
Section F

Flexible and Portable Cords

Flexible and Portable Cords

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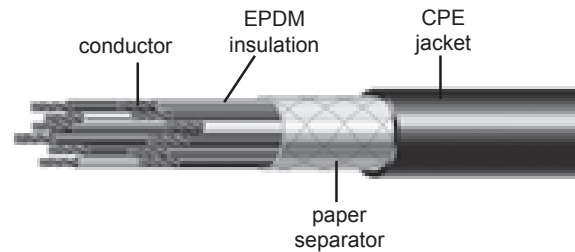
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Specification
HW250

TYPE SOOW

600 Volt UL/CSA, -40°C to +90°C
Black Jacket
Flexible Copper Conductors



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 01802	18	2	16	30	60	.34	70
HW250 01803	18	3	16	30	60	.36	85
HW250 01804	18	4	16	30	60	.39	100
HW250 01805	18	5	16	30	80	.46	130
HW250 01806	18	6	16	30	80	.49	150
HW250 01807	18	7	16	30	80	.50	160
HW250 01808	18	8	16	30	80	.53	170
HW250 01810	18	10	16	30	80	.60	215
HW250 01812	18	12	16	30	80	.60	245
HW250 01814	18	14	16	30	80	.66	265
HW250 01816	18	16	16	30	95	.70	310
HW250 01818	18	18	16	30	95	.76	340
HW250 01820	18	20	16	30	95	.79	375
HW250 01824	18	24	16	30	95	.90	450
HW250 01830	18	30	16	30	95	.92	520
HW250 01836	18	36	16	30	95	1.05	600

Flexible & Portable Cords

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery. UL listed and CSA certified for indoor and outdoor use.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

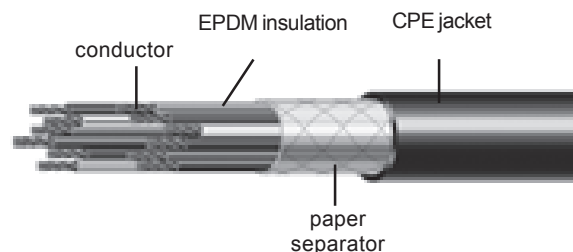
- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

- Flexible Cord – UL Standard 62
- Flexible Cord – CSA C22.2-49
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

TYPE SOOW

**600 Volt UL/CSA, -40°C to +90°C
Black Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 01602	16	2	26	30	60	.37	80
HW250 01603	16	3	26	30	60	.39	105
HW250 01604	16	4	26	30	60	.42	120
HW250 01605	16	5	26	30	80	.49	160
HW250 01606	16	6	26	30	80	.52	175
HW250 01607	16	7	26	30	80	.55	195
HW250 01608	16	8	26	30	80	.57	220
HW250 01609	16	9	26	30	80	.62	250
HW250 01610	16	10	26	30	80	.65	280
HW250 01612	16	12	26	30	80	.69	325
HW250 01614	16	14	26	30	95	.75	355
HW250 01616	16	16	26	30	95	.74	380
HW250 01618	16	18	26	30	95	.79	425
HW250 01620	16	20	26	30	95	.81	480
HW250 01624	16	24	26	30	95	.92	550
HW250 01630	16	30	26	30	95	1.05	715
HW250 01636	16	36	26	30	95	1.12	800
HW250 01637	16	37	26	30	95	1.18	815
HW250 01640	16	40	26	30	95	1.24	850

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery. UL listed and CSA certified for indoor and outdoor use.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

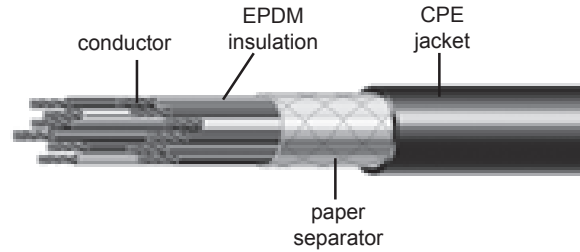
- Flexible Cord – UL Standard 62
- Flexible Cord – CSA C22.2-49
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

Flexible & Portable Cords

Specification
HW250

TYPE SOOW

600 Volt UL/CSA, -40°C to +90°C
Black Jacket
Flexible Copper Conductors



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 01402	14	2	41	45	80	.50	135
HW250 01403	14	3	41	45	80	.53	170
HW250 01404	14	4	41	45	80	.57	205
HW250 01405	14	5	41	45	95	.65	275
HW250 01406	14	6	41	45	95	.71	315
HW250 01407	14	7	41	45	95	.71	345
HW250 01408	14	8	41	45	95	.76	385
HW250 01409	14	9	41	45	95	.83	410
HW250 01410	14	10	41	45	95	.83	430
HW250 01412	14	12	41	45	95	.87	485
HW250 01414	14	14	41	45	110	1.00	590
HW250 01416	14	16	41	45	110	1.03	665
HW250 01418	14	18	41	45	110	1.10	710
HW250 01420	14	20	41	45	110	1.15	780
HW250 01424	14	24	41	45	125	1.26	985
HW250 01430	14	30	41	45	125	1.34	1130
HW250 01437	14	37	41	45	125	1.48	1330

Flexible & Portable Cords

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery. UL listed and CSA certified for indoor and outdoor use.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

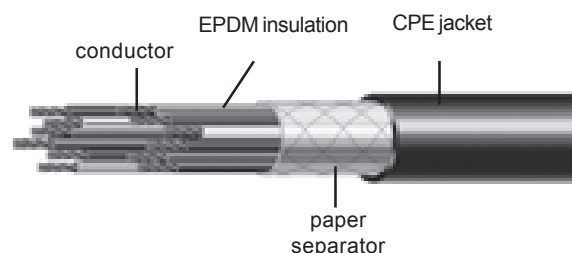
- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

