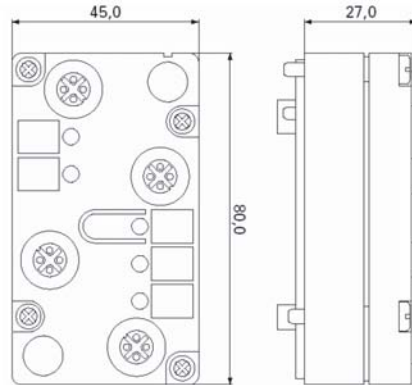


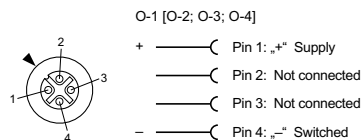
TABLE OF CONTENTS

AS-Interface module AAAA.....	2
AS-Interface module EEAA.....	4
AS-Interface module EEEE.....	6
AS-Interface coupler module PGK.....	8
AS-Interface coupler module FKK.....	10
AS-Interface coupler module 2 FK RK.....	12
AS-Interface coupler modul FK M12.....	14
AS-Interface coupler module 2 FK RK IP67.....	16
AS-Interface miniature-coupler module FTR/FBR.....	18

AS-INTERFACE® MODULE AAAA



Assignment ASI AM 11 F AAAA



DESCRIPTION

- For connection of conventional binary sensors and actuators to AS-Interface®
- Maximal total current for sensors 100mA. For actuators can taken up to 200mA from the AS-Interface® Bus , with a additional supply up to 2A total
- Short circuit proof inputs and short circuit proof current supply for sensors
- Standard assignment for n.o. and n.c. function; Pin 2 and 4 are short
- sensors can connected directly
- Integrated diagnose-LED for display of switching state
- Inputs for sensors with PNP-output
- Integrated Watchdog function turns at fault (staying away master signal) outputs powerless

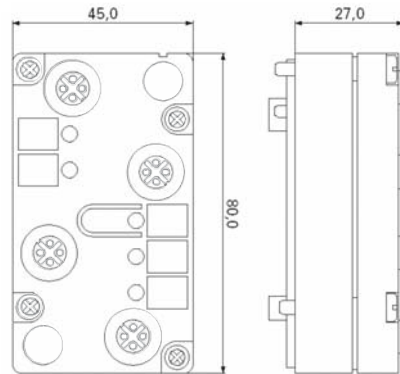
TECHNISCHE DATEN

Product	AS-Interface-module-07-AAAA
Description	4 actuator outputs
	additional supply
	semiconductor output
	Integrated watchdog function
Order number	08341055100
Scope of delivery	1 user module, 4 screws
	6 labels, 1 seal
AS-Interface Profil (E/A.ID-Code)	S-8.0
AS-Interface-approval no.	58901

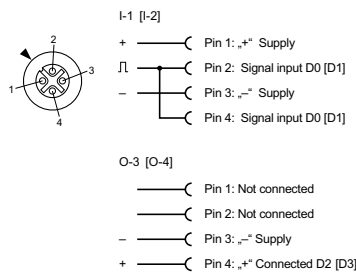
SPECIFICATIONS

Product	ASI-Interface-Module-07-AAAA	
Logical assignment		
User interface	Typ	Data bit
1	Ausgang PNP	D0
2	Ausgang PNP	D1
3	Ausgang PNP	D2
4	Ausgang PNP	D3
AS-Interface-adress		
Default setting	0	
User programmable	1-31	
Electrical interface		
Elektro-mechanical interface	EEMS	
Operating voltage	26,5V...31,6V	
Total current consumption	<50mA	
External additional supply	over coupler module and EEMS	
Input voltage	24V-10%/+15%	
Actuators		
Output voltage U_{out}	Input voltage - 0,7V	
Output current I_{out}	2A per output	
Induction protection	integrated	
Watchdog function	integrated	
Displays		
Operating voltage bus line	LED green (POWER)	
User interface	LED yellow (Actuator outputs.: O-1; O-2; O-3; O-4)	
User interface IEC 947-5-2	round connectors M12; socket	
EMV-limits		
Noise emission	after EN 55022; limit class B	
Noise immunity	after EN 50082-2	
Protection class DIN 40 050	IP 67, (only if screwed)	
Degree of soiling DIN EN 0110	3	
Ambient temperature	-25°C...+70°C	
Stock temperature	-40°C...+85°C	
Humidity	10%...90% (not condensed)	
Housing material	PA 6-GF-FR	
Weight	105g	
Shock stress	30g/11ms	
Vibration stress	10...55Hz; 1,0mm amplitude	

