

Data point list - **KEMPER** - FK-5 PRO break tank station

Physical interface	RS485
Protocol	ModBus RTU
Baud rate / databits / parity / stop bits	9600 / 8 / N / 1
Max. sampling rate	250 ms (4 per second)



Access via function codes (FC)	
Coil	Read with FC01; write with FC05
Discrete-Input	Read with FC02
Input-Register	Read with FC04
Holding-Register	Read with FC03; write with FC06
Valid from software	V2.01.27

Register-Address	Register type	Data point	Area [Unit]	Default value	Access	Comment
Sensor measurements						
100	Input-Register	Pump pressure	[bar * 100]		read	Currently measured pump pressure
101	Input-Register	Tank filling level	[%]		read	Currently measured tank filling level
102	Input-Register	Output temperature	[°C * 10]		read	Currently measured output temperature
Outputs						
200	Discrete-Input	Warning	0 - 1		read	Status of warning output 0 - No warning 1 - Warning active
201	Discrete-Input	Alarm	0 - 1		read	Status of alarm output 0 - Alarm active 1 - No alarm
202	Discrete-Input	Pump	0 - 1		read	Pump status 0 - Off 1 - On (Pump speed > 0)
203	Discrete-Input	External pump	0 - 1		read	External pump status 0 - Off 1 - On
204	Discrete-Input	Dosing unit	0 - 1		read	Dosing unit status 0 - Inactive 1 - Active
205	Discrete-Input	Drain valve	0 - 1		read	Drain valve status 0 - Inactive 1 - Active
206	Input-Register	Opening degree valve 1	[%]		read	Current opening degree of valve 1
207	Input-Register	Target opening degree valve 1	0 - 100%		read	Target opening degree of valve 1
208	Input-Register	Opening degree valve 2	[%]		read	Current opening degree of valve 1
209	Input-Register	Target opening degree valve 2	0 - 100%		read	Target opening degree of valve 2
Settings						
300	Holding-Register	Target pressure	[bar * 100]		read write	Target pressure of the system
301	Holding-Register	Time day	1 - 31		read write	System time - Day
302	Holding-Register	Time month	1 - 12		read write	System time - Month
303	Holding-Register	Time year	2000 - 2099		read write	System time - Year
304	Holding-Register	Time hour	0 - 23		read write	System time - Hour
305	Holding-Register	Time minute	0 - 59		read write	System time - Minute
306	Holding-Register	Time second	0 - 59		read write	System time - Second

Register-Address	Register type	Data point	Area [Unit]	Default value	Access	Comment
307	Holding-Register	Language	0 - 7		read write	Language setting 0 - German 1 - English 2 - Dutch 3 - French 4 - Danish 5 - Norwegian 6 - Italian
308	Holding-Register	Inlet flow control	0 - 3		read write	Setting of inlet control 0 - Inlet 1 1 - Inlet 2 2 - Inlet 1+2 (automatic) 3 - Inlet 1+2 (in sync)
309	Holding-Register	Operating mode			read write	Setting of operating mode 0 - Off 1 - Time operation on 2 - Automatic mode 3 - Standby
310	Coil	Controller restart	0 - 1		read write*	Trigger a restart of the controller
311	Coil	Load factory settings	0 - 1		read write*	Reset the controller to factory settings
Test values and manual mode						
400	Holding-Register	Release register (If 37254 is written into the release register, the registers marked with * can be written. Otherwise this registers can not be written.)	0- 65535	0	read write	Release function for register marked with *
401	Coil	Inlet valve 1 manual mode	0 - 1	0	read write*	Manual mode inlet valve 1 System must be in operating mode != Off
402	Holding-Register	Inlet valve 1 opening degree manual mode	0 - 100%	0%	read write	Inlet valve 1 opening degree manual mode
403	Coil	Inlet valve 2 manual mode	0 - 1	0	read write*	Manual mode inlet valve 2 System must be in operating mode != Off
404	Holding-Register	Inlet valve 2 opening degree manual mode	0 - 100%	0%	read write	Inlet valve 2 opening degree manual mode
System information						
500	Holding-Register	Serial number high word			read	Serial number of the device Hex format
501	Holding-Register	Serial number low word			read	Serial number of the device Hex format
502	Input-Register	Firmware version base PCB	Vxx.xx		read	Hex format
503	Input-Register	Firmware version controller (CPU) high word	Vx.xx.xx		read	Hex format
504	Input-Register	Firmware version controller (CPU) low word	Vx.xx.xx		read	Hex format