



Parameters	Unit		Value
	Length	(1)	mm
(2)		mm	9.100
Width	(3)	mm	2.700
	(4)	mm	55.000
Height	(3)	mm	3.300
	(4)	mm	4.200
Ground clearance		mm	950
Track Width		mm	1.500 - 2.250
Weight		kg	3.500
Steering		-	All-wheel drive, with directional stability when cornering
Design width of the nozzle boom		m	55
Max. Working width with R55 end nozzles		m	83
Volume flow (5)		m ³ /h	50
PE pipe connection		-	89 VT (other connection options on request)

Dimensions

¹⁾ With both drawbars, ²⁾ without drawbars, ³⁾ Transport position, ⁴⁾ Working position, ⁵⁾ Further nozzle sets for different volume flows on request

Application

- Agricultural irrigation
- Fruit and vegetable growing
- Speciality crops

Technical Details

- 55 m construction width of the cantilever in the form of a long-life tubular steel construction
- 83 m max. working width when using the R55 end nozzles
- Fully hydraulic operation for raising and lowering the boom system and for folding in and out the individual boom segments
- Even water distribution to low-pressure rotary nozzles from Nelson (nozzle inlet pressure 1.4 bar)
- Nozzle set with a water flow rate of 50 m³/h
- Variably adjustable working height of the rotating nozzles from 1.5 m to 2.2 m
- 4-wheel chassis with stub axle steering. The special steering geometry ensures that the nozzle wagon tracks accurately behind the tractor unit
- Track width adjustable from 1,500 mm to 2,250 mm
- Towing device on both sides for optimum manoeuvring options in the field
- Central water inlet below the drawbar for connection to the PE pipe of the irrigation machine
- Manual, lockable slewing ring for swivelling the boom by 30° to both sides to avoid any obstacles
- Fully galvanised design of the water-bearing components for optimum corrosion protection
- Transport width when folded of 2.7 m
- Integrated lighting system incl. warning signs in accordance with StVZO for road traffic
- Storage option integrated in the chassis for various irrigation accessories

- Hydraulic connection on both sides for connection to the tractor
- Wide tyres
- Further nozzle sets with different volume flows

Function

HÜDIG has set standards in the development of irrigation machines. For more than 100 years now, experience from agricultural irrigation has been utilised for the development and improvement of our products.

Hüdig designed the DW 55 nozzle wagon to further optimise irrigation in terms of precise water distribution and simultaneous energy savings. In addition to the advantages of finer water distribution and less wind drift, energy costs are an increasingly important item in the economic evaluation. Without taking into account the individual pump efficiencies, the energy costs decrease linearly with the reduced pressure. It therefore makes a difference whether the pressure on the sprinkler carriage is 4.5 bar or 3.0 bar.

The special 4-wheel steering geometry ensures that the nozzle trolley tracks accurately behind the tractor, minimising damage to the crop. The transport width when folded is 2.7 metres.

Components



Sturdy tubular steel construction

The selected tubular steel construction of all boom segments ensures high strength for the entire boom system. The individual segments are locked together without exception via the hydraulic system.



Height-adjustable pendulum frame

The centre pendulum frame can be moved hydraulically in height to ensure that precipitation is distributed as evenly as possible, even in windy conditions. This allows the working height of the nozzles to be variably adjusted from 1,500 mm to a maximum of 2,500 mm. For road transport, the boom system is lowered into the corresponding support pockets. The resulting low centre of gravity ensures safe handling on the road.



Boom system

The boom system consists of 8 elements. These are hydraulically folded in and out in parallel on both sides. The simultaneous movement guarantees high stability of the nozzle carriage during the folding process, which means that additional floor supports are not required. The water flow of the individual segments is also established during the unfolding process. Diaphragm accumulators, which keep the oil pressure in the hydraulic system constant, ensure that the respective connection points are tight.



Hydraulic system

The DW 55 nozzle wagon is operated fully hydraulically. The boom is moved in height and all 8 folding segments are folded in or out using the hydraulic unit located centrally on the front drawbar. Clear labelling of the individual sections ensures safe handling.



Nozzle system

Different nozzle systems are available to enable the DW 55 to be used in a variety of applications. Water flow rates of 40 m³/h up to 70 m³/h can be realised. Pressure reducers with an operating pressure of 1.4 bar are fitted upstream of the nozzle to minimise the energy required for irrigation and to ensure an even distribution of precipitation. Pressure reducers with 2.0 bar are used for the outer end nozzles. The nozzles in the corresponding rotary nozzle bodies from Nelson can be replaced quickly and with minimum effort. The same applies to the nozzle inserts in the two R55 end nozzles.



DW 55 in working position