- Flexible Cord – UL Standard 62
- Flexible Cord – CSA C22.2-49
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

TYPE SOOW

**600 Volt UL/CSA, -40°C to +90°C
Black Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 01202	12	2	65	45	95	.57	195
HW250 01203	12	3	65	45	95	.60	220
HW250 01204	12	4	65	45	95	.65	270
HW250 01205	12	5	65	45	95	.71	330
HW250 01207	12	7	65	45	95	.77	415
HW250 01208	12	8	65	45	95	.82	470
HW250 01209	12	9	65	45	95	.90	515
HW250 01210	12	10	65	45	110	1.00	580
HW250 01212	12	12	65	45	110	1.01	650
HW250 01214	12	14	65	45	110	1.08	740
HW250 01216	12	16	65	45	110	1.13	835
HW250 01218	12	18	65	45	110	1.15	910
HW250 01220	12	20	65	45	110	1.17	990
HW250 01224	12	24	65	45	125	1.40	1240
HW250 01230	12	30	65	45	125	1.50	1415
HW250 01236	12	36	65	45	125	1.65	1670
HW250 01240	12	40	65	45	125	1.69	1830

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery. UL listed and CSA certified for indoor and outdoor use.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

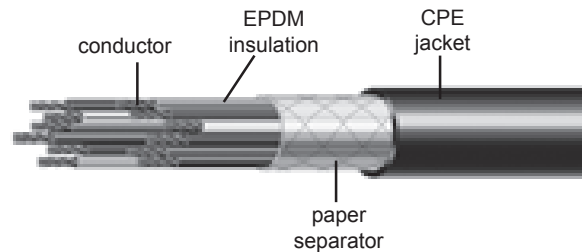
- Flexible cord – UL Standard 62
- Flexible cord – CSA C22.2-49
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

Flexible & Portable Cords

**Specification
HW250**

TYPE SOOW

**600 Volt, -40°C to +90°C
Black Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 01002	10	2	104	45	95	.62	215
HW250 01003	10	3	104	45	95	.66	290
HW250 01004	10	4	104	45	95	.71	350
HW250 01005	10	5	104	45	95	.77	465
HW250 01006	10	6	104	45	95	.87	500
HW250 01008	10	8	104	45	95	.94	625
HW250 01010	10	10	104	45	110	1.02	765
HW250 01012	10	12	104	45	110	1.07	865
HW250 01016	10	16	104	45	125	1.23	1150
HW250 01020	10	20	104	45	125	1.26	1445
HW250 00803	8	3	65	50	110	.70	375
HW250 00804	8	4	65	50	110	.79	480
HW250 00805	8	5	65	50	125	.83	570

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

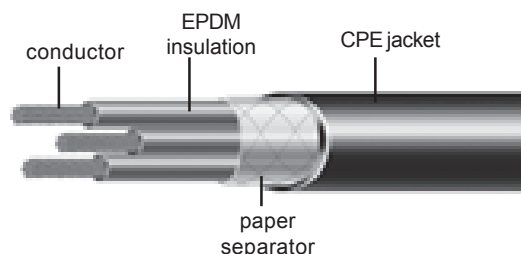
Note:

Sizes 8 AWG through 2 AWG are non-UL and non-CSA constructions made in accordance with applicable industry standards.

Flexible & Portable Cords

TYPE SOOW

**600 Volt, -40°C to +90°C
Black Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW250 00603	6	3	101	50	60	.78	510
HW250 00604	6	4	101	50	80	.85	615
HW250 00605	6	5	101	50	80	.95	810
HW250 00403	4	3	119	50	80	.93	680
HW250 00404	4	4	119	50	80	1.00	845
HW250 00405	4	5	119	50	80	1.01	1140
HW250 00203	2	3	133	50	80	1.06	985
HW250 00204	2	4	133	50	80	1.10	1245
HW250 00205	2	5	133	50	80	1.44	1650

Application:

For use in heavy-duty industrial applications where flexibility and durability is required. Typical uses include portable power distribution for tools, equipment, small motors and machinery.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Jacket:

Black chlorinated polyethylene (CPE) rubber.

Flame Tests:

MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580

Note:

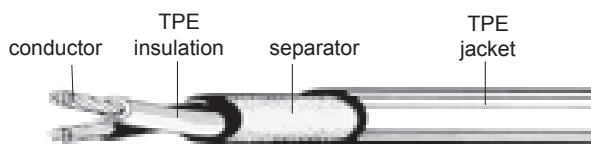
Sizes 8 AWG through 2 AWG are non-UL and non-CSA constructions made in accordance with applicable industry standards.

Flexible & Portable Cords

Specification
HW251

TYPE SEOW

600 Volt, UL/CSA, -50°C to 105°C
Yellow Jacket
Flexible Copper Conductors



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW251 01802	18	2	16	31	62	.34	57
HW251 01803	18	3	16	31	62	.36	69
HW251 01804	18	4	16	31	62	.39	78
HW251 01602	16	2	26	31	62	.37	69
HW251 01603	16	3	26	31	62	.39	80
HW251 01604	16	4	26	31	62	.42	96
HW251 01402	14	2	41	47	82	.50	124
HW251 01403	14	3	41	47	82	.53	149
HW251 01404	14	4	41	47	82	.57	180
HW251 01202	12	2	65	46	97	.57	152
HW251 01203	12	3	65	46	97	.60	197
HW251 01204	12	4	65	46	97	.64	240
HW251 01002	10	2	104	46	97	.62	193
HW251 01003	10	3	104	46	97	.66	257
HW251 01004	10	4	104	46	97	.70	313

Application:

High-grade yellow jacketed cord for use in harsh industrial applications where flexibility and durability is required. Superior insulation and jacketing material allows cable to be used in -50°C to 105°C environments. Typical uses include stage equipment and lighting, and portable power distribution for tools, equipment, small motors and machinery. UL listed and CSA certified for indoor and outdoor use.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Thermoplastic elastomer (TPE).

