



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





		Standard flat fan nozzles				
			8	0		
Series		632/633	610	612	616/617	652
Information	on page	108	111	113	116	118
Pressure range	Low pressure	•	•	•	•	•
	High pressure					
	<b>Low</b> < 4 l/min	•	•	•		•
	<b>Medium</b> 4 I/min–16 I/min	•	•	•	•	•
Flow rate at p = 5 bar	<b>High</b> 16 I/min–50 I/min	•		•	•	•
	<b>Very high</b> > 50 l/min				•	
	<b>Small</b> 20°–45°	•	•	•	•	•
Spray	<b>Medium</b> 60°–90°	•	•	•	•	•
angle	<b>Large</b> 120°-140°	•	•	•	•	•
	Stainless steel	•	•	•	•	•
Nozzle material	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			rd flat fan nozzles
Series		652 Belt lubrication nozzle	612.xxx.5E.03 Press-in nozzle	656/657	660
Information o	n page	121	122	123	125
Pressure	Low pressure	•	•	•	•
range	High pressure				
	<b>Low</b> < 4 l/min	(at p = 3 bar)	(at p = 2 bar)		•
	<b>Medium</b> 4 l/min–16 l/min			•	•
Flow rate at p = 5 bar	<b>High</b> 16 I/min–50 I/min			•	
	<b>Very high</b> > 50 l/min			•	
_	<b>Small</b> 20°–45°			•	•
Spray angla	<b>Medium</b> 60°–90°	•	•	•	•
Spray angle	<b>Large</b> 120°-140°	•	•	•	•
	Stainless steel	•		•	•
Nozzle	Brass			•	•
material	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	
				T
664/665	646	688/689	686	684
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			
				10	
Series		602	608	652	6FH with spray stabiliser
Information on page		135	136	137	138
Pressure range	Low pressure				
	High pressure	•	•	•	•
	<b>Low</b> < 4 l/min				
	<b>Medium</b> 4 I/min–16 I/min	(at p = 80 bar)	(at p = 80 bar)	(at p = 80 bar)	(at p = 80 bar)
Flow rate at p = 5 bar	<b>High</b> 16 I/min–50 I/min	(at p = 80 bar)	(at p = 80 bar)	(at p = 80 bar)	(at p = 80 bar)
	<b>Very high</b> > 50 l/min	(at p = 80 bar)		(at p = 80 bar)	(at p = 80 bar)
_	<b>Small</b> 20°–45°	•	•	•	•
	<b>Medium</b> 60°–90°	•	•	•	•
Spray angle	<b>Large</b> 120°–140°				
	Stainless steel	•	•	•	•
Nozzle material	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	
(H)				
676	676/677 MEMOSPRAY	676 Easy-Clip	SCALEMASTER	
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"		