



MAGMATECH

Innovative Technologies

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MGT SDD-1 STATIC DYNAMOMETRY SENSOR

The sensor is intended for inspection of sucker-rod pumping unit operation by dynamogram calculation.



- ✔ This is a unique sensor due to its long-term operation on beams of pumping unit cable hangers.
- ✔ It can be operated both with BSPM-1 portable data collection and visualization units and BSPS-1 static automation systems.
- ✔ It records dynamograms according to the specified time schedule.
- ✔ A sensor can be operated with one battery within minimum 2 years by daily recording of dynamograms.

SPECIFICATIONS

Technical Data	Description
Way of installation	Static, into beams of sucker-rod pumping unit cable hanger
Operating temperature range	-40...+500C
Sensor continuous operation time in dynamogram recording mode, minimum	100 hours or 5000 dynamograms
Autonomous operation time in dynamogram daily recording mode	2 years
Maintenance	Not needed within the whole period of ist autonomous operation
Power supply	From built-in maintenance-free 3 V battery
Range of loads being controlled	0/10000 kg
Range of movements being controlled	0/20 m
Controlled temp of swingings	0.5/15 swinging/min
Load resolution threshold	0.1 % of full scale
Load measurement accuracy	1 % of full scale
Sensor connection channel	Bluetooth 4.x (Bluetooth Low Energy)
Communication channel effective range, minimum	30 m
Sensor activation way	NFC
Data collection and transfer devices being connected	1. Portable data collection and transfer unit (BSPM) based on Android OS, IP68 protection class. 2. Static data collection and transfer unit (BSPS) with built-in GSM modem.
Automatic reading off the dynamogram	Every day at specified time or within specified interval (minimum 1 minute)
Quantity of dynamograms in the memory	7 (seven) dynamograms
Sensor firmware updating	Via Bluetooth by BSPM (mobile data collection and transfer unit)
BSPM software updating	Via the Internet (for free)
Level of protection from external disturbances	IP 67
Explosion Protection Certificate. Explosion protection label	1 Ex ib IIB T3 Gb

