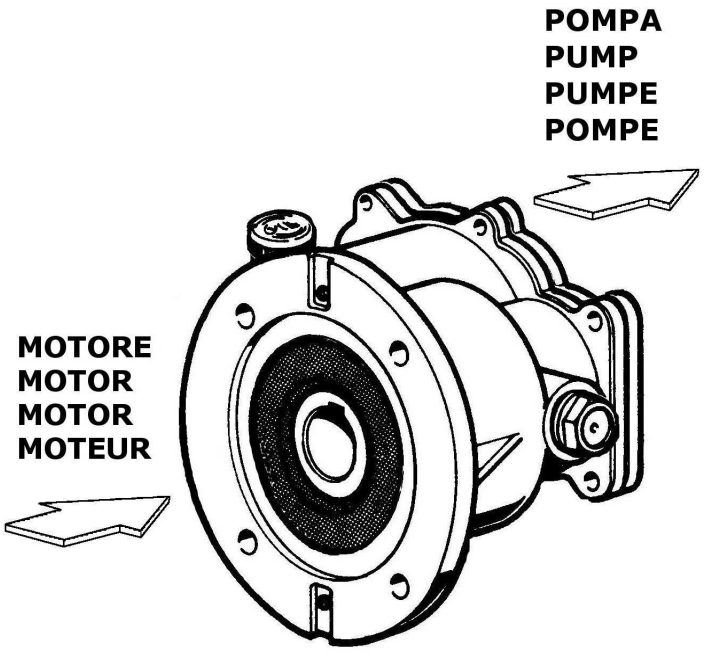
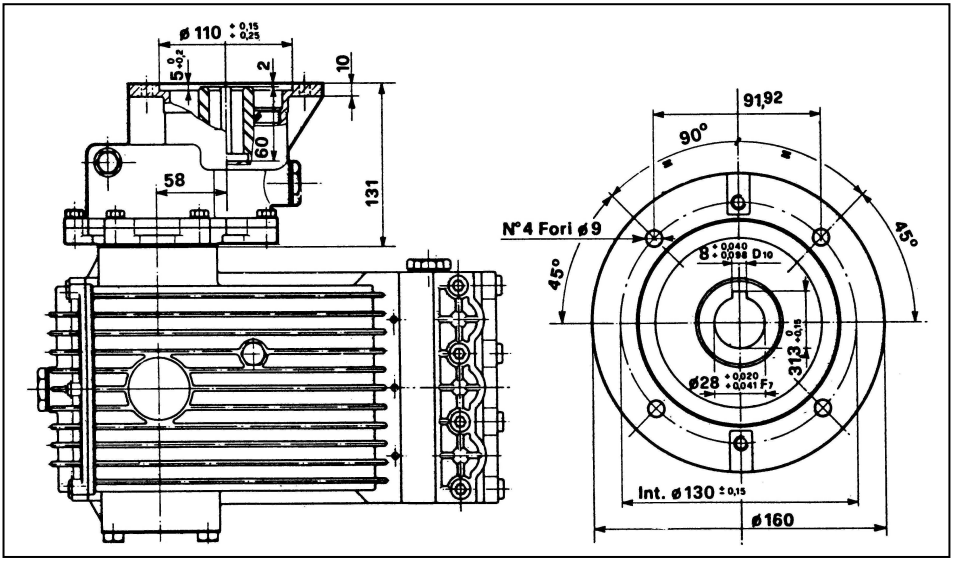
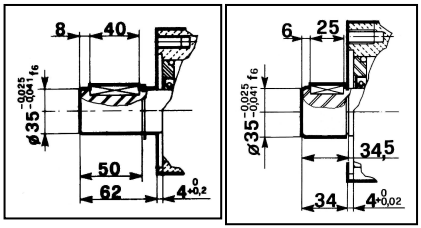
RE44

RIDUTTORE PER MOTORI ELETTRICI
REDUCTION GEAR FOR ELECTRIC MOTORS
RÉDUCTEUR POUR MOTEURS ÉLECTRIQUES
UNTERSETZUNGSGETRIEBE FÜR ELEKTROMOTOREN



ISTRUZIONI D'USO
OPERATING INSTRUCTIONS
MODE D'EMPLOI
BEDIENUNGSANLEITUNG





Tav.B

Tav.A

POS	CODICE CODE	DESCRIZIONE DESCRIPTION	N. PCS
1	90169600	Anello radiale Ø45x90x10	1
2	90099500	Anello per foro Ø85 UNI 7437	1
3	90075400	Anello fermo albero	1
4	91857500	Cuscinetto a sfere 6209	1
5	10017955	Pignone Z.13	1
6	90383300	OR Ø 13.95x2.62	1
7	98210000	Tappo G3/8x13	1
8	10017622	Carter riduttore	1
9	96701400	Rosetta Ø8 Schnorr	11
10	99306700	Vite M8x25 UNI 5739	4
11	10010884	Guarnizione	1

