ECM.4+8

Connecteurs M12 4 et 8 broches
4 and 8 pin M12 connector

Installation manual

(FR) **Manuel d'Installation et d'Utilisation** p.2
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(ES) **Manual de instalación y funcionamiento** p.14

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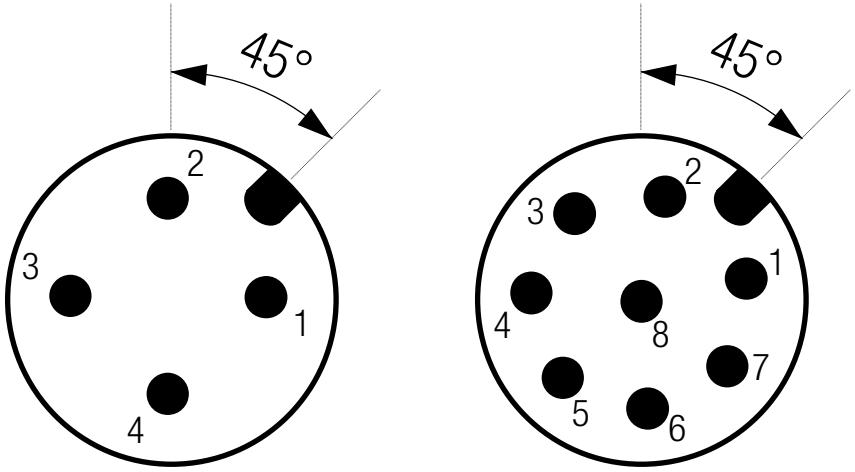
Description

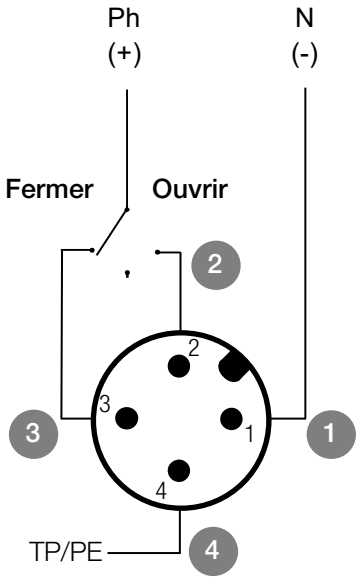


	Connecteur d'alimentation	Connecteur de recopie
Type	Connecteur mâle (détrompeur type A)	Connecteur mâle (détrompeur type A)
Section transversale	0,25 mm² / AWG 24	0,25 mm² / AWG 24
Tension nominale	30 V	30 V
Courant nominal (40 °C)	3 A	1.5 A
Résistance d'isolement	> 10^8 Ω	> 10^8 Ω
Degré de pollution	3	3
Catégorie de surtension	II	II
Matériau isolant	groupe II	groupe II
Degré de protection	IP68	IP68

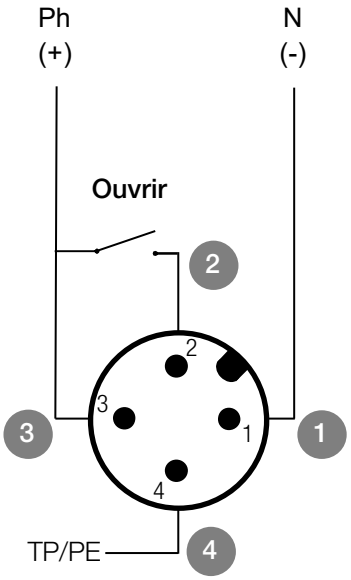
Connecteurs M12 4+8 broches pour actionneurs standard (G00)

Alimentation

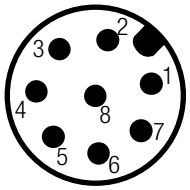
Mode 3 points modulants



Mode Tout ou rien (ON/OFF)



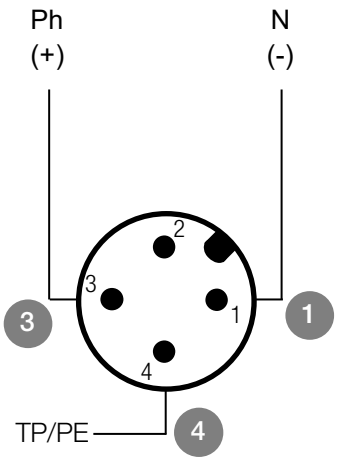
Recopie / options



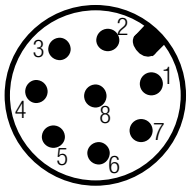
Nº	Fonction / actionneur	Maximum
1	Recopie de position (ouvert - commun)	30 V DC (1.5 A)
2	Recopie de position (ouvert - NO)	
3	Recopie de position (fermé - commun)	
4	Recopie de position (fermé - NO)	
5	Recopie de position (ouvert - NF)	
6	Recopie de position (fermé - NF)	
7	Report défaut (contact sec)	24 V DC (1.5 A)
8		

Connecteurs M12 4+8 broches pour actionneurs Modbus-RTU® (GMB)

