DATA SHEET

DIGMESA

EPI Arnite

Part number: 930-0501/V01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% GF (Arnite)
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

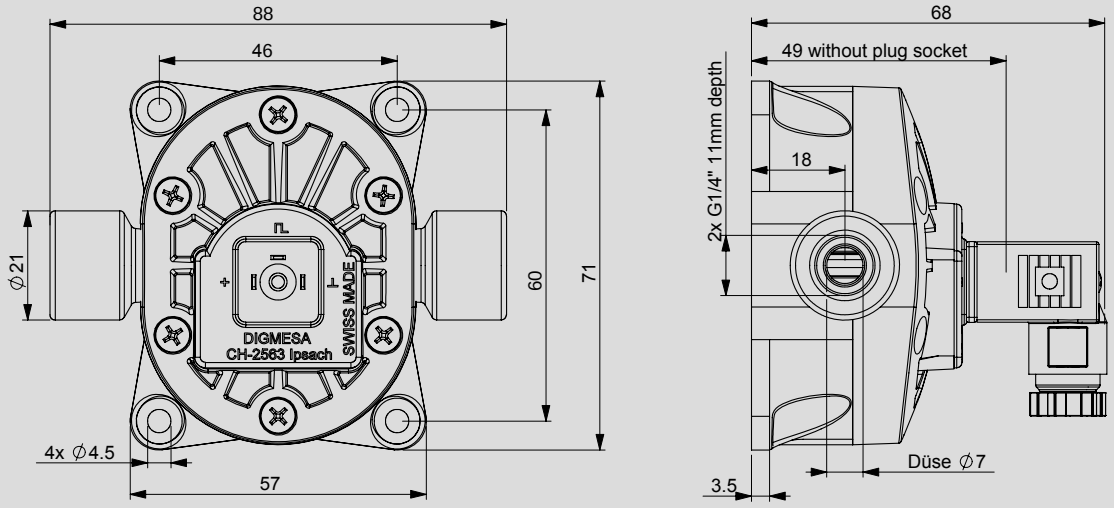
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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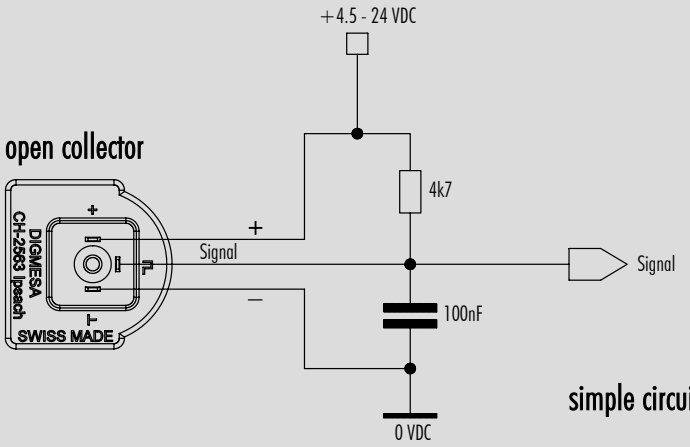
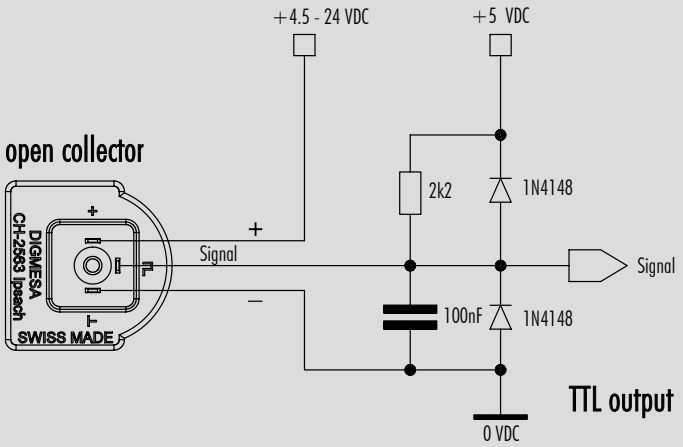
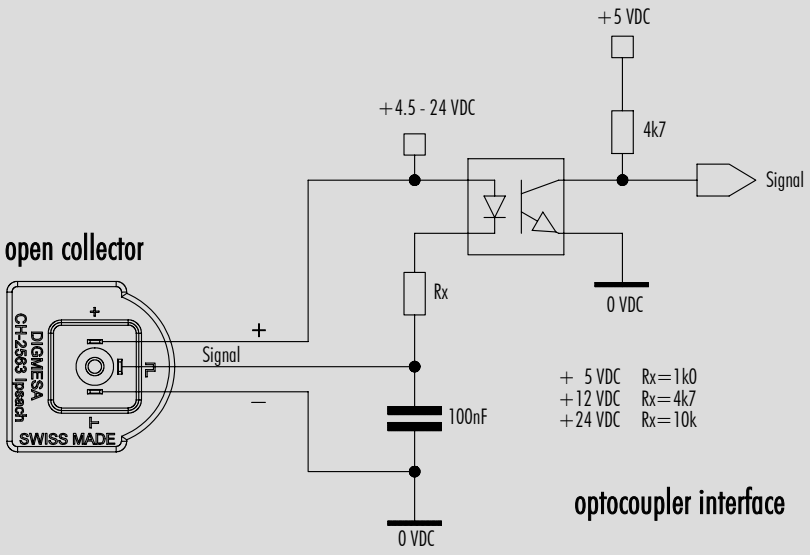
Interface Connection: Examples Open Collector







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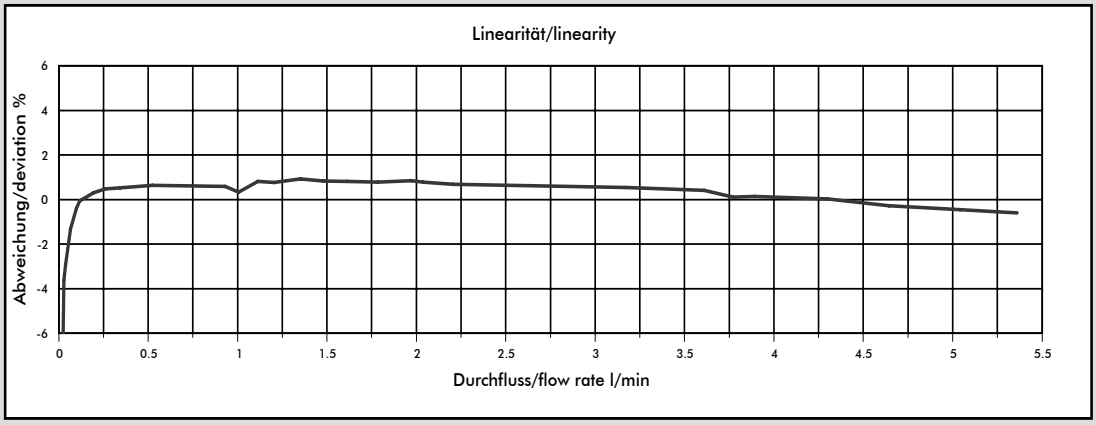
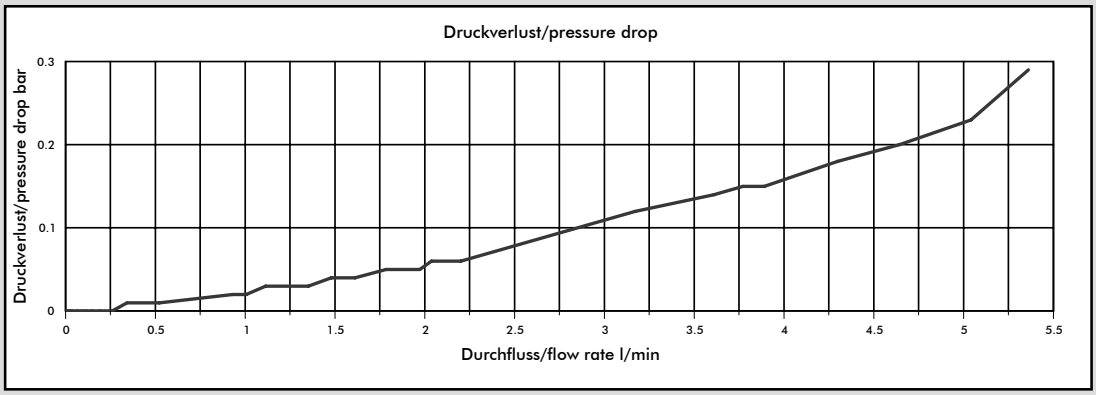
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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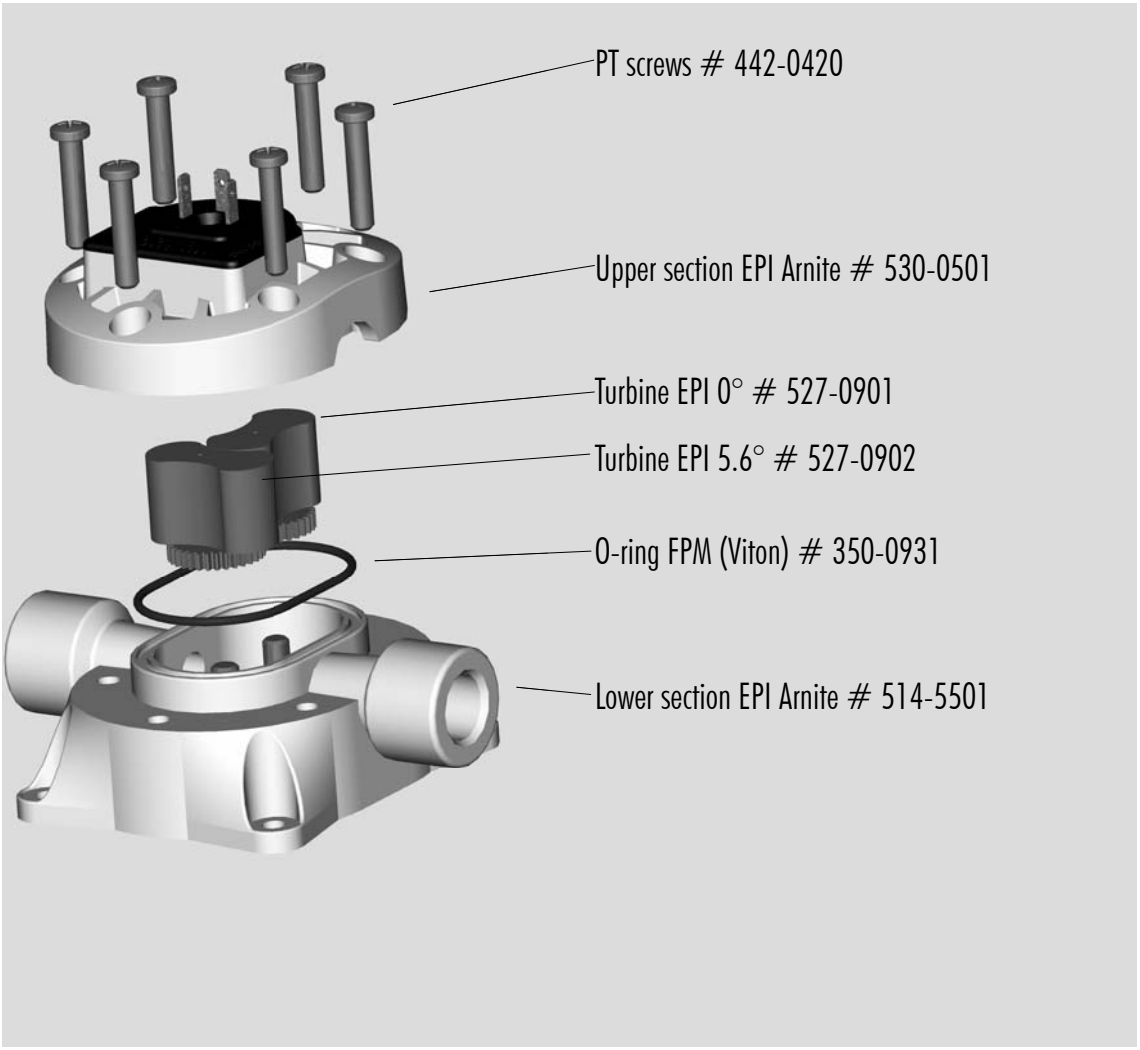
Spare parts:



Notes:

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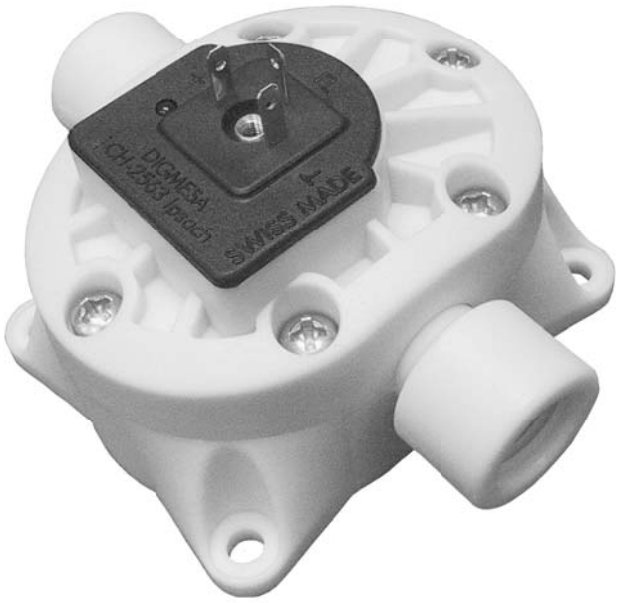
DATA SHEET



DIGMESA

EPI Arnite LED

Part number: 930-0501/V02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% glass fibre (Arnite)
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

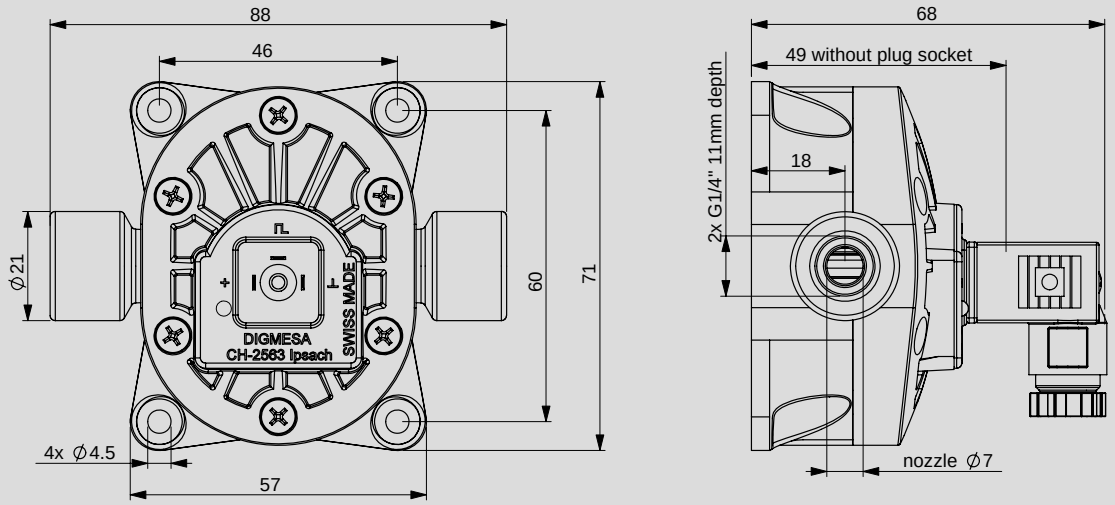
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

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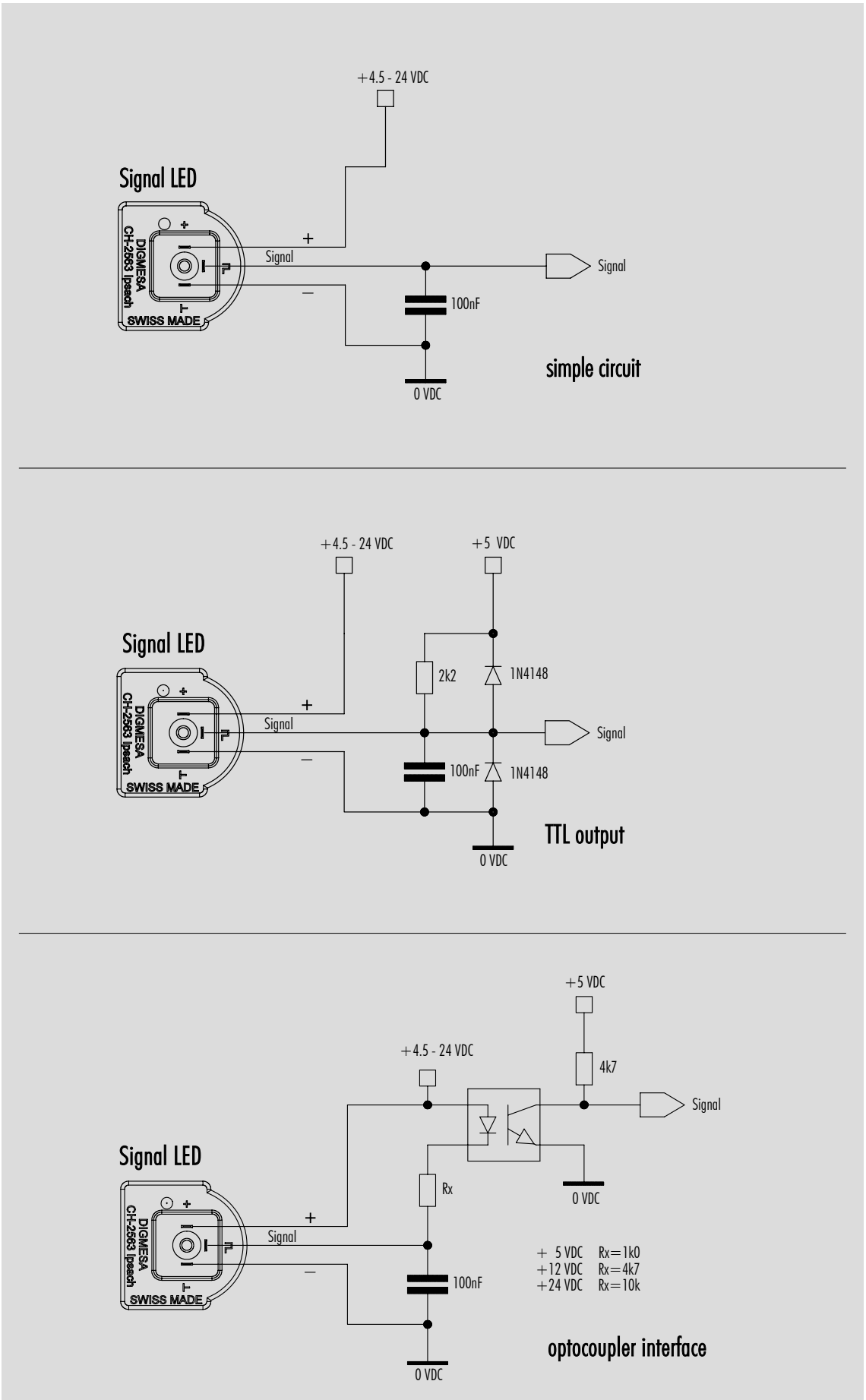
Interface Connection: Examples with LED



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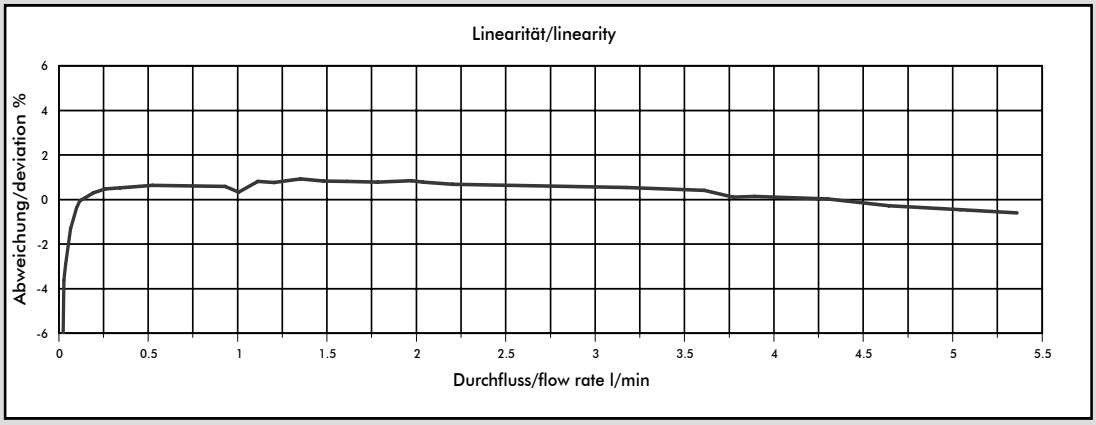
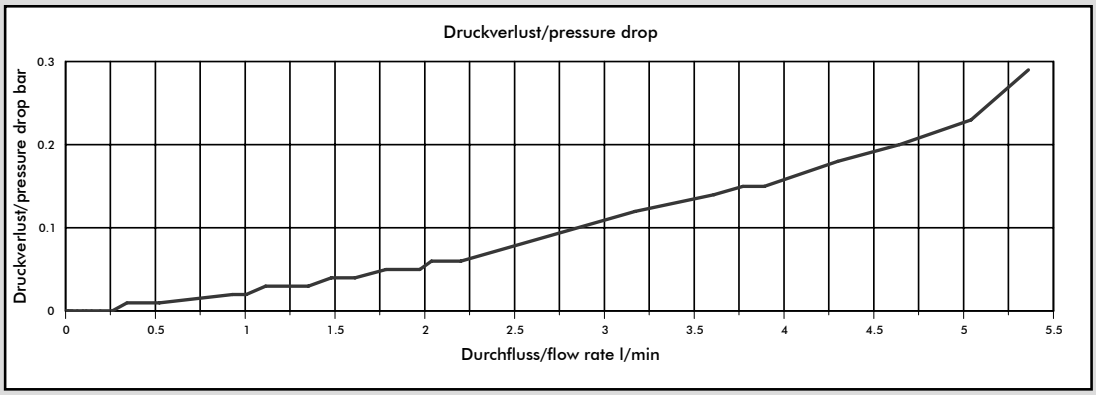
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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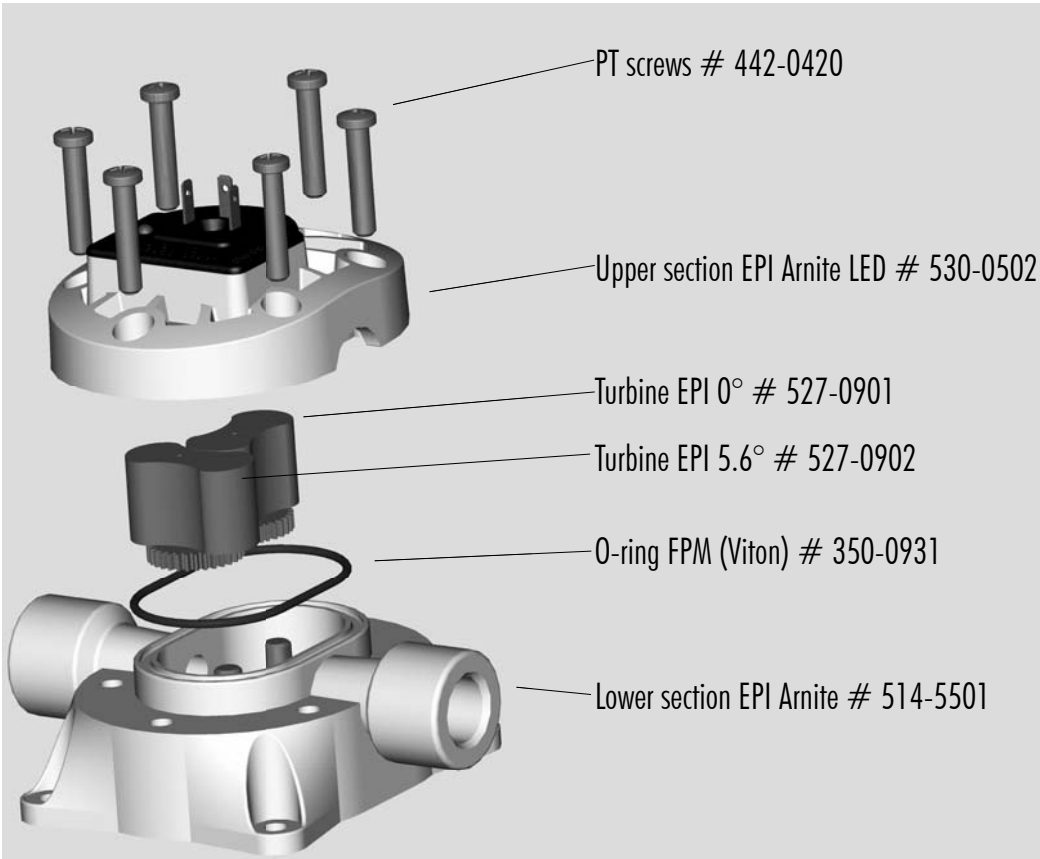
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI Arnite Double-Hall

(suitable for calibration)

Part number: 930-0501/V03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% glass fibre (Arnite)
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