Jacket:

Yellow thermoplastic elastomer (TPE).

Flame Tests:

- UL 1581 flame test
- CSA FT2 flame test
- MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

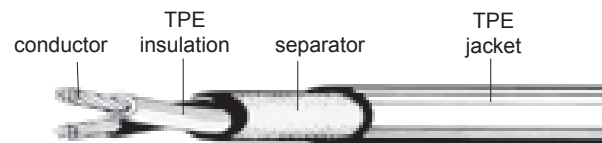
Additional Standards:

- NEC Article 400
- Flexible Cord – UL Standard 62
- Flexible Cord – CSA C22.2-49
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580B

Flexible & Portable Cords

TYPE SEOW

**600 Volt, -50°C to 105°C
Yellow Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW251 00802	8	2	96	48	90	.66	233
HW251 00803	8	3	96	48	90	.70	327
HW251 00804	8	4	96	48	100	.78	420
HW251 00602	6	2	96	48	90	.74	302
HW251 00603	6	3	96	48	100	.81	458
HW251 00604	6	4	96	48	100	.88	599
HW251 00402	4	2	96	48	125	.90	464
HW251 00403	4	3	96	48	125	.98	667
HW251 00404	4	4	96	48	125	1.09	865
HW251 00202	2	2	96	50	128	1.09	715
HW251 00203	2	3	119	50	128	1.15	971
HW251 00204	2	4	119	50	128	1.26	1225

Application:

High-grade yellow jacketed cord for use in harsh industrial applications where flexibility and durability is required. Superior insulation and jacketing material allows cable to be used in -50°C to 105°C environments. Typical uses include stage equipment and lighting, and portable power distribution for tools, equipment, small motors and machinery.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible bunch strand per ASTM B-174.

Insulation:

Thermoplastic elastomer (TPE).

Jacket:

Yellow thermoplastic elastomer (TPE).

Flame Tests:

MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

- NEC Article 400
- Pennsylvania Bureau of Mines – MSHA approved
- Federal Specification JC-580B

Note:

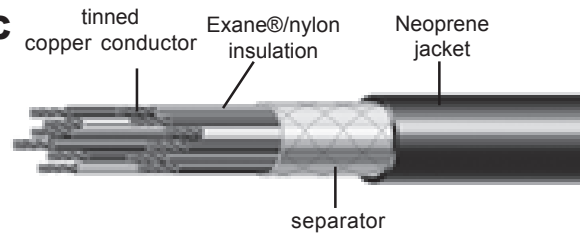
Sizes 8 AWG through 2 AWG are non-UL and non-CSA constructions made in accordance with applicable industry standards.

Flexible & Portable Cords

Specification
HW252

PERFECT-A-FLEX®

600 Volt UL Type TC, -54°C to +90°C
Exane® Insulation
Neoprene Jacket
Tinned Copper Conductors



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Nylon Jacket Thickness Mils	Overall Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW252 01802	18	2	16	16	5	60	.30	47
HW252 01803	18	3	16	16	5	60	.31	54
HW252 01804	18	4	16	16	5	60	.34	65
HW252 01805	18	5	16	16	5	60	.36	76
HW252 01806	18	6	16	16	5	60	.39	88
HW252 01807	18	7	16	16	5	60	.41	99
HW252 01808	18	8	16	16	5	60	.44	113
HW252 01812	18	12	16	16	5	60	.49	146

Application:

Very flexible cable for use on cable tender systems, festooned cable applications, pendant cable drops, overhead bridge cranes, warehouse stacking cranes, motor- or spring-driven reels, or any tough industrial application that requires both strength and flexibility. Approved for use in cable trays, in raceways supported by a messenger wire, in open air, and for direct burial applications. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductors:

Tinned soft annealed copper per ASTM B-33, Geolay stranding per ASTM B-286.

Insulation:

Irradiated cross-linked polyolefin (Exane®).

Insulation Jacket:

Clear Nylon.

Jacket:

Sunlight-resistant Neoprene per ICEA S-19-81

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- ICEA 210,000 BTU/hr flame test
- CSA FT4 flame test
- Individual conductors pass the UL VW-1 flame test

Color Code:

Control Sizes – ICEA Method 3, Table E-2

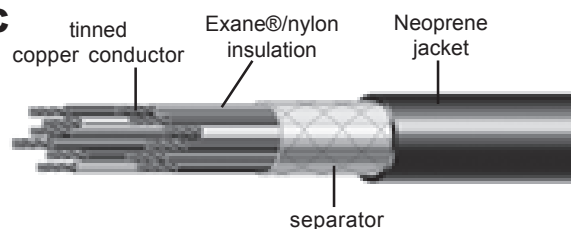
Additional Standards:

- UL Type TC tray cable per NEC Article 336
- CAN/CSA-C22.2 No. 239-M91 type CIC

Flexible & Portable Cords

PERFECT-A-FLEX®

**600 Volt UL Type TC, -54°C to +90°C
Exane® Insulation
Neoprene Jacket
Tinned Copper Conductors**



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Nylon Jacket Thickness Mils	Overall Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW252 01602	16	2	26	16	5	60	.32	56
HW252 01603	16	3	26	16	5	60	.33	70
HW252 01604	16	4	26	16	5	60	.37	90
HW252 01605	16	5	26	16	5	60	.40	100
HW252 01606	16	6	26	16	5	60	.42	117
HW252 01607	16	7	26	16	5	60	.46	131
HW252 01608	16	8	26	16	5	60	.49	152
HW252 01610	16	10	26	16	5	60	.50	171
HW252 01612	16	12	26	16	5	60	.52	190
HW252 01614	16	14	26	16	5	70	.58	236
HW252 01616	16	16	26	16	5	70	.60	258
HW252 01620	16	20	26	16	5	70	.67	332
HW252 01624	16	24	26	16	5	70	.71	365
HW252 01630	16	30	26	16	5	70	.75	440
HW252 01637	16	37	26	16	5	70	.89	560