AS-INTERFACE® MODULE EEAA



Assignment ASI AM 02 F EEAA / AM 08 F EEAA



DESCRIPTION

- For connection of conventional binary sensors and actuators to AS-Interface®
- Maximal total current for sensors 100mA. For actuators can taken up to 200mA from the AS-Interface® Bus , with a additional supply up to 2A total
- Short circuit proof inputs and short circuit proof current supply for sensors
- Standard assignment for n.o. and n.c. function; Pin 2 and 4 are short
- sensors can connected directly
- Integrated diagnose-LED for display of switching state
- Inputs for sensors with PNP-output
- Integrated Watchdog function turns at fault (staying away master signal) outputs powerless

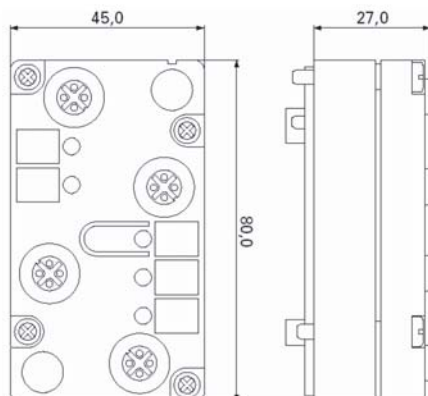
SPECIFICATIONS

Product	AS-Interface-module-02-EEAA	AS-Interface-module-08-EEAA
Description	2 sensor inputs 100mA	2 Sensor inputs 100mA
	2 actuator outputs	2 Actuator outputs
	Additional supply EEMS	Additional supply EEMS
	Relay output	Semiconductor output
		Integrated watchdog funtion
Order number	08341055200	08341055201
Scope of delivery	1 user module, 4 modul screws, 6 labels, 1 seal	
AS-Interface profile (E/A.ID-Code)	S-3.0	S-3.0
AS-Interface approval no.	58801	59001

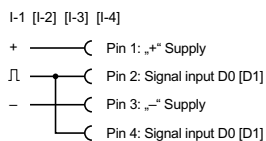
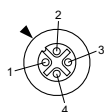
SPECIFICATIONS

Product	AS-Interface-module-02-EEAA	AS-Interface-module-08-EEAA		
Logical assignment				
User Interface	Typ	Data bit	Typ	Data bit
1	Input PNP	D0	Input PNP	D0
2	Input PNP	D1	Input PNP	D1
3	Input PNP	D2	Input PNP	D2
4	Input PNP	D3	Input PNP	D3
AS-Interface-adress				
Default setting ^{es}	0		0	
User programmable	1-31		1-31	
Elektrical interface				
Elektromechanical interface	EMS		EMS	
Operating voltage	26,5V...31,6V		26,5V...31,6V	
Total current consumption	200mA		200mA	
Voltage supply sensors				
Output voltage	18...30V DC		18...30V DC	
Output current; (-25°C...+50°C)	100mA		100mA	
(+50°C...70°C)	85mA		85mA	
Signal range sensors				
Low-signal range U_{in}	0,5V		0,5V	
I_{in}	<1,5mA		<1,5mA	
High-signal range U_{in}	10V... U_{out}		10V... U_{out}	
I_{in}	>5mA		>5mA	
External additional supply	over coupler module and EEMS		over coupler module and EEMS	
Input voltage	24V -10%/+15%		24V -10%/+15%	
Displays				
Operating voltage bus line	LED green (POWER)		LED green (POWER)	
User interfaces	LED yellow (Sensor input: I-1; I-2)		LED yellow (Sensor input: I-1; I-2)	
	(Sensor output: O-3; O-4)		(Sensor output: O-3; O-4)	
User interfaces IEC 947-5-2	round connector M12; Buchse			
EMV-limits				
Noise emission	after EN 55022; limit class B		after EN 55022; limit class B	
Noise immunity	after EN 50082-2		after EN 50082-2	
Protection class DIN 40 050	IP 67		IP 67	
Degree of soiling DIN EN 0110	3		3	
Ambient temperature	-25°C...+70°C		-25°C...+70°C	
Humidity	10%...90% (not condensed)		10%...90% (not condensed)	
Housing material	PA 6-GF-FR		PA 6-GF-FR	
Shock stress	30g/11ms		30g/11ms	
Vibration stress	10...55Hz; 1,0mm amplitude		10...55Hz; 1,0mm amplitude	

