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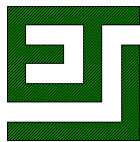
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# Butterfly Valves Series U



Specification N° :

Accessory :

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**16UGENR06-E****Butterfly valves Series U****1 of 4**

Title :

Revision N° :

**Features, range of types, assembly and operation****06 – 25.08.09**

## 1.0 Features, range of types, assembly and operation

This specification concerns the general features, the range of types, the assembly and the operation of the butterfly valves Series U. Admitted environmental and operating conditions depend generally from the compatibility of the materials and components and from the surface finish. The compatibility of the gasket material is indicated by specification N° 16UGUARxx.

## 2.0 Function

The butterfly valve permits to shut-off an oil pipe in order to be able to change one defective component of the circuit without having to lower the oil level below the level of the component. If fitted with an electrical contact, the butterfly valve shows if the pipeline is open or closed.

## 3.0 Construction features

Butterfly valves Series U consist mainly of a flange with a butterfly mounted in the flange's free passage, opened and shut by a driving shaft. The driving shaft has an hexagonal end protruding from the flange in order to be turned by a spanner for opening or closing the butterfly.

A sealing cap protects the hexagonal end of the shaft when in service, assuring the oil tightness and showing the position of the butterfly; the sealing cap can be padlocked in order to avoid undue operation of the butterfly.

### 3.1.0 Materials

#### 3.1.1.0 Standard execution

- Pressed steel flange or, for the bigger diameters oxycut or Cr-Mo cast iron flange;
- Driving shaft and countershaft of galvanised steel;
- Sealing cap and position plate of glassfiber reinforced nylon;
- Butterfly of sheet steel;
- External screws and washers of stainless steel.

For the gasket material see specification N° 16UGUARxx.

#### 3.1.2.0 Special executions

- Flange made of steel for low temperatures, stainless steel, aluminium, brass or bronze;
- Driving shaft and countershaft of stainless steel or brass;
- Butterfly of stainless steel or brass;
- Operation of the driving shaft by lever;
- Electrical contact indicating the open or shut position of the butterfly.

Special executions may require production tools not already available for all types.

### 3.2.0 Surface protection

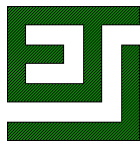
The butterfly valves Series U can be supplied with one of the following surface protection treatments. Specification N° 00VERRxx shows the detailed characteristics of the painting procedure.

#### 3.2.1.0 Execution NOR

External non-machined surfaces rough as per hot pressing or oxycut, sandblasted and slightly oiled; machined surfaces, butterfly and butterfly seat slightly oiled.

#### 3.2.2.0 Execution WAS

Valve flange protected up to nominal diameter by one coat of 2-pack epoxy primer paint, thickness 50 µm; butterfly and butterfly seat slightly oiled.



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**Features, range of types, assembly and operation****06 – 25.08.09****3.2.3.0 Execution BCR**

Valve flange, including butterfly seat, electro-galvanised and tropicalised thickness 10 mu; butterfly and butterfly seat slightly oiled.

**3.2.4.0 Execution EPX**

Valve flange protected as per execution WAS, then painted up to gasket seat with 2-pack polyurethane paint, colour RAL 7031; total paint thickness 110 mu; butterfly and butterfly seat slightly oiled. For consistent quantities other final colours may be supplied. This protection withstands the test of 500 hours in salty fog.

**3.2.5.0 Execution BCR+EPX**

This surface finish is a combination of executions BCR and EPX, designed in order to assure the maximum protection against corrosion of the valve flange.

**4.0 Operating features****4.1.0 Tightness of drive shaft**

The tightness to oil leakage from the shaft on the butterfly valve mounted as in service, complete with cap, is guaranteed by a gasket mounted into a seat on the cap and pressed against the machined upper part of the valve flange. This allows to obtain an excellent tightness and at the same time to exchange the gasket easily.

When the cap is not in place, an O-Ring gasket on the shaft avoids excessive leakage.

**No leakage is tolerated from drive shaft in service, with the cap in place.**

**4.2.0 Tightness of butterfly**

The oil tightness of the butterfly is obtained by contact metal to metal, fitting butterfly to seat at assembly; thus a constant performance even after a long use is assured.

Leakage at the butterfly is tested at assembly with oil at 20° C, 1 bar and viscosity of 30,5 cSt.

Following values for leakage are tolerated, measured in 1 hour:

Nominal diameter of valve in mm	<b>&lt;= 100</b>	<b>&gt;100 - &lt;=175</b>	<b>&gt;175</b>
Admitted leakage in dm <sup>3</sup> /h measured in 1 hour	<b>&lt;= 0,5</b>	<b>&lt;= 1,0</b>	<b>&lt;= 2,0</b>

**4.3.0 Operating Torque**

The operating torque measured by dynamometric spanner should not exceed following values:

Nominal diameter of valve in mm	<b>&lt;= 100</b>	<b>&gt;100 - &lt;=150</b>	<b>&gt;150</b>
Operating torque in Kgm.	<b>&lt;= 1</b>	<b>&lt;= 3</b>	<b>&lt;= 3</b>
Closing torque in Kgm.	<b>&lt;= 5</b>	<b>&lt;= 10</b>	<b>&lt;= 15</b>
Opening torque in Kgm.	<b>&lt;= 3</b>	<b>&lt;= 5</b>	<b>&lt;= 5</b>

**Operating torque:**

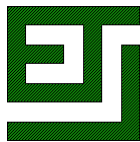
Torque necessary to turn the shaft from the open to the closed position;

**Closing torque:**

Torque necessary to obtain the complete closure of the valve;

**Opening torque:**

Torque necessary to open the valve, after complete closure.



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## 5.0 Assembling and operating instructions

### 5.1.0 Assembling instructions

The drawings referred to in chapter 6.0 as well as the table showing the gasket seat dimensions in specification N° 16UGUARxx give overall and mounting dimensions as well as dimensions and references of the mounting gasket.

Assembly of the different type of valves is done as shown in drawings N° 16.APP/1 and 16.APP/2. Valves may be installed with the drive shaft in any position, vertical, horizontal or angled.

Protection 8 of drawing N° 16.U/1 is present on all valves to protect the inscription plate 6 during sandblasting and painting; in service it has to be eliminated

### 5.2.0 Operating instructions

Numbering of parts refers to drawing N° 16.U/1.

The design of the operating system is common to all valves Series U; to open and close the valve operate as follows:

- The symbol or inscription on plate 6 indicates the valve position; the arrow on sealing cap 3 indicate in which direction drive shaft 5 has to be turned in order to open or close the valve;
- To close the valve first remove the seal or padlock 1 if present, then unscrew and remove the screws and washers 2 holding the sealing cap 3 in place;
- Remove the sealing cap 3 and its gasket 4; the drive shaft 5 is now accessible and the crest 5.1 indicates the position of the butterfly. A second gasket on the drive shaft hinders excessive oil leaks;
- With the appropriate spanner turn the drive shaft 5 clockwise 90° to close the valve; crest 5.1 now indicates that the valve is closed;
- Check integrity of gasket 4 and change it if necessary, then reassemble the sealing cap 3, after having turned it 180° on it's vertical axis;
- Fasten cap 3 with it's screws and washers 2; the symbol or inscription on plate 6 indicates now that the valve is closed;
- Padlock or seal the valve if necessary.

To open the valve proceed the same way but turn the drive shaft 5 counter-clockwise.

**Should the valve have been closed by fault in the wrong direction (counter-clockwise), crest 5.1 hinders to reassemble cap 3. Also, if the closing torque exceeds the maximum value, pin 7 hinders the butterfly to travel over the position of maximum tightness.**

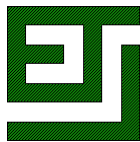
### 5.3.0 Changing the cap gasket

Oil tightness of the drive shaft is made by O-Ring gasket 4; should a leakage occur, check the surface on which the gasket is pressed as well as the gasket itself and make the necessary adjustments and/or change the gasket.

## 6.0 Range of types and reference drawings

The butterfly valves Series U have in standard execution flanges according to UNI PN10; flanges according to other standards can be supplied as special execution.

Nominal diameters (MD) range from 25 mm to 400 mm in steps of 25 mm up to MD 200 mm and of 50 mm above MD 200. Not all series can be supplied in all nominal diameters; see table below.



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**Features, range of types, assembly and operation****06 – 25.08.09****6.1.0 Butterfly valves Series U in standard execution**

Series	Description	DN	Ref. dwg	Assembly dwg
	<b>Butterfly valves with gasket seat</b>			
JUZ	Circular wafer with threaded holes and gasket seats	25 to 80 125 to 400	16.JUZ	16.APP/3
RUZ	Circular wafer with threaded holes and gasket seat, flange with recesses	25 to 100	16.RUZ	16.APP/3
SUZ	Circular wafer with flush holes and gasket seats, recessed flange	50 to 300	16.SUZ	16.APP/2
PUWZ	Square flange with threaded holes and gasket seats	50 to 100	16.PUWZ	16.APP/3
WUPZ	Recessed square flange with flush holes and gasket seats	80 - 100	QUZ16.080.00 WUPZ16.100.00	16.APP/2
WUZ	Square flange, weld on type with short neck, with gasket seats and flush or threaded holes	50 - 80	16.WUZ/WUTZ	16.APP/1
WUTZ	Square flange, weld on type with long neck, with gasket seats and flush or threaded holes	80	16.WUZ/WUTZ	16.APP/1
	<b>Butterfly valves without gasket seat</b>			
JUX	Circular wafer with threaded holes, without gasket seats	25 to 80 125 to 400	16.JUX	16.APP/3
SUX	Circular wafer with flush holes and without gasket seats, recessed flange	50 to 300	16.SU	16.APP/2
PUX	Square flange with threaded holes, without gasket seats	80	16.PUX	16.APP/3

**6.2.0 Special executions**

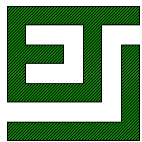
To meet special demands, valves with different executions can be supplied with:

- flange dimensions to other standards and/or with special machining;
- aluminium body for lower weight;
- all or some parts of the valve made of stainless steel or brass;
- lever to open or close the valve;
- special gaskets;
- special indication on position plate;
- significantly lower oil leakage values from closed butterfly than indicated at point 4.2.0

**7.0 Reference specifications**

- Gaskets, gasket seats and operating conditions
- Painting

N° 16UGUARxx  
N° 00VERRxx



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**16UGUAR05-E**

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**Butterfly valves Series U**

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**Dimensions and types of gaskets, dimensions of gasket seats**

Revision N° :

**05 – 25/07/06**

## 1.0 Dimensions and types of gaskets, dimensions of flange gasket seats

This specification indicates the dimensions and types of gaskets as well as the dimensions of the gasket seats and the admitted operating conditions depending on the gasket material. The gaskets are colour coded in order to avoid confusion.

