

OpenAir™ GSD Series, Non-Spring Return, 20 lb-in (2 Nm) Rotary Electronic Damper Actuators Déclencheurs électroniques rotatoires d'amortisseur Actuadores electrónicos rotatorios del apagador

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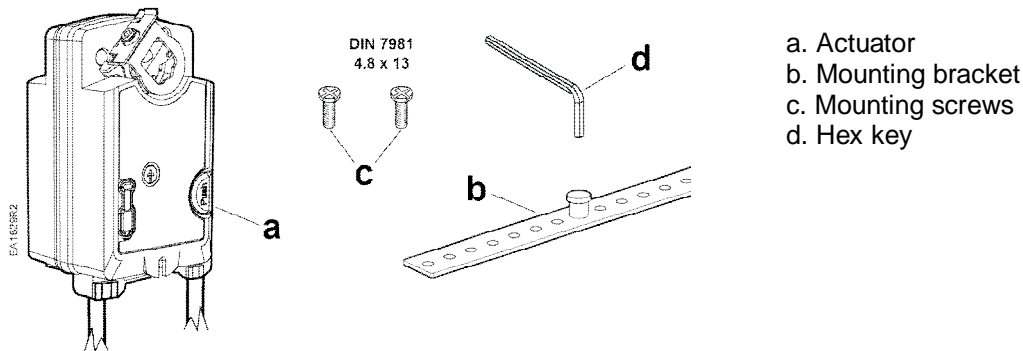


Figure 1.

Hints/Warnings	Conseils/Mise en garde	Indicaciones/Consejos
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Store these instructions with the actuator or with the plant documentation.

⚠ Warning
Do not open the actuator!

Only authorized personnel should connect actuators.

Do not expose the actuator's connecting cables to water or lay the cables in water.

Device of protection class II (protective insulation)

Device of protection class III (protective insulation)

Wiring and commissioning see *Technical Instructions 155-783*.

Cette notice est à conserver avec le servomoteur ou avec la documentation de l'installation.

⚠ Avertissement !
Ne pas ouvrir le servomoteur!
 Le branchement des servomoteurs ne doit être effectué que par un personnel qualifié.

Les câbles de raccordement du servomoteur ne doivent en aucun cas entrer en contact avec l'eau.

Classe d'isolation II (isolation de protection)

Classe d'isolation III (isolation de protection)

Câblage et mise en service : se référer aux instructions techniques du servomoteur, document n°155-783.

Conserve estas instrucciones con el actuador o con la documentación de la instalación!

⚠ Precaución
No abra el accionador!
 Sólo el personal autorizado puede conectar los actuadores.

No exponer los cables de conexión del actuador al agua ni dejarlos en contacto con ésta.

Equipo con tipo de protección II (aislamiento protegido)

Equipo con tipo de protección III (aislamiento protegido)

Cableado y puesta en marcha Ver la documentación técnica 155-783 del actuador.

**Shaft Adapter
 Mounting**

Positions de montage

Posición de montaje

⚠ IP54

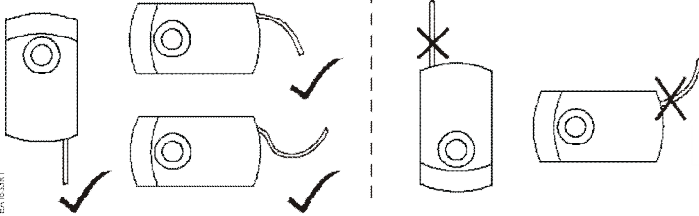


Figure 2. Acceptable Mounting Positions.

