

*TECHNICAL DATA SHEETS*  
*and*  
*RECOMMENDATIONS*

**ABER**

Manufacturing Hydraulic Excellence since 1972

[www.ABER.pt](http://www.ABER.pt)



## CONSTANT DRIVE 10 BOLT MOUNT POWER TAKE OFF RECOMMENDATIONS BEFORE START-UP



Torque Table			
Size (mm - inch)	M8 3/8"	M10 7/16"	M12 1/2"
Screws and nuts Torque	25 N.m 18 lbf.ft	60 N.m 45 lbf.ft	80 N.m 59 lbf.ft
Studs Torque	10 N.m 7 lbf.ft	20 N.m 15 lbf.ft	30 N.m 22 lbf.ft

### Installation of a constant drive 10 bolt mount PTO

1 - Drain the oil from the gearbox, remove hatch cover and the respective gasket and verify if PTO and transmission gears are compatible;

### Manufacturer's Declaration

ABER ensures compliance of its products with the essential health and safety requirements of the Directive 2006/42/EC and harmonized standard EN ISO 12100:2010.

### General information

The Power Take Offs are mechanical devices that transmit mechanical power. They are usually applied to transmissions from where the power is taken to be transmitted to the hydraulic pumps, intermediate shafts, etc. Normally applied in dumpers, cranes, cleaning systems, moving floors, compressors, etc. This device stands out do to the fact of almost non-existence noise and its high efficiency.

### Safety information



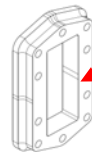
- Do not attempt to work or install a Power Take-Off with the engine running.
- A PTO must be properly matched to the vehicle transmission and to the auxiliary equipment. An incorrect matched could cause several damage to the vehicle transmission and the auxiliary equipment.

#### ATTENTION

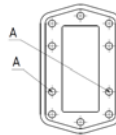
- Do not exceed the limits of power and torque in the technical sheet.
- The decisions of install guards in the PTO warning shall be the responsibility of the designers or installers.

### Maintenance

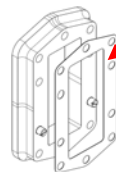
Monthly	Annually
<ul style="list-style-type: none"> <li>-Check the transmission oil level. We advise seeing the vehicle manufacturer recommendations.</li> <li>-Check for PTO leaks under and around the vehicle. Any leaks found should be stopped immediately</li> <li>-Check the tightness of the fixation studs and if necessary tighten more. Consult torque table to tight studs correctly.</li> </ul>	<ul style="list-style-type: none"> <li>-Check the transmission oil level. We advise seeing the vehicle manufacturer recommendations.</li> <li>-Check for PTO leaks under and around the vehicle. Any leaks found should be stopped immediately</li> <li>-Check the tightness of the fixation studs and if necessary tighten more. Consult torque table to tight studs correctly.</li> <li>-Visual inspection of all the components and if necessary proceed with the repair.</li> </ul>



2 - Clean the lip of the hatch with a wire brush or spatula, being careful not to let any foreign bodies into the transmission;



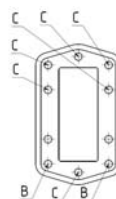
3 - In the PTO mounting Kit find the two alignment studs. Fit the studs in the respective holes (A) accord to the schematic image.



4 - Fit one or more gaskets as needed, between the inspection hatch and the PTO body. Ensure that the teeth of the gears in the transmission and those in the PTO are properly meshed.

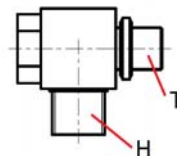
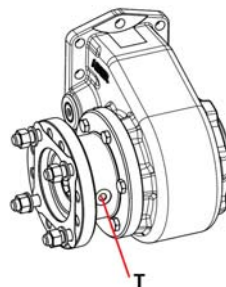
#### ATTENTION

Do not use more than three gaskets.



5 - Fit the screws, and washers according to the schematic image. The 25 mm screws and washers are fitted in the (B) holes and the 30mm screws and washers are fitted in the (C) holes. Consult torque table to tighten screws correctly.

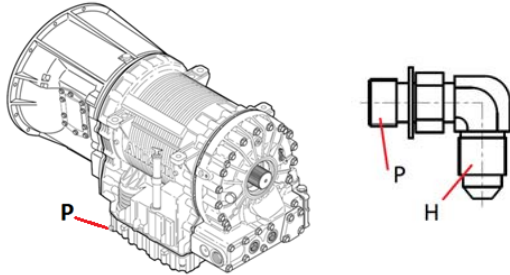
6 - Attach the 90° elbow fitting provided in the kit to the PTO threaded hole (T)



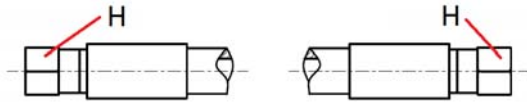


## CONSTANT DRIVE 10 BOLT MOUNT POWER TAKE OFF RECOMMENDATIONS BEFORE START-UP

7 - Attach the 90° elbow fitting provided in the kit to the threaded hole (P) on the transmission.



8 - Attach the hydraulic hose to the fittings (H). Check oil level and signs of oil leakage.



### Faults, causes and remedies

Faults	Causes	Remedies
Noise	<ol style="list-style-type: none"> <li>1. Assembly clearance</li> <li>2. Broken teeth</li> <li>3. Damaged roller-bearings</li> </ol>	<ol style="list-style-type: none"> <li>1. Check/adjust the looseness between the teeth and the thickness of the gaskets</li> <li>2-3. Repair or replace</li> </ol>
Over-heating	<ol style="list-style-type: none"> <li>1. Lack of lubrication</li> <li>2. Too tight between the wheel of the PTO and the wheel of the transmission</li> </ol>	<ol style="list-style-type: none"> <li>1. Refill the oil level</li> <li>2. Adjust the gap between teeth with the thickness of the gaskets</li> </ol>
Leaks	<ol style="list-style-type: none"> <li>1. Loose fixation nuts and studs</li> <li>2. Damaged gasket</li> </ol>	<ol style="list-style-type: none"> <li>1. Tight according to recommendations</li> <li>2. Replace gasket for another with the same thickness</li> </ol>
No transmission of movement	<ol style="list-style-type: none"> <li>1. PTO blockage</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair or replace control</li> </ol>



- A PTO should be mounted by qualified personnel. The correct mounting of the PTO is influenced by the ability of the operator.
- Always read carefully all owner's manuals, or other instructions before installation of PTO and driven equipment.
- In case of difficulties please ask our service department for advice.
- To install a PTO, the vehicle must be parked on a flat surface with the engine off and parking brake applied.
- Use appropriated tools and safety equipment.

- Ensure that the system cannot boot involuntarily.
- Ensure that the levels and quality of the oil are as recommended, that there are no leaks and that everything is properly tightened before starting.
- When the PTO is working, never touch or pull hoses or intermediate shaft when applied. When intermediate shaft is applied take into account that parts can be ejected.
- The application of the ABER's PTO must follow all the instructions hereby mentioned in order to assure the safety of all personal working with the equipment including its surroundings, assure a long life to the product and preserve the warranty of the brand. All applications that do not follow the hereby instruction are solely the users responsibility. If there should happen any malfunctioning, it is strictly forbidden the disassembly of the product except if it is being made by a qualified technician of the brand or if there is a special authorization to do that. If this specification should not be followed, all warranties might be lost.

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# POWER TAKE OFF RECOMMENDATIONS BEFORE START-UP



## Manufacturer's Declaration

ABER ensures compliance of its products with the essential health and safety requirements of the Directive 2006/42/EC and harmonized standard EN ISO 12100:2010.

## General information

The Power Take Offs are mechanical devices that transmit mechanical power. They are usually applied to gearboxes from where the power is taken to be transmitted to the hydraulic pumps, intermediate shafts, etc. Normally applied in dumpers, cranes, cleaning systems, moving floors, compressors, power generators, etc. This device stands out do to the fact of almost non-existence noise and its high efficiency.

## How to use

The following procedure is not valid for automatic gearboxes. The procedure to operate the PTO should always be made with the vehicle parked, parking brake actuated, engine running and in neutral.

1. press the clutch for 5/10 seconds;
2. turn on PTO control (pneumatic, vacuum, electric or mechanic);
3. release the clutch slowly;

To disconnect the PTO:

1. press the clutch for 5/10 seconds;
2. turn off PTO control;
3. release the clutch;

**ATTENTION**

PTO must be turned off, before the vehicle starts moving again. Do not exceed the limits of power and torque in the technical sheet. The incorrect engagement and disengagement, may cause premature equipment damage.

## Maintenance

Daily	Monthly	Annually
-Check the tightness of the pneumatic system and the light switches.	-Check the tightness of the pneumatic system and the light switches. -Check the oil level and refill if necessary. We advise seeing the gearbox manufacturer recommendations. -Check the tightness of the fixation studs and if necessary tighten more. Consult torque table to tight studs correctly. -Visual inspection of all the components and if necessary proceed with the repair.	-Check the tightness of the pneumatic system and the light switches -Check the oil level and refill if necessary. We advise seeing the gearbox manufacturer recommendations. -Check the tightness of the fixation studs and if necessary tighten more. Consult torque table to tight studs correctly. -Visual inspection of all the components and if necessary proceed with the repair. -Clean the gearbox and if necessary proceed with the repair.

## General information to mount a PTO

-The general instructions contained in this document do not replace specific information of any component involved in the assembly.

-To install the PTO, the vehicle must be parked on a flat surface with the engine off and parking brake applied.

-Use only the components supplied with PTO.

-Before final tightening, we recommend that you tighten the lock-nuts to the minimum torque and operate the PTO for 10/15 seconds. This allows the gears in the gearbox to self-align and also to check for any excessive noise.

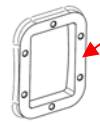
-Before re-filling the gear-box with oil it is advisable to check the noise level of the PTO. If the PTO produces a hissing noise, this means that there is insufficient backlash in which case another gasket must be added. If the Power Take-off rattles, this indicates that there is too much backlash and the number of gaskets must be reduced. Once the gearbox has been re-filled with oil, make sure there are no leaks. Make sure that the power required from the unit is effectively obtainable from the gearbox. If the Power Take-off becomes noisy after the additional assembly of a universal joint, make sure that the joint is not damaged nor the are the edges of the gearbox and PTO.

**Torque Table**

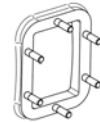
Size (mm - inch)	M8 3/8"	M10 7/16"	M12
Screws and nuts Torque (Nm)	25	50	80
Studs Torque (Nm)	10	20	30

## Installation of a side mount PTO

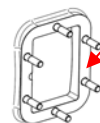
1 - Drain the oil from the gearbox, remove hatch cover and the respective gasket and verify if PTO and gearbox gears are compatible;



2 - Clean the lip of the hatch with a wire brush or spatula, being careful not to let any foreign bodies into the gearbox;



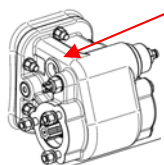
3 - If the PTO uses studs, fit them on the gearbox. Consult torque table to tighten studs correctly. In the case of through-threading, make sure that the studs do not interfere with the gears inside the gearbox. Apply a sealing glue to the thread of the studs;



4 - Fit one or more gaskets as needed, between the inspection hatch and the PTO body. Ensure that between the teeth of the gears in the gearbox and those in the PTO there is a backlash of 0,15/0,3 mm.

**ATTENTION**

Do not use more than three gaskets.



5 - Fit the PTO to the gearbox. On the PTO body there is a plug, if unscrewed, it's large enough to allow manual checking of backlash between the PTO and the gears of the gearbox. The upper wheel of the PTO should move manually and not be too loose, that is, not hitting anything.

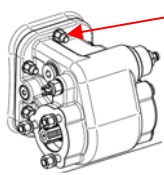


This should be checked with the engine off and the truck blocked with the parking brake.





# POWER TAKE OFF RECOMMENDATIONS BEFORE START-UP



6 - Fit the PTO tightly onto the gearbox. Consult torque table to tighten studs correctly. This operation is more secure when using a dynamometric spanner. Check the oil quality and level recommended by the manufacturer of the vehicle and refill the oil of the gearbox.

7 - Place fittings and accessories for control.

## Installation of a rear mount PTO

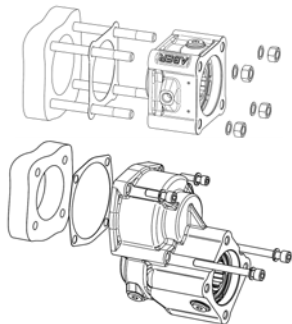
1-Drain the oil from the gearbox (in some gearboxes this step is no needed because the oil level does not reach the rear door), find the rear open and remove its cover and the respective gasket.

2-Clean the surface of the hatch with a wire brush or spatula, being careful not to let any foreign bodies in the gearbox;

3-If the PTO uses studs, fit them on the gearbox. Consult torque table to tighten studs correctly. In the case of through-threading, make sure that the studs do not interfere with the gears inside the gearbox. Apply a sealing glue to the thread of the studs;

4-Fit one gasket between the inspection hatch and the PTO body.

5- Install the PTO on the gearbox (install pump in PTO when studs are used to fix both components) and tighten the screws using the tightening torque indicated in the torque table.



6-Check the oil and the level given by the manufacturer of the vehicle and refill the oil of the gearbox taking into account the presence of the PTO.

7-Place the fitting and the air pipe.

### ATTENTION

For multi axis PTO it is recommend that you assemble the PTO according to the positions indicated in the

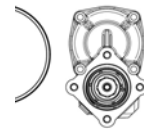
following diagram, which ensure a good lubrication of the internal components.



- A PTO should be mounted by qualified personnel. The correct mounting of the PTO is influenced by the ability of the operator.
- In case of difficulties please ask our service department for advice.
- To install a PTO, the vehicle must be parked on a flat surface with the engine off and parking brake applied.
- Use appropriated tools.
- Ensure that the system cannot boot involuntarily.
- Ensure that the levels and quality of the oil are as recommended, that there are no leaks and that everything is properly tightened before starting.
- When the PTO is working, never touch or pull hoses or intermediate shaft when applied. When intermediate shaft is applied take into account that parts can be ejected.

-The application of the ABER's PTO must follow all the instructions hereby mentioned in order to assure the safety of all personal working with the equipment including its surroundings, assure a long life to the product and preserve the warranty of the brand. All applications that do not follow the hereby instruction are solely the users responsibility. If there should happen any malfunctioning, it is strictly forbidden the disassembly of the product except if it is being made by a qualified technician of the brand or if there is a special authorization to do that. If this specification should not be followed, all warranties might be lost.

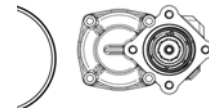
Vertical assembly  
Low outlet



Horizontal assembly



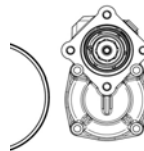
Use lubrication kit



Vertical assembly  
High outlet



Use lubrication kit



## Faults, causes and remedies

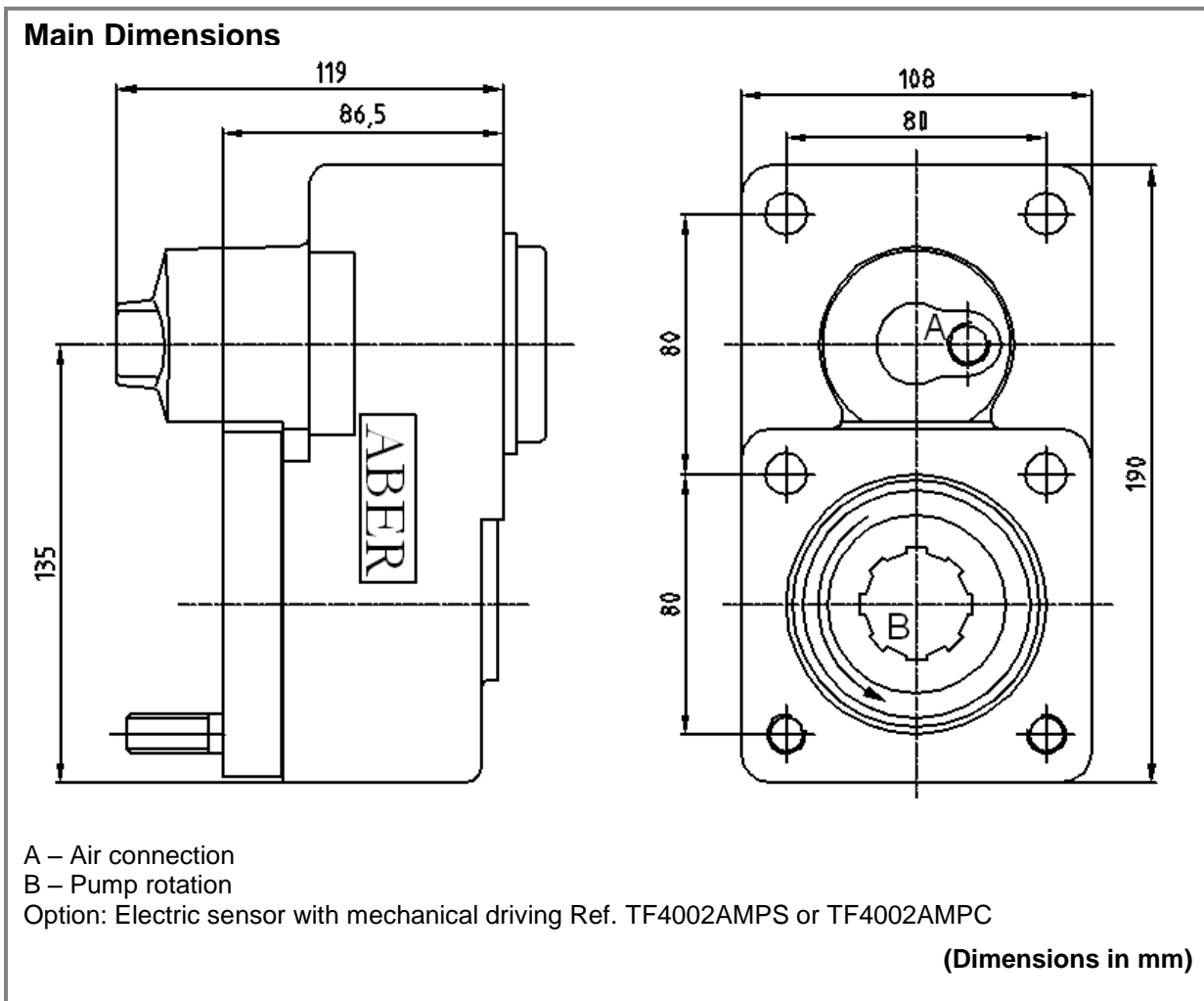
Faults	Causes	Remedies
Noise	<ol style="list-style-type: none"> <li>1.Vehicles clutch is not working properly</li> <li>2. Assembly clearance</li> <li>3.Broken teeth</li> <li>4.Damaged roller-bearings</li> </ol>	<ol style="list-style-type: none"> <li>1.Fully press the clutch or wait more time for the gearbox gearing to stop</li> <li>2. Check/adjust the looseness between the teeth and the thickness of the gaskets</li> <li>3-4.Repair or replace</li> </ol>
Over-heating	<ol style="list-style-type: none"> <li>1-2.Lack of lubrication</li> <li>3.Too tight between the wheel of the PTO and the wheel of the gearbox</li> </ol>	<ol style="list-style-type: none"> <li>1.Refill the oil level</li> <li>2.Use a PTO with a lubrication hose connected directly to the gearbox</li> <li>3.Adjust the gap between teeth with the thickness of the gaskets</li> </ol>
Leaks	<ol style="list-style-type: none"> <li>1.Loose fixation nuts and studs</li> <li>2.Damaged gasket</li> </ol>	<ol style="list-style-type: none"> <li>1.Tight according to recommendations</li> <li>2.Replace gasket for another with the same thickness</li> </ol>
PTO doesn't engage	<ol style="list-style-type: none"> <li>1.Obstructed air hose</li> <li>2.Low air pressure</li> <li>3.Control failure</li> </ol>	<ol style="list-style-type: none"> <li>1.Clean or replace hose</li> <li>2.Check for leak source and fix it</li> <li>3.Repair or replace control</li> </ol>
PTO doesn't disengage	<ol style="list-style-type: none"> <li>1. Internal PTO problem</li> </ol>	<ol style="list-style-type: none"> <li>1.Repair or replace control</li> </ol>
No transmission of movement	<ol style="list-style-type: none"> <li>1.PTO blockage</li> </ol>	<ol style="list-style-type: none"> <li>1.Repair or replace control</li> </ol>





<b>Power Take Offs</b> Relation 1 : 1,32		Ref. TF4001AMP
ZF	S5-35	

To apply with Gear Pumps or with Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>7,5</b>
<b>PTO internal ratio</b>	<b>1:1,32</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-35 / 5.64	.- 1 : 0.828
/ 6.45	.- 1 : 0.726
/ 6.75	.- 1 : 0.693
/ 6.79	.- 1 : 0.879
/ 7.65	.- 1 : 0.609
/ 8.02	.- 1 : 0.580

CTI TF4001AMP 1211-2

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown. The gear boxes are in constant change; therefore, ABER is not to be held responsible for any damage resulting from wrong application or application of outdated material.



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<b>Power Take Offs</b>		Ref. TF4001SP
Relation 1 : 1		
<b>ZF</b>	S5-35	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

Technical drawings showing the main dimensions of the Power Take Off. The front view shows a height of 108 mm and a width of 67 mm. The top view shows a square footprint with a side length of 108 mm. Key features include an air connection (A), pump rotation (B), and an optional electric sensor (C). The mounting holes are specified as (x4) Ø13 and the mounting plate as A 8x32x36 DIN 5462.

