

SERIE / TYPE

UGD

POMPA
DOSATRICE

METERING
PUMP

INIZIO - HOME



INDICE - TABLE OF CONTENTS

INDICE SERIE UDG

TABLE OF CONTENTS SERIE UDG

| | |
|--|-----------|
| POMPE DOSATRICI A MEMBRANA MECCANICA SERIE UDG | 27 |
| METERING PUMPS TYPE UGD WITH MECHANICAL DIAPHRAGM | 28 |
| DATI CARATTERISTICI | 29 |
| PERFORMANCE | |
| DIMENSIONI D'INGOMBRO | 29 |
| OVERALL DIMENSIONS | |
| DISEGNO SEZIONE MOVIMENTO POMPE SERIE UGD | 30 |
| <i>GEAR DRAWING PUMPS TYPE UGD</i> | |
| DISEGNI SEZIONI TESTATE POMPE SERIE UGD | 34 |
| ESECUZIONE IN AISI 316 | |
| <i>SECTIONS DRAWINGS PUMPING HEAD TYPE UGD</i> | |
| <i>EXECUTION IN 316 S.S.</i> | |
| DIS / DWG NR. 00M075S | |
| DIS / DWG NR. 00M100S | |
| DISEGNI SEZIONI TESTATE POMPE SERIE UGD | 37 |
| ESECUZIONE IN PVC | |
| <i>SECTIONS DRAWINGS PUMPING HEAD TYPE UGD</i> | |
| <i>EXECUTION IN PVC</i> | |
| DIS / DWG NR. 00M075P | |
| DIS / DWG NR. 00M100P | |

TORNA ALL'INIZIO - TORNA A UDG

METERING PUMPS TYPE UGD WITH MECHANICAL DIAPHRAGM

INTRODUCTION

The dosing pumps type UGD are studied to offer a high reliability and a metering precision also after a long working period.

The simple construction permits the maintenance operations to unexperienced personnel.

The pumps UGD are manufactured according to the Standards 89/392 CE and following modifications.

CONSTRUCTION

The pump casing on which is installed the gear is made of die-cast aluminium and it is in monobloc execution, as well as the lantern of the pump head and the lantern of the motor.

The pumping head can be supplied in AISI 316 or in PVC.

The diaphragm is made of rubber with inserted fabrics and externally lined with PTFE.

WORKING PRINCIPLE

The dosing pumps type UGD are mechanical diaphragm type connected to the driving mechanism through a shaft. The system is type spring return.

The profile of the membrane is designed to assure a flow variation directly proportioned to the stroke.

The electric motor drives the diaphragm through a gear type worm and worm wheel installed in the pump casing. The wheel is installed on the side of the driving shaft that pushes the rod connected to the diaphragm through a cam. The return of the plunger is assured by the releasing of the spring installed on the rod that is compressed during the pushing phase.

The gear is oil lubricated and it is supported at the ends by oversized ball bearings.

The flowrate can be adjusted manually or automatically with electric or pneumatic stroke positioners.

The adjusting system is based on a regulation micrometric screw with a rod that shuts the plunger stroke.

This system assures the dosing accuracy and the repeatability.

The dosing range varies from 0 to 100% of the flowrate.

ELECTRIC MOTOR

The electric motors are manufactured according to the Standards UNEL-MEC.

The main characteristics are:

frame B14, feeding voltage 230/440 V, 3 phases, frequency 50/60 Hz, mechanical protection IP 55 and insulation CI F.

On request it is possible to install explosion-proof or single phase motors.

