

Responsibility and recognition



Performing competent authority:
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ENTAM - Test Report

This test is recognized by the ENTAM members:



HBLFA Francisco Josephinum 003/17
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CMA Generalitat de Catalunya EB 04/16
Centre de Mecanització Agrària (CMA)



ENAMA Ente Nazionale per la Meccanizzazione Agricola (Italy) ENTAM „Rapporto di prova prestazionale“ 09/2016



HIAE (MGI) Hungarian Institute of Agricultural Engineering (Hungary) D-127/2016



IRSTEA - National Research Institute of Science and Technology for Environment and Agriculture (France) (formerly CEMAGREF) IRSTEA/CEMAGREF/ ENTAM/ 16/012



PIMR - Przemyslowy Instytut Maszyn Rolniczych Industrial Institute of Agricultural Engineering (Poland) PIMR-142/ENTAM/16

10.5073/AT.2016.D2067



Trade mark:

Lechler

Model:

IDTA 120-03 C

Equipment type:

hydraulic nozzle, double flat spray

Field of application:

Field crop

Pressure range:

2.0 - 8.0 bar tested

Standard working height:

50 cm (40 cm - 60 cm tested)

Manufacturer:

Lechler GmbH
Ulmer Strasse 128
72555 Metzingen
Germany

Test report: D 2067

Januar 2016

Test results

- This nozzle has been tested without accessories. This nozzle is appropriate for the use of spraying in field crops with a liquid pressure of 2.0 - 8.0 bar and on booms with distances of 500 mm between the nozzles.
- The nozzle is designed for spraying with the (front) spray directed 30 ° in driving direction and the (rear) spray directed 50 ° against driving direction (in relation to a vertical spray direction).
- The front page image of this report shows the assembled nozzle.
- The cross distribution CV¹⁾ is between 2.7 % (3.0 bar) and 5.3 % (8.0 bar) for the tested pressure range 2.0 - 8.0 bar at a standard working height of 50 cm. For a pressure of 4.0 bar, the CV varies from 4.5 % (40 cm) to 3.4 % (60 cm). The maximum allowed CV for one working height and one pressure (specified by the manufacturer) is 7 %, for all heights and pressures is 9 %.
- The mean deviation between the measured single nozzle flow rate and the flow rate table is between -2.7 % (at 4.0 bar) and -2.3 % (at 8.0 bar).
- The max. deviation of the single nozzle flow rates from the mean flow rate is between -1.4 % and -4.4 %.
- The nozzle fulfils the discharge rate requirement of the color code according ISO 10625 (color code: Gentian blue, 1.2 l/min at 3.0 bar). See tab.1.

Free download of the test under:

or

www.ENTAM.net
www.julius-kuehn.de

Test results

Pressure (bar)	Discharge rate without accessories (l/min)	Droplet size ²⁾
2.0	0.95	very coarse
4.0	1.33	very coarse
6.0	1.64	very coarse
8.0	1.9	coarse

Tab.1: Discharge rate and droplet size depending on liquid pressure.

1) For a distance of 50 cm between the nozzles.

2) According to BCPC scheme (additional information)

Additional information

The tested nozzles (24) were picked out at random of a stock of 200 nozzles. Testing takes place according to the Technical Instructions for ENTAM-Tests of Spray nozzles, rel.1.

This procedure was developed by the competent testing authorities of the European countries participating in ENTAM and is based on the ISO 5682 standard: „Equipment for crop protection—Spraying equipment; Part 1 Test methods for sprayer nozzles“ and on EN ISO 16119 standard. This test is only a technical performance test which takes place without an accompanying field test. The test results apply only to the tested appurtenances. Statements on the behaviour of different appurtenances cannot be derived from these results.