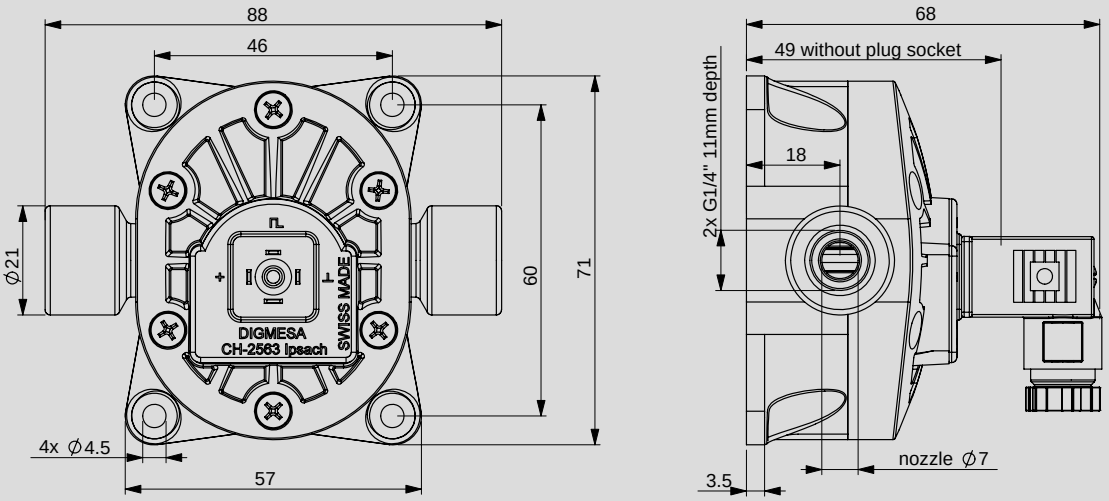
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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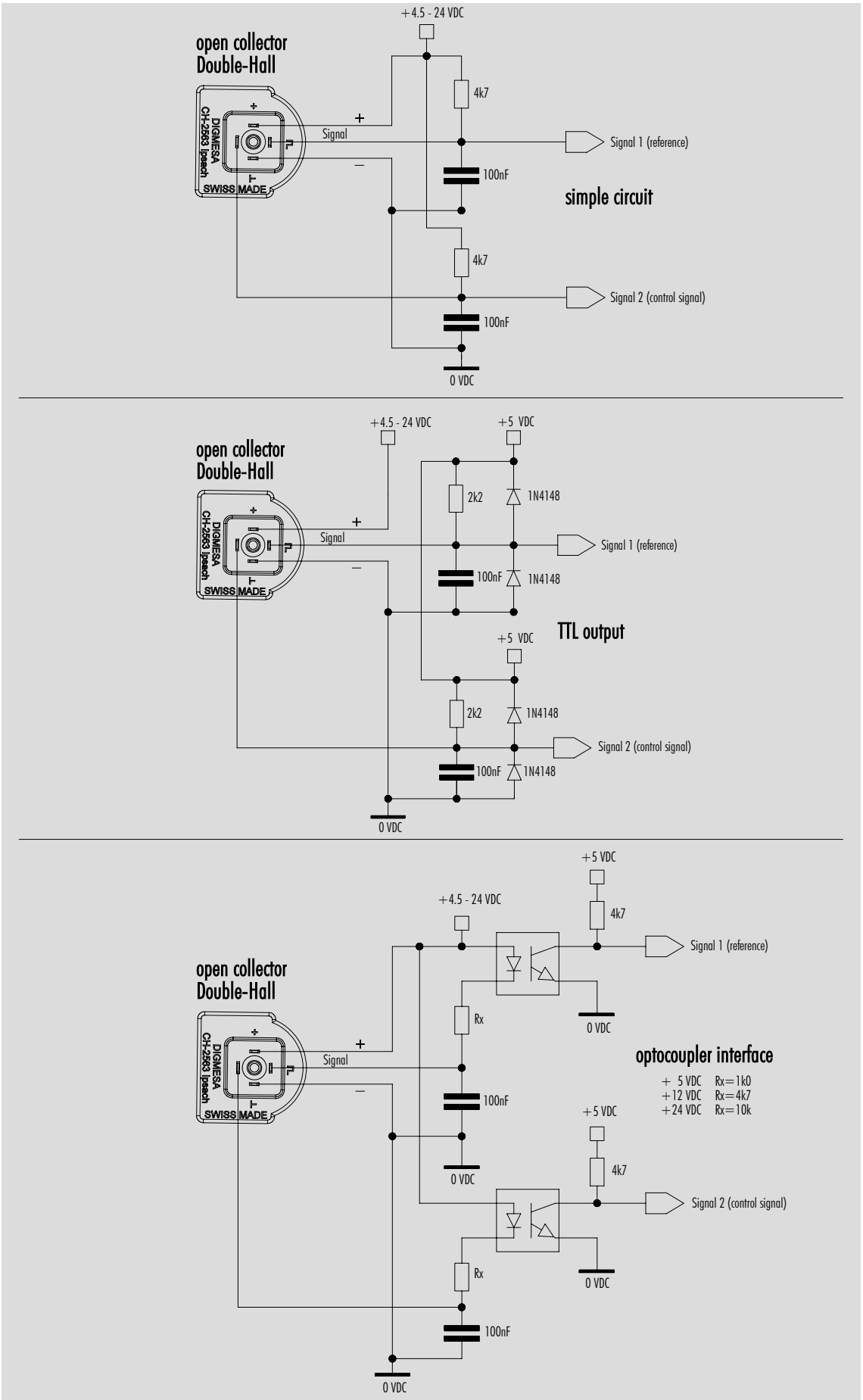
Interface Connection: Examples Double-Hall



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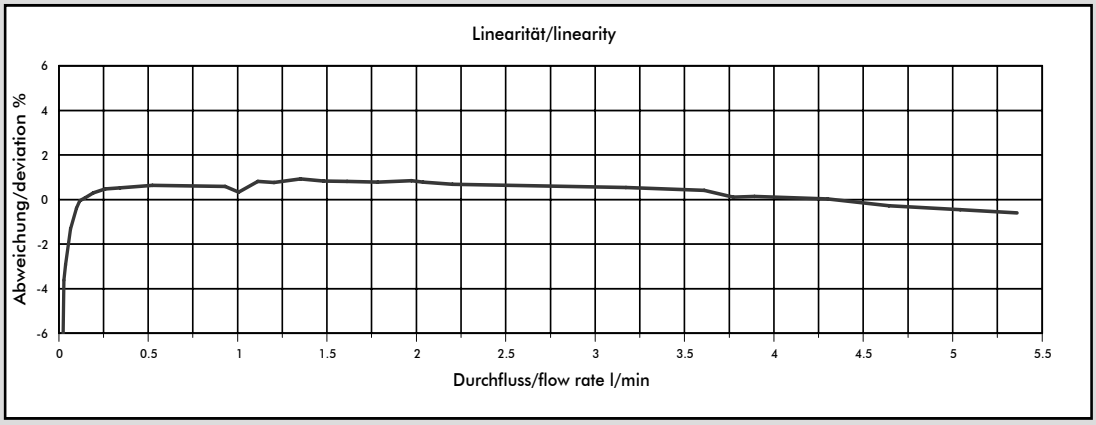
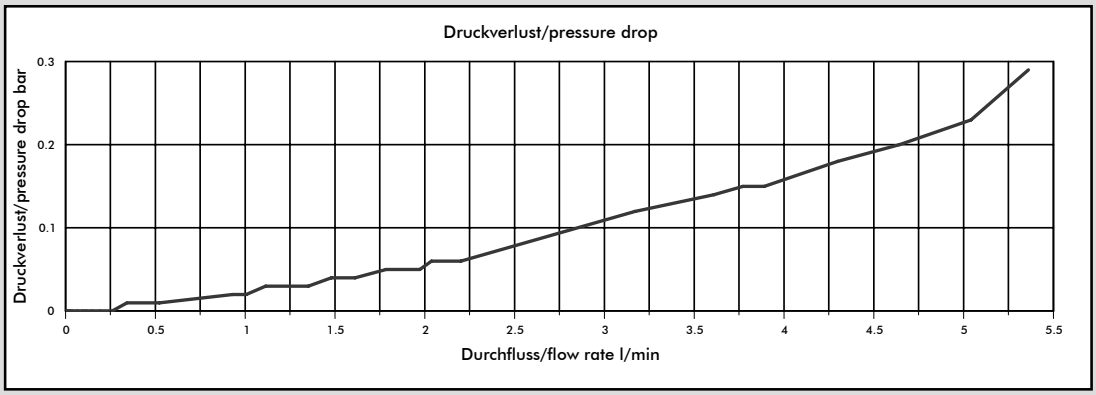
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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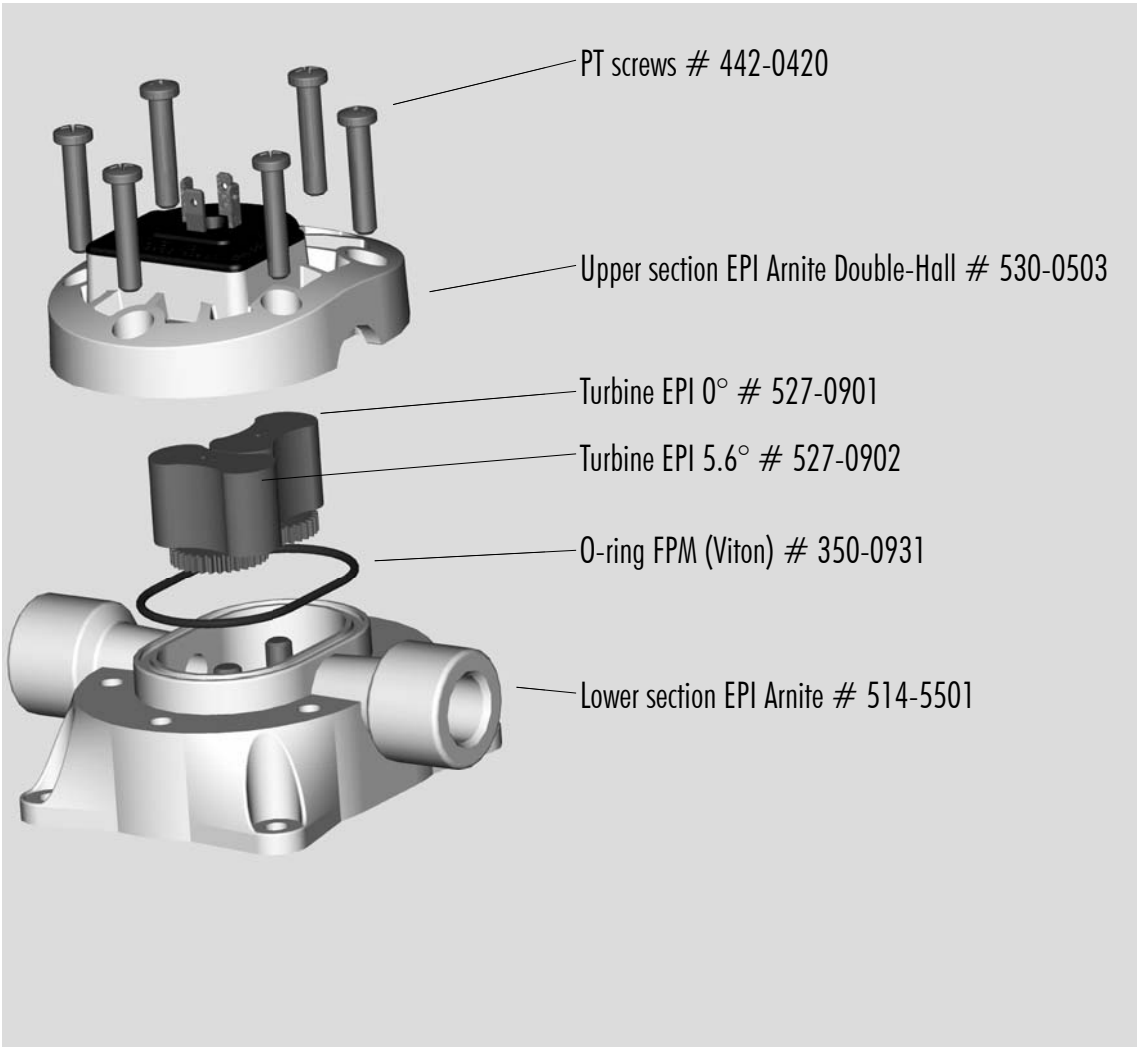
Spare parts:



Notes:

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DATA SHEET

DIGMESA

EPI PP chemistry
Part number: 930-0901/CV01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Zulassungen / Normen

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

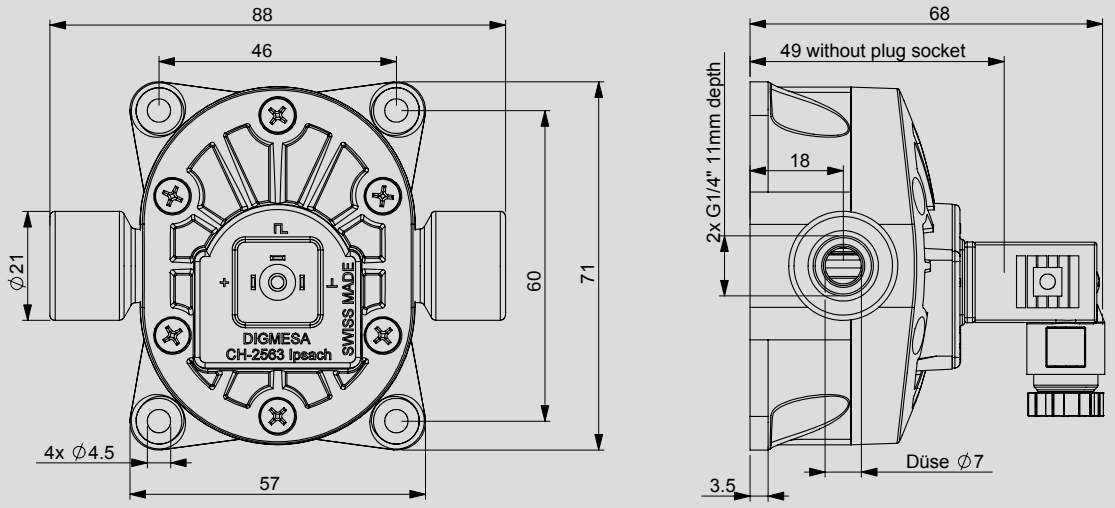
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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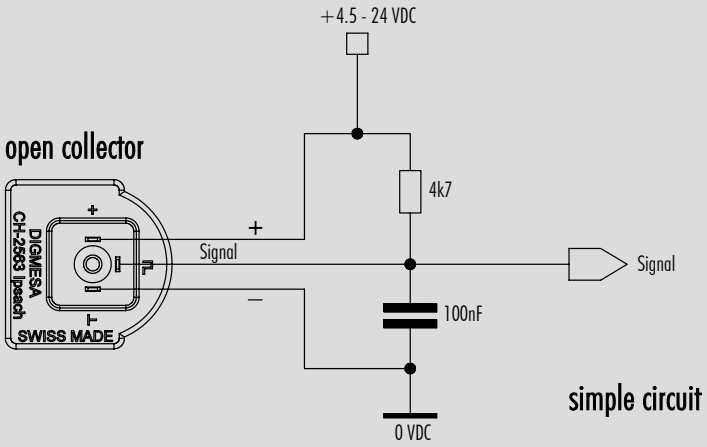
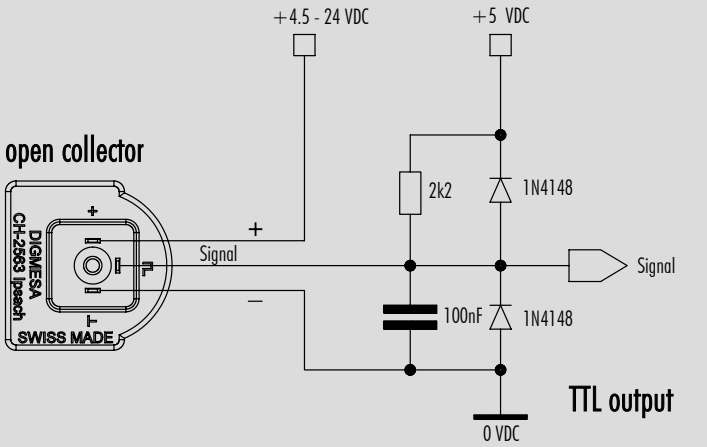
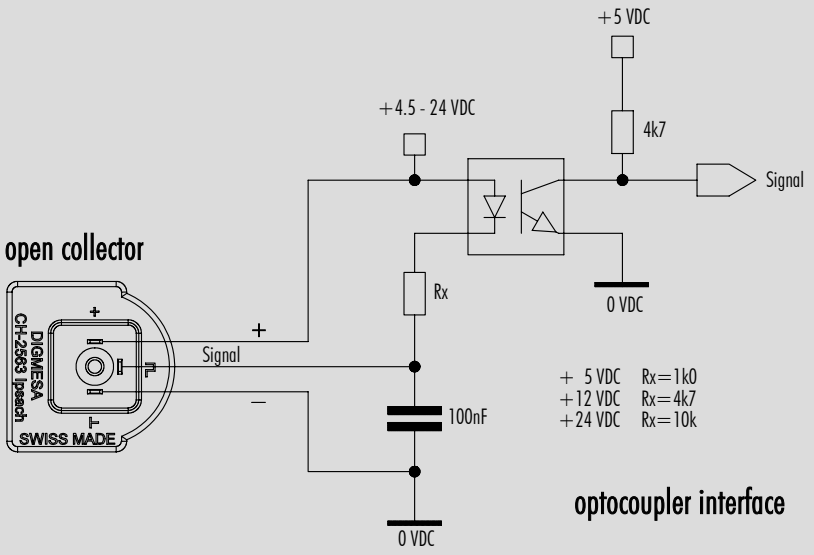
Interface Connection: Examples Open Collector

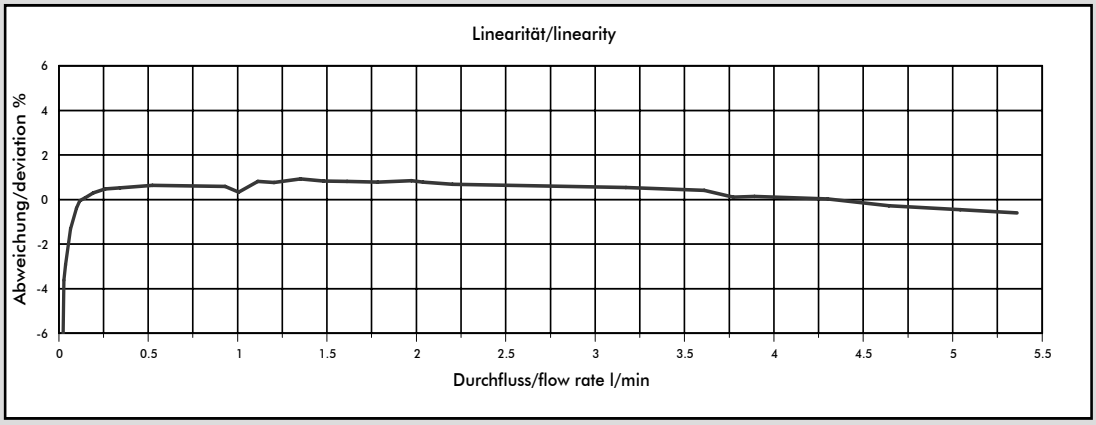


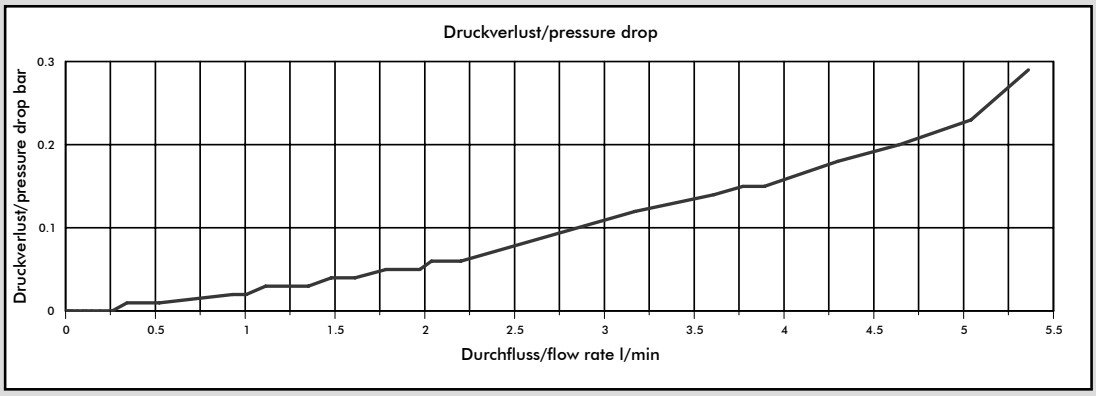




Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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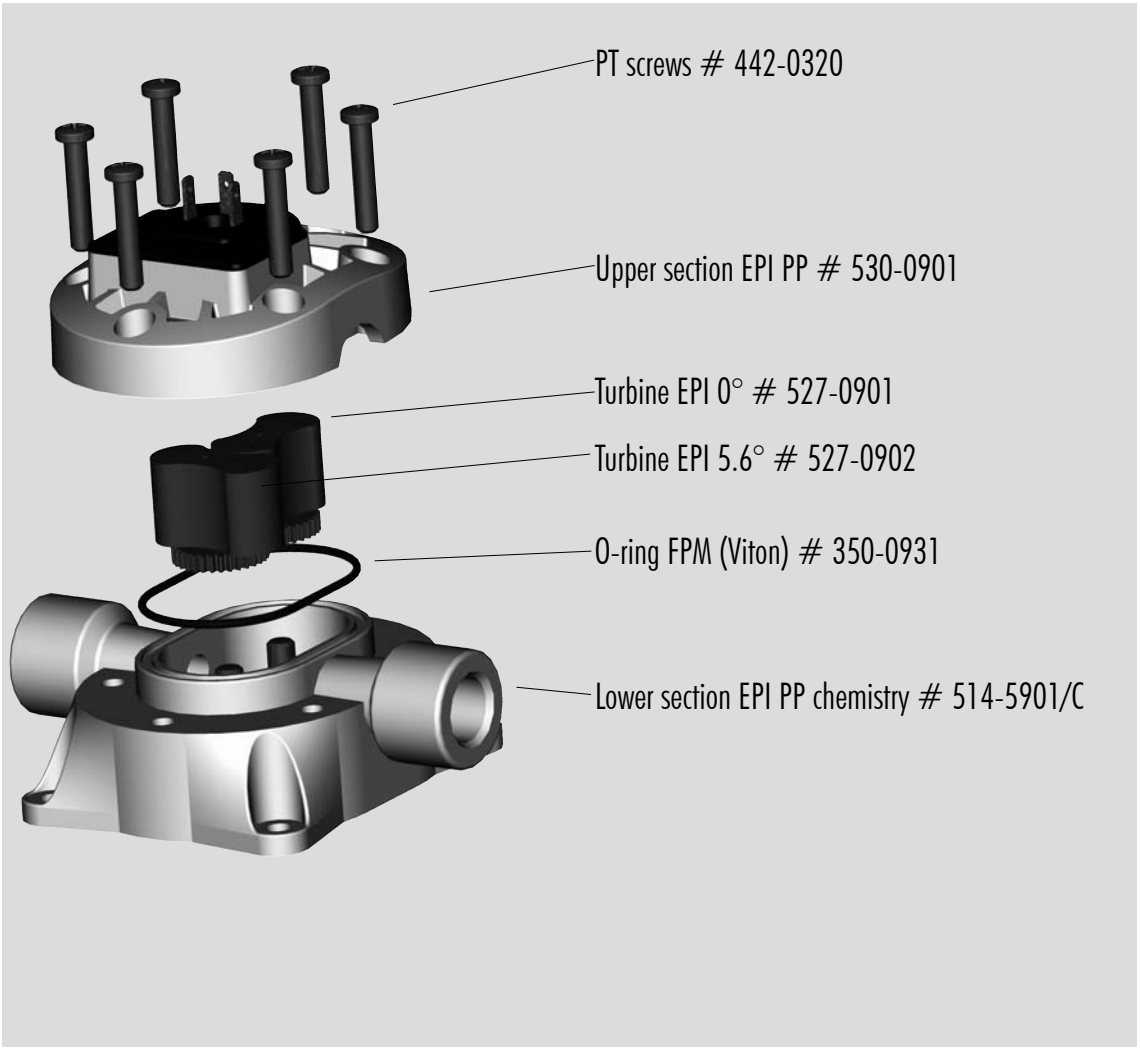
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PP LED chemistry

Part number: 930-0901/CV02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

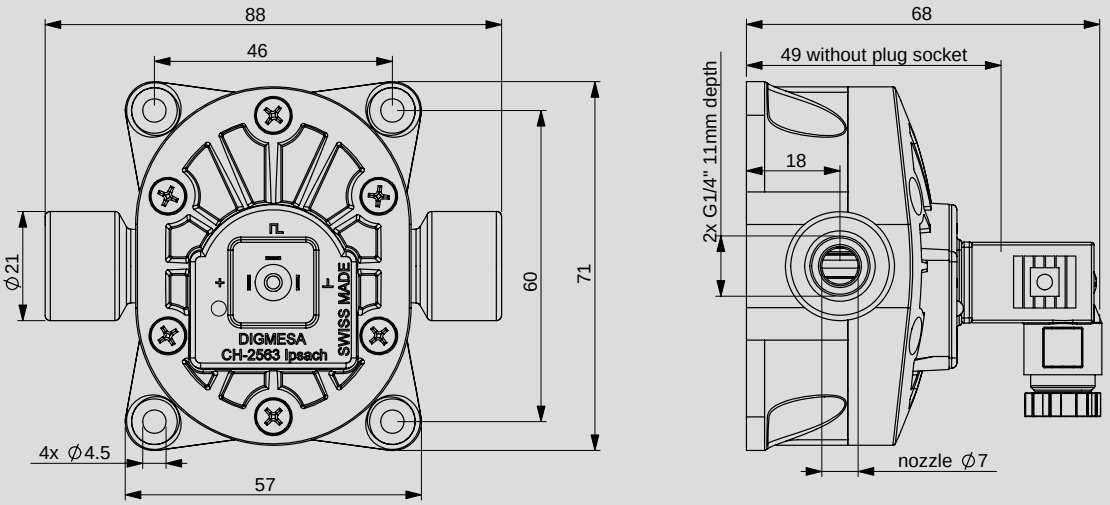
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

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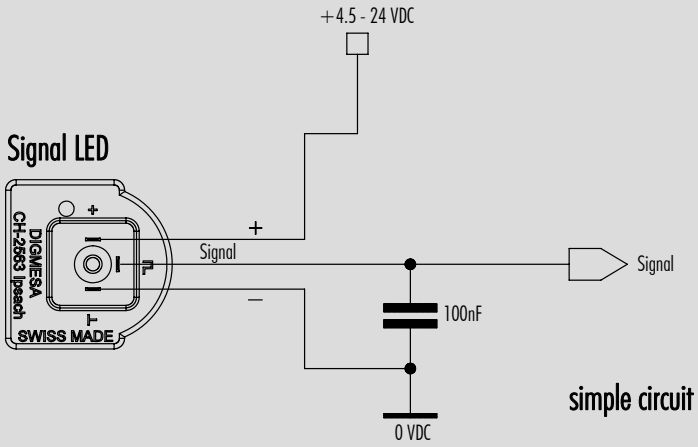
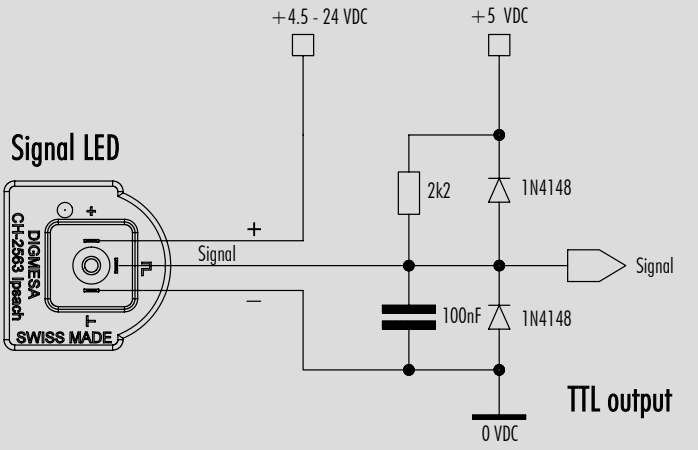
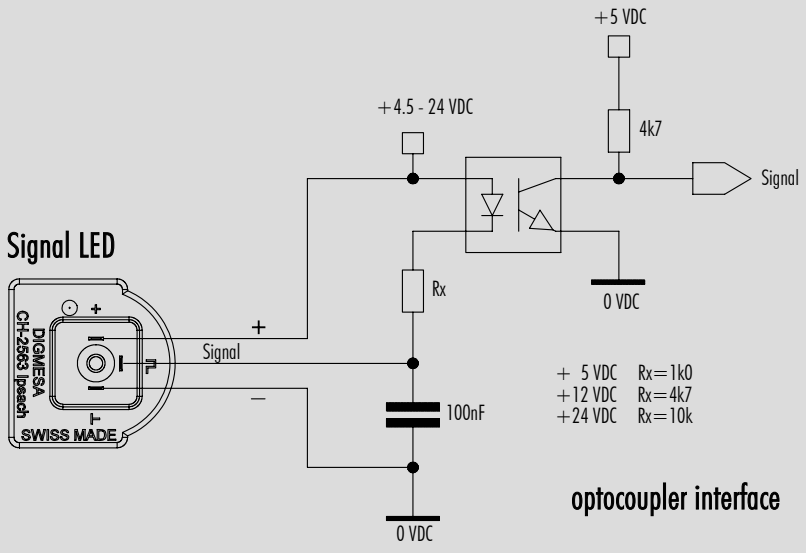
Interface Connection: Examples with LED







