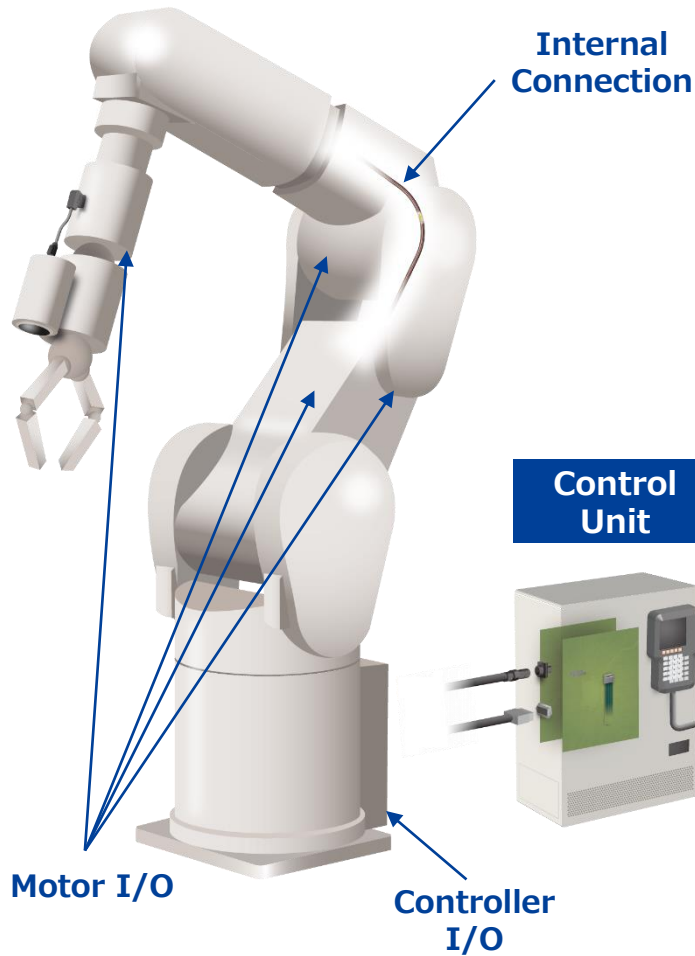


Connectors for Industrial Robots



Internal Connection (Non-Waterproof)



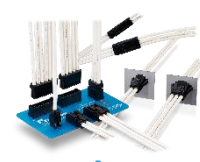
DF60 EnerBee
 Rated Current : 65A* Max.
 Rated Voltage : 1,000V AC/DC
 Pitch : 10.16mm
 No. of Pos. : 1-6
 AWG : 8-12
 *UL certified.



DF50 SignalBee
 Rated Current : 1A Max.
 Rated Voltage : 100V AC/DC
 Pitch : 1.0mm
 No. of Pos. : 2-50
 AWG : 26-32



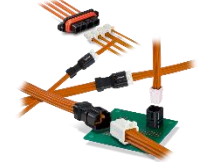
DF62 SignalBee
 Rated Current : 4A Max.
 Rated Voltage : 250V AC/DC
 Pitch : 2.0 x 2.2
 No. of Pos. : 2-7, 13, 24
 AWG : 22-30



DF63 EnerBee
 Rated Current : 15A Max.
 Rated Voltage : 630V AC/DC
 Pitch : 3.96
 No. of Pos. : 1-6
 AWG : 16-22



DF51 SignalBee
 Rated Current : 3A Max.
 Rated Voltage : 250V AC/DC
 Pitch : 2.0mm
 No. of Pos. : 2-30
 AWG : 22-30



DF62W SignalBee
 IP67 Equivalent (When Mated)
 Rated Current : 5A Max.
 Rated Voltage : 250V AC/DC
 Pitch : 2.0 x 2.2
 No. of Pos. : 2-4, 6, 9
 AWG : 20-26



DF63W EnerBee
 IP67 Waterproof (When Mated)
 Rated Current : 14A Max.
 Rated Voltage : 630V AC/DC
 Pitch : 3.96 x 4.4
 No. of Pos. : 2-4
 AWG : 16-22

Motor I/O



HR34B
 IP67/IP68 Waterproof (When Mated, 4pos. Receptacle)
 Rated Current : 5A Max.
 No. of Pos. : 4, 10
 AWG : 20-25



