

UNITRONIC® 190/ 190 CY/ 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

The UNITRONIC® 190 series of communication cables have been designed for general purpose installation in industrial signal and bus applications. EMC resistant designs with foil and braid shielding construction is available in all conductor and pair styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.

Application Advantages:

- Extended temperature rating of -10°C to +90°C
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation

UNITRONIC® 190 Construction:

Finely stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; gray PVC jacket.

UNITRONIC® 190 (UL) TYPE CMG 90°C...CSA, CMG or AWM I/II A/B 300V



UNITRONIC® 190 CY Construction:

Finely stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; overall foil tape wrap; drain wire; tinned copper braid (85% coverage); gray PVC jacket.

UNITRONIC® 190 CY (UL) TYPE CMG 90°C...CSA, CMG or AWM I/II A/B 300V



UNITRONIC® 190 CY TP (Twisted Pair) Construction:

Stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; overall foil tape wrap; drain wire; tinned copper braid (85% coverage); gray PVC jacket.

UNITRONIC® 190 CY TP (UL) TYPE CMG 90°C...CSA, CMG or AWM I/II A/B 300V



Cable Attributes, See Page 653



Oil Resistance:
OR-02



Flame Resistance:
FR-03



Motion Type:
FL-01



Mechanical Properties:
MP-01

Availability:



Standard put-ups are 100ft, 500ft, and 1,000ft. Bulk reels can be cut to length.

Complete the installation with:



SKINTOP® Strain Relief:
Page 486



EPIC® Connectors:
Page 251



OLFLEX® Tubing:
Page 546



Assemblies:
Page 627

Technical Data:



Minimum Bending Radius

- for installation:

5 x cable diameter

- with shield:

8 x cable diameter



Color Code:

Chart 2, Page 671

Chart 3 (CY) TP, Page 671



Temperature Range:

-10°C to +90°C



Approvals:

UL:

CMG

CSA:

CMG/FT4, AWM II A/B



Nominal Voltage:

300V



Test Voltage:

2000V



Conductor Stranding:

Fine Wire

UNITRONIC® 190/ 190 CY/ 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

UNITRONIC® 190: Unshielded Multi-Conductor Flexible Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (7/36) .08 mm ²							24 AWG (7/32) 0.25 mm ²						
602802	2	.143	3.6	1	10	15	602402	2	.161	4.1	3	13	19
602803	3	.149	3.8	2	12	18	602403	3	.168	4.3	4	15	22
602804	4	.158	4.0	2	14	21	602404	4	.179	4.5	6	18	27
602805	5	.168	4.3	3	16	24	602405	5	.192	4.9	7	21	31
602807	7	.178	4.5	4	18	27	602407	7	.205	5.2	10	25	37
602808	8	.189	4.8	5	20	30	602408	8	.219	5.6	12	28	42
602810	10	.213	5.4	6	23	34	602410	10	.249	6.3	15	34	51
602815	15	.248	6.3	9	29	43	602415	15	.290	7.4	22	46	69
602816	16	.253	6.4	9	31	46	602416	16	.295	7.5	23	49	73
602820	20	.269	6.8	12	36	54	602420	20	.317	8.1	29	58	86
602825	25	.297	7.5	15	43	64	602425	25	.351	8.9	37	70	104
602836	36	.328	8.3	21	56	83	602436	36	.401	10.2	53	99	148
602840	40	.339	8.6	23	61	91	602440	40	.414	10.5	59	108	161
602850	50	.375	9.5	29	73	109	602450	50	.473	12.0	73	135	201
26 AWG (7/34) 0.14 mm ²							22 AWG (7/30) 0.34 mm ²						
602602	2	.151	3.8	2	12	18	602202	2	.179	4.5	5	15	22
602603	3	.157	4.0	3	14	21	602203	3	.187	4.7	7	19	28
602604	4	.167	4.2	4	16	24	602204	4	.200	5.1	9	22	33
602605	5	.178	4.5	5	18	27	602205	5	.214	5.4	12	26	39
602607	7	.190	4.8	7	21	31	602207	7	.229	5.8	16	33	49
602608	8	.202	5.1	7	23	34	602208	8	.245	6.2	19	37	55
602610	10	.229	5.8	9	28	42	602210	10	.279	7.1	23	45	67
602615	15	.266	6.8	14	36	54	602215	15	.324	8.2	35	61	91
602616	16	.271	6.9	15	38	57	602216	16	.329	8.4	37	65	97
602620	20	.290	7.4	18	45	67	602220	20	.355	9.0	46	78	116
602625	25	.321	8.2	23	54	80	602225	25	.409	10.4	58	95	142
602636	36	.366	9.3	33	72	107	602236	36	.459	11.7	84	138	205
602640	40	.378	9.6	37	79	118	602240	40	.464	11.8	93	151	225
602650	50	.420	10.7	46	98	146	602250	50	.519	13.2	116	185	276

