

RE-2G(st)H SWAH - BS EN 50288-7 Si / CAM / LSZH / SWA / LSZH Cable



Eland Product Group: I

APPLICATION

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications. Used in areas where circuit integrity required in a fire situation. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CONSTRUCTION

Conductor

Class 2 stranded copper conductor

Insulation

EI2 Silicone rubber according to BS EN 50363-1

Individual And Collective Screen Or Collective Screen

PET (Polyester Tape)

AL/PET (Aluminium/Polyester Tape) with tinned drain wire

Multi-Core, Multi-Pair, PiMF and TiMF Type

Inner Sheath

LSZH (Low Smoke Zero Halogen) according to BS EN 50290

Armour

GSWA (Galvanised Steel Wire Armour)

Outer Sheath

LSZH (Low Smoke Zero Halogen) according to BS EN 50290

CABLE STANDARDS

BS EN 50288-1, BS EN 50288-7, HD 383, BS EN 50290-2,
BS EN/IEC 60332-1, BS EN/IEC 60332-3-24
BS EN 61034-2, BS EN 50267-2-3, BS EN 50267-2-1,
IEC 60331-23, BS EN 60228



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CHARACTERISTICS

Voltage Rating (Uo/U)

300/500V

Operating Temperature

Fixed: -30°C to +90°C

Minimum Bending Radius

10 x overall diameter

Core Identification

○ White and ● Black numbered

● Blue and ● Black numbered cores available on request

Outer Sheath Colour

● Blue ● Black ● Red ● Orange

Note

90V and 500V rated cables available on request

DIMENSIONS

Collectively Screened Multi-Core

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|-----------------|--------------|---|--------------------------------|-------------------------|
| RE2GSHSC2C05** | 2 | 0.5 | 10.4 | 205 |
| RE2GSHSC2C75** | 2 | 0.75 | 10.8 | 218 |
| RE2GSHSC2C10** | 2 | 1 | 11.4 | 238 |
| RE2GSHSC2C15** | 2 | 1.5 | 12 | 271 |
| RE2GSHSC2C25** | 2 | 2.5 | 13.3 | 326 |
| RE2GSHSC3C05** | 3 | 0.5 | 10.6 | 217 |
| RE2GSHSC3C75** | 3 | 0.75 | 11 | 235 |
| RE2GSHSC3C10** | 3 | 1 | 11.5 | 258 |
| RE2GSHSC3C15** | 3 | 1.5 | 12.4 | 298 |
| RE2GSHSC3C25** | 3 | 2.5 | 13.6 | 371 |
| RE2GSHSC4C05** | 4 | 0.5 | 11.1 | 234 |
| RE2GSHSC4C75** | 4 | 0.75 | 11.4 | 254 |
| RE2GSHSC4C10** | 4 | 1 | 12.2 | 389 |
| RE2GSHSC4C15** | 4 | 1.5 | 13 | 334 |
| RE2GSHSC4C25** | 4 | 2.5 | 14.4 | 417 |
| RE2GSHSC5C05** | 5 | 0.5 | 11.9 | 266 |
| RE2GSHSC5C75** | 5 | 0.75 | 12.3 | 296 |
| RE2GSHSC5C10** | 5 | 1 | 12.4 | 310 |
| RE2GSHSC5C15** | 5 | 1.5 | 13.8 | 380 |
| RE2GSHSC5C25** | 5 | 2.5 | 15.6 | 488 |
| RE2GSHSC6C05** | 6 | 0.5 | 12.4 | 291 |
| RE2GSHSC6C75** | 6 | 0.75 | 12.9 | 324 |
| RE2GSHSC6C10** | 6 | 1 | 13.5 | 359 |
| RE2GSHSC6C15** | 6 | 1.5 | 14.5 | 424 |
| RE2GSHSC6C25** | 6 | 2.5 | 16.5 | 548 |
| RE2GSHSC7C05** | 7 | 0.5 | 12.4 | 300 |
| RE2GSHSC7C75** | 7 | 0.75 | 12.9 | 333 |
| RE2GSHSC7C10** | 7 | 1 | 13.5 | 368 |
| RE2GSHSC7C15** | 7 | 1.5 | 14.5 | 438 |
| RE2GSHSC7C25** | 7 | 2.5 | 16.5 | 568 |
| RE2GSHSC10C05** | 10 | 0.5 | 14.2 | 367 |
| RE2GSHSC10C75** | 10 | 0.75 | 14.9 | 420 |
| RE2GSHSC10C10** | 10 | 1 | 15.9 | 480 |
| RE2GSHSC10C15** | 10 | 1.5 | 17.2 | 570 |
| RE2GSHSC10C25** | 10 | 2.5 | 19.8 | 758 |
| RE2GSHSC12C05** | 12 | 0.5 | 14.4 | 405 |
| RE2GSHSC12C75** | 12 | 0.75 | 15.2 | 450 |
| RE2GSHSC12C10** | 12 | 1 | 16.3 | 519 |
| RE2GSHSC12C15** | 12 | 1.5 | 17.6 | 621 |
| RE2GSHSC12C25** | 12 | 2.5 | 20.2 | 825 |
| RE2GSHSC19C05** | 19 | 0.5 | 16.2 | 500 |
| RE2GSHSC19C75** | 19 | 0.75 | 17.1 | 580 |
| RE2GSHSC19C10** | 19 | 1 | 18.2 | 660 |
| RE2GSHSC19C15** | 19 | 1.5 | 19.9 | 820 |
| RE2GSHSC19C25** | 19 | 2.5 | 23.8 | 1305 |