LF
 IPX7/IPX8 Waterproof (When Mated)
 Rated Current : 10A Max.
 No. of Pos. : 3, 4, 6, 11, 12, 20
 AWG : 16-26



MT
 Power/Signal Hybrid IP67 Waterproof (When Mated)
 Rated Current : 4A, 7A (Power) 1A (Signal)
 No. of Pos. : 6, 8, 14
 AWG : 18-26

Controller I/O



PQ50
 Rated Current : 19A Max.
 Rated Voltage : 600V AC/DC
 No. of Pos. : 20
 AWG : 14-22



PQ50WA
 IP67 Waterproof (When Mated)
 Rated Current : 19A Max.
 Rated Voltage : 600V AC/DC
 No. of Pos. : 92 Max. (Selectable Unit)
 AWG : 14-28



PQ50WT
 IP67 Waterproof (When Mated)
 Rated Current : 30A Max.
 Rated Voltage : 600V AC/DC
 No. of Pos. : 162 Max. (Selectable Unit)
 AWG : 10-28

Peripheral Device Connection (Non-Waterproof)



HR10
 Rated Current : 2A Max.
 No. of Pos. : 4, 5, 6, 10, 12, 20
 AWG : 26-30



HR25A
 Compact Push-pull Lock Connector
 Rated Current : 1A Max.
 No. of Pos. : 4, 6, 8, 12, 16, 20
 AWG : 30



IX Industrial
 IEC Standard Small, Robust I/O Connector
 Cat.6A Ethernet

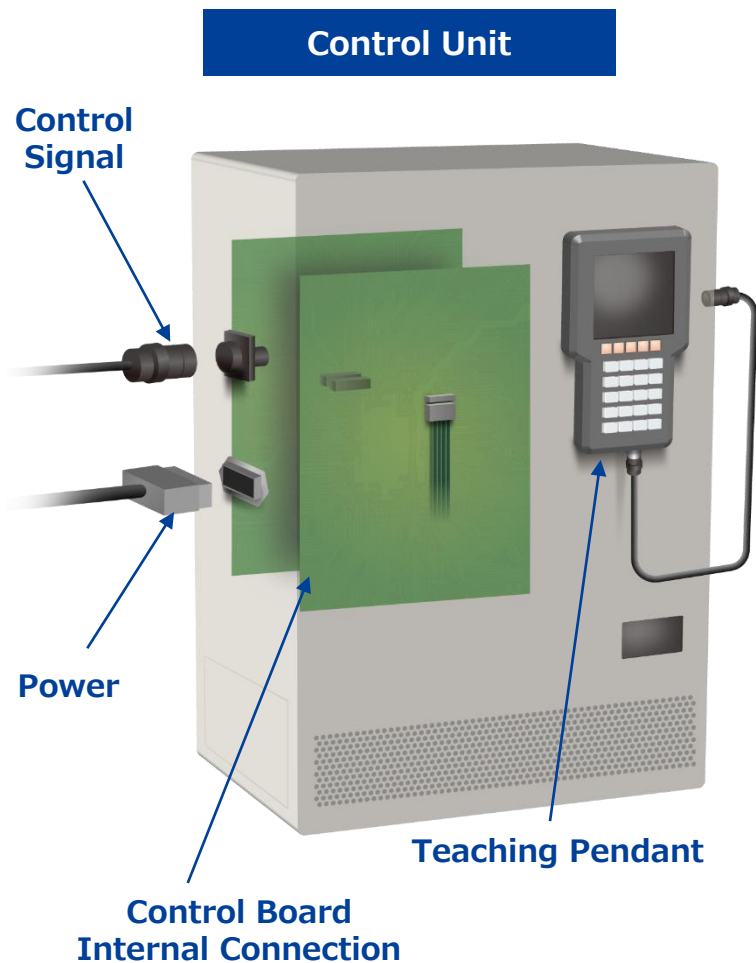


HR30
 IPX7/IPX8 Waterproof (When Mated)
 Rated Current : 5A Max. (6, 10, 12pos. : 2A Max.)
 No. of Pos. : 3, 6, 10, 12
 AWG : 26-30 (3pos. : 20)



