## Technical information for clamp straps with force sensor

## **Technical data:**

Physical connection			
Type of connector	USB - Type C		
Transfer protocol	Proprietary protocol		
Displays / control elements in combination with Bluetooth module			
	Short tap: Activates or deactivates the LED display for visual control of the sensor.		
Button	Long press > 2 seconds: Establish the configuration status		
	Longer pressure > 5 seconds: Restores the operating status.		
	Visual control status of the sensor		
	2 red LED's illuminated: The applied force is less than 10% of the set value.		
	1 green LED illuminated: The applied force is between 10% and 50% of the set value.		
LED indicator	2 green LED's illuminated: The applied force is between 50% and 90% of the set value.		
	3 green LEDs on: Force applied is between 90% and 110% of setpoint value.		
	3 green LEDs on and 1 red LED on: Force applied is between 110% and 150% of setpoint value.		
	3 green and 2 red LED's illuminated: The applied force is greater than 150% of the set value.		
	2 red LEDs blinking slowly (1x per second): battery level under 20%.		
	Configuration status		
	LEDs illuminate sequentially from red to green: Zero demanded, short press to confirm.		
	LEDs illuminate sequentially from green to red: Setpoint demanded; short press to confirm.		
	All LED's flash 3 times: Configuration has been acquired.		
	Operating status		
	All LEDs blinking (1x per second): Operating status established, link must be confirmed at the receiver.		
	3 green LEDs blinking 3 times: pairing successful.		
	2 red LEDs blinking 3 times: pairing failed.		

## Technical information for clamp straps with force sensor

Environmental conditions			
Application location		For use indoors	
Altitude		Up to 2000 m	
Operating temperature	[°C]	0 to 65	
Storage temperature	[°C]	-10 to 65	
Maximum relative humidity	[%]	80 (without condensation)	
Safety rating		IP64 as defined in DIN EN 60529	
Approval / inspections			
EMC		EN 301 489-1 / EN 301 489-3 / EN 301 489-17	
Vibration resistance		EN 60068-2-6	
Shock resistance		EN 60068-2-27	