Rotary head series 64

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with different joint solutions: female gas thread (BSP) or clip (fast joint).

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

Tab. 01	Flow rate (lt/h)			Angle	Max washing	Joints	
Pressure (Bar)	1	2	3		range**	Female	Clip*
Code				(Degrees)	(meters)	BSP	(mm)
64 1-1/4 O	12000	15500	18000	360°	3,2 ÷ 4,6	1¼"	
64 1-1/4 D	8000	11800	14000	180°▼	3,2 ÷ 4,6	1¼"	
64 C O	12000	15500	18000	360°	3,2 ÷ 4,6		Ø34 ÷ 40,5
64 C D	8000	11800	14000	180°▼	3,2 ÷ 4,6		Ø34 ÷ 40,5

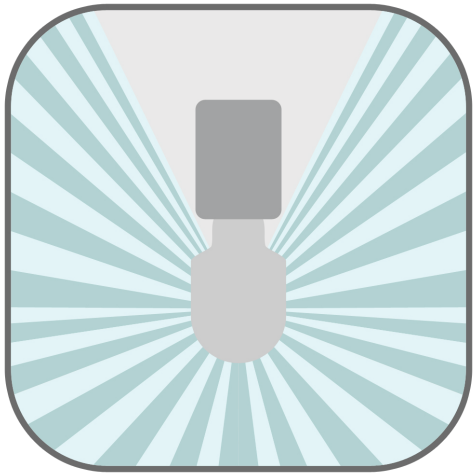
Max working temperature 95°C - Min working temperature 0°C

*Joints are made upon customers' specifications within the indicated range.

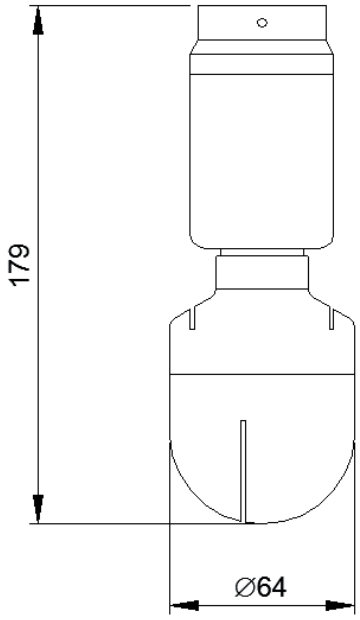
Rotary head series 64

Tanks and cisterns washing system

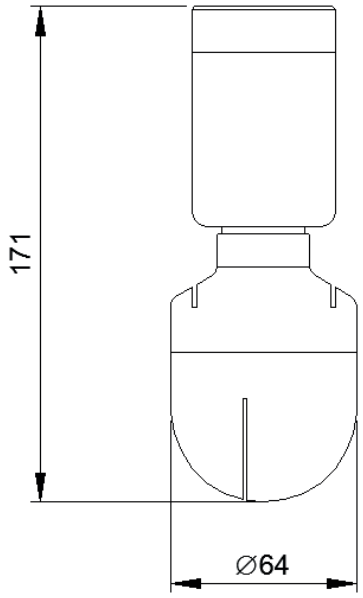
180° ▼



360°



Clip



Female

The weight of the rotary head series 64 can vary from 1.0 to 1.1 kg, depending on the model.

Rotary head series 44

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with different joint solutions: female gas thread (BSP) or socket welding.