A – Air connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4001SPS or TF4001SPC

**(Dimensions in mm)**

Main Data	
<b>Continuous Torque (Nm)</b>	<b>400</b>
<b>Intermittent Torque (Nm)</b>	<b>520</b>
<b>Power (at 1000 rpm)</b>	<b>57 cv / 42 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>2.4</b>
<b>PTO internal ratio</b>	<b>1:1</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-35 / 5.64	- 1 : 0.628
/ 6.45	- 1 : 0.550
/ 6.75	- 1 : 0.525
/ 6.79	- 1 : 0.666
/ 7.65	- 1 : 0.462
/ 8.02	- 1 : 0.440

CTI TF4001SP 1506-5

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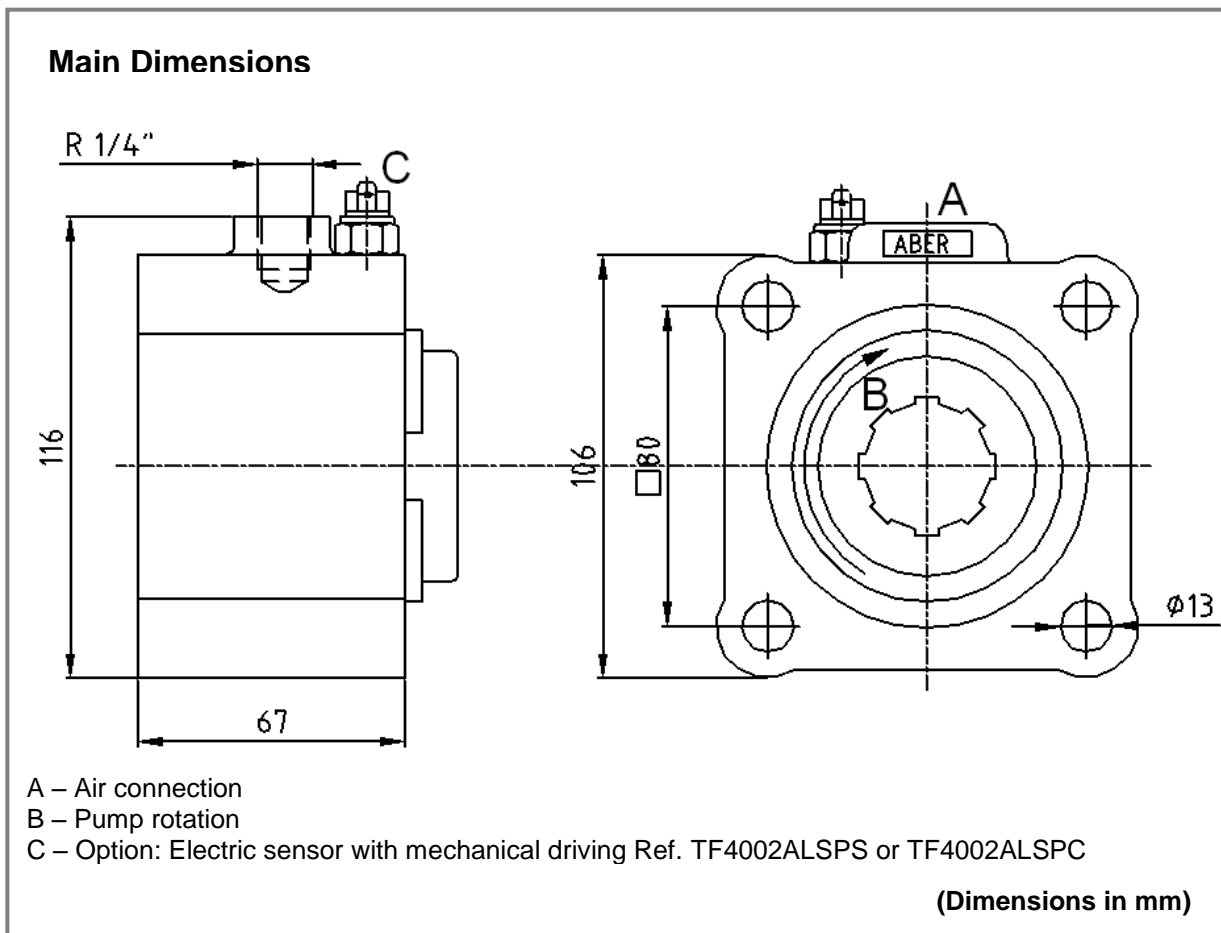


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<b>Power Take Offs</b>		Ref. TF4002ALSP
Relation 1 : 1		
<b>ZF</b>	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>4</b>
<b>PTO internal ratio</b>	<b>1:1</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.653
/ 5.50	.- 1 : 0.615
/ 6.20	.- 1 : 0.545
/ 6.61	.- 1 : 0.510
/ 6.61+GV80 / 5.30	High:.- 1 : 0.637 Normal:.- 1 : 0.510
/ 8.02	.- 1 : 0.422
/ 8.02+GV80 / 6.20	High:.- 1 : 0.545 Normal:.- 1 : 0.421

CTI TF4002ALSP 1211-1

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## Power Take Offs

Relation 1 : 1

Ref. TF4002ALSP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 ; 6S-1000

### Engine to PTO ratio

S5-90 GPA	.- 1 : 0.890		
S6-65 / 6.37	.- 1 : 0.650		
/ 6.70	.- 1 : 0.620		
/ 7.00+GV70 / 7.67	High: .- 1 : 0.456	Normal: .- 1 : 0.365	
/ 7.40	.- 1 : 0.562		
/ 7.52	.- 1 : 0.555		
/ 9.00	.- 1 : 0.462		
/ 7.97+GV80 / 6.70	High: .- 1 : 0.620	Normal: .- 1 : 0.525	
/ 9.00+GV80 / 6.70	High: .- 1 : 0.620	Normal: .- 1 : 0.462	
/ 9.00+GV80 / 7.52	High: .- 1 : 0.554	Normal: .- 1 : 0.462	
S6-66 / 7.36-1.0	.- 1 : 0.522		
/ 9.06-1.0	.- 1 : 0.416		
S6-70 / 6.80	.- 1 : 0.514		
/ 6.80+GV70 / 5.71	High: .- 1 : 0.612	Normal: .- 1 : 0.514	
/ 7.36	.- 1 : 0.478		
/ 7.92	.- 1 : 0.441		
/ 9.03	.- 1 : 0.387		
/ 9.59	.- 1 : 0.365		
S6-75 / 6.70+GV80 / 7.52	Normal: .- 1 : 0.620	Low: .- 1 : 0.554	
S6-80 / 5.03	.- 1 : 0.780		
/ 5.66	.- 1 : 0.740		
/ 5.66+GV80 / 7.52	High: .- 1 : 0.738	Normal: .- 1 : 0.556	
/ 6.10	.- 1 : 0.688		
/ 6.70	.- 1 : 0.620		
/ 6.70+GV80 / 5.30	High: .- 1 : 0.787	Normal: .- 1 : 0.620	
/ 6.90	.- 1 : 0.515		
/ 7.35	.- 1 : 0.552		
/ 7.41	.- 1 : 0.563		
/ 7.53	.- 1 : 0.555		
/ 7.67	.- 1 : 0.540		
/ 7.67+GV80 / 6.70	High: .- 1 : 0.622	Normal: .- 1 : 0.543	
/ 7.90	.- 1 : 0.525		
/ 9.00	.- 1 : 0.460		
/ 9.00+GV80 / 5.30	High: .- 1 : 0.787	Normal: .- 1 : 0.462	
/ 9.00+GV80 / 7.48	High: .- 1 : 0.562	Normal: .- 1 : 0.462	
/ 9.00+GV80 / 7.52	High: .- 1 : 0.554	Normal: .- 1 : 0.462	
S6-90 / 5.67	.- 1 : 0.750		
/ 5.74	.- 1 : 0.740		
/ 6.37	.- 1 : 0.740		
/ 6.98	.- 1 : 0.612		
/ 7.03	.- 1 : 0.603		
/ 7.03+GV90 / 5.67	High: .- 1 : 0.750	Normal: .- 1 : 0.603	
/ 7.03+GV90 / 5.74	High: .- 1 : 0.735	Normal: .- 1 : 0.600	
/ 7.40	.- 1 : 0.575		
/ 9.01	.- 1 : 0.470		
/ 9.01+GV90 / 7.40	High: .- 1 : 0.573	Normal: .- 1 : 0.471	

CTI TF4002ALSP 1211-1

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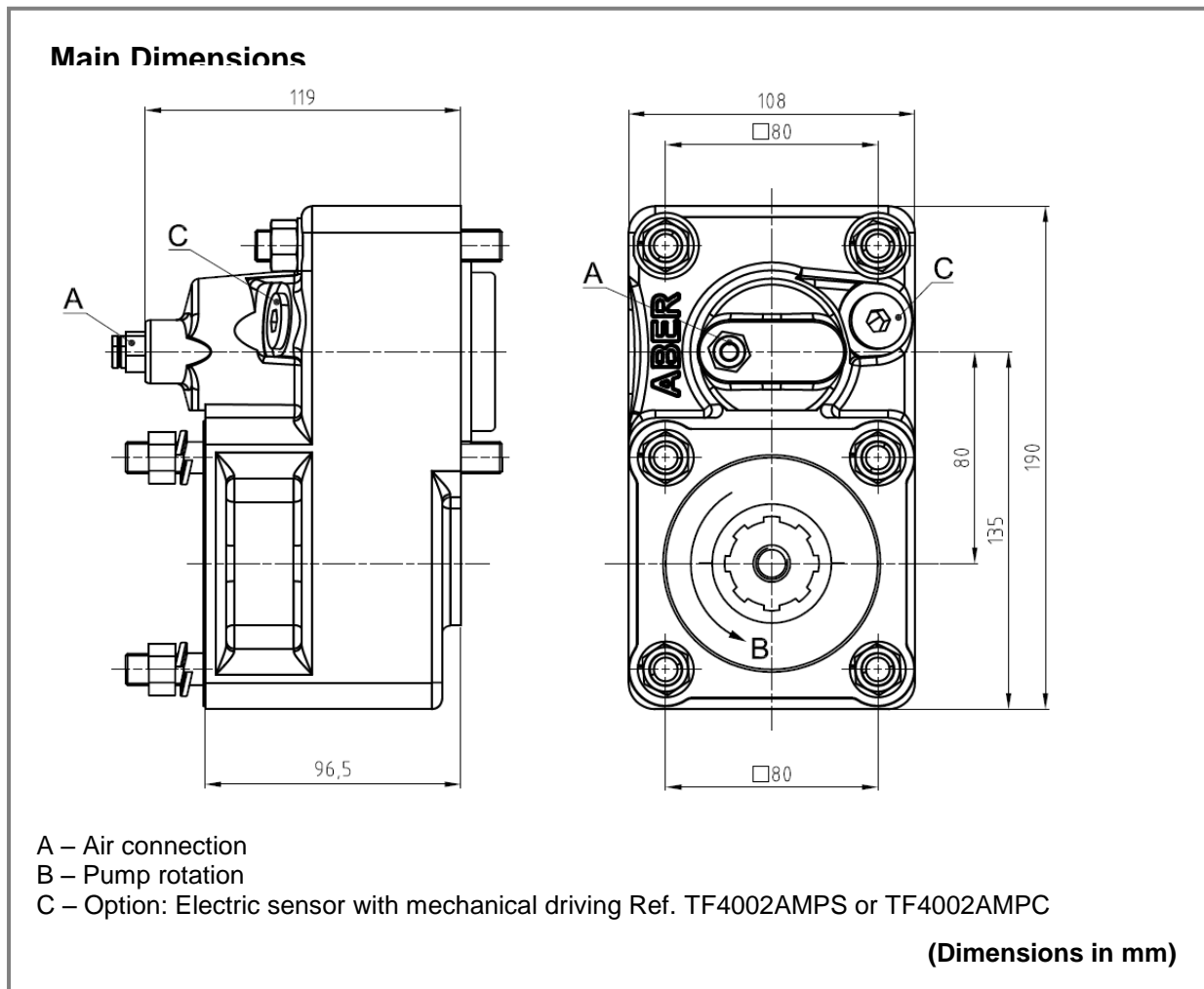
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<b>Power Take Offs</b>		Ref. TF4002AMP
Relation 1 : 1,32		
<b>ZF</b>	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO	

### To apply with Gear Pumps or with Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>7,5</b>
<b>PTO internal ratio</b>	<b>1:1,32</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.861
/ 5.50	.- 1 : 0.811
/ 6.20	.- 1 : 0.719
/ 6.61	.- 1 : 0.674
/ 6.61+GV80 / 5.30	High:.- 1 : 0.842 Normal:.- 1 : 0.674
/ 8.02	.- 1 : 0.557
/ 8.02+GV80 / 6.20	High:.- 1 : 0.719 Normal:.- 1 : 0.557

CTI TF4002AMP 1506- 4

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## Power Take Offs

Relation 1 : 1,32

Ref. TF4002AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO

### Engine to PTO ratio

S5-90 GPA		.- 1 : 1.174	
S6-65	/ 6.37	.- 1 : 0.860	
	/ 6.70	.- 1 : 0.820	
	/ 7.00+GV70 / 7.67	High: .- 1 : 0.602	Normal: .- 1 : 0.482
	/ 7.40	.- 1 : 0.741	
	/ 7.52	.- 1 : 0.732	
	/ 9.00	.- 1 : 0.610	
	/ 7.97+GV80 / 6.70	High: .- 1 : 0.819	Normal: .- 1 : 0.694
	/ 9.00+GV80 / 6.70	High: .- 1 : 0.819	Normal: .- 1 : 0.611
	/ 9.00+GV80 / 7.52	High: .- 1 : 0.732	Normal: .- 1 : 0.611
S6-66	/ 7.36-1.0	.- 1 : 0.690	
	/ 9.06-1.0	.- 1 : 0.550	
S6-70	/ 6.80	.- 1 : 0.679	
	/ 6.80+GV70 / 5.71	High: .- 1 : 0.808	Normal: .- 1 : 0.679
	/ 7.36	.- 1 : 0.630	
	/ 7.92	.- 1 : 0.582	
	/ 9.03	.- 1 : 0.511	
	/ 9.59	.- 1 : 0.482	
S6-75	/ 6.70+GV80 / 7.52	Normal: .- 1 : 0.819	Low: .- 1 : 0.732
S6-80	/ 5.03	.- 1 : 1.029	
	/ 5.66	.- 1 : 0.980	
	/ 5.66+GV80 / 7.52	High: .- 1 : 0.974	Normal: .- 1 : 0.733
	/ 6.10	.- 1 : 0.908	
	/ 6.70	.- 1 : 0.820	
	/ 6.70+GV80 / 5.30	High: .- 1 : 1.039	Normal: .- 1 : 0.819
	/ 6.90	.- 1 : 0.679	
	/ 7.35	.- 1 : 0.728	
	/ 7.41	.- 1 : 0.743	
	/ 7.53	.- 1 : 0.732	
	/ 7.67	.- 1 : 0.710	
	/ 7.67+GV80 / 6.70	High: .- 1 : 0.821	Normal: .- 1 : 0.716
	/ 7.90	.- 1 : 0.693	
	/ 9.00	.- 1 : 0.610	
	/ 9.00+GV80 / 5.30	High: .- 1 : 1.039	Normal: .- 1 : 0.611
	/ 9.00+GV80 / 7.48	High: .- 1 : 0.743	Normal: .- 1 : 0.611
	/ 9.00+GV80 / 7.52	High: .- 1 : 0.732	Normal: .- 1 : 0.611
S6-90	/ 5.67	.- 1 : 0.990	
	/ 5.74	.- 1 : 0.980	
	/ 6.37	.- 1 : 0.980	
	/ 6.98	.- 1 : 0.807	
	/ 7.03	.- 1 : 0.796	
	/ 7.03+GV90 / 5.67	High: .- 1 : 0.989	Normal: .- 1 : 0.796
	/ 7.03+GV90 / 5.74	High: .- 1 : 0.970	Normal: .- 1 : 0.790
	/ 7.40	.- 1 : 0.759	
	/ 9.01	.- 1 : 0.620	
	/ 9.01+GV90 / 7.40	High: .- 1 : 0.757	Normal: .- 1 : 0.622
6S-800 TO	/6.58-0.78	.-1 : 0.700	
6AS-800 TO	/6.58-0.78	.-1 : 0.700	
6S-1000 TO	/6.75-0.78	.-1 : 0.700	
6AS-1000 TO	/6.75-0.78	.-1 : 0.700	
6S-1200 TD	/7.72-1.00	.-1 : 0.713	
6S-1200 TO	/6.75-0.83	.-1 : 0.818	

CTI TF4002AMP 1506- 4

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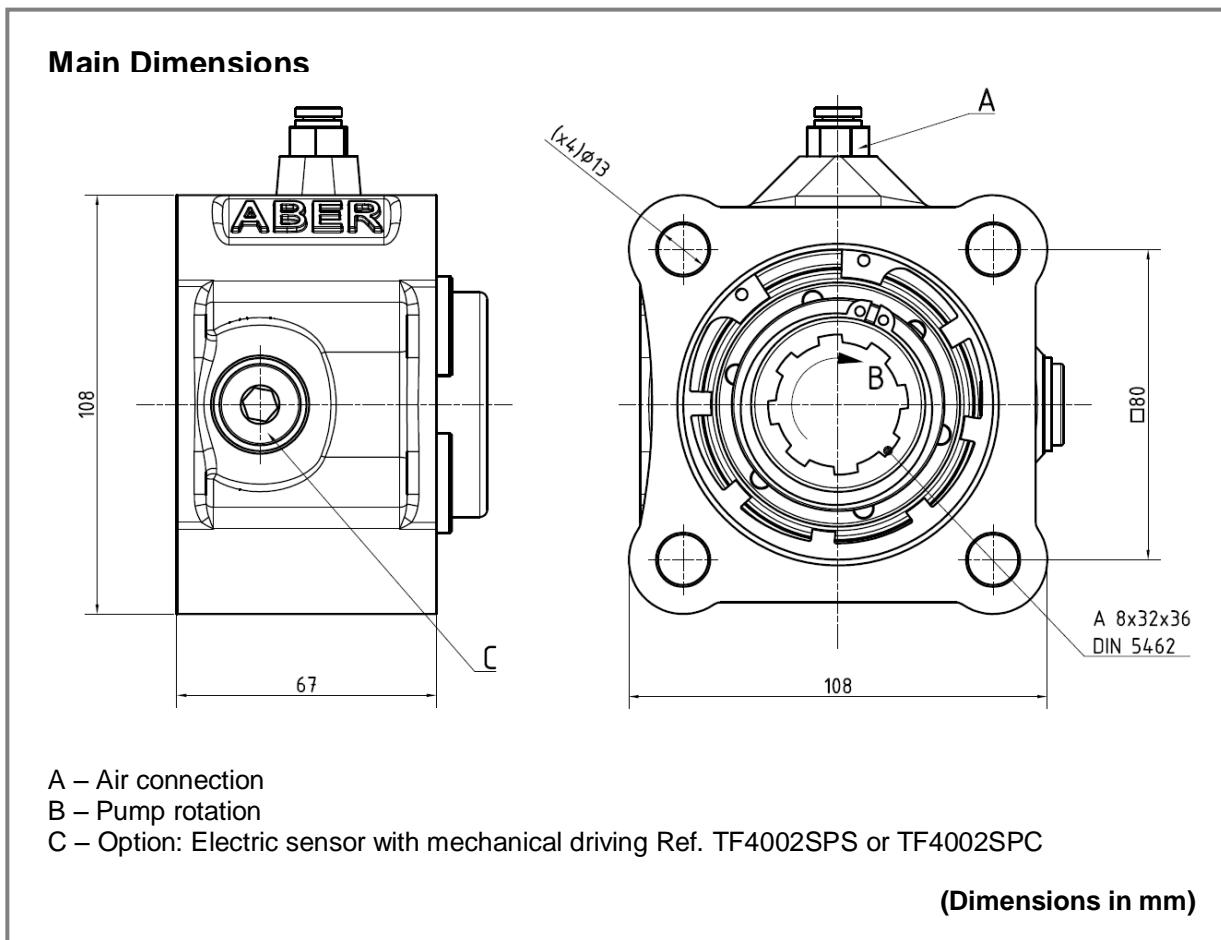
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<b>Power Take Offs</b>		Ref. TF4002SP
Relation 1 : 1		
<b>ZF</b>	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>1000</b>
<b>Intermittent Torque (Nm)</b>	<b>1200</b>
<b>Power (at 1000 rpm)</b>	<b>142 cv / 105 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>2.4</b>
<b>PTO internal ratio</b>	<b>1:1</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.653
/ 5.50	.- 1 : 0.615
/ 6.20	.- 1 : 0.545
/ 6.61	.- 1 : 0.510
/ 6.61+GV80 / 5.30	High:.- 1 : 0.637 Normal:.- 1 : 0.510
/ 8.02	.- 1 : 0.422
/ 8.02+GV80 / 6.20	High:.- 1 : 0.545 Normal:.- 1 : 0.421

CTI TF4002SP 1506- 6

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<b>Power Take Offs</b>		Ref. TF4002SP
Relation 1 : 1		
<b>ZF</b>	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO	

