

UL & CSA Listed - 2kV HDFPC-DLO, RHH/RHW-2 & RW90

Composite wall EPDM/CPE insulation. UL Listed as 2kV Heavy Duty Flexible Power Cable (HDFPC) DLO, Rated 90°C Dry or Wet, 2kV Type RHH/RHW-2 Rated 90°C Dry or Wet, 1/0 & larger rated FT4 and For CT Use (Cable Tray). CSA Listed as 2kV Type RW90, 1/0 & larger rated FT4 and TC-ER. For use in Cable Trays.

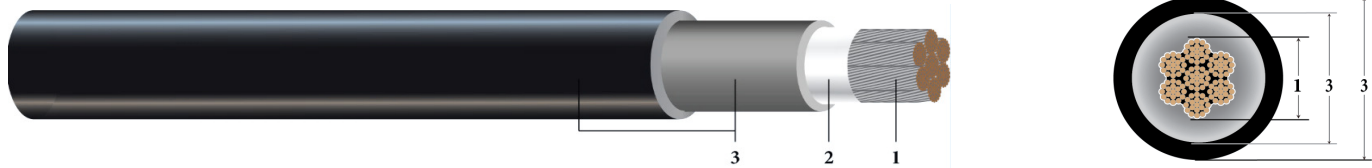


Image not to scale. See Table 1 for Dimensions

CONSTRUCTION:

- 1. Conductors:** ASTM B33 & B172 Flexible Stranded Rope-lay Class I Tinned Copper
Optional ASTM B3 & B172 Flexible Stranded Rope-lay Class I, Bare Copper available upon request
- 2. Binder Tape:** Mylar Tape
- 3. Insulation:** 2 Layer Ethylene Propylene Diene Monomer / Chlorinated Polyethylene (EPR/CPE)

APPLICATIONS AND FEATURES:

HDFPC-DLO is a 2kV flexible power cable with a variety of possible applications such as, but not limited to: Drilling rigs, railroad and transit car wiring, mining and other industrial equipment, and as flexible motor leads and wind turbine applications. The cable is suited for use in wet and dry areas, conduits, ducts, troughs, trays and where superior electrical properties are desired. The maximum continuous conductor temperature for normal operation is 90°C wet or dry. Approved for use per the NEC® as Type RHH/RHW-2 and per the CE Code Part 1 as Type RW90.

SPECIFICATIONS:

- ASTM B3 - Soft or Annealed Copper
- ASTM B33 - Tinned or Soft Annealed Copper
- ASTM B172 - Rope-Lay-Stranded Copper Conductors Having Bunch Stranded Members
- UL Subject 2806 - Type HDFPC DLO 2kV
- UL 44 - Type RHH/RHW-2 2kV
- CSA C22.2 No. 38 - CE Code Part 1 as Type RW90 2kV
- MSHA - P-07-KA10013
- CT Rated 1/0 and Larger
- Meets Requirements of G.E. Spec# 104W7006 Rev. F
- Meets Requirements of AAR RP-585



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SAMPLE PRINT LEGEND: (8 - 1 AWG)

SOUTHWIRE® ROYAL® 4 AWG (21.15mm²) E#### (UL) TYPE HDFPC EPR/CPE 2KV DLO 90C DRY 90C WET OR TYPE RHH/RHW-2 90C DRY 90C WET 2KV -40C PRI PRII SR VW-1 --- CSA LL##### RW90 90C DRY 90C WET 2KV -40C PRI PRII FT1 SR --- P-07-KA100013-MSHA [SEQUENTIAL FOOTAGE MARKS]

SAMPLE PRINT LEGEND: (1/0 AWG - 1111 KCMIL)

SOUTHWIRE® ROYAL® 373.7 KCMIL (189.4mm²) E### (UL) TYPE HDFPC EPR/CPE 2KV DLO 90C DRY 90C WET OR TYPE RHH/RHW-2 90C DRY 90C WET 2KV -40C PRI PRII SR FOR CT USE FT4 --- CSA LL##### RW90 90C DRY 90C WET TC-ER 2KV -40C PRI PRII FT1 FT4 SR --- P-07-KA100013-MSHA [SEQUENTIAL FOOTAGE MARKS]

