



TI-P136-24  
CMGT Issue 7

# EPM1 and EPM2

## Electronic Pump Monitors

### Description

The Spirax Sarco electronic pump monitor (EPM) is designed to monitor the operational status or meter the fluid output of positive displacement pumps. Suitable for all pump applications, the compact EPM can be used on both open vented or closed sealed systems. The EPM is powered by an integral 1.5 V lithium battery and can be connected to a standard MFP14 pump without the need for a separate power supply.

### Principal features:

- For monitoring or metering the output of positive displacement MFP type pumps.
- Reliable, trouble-free operation - no moving parts, or ongoing maintenance.
- Suitable for all pump applications to 198 °C.
- Clear 8 digit LCD display (EPM1 only).
- 7 year lithium battery.

### The EPM is available in two easy-to-specify options:

EPM1	A simple stand alone unit with an 8 digit LCD display.
EPM2	Version suitable for coupling to a remote counter/building energy management system (BEMS) up to a maximum of 48 V $\approx$ .

### EPM1 monitoring

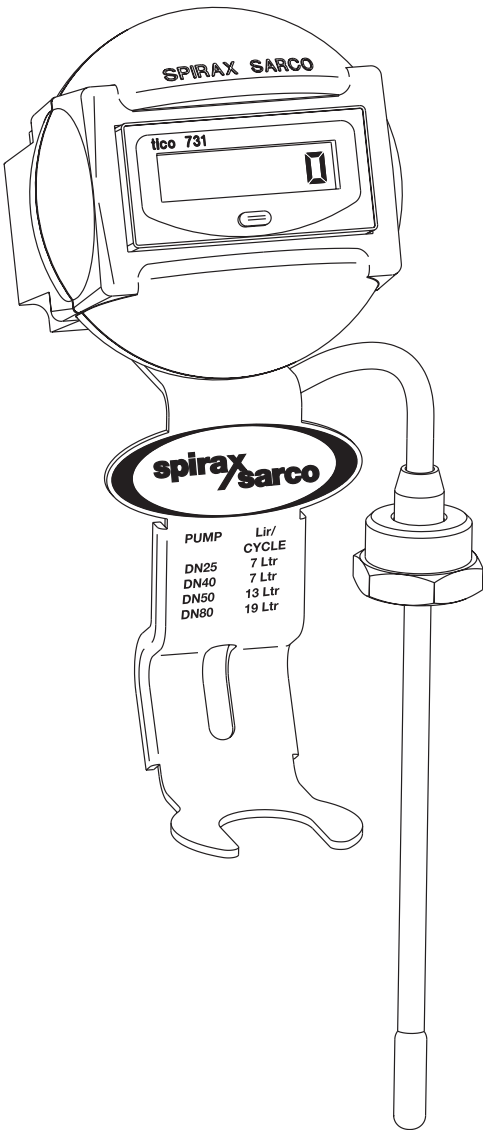
This option includes a clear, easy to read, 8 digit LCD display enabling the pump's operation to be closely monitored and the pumped condensate rate to be easily calculated. All MFP capacities (litres per cycle) are clearly laser etched into the stainless steel support bracket, so all the important information is readily available. In addition, the EPM1 has a lockable reset/zero facility, for full details see the Installation and Maintenance Instructions (IM-P136-23) supplied with the product.

### EPM2 intelligent pumping

EPM2 allows the pump to be incorporated into a BEMS. An auxiliary alarm can relay the operational status of the plant, providing a low cost diagnostic solution. Routine maintenance programs can be automatically timed to coincide with the exact quantity of pumped cycles, tailored to suit the individual needs of each process. EPM2 enables the volume of pumped condensate to be automatically calculated via the BEMS.

### Limiting conditions

Model	Ambient air temperature range	Pumped fluid maximum temperature limit
EPM1	-10 °C to +50 °C	198 °C
EPM2	-40 °C to +85 °C	198 °C



