

# UNITRONIC® 190/190 CY/190 CY (TP)

Flexible 300V multi-conductor & multi-pair industrial signal & control cable; unshielded & shielded



UNITRONIC® 190/190 CY is a multi-conductor cable for communication, signal, and control applications. It is designed for general purpose installations of electrical machinery. UNITRONIC® 190 CY has an overall foil tape & tinned copper braid for RFI & EMI protection. UNITRONIC® 190 CY (TP) is an overall shielded multi-paired version for data, communication, and signal applications.

## Recommended applications

RS-232; data buses; process control instrumentation; low-voltage signaling and interconnect

## Approvals



Cable attributes		page 648	
OIL	OR-02	FLAME	FR-03
MOTION	FL-01	MECH.	MP-01

## Unshielded construction

**Conductors:** finely stranded tinned copper

**Insulation:** SR-PVC

**Jacket:** specially formulated PVC; gray

## Shielded construction

**Conductors:** finely stranded tinned copper

**Pairs:** SR-PVC

**Insulation:** SR-PVC

**Shielding:** foil tape and tinned copper braid (85% coverage); drain wire

**Jacket:** specially formulated PVC; gray

## Application advantage

- Extended temperature range of -40°C to 105°C
- UV-resistant jacket
- Sequential foot marking for ease of installation

## Complete the installation



SKINTOP®  
strain relief  
page 492



EPIC®  
connectors  
page 284

## Technical data

### Minimum bend radius:

- for installation: 4 x cable diameter
- shielded: 6 x cable diameter

### Color code:

- UNITRONIC® 190/190 CY: chart 2, page 680
- UNITRONIC® 190 CY (TP): chart 3, page 680

### Temperature range:

- for stationary use: -40°C to +105°C
- for flexible use: -25°C to +105°C

### Approvals:

- UL: CMG per UL 444  
AWM 2661
- Attributes: UL Oil Res I  
-40°C cold bend; -25°C cold impact  
sunlight resistant  
NFPA 79
- NEC: meets NEC Art. 725 & 800
- Canada: cUL CMG FT4  
CSA AWM I/II A/B FT1
- Additional: RoHS

### Nominal voltage:

300V

### Test voltage:

1500V

### Conductor stranding:

fine wire

UNITRONIC® 190

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL PG thread
		in	mm			
<b>28 AWG (0.08 mm<sup>2</sup>)</b>						
602802	2	0.143	3.6	2	10	S1107
602803	3	0.149	3.8	3	12	S1107
602804	4	0.158	4.0	3	14	S1107
602805	5	0.168	4.3	4	16	S1107
602807	7	0.178	4.5	5	18	S1107
602808	8	0.189	4.8	5	20	S1107
602810	10	0.213	5.4	6	23	S1107
602815	15	0.248	6.3	9	29	S1109
602820	20	0.269	6.8	11	36	S1109
602825	25	0.297	7.5	15	43	S1111
602850	50	0.375	9.5	28	73	S1111
<b>26 AWG (0.14mm<sup>2</sup>)</b>						
602603	3	0.157	4.0	4	13	S1107
602605	5	0.178	4.5	6	17	S1107
602607	7	0.190	4.8	7	21	S1107
602610	10	0.229	5.8	9	28	S1107
602620	20	0.290	7.4	18	45	S1111
602625	25	0.321	8.2	23	54	S1111
602636	36	0.366	9.3	32	72	S1111

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL PG thread
		in	mm			
<b>24 AWG (0.25 mm<sup>2</sup>)</b>						
602402	2	0.161	4.1	3	19	S1107
602403	3	0.168	4.3	4	22	S1107
602404	4	0.179	4.5	7	27	S1107
602405	5	0.192	4.9	8	31	S1107
602407	7	0.205	5.2	11	37	S1107
602408	8	0.219	5.6	12	42	S1107
602410	10	0.249	6.3	15	51	S1109
602415	15	0.290	7.4	22	69	S1111
<b>22 AWG (0.34 mm<sup>2</sup>)</b>						
602202	2	0.179	4.5	5	15	S1107
602203	3	0.187	4.7	9	19	S1107
602204	4	0.200	5.1	11	22	S1107
602205	5	0.214	5.4	14	26	S1107
602207	7	0.229	5.8	18	33	S1107
602208	8	0.245	6.2	20	37	S1107
602210	10	0.279	7.1	23	45	S1111
602212	12	0.297	7.5	29	62	S1111
602220	20	0.355	9.0	46	78	S1111
602225	25	0.409	10.4	57	95	S1113
602236	36	0.459	11.7	81	138	S1113

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Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
		in	mm			
<b>26 AWG (0.14mm<sup>2</sup>)</b>						
602603S	3	0.192	4.9	10	24	53112210
602604S	4	0.202	5.1	11	29	53112210
602607S	7	0.225	5.7	15	35	53112210
602608S	8	0.237	6.0	16	37	53112210
602610S	10	0.264	6.7	20	44	53112210
602615S	15	0.301	7.6	26	53	53112220
602620S	20	0.325	8.3	30	64	53112220
<b>24 AWG (0.25 mm<sup>2</sup>)</b>						
602403S	3	0.203	5.2	12	31	53112210
602404S	4	0.214	5.4	14	34	53112210
602405S	5	0.227	5.8	16	38	53112210
602407S	7	0.240	6.1	20	44	53112210
602408S	8	0.254	6.5	22	49	53112210
602410S	10	0.284	7.2	27	53	53112220
602415S	15	0.325	8.3	35	66	53112220
602420S	20	0.352	8.9	44	79	53112220
602425S	25	0.366	9.3	52	95	53112230

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
		in	mm			
<b>22 AWG (0.34 mm<sup>2</sup>)</b>						
602202S	2	0.204	5.2	13	31	53112210
602203S	3	0.212	5.4	15	34	53112210
602204S	4	0.225	5.7	18	37	53112210
602205S	5	0.239	6.1	22	42	53112210
602207S	7	0.254	6.5	28	51	53112210
602208S	8	0.270	6.9	30	55	53112210
602210S	10	0.314	8.0	36	66	53112220
602215S	15	0.349	8.9	49	84	53112220
602216S	16	0.354	9.0	52	88	53112220
602220S	20	0.380	9.7	62	104	53112230
602225S	25	0.440	11.2	79	132	53112240
602236S	36	0.490	12.4	108	174	53112240
602240S	40	0.505	12.8	119	187	53112240

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Part number	Number of pairs	Nominal diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
		in	mm			
<b>24 AWG (0.25 mm<sup>2</sup>)</b>						
602402TP	2	0.254	6.5	17	35	53112210
602404TP	4	0.285	7.2	24	48	53112220
602405TP	5	0.305	7.7	28	55	53112220
602408TP	8	0.360	9.1	40	77	53112220

Part number	Number of pairs	Nominal diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
		in	mm			
<b>22 AWG (0.34 mm<sup>2</sup>)</b>						
602202TP	2	0.270	6.9	22	42	53112210
602203TP	3	0.294	7.5	27	51	53112220
602204TP	4	0.315	8.0	33	57	53112220
602205TP	5	0.338	8.6	38	68	53112220
602206TP	6	0.363	9.2	45	79	53112220

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values.