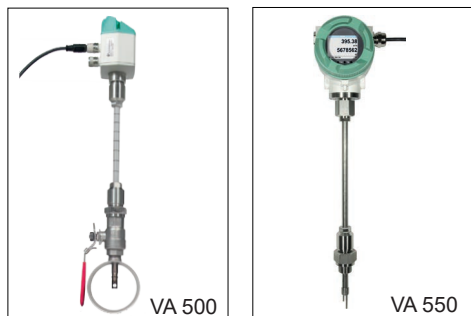




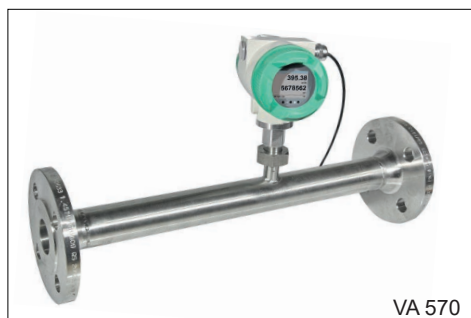
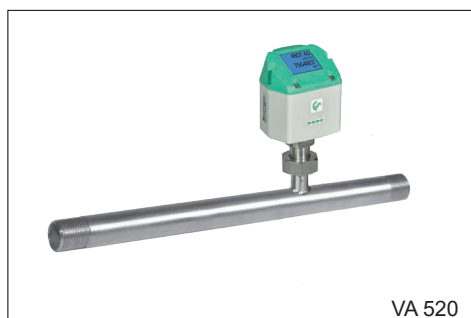
## Suitable sensors for DS 500 mobile, DS 400 mobile, PI 500, DP 510, LD 510

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

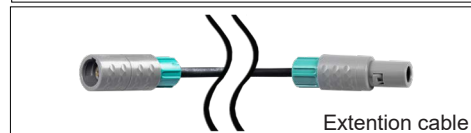
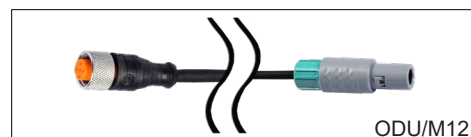


CONSUMPTION METERS INSERTION-VERSION	ORDER-NO.
VA 500 flow meter, Max version (185 m/s), probe length 220 mm, incl. 5 m connection cable to mobile devices	0695 1124
VA 500 flow meter, High-Speed version (224 m/s), probe length 220 mm, incl. 5 m connection cable to mobile devices	0695 1125
VA 550 Flow meter, measuring head in robust aluminium die casting housing	0695 0550 + order code A_...M..._

### Inline flow meter



FLOW METERS INLINE VERSION	ORDER-NO.
Inline Flow meter VA 520 with integrated measuring section, (R 1/4" DN 8)	0695 0520
Inline Flow meter VA 520 with integrated measuring section, (R 1/2" DN 15)	0695 0521
Inline Flow meter VA 520 with integrated measuring section, (R 3/4" DN 20)	0695 0522
Inline Flow meter VA 520 with integrated measuring section, (R 1" DN 25)	0695 0523
Inline Flow meter VA 520 with integrated measuring section, (R 1 1/4" DN 32)	0695 0526
Inline Flow meter VA 520 with integrated measuring section, (R 1 1/2" DN 40)	0695 0524
Inline Flow meter VA 520 with integrated measuring section, (R 2" DN 50)	0695 0525
Inline Flow meter VA 570 with integrated 1/2" measuring section	0695 0570 + order code A_...K_
Inline Flow meter VA 570 with integrated 3/4" measuring section	0695 0571
Inline Flow meter VA 570 with integrated 1" measuring section	0695 0572
Inline Flow meter VA 570 with integrated 1 1/4" measuring section	0695 0573
Inline Flow meter VA 570 with integrated 1 1/2" measuring section	0695 0574
Inline Flow meter VA 570 with integrated 2" measuring section	0695 0575



DEW POINT SENSORS	ORDER-NO.
FA 510 Dew point sensor, -80 ... + 20 ° Ctd incl. measuring chamber mobile and 5 m connection cable to mobile devices	0699 1510
FA 510 Dew point sensor, -20 ... + 50 ° Ctd incl. measuring chamber mobile and 5 m connection cable to mobile devices	0699 1512

CONNECTION CABLE FOR VA 500/520 AND FA 510 SENSORS	ORDER-NO.
Connection cable for VA / FA sensors to mobile devices, ODU/M12, 5 m	0553 1503
Extention cable for mobile für mobile equipment, 10 m	0553 0504