## 2.0 Admitted operating conditions

### 2.1.0 Standard execution – NBR Nitrile rubber

- Colour code Black
- Ambient conditions:
  - ◊ Ambient temperature -25°C to +50°C
  - ◊ Relative humidity 95% to 20°C - 80% to 40°C - 50% to 50°C
- Insulating liquid and it's temperature:
  - ◊ Mineral oil -25°C to +110°C
  - ◊ Silicone oil -25°C to +110°C

### 2.2.0 Execution Nf – HNBR Nitrile rubber for low temperature

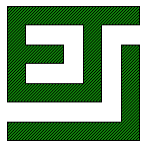
- Colour code Military green RAL 6016
- Ambient conditions:
  - ◊ Ambient temperature -45°C to +50°C
  - ◊ Relative humidity 95% to 20°C - 80% to 40°C - 50% to 50°C
- Insulating liquid and it's temperature:
  - ◊ Mineral oil -45°C to +110°C
  - ◊ Silicone oil -45°C to +110°C

### 2.3.0 Execution SI – SI Silicone rubber

- Colour code Red
- Ambient conditions:
  - ◊ Ambient temperature -60°C to +50°C
  - ◊ Relative humidity 95% to 20°C - 80% to 40°C - 50% to 50°C
- Insulating liquid and it's temperature:
  - ◊ Mineral oil -60°C to +150°C
  - ◊ Silicone oil not admitted

### 2.4.0 Execution Vt – FPM Fluorocarbon-rubber (Viton V)

- Colour code Green
- Ambient conditions:
  - ◊ Ambient temperature -15°C to +50°C
  - ◊ Relative humidity 95% to 20°C - 80% to 40°C - 50% to 50°C
- Insulating liquid and it's temperature:
  - ◊ Mineral oil -15°C to +150°C
  - ◊ Silicone oil -15°C to +150°C



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**Dimensions and types of gaskets, dimensions of gasket seats****05 – 25/07/06**

### 3.0 Tables of gasket types and flange gasket seats and dimensions

Gaskets are according to Italian (OR), British (BS) and French (R) standard.

Flange gasket seats are designed with uniform criteria:

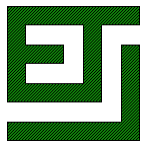
- gaskets are centred on the external diameter of the gasket seat with a play of 0,5 to 1,0 mm;
- radial compression of the gasket is between 32% and 33%;
- seat cross section is 12% to 16% bigger then gasket cross section;
- seat volume is 11% to 15% bigger then gasket volume.

#### 3.1.0 Table 1 - Butterfly valves Series SUZ - WUPZ

Measures in mm.

MD	Flange gaskets			Cap and plug gasket		Notes
	Seat	O-Ring gasket		O-Ring gasket		
		References	Dimensions Ø int x cord x Ø ext	Ref.	Dimensions Ø int. x cord	
<b>25</b>	34,7 x 48,7 x 3,6	OR6150 – BS325	37,47x5,34x48,15	OR4112	28,17x3,53	2
		R28	37,47x5,33x48,13			
<b>50</b>	70,0 x 84,0 x 3,6	OR6287 – BS332	72,39x5,34x83,07	OR4112	28,17x3,53	2
		R39	72,39x5,33x83,05			
<b>65</b>	76,0 x 90,0 x 3,6	OR6312 – BS338	78,74x5,34x89,42	OR4112	28,17x3,53	1-2
		R41	78,74x5,33x89,40			
<b>80</b>	98,5 x 112,5 x 3,6	OR6400 – BS345	101,00x5,34x111,68	OR4112	28,17x3,53	2
		R48	100,97x5,33x111,65			
<b>100</b>	115,7 x 134,5 x 4,7	OR8475 – BS427	120,00x6,99x133,98	OR4112	28,17x3,53	2
		R55	120,02x6,99x134,00			
<b>125</b>	141,5 x 160,3 x 4,7	OR8575 – BS435	145,40x6,99x159,38	OR146	41,28x3,53	2
		R63	145,42x6,99x159,40	OR4087	21,82x3,53	3
<b>150</b>	167,0 x 185,8 x 4,7	OR8675 – BS440	170,80x6,99x184,78	OR146	41,28x3,53	2
		R68	170,82x6,99x184,80	OR4087	21,82x3,53	3
<b>175</b>	186,0 x 204,8 x 4,7	OR8750 – BS443	189,90x6,99x203,88	OR146	41,28x3,53	2
		R71	189,87x6,99x203,85	OR4087	21,82x3,53	3
<b>200</b>	211,5 x 230,3 x 4,7	OR8850 – BS446	215,30x6,99x229,28	OR146	41,28x3,53	2
		R74	215,27x6,99x229,25	OR4087	21,82x3,53	3
<b>250</b>	275,0 x 293,8 x 4,7	OR81100 – BS451	278,70x6,99x292,68	OR146	41,28x3,53	2
		R79	278,77x6,99x292,75	OR4087	21,82x3,53	3
<b>300</b>	325,5 x 344,3 x 4,7	OR81300 – BS455	329,50x6,99x343,48	OR162	58,74x3,53	2
		R83	329,57x6,99x343,55	OR4087	21,82x3,53	3

**Notes:****1** = MD to be avoided**2** = Cap gasket**3** = Countershaft plug gasket



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**Dimensions and types of gaskets, dimensions of gasket seats****05 – 25/07/06****3.2.0 Table 2 - Butterfly valves Series JUZ – RUZ – PUWZ – WUZ - WUTZ**

Gasket seats are designed to be compatible with ISO PN 10 slip on flanges

Measures in mm.

MD	Flange gaskets			Cap and plug gasket		Notes
	Seat	O-Ring gasket		O-Ring gasket		
		References	Dimensions Ø int x cord x Ø ext	Ref.	Dimensions Ø int. x cord	
<b>25</b>	44,2 x 58,2 x 3,6	OR6187 – BS328	47,00x5,34x57,68	OR4112	28,17x3,53	2
		R31	46,99x5,33x57,65			
<b>50</b>	70,0 x 84,0 x 3,6	OR6287 – BS332	72,39x5,34x83,07	OR4112	28,17x3,53	2
		R39	72,39x5,33x83,05			
<b>65</b>	85,5 x 99,5 x 3,6	OR6350 – BS341	88,27x5,34x98,95	OR4112	28,17x3,53	1-2
		R44	88,27x5,33x98,93			
<b>80</b>	98,5 x 112,5 x 3,6	OR6400 – BS345	101,00x5,34x111,68	OR4112	28,17x3,53	2
		R48	100,97x5,33x111,65			
<b>100</b>	128,5 x 147,3 x 4,7	OR8525 – BS431	132,70x6,99x146,68	OR4112	28,17x3,53	2
		R59	132,72x6,99x146,70			
<b>125</b>	154,2 x 173,0 x 4,7	OR8625 – BS438	158,10x6,99x172,10	OR146	41,28x3,53	2
		R66	158,12x6,99x172,108	OR4087	21,82x3,53	3
<b>150</b>	186,0 x 204,8 x 4,7	OR8750 – BS443	189,90x6,99x203,88	OR146	41,28x3,53	2
		R71	189,87x6,99x203,85	OR4087	21,82x3,53	3
<b>175</b>	211,5 x 230,3 x 4,7	OR8850 – BS446	215,30x6,99x229,28	OR146	41,28x3,53	2
		R74	215,27x6,99x229,25	OR4087	21,82x3,53	3
<b>200</b>	237,0 x 255,8 x 4,7	OR8950 – BS448	240,70x6,99x254,68	OR146	41,28x3,53	2
		R76	240,67x6,99x254,65	OR4087	21,82x3,53	3
<b>250</b>	287,5 x 306,3 x 4,7	OR81150 – BS452	291,50x6,99x305,48	OR146	41,28x3,53	2
		R80	291,47x6,99x305,45	OR4087	21,82x3,53	3
<b>300</b>	338,5 x 357,3 x 4,7	OR81350 - BS456	342,30x6,99x356,28	OR162	58,74x3,53	2
		R84	342,27x6,99x356,25	OR4087	21,82x3,53	3

