

Rope Length Transmitter

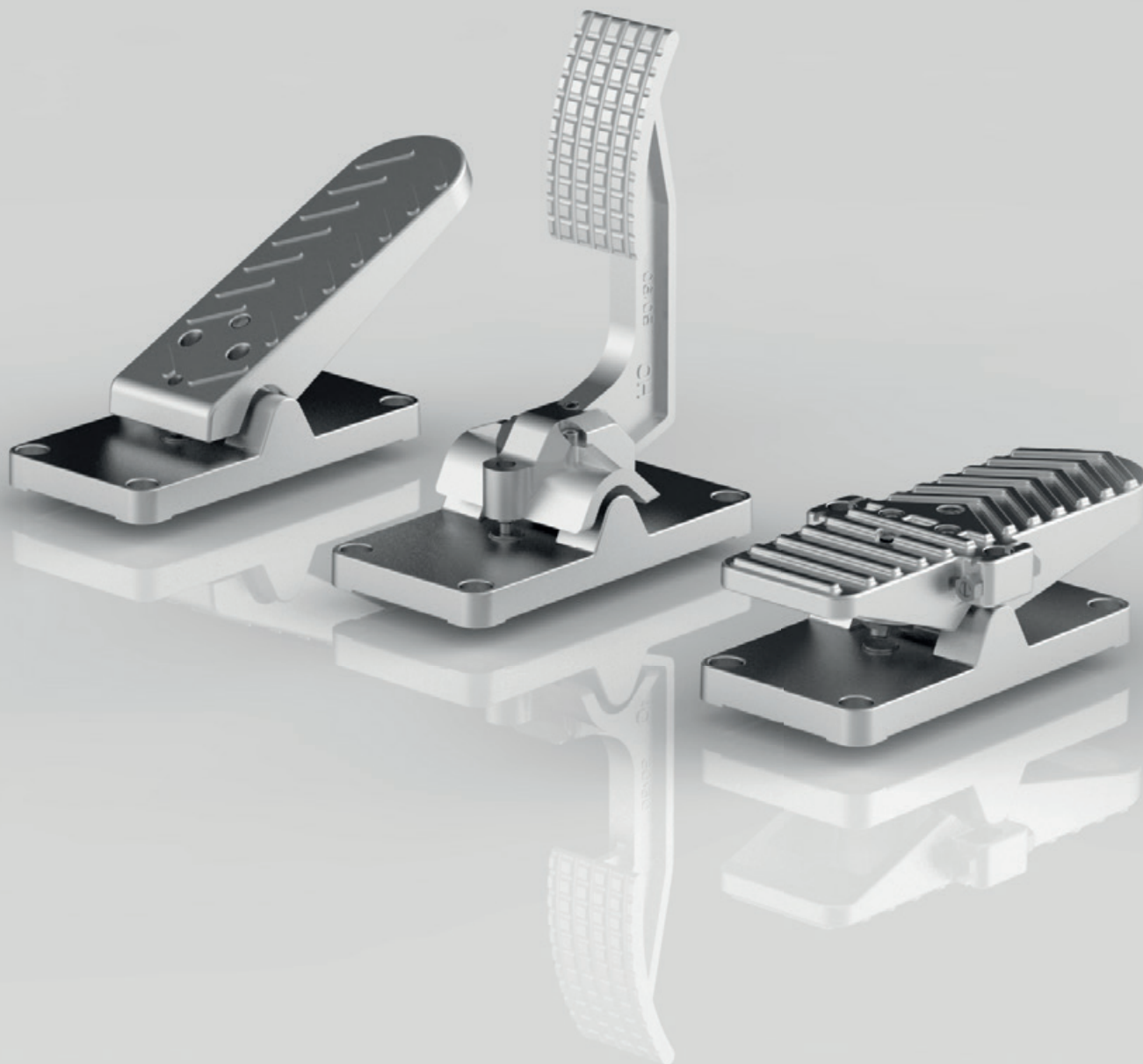
Tilt Angle Sensor

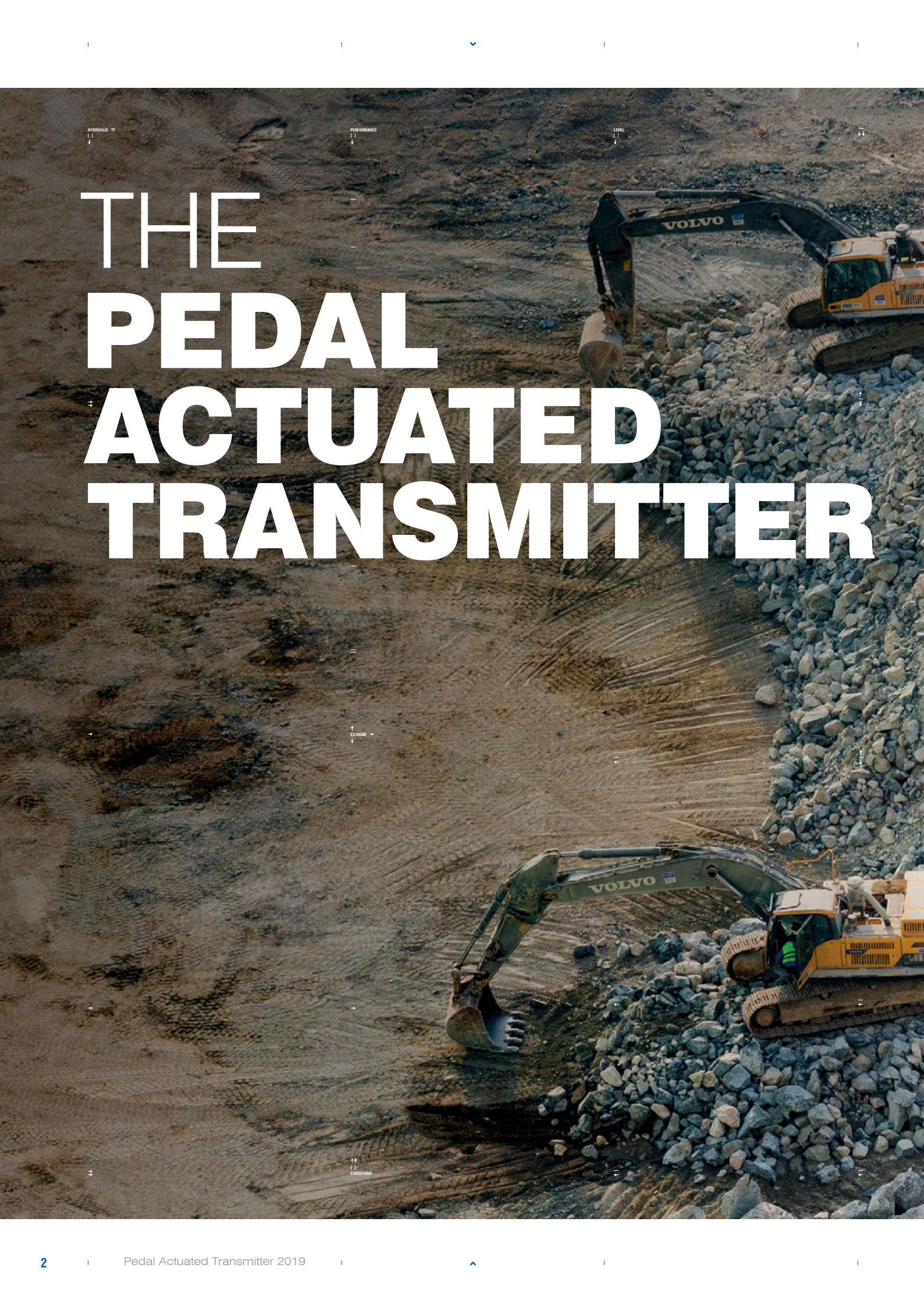
Pedal Actuated Transmitter

Joystick

Wind Sensor

Angular Position Transducer





THE PEDAL ACTUATED TRANSMITTER



Hydraulically actuated controlling equipment, for example in:

- Construction and drilling vehicles
- Cranes and excavators
- Wheel loaders and lifting platforms
- Forklifttruck and rack feeder

are controlled to an increasing degree electronically nowadays. Especially for these applications (under consideration of extreme operating conditions) our pedal actuated transmitters of series FS2000 were designed for. They allow the output of electrical control signals according to the pedal move.

Signal is carried out via wireless non-contact magnetic systems. Control signals are output either analogue (4 - 20 mA, 0 - 10 V) or digital (CANopen interface) by means of an incorporated electronics.

For security-relevant applications according to IEC 61508 SIL (Safety Integrated Level) respectively ISO 13849 PL (Performance Level) all models are available with redundant interfaces.



FLAT AND ROBUST CASING WITH HIGH IP-PROTECTION

In standard version all magnetic pedal actuated transmitters have a casing protection of IP67. Being extremely flat the robust casing is mounted directly on base plate. So no further installation depth is required. These features are particularly required in construction machinery as well as commercial vehicle sector. Thus ensuring an universal use of all pedal actuated transmitters.



SAFETY

Almost all FSG magnetic pedal actuated transmitters are equipped with redundant sensors. Depending on the electrical circuit these sensors thus meet the requirements of functional safety according to EN ISO 1348 and EN61508 guidelines.