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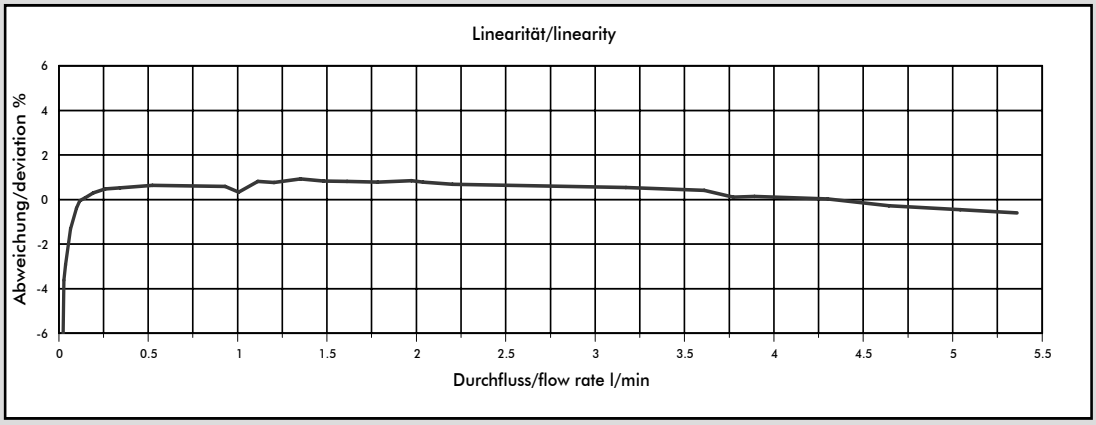
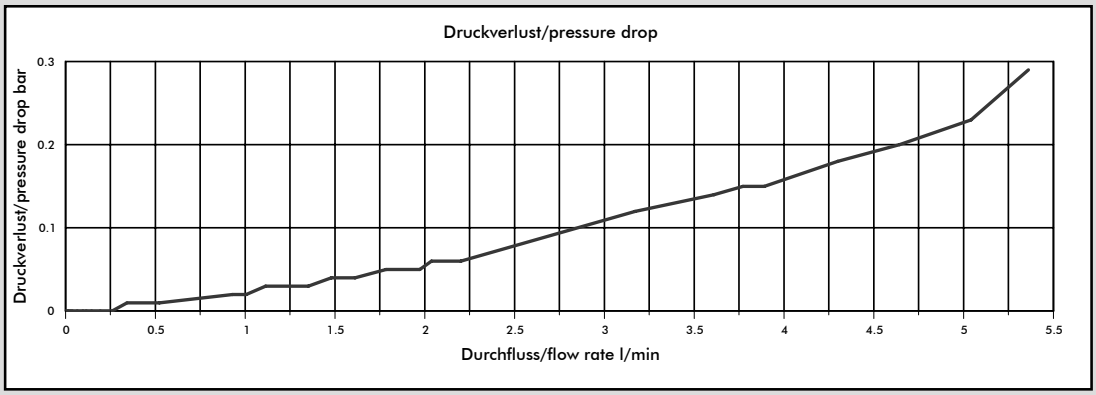
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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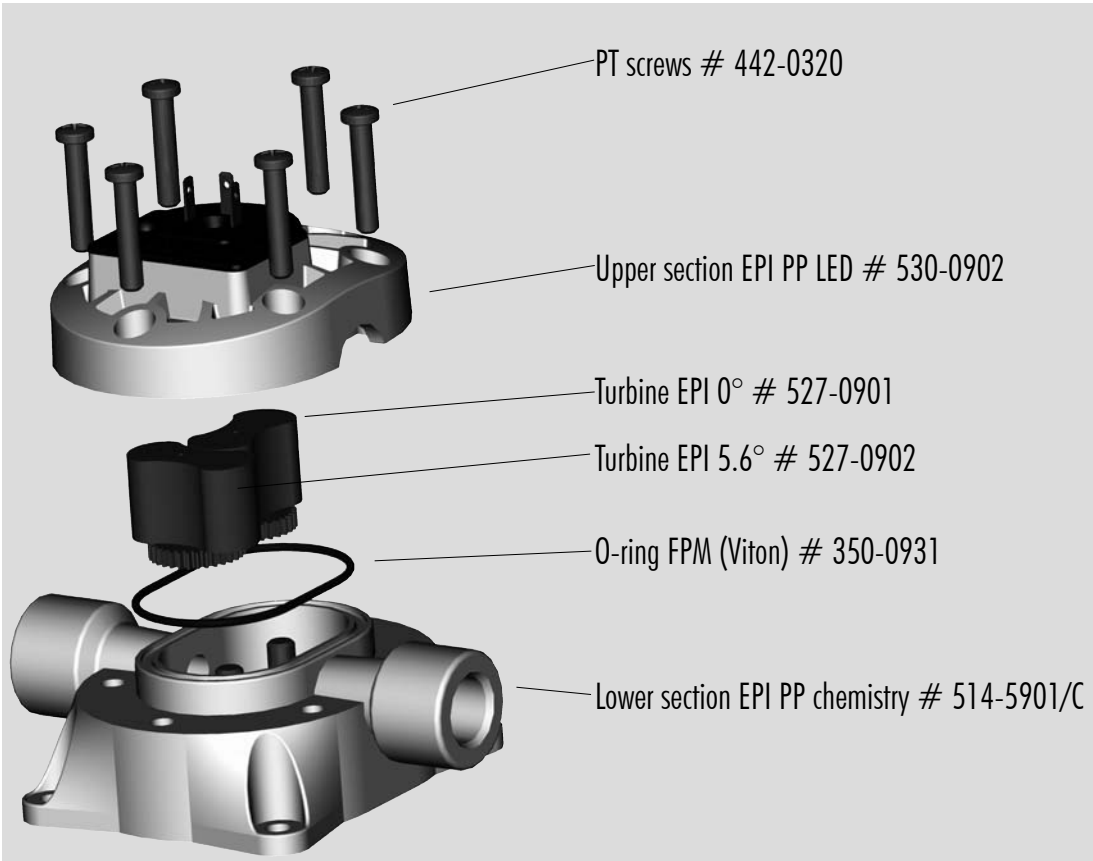
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PP chemistry

Double-Hall (suitable for calibration)

Part number: 930-0901/CV03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

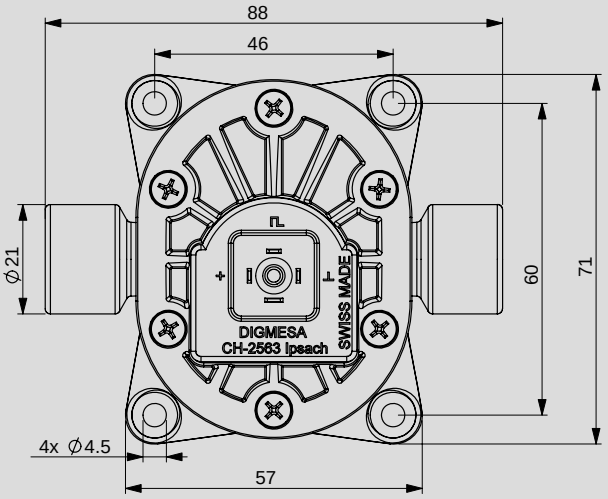
Technical data:

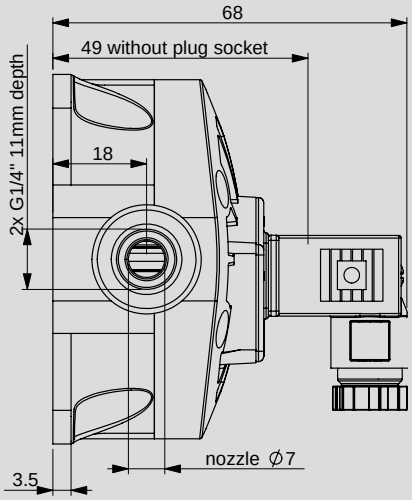
Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:





Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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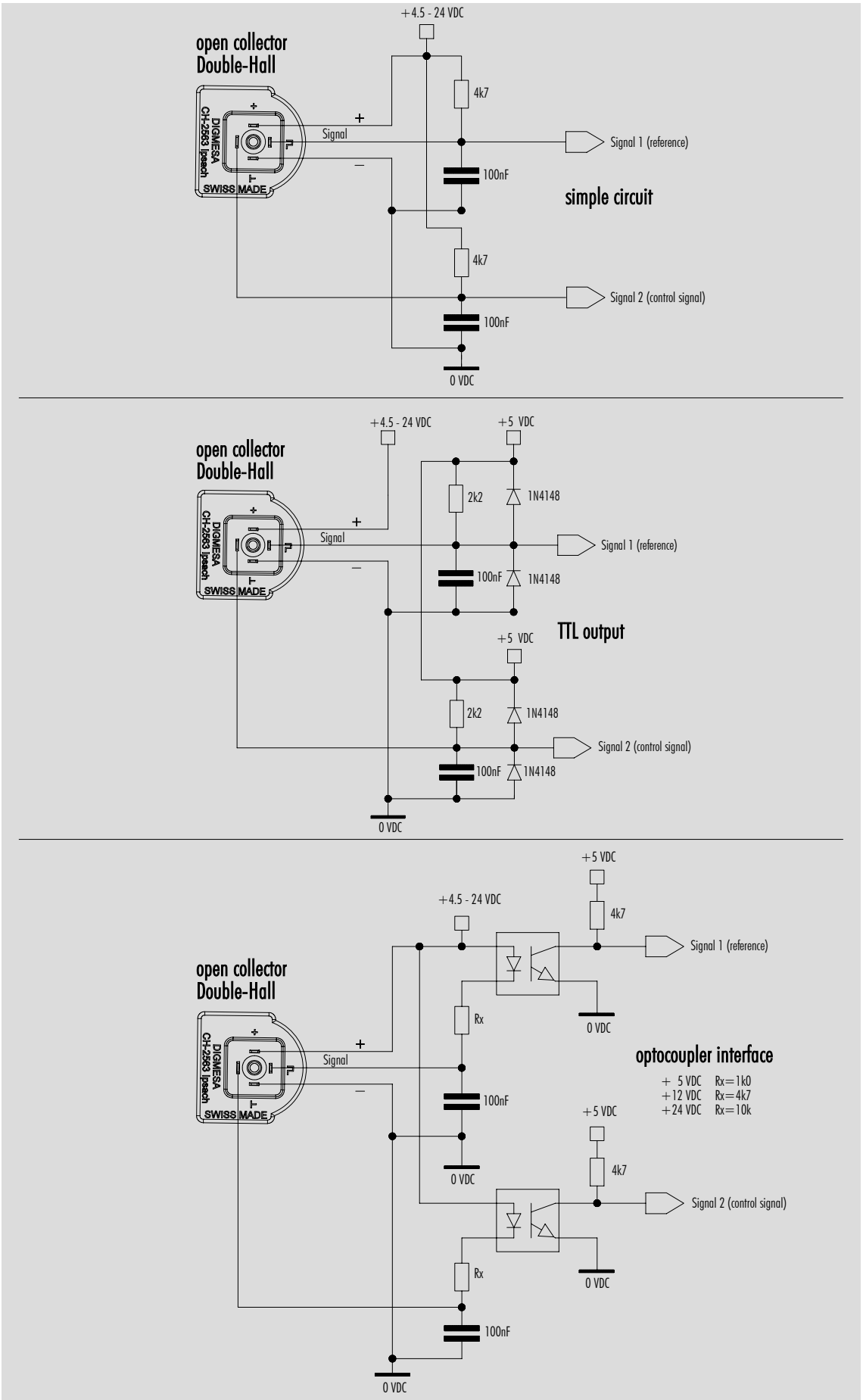
Interface Connection: Examples Double-Hall



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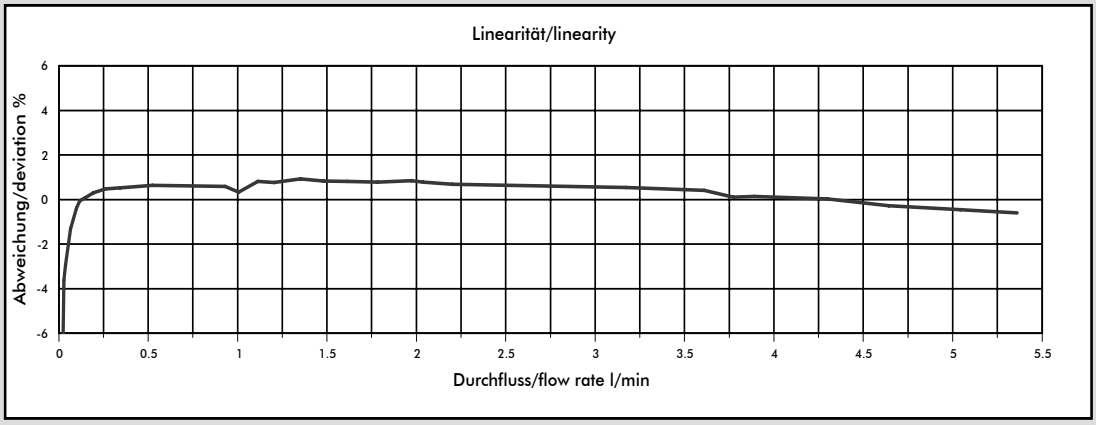
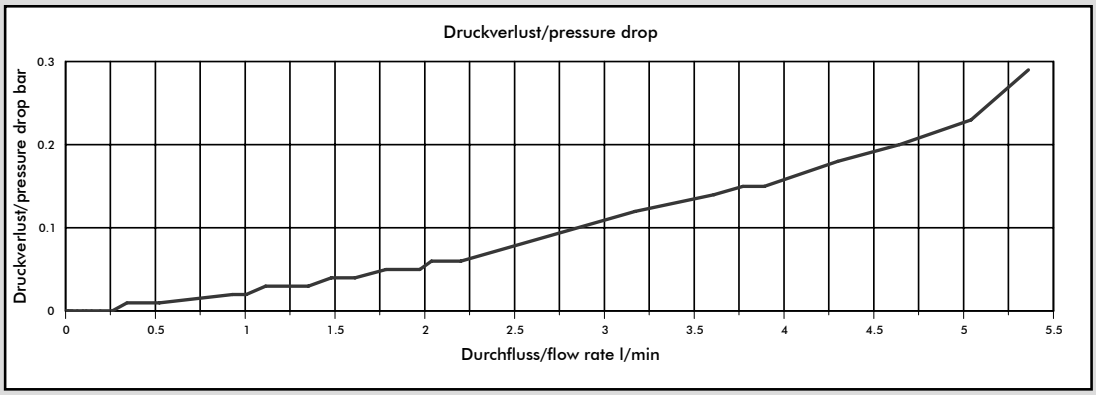
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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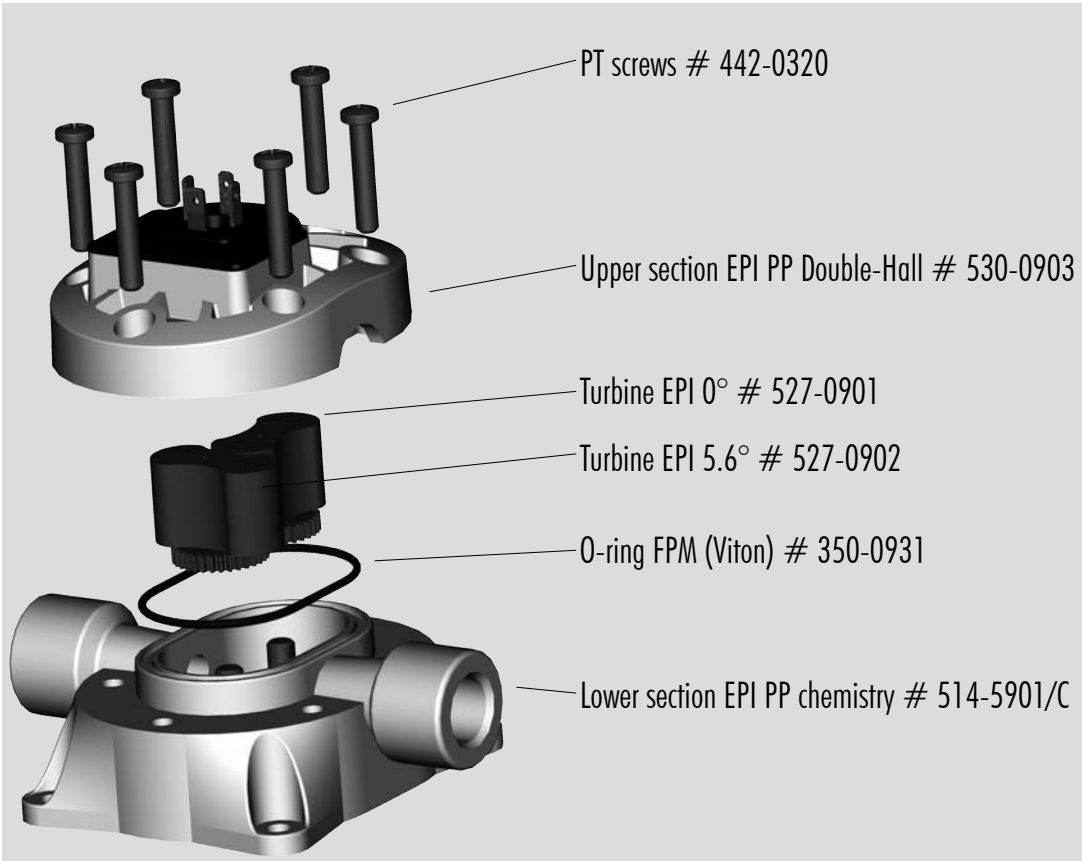
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PP

Part number: 930-0901/V01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

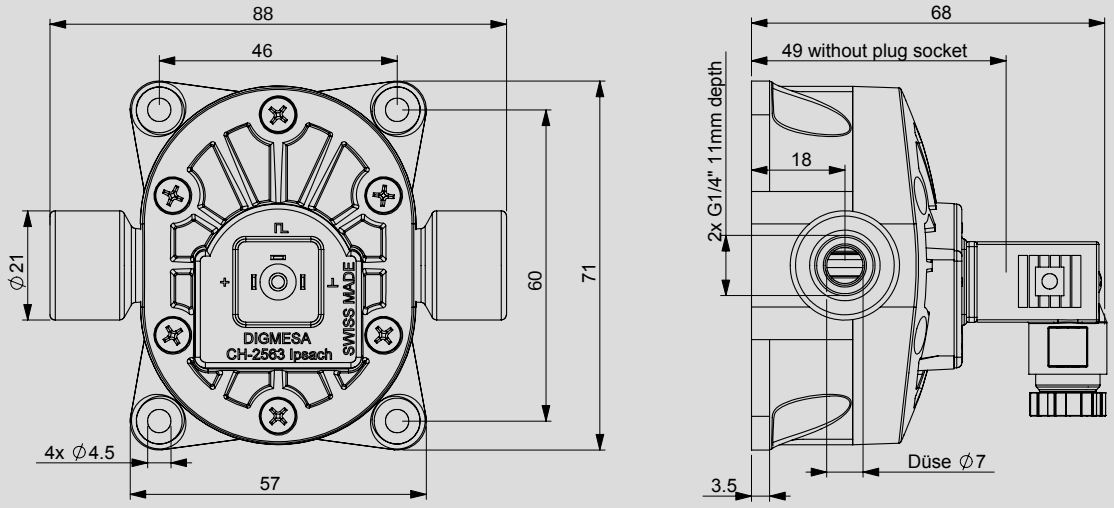
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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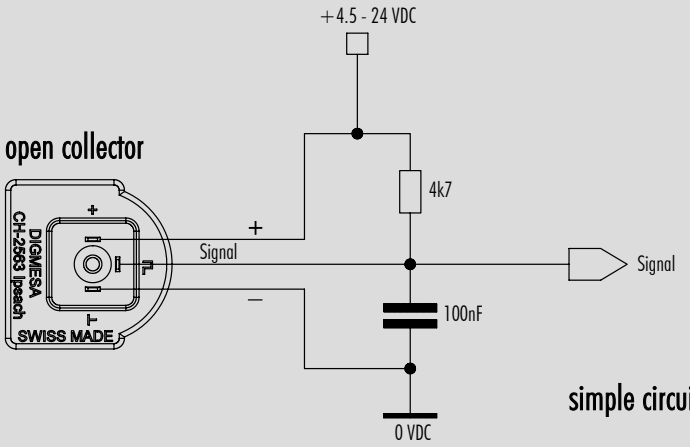
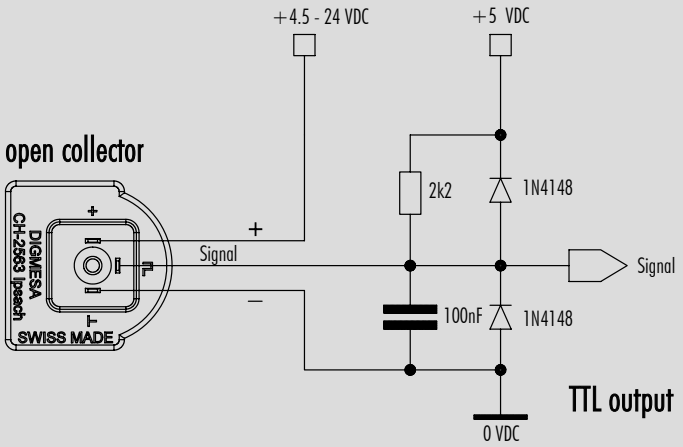
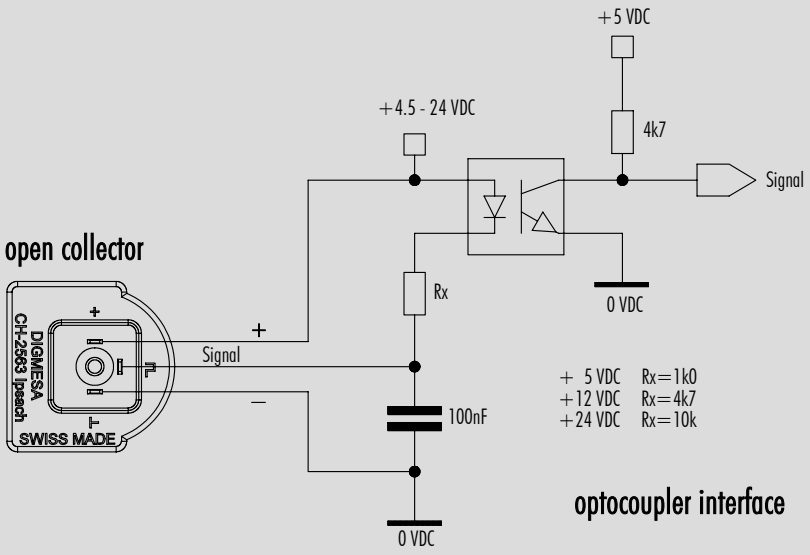
Interface Connection: Examples Open Collector







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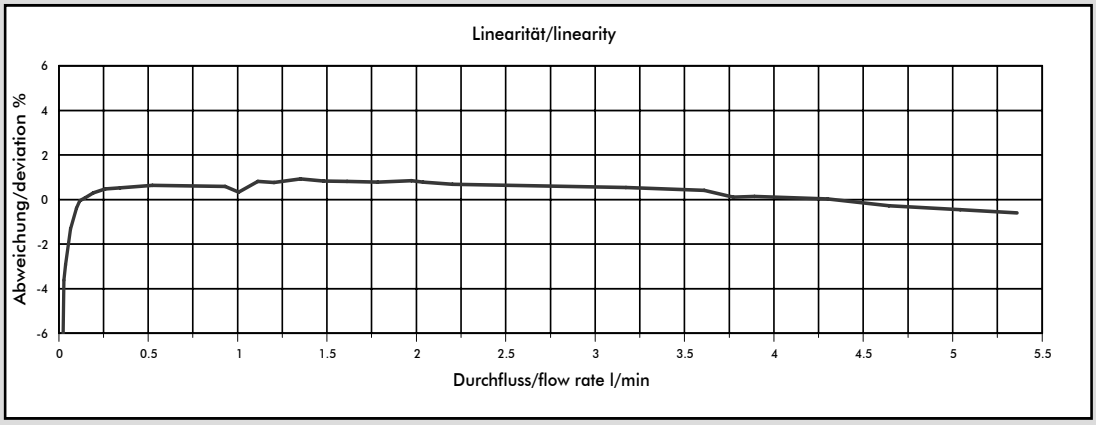
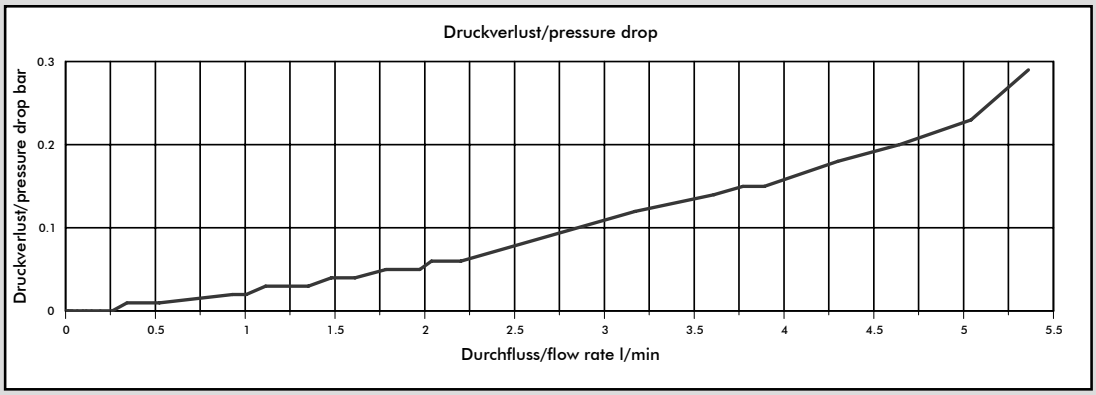
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

