



# HALLEY CABLES

# RE-2Y(St)HSWAH 70° C

## CU/PE/OSCR/LSZH/SWA/LSZH

### Instrumentation & Control Cables 500 V

PE insulated, screened, armoured, HFFR sheathed cables



### Construction:

- Conductor : stranded copper wires, class 2.
- Insulation : PE compound, (RE-2Y....).
- Lay-up : cores laid up in layers of optimum pitch.
- Separator : polyester tape.
- Screen : AL-PES tape over stranded tinned copper drain wire 0,50 mm<sup>2</sup>.
- Inner sheath : HFFR compound.
- Armour : galvanized round steel wire.
- Outer sheath : HFFR compound.
- Sheath colour : RAL 9005, black or RAL 5015, blue.
- Core identification : black numbered 1-2-3... Other core configurations manufactured upon request.

### Technical data and tests:

- Rated voltage : 500 V.
- Test voltage : Urms core-core : 2000 V;  
Urms core-screen : 2000 V.
- Temperature range (2Y) : operation : - 30° C ~ + 70° C;  
installation : - 5° C ~ + 50° C.
- Min. bending radius : 10 x D.

### Standards:

- Design : EN 50288-7.
- Conductor : IEC 60228 class 2, DIN EN 60228 class 2.
- Insulation : EN 50290-2-23.
- Inner sheath : EN 50290-2-27.
- Armour : EN 10257-1.
- Outer sheath : EN 50290-2-27.
- Flame test : IEC 60332-1 & DIN EN 60332-1.  
IEC 60332-3 & DIN EN 50266-2-4.
- Smoke density : IEC 61034-2 & DIN EN 61034-2.
- Halogen-free : IEC 60754-1/2 & DIN EN 50267-2.

### Applications:

These cables are used for control purposes (e.g. controlling of pumps, valves or engines) at chemistry and petrochemistry industry plants, power plants, natural gas and petroleum plants, etc... These cables are used in environments which must have no corrosive gases emitted in the event of fire. In case of fire, these cables inhibit the propagation of the flames whereby the development of smoke is extremely low. Instrumentation cables are not allowed for direct connection to a low impedance source, e.g. public mains electricity supply. For applications where heat resistance up to 90° C is crucial, RE-2X(St)HSWAH cables are suitable. With blue sheath it is suitable for intrinsically safe systems. The armour above the inner sheath protects the cable from mechanical shocks. These cables are not recommended for direct burial. They are for indoor and outdoor installation, in dry and wet locations; on racks, trays, in conduits.

### Technical data and tests:

- Conductor resistance (20° C) : 0,50 mm<sup>2</sup> : 36,0 Ω/km;  
0,75 mm<sup>2</sup> : 24,5 Ω/km;  
1,0 mm<sup>2</sup> : 18,1 Ω/km;  
1,3 mm<sup>2</sup> : 13,9 Ω/km;  
1,5 mm<sup>2</sup> : 12,1 Ω/km;  
2,5 mm<sup>2</sup> : 7,4 Ω/km.
- Insulation resistance (20° C) : min. 5000 MΩ/km.
- Mutual capacitance : max. 120 pF/m.
- L / R (ratio) (max.) : 0,50 mm<sup>2</sup> : 25 μH/Ω;  
0,75 mm<sup>2</sup> : 25 μH/Ω;  
1,0 mm<sup>2</sup> : 25 μH/Ω;  
1,3 mm<sup>2</sup> : 40 μH/Ω;  
1,5 mm<sup>2</sup> : 40 μH/Ω;  
2,5 mm<sup>2</sup> : 60 μH/Ω.

