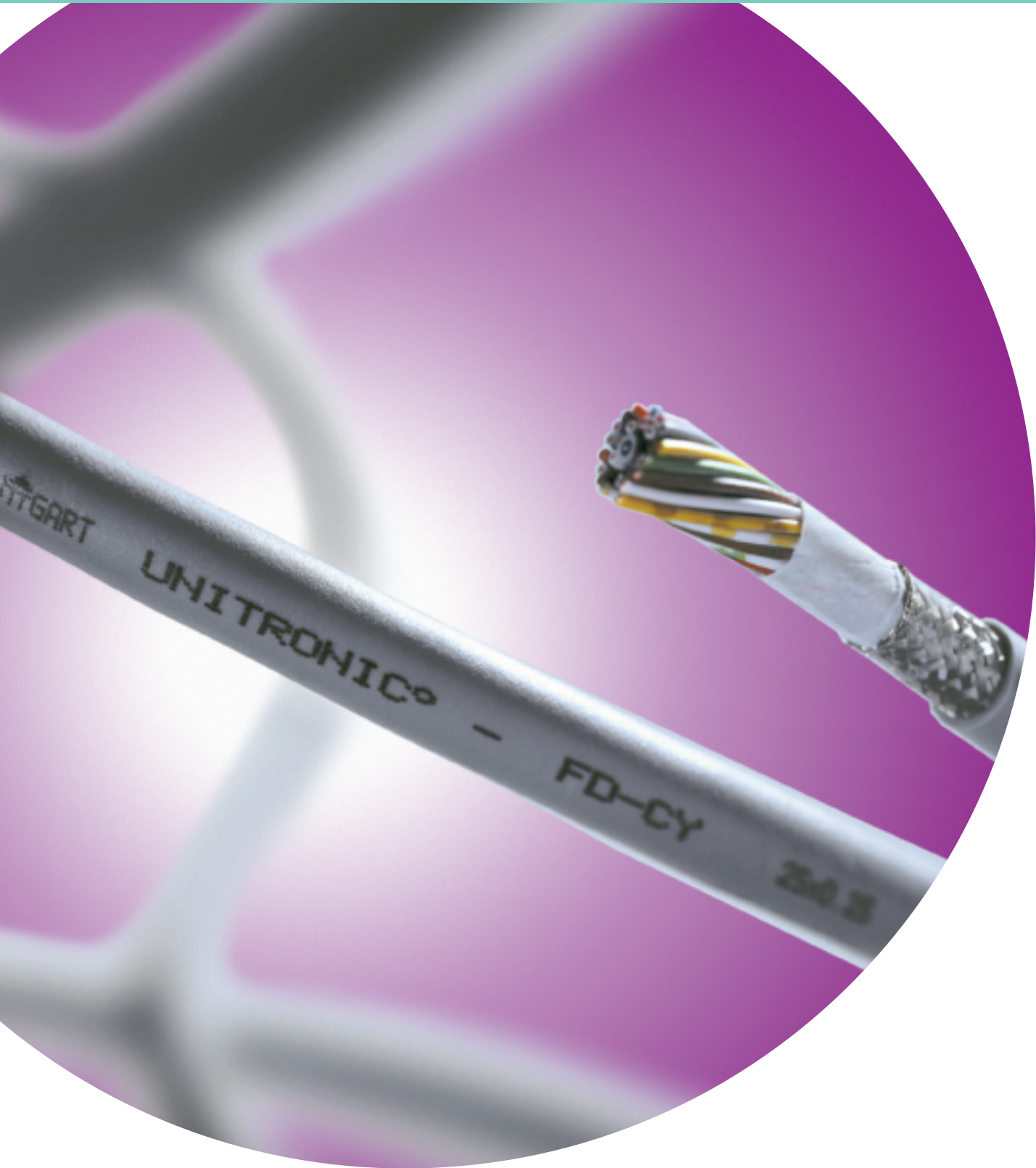


# Continuous Flex Data Cable



# Continuous Flex Data Cable

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# UNITRONIC®-FD 890

## Super Flexible Continuous Flex Data Transmission Cable

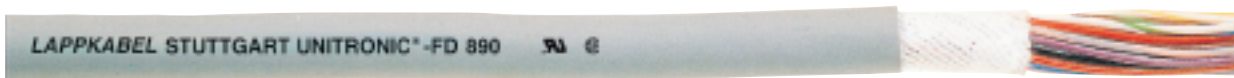


UNITRONIC®-FD 890 is a super flexible data transmission cable designed for automated production processes requiring increased flex life characteristics and durability. Special manufacturing techniques make this cable suitable for use in high speed automated equipment.

