

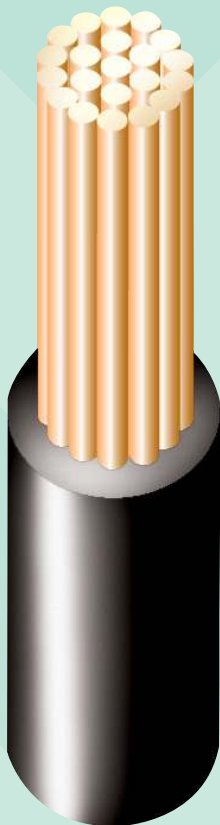
# LSOH Wiring Cables

Low Voltage (450/750 V)



## Cable Approvals

## Key Applications



## Conductor

## Insulation

## Core Identification

# LSOH Conduit Wire (HO7Z-R)

Cable approved to BS EN 50525-3-41



- > Installation in surface mounted or embedded conduits, or similar closed systems and for fixed protected installation in or on lighting fittings and inside appliances, switchgear and control gear particularly for situations in which low emissions of smoke and acid gas is required in case of burning
- > Green/Yellow for use as earth
- > Plain annealed copper stranded circular conductor complying with BS EN 60228 Class 2
- > 90°C LSOH crosslinked insulation complying with BS EN 50363-5 Type EI 5

- Red
- Black
- Blue
- Brown
- Grey
- Green/Yellow

Other core colours are available on request



Temperature Range  
-25 to +90°C



Bending Radius  
Fixed  $r=6D$



Mechanical Impact  
Medium



Fire Performance  
BS EN 60332-1-2



Flexibility  
Rigid



Halogen free  
BS EN 50267-2-2



Low smoke emissions  
BS EN 61034-2

# LSOH Conduit Wire (HO7Z-R)

## Cable Details

Nominal cross sectional area	Conceptual construction	Approx. overall diameter	Approx. cable weight	Maximum conductor resistance at 20°C	Short circuit rating 90-160°C (1 sec)	Short circuit rating 90-250°C (1 sec)	Current rating DC or single phase AC enclosed in conduit or trunking Amps	Current rating Three phase AC enclosed in conduit or trunking Amps	Voltage drop DC	Voltage drop DC or single phase AC	Voltage drop three phase AC
mm <sup>2</sup>	no/mm	mm	kg	ohms/km	kA	kA			mV/A/m	mV/A/m	mV/A/m
1.5	7/0.53	3	21	12.1	0.15	0.22	23	20	31	31	27
2.5	7/0.67	3.6	32	7.41	0.25	0.36	31	28	19	19	16
4	7/0.85	4.2	47	4.61	0.4	0.6	42	37	12	12	10
6	7/1.04	4.7	66	3.08	0.6	0.9	54	48	7.9	7.9	6.8
10	7/1.35	6.1	114	1.83	1	1.4	75	66	4.7	4.7	4
16	7/1.70	7.2	171	1.15	1.6	2.3	100	88	2.9	2.9	2.5
25	7/2.14	8.4	250	0.727	2.5	3.6	133	117	1.85	1.9	1.65
35	comp.*	9.5	350	0.524	3.5	5	164	144	1.35	1.35	1.15
50	comp.*	11.3	470	0.387	5	7.2	198	175	0.99	1.05	0.9
70	comp.*	12.6	670	0.268	7	10	253	222	0.68	0.75	0.65
95	comp.*	14.7	930	0.193	9.5	13.6	306	269	0.49	0.58	0.5
120	comp.*	16.2	1160	0.153	12	17.2	354	312	0.39	0.48	0.42
150	comp.*	18.1	1430	0.124	15	21.5	393	342	0.32	0.43	0.37
185	comp.*	20.2	1790	0.0991	18.5	26.5	449	384	0.25	0.37	0.32
240	comp.*	22.9	2350	0.0754	24	34.3	528	450	0.19	0.33	0.29
300	comp.*	27	3030	0.0601	30	42.9	603	514	0.155	0.31	0.27
400	comp.*	32	4010	0.047	40	57.2	683	584	0.12	0.29	0.25
500	comp.*	35.5	5020	0.0366	50	71.6	783	666	0.093	0.28	0.24
630	comp.*	39.5	6440	0.0283	63	90.2	900	764	0.072	0.27	0.23

\* Compressed stranded conducts

### Temperature Rating Factors

<b>Ambient Temperature °C</b>	25	30	35	40	45	50	55	60
<b>Rating Factor</b>	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71
<b>Ambient Temperature °C</b>	65	70	75	80				
<b>Rating Factor</b>	0.65	0.58	0.5	0.41				

### Correction factors for Groupings

<b>Number of circuits</b>	2	3	4	5	6	7	8	9
<b>Rating Factor</b>	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50



**THORNE &  
DERRICK  
INTERNATIONAL**

**Thorne & Derrick**  
+44 (0) 191 410 4292  
[www.powerandcables.com](http://www.powerandcables.com)