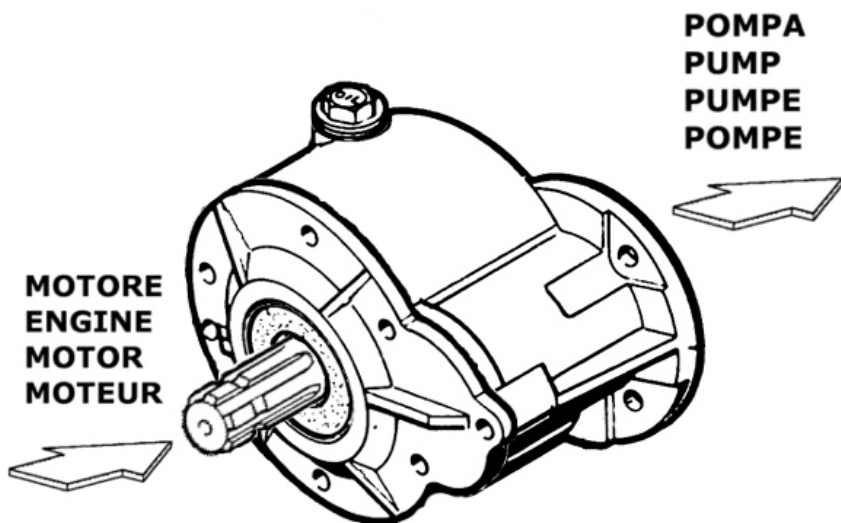
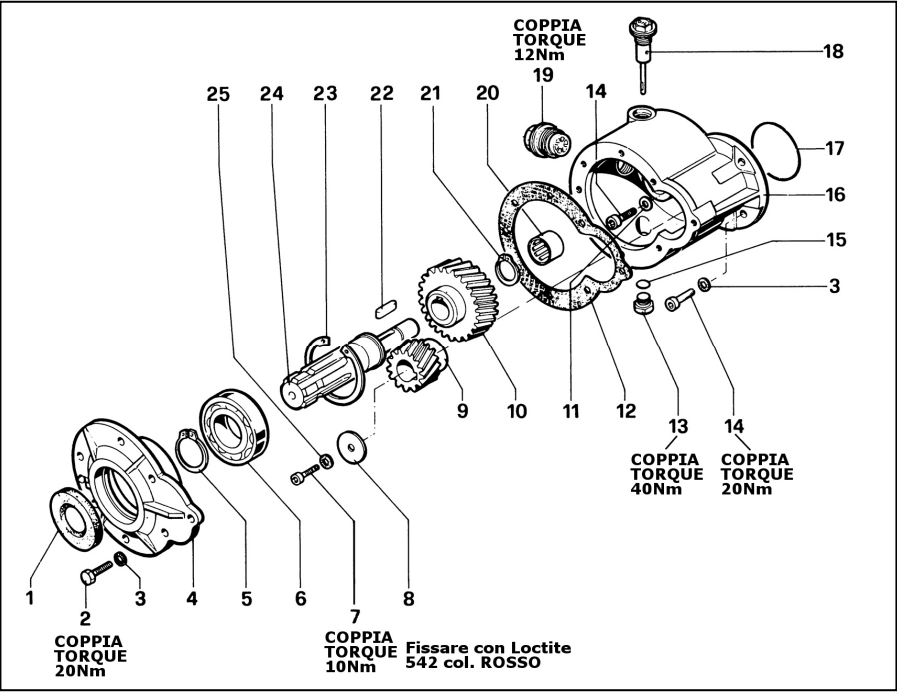
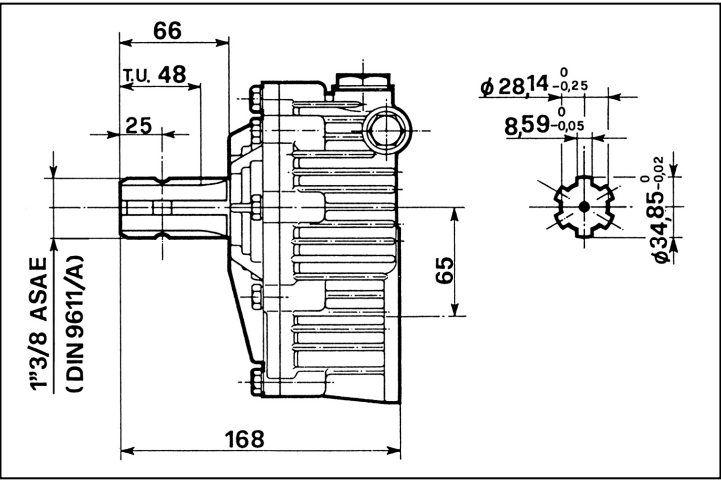


