

RFOU (i) 250V Instrumentation Cable – SHF2

Flame Retardant • Individual Screen • Halogen-Free • Rated 90°C

Pairs/Triads

Each pair/triad is twisted with a bare tinned drainwire and shielded with a poly/aluminum tape 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)

Stranding Profile
See Page 1

Size mm ²	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	3405230102GR	0.095	2.41	0.285	7.24	0.435	11.05	128	190
2 x 2 x 0.75	3405230202GR	0.095	2.41	0.429	10.90	0.591	15.01	250	372
4 x 2 x 0.75	3405230402GR	0.095	2.41	0.500	12.70	0.670	17.02	324	482
7 x 2 x 0.75	3405230702GR	0.095	2.41	0.632	16.05	0.809	20.55	462	687
8 x 2 x 0.75	3405230802GR	0.095	2.41	0.652	16.56	0.835	21.21	503	748
12 x 2 x 0.75	3405231202GR	0.095	2.41	0.805	20.45	0.988	25.10	690	1027
16 x 2 x 0.75	3405231602GR	0.095	2.41	0.890	22.61	1.098	27.89	876	1303
19 x 2 x 0.75	3405231902GR	0.095	2.41	0.974	24.74	1.188	30.18	992	1476
24 x 2 x 0.75	3405232402GR	0.095	2.41	1.129	28.68	1.375	34.93	1202	1788
32 x 2 x 0.75	3405233202GR	0.095	2.41	1.248	31.70	1.499	38.07	1566	2330
1 x 2 x 1.0	3405230103GR	0.103	2.62	0.301	7.65	0.451	11.46	141	210
2 x 2 x 1.0	3405230203GR	0.103	2.62	0.455	11.56	0.621	15.77	274	408
4 x 2 x 1.0	3405230403GR	0.103	2.62	0.531	13.49	0.703	17.86	356	530
7 x 2 x 1.0	3405230703GR	0.103	2.62	0.674	17.12	0.853	21.67	508	756
8 x 2 x 1.0	3405230803GR	0.103	2.62	0.695	17.65	0.881	22.38	570	848
12 x 2 x 1.0	3405231203GR	0.103	2.62	0.851	21.62	1.047	26.59	766	1140
16 x 2 x 1.0	3405231603GR	0.103	2.62	0.952	24.18	1.154	29.31	938	1396
19 x 2 x 1.0	3405231903GR	0.103	2.62	1.042	26.47	1.248	31.70	1064	1583
24 x 2 x 1.0	3405232403GR	0.103	2.62	1.208	30.68	1.436	36.47	1319	1963
32 x 2 x 1.0	3405233203GR	0.103	2.62	1.336	33.93	1.581	40.16	1718	2556

* Gray sheath is standard. For Blue sheath, put "BL" at end of Part Number (example: 3405230102BL)

SHF2 RFOU (i) 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 = 104 nF/km
 Inductance = 0.71 mH/km
 Resistance = 26.7 ohms/km

1.0 mm² Pairs or Triads
 Capacitance = 116 nF/km
 Inductance = 0.67 mH/km
 Resistance = 20.0 ohms/km

1.5 mm² Pairs or Triads
 Capacitance = 117 nF/km
 Inductance = 0.67 mH/km
 Resistance = 13.7 ohms/km

2.5 mm² Pairs or Triads
 Capacitance = 135 nF/km
 Inductance = 0.63 mH/km
 Resistance = 8.21 ohms/km

