

Declaration of manufacturer Mechanical gears

Series	431F5		
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

Familiy of products	Venetian blind (EN 13659)				
Gear type	Bevel gear	Reduction ratio i	1,2:1		
Torque M _S [Nm]	2,00	Efficiency η (M _S)	0,61		
For folding arm awning					
Torque M _{SN} [Nm]	X	Torque M _{SP} [Nm]	Х		

Technical data / Test results: forced operation test

Toolinical data / Tool Toolino Torous operation tool					
Forced operation test not carried out					
Test effort P _F [N]	X				
Cycles	X	Passed	Х		

Technical data / Test results: endurance test

Prüfmoment M _S [Nm]	2,00				
For folding arm awning					
Torque 90% of travel M _{SN} [Nm]		Х	Torque 10% of travel M _{SP} [Nm]	X	
Number of achieved cycles	10.000 (endurance class 3)				

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.

Jan Suil Buyl

Bietigheim-Bissingen, 01.12.2010

Hans-Michael Dangel (General Management)