AS-INTERFACE® MODULE EEEE



Assignment ASI AM 02 EEEE



DESCRIPTION

- For connection of conventional binary sensors and actuators to AS-Interface®
- Maximal total current for sensors 100mA. For actuators can taken up to 200mA from the AS-Interface® Bus , with a additional supply up to 2A total
- Short circuit proof inputs and short circuit proof current supply for sensors
- Standard assignment for n.o. and n.c. function; Pin 2 and 4 are short
- sensors can connected directly
- Integrated diagnose-LED for display of switching state
- Inputs for sensors with PNP-output
- Integrated Watchdog function turns at fault (staying away master signal) outputs powerless

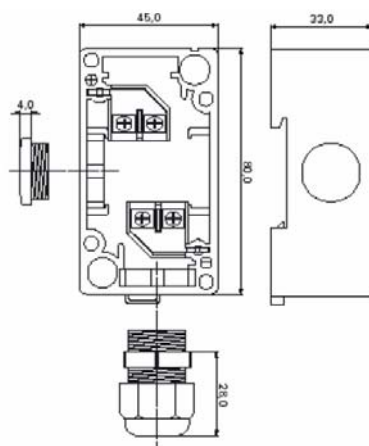
SPECIFICATIONS

Product	AS-Interface-module-02-EEEE	AS-Interface-module-06-EEEE
Description	4 Sensor inputs 100mA	4 sensor inputs 200mA
Order number	08341051000	08341051001
Scope of delivery	1 user module, 4 modul screws 6 labels, 1 seal	1 user module, 4 module screws 6 labels, 1 seal
AS-Interface profile (E/A.ID-Code)	S-0.0	S-0.0
AS-Interface approval no.	58701	58701

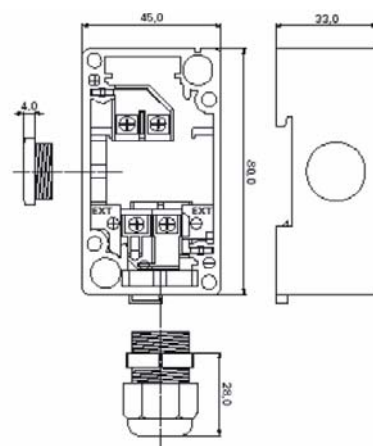
SPECIFICATIONS

Product	AS-Interface-module-02-EEEE	AS-Interface-module-06-EEEE		
Logical assignment				
Subscriber terminal	Type	Data bit	Typ	Data bit
1	Input PNP	D0	Input PNP	D0
2	Input PNP	D1	Input PNP	D1
3	Input PNP	D2	Input PNP	D2
4	Input PNP	D3	Input PNP	D3
AS-Interface-adress				
Default setting	0	0		
User programmable	1-31	1-31		
Electrical Interface				
Electromechanical interface	EMS	EMS		
Operating voltage	26,5V...31,6V	26,5V...31,6V		
Total current consumption	200mA	300mA		
Voltage supply sensors				
Output voltage	18...30V DC	18...30V DC		
Output current; (-25°C...+50°C)	<100mA	<200mA		
(+50°C...70°C)	<85mA	<150mA		
Signal range sensors				
Low-signal range U_{in}	0 - 5V	0 - 5V		
I_{in}	<1,5mA	<1,5mA		
High-signal range U_{in}	10V... U_{out}	10V... U_{out}		
I_{in}	>5mA	>5mA		
Displays				
Operating voltage sensors	LED green (POWER)	LED grün (POWER)		
Subscriber terminals	LED yellow (Sensor input: I-1; I-2; I-3; I-4)	LED gelb (Sensoreing.:I-1; I-2; I-3; I-4)		
EMV-limits				
Noise emission	after EN 55022; limit class B	after EN 55022; Grenzwertkl. B		
Noise immunity	after EN 50082-2	after EN 50082-2		
Protection class DIN 40 050	IP 67	IP 67		
Degree of soiling DIN EN 0110	3	3		
Ambient temperature	-25°C...+70°C	25°C...+70°C		
Stock temperature	-40°C...+85°C	-40°C...+85°C		
Humidity	10%...90% (not condensed)	10%...90% (not condensed)		
Housing material	PA 6-GF-FR	PA 6-GF-FR		
Weight	105g	105g		
Shock stress	30g/11ms	30g/11ms		
Vibration stress	10...55Hz; 1,0mm amplitude	10...55Hz; 1,0mm amplitude		

