



Suitable sensors for DS 500 mobile, DS 400 mobile, PI 500, DP 510, LD 510

Flow meters for installation and removal under pressure (insertion type)



VA 500



VA 550

FLOW METERS INSERTION-VERSION

VA 500 flow meter, max. version (185 m/s), probe length 220 mm, incl. 5 m connection cable to mobile devices

VA 500 flow meter, high-speed version (224 m/s), probe length 220 mm, incl. 5 m connection cable to mobile devices

VA 550 Flow meter, measuring head in robust aluminium die casting housing

ORDER NO.

0695 1124

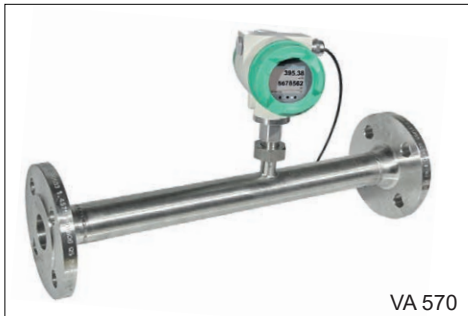
0695 1125

0695 0550
+ order code
A...M..._

Inline flow meter



VA 520



VA 570

FLOW METERS INLINE VERSION

Flow meter VA 520 with integrated measuring section, (R 1/4" DN 8)

Flow meter VA 520 with integrated measuring section, (R 1/2" DN 15)

Flow meter VA 520 with integrated measuring section, (R 3/4" DN 20)

Flow meter VA 520 with integrated measuring section, (R 1" DN 25)

Flow meter VA 520 with integrated measuring section, (R 1 1/4" DN 32)

Flow meter VA 520 with integrated measuring section, (R 1 1/2" DN 40)

Flow meter VA 520 with integrated measuring section, (R 2" DN 50)

Inline flow meter VA 570 with integrated 1/2" measuring section

Inline Flow meter VA 570 with integrated 3/4" measuring section

Inline Flow meter VA 570 with integrated 1" measuring section

Inline Flow meter VA 570 with integrated 1 1/4" measuring section

Inline flow meter VA 570 with integrated 1 1/2" measuring section

Inline Flow meter VA 570 with integrated 2" measuring section

ORDER NO.

0695 0520

0695 0521

0695 0522

0695 0523

0695 0526

0695 0524

0695 0525

0695 0570
+ order code
A...K_

0695 0571

0695 0572

0695 0573

0695 0574

0695 0575



FA 510

DEW POINT SENSORS

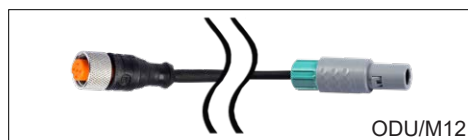
FA 510 dew point sensor, -80...+20 °Ctd incl. measuring chamber mobile and 5 m connection cable to mobile devices

FA 510 dew point sensor, -20...+50 °Ctd incl. measuring chamber mobile and 5 m connection cable to mobile devices

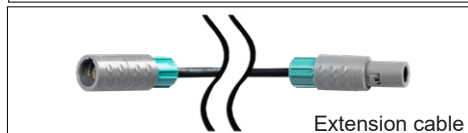
ORDER NO.

0699 1510

0699 1512



ODU/M12



Extension cable

CONNECTION CABLE FOR VA 500/520 AND FA 510 SENSORS

Connection cable for VA / FA sensors to mobile devices, ODU/M12, 5 m

Extension cable for mobile instruments, ODU / ODU, 10 m

ORDER NO.

0553 1503

0553 0504



CALIBRATION CERTIFICATES FOR FLOW METERS AND DEW POINT SENSORS

5 point precision calibration for flow sensors incl. ISO certificate

Precision calibration at -40 °Ctd with ISO certificate

ORDER NO.

3200 0001

0699 3396



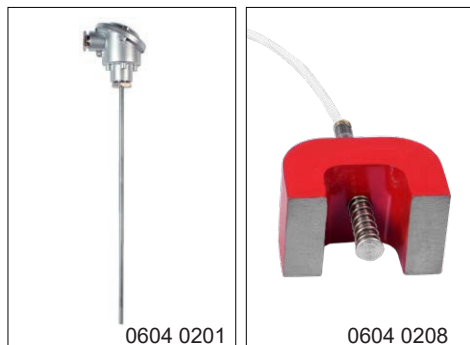
Suitable sensors for DS 500 mobile, DS 400 mobile, PI 500, DP 510, LD 510



