

1. Operational Instructions

- 1.1 Warranty
- 1.2 Installation
- 1.3 Use
- 1.4 Maintenance
- 1.5 Recommendations

1.1 Warranty. Definition : Warranty means the maximum period of time after the introduction of the valve on the market**. For longer periods Mei Valvole Industriali S.r.l. cannot assure the safety requirements of the European Directive PED 97/23/EC. Warranty is subordinated to a correct scheduling of the maintenance operations listed under Section 1.4. Warranty is also submitted to a correct use of the valve considering temperatures, pressures, compatibility of the fluids with the materials (Section 1.3) and to the right installation (Section 1.2)

The above mentioned period is identified as the valve's lifetime. That period changes according to the different models.

- Non return swing check valve, type CV, CS and CC, EN 1.4401/1.4404 (AISI 316/316L) made : **60 months**;
- Non return swing check valve, type CV, CS and CC, S 275 JR, S 275 J2G, ASTM A 105 made : **48 months**;
- Non return check valve, type CV and CS, CuAL10Fe2-B(CB331G) prospectus 32 EN 1982: **60 months**.

** Introduction on the market : is the first time that a Mei Valvole Industriali S.r.l. non return swing check valve is put on the EC market, both onerously or free of charge, for trading or for utilization purpose.

1.2 Installation. The installation of the valve on the plant must be done according to the procedures listed in the attached Installation Sheet (dis. 211.007.03 rev. A).
Installation must be done only between flanges.

Check that the flow's direction is the same of the one of the arrows indicated on the valve's label.

Mei Valvole Industriali S.r.l. is not responsible for damages caused to people, things or animals due to an improper use of the product.

1.3 Use. Definition of non-return swing check valve (EN 736-1:1995): it is a valve which automatically opens by fluid flow in a defined direction and which automatically closes to prevent fluid flow in the reverse direction.

Warning: Non-return swing check valves cannot be used neither as on-off valves nor as a safety valves.

Warning: MEI Valvole Industriali srl non-return swing check valves cannot be used for application with unstable fluids.

Working conditions as for max pressure, max and minimum temperature are those indicated on the label.

Summing up of the minimum and maximum working temperatures of the non return swing check valves materials matched with the elastomers used:

Marks: carbon steel (C), stainless steel (I), alu-bronze(B), Nitril-butadiene. Mark NBR 70 (N), Ethylene-propylene. Mark EPDM, Fluoridated-polymer. Mark FKM/FPM (V), P.T.F.E. (T)

body / disc/ elast.	Min TS °C	max TS °C
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C-C-Met : - 10° / + 250°	I-I-Met : - 50° / + 510°	B-B-Met : - 0° / + 400°
C-C-N : -10° / +120°	I-I-N : -25° / +120°	B-B-N : -0° / +120°
C-C-E : -10° / +130°	I-I-E : -40° / +130°	B-B-E : -0° / +130°
C-C-V : -10° / +250°	I-I-V : -50° / +260°	B-B-V : -0° / +260°
C-C-T : -10° / +250°	I-I-T : -50° / +260°	B-B-T : -0° / +260°

Summing up pf the PS according to the kind of flanging:

Pn 6 = Ps 6 bar	Pn 25 = Ps 25 bar	Pn100= Ps100bar	Ansi600=Ps100bar
Pn 10 = Ps 10 bar	Pn 40 = Ps 40 bar	Ansi150=Ps20bar	+++++
Pn 16 = Ps 16 bar	Pn63*= Ps 63 bar	Ansi300=Ps50bar	+++++

* Pn 63 = Pn 64

In case there is no documented evidence of the working conditions and no information about fluid, temperature and pressure is given, MEI Valvole Industriali srl refers to the user the choice of the most suitable to the application valve's materials.

1.4 Maintenance . Routine maintenance for all types consist of the following operations:

1. replacement of the valve's o-rings. This operation must be done every 12 months at last.
2. replacement of the discs, of the screws and the washers. This operation must be done every 36 months at last.