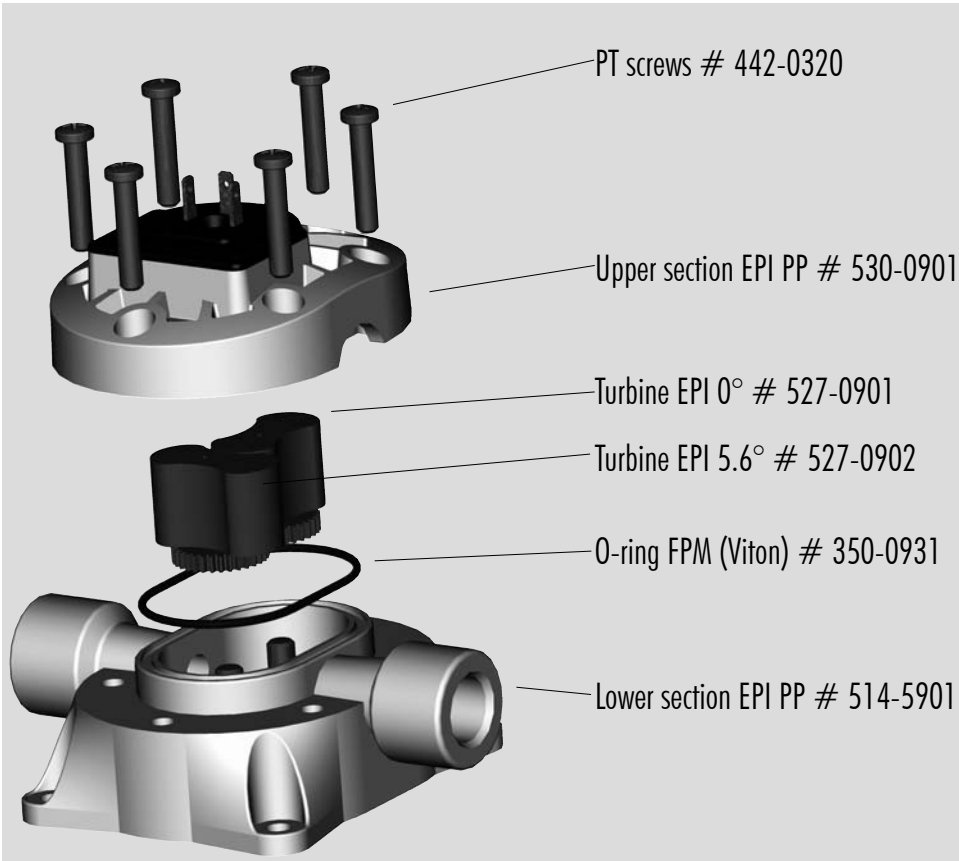
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PP LED

Part number: 930-0901/V02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

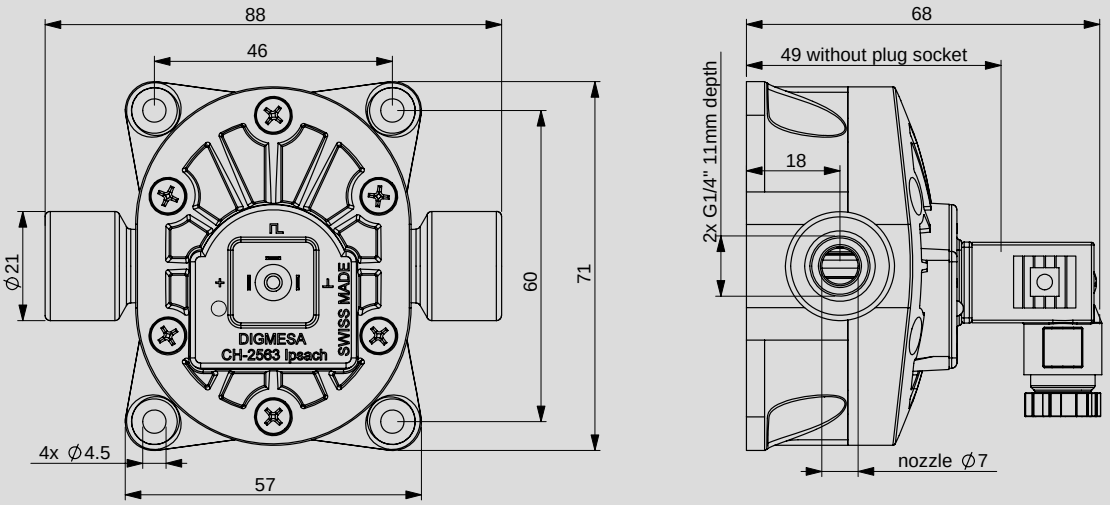
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

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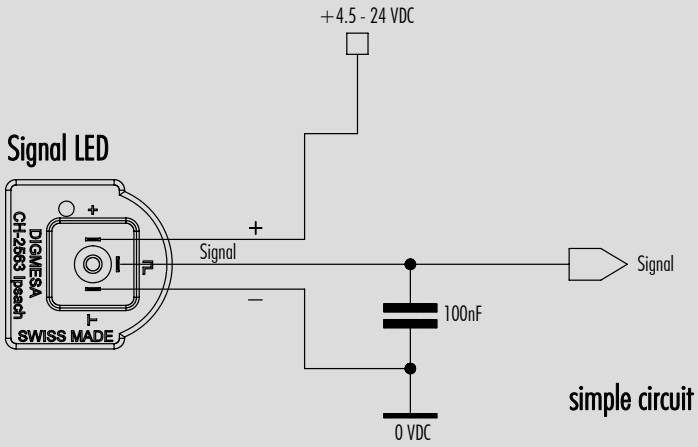
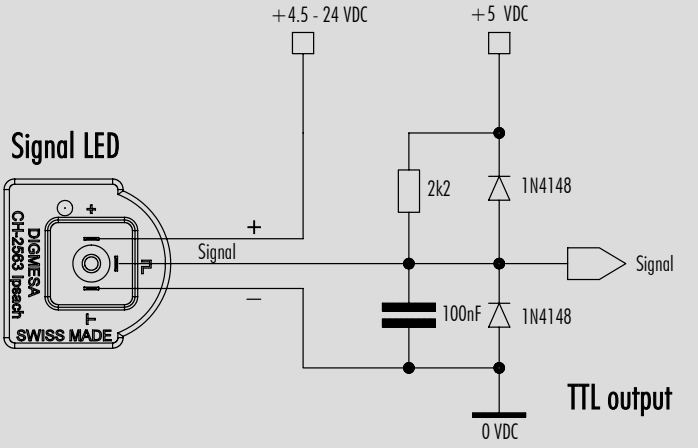
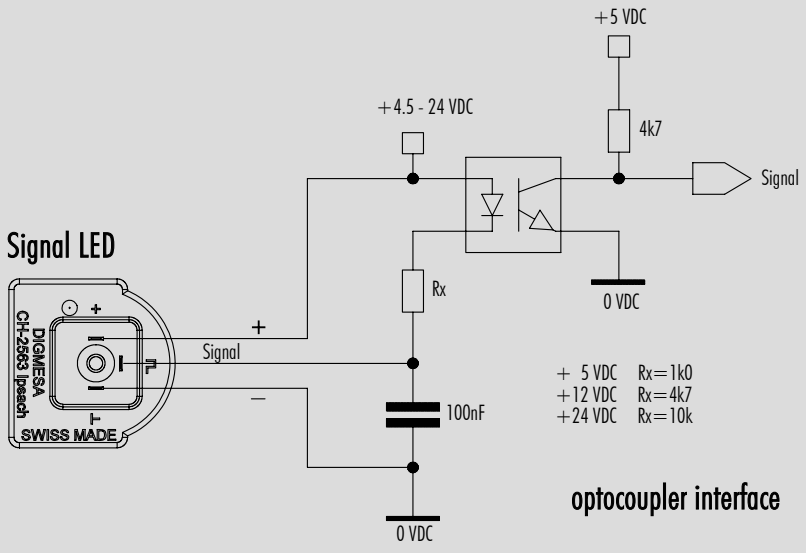
Interface Connection: Examples with LED







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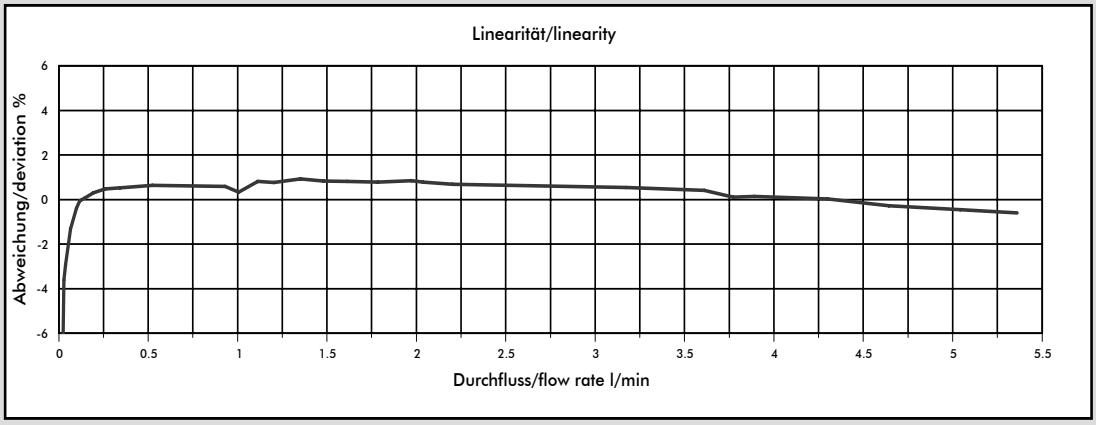
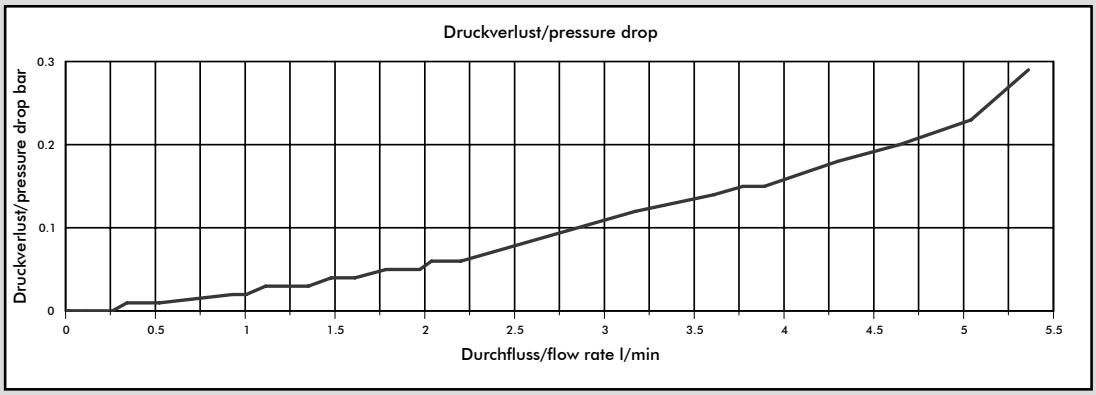
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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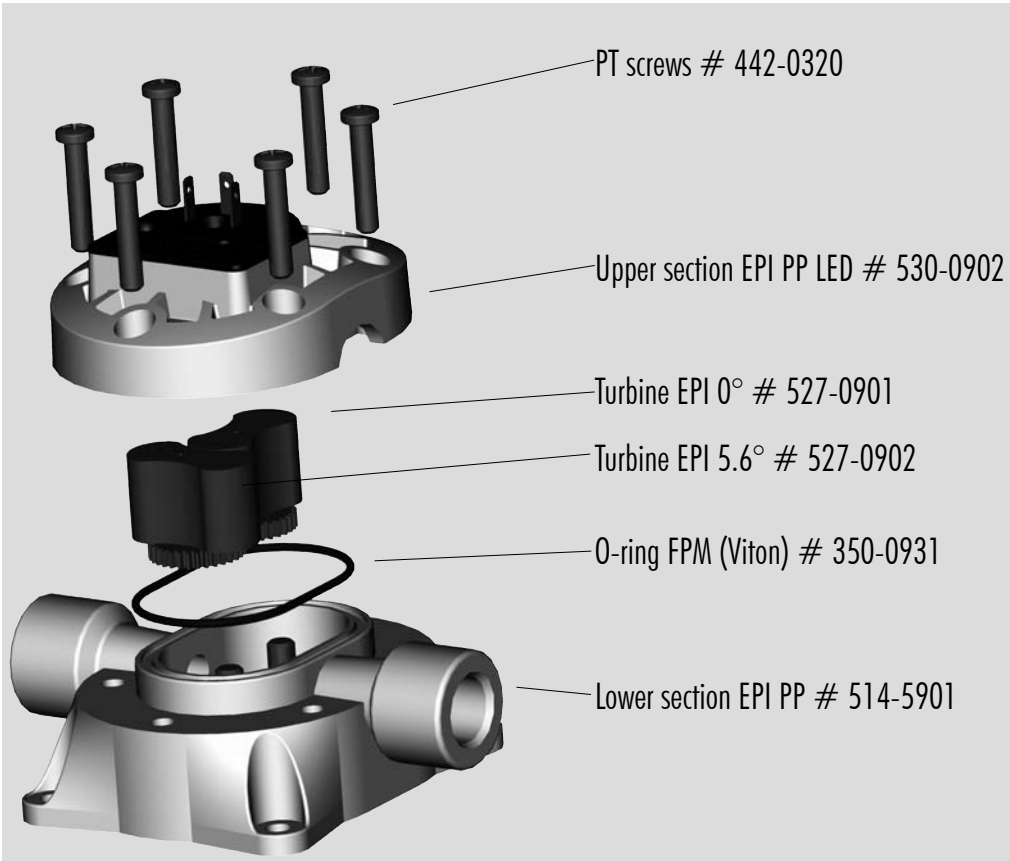
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PP Double-Hall (suitable for calibration)

Part number: 930-0901/V03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PP 30% glass fibre
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

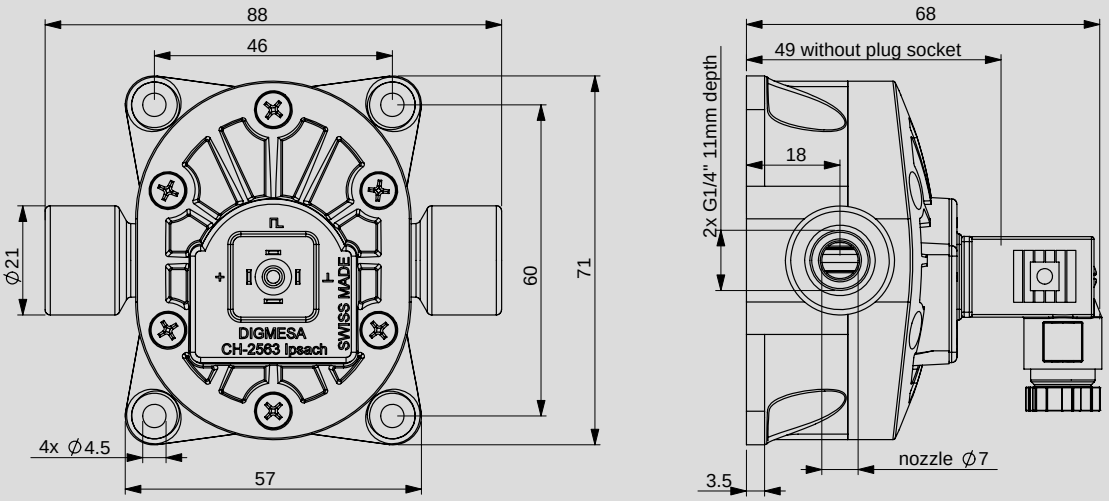
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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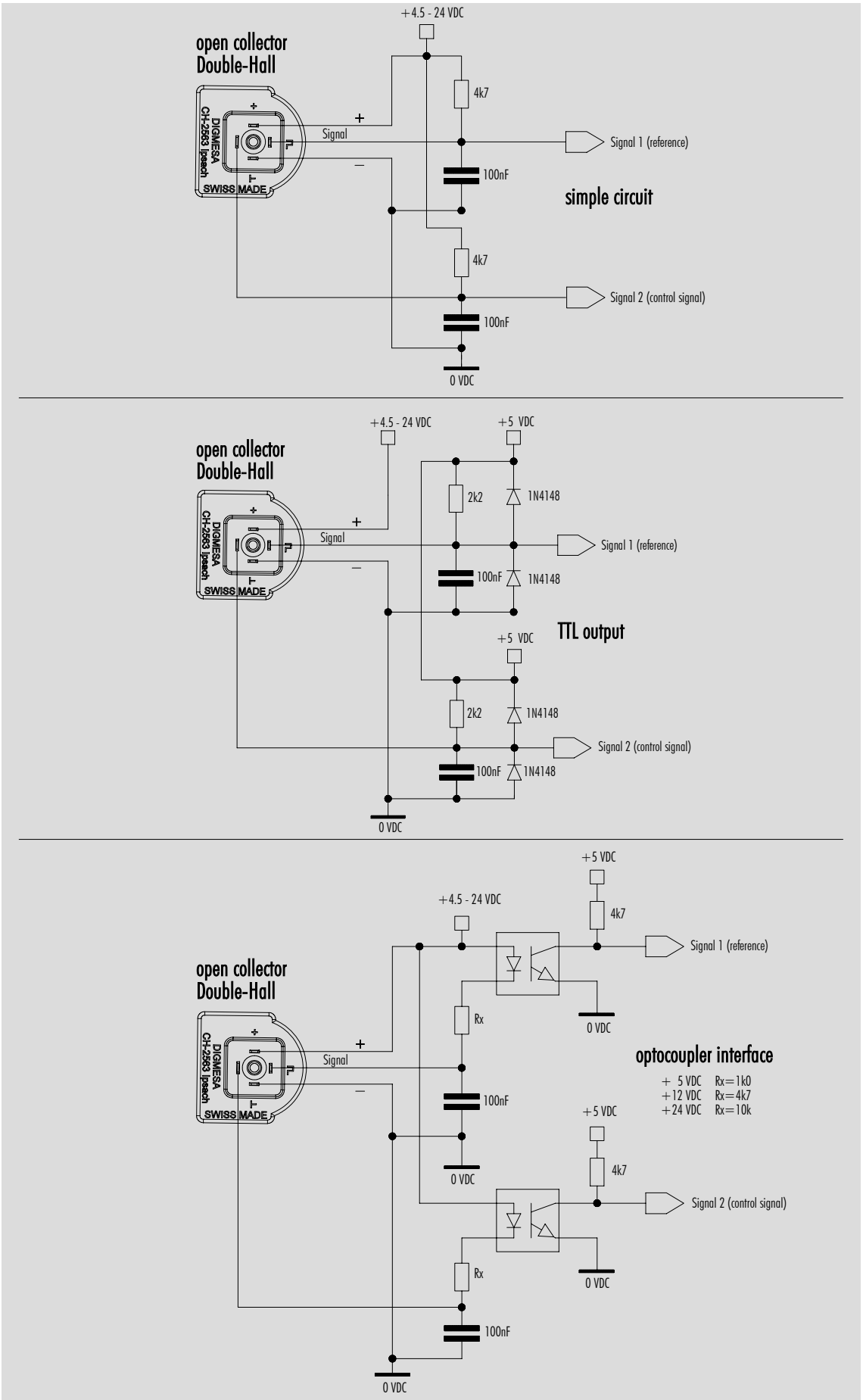
Interface Connection: Examples Double-Hall



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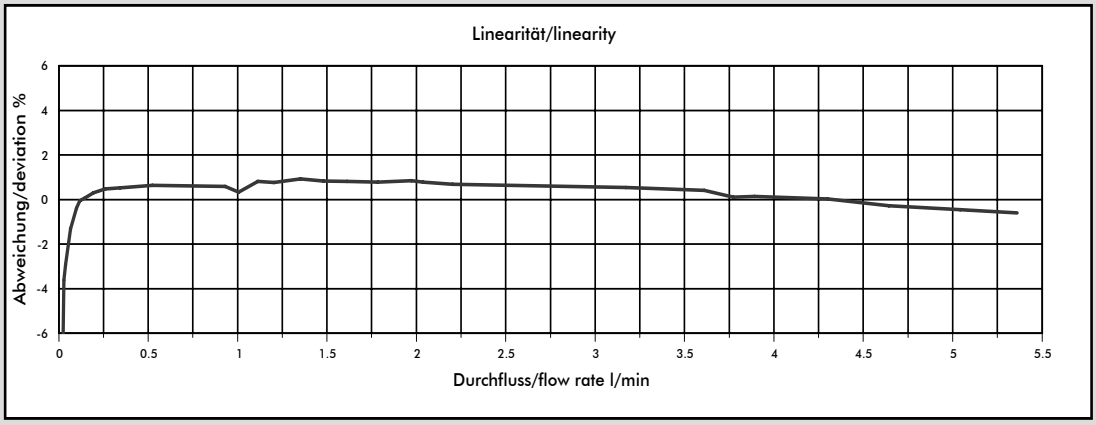
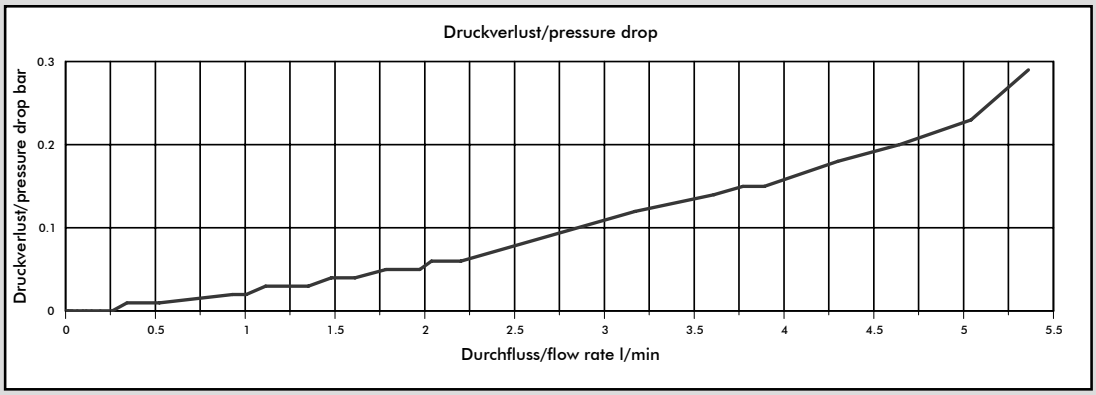
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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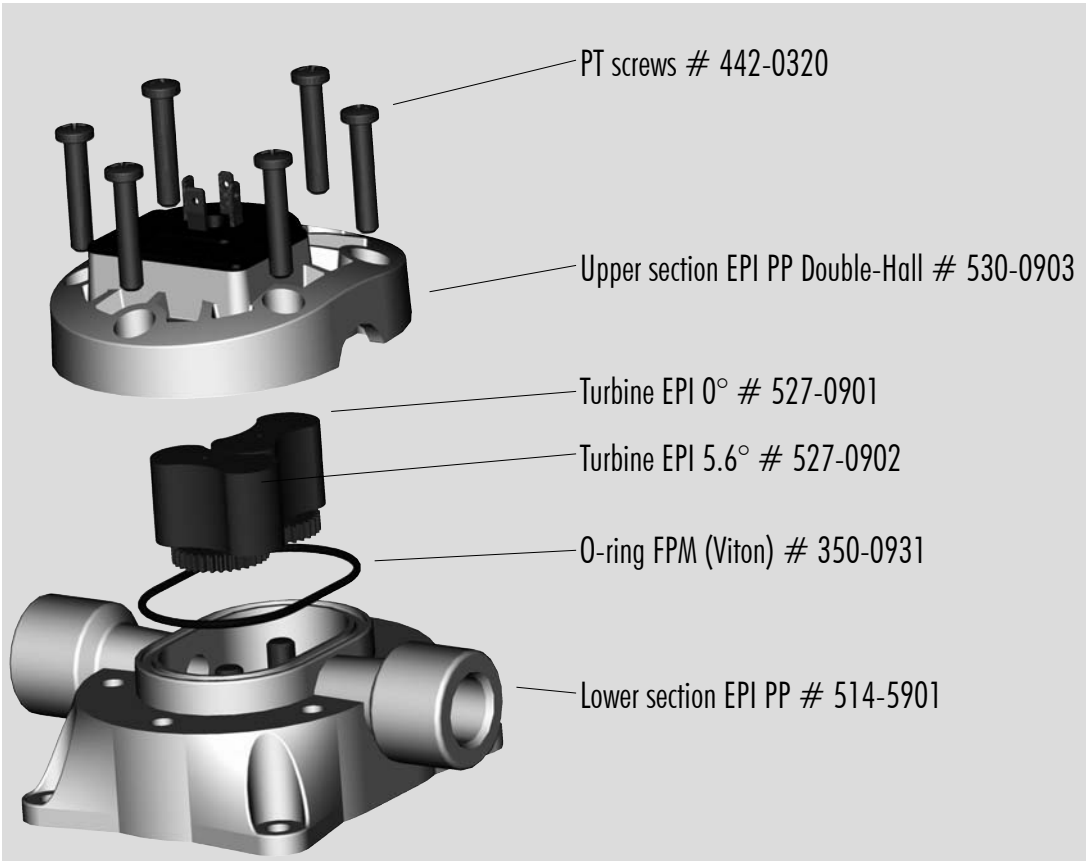
Spare parts:



Notes:

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DATA SHEET

DIGMESA

EPI PEEK chemistry

Part number: 930-0201/CV01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

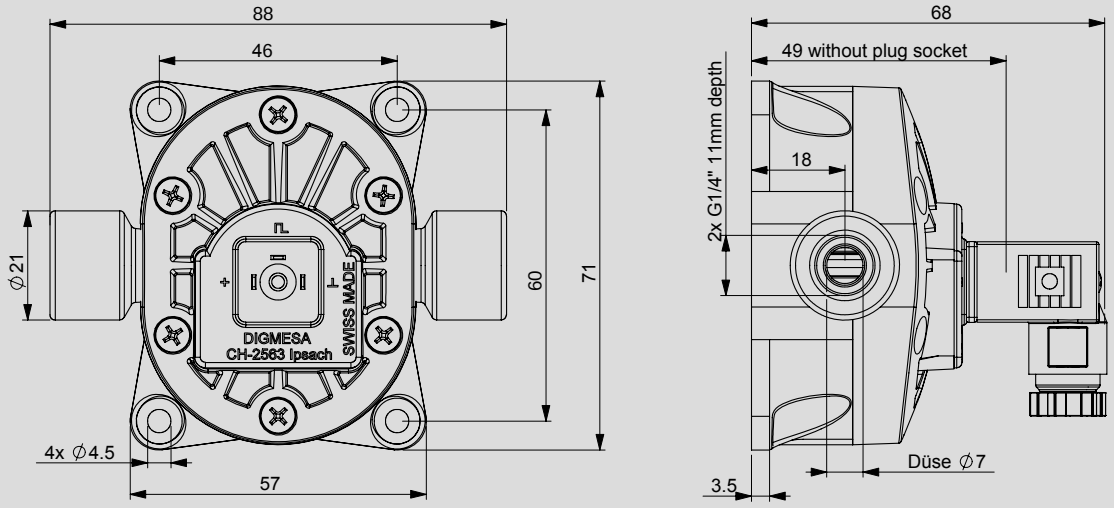
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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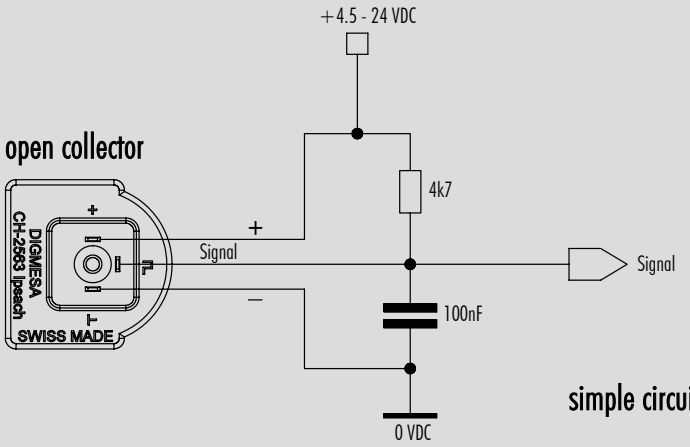
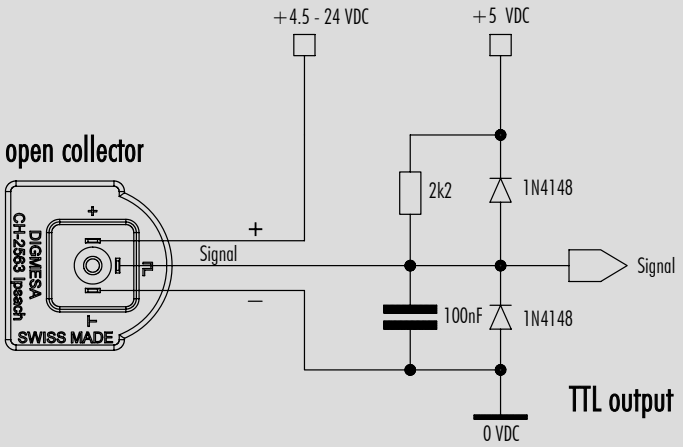
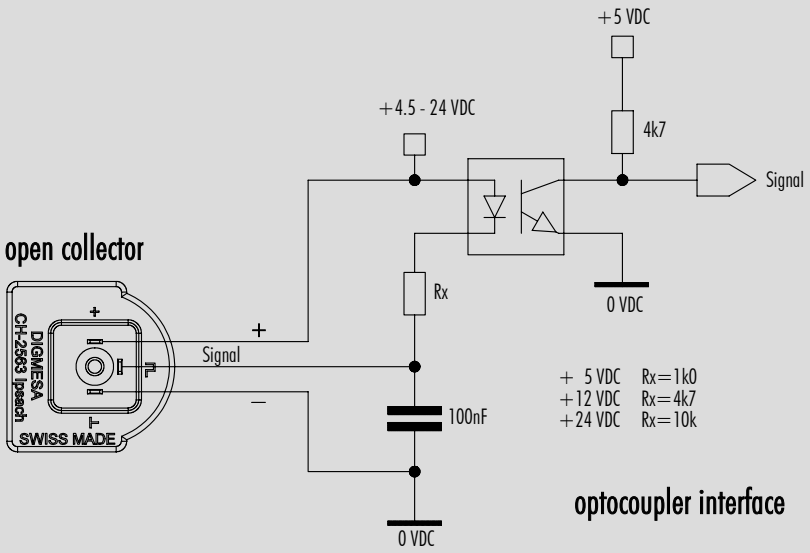
Interface Connection: Examples Open Collector