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

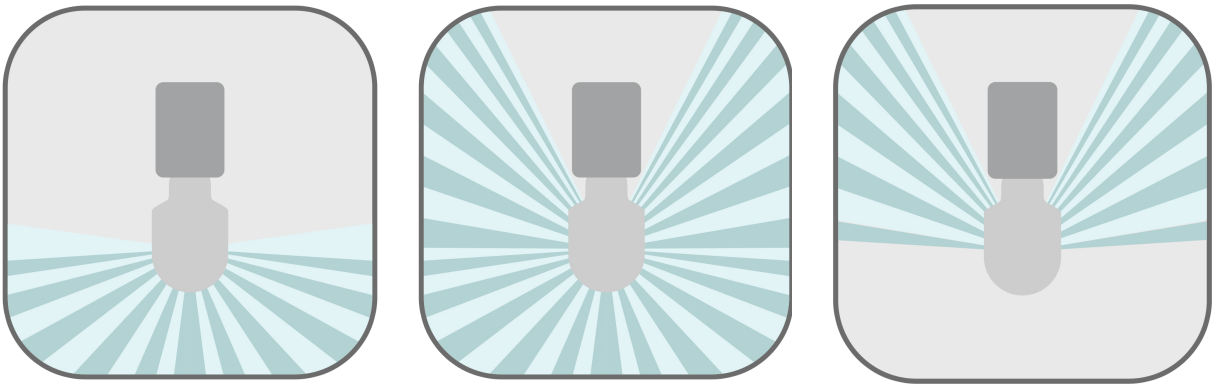
Tab. 02	Flow rate (lt/h)			Angle	Max washing	Joints		
Pressure (Bar)	1	2	3		range**	Female	Clip *	To weld *
Code				(Degrees)	(meters)	BSP	(mm)	(mm)
44 1/2 O	4100	5250	6100	360°	2,2 ÷ 3,4	1/2"		
44 1/2 U	3500	4800	5400	180°▲	2,2 ÷ 3,4	1/2"		
44 1/2 D	3900	5000	5900	180°▼	2,2 ÷ 3,4	1/2"		
44 3/4 O	4100	5250	6100	360°	2,2 ÷ 3,4	3/4"		
44 3/4 U	3500	4800	5400	180°▲	2,2 ÷ 3,4	3/4"		
44 3/4 D	3900	5000	5900	180°▼	2,2 ÷ 3,4	3/4"		
44 1 O	4100	5250	6100	360°	2,2 ÷ 3,4	1"		
44 1 U	3500	4800	5400	180°▲	2,2 ÷ 3,4	1"		
44 1 D	3900	5000	5900	180°▼	2,2 ÷ 3,4	1"		
44 C O	4100	5250	6100	360°	2,2 ÷ 3,4		Ø22 ÷ 40	
44 C U	3500	4800	5400	180°▲	2,2 ÷ 3,4		Ø22 ÷ 40	
44 C D	3900	5000	5900	180°▼	2,2 ÷ 3,4		Ø22 ÷ 40	
44 S O	4100	5250	6100	360°	2,2 ÷ 3,4			Ø22 ÷ 40
44 S U	3500	4800	5400	180°▲	2,2 ÷ 3,4			Ø22 ÷ 40
44 S D	3900	5000	5900	180°▼	2,2 ÷ 3,4			Ø22 ÷ 40

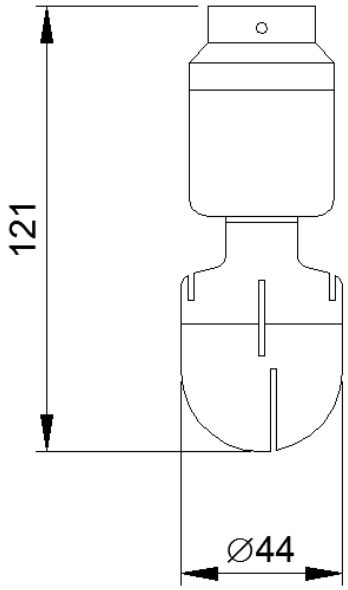
Max working temperature 95°C - Min working temperature 0°C

Rotary head series 44

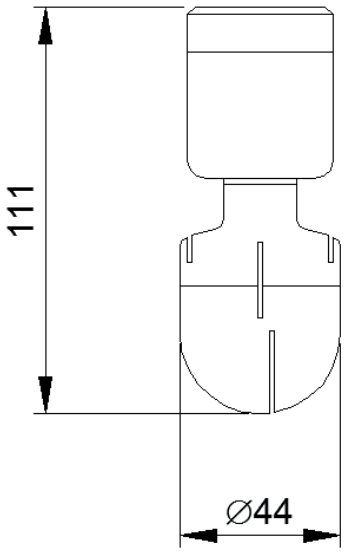
Tanks and cisterns washing system

*Joints are made upon customers' specifications within the indicated range.
The version to weld has a socket joint (the pipe is inserted inside the head joint).





Clip / To weld



Female

The weight of the rotary head series 44 can vary from 0.45 to 0.65 kg, depending on the model.

Rotary head series 44X

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with different joint solutions: female gas thread (BSP) or clip (fast joint).

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

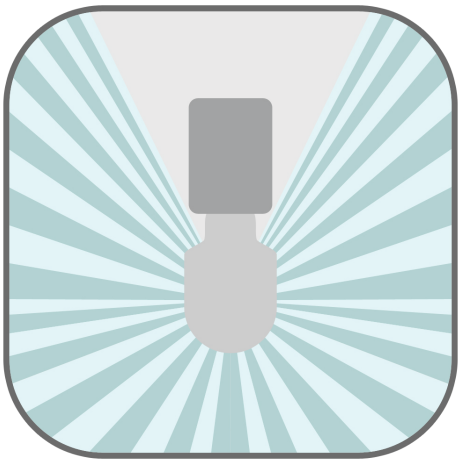
Tab. 03	Flow rate (lt/h)			Angle	Max washing	Joints		
Pressure (Bar)	1	2	3		range**	Female	Clip *	To weld *
Code				(Degrees)	(meters)	BSP	(mm)	(mm)
44X 3/4 O	6100	8200	10300	360°	2,2 ÷ 3,8	3/4"		
44X 1 O	6100	8200	10300	360°	2,2 ÷ 3,8	1"		
44X C O	6100	8200	10300	360°	2,2 ÷ 3,8		Ø25,4 ÷ 40	