Application:

Very flexible cable for use on cable tender systems, festooned cable applications, pendant cable drops, overhead bridge cranes, warehouse stacking cranes, motor- or spring-driven reels, or any tough industrial application that requires both strength and flexibility. Approved for use in cable trays, in raceways supported by a messenger wire, in open air, and for direct burial applications. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductors:

Tinned soft annealed copper per ASTM B-33, Geolay stranding per ASTM B-286.

Insulation:

Irradiated cross-linked polyolefin (Exane®).

Insulation Jacket:

Clear Nylon.

Jacket:

Sunlight-resistant Neoprene per ICEA S-19-81.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- ICEA 210,000 BTU/hr flame test
- CSA FT4 flame test
- Individual conductors pass the UL VW-1 flame test

Color Code:

Control Sizes – ICEA Method 1, Table E-2

Additional Standards:

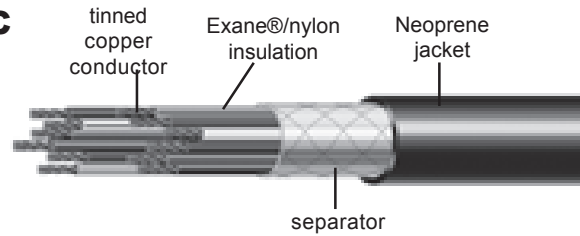
- UL Type TC tray cable per NEC Article 336
- CAN/CSA-C22.2 No. 239-M91 type CIC

Flexible & Portable Cords

Specification
HW252

PERFECT-A-FLEX®

600 Volt UL Type TC, -54°C to +90°C
Exane® Insulation
Neoprene Jacket
Tinned Copper Conductors



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Nylon Jacket Thickness Mils	Overall Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW252 01403	14	3	41	16	5	60	.38	102
HW252 01404	14	4	41	16	5	60	.42	130
HW252 01405	14	5	41	16	5	60	.45	149
HW252 01406	14	6	41	16	5	60	.49	174
HW252 01407	14	7	41	16	5	60	.53	199
HW252 01408	14	8	41	16	5	70	.58	239
HW252 01410	14	10	41	16	5	70	.61	292
HW252 01412	14	12	41	16	5	70	.64	320
HW252 01416	14	16	41	16	5	70	.69	405
HW252 01420	14	20	41	16	5	90	.80	493
HW252 01424	14	24	41	16	5	90	.89	620
HW252 01430	14	30	41	16	5	90	.92	733
HW252 01437	14	37	41	16	5	90	1.05	886

Application:

Very flexible cable for use on cable tender systems, festooned cable applications, pendant cable drops, overhead bridge cranes, warehouse stacking cranes, motor- or spring-driven reels, or any tough industrial application that requires both strength and flexibility. Approved for use in cable trays, in raceways supported by a messenger wire, in open air, and for direct burial applications. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductors:

Tinned soft bare annealed copper per ASTM B-33, Geolay stranding per ASTM B-286.

Insulation:

Irradiated cross-linked polyolefin (Exane®).

Insulation Jacket:

Clear Nylon.

Jacket:

Sunlight-resistant Neoprene per ICEA S-19-81.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- ICEA 210,000 BTU/hr flame test
- CSA FT4 flame test
- Individual conductors pass the UL VW-1 flame test

Color Code:

Control Sizes – ICEA Method 1, Table E-2

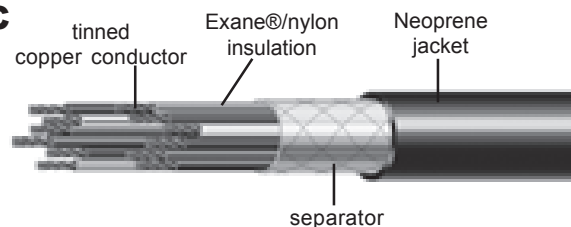
Additional Standards:

- UL Type TC tray cable per NEC Article 336
- CAN/CSA-C22.2 No. 239-M91 type CIC

Flexible & Portable Cords

PERFECT-A-FLEX®

**600 Volt UL Type TC, -54°C to +90°C
Exane® Insulation
Neoprene Jacket
Tinned Copper Conductors**



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Nylon Jacket Thickness Mils	Overall Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW252 01203	12	3	65	21	5	60	.42	130
HW252 01204	12	4	65	21	5	60	.47	170
HW252 01205	12	5	65	21	5	60	.51	195
HW252 01206	12	6	65	21	5	70	.57	242
HW252 01207	12	7	65	21	5	70	.62	275
HW252 01208	12	8	65	21	5	70	.65	315
HW252 01210	12	10	65	21	5	70	.69	370
HW252 01212	12	12	65	21	5	70	.71	425
HW252 01216	12	16	65	21	5	70	.80	545
HW252 01220	12	20	65	21	5	90	.95	706
HW252 01224	12	24	65	21	5	90	1.00	818
HW252 01230	12	30	65	21	5	90	1.08	1005
HW252 01237	12	37	65	21	5	90	1.20	1200

Application:

Very flexible cable for use on cable tender systems, festooned cable applications, pendant cable drops, overhead bridge cranes, warehouse stacking cranes, motor- or spring-driven reels, or any tough industrial application that requires both strength and flexibility. Approved for use in cable trays, in raceways supported by a messenger wire, in open air, and for direct burial applications. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductors:

Tinned soft annealed copper per ASTM B-33, Geolay stranding per ASTM B-286.

