EN

SWIVEL JOINTS

ORIGINAL INSTRUCTIONS



TECHNICAL DATA SHEET

CODE 14843 003 00 CODE 14843 004 00 CODE 14843 002 00 CODE 14843 000 00



COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

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1. General warnings

This technical data sheet contains technical information concerning swivel joints and the main installation and maintenance instructions.

Complying with the instructions contained in this technical data sheet is crucial for the recognition of warranty against defective parts. Upon receiving the goods, ensure that they are intact and have not been accidentally damaged during transport. In the event parts of the accessory must be replaced, use only genuine spare parts.

2. Technical data

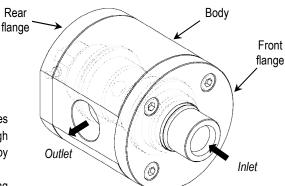
The swivel joints are designed to be installed in correspondence of swivel components for cleaning operations using high pressure water. The swivel joint is designed to drive the swivel accessories (e.g. hose reels) when winding and unwinding the hose. The swivel joints are available in various sizes and various inlet and outlet diameters, which obviously entail different flow rate values.

The swivel joints are available in four versions:

- **Swivel joint** ½" ½", code 14843 003 00;
- **Swivel joint 1" ¾"**, code 14843 004 00;
- Swivel joint 1" 1", code 14843 002 00;
- Swivel joint 1"¼ 1"¼, code 14843 000 00;

The swivel joint essentially consists of a central body and two side flanges (made of *Cast-iron G25*) and a hollow rotary axis (made of *Steel C40*), through which the pressurised water flows. The tightness of the swivel joint is ensured by two internal NBR seals.

The following figure shows a schematic diagram of a swivel joint, highlighting its main components.



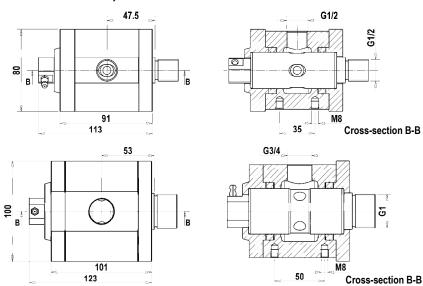
The following table shows the main operating parameters concerning maximum pressures that the swivel joints can withstand, flow rates and weight.

Operating parameters				
Parameter	Swivel joint ½" – ½" (code 14843 003 00)	Swivel joint 1" - 3/4" (code 14843 004 00)	Swivel joint 1" – 1" (code 14843 002 00)	Swivel joint 1" ¼ - 1" ¼ (code 14843 000 00)
MAXIMUM PRESSURE	250 bar	250 bar	250 bar	250 bar
MAX. ROTATION SPEED	0 ÷- 65 revs/min	0 ÷- 65 revs/min	0 ÷- 65 revs/min	0 ÷- 65 revs/min
WEIGHT	3.5 Kg	5.6 Kg	5.7 Kg	8.9 Kg

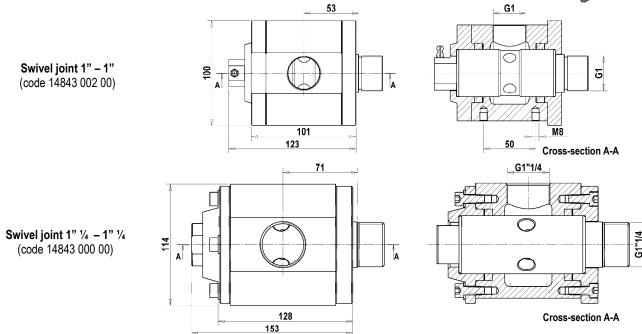
The following figures show the overall dimensions of the available swivel joints.

Swivel joint ½" – ½" (code 14843 003 00)

Swivel joint 1" – 3/4" (code 14843 004 00)







3. Installation

The swivel joint must be installed in correspondence of the rotary axis of the driven swivel component. The two components must be perfectly coaxial in order to ensure durability of the joint over time. The swivel joint must be powered by high pressure water through the axial inlet.

Upon installation, the swivel joint must be firmly fastened by knurling the thread, winding the hemp and adding the sealant. This prevents the joint from loosening during normal operation.

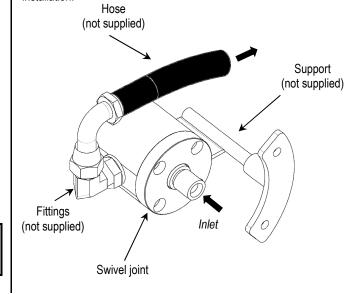
We recommend providing a duly shaped support to the joint. We recommend adding a curved fitting (with adequate radius of curvature) in correspondence of the outlet to allow for an easy connection of the hose to be wound around the swivel drum (e.g. hose reel).

