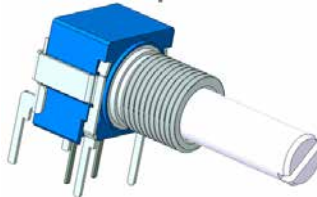


# MATERIAL DECLARATION SHEET



|                 |                    |     |     |                                                                                     |
|-----------------|--------------------|-----|-----|-------------------------------------------------------------------------------------|
| Material Number | 51AAN-XXX-AXXL     |     |     |  |
| Product Line    | Sensors & Controls |     |     |                                                                                     |
| Compliance Date | January 02, 2006   |     |     |                                                                                     |
| RoHS Compliant  | Yes                | MSL | N/A |                                                                                     |

| No. | Construction Element(subpart) | Homogeneous Material | Material weight [g] | Homogeneous Material/ Substances | CASRN if applicable | Materials Mass % | Material Mass % of total unit wt. | Subpart mass of total wt. (%) |
|-----|-------------------------------|----------------------|---------------------|----------------------------------|---------------------|------------------|-----------------------------------|-------------------------------|
| 1   | Hex Nut                       | Brass C260           | 1.25                | Copper                           | 7440-50-8           | 70               | 7.493                             | 10.704                        |
|     |                               |                      |                     | Zinc                             | 7440-66-6           | 30               | 3.211                             |                               |
|     |                               | Plating              | 0.09                | Nickel                           | 7440-02-0           | 100              | 0.771                             | 0.771                         |
| 2   | Lock Washer                   | C1050 Carbon Steel   | 0.169               | Carbon                           | 7440-44-0           | 0.5              | 0.0072                            | 1.45                          |
|     |                               |                      |                     | Iron                             | 7439-89-6           | 98.7             | 1.428                             |                               |
|     |                               |                      |                     | Manganese                        | 7439-96-5           | 0.75             | 0.0109                            |                               |
|     |                               |                      |                     | Phosphorus                       | 7723-14-0           | 0.02             | 0.0003                            |                               |
|     |                               |                      |                     | Sulphur                          | 7704-34-9           | 0.03             | 0.0004                            |                               |
|     |                               | Plating              | 0.001               | Nickel                           | 10101-97-0          | 100              | 0.009                             | 0.009                         |
| 3   | Bushing                       | Aluminum 2011        | 1.036               | Aluminum (Metal)                 | 7429-90-5           | 92.93            | 8.244                             | 8.871                         |
|     |                               |                      |                     | Bismuth                          | 7440-69-9           | 0.4              | 0.035                             |                               |
|     |                               |                      |                     | Copper                           | 7440-50-8           | 5.5              | 0.488                             |                               |
|     |                               |                      |                     | Iron                             | 7439-89-6           | 0.345            | 0.031                             |                               |
|     |                               |                      |                     | Lead                             | 7439-92-1           | 0.4              | 0.035                             |                               |
|     |                               |                      |                     | Silicone                         | 7440-21-3           | 0.2              | 0.018                             |                               |
|     |                               |                      |                     | Zinc (Metal)                     | 7440-66-6           | 0.15             | 0.013                             |                               |
|     |                               |                      |                     | Misc, Not to Declare             | N/A                 | 0.075            | 0.007                             |                               |
|     |                               | Plating              | 0.0032              | Nickel                           | 7440-02-0           | 100              | 0.027                             | 0.027                         |
| 4   | Body Molded                   | Resin                | 0.659               | PBT                              | 26062-94-2          | 53.7             | 3.030                             | 5.643                         |
|     |                               |                      |                     | Glass Fiber                      | 65997-17-3          | 30               | 1.693                             |                               |

