

**Declaration
of manufacturer Gears**

Series	446F6.. / 446F7.. Reversible bevel gearbox 3:1/ with quick assembly system
Test Lab / Client	Gerhard Geiger GmbH & Co.KG., Schleifmühle 6, 74321 Bietigheim-Bissingen, Germany
Standard	DIN EN 14203 (D) July 2004 , Blinds and Shutters – Capability for use of gears with crank handle – Requirements and test methods

Test data

Family of products	rolling shutters (EN 13659)		
Gear type	bevel gear	Reduction ratio i	3:1
Torque M_s [Nm]	9	Efficiency η (M_s)	0,62

Technical specifications

Forced operation test	carried		
Test effort P_F [N]	60 (10,8 Nm)	(Working radius 0,18m)	
Cycles	15	Passed	Yes
Number of achieved cycles	3.000 (endurance class 1)		

This gear series is in conformity with the requirements of the directive DIN EN 14203 dated July 2004.

Divergence from the norm:

Due to the strong thermal load at the test rig, the outflow of tiny amounts of lubricants is unavoidable.

Bietigheim-Bissingen, 18.03.2026

Roland Kraus (General Management)