The specially blended PVC jacket is resistant to mineral oils, synthetic oils, and water based coolants and prevents the cable from adhering to adjacent cables and cable track.

### UNITRONIC®-FD 890 Construction:

Finely stranded bare copper conductors; specially blended PVC insulation; dry lubricant; conductors cabled with non-wicking textile wrap; specially formulated gray oil resistant PVC jacket.



Cable Attributes							
	OR-02		FR-02		CF-01		MP-01

### Technical Data:

	Minimum Bending Radius for continuous flexing:	7.5 x cable diameter		Conductor Stranding:	Super fine wire, per VDE 0295, Class 6
	Temperature Range:	-5°C to +90°C		Color Code:	DIN 47100, Chart 8, Page 675
	Nominal Voltage:	300V		Approvals:	UL-AWM CSA-AWM II A/B FT1
	Test Voltage:	1500V			

Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
24 AWG (32/38) 0.25 mm <sup>2</sup>						22 AWG (42/38) 0.34 mm <sup>2</sup>					
892403	3	.205	5.2	26	38	892203	3	.220	5.6	33	49
892405	5	.228	5.8	40	59	892205	5	.256	6.5	50	75
892407	7	.295	7.5	50	74	892207	7	.291	7.4	66	98
892410	10	.335	8.5	65	97	892210	10	.374	9.5	91	135
892414	14	.358	9.1	83	124	892214	14	.382	9.7	140	209
892418	18	.386	9.8	101	150	892218	18	.413	10.5	161	240
892425	25	.453	11.5	138	205	892225	25	.520	13.2	193	288

# UNITRONIC®-FD/ FD CY

## Highly Flexible Continuous Flex Data Transmission Cable

UNITRONIC® FD is a highly flexible, multi-conductor, data transmission cable designed for automated production processes requiring increased flex life characteristics and durability. The small cable diameters allow installation in confined areas while providing excellent performance. The specially blended PVC jacket is resistant to mineral oils, synthetic oils and water based coolants, while preventing

the cable from adhering to adjacent cables and cable track. Also available in a shielded version, UNITRONIC® FD CY with an overall tinned copper braid. This is recommended whenever electrical interference distorts signal transmission or when EMI emissions need to be suppressed.

### UNITRONIC®-FD Construction:





Finely stranded bare copper conductors; specially blended PVC insulation; dry lubricant; non-wicking textile wrap; specially formulated gray PVC jacket.







### UNITRONIC®-FD CY Construction:

Finely stranded bare copper conductors; specially blended PVC insulation; dry lubricant; non-wicking textile wrap; tinned copper braid (85% coverage); specially formulated gray PVC jacket.



Cable Attributes							
	OR-02		FR-02		CF-01		MP-01

### Technical Data:

	Minimum Bending Radius for continuous flexing: UNITRONIC® FD: 5 x cable diameter UNITRONIC® FD CY: 7.5 x cable diameter		Conductor Stranding:	Super fine wire, per VDE 0295, Class 6
	Temperature Range: -5°C to +70°C		Color Code:	Chart 8, Page 675
	Working Voltage: 250V		Based on VDE specifications	
	Test Voltage: 1500V			

