

# OMRON FPC and PCB Connectors



## OMRON XN2 SERIES: EASY-WIRE CONNECTORS FOR INDUSTRIAL COMPONENTS

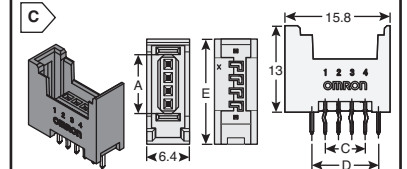
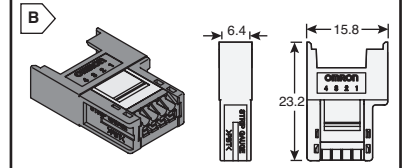
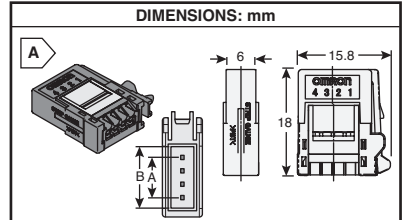
- Features:**
- E-con specifications (E-con specifications are currently being promoted for standardization by manufacturers of FA components and connectors)
  - Ideal for connecting sensors and uses industry-proven spring clamps for wiring
  - No special tools required and easy to rewire and repair
  - Each connector accepts any wire size from AWG28 (0.08 mm<sup>2</sup>) to AWG20 (0.5); External sheath diameter: 1.5 mm max



- Specifications:**
- Rated Current: 3A/pole (using 0.5mm<sup>2</sup> wire)
  - 2A/pole (using 0.3mm<sup>2</sup> wire)
  - 1A/pole (using 0.2mm<sup>2</sup> wire)
  - 0.5A/pole (using 0.1mm<sup>2</sup> wire)
  - Insertion Tolerance: 50 cycles
  - External sheath diameter: 1.5 mm max
- Contacts:**
- Phosphor bronze/Underplating: Nickel (1.5 to 3.0 μm)
  - Contacts: Gold (0.2 μm min.)
  - Terminals: Tin plating (1.0 μm min.)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Contacts	Description	Dimensions (mm)					Price Each			
					A	B	C	D	E	1	25	50	100
<b>Cable Plug Connector</b>													
653-XN2A-1370	XN2A-1370	A	3	AWG28 - AWG20	4.0	7.2	13.8	-	-	3.72	3.45	3.09	2.93
653-XN2A-1470	XN2A-1470	A	4	AWG28 - AWG20	6.0	9.2	15.8	-	-	3.72	3.45	3.09	2.93
<b>Cable Socket Connector</b>													
653-XN2B-1470	XN2B-1470	B	4	AWG28 - AWG20	-	-	-	-	-	3.72	3.45	3.09	2.93
<b>Single-Socket PCB Socket Connector</b>													
653-XN2D-1471	XN2D-1471	C	4	AWG28 - AWG20	8.9	6.8	6.0	10.0	15.8	3.72	3.45	3.09	2.93

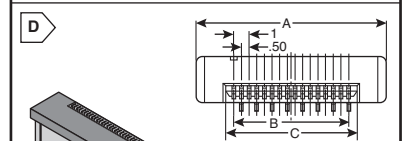


## OMRON XF2J SERIES: 0.50MM PITCH ZIF SLIDE-LOCKING CONNECTOR

- Features:**
- Top-entry ZIF Connector
  - Low on-board profile 4.15 mm, FPC thickness 0.3mm
  - Vacuum contact surface on the connector for automatic mounting
- Specifications:**
- Rated current: 0.5A AC/DC
  - Rated voltage: 50 VAC/VDC
  - Insertion tolerance: 30 times
- Contacts:**
- Spring copper alloy/nickel substrate (2 μm), gold-plated contacts (0.15 μm)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Contacts	Dimensions (mm)				Price Each				Reel Qty.	Reel Qty. Price Each
				A	B	C	D	1	25	50	100		
653-XF2J-0624-11A	XF2J-0624-11A	D	6	7.5	2.5	3.6	6.9	.64	.55	.48	.45	1000	.347
653-XF2J-1224-11A	XF2J-1224-11A	D	12	10.5	5.5	6.6	9.9	1.05	.79	.70	.63	1000	.523
653-XF2J-1624-11A	XF2J-1624-11A	D	16	12.5	7.5	8.6	11.9	1.56	1.01	.87	.81	1000	.637
653-XF2J-2424-11A	XF2J-2424-11A	D	24	16.5	11.5	12.6	15.9	1.72	1.39	1.18	1.10	1000	.86