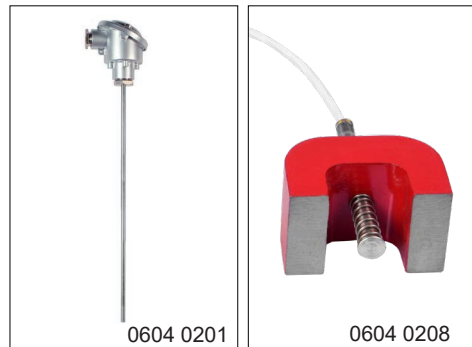
CALIBRATION CERTIFICATES FOR CONSUMPTIONS METERS AND DEW-POINT SENSORS	ORDER-NO.
5 point precision calibration for flow sensors incl. ISO certificate	3200 0001
Precision adjustment at -40 ° Ctd with ISO certificate	0699 3396



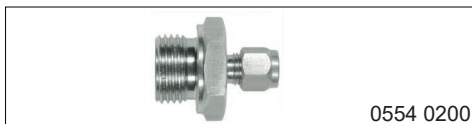
## Suitable sensors for DS 500 mobile, DS 400 mobile, PI 500, DP 510, LD 510



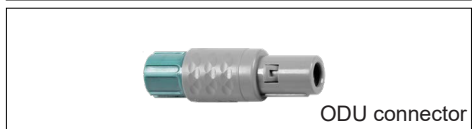
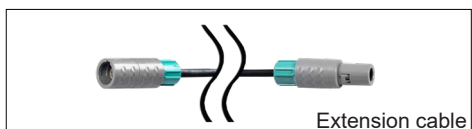
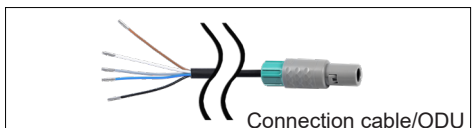
PRESSURE PROBES	± 1% ACCURACY	± 0,5% ACCURACY
Standard pressure probe CS 16, 0...16 bar	0694 1886	0694 3555
Standard pressure probe CS 40, 0...40 bar	0694 0356	0694 3930
Standard pressure probe CS 1.6, 0. 1.6 bar abs.		0694 3550
Standard pressure probe CS 10, 0...10 bar	0694 3556	0694 3554
Standard pressure 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	



TEMPERATURE SENSORS	ORDER-NO.
Bendable temperature probe PT 100 (2-wire) class A, length: 300 mm, d=3 mm, -70°C to +500°C, connect cable PFA, 2 m with ODU-plug (8 pole) to mobile instruments	0604 0200
Screw-in temperature sensor PT 100 class A, length 300 mm, d = 6 mm, with transmitter 4...20 mA = -50 °C...+ 500 °C (2-wire)	0604 0201
Cross-band surface temperature probe, thermocouple Type K, with integrated transducer 4...20 mA = 0°C...+180°C, 2 m connect calbe (PVC) with ODU-plug (8-pole) to mobile instruments	0604 0202
Cable temperature sensor PT 100 class A (4-wire), length: 300 mm, d = 6 mm, -70 ... + 260 ° C, 5 m connect 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 connect cable PFA with open ends	0604 0207
Magnetic surface temperature sensor, magnet 39x26x25 mm, PT 100 class B (2-wire), -30...+ 180 ° C, 5m connection cable PFA with open ends	0604 0208
Compression fittings: 6mm; G 1/2" teflon clamping ring pressure-tight up to 10 bar. Material: stainless steel, application area: max. + 260 °C	0554 0200
Compression fittings: 6mm; G 1/2" teflon 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 and external sensors to mobile devices, ODU/open ends, 5 m	0553 0501
Connection cable for pressure, temperature and external sensors to 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



CLAMP ON AMMETER	ORDER-NO.
Clamp-on ammeter 0 ... 1000 A TRMS incl. 3 m connection ends	0554 0519
Clamp-on ammeter 0 ... 400 A TRMS incl. 3 m connection ends	0554 0511