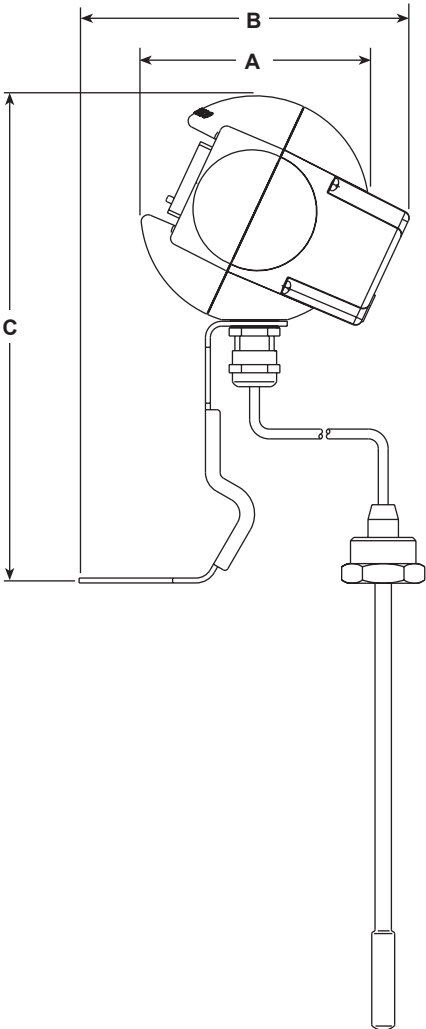
Condensate pumps  
Mechanical pumps and pumps traps

Materials

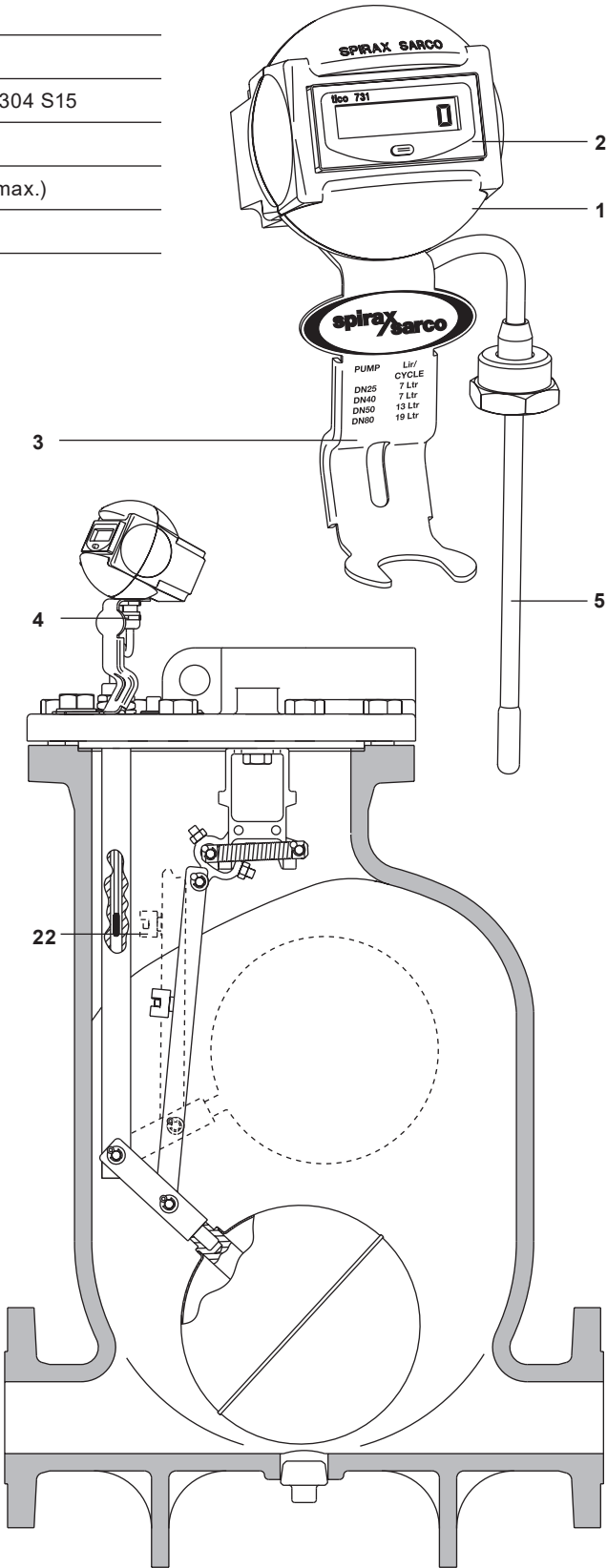
No.	Part	Material
1	Enclosure	Acetal
2	Digital counter (casing)	Makrolon
3	Bracket	Stainless steel
4	Gland	Nickel plated
5	Sensor (switch)	Precious metal 48 V ≈, 1 A, 12 W (max.)
22	Actuator	Alnico

Dimensions/weights (approximate) in mm and kg

Dimension			Weights	
A	B	C	EPM1	EPM2
Ø70	100	150	0.172	0.159



EPM1 shown



Safety information, installation and Maintenance

For full details see the Installation and Maintenance Instructions (IM-P136-23) supplied with the product.

**Installation note:** If installing in a hazardous area contact Spirax Sarco.

How to specify

Spirax Sarco electronic pump monitor (EPM) specifically for use with all MFP14 type pumps.