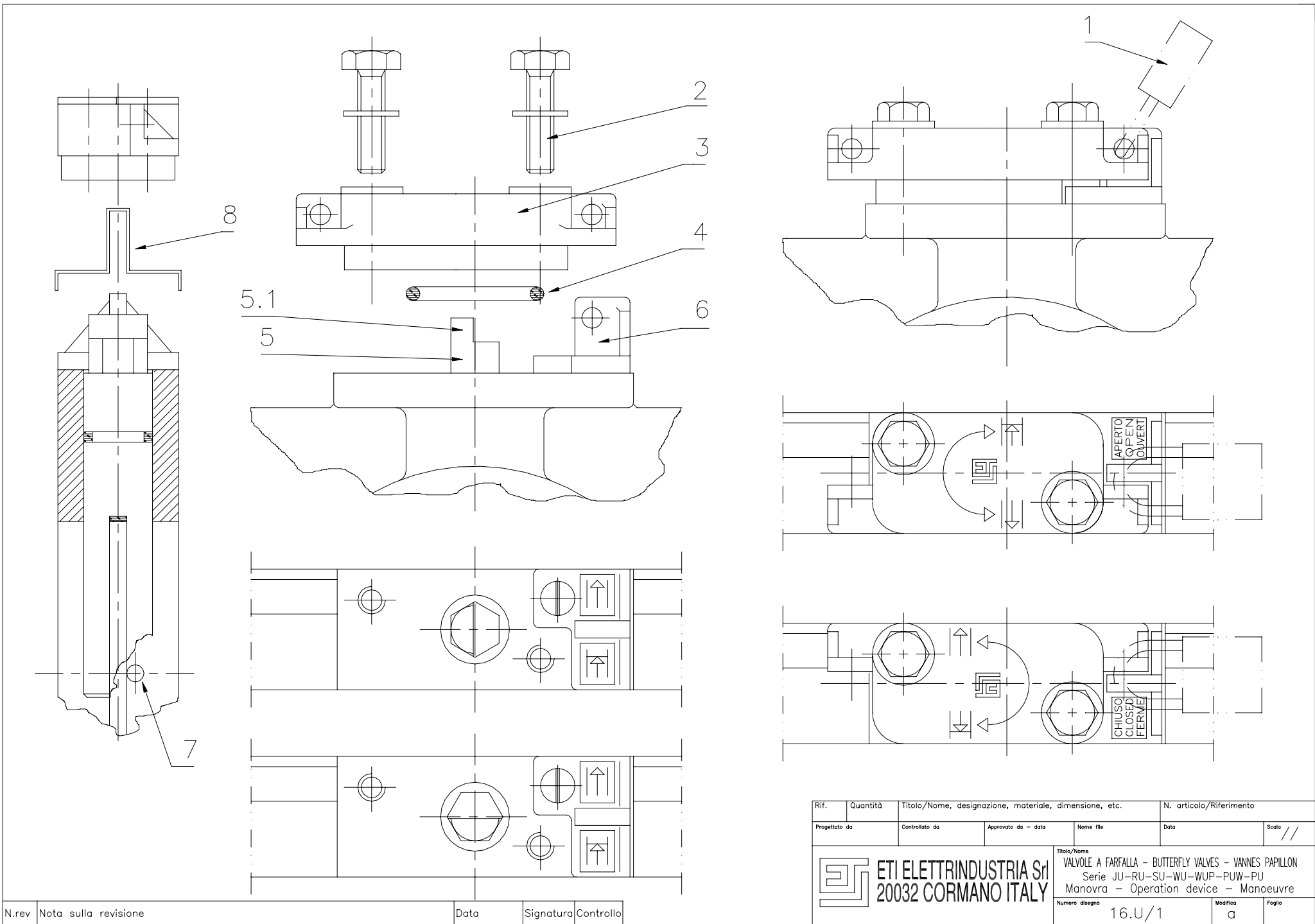
**Notes:**

1 = MD to be avoided

2 = Cap gasket

3 = Countershaft plug gasket





N.rev	Nota sulla revisione	Data	Signatura	Controllo
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Rif.	Quantità	Titolo/Nome, designazione, materiale, dimensione, etc.			N. articolo/Riferimento
Progettato da	Controllato da	Approvato da - data	Nome file	Data	Scala //
 <b>ETI ELETTROINDUSTRIA Srl</b> <b>20032 CORMANO ITALY</b>		Titolo/Nome <b>VALVOLE A FARFALLA - BUTTERFLY VALVES - VANNES PAPILLON</b> Serie JU-RU-SU-WU-WUP-PUW-PU Manovra - Operation device - Manoeuvre			Numero disegno <b>16.U/1</b>
		Modifica	Foglio		
		a			

Riproduzione vietata | Non misurare le quote dal disegno

N.riev Nete sulle versioni

Data

Signature/Contratto

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Holes/Trous

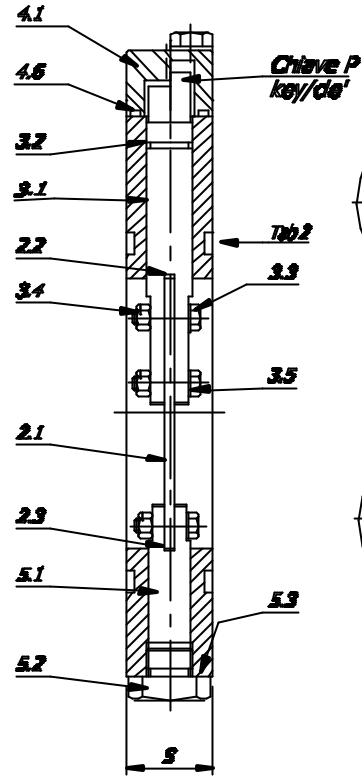
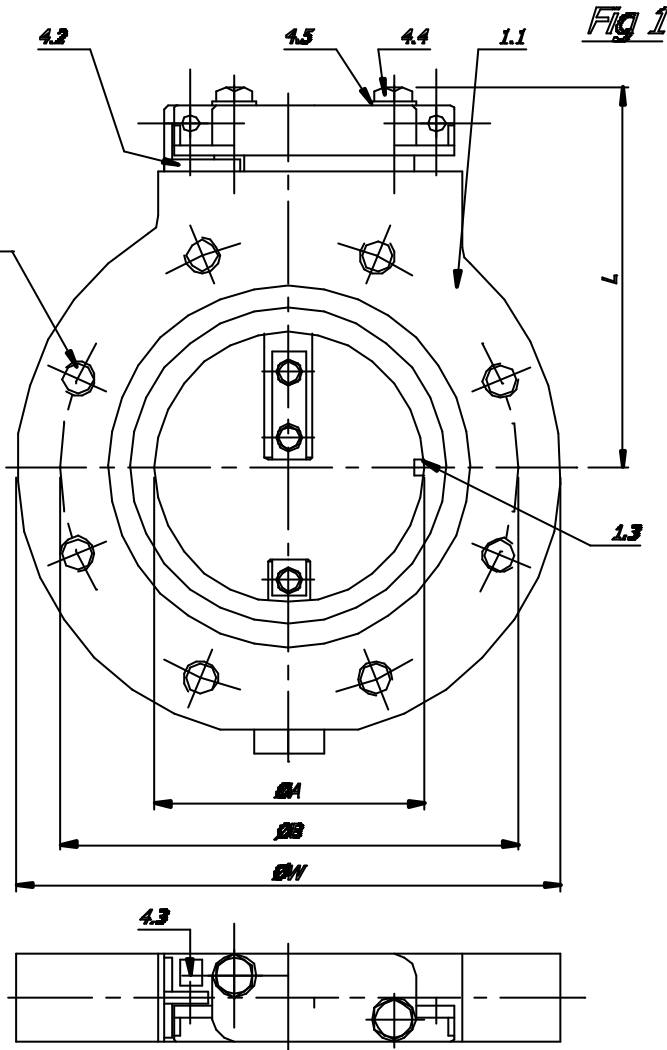


Fig 2

Fig 3

Fig 4

Tipo-Type	DN	ØA	ØB	ØW	N	Ød	S	P	L	Fig.	PESO-WEIGHT Kg.
JUZ 025	25	28	85	115	4	M12	35	13	100	4	3,0
JUZ 050	50	51	125	165	4	M16	35	14	118	4	4,0
JUZ 080	80	78	160	200	4	M16	35	14	135	4	7,5
JUZ 080/8F	80	78	160	200	8	M16	35	14	135	1-4	7,5
JUZ 125	125	124	210	250	8	M16	40	19	175	1	12,8
JUZ 150	150	149	240	285	8	M20	40	19	195	1	15,5
JUZ 175	175	174	270	315	8	M20	40	19	208	1	18,0
JUZ 200	200	198	295	340	8	M20	40	19	219	1	21,0
JUZ 250	250	249	350	395	12	M20	40	19	244	2	25,0
JUZ 300	300	299	400	445	12	M20	60	24	270	2	44,0
JUZ 350 *	350	348	460	505	16	M20	60	24	310	3	53,0
JUZ 400 *	400	390	515	565	16	M22	60	24	340	3	61,0

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

\*Esecuzioni speciali a richiesta.  
Special executions on request.  
Execution speciale a demande.

Flangie normalizzate : UNI 2223-67 PN10  
Flanges to standard : DIN 2501 ND10  
Brides selon normes : NF E 29-201 PN10



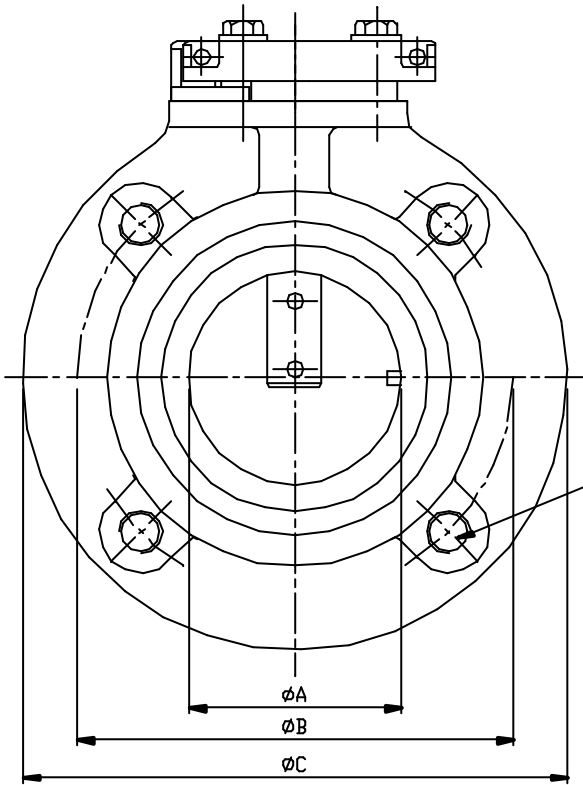
ETI ELETTRONICA S.p.A.  
20092 CORIMANO ITALY  
Valvole a farfalla - Butterfly valves - Vannes papillon  
Serie: JUZ

Progettato da: CALORIS  
Disegnato da: TIZIO/NOBILI, designazione, materiali, dimensioni, etc.  
Approvato da: ...  
Data: 20/07/2006

Forma e norme valvole - Norm valvula in acciaio inox

16 JUZ

N./rev. Nota sulla revisione  
 Data  
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 holes / trous

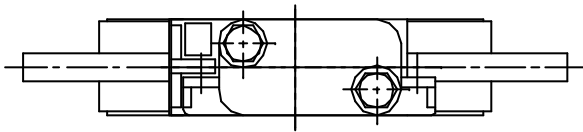


Fig.1

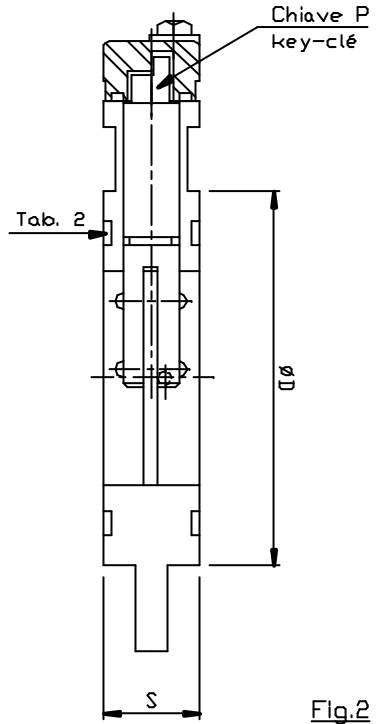
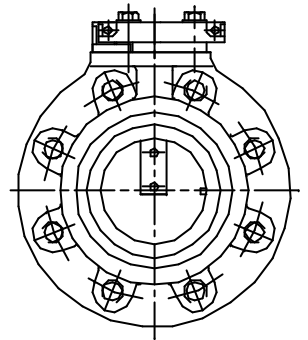


Fig.2



Tipa-Type	DN	ØA	ØB	ØC	N	ød	ØD	S	L	P	Fig.	PESO-WEIGHT Kg.
RUZ 501	25	28	85	115	4	M12	68	35	95	13	1	2.0
RUZ 502	50	51	125	165	4	M16	100	35	120	14	1	3.8
RUZ 503	80	78	160	200	4	M16	138	35	140	14	1	5.0
RUZ 504	100	98	180	220	8	M16	158	35	150	14	2	6.6