Elettropompa dosatrice a membrana diretta
regolazione manuale da 0÷100%

Direct diaphragm metering pump
manual adjustment from 0÷100%

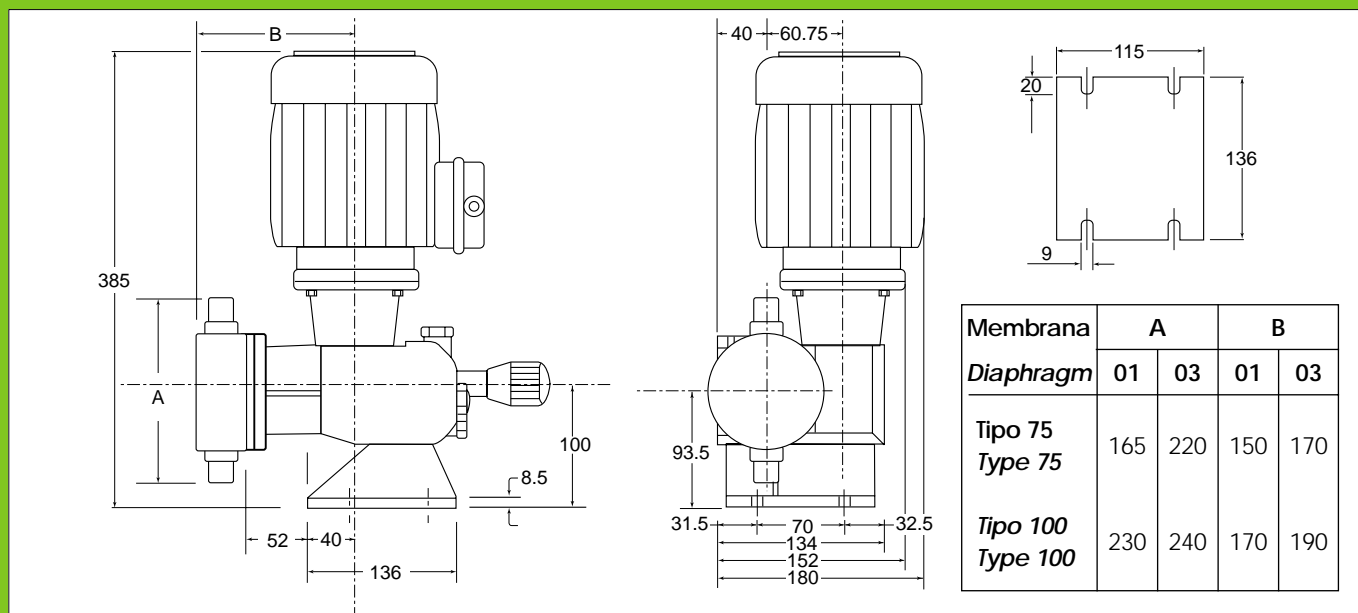
DATI CARATTERISTICI

PERFORMANCE

| Modello | Corsa mm | Membrana mm | Colpi al 1' | Motore Kw | Portata lt/h | | | Attacchi | |
|---------|-----------|--------------|-----------------|-----------|---------------|-----|-----|-------------|--------|
| Type | Stroke mm | Diaphragm mm | Speed s. per 1' | Motor Kw | Capacity lt/h | | | Connections | |
| | | | | | BAR | | | | |
| | | | | | 0 | 3 | 6 | 01 | 03 |
| UGD | 10 | 75 | 40 | 0.18 6P | 65 | 62 | 60 | 1/2 GM | 1/2 GF |
| UGD | 10 | 75 | 60 | 0.25 4P | 100 | 85 | 80 | 1/2 GM | 1/2 GF |
| UGD | 10 | 75 | 120 | 0.25 4P | 200 | 185 | 180 | 1/2 GM | 1/2 GF |
| UGD | 10 | 100 | 60 | 0.37 4P | 210 | 180 | — | 3/4 GF | 3/4 GF |
| UGD | 10 | 100 | 120 | 0.37 4P | 400 | 360 | — | 3/4 GF | 3/4 GF |