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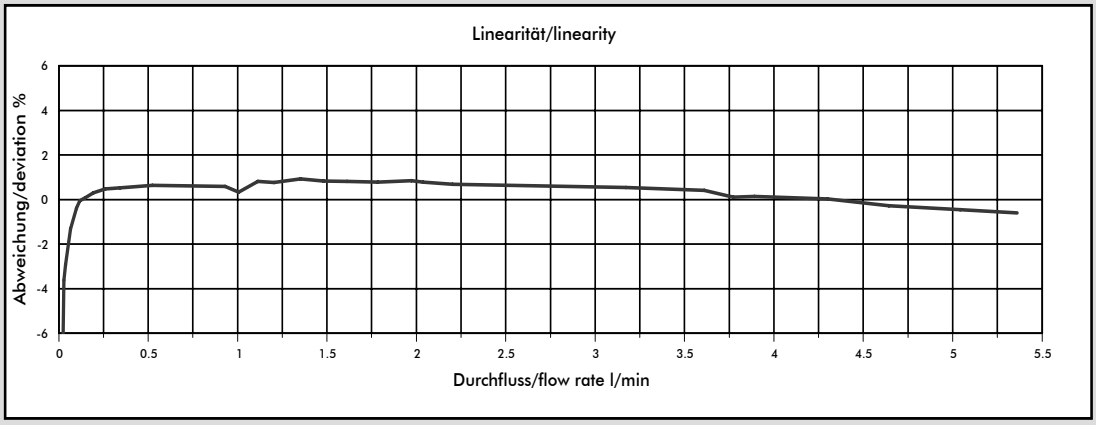
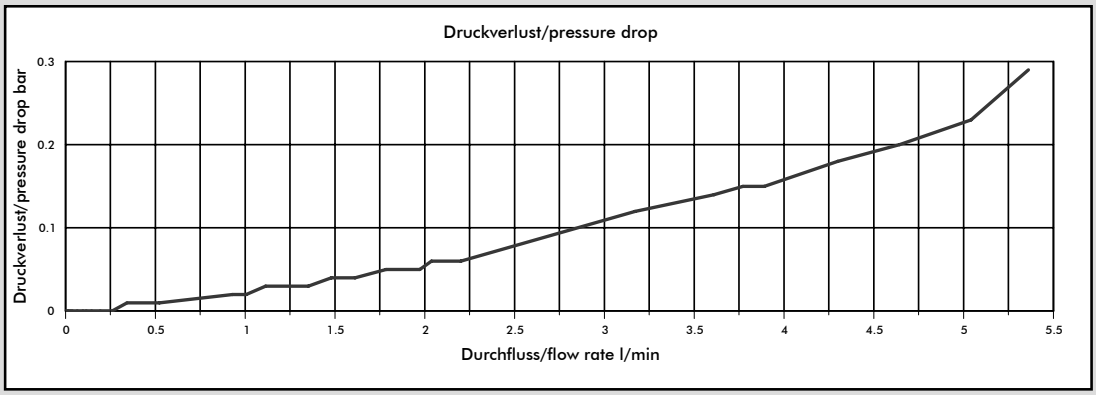
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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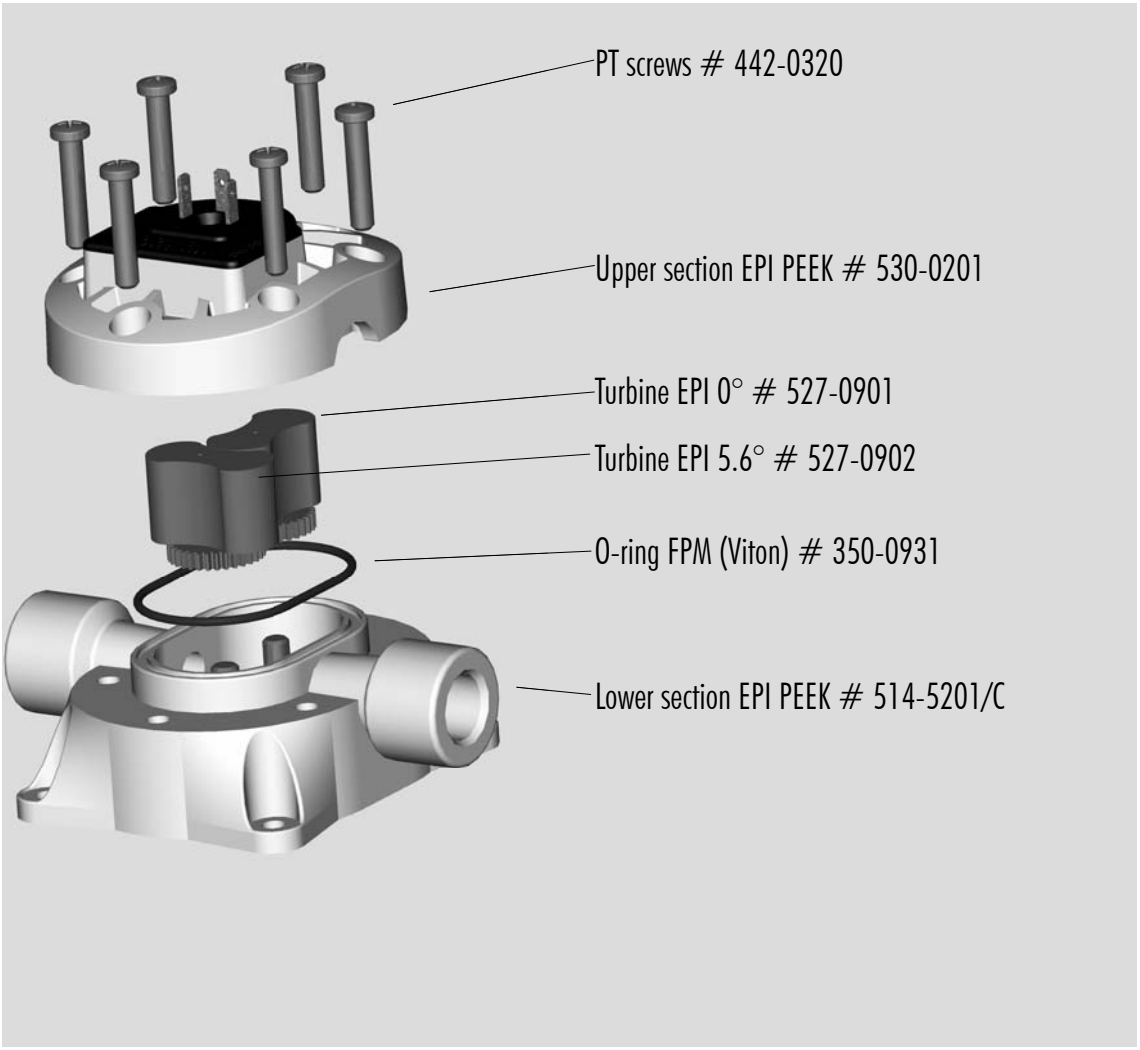
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PEEK LED chemistry

Part number: 930-0201/CV02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

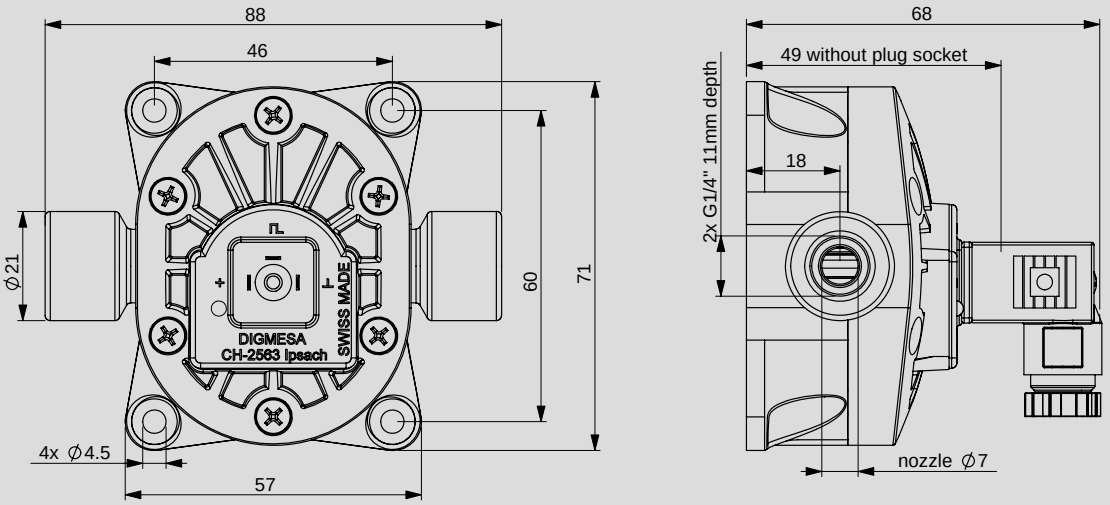
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

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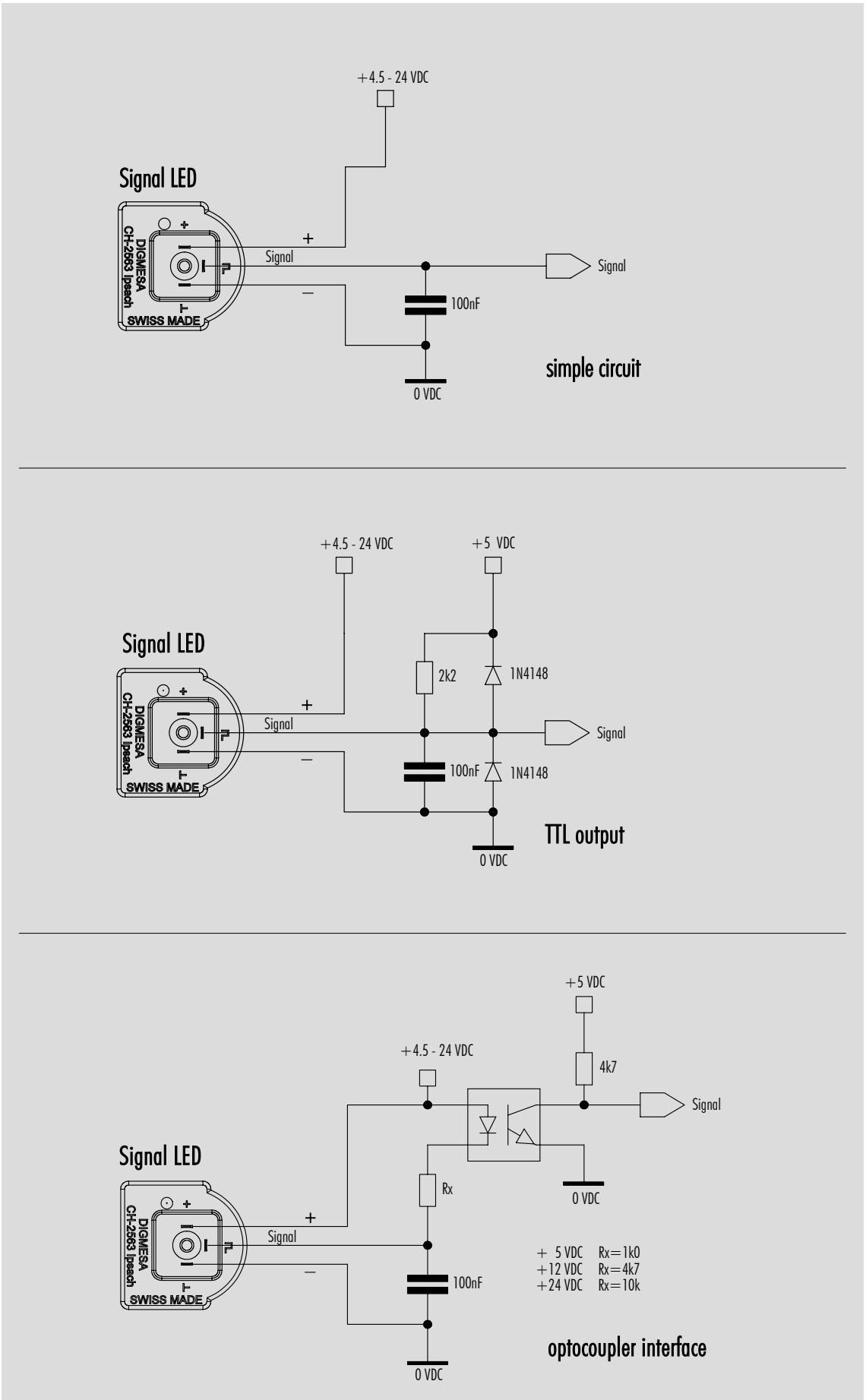
Interface Connection: Examples with LED



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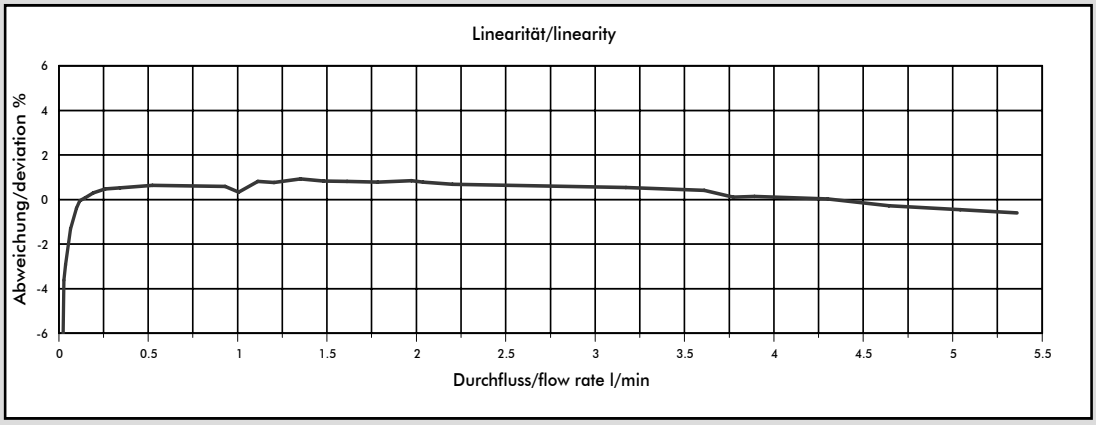
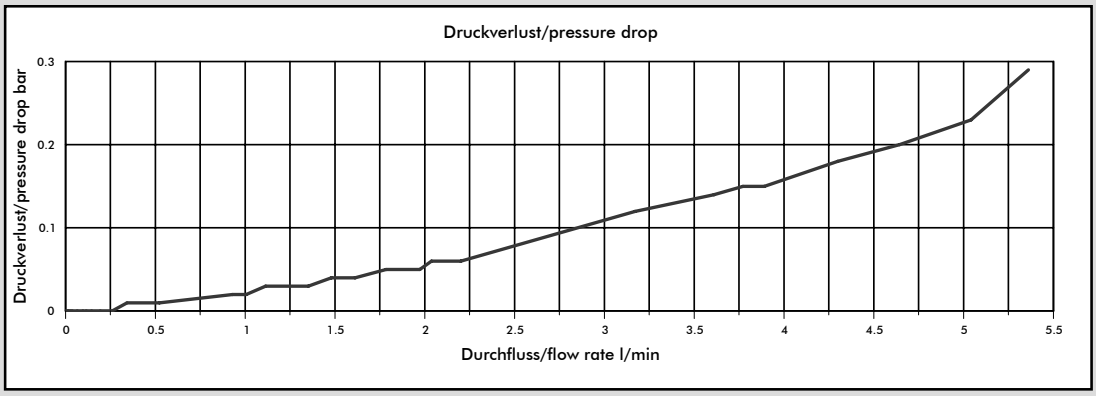
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

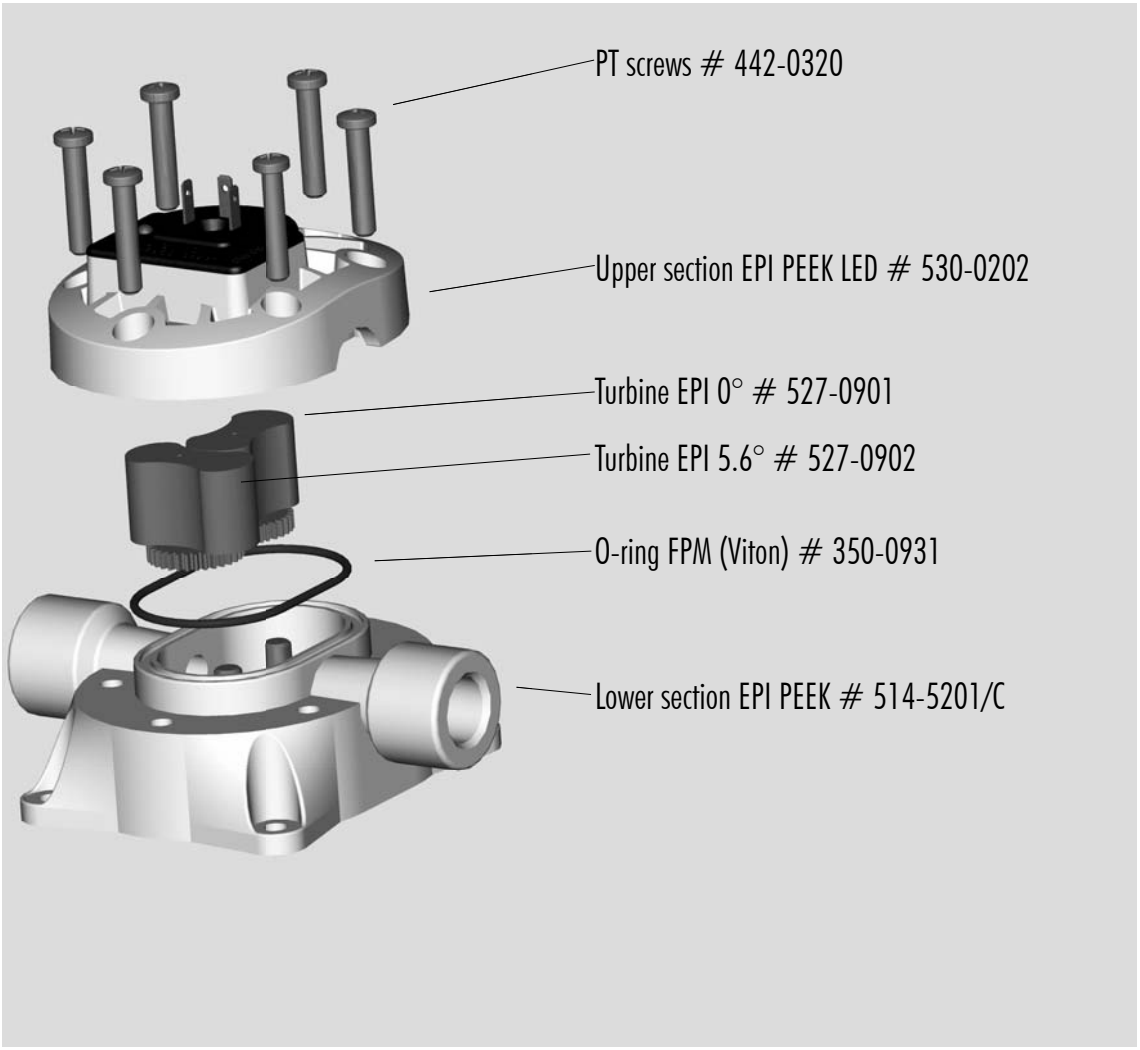
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

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DATA SHEET

DIGMESA

EPI PEEK chemistry

Double-Hall (suitable for calibration)

Part number: 930-0201/CV03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

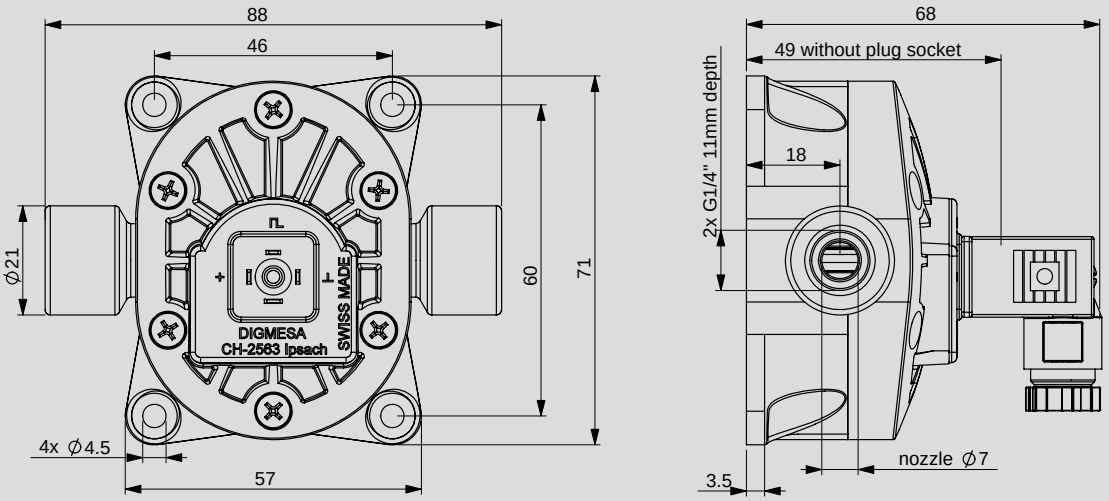
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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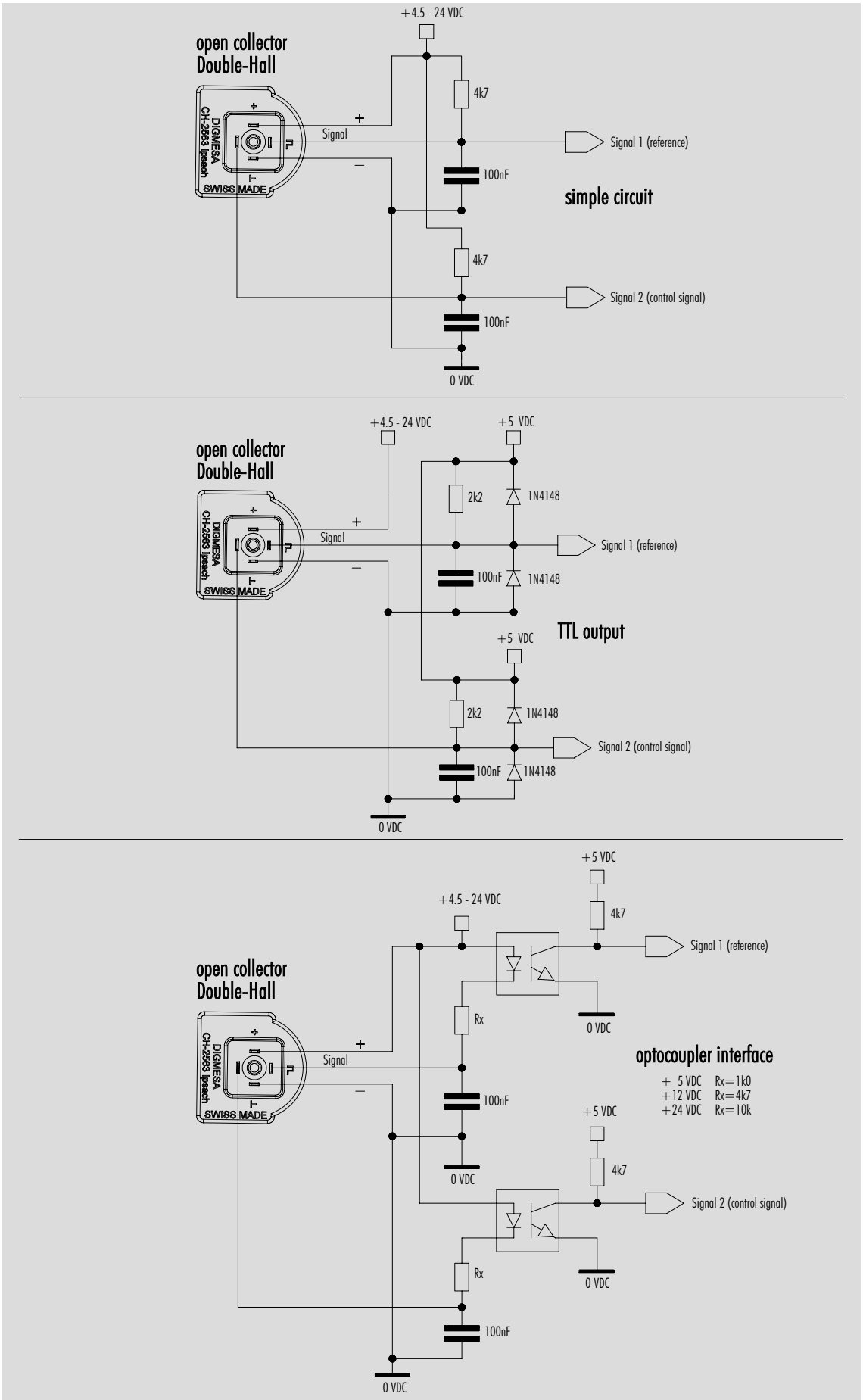
Interface Connection: Examples Double-Hall