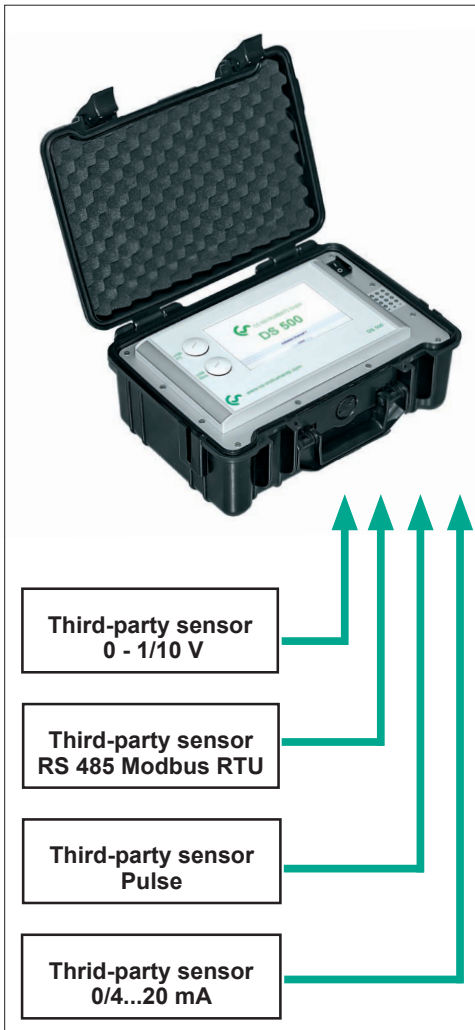




## Suitable sensors for DS 500 mobil, DS 400 mobil, PI 500



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 plants <ul style="list-style-type: none"> <li>• External current transformers for clamping around the phases (100 A or 600 A)</li> <li>• External magnetic measuring tip for measuring the voltage</li> <li>• measures kW, kWh, cos, phi, kVar, kVA</li> <li>• Data transfer to DS 500 mobile / DS 400 mobile via Modbus</li> <li>• Incl. connection cable for mobile current/effective power meter to mobile instruments, 5 m</li> </ul>	
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: <ul style="list-style-type: none"> <li>• 4-20 mA</li> <li>• 0-20 mA</li> <li>• 0-1 V / 0-10 V / 0-30 V</li> <li>• Pt 100 (2- or 3-wire)</li> <li>• Pt 1000 (2- or 3-wire)</li> <li>• Pulse outputs (e. G. of gas gas meters)</li> <li>• Frequency output</li> <li>• Modbus protocol</li> </ul>

# CS PM 600 -

Mobile current/effective power meter suitable for:

DS 500 mobile / DS 400 mobile / PI 500

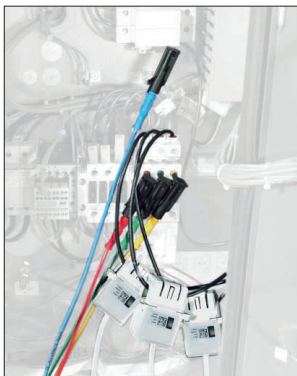
Measures voltage, current and calculates:

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



Current transformer can be opened

Magnetic voltage measuring tips electrically isolated



**Special features:**

- Magnetic voltage measuring tips for measuring 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 at a compressor

**TECHNICAL DATA CS PM 600**

<b>Parameters:</b>	Voltage (Volt) Current (Ampere) Cos phi Active power (kW) Apparent power (kVA) Reactive power (kVar) Active energy (kWh) Supply frequency (Hz) All parameters are transferred digital to DS 500 mobile/DS 400 mobile
<b>Accuracy current measurement:</b>	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
<b>Accuracy active energy:</b>	IEC 62053-21 Class 1
<b>Sensor connections:</b>	3 x current transformers (L1,L2,L3,N) 4 x voltage measurement (L1,L2,L3,N)
<b>Interface:</b>	RS 485 (Modbus protocol)
<b>Measure range:</b>	Voltage measurement max. 400 Volt Current measurement max. 100 A resp. 600 A
<b>Size current transformers:</b>	100 A / 1 A (max.24 mm wire) 600 A / 1 A (max. 36 mm wire)
<b>Dimensions case:</b>	270 x 225 x 156 mm (B x H x T)
<b>Operating temperature:</b>	- 10...+40°C

DESCRIPTION	ORDER-NO.
CS PM 600 current/effective power meter up to 100 A	0554 5341
CS PM 600 current/effective power meter up to 600 A	0554 5342
<ul style="list-style-type: none"> <li>• Mobile current effective power meter with 3 external current transformers for big machines and plants</li> <li>• External current transformers for clamping around the phases (100 A or 600 A)</li> <li>• External magnetic measuring tip for measuring the voltage</li> <li>• Misst kW, kWh, cos, phi, kVar, kVA</li> <li>• Data transfer via Modbus</li> <li>• Incl. connection cable for mobile current/effective power meter to mobile instruments, 5 m</li> </ul>	
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