AS-INTERFACE® MODULE PGK COUPLER MODULE FOR PGM INTERFACE



PGK 423



PGK F 423

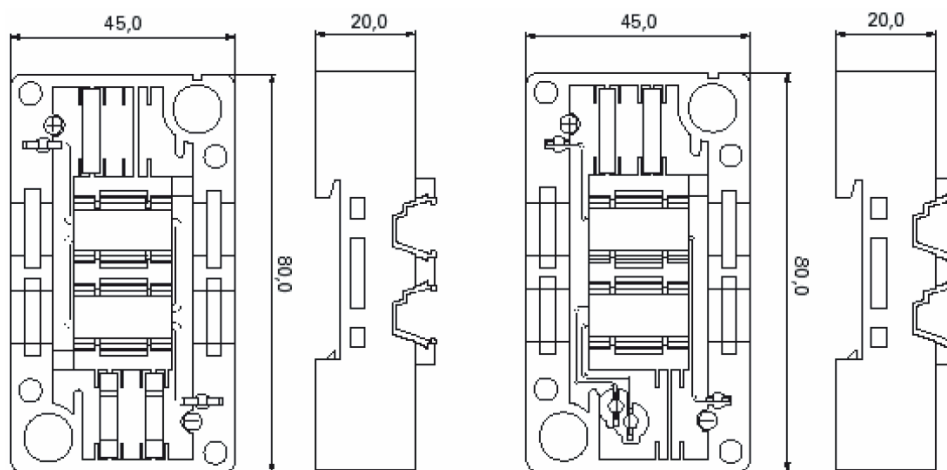
DESCRIPTION

- For connection of AS-Interface® bus and contact to connected user modules
- Four closable PG 11- cable glands
- approved screw terminal for safe contact to the bus line
- For DIN-Rail or screw mounting
- with separate terminal for connection of an external additional power supply over 4-way contact:
ASi+/ASi- and external supply +/-

SPECIFICATIONS

Product °	°	ASI-Socket-PGK 423°	ASI-Socket-PGK-F 423
Description °	°	Coupler module for round lines°	Coupler module for round lines
	°	°	with connection for additional supply
Order number °	°	08341051030°	08341051040° °
Scope of delivery °	°	1 coupler module, 4 nuts, 2 cable gland PG11, 3 closing screws	
Electromechanical Interface °	°	EMS °	EEMS
Connection ASI round line °	°		
Number of connectable lines		4	4
Outer line diameter °	°	6...10mm°	6...10mm
Conductor cross section °	°	1,0...2,5mm ² °	1,0...2,5mm ²
Cable screw		PG 11°	PG 11
Type of connection °	°	Screws°	Screws
Recommended cable type °	°	NYMHY-O 2x1,5°	NYMHY-O 2x1,5
Operating voltage °	°	<40 V°	<40 V
Operating current °	°	<5 A °	<5 A
Protection class DIN 40 050		IP 67 °	IP 67
Degree of soiling DIN EN 0110		3 °	3
Ambient temperature		-25°C...+70°C °	-25°C...+70°C
Stock temperature		-40°C...+85°C °	-40°C...+85°C
Humidity		10%...90% (not condensed)°	10%...90% (nicht condensed)
Housing material		PA 6 GF-FR °	PA 6 GF-FR
Weight		80g °	80g
Shock stress		30g/11ms°	30g/11ms
Vibration stress		10...55Hz; 1,0mm amplitude°	10...55Hz; 1,0mm amplitude