POS	CODICE CODE	DESCRIZIONE DESCRIPTION	N. PCS
12	97596800	Spia olio G3/4	1
13	10018055	Corona Z.32	1
14	99368200	Vite M10x30 UNI 5933	4
15	10010522	Flangia riduttore	1
16	67211384	Guarnizione	1
17	99305600	Vite M8x20 UNI 5739	7
18	98210300	Tappo carico olio G3/8	1
19	99368400	Vite M10x30 UNI 5739	1
20	96710400	Rosetta Ø10 Schnorr	1
21	96713500	Rosetta Ø43 **-Tav.A-**	1
21	10019764	Cappellotto Ø45 **-Tav.B-**	1

= ENGLISH =

TECHNICAL FEATURES		
MOTOR SHAFT DIAMETER	**28mm**	
MAX GEAR DRIVE POWER	**5,5 kW max (7,5 HP)**	
⚠ **Electric motors size : 100 – 112**	**Construction type : B3/B14**	
GEAR DRIVE RATIO (reduction)	**i = 2,4 (1450/600 rpm)**	
OIL CAPACITY	**0,35 L (11,8 fl.oz.)**	
LUBRICATING OIL	**See paragraph: "LUBRICATING OIL"**	
WEIGHT (without oil)	**4,1 kg (9,0 lb)**	
INTERPUMP GROUP PUMPS	**SERIES 69 all 600 rpm versions**	

«Translated from original instructions»

THIS DOCUMENT PROVIDES THE INSTRUCTIONS FOR THE INSTALLATION, USE AND MAINTENANCE OF THE REDUCTION GEAR, THEREFORE IT IS AN INTEGRAL PART OF IT AND MUST BE READ CAREFULLY BEFORE ANY USE AND KEPT WITH CARE.
STRICTLY COMPLY WITH THE INSTRUCTIONS CONTAINED IN THIS DOCUMENT IN VIEW OF A SAFE AND EFFECTIVE USE OF THE REDUCTION GEAR.
FAILURE TO COMPLY WITH THESE INSTRUCTIONS MIGHT CAUSE EARLY FAULTS AND RESULT IN SITUATIONS OF DANGER, IN ADDITION TO VOIDING ANY WARRANTY.

1- GENERAL INFORMATION

1.1- The RE44 reduction gear is designed to be operated by four-pole electric motors and to be coupled to the Interpump Group high pressure pumps. It must be used in connection with other mechanical units/components in order to create a system with a definite function.

1.2- Since the RE44 reduction gear is used within a complete system, installation and use must be suited to the type of system used and comply with the safety Regulations in force in the Country where the reduction gear is used.

1.3- Before using the reduction gear, make sure that the system the reduction gear is used with is certified to comply with the relevant Directives and/or Regulations.

1.4- Before installing and using the reduction gear for the first time, we suggest you check that it is undamaged and make sure that the rated features correspond to the required ones. If this is not the case, do not use the reduction gear and contact the after-sales service of Interpump Group for information.

1.5- In order to install the reduction gear correctly, follow the instructions for the assembly and for the connections with pump and motor as stated in this instruction manual and/or on the reduction gear itself.

1.6- Assembly and installation must be made by qualified staff only, who must have the necessary mechanical and technical skills and be informed of the operating and safety instructions contained in this document.

1.7- In view of a correct functioning of the reduction gear, and in particular of the pump it is coupled to, the rating of the motor used must be suited to the pump performance. In any case, the motor power must not exceed 5.5 kW (7.5HP).

⚠ **In case of doubts, do not hesitate to contact the after-sales service of Interpump Group.**

1.8- The installer must provide the ultimate consumer with the proper instructions for the correct use of the motor-reduction gear-pump assembly and, if necessary, of the system the assembly is used in connection with.

2- PACKAGE

2.1- Packages must be handled in compliance with the instructions stated on the packages themselves and/or provided by the manufacturer.

2.2- In case the reduction gear is not used immediately, it must be stored in its integral package and placed in areas which are not exposed to the weather and protected from excessive humidity and from direct sunlight. Moreover, it is advisable to place wooden pallets or other types of pallets between the package and the floor, in order to prevent the direct contact with the ground.

2.3- The package components must be disposed of in compliance with the relevant laws in force.

3- ASSEMBLY AND INSTALLATION

The positions mentioned in the following instructions refer to the exploded view.

Carefully clean all the driving parts/surfaces of the reduction gear, of the pump and of the motor.

3.1- Coupling to the pump:

3.1.1- Unscrew the 4 screws and remove the case cover - shaft outlet end of the pump the reduction gear must be coupled to. See table of TECHNICAL FEATURES in order to choose the pumps to be used.