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|-----------------|--------------|---|--------------------------------|-------------------------|
| RE2GSHSC24C05** | 24 | 0.5 | 18 | 608 |
| RE2GSHSC24C75** | 24 | 0.75 | 19 | 680 |
| RE2GSHSC24C10** | 24 | 1 | 21.2 | 911 |
| RE2GSHSC24C15** | 24 | 1.5 | 23.3 | 1119 |
| RE2GSHSC24C25** | 24 | 2.5 | 27 | 1514 |

Collectively Screened Multi-Pair

| ELAND PART NO. | NO. OF PAIRS | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|-----------------|--------------|---|--------------------------------|-------------------------|
| RE2GSHSC1P05** | 1 | 0.5 | 10.6 | 212 |
| RE2GSHSC1P75** | 1 | 0.75 | 10.8 | 228 |
| RE2GSHSC1P10** | 1 | 1 | 11.4 | 236 |
| RE2GSHSC1P13** | 1 | 1.3 | 11.8 | 264 |
| RE2GSHSC1P15** | 1 | 1.5 | 12 | 277 |
| RE2GSHSC2P05** | 2 | 0.5 | 12.8 | 295 |
| RE2GSHSC2P75** | 2 | 0.75 | 13.4 | 328 |
| RE2GSHSC2P10** | 2 | 1 | 14 | 360 |
| RE2GSHSC2P13** | 2 | 1.3 | 14.7 | 394 |
| RE2GSHSC2P15** | 2 | 1.5 | 15 | 411 |
| RE2GSHSC4P05** | 4 | 0.5 | 14 | 360 |
| RE2GSHSC4P75** | 4 | 0.75 | 14.8 | 403 |
| RE2GSHSC4P10** | 4 | 1 | 15.8 | 454 |
| RE2GSHSC4P13** | 4 | 1.3 | 16.6 | 503 |
| RE2GSHSC4P15** | 4 | 1.5 | 17 | 532 |
| RE2GSHSC6P05** | 6 | 0.5 | 16 | 455 |
| RE2GSHSC6P75** | 6 | 0.75 | 17 | 517 |
| RE2GSHSC6P10** | 6 | 1 | 18 | 588 |
| RE2GSHSC6P13** | 6 | 1.3 | 19 | 656 |
| RE2GSHSC6P15** | 6 | 1.5 | 20.1 | 726 |
| RE2GSHSC8P05** | 8 | 0.5 | 17.2 | 510 |
| RE2GSHSC8P75** | 8 | 0.75 | 18.2 | 583 |
| RE2GSHSC8P10** | 8 | 1 | 19.5 | 670 |
| RE2GSHSC8P13** | 8 | 1.3 | 21.3 | 861 |
| RE2GSHSC8P15** | 8 | 1.5 | 22.1 | 926 |
| RE2GSHSC10P05** | 10 | 0.5 | 18.6 | 579 |
| RE2GSHSC10P75** | 10 | 0.75 | 20.1 | 682 |
| RE2GSHSC10P10** | 10 | 1 | 22.1 | 900 |
| RE2GSHSC10P13** | 10 | 1.3 | 23.5 | 1019 |
| RE2GSHSC10P15** | 10 | 1.5 | 24.4 | 1084 |
| RE2GSHSC12P05** | 12 | 0.5 | 18.9 | 615 |
| RE2GSHSC12P75** | 12 | 0.75 | 21.1 | 840 |
| RE2GSHSC12P10** | 12 | 1 | 22.4 | 955 |
| RE2GSHSC12P13** | 12 | 1.3 | 23.9 | 1120 |
| RE2GSHSC12P15** | 12 | 1.5 | 25.2 | 1195 |
| RE2GSHSC16P05** | 16 | 0.5 | 21.7 | 852 |
| RE2GSHSC16P75** | 16 | 0.75 | 23.4 | 1025 |
| RE2GSHSC16P10** | 16 | 1 | 25.2 | 1195 |

