

Operation and Maintenance Manual

DRIVE STAND

**Cat. no.
9114**

Approved for use by

JAFAR S.A. Factory President

Failure to comply with the guidelines and instructions in this Operation and Maintenance Manual exempts the manufacturer from all obligations, liabilities and guarantees.

Due to the continuous development of our business, we reserve the right to introduce modifications and structural changes to the product presented herein.

TABLE OF CONTENTS

1	TECHNICAL DESCRIPTION	3
1.1	PRODUCT NAME AND FEATURES	3
1.2	INTENDED USE	3
1.3	TECHNICAL SPECIFICATION	3
2	DESIGN	3
2.1	FITTING DESIGN DESCRIPTION	3
2.2	MATERIALS	3
2.3	DIMENSIONS	4
2.4	STANDARDISATION	4
2.5	ORDERING REGULATIONS	5
2.6	MANUFACTURE AND ACCEPTANCE	5
2.7	MARKINGS	5
3	PROTECTION, STORAGE & TRANSPORT	5
3.1	PROTECTIVE COATINGS	5
3.2	PACKAGING	5
3.3	STORAGE	6
3.4	TRANSPORT	6
4	ASSEMBLY AND INSTALLATION	6
4.1	INSTALLATION GUIDELINES	6
4.2	INSTALLATION INSTRUCTIONS	7
4.3	OPERATION	7
4.4	OH&S REGULATIONS	7
5	GUARANTEE CONDITIONS	7

1 TECHNICAL DESCRIPTION

1.1 PRODUCT NAME AND FEATURES

This operation and maintenance manual applies to:

The stand of type 9113 to support the drive, intended for water pipeline systems, which serves as a base for the control element (extension) of fittings for the flow through horizontal lines.

1.2 INTENDED USE

The stand of type 9114 to support the drive, intended for controlling fittings, is mounted above ground and coupled with the fittings via its casing. It is used for transferring the torque from the drive to the fittings. Used where the gate valve is controlled from a specific distance from the pipeline, e.g. underground pipelines or pipelines operated from platforms. Stands are used for installations in horizontal pipelines.

1.3 TECHNICAL SPECIFICATION

Drive stand of type 9114.

- temperature up to +70°C
- connection flanges for the drive acc. to PN-EN ISO 5210:2011 characterised by dimensions contained in the table with dimensions.

2 DESIGN

2.1 FITTING DESIGN DESCRIPTION

"JAFAR" S.A. Fitting Factory provides drive stands of type 9114. All external elements are made of stainless steel (1.4301, 1.4021). The flange for the drive in the upper part enables mounting the drive. The flange in the lower part enables fixing to the substrate.

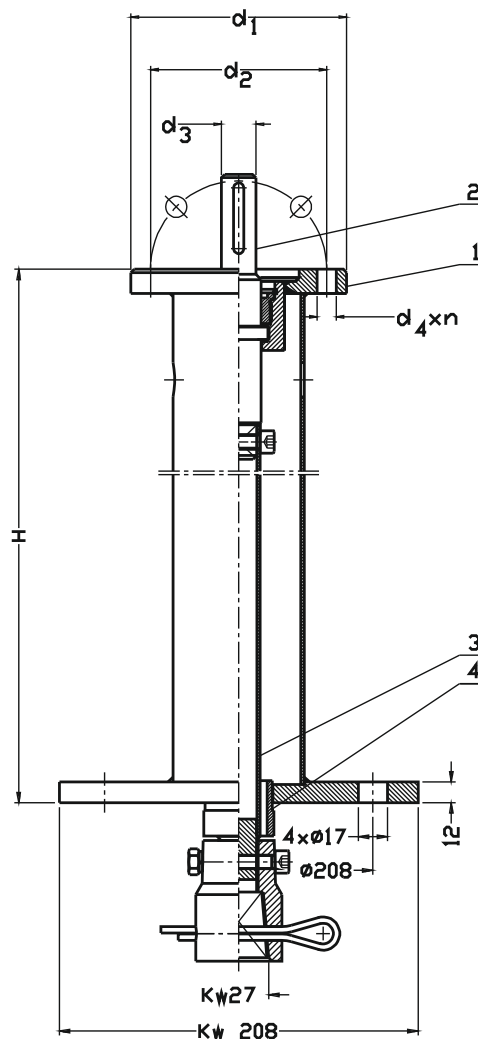
Stands are equipped with internal transmission units, each consisting of a pivot and spindle, terminated with a clutch.