# UNITRONIC®-FD/ FD CY

Highly Flexible Continuous Flex Data Transmission Cable

## UNITRONIC®-FD: Highly Flexible Continuous Flex Data Transmission Cable

Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
26 AWG (18/38) 0.14 mm <sup>2</sup>						22 AWG (42/38) 0.34 mm <sup>2</sup>					
27841	3	.161	4.1	17	26	27870	2	.193	4.9	20	30
27842	4	.173	4.4	21	31	27871	3	.205	5.2	29	43
27843	5	.185	4.7	24	35	27872	4	.224	5.7	38	57
27844	7	.213	5.4	34	50	27873	5	.244	6.2	44	65
27845	10	.252	6.4	42	63	27874	7	.280	7.1	57	85
27846	14	.256	6.5	52	77	27875	10	.346	8.8	79	117
27847	18	.283	7.1	61	91	27876	14	.350	8.9	101	151
27848	25	.339	8.6	84	125	27877	18	.394	10.0	122	182
24 AWG (32/38) 0.25 mm <sup>2</sup>						27878					
27855	2	.181	4.6	18	27		25	.484	12.3	168	250
27856	3	.185	4.7	22	33						
27857	4	.201	5.1	27	40						
27858	5	.220	5.6	34	51						
27859	7	.252	6.4	43	64						
27860	10	.303	7.7	56	84						
27861	14	.307	7.8	73	108						
27863	18	.346	8.8	87	130						
27865	25	.425	10.8	120	178						

## UNITRONIC®-FD CY: Shielded Highly Flexible Continuous Flex Data Transmission Cable

Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
26 AWG (18/38) 0.14 mm <sup>2</sup>						22 AWG (42/38) 0.34 mm <sup>2</sup>					
27411	3	.185	4.7	25	37	27440	2	.220	5.6	32	47
27412	4	.197	5.0	28	42	27441	3	.232	5.9	42	63
27413	5	.213	6.4	32	47	27442	4	.248	6.3	54	81
27414	7	.236	6.0	47	70	27443	5	.268	6.8	60	89
27416	10	.276	7.0	60	90	27444	7	.303	7.7	79	117
27418	14	.280	7.1	71	106	27446	10	.370	9.4	104	155
27420	18	.303	7.7	83	123	27448	14	.374	9.5	130	194
27422	25	.362	9.2	110	163	27450	18	.421	10.7	151	225
24 AWG (32/38) 0.25 mm <sup>2</sup>						27452					
27425	2	.201	5.1	26	39		25	.508	12.9	220	327
27426	3	.213	5.4	31	46						
27427	4	.228	5.8	36	53						
27428	5	.244	6.2	48	71						
27429	7	.276	7.0	60	89						
27431	10	.335	8.5	77	114						
27434	14	.339	8.6	95	141						
27436	18	.370	9.4	112	167						
27438	25	.449	11.4	148	221						

# UNITRONIC®-FD P PLUS UL/CSA

Highly Flexible, Continuous Flex Data Transmission Cable with Polyurethane Jacket



UNITRONIC®-FD P Plus UL/CSA is a highly flexible data transmission cable with a polyolefin insulation and a polyurethane outer jacket, which allows our cables to have excellent electrical properties and temperature rating. The UNITRONIC®-FD P Plus UL/CSA is a cost effective solution for machine tools requiring a long service life in

harsh environments. The tear resistant polyurethane outer jacket is also resistant to mineral oils and abrasion in cable track applications. It is suitable for use in clean room applications. UNITRONIC®-FD P Plus UL/CSA is halogen free and flame retardant.

## UNITRONIC®-FD P PLUS UL/CSA Construction:

Finely stranded bare copper conductors; specially blended polyolefin insulation; dry lubricant; non-wicking textile wrap; specially formulated gray polyurethane jacket with matte finish.



Cable Attributes							
	OR-05		FR-02		CF-01		MP-05

## Technical Data:

	Minimum Bending Radius for continuous flexing:	5 x cable diameter		Conductor Stranding:	Super fine wire, per VDE 0295, Class 6
	Temperature Range:	-40°C to +75°C		Color Code:	DIN 47100, Chart 8, Page 675
	Working Voltage:	250V		Approval:	UL Type CMX CSA Type CMX
	Test Voltage:	1500V			