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

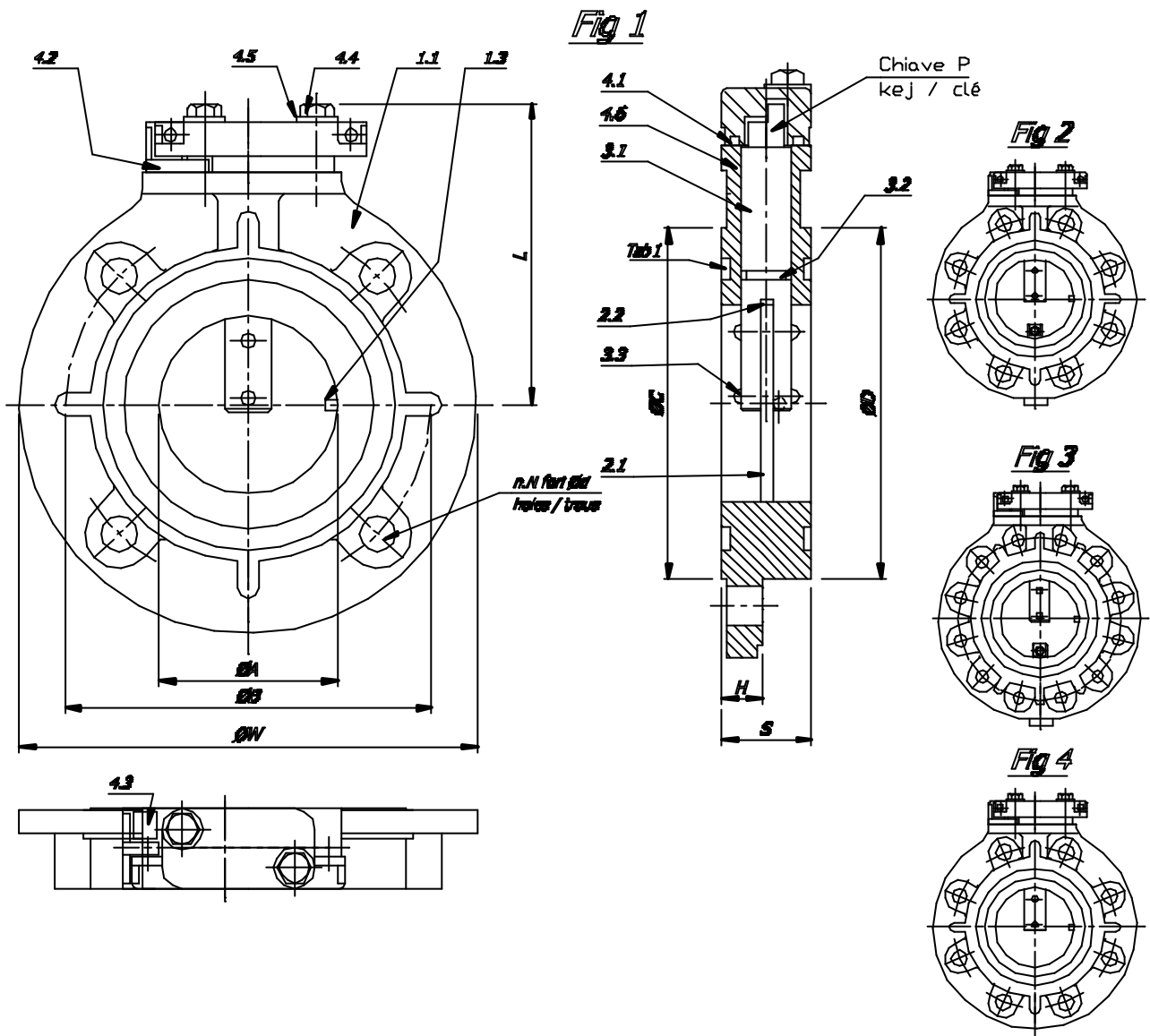
Flange normalizzate : UNI 2223-67 PN10  
 Flanges to standard : DIN 2501 ND10 DN 80 with 4 holes  
 Brides selon normes : NF E 29-201 PN10 DN 80 avec 4 trous

Rif. Quantità  
 Modifica  
 Materiale  
 Note  
 Data  
 N. ordine/Riferimento  
 28-06-06  
 //

**ETI ELETTRICI**  
**INDUSTRIA S.p.A.**  
**20092 CORNANO ITALY**

Valvola a farfalla - Butterfly valves - Vannes papillon  
 Serie RUZ  
 16 RUZ

N. rev. Nota sulle revisioni  
 Data  
 Signature  
 Control



Tipo-Type	DN	ØA	ØB	ØW	N	Ød	ØC	ØD	H	S	L	P	Fig.	PESO-WEIGHT Kg.
SUZ 505*	50	51	125	165	4	18	165	92	15	35	145	14	1	3.7
SUZ 506*	65	64	145	185	4	18	185	100	15	35	155	14	1	4.0
SUZ 507	80	78	160	200	4	18	138	122	13	35	145	14	1	4.2
SUZ 507 BF *	80	78	160	200	∞	18	138	122	13	35	145	14	4	4.2
SUZ 510	100	98	180	220	8	18	158	142	14	35	155	14	4	5.9
SUZ 511	125	124	210	250	8	18	238	172	17	40	175	19	2	8.5
SUZ 512	150	149	240	285	8	22	273	195	17	40	195	19	2	9.2
SUZ 513	175	174	270	315	8	22	242	225	18	40	210	19	2	13.2
SUZ 520	200	198	295	340	8	22	268	250	30	60	245	24	2	18.5
SUZ 525	250	249	350	395	12	22	320	305	32	60	270	24	3	28.2
SUZ 530	300	299	400	445	12	22	370	355	35	65	295	24	3	34.2

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

\*Esecuzioni speciali a richiesta.  
 Special executions on request.  
 Execution speciale a demande.

Flange normalizzate : UNI 2223-67 PN10  
 Flanges to standard : DIN 2501 ND10 DN 80 with 4 holes  
 Brides selon normes : NF E 29-201 PN10 DN 80 avec 4 trous



ENI Elettrotecnica S.p.A.  
 20092 COGNATELLO (MI)  
 Valsusa  
 Serie: SUZ  
 Valvole a farfalla - Butterfly valves - Vanes papillon

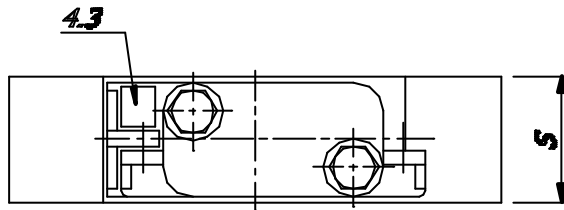
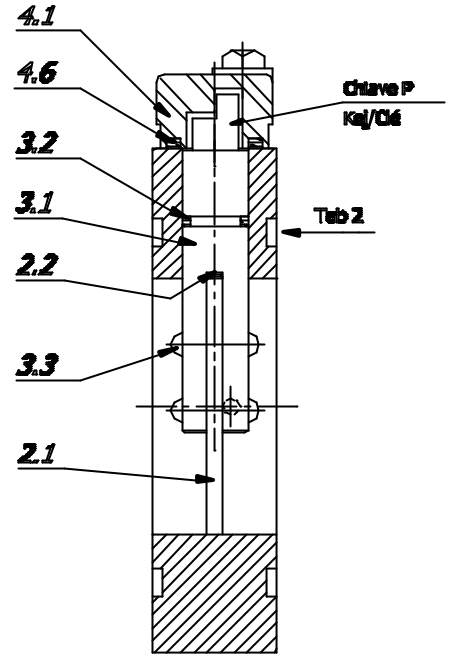
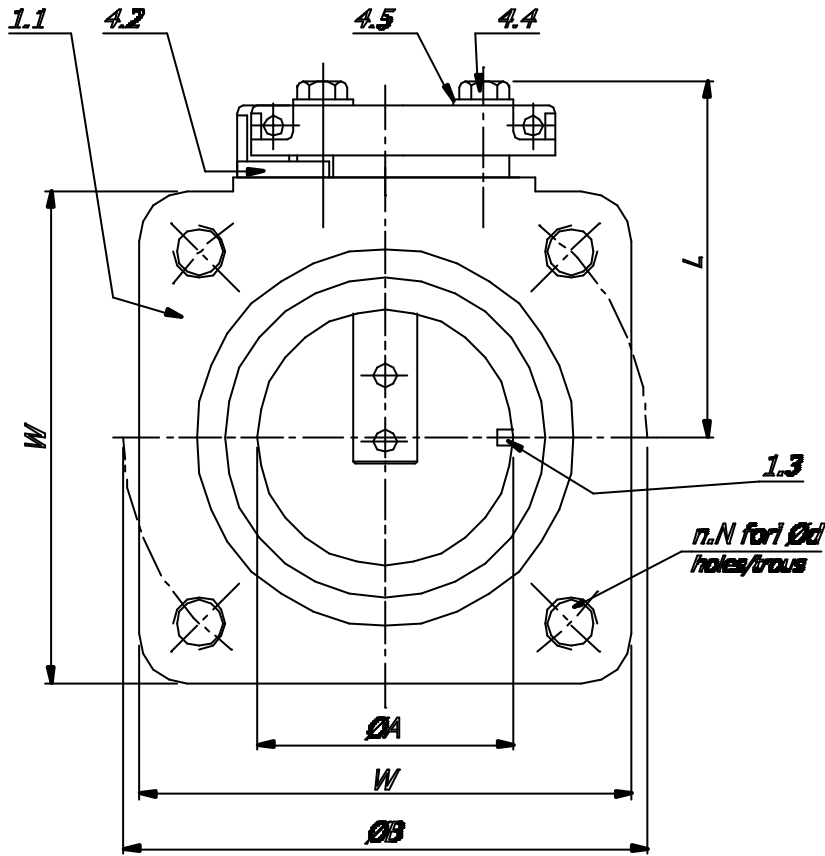
Proj. / Disegnata  
 Verif. / Norm. / Dimensioni / Materiali / Dimensioni, etc.  
 Appr. / Data  
 N. ordine / Referenza  
 Data: 08/05/2006  
 Scale: //

Scale: 1:1  
 16.SUZ

N. rev /  
Indice sulle revisioni

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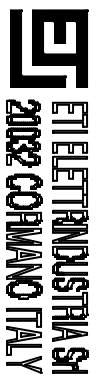
Signature  
Controllo



Tip- Type	DN	ØA	W	ØB	N	Ød	S	L	P	PESO-WEIGHT Kg.
PUWZ 050	50	51	120	125	4	M16	35	105	14	4.5
PUWZ 080	80	78	150	160	4	M16	35	120	14	5.5
PUWZ 100	100	98	170	180	4	M16	35	125	14	6.7

