



# OZONE SYSTEM

## OZONFILT OZMA

ProMinent®



OZONFILT OZMa is synonymous with maximum operational safety and minimal operating costs. The ozone generator is maintenance-free and generates up to 420 g/h of ozone from compressed air.

### BENEFIT

- ✓ Economical: maintenance-free generator concept with virtually unlimited service life
- ✓ Up to 30% energy savings for air treatment, thanks to demand-controlled and self-optimising air drying compared to conventional air treatment.
- ✓ Automatic control of the feed gas depends on the ozone output, therefore reduced consumption of feed gas is produced with intensive use of energy.
- ✓ High ozone concentration ensures optimum ozone solubility in water
- ✓ Direct injection without injector system for up to 2 bar back pressure
- ✓ Automatic ozone generation, virtually independent of fluctuations in mains voltage and pressure

### TECHNICAL DETAILS

- ✓ Compact mounting, ready-to-use in a painted steel cabinet or optionally in a stainless steel cabinet.
- ✓ With integrated filter package for the removal of dust and small amounts of residual oil in the compressed air.
- ✓ Special dielectric with excellent cooling: in spite of the low cooling water consumption, heat is quickly and efficiently discharged before the ozone produced can decompose due to excessive heat.
- ✓ PLC with integrated ozone measurement and PID control
- ✓ 7" touch panel with data logger and screen plotter
- ✓ Multiple communications interfaces (e.g. LAN, Profibus® DP, ISDN, TCP)
- ✓ Excellent efficiency: over 90% of the ozone is dissolved in the water thanks to the special construction of the mixing unit.
- ✓ Second freely configurable 0/ 4-20 mA input
- ✓ Contact output for common alarm message
- ✓ One freely configurable 0/ 4-20 mA output
- ✓ Integration of a dew point sensor to monitor the quality of compressed air
- ✓ Integration of an air conditioning unit to adjust the temperature of the ozone system
- ✓ Pause input for external switching on/off
- ✓ Contact input for locking the system, for example in the absence of flow
- ✓ Digital input for connecting a gas detector
- ✓ Digital input for controlling two power stages
- ✓ Digital input for controlling two power stages
- ✓ 0/4-20 mA input for external output control depending on the flow or measured value with a PICb controller.
- ✓ Contact output for operating status
- ✓ Contact output for limit violation, ozone concentration in the water too low

### TECHNICAL DATA

		OZMa 1A	OZMa 2A	OZMa 3A
Number of modules		1	1	1
Ozone capacity, measured in accordance with DIN with air at 20 °C, cooling water at 15 °C	g/h	70	105	140
Air consumption (only ozone generation)	Nm <sup>3</sup> /h	3.50	5.25	7.00
Ozone concentration in the gas phase referenced to nominal conditions	g/Nm <sup>3</sup>	20	20	20
Specific energy requirement at nominal capacity	Wh/g	16.5	16.5	16.5
Power factor at full capacity	cos φ	0.95	0.95	0.95
Ozone connection		Rp 3/8"	Rp 3/8"	Rp 3/8"

### ELECTRICAL CONNECTION

		OZMa 1A	OZMa 2A	OZMa 3A
Mains connected load	V/Hz/A	230/50;60/10	230/50;60/16	230/50;60/16
Enclosure rating		IP54	IP54	IP54
Degree of protection with integrated air conditioning unit (internal/external)		IP 54 / IP 34	IP 54 / IP 34	IP 54 / IP 34
Weight	kg	270	280	300

FOR MORE INFORMATION.

[www.ptdsak.com](http://www.ptdsak.com)

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COOLING WATER		OZMa 1A	OZMa 2A	OZMa 3A
Cooling water consumption (15 °C)	l/h	90	135	180
Cooling water consumption (30 °C)	l/h	125	190	250
Cooling water inlet pressure	bar	2...5	2...5	2...5
Cooling water outlet, open discharge	mm	8x5	8x5	12x9
Cooling water inlet, PE pressure hose	mm	8x5	8x5	12x9

### Ozone Generation Systems OZONFILT OZMa 4-6 A (Process Gas - Air)

#### TECHNICAL DATA

		OZMa 4A	OZMa 5A	OZMa 6A
Number of modules		2	2	3
Ozone capacity, measured in accordance with DIN with air at 20 °C, cooling water at 15 °C	g/h	210	280	420
Air consumption (only ozone generation)	Nm <sup>3</sup> /h	10.50	14.00	21.00
Ozone concentration in the gas phase referenced to nominal conditions	g/Nm <sup>3</sup>	20	20	20
Specific energy requirement at nominal capacity	Wh/g	16.5	16.5	16.5
Power factor at full capacity	cos φ	0.95	0.95	0.95
Ozone connection		Rp 3/8"	Rp 3/8"	Rp 3/8"

#### ELECTRICAL CONNECTION

		OZMa 4A	OZMa 5A	OZMa 6A
Mains connected load	V/Hz/A	400/50;60/16	400/50;60/16	400/50;60/16
Enclosure rating		IP54	IP54	IP54
Degree of protection with integrated air conditioning unit (internal/external)		IP 54 / IP 34	IP 54 / IP 34	IP 54 / IP 34
Weight	kg	420	445	580

COOLING WATER		OZMa 4A	OZMa 5A	OZMa 6A
Cooling water consumption (15 °C)	l/h	270	360	540
Cooling water consumption (30 °C)	l/h	300	400	600
Cooling water inlet pressure	bar	2...5	2...5	2...5
Cooling water outlet, open discharge	mm	12x9	12x9	12x9
Cooling water inlet, PE pressure hose	mm	12x9	12x9	12x9

