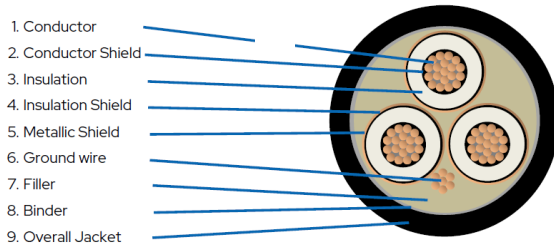


5kV CU EPR 133% IL CTS PVC TYPE MV-105 – Silicone Free

Type MV-105 Copper Conductor, Ethylene Propylene Rubber (EPR) 5kV 133% Insulation Level, Copper Tape Shield, Polyvinyl Chloride (PVC) Jacket.



CONSTRUCTION:

1. Conductor	Class B compressed or compact stranded bare copper per ASTM B3 and ASTM B8
2. Conductor Shield	Semi-conducting cross-linked copolymer
3. Insulation	No Lead Ethylene Propylene Rubber (NL-EPR) 133% Insulation Level
4. Insulation Shield	Stripable semi-conducting cross-linked copolymer
5. Metallic Shield	Copper tape helically wrapped 5 mils copper tape with 25% overlap
6. Ground Wire	Class B compressed or compact stranded bare copper per ASTM B3 and ASTM B8
7. Filler	Suitable filler
8. Binder	Glass tape
9. Overall Jacket	Polyvinyl Chloride (PVC)

APPLICATIONS AND FEATURES:

5kV cables are suited for use in wet and dry areas, conduits, ducts, direct burial, trays, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 105°C for normal operation, 140°C for emergency overload and 250°C for short circuit conditions.

SPECIFICATIONS:

- ASTM B3 Soft or annealed copper
- ASTM B8 Concentric-lay-standard copper
- UL 1072 Medium Voltage Power Cables
- ICEA S-97-682 Utility Shielded Power Cables Rated 5 through 46kV
- UL 1685 CT Flame Exposure Test
- UV Resistant
- Outdoor Rated

Cable Information: 3 Core (133%) (Compress Conductor) - Test Voltage 23kV

DWC Part No.	Size (AWG/MCM)	Conductor		Insulation		Jacket	Ground Size (AWG)	Cable Diameter (Approx) [inches]	Bending Radius (min) [inches]	Cable Weight [lbs/1000ft]	Max. Conductor Resistance (20°C)Ω/km
		No	Diameter [inches]	Thickness (Nom) [mils]	Diameter (Approx) [inches]	Thickness (Nom) [mils]					
02035KVSEPRPVC	2	7	0.280	115	0.575	80	6	1.634	16.4	1771	0.534
01035KVSEPRPVC	1	19	0.319	115	0.614	110	4	1.772	17.8	2221	0.423
1/0035KVSEPRPVC	1/0	19	0.362	115	0.654	110	4	1.870	18.7	2500	0.335
2/0035KVSEPRPVC	2/0	19	0.405	115	0.693	110	4	1.949	19.5	2848	0.266
3/0035KVSEPRPVC	3/0	19	0.456	115	0.744	110	3	2.067	20.7	3350	0.211
4/0035KVSEPRPVC	4/0	19	0.512	115	0.799	110	3	2.185	21.9	3876	0.167
2500/0035KVSEPRPVC	250	37	0.558	115	0.854	110	2	2.303	23.1	4458	0.141
3500/0035KVSEPRPVC	350	37	0.661	115	0.953	110	2	2.520	25.2	5613	0.101
5000/0035KVSEPRPVC	500	37	0.789	115	1.079	140	1	2.835	28.4	7577	0.0708
7500/0035KVSEPRPVC	750	61	0.968	115	1.264	140	1/0	3.228	32.3	10554	0.0472

Cable Information: 3 Core (133%) (Compress Conductor) - Test Voltage 23kV

DWC Part No.	Size (AWG/MCM)	Conductor		Insulation		Jacket	Ground Size (AWG)	Cable Diameter (Approx) [mm]	Bending Radius (min) [mm]	Cable Weight [lbs/1000ft]	Max. Conductor Resistance (20°C)Ω/km
		No	Diameter [mm]	Thickness (Nom) [mm]	Diameter (Approx) [mm]	Thickness (Nom) [mm]					
02035KVSEPRPVC	2	7	7.1	2.92	14.6	2.032	6	41.5	415	1771	0.534
01035KVSEPRPVC	1	19	8.1	2.92	15.6	2.794	4	45.0	450	2221	0.423
1/0035KVSEPRPVC	1/0	19	9.2	2.92	16.6	2.794	4	47.5	475	2500	0.335
2/0035KVSEPRPVC	2/0	19	10.3	2.92	17.6	2.794	4	49.5	495	2848	0.266
3/0035KVSEPRPVC	3/0	19	11.6	2.92	18.9	2.794	3	52.5	525	3350	0.211
4/0035KVSEPRPVC	4/0	19	13.0	2.92	20.3	2.794	3	55.5	555	3876	0.167
2500/0035KVSEPRPVC	250	37	14.2	2.92	21.7	2.794	2	58.5	585	4458	0.141
3500/0035KVSEPRPVC	350	37	16.8	2.92	24.2	2.794	2	64.0	640	5613	0.101
5000/0035KVSEPRPVC	500	37	20.0	2.92	27.4	3.556	1	72.0	720	7577	0.0708
7500/0035KVSEPRPVC	750	61	24.6	2.92	32.1	3.556	1/0	82.0	820	10554	0.0472