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

Flange normalizzate :: UNI 2223-67 PN10  
 Flanges to standard :: DIN 2501 ND10 DN80 with 4 holes  
 Brides selon normes :: NF E 29-201 PN10 DN80 avec 4 trous



ETI Elettrotecnica S.p.A.  
 20032 CORCHIANO ITALY  
 Via...  
 Tel. 039/20032  
 Fax 039/20032

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
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 Data  
 Firma

Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma

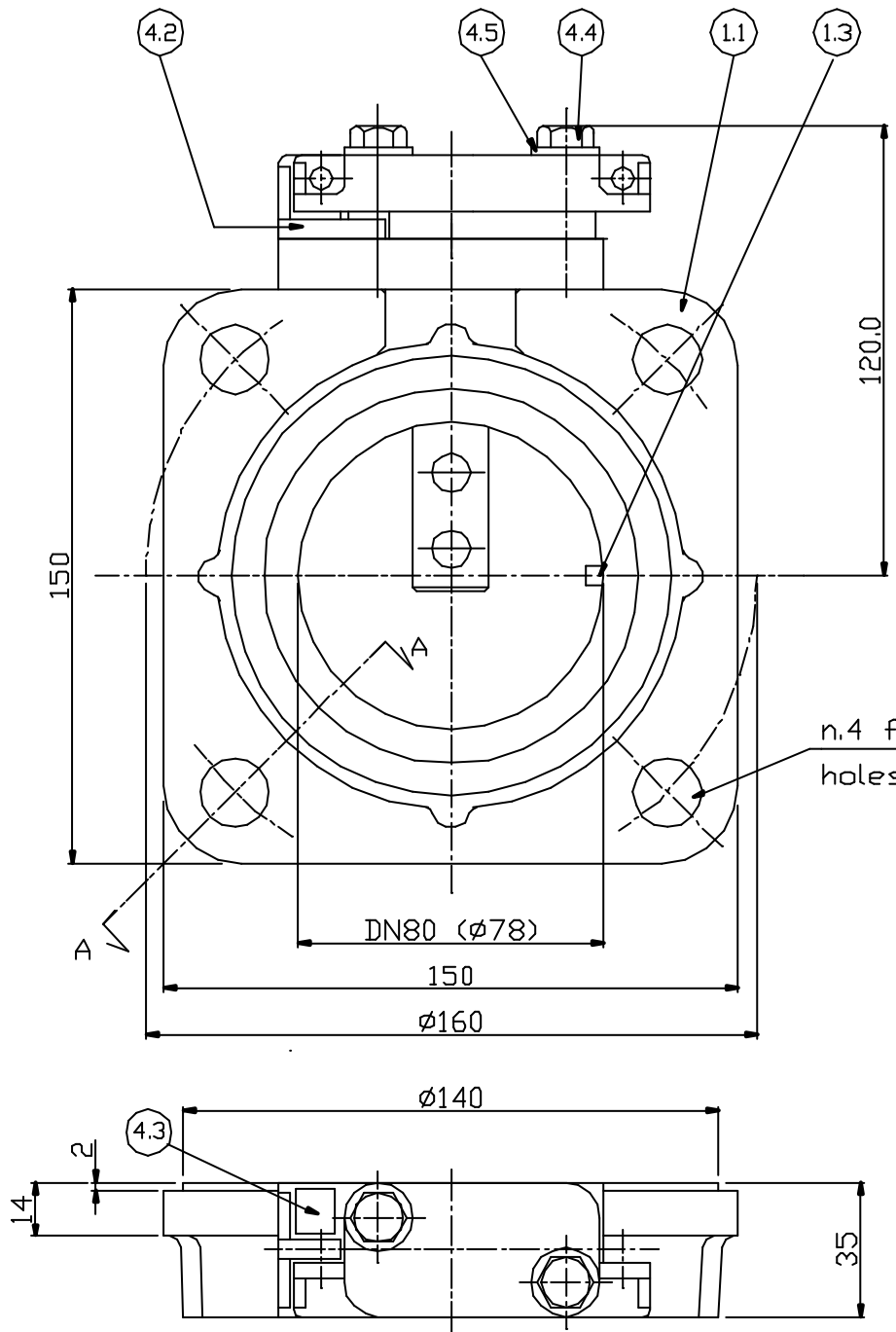
Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
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 Firma

Tip-Modello  
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 N. ordine/Articolo  
 Data  
 Firma

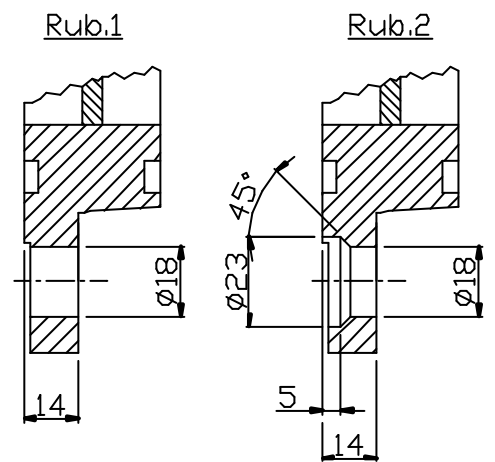
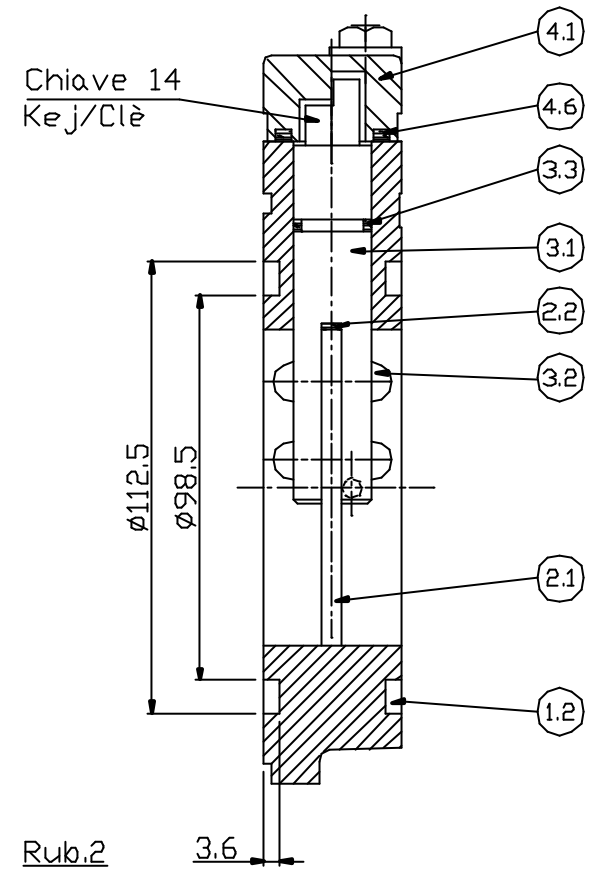
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 Serie: PUWZ  
 N. ordine/Articolo  
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 Firma

Tip-Modello  
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Tip-Modello  
 Serie: PUWZ  
 N. ordine/Articolo  
 Data  
 Firma



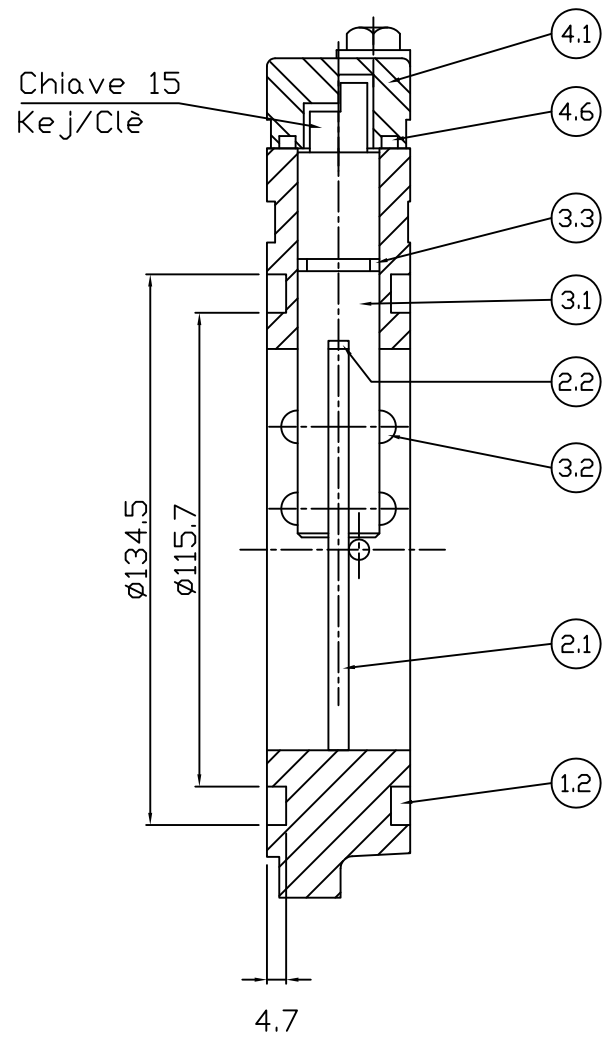
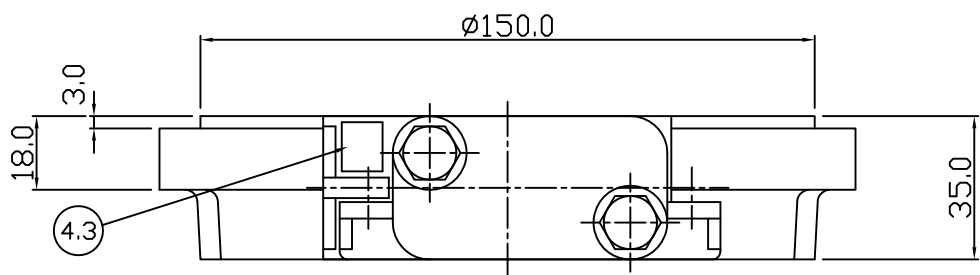
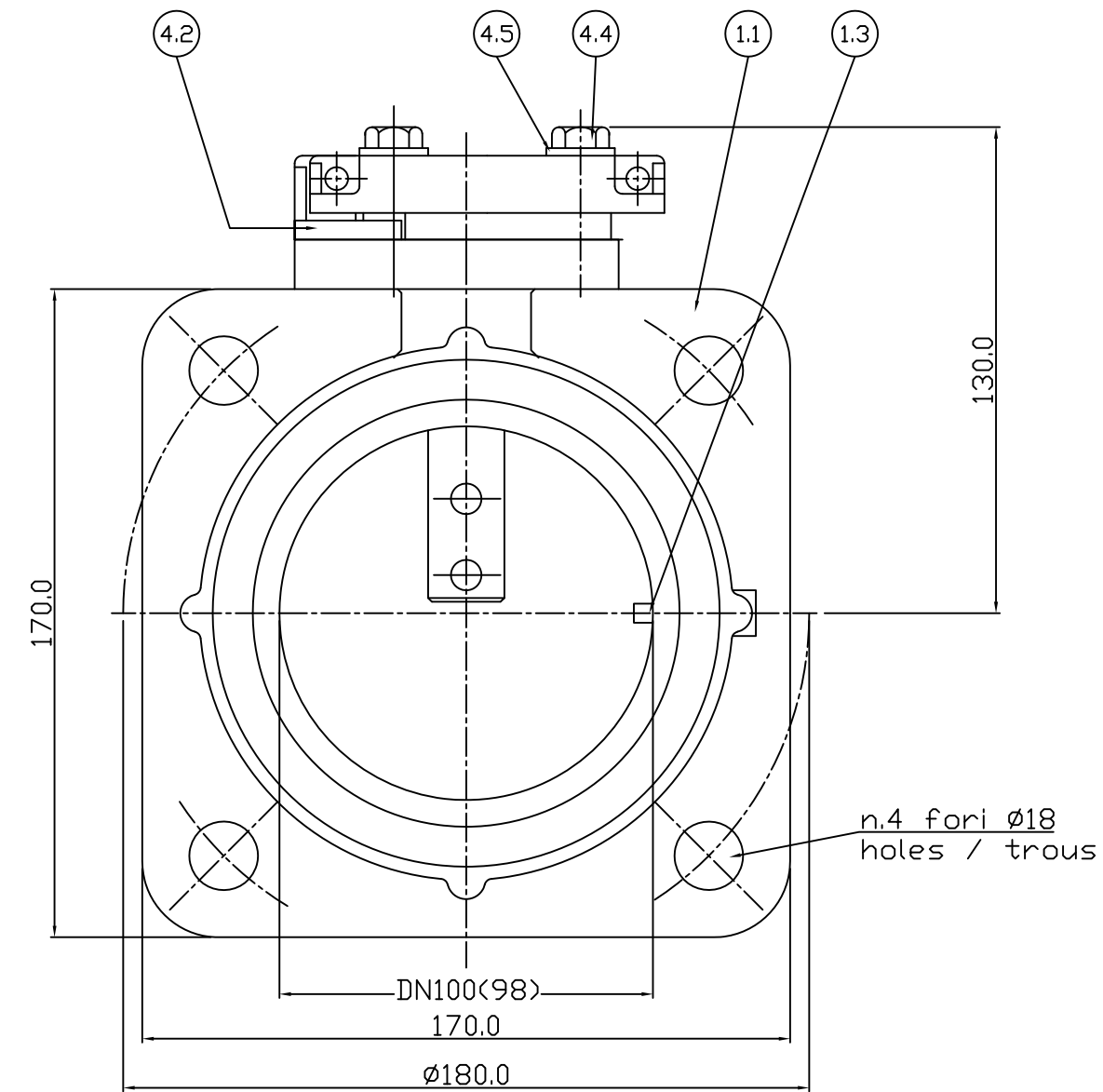
n.4 fori  $\phi 18.0$   
holes/trous