2.2 MATERIALS

The index of materials used for the production of the drive stand is to be found in the table below:

	Part name	Material	Standard
1	Body	Stainless steel 1.4301	PN-EN 10088-1: 2014
2	Pivot	Stainless steel 1.4021	PN-EN 10088-1: 2014
3	Spindle	Stainless steel 1.4301	PN-EN 10088-1: 2014
4	Centering bearing	PE 100 SDR11	PN-EN 1555: 2012

2.3 DIMENSIONS



Connections B3 acc. to ISO 5210	H	d_1	d_2	d_3	d_4	n	Weight
[mm]	[mm]	[mm]				[pcs.]	[kg]
F10	685	125	102	20	11	4	13
F14		175	140	30	17	4	16

2.4 STANDARDISATION

PN-EN 1074-1: 2002	Pipeline fittings. Functional requirements and verification tests. General requirements
PN-EN 1074-2: 2002	Pipeline fittings. Functional requirements and verification tests. Isolating valves.
PN-89/H-02650	Fittings and pipelines. Pressures and temperatures.
PN-EN 1092-2: 1999	Flanges and their connections. Circular flanges for pipes, fittings, couplers and accessories with PN designation. Cast iron flanges.
PN-EN 19:2005	Industrial fittings. Metal fitting marking.
PN-EN ISO 6708: 1998	Definition and selection of DN (nominal dimension).

PN-EN 1559-1: 2011	Founding. Technical conditions of delivery. General.
PN-EN 10088-1: 2014	Corrosion-resistant steel. Grades of stainless steel.
PN-74/H-84032	Spring steel. Grades
PN-EN 1982: 2010	Copper and its alloys. Ingots and castings.
PN-EN 12420: 2002	Copper and its alloys. Forgings.
PN-ISO 965-1: 2001	ISO general purpose metric screw threads. Tolerances. Principles and basic data.
PN-ISO 2903: 1996	Trapezoid ISO metric threads. Tolerances.
PN-EN ISO 4762: 2006	Hexagon socket screws.
PN-EN 10204: 2006	Metallic products. Types of inspection documents.
PN-ISO 1629: 2005	Rubber and latex. Nomenclature.
PN-EN ISO 1872-1:2000	Plastics. Polyethylene (PE) moulding and extrusion materials. Designation system and basis for specifications.
PN-EN ISO 1873-1:2000	Plastics. Polypropylene (PP) moulding and extrusion materials. Designation system and basis for specifications.
PN-EN ISO 1874-1:2010	Plastics. Polyamide (PA) forming and extrusion moulding materials. Designation system and basis for specification.

2.5 ORDERING REGULATIONS

Stands are special purpose equipment; please specify the following in your order:

- catalogue number,
- F10/F14 drive connection type

2.6 MANUFACTURE AND ACCEPTANCE

Drive stands of type 9114 are accepted and produced in accordance with PN-EN 1074-1:2002 (Water supply system fittings. Functional requirements and verification tests. General requirements) and PN-EN 12266-1:2007 (Industrial valves. Testing of metallic valves).

2.7 MARKINGS

Characteristics of the drive stand of type 9114 are specified in the following standards: PN-EN-19: 2005 and PN-EN-1074-1: 2002.

Bodies of stands feature markings on labels, stuck on walls of column necks. The markings contain the following data:

- stand type (acc. to the product catalogue no. /TYPE/)
 - material type
 - manufacturer trade mark
- and identification mark: (e.g. series no.)

3 PROTECTION, STORAGE & TRANSPORT

3.1 PROTECTIVE COATINGS

Stands of type 9114 are made of materials resistant to corrosion.

3.2 PACKAGING

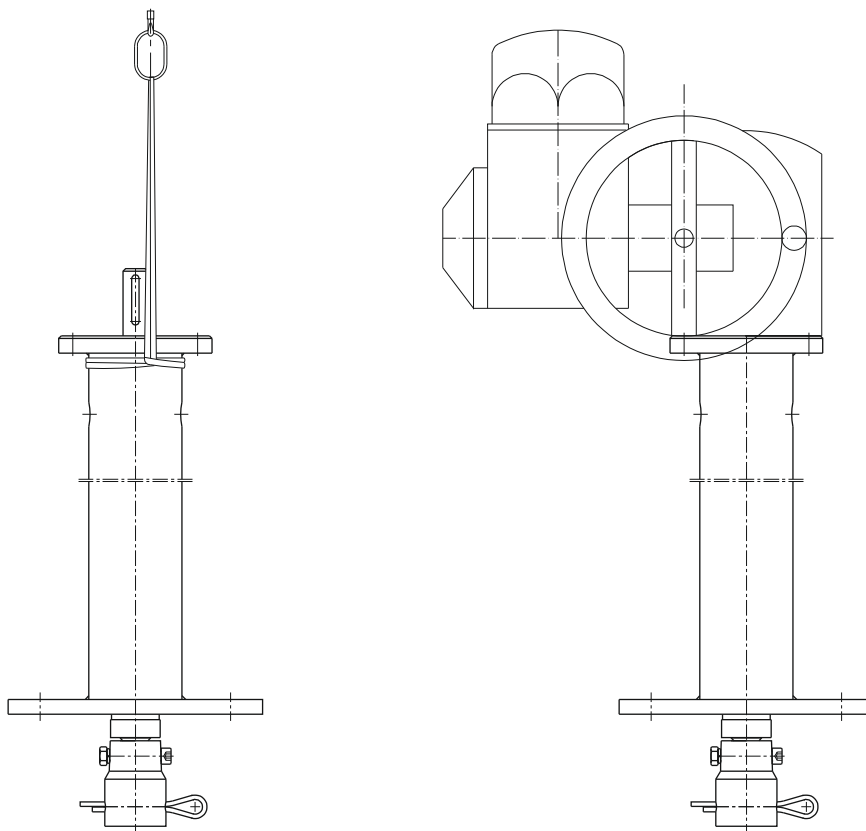
Stands are packaged on EURO pallets (1200x800) and secured with stretch foil.