Insulation:

Irradiated cross-linked polyolefin (Exane®).

Insulation Jacket:

Clear Nylon.

Jacket:

Sunlight-resistant Neoprene per ICEA S-19-81.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- ICEA 210,000 BTU/hr flame test
- CSA FT4 flame test
- Individual conductors pass the UL VW-1 flame test

Color Code:

Control Sizes – ICEA Method 1, Table E-2

Additional Standards:

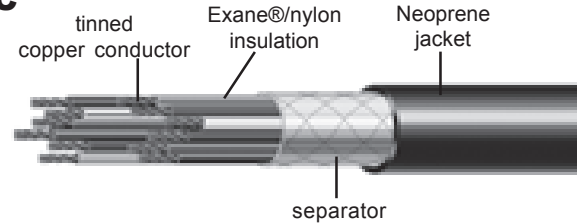
- UL Type TC tray cable per NEC Article 336
- CAN/CSA-C22.2 No. 239-M91 type CIC

Flexible & Portable Cords

Specification
HW252

PERFECT-A-FLEX®

600 Volt UL Type TC, -54°C to +90°C
Exane® Insulation
Neoprene Jacket
Tinned Copper Conductors



Catalog No.	Size AWG	Number of Conductors	Number of Strands	Insulation Thickness Mils	Nylon Jacket Thickness Mils	Overall Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW252 01003	10	3	105	21	5	60	.38	102
HW252 01004	10	4	105	21	5	60	.42	130
HW252 01005	10	5	105	21	5	60	.45	149
HW252 01006	10	6	105	21	5	60	.49	174

Application:

Very flexible cable for use on cable tender systems, festooned cable applications, pendant cable drops, overhead bridge cranes, warehouse stacking cranes, motor- or spring-driven reels, or any tough industrial application that requires both strength and flexibility. Approved for use in cable trays, in raceways supported by a messenger wire, in open air, and for direct burial applications. UL approved for use at 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Conductors:

Tinned soft annealed copper per ASTM B-33, Geolay stranding per ASTM B-286.

Insulation:

Irradiated cross-linked polyolefin (Exane®).

Insulation Jacket:

Clear Nylon.

Jacket:

Sunlight-resistant Neoprene per ICEA S-19-81.

Flame Tests:

- UL and IEEE 383 70,000 BTU/hr flame test
- ICEA 210,000 BTU/hr flame test
- CSA FT4 flame test
- Individual conductors pass the UL VW-1 flame test

Color Code:

Control Sizes – ICEA Method 1, Table E-2

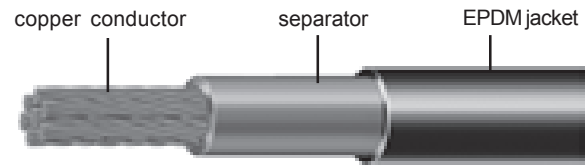
Additional Standards:

- UL Type TC tray cable per NEC Article 336
- CAN/CSA-C22.2 No. 239-M91 type CIC

Flexible & Portable Cords

WELDING CABLE

**600 Volt, -40°C to +90°C
Flexible Copper Conductor**



Catalog No.	Size AWG/kcmil	No. of Strands	Insulation Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW253 00601	6	260	73	.38	142
HW253 00401	4	374	73	.40	180
HW253 00201	2	625	73	.47	270
HW253 00101	1	778	73	.50	325
HW253 10101	1/0	990	87	.58	425
HW253 20101	2/0	1251	87	.62	480
HW253 30101	3/0	1586	105	.68	650
HW253 40101	4/0	2055	105	.76	820
HW253 25001	250	2496	119	.89	965
HW253 35001	350	3432	120	1.07	1345
HW253 50001	500	5054	120	1.20	1950

Application:

Used in welding applications for connections between the electrode holder and clamp, to the arc welder, bus, welding box or transformer. Recommended for use in industrial applications such as shipyards, mines and construction sites where resistance to extreme physical abuse and high flexibility are required.

Conductor:

Soft bare annealed copper per ASTM B-3, 30 AWG Class K rope lay stranding per ASTM B-172.

Insulation/Jacket:

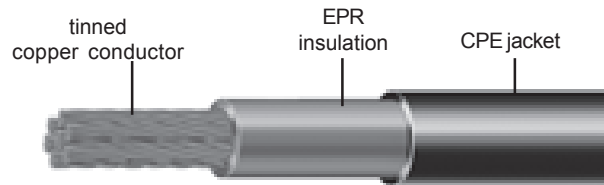
Ethylene propylene diene monomer (EPDM) rubber.

