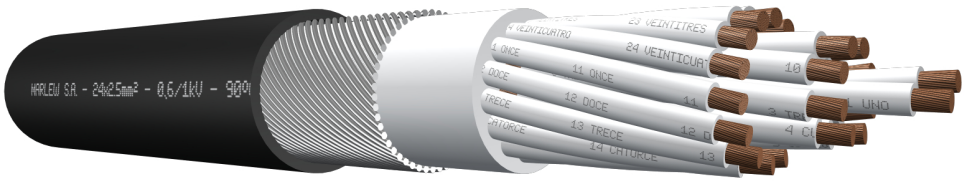
RefINAR CLAD series YC-H

Multiconductor Armour (SWA)



STEEL WIRE ARMOUR

0.6/1kV	***Flexible Cu 1 up to 4mm²***	***XLPE 90°C***	***Hydrocarbons and UV resistant PVC***

Control, signalling, protective equipment and electric controls for oil and gas industry (Midstream and Downstream) Installed in aerial trays, gutters or conduits, under roof or ladder under roof, buried in ducts or directly buried. It has additional mechanical protection.

Fire-retardant

HCL < 15%

Flexible stranded conductors

Mineral oil resistant

UV resistant

Suitable for low temperatures

FEATURES

Temperature ratings: 90°C (Operating) – 130°C (Overload) – 250°C (Short-Circuit)
Minimum temperature: Suitable for use in installations up to -30ºC
Voltage rating: 600/1000 Volt A.C. – 1200 Volt A.C. (Max) – 1500 Volt D.C.
Construction requirements: IEC 60502-1 – IRAM 2178-1
Conductor requirements: IRAM NM 280 – IEC 60228
Conductor: Annealed electrolytic copper - Flexible stranding class 5
Insulation: XLPE (Cross-Linked Polyethylene)
Bedding: Flame retardant PVC
Armour: Galvanized Steel Wire Armour
Sheath: Flame retardant PVC, enhanced hydrocarbons resistance, UV resistant and suitable for low temperature ratings, with low hydrochloric acid emissions (HCl)
Fire requirements: As per IEC 60332-3-24
Hydrocarbons resistance standard: UIC 895 OR (Oil and gas fuel)
Outdoors requirements: As per UL 2556 (UV Resistance)
Halogen emissions standard: IEC 60754-1 (HCl emission < 15%)

IDENTIFICATION

	Standard	
	Sheath	Conductors
Multiconductor	●	○ alphanumeric identification

INSTALLATION

Installation temperature *Over armour* *Minimum bend radius*

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ELECTRICAL CHARACTERISTICS

Resistances, reactance and intensity of admissible currents

Nominal cross-section sc mm²	Electrical resistance at 20ºC in C.C Ohm/km	Electrical resistance at 90ºC in C.A. Ohm/km	Current-carrying capacity in free air. At 40°C as per IEC 364-5-523. Formations in perforated trays or ladder type. (Ampere)						
			2x	4x	7x	10x	19x	30x	48x
1	19.5	24.86	--	--	--	--	--	--	--
1.5	13.3	16.96	23	20	16.1	11.5	11.5	10.4	8.1
2.5	7.98	10.18	31	28	21.7	15.5	15.5	14.0	10.9
4	4.95	6.31	43	36	30.1	21.5	21.5	19.4	--

As from seven-conductors, we've additionally applied the correction factor for more than three conductors the chart 310.15 (B)(3)(a) of the NFPA70.