Engine to PTO ratio		
S5-90 GPA	- 1 :	0.890
S6-65 / 6.37	- 1 :	0.650
/ 6.70	- 1 :	0.620
/ 7.00+GV70 / 7.67	High: - 1 :	0.456 Normal: - 1 : 0.365
/ 7.40	- 1 :	0.562
/ 7.52	- 1 :	0.555
/ 9.00	- 1 :	0.462
/ 7.97+GV80 / 6.70	High: - 1 :	0.620 Normal: - 1 : 0.525
/ 9.00+GV80 / 6.70	High: - 1 :	0.620 Normal: - 1 : 0.462
/ 9.00+GV80 / 7.52	High: - 1 :	0.554 Normal: - 1 : 0.462
S6-66 / 7.36-1.0	- 1 :	0.522
/ 9.06-1.0	- 1 :	0.416
S6-70 / 6.80	- 1 :	0.514
/ 6.80+GV70 / 5.71	High: - 1 :	0.612 Normal: - 1 : 0.514
/ 7.36	- 1 :	0.478
/ 7.92	- 1 :	0.441
/ 9.03	- 1 :	0.387
/ 9.59	- 1 :	0.365
S6-75 / 6.70+GV80 / 7.52	Normal: - 1 :	0.620 Low: - 1 : 0.554
S6-80 / 5.03	- 1 :	0.780
/ 5.66	- 1 :	0.740
/ 5.66+GV80 / 7.52	High: - 1 :	0.738 Normal: - 1 : 0.556
/ 6.10	- 1 :	0.688
/ 6.70	- 1 :	0.620
/ 6.70+GV80 / 5.30	High: - 1 :	0.787 Normal: - 1 : 0.620
/ 6.90	- 1 :	0.515
/ 7.35	- 1 :	0.552
/ 7.41	- 1 :	0.563
/ 7.53	- 1 :	0.555
/ 7.67	- 1 :	0.540
/ 7.67+GV80 / 6.70	High: - 1 :	0.622 Normal: - 1 : 0.543
/ 7.90	- 1 :	0.525
/ 9.00	- 1 :	0.460
/ 9.00+GV80 / 5.30	High: - 1 :	0.787 Normal: - 1 : 0.462
/ 9.00+GV80 / 7.48	High: - 1 :	0.562 Normal: - 1 : 0.462
/ 9.00+GV80 / 7.52	High: - 1 :	0.554 Normal: - 1 : 0.462
S6-90 / 5.67	- 1 :	0.750
/ 5.74	- 1 :	0.740
/ 6.37	- 1 :	0.740
/ 6.98	- 1 :	0.612
/ 7.03	- 1 :	0.603
/ 7.03+GV90 / 5.67	High: - 1 :	0.750 Normal: - 1 : 0.603
/ 7.03+GV90 / 5.74	High: - 1 :	0.735 Normal: - 1 : 0.600
/ 7.40	- 1 :	0.575
/ 9.01	- 1 :	0.470
/ 9.01+GV90 / 7.40	High: - 1 :	0.573 Normal: - 1 : 0.471
6S-800 TO / 6.58-0.78	- 1 :	0.530
6AS-800 TO / 6.58-0.78	- 1 :	0.530
6S-1000 TO / 6.75-0.78	- 1 :	0.530
6AS-1000 TO / 6.75-0.78	- 1 :	0.530
6S-1200 TD / 7.72-1.00	- 1 :	0.540
6S-1200 TO / 6.75-0.83	- 1 :	0.620

CTI TF4002SP 1506-6

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## Power Take Offs

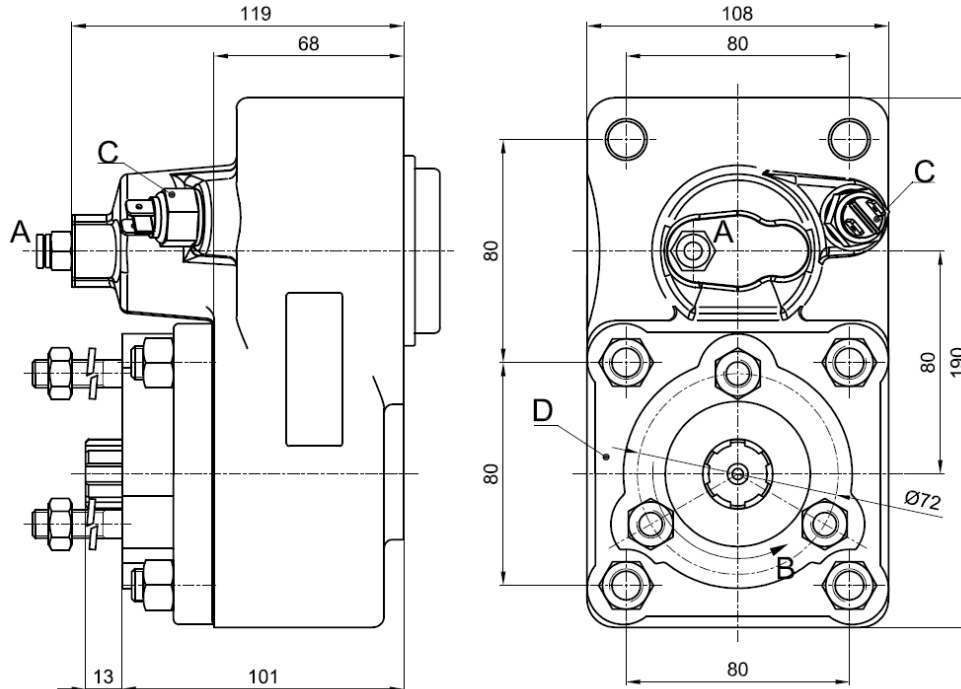
Relation 1 : 1,32

Ref. TF4002UNI

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 ; 6S-1000

### Main Dimensions



- A – Air connection
- B – Sense of rotation
- C – Option: Electric sensor with mechanical driving Ref. TF4002UNIS or TF4002UNIC
- D – It can be positioned on 4 different ways

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>380</b>
<b>Power (at 1000 rpm)</b>	<b>40 cv / 30 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>11</b>
<b>PTO internal ratio</b>	<b>1:1,32</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.861
/ 5.50	.- 1 : 0.811
/ 6.20	.- 1 : 0.719
/ 6.61	.- 1 : 0.674
/ 6.61+GV80 / 5.30	High: - 1 : 0.842 Normal: - 1 : 0.674
/ 8.02	.- 1 : 0.557
/ 8.02+GV80 / 6.20	High: -1 : 0.719 Normal: - 1 : 0.557

CTI TF4002UNI 1211-2

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## Power Take Offs

Relation 1 : 1,32

Ref. TF4002UNI

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 ; 6S-1000

### Engine to PTO ratio

S5-90 GPA	- 1 : 1.174		
S6-65 / 6.37	- 1 : 0.860		
/ 6.70	- 1 : 0.820		
/ 7.00+GV70 / 7.67	High: - 1 : 0.602	Normal: - 1 : 0.482	
/ 7.40	- 1 : 0.741		
/ 7.52	- 1 : 0.732		
/ 9.00	- 1 : 0.610		
/ 7.97+GV80 / 6.70	High: - 1 : 0.819	Normal: - 1 : 0.694	
/ 9.00+GV80 / 6.70	High: - 1 : 0.819	Normal: - 1 : 0.611	
/ 9.00+GV80 / 7.52	High: - 1 : 0.732	Normal: - 1 : 0.611	
S6-66 / 7.36-1.0	- 1 : 0.690		
/ 9.06-1.0	- 1 : 0.550		
S6-70 / 6.80	- 1 : 0.679		
/ 6.80+GV70 / 5.71	High: - 1 : 0.808	Normal: - 1 : 0.679	
/ 7.36	- 1 : 0.630		
/ 7.92	- 1 : 0.582		
/ 9.03	- 1 : 0.511		
/ 9.59	- 1 : 0.482		
S6-75 / 6.70+GV80 / 7.52	Normal: - 1 : 0.819	Low: - 1 : 0.732	
S6-80 / 5.03	- 1 : 1.029		
/ 5.66	- 1 : 0.980		
/ 5.66+GV80 / 7.52	High: - 1 : 0.974	Normal: - 1 : 0.733	
/ 6.10	- 1 : 0.908		
/ 6.70	- 1 : 0.820		
/ 6.70+GV80 / 5.30	High: - 1 : 1.039	Normal: - 1 : 0.819	
/ 6.90	- 1 : 0.679		
/ 7.35	- 1 : 0.728		
/ 7.41	- 1 : 0.743		
/ 7.53	- 1 : 0.732		
/ 7.67	- 1 : 0.710		
/ 7.67+GV80 / 6.70	High: - 1 : 0.821	Normal: - 1 : 0.716	
/ 7.90	- 1 : 0.693		
/ 9.00	- 1 : 0.610		
/ 9.00+GV80 / 5.30	High: - 1 : 1.039	Normal: - 1 : 0.611	
/ 9.00+GV80 / 7.48	High: - 1 : 0.743	Normal: - 1 : 0.611	
/ 9.00+GV80 / 7.52	High: - 1 : 0.732	Normal: - 1 : 0.611	
S6-90 / 5.67	- 1 : 0.990		
/ 5.74	- 1 : 0.980		
/ 6.37	- 1 : 0.980		
/ 6.98	- 1 : 0.807		
/ 7.03	- 1 : 0.796		
/ 7.03+GV90 / 5.67	High: - 1 : 0.989	Normal: - 1 : 0.796	
/ 7.03+GV90 / 5.74	High: - 1 : 0.970	Normal: - 1 : 0.790	
/ 7.40	- 1 : 0.759		
/ 9.01	- 1 : 0.620		
/ 9.01+GV90 / 7.40	High: - 1 : 0.757	Normal: - 1 : 0.622	

CTI TF4002UNI 1211-2

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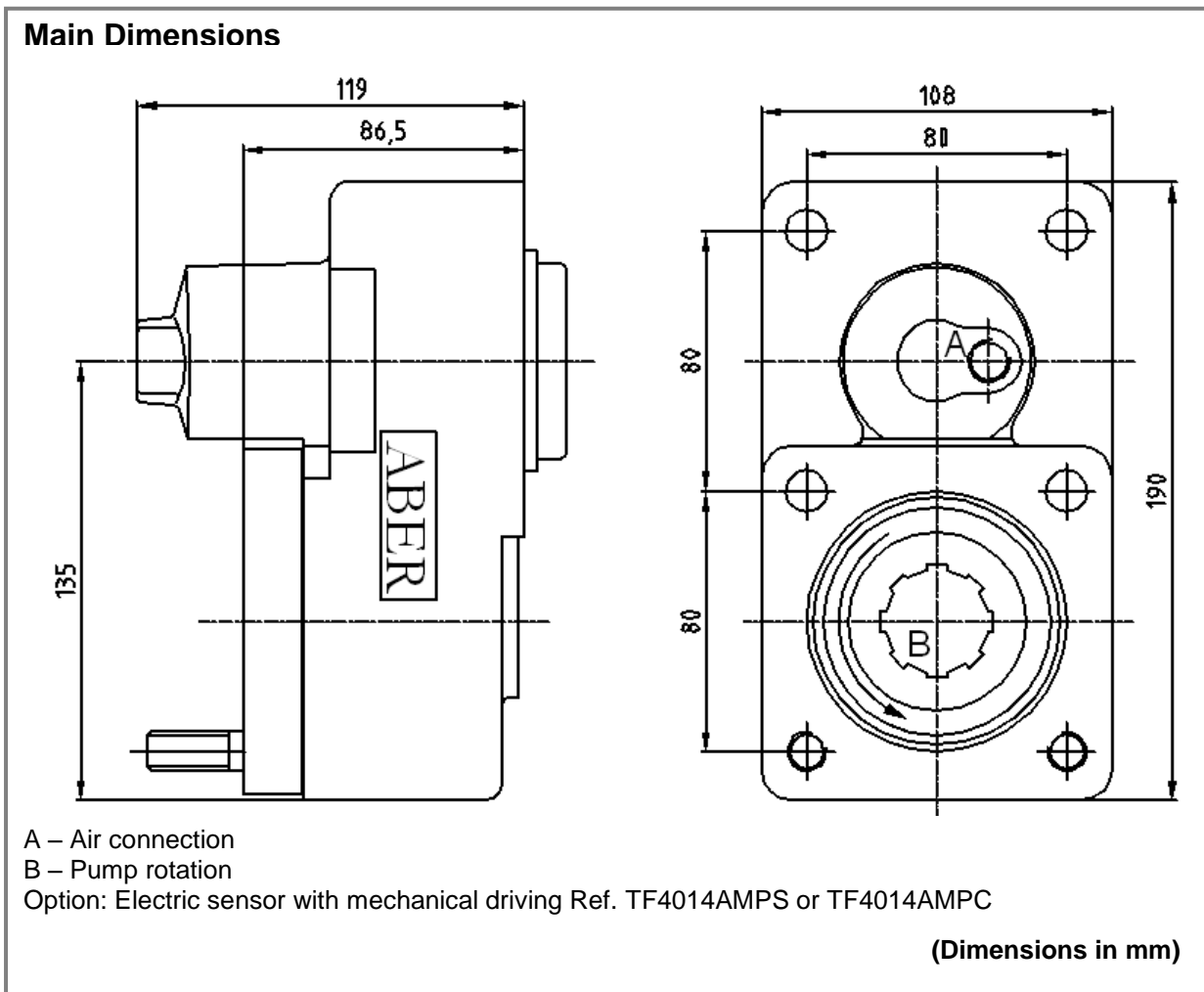
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<b>Power Take Offs</b> Relation 1 : 1,32		Ref. TF4014AMP
ZF	S6-36 ; 6S-850 ; 6S-700	

**To apply with Gear Pumps or with Piston Pumps**



Main Data			
<b>Continuous Torque (Nm)</b>		<b>300</b>	
<b>Intermittent Torque (Nm)</b>		<b>420</b>	
<b>Power (at 1000 rpm)</b>		<b>42 cv / 32 kW</b>	
<b>Mounting Position</b>		<b>Rear</b>	
<b>Pump Rotation</b>		<b>Right Hand</b>	
<b>Weight (kg)</b>		<b>7,5</b>	
<b>PTO internal ratio</b>		<b>1:1,32</b>	
<b>Indicative ratio from motor to PTO's output</b>			
6-S-850 / 6.72-0.79	- 1 : 0.700	S6-36 / 6.06	- 1 : 0.770
/ 6.93-0.80	- 1 : 0.673	/ 6.93 - 0.80	- 1 : 0.673
/ 7.43-1.00	- 1 : 0.634	/ 7.43 - 1.00	- 1 : 0.634
/ 8.97-1.00	- 1 : 0.530	/ 8.97 - 1.00	- 1 : 0.530
		/ 7.43 - 0.85+GV36	High: 1 : 0.740 Normal: 1 : 0.630
		/ 8.97 - 0.83+GV36	High: 1 : 0.630 Normal: 1 : 0.520

CTI TF4014AMP 1211-3

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<b>Power Take Offs</b> Relation 1 : 1		Ref. TF4014SP
<b>ZF</b>	S6-36 ; 6S-700 ; 6AS-700 ; 6S-850	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

A – Air connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4014SPS or TF4014SPC

**(Dimensions in mm)**

Main Data			
<b>Continuous Torque (Nm)</b>	<b>600</b>		
<b>Intermittent Torque (Nm)</b>	<b>720</b>		
<b>Power (at 1000 rpm)</b>	<b>85 cv / 63 kW</b>		
<b>Mounting Position</b>	<b>Rear</b>		
<b>Pump Rotation</b>	<b>Left Hand</b>		
<b>Weight (kg)</b>	<b>2.4</b>		
<b>PTO internal ratio</b>	<b>1:1</b>		
<b>Indicative ratio from motor to PTO's output</b>			
6S-850 / 6.72-0.79	.- 1 : 0.530	S6-36 / 6.06	.- 1 : 0.583
/ 6.93-0.80	.- 1 : 0.510	/ 6.93 - 0.80	.- 1 : 0.510
/ 7.43-1.00	.- 1 : 0.480	/ 7.43 - 1.00	.- 1 : 0.480
/ 8.51-1.00	.- 1 : 0.420	/ 8.97 - 1.00	.- 1 : 0.401
/ 8.97-1.00	.- 1 : 0.401	/ 7.43 - 0.85+GV36	High: 1 : 0.560 Normal: 1 : 0.477
		/ 8.97 - 0.83+GV36	High: 1 : 0.477 Normal: 1 : 0.393
6S-700 / 6.02-0.79	.- 1 : 0.570	6AS-700 TO/6.02-0.79	.- 1 : 0.570

CTI TF4014SP 1506-5

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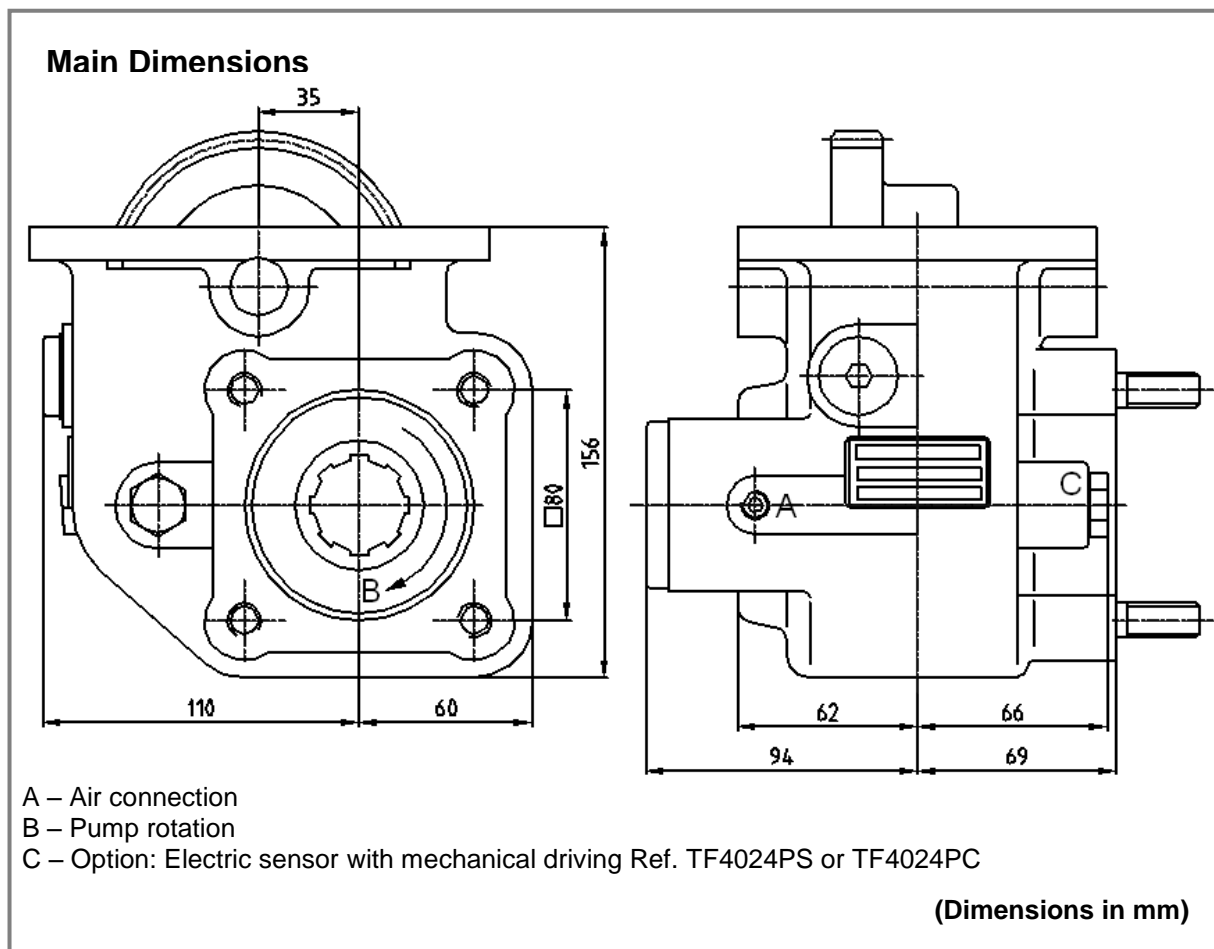
## POWER TAKE OFFS

Ref. TF4024P

ZF

S5-42/5.72

To apply with Gear Pumps or Piston Pumps



### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,59</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,20</b>

CTI TF4024P 1211-2

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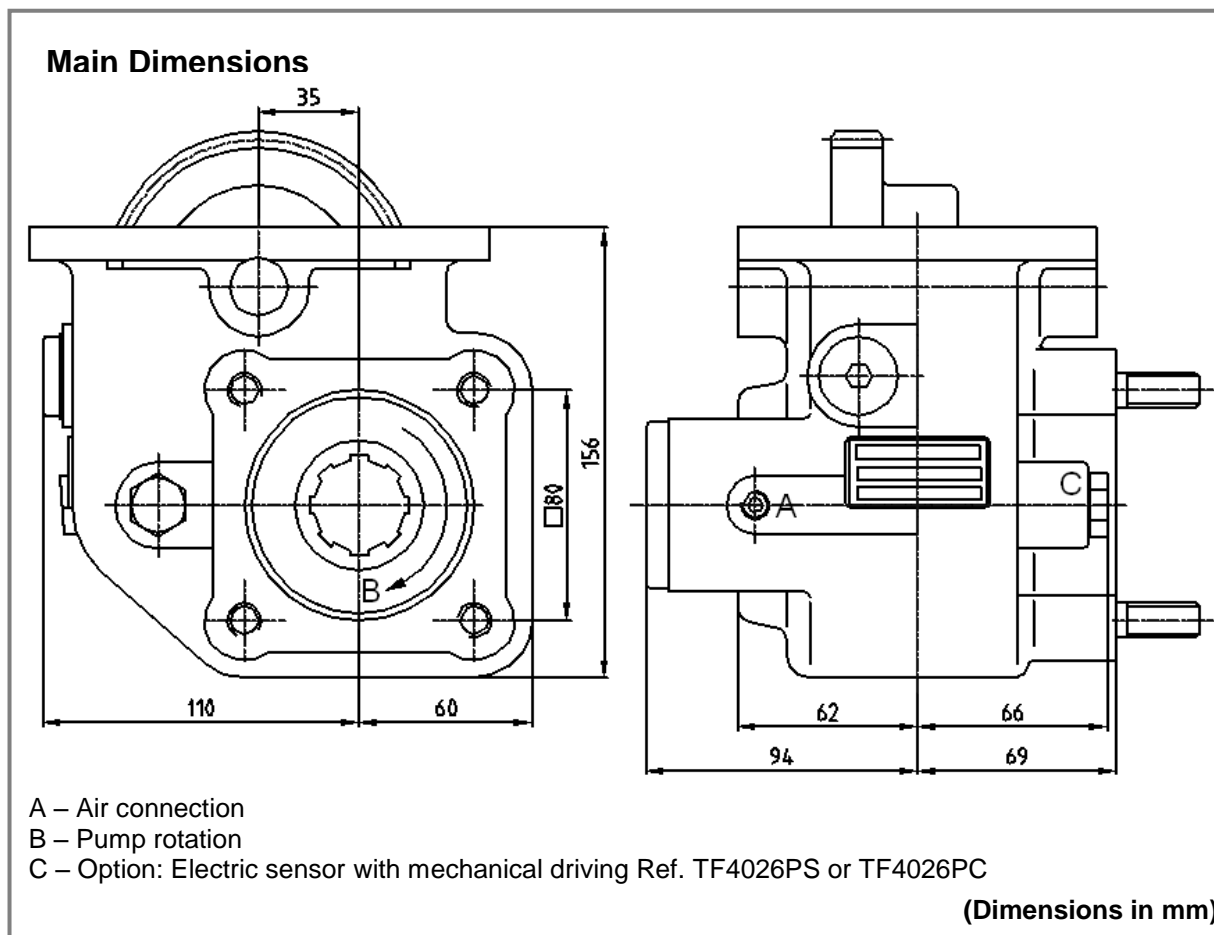
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<b>POWER TAKE OFFS</b>		Ref. TF4026P
<b>ZF</b>	S5-42/4.65	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,59</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,66</b>

