

BFOU (c) 250V Instrumentation Cable – SHF2

Fire Resistant • Collective Screen • Halogen-Free • Rated 90°C

Pairs/Triads

Each pair/triad is twisted together and cabled with an overall poly/aluminum shield to provide 100% coverage

Core Identification:

Pair: Black - Light Blue
Triad: Black - Light Blue - Brown

Armor

Basket weave tinned copper wire armor per IEC 60092-353

Outer Sheath

Low smoke halogen-free flame retardant compound meeting IEC 60092-359 Type SHF-2.

Standard sheath color is gray. Blue sheath is available for intrinsically safe installations.



Conductor

Flexible Class 5 tinned copper per IEC 60228

Insulation

Fire resistant tape and low smoke halogen-free EP meeting IEC 60092-351

Hawke Gland Types

See Page 1

Bedding

Low smoke halogen-free polyolefin bedding meeting IEC 60092-353

Application

Designed for instrumentation, communication and public address/general alarm systems in EX or safe areas.

Features

- Meets IEC 60092-350, IEC 60092-351, IEC 60092-353 AND IEC 60092-359
- Fire resistant: IEC 60331
- Flame retardant: IEC 60332-3 Cat A
- Low smoke: IEC 61034-2
- Acidity: IEC 60754-2
- Halogen-free: 60754-1
- Flexibility: High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.

Ratings & Approvals

- 90°C Temperature Rating
- American Bureau of Shipping (ABS) BT367739
- Det Norske Veritas (DNV)
- Lloyd's Register of Shipping (LRS) (pending)

Stranding Profile

See Page 1

Size mm2	SHF2 Part No.*	Diameter Over Ins. (in)	Diameter Over Ins. (mm)	Diameter Over Bedding (in)	Diameter Over Bedding (mm)	Overall Cable Diameter (in)	Overall Cable Diameter (mm)	Cable Weight (lbs/kft)	Cable Weight (kg/km)
1 x 2 x 0.75	3414240102GR	0.109	2.77	0.340	7.92	0.462	11.73	148	220
2 x 2 x 0.75	3414240202GR	0.109	2.77	0.496	11.56	0.614	15.60	257	382
4 x 2 x 0.75	3414240402GR	0.109	2.77	0.570	13.46	0.696	17.68	324	482
7 x 2 x 0.75	3414240702GR	0.109	2.77	0.688	16.21	0.813	20.65	407	606
8 x 2 x 0.75	3414240802GR	0.109	2.77	0.749	17.58	0.871	22.12	488	726
12 x 2 x 0.75	3414241202GR	0.109	2.77	0.926	21.74	1.043	26.49	652	970
16 x 2 x 0.75	3414241602GR	0.109	2.77	1.035	26.80	1.149	29.18	806	1199
19 x 2 x 0.75	3414241902GR	0.109	2.77	1.104	25.91	1.245	31.62	954	1419
24 x 2 x 0.75	3414242402GR	0.109	2.77	1.334	30.94	1.426	36.22	1047	1558
32 x 2 x 0.75	3414243202GR	0.109	2.77	1.443	33.78	1.594	40.49	1496	2226
1 x 2 x 1.0	3414240103GR	0.114	2.90	0.342	8.18	0.472	11.99	160	238
2 x 2 x 1.0	3414240203GR	0.114	2.90	0.509	12.14	0.640	16.26	278	414
4 x 2 x 1.0	3414240403GR	0.114	2.90	0.593	14.15	0.725	18.42	361	537
7 x 2 x 1.0	3414240703GR	0.114	2.90	0.716	18.01	0.886	22.50	436	649
8 x 2 x 1.0	3414240803GR	0.114	2.90	0.780	18.26	0.902	22.91	529	787
12 x 2 x 1.0	3414241203GR	0.114	2.90	0.956	22.38	1.072	27.23	721	1073
16 x 2 x 1.0	3414241603GR	0.114	2.90	1.086	25.10	1.186	30.12	845	1257
19 x 2 x 1.0	3414241903GR	0.114	2.90	1.148	27.69	1.293	32.84	992	1476
24 x 2 x 1.0	3414242403GR	0.114	2.90	1.356	32.18	1.481	37.62	1158	1723
32 x 2 x 1.0	3414243203GR	0.114	2.90	1.518	35.56	1.636	41.55	1638	2437

* Gray sheath is standard. For Blue sheath, put "BL" at end of Part Number (example: 3414240102BL)

SHF2 BFOU (c) 250V Instrumentation Cable



See page 1 for Ampacity Ratings, Bend Radius, Stranding Profile and Hawke Gland Types.