Sez.: A-A

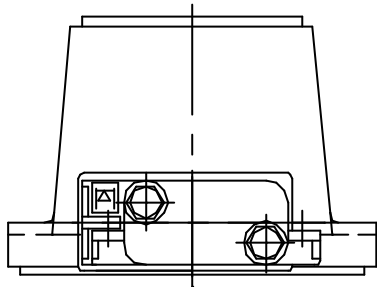
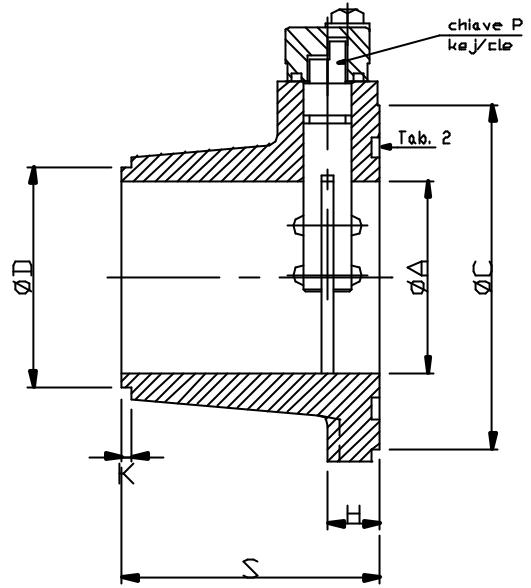
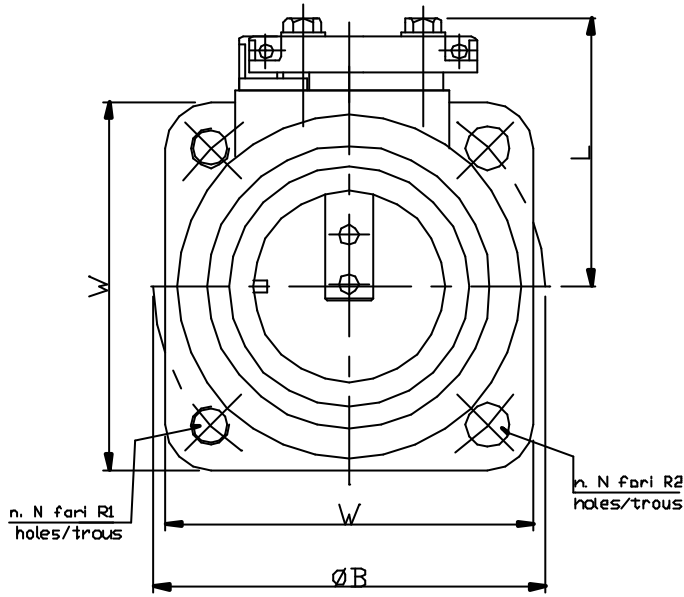
N. rev.	Nota sulla revisione	Data	Firma	Controllo
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		Valvola a farfalla-Butterfly valve-Vanne Papillon Tipo - Type <b>WUPZ 080</b>	
05-09-2006		1:1	
QUZ16.080.00			



N.	Quantità	Titolo/Descr., designazione, materiale, dimensioni, etc.	N. articolo / Materiale		
Proprietà di G L	Controlato da	Approvato da - data	Nome file	Data 06/03/2008	Scala 1:1.5
 <b>ELETTRINDUSTRIA SRL</b> 20032 CORMANO ITALY		Titolo/Descr. Valvola a farfalla Butterfly valve Vanne papillon		<b>WUPZ100</b> Numero disegno WUPZ16.100.00	
N. rev   Nota sulla revisione		Data   Firma   Controllo		Modifica   Pagina	

N/rev Nota sulla revisione  
 Data  
 Signature Controllo



Tipo-Type	DN	ØA	W	ØB	ØC	ØD	N	R.1	R.2	S	H	K*	L	P	PESO-WEIGHT Kg.
WUZ 050	50	51	125	125	102	63	4	M16*	Ø18	70	14	6	110	14	2,8
WUZ 080	80	78	150	160	140	90	4	M16*	Ø18	70	21	8	120	14	4,5
WUTZ 080	80	78	150	160	140	90	4	M16	Ø18*	105	21	4	120	14	5,2

Dimensioni in mm - Measures in mm - Dimensions en mm

(< \*) Esecuzione standard  
 Standard execution

Flange normalizzate: UNI2223-67 PN10  
 Flanges to standards: DIN2501 ND10  
 Brides selon normes: NF E29-201 PN10

DN80 with 4 holes  
 DN80 avec 4 trous

Riproduzione vietata | Non ristampare le quote dal disegno

**ETI ELETTRONICA S.p.A.**  
**20092 CORIMANO ITALY**

Valido a farfalla - Butterfly valves - Vanne papillon  
 Serie: WUZ - WUTZ

16.WUZ-WUTZ

Quantità	Descrizione	Approvato da	Rev.

N. ordine/Rif.ordine

25/07/06

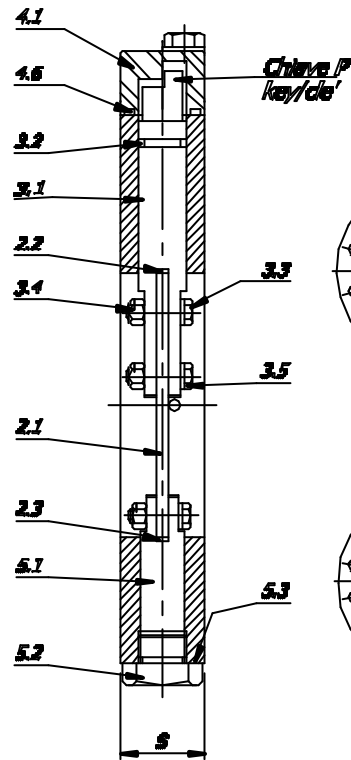
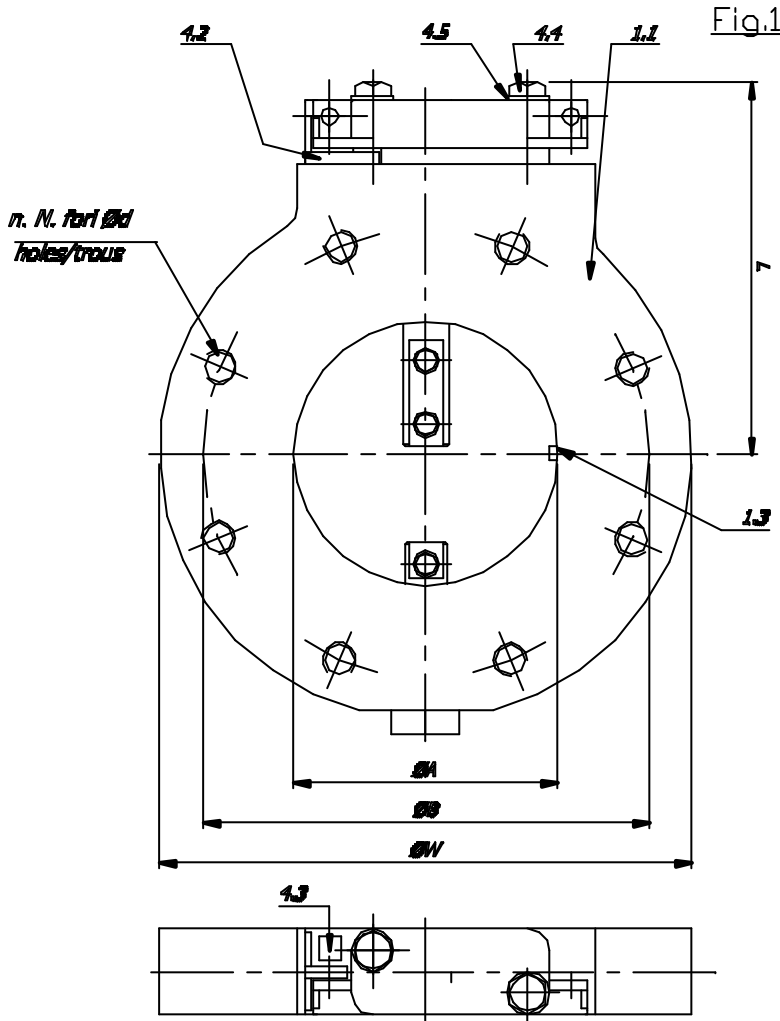
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N. rev. Nota sulla revisione

