

# **GEIGER**

## **ANTRIEBSTECHNIK**

#### Content

## WITH MECHANICAL OR ELECTRONIC LIMIT STOP

## Venetian blind motor series GJ56..

Our electric motors GJ56.. with mechanical limit stop and GJ56.. E with electronic limit stop have proved successful in daily use millions of times. Both drives are characterized by their reliable and proven components, the safe and quick installation in all standard head rails and the optimum torque values.

## GJ56.. - Noise reduction



## Standard Venetian blind motors

In the past, higher priority was usually given to functionality rather than to the sound power level of the motor.



#### GJ56..

#### Noise-optimized gear through:

- Application of new materials
- New material combinations
- Optimized processing quality

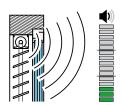
These measures allowed us to reduce the sound pressure level up to 6 dB(A).

#### Advantages:

- Better running smoothness
- ▶ Lower noise emission level on the facade
- ► Lower noise emission level inside the room
- ► The motors are designed so that the low noise level is maintained throughout their lifetime.

Available up to 10 Nm.

## GJ56..-SILENT



#### GJ56.. with Silent Brake for indoor use

The GJ56.. brake which has proven its reliability millions of times has been optimized through further technical development so that the switching operation is now noticeably quieter.

#### Your advantage:

- Lower noise emission level on the facade when starting/stopping the motor
- Lower noise emission level inside the room
- Switching noise offering now a quite pleasant sound quality

Suitable for all electronic and mechanical motors between 3 and 10 Nm. The GJ56.. drives with Silent Brake are only suitable for indoor use.

# GJ56.. with mechanical end stop

The GEIGER GJ56.. with mechanical end stop have proved their quality millions of times and are operated worldwide with Venetian blinds.

## **Advantages:**

- ▶ Safe adjustment of the end stops with self-locking push-buttons
- Limit switch range: 80 rotations
- ▶ Safe fitting in all current head rails no tools needed
- ► Pluggable connection cable
- Available with 3, 6, 10, 16 and 20 Nm torque



Technical data GJ56 with mechanical end stop (standard)					
	GJ5603k	GJ5606k	GJ5610	GJ5620	
Voltage	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz	
Current	0,40 A	0,40 A	0,60 A	0,85 A	
Cos Phi (cosφ)	> 0,95	> 0,95	> 0,95	> 0,95	
Inrush current (factor)	x 1,2	x 1,2	x 1,2	x 1,2	
Power	90 W	93 W	135 W	190 W	
Torque	3 Nm	6 Nm	10 Nm	2 x 10 Nm	
Speed	26 rpm	26 rpm	26 rpm	26 rpm	
Protection class	IP 54	IP 54	IP 54	IP 54	
Limit switch range	80 rotations	80 rotations	80 rotations	80 rotations	
Operating mode	S2 4 min	S2 4 min	S2 4 min	S2 4 min	
Sound pressure level 1)	34 dB(A)	34 dB(A)	35 dB(A)	40 dB(A)	
Total length	299 mm	299 mm	309 mm	336 mm	
Diameter	55 mm	55 mm	55 mm	55 mm	
Weight	approx 1,50 kg	approx 1,50 kg	approx 1,70 kg	approx 2,20 kg	

Technical data GJ56 with mecha	Special model		
	GJ5606	GJ5616 <sup>2)</sup>	GS5624 <sup>2)</sup>
Voltage	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz
Current	0,40 A	0,70 A	0,40 A
Cos Phi (cosφ)	> 0,95	> 0,95	> 0,95
Inrush current (factor)	x 1,2	x 1,2	x 1,2
Power	90 W	150 W	90 W
Torque	6 Nm	2 x 8 Nm	2 x 12 Nm
Speed	26 rpm	26 rpm	5 rpm
Protection class	IP 54	IP 54	IP 54
Limit switch range	80 rotations	80 rotations	80 rotations
Operating mode	S2 6 min	S2 6 min	S2 6 min
Sound pressure level 1)	34 dB(A)	40 dB(A)	-
Total length	304 mm	336 mm	311 mm
Diameter	55 mm	55 mm	55 mm
Weight	approx 1,60 kg	approx 2,20 kg	approx 1,70 kg

<sup>&</sup>lt;sup>1)</sup> The average sound pressure level data are intended for guidance only. The values were determined by GEIGER at a distance of 1 m, with a hanging motor at idle speed and averaged over 10 seconds. There is no reference to any specific test standard.

<sup>2)</sup> Without VDE certificate

## GJ5606-DuoDrive

The GJ56..-DuoDrive has been designed to set the slat angle of the Venetian blinds with highest precision and to ensure a fast closing/opening of the blinds - two apparently contradictory requirements united in one motor.

