

Declaration of manufacturer Mechanical gears

Series	414F (3:1)	
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	
	gears with crank handle – Requirements and test methods	

Test data

Familiy of products	Rolling shutter / other awnings		
Gear type	Worm gear	Reduction ratio i	3:1
Torque M _S [Nm]	3,5	Efficiency η (M _S)	0,35

Test results

Forced operation test carried out				
Test effort P _F [N]	60 (10,8 Nm) (Working radius 0,18 m)			
Cycles	35	Passed	YES	

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 Duck

Bietigheim-Bissingen, 08.12.2009

Hans-Michael Dangel (General Management)