AS - INTERFACE® MODULE FKK COUPLER MODULE FOR FLAT CABLE



FKK V

FKK FV

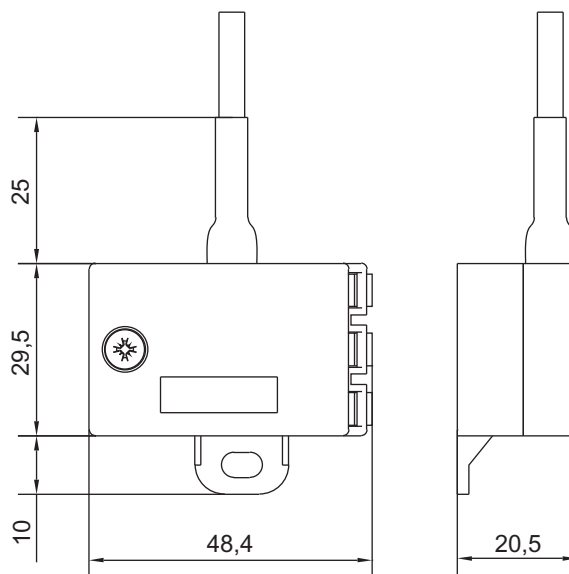
DESCRIPTION

- Safe function contact of the bus line with penetration technology ensures the efficient operation
- Protected against polarity reversal for simply mounting without special knowledges and -tools
- The cable lines are closable, so that end users have the full IP protection class (keine weiterführende Busleitung)
- For DIN-rail and screw mounting
- Variation as: branch of the bus line or input for external power supply over flat cable

SPECIFICATIONS

Products²	²	ASI-Socket-FKK-V ²	ASI-Socket-FKK-FV
Description²	²	Coupler module for ribbon cable ²	Coupler module for ribbon cable
	²	²	With terminal for additional supply
Order number		08341051020 ²	08341051010 ²
Scope of delivery²	²	1 coupler module, 4 seals, 3 fillers	
Electromechanical interface²	²	EMS ²	EEMS
Interface ASI flat cable²	²		
Number of connectable cables		2	1 AS-Interface® ribbon cable
	²	²	1 additional supply
Cable type²	²	AS-Interface® ribbon cable ²	AS-Interface® ribbon cable
Wire diameter²	²	1,5mm ²²	1,5mm ²
Connection type²	²	Penetration technology, screws ²	Penetration technology, screws ²
Operating voltage²	²	<40 V ²	<40 V
Operating current²	²	<2 A ²	<2 A
AS-Interface additional supply		-	<2A
Protection class DIN 40 050		IP 67 ²	IP 67
Degree of soiling DIN EN 0110		3 ²	3
Ambient temperature		-25°C...+70°C ²	-25°C...+70°C
Storage temperature		-40°C...+85°C ²	-40°C...+85°C
Humidity		10%...90% (non condensing) ²	10%...90% (not condensing)
Housing material		PBT-GF-FR ²	PBT-GF-FR
Weight		65g ²	65g
Shock stress		30g/11ms ²	30g/11ms
Vibration stress		10...55Hz; 1,0mm amplitude ²	10...55Hz; 1,0mm amplitude

AS-INTERFACE® MODUL 2 FK RK TWOFOLD MINIATUR-COUPLER MODULE



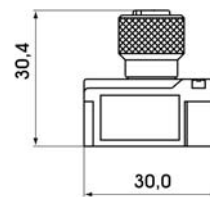
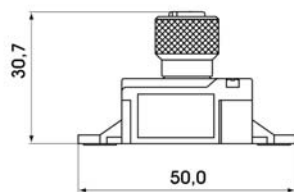
DESCRIPTION

- Directly connection from AS-Interface®-able devices to yellow and black AS-i cable
- With assembling able cable and M12 cable gland straight
- With assembling able cable and M12 cable gland angled
- With fix mounted cable without connector