LF
 IPX7/IPX8 Waterproof (When Mated)
 Rated Current : 10A Max.
 No. of Pos. : 3, 4, 6, 11, 12, 20
 AWG : 16-26

Connectors for Robot Control Units



Control Unit

Control Signal

Power

Teaching Pendant

Control Board Internal Connection

Control Signal



LF
IPX7/IPX8 Waterproof
(When Mated)
Rated Current : 10A Max.
No. of Pos. : 3, 4, 6, 11, 12, 20
AWG : 16-26



TM11R
RJ45
Cat.3, Cat.5
Rated Current : 1A



DH
Pitch : 1mm
Rated Current : 0.5A Max.
No. of Pos. : 17, 27, 37, 51



IX
IEC Standard
Small, Robust I/O Connector
Cat.6A Ethernet



GT17H/GT17HN
1Gbps High Speed Connector
Meeting Automotive Specs.
No. of Pos. : 4 (GT17H)
4, 16 (GT17HN)

Power



PQ50
Rated Current : 19A Max.
Rated Voltage : 600V AC/DC
No. of Pos. : 20
AWG : 14-22



PQ50S
Rated Current : 12.5A Max.
Rated Voltage : 300V AC/DC
No. of Pos. : 36, 48
AWG : 16-28

Teaching Pendant



HR22K
IPX7 Waterproof (When Mated)
Rated Current : 2A Max.
Rated Voltage : 100V AC, 140V DC
No. of Pos. : 20
AWG : 24-28



DH
High Speed Transmission
Rated Current : 0.5A
Pitch : 1.0mm



LF
IPX7/IPX8 Waterproof
(When Mated)
Rated Current : 10A Max.
No. of Pos. : 3, 4, 6, 11, 12, 20
AWG : 16-26

Control Board Internal Connection

Wire-to-Board



DF60
Rated Current : 65A* Max.
Rated Voltage : 1,000V AC/DC
Pitch : 10.16mm
No. of Pos. : 1-6
AWG : 8-12
*UL certified.



DF22
Rated Current : 30A Max.
Rated Voltage : 1,000V AC/DC
Pitch : 7.92mm
No. of Pos. : 1-5
AWG : 10-16



DF63
Rated Current : 15A Max.
Rated Voltage : 630V AC/DC
Pitch : 3.96, 7.92mm
No. of Pos. : 1-6
AWG : 16-22



DF50/DF50A
Rated Current : 1A Max.
Rated Voltage : 100V AC/DC
Pitch : 1.0mm
No. of Pos. : 20, 30, 40, 50 (DF50)
2-16 (DF50A)
AWG : 26-32



KW30
Rated Current : 3A Max.
Rated Voltage : 100V AC/DC
Pitch : 1.0mm
No. of Pos. : 2-15
AWG : 28-32



DF51/DF51K
Rated Current : 3A Max.
Rated Voltage : 250V AC/DC
Pitch : 2.0mm
No. of Pos. : 2-30
AWG : 22-30



HIF3M*W
Rated Current : 1A Max.
Rated Voltage : 200V AC/DC
Pitch : 2.54mm
No. of Pos. : 10-64
AWG : 28

Ribbon Cable

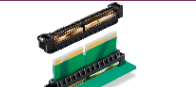
Board-to-Board



FX18
16Gbps High Speed Transmission
Floating Design
Stacking Height :
2 Piece: 10-30mm/3 Piece: 25-45mm
Pitch : 0.8mm
No. of Pos. : 40-180



FX23/FX23L
16Gbps High Speed Transmission
Floating Design
Stacking Height : 8-30mm
Pitch : 0.5mm
No. of Pos. : Signal : 20-120
Power : 4



FX27
PCIe Gen.1 Transmission
Floating Design
Stacking Height : 22mm Min.
Pitch : 0.8mm
No. of Pos. : 40-120



FX30B
Floating Design
Stacking Height : 20-30mm
Pitch : 3.81, 7.62mm
No. of Pos. : 2-5



FH63S
FPC/FFC/Shield FFC Connector
Height : 2.8mm
Pitch : 0.5mm
No. of Pos. : 10, 20, 30, 40



FH28K
125°C Heat Resistance
FPC/FFC Connector
Height : 2.55mm
Pitch : 0.5mm
No. of Pos. : 10-80