DIMENSIONI D'INGOMBRO

OVERALL DIMENSIONS

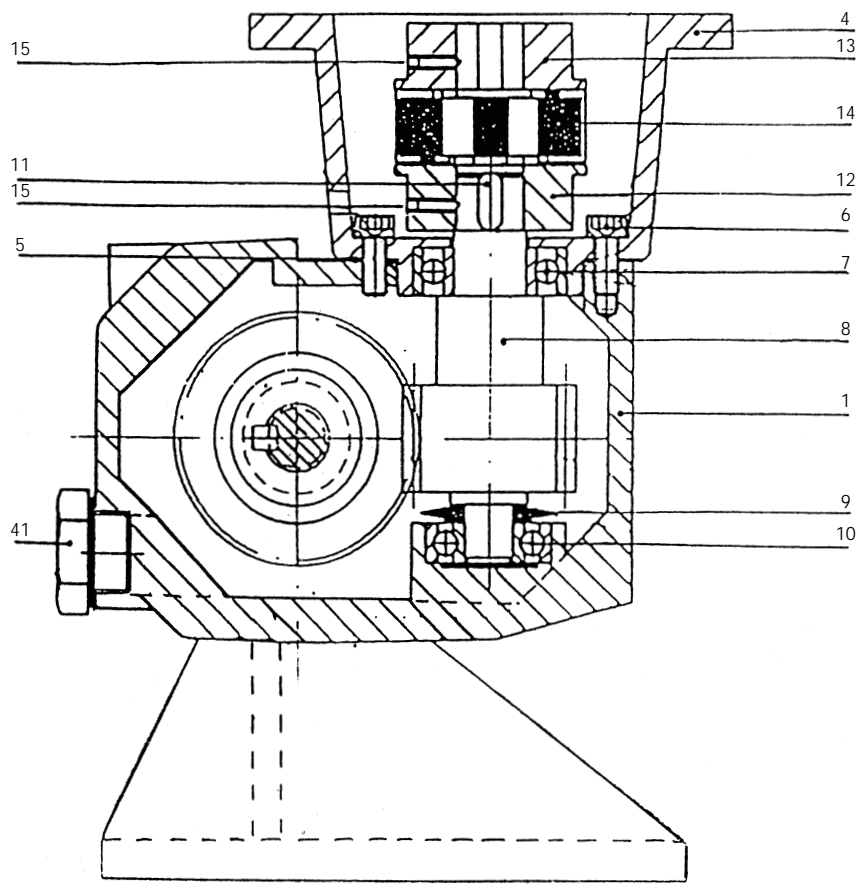


| COSTRUZIONE / CONSTRUCTION | COSTRUZIONE / CONSTRUCTION | |
|----------------------------|----------------------------|----------|
| | 01 | 03 |
| Testata Pompa / Pump Head | AISI 316 | PVC |
| Membrana / Diaphragm | NBR/PTFE | NBR/PTFE |
| Valvole / Valves | AISI 316 | PYREX |
| Sede Valvola / Valve Seat | AISI 316 | PVC |
| Guarnizioni / Valve Seal | PTFE | PTFE |

Motore elettrico CVE - 220/440V/3/50/60 Hz - IP 55 - Cl. F - Forma B14
Standard electric motor TEFC - 220/440V/3/50/60 Hz - IP 55 - Cl. F - Frame B14

DISEGNO SEZIONE MOVIMENTO POMPE **SERIE UGD**

*GEAR DRAWING PUMPS **TYPE UGD***



EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)

Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

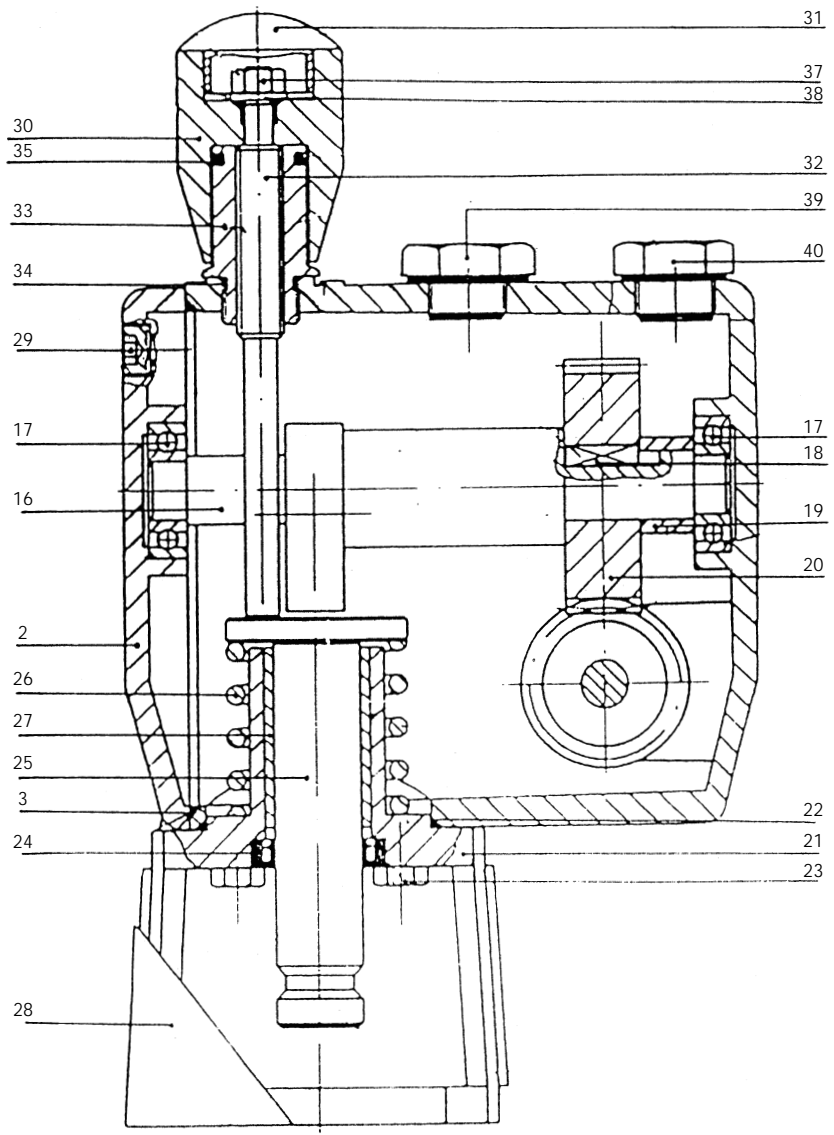
OGGETTO : **MOVIMENTO UGD**

SUBJECT : **GEAR UGD**

DIS/DWG. NR : **100.00.02 A**

DATA/DATE : **04/2000**

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE



EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)
 Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : MOVIMENTO UGD
 SUBJECT : GEAR UGD

DIS/DWG. NR : 100.00.02 B DATA/DATE : 04/2000

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE

| | | |
|----|--------------------------------|----------------------------|
| 1 | CORPO POMPA | PUMP BODY |
| 2 | COPERCHIO | SIDE COVER |
| 3 | O RING COPERCHIO | COVER O RING |
| 4 | CAMPANA MOTORE | MOTOR LANTERN |
| 5 | GUARNIZIONE CAMPANA | MOTOR LANTERN GASKET |
| 6 | VITE CAMPANA | MOTOR LANTERN SCREW |
| 7 | CUSCINETTO CAMPANA | MOTOR LANTERN BALL BEARING |
| 8 | VITE SENZA FINE | WORM GEAR |
| 9 | MOLLA A TAZZA | SPRING |
| 10 | CUSCINETTO VITE SENZA FINE | WORM GEAR BALL BEARING |
| 11 | CHIAVETTA VITE SENZA FINE | WORM GEAR KEY |
| 12 | GIUNTO LATO POMPA | COUPLING PUMP SIDE |
| 13 | GIUNTO LATO MOTORE | COUPLIG MOTOR SIDE |
| 14 | STELLA GIUNTO | FLEXIBLE COUPLING |
| 15 | GRANO GIUNTO | GRUB SCREW |
| 16 | ALBERO ECCENTRICO | ECCENTRIC SHAFT |
| 17 | CUSCINETTO ALBERO | SHAFT BALL BEARING |
| 18 | CHIAVETTA RUOTA ELICOIDALE | WORM WHEEL KEY |
| 19 | DISTANZIALE | SPACER |
| 20 | RUOTA ELICOIDALE | WORM WHEEL |
| 21 | LANTERNA TESTA | LANTERN HEAD |
| 22 | O RING LANTERNA | LANTERN HEAD O RING |
| 23 | VITE LANTERNA TESTA | LANTERN HEAD SCREW |
| 24 | PARAOLIO SLITTA | PUSH ROD OIL SEAL |
| 25 | SLITTA | PUSH ROD |
| 26 | MOLLA | PUSH ROD SPRING |
| 27 | BUSSOLA SLITTA | LANTERN HEAD SLEEVE |
| 28 | COPRI LANTERNA | LANTERN HEAD PROTECTION |
| 29 | VITE COPERCHIO | COVER SCREW |
| 30 | MANOPOLA | ADJUSTING KNOB |
| 31 | TAPPO MANOPOLA | KNOB COVER |
| 32 | VITE DI REGOLAZIONE | ADJUSTING SCREW |
| 33 | SUPPORTO DI REGOLAZIONE | ADJUSTING GUIDE |
| 34 | O RING SUPPORTO DI REGOLAZIONE | ADJUSTING GUIDE O RING |
| 35 | O RING MANOPOLA | ADJUSTING KNOB O RING |
| 37 | DADO VITE DI REGOLAZIONE | ADJUSTING SCREW NUT |
| 38 | RONDELLA VITE DI REGOLAZIONE | ADJUSTING SCREW WASHER |
| 39 | SPIA LIVELLO OLIO | OIL WIDOW |
| 40 | TAPPO CARICO OLIO | OIL FILTER PLUG |
| 41 | TAPPO SCARICO OLIO | OIL DRAIN PLUG |

EURALCA *SRL* - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)
 Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : **MOVIMENTO UGD ELENCO COMPONENTI**
 SUBJECT : **GEAR UG PART LIST**

