

Declaration of manufacturer Mechanical gears

Series	419F...
Test Lab / Client	Gerhard Geiger GmbH & Co., 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	Worm gear	Reduction ratio i	8:1
Torque M_S [Nm]	16	Efficiency η (M_S)	0,36
For folding arm awning			
Torque M_{SN} [Nm]	X	Torque M_{SP} [Nm]	X

Technical data / Test results: forced operation test

Forced operation test carried out			
Test effort P_F [N]	60 (10,80 Nm)		
Cycles	15	Passed	YES

Technical data / Test results: endurance test

Prüfmoment M_S [Nm]	16		
For folding arm awning			
Torque 90% of travel M_{SN} [Nm]	X	Torque 10% of travel M_{SP} [Nm]	X
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, 06.12.2010

Hans-Michael Dangel (General Management)