Cable Information: 3 Core (133%) (Compact Conductor) - Test Voltage 23kV

DWC Part No.	Size (AWG/MCM)	Conductor		Insulation		Jacket	Ground Size (AWG)	Cable Diameter (Approx) [inches]	Bending Radius (min) [inches]	Cable Weight [lbs/1000ft]	Max. Conductor Resistance (20°C)Ω/km
		No	Diameter [inches]	Thickness (Nom) [mils]	Diameter (Approx) [inches]	Thickness (Nom) [mils]					
02035KVSEPRPVC	2	7	0.270	115	0.567	80	6	1.614	16.2	1752	0.534
01035KVSEPRPVC	1	19	0.304	115	0.598	110	4	1.752	17.6	2189	0.423
1/0035KVSEPRPVC	1/0	19	0.339	115	0.634	110	4	1.831	18.4	2461	0.335
2/0035KVSEPRPVC	2/0	19	0.382	115	0.677	110	4	1.909	19.1	2817	0.266
3/0035KVSEPRPVC	3/0	19	0.43	115	0.724	110	3	2.028	20.3	3312	0.211
4/0035KVSEPRPVC	4/0	19	0.481	115	0.776	110	3	2.126	21.3	3827	0.167
2500/0035KVSEPRPVC	250	37	0.524	115	0.827	110	2	2.244	22.5	4396	0.141
3500/0035KVSEPRPVC	350	37	0.619	115	0.921	110	2	2.441	24.5	5544	0.101
5000/0035KVSEPRPVC	500	37	0.741	115	1.043	110	1	2.697	27.0	7330	0.0708
7500/0035KVSEPRPVC	750	61	0.91	115	1.22	140	1/0	3.150	31.5	10443	0.0472

Cable Information: 3 Core (133%) (Compact Conductor) - Test Voltage 23kV

DWC Part No.	Size (AWG/MCM)	Conductor		Insulation		Jacket	Ground Size (AWG)	Cable Diameter (Approx) [mm]	Bending Radius (min) [mm]	Cable Weight [lbs/1000ft]	Max. Conductor Resistance (20°C)Ω/km
		No	Diameter [mm]	Thickness (Nom) [mm]	Diameter (Approx) [mm]	Thickness (Nom) [mm]					
02035KVSEPRPVC	2	7	6.85	2.92	14.4	2.032	6	41.0	410	1752	0.534
01035KVSEPRPVC	1	19	7.7	2.92	15.2	2.794	4	44.5	445	2189	0.423
1/0035KVSEPRPVC	1/0	19	8.6	2.92	16.1	2.794	4	46.5	465	2461	0.335
2/0035KVSEPRPVC	2/0	19	9.7	2.92	17.2	2.794	4	48.5	485	2817	0.266
3/0035KVSEPRPVC	3/0	19	10.9	2.92	18.4	2.794	3	51.5	515	3312	0.211
4/0035KVSEPRPVC	4/0	19	12.2	2.92	19.7	2.794	3	54.0	540	3827	0.167
2500/0035KVSEPRPVC	250	37	13.3	2.92	21	2.794	2	57.0	570	4396	0.141
3500/0035KVSEPRPVC	350	37	15.7	2.92	23.4	2.794	2	62.0	620	5544	0.101
5000/0035KVSEPRPVC	500	37	18.8	2.92	26.5	2.794	1	68.5	685	7330	0.0708
7500/0035KVSEPRPVC	750	61	23.1	2.92	31	3.556	1/0	80.0	800	10443	0.0472

Ampacities – According to NEC

Size	Isolated in Air [NEC Table 310.60(C) (60)]	Directly Buried [NEC TABLE 310.60(C)(81)]	Underground Electrical Ducts [NEC TABLE 310.60(C)(77)]
1/0 AWG	290	320	210
2/0 AWG	330	365	235
3/0 AWG	385	415	270
4/0 AWG	445	465	310
250 MCM	495	510	345
350 MCM	615	615	415
500 MCM	775	745	505
750 MCM	1000	910	630

Maximum Side Pressure, Pull Tensions

Size	Maximum Side Pressure [lbs/ft]	Pull Tensions [lbs]
1/0 AWG	300	845
2/0 AWG	300	1065
3/0 AWG	300	1342
4/0 AWG	300	1693
250 MCM	300	2000
350 MCM	300	2800
500 MCM	300	4000
750 MCM	300	6000

Product details and specifications are subject to manufacturing variations and accepted industry tolerances. Please contact your DWC Account Manager with questions or to confirm specific product requirements.