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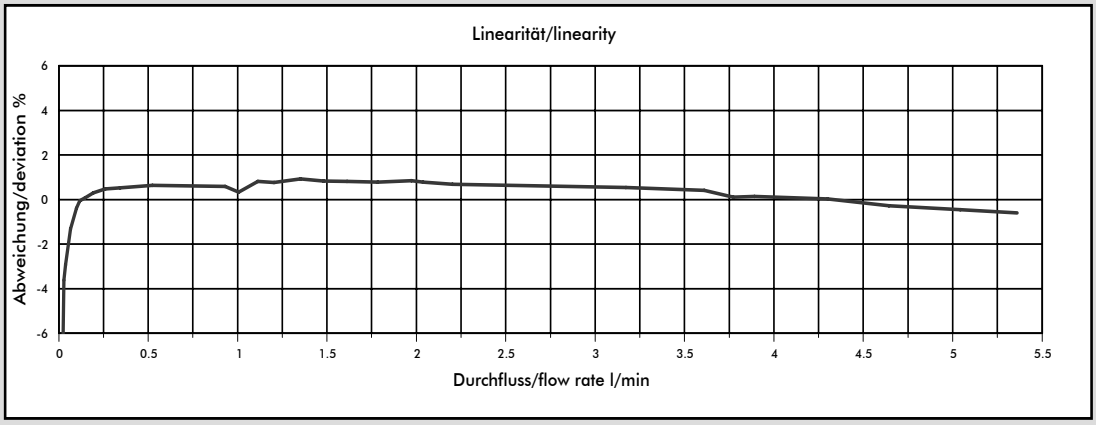
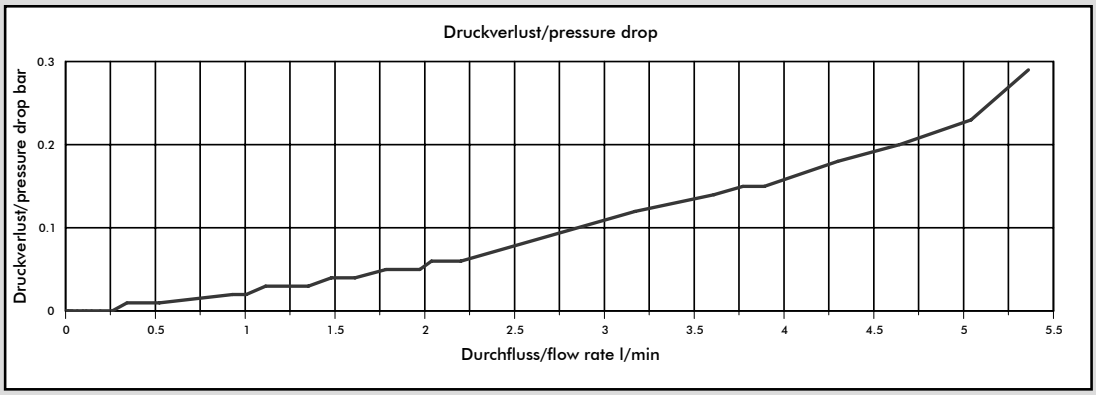
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

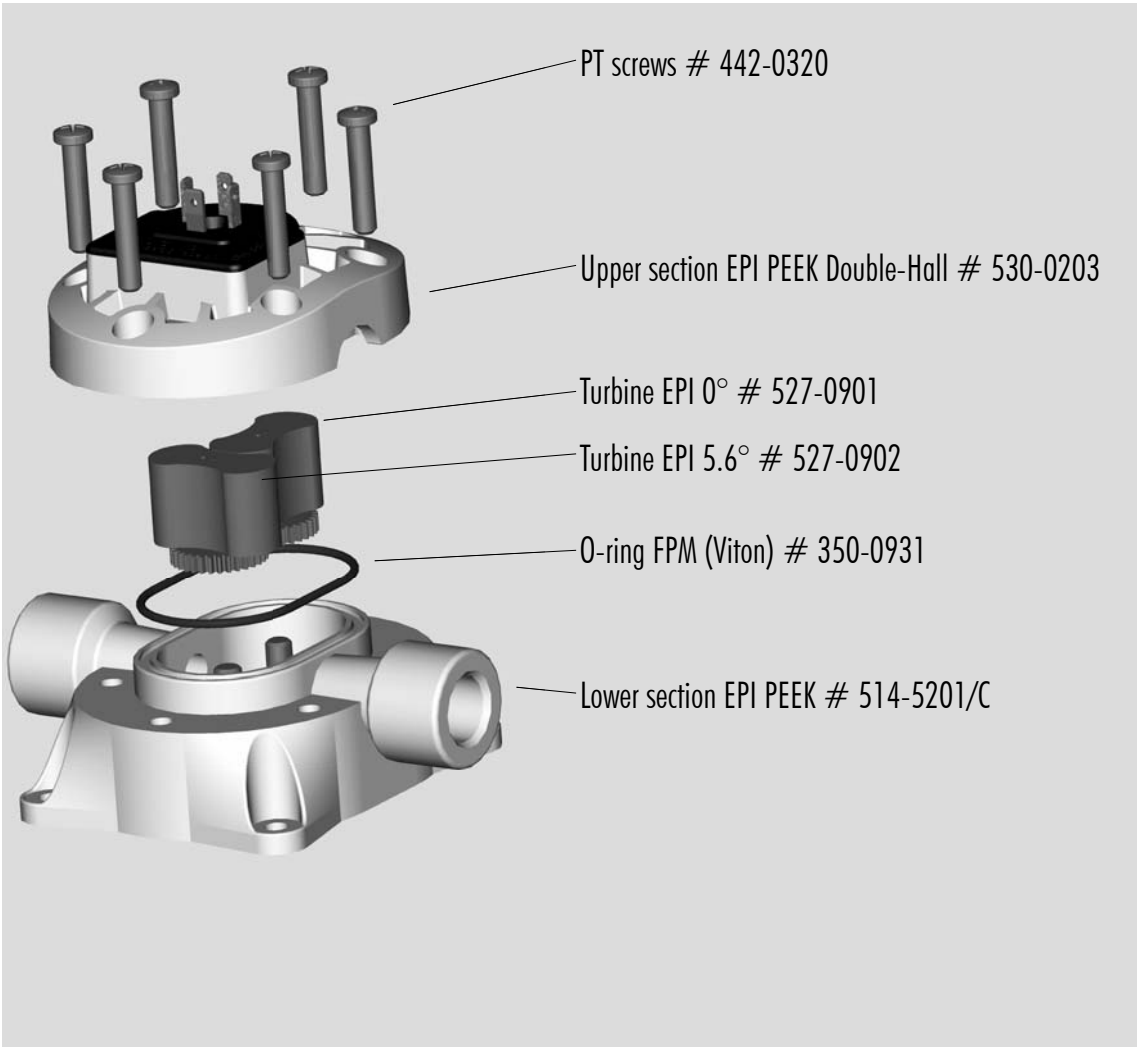
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PEEK

Part number: 930-0201/V01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

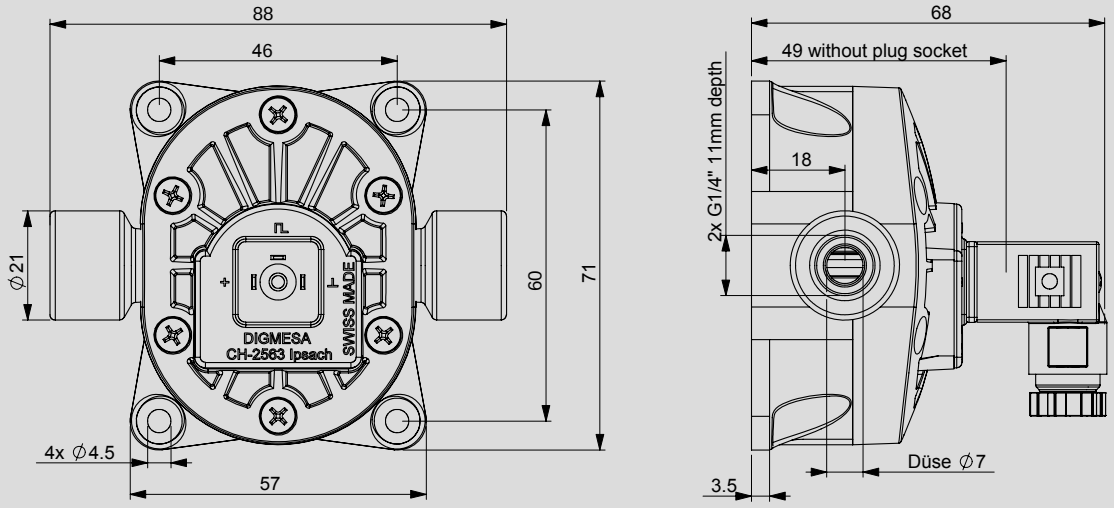
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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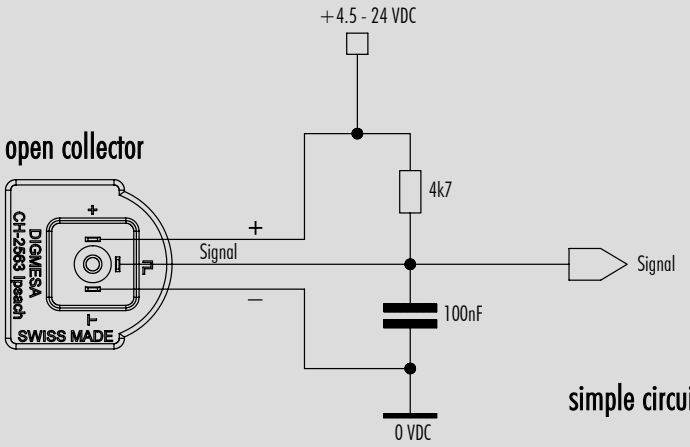
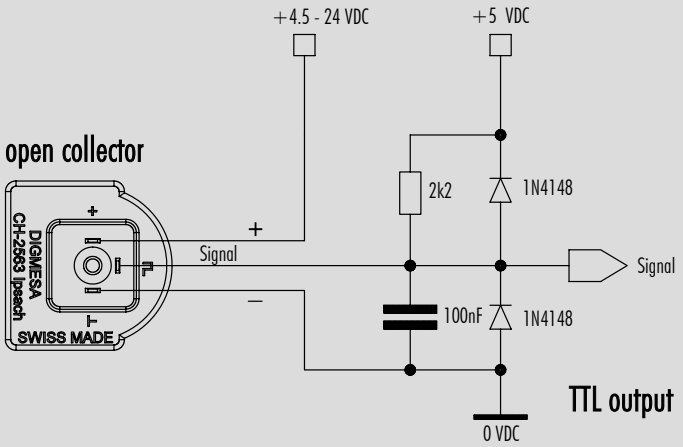
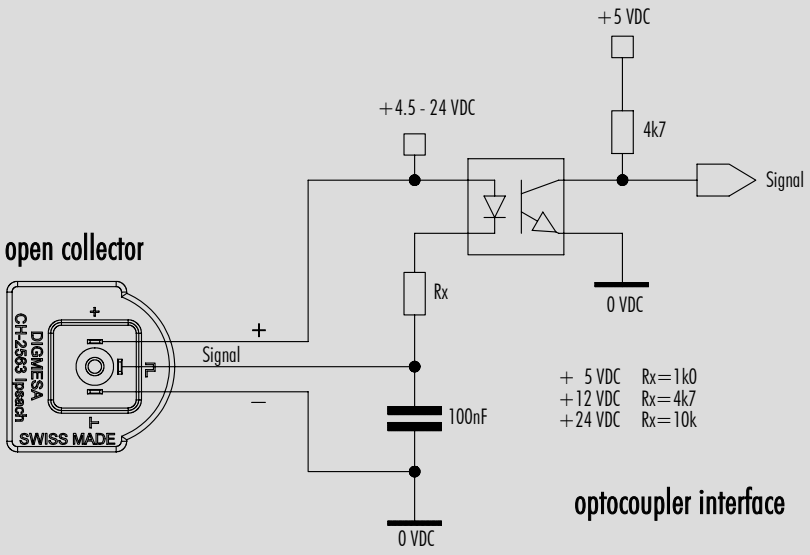
Interface Connection: Examples Open Collector







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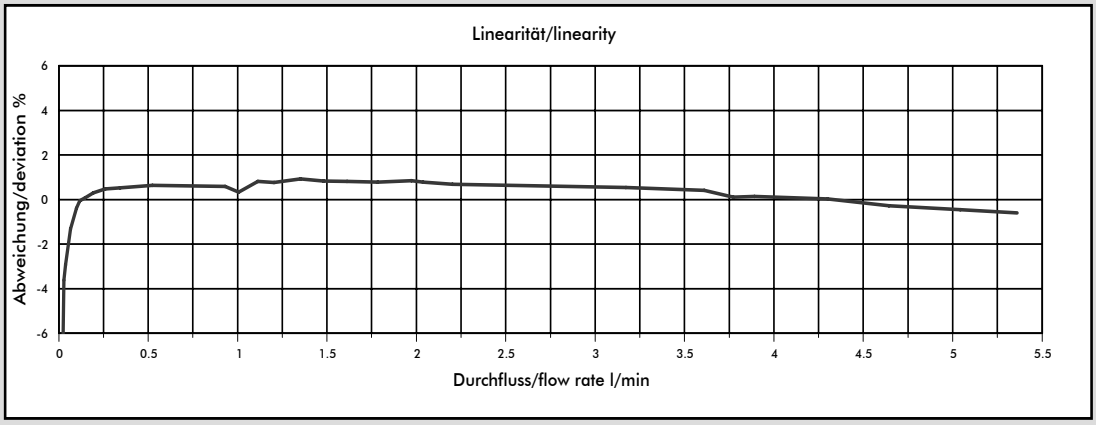
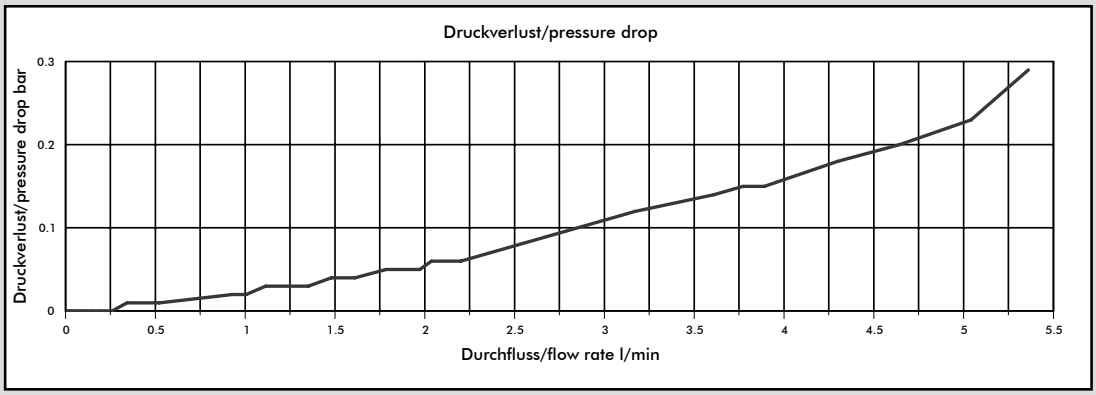
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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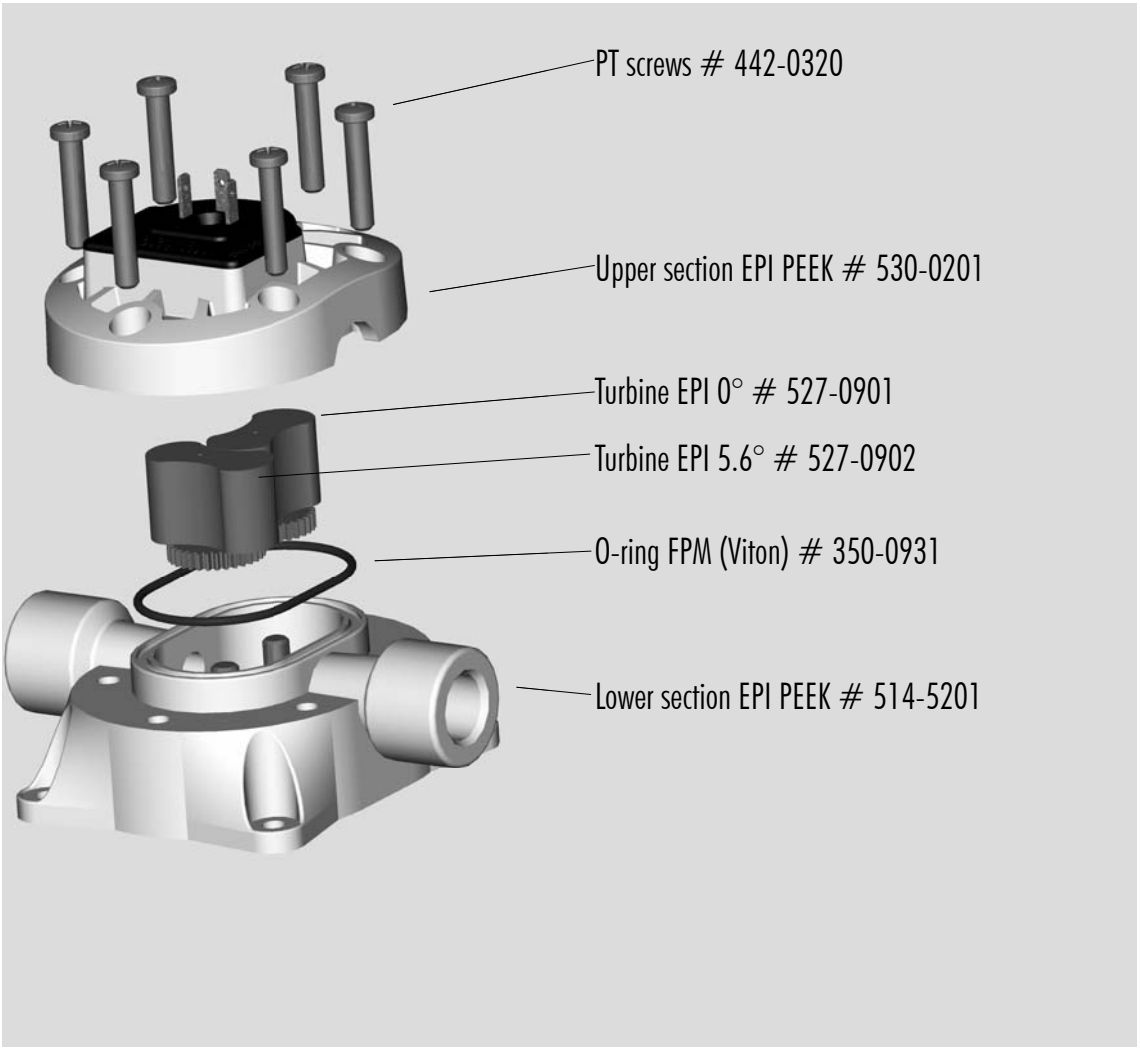
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PEEK LED

Part number: 930-0201/V02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

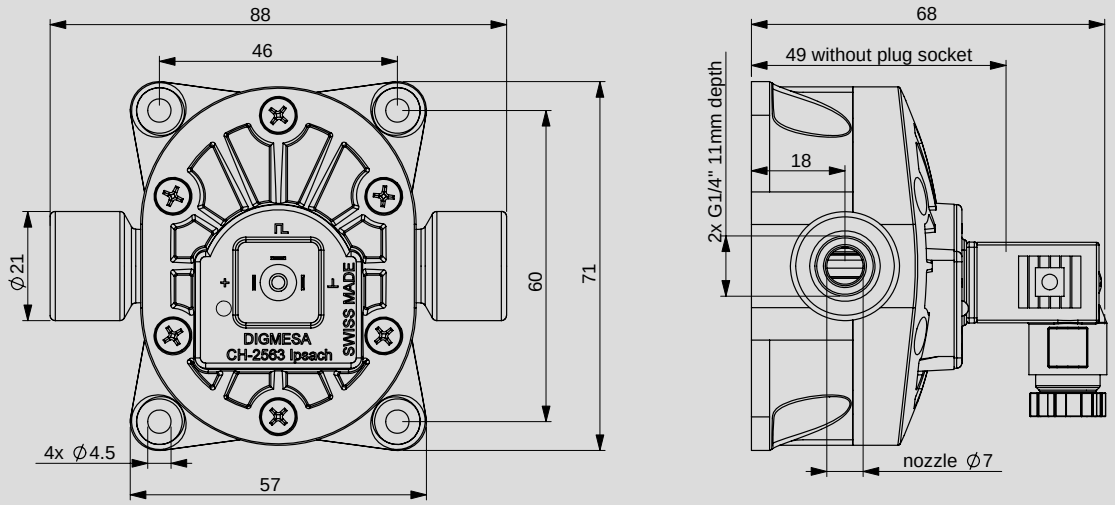
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



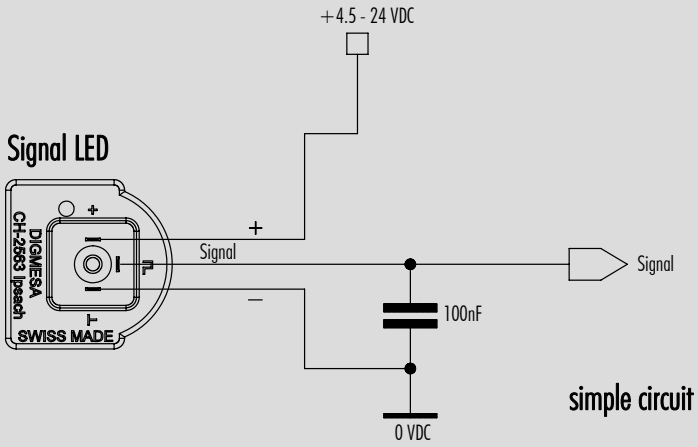
Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

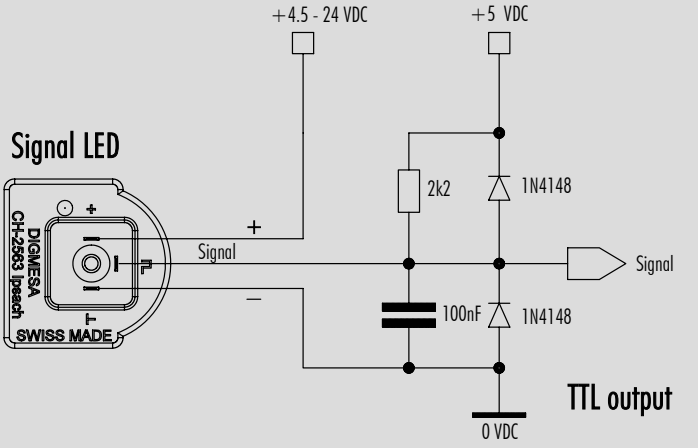
RESISTANCE

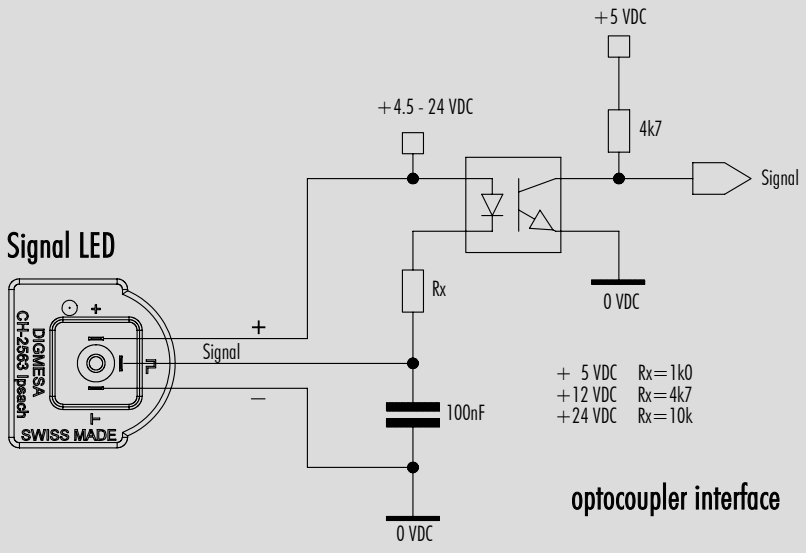
Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Interface Connection: Examples with LED







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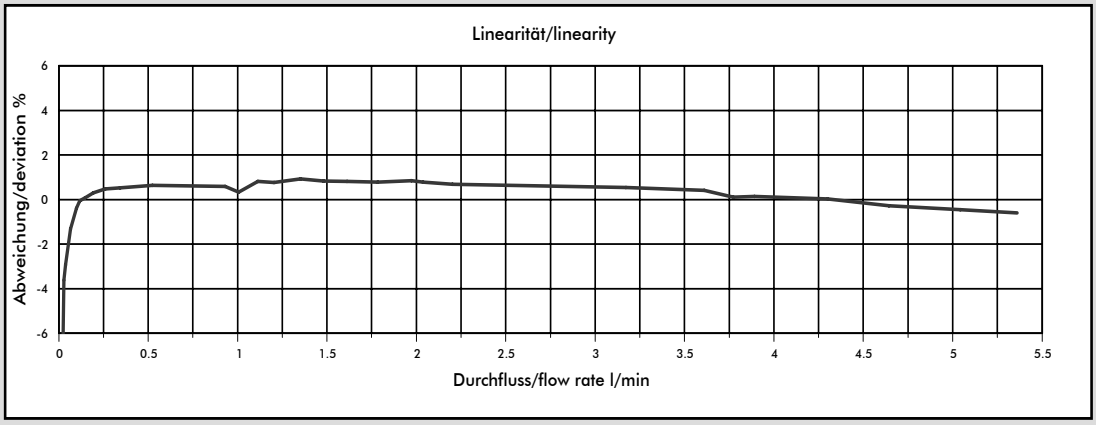
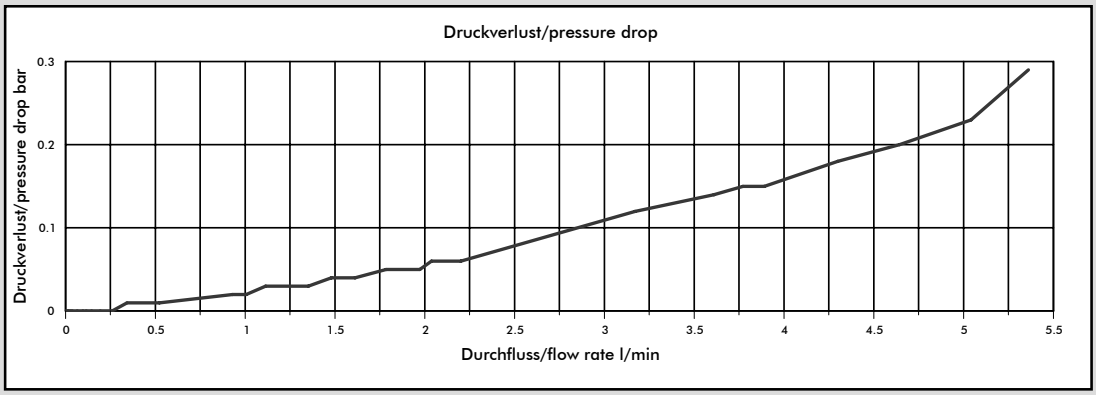
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

