## **Manufacturer Information**

For users regarding firmware and hardware updates (in accordance with the NAMUR 53 recommendation)

1 Type of device						
<ul><li>☑ Field device / signal processing device</li><li>☐ Monitoring / operating system</li></ul>						
Manufacturer	:	Endress+Hauser Flowtec AG	ì			
Product	:	Proline Promag 400 HART				
Part number / Order code	:	5[D W]4C - **********				
Communication / Interface		Communication	Device Type			
		HART	0x1169			
2 Firmware, Hardware I						
Type of change:						

How can the old Firmware version / Hardware I revision number be identified:

2.00.012.01.00

Local display

Old version / revision

New version / revision

П

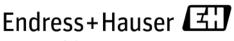
• Connection nameplate

Hardware I revision

• Configuration and service software e.g. FieldCare

Description of the modification with respect to the old Firmware version / Hardware I revision:

- Current Output: Added parameter "Output Damping" to menu "Setup/CurrentOutSelection".
- Custody Transfer: Add locking of parameter "Alarm Delay" and "Assign behaviour of diagnostic no. 441" of event handling and in custody transfer mode "defined parameter".
- Custody transfer: Operation of Custody Transfer Dipswitch for activation/deactivation of Custody Transfer Mode only possible in powerless state.
- Diagnostic handling: Added DiagNo 961, "Electrode Potential Out of Range" (Event ID 341) with Namur state signal "Warning".
- Diagnostic handling: Make diagnostic "Process Limit" (diagnostic no 842) of event id 145 configurable with default value "Off".
- Diagnostic handling: New event "ISEM Supply Voltage" with diagnostic "Check Supply



- Voltage To ISEM" (Diagnostic no 378) and Namur state signal "Failure" for ISEM power supply failures available.
- Frequency output: Set visualization of parameter "Frequency Frequency Max Value" from 10 kHz to the maximum possible value of 12.5 kHz.
- Heartbeat: "Heartbeat Verification Report" shows the current deviations and their limits instead of absolute output values.
- Heartbeat: "Heartbeat Verification Report" shows the detailed measuring details of page 3 and 4 to all access levels (only available in Webserver and Verification DTM)
- Heartbeat: Added measurement points E1, E2, Diff and PE-GND to verification report.
- Heartbeat: Allow performing of heartbeat verification with partially filled pipe.
- Local display: Performance and stability optimization improvements value to 3 seconds. This leads to a more stable display of the measured values.
- Measurement: New Event "Conductivity failed" (Event ID 906) with diagnostic "Check Grounding Deactivate Conductivity Measurement" (Diagnostic no 169) and Namur state signal "Warning".
- Measurement: Added velocity saturation. Flow peaks cutted at +- 20m/s.
- Measurement: Filter extension for adaptive and dynamic flow filter.
- Measurement: Improvements of signal integrity: Reduced influence on flow measurement and added possibility to turn off diagnostic 377. Reduced false positive from Signal Integrity (DiagNo 377) when pipe is empty.
- System: SW versions of submodules are visible with access rights "Maintenance".
- Units: Add unit "Million standard cubic feet per day" (MMSft3/d) for parameter "Corrected volume flow".
- Units: Add unit "Nhl" for parameter "Totalizer" and "Corrected Volume Flow".
- Webserver: Export of parameter protocol available as pdf file.
- Webserver: Implement WLAN client mode support.
- Webserver: Support of data logging functionality on webserver.

## 3 Functional Safety Impact on Functional Safety: No $\boxtimes$ Yes Changes in safety figures: $\boxtimes$ Yes $\rightarrow$ new figures refer to Safety Manual (chapter 5) 4 Compatibility (Firmware, Hardware I) Is the new Firmware version compatible with the previous version, the installed device drivers, the operating tool compatible / is the new Hardware I revision compatible with the previous revision? Yes $\boxtimes$ No, description:

Inco	mpatibility due to new parameter	rs and units v	vhich makes a r	new device driver necessary.		
Is a F ⊠	Firmware / Hardware I update ger Yes, reason:	nerally recom	mended?			
Whe	en new features shall be used an	update is nec	essary.			
• F	firmware update exchange can b lashing the new firmware by mea iceCare, Webserver	_	-	on program, i.e. FieldCare,		
	No, reason:					
	Occumentation					
Instr	ruction manual					
Is a n	new instruction manual required b	pecause of the	e changes in po	oint 2?		
	Yes No					
Whic	ch manual corresponds to the nev	v Firmware ve	ersion / Hardwa	are I revision:		
Devi	ice Communica	ation option	Manual	Documentation code		
-	-		-	-		
Safe	ty manual					
Is a n	new safety manual required becau	ise of the cha	nges in point 2	?		
	Yes No					
Whic	ch safety manual corresponds to t	he new Firm	ware version / l	Hardware I revision:		
Devi	ice		Manual	Documentation code		
-			-	-		
	new manuals can be downloaded v.endress.com - area "DOV - enter the	WNLOADS"	ernet: s and type of ma	anual		
6 P	Price					
Has t	the price of the device changed?					
	Yes, new list price and update costs (without installation) are attached No					