GEA ORBITAL CLEANER OC200

Technical Brochure
Soiling Classification IV

Engineering for a better world.

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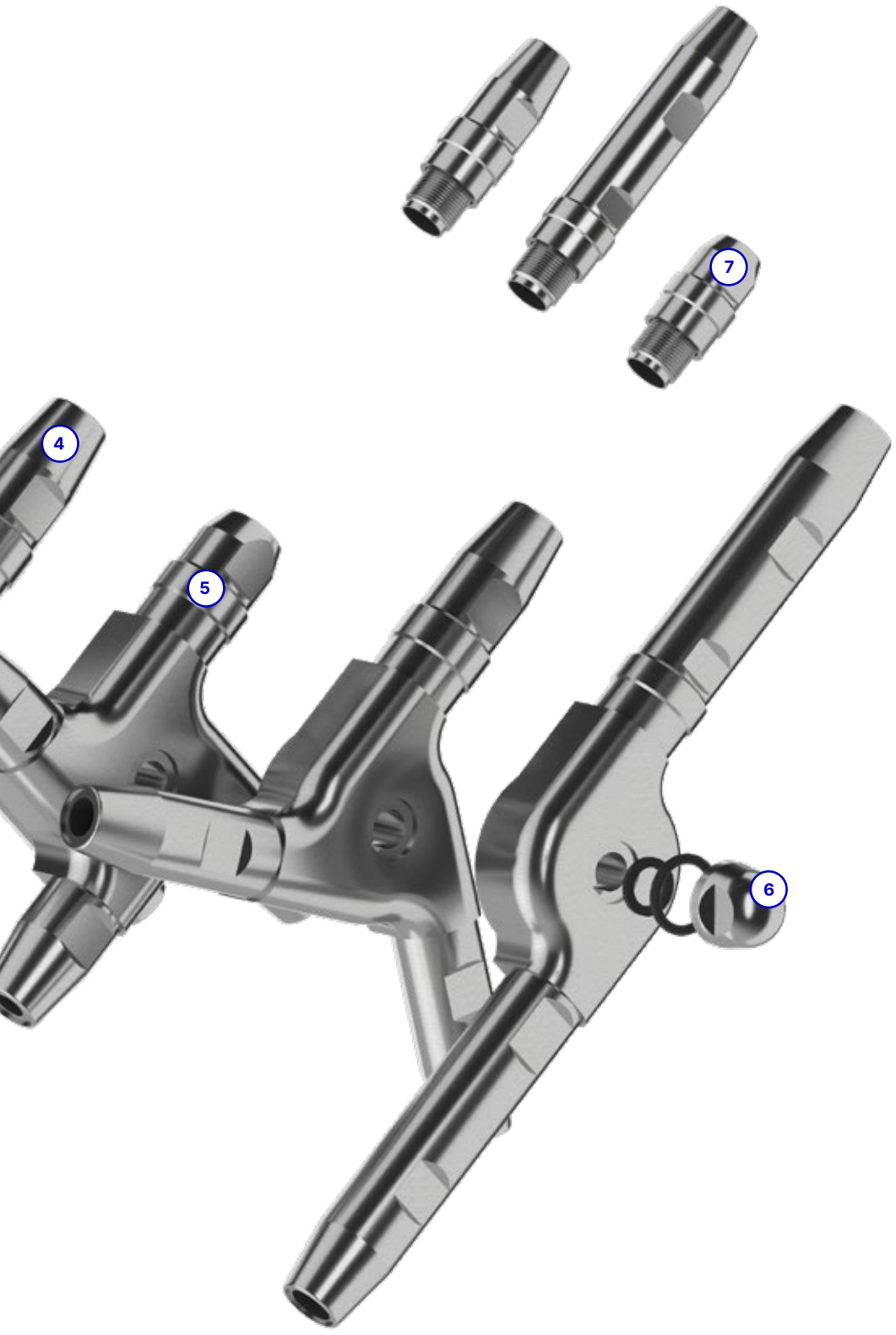
ONE CLEANER, NUMEROUS OPTIONS.