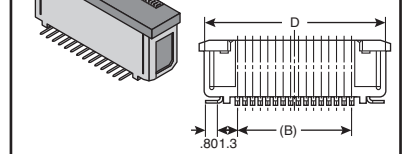


## OMRON XF2L SERIES: SMT ZIF 0.50MM PITCH SLIDE-LOCK FPC CONNECTORS

- Features:**
- Contact styles have same dimensions and utilize same PCB layout for efficiency
  - Color-coded slide identifies top and bottom contact versions to prevent mix-ups during production
- Specifications:**
- Rated current: 0.5A
  - Rated voltage: 50 VDC
  - Insertion tolerance: 20 times
  - Contact material: nickel substrate, gold plating

For quantities of 6000 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Cont.	Contact Location	Dimensions: mm				Price Each				Reel Qty.	Reel Qty. Price Each
					A	B	C	D	1	25	50	100		
653-XF2L-0425-1A	XF2L-0425-1A	E	4	Top	1.5	5.9	6.9	2.6	.57	.52	.46	.39	3000	.289
653-XF2L-0535-1A	XF2L-0535-1A	E	5	Bottom	2.0	6.4	7.4	3.1	.60	.54	.48	.41	3000	.30
653-XF2L-0625-1A	XF2L-0625-1A	E	6	Top	2.5	6.9	7.9	3.6	.62	.55	.49	.43	3000	.317
653-XF2L-0635-1A	XF2L-0635-1A	E	6	Bottom	2.5	6.9	7.9	3.6	.58	.51	.46	.40	3000	.295
653-XF2L-0825-1A	XF2L-0825-1A	E	8	Top	3.5	7.9	8.9	4.6	.68	.60	.54	.47	3000	.347
653-XF2L-1025-1A	XF2L-1025-1A	E	10	Top	4.5	8.9	9.9	5.6	.74	.65	.58	.51	3000	.378
653-XF2L-1225-1A	XF2L-1225-1A	E	12	Top	5.5	9.9	10.9	6.6	.80	.74	.63	.58	3000	.42
653-XF2L-1235-1A	XF2L-1235-1A	E	12	Bottom	5.5	9.9	10.9	6.6	1.09	.89	.83	.79	3000	.373
653-XF2L-1325-1A	XF2L-1325-1A	E	13	Top	6.0	10.4	11.4	7.1	.78	.69	.62	.52	3000	.38
653-XF2L-1825-1A	XF2L-1825-1A	E	18	Top	8.5	12.9	13.9	9.6	.89	.80	.71	.60	3000	.45
653-XF2L-1835-1A	XF2L-1835-1A	E	18	Bottom	8.5	12.9	13.9	9.6	.99	.90	.80	.68	3000	.50
653-XF2L-2035-1A	XF2L-2035-1A	E	20	Bottom	9.5	13.9	14.9	10.6	.97	.87	.77	.65	3000	.48
653-XF2L-3025-1A	XF2L-3025-1A	E	30	Top	14.5	18.9	19.9	15.6	1.25	1.12	.99	.84	3000	.62
653-XF2L-3035-1A	XF2L-3035-1A	E	30	Bottom	14.5	18.9	19.9	15.6	1.21	1.09	.96	.82	3000	.62

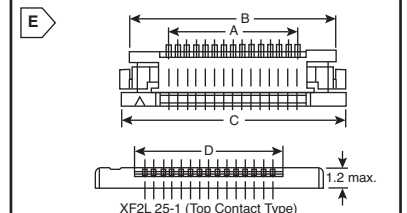


## OMRON XF2M SERIES: SMT 0.50MM PITCH ROTARY BACKLOCK FPC CONNECTORS

- Features:**
- Double-sided (upper and lower) contact structure enables component reductions
  - Short body depth of 5.9 mm with slider closed
- Specifications:**
- Rated current: 0.5A
  - Rated voltage: 50 VDC
  - Insertion tolerance: 20 times
  - Contact material: nickel substrate, gold plating

