

# RFOU (c) 250V Instrumentation Cable – SHF2

Flame Retardant • 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

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
- 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)

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	3405240102GR	0.095	2.41	0.285	7.24	0.435	11.05	128	190
2 x 2 x 0.75	3405240202GR	0.095	2.41	0.415	10.54	0.573	14.55	229	341
4 x 2 x 0.75	3405240402GR	0.095	2.41	0.481	12.22	0.645	16.38	284	423
7 x 2 x 0.75	3405240702GR	0.095	2.41	0.597	15.16	0.771	19.58	384	571
8 x 2 x 0.75	3405240802GR	0.095	2.41	0.621	15.77	0.806	20.47	414	616
12 x 2 x 0.75	3405241202GR	0.095	2.41	0.750	19.05	0.946	24.03	562	836
16 x 2 x 0.75	3405241602GR	0.095	2.41	0.837	21.26	1.031	26.19	662	985
19 x 2 x 0.75	3405241902GR	0.095	2.41	0.915	23.24	1.125	28.58	758	1128
24 x 2 x 0.75	3405242402GR	0.095	2.41	1.044	26.52	1.280	32.51	897	1335
32 x 2 x 0.75	3405243202GR	0.095	2.41	1.172	29.77	1.403	35.64	1150	1711
1 x 2 x 1.0	3405240103GR	0.103	2.62	0.301	7.65	0.451	11.46	141	210
2 x 2 x 1.0	3405240203GR	0.103	2.62	0.439	11.15	0.602	15.29	252	375
4 x 2 x 1.0	3405240403GR	0.103	2.62	0.511	12.98	0.673	17.09	315	469
7 x 2 x 1.0	3405240703GR	0.103	2.62	0.613	15.57	0.816	20.73	453	674
8 x 2 x 1.0	3405240803GR	0.103	2.62	0.645	16.38	0.846	21.49	471	701
12 x 2 x 1.0	3405241203GR	0.103	2.62	0.812	20.62	1.006	25.55	645	960
16 x 2 x 1.0	3405241603GR	0.103	2.62	0.906	23.01	1.101	27.97	772	1149
19 x 2 x 1.0	3405241903GR	0.103	2.62	0.958	24.33	1.187	30.15	872	1297
24 x 2 x 1.0	3405242403GR	0.103	2.62	1.147	29.13	1.369	34.77	1061	1579
32 x 2 x 1.0	3405243203GR	0.103	2.62	1.268	32.21	1.498	38.05	1384	2059

\* Gray sheath is standard. For Blue sheath, put "BL" at end of Part Number (example: 3405240102BL)

# SHF2 RFOU (c) 250V Instrumentation Cable



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

## Oil & Gas Cables

**0.75 mm<sup>2</sup> Pairs or Triads**  
 Capacitance = 64 nF/km  
 Inductance = 0.71 mH/km  
 Resistance = 26.7 ohms/km