Max working temperature 95°C - Min working temperature 0°C

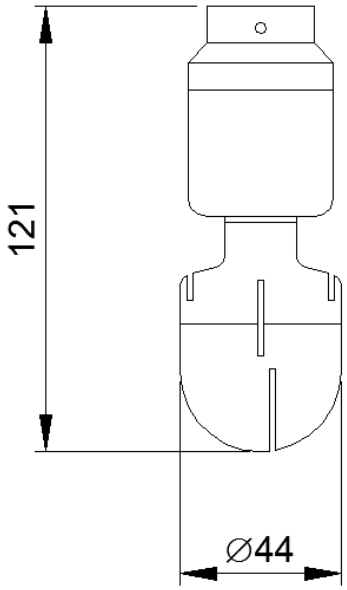
*Joints are made upon customers' specifications within the indicated range.

Rotary head series 44X

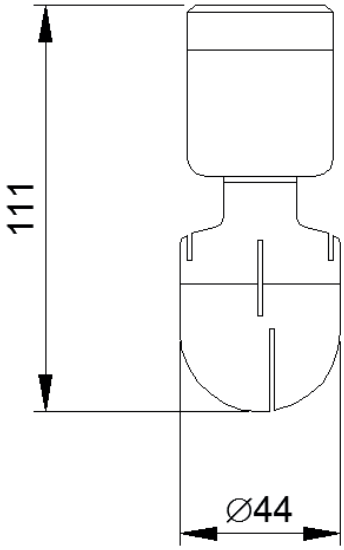
Tanks and cisterns washing system



360°



Clip / To weld



Female

The weight of the rotary head series 44X can vary from 0,45 to 0,65 kg depending on the model.

Rotary head series 24

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with different joint solutions: female gas thread (BSP), clip (fast joint) or socket welding.

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

Tab. 04	Flow rate (lt/h)			Angle	Max washing	Joints			
Pressure (Bar)	0,5	1	2		range**	Female	Male	Clip *	To weld *
Code				(Degrees)	(meters)	BSP	BSP	(mm)	(mm)
24 1/2 O	1260	1860	2700	360°	1,3 ÷ 2,2	1/2"			
24 1/2 D	480	1620	2340	180°▼	1,3 ÷ 2,2	1/2"			
24 1/2M O	1260	1860	2700	360°	1,3 ÷ 2,2		1/2"		
24 1/2M D	480	1620	2340	180°▼	1,3 ÷ 2,2		1/2"		
24 3/8M O	1260	1860	2700	360°	1,3 ÷ 2,2		3/8"		
24 3/8M D	480	1620	2340	180°▼	1,3 ÷ 2,2		3/8"		
24 C O	1260	1860	2700	360°	1,3 ÷ 2,2			Ø13 ÷ 21,5	
24 C D	480	1620	2340	180°▼	1,3 ÷ 2,2			Ø13 ÷ 21,5	
24 S O	1260	1860	2700	360°	1,3 ÷ 2,2				Ø13 ÷ 21,5
24 S D	480	1620	2340	180°▼	1,3 ÷ 2,2				Ø13 ÷ 21,5

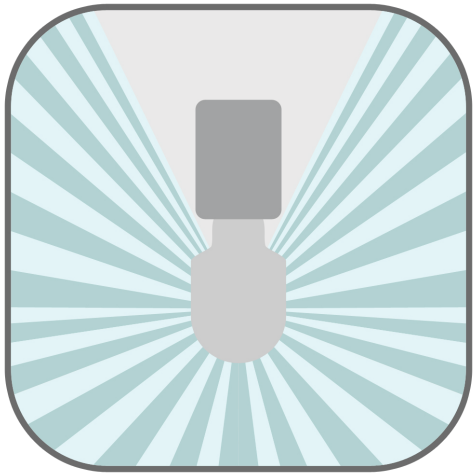
Max working temperature 95°C - Min working temperature 0°C

*Joints are made upon customers' specifications within the indicated range. The version to weld has a socket joint (the pipe is inserted inside the head joint).