GSD16..1P

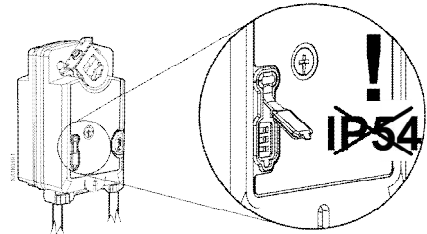
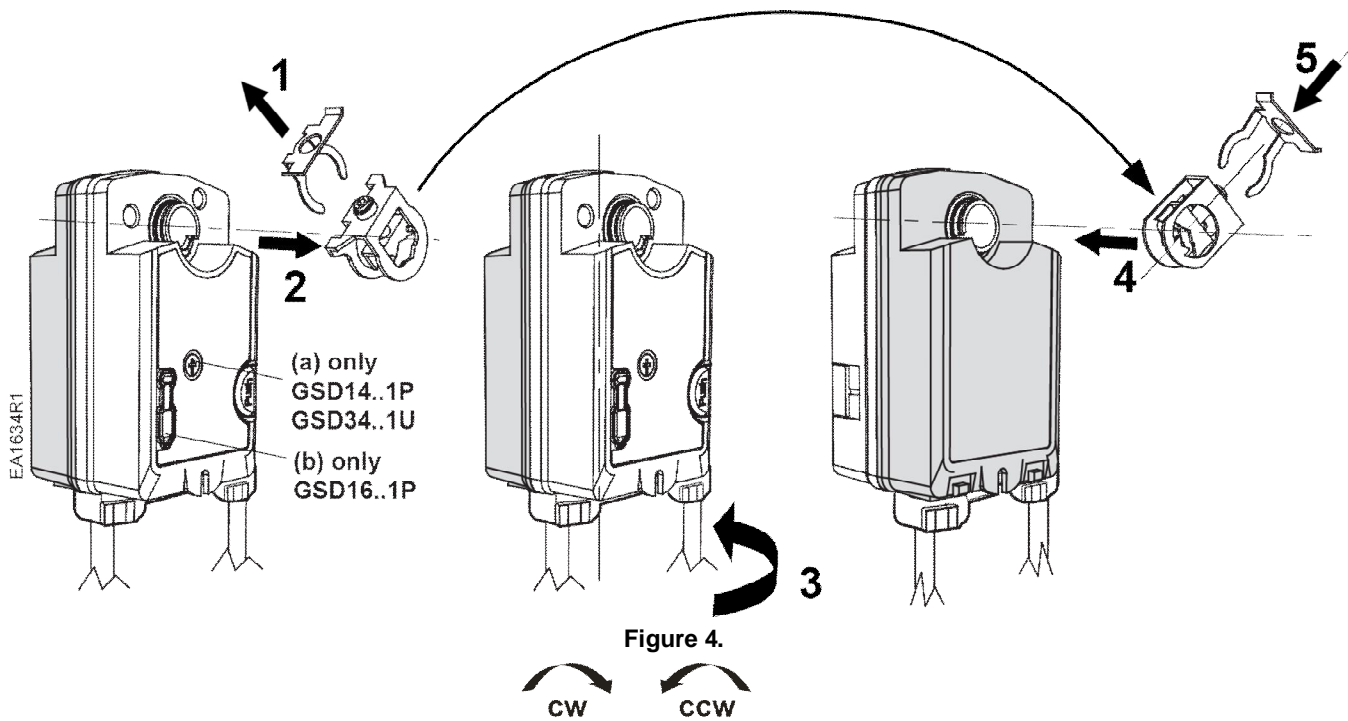


Figure 3. DIP Switch Cover Must be Closed for IP54 Listing.



(a) GSD14..1P GSD34..1U		(b) GSD16..1P	

EA1634R1

Figure 5.

Shaft Mounting Montage sur l'axe des volets Montaje sobre el eje

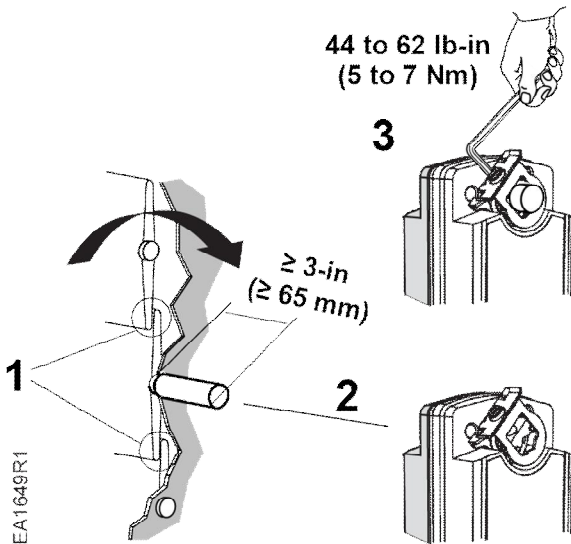


Figure 6. Clockwise Rotation with ≥ 3-inch (65 mm) Shaft.