DIMENSIONS & WEIGHT

Cable formation N° Cond. x cross-section (mm²)	Diameter under armour mm	External diameter mm	Weight kg/km	Code
2x1.0	7.6	12.2	268	YC 2C1.0 H
3x1.0	8.0	12.6	290	YC 3C1.0 H
4x1.0	8.7	13.3	318	YC 4C1.0 H
5x1.0	9.4	14.0	354	YC 5C1.0 H
7x1.0	10.2	14.8	394	YC 7C1.0 H
10x1.0	12.0	17.5	582	YC 10C1.0 H
12x1.0	12.9	18.4	637	YC 12C1.0 H
14x1.0	13.7	19.2	691	YC 14C1.0 H
19x1.0	15.6	21.8	941	YC 19C1.0 H
24x1.0	17.2	23.4	1070	YC 24C1.0 H
30x1.0	19.0	25.2	1223	YC 30C1.0 H
37x1.0	20.8	27.0	1378	YC 37C1.0 H
48x1.0	23.3	29.7	1618	YC 48C1.0 H
2x1.5	8.1	12.7	295	YC 2C1.5 H
3x1.5	8.6	13.2	321	YC 3C1.5 H
4x1.5	9.3	13.9	354	YC 4C1.5 H
5x1.5	10.1	14.7	396	YC 5C1.5 H
7x1.5	11.0	16.5	558	YC 7C1.5 H
10x1.5	12.9	18.4	658	YC 10C1.5 H
12x1.5	13.9	19.4	733	YC 12C1.5 H
14x1.5	14.8	21.0	901	YC 14C1.5 H
19x1.5	16.9	23.1	1073	YC 19C1.5 H
24x1.5	18.7	24.9	1226	YC 24C1.5 H
30x1.5	20.6	27.0	1438	YC 30C1.5 H
37x1.5	22.6	29.0	1626	YC 37C1.5 H
48x1.5	25.4	33.3	2211	YC 48C1.5 H
2x2.5	9.0	13.6	341	YC 2C2.5 H
3x2.5	9.5	14.1	376	YC 3C2.5 H
4x2.5	10.4	15.9	531	YC 4C2.5 H
5x2.5	11.3	16.8	592	YC 5C2.5 H
7x2.5	12.3	17.8	671	YC 7C2.5 H

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Cable formation N° Cond. x cross-section (mm²)	Diameter under armour mm	External diameter mm	Weight kg/km	Code
10x2.5	14.5	20.7	921	YC 10C2.5 H
12x2.5	15.7	21.9	1018	YC 12C2.5 H
14x2.5	16.7	22.9	1114	YC 14C2.5 H
19x2.5	19.1	25.3	1334	YC 19C2.5 H
24x2.5	21.1	27.5	1547	YC 24C2.5 H
30x2.5	23.3	29.7	1803	YC 30C2.5 H
37x2.5	25.7	33.4	2373	YC 37C2.5 H
48x2.5	28.9	37.0	2828	YC 48C2.5 H
2x4	10.1	14.7	406	YC 2C4 H
3x4	10.7	16.2	557	YC 3C4 H
4x4	11.7	17.2	637	YC 4C4 H
5x4	12.7	18.2	715	YC 5C4 H
7x4	13.9	19.4	832	YC 7C4 H
10x4	16.4	22.6	1128	YC 10C4 H
12x4	17.8	24.0	1271	YC 12C4 H
14x4	19.0	25.2	1396	YC 14C4 H
19x4	21.7	28.1	1717	YC 19C4 H
24x4	24.1	31.8	2258	YC 24C4 H
30x4	26.7	34.6	2656	YC 30C4 H
37x4	29.4	37.5	3083	YC 37C4 H
48x4	33.1	41.4	3772	YC 48C4 H
2x1.0+PE1.0	8.0	12.6	290	YC 2C1.0G1.0 H
3x1.0+PE1.0	8.7	13.3	318	YC 3C1.0G1.0 H
4x1.0+PE1.0	9.4	14.0	354	YC 4C1.0G1.0 H
6x1.0+PE1.0	10.2	14.8	394	YC 6C1.0G1.0 H
9x1.0+PE1.0	12.0	17.5	582	YC 9C1.0G1.0 H
11x1.0+PE1.0	12.9	18.4	637	YC 11C1.0G1.0 H
13x1.0+PE1.0	13.7	19.2	691	YC 13C1.0G1.0 H
18x1.0+PE1.0	15.6	21.8	941	YC 18C1.0G1.0 H
23x1.0+PE1.0	17.2	23.4	1070	YC 23C1.0G1.0 H
29x1.0+PE1.0	19.0	25.2	1223	YC 29C1.0G1.0 H
36x1.0+PE1.0	20.8	27.0	1378	YC 36C1.0G1.0 H
47x1.0+PE1.0	23.3	29.7	1618	YC 47C1.0G1.0 H
2x1.5+PE1.5	8.6	13.2	321	YC 2C1.5G1.5 H
3x1.5+PE1.5	9.3	13.9	354	YC 3C1.5G1.5 H
4x1.5+PE1.5	10.1	14.7	396	YC 4C1.5G1.5 H
6x1.5+PE1.5	11.0	16.5	558	YC 6C1.5G1.5 H
9x1.5+PE1.5	12.9	18.4	658	YC 9C1.5G1.5 H
11x1.5+PE1.5	13.9	19.4	733	YC 11C1.5G1.5 H
13x1.5+PE1.5	14.8	21.0	901	YC 13C1.5G1.5 H
18x1.5+PE1.5	16.9	23.1	1073	YC 18C1.5G1.5 H
23x1.5+PE1.5	18.7	24.9	1226	YC 23C1.5G1.5 H
29x1.5+PE1.5	20.6	27.0	1438	YC 29C1.5G1.5 H
36x1.5+PE1.5	22.6	29.0	1626	YC 36C1.5G1.5 H