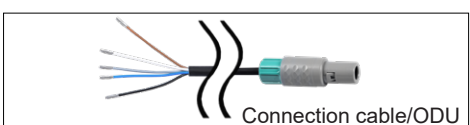
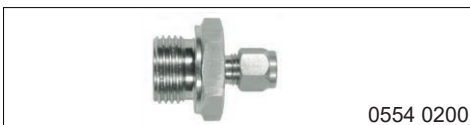
PRESSURE PROBE WITH 4...20 mA ANALOGUE OUTPUT	± 1%	± 0,5%
	ACCURACY	ACCURACY
Standard pressure probe CS 16, 0...16 bar	0694 1886	0694 3555
Standard pressure probe CS 40, 0...40 bar	0694 0356	0694 3930
Standard pressure probe CS 1.6, 0...1.6 bar abs.		0694 3550
Standard pressure probe CS 10, 0...10 bar	0694 3556	0694 3554
Standard pressure probe CS 100, 0...100 bar		0694 3557
Standard pressure probe CS 250, 0...250 bar		0694 3558
Standard pressure probe CS 400, 0...400 bar		0694 3559
Precision pressure probe CS -1...+15 bar, ± 0.5 % accuracy of. f.s.		0694 3553
Differential pressure probe 1.6 bar diff.		0694 3561
Calibration certificate pressure, 5 calibration points for the whole measuring range	3200 0004	



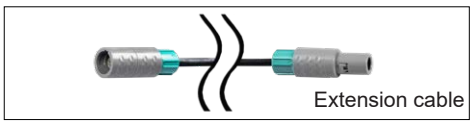
DIGITAL PRESSURE SENSORS	± 1%	± 0,5%
	ACCURACY	ACCURACY
Digital pressure probe DPS 16, 0...16 bar RS 485, G1/2"	0694 2886	0694 4555
Digital pressure probe DPS 16, 0...16 bar RS 485, NPT 1/2"	0694 3886	0694 5555



TEMPERATURE SENSORS	ORDER NO.
Bendable temperature sensor PT 100 (2-wire) class B, length: 300 mm, d=3 mm, -70...+550 °C, connection cable 2 m PFA with ODU plug (8-pin) to mobile devices	0604 0200
Screw-in temperature sensor PT 100 class A, length 300 mm, d = 6 mm, with measuring transducer 4...20 mA = -50 °C...+ 550 °C (2-wire)	0604 0201
Cross-band surface probe, thermocouple type K with measuring transducer 4...20 mA = 0°C...+180 °C, 2 m cable PVC with ODU plug (8-pole) to mobile devices	0604 0202
Cable temperature sensor PT 100 class A (4-wire), length: 300 mm, d = 6 mm, -70 ... +260 °C, 5 m connection cable PFA with open ends	0604 0205
Cable temperature sensor PT 100 class A (4-wire), length: 100 mm, d = 6 mm, -70...+260 °C, 5 m connection cable PFA with open ends	0604 0206
Cable temperature sensor PT 100 class A (4-wire), length: 200 mm, d = 6 mm, -70...+260 °C, 5 m connection cable PFA with open ends	0604 0207
Magnetic surface temperature sensor, holding magnet 39x26x25 mm, PT 100 class B (2-wire), -30...+180 °C, 5 m connection cable PFA with open ends	0604 0208
Compression fitting; 6 mm; G 1/2" PTFE clamping ring pressure-tight up to 10 bar. Material: stainless steel, application area: max. + 260 °C	0554 0200
Compression fitting; 6 mm; G 1/2" stainless steel clamping ring. Pressure-tight up to 16 bar, material: stainless steel, application area: max. + 260 °C	0554 0201
Calibration certificate temperature, 2 calibration points	0520 0180



CONNECTION CABLES FOR PRESSURE SENSORS / TEMPERATURE SENSORS	ORDER NO.
Connection cable for pressure, temperature or third-party sensors on mobile devices, ODU/open ends, 5 m	0553 0501
Connection cable for pressure, temperature or third-party sensors on mobile devices, ODU/open ends, 10 m	0553 0502
Extension cable for mobile instruments, ODU / ODU, 10 m	0553 0504
ODU plug for connection to mobile devices	Z604 0104





Suitable sensors for DS 500 mobile, DS 400 mobile, PI 500, DP 510, LD 510



CLAMP-ON AMMETERS

	ORDER NO.
Clamp-on ammeter 0...1000 A TRMS incl. 3 m connection cable	0554 0519
Clamp-on ammeter 0...400 A TRMS incl. 3 m connection cable	0554 0511

Suitable sensors for DS 500 mobil, DS 400 mobil, PI 500



CURRENT/EFFECTIVE POWER METER

	ORDER NO.
CS PM 600 mobile current/effective power meter up to 100 A	0554 5341
CS PM 600 mobile current/effective power meter up to 600 A	0554 5342