Part Number	Number of Conductors	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Approx. Weight lbs/mft	Approx. Weight kg/km	Part Number	Number of Conductors	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Approx. Weight lbs/mft	Approx. Weight kg/km
<b>26 AWG (18/38) 0.14 mm<sup>2</sup></b>						<b>22 AWG (42/38) 0.34 mm<sup>2</sup></b>					
0028850	3	.161	4.1	17	25	0028867	2	.193	4.9	22	33
0028851	4	.173	4.4	20	30	0028868	3	.205	5.2	28	41
0028852	5	.185	4.7	23	34	0028869	4	.224	5.7	37	55
0028853	7	.213	5.4	32	48	0028870	5	.244	6.2	42	62
0028854	10	.252	6.4	40	60	0028871	7	.280	7.1	54	80
0028855	14	.256	6.5	50	74	0028872	10	.346	8.8	74	110
0028856	18	.280	7.1	58	87	0028873	14	.350	8.9	97	144
0028857	25	.339	8.6	81	120	0028874	18	.394	10.0	118	175
<b>24 AWG (32/38) 0.25 mm<sup>2</sup></b>						0028875	25	.484	12.3	161	239
0028858	2	.177	4.5	18	27						
0028859	3	.185	4.7	22	32						
0028860	4	.201	5.1	26	39						
0028861	5	.220	5.6	33	49						
0028862	7	.252	6.4	41	61						
0028863	10	.303	7.7	54	80						
0028864	14	.307	7.8	69	103						
0028865	18	.346	8.8	84	125						
0028866	25	.425	10.8	115	171						



# UNITRONIC®-FD CP PLUS UL/CSA

Highly Flexible, Continuous Flex Shielded  
Data Transmission Cable with Polyurethane Jacket



UNITRONIC®-FD CP Plus UL/CSA is a highly flexible shielded data transmission cable with a polyolefin insulation and a polyurethane outer jacket, which allows the cable to have excellent electrical properties and temperature rating. A tinned copper braid is recommended for use whenever electrical interference distorts signal transmission or when EMI emissions need to be

suppressed. The UNITRONIC®-FD P CP Plus UL/CSA is a cost effective solution for machine tools requiring a long service life in harsh environments. The tear resistant polyurethane outer jacket is also resistant to mineral oils and abrasion in cable track applications. It is suitable for use in clean room applications. UNITRONIC®-FD CP Plus UL/CSA is halogen free and flame retardant.

## UNITRONIC®-FD CP Plus Construction:

Finely stranded bare copper conductors; polyolefin insulation; dry lubricant; non-wicking textile wrap; tinned copper braid (85% coverage); specially formulated gray polyurethane jacket with matte finish.



Cable Attributes							
	OR-05		FR-02		CF-01		MP-05

## Technical Data:

	Minimum Bending Radius for continuous flexing:	7.5 x cable diameter		Conductor Stranding:	Super fine wire, per VDE 0295, Class 6
	Temperature Range:	-40°C to +75°C		Color Code:	DIN 47100, Chart 8, Page 675
	Working Voltage:	250V		Approval:	UL Type CMX CSA Type CMX
	Test Voltage:	1500V			

Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
26 AWG (18/38) 0.14 mm <sup>2</sup>						22 AWG (42/38) 0.34 mm <sup>2</sup>					
0028880	2	.177	4.5	22	33	0028898	2	.220	5.6	30	45
0028881	3	.185	4.7	24	36	0028899	3	.232	5.9	41	61
0028882	4	.197	5.0	27	40	0028900	4	.248	6.3	52	77
0028883	5	.213	5.4	30	45	0028901	5	.268	6.8	56	83
0028884	7	.236	6.0	45	67	0028902	7	.303	7.7	73	109
0028885	10	.276	7.0	58	87	0028903	10	.370	9.4	99	147
0028886	14	.280	7.1	69	102	0028904	14	.374	9.5	125	186
0028887	18	.303	7.7	79	118	0028905	18	.421	10.7	145	216
0028888	25	.362	9.2	105	157	0028906	25	.508	12.9	211	314
24 AWG (32/38) 0.25 mm <sup>2</sup>											
0028889	2	.201	5.1	26	38						
0028890	3	.213	5.4	30	45						
0028891	4	.228	5.8	35	52						
0028892	5	.244	6.2	46	69						
0028893	7	.276	7.0	56	84						
0028894	10	.335	8.5	73	109						
0028895	14	.339	8.6	91	136						
0028896	18	.370	9.4	108	161						
0028897	25	.449	11.4	143	213						

# UNITRONIC®-FD CP (TP) PLUS UL/CSA

Highly Flexible, Continuous Flex Shielded Paired Data Transmission Cable with Polyurethane Jacket