CTI TF4026P 1211-2

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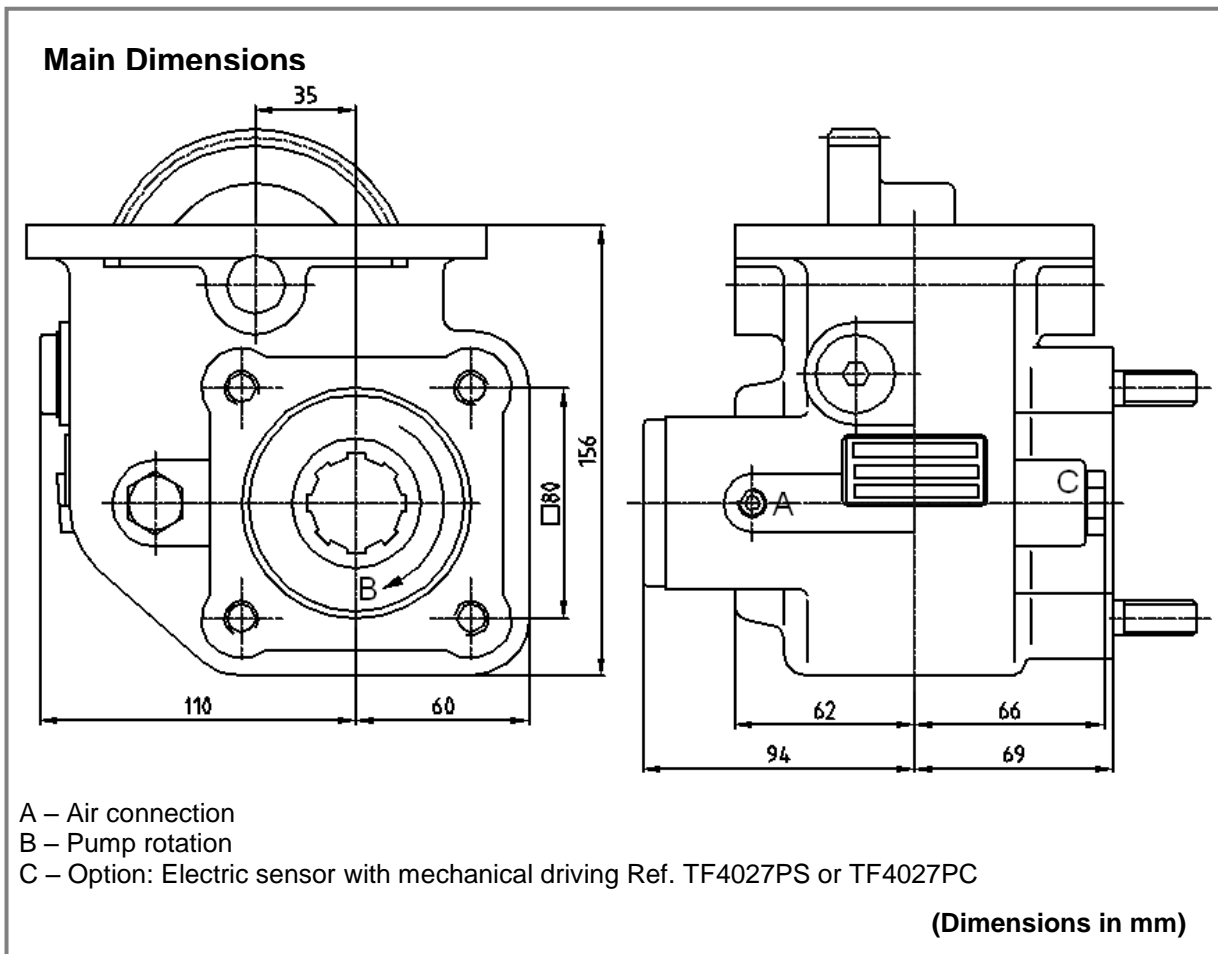


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<b>POWER TAKE OFFS</b>		Ref. TF4027P
<b>ZF</b>	S5-42/7.55	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,33</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1</b>

CTI TF4027P 1211-2

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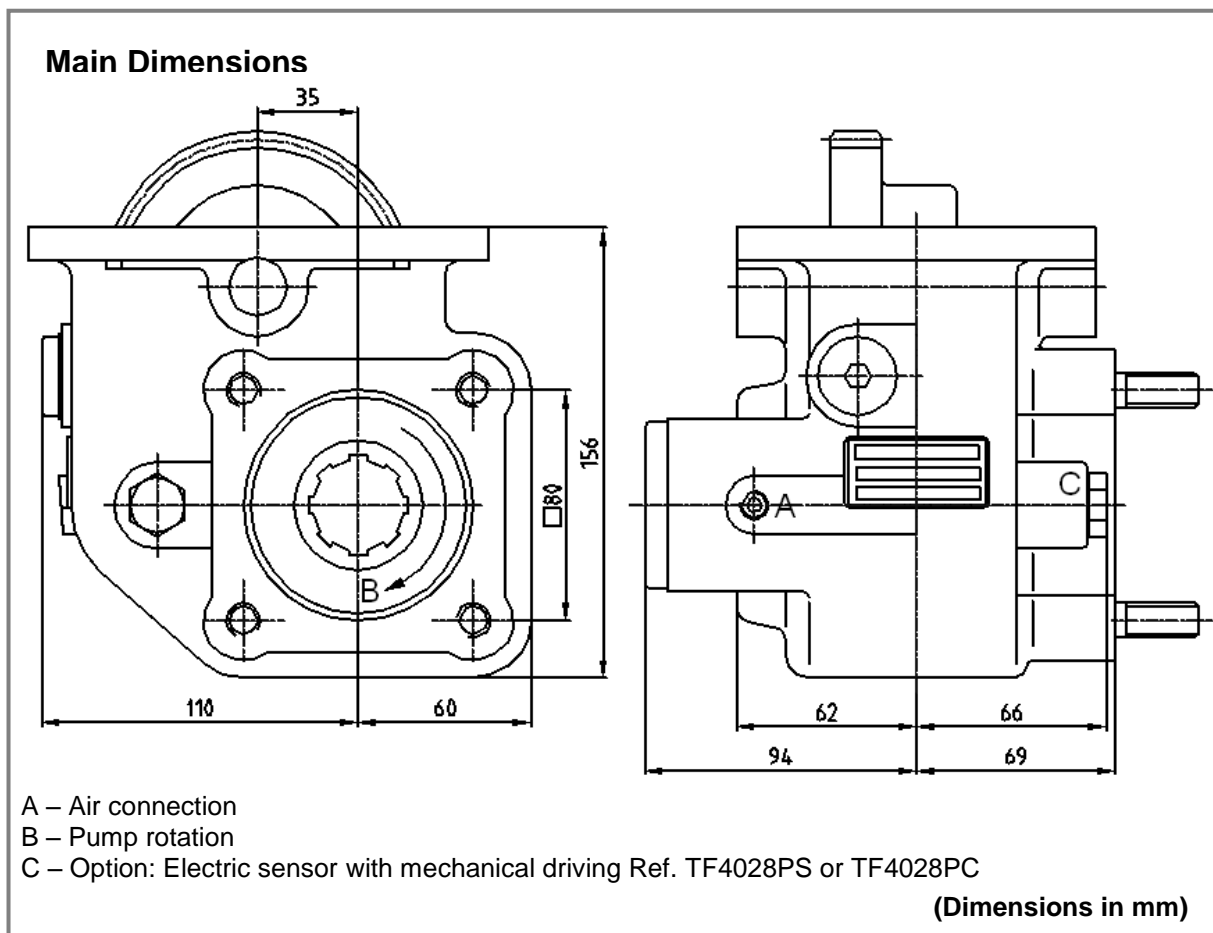
## POWER TAKE OFFS

Ref. TF4028P

ZF

S5-42/6.56

To apply with Gear Pumps or Piston Pumps



### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,36</b>
<b>Indicative ratio from motor to PTO's output</b>	

CTI TF4028P 1211-2

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<b>POWER TAKE OFFS</b>		Ref. TF4029M
<b>ZF</b>	5S-200 ; 5S-300 ; 2830.5 Mechanic Control	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

X – Mechanic control  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4029MS or TF4029MC

**(Dimensions in mm)**

<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,65</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,24</b>

CTI TF4029M 1211-2

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## POWER TAKE OFFS

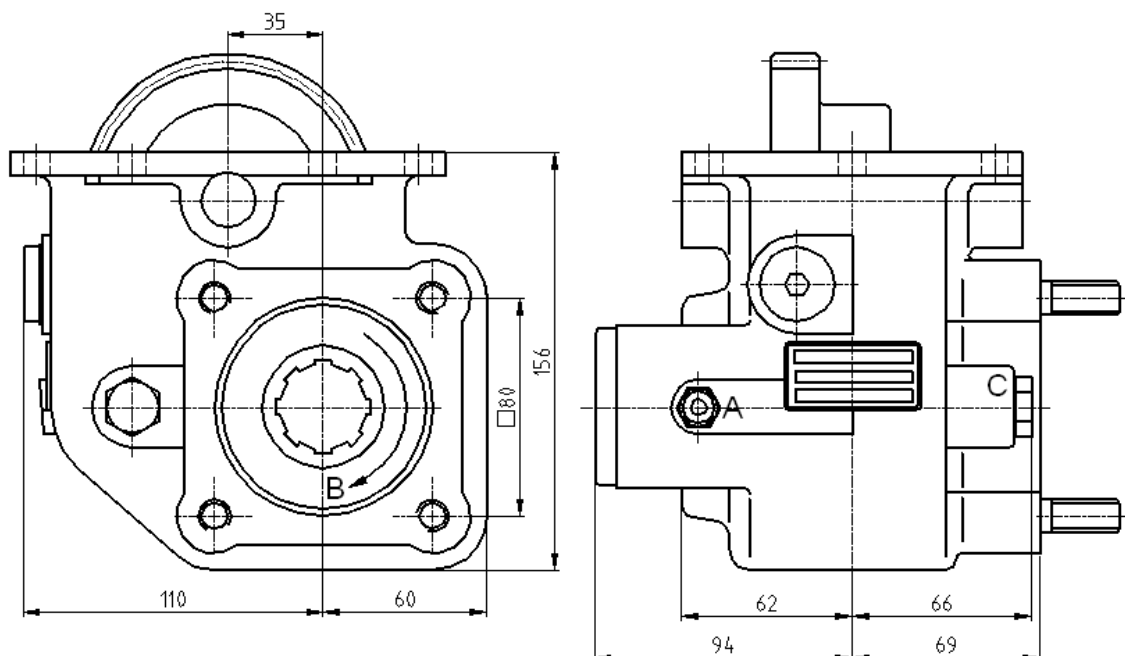
Ref. TF4029P

ZF

5S-200 ; 5S-300 ; 2830.5 Pneumatic Control

To apply with Gear Pumps or Piston Pumps

### Main Dimensions



A – Air connection

B – Pump rotation

C – Option: Electric sensor with mechanical driving Ref. TF4029PS or TF4029PC

(Dimensions in mm)

### Main Data

Continuous Torque (Nm)	300
Intermittent Torque (Nm)	420
Power (at 1000 rpm)	42 cv / 32 kW
Mounting Position	Left
Pump Rotation	Left Hand
Weight (kg)	12
PTO internal ratio	1:1,65
Indicative ratio from motor to PTO's output	1:1,24

CTI TF4029P 1211-2

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## POWER TAKE OFFS

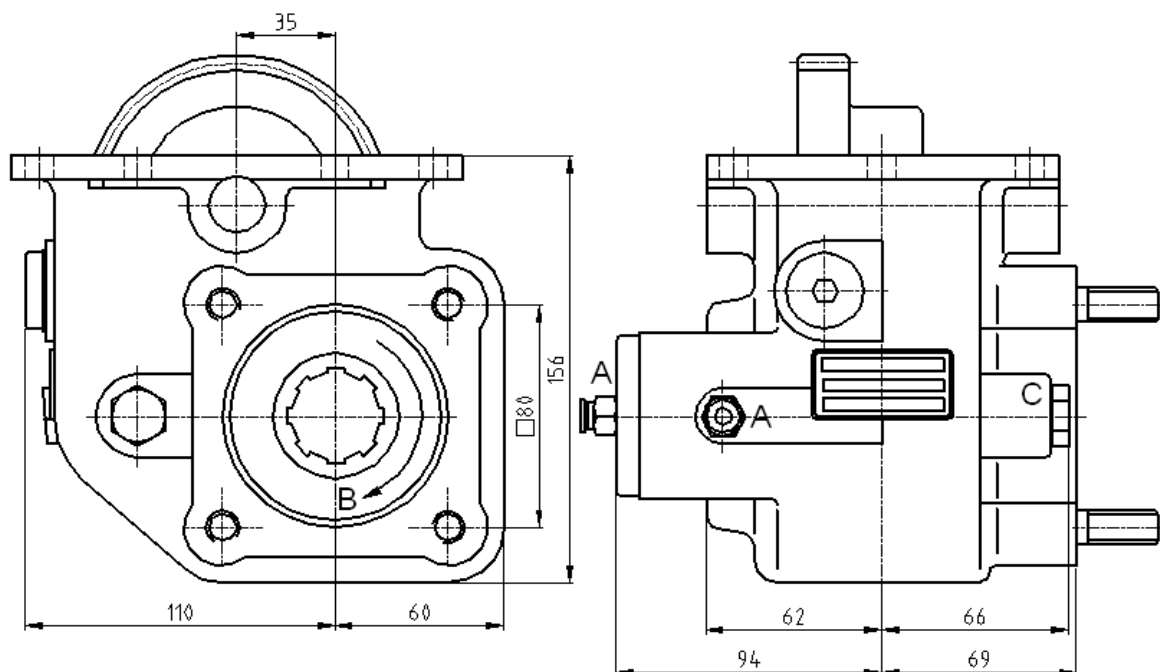
Ref. TF4029V

ZF

5S-200 ; 5S-300 ; 2830.5 Vacuum Control

To apply with Gear Pumps or Piston Pumps

### Main Dimensions



A – Vacuum connection

B – Pump rotation

C – Option: Electric sensor with mechanical driving Ref. TF4029VS or TF4029VC

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,65</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,24</b>

CTI TF4029V 1211-2

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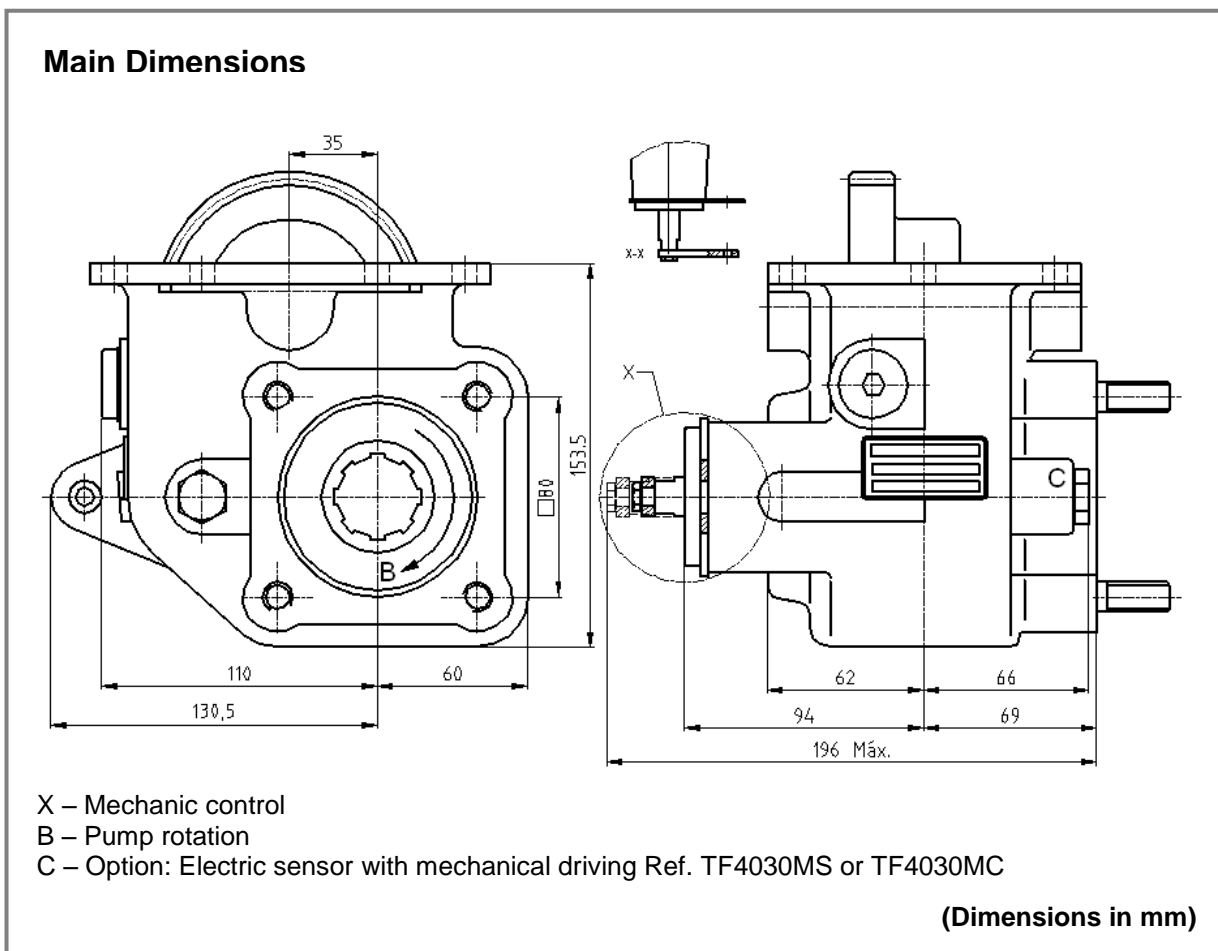
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<b>POWER TAKE OFFS</b>		Ref. TF4030M
<b>ZF</b>	6S-300 ; 6S-350 Mechanic Control	

To apply with Gear Pumps or Piston Pumps



<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,58</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,05</b>

CTI TF4030M 1211-2

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<b>POWER TAKE OFFS</b>		Ref. TF4030P
<b>ZF</b>	6S-300 ; 6S-350 Pneumatic Control	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

A – Pneumatic connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4030PS or TF4030PC

**(Dimensions in mm)**

Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (Kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1.1,58</b>
<b>Indicative ratio from motor to PTO´s output</b>	<b>1:1,05</b>

CTI TF4030P 1211-2

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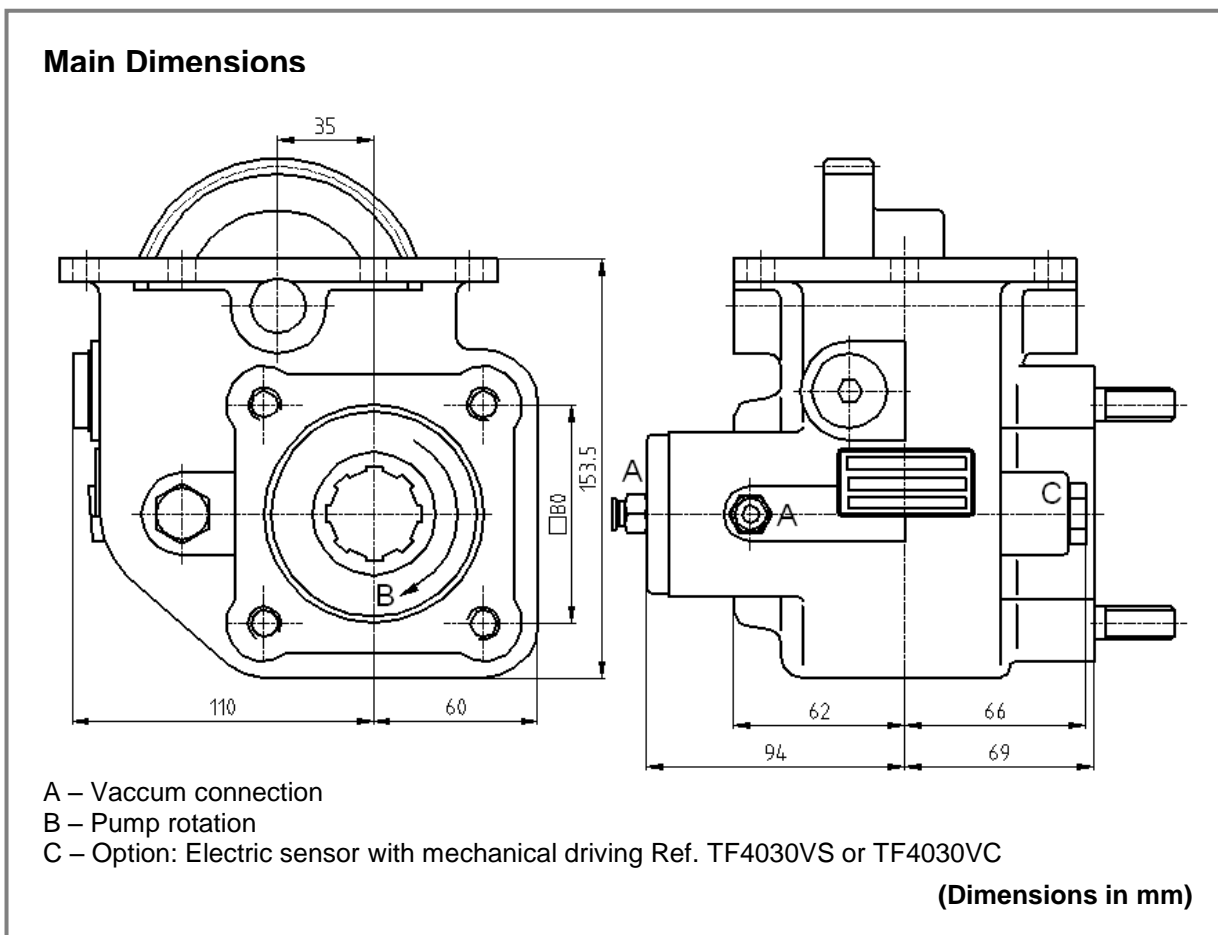