Alimentation



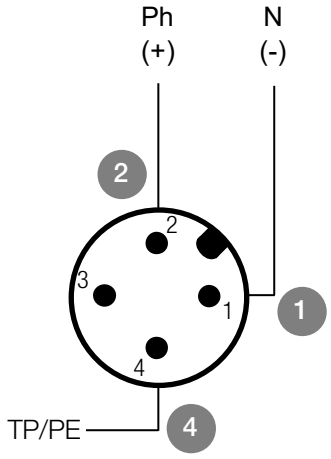
Recopie / Modbus-RTU®



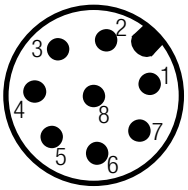
Nº	Fonction / actionneur
1	Signal Modbus-RTU® (A)
2	Signal Modbus-RTU® (0)
3	Signal Modbus-RTU® (B)
4	—
5	—
6	—
7	—
8	—

Connecteurs M12 4+8 broches pour actionneurs POSI (GP5/GP6)

Alimentation



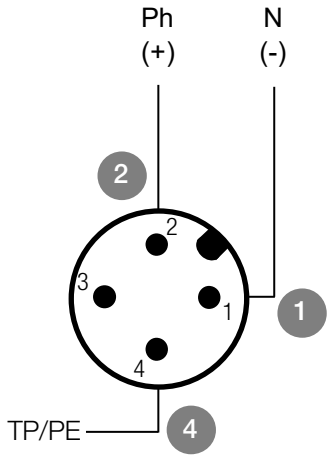
Recopie / Positionnement



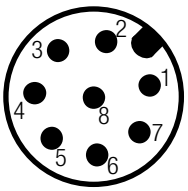
Nº	Fonction / actionneur	Maximum
1	Recopie de position (Ouvert - commun)	30 V DC (1.5 A)
2	Recopie de position (Ouvert - NO)	
3	Recopie de position (fermé - commun)	
4	Recopie de position (fermé - NO)	
5	Signal analogique POSI · consigne (-)	**Mode 0-10 V:** 1.5 A **Mode 4-20 mA:** 30 V
6	Signal analogique POSI · consigne (+)	
7	Signal analogique POSI · recopie (-)	
8	Signal analogique POSI · recopie (+)	

Connecteurs M12 4+8 broches pour actionneurs POSI (GP8)

Alimentation



Modbus-RTU® / Positionnement

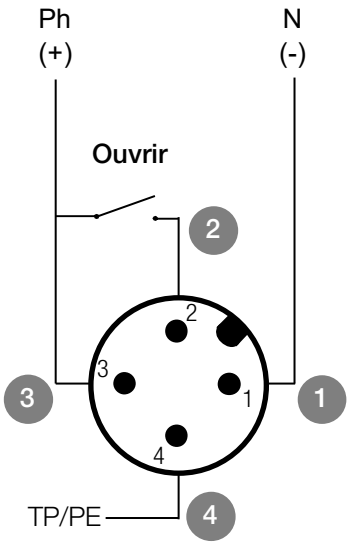


Nº	Fonction / actionneur	Maximum
1	Signal Modbus-RTU® (A)	
2	Signal Modbus-RTU® (0)	
3	Signal Modbus-RTU® (B)	
4	Signal analogique POSI · consigne (-)	**Mode 0-10 V:** 1.5 A **Mode 4-20 mA:** 30 V
5	Signal analogique POSI · consigne (+)	
6	Signal analogique POSI · recopie (-)	
7	Signal analogique POSI · recopie 0-10 V (+)	
8	Signal analogique POSI · recopie 4-20 mA (+)	

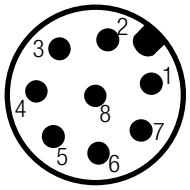
Connecteurs M12 4+8 broches pour actionneurs BBPR (GS6)

Alimentation

Mode Tout ou rien (ON/OFF)



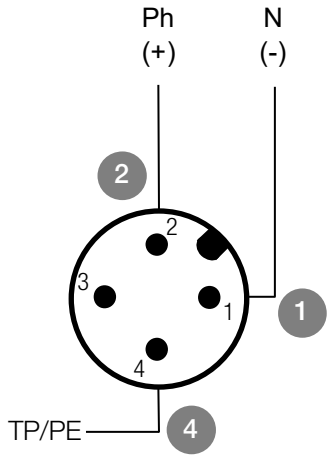
Recopie



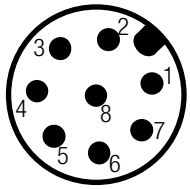
N°	Fonction / actionneur	Maximum
1	Recopie de position (Ouvert - commun)	30 V DC (1.5 A)
2	Recopie de position (Ouvert - NO)	
3	Recopie de position (fermé - commun)	
4	Recopie de position (fermé - NO)	
5	Report d'état de charge batterie (contact sec)	24 V DC (1 A)
6		
7	Report défaut (contact sec)	24 V DC (1.5 A)
8		

Connecteurs M12 4+8 broches pour actionneurs POSI-BBPR (GPS)

Alimentation



Recopie / Positionnement



N°	Fonction / actionneur	Maximum
1	Report défaut (contact sec)	24 V DC (1.5 A)
2		
3	Report d'état de charge batterie (contact sec)	24 V DC (1 A)
4		
5	Signal analogique POSI consigne (-)	**Mode 0-10 V:** 1.5 A **Mode 4-20 mA:** 30 V
6	Signal analogique POSI consigne (+)	
7	Signal analogique POSI recopie (-)	
8	Signal analogique POSI recopie 4-20 mA (+)	

? Pour obtenir la recopie de position avec un signal en 0-10 V :

- retirer le capot de l'actionneur,
- déconnecter le fil rouge (8) de la borne 13b de la carte supérieure,
- connecter ce fil sur la borne 13a de la carte supérieure.

