



BRIEF INFORMATION

Washer pumps and water tanks

- Flexible installation due to compact design
- High cleaning performance with minimal water consumption
- Best performance on running vehicle

PRODUCT FEATURES

Application

The pumps are developed for two different applications, for windscreen and headlamp cleaning systems.

Windshield cleaning system pumps are required for selective cleaning of windshields or rear windows. These functions can either be covered by single outlet pumps or a dual outlet pump. If a dual outlet pump is used, both the windshield and the rear window are supplied from a single pump with a reversible direction of rotation. The dual outlet pump has an integrated non-return valve that prevents the long tube leading to the rear window from emptying when the pump is switched off.

Headlamp cleaning system pumps require more power than windshield washer pumps in order to clean the headlamps using a jet-blast principle. A snap on fastener is used to adapt the tube system; it enables easy, quick and reliable modification of the tube configuration.

Design and function

The cleaning fluid is sprayed at high pressure in the form of cone-shaped drops onto the headlamp cover lens. The cone-shaped drops are formed by means of special whirl chamber nozzles.

The headlamp cleaning system is usually triggered together with the windscreen cleaning system. Every time the driver activates the windscreen washers, the headlamps are automatically cleaned at the same time. This coupling only takes place when the lights are switched on. When the centrifugal pump is triggered, this presses the water into a cylinder, the piston of which has a nozzle head attached and is extended against a pressure spring, bringing the nozzles into their working position.

Until the working position is reached, a valve ensures that the movement only is carried out first without any water escaping from the nozzles. When the working position has been reached, the valve opens and water is sprayed onto the headlamps. Once the pump has been switched off, the return spring moves the piston back into its initial position. One washing impulse takes approx. 0.5 s for stationary nozzles and approx. 0.8 s for telescopic nozzles (due to the time required for extension).

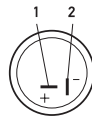
TECHNICAL DETAILS

WASHER PUMPS FOR WINDSCREEN CLEANING

Technical data

Rated voltage	12 V or 24 V
Pressure	2 bar, 1 l/min or 1.5 bar, 1 l/min
Pump type	mono or dual
Protection class	IP 4
Ø Housing	35 mm
Ø In	7 mm
Ø Out	6 mm

Pin assignment



8TW 004 223-031/-037/-038/-097/-107,
8TW 005 206-031,
8TW 005 496-051/-057
 Pin 1: +
 Pin 2: -



8TW 004 223-061
 Pin 1: +
 Pin 2: -



8TW 005 496-011
 Pin 1: +
 Pin 2: -



8TW 005 206-011/-017
 Output 1: +
 Output 2: -

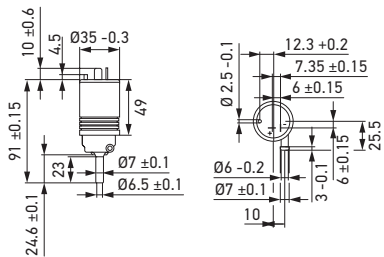


8TW 005 206-051
 Pin 1: +
 Pin 2: -

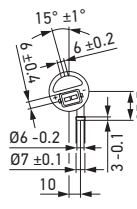
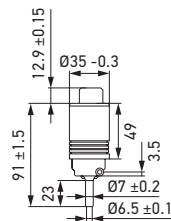
Output 1:	Output 2:
1 2	1 2
1	1

Technical drawing

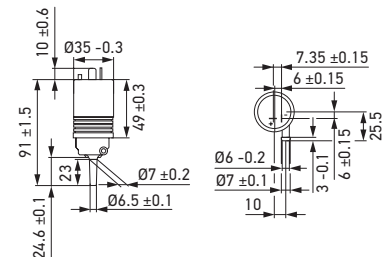
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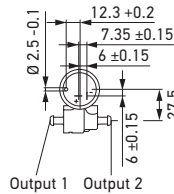
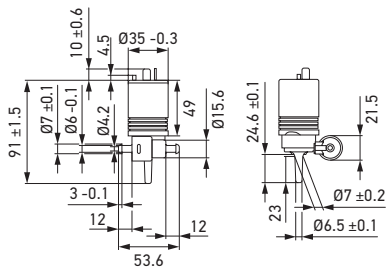
8TW 004 223-061