# MATERIAL DECLARATION SHEET



|   |           |         |       |                                   |            |      |        |       |
|---|-----------|---------|-------|-----------------------------------|------------|------|--------|-------|
|   |           |         |       | Brominated Epoxy Resin            | 68928-70-1 | 10.5 | 0.593  |       |
|   |           |         |       | Antimony Trioxide                 | 1309-64-4  | 3    | 0.169  |       |
|   |           |         |       | Pigment Blue 15                   | 147-14-8   | 0.8  | 0.045  |       |
|   |           |         |       | Further Additives, Not to Declare | N/A        | 2    | 0.113  |       |
| 5 | Substrate | Ceramic | 0.3   | Aluminum Oxide                    | 1344-28-1  | 96   | 2.5    | 2.569 |
|   |           |         |       | Silicon Dioxide                   | 7631-86-9  | 2    | 0.051  |       |
|   |           |         |       | Magnesium Oxide                   | 1309-48-4  | 1    | 0.026  |       |
|   |           |         |       | Calcium Oxide                     | 1305-78-8  | 1    | 0.026  |       |
| 6 | Ink       | Ink     | 0.005 | Silver                            | 7440-22-4  | 92   | 0.039  | 0.043 |
|   |           |         |       | Bismuth in Glass                  | 7440-69-9  | 2    | 0.0009 |       |
|   |           |         |       | Copper                            | 7440-50-8  | 1    | 0.0004 |       |
|   |           |         |       | Glass w/o Declarable              | 65997-17-3 | 3.5  | 0.0015 |       |
|   |           |         |       | Barium                            | 7440-39-3  | 0.2  | 0.0001 |       |
|   |           |         |       | Boron                             | 7440-42-8  | 0.2  | 0.0001 |       |
|   |           |         |       | Aluminum in Glass                 | 7429-90-5  | 1.1  | 0.0005 |       |
| 7 | Ink       | Ink     | 0.003 | Ruthenium oxide                   | 12036-10-1 | 12.1 | 0.003  | 0.026 |
|   |           |         |       | Silver                            | 7440-22-4  | 10.1 | 0.003  |       |
|   |           |         |       | Palladium                         | 7440-05-3  | 12.1 | 0.003  |       |
|   |           |         |       | Lead in Glass                     | 7439-92-1  | 36.3 | 0.009  |       |
|   |           |         |       | Aluminum                          | 7429-90-5  | 3.1  | 0.001  |       |
|   |           |         |       | Calcium oxide                     | 1305-78-8  | 1.1  | 0.0003 |       |
|   |           |         |       | Bismuth trioxide                  | 1304-76-3  | 11.1 | 0.003  |       |
|   |           |         |       | Digadolinium trioxide             | 12064-62-9 | 14.1 | 0.0036 |       |
| 8 | Ink       | Ink     | 0.005 | Ruthenium oxide                   | 12036-10-1 | 15   | 0.0064 | 0.043 |
|   |           |         |       | Silver                            | 7440-22-4  | 5    | 0.0021 |       |
|   |           |         |       | Palladium                         | 7440-05-3  | 5    | 0.0021 |       |
|   |           |         |       | Lead in Glass                     | 7439-92-1  | 43   | 0.0184 |       |
|   |           |         |       | Aluminum                          | 7429-90-5  | 5    | 0.0021 |       |