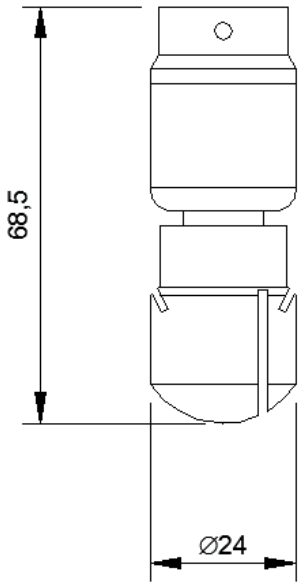
Rotary head series 24

Tanks and cisterns washing system

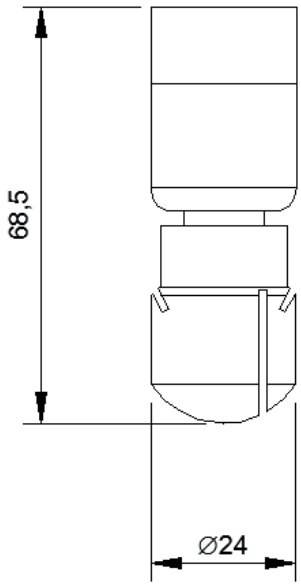
180° ▼



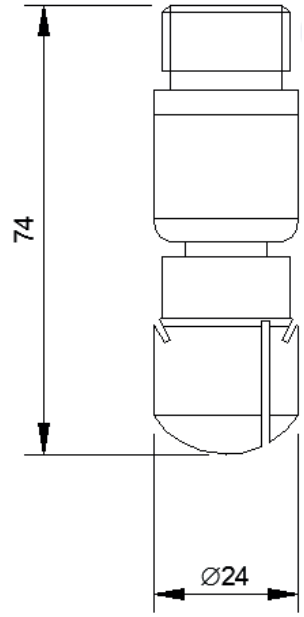
360°



Clip / To weld



Female



Male

The weight of the rotary head series 24 can vary from 0,15 to 0,25 kg , depending on the model.

Rotary head series 475

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with a female gas thread (BSP) joint.

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

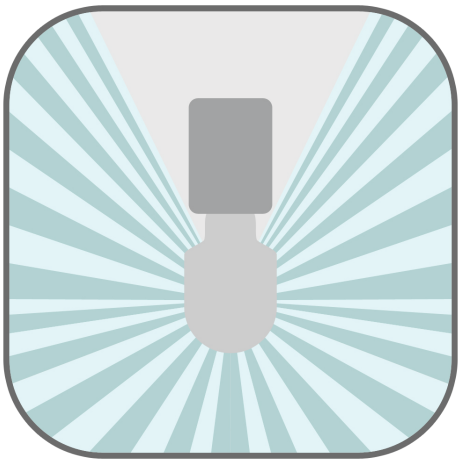
Technical Characteristics:

Tab. 05	Flow rate (lt/h)			Angle	Max washing	Joints	
Pressure (Bar)	1	2	3		range**	Female	
Code				(Degrees)	(meters)	BSP	
475 1/2 O	4900	6200	7200	360°	2,2 ÷ 3,4	1/2 "	
475 3/4 O	4900	6200	7200	360°	2,2 ÷ 3,5	3/4 "	

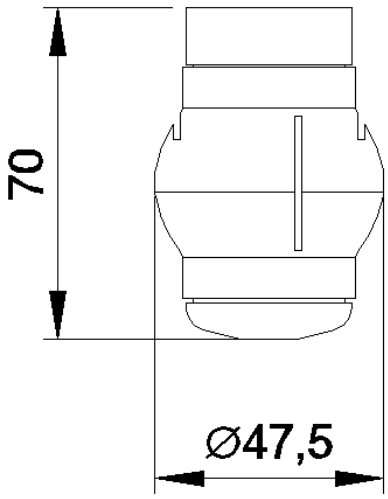
Max working temperature 95°C - Min working temperature 0°C

Rotary head series 475

Tanks and cisterns washing system



360°



Female

The weight of the rotary head series 475 can vary from 0,35 to 0,45 kg , depending on the model.

Rotary head series 89

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of DELRIN and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with a female gas thread (BSP) joint.

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

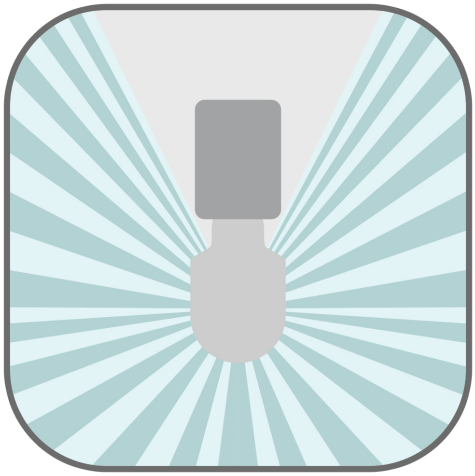
Technical Characteristics:

Tab. 06	Flow rate (lt/h)			Angle	Max washing	Joints	
Pressure (Bar)	1	2	3		range**	Female	
Code				(Degrees)	(meters)	BSP	
89 1-1/4 O	10400	13600	14900	360°	1,5 ÷ 4	1¼"	

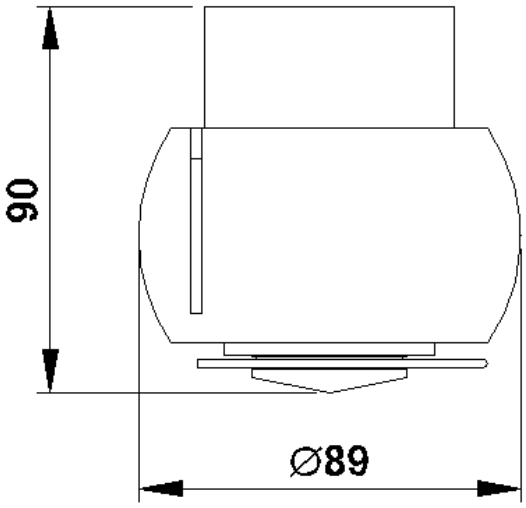
Max working temperature 90°C - Min working temperature 0°C

Rotary head series 89

Tanks and cisterns washing system



360°



Female

The weight of the rotary head series 89 is about 0,30 kg

Rotary head series 59

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI304 stainless steel and are mounted onto two DELRIN (white POM) gaskets (available in TEFLON-PTFE upon request), that reduce the friction noise . All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces.