System versions	magnetic	magnetic	magnetic
			
Mechanical Data			
Series	FS-S	FS-P	FS-W
Casing	76 x 181 mm	91 x 181 mm	91 x 181 mm
Casing material	Aluminium, passivated	Aluminium, passivated	Aluminium, passivated
IP code of casing up to	IP67	IP67	IP67
Fixing	4 x Ø 8,5	4 x Ø 8,5	4 x Ø 8,5
Pedal angle	12°	20°	32°
Actuation force	20N	20N	20-30N
Temperature range	-30°C up to +80°C	-30°C up to +80°C	-30°C up to +80°C
Shock	50 g, 6 ms	50 g, 6 ms	50 g, 6 ms
Vibration	4 g Sinus, 5 - 200 Hz	4 g Sinus, 5 - 200 Hz	4 g Sinus, 5 - 200 Hz
Connection	Plug or cable	Plug or cable	Plug or cable
Weight	1000 g	1000 g	1300 g
Electrical Data			
Voltage output	0 - 10V DC, on request	0 - 10V DC, on request	0 - 10V DC, on request
Current output	2 x 4 – 20 mA, opposite signals	2 x 4 – 20 mA, opposite signals	2 x 4 – 20 mA, opposite signals
Signal output current	3- wire system	3- wire system	3- wire system
Max. burden current output	600 Ω	600 Ω	600 Ω
Bus output	CANopen	CANopen	CANopen
Signal calibration	Firm calibration	Firm calibration	Firm calibration
Supply	18 - 36 V DC	18 - 36 V DC	18 - 36 V DC
Current consumption	< 80 mA	< 80 mA	< 80 mA
Test voltage	500 V, 50 Hz, 1 min	500 V, 50 Hz, 1 min	500 V, 50 Hz, 1 min
Interference immunity	EN 61 000-6-2	EN 61 000-6-2	EN 61 000-6-2
Emitted interference	EN 61 000-6-4	EN 61 000-6-4	EN 61 000-6-4
Other			
Customized features	Flat casing, no mounting depth 	Flat casing, no mounting depth 	Flat casing, no mounting depth 
Optional	–	–	–
Article number	9400S50	9400S01	9400S01

System versions	magnetic	magnetic	magnetic
			
Mechanical Data			
Series	FS-G	FS-G/K	FS-P
Casing	91 x 181 mm	91 x 181 mm	100 x 150 mm
Casing material	Aluminium, passivated	Aluminium, passivated	Aluminium
IP code of casing up to	IP67	IP67	IP67
Fixing	4 x Ø 8,5	4 x Ø 8,5	4 x Ø 7
Pedal angle	20°	20°	18°
Actuation force	20N	50N - 160N	20N - 42N
Temperature range	-30°C up to +80°C	-30°C up to +80°C	-30°C up to +80°C
Shock	50 g, 6 ms	50 g, 6 ms	50 g, 6 ms
Vibration	4 g Sinus, 5 - 200 Hz	4 g Sinus, 5 - 200 Hz	4 g Sinus, 5 - 200 Hz
Connection	Plug or cable	Plug or cable	Plug or cable
Weight	1000 g	1100 g	1200 g
Electrical Data			
Voltage output	0 - 10V DC, on request	0 - 10V DC, on request	0 - 10V DC, on request
Current output	2 x 4 – 20 mA, opposite signals	2 x 4 – 20 mA, opposite signals	2 x 4 – 20 mA, opposite signals
Signal output current	3- wire system	3- wire system	3- wire system
Max. burden current output	600 Ω	600 Ω	600 Ω
Bus output	CANopen	CANopen	CANopen
Signal calibration	Firm calibration	Firm calibration	Firm calibration
Supply	18 - 36 V DC	18 - 36 V DC	18 - 36 V DC
Current consumption	< 80 mA	< 80 mA	< 80 mA
Test voltage	500 V, 50 Hz, 1 min	500 V, 50 Hz, 1 min	500 V, 50 Hz, 1 min
Interference immunity	EN 61 000-6-2	EN 61 000-6-2	EN 61 000-6-2
Emitted interference	EN 61 000-6-4	EN 61 000-6-4	EN 61 000-6-4
Other			
Customized features	Flat casing, no mounting depth 	Flat casing, no mounting depth 	Flat casing, no mounting depth 
Optional	with Kick-Down-Function	–	–
Article number	9400S50	9400S50	9430S01



BERLIN (HEADQUARTERS)

- founded in 1946
- total production area: 3500 m²
- number of employees: 170
- company management and sales
- design and development
- production and assembly



HEPPENHEIM

- founded in 1961
- total production area: 2700 m²
- number of employees: 40
- production and assembly





4

locations in germany

12

representations worldwide

70

years in the market

90

percent vertical range of manufacture

450

employees

KÖNIGS WUSTERHAUSEN/OT KABLOW

- founded in 1992
- total production area: 5000 m²
- number of employees: 180
- production and assembly



KÖNIGS WUSTERHAUSEN/OT ZERNSDORF

- founded in 2017
- number of employees: 60
- total production area: 4300 m²





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