

FUNCTIONAL SAFETY DATA SHEET[®]

Manufacturer	Bopp & Reuther Messtechnik GmbH Am Neuen Rheinhafen 4 67346 Speyer Germany
Product(s)	OaP oval wheel meters with AG19 or AG 20 pulse pick up
Intended application	The above listed product(s) are used to measure the flow of liquids
Basis of testing	IEC 61508:1999
Report	The test report 195.101.4-1 of 2008-08-07 is an integral part of this data sheet
Functional Safety Data	
Type	A
Hardware Fault Tolerance	0
Safe Failure Fraction	91.8 %
Safe Detected Failure Rate	0 /hour
Safe Undetected Failure Rate	155.8E-9 /hour
Dangerous Detected Failure Rate	0 /hour
Dangerous Undetected Failure Rate	72.51E-9 /hour
No Effect Failure Rate	653.1E- /hour
MTTFd	1574 years
MTTFs	141 years
PFD	See report for sample calculations
PFS	See report for sample calculations
Fit for use in Safety Integrity Level	2
Fit for use in Spurious Trip Level™	2

2008-08-11

Date

Dr. M.J.M. Houtermans