Warning: The above mentioned terms are highly reduced in case of high aggressiveness of the fluid or in case of turbulences.

Mei Valvole Industriali S.r.l. declines every responsibility or warranty for products being repaired by a third party or in case the suggested maintenance operations schedule has not been followed.

1.5 Recommendations. Recommendations are to avoid a wrong use of the non return swing check valve..

1. The valves can be installed only according to the Working Plane (dis. 211.007.02 rev. A).
2. The flow direction in the plant must be the same of the one of the arrows indicated on the valves.
3. When disassembling the valve be sure that the system is stopped and that both the temperature and the pressure of the fluid are not dangerous.
4. When mounting the valve between the flanges be sure that the contact faces are free of impurities or fluid's residues that may compromise the tightness .

It is recommended to install check valves at minimum 2 meters from the pump start or from a bend, as in a nearer position there can be some problems of pressure accumulation, with the risk of noise and broken disc.

DECLARATION OF CONFORMITY
The pressure Equipment Directive

Name and Address of the manufacturer

MEI Valvole Industriali srl
Via stipeti, 44 - 55060 Coselli (LU) Italy

Description of the Pressure Equipment

Non return swing check valve type CV,CS, CC from DN 32 to DN 800 for UNI PN 6 : PN 250 flanges and for ANSI 150:ANSI 1500 RJ and RTJ flanges.

Conformity Assesment Procedure Followed

Module B + C1

Name and address of the Notified Body which carried out the inspection

Società Consortile PASCAL a r.l.
Via G. Giardino, 4 - 20123 MILANO - ITALY

EC Type Examination Certificate

PA032

References of Harmonised Standards used:

EN 19, EN 473, EN 1982, PREN 12266-1

References of other Technical Standards and Specifications used:

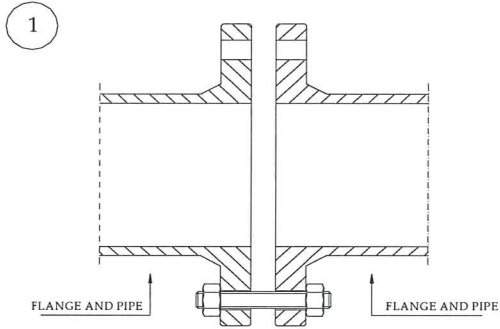
PR EN 12516-1, PR EN 12516-2, EN 736-1-2-3, EN 287, EN 288

Authorised Person

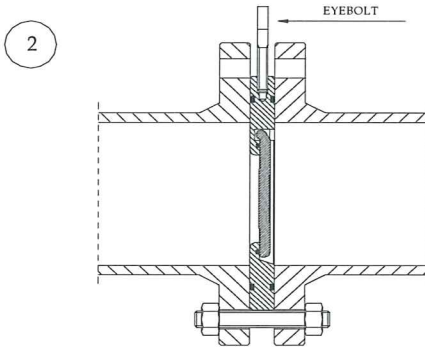
Signature  Name : **Lorenzo MEI**

Title : **General Manager**

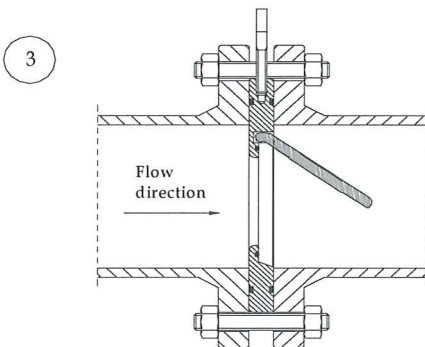
Date : **22/01/2004**



Insert one or two stud bolts and tighten them with nuts without forcing



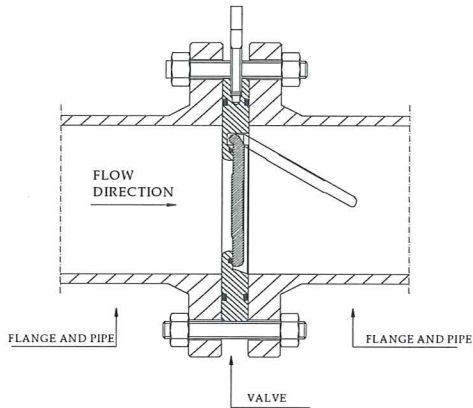
Holding the valve by the eyebolt, lower and set it on the already inserted stud bolt