- Mobile current/effective power meter with 3 external current transformers for big machines and systems
- External current transformers for encompassing the phases (100 A or 600 A)
- External magnetic measuring tip for picking off the voltage – measures kW, kWh, cos, phi, Var, kVA
- Data transfer to DS 500 mobile / DS 400 mobile via Modbus
- Incl. connection cable for mobile current/effective power meter, 5 m

Current transformer 100A/1A consisting of 3 transformers for mobile instruments Z554 0001

Current transformer 600A/1A consisting of 3 transformers for mobile instruments Z554 0002

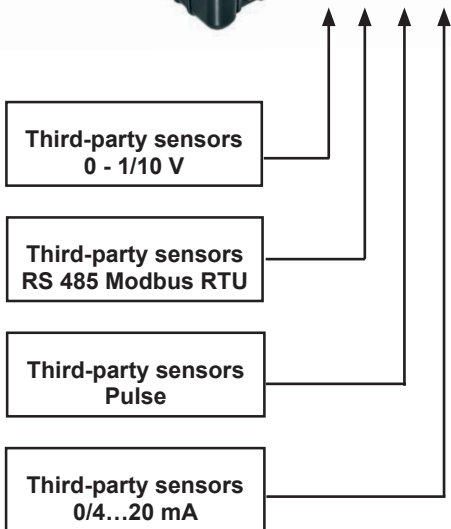
Current transformer 1000A/1A consisting of 3 transformers for mobile instruments Z554 0003



ANY THIRD-PARTY SENSOR CONNECTABLE

Additionally, any third-party sensors with the following signal outputs can be connected:

- 4-20 mA
- 0-20 mA
- 0-1 V/0-10 V/0-30 V
- Pt 100 (2- or 3-wire)
- Pt 1000 (2- or 3-wire)
- Pulse outputs (e. g. of gas meters)
- Frequency output
- Modbus protocol



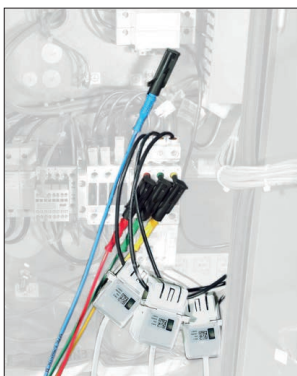
CS PM 600 - Mobile current/effective power meter suitable for: DS 500 mobile / DS 400 mobile / PI 500

Measures voltage, current and calculates:

Effective power [kW]
 Apparent power [kVA]
 Reactive power [kVar]
 Active energy [kWh]
 cos phi



Magnetic voltage measuring tips electrically isolated



Special features:

- Magnetic voltage measuring tips for picking off the voltage during operation
- Hinged current transformers encompass the conductors of the phases L1, L2, L3. This can also be done during operation

All measured data are transferred digitally (Modbus) to DS 500 mobile/ DS 400 mobile and can be recorded there.



Example: Measurement on the compressor

TECHNICAL DATA CS PM 600

Parameters:	Voltage (Volt) Current (Ampere) Cos phi Effective power (kW) Apparent power (kVA) Reactive power (kVar) Active energy (kWh) Power frequency (Hz) All parameters are transferred digitally to DS 500 mobile /DS 400 mobile
Accuracy current measurement:	Threshold values for current deviation. Loss angle according to IEC 60044-1. Current deviation in % at rated current in 120% 1 100% 1 20% 1.5 5% 3
Accuracy active energy:	IEC 62053-21 Class 1
Sensor connections:	3 x current transformers (L1,L2,L3,N) 4 x voltage measurement (L1,L2,L3)
Interfaces:	RS 485 (Modbus protocol)
Measuring range:	Voltage measurement max. 400 Volt (in special version up to 480V) Current measurement max. 100 A or 600 A
Size current transformers:	100 A / 1 A (max. 24 mm wire), 600 A / 1 A (max. 36 mm wire)
Dimensions case:	270 x 225 x 156 mm (B x H x T)
Operating temperature:	- 10...+40 °C

DESCRIPTION	ORDER NO.
CS PM 600 mobile current/effective power meter 100 A	0554 5341
CS PM 600 mobile current/effective power meter 600 A	0554 5342
<ul style="list-style-type: none"> • Mobile current/effective power meter with 3 external current transformers for big machines and systems • External current transformers for encompassing the phases (100 A or 600 A) • External magnetic measuring tip for measuring the voltage • Measures kW, kWh, cos, phi, kVar, kVA • Data transfer via Modbus • Incl. connection cable for mobile current/effective power meter to mobile instruments, 5 m 	
Current transformer 100A/1A consisting of 3 transformers for mobile instruments	Z554 0001
Current transformer 600A/1A consisting of 3 transformers for mobile instruments	Z554 0002
Current transformer 1000A/1A consisting of 3 transformers for mobile instruments	Z554 0003