Data

Signature Controllo



Tipo-Type	DN	øA	øB	øW	N	ød	S	P	L	Fig.	PESI-WEIGHT Kg
JUX 025	25	28	85	115	4	M12	35	13	100	4	3,0
JUX 050	50	51	125	165	4	M16	35	14	118	4	4,0
JUX 080	80	78	160	200	4	M16	35	14	135	4	7,5
JUX 080/8F	80	78	160	200	8	M16	35	14	135	1-4	7,5
JUX 125	125	124	210	250	8	M16	40	19	175	1	12,8
JUX 150	150	149	240	285	8	M20	40	19	195	1	15,5
JUX 175	175	174	270	315	8	M20	40	19	208	1	18,0
JUX 200	200	198	295	340	8	M20	40	19	219	1	21,0
JUX 250	250	249	350	395	12	M20	40	19	244	2	25,0
JUX 300	300	299	400	445	12	M20	60	24	270	2	44,0
JUX 350 *	350	348	460	505	16	M20	60	24	310	3	53,0
JUX 400 *	400	390	515	565	16	M22	60	24	340	3	61,0

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

\*Esecuzioni speciali a richiesta.  
Special executions on request.  
Execution speciales a demande.

Flange normalizzate : UNI 2223-67 PN10  
Flanges to standard : DIN 2501 ND10  
Brides selon normes : NF E 29-201 PN10

Riproduzione vietata Non ristampare in quote del disegno

**ETI ELETTROINDUSTRIALI**  
**ZONE COMANDI ITALY**

Valvole a farfalla - Butterfly valves - Valves papillon  
Serie: **JUX**

16-JUX

Quantità  
Thesis/Normali, designazioni, materiali, dimensioni, etc.  
N. ordine/contratto  
03/03/2006

N. rev  
 Nota sulle revisioni  
 Data  
 Signature  
 Controllo

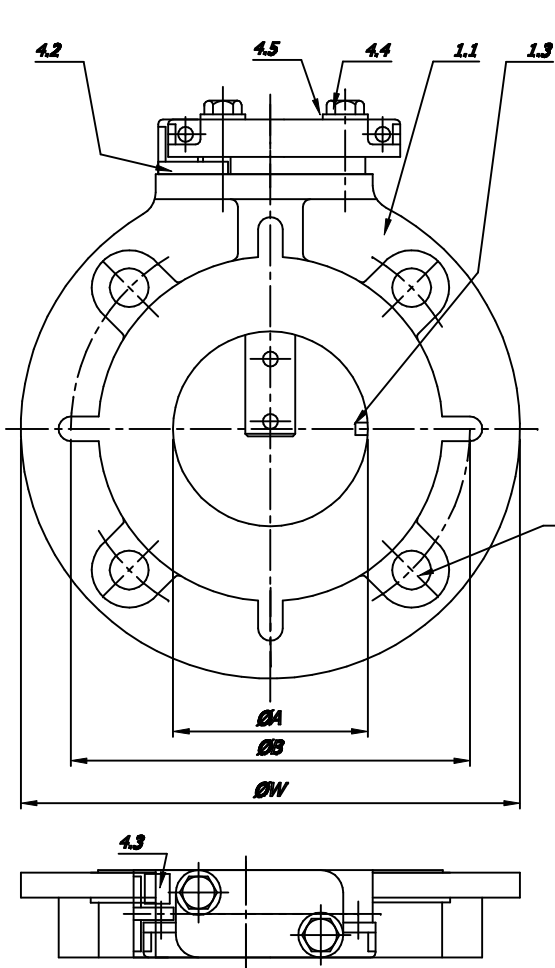


Fig.1

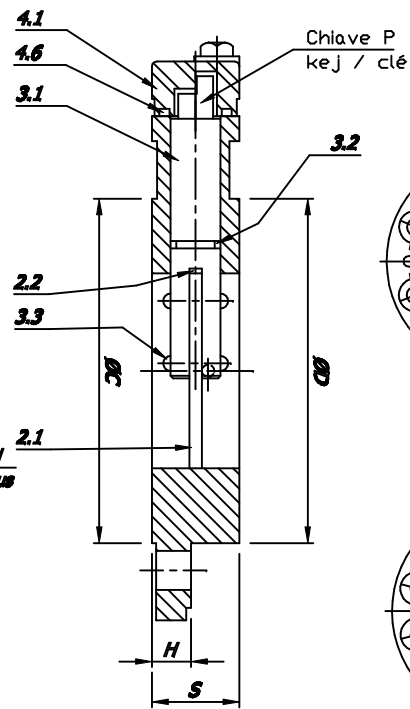


Fig.2

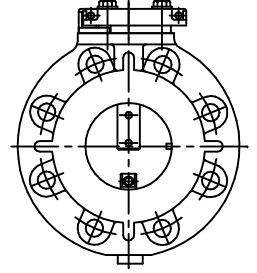


Fig.3

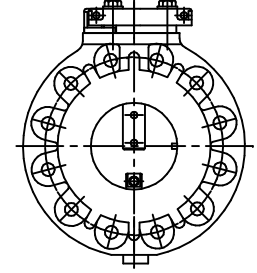
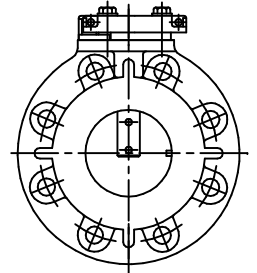


Fig.4



Tipo-Type	DN	ØA	ØB	ØW	N	Ød	ØC	ØD	H	S	L	P	Fig.	PESO-WEIGHT Kg.
SUX 505*	50	51	125	165	4	18	165	92	15	35	145	14	1	3.7
SUX 506*	65	64	145	185	4	18	185	100	15	35	155	14	1	4.0
SUX 507	80	78	160	200	4	18	138	122	13	35	145	14	1	4.2
SUX 507 8f *	80	78	160	200	∞	18	138	122	13	35	145	14	4	4.2
SUX 510	100	98	180	220	8	18	158	142	14	35	155	14	4	5.9
SUX 511	125	124	210	250	8	18	238	172	17	40	175	19	2	8.5
SUX 512	150	149	240	285	8	22	273	195	17	40	195	19	2	9.2
SUX 513	175	174	270	315	8	22	242	225	18	40	210	19	2	13.2
SUX 520	200	198	295	340	8	22	268	250	30	60	245	24	2	18.5
SUX 525	250	249	350	395	12	22	320	305	32	60	270	24	3	28.2
SUX 530	300	299	400	445	12	22	370	355	35	65	295	24	3	34.2

Dimensioni in mm. - Measures in mm. - Dimensions en mm.

\*Esecuzioni speciali a richiesta.  
 Special executions on request.  
 Execution speciales a demande.

Flange normalizzate : UNI 2223-67 PN10  
 Flanges to standard : DIN 2501 ND10 DN 80 with 4 holes  
 Brides selon normes : NF E 29-201 PN10 DN 80 avec 4 trous

Rif. Quantità Titolo/Nome, designazione, materiale, dimensioni, etc. N. articolo/affinamento

Progetto da Controllo da Approvato da - data Firma Data 08/05/2006

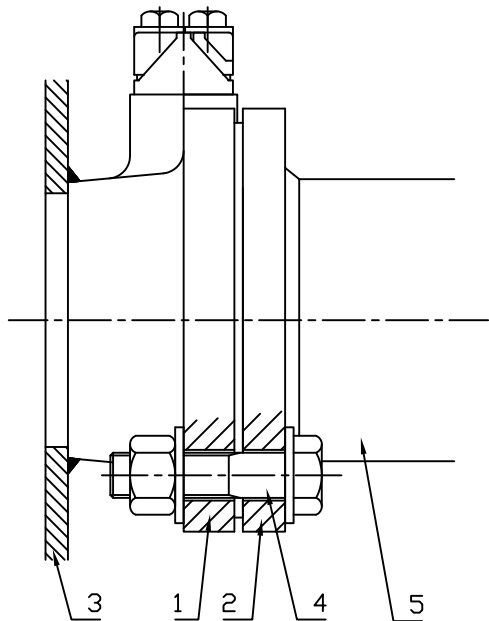
Reproduzione vietata Non misurare le quote dal disegno

**ETI** ETI ELETTRINDUSTRIA S.p.A. Valvola a farfalla - Butterfly valves - Vannes papillon Serie: SUX

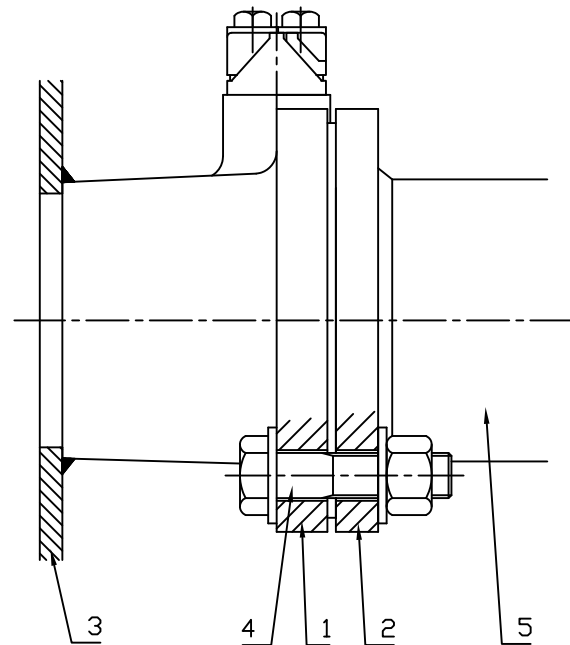
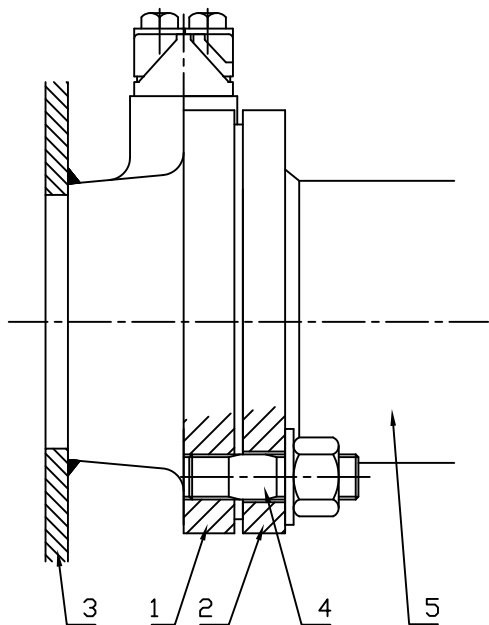
Numero disegno 16.SUX

