

|                             |                  |               | Range[N]       |        |         |       |       |       | Uncertanties(FS) |        |        |        |        |        | Resolution[N/Nm]               |       |       |        |        |         |                   |       |                   |
|-----------------------------|------------------|---------------|----------------|--------|---------|-------|-------|-------|------------------|--------|--------|--------|--------|--------|--------------------------------|-------|-------|--------|--------|---------|-------------------|-------|-------------------|
| Company                     | Model            | Calibration   | Fx             | Fy     | Fz      | Tx    | Ty    | Tz    | Fx               | Fy     | Fz     | Tx     | Ty     | Tz     | Fx                             | Fy    | Fz    | Tx     | Ty     | Tz      | IP                | Price | Delivery          |
| ATI-Industrial Automation   | Gamma            | SI-130-10     | 130,00         | 130,00 | 400,00  | 10,00 | 10,00 | 10,00 | 1,00 %           | 1.25%  | 0.75%  | 1,00 % | 1.25%  | 1.5%   | 0,03                           | 0,03  | 0,05  | 0,0013 | 0,0013 | 0,0013  | 68                |       | Ship 3-4 weeks    |
| ATI-Industrial Automation   | Mini 40          | SI-40-2       | 40,00          | 40,00  | 120,00  | 2,00  | 2,00  | 2,00  | 1.25%            | 1.25%  | 1,00 % | 1.25%  | 1.5%   | 1.5%   | 0,02                           | 0,02  | 0,04  | 0,0005 | 0,0005 | 0,0005  |                   |       | Ship 3-4 weeks    |
| ATI-Industrial Automation   | Gamma            | SI-130-10     | 130,00         | 130,00 | 400,00  | 10,00 | 10,00 | 10,00 | 0.75%            | 1,00 % | 1,00 % | 1,00 % | 1.25%  | 1.5%   | 0,03                           | 0,03  | 0,05  | 0,0013 | 0,0013 | 0,0013  |                   |       | Ship 3-4 weeks    |
| Interface Force Measurement | 6A40A-200N       |               | 200,00         | 200,00 | 500,00  | 5,00  | 5,00  | 10,00 | 1,00 %           | 1,00 % | 1,00 % | 1,00 % | 1,00 % | 1,00 % | See amplifier                  |       |       |        |        |         | 67                |       | Lead time 4 weeks |
| Interface Force Measurement | 6A40A-500N       |               | 500,00         | 500,00 | 2000,00 | 20,00 | 20,00 | 20,00 | 1,00 %           | 1,00 % | 1,00 % | 1,00 % | 1,00 % | 1,00 % |                                |       |       |        |        |         | 67                |       | Lead time 4 weeks |
| Interface Force Measurement | Signal Amplifier |               | No information |        |         |       |       |       |                  |        |        |        |        |        | 100k division                  |       |       |        | 65     |         | Lead time 4 weeks |       |                   |
| Sunrise Instrument          | M3706B           |               | 100,00         | 100,00 | 200,00  | 10,00 | 10,00 | 10,00 | 1,00 %           |        |        |        |        |        | No information, coupled output |       |       |        |        |         | 60                |       | Lead time 6 weeks |
| Sunrise Instrument          | M3706C           |               | 200,00         | 200,00 | 400,00  | 20,00 | 20,00 | 20,00 | 1,00 %           |        |        |        |        |        | No information, coupled output |       |       |        |        |         | 60                |       | Lead time 6 weeks |
| Sunrise Instrument          | M3816C           |               | 130,00         | 130,00 | 130,00  | 14,00 | 14,00 | 14,00 | 1,00 %           |        |        |        |        |        | 1/5000 with M8125 16 bit       |       |       |        |        |         | 65                |       | Lead time 6 weeks |
| Sunrise Instrument          | M3816D           |               | 260,00         | 260,00 | 260,00  | 28,00 | 28,00 | 28,00 | 1,00 %           |        |        |        |        |        | 1/5000 with M8125 16 bit       |       |       |        |        |         | 65                |       | Lead time 6 weeks |
| Sunrise Instrument          | M8128            | Interface box | No information |        |         |       |       |       |                  |        |        |        |        |        |                                |       |       |        |        |         |                   |       | Lead time 6 weeks |
| Weiss Robotics              | KMS 40           |               | 120,00         | 120,00 | 120,00  | 3,00  | 3,00  | 3,00  | 1,00 %           |        |        |        |        |        | 0.005                          |       |       | 0.001  |        |         | 40                |       | 1 week            |
| Optoforce                   | HEX-70-XE-200N   |               | 200,00         | 200,00 | 200,00  | 10,00 | 10,00 | 6,50  | 3,00 %           |        |        |        |        |        | 0.022                          | 0.022 | 0.133 | 0.001  | 0.001  | 0.00065 | 65                |       | No information    |
| Robotnik                    | MINI40           | SI-40-2       | 40,00          | 40,00  | 120,00  | 2,00  | 2,00  | 2,00  | 1.25%            | 1.25%  | 1,00 % | 1.25%  | 1.5%   | 1.5%   | 0,02                           | 0,02  | 0,04  | 0,0005 | 0,0005 | 0,0005  | 68                |       | 7-8 weeks         |
| Kistler                     | No reply         |               |                |        |         |       |       |       |                  |        |        |        |        |        |                                |       |       |        |        |         |                   |       |                   |