UNITRONIC®-FD CP (TP) Plus UL/CSA is a paired highly flexible cable with a polyolefin insulation and a polyurethane outer jacket, which allows the cable to have excellent electrical properties and temperature rating. UNITRONIC®-FD CP (TP) Plus UL/CSA is a cost effective solution for machine tools requiring a long service life in harsh environments. A tinned copper braid is recommended for use whenever electrical interference

distorts signal transmission or when EMI emissions need to be suppressed. The tear resistant, polyurethane outer jacket is also resistant to mineral oils and abrasion in cable track applications. UNITRONIC®-FD CP (TP) Plus UL/CSA is halogen free and flame retardant. The UNITRONIC®-FD CP (TP) Plus UL/CSA will replace the non UL/CSA version as stock is depleted.

## UNITRONIC®-FD-CP (TP) PLUS UL/CSA Construction:

Finely stranded bare copper conductors; polyolefin insulation; conductors paired and cabled together; dry lubricant; non-wicking textile wrap; tinned copper braid (85% coverage); gray polyurethane jacket.



(TP): Twisted Pairs

Cable Attributes							
	OR-05		FR-02		CF-01		MP-05

## Technical Data:

Minimum Bending Radius for continuous flexing: 7.5 x cable diameter

Temperature Range: -40°C to +75°C

Working Voltage: 250V

Test Voltage: 1500V

Conductor Stranding: Super fine wire, per VDE 0295, Class 6

Color Code: DIN 47100, Chart 7, Page 674

Approvals: UL Type CMX  
CSA Type CMX

Part Number FD CP TP PLUS UL/CSA	Part Number FD CP TP PLUS	Number of Pairs	Nominal Outer Diameter		Approx. Weight		Part Number FD CP TP PLUS UL/CSA	Part Number FD CP TP PLUS	Number of Pairs	Nominal Outer Diameter		Approx. Weight	
			inches	mm	lbs/mft	kg/km				inches	mm	lbs/mft	kg/km
26 AWG (18/38) 0.14 mm <sup>2</sup>							30929	-	3	.343	8.7	63	101
30961	-	1	.177	4.5	14	23	30930	-	4	.374	9.5	74	119
30910	-	2	.244	6.2	26	42	30931	-	5	.398	10.1	85	136
30911	-	3	.256	6.5	33	53	30932	-	6	.433	11.0	103	165
30912	-	4	.268	6.8	37	59	30933	-	8	.480	12.2	137	221
30913	-	5	.287	7.3	47	75	30934	-	10	.559	14.2	170	274
30914	-	6	.295	7.5	57	91	20 AWG (28/34) 0.50 mm <sup>2</sup>						
30915	-	8	.346	8.8	68	109	30964	28919	1	.244	6.2	29	47
30916	-	10	.394	10.0	75	120	30937	28920	2	.366	9.3	62	99
24 AWG (32/38) 0.25 mm <sup>2</sup>							30938	28921	3	.398	10.1	81	130
30962	28910	1	.201	5.1	17	27	30939	28922	4	.421	10.7	92	148
30919	28911	2	.287	7.3	37	60	30940	28923	5	.465	11.8	104	168
30920	28912	3	.303	7.7	45	72	30941	28924	6	.480	12.2	121	194
30921	28913	4	.327	8.3	55	89	30942	28925	8	.567	14.4	176	284
30922	28914	5	.350	8.9	64	103	30943	28926	10	.646	16.4	213	343
30923	28915	6	.362	9.2	81	131	30944	28927	14	.657	16.7	249	401
30924	28916	8	.425	10.8	96	155	18 AWG (42/34) 1.00 mm <sup>2</sup>						
30925	28917	10	.488	12.4	116	186	30955	28937	1	.276	7.0	44	71
30926	28918	14	.496	12.6	136	219	30956	28938	2	.433	11.0	80	129
22 AWG (42/38) 0.34 mm <sup>2</sup>							30957	28939	3	.469	11.9	105	169
30963	-	1	.220	5.6	22	36	30958	28940	4	.492	12.5	127	204
30928	-	2	.346	8.8	50	81	30959	28941	5	.555	14.1	147	237



# UNITRONIC® FLEX CY

Flexible Continuous Flex Data Transmission Cable with Overall Shield

**LEAD FREE/ROHS**



UNITRONIC® FLEX CY is a UL/CSA approved shielded data transmission cable designed for automated production processes requiring increased flex life characteristics. The specially blended PVC jacket is resistant to mineral oils, synthetic oils, water based coolants, and prevents the

cable from adhering to other cables and cable track. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmissions, or when EMI emissions need to be suppressed.

