

# OLFLEX® FD 890 PLUS/ 890 CY PLUS

Super Flexible, Heavy Duty, Continuous Flex Control Cable

UL Type MTW Approved Cable



OLFLEX® FD 890 PLUS is a super flexible, heavy duty, multi-conductor cable designed for continuous flex applications. Superior stranding, specially formulated PVC insulation and jacket compounds optimize flex life and provide excellent resistance to mineral oils, synthetic oils and water based coolants. OLFLEX® FD 890 PLUS is rated 600V, 90°C with UL Type MTW conforming to NFPA 79 2007 standards for machine wiring and is also UL and CSA AWM approved.

### Recommended Applications:

Gantry robots, Cable tracks, Pick and place units, Conveyor systems, Machine tools and Other continuous flexing applications.

### Application Advantage:

- Conforms to latest approvals of North American Machine Tool compliance requirements
- Meets UL Oil Res I/II for long service life, resistant to harsh environments
- Pressure extruded jacket for precision connectorization

### OLFLEX® FD 890 PLUS Construction:

Finely stranded bare copper conductors; specially blended PVC/ nylon insulation; dry lubricant; conductors cabled with non-wicking textile wrap over outer layer; specially formulated UV and oil resistant PVC jacket.



### OLFLEX® FD 890 CY PLUS Construction:

Finely stranded bare copper conductors; specially blended PVC/ nylon insulation; dry lubricant; conductors cabled with non-wicking textile wrap; black inner PVC jacket; tinned copper braid (85% coverage); specially formulated UV and oil resistant PVC jacket.



#### Cable Attributes, See Page 653

	Oil Resistance: OR-04		Flame Resistance: FR-02
	Motion Type: CF-02		Mechanical Properties: MP-02

#### Availability:

Standard put-ups are 100ft, 250ft, 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		SKINTOP® MS-SC Page 486

Also available with blue and black conductors; minimum order required

### Technical Data:

	Minimum Bending Radius - for continuous flexing: 7.5 x cable diameter - with shield: 10 x cable diameter		Color Code: Red with numbered cores, plus green/yellow ground Optional: Other color codes available upon request
	Temperature Range: - for flexible use: -5°C to +90°C - for stationary use: -40°C to +90°C		Approvals: UL: - Type MTW, Oil Res I & II - UL- AWM 2587 + 21098 - NFPA 79 2007 compliant - Passes Oil Res + UL 758 80°C test CSA: - CSA-AWM I/II A/B FT 1 - CSA C22.2 210.2 - Sec. 7.6.12.1, 8.8.8- Oil Resistance Tests Additional: - Based on VDE Specifications
	Nominal Voltage: UL/CSA: 600V CE: 300/500V		
	Test Voltage: 3000V		
	Conductor Stranding: Super Fine Wire, better than VDE 0295, Class 6		* Passes Impact and Crush tests to UL 1277 Same requirement for Exposed Run

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## OLFLEX FD® 890 PLUS: Super Flexible Heavy Duty Continuous Flex Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km
20 AWG (74/38) 0.50 mm <sup>2</sup>							14 AWG (320/38) 2.50 mm <sup>2</sup>						
882003*	3	.290	7.4	10	47	70	881404	4	.449	11.4	60	146	217
882004*	4	.316	8.0	13	53	79	881407	7	.611	15.5	105	226	337
882005	5	.341	8.7	17	69	102	12 AWG (511/38) 4 mm <sup>2</sup>						
882007	7	.394	10.0	23	78	116	881204	4	.510	12.9	100	200	298
882012*	12	.450	11.4	40	122	182	881207	7	.695	17.7	176	315	469
882018	18	.526	13.4	60	179	266	10 AWG (343/34) 6 mm <sup>2</sup>						
882025	25	.644	16.4	83	262	391	881004	4	.631	16.0	147	277	413
18 AWG (114/38) 0.75 mm <sup>2</sup>							8 AWG (301/32) 10 mm <sup>2</sup>						
881803*	3	.315	8.0	19	50	75	880804	4	.794	20.2	245	513	765
881804	4	.344	8.7	25	63	94	6 AWG (483/32) 16 mm <sup>2</sup>						
881805	5	.372	9.5	31	78	116	880604	4	.924	23.5	393	721	1074
881807	7	.432	11.0	44	103	153							
881812*	12	.497	12.6	75	157	234							
881815	15	.588	14.9	94	212	317							
881818	18	.617	15.7	113	235	350							
881825	25	.713	18.3	156	327	487							
16 AWG (182/38) 1.50 mm <sup>2</sup>													
881603	3	.353	9.0	27	86	129							
881604	4	.387	9.8	36	107	159							
881605	5	.421	10.7	45	133	198							
881607	7	.492	12.5	64	141	211							
881612	12	.603	15.3	109	247	367							
881618	18	.705	17.9	163	332	495							
881625	25	.865	22.0	227	504	751							

\*- Minimum bend radius for 882003, 882004, 882012, 881803, 881812 is 10X cable diameter.

## OLFLEX FD® 890 CY PLUS: Shielded Super Flexible Heavy Duty Continuous Flex Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km
20 AWG (74/38) 0.50 mm <sup>2</sup>							14 AWG (320/38) 2.50 mm <sup>2</sup>						
882003CY	3	.368	9.4	27	88	131	881404CY	4	.582	14.8	86	191	285
882004CY	4	.394	10.0	32	103	154	881407CY	7	.710	18.0	136	347	518
882005CY	5	.419	10.6	38	111	165	12 AWG (511/38) 4 mm <sup>2</sup>						
882007CY	7	.472	12.0	48	138	206	881204CY	4	.643	16.3	146	242	361
882012CY	12	.583	14.8	71	226	337	881207CY	7	.819	20.8	225	494	735
882018CY	18	.659	16.7	101	294	438	10 AWG (343/34) 6 mm <sup>2</sup>						
882025CY	25	.778	19.8	137	408	608	881004CY	4	.739	18.8	196	333	496
18 AWG (114/38) 0.75 mm <sup>2</sup>							8 AWG (301/32) 10 mm <sup>2</sup>						
881803CY	3	.393	10.0	34	95	142	880804CY	4	.964	24.5	305	766	1142
881804CY	4	.422	10.7	46	113	168	6 AWG (483/32) 16 mm <sup>2</sup>						
881805CY	5	.450	11.4	54	132	197	880604CY	4	1.048	26.6	467	969	1444
881807CY	7	.565	14.4	68	198	295							
881812CY	12	.630	16.0	107	268	400							
881818CY	18	.716	18.2	162	356	530							
881825CY	25	.883	22.4	213	538	801							
16 AWG (182/38) 1.50 mm <sup>2</sup>													
881603CY	3	.431	10.9	48	121	181							
881604CY	4	.465	11.8	61	154	229							
881605CY	5	.499	12.7	70	169	252							
881607CY	7	.625	15.9	91	258	385							
881612CY	12	.702	17.8	156	366	546							
881618CY	18	.829	21.1	219	495	737							
881625CY	25	1.023	26.0	292	706	1051							