For quantities of 3000 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Contacts	Dimensions: mm					Price Each				Reel Qty.	Reel Qty. Price Each
				A	B	C	D	E	1	25	50	100		
653-XF2M-1015-1A	XF2M-1015-1A	F	10	4.5	5.6	8.5	9.1	7.1	1.06	.94	.84	.71	1500	.531
653-XF2M-1215-1A	XF2M-1215-1A	F	12	5.5	6.6	9.5	10.1	8.1	1.16	1.04	.92	.79	1500	.581
653-XF2M-1415-1A	XF2M-1415-1A	F	14	6.5	7.6	10.5	11.1	9.1	1.22	1.09	.97	.83	1500	.61
653-XF2M-1815-1A	XF2M-1815-1A	F	18	8.5	9.6	12.5	13.1	11.1	1.30	1.17	1.04	.88	1500	.647
653-XF2M-2015-1A	XF2M-2015-1A	F	20	9.5	10.6	13.5	14.1	12.1	1.36	1.21	1.08	.92	1500	.67
653-XF2M-2215-1A	XF2M-2215-1A	F	22	10.5	11.6	14.5	15.1	13.1	1.41	1.26	1.12	1.01	1500	.705
653-XF2M-2415-1A	XF2M-2415-1A	F	24	11.5	12.6	15.5	16.1	14.1	1.47	1.32	1.17	.99	1500	.734
653-XF2M-2615-1A	XF2M-2615-1A	F	26	12.5	13.6	16.5	17.1	15.1	1.53	1.38	1.22	1.04	1500	.767
653-XF2M-3015-1A	XF2M-3015-1A	F	30	14.5	15.6	18.5	19.1	17.1	1.64	1.47	1.31	1.28	1500	.821
653-XF2M-3215-1A	XF2M-3215-1A	F	32	15.5	16.6	19.5	20.1	18.1	1.77	1.59	1.41	1.20	1500	.883
653-XF2M-3315-1A	XF2M-3315-1A	F	33	16.0	17.1	20.0	20.6	18.6	1.81	1.62	1.44	1.22	1500	.975
653-XF2M-3415-1A	XF2M-3415-1A	F	34	16.5	17.6	20.5	21.1	19.1	1.84	1.65	1.47	1.25	1500	.921
653-XF2M-3515-1A	XF2M-3515-1A	F	35	17.0	18.1	21.0	21.6	19.6	2.03	1.82	1.62	1.38	1500	1.01
653-XF2M-3615-1A	XF2M-3615-1A	F	36	17.5	18.6	21.5	22.1	20.1	1.87	1.72	1.53	1.30	1500	.96
653-XF2M-4015-1A	XF2M-4015-1A	F	40	19.5	20.6	23.5	24.1	22.1	2.08	1.86	1.66	1.41	1500	1.03
653-XF2M-4515-1A	XF2M-4515-1A	F	45	22.0	23.1	26.0	26.6	24.6	2.29	2.06	1.83	1.55	1500	1.14
653-XF2M-5015-1A	XF2M-5015-1A	F	50	24.5	25.6	28.5	29.1	27.1	2.12	2.01	1.92	1.67	1500	1.22



## OMRON XF2R SERIES: 0.50MM PITCH LOW-PROFILE ROTARY BACKLOCK FPC CONNECTORS

- Features:**
- FPC insertion sensation greatly improved with 1.1mm FPC guide section
  - Double-sided (upper and lower) contact structure enables component reductions
  - Effective interface length for terminals increased to 1.4mm to ensure stability in applications with a lot of movement
- Specifications:**
- Rated current / voltage: 0.3A AC/DC / 50V AC/DC
  - Insertion tolerance: 20 times
  - Contact material: nickel substrate, gold plating

For quantities of 6000 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Contacts	Dimensions: mm					Price Each				Reel Qty.	Reel Qty. Price Each
				A	B	C	D	E	1	25	50	100		
653-XF2R-4015-4A	XF2R-4015-4A	G	40	22.0	19.5	20.6	21.55	22.35	2.93	2.80	2.60	2.34	3000	1.69
653-XF2R-0615-4A	XF2R-0615-4A	G	6	5.0	2.5	3.6	4.55	5.35	1.30	1.15	1.03	.95	3000	.73
653-XF2R-1815-4A	XF2R-1815-4A	G	18	11.0	8.5	9.6	10.55	11.35	1.85	1.77	1.64	1.40	3000	1.03
653-XF2R-2415-4A	XF2R-2415-4A	G	24	14.0	11.5	12.6	13.55	14.35	2.15	2.05	1.96	1.86	3000	1.24
653-XF2R-3415-4A	XF2R-3415-4A	G	34	19.0	16.5	17.6	18.55	-	2.63	2.52	2.40	2.28	3000	1.52