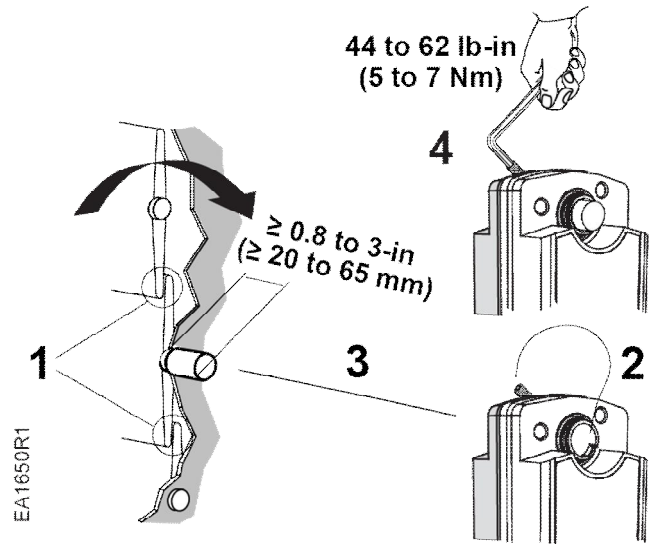


Figure 7. Clockwise Rotation with 0.8- to 3-inch (20 to 65 mm) Shaft.

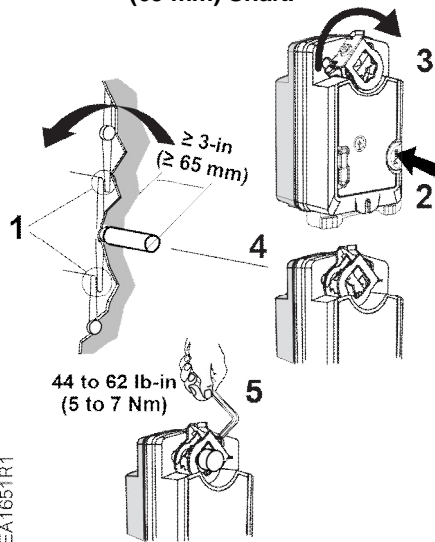


Figure 8. Counterclockwise Rotation with ≥ 3-inch (≥ 65 mm) Shaft.

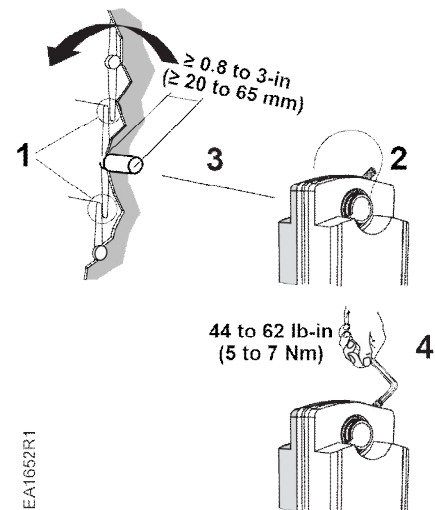


Figure 9. Counterclockwise Rotation with 0.8- to 3-inch (20 to 65 mm) Shaft.

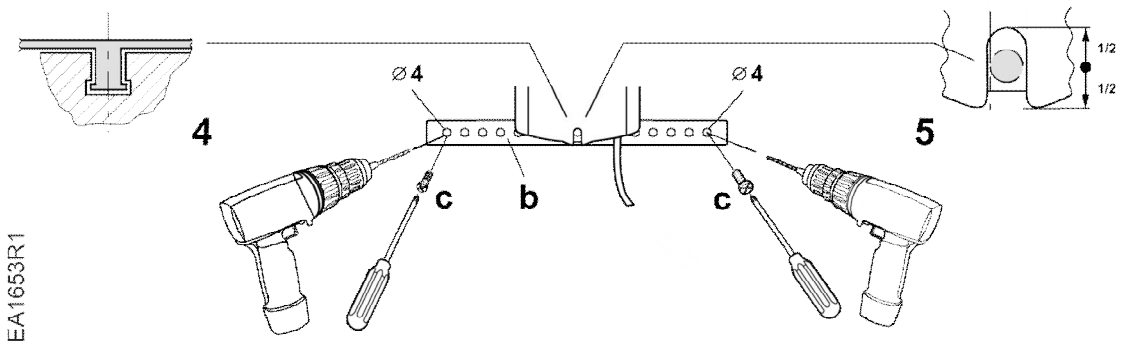
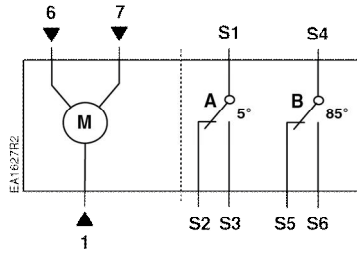


Figure 10. Anti-Rotation Bracket.