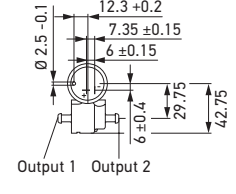
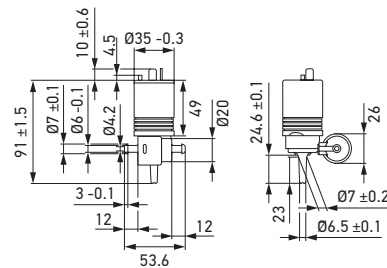
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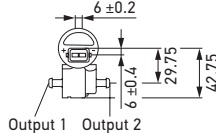
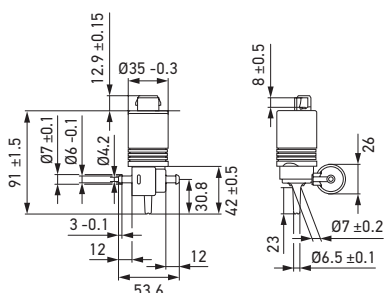
8TW 005 206-011/-017



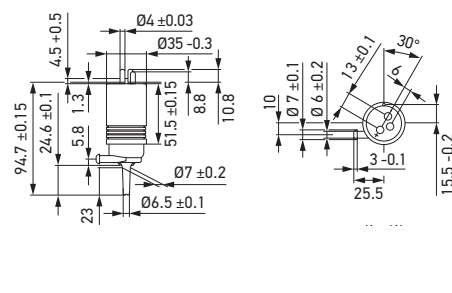
8TW 005 206-031



8TW 005 206-051



8TW 005 496-011



PROGRAM OVERVIEW

Product image	Rated voltage	Pressure	Pump type	Contact	Mating connector	Part number	Packaging unit
	12 V	2 bar, 1 l/min	mono	Flat connector 6.3 x 0.8 mm	8JD 008 151-021	8TW 004 223-031	1
						8TW 004 223-037	60
	12 V	1.5 bar, 1 l/min	mono	Flat connector 6.3 x 0.8 mm	8JD 008 151-021	8TW 004 223-097	40
	24 V					8TW 004 223-107	60
	12 V	2 bar, 1 l/min	mono	Connector with 2.8 mm flat plugs for counter plugs	VAG 357 972 752	8TW 004 223-061	1
	12 V	2 bar, 1 l/min	dual	Flat connector 6.3 x 0.8 mm	8JD 008 151-021	8TW 005 206-011	1
						8TW 005 206-017	88
	12 V	2 bar, 1 l/min	dual	Flat connector 6.3 x 0.8 mm	8JD 008 151-021	8TW 005 206-031	1
	12 V	2 bar, 1 l/min	dual	Connector with 2.8 mm flat plugs for counter plugs	AMP 828962	8TW 005 206-051	1
	12 V	2 bar, 1 l/min	mono	Round connector 3 x 4 mm	Vehicle-specific	8TW 005 496-011	1
	24 V	2 bar, 1 l/min	mono	Flat connector 6.3 x 0.8 mm	8JD 008 151-021	8TW 005 496-051	1
						8TW 005 496-057	60

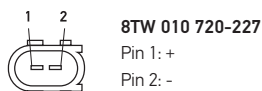
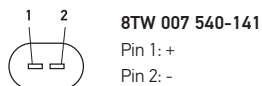
TECHNICAL DETAILS

WASHER PUMPS FOR HEADLAMP CLEANING

Technical data

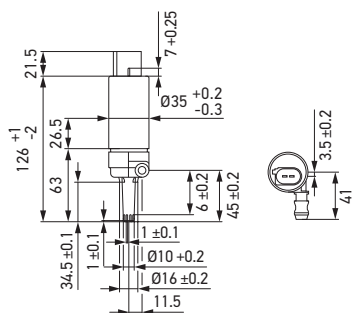
	8TW 007 540-141	8TW 010 720-227
Rated voltage	12 V	24 V
Pressure	2.5 bar, 7.2 l/min	≤ 5 bar
Pump type	mono	
Protection class	IP 4	
Ø Housing	35 / 46 mm	35 mm
Ø In	10.5 mm	10.5 mm
Ø Out	11 mm	11.5 mm