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Cable formation N° Cond. x cross-section (mm²)	Diameter under armour mm	External diameter mm	Weight kg/km	Code
47x1.5+PE1.5	25.4	33.3	2211	YC 47C1.5G1.5 H
2x2.5+PE2.5	9.5	14.1	376	YC 2C2.5G2.5 H
3x2.5+PE2.5	10.4	15.9	531	YC 3C2.5G2.5 H
4x2.5+PE2.5	11.3	16.8	592	YC 4C2.5G2.5 H
6x2.5+PE2.5	12.3	17.8	671	YC 6C2.5G2.5 H
9x2.5+PE2.5	14.5	20.7	921	YC 9C2.5G2.5 H
11x2.5+PE2.5	15.7	21.9	1018	YC 11C2.5G2.5 H
13x2.5+PE2.5	16.7	22.9	1114	YC 13C2.5G2.5 H
18x2.5+PE2.5	19.1	25.3	1334	YC 18C2.5G2.5 H
23x2.5+PE2.5	21.1	27.5	1547	YC 23C2.5G2.5 H
29x2.5+PE2.5	23.3	29.7	1803	YC 29C2.5G2.5 H
36x2.5+PE2.5	25.7	33.4	2373	YC 36C2.5G2.5 H
47x2.5+PE2.5	28.9	37.0	2828	YC 47C2.5G2.5 H
2x4+PE4	10.7	16.2	557	YC 2C4G4 H
3x4+PE4	11.7	17.2	637	YC 3C4G4 H
4x4+PE4	12.7	18.2	715	YC 4C4G4 H
6x4+PE4	13.9	19.4	832	YC 6C4G4 H
9x4+PE4	16.4	22.6	1128	YC 9C4G4 H
11x4+PE4	17.8	24.0	1271	YC 11C4G4 H
13x4+PE4	19.0	25.2	1396	YC 13C4G4 H
18x4+PE4	21.7	28.1	1717	YC 18C4G4 H
23x4+PE4	24.1	31.8	2258	YC 23C4G4 H
29x4+PE4	26.7	34.6	2656	YC 29C4G4 H
36x4+PE4	29.4	37.5	3083	YC 36C4G4 H
47x4+PE4	33.1	41.4	3772	YC 47C4G4 H

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