MOLTIPLICATORE PER ACCOPPIAMENTO TRATTORE
OVERGEAR FOR TRACTOR COUPLING
MULTIPLICATEUR POUR ACCOUPLEMENT TRACTEUR
ÜBERSETZUNGSGETRIEBE FÜR TRAKTORKUPPLUNG



ISTRUZIONI D'USO
OPERATING INSTRUCTIONS
MODE D'EMPLOI
BEDIENUNGSANLEITUNG



POS	CODICE CODE	DESCRIZIONE DESCRIPTION	N. PCS
1	10167200	Anello radiale Ø 35x52x8	1
2	99306700	Vite M8x25 UNI 5739	8
3	99701400	Rosetta Ø 8.4 Schnorr	10
4	10022022	Coperchio	1
5	90069500	Anello fermo albero	1
6	91847000	Cuscinetto a sfere 6207	1
7	99189700	Vite M6x25 UNI 5931	1
8	96695300	Rosetta Ø 6.5x30x4	1
9	10022155	Pignone Z 17	1
10	10022255	Corona Z 32	1
11	93175400	Guarnizioni Ø 8.5	2
12	10022484	Guarnizione	1
13	98210000	Tappo G3/8x13	1

POS	CODICE CODE	DESCRIZIONE DESCRIPTION	N. PCS
14	99308500	Vite M8x30 UNI 5931 Autoblocc	4
15	90383300	OR Ø 13.95x2 62	1
16	10021922	Carter	1
17	90389800	OR Ø 56.82x2 62	1
18	98210300	Tappo carico olio G3/8	1
19	97596800	Spia livello olio	1
20	91831000	Boccola a rullini	1
21	90063500	Anello fermo albero	1
22	91487700	Linguetta	1
23	90091800	Anello di fermo Ø 72 UNI 7437	1
24	10022355	Albero	1
25	96693800	Rosetta Ø 6.4 Schnorr	1

= ENGLISH =

TECHNICAL FEATURES

SHAFT DIAMETER		1"3/8 ASAE (DIN 9611/A)
MAX GEAR DRIVE POWER		7,0 kW max (9,5 HP)
	Suited for couplings to farm tractor power takeoffs	
GEAR DRIVE RATIO (gearing-up)		i = 1,9 (540/1000 rpm)
OIL CAPACITY		0,26 L (8,8 fl.oz.)
LUBRICATING OIL		See paragraph: "LUBRICATING OIL"
WEIGHT (without oil)		4,2 kg (9,2 lb)
INTERPUMP GROUP PUMPS		SERIES 47 SERIES 66 all 1000 rpm versions

«Translated from original instructions»

THIS DOCUMENT PROVIDES THE INSTRUCTIONS FOR THE INSTALLATION, USE AND MAINTENANCE OF THE OVERGEAR, 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 OVERGEAR.

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 M.-P.T.O. overgear is designed to connect the power takeoffs of farm tractors 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 M.-P.T.O. overgear 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 overgear is used.

1.3- Before using the overgear, make sure that the system the overgear is used with is safe and complies with the applicable Directives and/or Regulations.

1.4- Before installing and using the overgear 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 overgear and contact the after-sales service of Interpump Group for information.

1.5- In order to install the overgear correctly, follow the instructions for the assembly and for the connections with pump and power takeoff as stated in this instruction manual and/or on the overgear 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 overgear, and in particular of the pump it is coupled to, the power transmitted by the power takeoff must be suited to the pump performance. In any case, the power must not exceed 7.0 kW (9.5HP).