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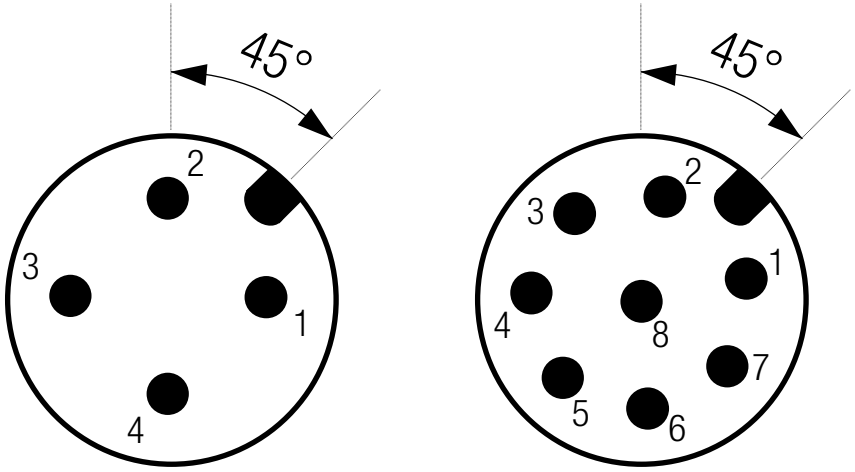
Description

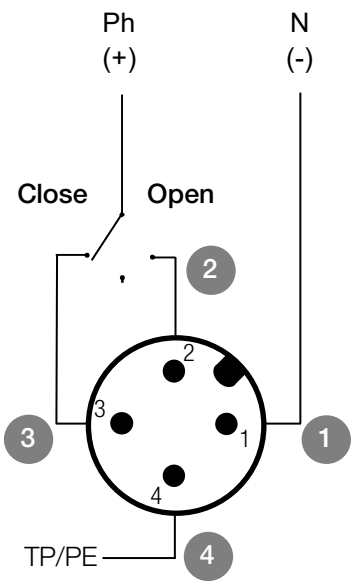


	Power supply connector	Feedback connector
Type	male connector (type A coding)	male connector (type A coding)
Cross-sectional area	0,25 mm² / AWG 24	0,25 mm² / AWG 24
Rated voltage	30 V	30 V
Rated current (40 °C)	3 A	1.5 A
Insulation resistance	> 10^8 Ω	> 10^8 Ω
Pollution degree	3	3
Overvoltage category	II	II
Insulating material	group II	group II
Degree of protection	IP68	IP68

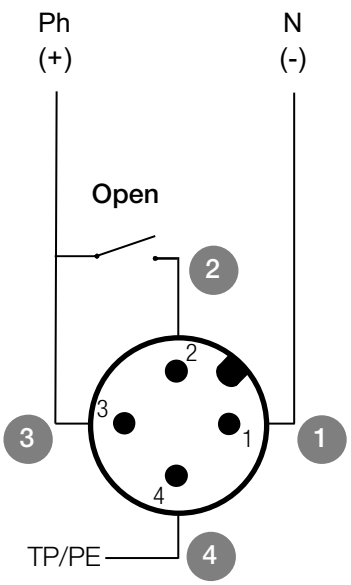
M12 4+8 pins connectors for standard actuators (G00)

Power supply

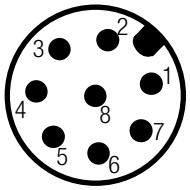
Modulating 3-point control



On-Off mode



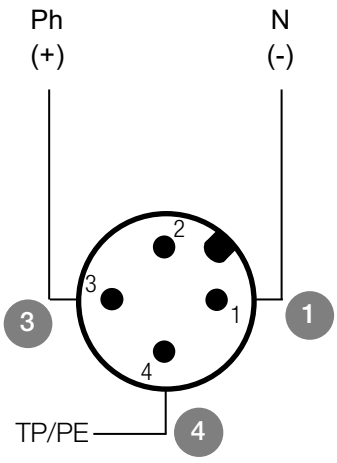
Feedback / options



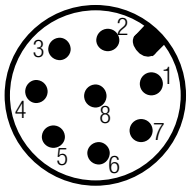
Nº	Function / actuator	Maximum
1	Position feedback (open - common)	30 V DC (1.5 A)
2	Position feedback (Open- NO)	
3	Position feedback (closed - common)	
4	Position feedback (Closed - NO)	
5	Position feedback (Open- NC)	
6	Position feedback (Closed - NC)	
7	Failure feedback (dry contact)	24 V DC (1.5 A)
8		

M12 4+8 pins connectors for Modbus-RTU® actuators (GMB)

Power supply



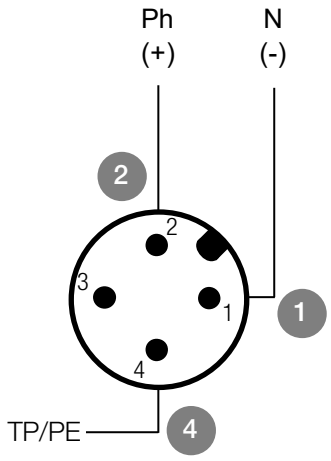
Feedback / Modbus-RTU®



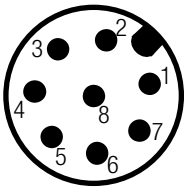
Nº	Function / actuator
1	Modbus-RTU® signal (A)
2	Modbus-RTU® signal (0)
3	Modbus-RTU® signal (B)
4	—
5	—
6	—
7	—
8	—

M12 4+8 pins connectors for POSI actuators (GP5/GP6)