SPECIFICATIONS

Product	ASI 2 FK RK-EF PUR	ASI 2 FK RK-EWF PUR	ASI 2 FK RK PUR
Description	Mini-coupler module for ribbon cable (yellow + black)		
	assembled conductor and conductor socket straight	assembled conductor and conductor socket angled	with fix mounted conductor
Order number	08341055980	08341055990	08341055995
Scope of delivery	1 miniature coupler module		
Connection ASI ribbon cable			
Number of connectable conductors	2		
Conductor cross section	1,5 mm ²		
Conductor type	AS-Interface® ribbon cable yellow + black®		
Connection type	Penetration technology / screws		
Connection sensors/actuators			
	Conductor socket M12®		
	Pin 1: AS-Interface® "+"	Brown: AS-Interface® "+"®	
	Pin 2: Ext. power supply "-"	Blue: AS-Interface® "-"®	
	Pin 3: AS-Interface® "-"	Black: AUX "+"®	
	Pin 4: Ext. power supply "+"	White: AUX "-"	
Conductor type	PUR massiv®		
Conductor cross section	0,34 mm ²		
Operating voltage	<40 V		
Operating current	<4 A		
Protection class DIN 40 050	IP 65		
Degree of soiling DIN EN 0110	3		
Ambient temperature	-25°C...+70°C		
Storage temperature	-40°C...+85°C		
Humidity	10%...90% (non condensing)		
Housing material	PA 66 GF-FR		
Weight	30g		
Shock stress	30g/11ms		
Vibration stress	10...55Hz; 1,0mm amplitude		

AS-INTERFACE® MODUL FK M12 MINI-MODULE FOR DIRECTLY CONNECTION



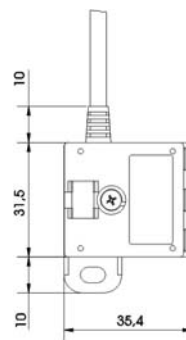
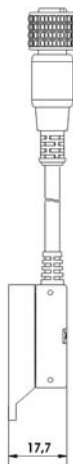
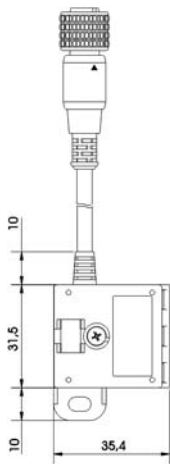
DESCRIPTION

- For directly connection of AS-Interface-able devices to AS-Interface ribbon cable
- With integrated seal for the ribbon cable
- Optional with fastening flange for screw mounting
- For uncomplicated connection the orientation of the socket can be rotated 90°

SPECIFICATIONS

Product ²	²	ASI FK M12 ²	ASI FK M12 K
Description ²	²	Mini-coupler module for ribbon cable ²	Mini-coupler module for ribbon cable
	²	(passive) with fastening flange ²	(passive)
Order number		08341055960	08341055970
Delivery of scope ²	²	1 coupler module ²	1 coupler module
		1 seal ²	1 seal
Connection ASI ribbon cable ^{2 2}			
Number of connectable conductors		1	1
Conductor type ²	²	AS-Interface® ribbon cable ²	AS-Interface® ribbon cables ²
Conductor cross section ²	²	1,5mm ²²	1,5mm ²²
Connection type ²	²	Penetration technology / screws ²	Penetration technology / screws
Connection Sensors/Actuators			
	²	User interface IEC 947-5-2 ²	User interface IEC 947-5-2 ²
	²	Circular connector M12; socket ²	Circular connector M12; socket
Operating voltage ²	²	<40 V ²	<40 V ²
Operating current ²	²	<2 A ²	<2 A ²
Protection class DIN 40 050		IP 67 ²	IP 67 ²
Degree of soiling DIN EN 0110	3 ²	3 ²	
Ambient temperature		-25°C...+70°C ²	-25°C...+70°C ²
Storage temperature		-40°C...+85°C ²	-40°C...+85°C ²
Housing material		PA 66 GF-FR ²	PA 66 GF-FR
Weight		15g ²	15g ²
Shock stress		30g/11ms ²	30g/11ms
Vibration stress		10...55Hz; 1,0mm amplitude ²	10...55Hz; 1,0mm amplitude