Flexible & Portable Cords

Specification
HW254

DIESEL LOCOMOTIVE (DLO)

2000 Volt, 90°C
RHW-2 or RHH (UL)
EPR Insulation, CPE Jacket
Flexible Copper Conductor



Catalog No.	Area Circular Mils	Size AWG/kcmil	Number of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW254 01401	3831	14	19	47	20	.20	30
HW254 01201	6088	12	19	47	20	.22	40
HW254 01001	10910	10	27	47	20	.25	55
HW254 00801	14950	8	37	55	20	.28	75
HW254 00601	24640	6	61	62	31	.36	125
HW254 00401	42420	4	105	62	31	.45	200
HW254 00201	60600	2	147	62	31	.49	265
HW254 00101	90900	1	224	78	47	.62	415
HW254 10101	111100	1/0	273	78	47	.66	490
HW254 20101	131300	2/0	323	78	47	.70	560
HW254 30101	181800	3/0	456	78	47	.78	755
HW254 40101	222200	4/0	551	78	47	.84	895
HW254 26201	262600	262	646	94	65	.95	1085
HW254 31301	313100	313	777	94	65	1.02	1255
HW254 37301	373700	373	925	94	65	1.08	1485
HW254 44401	444400	444	1100	94	65	1.15	1745
HW254 53501	535300	535	1332	109	65	1.26	2090
HW254 64601	646400	646	1591	109	65	1.35	2470
HW254 77701	777700	777	1924	109	65	1.45	2910
HW254 92901	929200	929	2318	109	65	1.59	3515
HW254 11111	1111000	1111	2745	125	65	1.69	4150

Flexible & Portable Cords

Application:

For use on diesel-electric locomotive and in applications involving a high amount of durability and flexibility including mining, general construction, temporary power supply motor lead, and cable tray when CT rated. For use in circuits not to exceed 2,000 volts.

Conductors:

Tin-coated soft annealed copper per ASTM B-33 and AAR 591, stranding per ASTM B-172 or B-174.

Insulation:

Ethylene propylene rubber (EPR) per ICEA 95-658 or ICEA S-75-381.

Jacket:

Chlorinated polyethylene (CPE).

Flame Tests:

- IEEE 383 70,000 BTU/hr flame test
- UL 1658 vertical cable tray flame test

Additional Standards:

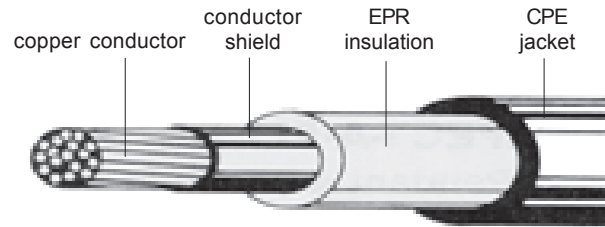
- ICEA S-95-658
- NEMA WC-70
- Association of American Railroads (AAR)
- Pennsylvania Bureau of Mines – MSHA approved

Note:

CT ratings are available on sizes 1/0 AWG and larger.

JUMPER CABLE

**5KV/15KV, -40°C to +90°C
Flexible Copper Conductor**



Catalog No.	Size AWG/kcmil	Number of Strands	Conductor Diameter Inch	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW255 00201	2	259	.33	210	65	.91	550
HW255 00101	1	259	.38	210	65	.95	630
HW255 10101	1/0	266	.42	210	65	1.00	726
HW255 20101	2/0	342	.47	210	65	1.05	855
HW255 40101	4/0	532	.60	210	65	1.16	1165
HW255 35001	350	888	.78	210	65	1.30	1685
HW255 50001	500	1221	.93	210	65	1.43	2185

Application:

For use as a temporary jumper cable for portable or mobile substations, or for temporarily bypassing damaged or faulted sections of power cable in circuits up to 15000 volts.

Conductor:

Tin-coated, soft annealed copper per ASTM B-33, flexible bunch strand with a semi-conducting conductor shield.

Insulation:

Ethylene propylene rubber (EPR) per ASTM D-2802

Jacket:

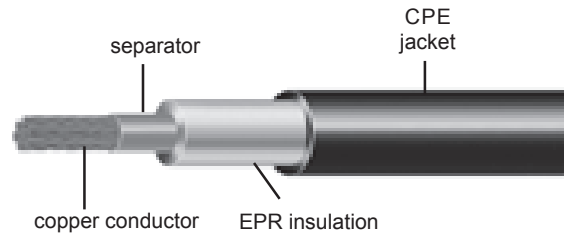
Red thermoset chlorinated polyethylene (CPE) per ASTM D4313.

Flexible & Portable Cords

Specification
HW256

PORTABLE POWER CABLE – TYPE W

**2000 Volt UL, -40°C to +90°C
EPR Insulation, CPE Jacket
Single, Flexible Copper Conductor**



Catalog No.	Size AWG/kcmil	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW256 00801	8	168	60	75	.44	155
HW256 00601	6	266	60	95	.53	267
HW256 00401	4	420	60	95	.60	369
HW256 00201	2	665	60	95	.66	458
HW256 10101	1/0	1064	80	95	.79	658
HW256 20101	2/0	1311	80	95	.81	730
HW256 40101	4/0	2109	80	95	.95	1049
HW256 25001	250	637	95	95	1.08	1425
HW256 35001	350	882	95	95	1.20	1971
HW256 50001	500	1225	95	95	1.34	2651

Application:

Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including trailing cable on mobile mining equipment, diesel electric locomotives, lifting magnets, cranes, cutters, loaders, conveyors, drills and pumps where grounded circuits are not required. For use in circuits not to exceed 2000 volts.

Conductor:

Soft bare annealed copper, rope stranded per ICEA S-75-381 part 2 and UL requirements.

Insulation:

Ethylene propylene rubber (EPR) per ICEA S-75-381.

Jacket:

Chlorinated polyethylene (CPE) rubber per ICEA S-75-381.

Flame Tests:

MSHA flame test

Additional Standards:

Pennsylvania Bureau of Mines – MSHA approved

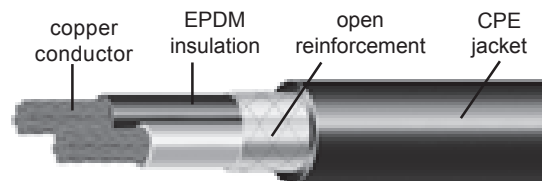
Note:

Sizes 1/0 AWG and larger are non-UL constructions made in accordance with applicable industry standards.

