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Комплектующие расходомеров Flux

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For pulse transmission to an external LCD unit, any other external system (like e.g. FLUX Process Control System on page 13) or SPS all models of FLUX liquid meters Type FMO 4 to FMO 50 are also available in pulse version without electronic LCD unit.



FLUX Liquid Meter Type FMO in pulse version without electronic LCD unit

Design and technical data correspond to standard versions on pages 6 to 10, but part no. of pulse version will change to

Part No. AB8

Cable

shielded, for transmission of pulses from Reed-switch on FMO to external electronic LCD unit

Part No.

934 08 032	5 m long
934 08 033	10 m long
934 08 034	15 m long

other cable lengths on request

External electronic LCD unit

with mounting flange

Part. 001 42 008



Optional 4 - 20 mA loop powered module to analogue converter on request.

INTERFACE AMPLIFIER FOR PRE-SET BATCH CONTROL WITH FLUX FMO LIQUID METER IN AUTO MODE



Type FSV 100

integral mounting onto FMO – see picture on page 3.
Supply voltage 230 Volt, 50 Hz, protected to IP 54. With 5 m power supply cable.
Two output signals for: main flow control for a pump and/or magnetic valve and secondary control for turn down controlling a magnetic valve or relay.
With plug connections for control features.

Part No. 001 49 040

Type FSV 112

Complete with housing for wall mounting.
Supply voltage 230 Volt, 50 Hz, protected to IP 54.
Two output signals for: main flow control for a pump and/or magnetic valve and secondary control for turn down controlling a magnetic valve or relay.
Input socket for power supply and output plugs for control features.

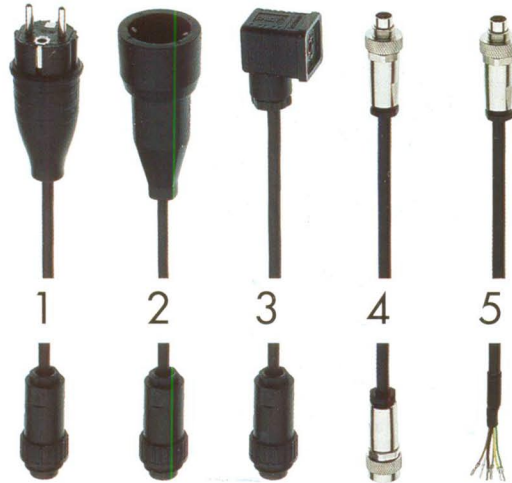
Part No. 001 49 041

Type FSV 132

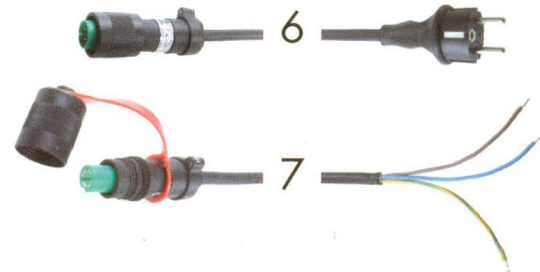
without housing for mounting into a switch-board.
Supply voltage 230 Volt, 50 Hz, protected to IP 20.
Two output signals for control of a pump and two magnetic valves.

Part No. 940 04 020

Accessories for FSV 100, FSV 112 and FSV 132



- | | | |
|---|--|-----------|
| 1 | Power supply cable, 5 m, for use with FSV 112 | |
| | Part No. 934 08 037 | |
| 2 | Connecting cable to motor, 0,5 m, for use with FSV 100 and FSV 112 | |
| | Part No. 934 08 035 | |
| 3 | Connecting cable to magnetic valve, 5m, for use with FSV 100 and FSV 112 | |
| | Part No. 934 08 036 | |
| 4 | Connecting cable 5 m, to transmit the pulses from FMO to FSV 112 | |
| | Part No. 934 08 039 | |
| 5 | Connecting cable, to transmit the pulses from FMO to FSV 121-1 Ex and FSV 132. | |
| | Part No. 934 08 038 | 5 m long |
| | Part No. 934 08 040 | 10 m long |



Type FSV 121-1 Ex

explosion-proof to II 2 G EEx ed (ia) IIC T6.
Supply voltage 230 Volt, 50 Hz, protected to IP 54.
One output signal for control of a pump or a magnetic valve.
Without plug connections.
Connecting cable to transmit the pulses from FMO see above accessories item 5.

Part No. 001 49 039

Type FSV 121 Ex

explosion-proof to II 2 G EEx ed (ia) IIC T6.
Supply voltage 230 Volt, 50 Hz, protected to IP 54.
One output signal for control of a pump or a magnetic valve.
With connecting 5 m connecting cable to transmit the pulses from FMO.
Input socket for power supply and output plugs for control features.