Power supply



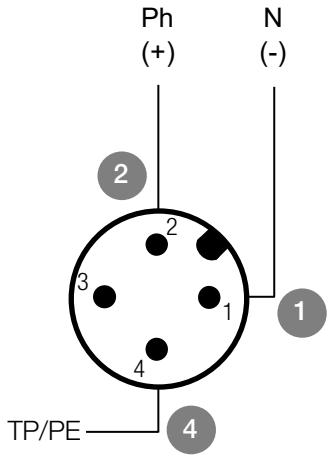
Feedback / Positioning



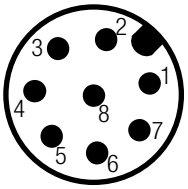
Nº	Function / actuator	Maximum
1	Position feedback (Open - common)	30 V DC (1.5 A)
2	Position feedback (Open - NO)	
3	Position feedback (Closed - common)	
4	Position feedback (Closed - NO)	
5	POSI setpoint analogue signal (-)	**0-10 V mode:** 1.5 A **4-20 mA mode:** 30 V
6	POSI setpoint analogue signal (+)	
7	POSI feedback analogue signal (-)	
8	POSI feedback analogue signal (+)	

M12 4+8 pins connectors for POSI actuators (GP8)

Power supply



Modbus-RTU® / Positioning

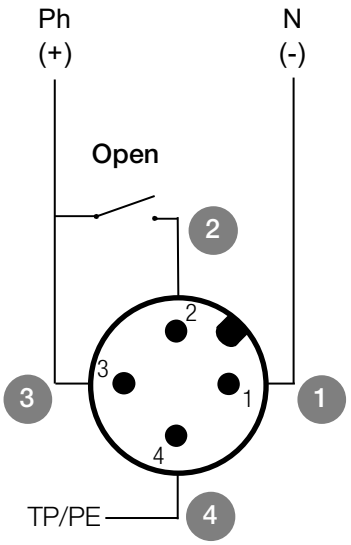


Nº	Function / actuator	Maximum
1	Modbus-RTU® signal (A)	
2	Modbus-RTU® signal (0)	
3	Modbus-RTU® signal (B)	
4	POSI setpoint analogue signal (-)	**0-10 V mode:** 1.5 A **4-20 mA mode:** 30 V
5	POSI setpoint analogue signal (+)	
6	POSI feedback analogue signal (-)	
7	POSI feedback 0-10 V analogue signal (+)	
8	POSI feedback 4-20 mA analogue signal (+)	

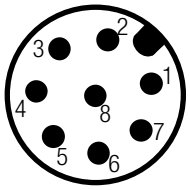
M12 4+8 pins connectors for BBPR actuators (GS6)

Power supply

On-Off mode



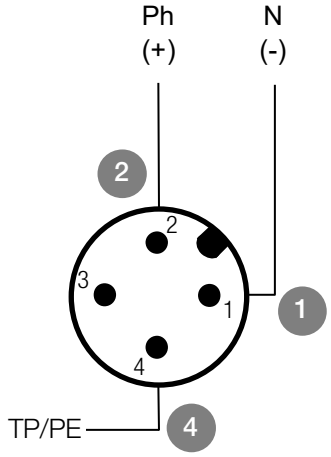
Feedback



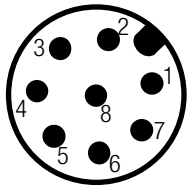
N°	Function / actuator	Maximum
1	Position feedback (Open - common)	30 V DC (1.5 A)
2	Position feedback (Open - NO)	
3	Position feedback (Closed - common)	
4	Position feedback (Closed - NO)	
5	Battery charge feedback (dry contact)	24 V DC (1 A)
6		
7	Failure feedback (dry contact)	24 V DC (1.5 A)
8		

M12 4+8 pins connectors for POSI-BBPR actuators (GPS)

Power supply



Feedback / Positioning



N°	Function / actuator	Maximum
1	Failure feedback (dry contact)	24 V DC (1.5 A)
2		
3	Battery charge feedback (dry contact)	24 V DC (1 A)
4		
5	POSI setpoint analogue signal (-)	**0-10 V mode:** 1.5 A **4-20 mA mode:** 30 V
6	POSI setpoint analogue signal (+)	
7	POSI feedback analogue signal (-)	
8	POSI feedback 4-20 mA analogue signal (+)	

To obtain the position feedback with a 0-10 V signal:

- remove the actuator cover,
- disconnect the red wire (8) from the terminal 13b of the upper board
- connect this wire on the terminal 13a of the upper board

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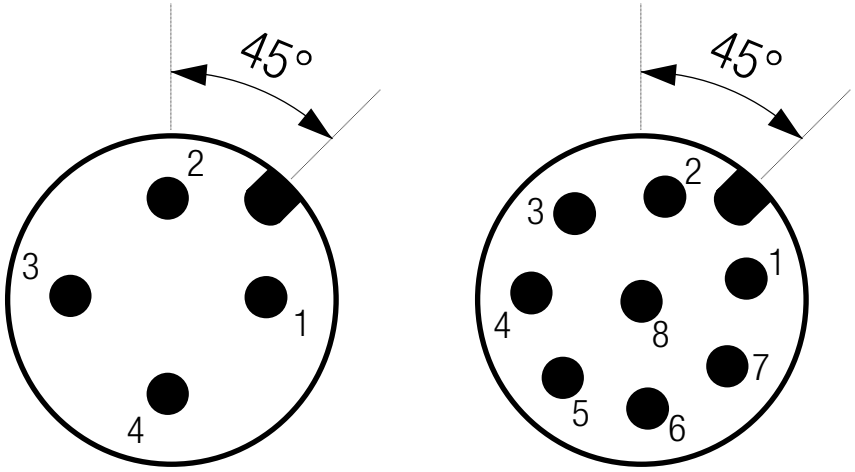
4+8-polige M12-Steckverbinder für POSI -Aktuatoren POSI (GP8) 4