DIS/DWG. NR : **100.00.02 C**

DATA/DATE : **04/2000**

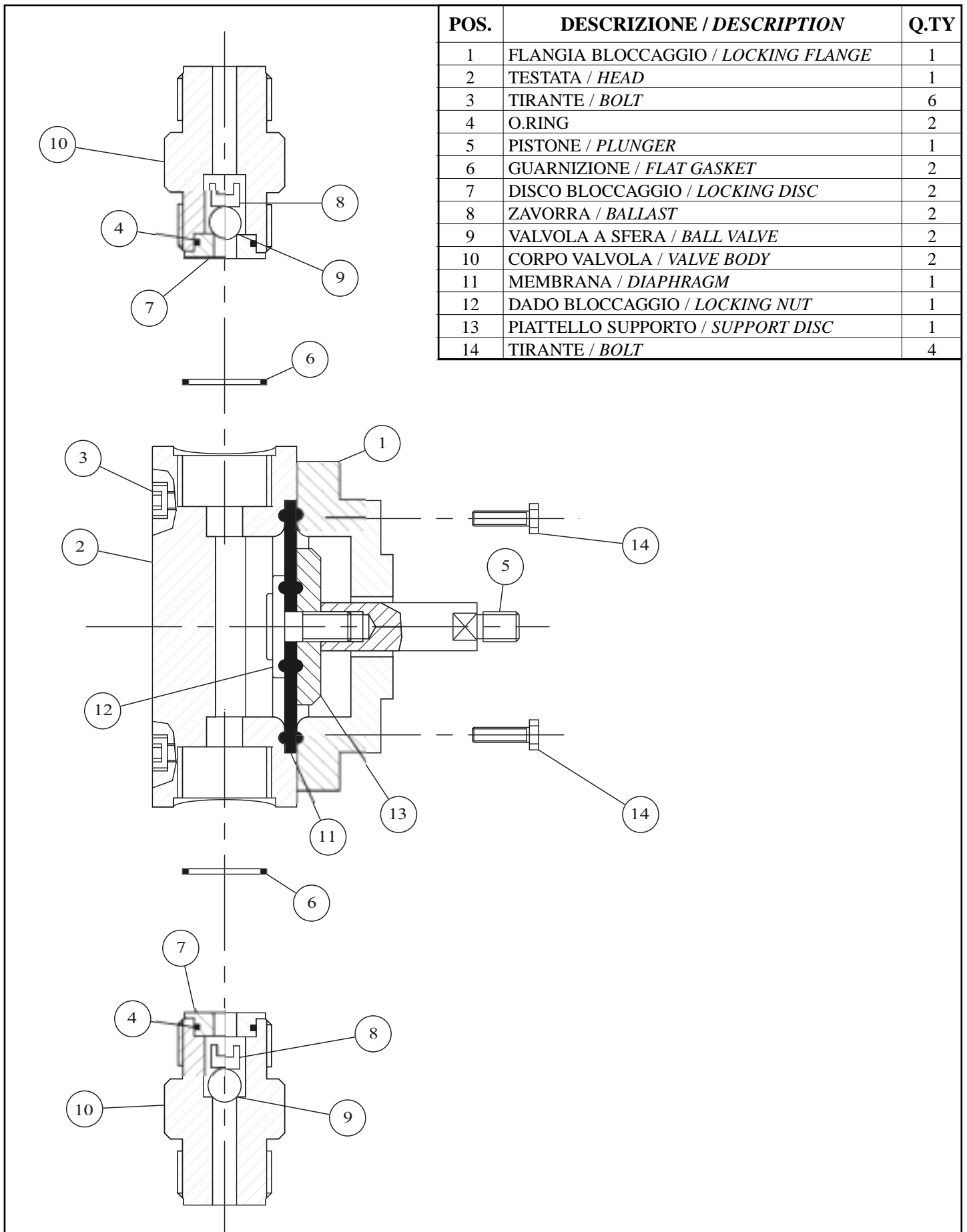
PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE

DISEGNI SEZIONI TESTATE POMPE **SERIE UGD**
ESECUZIONE IN AISI 316

*SECTIONS DRAWINGS PUMPING HEAD **TYPE UGD***
EXECUTION IN 316 S.S.