**1.0 mm<sup>2</sup> Pairs or Triads**  
 Capacitance = 68 nF/km  
 Inductance = 0.67 mH/km  
 Resistance = 20.0 ohms/km

**1.5 mm<sup>2</sup> Pairs or Triads**  
 Capacitance = 69 nF/km  
 Inductance = 0.69 mH/km  
 Resistance = 13.7 ohms/km

**2.5 mm<sup>2</sup> Pairs or Triads**  
 Capacitance = 76 nF/km  
 Inductance = 0.63 mH/km  
 Resistance = 8.21 ohms/km

Size mm <sup>2</sup>	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	3405240104GR	0.121	3.07	0.337	8.56	0.490	12.45	176	262
2 x 2 x 1.5	3405240204GR	0.121	3.07	0.505	12.83	0.668	16.97	346	515
4 x 2 x 1.5	3405240404GR	0.121	3.07	0.578	14.68	0.754	19.15	419	623
7 x 2 x 1.5	3405240704GR	0.121	3.07	0.740	18.80	0.920	23.37	565	841
8 x 2 x 1.5	3405240804GR	0.121	3.07	0.764	19.41	0.953	24.21	611	909
12 x 2 x 1.5	3405241204GR	0.121	3.07	0.940	23.88	1.142	29.01	828	1232
16 x 2 x 1.5	3405241604GR	0.121	3.07	1.050	26.67	1.251	31.78	1025	1525
19 x 2 x 1.5	3405241904GR	0.121	3.07	1.162	29.51	1.386	35.20	1204	1791
24 x 2 x 1.5	3405242404GR	0.121	3.07	1.326	33.68	1.613	40.97	1394	2812
32 x 2 x 1.5	3405243204GR	0.121	3.07	1.485	37.72	1.747	44.37	1909	3485
1 x 2 x 2.5	3405240105GR	0.143	3.63	0.381	9.68	0.534	13.56	202	301
2 x 2 x 2.5	3405240205GR	0.143	3.63	0.573	14.55	0.736	18.69	386	574
4 x 2 x 2.5	3405240405GR	0.143	3.63	0.680	17.27	0.835	21.21	511	760
7 x 2 x 2.5	3405240705GR	0.143	3.63	0.872	22.15	1.044	26.52	756	1125
8 x 2 x 2.5	3405240805GR	0.143	3.63	0.910	23.11	1.080	27.43	807	1201
12 x 2 x 2.5	3405241205GR	0.143	3.63	1.126	28.60	1.311	33.30	1143	1701
16 x 2 x 2.5	3405241605GR	0.143	3.63	1.261	32.03	1.465	37.21	1467	2183
19 x 2 x 2.5	3405241905GR	0.143	3.63	1.381	35.08	1.589	40.36	1663	2474
24 x 2 x 2.5	3405242405GR	0.143	3.63	1.571	39.90	1.847	46.91	2043	3040
32 x 2 x 2.5	3405243205GR	0.143	3.63	1.733	44.02	2.001	50.83	2607	3879
1 x 3 x 0.75	3405280102GR	0.095	2.41	0.299	7.59	0.457	11.61	145	216
2 x 3 x 0.75	3405280202GR	0.095	2.41	0.497	12.62	0.663	16.84	283	421
4 x 3 x 0.75	3405280402GR	0.095	2.41	0.582	14.78	0.752	19.10	355	528
7 x 3 x 0.75	3405280702GR	0.095	2.41	0.701	17.81	0.880	22.35	488	726
8 x 3 x 0.75	3405280802GR	0.095	2.41	0.786	19.96	0.972	24.69	550	818
12 x 3 x 0.75	3405281202GR	0.095	2.41	0.937	23.80	1.131	28.73	756	1125
16 x 3 x 0.75	3405281602GR	0.095	2.41	1.049	26.64	1.251	31.78	898	1336
19 x 3 x 0.75	3405281902GR	0.095	2.41	1.127	28.63	1.333	33.86	1023	1522
24 x 3 x 0.75	3405282402GR	0.095	2.41	1.331	33.81	1.568	39.83	1235	1838
32 x 3 x 0.75	3405283202GR	0.095	2.41	1.474	37.44	1.716	43.59	1626	2419
1 x 3 x 1.0	3405280103GR	0.103	2.62	0.316	8.03	0.470	11.94	158	235
2 x 3 x 1.0	3405280203GR	0.103	2.62	0.537	13.64	0.703	17.86	348	518
4 x 3 x 1.0	3405280403GR	0.103	2.62	0.629	15.98	0.800	20.32	413	614
7 x 3 x 1.0	3405280703GR	0.103	2.62	0.759	19.28	0.934	23.72	563	838
8 x 3 x 1.0	3405280803GR	0.103	2.62	0.838	21.29	1.025	26.04	734	1152
12 x 3 x 1.0	3405281203GR	0.103	2.62	1.014	25.76	1.206	30.63	859	1278
16 x 3 x 1.0	3405281603GR	0.103	2.62	1.152	29.26	1.353	34.37	1077	1602
19 x 3 x 1.0	3405281903GR	0.103	2.62	1.218	30.94	1.436	36.47	1253	1864
24 x 3 x 1.0	3405282403GR	0.103	2.62	1.440	36.58	1.697	43.10	1498	2229
32 x 3 x 1.0	3405283203GR	0.103	2.62	1.612	40.94	1.857	47.17	1957	2912
1 x 3 x 1.5	3405280104GR	0.121	3.07	0.353	8.97	0.509	12.93	187	278
2 x 3 x 1.5	3405280204GR	0.121	3.07	0.614	15.60	0.783	19.89	427	635
4 x 3 x 1.5	3405280404GR	0.121	3.07	0.721	18.31	0.909	23.09	535	796
7 x 3 x 1.5	3405280704GR	0.121	3.07	0.874	22.20	1.059	26.90	744	1107
8 x 3 x 1.5	3405280804GR	0.121	3.07	0.953	24.21	1.147	29.13	824	1226
12 x 3 x 1.5	3405281204GR	0.121	3.07	1.191	30.25	1.241	31.52	943	1403
16 x 3 x 1.5	3405281604GR	0.121	3.07	1.333	33.86	1.548	39.32	1437	2138
19 x 3 x 1.5	3405281904GR	0.121	3.07	1.410	35.81	1.645	41.78	1667	2480
24 x 3 x 1.5	3405282404GR	0.121	3.07	1.687	42.85	1.928	48.97	2095	3117
32 x 3 x 1.5	3405283204GR	0.121	3.07	1.869	47.47	2.134	54.20	2669	3971
1 x 3 x 2.5	3405280105GR	0.143	3.63	0.401	10.19	0.567	14.40	247	368
2 x 3 x 2.5	3405280205GR	0.143	3.63	0.709	18.01	0.882	22.40	508	756
4 x 3 x 2.5	3405280405GR	0.143	3.63	0.836	21.23	1.017	25.83	693	1031
7 x 3 x 2.5	3405280705GR	0.143	3.63	1.016	25.81	1.208	30.68	1007	1498
8 x 3 x 2.5	3405280805GR	0.143	3.63	1.126	28.60	1.312	33.32	1369	2037
12 x 3 x 2.5	3405281205GR	0.143	3.63	1.355	34.42	1.582	40.18	1541	2293
16 x 3 x 2.5	3405281605GR	0.143	3.63	1.572	39.93	1.802	45.77	2029	3019
19 x 3 x 2.5	3405281905GR	0.143	3.63	1.664	42.27	1.901	48.29	2278	3389
24 x 3 x 2.5	3405282405GR	0.143	3.63	1.988	50.50	2.295	58.29	2891	4301
32 x 3 x 2.5	3405283205GR	0.143	3.63	2.204	55.98	2.473	62.81	3690	5490