Oil & Gas Cables

0.75 mm² Pairs or Triads
 Capacitance = 57 nF/km
 Inductance = 0.80 mH/km
 Resistance = 26.7 ohms/km

1.0 mm² Pairs or Triads
 Capacitance = 60nF/km
 Inductance = 0.75 mH/km
 Resistance = 20.0 ohms/km

1.5 mm² Pairs or Triads
 Capacitance = 61 nF/km
 Inductance = 0.74 mH/km
 Resistance = 13.7 ohms/km

2.5 mm² Pairs or Triads
 Capacitance = 69 nF/km
 Inductance = 0.67 mH/km
 Resistance = 8.21 ohms/km

Size mm2	SHF2 Part No.*	Diameter Over Ins. (in)	Diameter Over Ins. (mm)	Diameter Over Bedding (in)	Diameter Over Bedding (mm)	Overall Cable Diameter (in)	Overall Cable Diameter (mm)	Cable Weight (lbs/ft)	Cable Weight (kg/km)
1 x 2 x 1.5	3414240104GR	0.131	3.58	0.354	8.99	0.507	12.88	172	256
2 x 2 x 1.5	3414240204GR	0.131	3.58	0.529	13.44	0.697	17.70	342	509
4 x 2 x 1.5	3414240404GR	0.131	3.58	0.620	15.75	0.797	20.24	449	668
7 x 2 x 1.5	3414240704GR	0.131	3.58	0.796	20.22	0.981	24.92	631	939
8 x 2 x 1.5	3414240804GR	0.131	3.58	0.817	20.75	1.008	25.60	683	1016
12 x 2 x 1.5	3414241204GR	0.131	3.58	1.004	25.50	1.206	30.63	874	1300
16 x 2 x 1.5	3414241604GR	0.131	3.58	1.129	28.68	1.339	34.01	1111	1653
19 x 2 x 1.5	3414241904GR	0.131	3.58	1.253	31.83	1.481	37.62	1303	1939
24 x 2 x 1.5	3414242404GR	0.131	3.58	1.460	37.08	1.691	42.95	1532	2279
32 x 2 x 1.5	3414243204GR	0.131	3.58	1.600	40.64	1.886	47.90	2015	2998
1 x 2 x 2.5	3414240105GR	0.153	4.14	0.392	9.96	0.557	14.15	210	312
2 x 2 x 2.5	3414240205GR	0.153	4.14	0.631	16.03	0.775	19.69	429	638
4 x 2 x 2.5	3414240405GR	0.153	4.14	0.697	17.70	0.891	22.63	536	798
7 x 2 x 2.5	3414240705GR	0.153	4.14	0.896	22.76	1.108	28.14	788	1172
8 x 2 x 2.5	3414240805GR	0.153	4.14	0.935	23.75	1.135	28.83	883	1314
12 x 2 x 2.5	3414241205GR	0.153	4.14	1.170	29.72	1.393	35.38	1302	1937
16 x 2 x 2.5	3414241605GR	0.153	4.14	1.310	33.27	1.544	39.22	1543	2296
19 x 2 x 2.5	3414241905GR	0.153	4.14	1.433	36.40	1.703	43.26	1714	2550
24 x 2 x 2.5	3414242405GR	0.153	4.14	1.660	42.16	1.919	48.74	2101	3126
32 x 2 x 2.5	3414243205GR	0.153	4.14	1.814	46.08	2.082	52.88	2653	3947
1 x 3 x 0.75	3414280102GR	0.109	2.77	0.327	8.31	0.479	12.17	151	225
2 x 3 x 0.75	3414280202GR	0.109	2.77	0.560	14.22	0.722	18.34	321	478
4 x 3 x 0.75	3414280402GR	0.109	2.77	0.657	16.69	0.828	21.03	405	603
7 x 3 x 0.75	3414280702GR	0.109	2.77	0.794	20.17	0.973	24.71	548	815
8 x 3 x 0.75	3414280802GR	0.109	2.77	0.872	22.15	1.057	26.85	642	955