The heads are available with different joint solutions: male gas thread (BSP), clip (fast joint) or socket welding.

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

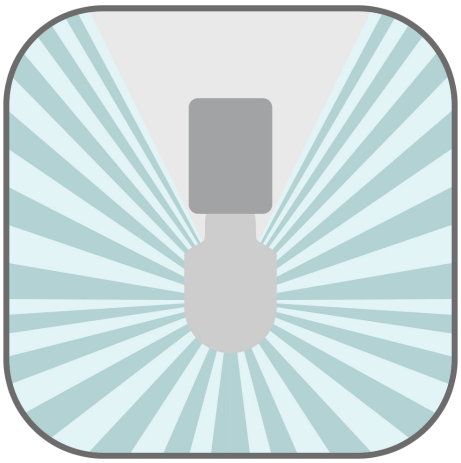
Tab. 07	Flow rate (lt/h)			Angle	Max washing	Joints		
Pressure (Bar)	0,5	1	2		range**	Male	Clip	To weld *
Code				(Degrees)	(meters)	BSP	(mm)	(mm)
59 1/2 O	3900	5200	6100	360°	2,5 ÷ 3,5	1/2"		
59 C O	3900	5200	6100	360°	2,5 ÷ 3,5		Ø28	
59 S O	3900	5200	6100	360°	2,5 ÷ 3,5			Ø25

Max working temperature 95°C - Min working temperature 0°C

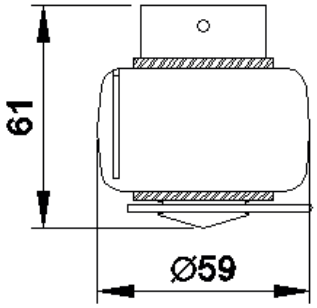
*The version to weld has a socket joint (the pipe is inserted inside the head joint).

Rotary head series 59

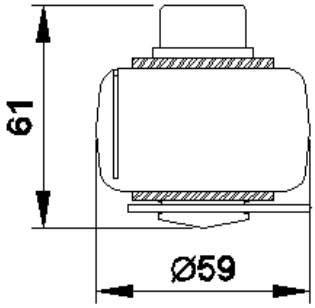
Tanks and cisterns washing system



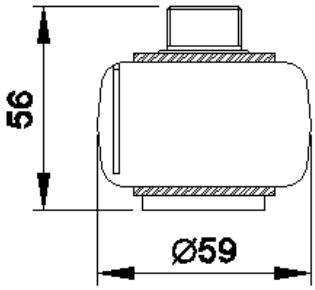
360°



Clip



To weld



Male

The weight of the rotary head series 59 can vary from 0,25 to 0,30 kg, depending on the model.

Rotary head series 34

Tanks and cisterns washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two TEFLON-PTFE gaskets, that reduce friction and noise . All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The heads are available with different joint solutions: male or female gas thread (BSP).

Operation:

The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength.

Technical Characteristics:

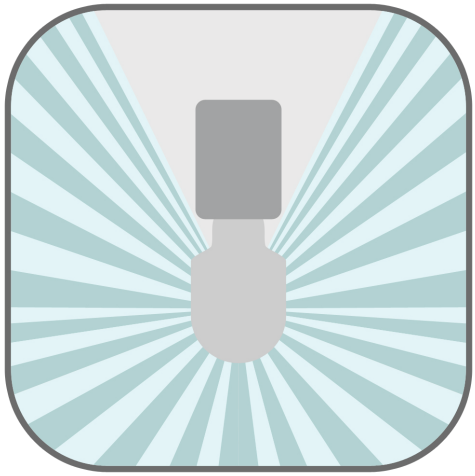
Tab. 08	Flow rate (lt/h)			Angle	Max washing	Joints	
Pressure (Bar)	0,5	1	2		range**	Female	Male
Code				(Degrees)	(meters)	BSP	BSP
34 1/2 O	1200	1850	2700	360°	0,5 ÷ 1,5	1/2"	
34 1/4M O	1200	1850	2700	360°	0,5 ÷ 1,5		1/4"