3.1.2- Center the reduction gear flange pos. 15 on the pump case – shaft outlet end placing the gasket pos. 16 between them.

3.1.3- Fix the reduction gear flange pos. 15 to the pump by means of the four screws pos. 14 and tighten (torque wrench setting: 45 Nm).

3.1.4- IMPORTANT: Place the reduction gear flange pos. 15 horizontally taking care that when the reduction gear is assembled, the oil dipstick cap pos. 18 is positioned upwards.

3.1.5- Lubricate the pump shaft with grease in order to make the assembly easier and prevent contact oxidation.

3.1.6- Fit the crown gear pos. 13 to the pump shaft up to limit stop. Make sure that the feather key is present on the shaft.

3.1.7- Fix the crown gear pos. 13 to the pump shaft by means of the washer pos. 21 and tighten the screw pos. 19 with 542 Loctite (torque wrench setting: 45 Nm).

3.1.8- Join the two parts of the reduction gear matching the reduction gear casing pos. 8 with the reduction gear flange pos. 15 and place the gasket pos. 11 between them. Position the toothing of the crown gear and of the pinion gear so as to make the mesh and the coupling easier.

3.1.9- Fix the reduction gear casing pos. 8 to the reduction gear flange pos. 15 by means of the seven screws pos. 17 and tighten (torque wrench setting 20 Nm).

3.1.10- Screw down the oil drain cap pos. 7 (torque wrench setting 40 Nm) into the lower port of the reduction gear casing pos. 8.

3.1.11- Make the first oil filling by the oil dipstick cap hole pos. 18 up to the middle of the oil window cap pos. 12. Approximately 0.35 litres are needed. (See paragraph "LUBRICATING OIL").

3.1.12- Screw down the oil dipstick cap pos. 18.

3.2- Coupling to the motor:

3.2.1- Lubricate the motor shaft with grease in order to make the assembly easier and prevent contact oxidation.

3.2.2- Center and couple the reduction gear/pump assembly to the motor by means of the flange taking care that the shaft and the hole are correctly aligned. See table of "TECHNICAL FEATURES" in order to choose the flange to be used with the motor. Make sure that the feather key is present on the motor shaft.

3.2.3- Do not force and/or damage the coupling of the motor shaft to the reduction gear pinion hole due to incorrect actions.

3.2.4- In order to obtain a good centering and a correct functioning we suggest you use motor shafts with the following machining tolerances for the shaft end:

Pinion	Motor shaft
P/n 10017955 – Ø28 F7 (+0.041/+0.020)	Ø28 h7 (0/-0.021)

3.2.5- Fix the reduction gear/pump assembly to the motor by means of the four screws pos. 10 and tighten (torque wrench setting: 20 Nm).

IMPORTANT: The pump must be fixed to the reduction gear only, therefore it must be suspended during working.

4- LUBRICATING OIL

4.1- For the inside lubrication use gear drive oils with cSt 40°C ≥180 viscosity, better if containing addition agents in order to grant an excellent level of protection against wear, against foaming and to provide high oxidation and corrosion strength. We suggest you use ISO VG 220 DIN 51519 quality oils (or with 80W-90 SAE degree).

4.2- These oil types are valid for room temperatures between 0°C and 30°C. In case of different temperatures, please contact the after-sales service of Interpump Group.

4.3- Oil change

4.3.1- The oil change must be carried out when the reduction gear is at a working temperature.

4.3.2- Place a container under the drain plug pos. 7.

4.3.3- Remove the oil dipstick cap pos. 18 and then the drain plug pos. 7.

4.3.4- Wait until all the oil has been drained, then screw back the drain plug pos. 7 (torque wrench setting as stated above).

4.3.5- Fill with fresh oil up to the middle of the oil window cap pos. 12 and screw back the oil dipstick cap pos. 18.

IMPORTANT: The exhausted oil must be gathered in containers and disposed of contacting the authorized centres as established by the laws in force. The oil must not be dispersed in the environment for any reason.

5- MAINTENANCE

5.1- Maintenance and repair must be carried out by qualified and authorized staff only. Before any operation, make sure that the motor-reduction gear- pump assembly is shut down and made unusable.

5.2- A correct maintenance helps extend the working life and grants a better performance of the reduction gear.

5.3- Scheduled maintenance

5.3.1- After 50 working hours:

Change the oil after 50 working hours from the first use. Afterwards, the oil must be changed every 1000 working hours or once a year (See paragraph "Oil change").

5.3.2- Every 500 hours

Check the oil window pos. 12 to verify the oil level. If necessary, add the oil up to the middle of the oil window. In case of a substantial decrease in the oil level, check that there are no leakages or drippings caused by an excessive wear or by breakings.