DIS / DWG NR. 00M075S

DIS / DWG NR. 00M100S



| POS. | DESCRIZIONE / DESCRIPTION | Q.TY |
|------|-------------------------------------|------|
| 1 | FLANGIA BLOCCAGGIO / LOCKING FLANGE | 1 |
| 2 | TESTATA / HEAD | 1 |
| 3 | TIRANTE / BOLT | 6 |
| 4 | O.RING | 2 |
| 5 | PISTONE / PLUNGER | 1 |
| 6 | GUARNIZIONE / FLAT GASKET | 2 |
| 7 | DISCO BLOCCAGGIO / LOCKING DISC | 2 |
| 8 | ZAVORRA / BALLAST | 2 |
| 9 | VALVOLA A SFERA / BALL VALVE | 2 |
| 10 | CORPO VALVOLA / VALVE BODY | 2 |
| 11 | MEMBRANA / DIAPHRAGM | 1 |
| 12 | DADO BLOCCAGGIO / LOCKING NUT | 1 |
| 13 | PIATTELLO SUPPORTO / SUPPORT DISC | 1 |
| 14 | TIRANTE / BOLT | 4 |

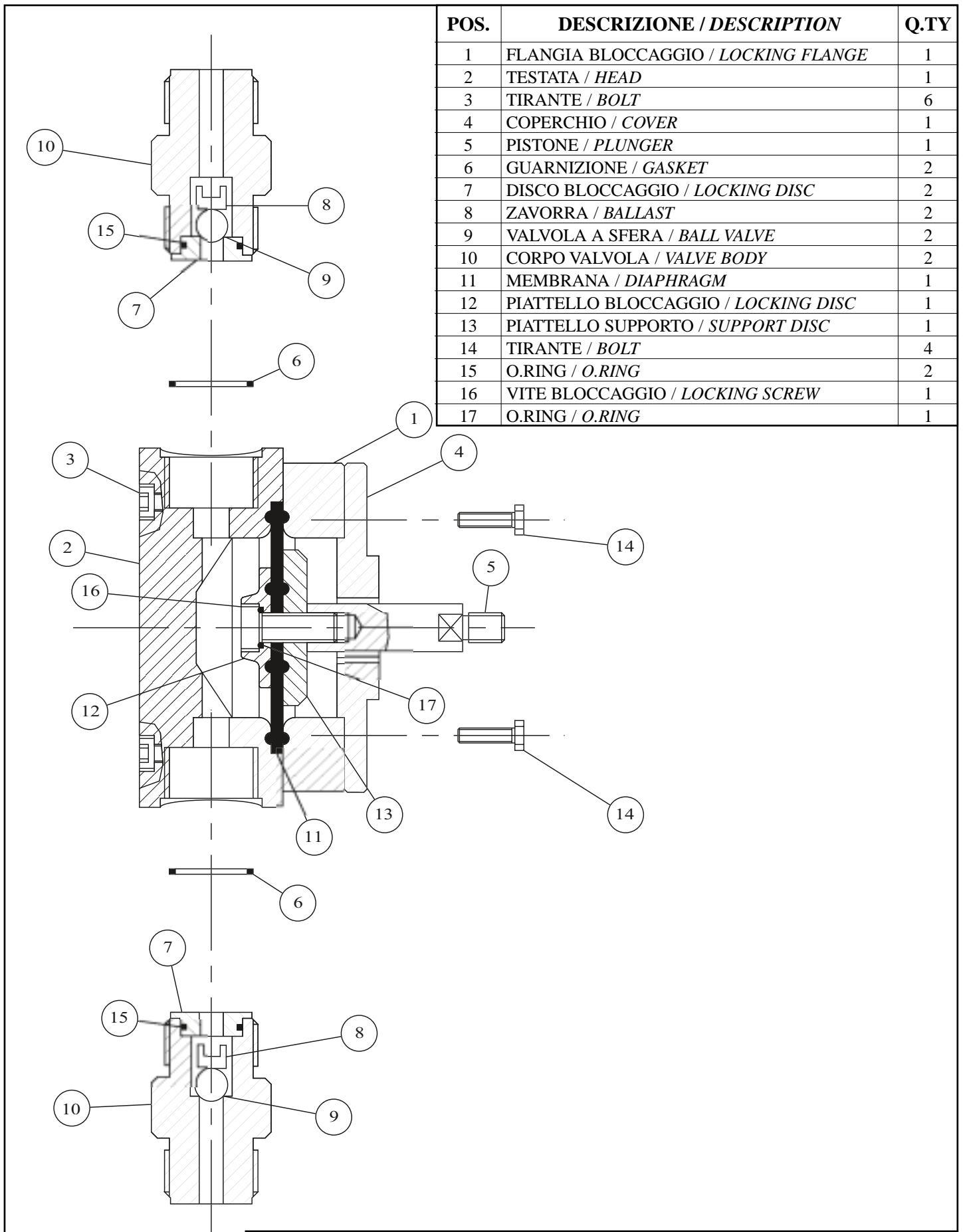
EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)
 Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : TESTATA POMPA UGD-01
 SUBJECT : PUMP HEAD UGD 01