2kV HDFPC-DLO, RHH/RHW-2 & RW90 - TABLE 1, Physical Data

Stock Code	Conductor			Nom. Composite Insulation Thickness				Nominal Overall Diameter		Approximate Net Weight*		Max. Pulling Tension
	Size	Stranding	Nominal OD	EPDM Inner Layer		CPE Outer Layer						
	AWG/kcmil	No. (inch/AWG)	Inches	Inches	mm	Inches	mm	Inches	mm	Lbs/Mft	Kg/Km	Pounds
167014	8	41/24	0.145	0.060	1.52	0.035	0.09	0.329	8.38	92	137	138
167015	6	65/24	0.180	0.060	1.52	0.035	0.09	0.382	9.40	133	198	214
167017	4	105/24	0.235	0.060	1.52	0.035	0.09	0.440	11.18	197	293	336
167018	3	133/24	0.265	0.060	1.52	0.035	0.09	0.455	11.56	243	362	426
167019	2	161/24	0.300	0.060	1.52	0.035	0.09	0.495	12.57	280	417	515
167020	1	210/24	0.330	0.070	1.78	0.050	1.27	0.635	16.13	400	595	672
167021	1/0	266/24	0.385	0.070	1.78	0.050	1.27	0.645	16.38	451	671	851
167022	2/0	342/24	0.400	0.070	1.78	0.050	1.27	0.678	17.53	558	830	1094
167023	3/0	418/24	0.480	0.070	1.78	0.050	1.27	0.760	19.30	675	1004	1338
167024	4/0	532/24	0.525	0.070	1.78	0.050	1.27	0.815	20.70	816	1214	1702
167026	262.6	646/24	0.565	0.080	2.03	0.070	1.78	0.915	23.24	977	1454	2067
167027	313.3	779/24	0.650	0.080	2.03	0.070	1.78	0.990	24.89	1133	1686	2493
167029	373.7	931/24	0.701	0.080	2.03	0.070	1.78	1.040	26.42	1346	2003	2979
167030	444.4	1121/24	0.782	0.080	2.03	0.070	1.78	1.116	28.07	1655	2463	3587
167031	535.3	1349/24	0.843	0.095	2.41	0.070	1.78	1.205	30.73	1919	2855	4317
167032	646.4	1628/24	0.890	0.095	2.41	0.070	1.78	1.272	32.77	2267	3373	5210
167033	777.7	1924/24	0.966	0.095	2.41	0.070	1.78	1.380	35.43	2690	4003	6157
167036	929.2	2318/24	1.113	0.095	2.41	0.070	1.78	1.470	37.34	3123	4647	7418
167035	1111.1	2745/24	1.168	0.115	2.92	0.100	2.54	1.640	41.66	4154	6181	8784

Note: All dimensions are nominal and subject to normal manufacturing variances

*Actual shipping weight may vary



2kV HDFPC-DLO, RHH/RHW-2 & RW90

2kV HDFPC-DLO, RHH/RHW-2 & RW90 - TABLE 2, Electrical Data

Stock Code	Conductor		Bend Radius Inches	DC Resistance at 20°C Ω/Mft	X - Triangular Conduit		Capacitance pF/Ft	X Steel or PVC Conduit Ω/Mft	Ampacity			
	Size AWG/kcmil	Stranding No. (inch/AWG)			PVC Ω/Mft	Steel Ω/Mft			In Conduit*		In Air**	
									75°C	90°C	75°C	90°C
	Amps											
167014	8	41/24	1.32	0.6540	0.038	0.050	69.13	0.034	50	55	70	80
167015	6	65/24	1.49	0.4190	0.037	0.048	82.45	0.033	65	75	95	105
167017	4	105/24	1.68	0.2630	0.035	0.045	99.50	0.027	85	95	125	140
167018	3	133/24	1.82	0.2010	0.037	0.048	95.42	0.028	100	112	147	165
167019	2	161/24	2.02	0.1660	0.033	0.042	120.70	0.022	115	130	170	190
167020	1	210/24	2.24	0.1320	0.034	0.044	116.90	0.023	130	145	195	220
167021	1/0	266/24	2.76	0.1050	0.033	0.042	129.24	0.021	150	170	230	260
167022	2/0	342/24	2.88	0.0834	0.032	0.041	142.45	0.019	175	195	265	300
167023	3/0	418/24	2.90	0.0662	0.031	0.040	158.10	0.017	200	225	310	350
167024	4/0	532/24	3.24	0.0525	0.030	0.039	175.07	0.015	230	260	360	405
167026	262.6	646/24	3.86	0.0426	0.029	0.037	166.56	0.013	267	304	421	473
167027	313.3	779/24	4.18	0.0357	0.028	0.037	180.63	0.012	298	332	453	570
167029	373.7	931/24	4.36	0.0300	0.029	0.038	193.90	0.013	323	365	522	592
167030	444.4	1121/24	5.83	0.0252	0.029	0.037	217.24	0.012	358	405	581	655
167031	535.3	1349/24	6.00	0.0209	0.029	0.038	193.00	0.014	394	446	660	747
167032	646.4	1628/24	6.43	0.0174	0.029	0.037	210.00	0.013	439	496	712	804
167033	777.7	1924/24	6.82	0.0146	0.028	0.036	232.53	0.011	483	543	802	904
167036	929.2	2318/24	7.36	0.0121	0.027	0.036	252.84	0.010	529	594	886	998
167035	1111.1	2745/24	8.80	0.0102	0.028	0.037	265.42	0.012	570	648	1012	1145

* Ampacities based on Table 310.15(B)(16) of the National Electric Code® for not more than three current-carrying conductors in raceway, cable or earth. Based on Ambient Temperature of 30°C (86°F).

** Ampacities based on Table 310.15(B)(17) of the National Electric Code® Allowable Ampacities of Single-Insulated Conductors rated up to and including 2000 Volts in free air. Based on Ambient Temperature of 30°C (86°F).

