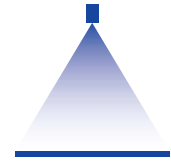


# FLAT FAN NOZZLES OVERVIEW OF TYPES



Lechler flat fan nozzles produce intensive, uniform water jet. Flat fan nozzles are generally used in cleaning processes and throughout many areas of surface treatment. Numerous designs – including tongue-type nozzles for special applications – and extensive assembly accessories enable easy installation as well as quick nozzle changeovers.

## Standard flat fan nozzles



- Particularly high-energy spray with spray angles of up to 60°
- Parabolic liquid distribution
- Unaffected by transient pressures
- Simple and cost-saving assembling options

## Tongue-type nozzles



- Special design in which a solid stream is diverted by a deflector plate
- Powerful, sharply delimited spray
- Shape of the deflector plate determines the spray angle
- Clog resistant due to large free cross-sections

## International nozzle code

Flat fan nozzles designations are governed by international standards. The first two digits specify the spray angle in degrees, the others the flow rate in US gallons per minute at 40 psi. Our high pressure flat fan nozzles (series 602/608/652/6FH) are specified with this international nozzle code.

Spray angle  
in degrees



Flow rate in US gal/min at 40 psi

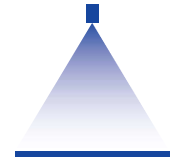
Conversion: Value · 3.22 = flow rate in l/min at 2 bar










example: 0.2 gal/min at 40 psi = 0.644 l/min at 2 bar

## Good to know

Information on the arrangement of several flat fan nozzles can be found in Chapter “Planning Aids” on Page 255.









# FLAT FAN NOZZLES OVERVIEW OF SERIES



		Standard flat fan nozzles				
						
Series		632/633	610	612	616/617	652
Information on page		108	111	113	116	118
Pressure range	Low pressure	•	•	•	•	•
	High pressure					
 Flow rate at p = 5 bar	Low < 4 l/min	•	•	•		•
	Medium 4 l/min–16 l/min	•	•	•	•	•
	High 16 l/min–50 l/min	•		•	•	•
	Very high > 50 l/min				•	
 Spray angle	Small 20°–45°	•	•	•	•	•
	Medium 60°–90°	•	•	•	•	•
	Large 120°–140°	•	•	•	•	•
 Nozzle material	Stainless steel	•	•	•	•	•
	Brass	•	•	•	•	•
	Plastic	•				•
 Nozzle connection		1/8 BSPT 1/4 BSPT 3/8 BSPT 1/2 BSPT	1/8 BSPP	1/4 BSPP	3/4 BSPP	Assembly with retaining nut 3/8 BSPP

















		Standard flat fan nozzles			
					
Series		652 Belt lubrication nozzle	612.xxx.5E.03 Press-in nozzle	656/657	660
Information on page		121	122	123	125
Pressure range	Low pressure	•	•	•	•
	High pressure				
 Flow rate at p = 5 bar	Low < 4 l/min	• (at p = 3 bar)	• (at p = 2 bar)		•
	Medium 4 l/min–16 l/min			•	•
	High 16 l/min–50 l/min			•	
	Very high > 50 l/min			•	
 Spray angle	Small 20°–45°			•	•
	Medium 60°–90°	•	•	•	•
	Large 120°–140°	•	•	•	•
 Nozzle material	Stainless steel	•		•	•
	Brass			•	•
	Plastic	•	•		
 Nozzle connection		Assembly with retaining nut 3/8 BSPP	For pressing into pipes	Assembly with retaining nut 3/4 BSPP	Assembly with retaining nut 3/8 BSPP and dovetail guide

		Tongue-type nozzles		
				
<b>664/665</b>	<b>646</b>	<b>688/689</b>	<b>686</b>	<b>684</b>
127	129	131	132	134
•	•	•	•	•
	•		• (at p = 2 bar)	• (at p = 2 bar)
•	•	• (at p = 2 bar)	• (at p = 2 bar)	• (at p = 2 bar)
•		• (at p = 2 bar)	• (at p = 2 bar)	
•				
•	•	•		
•	•		•	
•	•		•	•
•		•	•	
•			•	
	•	•	•	•
Assembly with retaining nut 3/4 BSPP and dovetail guide	Assembly with bayonet quick-release system	3/8 BSPT 3/4 BSPP	1/8 BSPT 1/4 BSPT 3/8 BSPT 1/2 BSPT	Assembly with retaining nut 3/8 BSPP





		Standard flat fan nozzles			
					
Series		602	608	652	6FH with spray stabiliser
Information on page		135	136	137	138
Pressure range	Low pressure				
	High pressure	•	•	•	•
 Flow rate at p = 5 bar	Low < 4 l/min				
	Medium 4 l/min–16 l/min	• (at p = 80 bar)	• (at p = 80 bar)	• (at p = 80 bar)	• (at p = 80 bar)
	High 16 l/min–50 l/min	• (at p = 80 bar)	• (at p = 80 bar)	• (at p = 80 bar)	• (at p = 80 bar)
	Very high > 50 l/min	• (at p = 80 bar)		• (at p = 80 bar)	• (at p = 80 bar)
 Spray angle	Small 20°–45°	•	•	•	•
	Medium 60°–90°	•	•	•	•
	Large 120°–140°				
 Nozzle material	Stainless steel	•	•	•	•
	Brass				
	Plastic				
 Nozzle connection		1/4 BSPT 1/4 NPT	1/8 BSPT 1/8 NPT	Assembly with retaining nut 3/8 BSPP	1/8 BSPT 1/8 NPT 1/4 BSPT 1/4 NPT Assembly with retaining nut 3/8 BSPP

Swivelling nozzles	Nozzle systems for surface treatment		Descaling nozzles
			
<b>676</b>	<b>676/677 MEMOSPRAY</b>	<b>676 Easy-Clip</b>	<b>SCALEMASTER</b>
140	142	146	Upon request
•	•	•	
•			
•			
•	• (at p = 2 bar)	• (at p = 2 bar)	
•	• (at p = 2 bar)	• (at p = 2 bar)	
•			
•	•		
•	•	•	
•	•		
•	•		
•			
•	•	•	
Assembly with retaining nut Welded nipple Threaded nipple Threaded socket	Eyelet clamps for following pipe sizes: 1" 1 1/4" 1 1/2" 2"	Eyelet clamps for following pipe sizes: 1" 1 1/4" 1 1/2" 2"	