Wiring Diagrams Schémas de raccordement Diagramas de cableado

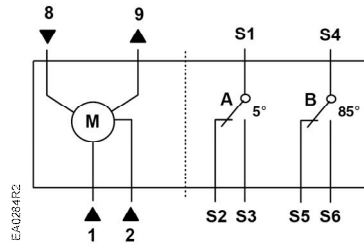
GSD14x.1P
 24 Vac/dc Power Supply
 2-Point/Floating Control



Class III

Figure 11.

GSD16x.1P
 24 Vac/dc Power Supply
 Modulating Control



Class III

Figure 12.

GSD34x.1U
 100 to 240 Vac Power Supply
 2-Point/Floating Control

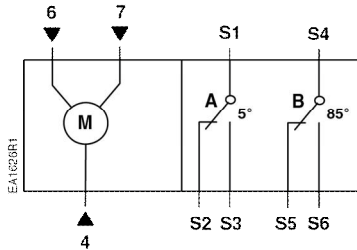
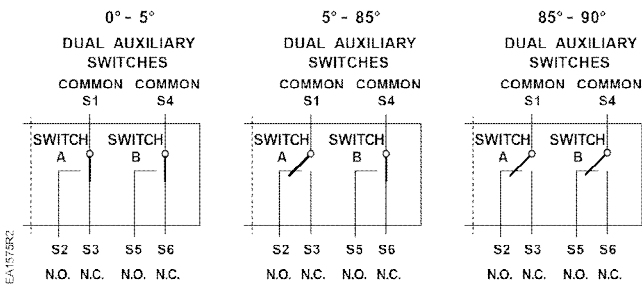


Figure 13.

Auxiliary Switches Contacts Auxiliaires Contacto Auxiliar



Actuator Position	Switch A Common S1 Connected to	Switch B Common S4 Connected to
0° to 5°	S3	S6
5° to 85°	S2	S6
85° to 90°	S2	S5



CAUTION:

Mixed switch operation to the switching outputs of both dual end switches (5° and 85°) is not permitted.

Either AC line voltage from the same phase must be applied to all six outputs of the fixed dual end switches, or UL-Class 2 voltage must be applied to all six outputs

DIP Switches	Communtateur DIP	DIP Contacto
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NOTE: The black position indicates the active switch setting.




Description	Label	Description	Function
2 to 10 Vdc		0 to 10 Vdc	Control signal selection
			Not In Use
Inverse Acting		Direct-Acting	Input signal inversion

Figure 14. DIP Switches.


Control Signal Selection


Selects the control and feedback signals

Input Signal Inversion

Allows inverting the control input signal

The arrow direction indicates opening or closing (closing or opening) when operating an actuator with a given control signal.

 = Direct acting (Factory setting)
 Input signal 0 Vdc ► fail-safe position

 = Inverse acting
 Input signal 10 Vdc ► fail-safe position

Wire Designations	Désignations de fil	Designaciones del alambre
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Table 1.

Connecting	Standard Symbol	Function	Color	Color Symbol
24 Vac/dc Actuator	1	Supply (SP)	Red	RD
	2	System Neutral	Black	BK
	6	Control signal clockwise (GSD14x.1P)	Violet	VT
	7	Control signal counterclockwise GSD14x.1P	Orange	OG
	8	Input Signal: 0 (2) to 10 Vdc or 10 to 0 (2) Vdc (GSD16x)	Gray	GY
100 to 240 Vac Actuators	9	Position Output: 0 (2) to 10 Vdc or 10 to 0 (2) Vdc (GSD16x)	Pink	PK
	4	Neutral	Lt Blue	LB
	6	Control signal clockwise (GSD34x.1U)	Black	BK
Auxiliary Switches	7	Control signal counterclockwise (GSD34x.1U)	White	WH
	S1	Switch A - Common	Gray/Red	GYRD
	S2	Switch A - N.O.	Gray/Blue	GYBU
	S3	Switch A - N.C.	Gray/Pink	GYPK
	S4	Switch B - Common	Black/Red	BKRD
	S5	Switch B - N.O.	Black/Blue	BKBU
S6	Switch B - N.C.	Black/Pink	BKPK	

Table 2.