Pin assignment

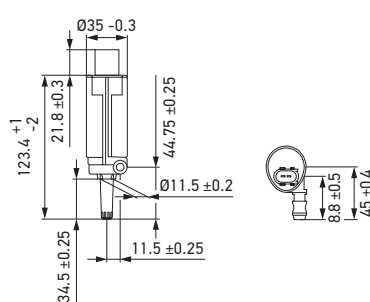


Technical drawing



8TW 007 540-141



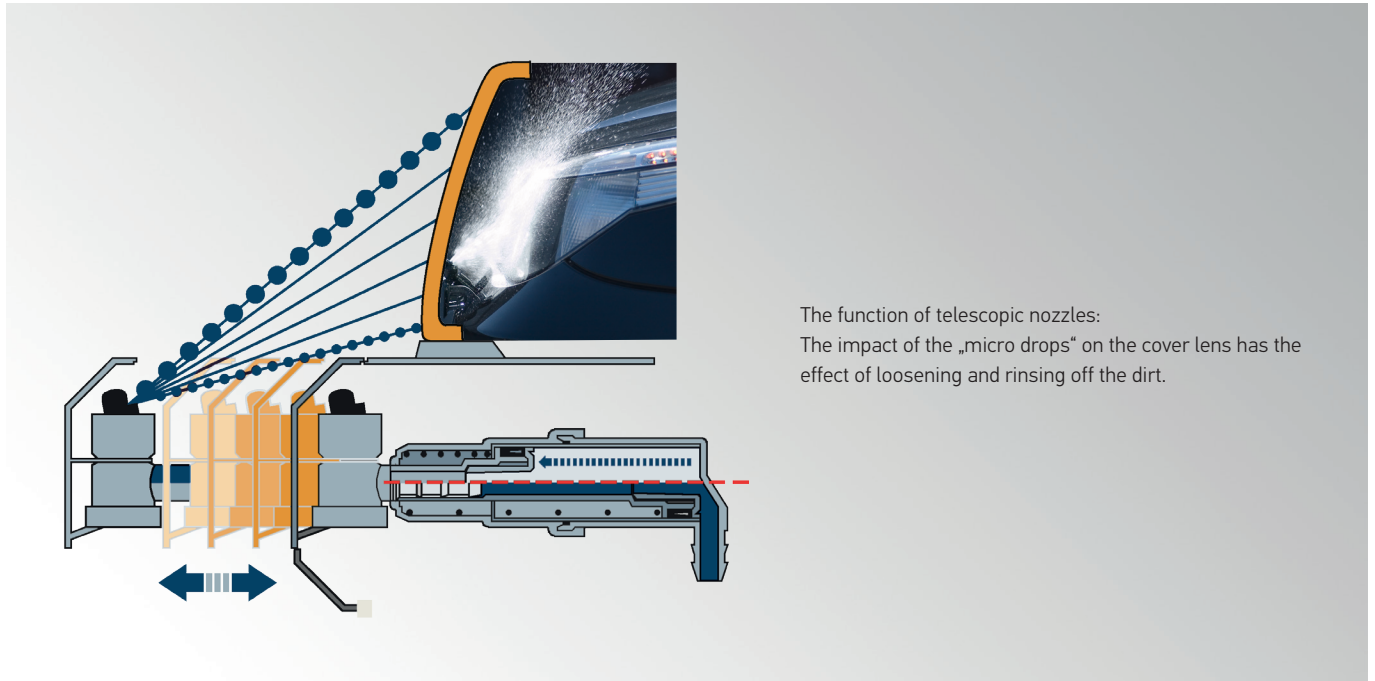
8TW 010 720-227



PROGRAM OVERVIEW

Product image	Rated voltage	Pressure	Pump type	Contact	Mating connector	Part number	Packaging unit
	12 V	2.5 bar, 7.2 l/min	mono	Connector with 2.8 mm flat plugs for counter plugs	VAG: 1J0 973 722 A	8TW 007 540-141	1
	24 V	≤ 5 bar	mono	Connector with 2.8 mm flat plugs for counter plugs	Tyco C14 18483 key D	8TW 010 720-227	54

FUNCTIONAL DIAGRAM OF HEADLAMP CLEANING SYSTEM



APPLICATION EXAMPLE:

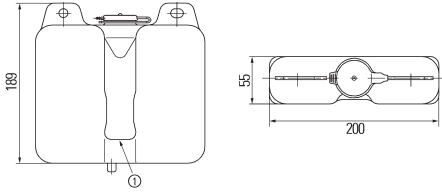


TECHNICAL DETAILS

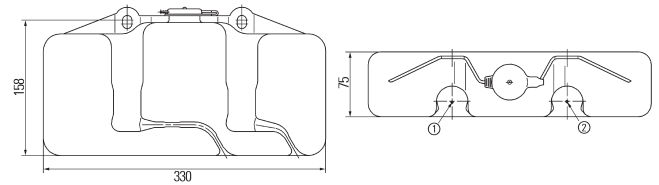
WATER TANKS

Technical drawing

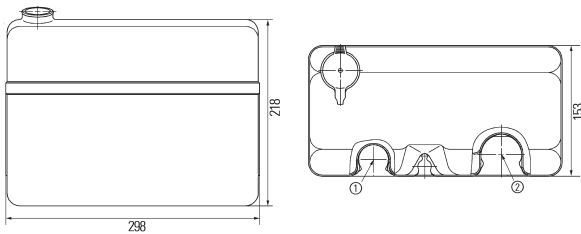
8WB 003 248-001/-007



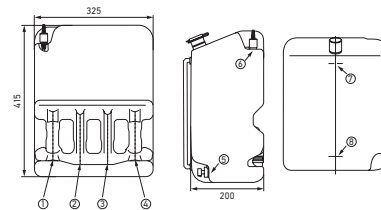
8WB 003 443-011/-057/-067






8BW 003 966-067, 8BW 504 000-037



8BW 007 757-017/-027/-037/-047/-097/-117




PROGRAM OVERVIEW

Product image	Description	Rated voltage	Volume	Colour	Part number	Packaging unit
	With bracket and 1 pump	12 V	1,5 l	white	8WB 003 248-001	1
	Pump holder: Position 1: Ø 35 mm, bore Ø 11 mm				8WB 003 248-007	50
	With 1 water pump	24 V	3 l	white	8WB 003 443-011 ¹⁾	1
	Pump holder: Positions 1,2: Ø 35 mm Position 1: Bore Ø 11 mm Position 2: closed	12 V			8WB 003 443-067 ²⁾	51
	With 2 pumps	12 V			8BW 003 443-057	51
	With 1 water pump Pump holder Position 1: Ø 35 mm Bore Ø 11 mm Position 2: Ø 46 mm Bore Ø 20 mm, Grommet with plug	24 V	8 l	white	8BW 003 966-067	28
	Position 1: Ø 35 mm Position 2: Ø 46 mm Position 1: Bore Ø 11 mm Position 2: Bore Ø 11 mm, with adapter ring				8BW 504 000-037	24

¹⁾ Without grommet

²⁾ Grommet

Product image	Description	Rated voltage	Volume	Colour	Part number	Packaging unit
	<p>With 2 pumps</p> <p>Pump holder: Positions 1-4: Ø 35 mm Position 1: Closed Position 2: Bore Ø 11 mm Position 3: Bore Ø 11 mm Positions 4-6: Closed Positions 7-8: Bore Ø 11 mm, Fill level indicator</p>				8BW 007 757-017	20
	<p>With 2 pumps</p> <p>Pump holder: Positions 1-4: Ø 35 mm Position 1: Closed Position 2: Bore Ø 11 mm Position 3: Bore Ø 11 mm Positions 4-8: Closed</p>				8BW 007 757-027	20
	<p>With 2 pumps</p> <p>Pump holder: Positions 1-4: Ø 35 mm Position 1: Closed Position 2: Bore Ø 11 mm Position 3: Bore Ø 11 mm Position 4: Bore Ø 20 mm, Grommet with plug Positions 5-8: Closed</p>				8BW 007 757-037	20
	<p>With 2 pumps</p> <p>Pump holder: Positions 1-4: Ø 35 mm Position 1: Closed Position 2: Bore Ø 11 mm Position 3: Bore Ø 11 mm Position 4: Closed Position 5: Level control switch 6PR 005 345-017 Position 6: Bore Ø 11 mm, One-way valve 9XL 564 781-002 Positions 7-8: Bore Ø 11 mm, Fill level indicator</p>	24 V	20 l	black	8BW 007 757-047	20
	<p>With 1 pump and grommet</p> <p>Pump holder: Positions 1-2: Ø 35 mm Position 1: Closed Position 2: Bore Ø 11 mm</p>				8BW 007 757-097	1
<p>With 4 pumps</p> <p>Pump holder: Positions 1-4: Ø 35 mm Position 1: Bore Ø 11 mm Position 2: Bore Ø 11 mm Position 3: Bore Ø 11 mm Position 4: Bore Ø 20 mm</p>				8BW 007 757-117	1	

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Subject to technical and price modifications.