

CERTIFICATE FUNCTIONAL SAFETY DATA SHEET®

Product(s)	SITRANS P310, P DS III, P410
Manufacturer	Siemens
Intended application	The above listed products are used as pressure transmitters in the process industries
Basis of testing	IEC 61508:2010 IEC 61511:2003
Report	The test report 207.103.1 is an integral part of this data sheet
Assessment	Proven in use
Operational Hours	6.150.000.000
Functional Safety Data	Overview of order numbers and valid combinations see report 207.103.1 and actual product catalogue Siemens FI 01

	7MF2033-****-****-Z C23, span ≤ 63 bar 7MF4033-****-****-Z C23 / Z C23 C41, span ≤ 63 bar 7MF4133-x***-****-Z C23; x = [B..E, S..U]	7MF2033-****-****-Z C23, span ≥ 160 bar 7MF4033-****-****-Z C23 / Z C23 C41, span ≥ 160 bar 7MF4233-****-****-Z C23	7MF2433-****-****-Z C23 7MF4y33-****-****-Z C23 y = [3,4,5,6] 7MF4z33-****-****-Z C23 C41 z = [4,5]
Type	B	B	B
Hardware Fault Tolerance	1	1	1
Safe Failure Fraction	96.00%	96.00%	96.00%
Safe Detected Failure Rate	0.00 /hour	0.00 /hour	0.00 /hour
Safe Undetected Failure Rate	1.53E-7 /hour	1.69E-7 /hour	2.00E-7 /hour
Dangerous Detected Failure Rate	4.86E-7 /hour	4.62E-7 /hour	5.09E-7 /hour
Dangerous Undetected Failure Rate	0.26E-7 /hour	0.24E-7 /hour	0.25E-7 /hour
PFDavg (1Y, MTTR = 72h, Beta = 2%)	3.06E-006	2.84E-006	3.01E-006
PFDavg (1Y, MTTR = 72h, Beta = 5%)	7.59E-006	7.06E-006	7.48E-006
Fit for use in Safety Integrity Level	SIL3, IEC 61511	SIL3, IEC 61511	SIL3, IEC 61511
Fit for use in Spurious Trip Level®	5	5	4

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Date



Dr. M.J.M. Houtermans