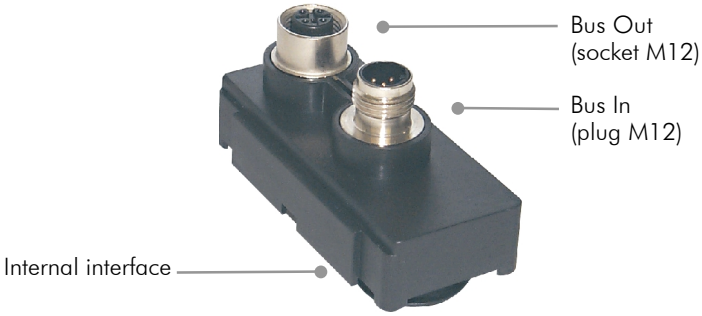
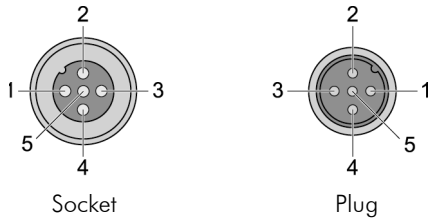
Field Bus Module Profibus-DP RIO-P F DP



Assignment

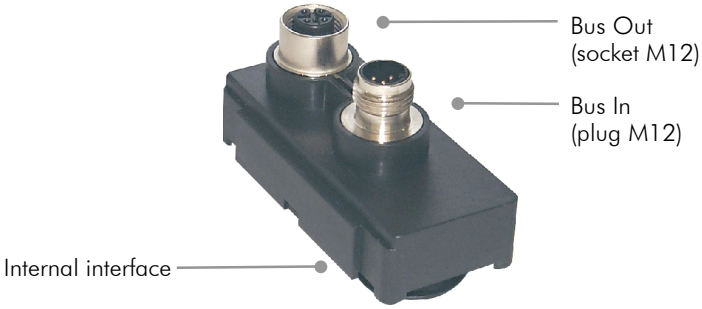


The RIO-P F DP field bus module is plugged onto the RIO-P BC DP bus coupler. It has an internal interface to the bus coupler and two M12 interfaces to the field bus. The M12 connectors correspond to IEC 947-5-2 with reverse key coding. The connections are in the module, so the field bus remains functional even if the module is removed.

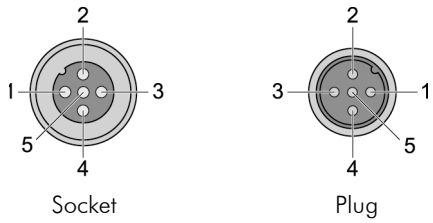
Pin	Signal	Meaning
1	VP	Supply voltage plus
2	RxD/TxD-N	Receive/send data N, A line
3	DGND	Data ground
4	RxD/TxD-P	Receive/send data P, B line
5	–	Functional earth
Thread	–	Shield

Technical Data	RIO-P F DP
Article number	382 382 79
Connectors	1 x M12 socket, 1 x M12 plug
For general technical data see last page	

Field Bus Module CAN DeviceNet / CANopen RIO-P F CAN



Assignment

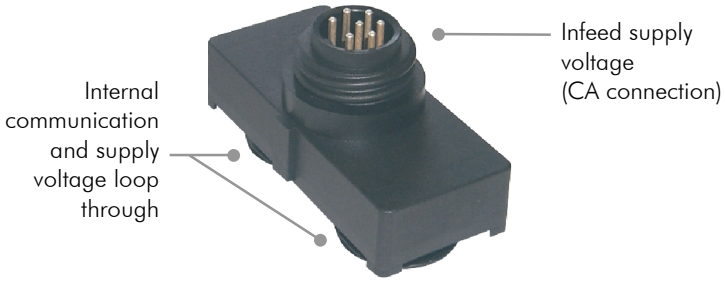


The RIO-P F CAN field bus module is plugged onto the RIO-P BC CAN DN or RIO-P BC CANopen bus coupler. It has an internal interface to the respective bus coupler and two M12 interfaces to the field bus. The M12 connectors correspond to IEC 947-5-2 with mechanical standard coding. The connections are in the module, so the field bus remains functional even if the module is removed.

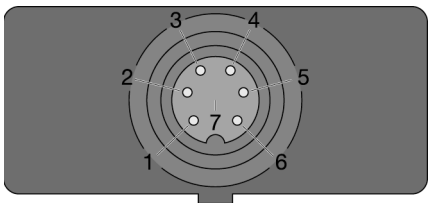
Pin	Signal	Meaning
1	–	Shield
2	V+	Supply voltage plus
3	V–	Supply voltage minus
4	CAN-H	CAN high
5	CAN-L	CAN low
Thread	–	Shield

Technical Data	RIO-P F CAN
Article number	382 382 78
Connectors	1 x M12 socket, 1 x M12 plug
For general technical data see last page	

Infeed Module CA — RIO-P KE CA



Assignment

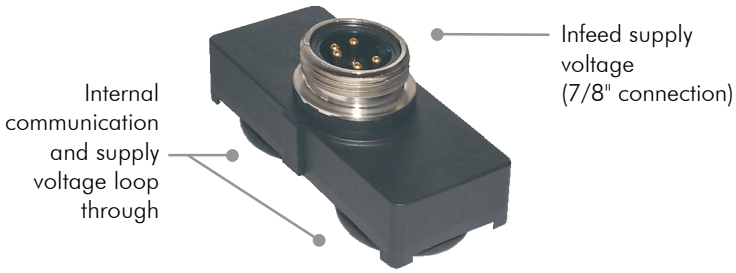


Pin	Meaning
1	0 V module and sensor supply
2	DC 24 V module and sensor supply
3	n.a.
4	n.a.
5	DC 24 V actuator supply
6	0 V actuator supply
7	Functional earth

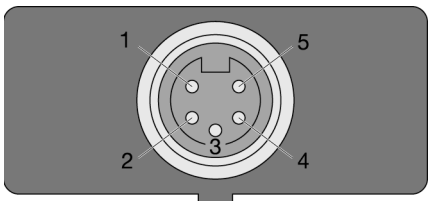
The infeed module feeds the supply voltage for the bus coupler module and the sensors and actuators via a CA connection. It connects the bus coupler module to the first I/O module or connects two I/O modules.