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 power takeoff-overgear-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 overgear 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 overgear, of the pump and of the power takeoff.

3.1- Coupling to the pump:

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

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

3.1.3- Fit the pinion gear pos. 9 to the pump shaft up to limit stop. Make sure that the feather key is present on the shaft.

3.1.4- Fix the pinion gear pos. 9 to the pump shaft by means of the washer pos. 8 and tighten the screw pos. 7 with 542 Loctite (torque wrench setting: 10 Nm).

3.1.5- Lubricate the O-ring pos. 17 and place it in the seat obtained on the outside end of the case pos. 16 by the hole provided for the pump shaft.

3.1.6- Center the case pos. 16 on the pump side cover – shaft outlet end taking care that the O-ring pos. 17 stays in place correctly.

3.1.7- Fix the case pos. 16 to the pump by means of the four screws pos. 14 and tighten (torque wrench setting: 20 Nm). Before assembling the two inside screws it is necessary to fit the two gaskets pos. 11.

3.1.8- **IMPORTANT:** Place the case pos. 16 horizontally taking care that when the overgear is assembled, the oil cap pos. 18 is positioned upwards.

3.1.9- Join the two parts of the overgear matching the cover pos. 4 with the case pos. 16 and place the gasket pos. 12 between them. Position the toothing of the crown gear and of the pinion gear so as to make the mesh and the coupling easier.

3.1.10- Fix the cover pos. 4 to the case pos. 16 by means of the eight screws pos. 2 and tighten (torque wrench setting 20 Nm).

3.1.11- Screw down the oil drain cap pos. 13 (torque wrench setting 40 Nm) into the lower part of the case pos. 16.

3.1.12- Make the first oil filling by the oil cap hole pos. 18 up to the middle of the oil window cap pos. 19. Approximately 0.26 litres are needed. (See paragraph "LUBRICATING OIL").

3.1.13- Screw down the oil cap pos. 18.

3.2- Coupling to the power takeoff:

3.2.1- In order to work safely, do not use insecure connections disregarding the basic common sense principles.

3.2.2- For the power takeoff use a standardized female spline shaft as stated in the table of "TECHNICAL FEATURES".

3.2.3- Center and couple the overgear/pump assembly to the power takeoff by means of the spline shaft and secure the connection using the safety lock.

3.2.4- Do not force and/or damage the coupling of the overgear shaft to the power takeoff shaft due to incorrect actions.



IMPORTANT: For the correct use of the overgear/pump assembly, the pump must be fixed to a rigid rest during working.

4- LUBRICATING OIL

4.1- For the inside lubrication use gear drive oils with cSt $40^{\circ}\text{C} \geq 180$ 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 overgear is at a working temperature.

4.3.2- Place a container under the drain plug pos. 13.

4.3.3- Remove the oil cap pos. 18 and then the drain plug pos. 13.

4.3.4- Wait until all the oil has been drained, then screw back the drain plug pos. 13 (torque wrench setting as stated above).

4.3.5- Fill with fresh oil up to the middle of the oil window cap pos. 19 and screw back the oil 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 power takeoff-overgear-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 overgear.

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. 19 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 overgear 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 overgear 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 overgear to an authorized disposal centre or contact the nearest INTERPUMP GROUP Authorized Service Centre.



IMPORTANT: The overgear 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 overgear 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 overgear 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:	Moltiplicatore
Tipo:	Moltiplicatore per accoppiamento trattore
Marchio di fabbrica:	INTERPUMP GROUP
Modello:	M.-P.T.O.

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 moltiplicatore 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 moltiplicatore nei modi e nei termini da definire.

Il moltiplicatore non deve essere messo in servizio finché l'impianto al quale il moltiplicatore 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:	Overgear
Type:	Overgear for tractor coupling
Trademark:	INTERPUMP GROUP
Model:	M.-P.T.O.

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 overgear 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 overgear within the terms and in the ways to be determined.

The overgear must not be put into service until the system into which the overgear 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 _____