## UNITRONIC® FLEX CY Construction:

Stranded bare copper conductors; specially blended PVC insulation; non-wicking textile wrap; tinned copper braid (85% coverage); specially blended gray PVC jacket.



Cable Attributes							
	OR-02		FR-02		CF-01		MP-01

## Technical Data:

- Minimum Bending Radius for continuous flexing: 10 x cable diameter
- Temperature Range: -10°C to +105°C
- Rated Voltage: 300V
- Test Voltage: 2000V

- Conductor Stranding: Fine wire
- Color Code: Chart 2, Page 672
- Approvals: UL-AWM VW-1  
CSA-AWM II A/B FT1

Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Conductors	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
26 AWG (19/38) 0.14 mm <sup>2</sup>						892407CY	7	.278	7.1	50	75
892603CY	3	.203	5.2	25	38	892410CY	10	.324	8.2	66	99
892604CY	4	.213	5.4	27	40	892425CY	25	.424	10.8	120	179
892607CY	7	.257	6.5	38	57	22 AWG (26/36) 0.34 mm <sup>2</sup>					
892610CY	10	.297	7.6	55	82	892203CY	3	.232	5.9	34	51
24 AWG (19/36) 0.25 mm <sup>2</sup>						892204CY	4	.257	6.5	40	60
892403CY	3	.216	5.5	28	42	892207CY	7	.314	8.0	60	89
892404CY	4	.233	5.9	34	51	892210CY	10	.364	9.3	85	127

# UNITRONIC® FLEX CY (TP)

**LEAD FREE/ROHS**

Flexible Continuous Flex Paired Data Transmission Cable with Overall Shield



UNITRONIC® FLEX CY (TP) is a highly flexible UL/CSA approved shielded multi-paired data transmission cable designed for automated production processes requiring increased flex life characteristics. (Special paired assembly ensures maximum interference suppression in analog or digital signal transmissions.)

The specially blended PVC jacket is resistant to mineral oils, water based coolants, and prevents the cable from adhering to other cables and cable track. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmissions, or when EMI emissions need to be suppressed.

## UNITRONIC® FLEX CY (TP) Construction:

Stranded bare copper conductors; specially blended PVC insulation; paired conductors; mylar wrap; tinned copper braid (85% coverage); specially blended gray PVC jacket.



(TP): Twisted Pairs

Cable Attributes							
	OR-02		FR-02		CF-01		MP-01

## Technical Data:

- Minimum Bending Radius for continuous flexing: 10 x cable diameter
- Temperature Range: -10°C to +105°C
- Rated Voltage: 300V
- Test Voltage: 2000V

- Conductor Stranding: Fine wire
- Color Code: Chart 3, Page 672
- Approvals: UL-AWM  
CSA-AWM II A/B FT1

Part Number	Number of Pairs	Nominal Outer Diameter		Approx. Weight		Part Number	Number of Pairs	Nominal Outer Diameter		Approx. Weight	
		inches	mm	lbs/mft	kg/km			inches	mm	lbs/mft	kg/km
26 AWG (19/38) 0.14 mm <sup>2</sup>						892406TP	6	.367	9.3	73	109
892602TP	2	.252	6.4	34	38	892408TP	8	.412	10.5	89	133
892604TP	4	.278	7.1	45	59	22 AWG (26/36) 0.34 mm <sup>2</sup>					
892606TP	6	.327	8.3	58	74	892202TP	2	.304	7.7	48	72
892608TP	8	.372	9.5	74	97	892204TP	4	.341	8.7	65	97
24 AWG (19/36) 0.25 mm <sup>2</sup>						892206TP	6	.419	10.7	90	134
892402TP	2	.272	6.9	40	150	892208TP	8	.469	11.9	111	165
892404TP	4	.302	7.7	53	205						