Fully adjustable to the cleaning process, thus saving time and resources.

The orbital cleaner OC200 can be tailored to the cleaning process, saving time and resources. With operating pressures between 4 and 10 bar, the OC200 can clean vessels up to 36 m in diameter at optimum operating conditions. Its modular design covers a wide range of flow rates, spray distances and pattern times.

General Specifications / Technical Data	
Soiling classification	IV
Cleaning diameter	max. 36 m / 118 ft
Spray pattern	360°
Flow rate	17 – 65 m³/h 283 – 1.083 l/min 75 – 286 US gpm
Pressure range	4 – 10 bar / 58 – 145 psi
Optimal pressure	6 – 8 bar / 87 – 116 psi
Full pattern time	8 – 21 min
Weight	5,7 – 7,3 kg
Operating temperature	max. 95 °C / 203 °F
Ambient temperature*	max. 140 °C / 284 °F
Insertion opening	Ø 200 – 370 mm Ø 7,88 – 14,57 inch**

* not in operation ** depending on nozzle carrier and nozzle length



1 Rotor and stator
Various rotor and stator combinations offer flexibility on speed control.

2 Main cleaner body
Standard central core of the cleaner remains constant with all options.

3 Nozzle carrier
Two-nozzle, three-nozzle and four-nozzle carriers can be selected to meet requirements regarding insertion openings, flows and soiling levels.

4 Nozzle diameter
Eight different nozzle diameters from 8 to 15 mm to optimize flow, full pattern times and spray projections.

5 Self-cleaning jets
Backwash nozzle prevents product build-up on the cleaner.

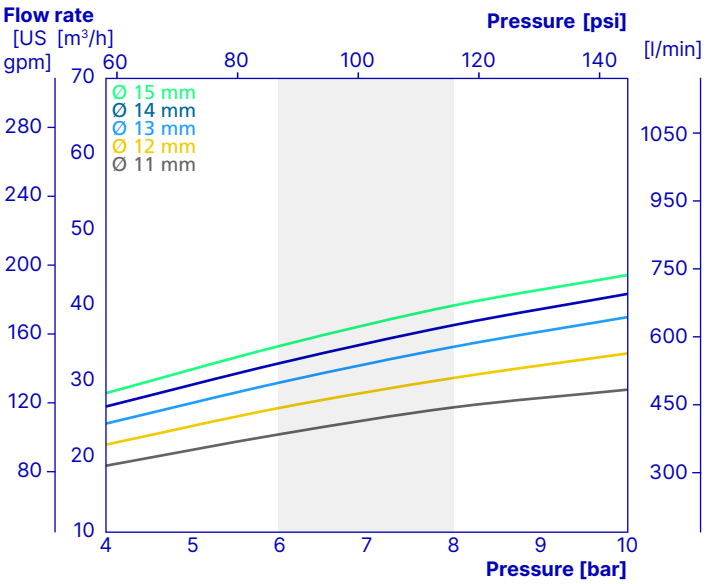
6 Locking mechanism
Allows fast and easy disassembly for maintenance.