4+8-polige M12-Steckverbinder für BBPR -Aktuatoren (GS6) 5

4+8-polige M12-Steckverbinder für POSI-BBPR -Aktuatoren (GPS) 5

Beschreibung

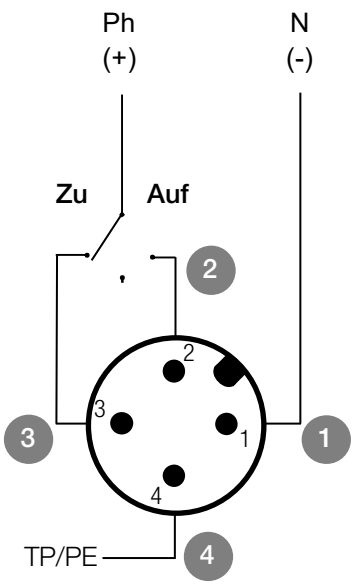


	Stromversorgungsstecker	Kopierstecker
Typ	Steckverbinder (Typ-A-Codierung)	Steckverbinder (Typ-A-Codierung)
Querschnitt	0,25 mm² / AWG 24	0,25 mm² / AWG 24
Nennspannung	30 V	30 V
Nennstrom (40 °C)	3 A	1.5 A
Isolationswiderstand	> 10^8 Ω	> 10^8 Ω
Verschmutzungsgrad	3	3
Überspannungskategorie	II	II
Isolationsmaterial	Gruppe II	Gruppe II
Schutzgrad	IP68	IP68

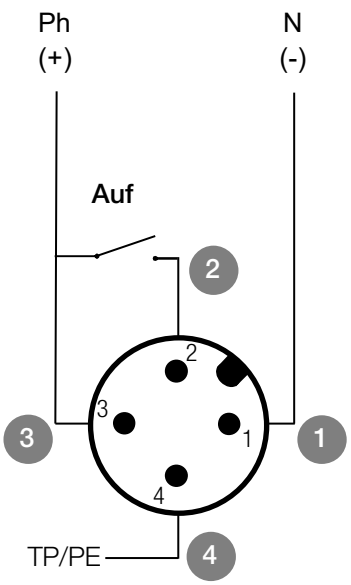
4+8-polige M12-Steckverbinder für Standard-Aktuatoren (G00)

Spannungsversorgung

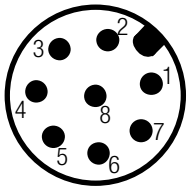
3-Punkt-Modus



Auf-Zu Modus



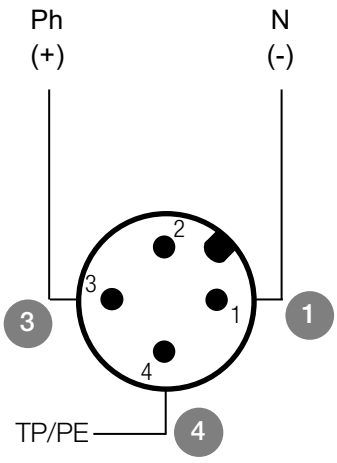
Rückmeldung / optionen



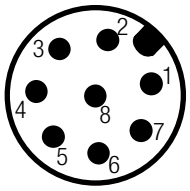
N°	Funktion / Stellantriebe	Maximum
1	Positionsrückmeldung (Öffnen - gemeinsam)	30 V DC (1.5 A)
2	Positionsrückmeldung (Öffnen - NO)	
3	Positionsrückmeldung (Schließen - gemeinsam)	
4	Positionsrückmeldung (Schließen - NO)	
5	Stellungsrückmeldung (Öffnen - NG)	
6	Positionsrückmeldung (Schließen - NG)	
7	Fehlermeldung (potentialfreier Kontakt)	24 V DC (1.5 A)
8		

4+8-polige M12-Steckverbinder für Modbus-RTU® -Aktuatoren (GMB)

Spannungsversorgung



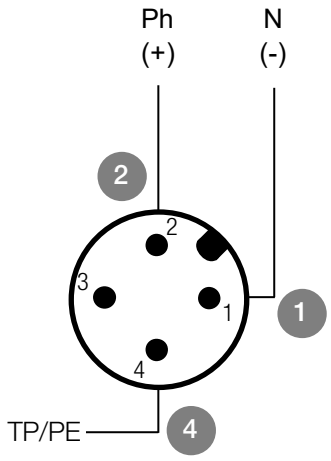
Rückmeldung / Modbus-RTU®



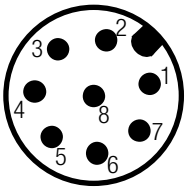
N°	Funktion / Stellantriebe
1	Modbus-RTU®-Signal (A)
2	Modbus-RTU®-Signal (0)
3	Modbus-RTU®-Signal (B)
4	—
5	—
6	—
7	—
8	—

4+8-polige M12-Steckverbinder für POSI -Aktuatoren (GP5/GP6)