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<b>POWER TAKE OFFS</b>		Ref. TF4030V
<b>ZF</b>	6S-300 ; 6S-350 Vacuum Control	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,58</b>
<b>Indicative ratio from motor to PTO´s output</b>	<b>1:1,05</b>

CTI TF4030V 1211- 1

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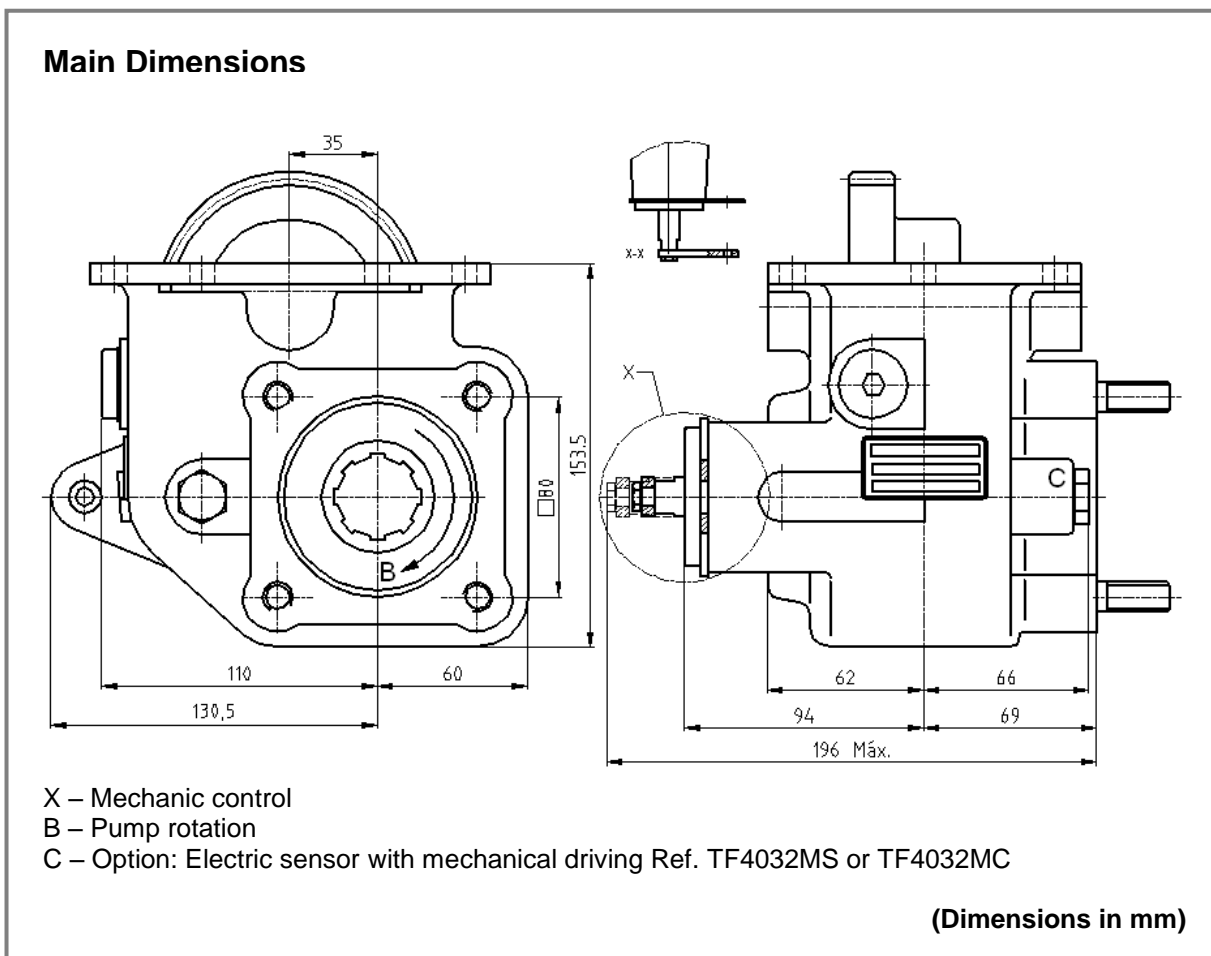


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<b>POWER TAKE OFFS</b>		Ref. TF4032M
<b>ZF</b>	6S-380 ; 6S-400 ; 2840.6 Mechanic Control	

To apply with Gear Pumps or Piston Pumps



<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,55</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1</b>

CTI TF4032M 1211-2

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<b>POWER TAKE OFFS</b>		Ref. TF4032P
<b>ZF</b>	6S-380 ; 6S-400 ; 2840.6 Pneumatic Control	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

A – Pneumatic connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4032PS or TF4032PC

**(Dimensions in mm)**

<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,55</b>
<b>Indicative ratio from motor to PTO´s output</b>	<b>1:1</b>

CTI TF4032P 1211-2

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<b>POWER TAKE OFFS</b>		Ref. TF4032V
<b>ZF</b>	6S-380 ; 6S-400 ; 2840.6 Vacuum Control	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

A – Vacuum connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4032VS or TF4032VC

**(Dimensions in mm)**

<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,55</b>
<b>Indicative ratio from motor to PTO´s output</b>	<b>1:1</b>

CTI TF4032V 1211-2

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## Power Take Offs

Relation 1 : 1

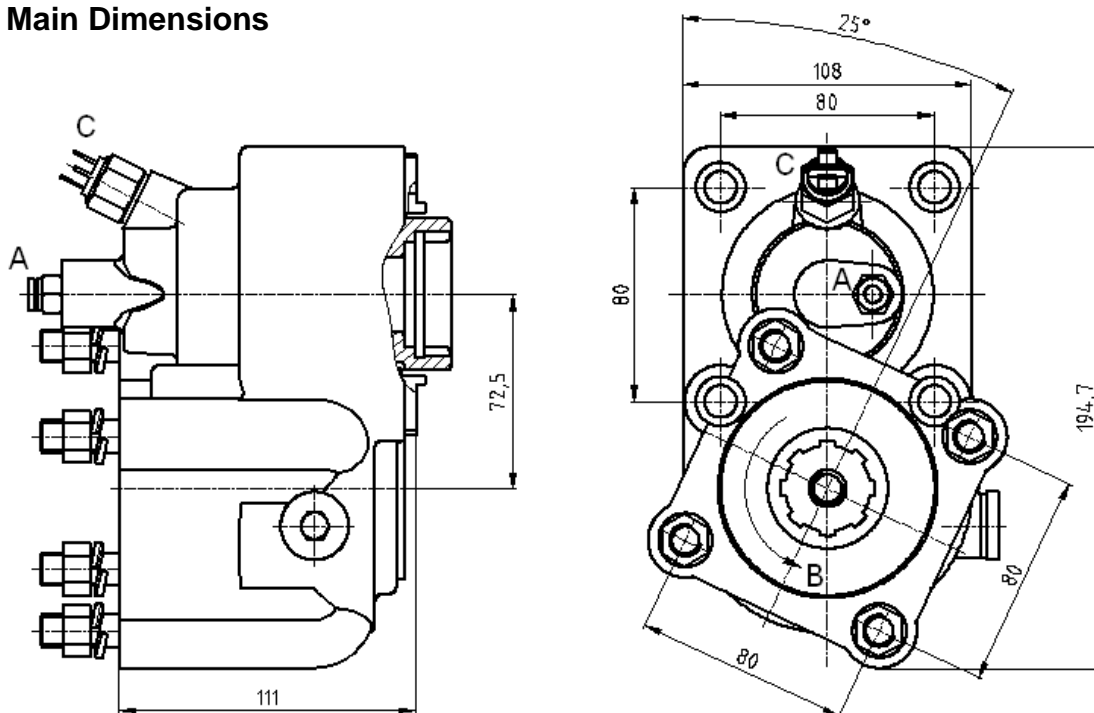
Ref. TF4033AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

To apply with Gear Pumps or with Piston Pumps

### Main Dimensions



A – Air connection

B – Sense of rotation

C – Option: Electric sensor with mechanical driving Ref. TF4033AMPS or TF4033AMPC

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>500</b>
<b>Intermittent Torque (Nm)</b>	<b>550</b>
<b>Power (at 1000 rpm)</b>	<b>69 cv / 51 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>11</b>
<b>PTO internal ratio</b>	<b>1:1</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.653
/ 5.50	.- 1 : 0.615
/ 6.20	.- 1 : 0.545
/ 6.61	.- 1 : 0.510
/ 6.61+GV80 / 5.30	High: .- 1 : 0.637 Normal: .- 1 : 0.510
/ 8.02	.- 1 : 0.422
/ 8.02+GV80 / 6.20	High: .-1 : 0.545 Normal: .- 1 : 0.421

CTI TF4033AMP 1506- 3

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# Power Take Offs

Relation 1 : 1

Ref. TF4033AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

## Engine to PTO ratio

S5-90 GPA		.- 1 : 0.890
S6-65 / 6.37		.- 1 : 0.650
/ 6.70		.- 1 : 0.620
/ 7.00+GV70 / 7.67	High: .-	1 : 0.456 Normal: .-
/ 7.40		.- 1 : 0.562
/ 7.52		.- 1 : 0.555
/ 9.00		.- 1 : 0.462
/ 7.97+GV80 / 6.70	High: .-	1 : 0.620 Normal: .-
/ 9.00+GV80 / 6.70	High: .-	1 : 0.620 Normal: .-
/ 9.00+GV80 / 7.52	High: .-	1 : 0.554 Normal: .-
S6-66 / 7.36-1.0		.- 1 : 0.522
/ 9.06-1.0		.- 1 : 0.416
S6-70 / 6.80		.- 1 : 0.514
/ 6.80+GV70 / 5.71	High: .-	1 : 0.612 Normal: .-
/ 7.36		.- 1 : 0.478
/ 7.92		.- 1 : 0.441
/ 9.03		.- 1 : 0.387
/ 9.59		.- 1 : 0.365
S6-75 / 6.70+GV80 / 7.52	Normal: .-	1 : 0.620 Low: .-
S6-80 / 5.03		.- 1 : 0.780
/ 5.66		.- 1 : 0.740
/ 5.66+GV80 / 7.52	High: .-	1 : 0.738 Normal: .-
/ 6.10		.- 1 : 0.688
/ 6.70		.- 1 : 0.620
/ 6.70+GV80 / 5.30	High: .-	1 : 0.787 Normal: .-
/ 6.90		.- 1 : 0.515
/ 7.35		.- 1 : 0.552
/ 7.41		.- 1 : 0.563
/ 7.53		.- 1 : 0.555
/ 7.67		.- 1 : 0.540
/ 7.67+GV80 / 6.70	High: .-	1 : 0.622 Normal: .-
/ 7.90		.- 1 : 0.525
/ 9.00		.- 1 : 0.460
/ 9.00+GV80 / 5.30	High: .-	1 : 0.787 Normal: .-
/ 9.00+GV80 / 7.48	High: .-	1 : 0.562 Normal: .-
/ 9.00+GV80 / 7.52	High: .-	1 : 0.554 Normal: .-
S6-90 / 5.67		.- 1 : 0.750
/ 5.74		.- 1 : 0.740
/ 6.37		.- 1 : 0.740
/ 6.98		.- 1 : 0.612
/ 7.03		.- 1 : 0.603
/ 7.03+GV90 / 5.67	High: .-	1 : 0.750 Normal: .-
/ 7.03+GV90 / 5.74	High: .-	1 : 0.735 Normal: .-
/ 7.40		.- 1 : 0.575
/ 9.01		.- 1 : 0.470
/ 9.01+GV90 / 7.40	High: .-	1 : 0.573 Normal: .-
6S-800 TO / 6.58-0.78		.-1 : 0.530
6AS-800 TO / 6.58-0.78		.-1 : 0.530
6S-1000 TO / 6.75-0.78		.-1 : 0.530
6AS-1000 TO / 6.75-0.78		.-1 : 0.530
6S-1200 TD / 7.72-1.00		.-1 : 0.540
6S-1200 TO / 6.75-0.83		.-1 : 0.620

CTI TF4033AMP 1506- 3

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown. The gear boxes are in constant change; therefore, ABER is not to be held responsible for any damage resulting from wrong application or application of outdated material.



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## Power Take Offs

Relation 1 : 1,73

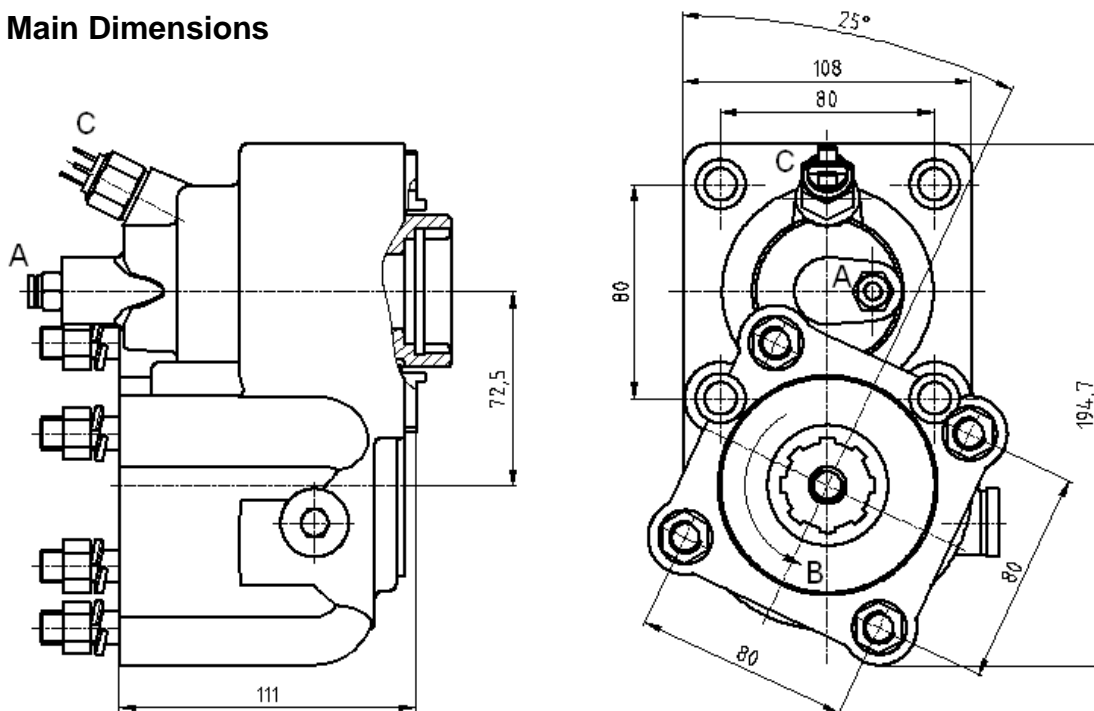
Ref. TF4034AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

To apply with Gear Pumps or with Piston Pumps

### Main Dimensions



A – Air connection

B – Sense of rotation

C – Option: Electric sensor with mechanical driving Ref. TF4034AMPS or TF4034AMPC

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>350</b>
<b>Intermittent Torque (Nm)</b>	<b>450</b>
<b>Power (at 1000 rpm)</b>	<b>48 cv / 36 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>11</b>
<b>PTO internal ratio</b>	<b>1:1,73</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 1.130
/ 5.50	.- 1 : 1.064
/ 6.20	.- 1 : 0.943
/ 6.61	.- 1 : 0.882
/ 6.61+GV80 / 5.30	High:.- 1 : 1.102 Normal:.- 1 : 0.882
/ 8.02	.- 1 : 0.730
/ 8.02+GV80 / 6.20	High:.-1 : 0.943 Normal:.- 1 : 0.728

CTI TF4034AMP 1506- 3

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## Power Take Offs

Relation 1 : 1,73

Ref. TF4034AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

### Engine to PTO ratio

S5-90 GPA		.- 1 : 1.540	
S6-65 / 6.37		.- 1 : 1.125	
/ 6.70		.- 1 : 1.073	
/ 7.00+GV70 / 7.67	High: .-	1 : 0.789	Normal: .-
/ 7.40		.- 1 : 0.972	
/ 7.52		.- 1 : 0.960	
/ 9.00		.- 1 : 0.799	
/ 7.97+GV80 / 6.70	High: .-	1 : 1.073	Normal: .-
/ 9.00+GV80 / 6.70	High: .-	1 : 1.073	Normal: .-
/ 9.00+GV80 / 7.52	High: .-	1 : 0.958	Normal: .-
S6-66 / 7.36-1.0		.- 1 : 0.903	
/ 9.06-1.0		.- 1 : 0.720	
S6-70 / 6.80		.- 1 : 0.889	
/ 6.80+GV70 / 5.71	High: .-	1 : 1.059	Normal: .-
/ 7.36		.- 1 : 0.827	
/ 7.92		.- 1 : 0.763	
/ 9.03		.- 1 : 0.670	
/ 9.59		.- 1 : 0.631	
S6-75 / 6.70+GV80 / 7.52	Normal: .-	1 : 1.073	Low: .-
S6-80 / 5.03		.- 1 : 1.349	
/ 5.66		.- 1 : 1.280	
/ 5.66+GV80 / 7.52	High: .-	1 : 1.277	Normal: .-
/ 6.10		.- 1 : 1.190	
/ 6.70		.- 1 : 1.073	
/ 6.70+GV80 / 5.30	High: .-	1 : 1.362	Normal: .-
/ 6.90		.- 1 : 0.891	
/ 7.35		.- 1 : 0.955	
/ 7.41		.- 1 : 0.974	
/ 7.53		.- 1 : 0.960	
/ 7.67		.- 1 : 0.934	
/ 7.67+GV80 / 6.70	High: .-	1 : 1.076	Normal: .-
/ 7.90		.- 1 : 0.908	
/ 9.00		.- 1 : 0.796	
/ 9.00+GV80 / 5.30	High: .-	1 : 1.362	Normal: .-
/ 9.00+GV80 / 7.48	High: .-	1 : 0.972	Normal: .-
/ 9.00+GV80 / 7.52	High: .-	1 : 0.958	Normal: .-
S6-90 / 5.67		.- 1 : 1.298	
/ 5.74		.- 1 : 1.280	
/ 6.37		.- 1 : 1.280	
/ 6.98		.- 1 : 1.059	
/ 7.03		.- 1 : 1.043	
/ 7.03+GV90 / 5.67	High: .-	1 : 1.298	Normal: .-
/ 7.03+GV90 / 5.74	High: .-	1 : 1.272	Normal: .-
/ 7.40		.- 1 : 0.995	
/ 9.01		.- 1 : 0.813	
/ 9.01+GV90 / 7.40	High: .-	1 : 0.991	Normal: .-
6S-800 TO / 6.58-0.78		.- 1 : 0.917	
6AS-800 TO / 6.58-0.78		.- 1 : 0.917	
6S-1000 TO / 6.75-0.78		.- 1 : 0.917	
6AS-1000 TO / 6.75-0.78		.- 1 : 0.917	
6S-1200 TD / 7.72-1.00		.- 1 : 0.934	
6S-1200 TO / 6.75-0.83		.- 1 : 1.073	

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## Power Take Offs

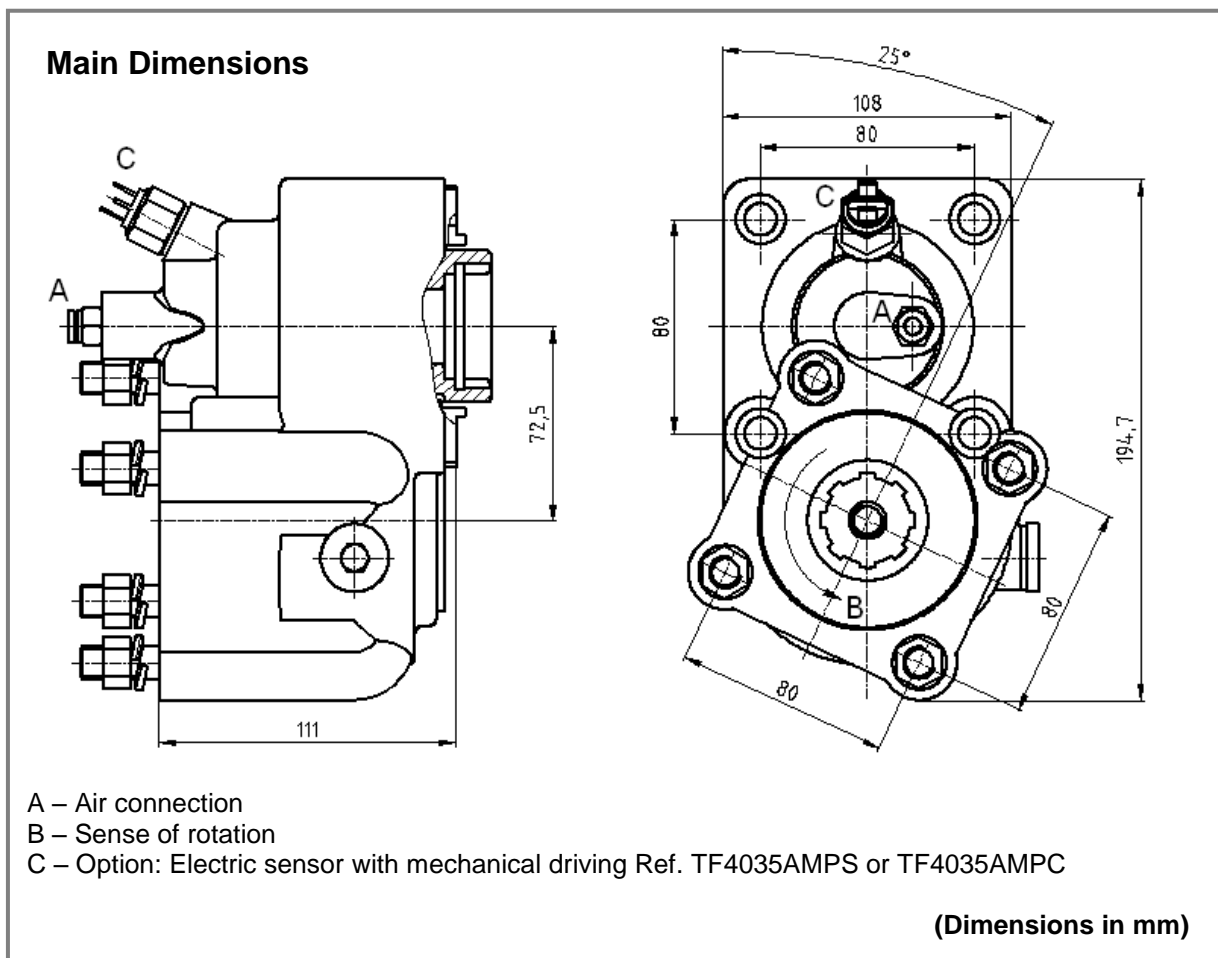
Relation 1 : 1,56

Ref. TF4035AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

To apply with Gear Pumps or with Piston Pumps



### Main Data

<b>Continuous Torque (Nm)</b>	<b>400</b>
<b>Intermittent Torque (Nm)</b>	<b>500</b>
<b>Power (at 1000 rpm)</b>	<b>55 cv / 40 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>11</b>
<b>PTO internal ratio</b>	<b>1:1,56</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 1.019
/ 5.50	.- 1 : 0.959
/ 6.20	.- 1 : 0.850
/ 6.61	.- 1 : 0.796
/ 6.61+GV80 / 5.30	High: .- 1 : 0.994 Normal: .- 1 : 0.796
/ 8.02	.- 1 : 0.658
/ 8.02+GV80 / 6.20	High: .-1 : 0.850 Normal: .- 1 : 0.657