7 Nozzle lengths
Long, short and extended nozzle options to adjust impact and spray projection.

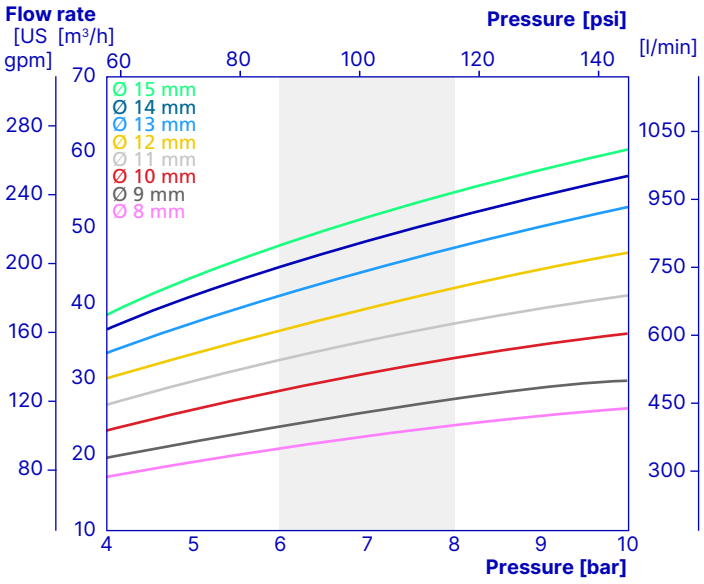
Performance data

Flow performance data
The OC200 is capable of being configured with a 2-, 3- or 4-nozzle carrier. The three diagrams show the flow rate for all available nozzle configurations and diameters at different operating pressures.