Flexible & Portable Cords

ROUND PORTABLE CABLE – TYPE W

**2000 Volt UL, -40°C to +90°C
EPR Insulation, CPE Jacket
Multiple Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW256 00802	8	2	133	60	116	.82	385
HW256 00803	8	3	133	60	143	.93	590
HW256 00804	8	4	133	60	146	1.01	715
HW256 00805	8	5	133	60	146	1.06	812
HW256 00602	6	2	133	60	139	.91	480
HW256 00603	6	3	133	60	152	1.02	775
HW256 00604	6	4	133	60	155	1.11	935
HW256 00605	6	5	133	60	164	1.21	1094
HW256 00402	4	2	133	60	157	1.02	665
HW256 00403	4	3	133	60	172	1.11	980
HW256 00404	4	4	133	60	172	1.22	1200
HW256 00405	4	5	133	60	183	1.39	1506
HW256 00202	2	2	259	60	186	1.23	1015
HW256 00203	2	3	259	60	180	1.30	1380
HW256 00204	2	4	259	60	179	1.39	1680
HW256 00205	2	5	259	60	182	1.61	2239
HW256 00102	1	2	259	80	199	1.42	1195
HW256 00103	1	3	259	80	193	1.48	1705
HW256 00104	1	4	259	80	210	1.62	2213
HW256 00105	1	5	259	80	188	1.91	2800

Application: Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including trailing cable on mobile mining equipment, diesel electric locomotives, lifting magnets, cranes, cutters, loaders, conveyors, drills and pumps where grounded circuits are not required. For use in circuits not to exceed 2000 volts.

Conductors: Soft bare annealed copper per ASTM B-3, flexible rope lay strand per UL Standard 44.

Insulation: Ethylene propylene diene monomer (EPDM) rubber per UL Standard 44.

Assembly: Multiple conductor constructions cabled with fillers for roundness, with an open reinforcement over the assembly for mechanical protection.

Jacket: Chlorinated polyethylene (CPE) rubber per UL Standard 1581.

Flame Tests: MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

Additional Standards:

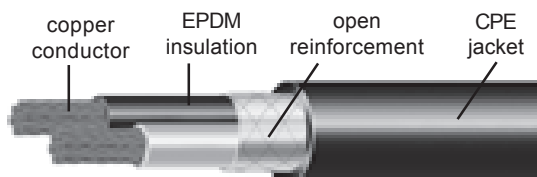
- ICEA S-75-381
- NEMA WC-58
- Pennsylvania Bureau of Mines – MSHA approved

Flexible & Portable Cords

**Specification
HW256**

ROUND PORTABLE CABLE – TYPE W

**2000 Volt, -40°C to +90°C
EPR Insulation, CPE Jacket
Multiple Flexible Copper Conductors**



Catalog No.	Size AWG/kcmil	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW256 10102	1/0	2	259	80	165	1.52	1500
HW256 10103	1/0	3	259	80	203	1.61	2165
HW256 10104	1/0	4	259	80	193	1.76	2693
HW256 10105	1/0	5	259	80	188	2.03	3065
HW256 20102	2/0	2	259	80	177	1.62	1805
HW256 20103	2/0	3	259	80	198	1.72	2520
HW256 20104	2/0	4	259	80	182	1.89	3326
HW256 20105	2/0	5	259	80	192	2.18	3775
HW256 30102	3/0	2	259	80	182	1.74	2075
HW256 30103	3/0	3	259	80	185	1.85	3180
HW256 30104	3/0	4	259	80	184	2.03	4068
HW256 30105	3/0	5	259	80	182	2.34	4645
HW256 40102	4/0	2	259	80	199	1.90	2585
HW256 40103	4/0	3	259	80	207	2.02	3360
HW256 40104	4/0	4	259	80	221	2.19	4260
HW256 40105	4/0	5	259	80	203	2.54	5515
HW256 25003	250	3	427	95	267	2.36	4645
HW256 35003	350	3	427	95	283	2.50	5225
HW256 50003	500	3	427	95	295	3.00	7985

Flexible & Portable Cords

Application: Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including trailing cable on mobile mining equipment, diesel electric locomotives, lifting magnets, cranes, cutters, loaders, conveyors, drills and pumps where grounded circuits are not required. For use in circuits not to exceed 2000 volts.

Conductors: Soft bare annealed copper per ASTM B-3, flexible rope lay strand per UL Standard 44.

Insulation: Ethylene propylene diene monomer (EPDM) rubber per UL Standard 44.

Assembly: Multiple conductor constructions cabled with fillers for roundness, with an open reinforcement over the assembly for mechanical protection.

Jacket: Chlorinated polyethylene (CPE) rubber per UL Standard 1581.

Flame Tests: MSHA flame test

Color Code:

- ICEA Method 1
- Three conductor – black, white, green

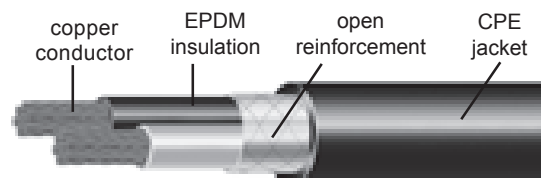
Additional Standards:

- ICEA S-75-381
- NEMA WC-58
- Pennsylvania Bureau of Mines – MSHA approved

Note: Sizes 1/0 AWG and larger are non-UL constructions made in accordance with applicable industry standards.

MAGNET CRANE CABLE – TYPE W

**2000 Volt UL, -40°C to +90°C
EPR Insulation, CPE Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Conductors	No. of Strands	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW257 00802	8	2	133	60	107	.82	355
HW257 00602	6	2	133	60	125	.92	500
HW257 00402	4	2	133	60	155	1.07	710
HW257 00202	2	2	133	60	165	1.26	970

Application:

Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including trailing cable on mobile mining equipment, diesel electric locomotives, lifting magnets, cranes, cutters, loaders, conveyors, drills and pumps where grounded circuits are not required. For use in circuits not to exceed 2000 volts.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible rope lay strand per ASTM B-172.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber per ICEA S-75-381.

