

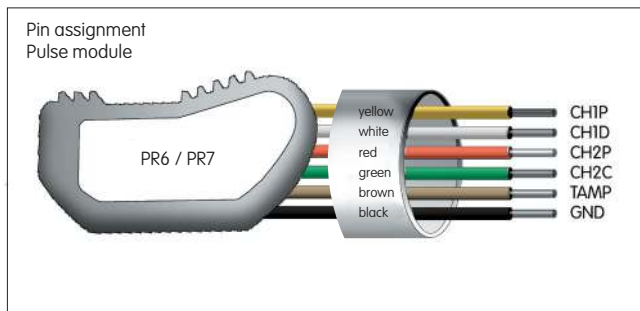
PR6 / PR7

Falcon communication modules

High data quality and flexibility
for remote metering



- For ELSTER water meters with communication interface, from year of construction 2008
- Pulse modules with two outputs
- EMERIS radio module
- M-Bus module acc. to EN13757
- Integrated forward and backflow detection
- Non-reactive and tamper-resistant



Application for meters of type:

PR6/PR6M/TPR6

V200
V210
V220F
C4000 bypass meter

PR7/PR7M/TPR7

H4000
H4200
S2000
C4000 main meter
C3100 main meter
all of them from
year of construction 2008

Radio module		Ordering number		Operating temperature	-15 °C up to +70 °C
internal antenna		TPR6	TPR7	Protection class	IP68
external antenna (2 m fixed cable)		2925M1272	2925M1276	Battery lifetime	up to 15 years
		2925M1273	2925M1277	Protocol content	
Protocol		Wavenis		Minimum	Initial meter reading
Frequency technology		FHSS (15 radio channels) (Frequency Hopping Spread Spectrum)		Data memory	Pulse value
Frequency		868 MHz, ISM band			24 values
Type of transmission		Bi-directional			programmable
Transmitting power	mW	25			– monthly, weekly, daily values
Range	m	up to 600 (depending on env. circumstances)		Alarm signal	– free interval (1 min - 31 h.)
Connection velocity		up to 9.6 kbits/s			Battery, cable break, burst pipe, backflow, manipulation
Power of emission		8 dBi		Time management	Day/night switch off
Standard		CE (EN300-683)		Programming	weekend switch off
Certification		ART (EN300-220-1)			via ECM software
Conformity		RTE 99/5/EC			

M-Bus module		Ordering number		Protocol content	
Standard		PR6M	PR7M	13 monthly volume values with date	
EN13757		2925M1268	2925M1269	13 flow rate maximum values with date	
Connecting cable	m	2	5	13 leakage alarm	
		2 wires reverse polarity protection		Due date volume	
Power supply		Remote power supply of the M-Bus with automatic changeover to battery if the bus fails		Date and time	
M-Bus operation		max. 1.5 mA (1 standard load), standby current M-Bus max. 1.5 mA, typ. 1.4 mA		Alarm signal	
Space (0-Bit) current		standby current + typ. 13 mA		– battery	
M-Bus Interface		TI TSS721 with 2 x 215Ohm protective resistor		– manipulation with date	
Operating temperature		-15 °C up to +70 °C		– backflow with date	
Protection class		IP68		pulse value	
Connection velocity		300 and 2400 Baud		momentary flow rate l/h or m³/h	
				flow rate calculation 1 min – 60 min	
				backflow volume	
				decimal place	
				switchable	
				for important settings	
				via MB Conf-software	
				Primary/secondary addressing	
				with wildcard	
				Supported functions	
				FCB-Bit, SND_NKE, REQ_UD2, SND_UD, RSP_UD	

Pulse module		Ordering number		Pin assignment	
CH1P	CH2P	PR6	PR7	CH1P	Volume pulses (independent of flow direction), active „low“
1 litres/pulse*; 10 litres/pulse*		2925M1265	2925M1224	CH1D	Direction flag, „high“ = forward flow
1 litres/pulse*; 100 litres/pulse*		2925M1261	2925M1263	CH2P	adjusted volume pulse = forward flow minus backflow, active „low“.
1 litres/pulse*; 1000 litres/pulse*		2925M1262	2925M1264		During a backward flow no pulses are send to the output. After renewed forward first the pulse numbers which are stored in the memory will be deleted. This pulse numbers are generated from the previous backward flow. After deleting the memory forward pulses will be send to the output only.
Connecting cable	m	2	5	CH2C	Backflow compensations flag. This flag is „low“, if currently a backflow compensation is running
Battery lifetime		10 years		TAMP	Alarm flag, signals the removal of the pulse module from the register or low charge of battery, active „high“
Operating temperature		-15 °C up to +70 °C		GND	Ground
Protection class		IP68			
Output load	max.	30 Vdc			
	max.	30 mA			
Frequency	max.	75 Hz			
Pulse width CH 1P	min.	5 ms (typical 8-12 ms)			
Pulse width CH 2P	min.	50 ms			
Pulse/pause		1:1			

* for meters up to DN 125/Qn 100, from DN 150/Qn 150 upwards pulse rate x 10.
Other pulse versions on request

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