Câbles de raccordement	Symbole Standard	Fonction	Couleur	Étiquette
Servomoteur 24 V~/-	1	Alimentation (SP)	Rouge	RD
	2	Neutre (SN)	Noir	BK
	6	Signal de commande – sens des aiguilles (GSD14x.1P)	Violet	VT
	7	Signal de commande – sens contraire des aiguilles (GSD14x.1P)	Orange	OG
	8	Signal de commande 0...10 V- ou 2...10 V- ou 10...0 V- ou 10...2 V- (GSD16x)	Gris	GY
	9	Sortie 0...10 V- ou 2-10 V- ou 10...0 V- ou 10 ... 2 V- pour indicateur de position (GSD16x)	Rose	PK
Servomoteurs 120...240 V~	4	Neutre	Bleu Cl	LB
	6	Signal de commande dans le sens des aiguilles d'une montre (GSD34x.1U)	Noir	BK
	7	Signal de commande dans le sens contraire des aiguilles d'une montre (GSD34x.1U)	Blanc	WH
Commutateurs auxiliaires	S1	Commutateur A - Commun	Gris/Rouge	GYRD
	S2	Commutateur A - N.O.	Gris/Bleu	GYBU
	S3	Commutateur A - N.C.	Gris/Rose	GYPK
	S4	Commutateur B - Commun	Noir/Rouge	BKRD
	S5	Commutateur B - N.O.	Noir/Bleu	BKBU
	S6	Commutateur B - N.C.	Noir/Rose	BKPK

Table 3.

Conexión	Símbolo estándar	Función	Color	Color Abreviatura
Accionador 24V ca/cc	1	Suministro de corriente (SP)	Rojo	RD
	2	Sistema neutral	Negro	BK
	6	Señal de control-sentido de las agujas del reloj (GSD14x.1P)	Violeta	VT
	7	Señal de control - sentido contrario a las agujas del reloj (GSD14x.1P)	Naranja	OG
	8	Señal de entrada 0 a 10V o 2 a 10V o 10 a 0V o 10 a 2V (GSD16x)	Gris	GY
	9	Salida de 0 a 10V o 2 a 10V o 10 a 0V o 10 a 2V cc para indicador de posición (GSD16x)	Rosado	PK
Accionador 120...240V ca	4	Neutro	Azul claro	LB
	6	Señal de control en sentido horario (GSD34x.1U)	Negro	BK
	7	Señal de control en sentido antihorario (GSD34x.1U)	Blanco	WH
Conmutadores Auxiliares	1	Switch A - Común	Gris/Rojo	GYRD
	2	Switch A - N.O.	Gris/Azul	GYBU
	3	Switch A - N.C.	Gris/Rosado	GYPK
	4	Switch B - Común	Negro/Rojo	BKRD
	5	Switch B - N.O.	Negro/Azul	BKBU
	6	Switch B - N.C.	Negro/Rosado	BKPK

Retrofit Wiring

Table 4.

Modulating Control (2 to 10 Vdc) Function	Siemens GSD161.1P		Belimo CMB24-SR-R	
	Color	Number	Color	Number
Supply (24 Vac/dc)	Red	1	Red	2
Common	Black	2	Black	1
0(2) to 10 Vdc Input	Gray	8	White	3
0(2) to 10 Vdc Feedback	Pink	9	Orange	5
2-Position/Floating Control (24 Vac/Vdc) Function	Siemens GSD141.1P		Belimo CMB24-3	
	Color	Number	Color	Number
Common	Red	1	Black	1
Control Signal CW	Violet	6	Red	2
Control Signal CCW	Orange	7	White	3
2-Position/Floating Control (100 to 240 Vac) Function	Siemens GSD341.1U		Belimo CMB120-3	
	Color	Number	Color	Number
Common	Lt Blue	4	N/A	1
Control Signal CW	Black	6	N/A	2
Control Signal CCW	White	7	N/A	3

Postcâblage

Table 5.

Commande progressive (2...10 V-)	Siemens GSD161.1P		Belimo CMB24-SR-R	
	Couleur	Numéro	Couleur	Numéro
Alimentation (24 V~/-)	Rouge	1	Rouge	2
Commun	Noir	2	Noir	1
Entrée 0(2)...10 V-	Gris	8	Blanc	3
Retroaction 0(2)...10 V-	Rose	9	Orange	5
Fonction Commande TOR/Flottante (24 V~/-)	Siemens GSD141.1P		Belimo CMB24-3	
	Couleur	Numéro	Couleur	Numéro
Commun	Rouge	1	Rouge	1
Signal de commande dans le sens des aiguilles d'une montre	Violet	6	Noir	2
Signal de commande dans le sens contraire des aiguilles d'une montre	Orange	7	Blanc	3
Fonction Commande TOR/Flottante (120...240 V~/-)	Siemens GSD341.1U		Belimo CMB120-3	
	Couleur	Numéro	Couleur	Numéro
Commun	Bleu Cl	4	N/A	1
Signal de commande dans le sens des aiguilles d'une montre	Blanc	6	N/A	2
Signal de commande dans le sens contraire des aiguilles d'une montre	Noir	7	N/A	3