CTI TF4035AMP 1506- 3

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## Power Take Offs

Relation 1 : 1,56

Ref. TF4035AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

### Engine to PTO ratio

S5-90 GPA		- 1 : 1.388	
S6-65 / 6.37		- 1 : 1.014	
/ 6.70		- 1 : 0.967	
/ 7.00+GV70 / 7.67	High: - 1 : 0.711	Normal: - 1 : 0.569	
/ 7.40		- 1 : 0.877	
/ 7.52		- 1 : 0.866	
/ 9.00		- 1 : 0.721	
/ 7.97+GV80 / 6.70	High: - 1 : 0.967	Normal: - 1 : 0.819	
/ 9.00+GV80 / 6.70	High: - 1 : 0.967	Normal: - 1 : 0.721	
/ 9.00+GV80 / 7.52	High: - 1 : 0.864	Normal: - 1 : 0.721	
S6-66 / 7.36-1.0		- 1 : 0.814	
/ 9.06-1.0		- 1 : 0.649	
S6-70 / 6.80		- 1 : 0.802	
/ 6.80+GV70 / 5.71	High: - 1 : 0.955	Normal: - 1 : 0.802	
/ 7.36		- 1 : 0.746	
/ 7.92		- 1 : 0.688	
/ 9.03		- 1 : 0.604	
/ 9.59		- 1 : 0.569	
S6-75 / 6.70+GV80 / 7.52	Normal: - 1 : 0.967	Low: - 1 : 0.864	
S6-80 / 5.03		- 1 : 1.217	
/ 5.66		- 1 : 1.154	
/ 5.66+GV80 / 7.52	High: - 1 : 1.151	Normal: - 1 : 0.867	
/ 6.10		- 1 : 1.073	
/ 6.70		- 1 : 0.967	
/ 6.70+GV80 / 5.30	High: - 1 : 1.228	Normal: - 1 : 0.967	
/ 6.90		- 1 : 0.803	
/ 7.35		- 1 : 0.861	
/ 7.41		- 1 : 0.878	
/ 7.53		- 1 : 0.866	
/ 7.67		- 1 : 0.842	
/ 7.67+GV80 / 6.70	High: - 1 : 0.970	Normal: - 1 : 0.847	
/ 7.90		- 1 : 0.819	
/ 9.00		- 1 : 0.718	
/ 9.00+GV80 / 5.30	High: - 1 : 1.228	Normal: - 1 : 0.721	
/ 9.00+GV80 / 7.48	High: - 1 : 0.877	Normal: - 1 : 0.721	
/ 9.00+GV80 / 7.52	High: - 1 : 0.864	Normal: - 1 : 0.721	
S6-90 / 5.67		- 1 : 1.170	
/ 5.74		- 1 : 1.154	
/ 6.37		- 1 : 1.154	
/ 6.98		- 1 : 0.955	
/ 7.03		- 1 : 0.941	
/ 7.03+GV90 / 5.67	High: - 1 : 1.170	Normal: - 1 : 0.941	
/ 7.03+GV90 / 5.74	High: - 1 : 1.147	Normal: - 1 : 0.936	
/ 7.40		- 1 : 0.897	
/ 9.01		- 1 : 0.733	
/ 9.01+GV90 / 7.40	High: - 1 : 0.894	Normal: - 1 : 0.735	
6S-800 TO / 6.58-0.78		-1 : 0.827	
6AS-800 TO / 6.58-0.78		-1 : 0.827	
6S-1000 TO / 6.75-0.78		-1 : 0.827	
6AS-1000 TO / 6.75-0.78		-1 : 0.827	
6S-1200 TD / 7.72-1.00		-1 : 0.872	
6S-1200 TO / 6.75-0.83		-1 : 0.967	

CTI TF4035AMP 1506- 3

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## Power Take Offs

Relation 1 : 1,35

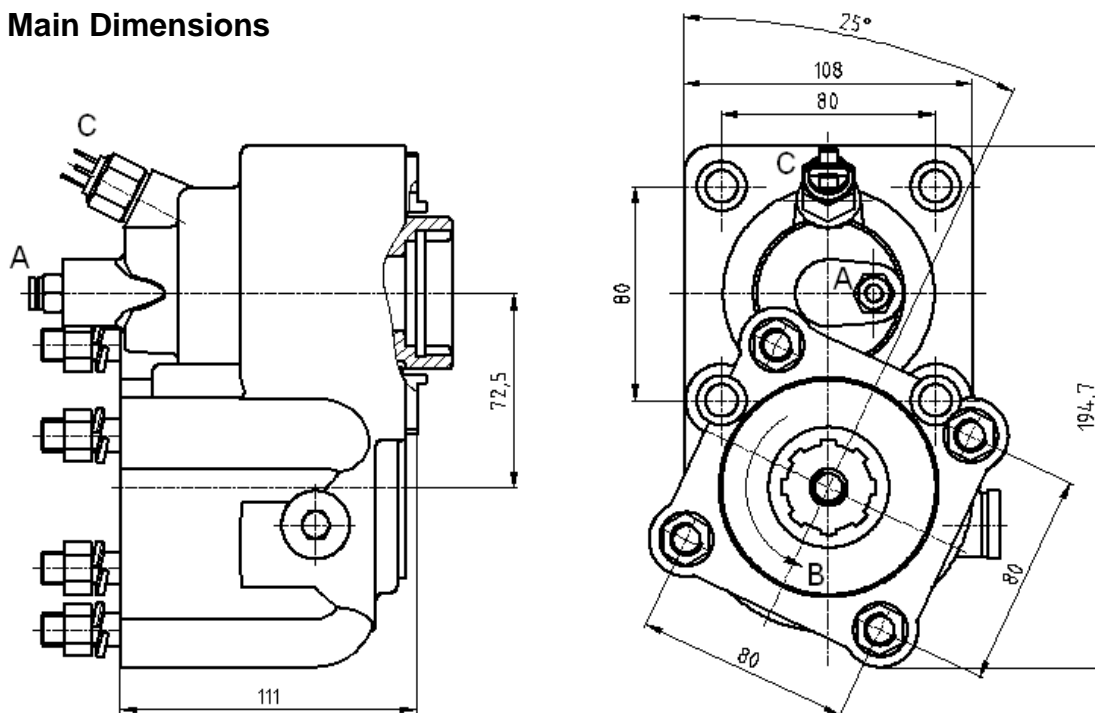
Ref. TF4036AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

To apply with Gear Pumps or with Piston Pumps

### Main Dimensions



A – Air connection

B – Sense of rotation

C – Option: Electric sensor with mechanical driving Ref. TF4036AMPS or TF4036AMPC

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>450</b>
<b>Intermittent Torque (Nm)</b>	<b>500</b>
<b>Power (at 1000 rpm)</b>	<b>62 cv / 46 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>11</b>
<b>PTO internal ratio</b>	<b>1:1,35</b>
<b>Indicative ratio from motor to PTO's output</b>	
S5-50 / 5.30	.- 1 : 0.882
/ 5.50	.- 1 : 0.830
/ 6.20	.- 1 : 0.736
/ 6.61	.- 1 : 0.689
/ 6.61+GV80 / 5.30	High:.- 1 : 0.860 Normal:.- 1 : 0.689
/ 8.02	.- 1 : 0.570
/ 8.02+GV80 / 6.20	High:.-1 : 0.736 Normal:.- 1 : 0.568

CTI TF4036AMP 1506- 3

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# Power Take Offs

Relation 1 : 1,35

Ref. TF4036AMP

ZF

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 TO ; 6AS-800 TO ; 6S-1000 TO ; 6AS-1000 TO ; 6S-1200 TD/TO  
REINFORCED

## Engine to PTO ratio

S5-90 GPA	- 1 : 1.202		
S6-65 / 6.37	- 1 : 0.878		
/ 6.70	- 1 : 0.837		
/ 7.00+GV70 / 7.67	High: - 1 : 0.616	Normal: - 1 : 0.493	
/ 7.40	- 1 : 0.759		
/ 7.52	- 1 : 0.749		
/ 9.00	- 1 : 0.624		
/ 7.97+GV80 / 6.70	High: - 1 : 0.837	Normal: - 1 : 0.709	
/ 9.00+GV80 / 6.70	High: - 1 : 0.837	Normal: - 1 : 0.624	
/ 9.00+GV80 / 7.52	High: - 1 : 0.748	Normal: - 1 : 0.624	
S6-66 / 7.36-1.0	- 1 : 0.705		
/ 9.06-1.0	- 1 : 0.562		
S6-70 / 6.80	- 1 : 0.694		
/ 6.80+GV70 / 5.71	High: - 1 : 0.826	Normal: - 1 : 0.694	
/ 7.36	- 1 : 0.645		
/ 7.92	- 1 : 0.595		
/ 9.03	- 1 : 0.522		
/ 9.59	- 1 : 0.493		
S6-75 / 6.70+GV80 / 7.52	Normal: - 1 : 0.837	Low: - 1 : 0.748	
S6-80 / 5.03	- 1 : 1.053		
/ 5.66	- 1 : 0.999		
/ 5.66+GV80 / 7.52	High: - 1 : 0.996	Normal: - 1 : 0.751	
/ 6.10	- 1 : 0.929		
/ 6.70	- 1 : 0.837		
/ 6.70+GV80 / 5.30	High: - 1 : 1.062	Normal: - 1 : 0.837	
/ 6.90	- 1 : 0.695		
/ 7.35	- 1 : 0.745		
/ 7.41	- 1 : 0.760		
/ 7.53	- 1 : 0.749		
/ 7.67	- 1 : 0.729		
/ 7.67+GV80 / 6.70	High: - 1 : 0.840	Normal: - 1 : 0.733	
/ 7.90	- 1 : 0.709		
/ 9.00	- 1 : 0.621		
/ 9.00+GV80 / 5.30	High: - 1 : 1.062	Normal: - 1 : 0.624	
/ 9.00+GV80 / 7.48	High: - 1 : 0.759	Normal: - 1 : 0.624	
/ 9.00+GV80 / 7.52	High: - 1 : 0.748	Normal: - 1 : 0.624	
S6-90 / 5.67	- 1 : 1.013		
/ 5.74	- 1 : 0.999		
/ 6.37	- 1 : 0.999		
/ 6.98	- 1 : 0.826		
/ 7.03	- 1 : 0.814		
/ 7.03+GV90 / 5.67	High: - 1 : 1.013	Normal: - 1 : 0.814	
/ 7.03+GV90 / 5.74	High: - 1 : 0.992	Normal: - 1 : 0.810	
/ 7.40	- 1 : 0.776		
/ 9.01	- 1 : 0.635		
/ 9.01+GV90 / 7.40	High: - 1 : 0.774	Normal: - 1 : 0.636	
6S-800 TO / 6.58-0.78	- 1 : 0.716		
6AS-800 TO / 6.58-0.78	- 1 : 0.716		
6S-1000 TO / 6.75-0.78	- 1 : 0.716		
6AS-1000 TO / 6.75-0.78	- 1 : 0.716		
6S-1200 TD / 7.72-1.00	- 1 : 0.729		
6S-1200 TO / 6.75-0.83	- 1 : 0.837		

CTI TF4036AMP 1506- 3

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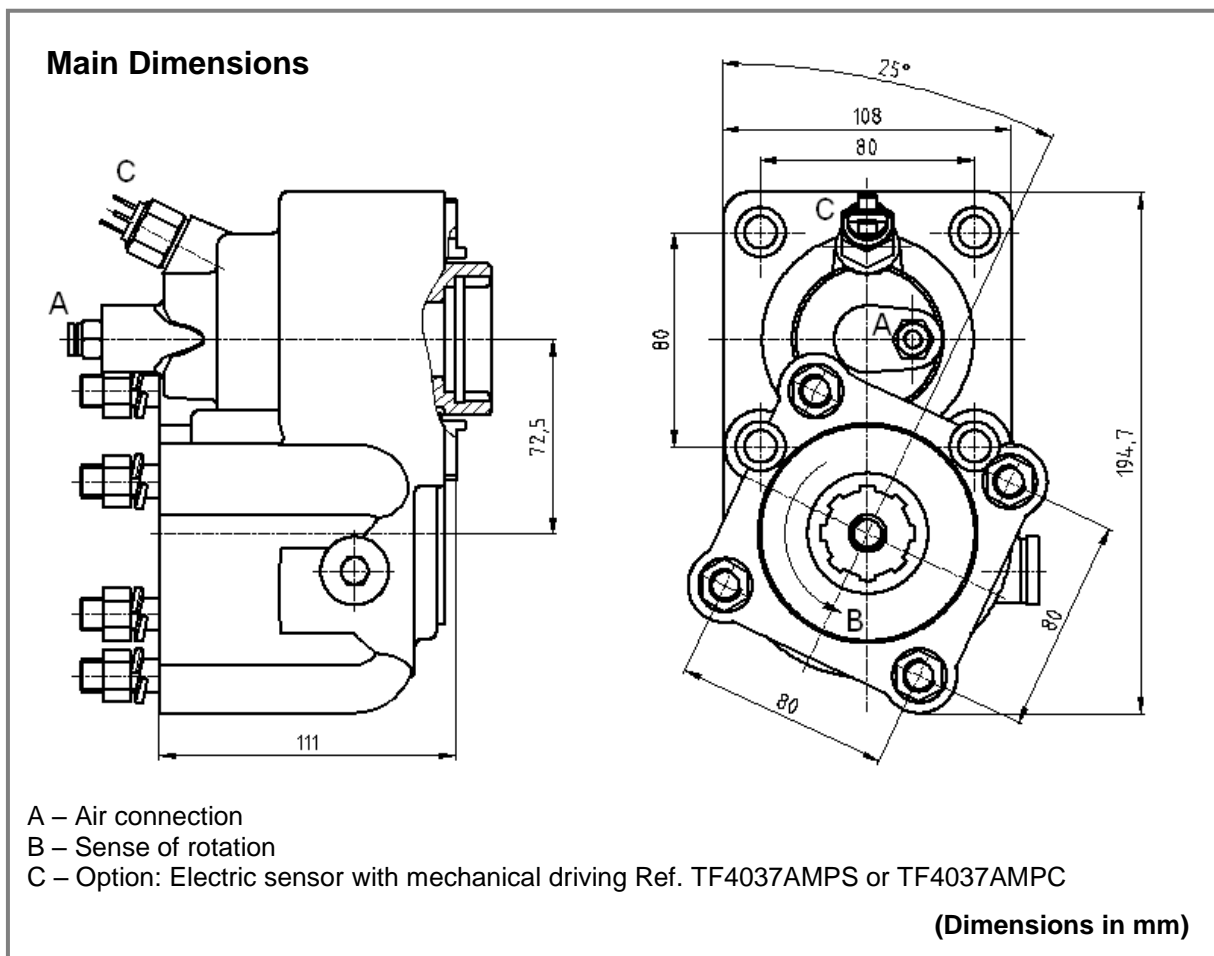
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<b>Power Take Offs</b>		Ref. TF4037AMP
Relation 1 : 1,56		
<b>ZF</b>	S6-36 ; 6S-850 ; 6S-700 REINFORCED	

To apply with Gear Pumps or with Piston Pumps



Main Data			
<b>Continuous Torque (Nm)</b>		<b>400</b>	
<b>Intermittent Torque (Nm)</b>		<b>500</b>	
<b>Power (at 1000 rpm)</b>		<b>55 cv / 40 kW</b>	
<b>Mounting Position</b>		<b>Rear</b>	
<b>Pump Rotation</b>		<b>Right Hand</b>	
<b>Weight (kg)</b>		<b>11</b>	
<b>PTO internal ratio</b>		<b>1:1,56</b>	
<b>Indicative ratio from motor to PTO's output</b>			
6-S-850 / 6.72-0.79	- 1 : 0.827	S6-36 / 6.06	- 1 : 0.909
/ 6.93-0.80	- 1 : 0.796	/ 6.93 - 0.80	- 1 : 0.796
/ 7.43-1.00	- 1 : 0.749	/ 7.43 - 1.00	- 1 : 0.749
/ 8.97-1.00	- 1 : 0.626	/ 8.97 - 1.00	- 1 : 0.626
		/ 7.43 - 0.85+GV36	High: 1 : 0.874 Normal: 1 : 0.744
		/ 8.97 - 0.83+GV36	High: 1 : 0.744 Normal: 1 : 0.613

CTI TF4037AMP 1211-2

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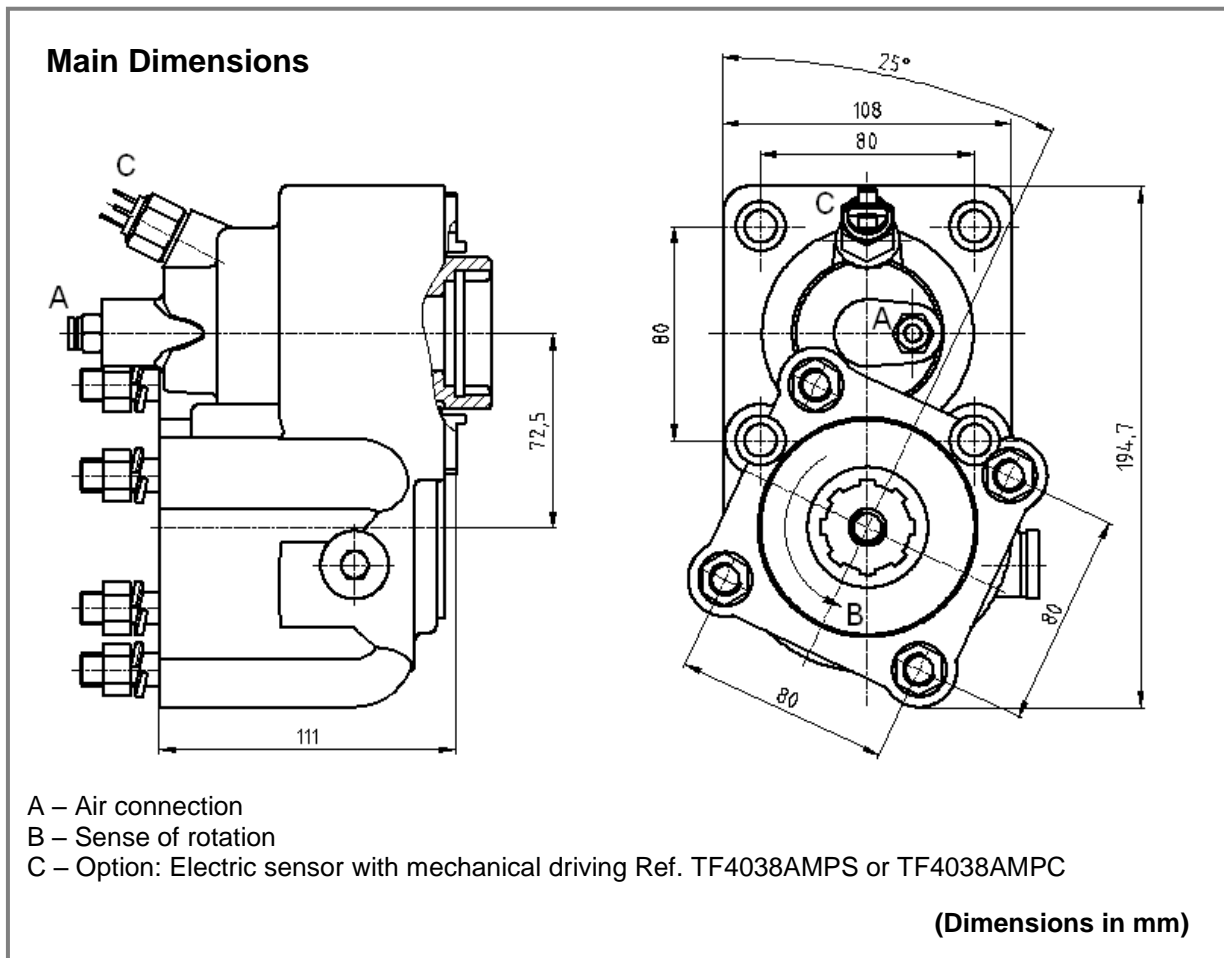


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<b>Power Take Offs</b>		Ref. TF4038AMP
Relation 1 : 1,35		
<b>ZF</b>	S6-36 ; 6S-850 ; 6S-700 REINFORCED	