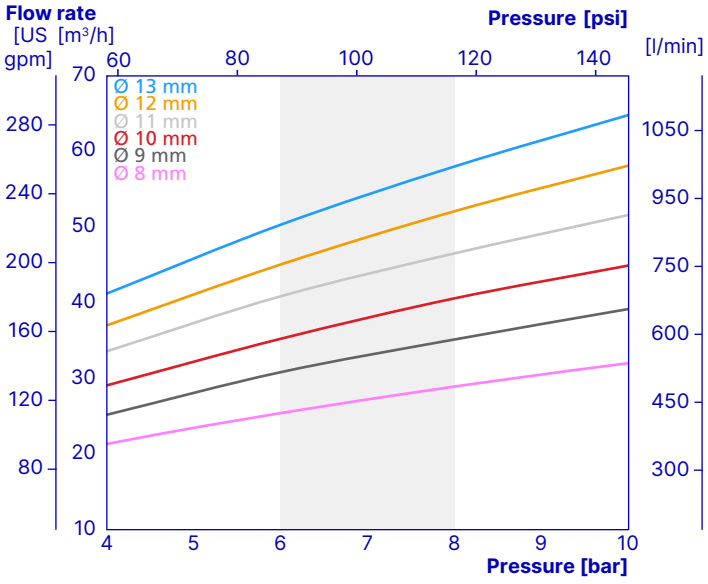
2-nozzle version



3-nozzle version

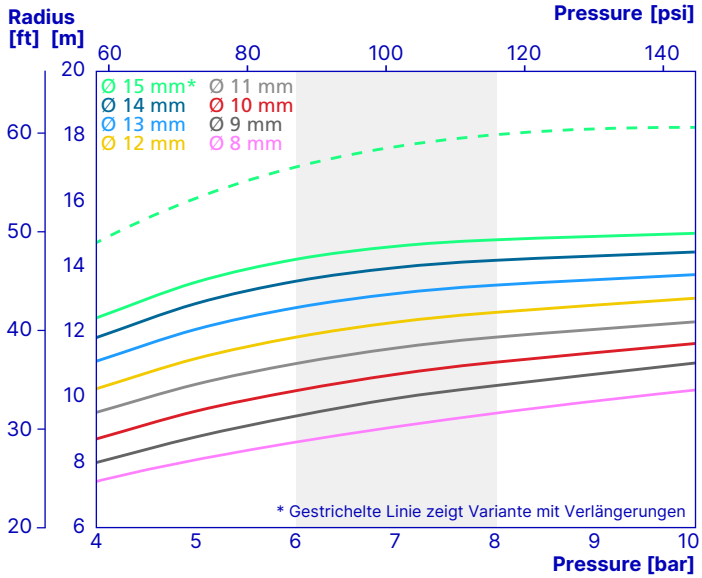


4-nozzle version



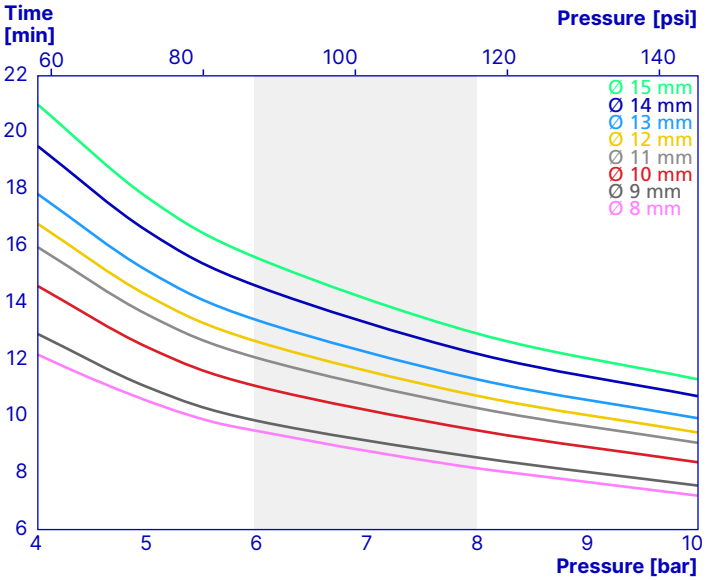
GEA's policy of continued improvement means that specifications may vary without prior notice.

Dynamic spray performance (all versions)



Dynamic spray performance
The solid curves show the dynamic spray radius of the long nozzle combined with the recommended rotor/stator combination that our product experts have preselected for the various nozzle options. The dashed curve expresses the increased performance with extensions for the 15 mm nozzle. Our product experts are available to advise on the dynamic spray radius for other customized configurations.

Max. full pattern time (all versions)

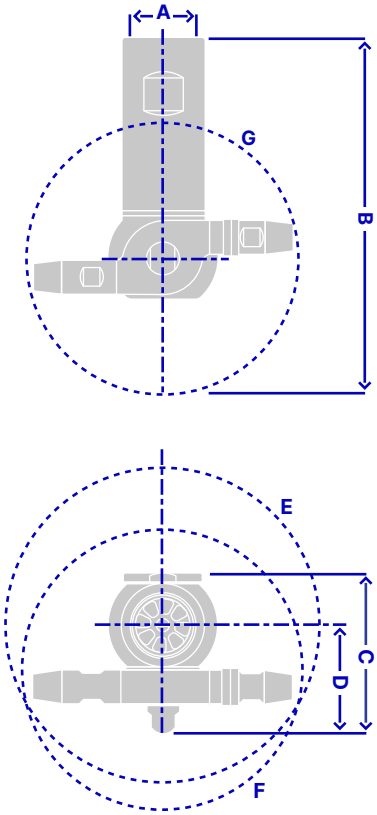


Full pattern time
The diagram shows the maximum time to complete the full spray pattern with the optimum speed for each nozzle diameter. Our product experts are available to adjust the speed to customize cleaning performance where required. Depending on the customized configuration of the cleaner, the time for the full pattern varies. Please note: Depending on the level of soiling and the required CIP cycle the acceptable level of performance may be achieved with a partial, complete or multiple full pattern time.

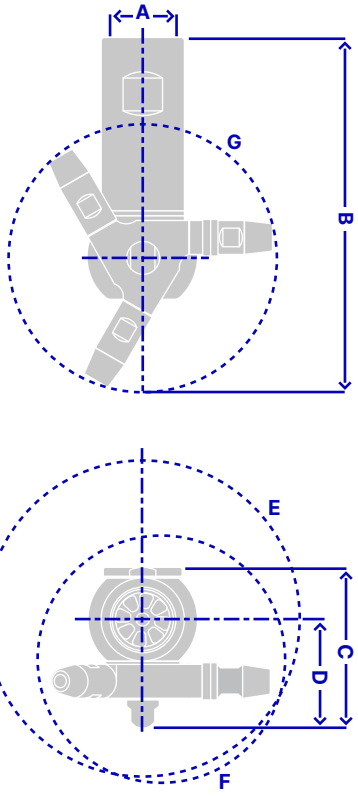
All diagrams are based on a cleaning medium of: density 1 kg / dm³, viscosity 1 mm² / s, temperature 20 °C

