

Declaration of manufacturer Mechanical gears

Series	410F		
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	Folding arm awings (EN 13561)				
Gear type	Bevel gear	Reduction ratio i	3:1		
Torque M _S [Nm]	X	Efficiency η (M _S)	0,68		
For folding arm awning					
Torque M _{SN} [Nm]	5,20	Torque M _{SP} [Nm]	20,80		

Technical data / Test results: forced operation test

Forced operation test carried out					
Test effort P _F [N]	120 (20,60 Nm)				
Cycles	35	Passed	YES		

Technical data / Test results: endurance test

Prüfmoment M _S [Nm]	X					
For folding arm awning						
Torque 90% of travel M _{SN} [Nm] 5,2		5,20	Torque 10% of travel M _{SP} [Nm]	20,80		
Number of achieved cycles	7.000 (endurance class 2)					

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 line Dupl

Bietigheim-Bissingen, 01.12.2010

Hans-Michael Dangel (General Management)