

# Technical specifications: CS22 / CS22 D



<b>Measuring gas supply</b>	Diffusion	
<b>Measuring range and measuring gas</b>	sensor dependent	
<b>Update time</b>	1s	
<b>Readiness delay</b>	5s plus 120s sensor run-in phase (heating up)	
<b>Power supply</b>	Operating voltage:	24V DC (12-30V DC allowable)
	Power consumption	<u>RS485 and 0,2-1mA version</u> <u>4-20mA version</u>
	without display *1:	typ. 50/62/86mA @24V/18V/12V                      max.72/84/108mA @24V/18V/12V
	with display *1:	typ. 56/70/100mA @24V/18V/12V                      max.78/92/122mA @24V/18V/12V
	with display+horn *1:	max.66/82/115mA @24V/18V/12V                      max.88/104/137mA @24V/18V/12V
	without display *2:	typ. 60/75/106mA @24V/18V/12V                      max.82/97/128mA @24V/18V/12V
	with display *2:	typ. 67/84/120mA @24V/18V/12V                      max.89/106/142mA @24V/18V/12V
	with display+horn *2:	max.75/95/135mA @24V/18V/12V                      max.97/117/157mA @24V/18V/12V
	Fuses:	250mA (not changeable)
<b>Climatic conditions</b>	Short-term storage temperature:	-25...+60°C
	Recommended storage temperature:	0...+30°C
	Operating temperature:	-20...+50°C (sensor dependent)
	Humidity:	5...90% r.h. (sensor dependent)
	Air pressure:	80...120kPa (sensor dependent)
<b>Display &amp; controls</b>	Status-LEDs:	green for operation and yellow for fault or service
	Display:	2,2" graphic display
	Buttons:	3 function buttons (display version only)
	AutoCal button:	for ZERO and SPAN adjustment (inboard)
	Potentiometer:	for ZERO and SPAN adjustment (inboard)
<b>Service connector</b>	Design:	3,5 mm stereo jack socket (internal)
	Analogue output:	0.2-1.0V corresponding to 0-100% MR for sensor calibration
	Digital input:	for configuration and firmware update
<b>Signal output</b>	analogue:	4-20mA (max. load: 400 Ω/650 Ω/150 Ω @24 V/18 V/12 V supply) 0.2-1mA (max. load: 14K/9K3/14K5 @ 24 V/18 V/12 V supply)
	or digital:	RS-485; Half duplex; 9600/19200/38400 Baud; Modbus protocol, Slide switch for 120 Ω terminating resistor
<b>Connection Cable</b>	Cable glands:	1 or 2 glands M16x1.5 (for cable diameter 4.5-10 mm)
	Connection terminals:	4 double terminals (0.08 mm <sup>2</sup> to 2.5 mm <sup>2</sup> conductor cross-section)
	Cable (analogue):	3-core e.g. LiYY 3x0.75...1.5 mm <sup>2</sup> or LiYCY
	Cable (digital):	4-core e.g. LiYY 4x0.75...1.5 mm <sup>2</sup> or cable Y(St)Y 2x2x0.8 *3
<b>Housing</b>	Protection class:	IP54
	Material:	Plastic
	Dimensions:	96 x 140 x 49 mm (W x H x D) with sensor
	Weight:	175g or 220g (with display)
<b>Approvals / Tests</b>	Electromagnetic compatibility:	DIN EN 50270:2015                      Interference emission: Type class I Interference immunity: Type class II

to \*1: For low power sensor MK147

to \*2: For high power sensors MK144, MK322, MK327, MK328 and MK370

to \*3: The cable Y(St)Y 2x2x0.8 is suitable for powering several bus transmitters via the same cable only for short cable runs.  
The maximum possible distance depends on the number and local distribution of the transmitters on the bus cable.