3 Conductor DriveRx VFD* Cable+ 1000V

Description Modern drive technology has enhanced the performance of industrial motors. Decreased switching time of the electronics in Variable Frequency, Pulse Width Modulation or Vector drives, means specialized cables connecting the drive unit and the motor become critical to the performance of these systems. Nexans DriveRx® cable is specially constructed to meet the challenges of modern adjustable speed drive systems. Drive manufacturers recommend the Nexans cable construction, with thecorrugated continuous aluminum sheath and 3 bonding conductors. The three conductor construction virtually eliminates magnetic fields outside of the cable, so induced voltage from one power cable to another or cross talk to control/instrumentation cables is also reduced. The continuous aluminum sheath (as opposed to interlocked armour) acts as an effective shield for high frequency "noise" that may still be produced and could affect adjacent control and instrumentation cables. This sheath, in combination with the three grounding conductors, also acts as a long-term low resistance path to the ground. This will eliminate standing voltages that may be created on the motor frame and also reduce bearing currents due to this standing voltage or to common mode voltage.

Application Nexans DriveRx® cable is recommended for industrial, commercial and utility installations including outdoor wet locations. DriveRx® can be installed in tray, conduit or direct buried, strapped to walls or surface mounted. Although DriveRx® can be installed in tray or conduit, mechanical protection is NOT required, as DriveRx® is impact and crush resistant. Cable temperature rating is 90ºC to -40ºC. DriveRx® is flame, oil and UV resistant. Certification to standard C22.2 No. 174 allows installation in hazardous locations.

Conductor Copper

Max. Temp. 90 °C

Approvals CSA C22.2 N° 123; CSA C22.2 N° 174

Product Code	AWG Size	Bonding AWG (bare copper)	Cable Core Diameter		Aluminum Sheath Thickness		Aluminum Sheath Diameter		PVC Jacket Diameter		Outer Jacket Diameter		Cable Weight (Armoured)		Minimum bend Radius	
			In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	lbs/mft	kg/km	In.***	mm***
19X1203	12	3x18	.401	10.20	.030	.780	0.602	15.30	.050	1.27	0.700	17.80	168	250	5.51	140
19X1003	10	3x16	.452	11.50	.030	.780	0.634	16.10	.050	1.27	0.732	18.60	221	330	5.70	145
19X0803	8	3x14	.499	12.70	.030	.780	0.756	19.20	.050	1.27	0.862	21.90	312	465	6.89	175
19X0603	6	3x12	.642	16.30	.030	.780	0.913	23.20	.050	1.27	1.023	26.00	467	695	8.26	210
19X0403	4	3x12	.736	18.70	.030	.780	0.976	24.80	.050	1.27	1.078	27.40	628	935	8.85	225
19X0303	3	3x12	.791	20.10	.040	1.000	1.118	28.40	.050	1.27	1.232	31.30	786	1170	10.03	255
19X0203	2	3x10	.858	21.80	.040	1.000	1.177	29.90	.050	1.27	1.279	32.50	1098	1635	10.62	270
19X0103	1	3x10	1.011	25.70	.043	1.090	1.362	34.60	.050	1.27	1.460	37.10	1374	2045	12.40	315
19X03	1/0	3x10	1.094	27.80	.043	1.090	1.417	36.00	.050	1.27	1.519	38.60	1592	2370	12.79	325
19X003	2/0	3x10	1.181	30.00	.043	1.090	1.559	39.60	.050	1.27	1.661	42.20	2002	2980	14.17	360
19X0003	3/0	3x8	1.287	32.70	.043	1.090	1.661	42.20	.050	1.27	1.783	45.30	2456	3655	14.96	380
19X00003	4/0	3x8	1.397	35.50	.043	1.090	1.748	44.40	.050	1.27	1.850	47.00	2899	4315	15.74	400
19X2503	250	3x8	1.488	37.80	.043	1.090	1.897	48.20	.050	1.27	2.012	51.10	3245	4830	17.12	435
19X3503	350	3x8	1.744	44.30	.043	1.090	2.220	56.40	.050	1.27	2.330	59.20	4452	6625	20.07	510
19X5003	500	3x6	2.003	50.90	.050	1.290	2.480	63.00	.050	1.27	2.590	65.80	6138	9135	22.44	570

*A 1966 IEEE paper compared "commonly available" cable constructions for VFD feeders.
A corrugated aluminum sheathed cable similar in construction to DriveRx was determined to provide the best combination of electrical, installation, maintenance and cost factors of the cables studied.
**Rated current per table #2 in Canadian Electrical Code _1974
***Minimum bend radius per rule 12-712(3) in C.E.C. is 9x sheath diameter.
+Cable is CSA approved to standard C22.2 No. 123-96 and approved for hazardous locations to standard C22.2 No. 174-M 1984.
^^Size of each bonding conductor. Total area of 3 conductors meets or exceeds bonding conductor size (Table #16) in Canadian Electrical Code.

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