5.4- Replace the reduction gear parts with original spare parts only. Use only oil types as stated in the above paragraph.

IMPORTANT: After maintenance, we suggest you change the lubricating oil. Moreover, make sure that the reduction gear is re-assembled correctly and that the initial conditions are restored. If necessary, comply with the instructions contained in the above paragraph "ASSEMBLY AND INSTALLATION".

5.5- In case of disposal, we suggest you take the reduction gear to an authorized disposal centre or contact the nearest INTERPUMP GROUP Authorized Service Centre.

IMPORTANT: The reduction gear shall not be tampered with for any reason and/or used for any purpose other than the use it has been designed for. In case of tampering, the manufacturer disclaims all responsibility as to the reduction gear functioning and safety.

6- WARRANTY CONDITIONS

6.1- The period and conditions of warranty are specified in the purchase contract.

6.2- Warranty is voided in case the reduction gear is used for improper purposes, used at higher performances than the rated ones, repaired with non-original spare parts or if it turns out to be damaged due to the non-compliance with the operating instructions or to unauthorized tampering.

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Offenders will be prosecuted according to the laws in force and proper legal actions will be instituted against them.

The information contained in this document may be modified without notice.

DICHIARAZIONE DI INCORPORAZIONE
(Ai sensi dell'allegato II della Direttiva Europea 2006/42/CE)

Il produttore **INTERPUMP GROUP S.p.A. – Via E. Fermi, 25 – 42049 S. ILARIO D'ENZA (RE) – Italia**
DICHIARA che l'attrezzatura identificata e descritta come segue:

Denominazione:	Riduttore
Tipo:	Riduttore per motori elettrici
Marchio di fabbrica:	INTERPUMP GROUP
Modello:	RE44

Risulta essere conforme ai requisiti delle sotto elencate direttive e successivi aggiornamenti:
Direttiva Macchine 2006/42/CE
Direttiva sulla restrizione dell'uso di determinate sostanze pericolose 2002/95/CE - RoHS
Direttiva sulla responsabilità del produttore 85/374/CE

UNI EN ISO 12100-1:2005 – UNI EN ISO 12100-2:2005

Il riduttore sopra identificato rispetta tutti i requisiti essenziali di sicurezza e di tutela della salute elencati nel punto 1 dell'allegato I della Direttiva Macchine e la relativa documentazione tecnica è stata compilata in conformità dell'allegato VII B.

Inoltre il produttore e il suo mandatario si impegnano a rendere disponibile, a seguito di una richiesta adeguatamente motivata, copia della documentazione tecnica pertinente il riduttore nei modi e nei termini da definire.

Il riduttore non deve essere messo in servizio finché l'impianto al quale il riduttore deve essere incorporato è stato dichiarato conforme alle disposizioni delle relative direttive e/o norme.

Persona autorizzata a costituire il fascicolo tecnico Nome: Maurizio Novelli

Indirizzo: INTERPUMP GROUP S.p.A. Via E. Fermi,25 S. Ilario d'Enza (RE) Italy

Persona autorizzata a redigere la dichiarazione: L'amministratore delegato Ing. Paolo Marinsek

Reggio Emilia 6/05/2010 Firma _____

DECLARATION OF INCORPORATION
(According to annex II of European Directive 2006/42/EC)

The manufacturer **INTERPUMP GROUP S.p.A. – Via E. Fermi, 25 – 42049 S. ILARIO D'ENZA (RE) – Italy**
DECLARE that the device identified and described as follows:

Description:	Reduction gear
Type:	Reduction gear for electric motors
Trademark:	INTERPUMP GROUP
Model:	RE44

Complies with the requirements of the below-listed directives and following updates:
Directive 2006/42/EC Machinery
Directive 2002/95/EC Reduction of hazardous substances - RoHS
Directive 85/374/EC Liability for defective products

UNI EN ISO 12100-1:2005 – UNI EN ISO 12100-2:2005

The above-mentioned reduction gear complies with all the essential requirements of safety and health protection listed in annex I, point 1 of the Machinery Directive and the relevant technical documents are compiled in accordance with annex VII B.

Moreover, in response to a reasoned request, the manufacturer and their mandatory undertake to transmit copy of the technical documents on the reduction gear within the terms and in the ways to be determined.

The reduction gear must not be put into service until the system into which the reduction gear is to be incorporated has been declared in conformity with the provisions of the relevant directives and/or norms.

Person authorized to compile the technical documents Name: Maurizio Novelli

Address: INTERPUMP GROUP S.p.A. Via E. Fermi,25 S. Ilario d'Enza (RE) Italy

Person empowered to draw up the declaration: Ing. Paolo Marinsek (Managing Director)

Reggio Emilia 6/05/2010 Signature _____

INTERPUMP GROUP S.p.A.

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