Max working temperature 95°C - Min working temperature 0°C

Rotary head series 34

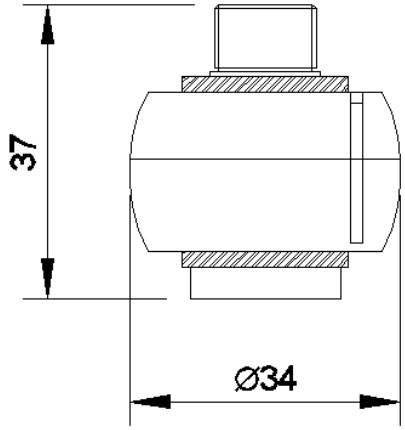
Tanks and cisterns washing system

180° ▼

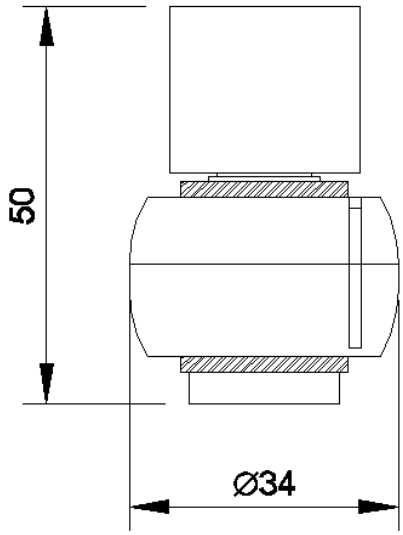


360°

TEFLON



Male



Female

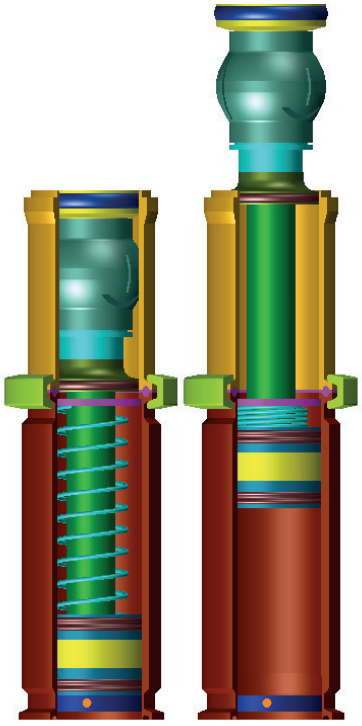
The weight of the rotary head series 34 can vary from 0,10 to 0,12 kg, depending on the model.

Series 52

Mechanical dynamic washing system

Construction:

The rotary spray heads are made of AISI316L stainless steel and are mounted onto two bearings. All internal surfaces are carved with high precision machine tools, which provide a smooth polishing and high quality surfaces. The washing system is available with two different input joints: DN50 Clamp or wall mount to weld Ø 52.



Operation:

The rotary head exits the cylinder when the fluid pressure reaches approx.. 1 bar of pressure. The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the pressure and flow rate of the washing fluid. For better results, be careful to follow the values given in table 09. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength. When the washing cycle is finished and the fluid stops, the spring will make the rotary head return in its initial position inside the cylinder.

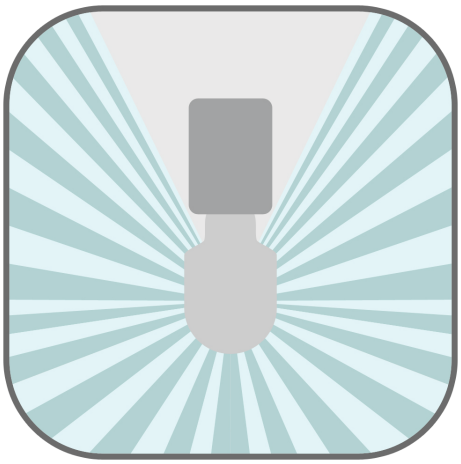
Technical Characteristics:

Tab. 09	Flow rate (lt/h)			Angle	Max washing	Fluid joints	Wall joint
Pressure (Bar)	1	2	3		range**	Clamp	To weld
Code				(Degrees)	(meters)	DIN32676	
52 DN50 O	4200	5500	6900	360°	2,2 ÷ 3,4	DN50	Ø52