12 x 3 x 0.75	3414281202GR	0.109	2.77	1.061	26.95	1.255	31.88	906	1348
16 x 3 x 0.75	3414281602GR	0.109	2.77	1.189	30.20	1.391	35.33	1084	1613
19 x 3 x 0.75	3414281902GR	0.109	2.77	1.258	31.95	1.464	37.19	1211	1802
24 x 3 x 0.75	3414282402GR	0.109	2.77	1.533	38.94	1.751	44.48	1326	1973
32 x 3 x 0.75	3414283202GR	0.109	2.77	1.691	42.95	1.933	49.10	1918	2854
1 x 3 x 1.0	3414280103GR	0.114	3.51	0.338	8.59	0.492	12.50	175	260
2 x 3 x 1.0	3414280203GR	0.114	3.51	0.577	14.66	0.745	18.92	359	534
4 x 3 x 1.0	3414280403GR	0.114	3.51	0.678	17.22	0.850	21.59	464	690
7 x 3 x 1.0	3414280703GR	0.114	3.51	0.824	20.93	1.005	25.53	615	915
8 x 3 x 1.0	3414280803GR	0.114	3.51	0.899	22.83	1.086	27.58	755	1123
12 x 3 x 1.0	3414281203GR	0.114	3.51	1.120	28.45	1.330	33.78	944	1405
16 x 3 x 1.0	3414281603GR	0.114	3.51	1.209	30.71	1.428	36.27	1229	1829
19 x 3 x 1.0	3414281903GR	0.114	3.51	1.326	33.68	1.549	39.34	1398	2080
24 x 3 x 1.0	3414282403GR	0.114	3.51	1.612	40.94	1.836	46.63	1587	2361
32 x 3 x 1.0	3414283203GR	0.114	3.51	1.775	45.09	2.026	51.46	2142	3187
1 x 3 x 1.5	3414280104GR	0.131	3.58	0.375	9.53	0.530	13.46	210	312
2 x 3 x 1.5	3414280204GR	0.131	3.58	0.653	16.59	0.828	21.03	453	674
4 x 3 x 1.5	3414280404GR	0.131	3.58	0.771	19.58	0.951	24.16	599	891
7 x 3 x 1.5	3414280704GR	0.131	3.58	0.936	23.77	1.127	28.63	842	1253
8 x 3 x 1.5	3414280804GR	0.131	3.58	1.039	26.39	1.238	31.45	918	1366
12 x 3 x 1.5	3414281204GR	0.131	3.58	1.279	32.49	1.489	37.82	1295	1927
16 x 3 x 1.5	3414281604GR	0.131	3.58	1.451	36.86	1.671	42.44	1551	2308
19 x 3 x 1.5	3414281904GR	0.131	3.58	1.535	38.99	1.761	44.73	1837	2733
24 x 3 x 1.5	3414282404GR	0.131	3.58	1.831	46.51	2.077	52.76	2261	3364
32 x 3 x 1.5	3414283204GR	0.131	3.58	2.032	51.61	2.289	58.14	2913	4334
1 x 3 x 2.5	3414280105GR	0.153	4.14	0.380	9.65	0.548	13.92	221	329
2 x 3 x 2.5	3414280205GR	0.153	4.14	0.745	18.92	0.924	23.47	549	817
4 x 3 x 2.5	3414280405GR	0.153	4.14	0.881	23.88	1.068	27.13	747	1111
7 x 3 x 2.5	3414280705GR	0.153	4.14	1.090	27.69	1.288	32.72	1103	1641
8 x 3 x 2.5	3414280805GR	0.153	4.14	1.190	30.23	1.417	35.99	1333	1983
12 x 3 x 2.5	3414281205GR	0.153	4.14	1.487	37.77	1.723	43.76	1702	2532
16 x 3 x 2.5	3414281605GR	0.153	4.14	1.666	42.32	1.915	48.64	2256	3357
19 x 3 x 2.5	3414281905GR	0.153	4.14	1.764	44.81	2.019	51.28	2436	3625
24 x 3 x 2.5	3414282405GR	0.153	4.14	2.106	53.49	2.378	60.40	2923	4349
32 x 3 x 2.5	3414283205GR	0.153	4.14	2.340	59.44	2.626	66.70	3921	5834