Technical Data	RIO-P KE CA
Article number	382 382 74
Connection	CA 7-pin
Capacity	Sensors: max. 4 A, actuators: max. 8 A
For general technical data see last page	

Infeed Module 7/8" — RIO-P KE CB



Assignment

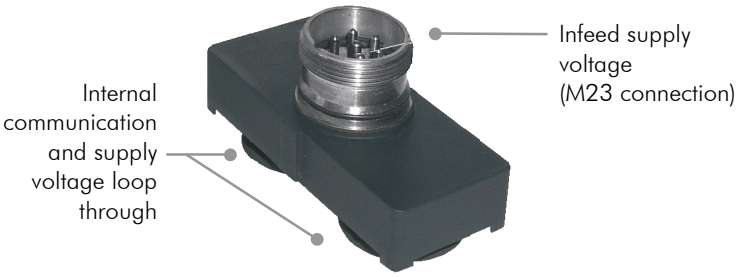


Pin	Meaning
1	DC 24 V module and sensor supply
2	0 V Module and sensor supply
3	Functional earth
4	DC 24 V actuator supply
5	0 V actuator supply

The infeed module feeds the supply voltage for the bus coupler module and the sensors and actuators via a 7/8" connection. It connects the bus coupler module to the first I/O module or connects two I/O modules.

Technical Data	RIO-P KE CB
Article number	382 382 75
Connection	7/8" 5-pin
Capacity	Sensors: max. 4 A, actuators: max. 8 A
For general technical data see last page	

Infeed Module M23 RIO-P KE CC



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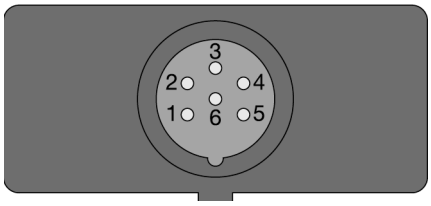
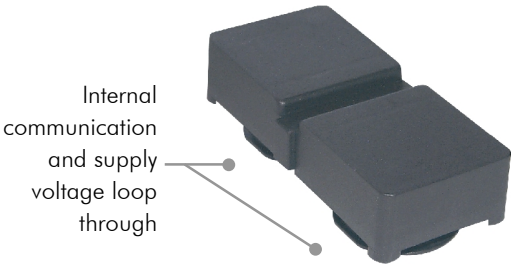


Pin	Meaning
1	Functional earth
2	DC 24 V actuator supply
3	0 V actuator supply
4	DC 24 V module and sensor supply
5	0 V module and sensor supply
6	n.a.
Housing	Functional earth

The infeed module feeds the supply voltage for the bus coupler module and the sensors and actuators via an M23 connection. It connects the bus coupler module to the first I/O module or connects two I/O modules.

Technical Data	RIO-P KE CC
Article number	382 382 93
Connection	M23 6-pin
Capacity	Sensors: max. 4 A, actuators: max. 8 A
For general technical data see last page	

Bridge Module — RIO-P KB



The bridge module connects two I/O modules and serves to transmit internal communication and loop through the supply voltage for sensors and actuators.

Technical Data	RIO-P KB
Article number	382 382 76
Capacity	Sensors: max. 4 A, actuators: max. 8 A
For general technical data see last page	

Terminator Module — RIO-P KA

The terminator module seals the last connection in a row of I/O modules.
The module has no electrical function.

Technical Data	RIO-P KA
Article number	382 382 77
For general technical data see last page	

Technical Data RIO Protected IP67

Supply voltage	
Operating voltage	24 V DC ± 20% max. 5% residual ripple

Connection system	
Sensors / actuators	M12 connectors 5-pin
Field bus	M12 connectors 5-pin
Supply voltage	Depending on infeed module: CA, 7/8" or M23

Housing and installation	
Type of protection	IP 67 to EN 60529
Dimensions (W x H x D)	70 x 140 x 45 mm (bus coupler and I/O modules)
Fixing	On electrically conductive surface with at least two diagonally opposed fixing points (for normal mechanical load) with M4 screws
Installation Position	Any

Climatic conditions	
Ambient operating temperature	0 ... +55°C (category KV to DIN 40040)
Storage temperature	–25 ... +70°C (category HS to DIN 40040)
Relative humidity	100%
Air pressure in operation	860 ... 1060 hPa

Mechanical strength	
Vibration	10 ... 57 Hz constant amplitude 0.075 mm 57 ... 150 Hz constant acceleration 1 g (to DIN IEC 68-2-6)

Electromagnetic compatibility	
Electrostatic discharge	EN 61000-4-2: 8 kV contact discharge
Electromagnetic fields	EN 61000-4-3: field intensity 10 V/m, 80 ... 1000 MHz
Burst	EN 61000-4-4: 2 kV on DC supply lines, 1 kV on I/O signal and serial interface lines
Interference emissions	EN 55011: Limit Category A, Group 1