Part No. 001 49 051

Accessories for FSV 121 Ex

- | | | |
|---|--|--|
| 6 | Power supply cable, 5 m | |
| | Part No. 934 08 048 | |
| 7 | Connecting cable to motor or magnetic valve, 5 m | |
| | Part No. 934 08 049 | |

In conjunction with the new Process Control System PCS the Liquid Meter Type FMO in pulse version without electronic LCD unit can be used as a complete control system for computerized liquid handling operations. The process control module PCM together with the complementary software allows the use of any PC as a central control unit, without having to interfere into its hardware. All that is required is a free serial interface RS 232 on the PC as well as an interface converter PCC.

TECHNICAL DATA

FLUX PROCESS CONTROL SYSTEM PCS COMPLETE, CONSISTING OF

FLUX Process Control Module PCM

230 V, 50/60 Hz.

max. 2 counters per module, 2 potential-free relays per counter to control up to 4 output devices (230 VAC, 8 A; 24 VAC/VDC, 8 A; 12 VDC, 8 A).

Serial interface RS 485 with screw terminals.

Sensor input (1 per counter):
potential-free mechanical contact (relay, conventional or Reed-type)
electronic counter (Hall effect sensor, capacity switch).

Frequency on sensor input: 0–200 Hz

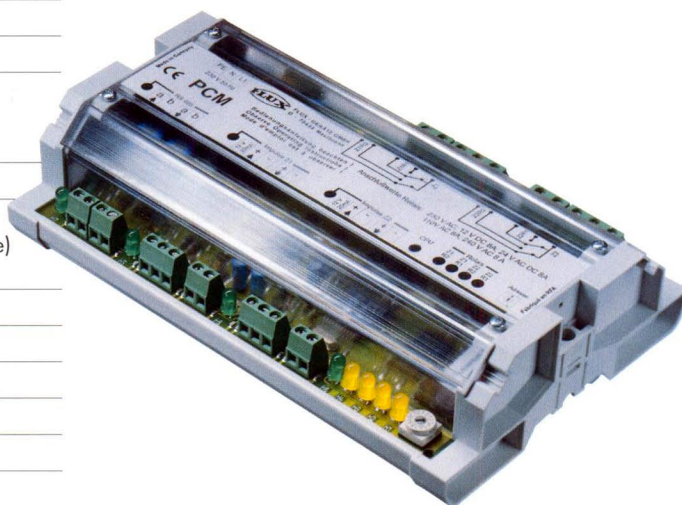
Relay connections: screw terminals for cable section 1,5 mm²

Temperature range: –20 °C to +70 °C

Easy mounting on DIN-bar.

Display of status via LED.

Dimensions: 50 x 128 x 192 mm



Software on CD-ROM

System requirements:

Microsoft Windows 98 or higher.

Pentium Processor or higher.

32 MB RAM

Free harddisk space at least 6 MB.

Free interface RS 232.

CD-ROM-drive (for installation only).



FLUX Interface Converter PCC

RS 232 to RS 485 converter.

Galvanic separation up to 3000 VDC.

Automatic setting of Baudrate and data transmission parameters.

Supply voltage 10 to 30 VDC.

Temperature range: –10 °C to +70 °C.

Easy mounting on DIN-bar.

Temperature range: –20 °C to +70 °C.

Easy mounting on DIN-bar.

Including connecting cable DB 9 to PC, 2 m long.



Mains supply unit for PCC interface converter

230 V, 50 Hz

Output 12 VDC, 600 mA.

Including power supply cable.

Connecting cable, 5m long

(PCM module – PCC interface converter)

two-way, twisted pair cable

Part No. A10 00 100

FMO – MAXIMUM FLOWRATE DEPENDING ON THE VISCOSITY AND A PRESSURE DROP OF MAX. 1 BAR

Type	FMO 4	FMO 10	FMO 40	FMO 50
Viscosity < 1 000 mPas	30,0 l/min	120 l/min	240 l/min	350 l/min
Viscosity < 3 000 mPas	27,0 l/min	108 l/min	215 l/min	312 l/min
Viscosity < 4 000 mPas	24,0 l/min	96 l/min	195 l/min	280 l/min
Viscosity < 5 000 mPas	21,0 l/min	84 l/min	170 l/min	245 l/min
Viscosity < 10 000 mPas	15,0 l/min	60 l/min	120 l/min	175 l/min
Viscosity < 25 000 mPas	12,0 l/min	48 l/min	95 l/min	140 l/min
Viscosity < 50 000 mPas	9,0 l/min	36 l/min	70 l/min	105 l/min
Viscosity < 100 000 mPas	6,0 l/min	24 l/min	45 l/min	70 l/min
Viscosity < 500 000 mPas	3,0 l/min	12 l/min	20 l/min	35 l/min

Values for viscosities exceeding 500 000 mPas ($\hat{=}$ cP) on request.

The performance data refers to liquids which are self-lubricating, non-adhesive or non-hardening.
With all transfer mediums the FLUX Liquid meters FMO have to be calibrated for the application parameters.

EXAMPLE

Stainless steel Liquid meters in combination with high viscosity pump F 560 S to transfer medium to high viscosity pasty substances.