AS-INTERFACE® MODUL FK RK IP67 MINI-MODULE ASSEMBLED



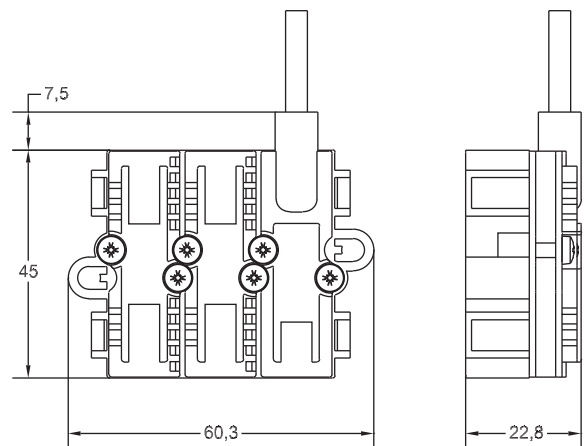
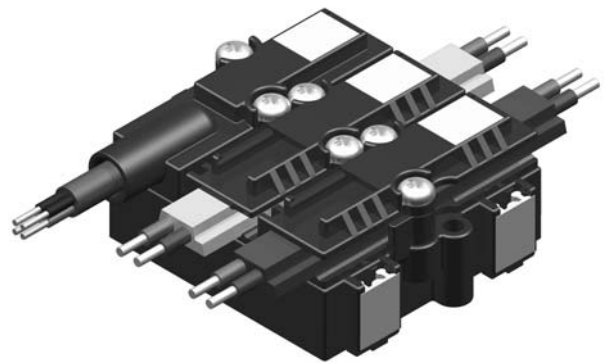
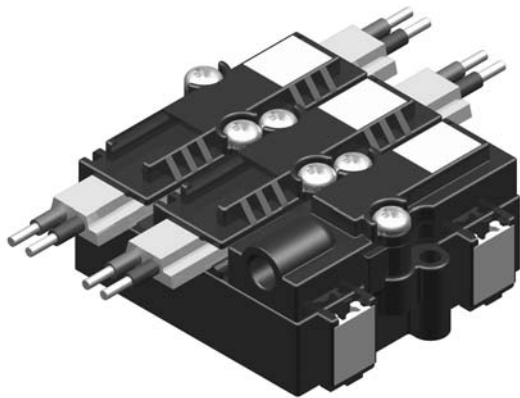
DESCRIPTION

- For directly connection AS-Interface-able devices to AS-Interface ribbon cable
- Conductor-snap in for easy mounting
- With fastening flange for screw mounting

SPECIFICATIONS

Product	ASI FK RK IP67 EF124 ®	ASI FK RK IP67 EwF124®	ASI FK RK IP67 PUR 2 x 0,34®
Description	Coupler module for ribbon-® cables with assembled® cable and straight socket ® ®		
Order number	08341055930	08341055940	08341055950
Scope of delivery	1 coupler module		
Cable length	2m		
Anschluss ASI round cable	®		
Number of connectable cables	2		
Conductor type	AS-Interface ribbon cable (yellow+black)		
Conductor cross section	1,5mm²®		
Connection type	Penetration technology / screws		
Connection Sensors/ Actuators			
	User interface IEC ®	User Interface IEC®	®
	947-5-2, round connector®	947-5-2, round connector	
	M12; socket®	M12; socket	
	Pin 1: AS-Interface® "+"®	Pin 1: AS-Interface® "+"	Brown: AS-Interface® "+"
	Pin 3: AS-Interface® "-"®	Pin 3: AS-Interface® "-"	Blue AS-Interface® "-"
Conductor type	PUR	PUR	PUR/PVC
Conductor cross section	0,34 mm²		
Operating voltage	<40 V		
Operating current	<4 A		
Protection class DIN 40 050	IP 67®		
Degree of soiling DIN EN 0110	3		
Ambient temperature	-25°C...+70°C ®		
Storage temperature	-40°C...+85°C ®		
Humidity	10%...90% (non condensing)®		
Housing material	PA 6 GF-FR / TPU®		
Weight	20g ®		
Shock stress	30g/11ms		
Vibration stress	10...55Hz; 1,0mm amplitude		