| ELAND PART NO. | NO. OF PAIRS | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|-----------------|--------------|---|--------------------------------|-------------------------|
| RE2GHSHC16P13** | 16 | 1.3 | 26.4 | 1320 |
| RE2GHSHC16P15** | 16 | 1.5 | 27.4 | 1431 |
| RE2GHSHC20P05** | 20 | 0.5 | 23.8 | 990 |
| RE2GHSHC20P75** | 20 | 0.75 | 25.5 | 1190 |
| RE2GHSHC20P10** | 20 | 1 | 27.4 | 1365 |
| RE2GHSHC20P13** | 20 | 1.3 | 29.2 | 1542 |
| RE2GHSHC20P15** | 20 | 1.5 | 31 | 1702 |
| RE2GHSHC24P05** | 24 | 0.5 | 25.2 | 1130 |
| RE2GHSHC24P75** | 24 | 0.75 | 27.3 | 1290 |
| RE2GHSHC24P10** | 24 | 1 | 29.2 | 1516 |
| RE2GHSHC24P13** | 24 | 1.3 | 31.3 | 1754 |
| RE2GHSHC24P15** | 24 | 1.5 | 35 | 2185 |

Collectively and Individually Screened Pairs in Metal Foil - PiMF

| ELAND PART NO. | NO. OF PAIRS | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|-----------------|--------------|---|--------------------------------|-------------------------|
| RE2GHSHI2P05** | 2 | 0.5 | 14 | 349 |
| RE2GHSHI2P75** | 2 | 0.75 | 14.5 | 379 |
| RE2GHSHI2P10** | 2 | 1 | 15.5 | 421 |
| RE2GHSHI2P13** | 2 | 1.3 | 16.5 | 460 |
| RE2GHSHI2P15** | 2 | 1.5 | 16.8 | 478 |
| RE2GHSHI4P05** | 4 | 0.5 | 15.6 | 437 |
| RE2GHSHI4P75** | 4 | 0.75 | 16.5 | 479 |
| RE2GHSHI4P10** | 4 | 1 | 17.5 | 540 |
| RE2GHSHI4P13** | 4 | 1.3 | 18.1 | 582 |
| RE2GHSHI4P15** | 4 | 1.5 | 19 | 627 |
| RE2GHSHI6P05** | 6 | 0.5 | 17.6 | 562 |
| RE2GHSHI6P75** | 6 | 0.75 | 18.8 | 617 |
| RE2GHSHI6P10** | 6 | 1 | 20 | 700 |
| RE2GHSHI6P13** | 6 | 1.3 | 21 | 880 |
| RE2GHSHI6P15** | 6 | 1.5 | 22.3 | 928 |
| RE2GHSHI8P05** | 8 | 0.5 | 18.8 | 612 |
| RE2GHSHI8P75** | 8 | 0.75 | 20 | 720 |
| RE2GHSHI8P10** | 8 | 1 | 21.3 | 900 |
| RE2GHSHI8P13** | 8 | 1.3 | 23.5 | 1010 |
| RE2GHSHI8P15** | 8 | 1.5 | 24 | 1064 |
| RE2GHSHI10P05** | 10 | 0.5 | 22 | 854 |
| RE2GHSHI10P75** | 10 | 0.75 | 24 | 995 |
| RE2GHSHI10P10** | 10 | 1 | 25 | 1090 |
| RE2GHSHI10P13** | 10 | 1.3 | 26.5 | 1210 |
| RE2GHSHI10P15** | 10 | 1.5 | 27.5 | 1286 |
| RE2GHSHI12P05** | 12 | 0.5 | 22.5 | 915 |
| RE2GHSHI12P75** | 12 | 0.75 | 24.5 | 1045 |
| RE2GHSHI12P10** | 12 | 1 | 26 | 1180 |
| RE2GHSHI12P13** | 12 | 1.3 | 27.5 | 1317 |
| RE2GHSHI12P15** | 12 | 1.5 | 28.1 | 1412 |
| RE2GHSHI16P05** | 16 | 0.5 | 24.6 | 1086 |
| RE2GHSHI16P75** | 16 | 0.75 | 26.5 | 1250 |