To apply with Gear Pumps or with Piston Pumps



Main Data			
<b>Continuous Torque (Nm)</b>		<b>450</b>	
<b>Intermittent Torque (Nm)</b>		<b>550</b>	
<b>Power (at 1000 rpm)</b>		<b>62 cv / 46 kW</b>	
<b>Mounting Position</b>		<b>Rear</b>	
<b>Pump Rotation</b>		<b>Right Hand</b>	
<b>Weight (kg)</b>		<b>11</b>	
<b>PTO internal ratio</b>		<b>1:1,35</b>	
<b>Indicative ratio from motor to PTO's output</b>			
6-S-850 / 6.72-0.79	- 1 : 0.716	S6-36 / 6.06	- 1 : 0.787
/ 6.93-0.80	- 1 : 0.689	/ 6.93 - 0.80	- 1 : 0.589
/ 7.43-1.00	- 1 : 0.648	/ 7.43 - 1.00	- 1 : 0.648
/ 8.97-1.00	- 1 : 0.541	/ 8.97 - 1.00	- 1 : 0.541
		/ 7.43 - 0.85+GV36	High: 1 : 0.756 Normal: 1 : 0.644
		/ 8.97 - 0.83+GV36	High: 1 : 0.644 Normal: 1 : 0.531

CTI TF4038AMP 1211-2

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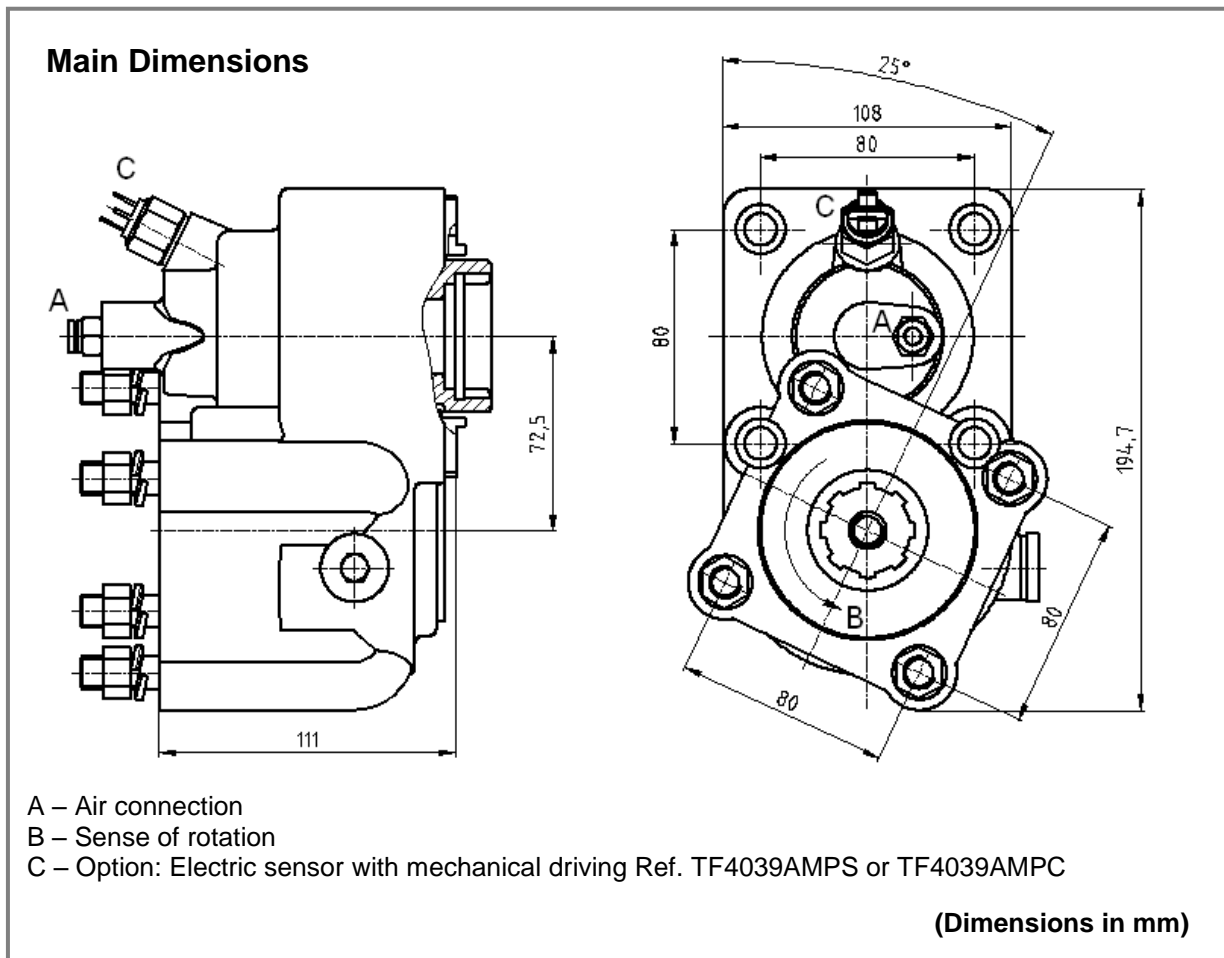
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<b>Power Take Offs</b> Relation 1 : 1		Ref. TF4039AMP
<b>ZF</b>	S6-36 ; 6S-850 ; 6S-700 REINFORCED	

To apply with Gear Pumps or with Piston Pumps



Main Data			
<b>Continuous Torque (Nm)</b>		<b>500</b>	
<b>Intermittent Torque (Nm)</b>		<b>550</b>	
<b>Power (at 1000 rpm)</b>		<b>69 cv / 51 kW</b>	
<b>Mounting Position</b>		<b>Rear</b>	
<b>Pump Rotation</b>		<b>Right Hand</b>	
<b>Weight (kg)</b>		<b>11</b>	
<b>PTO internal ratio</b>		<b>1:1</b>	
<b>Indicative ratio from motor to PTO's output</b>			
6-S-850 / 6.72-0.79	- 1 : 0.530	S6-36 / 6.06	- 1 : 0.583
/ 6.93-0.80	- 1 : 0.510	/ 6.93 - 0.80	- 1 : 0.510
/ 7.43-1.00	- 1 : 0.480	/ 7.43 - 1.00	- 1 : 0.480
/ 8.97-1.00	- 1 : 0.401	/ 8.97 - 1.00	- 1 : 0.401
		/ 7.43 - 0.85+GV36	High: 1 : 0.560 Normal: 1 : 0.477
		/ 8.97 - 0.83+GV36	High: 1 : 0.477 Normal: 1 : 0.393

CTI TF4039AMP 1211-2

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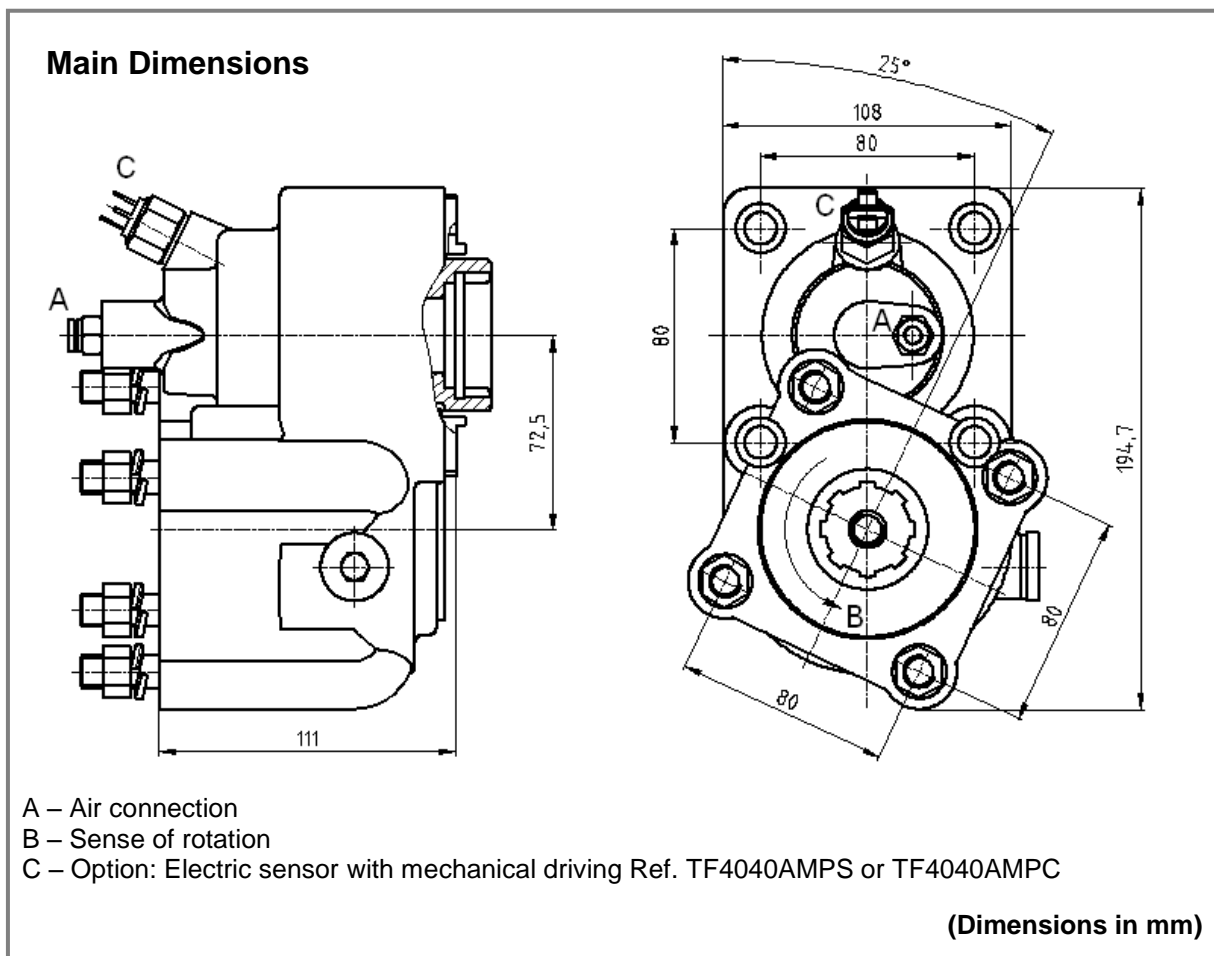


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<b>Power Take Offs</b>		Ref. TF4040AMP
Relation 1 : 1,73		
<b>ZF</b>	S6-36 ; 6S-850 ; 6S-700 REINFORCED	

To apply with Gear Pumps or with Piston Pumps



Main Data			
<b>Continuous Torque (Nm)</b>		<b>400</b>	
<b>Intermittent Torque (Nm)</b>		<b>500</b>	
<b>Power (at 1000 rpm)</b>		<b>48 cv / 36 kW</b>	
<b>Mounting Position</b>		<b>Rear</b>	
<b>Pump Rotation</b>		<b>Right Hand</b>	
<b>Weight (kg)</b>		<b>11</b>	
<b>PTO internal ratio</b>		<b>1:1,73</b>	
<b>Indicative ratio from motor to PTO's output</b>			
6-S-850 / 6.72-0.79	- 1 : 0.917	S6-36 / 6.06	- 1 : 1.009
/ 6.93-0.80	- 1 : 0.882	/ 6.93 - 0.80	- 1 : 0.882
/ 7.43-1.00	- 1 : 0.830	/ 7.43 - 1.00	- 1 : 0.830
/ 8.97-1.00	- 1 : 0.694	/ 8.97 - 1.00	- 1 : 0.694
		/ 7.43 - 0.85+GV36	High: 1 : 0.969 Normal: 1 : 0.825
		/ 8.97 - 0.83+GV36	High: 1 : 0.825 Normal: 1 : 0.680

CTI TF4040AMP 1211- 2

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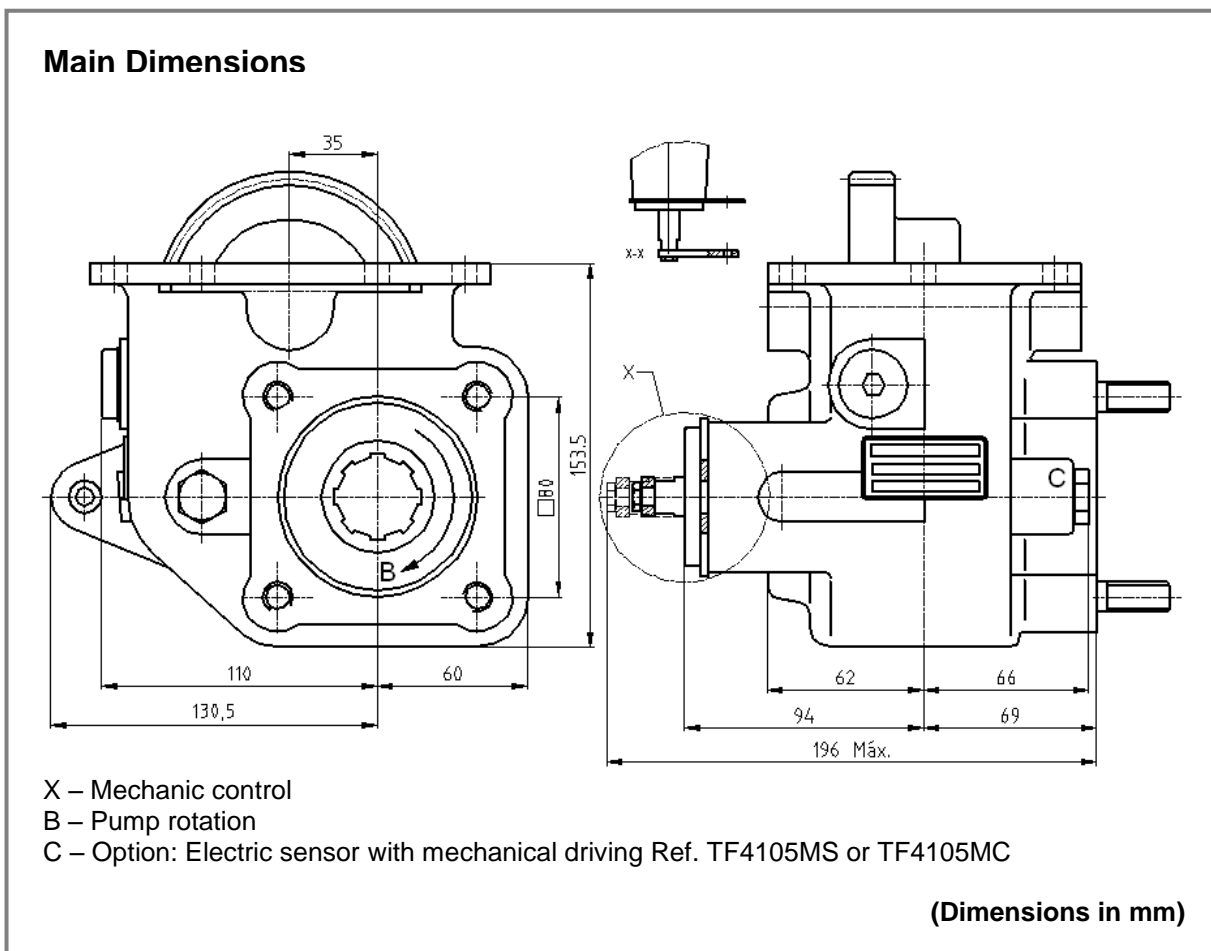


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<b>POWER TAKE OFFS</b>		Ref. TF4105M
<b>ZF</b>	6S-420 ; MO37S6 Mechanic Control	

To apply with Gear Pumps or Piston Pumps



<b>Main Data</b>	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,391</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,043</b>

CTI TF4105M 1211- 1

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<b>POWER TAKE OFFS</b>		Ref. TF4105P
<b>ZF</b>	6S-420 ; MO37S6 Pneumatic Control	

To apply with Gear Pumps or Piston Pumps

**Main Dimensions**

A – Pneumatic connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving Ref. TF4105PS or TF4105PC

(Dimensions in mm)

Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,391</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,043</b>

CTI TF4105P 1211- 1

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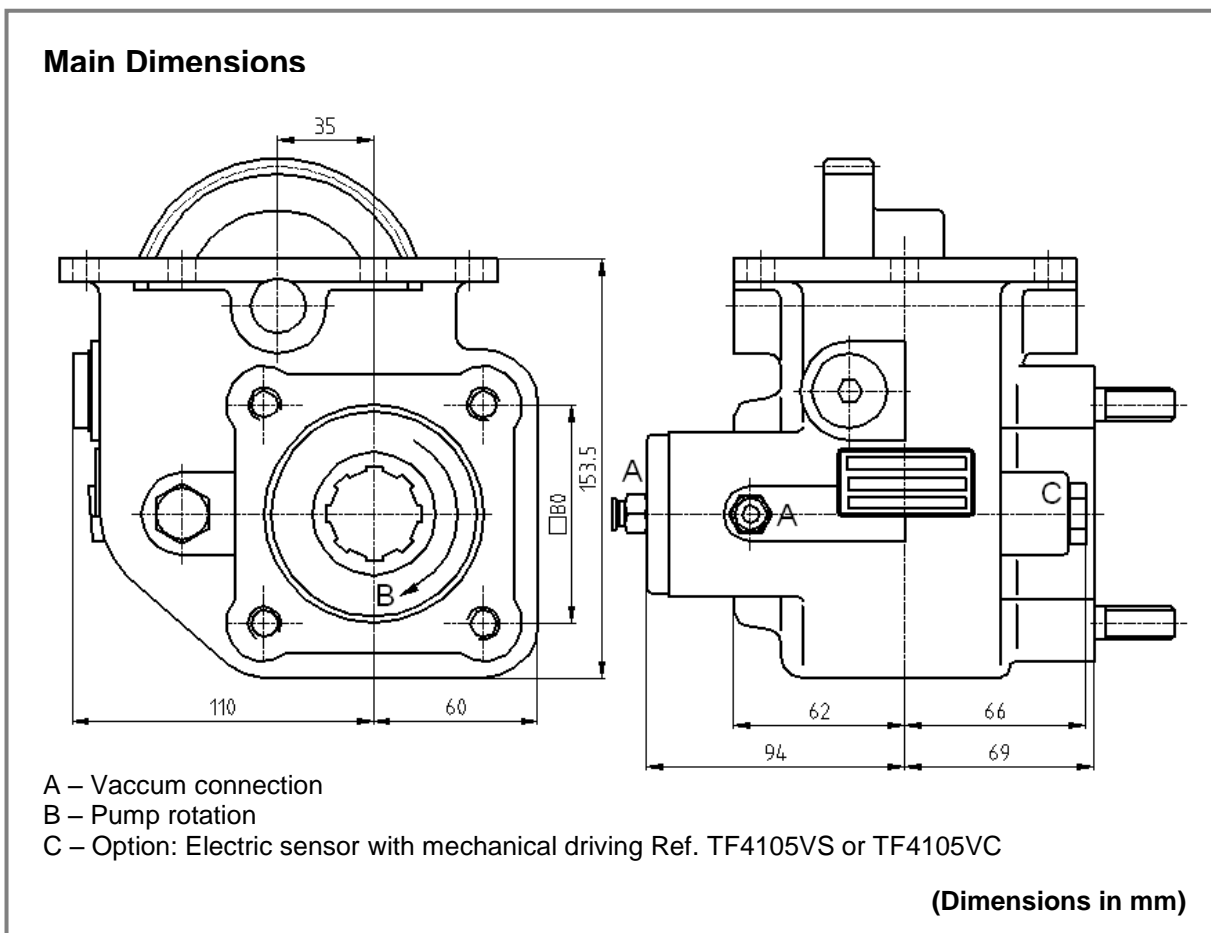


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<b>POWER TAKE OFFS</b>		Ref. TF4105V
<b>ZF</b>	6S-420 ; MO37S6 Vacuum Control	

To apply with Gear Pumps or Piston Pumps



Main Data	
<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 rpm)</b>	<b>42 cv / 32 kW</b>
<b>Mounting Position</b>	<b>Left</b>
<b>Pump Rotation</b>	<b>Left Hand</b>
<b>Weight (kg)</b>	<b>12</b>
<b>PTO internal ratio</b>	<b>1:1,391</b>
<b>Indicative ratio from motor to PTO's output</b>	<b>1:1,043</b>

CTI TF4105V 1211- 1

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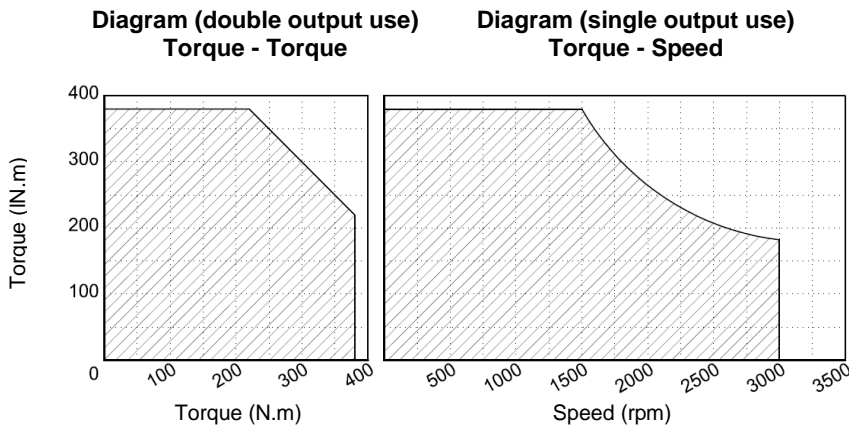
<b>Power Take Offs</b>		Ref. TF4201AMP
Relation 1 : 1,56		
<b>ZF</b>	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;	
<b>Twin output</b>	6S-800 ; 6S-1000	

### Main Dimensions

A – Air connection  
 B – Pump rotation  
 C – Option: Electric sensor with mechanical driving. Ref TF4201AMPC  
 Output 1 - Coupling according to ISO 7653, splined shaft A8x32x36  
 Output 2 - Coupling according to ISO 7653, splined shaft A8x32x36

**(Dimensions in mm)**

Main Data	
<b>Continuous Torque (Nm) (single use)</b>	<b>380</b>
<b>Intermittent Torque (Nm) (single use)</b>	<b>460</b>
<b>Power (at 1000 rpm)</b>	<b>54 cv / 40 kW</b>
<b>Mounting Position</b>	<b>Rear</b>
<b>Pump Rotation</b>	<b>Right Hand</b>
<b>Weight (kg)</b>	<b>17.4</b>
<b>PTO internal ratio</b>	<b>1:1,56</b>



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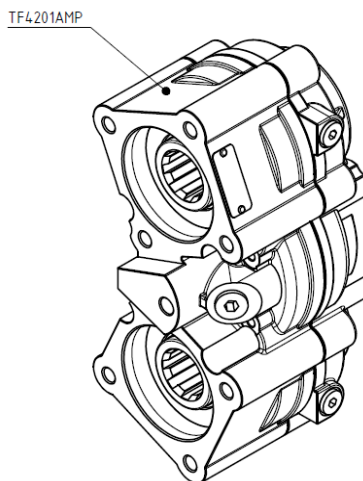


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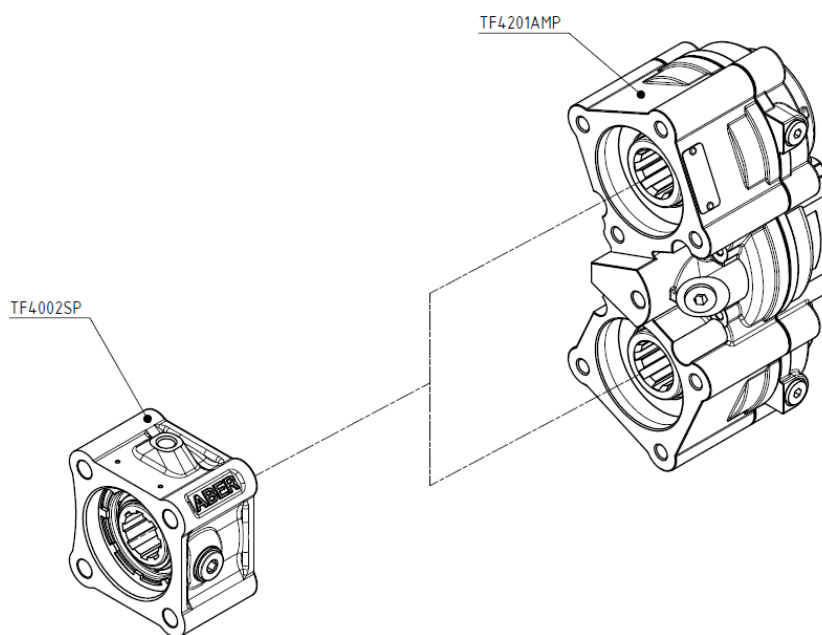


<b>Power Take Offs</b>		Ref. TF4201AMP
Relation 1 : 1,56		
<b>ZF</b> Twin output	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000	

### Pneumatic engagement for PTO TF4201AMP



### Pneumatic independent engagement for PTO TF4201AMP



To use the two outputs of the power take off TF4201AMP independently it's necessary assembly the PTO TF4002SP (internal ratio: 1:1) in the output(s). To use this option order TF4201AMP+TF4002SP+JUNK4201SPAMP.