AS-INTERFACE® MODUL 2 FTR / FBR TWOFOLD MINIATURE COUPLER MODULES



DESCRIPTION

- Directly connection AS-Interface able devices to yellow and black AS-i cable
- With assembled cable and M12 socket straight
- With assembled cable and M12 socket angled
- With fix mounted cable without connector
- As turn-off for ribbon cable yellow or black

SPECIFICATIONS

Product²	2	ASI 2 FTR HiPer ²	ASI 2 FBR
Description²	2	Mini-Koppelmdul für Flachbandleitung ²	Brücke zum Erzeugen von Ab- ²
	2	mit fest montierter Leitung ²	zweigungen bei AS-i und AUX
	2	2	Flachbandleitungen
Order number		08341055910 ²	08341055920
Scope of delivery²	2	1 Koppelmodul ²	1 Brückenmodul
Connection ASI cable²	2		
Number of connectable cables		2	2
Conductor type²	2	AS-Interface ribbon cable ²	AS-Interface ribbon cable
Conductor cross section²	2	1,5mm ²²	1,5mm ²²
Connection type²	2	Penetration technology / screws ²	Penetration technology / screws
Connection sensors/actuators			
Wire assignment²	2	Brown: AS-Interface "+" ²	Brown: AS-Interface "+" ²
	2	Blue: AS-Interface "-" ²	Blue: AS-Interface "-" ²
	2	Black: AUX "+" ²	Black: AUX "+" ²
	2	White: AUX "-" ²	White: AUX "-" ²
	2	2	2
Conductcor type²	2	PUR massive ²	PUR massive
Conductor cross section²	2	0,34 mm ²²	0,34 mm ²
Cable length²	2	2m ²	2m
Operating voltage²	2	<40 V ²	<40 V ²
Operating current²	2	<4 A ²	<4 A ²
Protection class DIN 40 050		IP 65 / IP 67 ²	IP 65 / IP 67 ²
Degree of soiling DIN EN 0110	3 ²	3 ²	
Ambient temperature		-25°C...+70°C ²	-25°C...+70°C
Housing material		PBT ²	PBT ²
Weight		50g ²	50g ²
Shock stress		30g/11ms ²	30g/11ms
Vibration stress		10...55Hz; 1,0mm amplitude ²	10...55Hz; 1,0mm amplitude

SPECIFICATIONS

Product	"	ASI 2 FTR-EF HiPer "	ASI 2 FTR-EWF HiPer
Description	"	Mini-coupler module for ribbon cable"	Mini-coupler module for ribbon cable"
"	"	with assembled cable"	with assembled cable
"	"	and straight socket"	and angled socket
Order number	"	08341055996 "	08341055997
Scope of delivery	"	1 coupler module"	1 coupler module
Cable length	"	2m"	2m
Connection ASI cable	"		
Number of connectable cables	"	2	2
Conductor type	"	AS-Interface ribbon cable"	AS-Interface ribbon cable
Conductor cross section	"	1,5mm ² "	1,5mm ² "
Connection type	"	Penetration technology / screws"	Penetration technology / screws
Connection Sensors/Actuators	"		
"	"	Socket M12"	Socket M12"
"	"	Pin 1: AS-Interface "+""	Pin 1: AS-Interface "+""
"	"	Pin 2: Ext. power supply "-""	Pin 2: Ext. power supply "-""
"	"	Pin 3: AS-Interface "-""	Pin 3: AS-Interface "-""
"	"	Pin 4: Ext. power supply "+""	Pin 4: Ext. power supply "+""
Conductor cross section	"	0,34 mm ² "	0,34 mm ² "
Conductor type	"	PUR massive"	PUR massive
Operating voltage	"	<40 V"	<40 V"
Operating current	"	<4 A "	<4 A"
Protection class DIN 40 050	"	IP 65 / IP 67"	IP 65 / IP 67"
Degree of soiling DIN EN 0110	"	3 "	3"
Ambient temperature	"	-25°C...+70°C "	-25°C...+70°C"
Storage temperature	"	-40°C...+85°C "	-40°C...+85°C" "
Housing material	"	PBT"	PBT
Weight	"	50g "	50g"
Shock stress	"	30g/11ms"	30g/11ms
Vibration stress	"	10...55Hz; 1,0mm amplitude"	10...55Hz; 1,0mm amplitude