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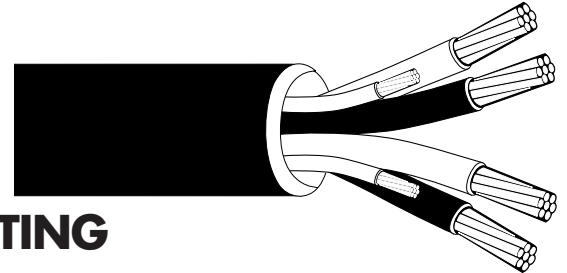
Paige SPEC P7304D

CABLECON DIRECT BURIAL CABLE

CONDUCTOR: **CLASS B STRANDED ALUMINUM**

JACKET: **COMPOUNDED THERMOSETTING CROSS-LINKED POLYETHYLENE**

SIZES: **18AWG THRU 2000MIL**



1.0 SCOPE:

1.1 Cablecon is a tough, durable and reliable pre-assembled cable-in-conduit system that minimizes the chance of crop loss due to cable failures caused by gopher bites, salt damage or chemical deterioration. The size of the conduit and its smooth, continuous surface make Cablecon virtually impenetrable to gopher attacks. There are no leaky couplings or splices to fail. And Cablecon's durable polyethylene composition resists abrasion, moisture, acids, alkalis, salts, detergents and other chemicals. The electrical cables inside remain protected.

conductors laid parallel. Wall thickness are in accordance with Underwriters' Laboratory and National Electric Code requirements for Types RHH and RHW. It combines outstanding resistance to heat and water with exceptional resistance to chemicals, abrasion, crushing and weathering and meets the applicable requirements of U.L. Standard S-66-524. Color-coded by ICEA Method III, longitudinally colored stripe.

2.0 CONSTRUCTION:

2.1 Conductor:
Class B stranded, aluminum conductor per ASTM B323 or B231.

2.3 Conduit:
a black High Density Type III, Grade P33 polyethylene with outstanding resistance to corrosion, rust, chemicals, weather and sunlight and is impervious to electrolytic environments. Its strength and abrasion resistance, combined with excellent aging characteristics, make a long-lasting protection for the cable construction.

2.2 Insulation:
Specifically compounded thermosetting cross-linked polyethylene. Four insulated

2.4 Kill Wires:
optional

2.5

LEGEND: INTEGRAL CABLECON (SIZE) TYPE III HDPE

DUCT SIZE	OUTSIDE DIAMETER	NOMINAL WALL	NOMINAL I.D.	CONDUIT WEIGHT
1.25"	1.660" +/-0.12"	.108" +/-0.10"	1.444"	198.32#
1.50"	1.900" +/-0.12"	.122" +/-0.10"	1.656"	259.44#
2.00"	2.375" +/-0.12"	.150" +/-0.10"	2.075"	405.38#

3.0 FORMULA FOR FIGURING WIRE SIZE FOR CENTER PIVOTS:
3.1

$$.R = \frac{.02887V}{LA}$$

3.2 Multiply the Voltage by .02887

3.3 Divide this number by the length in thousands of feet (i.e. if the length is 3,500 ft. - divide by 3.5).

3.4 Divide this number by the full load current in amps (see NEC 70-428).

3.5 From NEC Table 70-830, from column labeled DC Resistance, locate the number you have calculated (or next **Lower** number and look back across the chart to the first column labeled SIZE AWG/kcmil to find correct wire size to be used).

4.0 CONDUCTOR PROPERTIES

SIZE AWG/ KCMIL	DC RESISTANCE AT 75°C ALUMINUM	SIZE AWG/ KCMIL	DC RESISTANCE AT 75°C ALUMINUM	SIZE AWG/ KCMIL	DC RESISTANCE AT 75°C ALUMINUM	SIZE AWG/ KCMIL	DC RESISTANCE AT 75°C ALUMINUM
18	12.8	10	2.04	2/0	.159	700	.0303
18	13.1	8	1.26	3/0	.126	750	.0282
16	8.05	8	1.28	4/0	.100	800	.0265
16	8.21	6	.808	250	.0847	900	.0235
14	5.06	4	.508	300	.0707	1000	.0212
14	5.17	3	.403	350	.0605	1250	.0169
12	3.18	2	.319	400	.0529	1500	.0141
12	3.25	1	.253	500	.0424	1750	.0121
10	2.00	1/0	.201	600	.0353	2000	.0106

5.0 FULL-LOAD CURRENT THREE-PHASE ALTERNATING-CURRENT MOTORS

5.1 Induction Type Squirrel-Cage and Wound-Rotor Amperes

HP	115V	200V	208V	230V	460V	575V	2300V
.5	4	2.3	2.2	2	1	.8	
.75	5.6	3.2	3.1	2.8	1.4	1.1	
1	7.2	4.1	4.0	3.6	1.8	1.4	
1.5	10.4	6.0	5.7	5.2	2.6	2.1	
2	13.6	7.8	7.5	6.8	3.4	2.7	
3		11.0	10.6	9.6	4.8	3.9	
5		17.5	16.7	15.2	7.6	6.1	
7.5		25.3	24.2	22	11	9	
10		32.2	30.8	28	14	11	
15		48.3	46.2	42	21	17	
20		62.1	59.4	54	27	22	
25		78.2	74.8	68	34	27	
30		92	88	80	40	32	
40		119.6	114.4	104	52	41	
50		149.5	143.0	130	65	52	
60		177.1	169.4	154	77	62	16
75		220.8	211.2	192	96	77	20
100		285.2	272.8	248	124	99	26
125		358.8	343.2	312	156	125	31
150		414	396.0	360	180	144	37
200		552	528.0	480	240	192	49