UNITRONIC® 190 CY: Foil Braid Shielded Multi-Conductor Flexible Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (7/36) .08 mm ²							24 AWG (7/32) 0.25 mm ²						
602802S	2	.178	4.5	1	21	31	602402S	2	.196	5.0	3	25	37
602803S	3	.184	4.7	2	23	34	602403S	3	.203	5.2	4	28	42
602804S	4	.193	4.9	2	26	39	602404S	4	.214	5.4	6	32	48
602805S	5	.203	5.2	3	28	42	602405S	5	.227	5.8	7	35	52
602807S	7	.213	5.4	4	31	46	602407S	7	.240	6.1	10	41	61
602808S	8	.224	5.7	5	32	48	602408S	8	.254	6.5	12	45	67
602810S	10	.248	6.3	6	38	57	602410S	10	.284	7.2	15	53	79
602815S	15	.283	7.2	9	46	69	602415S	15	.325	8.3	22	66	98
602816S	16	.288	7.3	9	48	72	602416S	16	.330	8.4	23	69	103
602820S	20	.304	7.7	12	54	80	602420S	20	.352	8.9	29	80	119
602825S	25	.332	8.4	15	62	92	602425S	25	.386	9.8	37	95	142
602836S	36	.363	9.2	21	78	116	602436S	36	.426	10.8	53	132	197
602840S	40	.374	9.5	23	83	124	602440S	40	.439	11.2	59	143	213
602850S	50	.422	10.7	29	101	150	602450S	50	.488	12.4	73	170	253
26 AWG (7/34) 0.14 mm ²							22 AWG (7/30) 0.34 mm ²						
602602S	2	.186	4.7	2	23	34	602202S	2	.204	5.2	5	29	43
602603S	3	.192	4.9	3	25	37	602203S	3	.212	5.4	7	33	49
602604S	4	.202	5.1	4	28	42	602204S	4	.225	5.7	9	38	57
602605S	5	.213	5.4	5	30	45	602205S	5	.239	6.1	12	42	63
602607S	7	.225	5.7	7	34	51	602207S	7	.254	6.5	16	50	75
602608S	8	.237	6.0	7	37	55	602208S	8	.270	6.9	19	55	82
602610S	10	.264	6.7	9	44	66	602210S	10	.314	8.0	23	66	98
602615S	15	.301	7.6	14	54	80	602215S	15	.349	8.9	35	84	125
602616S	16	.306	7.8	15	56	83	602216S	16	.349	8.9	37	88	131
602620S	20	.325	8.3	18	64	95	602220S	20	.380	9.7	46	103	153
602625S	25	.356	9.0	23	75	112	602225S	25	.440	11.2	58	132	197
602636S	36	.401	10.2	33	99	148	602236S	36	.490	12.4	84	173	258
602640S	40	.413	10.5	37	107	159	602240S	40	.505	12.8	93	187	279
602650S	50	.461	11.7	46	132	198	602250S	50	.560	14.2	116	220	328

UNITRONIC® 190/ 190 CY/ 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

UNITRONIC® 190 CY TP: Foil Braid Shielded Twisted Pair Flexible Signal & Control Cable

Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km
26 AWG (7/34) 0.14 mm ²					22 AWG (7/30) 0.34 mm ²				
602602TP	2	.242 6.1	4	31 46	602202TP	2	.270 6.9	9	42 63
602603TP	3	.252 6.4	6	35 52	602203TP	3	.294 7.5	14	50 75
602604TP	4	.268 6.8	7	40 60	602204TP	4	.315 8.0	19	58 86
602605TP	5	.287 7.3	9	46 69	602205TP	5	.338 8.6	23	68 101
602606TP	6	.306 7.8	11	52 77	602206TP	6	.363 9.2	28	78 118
602608TP	8	.347 8.8	15	62 92	602208TP	8	.409 10.4	37	106 158
24 AWG (7/32) 0.25 mm ²									
602402TP	2	.254 6.5	6	36 54					
602403TP	3	.266 6.8	9	42 63					
602404TP	4	.285 7.2	12	48 72					
602405TP	5	.305 7.7	15	55 82					
602406TP	6	.337 8.6	18	64 95					
602408TP	8	.360 9.1	23	77 115					

* Additional configurations are available, please call your Lapp representative for more information.