The solution lies in the two different speeds of the DuoDrive:

- 39 revolutions per minute for the blind movements (50% faster than before)
- 9 revolutions per minute for the rotation of the slats (65% slower than before)

This could be achieved through an automatic switching gear unit which switches from 9 to 39 revolutions per minute by each change of direction after a 3/4 rotation.

## Advantages of the fast travel movements:

- Fast protection of the blind in case of wind alarm
- Additional comfort through shorter travel times
- More driving cycles before activation of the thermal protection
- ▶ Time savings by commissioning of the Venetian blind

## Advantages of the slow rotation of the slats:

- ▶ Triples the available time for positioning the slats
- ▶ Ideal for automated daylight control without SMI
- > Optimally configured for a sensitive slat adjustment by hand



Technical data GJ5606-DuoDrive with mechanical end stop				
Voltage	230 V~/50 Hz			
Current	0,65 A			
Cos Phi (cosφ)	> 0,95			
Inrush current (factor)	x 1,2			
Power	145 W			
Torque	6 Nm			
Speed	9 rpm / 39 rpm			
Protection class	IP 54			
Limit switch range	80 rotations			
Operating mode	S2 4 min.			
Total length (with coupling)	346,5 mm			
Diameter	55 mm			
Weight	approx 2,10 kg			

## GJ56..-T90 - for high temperature ranges

This Venetian blind motor has been optimized for use in high temperature ranges. Through the use of special materials this motor can be operated up to  $+90^{\circ}$  C.

The requirements of the Cahier 3677 - CSTB, class B -

- 8000 cycles at room temperature
- 2000 cycles at 75° C
- 500 cycles at 85° C

have been fulfilled.



These tests were realized by GEIGER on a test setup according EN14202 at constant nominal load of 6 Nm - which exceeds by far the given requirements - and successfully completed.

Based on these positive results we guarantee that the GJ5606 motor can be safely operated in a temperature range from  $-20^{\circ}$  C to  $+90^{\circ}$  C.

The current standard connecting cables are approved in accordance with EN60335-1, section 25 up to 60° C.

However you can order special connecting cables that are approved up to 90° C.

Please find below the item numbers:

- M56E451 (50 cm with STAS 3 plug)
- M56E450 (90 cm with STAS 3 plug)
- M56E452 (300 cm open-ended)

Technical data GJ56T90 with n (run-time optimized version)			
( ,	GJ5606-T90	GJ5616-T90	
Voltage	230 V~/50 Hz	230 V~/50 Hz	
Current	0,40 A	0,70 A	
Cos Phi (cosφ)	> 0,95	> 0,95	
Inrush current (factor)	x 1,2	x 1,2	
Power	90 W	150 W	
Torque	6 Nm	16 Nm	
Speed	26 rpm	26 rpm	
Protection class	IP 54	IP 54	
Limit switch range	80 rotations	80 rotations	
Operating mode	S2 6 min	S2 6 min	
Total length	304 mm	336 mm	
Diameter	55 mm	55 mm	
Weight	approx 1,60 kg	approx 2,20 kg	

## GJ56.. E07 SMI - Premium electronic drive

- Adjustable end positions with any standard setting cable
- With limit stop switch for safety shutdown
- With optional limit stop switch as reference point for belt length adjustment
- Dynamic torque shutdown
- Parallel connection and individual control of max. 16 SMI motors with SMI actuator
- Starting time: about 100 ms
- Suitable for Venetian blind systems with automatic solar tracking
- With 3, 6, 10 and 20 Nm, different cable lengths are available



# Advantages - 5-fold safety through:

- Proven engine and braking system
- ▶ Motor intelligence: torque shutdown in case of overload
- Emergency shutdown via limit stop switch: operating errors are excluded
- ► Feedback "position" to building control
- ► Feedback "defect" to building control

Technical data GJ56 E06 and E07 with electronic end stop					
	GJ5603k E	GJ5606k E	GJ5606 E <sup>1)</sup>	GJ5610 E	GJ5620 E
Voltage	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz
Current	0,40 A	0,40 A	0,40 A	0,60 A	0,85 A
Cos Phi (cosφ)	> 0,95	> 0,95	> 0,95	> 0,95	> 0,95
Inrush current (factor)	x 1,2	x 1,2	x 1,2	x 1,2	x 1,2
Power	90 W	93 W	90 W	135 W	190 W
Torque	3 Nm	6 Nm	6 Nm	10 Nm	2 x 10 Nm
Speed	26 rpm	26 rpm	26 rpm	26 rpm	26 rpm
Protection class	IP 54	IP 54	IP 54	IP 54	IP 54
Limit switch range	> 200 rotations	> 200 rotations	> 200 rotations	> 200 rotations	> 200 rotations
Operating mode	S2 4 min.	S2 4 min.	S2 6 min.	S2 4 min.	S2 4 min.
Total length (with coupling)	319,5 mm	319,5 mm	324,5 mm	329,5 mm	356,7 mm
Diameter	55 mm	55 mm	55 mm	55 mm	55 mm
Weight	approx 1,50 kg	approx 1,50 kg	approx 1,60 kg	approx 1,70 kg	approx 2,20 kg