3.3 STORAGE

Store stands indoors.

3.4 TRANSPORT

Transport stands by sheltered vehicles.



Sample schematic drawing for the transport of the stand

4 ASSEMBLY AND INSTALLATION

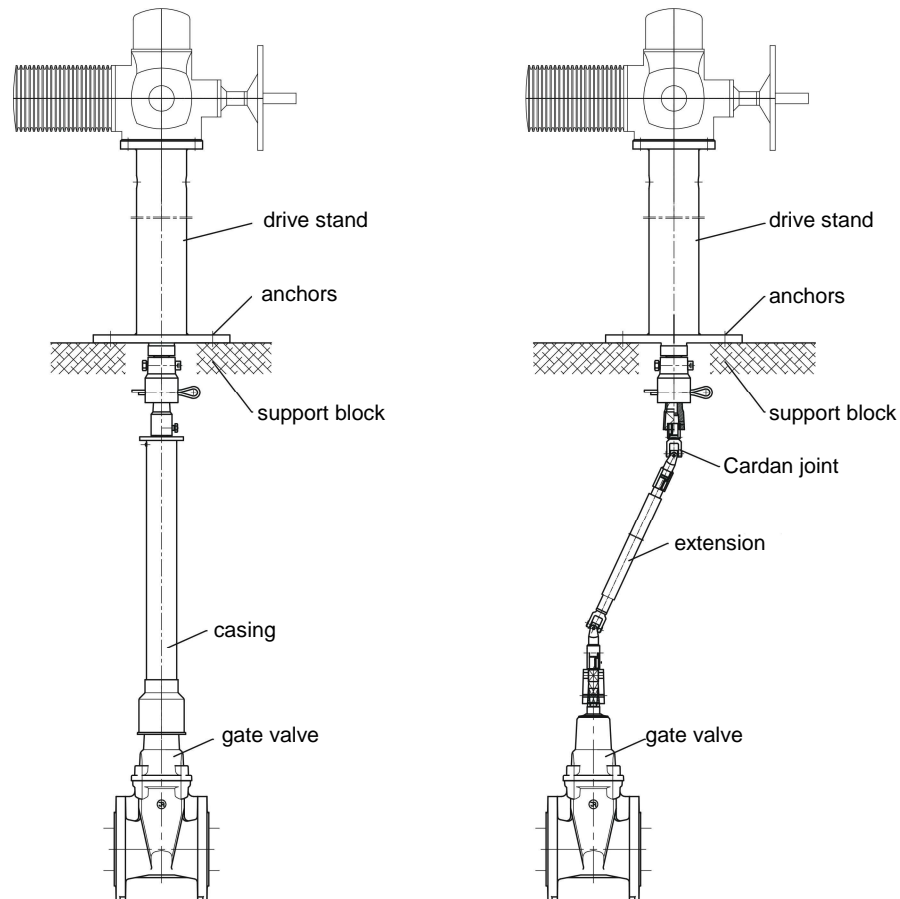
4.1 INSTALLATION GUIDELINES

The stand of type 9114 should be mounted on a stable substrate so that it is fixed in a manner preventing its turning. The stand (drive pivot) axis should be perpendicular to the substrate surface and serve as an extension of the pivot axis, fittings. If it is not possible to set the stand so that its axis is in the axis of the pivot of the fitting drive, use the connection to the casing through Cardan joints.

4.2 INSTALLATION INSTRUCTIONS

Before installing the fittings, check the technical and commercial documentation, i.e. intended use and operation parameters of the pipeline in which they are to be installed. Before mounting the stand, check whether the distance of the gate valve and stand enables connecting the owned casing or extension and whether the prepared surface for the flange fixing the stand is perpendicular to the fitting axis.

The method for the installation of the stand of type 9114 is presented in the schematic drawing below:



4.3 OPERATION

The stand should be operated according to requirements pertaining to connection fittings and accessories. In order to ensure the full operational efficiency of sets, it is recommended carrying out periodic inspections which consist in overloading the sets (from the full opening to the full closing) so as to check how the mechanism functions.

4.4 OH&S REGULATIONS

Stands are subject to guidelines and recommendations included in H&S regulations applicable to the installation of pipelines and equipment in: water supply stations, thermal power stations, sewage treatment plants, intermediate pumping stations and other structures, as well as general health and safety regulations (use of upper limb protection equipment, lower limb protection equipment, head protection equipment and protective clothing), in particular during works with low and high temperature exposure.

5 GUARANTEE CONDITIONS

The manufacturer grants guarantee for the product being installed and operated according to this O&MM. The conditions and period of the guarantee are specified in the guarantee sheet.