

# LTN Nozzles

Angus Long Throw Nozzles

- Designed for a wide range of applications
- High performance and reliability
- Waterjet or spray pattern
- Five models available



Angus Long Throw LTN Nozzles have been designed for a wide range of applications, requiring a waterjet or spray pattern. Whether for extinguishing fires, cooling duties including storage tanks and process areas, other hot metal surfaces, or providing protection against radiant heat the LTN Nozzles will provide reliable and effective protection.

This nozzle range can also provide a nonaspirated foam spray, when used with film forming foams such as Petroseal FFFP or Tridol AFFF which are ideally suited to offshore helideck and aircraft hangar protection. Rapid knockdown of hydrocarbon spill fires can then be provided. These Gunmetal nozzles are particularly suited for use in coastal and offshore marine environments. Five models are available at flows of 900, 1800, 2700 and 3300 litres/ minute at 7 bar g inlet pressure with a self-inducing FFFP/AFFF foam version for 3% or 6% induction (1% to special order) at 1900 litres/minute at 7 bar g.

Each nozzle provides a constant flow rate at a given pressure from jet through adjustment to wide angle spray. This constant flow ensures that rapid changes of mode produce no detrimental effects on supply pumps, operating personnel or other equipment sharing the same water supply. These LTN nozzles offer high performance and reliability. They are ideally suited for use with the Angus Streamline Monitors from the HM-80 hand monitor, to the DGM-80 Geared monitor or OM-80 entirely water powered oscillating monitor and the PGM portable ground monitor (particularly effective with the LTN900 or LTN1800 nozzles).

Automatically actuated variants of these LTN nozzles are available for fitting to the advanced Angus Remote Control Monitors – both the fully hydraulic RCMh-80, the all electric RCMe-80 and the hybrid RCMeh-80 (monitor data sheets available on request).

Specification						
LTN Model	900	1800	1900SI	2700	3300	
Nominal flow at 7 bar g. (±5%)	900L/min	1800L/min	1900L/min	2700L/min	3300L/min	
K factor*	340	680	720	1020	1247	
Minimum working pressure	4 bar g					
Maximum working pressure	16 bar g					
Maximum spray angle	90° (nominal)					
Nominal dimensions (mm):						
Length "X" (minimum)	172	172	377	172	172	
Diameter "Y"	110	136	136	136	136	
Pick-up tube length (m)	-	-	3m	-	-	
Inlet connection "Z" (BSP Female)	2″#	21⁄2″#	2½" Swivel	21⁄2″	21⁄2″	
Approx. Weight (kg): Gunmetal	4.0	6.4	16	6.4	6.4	

\* Flow rate (litres/min) =  $K\sqrt{P}$  where P = inlet pressure (bar g)

# Also available with 21/2" Inst. Male coupling (BS336).

Alternative adaptors may be selected from the Armourite range.





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#### Operation

LTN Nozzles are of the ring orifice type, adjustable between jet and wide angle spray by a single 360° turn of the diffuser head. Synthetic rubber seals are fitted to prevent ingress of water, dust and other contaminants to the helical adjustment groove. A specially designed double row diffuser produces a fine spray, ideal for cooling and film forming foam applications. Problems with metal teeth type diffusers have been eliminated by the use of rugged polyurethane for the combined buffer and diffuser head.



Typical Performance Data											
LTN Nozzle	Inlet Pressure Nominal Flo	Nominal Flow	JET	Typical THROW* (metres)							
				10° Spray			30° Spray				
	(barg)	(intres/min)		А	В	С	D	А	В	С	D
LTN 900	5	760	35	21	19	16	4	13	11	8	7
	7	900	50	29	27	23	5	18	15	11	8
	10	1080	56	32	30	26	6	20	17	12	9
	15	1300	62	36	34	32	6	22	19	14	10
LTN 1800	5	1520	47	24	22	18	4	16	13	10	7
	7	1800	50	34	31	26	5	23	18	14	10
	10	2150	55	38	35	29	6	26	20	16	11
	15	2635	60	42	39	33	7	29	23	18	12
LTN 1900SI	5	1610	22	13	11	8	6	8	6	4	10
	7	1900	33	20	18	15	7	12	10	8	11
	10	2277	41	25	21	17	8	15	12	10	12
LTN 2700	5	2280	50	24	22	18	4	16	13	10	7
	7	2700	60	34	31	26	5	23	18	14	10
	10	3227	65	38	35	29	6	26	20	16	11
	15	3950	68	42	39	33	7	29	23	18	12
LTN 3300	5	2790	48	24	22	18	4	16	13	10	7
	7	3300	55	34	31	26	5	23	18	14	10
	10	3944	60	38	35	29	6	26	20	16	11
	15			42	39	33	7	29	23	18	12

\* assumes 2m/sec following air movement

Material Specification	
Body sections	Gunmetal LG2 high strength machined castings
Diffuser sleeve	Polyurethane cast and bonded to front section
Spray deflector	High strength acetal polymer
Seals	Synthetic rubber
Fasteners	Stainless steel

## INTERNATIONAL SALES

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### UK SALES

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