 $<sup>^{1)}</sup>$  run-time optimized motor

## GJ56.. E14 Performance

- Adjustable end positions with any setting cable
- With limit stop switch for safety shutdown
- With optional limit stop switch as reference point for belt length adjustment
- Dynamic torque shutdown
- Parallel connection
- Starting time: about 100 ms
- With 6, 10 and 20 Nm, different cable lengths are available

## Your advantage - 5-fold safety through:

- Proven engine and braking system
- Motor intelligence: torque shutdown in case of overload
- Shutdown via limit stop switch optionally possible
- ▶ Referencing can be enabled/disabled
- ► Anti-freeze protection



## GJ56.. E14 Perfection

- Adjustable end positions with any setting cable
- Adjustable intermediate position (shade position)
- With limit stop switch for safety shutdown
- With optional limit stop switch as reference point for belt length adjustment
- Dynamic torque shutdown
- Parallel connection
- Starting time: about 100 ms
- With 6, 10 and 20 Nm, different cable lengths are available

# Your advantage - 6-fold safety through:

- Proven engine and braking system
- Motor intelligence: torque shutdown in case of overload
- ▶ Shutdown via limit stop switch optionally possible
- Adjustable intermediate position (shade position)
- ▶ Referencing can be enabled/disabled
- Anti-freeze protection



Technical data GJ56 E14 with electronic end stop (standard electronic)					
	GJ5606k E14	GJ5606 E14 <sup>1)</sup>	GJ5610 E14	GJ5620 E14	
Voltage	230 V~/50 Hz	230V~/50Hz	230 V~/50 Hz	230 V~/50 Hz	
Current	0,40 A	0,40 A	0,60 A	0,85 A	
Cos Phi (cosφ)	> 0,95	> 0,95	> 0,95	> 0,95	
Inrush current (factor)	x 1,2	x 1,2	x 1,2	x 1,2	
Power	93 W	90 W	135 W	190 W	
Torque	6 Nm	6 Nm	10 Nm	2 x 10 Nm	
Speed	26 rpm	26 rpm	26 rpm	26 rpm	
Protection class	IP 54	IP 54	IP 54	IP 54	
Limit switch range	∞	∞	∞	∞	
Operating mode	S2 4 min.	S2 6 min.	S2 4 min.	S2 4 min.	
Total length (with coupling)	324,5 mm	329,5 mm	334,5 mm	361,7 mm	
Diameter	55 mm	55 mm	55 mm	55 mm	
Weight	approx. 1,50 kg	approx. 1,60 kg	approx. 1,70 kg	approx. 2,20 kg	
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<sup>1)</sup> Run-time optimized version-

# GJ56.. AIR - Electronic drive Smart Home Ready

- Adjustable end positions with any AIR transmitter
- With limit stop switch for safety shutdown
- With optional limit stop switch as reference point for belt length adjustment
- Middle position with adjustable slat angle
- Dynamic torque shutdown
- Parallel connection
- With 6, 10 and 20 Nm, different cable lengths are available



# Your advantage - 5-fold safety through:

- ► Bidirectional radio system
- Proven engine and braking system
- ▶ Motor intelligence: torque shutdown in case of overload
- ▶ Shutdown via limit stop switch: operating errors are excluded
- Anti-freeze protection

Technical data GJ56 AIR with bidirectional radio-controlled end stop					
	GJ5606k F03	GJ5610 F03	GJ5620 F03		
Voltage	230 V~/50 Hz	230 V~/50 Hz	230 V~/50 Hz		
Current	0,40 A	0,60 A	0,85 A		
Cos Phi (cosφ)	> 0,95	> 0,95	> 0,95		
Inrush current (factor)	x 1,2	x 1,2	x 1,2		
Power	93 W	135 W	190 W		
Torque	6 Nm	10 Nm	2 x 10 Nm		
Speed	26 rpm	26 rpm	26 rpm		
Protection class	IP 54	IP 54	IP 54		
Limit switch range	> 200 rotations	> 200 rotations	> 200 rotations		
Operating mode	S2 4 min.	S2 4 min.	S2 4 min.		
Total length (with coupling)	319,5 mm	329,5 mm	356,7 mm		
Diameter	55 mm	55 mm	55 mm		
Weight	approx 1,50 kg	approx 1,70 kg	approx 2,20 kg		

 ${\bf Subject\ to\ technical\ modifications}$ 



The name GEIGER Antriebstechnik is synonymous worldwide for drive solutions in the sun protection area.

Today we are with about 320 employees one of the leading manufacturers of mechanical and electrical drives for Venetian blinds, awnings and rolling shutters.

GEIGER is a well-known, mid-sized company which offers worldwide drive components for the sun protection systems.

