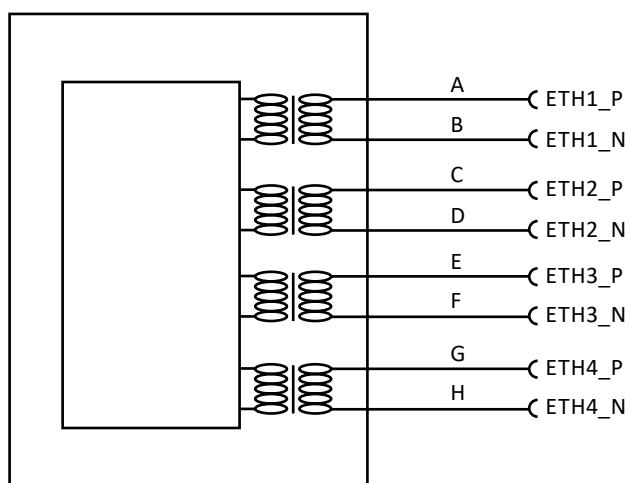
## LVM2520



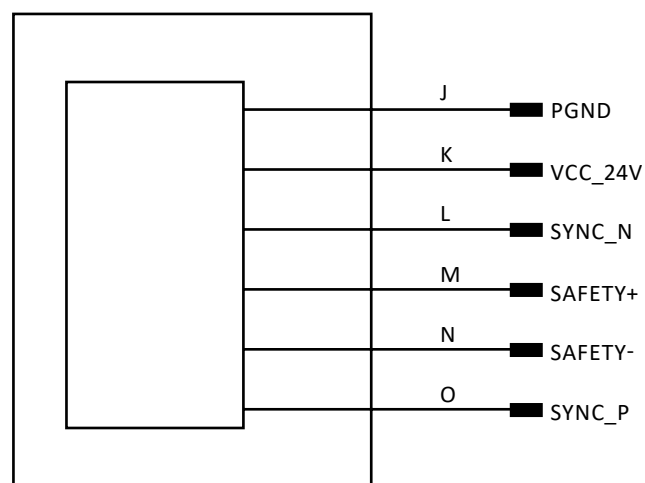
## THE POWER &amp; ETHERNET CORDSET

| 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-              |

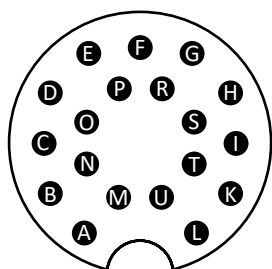
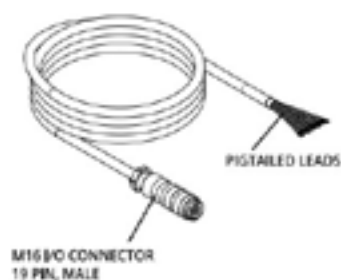
## CONNECTION DIAGRAM, ETHERNET



## CONNECTION DIAGRAM, POWER SUPPLY



## LVM2520



| 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 &amp; OUTPUT