Assembly:

Cabled with fillers for roundness, with an open reinforcement over the assembly for mechanical protection.

Jacket:

Double-layer, heavy-duty, oil-resistant thermoset Neoprene rubber per ICEA S-75-381.

Flame Tests:

MSHA flame test

Color Code:

ICEA Method 1

Additional Standards:

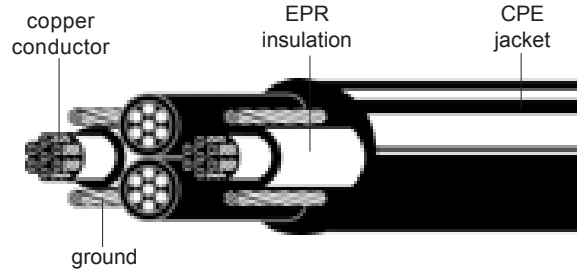
Pennsylvania Bureau of Mines – MSHA approved

Flexible & Portable Cords

**Specification
HW258**

PORTABLE POWER CABLE – TYPE G

**2000 Volt, -40°C to +90°C
Four Conductor
EPR Insulation, CPE Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG	No. of Strands	Insulation Thickness Mils	Grounding Conductor Size AWG	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW258 00804	8	133	60	12	146	1.02	829
HW258 00604	6	133	60	12	155	1.13	1046
HW258 00404	4	133	60	10	172	1.24	1363
HW258 00304	3	133	60	10	156	1.31	1550
HW258 00204	2	133	60	9	179	1.40	1802
HW258 00104	1	133	80	8	210	1.64	2620
HW258 10104	1/0	259	80	7	193	1.77	3163
HW258 20104	2/0	259	80	6	182	1.91	3546
HW258 30104	3/0	259	80	5	184	2.05	4360
HW258 40104	4/0	259	80	4	221	2.24	5269

Application:

Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including mobile mining equipment, cutters, loaders, conveyors, drills and pumps where grounding is required. For use in circuits not to exceed 2,000 volts.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible rope lay strand.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Grounding Conductors:

Four insulated, soft bare annealed copper conductors per ASTM B-3, flexible strand sized in accordance with applicable ICEA standards.

Assembly:

Multiple conductor constructions cabled with fillers for roundness, with an open reinforcement over the assembly for mechanical protection.

Jacket:

Chlorinated polyethylene (CPE) rubber.

Flame Tests:

- MSHA flame test

Color Code:

Black, white, red, orange

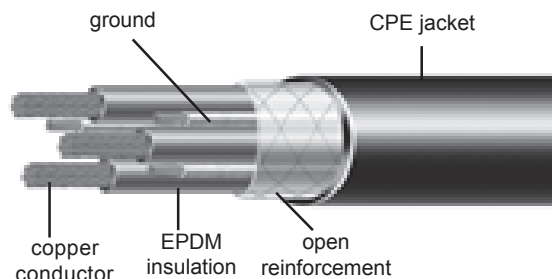
Additional Standards:

- ICEA S-75-381
- Pennsylvania Bureau of Mines – MSHA approved

Flexible & Portable Cords

PORTABLE POWER CABLE – TYPE G-GC

**2000 Volt, -40°C to +90°C
Three Conductor
EPR Insulation, CPE Jacket
Flexible Copper Conductors**



Catalog No.	Size AWG/kcmil	Number of Strands	Insulation Thickness Mils	Grounding Conductor Size AWG	Ground Check Conductor Size	Jacket Thickness Mils	Overall Diameter Inch	Net Weight Lbs/Mft
HW259 00803	8	133	60	10	10	143	.97	675
HW259 00603	6	133	60	10	10	152	1.05	825
HW259 00403	4	259	60	8	10	172	1.19	1125
HW259 00203	2	259	60	7	10	180	1.34	1525
HW259 00103	1	259	80	6	8	193	1.51	1795
HW259 10103	1/0	259	80	5	8	203	1.65	2390
HW259 20103	2/0	259	80	4	8	198	1.75	2790
HW259 30103	3/0	259	80	3	8	185	1.89	3426
HW259 40103	4/0	259	80	2	8	207	2.04	4030
HW259 25003	250	427	95	2	8	267	2.38	5445
HW259 35003	350	427	95	1/0	8	283	2.73	7273
HW259 50003	500	427	95	2/0	8	295	3.02	9439

Application:

Portable power cable designed for heavy duty temporary or permanent use where maximum resistance to flex fatigue is required. Used in extremely demanding applications including mobile mining equipment, cutters, loaders, conveyors, drills and pumps. For three-phase alternating current circuits, not to exceed 2,000 volts, where grounding conductors and ground check conductors are required.

Conductors:

Soft bare annealed copper per ASTM B-3, flexible rope lay strand.

Insulation:

Ethylene propylene diene monomer (EPDM) rubber.

Grounding Conductors:

Two insulated ground and one insulated ground check, soft bare annealed copper conductors per ASTM B-3, flexible strand sized in accordance with applicable ICEA standards.

Assembly:

Multiple conductor constructions cabled with fillers for roundness, with an open reinforcement over the assembly for mechanical protection.

Jacket:

Chlorinated polyethylene (CPE) rubber.

Flame Tests:

- MSHA flame test

Color Code:

Black, white, red

Additional Standards:

- ICEA S-75-381
- Pennsylvania Bureau of Mines – MSHA approved

Flexible & Portable Cords

