



Suitable for biogas production
plants, LNG or LCNG stations

High pressure
pump <400 bar

Built with simplicity regarding
control and management

FS6 -III & FS12-III

ODOR DOSING EQUIPMENT

**PALMSTIERNAS PROVIDES EQUIPMENT FOR
ODORIZING OF GAS.**

**Both natural gas and upgraded biogas are odorless,
odorant must be added to the gas so that one can
smell the gas mixture long before it becomes
explosive (<20% LEL).**

**Extevent, acquired by Palmstiernas in 2020, has
developed its own dosing equipment.**

**Today, we manufacture the third generation
of the equipment.**

PALMSTIERNAS SVENSKA AB

ODORIZER

The equipment accurately and automatically doses the correct amount of odorant into the gas.

ODORIZER FS 6.0-III and FS 12.0-III are equipped with a flow switch to ensure functionality, can withstand pressures up to 400 bar, and are therefore also suitable for LCNG stations.

LCNG stations is a facility that converts high-pressure condense liquefied Natural Gas into compressed Natural Gas, which is used for various purposes including fueling stations.

The equipment is available in two sizes with a buffer tank of 6 or 12-litres capacity and is rated for installation in Ex zones.

ODORANT



There are different types of odorants.

They can be categorized into two groups; one that contain sulfur like THT and Mercaptane and one that is sulfur-free like Gasodor.



ODORANT TANKS

For the transport of odorants, we primarily use tanks of the GA50 type, which is a stainless steel tank with a 50-litre capacity, pressure approved up to 10 bar.

On the top of the vessel, there are connections with quick couplings. The customer purchases their own container, which then can be refilled.

OPTIONS

Various options such as cabinets, heaters, spill protection, level switch, and carbon filters are available as accessories to the odorizer.

THE DOSING PUMP

The standard pump maximum performance is 100 mm³ (0,1 ml = 0,1 CC) per stroke. We recommend to always run the pump on 100%. A plant with average production of approximately 100 Nm³/h would require a dosage of 1000 mm³ (Gasodor) per hour. 10 strokes of 100 mm³ per hour.

Maximum number of strokes per minute is recommended at 4 strokes.

SIGHT GLASS

The amount of odor can be measured by any personnel by looking at the sight glass. Each millimeter on the glass equals 55 mm³.

Using just the Glass pipe (middle-valve closed). The level in the sight glass should drop approximately 2 mm per stroke.

PRODUCT KEY – ODOR DOSING EQUIPMENT

			3	4	5	6	7	8	9	10	11
F	S	-	6	HP							

6 liter capacity in buffertank	6										
12 liter capacity in buffertank	12										
50 liter capacity in buffertank	50										
No check valve		0									
Check valve with isolation valves at injection point		HP									(*1)
2500 Nm ³ /h maximum gas flow			125								(*2)
20 000 Nm ³ /h maximum gas flow			250								(*2)
50 000+ Nm ³ /h maximum gas flow			500								(*2)(*3)
Wall mounting without cabinet				0							
Odorizer mounted in stainless steel wall cabinet 800x800x300				SV							
Odorizer mounted in stainless steel floor cabinet 1800x800x450				SG							
No insulation, only junction boxes					0						
Insulation with heating, thermostat and junction boxes					1						(*4)
No carbon filter						0					
Filter with activated carbon						F					
None							0				
Spill tray mounted under the dosing equipment type FS-6 (400x120x25)							S6				
Spill tray mounted under the dosing equipment type FS-12 (400x200x25)							S12				
None								0			
Level switch mounted at the sight glass set at 20% remaining. Incl. Barrier								N			
Extra level switch for 2 point indication								NN			
for future use										X	
for future use										X	

*1 Must be used at pressures >20 bar

*2 Based on Gasodor as an odorant, at THT the maximum flow is halved. Example: pump 125 can handle approximately 1250 Nm³/h with THT as odorant

*3 Ask Palmstiernas for this type of application

*4 Recommended if there is a risk of condensation

Example type code :

FS-6HP125SG1000





OUR TEAM



Per Hermansson

Sales

per.hermansson
@palmstiernas.se



Per-Arne Östman

Assembly

per-arne.ostman
@palmstiernas.se



William Leicht

Service

william.leicht
@palmstiernas.se

SERVICE AGREEMENT

We sign agreements on regular and remedial service for the facilities.

Scheduled and remedial maintenance is performed by our Service Technicians.

Contact us for a quote



Palmstiernas Svenska AB
Bivägen 1, 663 41 Hammarö, Sweden

+46 54 52 14 70
www.palmstiernas.se