| ELAND PART NO. | NO. OF PAIRS | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|--------------------------------|-------------------------|
| RE2GSHI16P10** | 16 | 1 | 28.1 | 1408 |
| RE2GSHI16P13** | 16 | 1.3 | 30 | 1585 |
| RE2GSHI16P15** | 16 | 1.5 | 31 | 1726 |
| RE2GSHI20P05** | 20 | 0.5 | 27 | 1250 |
| RE2GSHI2P75** | 20 | 0.75 | 29 | 1440 |
| RE2GSHI20P10** | 20 | 1 | 31 | 1640 |
| RE2GSHI20P13** | 20 | 1.3 | 33.4 | 2031 |
| RE2GSHI20P15** | 20 | 1.5 | 35 | 2213 |
| RE2GSHI24P05** | 24 | 0.5 | 29.6 | 1445 |
| RE2GSHI24P75** | 24 | 0.75 | 31.7 | 1675 |
| RE2GSHI24P10** | 24 | 1 | 35 | 2113 |
| RE2GSHI24P13** | 24 | 1.3 | 37.5 | 2402 |
| RE2GSHI24P15** | 24 | 1.5 | 39 | 2586 |

Collectively and Individually Screened Triple in Metal Foil - TiMF

| ELAND PART NO. | NO. OF TRIPLE | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|---------------|---|--------------------------------|-------------------------|
| RE2GSHI2T05** | 2 | 0.5 | 14.7 | 390 |
| RE2GSHI2T75** | 2 | 0.75 | 15.9 | 432 |
| RE2GSHI2T10** | 2 | 1 | 16.7 | 478 |
| RE2GSHI2T13** | 2 | 1.3 | 17.6 | 526 |
| RE2GSHI2T15** | 2 | 1.5 | 18 | 545 |
| RE2GSHI4T05** | 4 | 0.5 | 16.5 | 497 |
| RE2GSHI4T75** | 4 | 0.75 | 17.7 | 557 |
| RE2GSHI4T10** | 4 | 1 | 18.7 | 621 |
| RE2GSHI4T13** | 4 | 1.3 | 20 | 700 |
| RE2GSHI4T15** | 4 | 1.5 | 20.4 | 744 |
| RE2GSHI6T05** | 6 | 0.5 | 18.8 | 637 |
| RE2GSHI6T75** | 6 | 0.75 | 21 | 840 |
| RE2GSHI6T10** | 6 | 1 | 22.3 | 925 |
| RE2GSHI6T13** | 6 | 1.3 | 23.9 | 1062 |
| RE2GSHI6T15** | 6 | 1.5 | 24.5 | 1127 |
| RE2GSHI8T05** | 8 | 0.5 | 20.9 | 835 |
| RE2GSHI8T75** | 8 | 0.75 | 22.5 | 940 |
| RE2GSHI8T10** | 8 | 1 | 23.9 | 1072 |
| RE2GSHI8T13** | 8 | 1.3 | 25.5 | 1211 |
| RE2GSHI8T15** | 8 | 1.5 | 26.1 | 1291 |
| RE2GSHI10T05** | 10 | 0.5 | 24 | 1007 |
| RE2GSHI10T75** | 10 | 0.75 | 25.7 | 1160 |
| RE2GSHI10T10** | 10 | 1 | 27.4 | 1308 |
| RE2GSHI10T13** | 10 | 1.3 | 29.3 | 1500 |
| RE2GSHI10T15** | 10 | 1.5 | 30 | 1570 |
| RE2GSHI12T05** | 12 | 0.5 | 24.8 | 1083 |
| RE2GSHI12T75** | 12 | 0.75 | 26.4 | 1260 |
| RE2GSHI12T10** | 12 | 1 | 28.1 | 1415 |
| RE2GSHI12T13** | 12 | 1.3 | 30.1 | 1610 |
| RE2GSHI12T15** | 12 | 1.5 | 31.1 | 1750 |