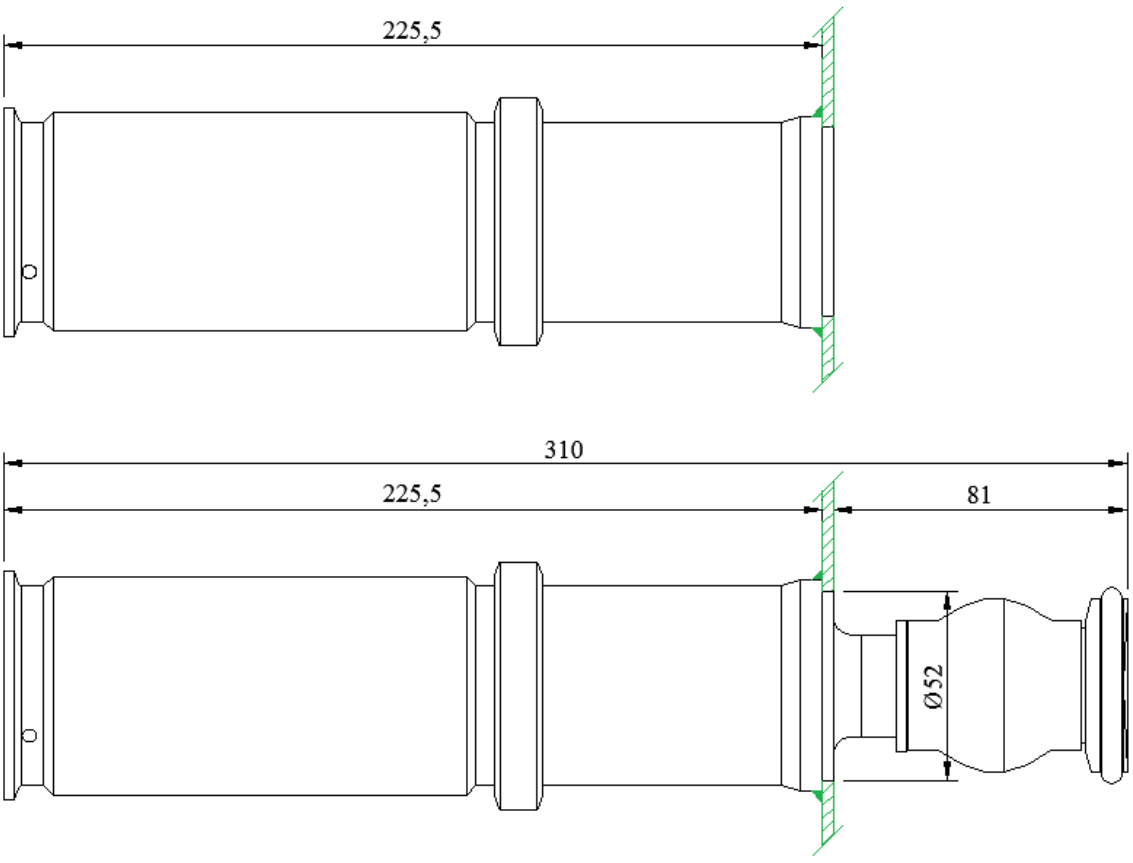
Max working temperature 95°C - Min working temperature 0°C

Series 52

Mechanical dynamic washing system



360°



Series 50

Mechanical dynamic washing system

Construction:

The rotary head exits the cylinder when the fluid pressure reaches approx.. 1 bar of pressure. The fluid flowing through the rotary head produces the rotation. Its speed varies depending on the pressure and flow rate of the washing fluid. For better results, be careful to follow the values given in table 09. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength. When the washing cycle is finished and the fluid stops, the spring will make the rotary head return in its initial position inside the cylinder.

Operation:

The rotary head exits the cylinder (250 mm) pushed by a pneumatic actuator. The distance can be changed to fit the specific washing needs, thanks to two magnetic sensors placed on the actuator. It's possible to reduce the stroke (how much the head will exit) by moving the magnetic sensor "A". In order to have a stroke of less than 250 mm it is necessary to use a pneumatic distributor with "closed centers", in order to avoid that the washing fluid pressure is superior to the actuator's thrust.

The magnetic sensors permit to integrate the rotary head with a C.I.P. plant logics, by signaling the position of the washing head. This is very important if the tank contains agitators that can damage the rotary head when moving. Its speed varies depending on the washing fluid pressure that needs to be limited. An excessive speed in the rotation breaks the flow into drops, reducing the impact strength (see table 10).

During the washing phase, a watertight system keeps the washing fluid away from the pneumatic actuator. When the C.I.P. process is finished, the pneumatic actuator is activated and the rotary head returns to its initial position inside the cylinder.

Technical Characteristics:

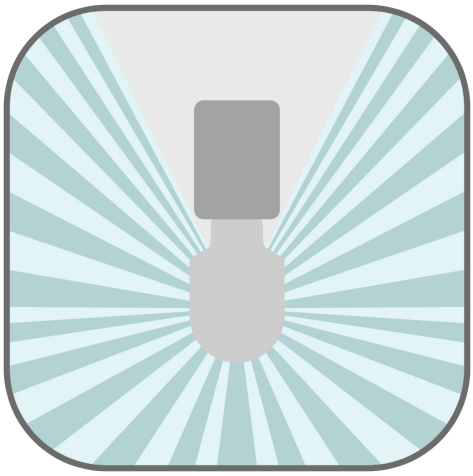
Tab. 10	Flow rate (lt/h)			Angle	Max washing	Fluid joint	Wall joint
Pressure (Bar)	1	2	3		range**	Clamp	Clamp
Code				(Degrees)	(meters)	DIN32676	DIN32676
50 DN25 O	4900	6200	7200	360°	2,2 ÷ 3,4	DN25	DN50
50 DN25B O*	4900	6200	7200	360°	2,2 ÷ 3,4	DN25	DN50