Spannungsversorgung



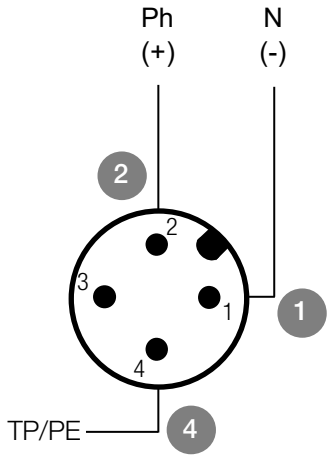
Rückmeldung / Positionierung



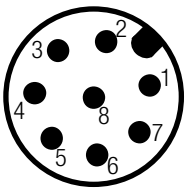
Nº	Funktion / Stellantriebe	Maximum
1	**Positionsrückmeldung (Öffnen - gemeinsam)**	30 V DC (1.5 A)
2	**Positionsrückmeldung (Öffnen - NO)**	
3	**Positionsrückmeldung (Schließen - gemeinsam)**	
4	**Positionsrückmeldung (Schließen - NO)**	
5	**Analoges Signal POSI Signalgeber (-)**	**0-10 V-Modus:** 1.5 A **4-20 mA-Modus:** 30 V
6	**Analoges Signal POSI Signalgeber (+)**	
7	**Analoges Signal POSI Rückmeldung (-)**	
8	**Analoges Signal POSI Rückmeldung (+)**	

4+8-polige M12-Steckverbinder für POSI -Aktuatoren (GP8)

Spannungsversorgung



Modbus-RTU® / Positionierung

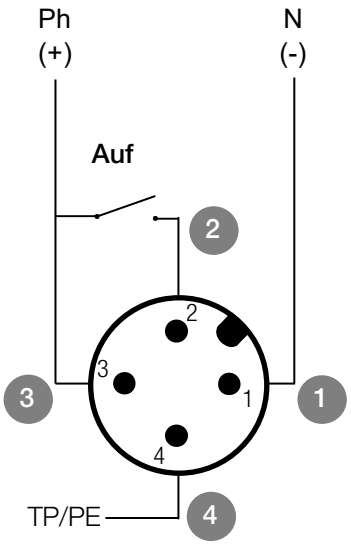


Nº	Funktion / Stellantriebe	Maximum
1	**Signal Modbus-RTU® (A)**	
2	**Signal Modbus-RTU® (0)**	
3	**Signal Modbus-RTU® (B)**	
4	**Analoges Signal POSI Signalgeber (-)**	**0-10 V-Modus:** 1.5 A **4-20 mA-Modus:** 30 V
5	**Analoges Signal POSI Signalgeber (+)**	
6	**Analoges Signal POSI Rückmeldung (-)**	
7	**Analoges Signal POSI Rückmeldung 0-10 V (+)**	
8	**Analoges Signal POSI Rückmeldung 4-20 mA (+)**	

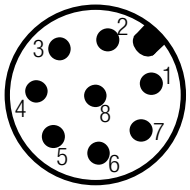
4+8-polige M12-Steckverbinder für BBPR -Aktuatoren (GS6)

Spannungsversorgung

Auf-Zu Modus



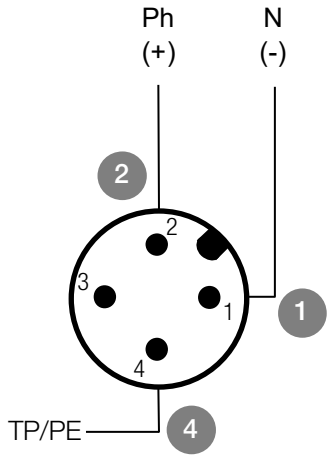
Rückmeldung



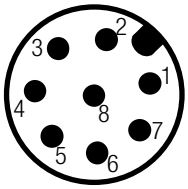
N°	Funktion / Stellantriebe	Max.
1	Positionsrückmeldung (Öffnen - gemeinsam)	30 V DC (1.5 A)
2	Positionsrückmeldung (Öffnen - NO)	
3	Positionsrückmeldung (Schließen - gemeinsam)	
4	Positionsrückmeldung (Schließen - NO)	
5	Batterieladezustandsrückmeldung (potentialfreier Kontakt)	24 V DC (1 A)
6		
7	Fehlermeldung (potentialfreier Kontakt)	24 V DC (1.5 A)
8		

4+8-polige M12-Steckverbinder für POSI-BBPR -Aktuatoren (GPS)

Spannungsversorgung



Rückmeldung / Positionierung



N°	Funktion / Stellantriebe	Maximum
1	Fehlermeldung (potentialfreier Kontakt)	24 V DC (1.5 A)
2		
3	Batterieladezustandsrückmeldung (potentialfreier Kontakt)	24 V DC (1 A)
4		
5	Analoges Signal POSI Signalgeber (-)	**0-10 V-Modus:** 1.5 A **4-20 mA-Modus:** 30 V
6	Analoges Signal POSI Signalgeber (+)	
7	Analoges Signal POSI Rückmeldung (-)	
8	Analoges Signal POSI Rückmeldung 4-20 mA (+)	

? Um die Positionsrückmeldung mit einem 0-10-V-Signal zu erhalten :

- die Abdeckung des Stellantriebs entfernen,
- Trennen Sie den roten Draht (8) von Klemme 13b der oberen Platine,
- Diesen Draht an Klemme 13a der oberen Platine anschließen.