Dimensions

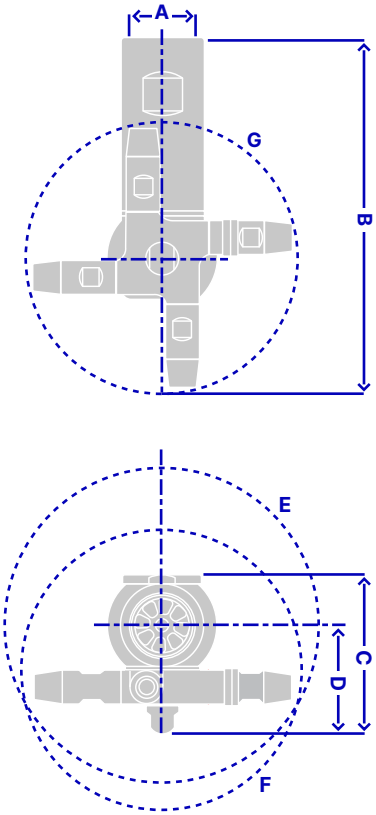
2-nozzle version



3-nozzle version



4-nozzle version



Dimensions

Nozzle length	A	B [mm]	C [mm]	D [mm]	E [mm]	F (Minimum insertion size) [mm] 2 & 4 nozzles	F (Minimum insertion size) [mm] 3 nozzles	G [mm]
Short	2" BSP × 22 mm or 2" NPT*	296	144	97	240	200	200	200
Long		316			280	250	210	240
Long with extensions		376			400	370	320	360

* Hygienic adaptors are available for 2“ BSP versions only.

Order information

Position	Description of the order code for the standard version							
1	**Cleaner designation**							
	OC200	OC200						
2	**Spray pattern**							
	0	360°						
3	**Nozzle carrier**							
	2	2 nozzles	3	3 nozzles	4	4 nozzles		
4	**Nozzle diameter**							
	8	Ø 8 mm	10	Ø 10 mm	12	Ø 12 mm	14	Ø 14 mm
	9	Ø 9 mm	11	Ø 11 mm	13	Ø 13 mm	15	Ø 15 mm
5	**Nozzle length**							
	S	Short nozzles						
	L	Long nozzles						
	LX	Long nozzles with extensions						
6	**Self-cleaning**							
	J	Yes						
	N	No						
7	**Full pattern time**							
	OPT	Optimum						
	C	Customized (needs to be defined in consultation with the product support)						
8	**Rotor**							
	e.g. 30	Rotor (pre-defined by the selection of optimum or can be customized by product support)						
9	**Matrix**							
	1	Matrix 1						
10	**Type of pipe connection**							
	BSP	BSP connection						
	NPT	NPT connection						
11	**Connection size**							
	2	2"						
12	**Material bearing**							
	11	A350 / C-PTFE / PEEK						
13	**Material elastomer**							
	10	FKM						
	11	EPDM						
14	**Material body**							
	1	316L / 1.4404						
15	**Surface finish (external)**							
	2	$R_a \leq 0{,}8$ µm						
17	**Certificates**							
	0	Without certificate						
	W	Material certificate EN10204-2.2						
	Z	Material certificate EN10204-3.1						
	K	FDA declaration of conformity *						
	E	Regulation (EU) No. 1935/2004, No. 2023 / 2006, No. 10 / 2011 declaration of conformity *						
	A	ADI free declaration of conformity *						
	U	USP class VI declaration of conformity *						
	O	Surface finish test & protocol						

The code is composed as follows depending on the chosen configuration:

Position	1		2		3		4	5		6		7		8		9		10	11		12		13		14		15	16**		17
Code	OC200	-	0	-		×			-		-		-		-	1	-		2	-	11	-		-	1	-	2	//	//	

* Certificate: Availability depending on approval code
** Approval Code: Depending on cleaner configuration

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