How to order

Please state the size and material of MFP14 automatic pump:

**Example 1:** 1 off Spirax Sarco EPM1 with counter for a DN25 MFP14 (SG iron) automatic pump.

**Example 2:** 1 off Spirax Sarco EPM2 for a 3" x 2" MFP14SS (Cast stainless steel) automatic pump.

Spare parts

The spare parts available are detailed below. No other parts are supplied as spares.

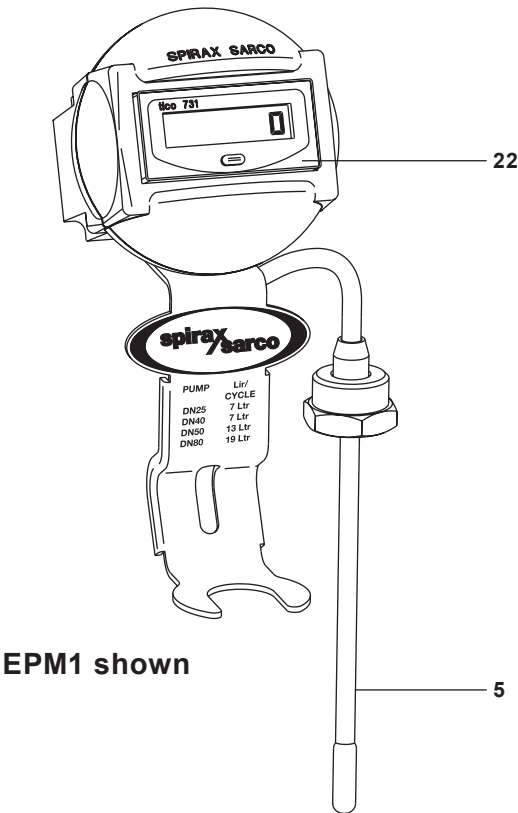
Available spares

EPM Actuator assembly	22
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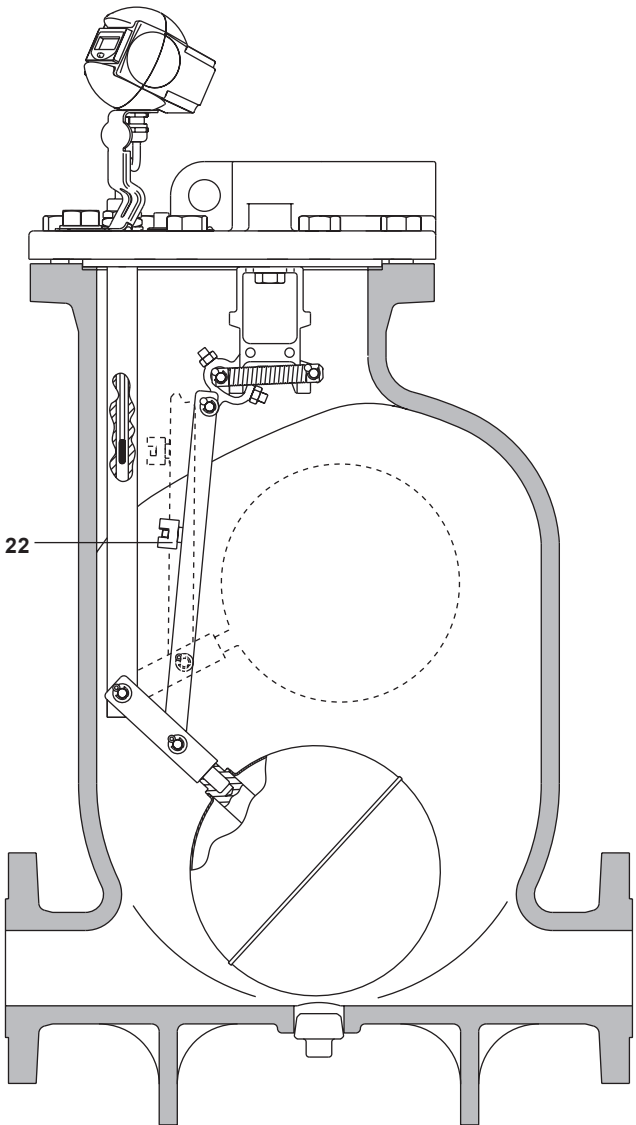
How to order spares

Always order spares using the description given in the column headed 'Available spares' and state the size and type of MFP14 pump.

**Example:** 1 - EPM actuator assembly for use with a DN25 MFP14 automatic pump.



EPM1 shown



9 Condensate pumps  
Mechanical pumps and pumps traps