Índice

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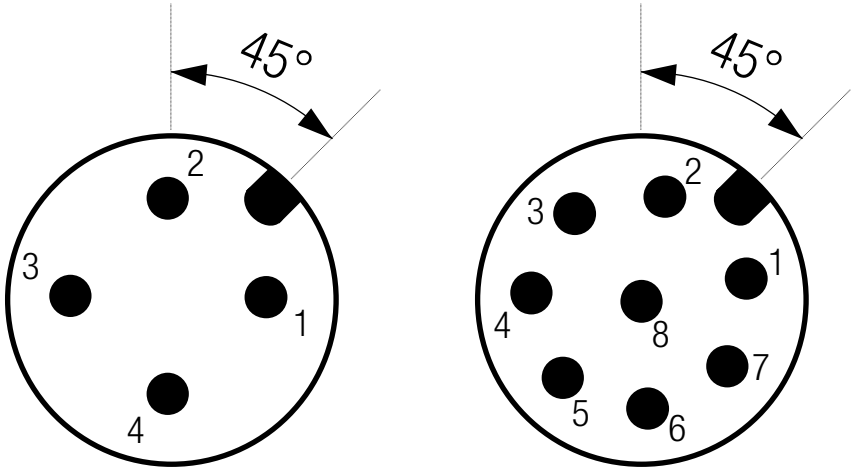
Conectores M12 de 4+8 patillas para actuadores estándar (G00) 3
Conectores M12 de 4+8 patillas para actuadores Modbus-RTU® (GMB) 3
Conectores M12 de 4+8 patillas para actuadores POSI (GP5/GP6) 4
Conectores M12 de 4+8 patillas para actuadores POSI (GP8) 4
Conectores M12 de 4+8 patillas para actuadores BBPR (GS6) 5
Conectores M12 de 4+8 patillas para actuadores POSI-BBPR (GPS) 5

Descripción

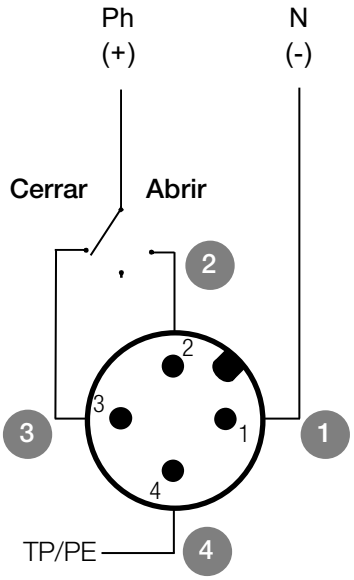


	Conector de alimentación	Conector de recopia
Tipo	Conector macho (codificación tipo A)	Conector macho (codificación tipo A)
Sección	0,25 mm² / AWG 24	0,25 mm² / AWG 24
Voltaje nominal	30 V	30 V
Intensidad nominal (40 °C)	3 A	1.5 A
Resistencia del aislamiento	> 10^8 Ω	> 10^8 Ω
Grado de polución	3	3
Categoría de sobretensión	II	II
Material aislante	groupo II	groupo II
Grado de protección	IP68	IP68

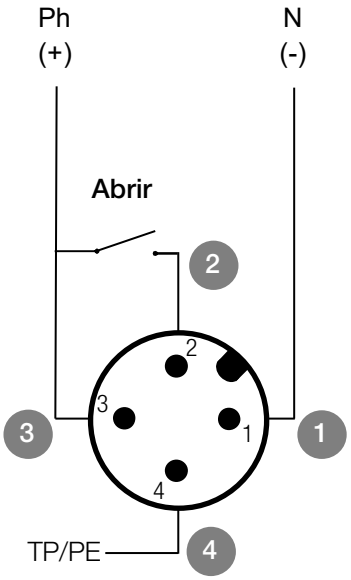
Conectores M12 de 4+8 patillas para actuadores estándar (G00)

suministro de energía

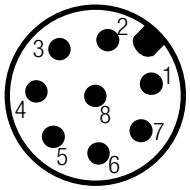
Modo 3 puntos modulantes



Modo Todo o nada (ON-OFF)



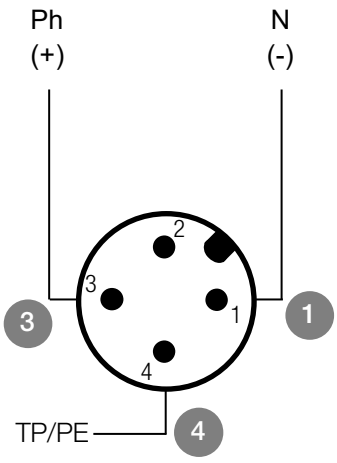
información de posición / opciones



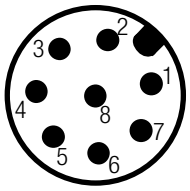
Nº	Función / actuador	Máximo
1	información de posición (abierta - común)	30 V DC (1.5 A)
2	información de posición (abierta - NA)	
3	información de posición (cerrada - común)	
4	información de posición (cerrada - NA)	
5	información de posición (abierta - NC)	
6	información de posición (cerrada - NC)	
7	retorno de defecto (contacto seco)	24 V DC (1.5 A)
8		

