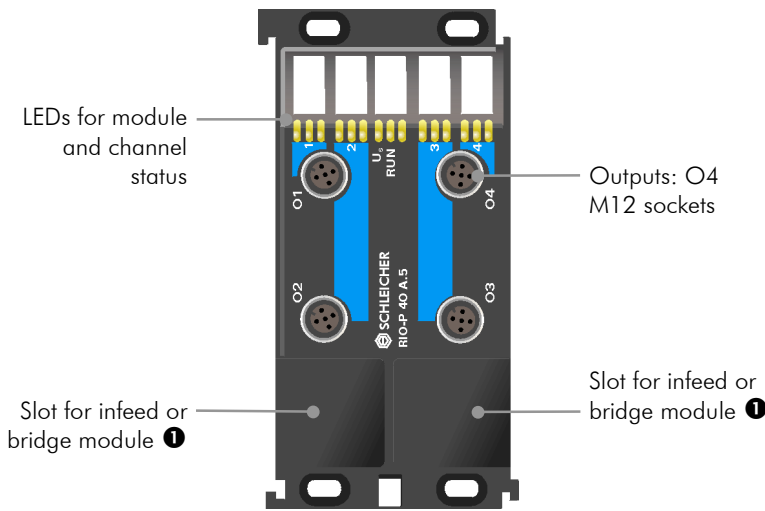


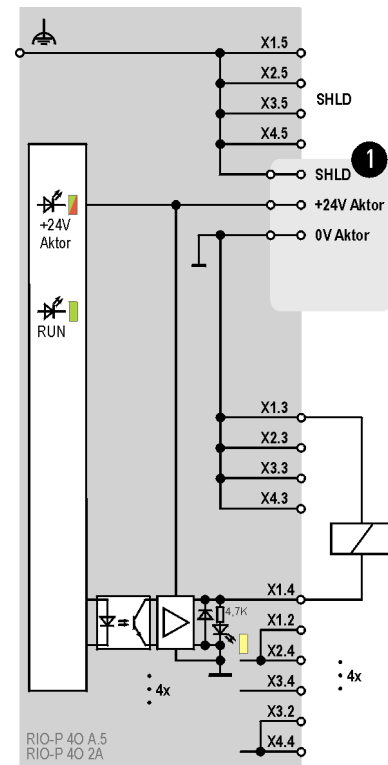
**Digital 4 Outputs DC 24 V 0.5 A**  
**Digital 4 Outputs DC 24 V 2 A**

**RIO-P 40 A.5**  
**RIO-P 40 2A**



The RIO-P 40 A.5 and RIO-P 40 2A digital modules provide 4 output channels for binary position signals with 24 V level. The channels are isolated from the internal bus and are short-circuit-proof and overcurrent-protected. The maximum output current per channel is 0.5 A/2 A. If more current is required the outputs can be connected in parallel. The signal state of each channel can be read on an LED.

**Block diagram**



Technical Data	RIO-P 40 A.5	RIO-P 40 2A
Article number	384 382 85	384 382 82
Number of inputs/outputs	4 outputs binary	
Data width	1 bit per channel I/O	
External supply voltage	DC 24 V ( $\pm 20\%$ , max. 5% residual ripple)	
Power consumption	0.25 W (without load current) from external 24 V supply 0.325 W from internal 5 V supply	
Connection system	Two-wire	
<b>Outputs</b>		
Switching level	H level: supply voltage - 0.5 V ( $I_L < 0,5 A$ ) L level: $\leq 0.5 V$ ( $I_L = 0 A$ )	H level: supply voltage - 1 V ( $I_L < 2 A$ ) L level: $\leq 0.5 V$ ( $I_L = 0 A$ )
Output current per output	Max. 0.5 A, can be connected in parallel	Max. 2 A, can be connected in parallel
Total current for whole module	Max. 2 A	Max. 8 A at 0 ... 45°C Max. 4 A at 0 ... 55°C
Switching frequency	200 Hz with ohmic load: with inductive load 1 Hz with lamp load	
Simultaneity	100%	
Free-wheeling diode	Integrated	
Isolation	Each channel individually isolated from internal bus by optocouplers	
Signal delay	$< 100 \mu s$ (with ohmic load)	

For general technical data see next page

## Technical Data RIO Protected IP67

### Supply voltage

Operating voltage	24 V DC $\pm$ 20% max. 5% residual ripple
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### 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)
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### 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