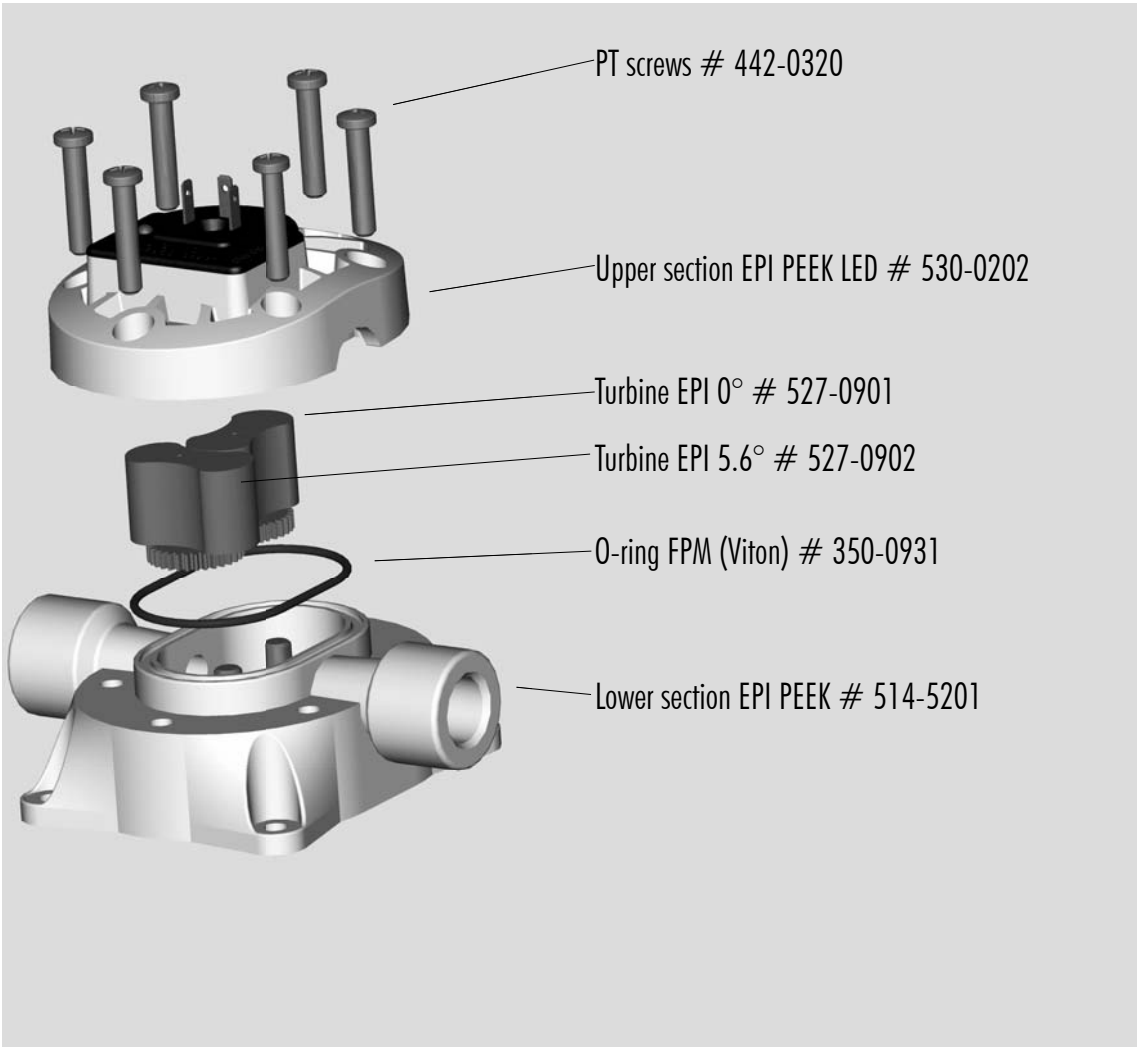
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI PEEK Double-Hall (suitable for calibration)

Part number: 930-0201/V03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PEEK 150 GL 30 natur
Bearing pin:	Inox 1.4435 Aluminium oxide on request
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

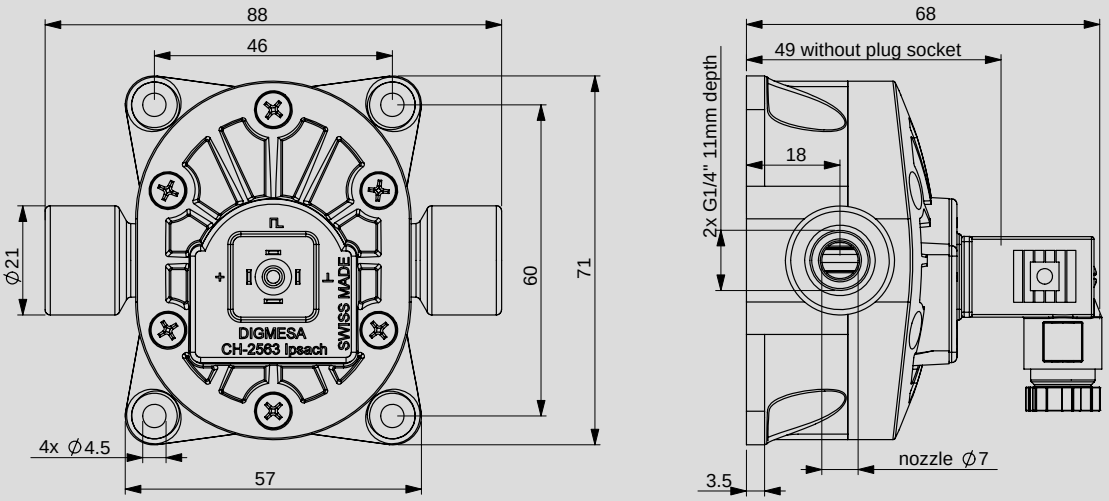
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

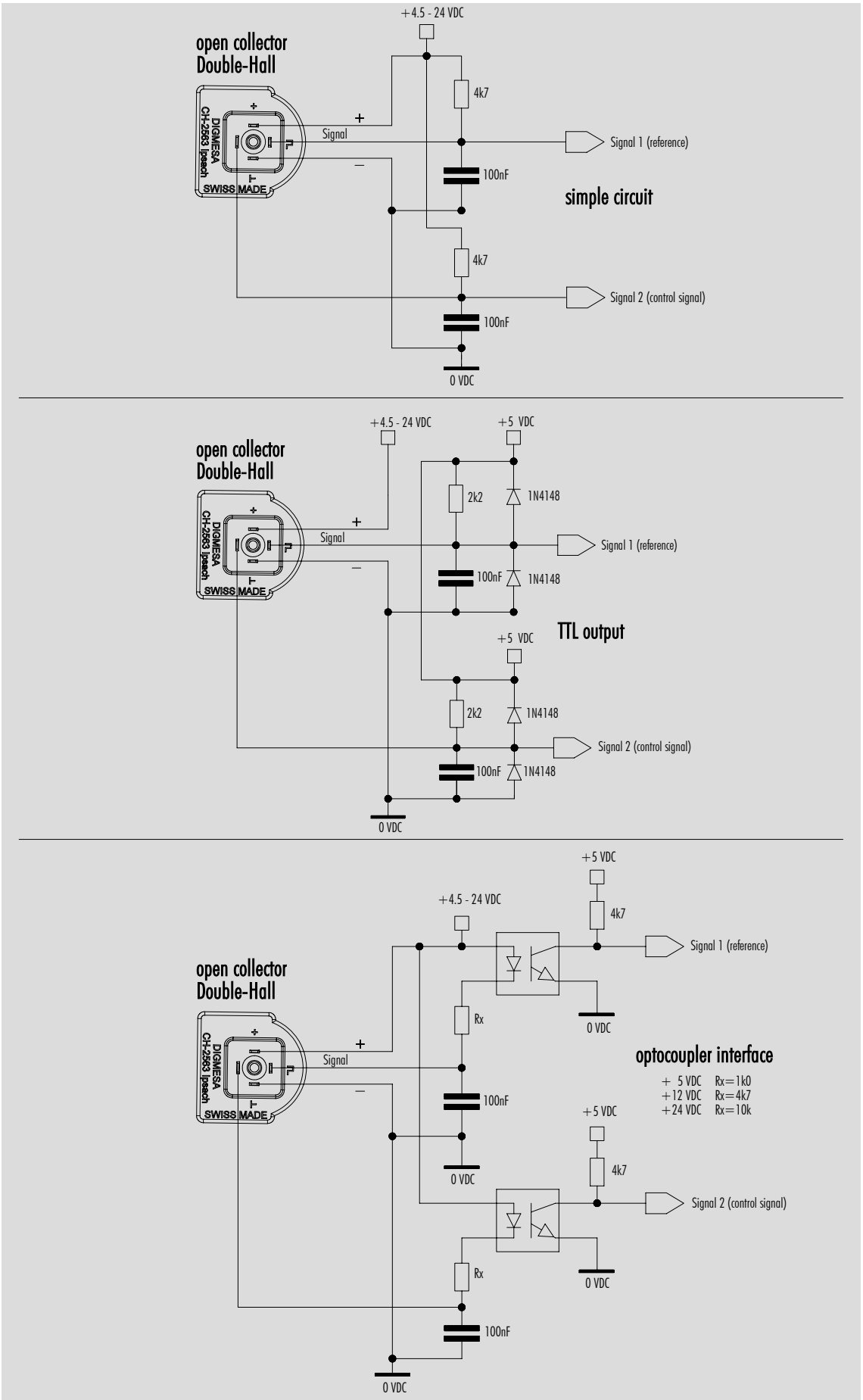
ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Interface Connection: Examples Double-Hall



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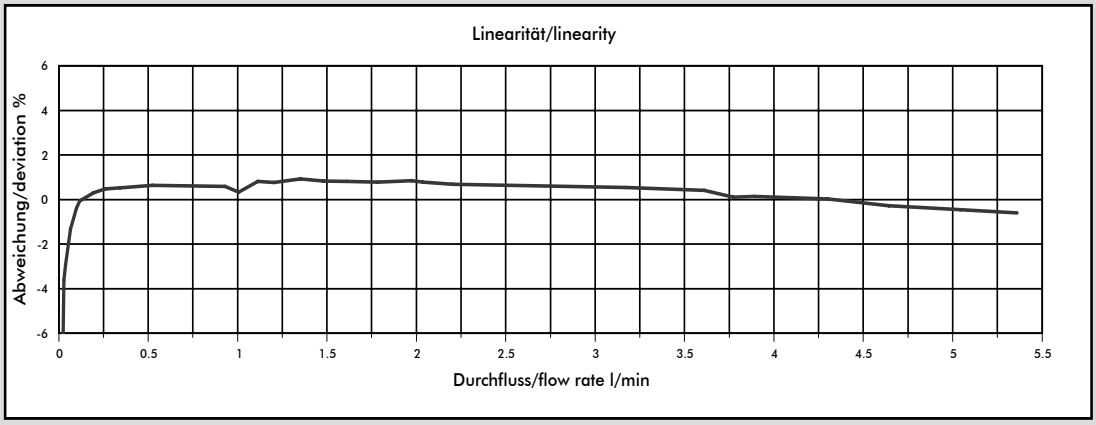
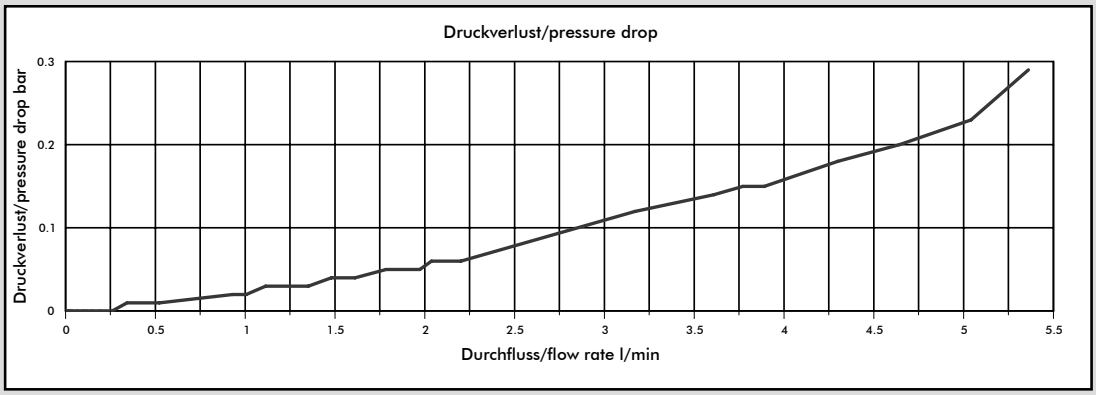
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

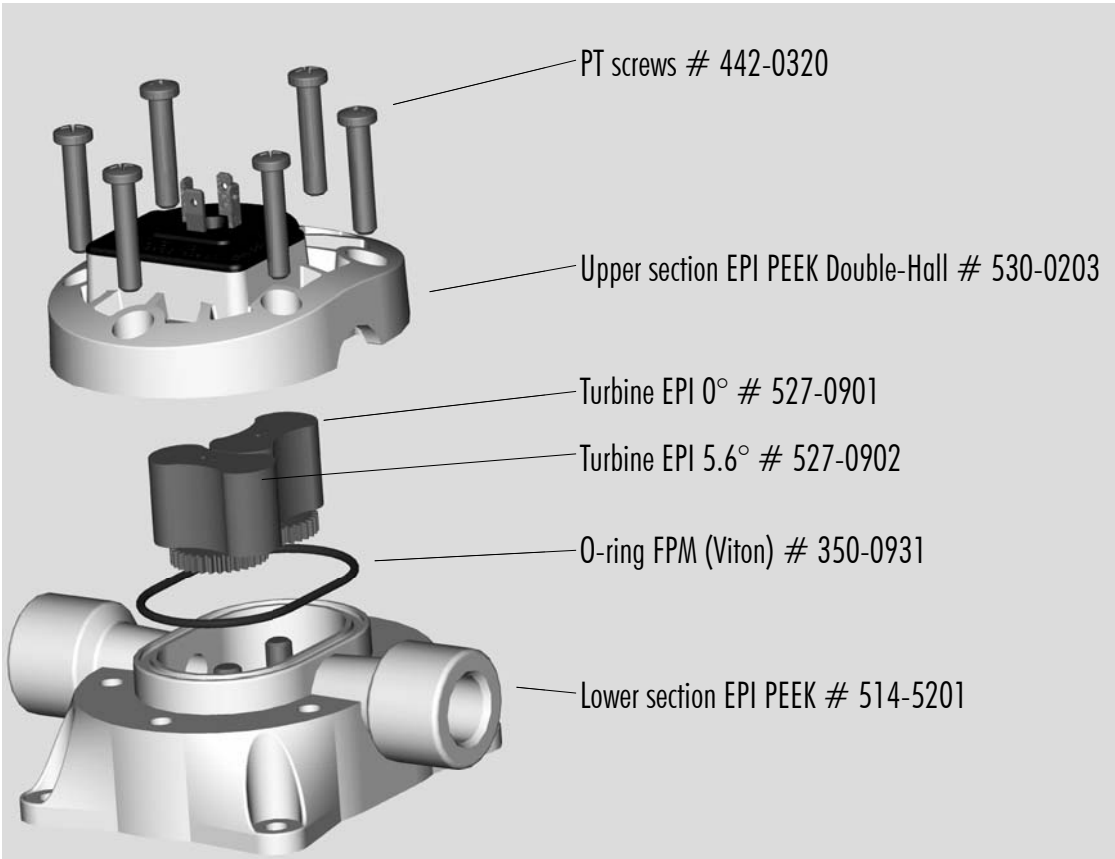
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI Arnite chemistry
Part number: 930-0501/CV01

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% glass fibre (Arnite)
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

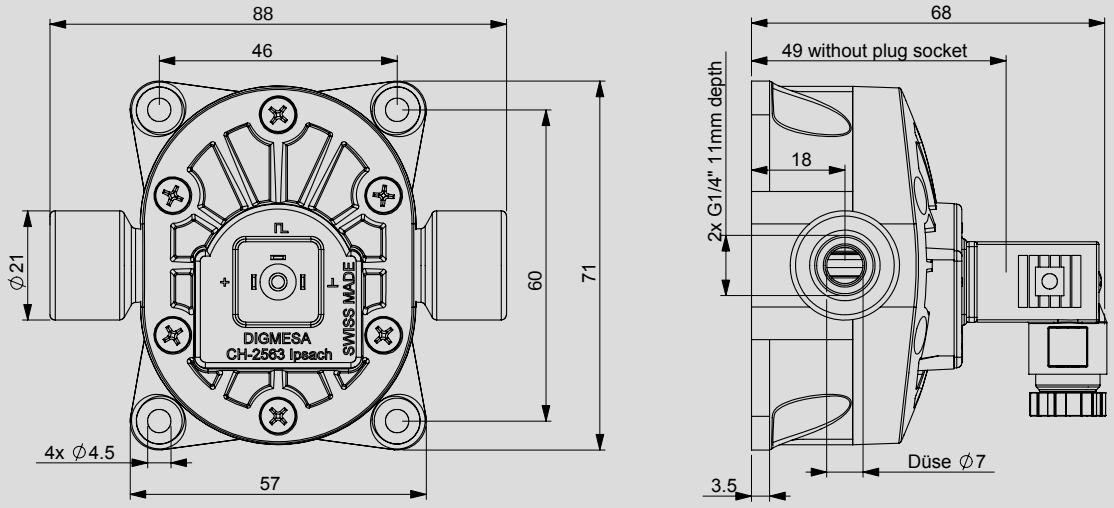
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:

3-pin solenoid socket

Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

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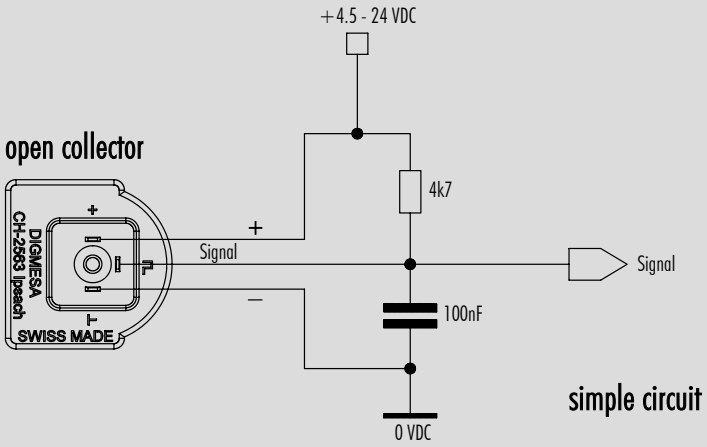
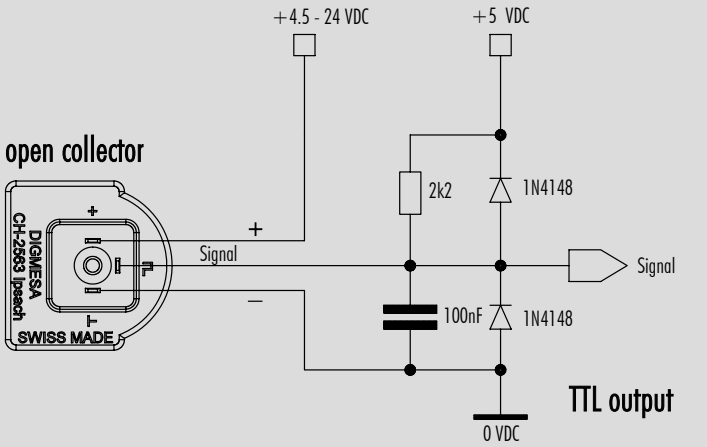
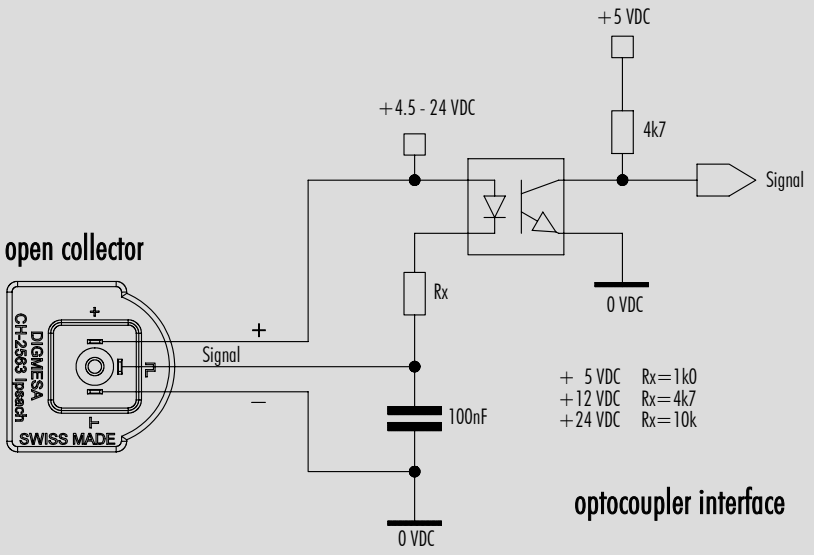
Interface Connection: Examples Open Collector







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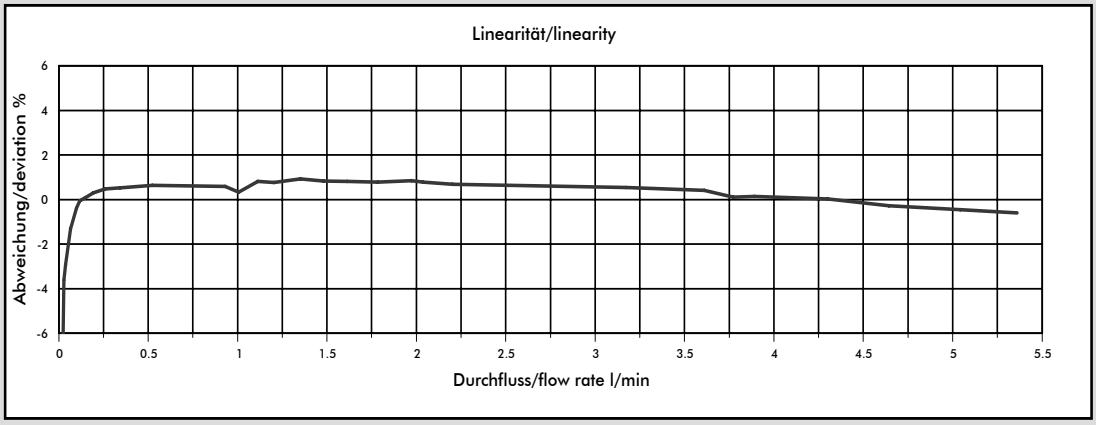
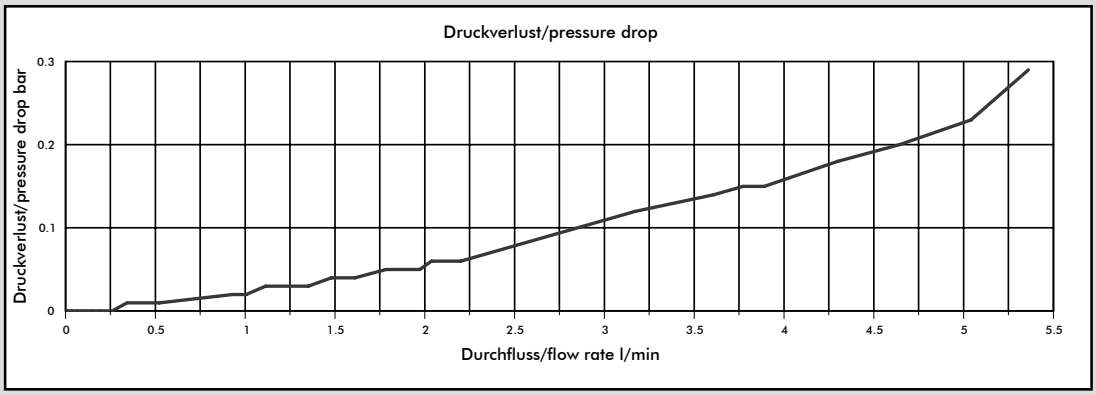
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

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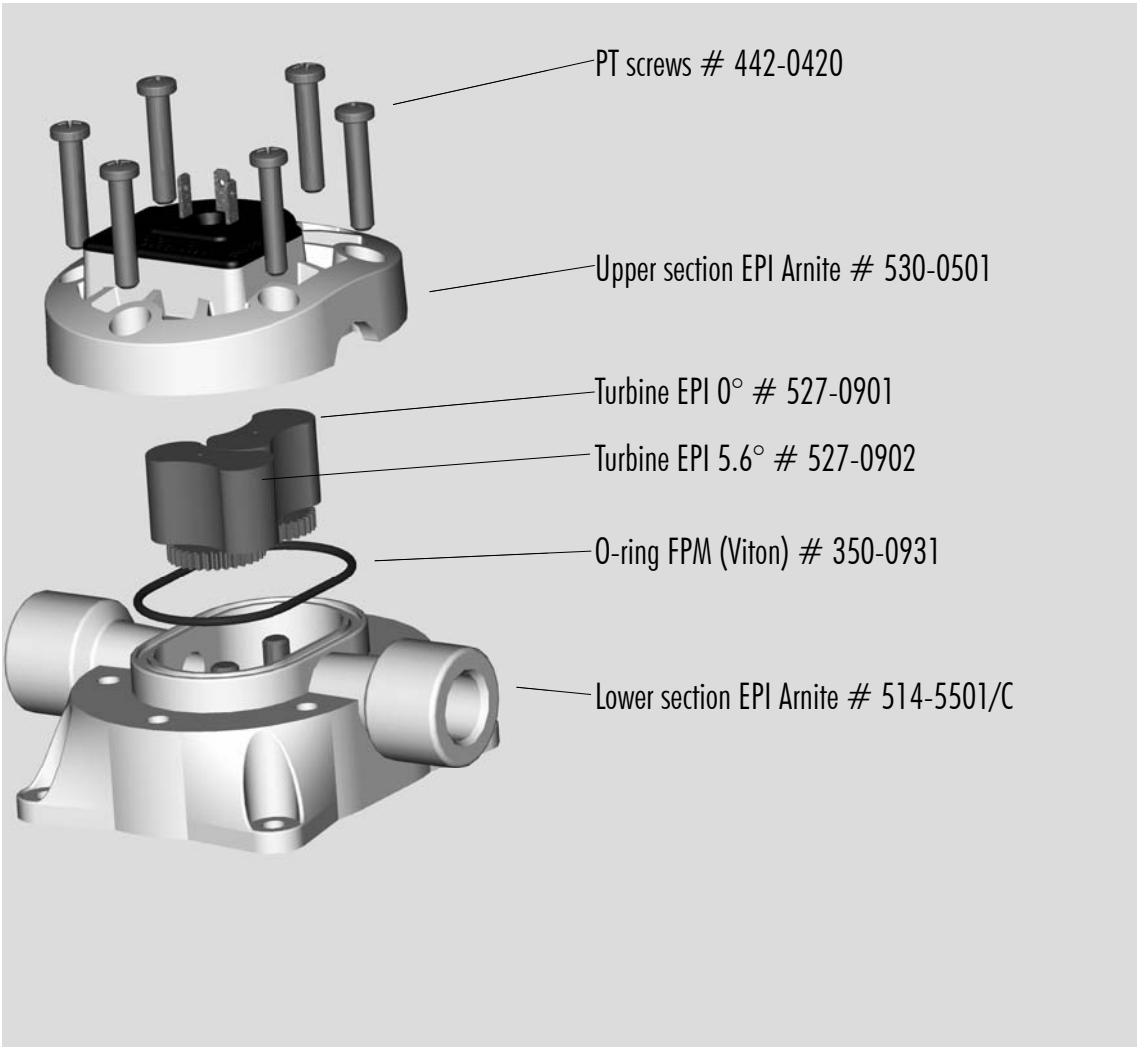
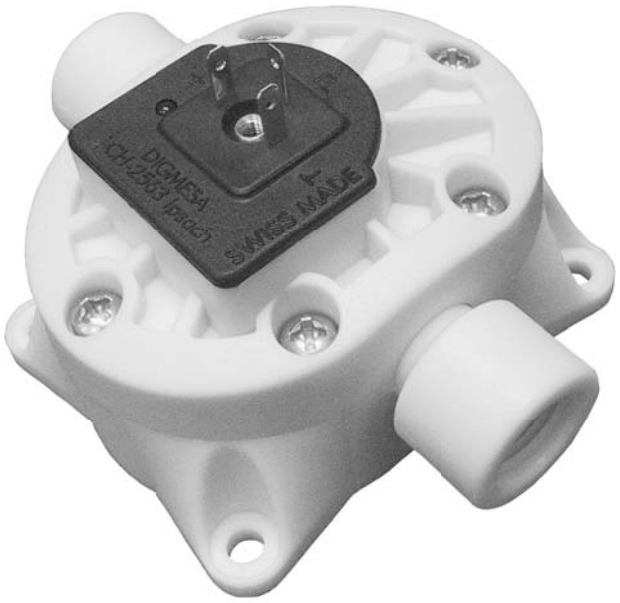
Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET



DIGMESA

EPI Arnite LED chemistry

Part number: 930-0501/CV02

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Pulse detection by incorporated LED in cover (lights once per pulse).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% glass fibre (Arnite)
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

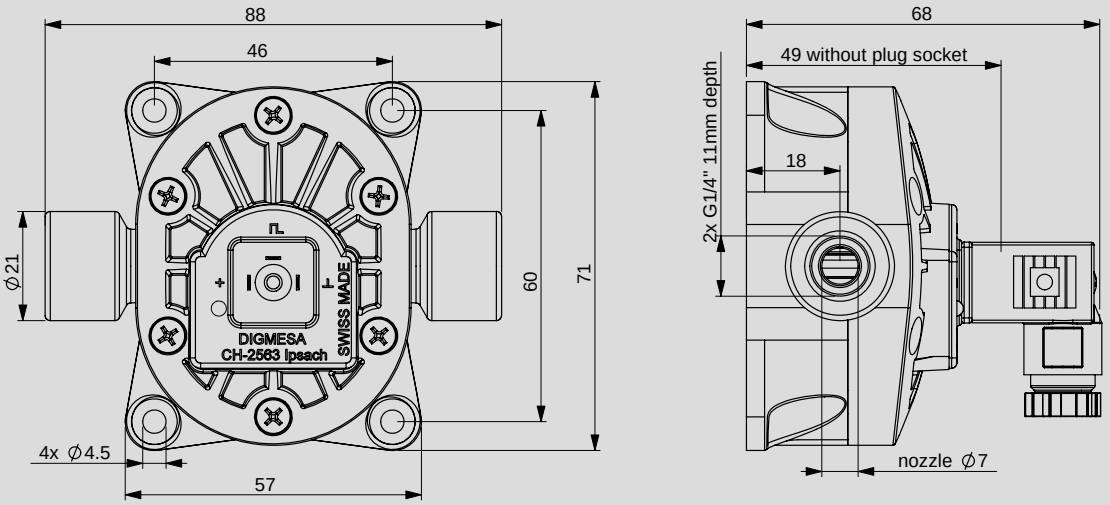
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	8 mA to max. 25 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 5 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
3-pin solenoid socket
Item number: 941-0002/3

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

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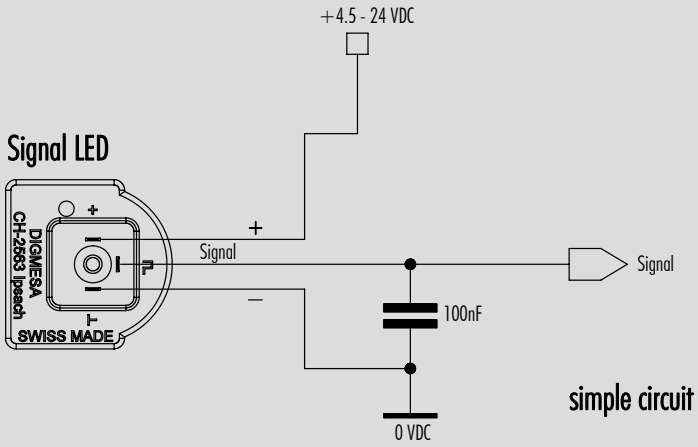
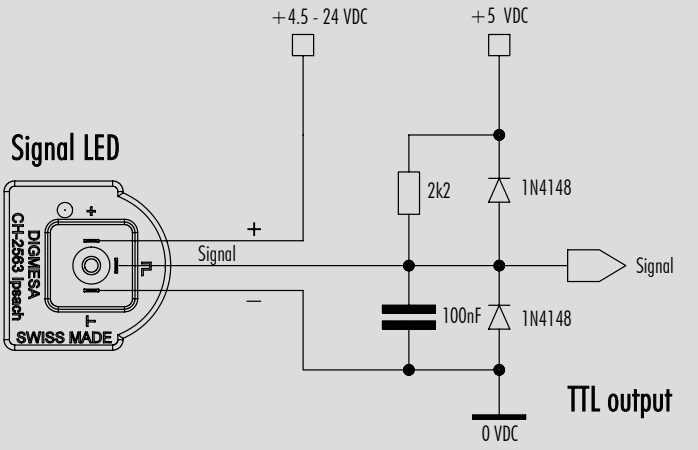
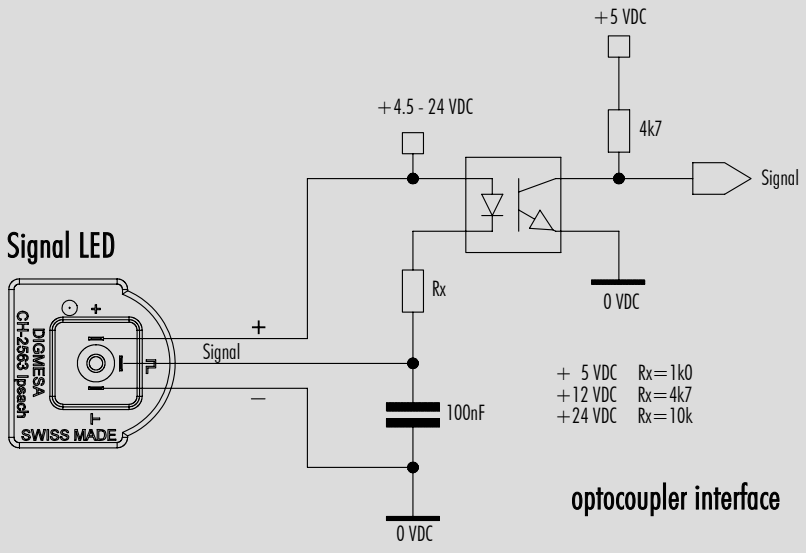
Interface Connection: Examples with LED







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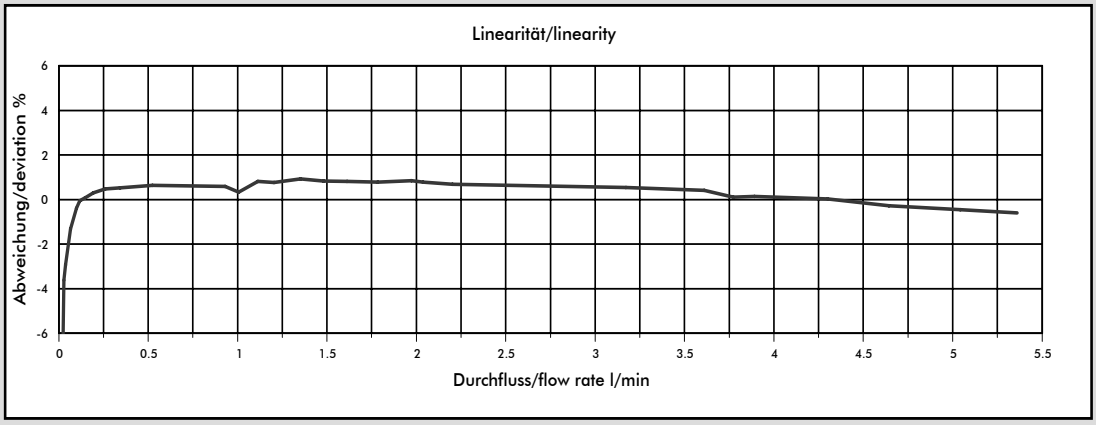
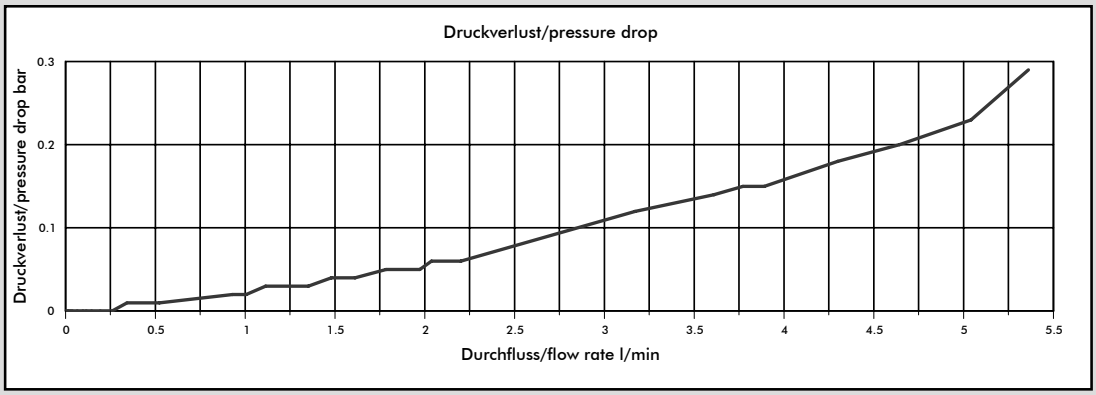
Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

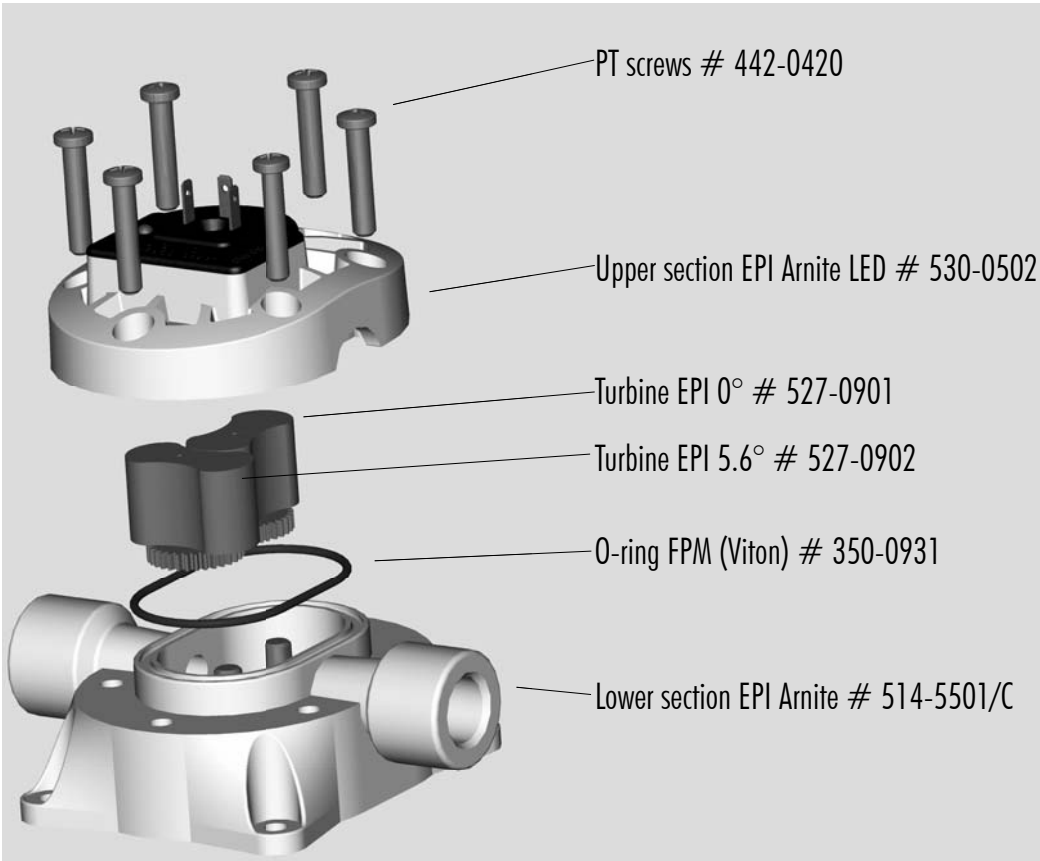
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

DATA SHEET

DIGMESA

EPI Arnite chemistry

Double-Hall (suitable for calibration)

Part number: 930-0501/CV03

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland
Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88
www.digmesa.com

General Description

The EPI flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EPI flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

Specific applications: Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.
Can be calibrated via the 4th pin (Double-Hall).

Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04 , IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)

CE

Material:

Housing:	PBT 35% glass fibre (Arnite)
Bearing pin:	Aluminium oxide (Al_2O_3)
O-ring:	FPM (Viton) EPDM on request
Turbine:	PEEK
Magnets:	NdFeB (Neodym) (not in contact with the medium)

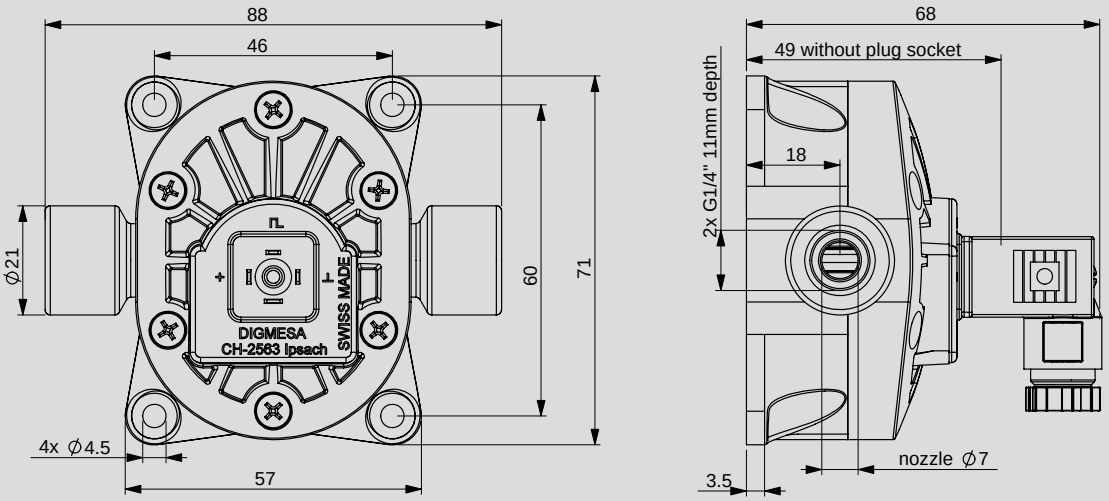
Technical data:

Flow rate:	0.06 - 16.0 l/min depending on viscosity
Measuring accuracy:	+/- 1.0% depending on viscosity
Repetition:	< +/- 0.25%
Temperature range:	-10°C to +65°C 14°F to 149°F
Pressure range:	10 bar at 20°C 145 psi /68°F
Mounting position:	Horizontal recommended
Nozzle size:	Ø 7.0 mm
Viscosity range:	approx. 5 - 8000 centistokes

Electrical connection ratings:

Power supply:	4.5–24 V DC
Consumption:	5 mA to max. 13 mA
Signal connection:	Open collector NPN
Signal voltage:	0 V GND
Signal load:	max. 20 mA
Leakage current:	max. 10 µA
Connections:	3-pin AMP 2.8 x 0.8 mm 1-pin AMP 3.5 x 0.8 mm
Signal:	Square-wave output
Duty Cycle:	50% / ±3%

Dimensions in mm:



Included in the delivery:
4-pin solenoid socket
Item number: 941-0002/4

RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

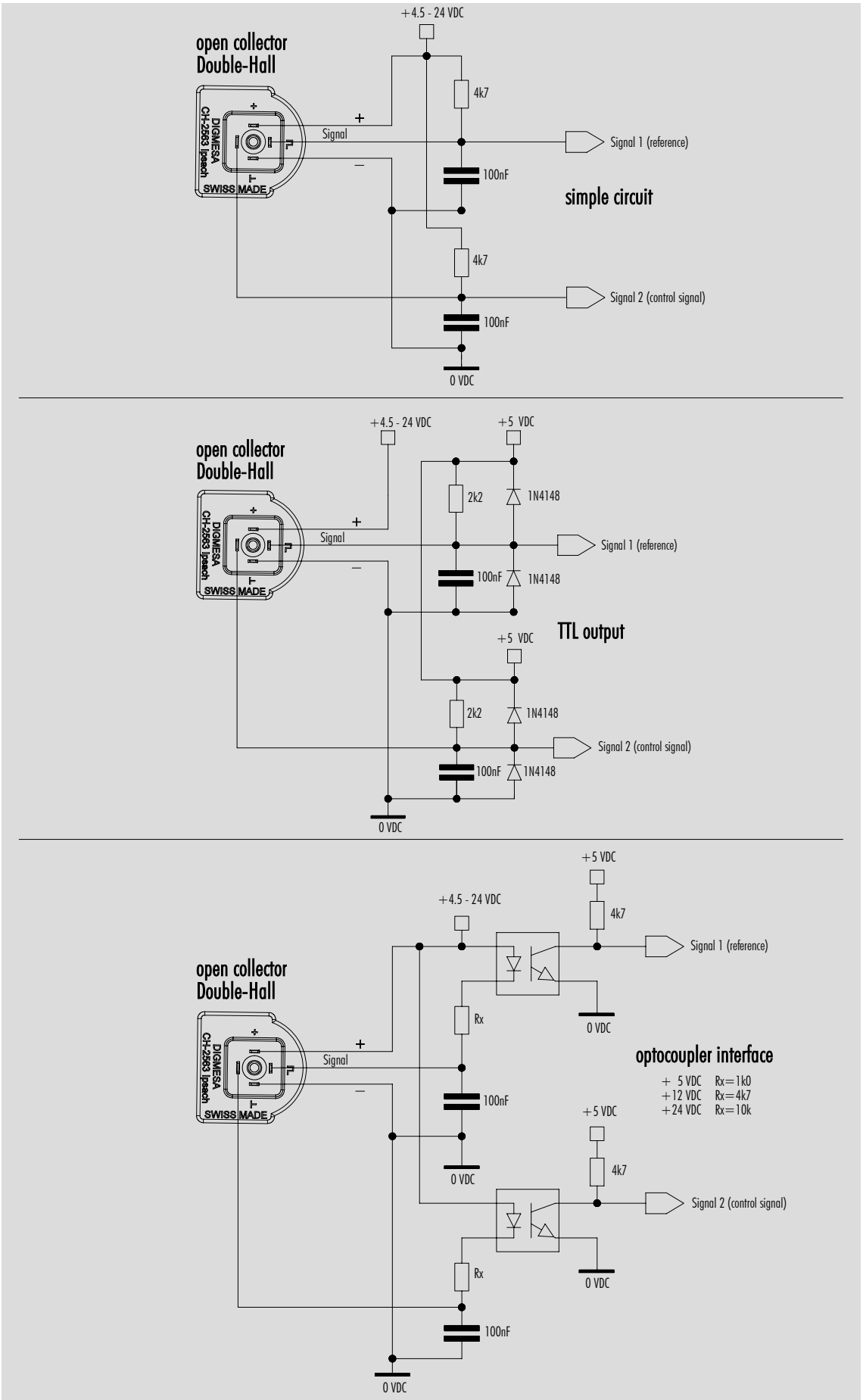
ELECTRONIC

DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

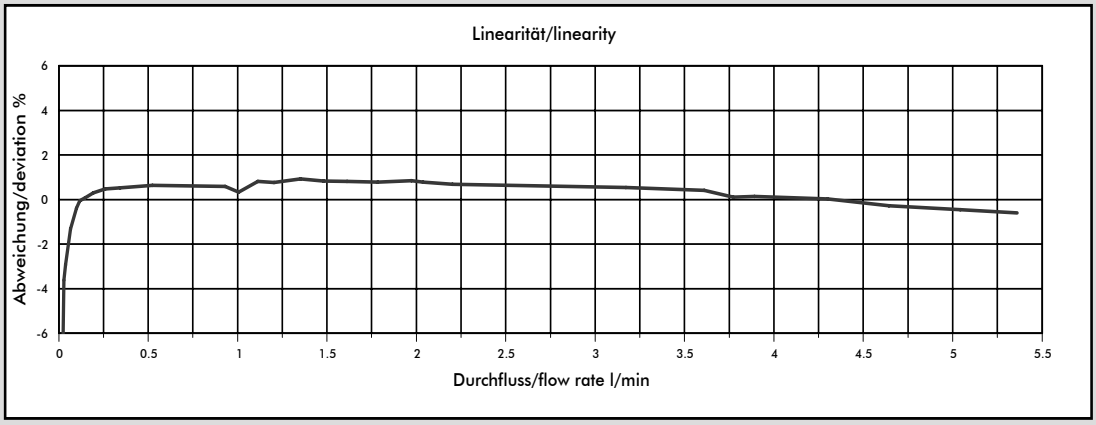
Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

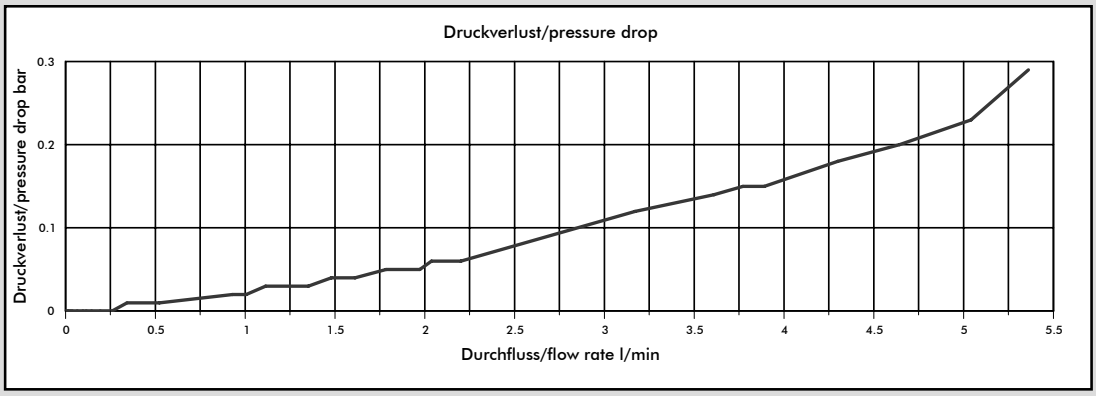
Interface Connection: Examples Double-Hall



Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Measurement Curve EPI Ø7.00 mm





Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

The values specified must be considered as approximate values.

The number of pulses per litre may differ depending on medium and installation.

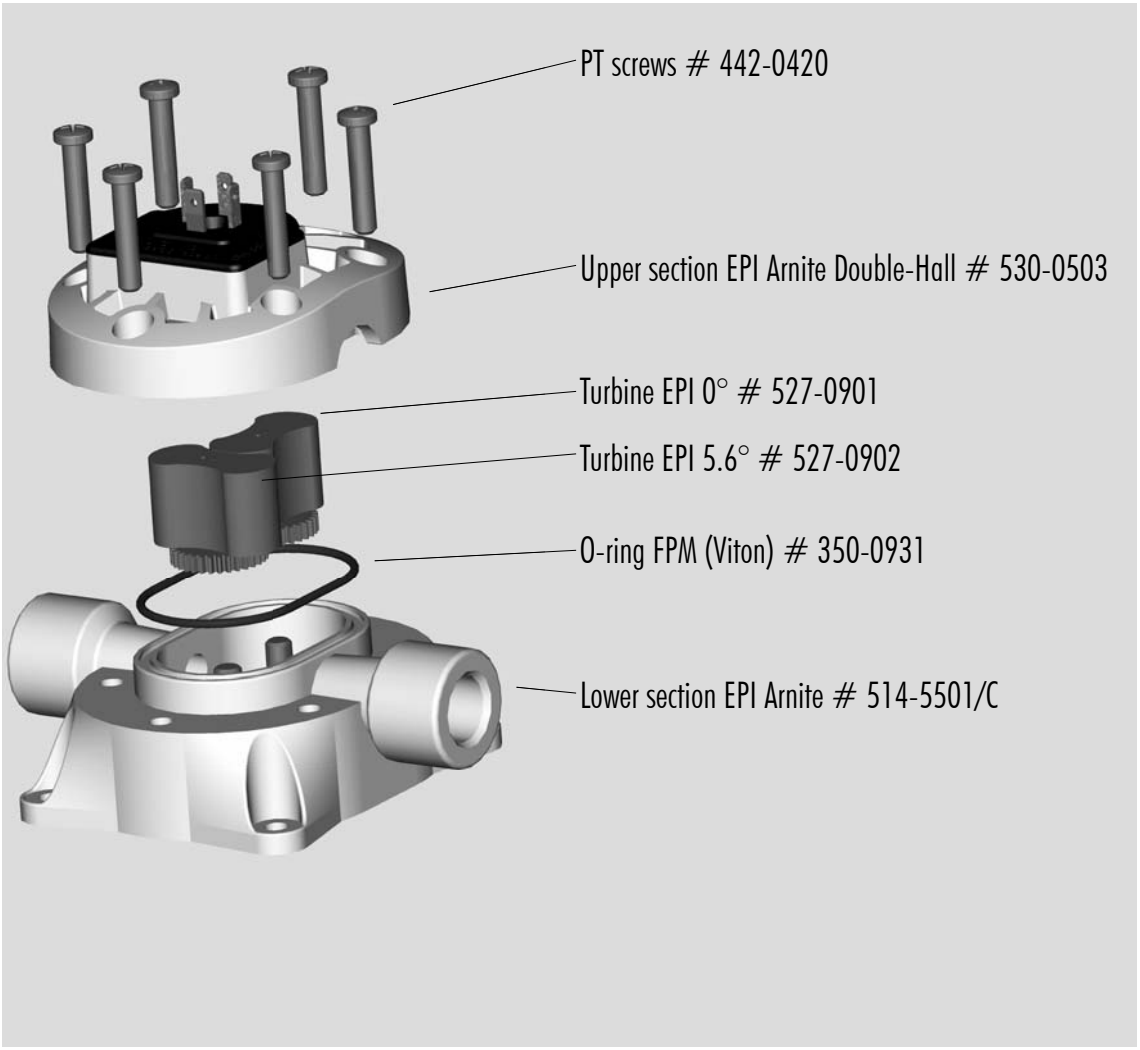
We recommend to calibrate the number of pulses per litre in line with the complete installation.

MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

Digmesa AG, Keltenstrasse 31, CH–2563 Ipsach / Switzerland, Phone +41 (32) 332 77 77, Fax +41 (32) 332 77 88, www.digmesa.com

Spare parts:



Notes:

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