During the winter season, the liquid contained in the swivel joint must be drained during downtime.



Attention: ensure a discharge system for the joint during installation to prevent damage caused by frost.

The figure below shows a schematic diagram of a possible installation.



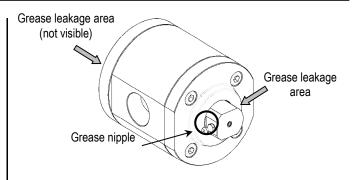
4. Maintenance

Under normal conditions, the swivel joint needs to be greased periodically. We recommend greasing the swivel joint on a weekly basis, ensuring that the grease comes out even from the non-visible part.



Attention: ensure that he grease comes out even from the non-visible part.

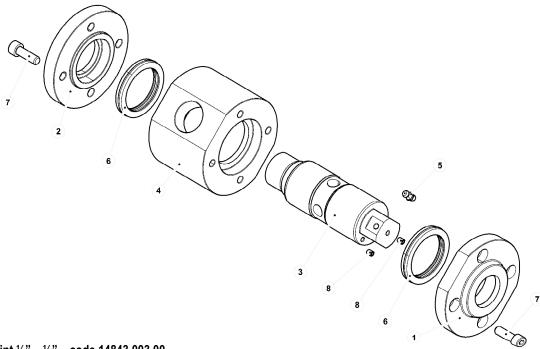
The following figure shows a schematic diagram of the grease nipple and the grease leakage areas.



We recommend using NLGI EP 2 lithium grease.



SWIVEL JOINT



Swivel joint $\frac{1}{2}$ " – $\frac{1}{2}$ " – code 14843 003 00

Pos.	Code	Description	Qty	Pos.	Code	Description	Qty
1	1610506000	JOINT REAR FLANGE 1/2"	1	6	4022272314	ROTOMATIC SEAL M17-35	2
2	1610506100	JOINT FRONT FLANGE 1/2"	1	7	4026121405	GALV. TCEI SCREW 8.8 M8X20 (REAR)	4
3	1650009300	JOINT DISTRIBUTOR SHAFT 1/2"	1		4026121407	GALV. TCEI SCREW 8.8 M8X25 (FRONT)	4
4	1687504300	SWIVEL JOINT BODY 1/2"	1	8	4026136202	HEADLESS SCREW 12.9 M6X6	1
5	4022100100	STRAIGHT BALL-TYPE GREASE NIP. M6X1	1				

Swivel joint 1" - 3/4" - code 14843 004 00

Pos.	Code	Description	Qty	Pos.	Code	Description	Qty
1	1610506200	JOINT REAR FLANGE 1"	1	5	4022100100	STRAIGHT BALL-TYPE GREASE NIP. M6X1	1
2	1610506300	JOINT FRONT FLANGE 1"	1	6	4022272318	ROTOMATIC SEAL M17-045	2
3	1650009200	JOINT DISTRIBUTOR SHAFT 1"	1	7	4026121407	GALV. TCEI SCREW 8.8 M8X25	8
4	1687504400	SWIVEL JOINT BODY 3/4"	1	8	4026135303	HEADLESS SCREW 14.9 M5X6	2

Swivel joint 1" - 1" - code 14843 002 00

Pos.	Code	Description	Qty	Pos.	Code	Description	Qty
1	1610506200	JOINT REAR FLANGE 1"	1	5	4022100100	STRAIGHT BALL-TYPE GREASE NIP.M6X1	1
2	1610506300	JOINT FRONT FLANGE 1"	1	6	4022272318	ROTOMATIC SEAL M17-045	2
3	1650009200	JOINT DISTRIBUTOR SHAFT 1"	1	7	4026121407	GALV. TCEI SCREW 8.8 M8X25	8
4	1687504200	SWIVEL JOINT BODY 1"	1	8	4026135303	HEADLESS SCREW 14.9 M5X6	2

Swivel joint 1"1/4 - 1"1/4 - code 14843 000 00

Pos.	Code	Description	Qty	Pos.	Code	Description	Qty
1	1610505500	SWIVEL JOINT FLANGE 1"1/4	1	6	4022272320	ROTOMATIC SEAL M17-55	2
2	1610505600	SWIVEL JOINT FLANGE 1"1/4	1	7	4026121405	GALV. TCEI SCREW 8.8 M8X20	8
3	1650008700	SWIVEL JOINT AXIS 1"1/4	1	8	4026135904	HEADLESS SCREW 12.9 M6X10	1
4	1687503800	SWIVEL JOINT BODY 1"1/4	1		4026357005	GALV. FLAT WASHER M8	4
5	4022100010	STRAIGHT BALL-TYPE GREASE NIP. M10X1	1				

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