Conectores M12 de 4+8 patillas para actuadores Modbus-RTU® (GMB)

suministro de energía



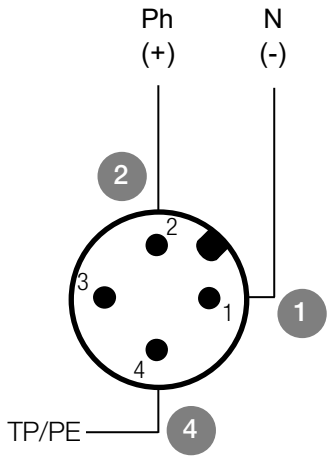
información de posición / Modbus-RTU®



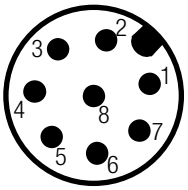
Nº	Función / actuador
1	Señal Modbus-RTU® (A)
2	Señal Modbus-RTU® (0)
3	Señal Modbus-RTU® (B)
4	—
5	—
6	—
7	—
8	—

Conectores M12 de 4+8 patillas para actuadores **POSI (GP5/GP6)**

suministro de energía



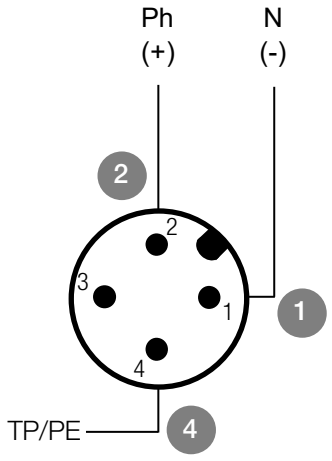
Información de posición / posicionamiento



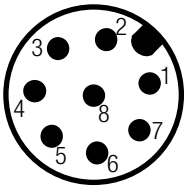
Nº	Función / actuador	Máximo
1	información de posición (abierta - común)	30 V DC (1.5 A)
2	información de posición (abierta - NA)	
3	información de posición (cerrada - común)	
4	información de posición (cerrada - NA)	
5	Señal analógica POSI · mando (-)	**Modo 0-10 V:** 1.5 A **Modo 4-20 mA:** 30 V
6	Señal analógica POSI · mando (+)	
7	Señal analógica POSI · retroalimentación (-)	
8	Señal analógica POSI · retroalimentación (+)	

Conectores M12 de 4+8 patillas para actuadores **POSI (GP8)**

suministro de energía



Modbus-RTU® / posicionamiento

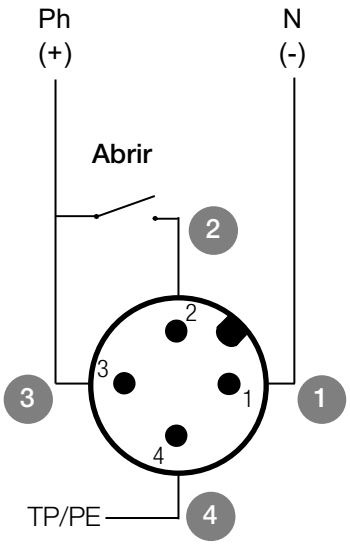


Nº	Función / actuador	Máximo
1	Señal Modbus-RTU® (A)	
2	Señal Modbus-RTU® (0)	
3	Señal Modbus-RTU® (B)	
4	Señal analógica POSI · mando (-)	**Modo 0-10 V:** 1.5 A **Modo 4-20 mA:** 30 V
5	Señal analógica POSI · mando (+)	
6	Señal analógica POSI · retroalimentación (-)	
7	Señal analógica POSI · retroalimentación 0-10 V (+)	
8	Señal analógica POSI · retroalimentación 4-20 mA (+)	

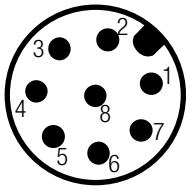
Conectores M12 de 4+8 patillas para actuadores **BBPR (GS6)**

suministro de energía

Modo Todo o nada (ON-OFF)



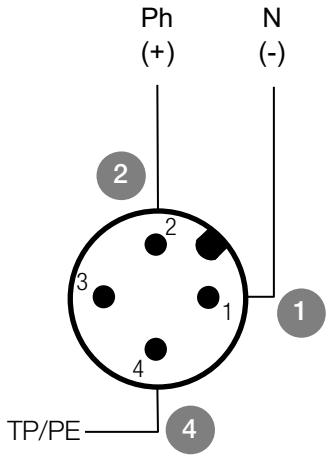
información de posición



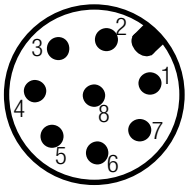
Nº	Función / actuador	Máximo
1	información de posición (abierta - común)	30 V DC (1.5 A)
2	información de posición (abierta - NA)	
3	información de posición (cerrada - común)	
4	información de posición (cerrada - NA)	
5	estado de carga de la batería (contacto seco)	24 V DC (1 A)
6		
7	retorno de defecto (contacto seco)	24 V DC (1.5 A)
8		

Conectores M12 de 4+8 patillas para actuadores **POSI-BBPR (GPS)**

suministro de energía



Información de posición / posicionamiento



Nº	Función / actuador	Máximo
1	retorno de defecto (contacto seco)	24 V DC (1.5 A)
2		
3	estado de carga de la batería (contacto seco)	24 V DC (1 A)
4		
5	Señal analógica POSI · mando (-)	**Modo 0-10 V:** 1.5 A **Modo 4-20 mA:** 30 V
6	Señal analógica POSI · mando (+)	
7	Señal analógica POSI · retroalimentación (-)	
8	Señal analógica POSI · retroalimentación 4-20 mA (+)	

Para obtener la retroalimentación de posición con una señal de 0-10 V :

- Retire la tapa del actuador,
- Desconecte el cable rojo (8) del terminal 13b de la tarjeta superior,
- Conecte este cable al terminal 13a de la tarjeta superior.