# MATERIAL DECLARATION SHEET



|    |                |                            |        |                                         |            |       |         |       |
|----|----------------|----------------------------|--------|-----------------------------------------|------------|-------|---------|-------|
|    |                |                            |        | Bismuth trioxide                        | 1304-76-3  | 13    | 0.0056  |       |
|    |                |                            |        | Digadolinium trioxide                   | 12064-62-9 | 14    | 0.0060  |       |
| 9  | Terminal (X3)  | Phosphor Bronze C510 Alloy | 0.12   | Copper                                  | 7440-50-8  | 94.6  | 0.972   | 1.028 |
|    |                |                            |        | Iron                                    | 7439-89-6  | 0.06  | 0.0006  |       |
|    |                |                            |        | Phosphorus                              | 7723-14-0  | 0.19  | 0.0020  |       |
|    |                |                            |        | Lead                                    | 7439-92-1  | 0.025 | 0.0003  |       |
|    |                |                            |        | Tin                                     | 7440-31-5  | 5     | 0.051   |       |
|    |                |                            |        | Zinc (metal)                            | 7440-66-6  | 0.1   | 0.0010  |       |
|    |                |                            |        | Misc., not to declare                   | N/A        | 0.025 | 0.0003  |       |
|    |                | Plating-Cu                 | 0.0015 | Copper                                  | 7440-50-8  | 100   | 0.013   | 0.013 |
|    |                | Plating-Sn                 | 0.008  | Tin                                     | 7440-31-5  | 100   | 0.069   | 0.069 |
| 10 | Shaft          | Brass C360                 | 6.85   | Copper                                  | 7440-50-8  | 61.5  | 36.07   | 58.66 |
|    |                |                            |        | Iron                                    | 7439-89-6  | 0.2   | 0.117   |       |
|    |                |                            |        | Lead                                    | 7439-92-1  | 3     | 1.760   |       |
|    |                |                            |        | Zinc                                    | 7440-66-6  | 35    | 20.53   |       |
|    |                |                            |        | Misc, not to declare                    | N/A        | 0.3   | 0.176   |       |
|    |                | Plating                    | 0.015  | Nickel                                  | 7440-02-0  | 100   | 0.128   | 0.128 |
| 11 | Rotor          | Resin                      | 0.1757 | Nylon 6.6 (Polyhexamethylene Adipamide) | 32131-17-2 | 66    | 0.993   | 1.505 |
|    |                |                            |        | Glass Fiber                             | 65997-17-3 | 32    | 0.481   |       |
|    |                |                            |        | Molybdenum Disulfide                    | 1317-33-5  | 2     | 0.030   |       |
| 12 | Contact Spring | Nickel/Silver C7701        | 0.029  | Copper                                  | 7440-50-8  | 55.5  | 0.138   | 0.248 |
|    |                |                            |        | Iron                                    | 7439-89-6  | 0.13  | 0.0003  |       |
|    |                |                            |        | Manganese                               | 7439-96-5  | 0.35  | 0.001   |       |
|    |                |                            |        | Nickel                                  | 7440-02-0  | 18    | 0.045   |       |
|    |                |                            |        | Lead                                    | 7439-92-1  | 0.02  | 0.00005 |       |
|    |                |                            |        | Zinc                                    | 7440-66-6  | 26    | 0.065   |       |
| 13 | Rear Cover     | Resin                      | 0.2107 | PBT                                     | 26062-94-2 | 53.7  | 0.969   | 1.804 |
|    |                |                            |        | Glass Fiber                             | 65997-17-3 | 30    | 0.541   |       |
|    |                |                            |        | Brominated Epoxy                        | 68928-70-1 | 10.5  | 0.189   |       |