Modifica Foglio //





Serie:WUZ



Serie:WUTZ

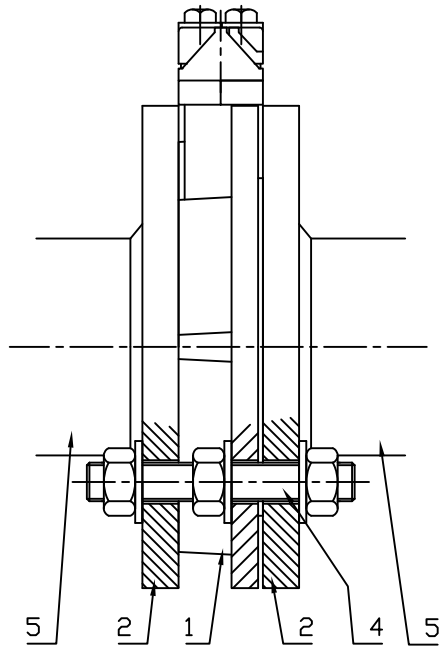
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4		Vite-Tirante/ Screw-Bolt/ Vis-Tirant	
3		Cassa trasformatore/ Transformer tank/ Cuve transformateur	
2		Flangia/ Flange/ Bride	
1		Valvola/ Valve/ Vanne	
Rif.	Quantità	Titolo/Nome, designazione, materiale, dimensione, etc.	N. articolo/Riferimento

Progettato da	Controllato da	Approvato da - data	Nome file	Data	Scala
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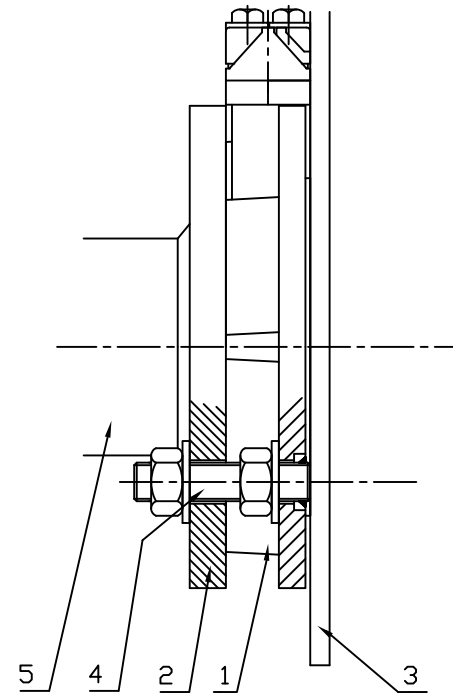
 <b>ETI ELETTRINDUSTRIA SRI</b> 20032 CORMANO ITALY	Titolo/Nome Valvole a farfalla - Butterfly valves - Vannes papillon Esempio di montaggio - Assembling examples - Exemples de montage Serie: WUZ - WUTZ		
	Numero disegno	Modifica	Foglio
	16.APP/1		

Riproduzione vietata Non misurare le quote dal disegno

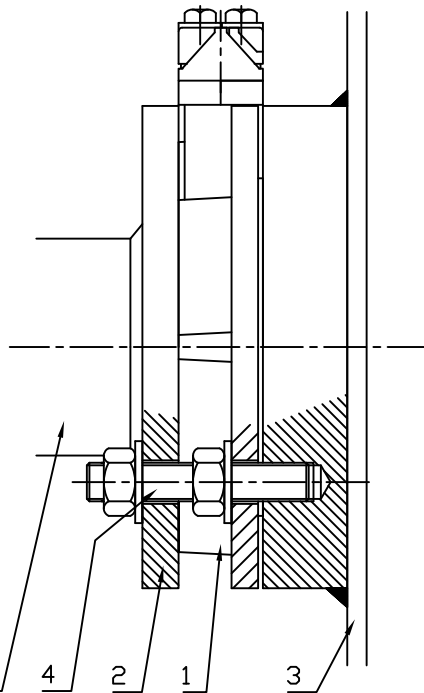
A	AGGIORNATO NOME VALVOLE	Data	Signatura	Controllo
N.rev	Nota sulla revisione	Data	Signatura	Controllo



SERIE:SUZ-WUPZ



SERIE:SUZ



5		Tubazione/ Pipeline/ Tuyauterie	
4		Vite-Tirante/ Screw-Bolt/ Vis-Tirant	
3		Cassa trasformatore/ Transformer tank/ Cuve transformateur	
2		Flangia/ Flange/ Bride	
1		Valvola/ Valve/ Vanne	
Rif.	Quantità	Titolo/Nome, designazione, materiale, dimensione, etc.	N. articolo/Riferimento

Progettato da	Controllato da	Approvato da - data	Nome file	Data	Scala
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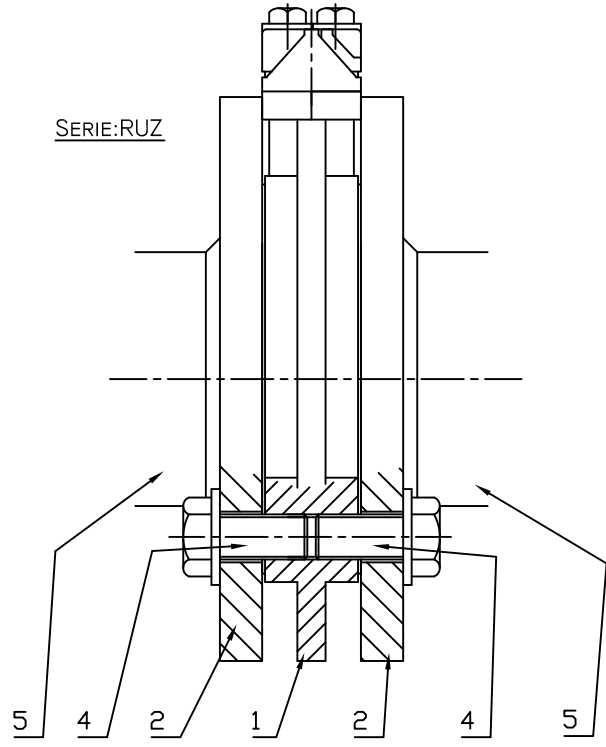


Valvole a farfalla - Butterfly valves - Vannes papillon  
 Esempio di montaggio - Assembling examples - Exemples de montage  
 Serie: SUZ - WUPZ

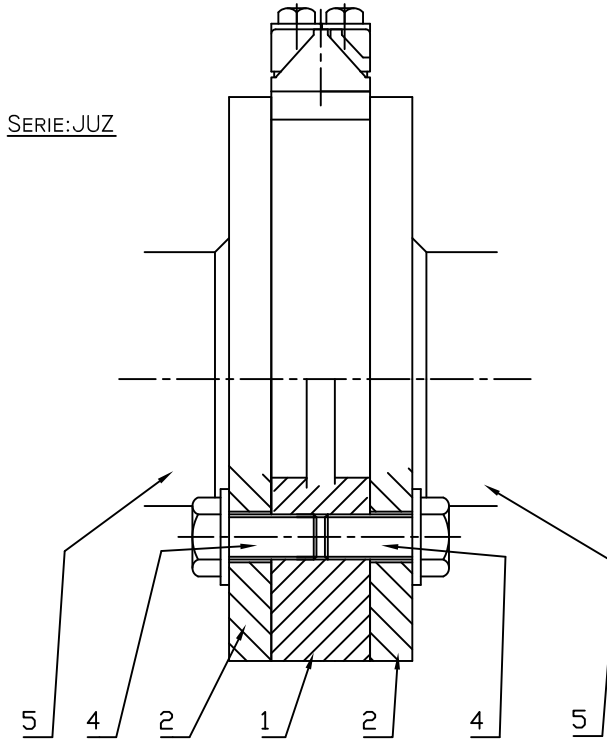
Numero disegno	Modifica	Foglio
16.APP/2		

N.rev	Nota sulla revisione	Data	Signatura	Controllo
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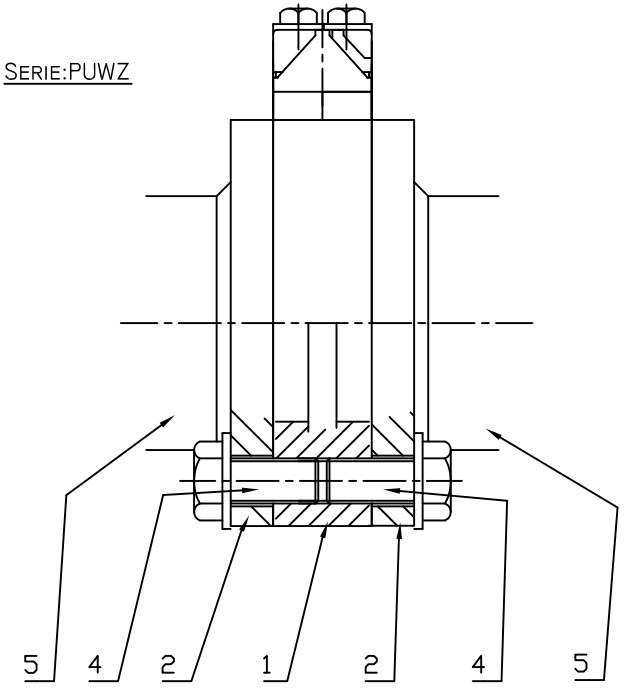
SERIE:RUZ



SERIE:JUZ



SERIE:PUWZ



5	Tubazione/ Pipeline/ Tuyauterie
4	Vite-Tirante/ Screw-Bolt/ Vis-Tirant
3	Cassa trasformatore/ Transformer tank/ Cuve transformateur
2	Flangia/ Flange/ Bride
1	Valvola/ Valve/ Vanne

Rif.	Quantità	Titolo/Nome, designazione, materiale, dimensione, etc.	N. articolo/Riferimento
Progettato da	Controllato da	Approvato da - data	Nome file
			Data 19/06/09
			Scala //

**ETI ELETTRINDUSTRIA Srl**  
20032 CORMANO ITALY

Valvole a farfalla - Butterfly valves - Vannes papillon  
Esempio di montaggio - Assembling examples - Exemples de montage  
Serie: JUZ - PUWZ - RUZ

Numero disegno  
16.APP/3

N.rev	Nota sulla revisione	Data	Signatura	Controllo
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