DIS/DWG. NR : 00M075S

DATA/DATE : 04/2000

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE



EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)
 Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : TESTATA POMPA UGD-01

SUBJECT : PUMP HEAD UGD 01

DIS/DWG. NR : 00M100S

DATA/DATE : 04/2000

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE

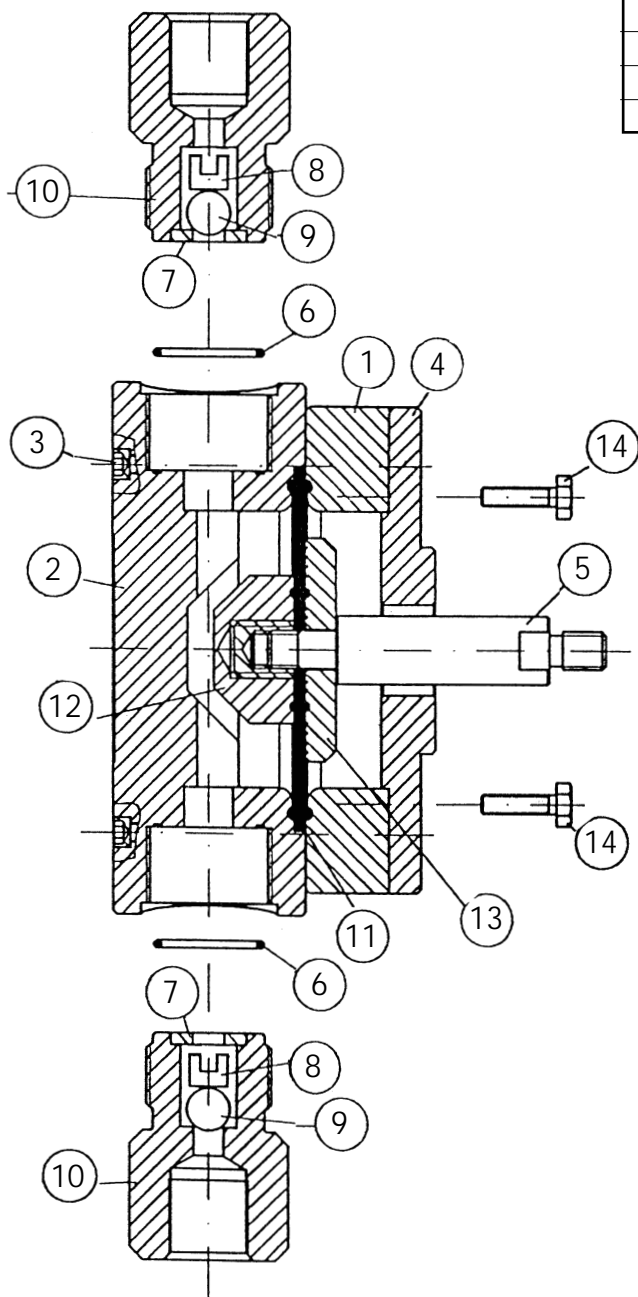
DISEGNI SEZIONI TESTATE POMPE **SERIE UGD**
ESECUZIONE IN PVC

*SECTIONS DRAWINGS PUMPING HEAD **TYPE UGD***
EXECUTION IN PVC

DIS / DWG NR. 00M075P

DIS / DWG NR. 00M100P

| POS. | DESCRIZIONE / DESCRIPTION | Q.TY |
|------|-------------------------------------|------|
| 1 | FLANGIA BLOCCAGGIO / LOCKING FLANGE | 1 |
| 2 | TESTATA / HEAD | 1 |
| 3 | TIRANTE / BOLT | 6 |
| 4 | COPERCHIO / COVER | 1 |
| 5 | PISTONE / PLUNGER | 1 |
| 6 | GUARNIZIONE / FLAT GASKET | 2 |
| 7 | DISCO BLOCCAGGIO / LOCKING DISC | 2 |
| 8 | ZAVORRA / BALLAST | 2 |
| 9 | VALVOLA A SFERA / BALL VALVE | 2 |
| 10 | CORPO VALVOLA / VALVE BODY | 2 |
| 11 | MEMBRANA / DIAPHRAGM | 1 |
| 12 | DADO BLOCCAGGIO / LOCKING NUT | 1 |
| 13 | PIATTELLO SUPPORTO / SUPPORT DISC | 1 |
| 14 | TIRANTE / BOLT | 4 |



EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)

Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : TESTATA POMPA UGD-03

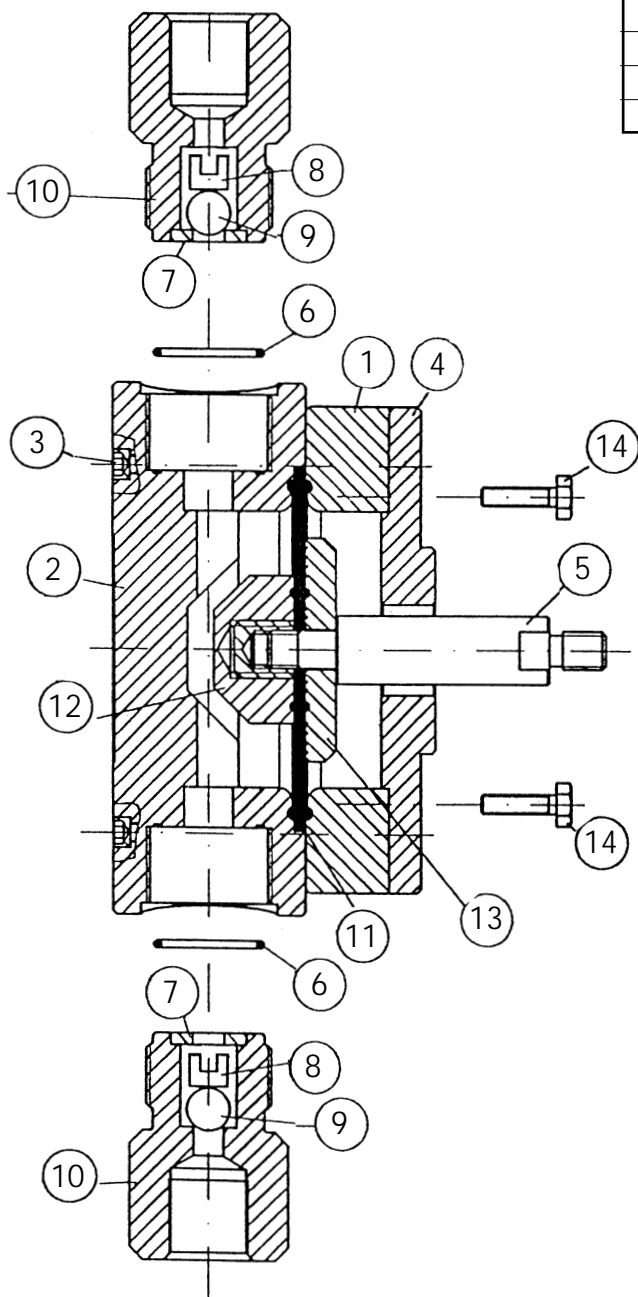
SUBJECT : PUMP HEAD UGD 03

DIS/DWG. NR : 00M075P

DATA/DATE : 04/2000

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE

| POS. | DESCRIZIONE / DESCRIPTION | Q.TY |
|------|-------------------------------------|------|
| 1 | FLANGIA BLOCCAGGIO / LOCKING FLANGE | 1 |
| 2 | TESTATA / HEAD | 1 |
| 3 | TIRANTE / BOLT | 6 |
| 4 | COPERCHIO / COVER | 1 |
| 5 | PISTONE / PLUNGER | 1 |
| 6 | GUARNIZIONE / FLAT GASKET | 2 |
| 7 | DISCO BLOCCAGGIO / LOCKING DISC | 2 |
| 8 | ZAVORRA / BALLAST | 2 |
| 9 | VALVOLA A SFERA / BALL VALVE | 2 |
| 10 | CORPO VALVOLA / VALVE BODY | 2 |
| 11 | MEMBRANA / DIAPHRAGM | 1 |
| 12 | DADO BLOCCAGGIO / LOCKING NUT | 1 |
| 13 | PIATTELLO SUPPORTO / SUPPORT DISC | 1 |
| 14 | TIRANTE / BOLT | 4 |



EURALCA SRL - Via A. Manzoni, 9 - 2093 COLOGNO MONZESE (MI)

Tel. ++39 022533841 Fax ++39 022540457 E-mail: euralca@tin.it www.euralca.it

OGGETTO : TESTATA POMPA UGD-03

SUBJECT : PUMP HEAD UGD 03

DIS/DWG. NR : 00M100P

DATA/DATE : 04/2000

PROPRIETÀ RISERVATA A TERMINI DI LEGGE. VIETATA LA RIPRODUZIONE A TERZI SENZA AUTORIZZAZIONE