| ELAND PART NO. | NO. OF TRIPLE | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|---------------|---|--------------------------------|-------------------------|
| RE2GSHI16T05** | 16 | 0.5 | 27.4 | 1290 |
| RE2GSHI16T75** | 16 | 0.75 | 28.9 | 1500 |
| RE2GSHI16T10** | 16 | 1 | 31.1 | 1738 |
| RE2GSHI16T13** | 16 | 1.3 | 33.8 | 2180 |
| RE2GSHI16T15** | 16 | 1.5 | 35.3 | 2370 |
| RE2GSHI20T05** | 20 | 0.5 | 29.5 | 1496 |
| RE2GSHI20T75** | 20 | 0.75 | 31.7 | 1760 |
| RE2GSHI20T10** | 20 | 1 | 34.4 | 2200 |
| RE2GSHI20T13** | 20 | 1.3 | 37.5 | 2600 |
| RE2GSHI20T15** | 20 | 1.5 | 38.7 | 2760 |
| RE2GSHI24T05** | 24 | 0.5 | 33 | 1903 |
| RE2GSHI24T75** | 24 | 0.75 | 36 | 2300 |
| RE2GSHI24T10** | 24 | 1 | 38.5 | 2610 |
| RE2GSHI24T13** | 24 | 1.3 | 41.3 | 3030 |
| RE2GSHI24T15** | 24 | 1.5 | 42.6 | 3220 |

Eland Part No. shown above designate the sheath colour (). For each colour substitute * for a colour code as listed below. e.g. RE2GSHI2P05RD = 0.5mm² Red

Colour Codes

| COLOUR | Black | Blue | Red | Orange |
|--------|-------|------|-----|--------|
| CODE | BK | BL | RD | OR |

CONDUCTORS

| NOMINAL CROSS SECTIONAL AREA mm ² | MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km | |
|---|---|---------|
| | Class 1 & 2 | Class 5 |
| 0.5 | 36 | 39 |
| 0.75 | 24.5 | 26 |
| 1 | 18.1 | 19.5 |
| 1.3 | 13.9 | - |
| 1.5 | 12.1 | 13.3 |
| 2.5 | 7.41 | 7.98 |

ELECTRICAL CHARACTERISTICS

Individually and Collectively Screened Cables

| NOMINAL CROSS SECTIONAL AREA mm ² | MUTUAL CAPACITANCE pF/m | | | | MINIMUM INSULATION RESISTANCE AT 20°C Mohms/km | MAXIMUM L/R RATIO μH/ohms |
|---|----------------------------|------------|------|------|---|------------------------------|
| | Multi-Core | Multi-Pair | PIMF | TIMF | | |
| 0.5 | 150 | 110 | 150 | 150 | 300 | 25 |
| 0.75 | 150 | 110 | 150 | 150 | 300 | 25 |
| 1 | 150 | 110 | 150 | 150 | 300 | 25 |
| 1.3 | - | 110 | 150 | 150 | 300 | 40 |
| 1.5 | 150 | 110 | 150 | 150 | 300 | 40 |
| 2.5 | 150 | - | - | - | 300 | 60 |

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.