Size mm ²	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 1.5	3405230104GR	0.121	3.07	0.337	8.56	0.490	12.45	176	262
2 x 2 x 1.5	3405230204GR	0.121	3.07	0.515	13.08	0.688	17.48	381	567
4 x 2 x 1.5	3405230404GR	0.121	3.07	0.603	15.32	0.783	19.89	457	680
7 x 2 x 1.5	3405230704GR	0.121	3.07	0.769	19.53	0.958	24.33	687	1022
8 x 2 x 1.5	3405230804GR	0.121	3.07	0.802	20.37	0.991	25.17	727	1082
12 x 2 x 1.5	3405231204GR	0.121	3.07	0.976	24.79	1.191	30.25	1001	1489
16 x 2 x 1.5	3405231604GR	0.121	3.07	1.109	28.17	1.310	33.27	1227	1826
19 x 2 x 1.5	3405231904GR	0.121	3.07	1.214	30.84	1.403	35.64	1334	1985
24 x 2 x 1.5	3405232404GR	0.121	3.07	1.387	35.23	1.663	42.24	1738	2586
32 x 2 x 1.5	3405233204GR	0.121	3.07	1.554	39.47	1.815	46.10	2379	3540
1 x 2 x 2.5	3405230105GR	0.143	3.63	0.375	9.530	0.534	13.56	202	301
2 x 2 x 2.5	3405230205GR	0.143	3.63	0.579	14.71	0.756	19.20	480	714
4 x 2 x 2.5	3405230405GR	0.143	3.63	0.681	17.30	0.866	22.00	612	911
7 x 2 x 2.5	3405230705GR	0.143	3.63	0.872	22.15	1.068	27.13	961	1430
8 x 2 x 2.5	3405230805GR	0.143	3.63	0.901	22.89	1.105	28.07	994	1479
12 x 2 x 2.5	3405231205GR	0.143	3.63	1.126	28.60	1.343	34.11	1435	2135
16 x 2 x 2.5	3405231605GR	0.143	3.63	1.261	32.03	1.503	38.18	1847	2748
19 x 2 x 2.5	3405231905GR	0.143	3.63	1.381	35.08	1.644	41.76	2136	3178
24 x 2 x 2.5	3405232405GR	0.143	3.63	1.597	40.56	1.898	48.21	2335	3474
32 x 2 x 2.5	3405233205GR	0.143	3.63	1.770	44.96	2.086	52.98	3114	4633
1 x 3 x 0.75	3405270102GR	0.095	2.41	0.299	7.59	0.457	11.61	145	216
2 x 3 x 0.75	3405270202GR	0.095	2.41	0.522	13.26	0.690	17.53	309	460
4 x 3 x 0.75	3405270402GR	0.095	2.41	0.611	15.52	0.786	19.96	398	592
7 x 3 x 0.75	3405270702GR	0.095	2.41	0.738	18.75	0.921	23.39	550	818
8 x 3 x 0.75	3405270802GR	0.095	2.41	0.823	20.90	1.012	25.70	656	976
12 x 3 x 0.75	3405271202GR	0.095	2.41	0.989	25.12	1.186	30.12	848	1262
16 x 3 x 0.75	3405271602GR	0.095	2.41	1.124	28.55	1.330	33.78	1061	1579
19 x 3 x 0.75	3405271902GR	0.095	2.41	1.189	30.20	1.412	35.86	1236	1839
24 x 3 x 0.75	3405272402GR	0.095	2.41	1.406	35.71	1.657	42.09	1515	2254
32 x 3 x 0.75	3405273202GR	0.095	2.41	1.575	40.01	1.826	46.38	1931	2873
1 x 3 x 1.0	3405270103GR	0.103	2.62	0.316	8.03	0.470	11.94	158	235
2 x 3 x 1.0	3405270203GR	0.103	2.62	0.555	14.10	0.725	18.42	371	552
4 x 3 x 1.0	3405270403GR	0.103	2.62	0.652	16.56	0.828	21.03	454	676
7 x 3 x 1.0	3405270703GR	0.103	2.62	0.788	20.02	0.973	24.71	645	960
8 x 3 x 1.0	3405270803GR	0.103	2.62	0.874	22.20	1.066	27.08	876	1303
12 x 3 x 1.0	3405271203GR	0.103	2.62	1.058	26.87	1.262	32.05	993	1477
16 x 3 x 1.0	3405271603GR	0.103	2.62	1.203	30.56	1.428	36.27	1298	1931
19 x 3 x 1.0	3405271903GR	0.103	2.62	1.273	32.33	1.502	38.15	1452	2160
24 x 3 x 1.0	3405272403GR	0.103	2.62	1.523	38.68	1.724	43.79	1820	2708
32 x 3 x 1.0	3405273203GR	0.103	2.62	1.598	40.59	1.840	46.74	2071	3081
1 x 3 x 1.5	3405270104GR	0.121	3.07	0.353	8.97	0.509	12.930	187	278
2 x 3 x 1.5	3405270204GR	0.121	3.07	0.630	16.00	0.806	20.470	403	600
4 x 3 x 1.5	3405270404GR	0.121	3.07	0.742	18.85	0.928	23.570	576	857
7 x 3 x 1.5	3405270704GR	0.121	3.07	0.867	22.02	1.093	27.760	799	1189
8 x 3 x 1.5	3405270804GR	0.121	3.07	0.984	24.99	1.187	30.150	858	1277
12 x 3 x 1.5	3405271204GR	0.121	3.07	1.231	31.27	1.461	37.110	1270	1890
16 x 3 x 1.5	3405271604GR	0.121	3.07	1.379	35.03	1.621	41.170	1570	2336
19 x 3 x 1.5	3405271904GR	0.121	3.07	1.404	35.66	1.652	41.960	1835	2730
24 x 3 x 1.5	3405272404GR	0.121	3.07	1.680	42.67	1.927	48.950	2304	3428
32 x 3 x 1.5	3405273204GR	0.121	3.07	1.932	49.07	2.210	56.130	2893	4304
1 x 3 x 2.5	3405270105GR	0.143	3.63	0.395	10.03	0.560	14.22	247	368
2 x 3 x 2.5	3405270205GR	0.143	3.63	0.725	18.42	0.908	23.06	562	836
4 x 3 x 2.5	3405270405GR	0.143	3.63	0.856	21.74	1.501	38.13	801	1192
7 x 3 x 2.5	3405270705GR	0.143	3.63	1.043	26.49	1.251	31.78	1170	1741
8 x 3 x 2.5	3405270805GR	0.143	3.63	1.146	29.11	1.361	34.57	1298	1931
12 x 3 x 2.5	3405271205GR	0.143	3.63	1.428	36.27	1.662	42.21	1906	2836
16 x 3 x 2.5	3405271605GR	0.143	3.63	1.619	41.12	1.882	47.80	2304	3726
19 x 3 x 2.5	3405271905GR	0.143	3.63	1.714	43.54	1.984	50.39	2598	4220
24 x 3 x 2.5	3405272405GR	0.143	3.63	2.049	52.04	2.360	59.94	3209	4775
32 x 3 x 2.5	3405273205GR	0.143	3.63	2.273	57.73	2.604	66.14	3861	6806