

**Declaration of manufacturer
Mechanical Gears**

Series	456F6.. switchable
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	4:1
Torque M_s [Nm]	12	Efficiency η (M_s)	0,63

Test results

Forced operation test	carried out		
Test effort P_F [N]	60 (10,8 Nm) (Working radius 0,18m)		
Cycles	15	Passed	Yes

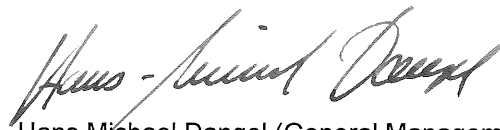
Number of achieved cycles	3.000 (endurance class 1)
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This gear series is in conformity with the requirements of the directive DIN EN 14203 dated July 2004.

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, 22.08.2014



Hans Michael Dangel (General Management)