# MATERIAL DECLARATION SHEET



|    |               |                                    |        |                                                                                    |            |        |        |       |
|----|---------------|------------------------------------|--------|------------------------------------------------------------------------------------|------------|--------|--------|-------|
|    |               |                                    |        | Resin                                                                              |            |        |        |       |
|    |               |                                    |        | Antimony Trioxide                                                                  | 1309-64-4  | 3      | 0.054  |       |
|    |               |                                    |        | Pigment Blue 15                                                                    | 147-14-8   | 0.8    | 0.014  |       |
|    |               |                                    |        | Further Additives, Not to Declare                                                  | N/A        | 2      | 0.036  |       |
| 14 | O-Ring        | Nitrile Rubber                     | 0.01   | Nitrile Rubber                                                                     | 9005-98-5  | 100    | 0.086  | 0.086 |
| 15 | Bracket Plate | 301 Stainless Steel                | 0.347  | Carbon                                                                             | 7440-44-0  | 0.15   | 0.004  | 2.97  |
|    |               |                                    |        | Manganese                                                                          | 7439-96-5  | 2      | 0.059  |       |
|    |               |                                    |        | Phosphorus                                                                         | 7723-14-0  | 0.045  | 0.001  |       |
|    |               |                                    |        | Sulfur                                                                             | 7704-34-9  | 0.03   | 0.001  |       |
|    |               |                                    |        | Silicon                                                                            | 7440-21-3  | 1      | 0.030  |       |
|    |               |                                    |        | Chromium                                                                           | 7440-47-3  | 17     | 0.505  |       |
|    |               |                                    |        | Nickel                                                                             | 7440-02-0  | 7      | 0.208  |       |
|    |               |                                    |        | Iron                                                                               | 7439-89-6  | 72.775 | 2.161  |       |
|    |               | Plating-Sn                         | 0.0032 | Tin                                                                                | 744031-5   | 100    | 0.027  | 0.027 |
| 16 | Rear Bracket  | SPCC (Steel Plate Cold Commercial) | 0.279  | Carbon                                                                             | 7440-44-0  | 0.03   | 0.0007 | 2.389 |
|    |               |                                    |        | Manganese                                                                          | 7439-96-5  | 0.16   | 0.0038 |       |
|    |               |                                    |        | Phosphorus                                                                         | 7723-14-0  | 0.013  | 0.0003 |       |
|    |               |                                    |        | Sulfur                                                                             | 7704-34-9  | 0.008  | 0.0002 |       |
|    |               |                                    |        | Silicon                                                                            | 7440-21-3  | 0.01   | 0.0002 |       |
|    |               |                                    |        | Iron                                                                               | 7439-89-6  | 99.779 | 2.384  |       |
|    |               | Plating-Sn                         | 0.001  | Tin                                                                                | 744031-5   | 100    | 0.009  | 0.009 |
| 17 | Lube          | Lube                               | 0.0015 | Decanoic Acid, Mixed Esters with Heptanoic Acid, Octanoic Acid, Trimethylolpropane | 68130-53-0 | 54.4   | 0.007  | 0.013 |
|    |               |                                    |        | Lithium 12-Hydroxystearate                                                         | 7620-77-1  | 5.7    | 0.001  |       |
|    |               |                                    |        | Isohexadecyl-Isooctadecanoate                                                      | 52006-45-8 | 33.7   | 0.004  |       |

# MATERIAL DECLARATION SHEET



|    |       |              |        |                     |            |     |       |       |
|----|-------|--------------|--------|---------------------|------------|-----|-------|-------|
|    |       |              |        | Polyisobutylene     | 9003-27-4  | 6.2 | 0.001 |       |
| 18 | Lube  | Lube         | 0.0015 | Fluorosilicone      | 63148-56-1 | 100 | 0.013 | 0.013 |
| 19 | Epoxy | Epoxy        | 0.089  | Epoxy Resin         | 25085-99-8 | 49  | 0.373 | 0.762 |
|    |       |              |        | Antimony Trioxide   | 1309-64-4  | 11  | 0.084 |       |
|    |       |              |        | Quartz, (SiO2)      | 14808-60-7 | 11  | 0.084 |       |
|    |       |              |        | Aluminum Oxide      | 1344-28-1  | 11  | 0.084 |       |
|    |       |              |        | Kaolin Clay         | 1332-58-7  | 9   | 0.069 |       |
|    |       |              |        | Mg Alumino Silicate | 1302-88-1  | 9   | 0.069 |       |
| 20 | Epoxy | Epoxy        | 0.015  | Epoxy Resin         | 25085-99-8 | 51  | 0.066 | 0.128 |
|    |       |              |        | Quartz, (SiO2)      | 14808-60-7 | 34  | 0.044 |       |
|    |       |              |        | Kaolin Clay         | 1332-58-7  | 15  | 0.019 |       |
|    |       | Total weight | 11.678 |                     |            |     |       |       |

This Document was updated on: **09/16/2025**

## Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.