www.halleycables.com

RE-2Y(St)HSWAH 70° C ~ CU/PE/OSCR/LSZH/SWA/LSZ





**HALLEY CABLES**

**RE-2Y(St)HSWAH 70° C**

**CU/PE/OSCR/LSZH/SWA/LSZH**

**Instrumentation & Control Cables 500 V**

PE insulated, screened, armoured, HFFR sheathed cables

www.halleycables.com

RE-2Y(St)HSWAH 70° C ~ CU/PE/OSCR/LSZH/SWA/LSZ

## DIMENSIONS

No. of cores x cross section mm <sup>2</sup>	Approx. outer diameter mm	Copper weight kg/km	Approx. cable weight kg/km
2x0,50	10,8	24	230
2x0,75	11,4	34	260
2x1	11,8	43	280
2x1,3	12,3	55	310
2x1,5	12,6	62	325
2x2,5	13,8	62	370
3x0,50	11,3	34	260
3x0,75	11,8	48	290
3x1	12,2	62	320
3x1,3	12,7	80	360
3x1,5	13,0	91	380
3x2,5	14,3	91	425
4x0,50	11,8	43	290
4x0,75	12,3	62	325
4x1	12,8	82	360
4x1,3	13,4	105	410
4x1,5	13,8	120	435
4x2,5	15,4	120	500
5x0,50	12,4	53	320
5x0,75	12,9	77	364
5x1	13,5	101	405
5x1,3	14,2	130	465
5x1,5	14,6	149	495
5x2,5	16,4	149	570
6x0,50	13,0	62	350
6x0,75	13,4	91	395
6x1	14,2	120	455
6x1,3	15,2	155	525
6x1,5	15,6	178	565
6x2,5	17,4	178	640
8x0,50	13,9	82	410
8x0,75	14,8	120	480
8x1	15,5	158	545
8x1,3	16,3	204	625
8x1,5	16,9	235	680
8x2,5	19,1	235	780
10x0,50	15,2	101	475
10x0,75	16,0	149	555
10x1	16,8	197	635
10x1,3	17,8	254	735
10x1,5	18,4	293	800
10x2,5	21,7	293	1025





**HALLEY CABLES**

**RE-2Y(St)HSWAH 70° C**

**CU/PE/OSCR/LSZH/SWA/LSZH**

**Instrumentation & Control Cables 500 V**

PE insulated, screened, armoured, HFFR sheathed cables

www.halleycables.com

RE-2Y(St)HSWAH 70° C ~ CU/PE/OSCR/LSZH/SWA/LSZ

## DIMENSIONS

No. of cores x cross section mm <sup>2</sup>	Approx. outer diameter mm	Copper weight kg/km	Approx. cable weight kg/km
12x0,50	15,5	120	515
12x0,75	16,4	178	605
12x1	17,2	235	700
12x1,3	18,2	304	815
12x1,5	19,0	350	895
12x2,5	22,2	350	1125
14x0,50	16,0	139	560
14x0,75	16,9	206	665
14x1	17,8	274	770
14x1,3	19,1	354	910
14x1,5	19,7	408	995
14x2,5	23,3	408	1250
16x0,50	16,6	158	605
16x0,75	17,5	235	725
16x1	18,5	312	840
16x1,3	20,6	404	1100
16x1,5	21,3	466	1200
16x2,5	24,3	466	1370
20x0,50	17,9	197	700
20x0,75	19,1	293	855
20x1	20,9	389	1105
20x1,3	22,2	504	1295
20x1,5	23,2	581	1425
20x2,5	26,4	581	1615
24x0,50	19,4	235	810
24x0,75	21,3	350	1085
24x1	22,7	466	1275
24x1,3	24,2	604	1500
24x1,5	25,1	696	1645
24x2,5	28,9	696	1880
27x0,50	19,7	264	865
27x0,75	21,6	394	1160
27x1	23,1	523	1370
27x1,3	24,6	679	1615
27x1,5	25,5	782	1775
27x2,5	29,4	782	2020
30x0,50	20,9	293	1025
30x0,75	22,2	437	1240
30x1	23,7	581	1470
30x1,3	25,3	754	1740
30x1,5	26,4	869	1930
30x2,5	30,5	869	2195





**HALLEY CABLES**

**RE-2Y(St)HSAWAH 70° C**

**CU/PE/OSCR/LSZH/SWA/LSZH**

**Instrumentation & Control Cables 500 V**

PE insulated, screened, armoured, HFFR sheathed cables

www.halleycables.com

RE-2Y(St)HSAWAH 70° C ~ CU/PE/OSCR/LSZH/SWA/LSZH

## DIMENSIONS

No. of cores x cross section mm <sup>2</sup>	Approx. outer diameter mm	Copper weight kg/km	Approx. cable weight kg/km
37x0,50	22,1	360	1175
37x0,75	23,7	538	1445
37x1	25,1	715	1705
37x1,3	27,1	928	2045
37x1,5	28,1	1070	2255
37x2,5	33,2	1070	2735
40x0,50	23,0	389	1255
40x0,75	24,4	581	1530
40x1	26,1	773	1825
40x1,3	27,9	1003	2175
40x1,5	29,0	1157	2400
40x2,5	34,9	1157	2970