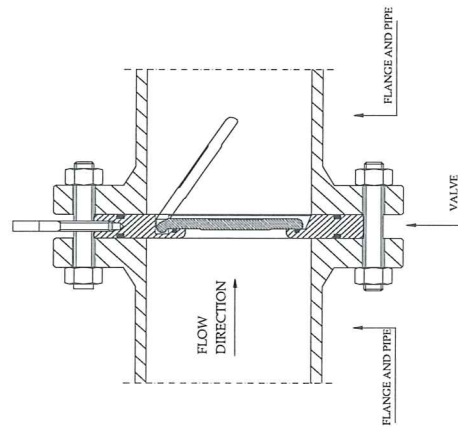
Insert the other stud bolts and tighten them with the nuts. Be sure that the valve's external diameter is equidistant from the screws and that the direction of the arrows on the external diameter is the same as the one of the flow

REV.	DATE	DESCRIPTION			MODIFIED BY	
		DIMENSIONS WITHOUT TOLERANCES INDICATION: EN 22768-1 - f			approved	<i>[Signature]</i>
		sm.n.qu.	scale		designed	<i>[Signature]</i>
			1:1		date	21-01-02
		Object	INSTALLATION SHEET		drawing	rev.
					211.007.03	A
MEI VALVOLE INDUSTRIALI srl PROPERTY. NO UNAUTHORIZED REPRODUCTION, DISCLOSURE AND EXECUTION IS ALLOWED					sheet	1 of 1

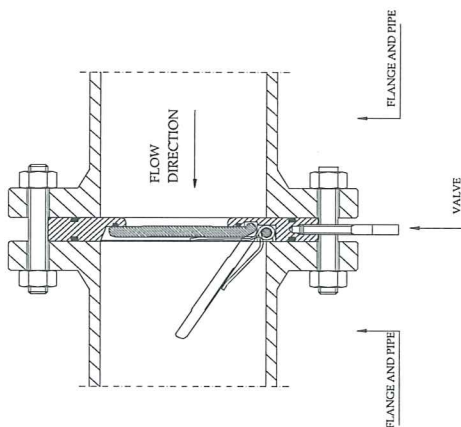
VERTICALLY ASSEMBLED VALVE
ON HORIZONTAL PIPELINE
RIGHT APPLICATION FOR ALL TYPES



HORIZONTALLY ASSEMBLED VALVE ON
VERTICAL PIPELINE WITH UPHILL FLOW
RIGHT APPLICATION FOR ALL TYPES



HORIZONTALLY ASSEMBLED VALVE ON
VERTICAL PIPELINE WITH DOWNHILL FLOW
RIGHT APPLICATION ONLY FOR "CS" AND "CC" TYPE
DO NOT USE FOR "CV" TYPE



REV.	DATE	DESCRIPTION			MODIFIED BY
		DIMENSIONS WITHOUT TOLERANCES INDICATION: EN 22768-1 - f			approved <i>[Signature]</i>
		sm.n.qu.	scale		designed <i>[Signature]</i>
			1:1		date 21-01-02
 VALVOLE INDUSTRIALI SRL LUCCA		Object			drawing
		WORKING PLANE			211.007.02
		MEI VALVOLE INDUSTRIALI s.r.l. PROPERTY. NO UNAUTHORIZED REPRODUCTION, DISCLOSURE AND EXECUTION IS ALLOWED			rev. A
					sheet 1 of 1