

MATERIAL DECLARATION SHEET

BOURNS®

Material Number	81/ 82C2X-XXX-AXX-AXXL			
Product Line	Sensor & 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	0.0819	Copper	7440-50-8	70.00	0.416	0.59
				Zinc	7440-66-6	30.00	0.178	
		Plating	0.0010	Nickel	7440-02-0	100	0.007	0.01
2	Lock Washer	C1050 Carbon Steel	0.1690	Carbon	7440-44-0	0.5	0.006	1.23
				Iron	7439-89-6	98.7	1.211	
				Manganese	7439-96-5	0.75	0.009	
				Phosphorus	7723-14-0	0.02	0.0002	
				Sulphur	7704-34-9	0.03	0.0004	
		Plating	0.0010	Nickel	7440-02-0	100	0.007	0.01
3	Bushing	Aluminum 2011	0.7220	Aluminum (Metal)	7429-90-5	92.93	4.87	5.24
				Bismuth	7440-69-9	0.4	0.02	
				Copper	7440-50-8	5.5	0.29	
				Iron	7439-89-6	0.345	0.02	
				Lead	7439-92-1	0.4	0.02	
				Silicon	7440-21-3	0.2	0.01	
				Zinc (Metal)	7440-66-6	0.15	0.01	
				Misc, Not to Declare	Proprietary	0.075	0.004	
		Plating	0.0010	Nickel	7440-02-0	100	0.01	0.01

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4	Body	Resin	1.8600	PBT	26062-94-2	53.7	7.25	13.51
				Glass Fiber	65997-17-3	30	4.05	
				Brominated Epoxy Resin	68928-70-1	10.5	1.42	
				Antimony Trioxide	1309-64-4	3	0.41	
				Pigment Blue 15	147-14-8	0.8	0.11	
				Further Additives, Not to Declare	Proprietary	2	0.27	
5	Shaft	Brass 360	1.5000	Copper	7440-50-8	61.5	6.70	10.89
				Iron	7439-89-6	0.2	0.02	
				Lead	7439-92-1	3	0.33	
				Zinc	7440-66-6	35	3.81	
				Misc, Not to Declare	Proprietary	0.3	0.03	
		Plating	0.0010	Nickel	7440-02-0	100	0.01	0.01
6	Rotor	Resin	0.5300	PBT	26062-94-2	53.7	2.07	3.85
				Glass Fiber	65997-17-3	30	1.15	
				Brominated Epoxy Resin	68928-70-1	10.5	0.40	
				Antimony Trioxide	1309-64-4	3	0.12	
				Pigment Blue 15	147-14-8	0.8	0.03	
				Further Additives, Not to Declare	Proprietary	2	0.08	
7	Contact Spring X2	Strip Laminated	0.01	Copper	7440-50-8	70	0.0508	0.07
				Zinc	7440-66-6	30	0.0218	
		Spacer Strip	0.008	Nickel	7440-02-0	18	0.010	0.06
				Copper	7440-50-8	55	0.032	
				Zinc	7440-66-6	27	0.016	
		Solder Inlay	0.003	Tin	7440-31-5	94.2	0.021	0.02
				Silver	7440-22-4	5	0.0011	
				Bismuth	7440-69-9	0.3	0.00007	
				Impurities	Proprietary	0.5	0.0001	
		Wire	0.026	Copper	7440-50-8	65	0.12	0.19

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				Nickel	7440-02-0	18	0.03	
				Zinc	7440-66-6	17	0.03	
8	Rotor Driver	Zinc Alloy 3	1.0130	Aluminium (Metal)	7429-90-5	4	0.29	7.36
				Cadmium	7440-43-9	0.002	0.0001	
				Copper	7440-50-8	0.1	0.01	
				Iron	7439-89-6	0.05	0.004	
				Magnesium (Metal)	7439-95-4	0.04	0.003	
				Lead	7439-92-1	0.003	0.0002	
				Tin	7440-31-5	0.002	0.0001	
				Zinc (Metal)	7440-66-6	95.7	7.04	
				Misc, Not to Declare	Proprietary	0.1	0.01	
9	Substrate X2	Ceramic	1.9560	Aluminum Oxide	1344-28-1	96	13.64	14.20
				Silicon Oxide	7631-86-9	2	0.28	
				Magnesium Oxide	1309-48-4	1	0.14	
				Calcium Oxide	1305-78-8	1	0.14	
10	Ink (X2)	Ink	0.0100	Silver	7440-22-4	75	0.0545	0.07
				Palladium	7440-05-3	11.5	0.0084	
				Glass w/o Declarables	65997-17-3	6	0.0044	
				Lead in Glass	7439-92-1	0.5	0.0004	
				Dibismuth-Trioxide	1304-76-3	3.2	0.0023	
				Nickel-Monoxide	1313-99-1	0.8	0.0006	
				Zinc Oxide	1314-13-2	0.8	0.0006	
				Ceramic w/o Declarable Substances	66402-68-4	2.1	0.0015	
				Copper	7440-50-8	0.1	0.0001	
11	Ink (X2)	Ink	0.0018	Ruthenium Oxide	12036-10-1	12.1	0.002	0.01
				Silver	7440-22-4	10.1	0.001	
				Palladium	7440-05-3	12.1	0.002	
				Lead in Glass	7439-92-1	36.3	0.005	
				Aluminum	7429-90-5	3.1	0.0004	
				Calcium Oxide	1305-78-8	1.1	0.0001	