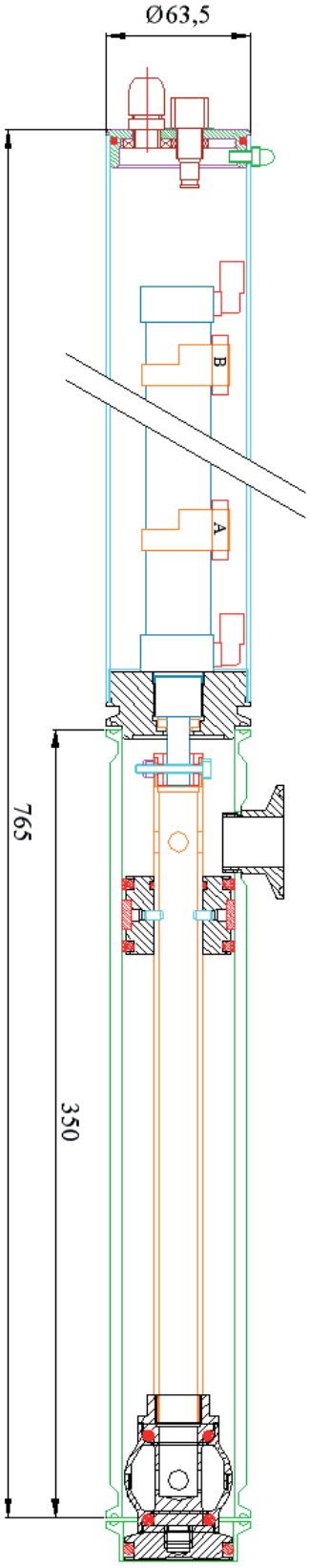
* washing system for insulated tanks

Max working temperature 95°C - Min working temperature 0°C

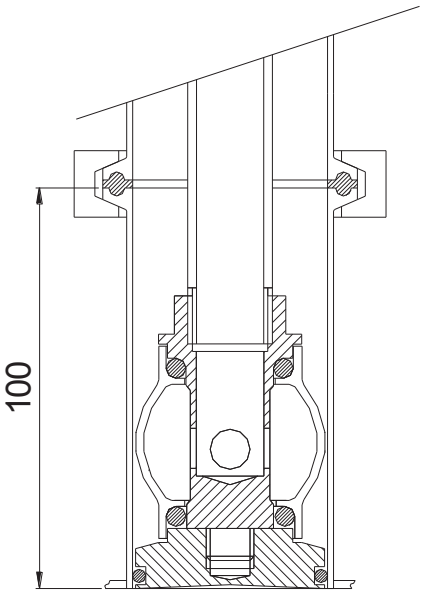
Series 50

Mechanical dynamic washing system

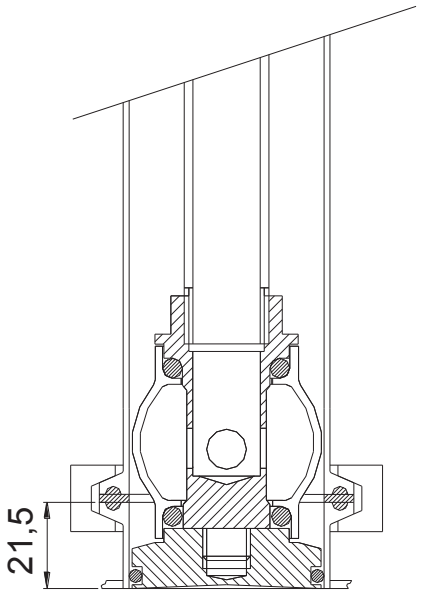




TANK WITH INSULATION



TANK WITHOUT INSULATION



TANK INTERNAL SIDE

NOTES

Max Washing range

In order to define the actual washing distance of a rotary head, we need to identify the processing conditions, like the kind of product to eliminate, the washing solution, the pressure and temperature of the washing jets. Each value needs to be determined through specific trials. What we can define, is a "wetting range", which is the max distance a head can reach, wetting the whole internal surface of a tank.

Warranty

The products are replaced or repaired, following decision of the producer, with no expense for the customer, in case of parts that are faulty from the origin. The warranty is valid if the defect is notified through mail within 30 days from its installation, or within a year from the delivery date. The cost of the replacement or repair of the item is the only expenditure that can be charged to our company, that cannot be held responsible for damages to persons or things, nor for trade losses due to the non-working conditions of our products.

In order to improve our products we continuously enhance our products, therefore shapes, dimensions and characteristics of our products, as shown or written in this catalog, may be changed without prior notice.

LEGEND

O	360°
U	180° UP
D	180° DOWN
C	CLIP
S	TO WELD