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				Bismuth Trioxide	1304-76-3	11.1	0.001	
				Digadolinium Trioxide	12064-62-9	14.1	0.002	
12	Ink (X2)	Ink	0.0342	Ruthenium Oxide	12036-10-1	15	0.037	0.25
				Silver	7440-22-4	5	0.012	
				Palladium	7440-05-3	5	0.012	
				Lead in Glass	7439-92-1	43	0.107	
				Aluminum	7429-90-5	5	0.012	
				Bismuth Trioxide	1304-76-3	13	0.032	
				Digadolinium Trioxide	12064-62-9	14	0.035	
13	Terminal Wire (X6)	Copper	0.5920	Copper	7440-50-8	100	4.30	4.30
		Plating	0.0060	Tin	7440-31-5	100	0.0436	0.0436
14	Body (X2)	Resin	1.1340	PBT	26062-94-2	53.7	4.42	8.24
				Glass Fiber	65997-17-3	30	2.47	
				Brominated Epoxy Resin	68928-70-1	10.5	0.86	
				Antimony Trioxide	1309-64-4	3	0.25	
				Pigment Blue 15	147-14-8	0.8	0.07	
				Further Additives, Not to Declare	Proprietary	2	0.16	
15	Body	Resin	1.3310	PBT	26062-94-2	53.7	5.19	9.67
				Glass Fiber	65997-17-3	30	2.90	
				Brominated Epoxy Resin	68928-70-1	10.5	1.01	
				Antimony Trioxide	1309-64-4	3	0.29	
				Pigment Blue 15	147-14-8	0.8	0.08	
				Further Additives, Not to Declare	Proprietary	2	0.19	
16	Rotor	Resin	0.4510	Polyamide 66	32131-17-2	53	1.74	3.28
				Glass Fibers	65997-17-3	32	1.05	
				Tetrafluoroethylene Polymer	9002-84-0	13	0.43	
				Dimethylsilicone	63148-62-9	2	0.07	
17	Washer	Teflon	0.0160	Polytetrafluoroethylene	9002-84-0	100	0.12	0.12

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18	Spring Washer	Beryllium Copper	0.031	Beryllium	7440-41-7	1.90	0.0043	0.23
				Nickel	7440-02-0	0.30	0.0007	
				Cobalt	7440-48-4	0.30	0.0007	
				Iron	7439-89-6	0.30	0.0007	
				Aluminum	7429-90-5	0.10	0.0002	
				Silicon	7440-21-3	0.10	0.0002	
				Copper	7440-50-8	96.70	0.2177	
				Silver	7440-22-4	0.05	0.0001	
				Misc, Not to Declare	Proprietary	0.25	0.0006	
19	Front Cover	Stainless Steel 304	0.694	Carbon	7440-44-0	0.08	0.004	5.04
				Manganese	7439-96-5	2	0.1008	
				Phosphorus	7723-14-0	0.045	0.0023	
				Sulfur	7704-34-9	0.03	0.0015	
				Silicon	7440-21-3	0.75	0.0378	
				Chromium	7440-47-3	18	0.9072	
				Nickel	7440-02-0	8	0.4032	
				Iron	7439-89-6	71.095	3.5831	
20	Rivet X4	Aluminum Wire 2117-H-15	0.605	Aluminum	7429-90-5	95.01	4.174	4.39
				Copper	7440-50-8	2.6	0.114	
				Silicon	7440-21-3	0.8	0.035	
				Chromium	7440-47-3	0.09	0.004	
				Manganese	7439-96-5	0.2	0.009	
				Zinc	7440-66-6	0.25	0.011	
				Iron	7439-89-6	0.7	0.031	
				Magnesium	7439-95-4	0.35	0.015	
21	Rear Cover	Stainless Steel 304	0.949	Carbon	7440-44-0	0.08	0.006	6.89
				Manganese	7439-96-5	2	0.138	
				Phosphorus	7723-14-0	0.045	0.003	
				Sulfur	7704-34-9	0.03	0.002	
				Silicon	7440-21-3	0.75	0.052	
				Chromium	7440-47-3	18	1.241	

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				Nickel	7440-02-0	8	0.551	
				Iron	7439-89-6	71.095	4.900	
22	Adhesive	Adhesive	0.0001	Acrylic Resin	Proprietary	98.8	0.0007	0.001
				Misc, not to Declare	Proprietary	1.2	0.00001	
23	Lube X2	Lube	0.0032	Decanoic Acid, Mixed Esters With Heptanoic Acid, Octanoic Acid, Trimethylolpropane	68130-53-0	54.40	0.01	0.023
				Lithium 12-Hydroxystearate	7620-77-1	5.70	0.001	
				Isohexadecyl-Isooctadecanoate	52006-45-8	33.70	0.008	
				Polyisobutylene	9003-27-4	6.20	0.001	
24	Lube	Lube	0.0288	Siloxanes and Silicones, Di-Me, Di-Ph	68083-14-7	68.90	0.144	0.21
				Lithium stearate	4485-12-5	25.40	0.053	
				Silane, Dichlorodimethyl-Reaction Products with Silica	68611-44-9	4.80	0.010	
				Diphenylamine	122-39-4	0.90	0.002	
		Total weight	13.7700					

This Document was updated on: **02/09/2026**

Important remarks:

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