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## Power Take Offs

Relation 1 : 1,56

Ref. TF4201AMP

**ZF**  
Twin output

S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ;  
6S-800 ; 6S-1000

### Indicative ratio from motor to PTO's output

S5-50 / 5.30	- 1 : 1.019		
/ 5.50	- 1 : 0.960		
/ 6.20	- 1 : 0.850		
/ 6.61	- 1 : 0.796		
/ 6.61+GV80 / 5.30	High: - 1 : 0.994	Normal: - 1 : 0.796	
/ 8.02	- 1 : 0.658		
/ 8.02+GV80 / 6.20	High: - 1 : 0.850	Normal: - 1 : 0.657	
S5-90 GPA	- 1 : 1.389		
S6-65 / 6.37	- 1 : 1.014		
/ 6.70	- 1 : 0.967		
/ 7.00+GV70 / 7.67	High: - 1 : 0.711	Normal: - 1 : 0.569	
/ 7.40	- 1 : 0.877		
/ 7.52	- 1 : 0.866		
/ 9.00	- 1 : 0.721		
/ 7.97+GV80 / 6.70	High: - 1 : 0.967	Normal: - 1 : 0.819	
/ 9.00+GV80 / 6.70	High: - 1 : 0.967	Normal: - 1 : 0.720	
/ 9.00+GV80 / 7.52	High: - 1 : 0.864	Normal: - 1 : 0.720	
S6-66 / 7.36-1.0	- 1 : 0.814		
/ 9.06-1.0	- 1 : 0.649		
S6-70 / 6.80	- 1 : 0.802		
/ 6.80+GV70 / 5.71	High: - 1 : 0.955	Normal: - 1 : 0.802	
/ 7.36	- 1 : 0.746		
/ 7.92	- 1 : 0.688		
/ 9.03	- 1 : 0.604		
/ 9.59	- 1 : 0.569		
S6-75 / 6.70+GV80 / 7.52	Normal: - 1 : 0.967	Low: - 1 : 0.864	
S6-80 / 5.03	- 1 : 1.217		
/ 5.66	- 1 : 1.154		
/ 5.66+GV80 / 7.52	High: - 1 : 1.151	Normal: - 1 : 0.867	
/ 6.10	- 1 : 1.073		
/ 6.70	- 1 : 0.967		
/ 6.70+GV80 / 5.30	High: - 1 : 1.228	Normal: - 1 : 0.967	
/ 6.90	- 1 : 0.803		
/ 7.35	- 1 : 0.861		
/ 7.41	- 1 : 0.878		
/ 7.53	- 1 : 0.866		
/ 7.67	- 1 : 0.842		
/ 7.67+GV80 / 6.70	High: - 1 : 0.970	Normal: - 1 : 0.847	
/ 7.90	- 1 : 0.819		
/ 9.00	- 1 : 0.718		
/ 9.00+GV80 / 5.30	High: - 1 : 1.228	Normal: - 1 : 0.721	
/ 9.00+GV80 / 7.48	High: - 1 : 0.877	Normal: - 1 : 0.721	
/ 9.00+GV80 / 7.52	High: - 1 : 0.864	Normal: - 1 : 0.721	
S6-90 / 5.67	- 1 : 1.170		
/ 5.74	- 1 : 1.154		
/ 6.37	- 1 : 1.154		
/ 6.98	- 1 : 0.955		
/ 7.03	- 1 : 0.941		
/ 7.03+GV90 / 5.67	High: - 1 : 1.170	Normal: - 1 : 0.941	
/ 7.03+GV90 / 5.74	High: - 1 : 1.147	Normal: - 1 : 0.936	
/ 7.40	- 1 : 0.897		
/ 9.01	- 1 : 0.733		
/ 9.01+GV90 / 7.40	High: - 1 : 0.894	Normal: - 1 : 0.735	

CTI TF4201AMP 1606-2

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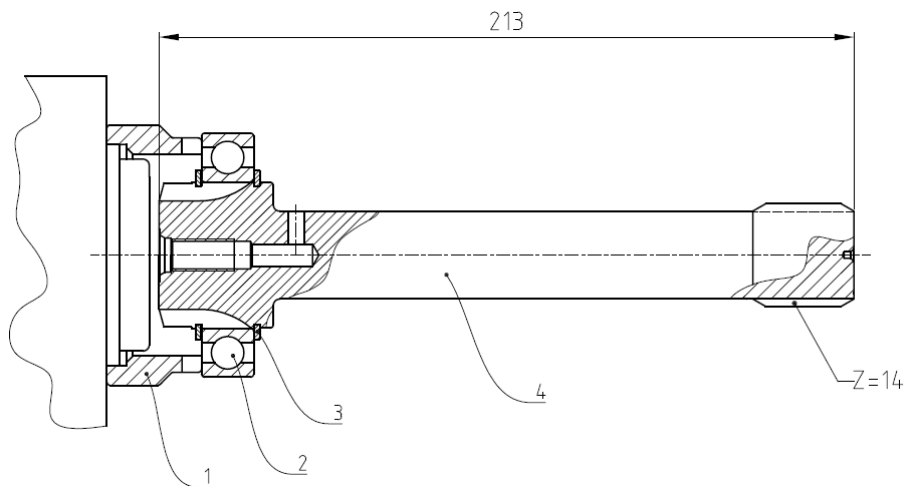


## ADAPTER KIT TO POWER TAKE OFFS ZF

8-S-151; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO;  
16-S-1920 TD;16-S-2220 TO/TD; 16-S-2520 TO; 8S-1620 TD; 8S-1820 TO;  
8S-220 TO; 16S-2320 TD; 16S-2330 TD; 16S-2720 TO; 16S-2730 TO

Ref. VK4001S  
VK4001AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4001

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>1.7</b>
<b>Engine-Kit adapter ratio</b>	

8-S-151 / 13.79 - 1:0.920

8-S-1620 TD / 13.80-1.0 - 1:0.910

8-S-1820 TO / 11.54-0.84 ; 8-S-220 TO / 11.54-0.84 - 1:1.090

16-S-151 / 13.85-0.84 High:- 1:0.920 Normal:- 1:0.770  
/ 16.53-1.00 High:- 1:0.920 Normal:- 1:0.770

16-S-221 / 13.85-0.84 High:- 1:0.920 Normal:- 1:0.770  
/ 16.53-1.00 High:- 1:0.920 Normal:- 1:0.770

16-S-181 / 13.85-0.84 High:- 1:0.920 Normal:- 1:0.770  
/ 16.53-1.00 High:- 1:0.920 Normal:- 1:0.770

16-S-1820 TO ; 16-S-2220 TO ; 16-S-2520 TO ; 16-S-2720 TO ; 16-S-2730 TO / 13.80-0.84 High:- 1:1.090 Normal:- 1:0.910

16-S-1620 TD ; 16-S-1920 TD ; 16-S-2220 TD ; 16-S-2320 TD ; 16-S-2330 TD / 16.41-1.0 High:- 1:0.910 Normal:- 1:0.770

**Note 1:** For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

**Example:** Gearbox 16-S-151 / 13.85-0.84 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High .- 1 : 1.214 (0.920 x 1.32 = 1.214)

Normal .- 1 : 1.016 (0.770 x 1.32 = 1.016)

**Note 2:** Adapter Kit is supplied without studs.Please use those that are provided with the PTO.

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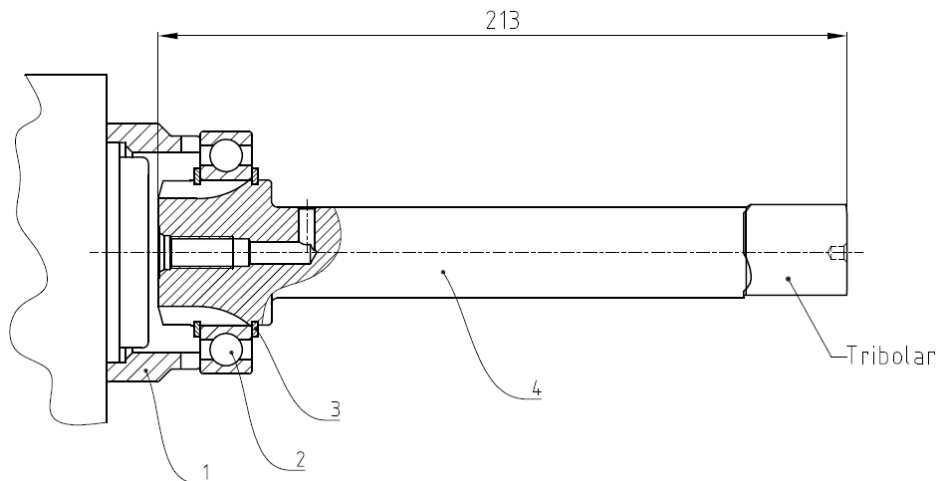


## ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ;  
16-S-151 ; 16-S-181 ; 16-S-221

Ref. VK4002S  
VK4002AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4002

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>1.7</b>
<b>Engine-Kit adapter ratio</b>	
16-S-130/11.46	High: - 1 : 0.97    Normal: - 1 : 0.82
/ 13.68	High: - 1 : 0.97    Normal: - 1 : 0.82
/ 14.14	High: - 1 : 0.92    Normal: - 1 : 0.77
/ 16.47	High: - 1 : 0.92    Normal: - 1 : 0.77
/ 17.47	High: - 1 : 0.91    Normal: - 1 : 0.74
/ 11.74	High: - 1 : 0.97    Normal: - 1 : 0.82
/ 13.80	High: - 1 : 0.92    Normal: - 1 : 0.77
/ 14.29	High: - 1 : 0.91    Normal: - 1 : 0.74
/ 17.06	High: - 1 : 0.91    Normal: - 1 : 0.74

#### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

#### Example:

Gearbox 16-S-130 / 11.46 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High - 1 : 1.2804 (0.97 x 1.32 = 1.2804)

Normal - 1 : 1.0824 (0.82 x 1.32 = 1.0824)

#### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4002S / VK4002AM 0811-1

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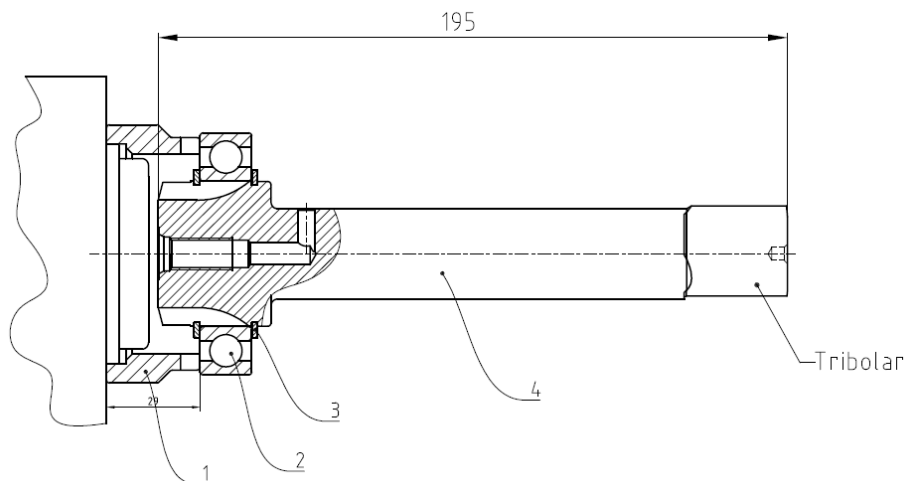


## ADAPTER KIT TO POWER TAKE OFFS ZF

16-K-130 ; 16-S-112 ; 16-S-150

Ref. VK4005S  
VK4005AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4005

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>1.7</b>
<b>Engine-Kit adapter ratio</b>	
16-S-112/11.46 High: .- 1 : 0.963 Normal: .- 1 : 0.820 / 13.68 High: .- 1 : 0.963 Normal: .- 1 : 0.820	

#### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

#### Example:

Gearbox 16-S-112 / 11.46 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High .- 1 : 1.27116 (0.963 x 1.32 = 1.27116)

Normal .- 1 : 1.0824 (0.82 x 1.32 = 1.0824)

#### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4005S / VK4005AM 0811-1

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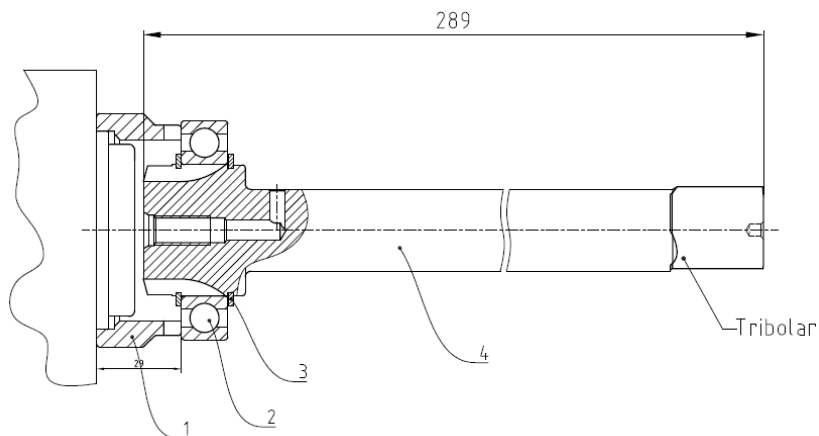


## ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A

Ref. VK4006S  
VK4006AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4006

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>
<b>Engine-Kit adapter ratio</b>	
16-S-160 A / 11.74	High: .- 1 : 0.963    Normal: .- 1 : 0.820
/ 17.47	High: .- 1 : 0.910    Normal: .- 1 : 0.740
/ 14.14	High: .- 1 : 0.920    Normal: .- 1 : 0.770
16-S-190 A / 11.74	High: .- 1 : 0.970    Normal: .- 1 : 0.820
16-S-220 A / 14.14	High: .- 1 : 0.920    Normal: .- 1 : 0.770

#### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

#### Example:

Gearbox 16-S-160 A / 11.74 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High .- 1 : 1.271 (0.963 x 1.32 = 1.271)

Normal .- 1 : 1.082 (0.820 x 1.32 = 1.082)

#### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4006S / VK4006AM 0811-1

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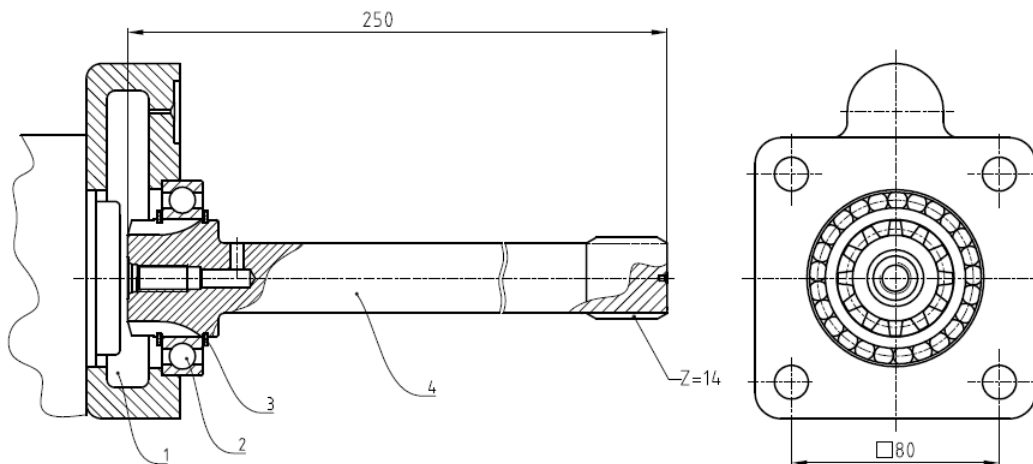


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4007S

16-S-151 IT; 16-S-181 IT; 16-S-221 IT; 16-S-1621 TD IT; 16-S-1821 TO IT;  
16-S-1921 TD IT; 16-S-2221 TD/TO IT; 16-S-2321 TD IT; 16-S-2331 TD IT;  
16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4007

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>
<b>Engine-Kit adapter ratio</b>	
16-S-151/221 /13.80 High:- 1 : 0.92 Normal:- 1 : 0.77	
/13.85 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.41 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.47 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.53 High:- 1 : 0.92 Normal:- 1 : 0.77	
16-S-1621 TD IT; 16-S-1921 TD IT; 16-S-2221 TD IT; 16-S-2321 TD IT; 16-S-2331 TD IT	/16.41 High:- 1 : 0.91 Normal:- 1 : 0.77
16-S-1821 TO IT; 16-S-2221 TO IT; 16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT	/13.80 High:- 1 : 1.09 Normal:- 1 : 0.91

#### KIT Studs:

KIT VK4007S for PTO (ratio 1:1)

- 4 stud M12x155
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

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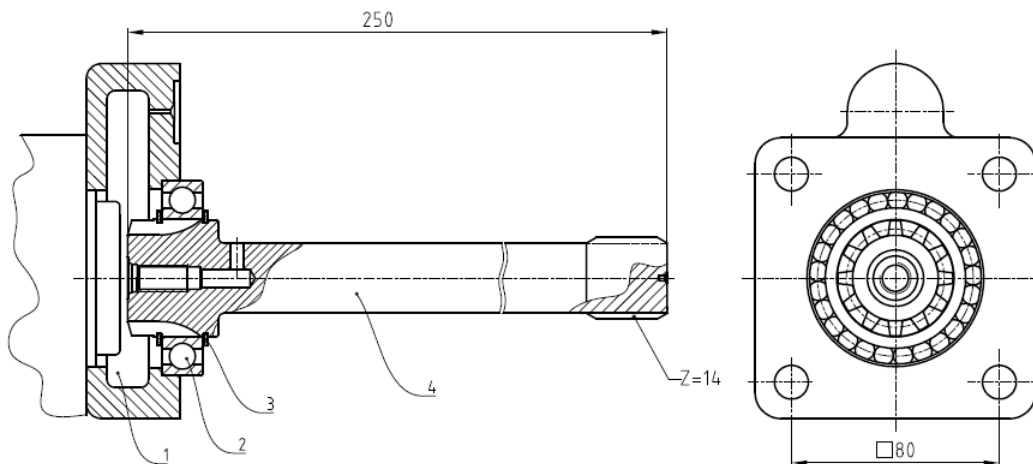


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4007AM

16-S-151 IT; 16-S-181 IT; 16-S-221 IT; 16-S-1621 TD IT; 16-S-1821 TO IT;  
16-S-1921 TD IT; 16-S-2221 TD/TO IT; 16-S-2321 TD IT; 16-S-2331 TD IT;  
16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4007

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>

#### Engine-Kit adapter ratio

16-S-151/221 /13.80	High:- 1 : 0.92	Normal:- 1 : 0.77
/13.85	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.41	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.47	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.53	High:- 1 : 0.92	Normal:- 1 : 0.77
16-S-1621 TD IT; 16-S-1921 TD IT; 16-S-2221 TD IT; 16-S-2321 TD IT; 16-S-2331 TD IT	/16.41	High:- 1 : 0.91 Normal:- 1 : 0.77
16-S-1821 TO IT; 16-S-2221 TO IT; 16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT	/13.80	High:- 1 : 1.09 Normal:- 1 : 0.91

**Note:** For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

**Example:** Gearbox 16-S-151 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High - 1 : 1.2144 (0.92 x 1.32 = 1.2144)  
Normal - 1 : 1.0164 (0.77 x 1.32 = 1.0164)

**KIT Studs:** KIT VK4007AM for PTO (ratio 1:1.32)

- 2 stud M12x135
- 2 stud M12x170
- 4 nut M12
- 4 washer
- 1 Jute ZF
- 1 Jute IT

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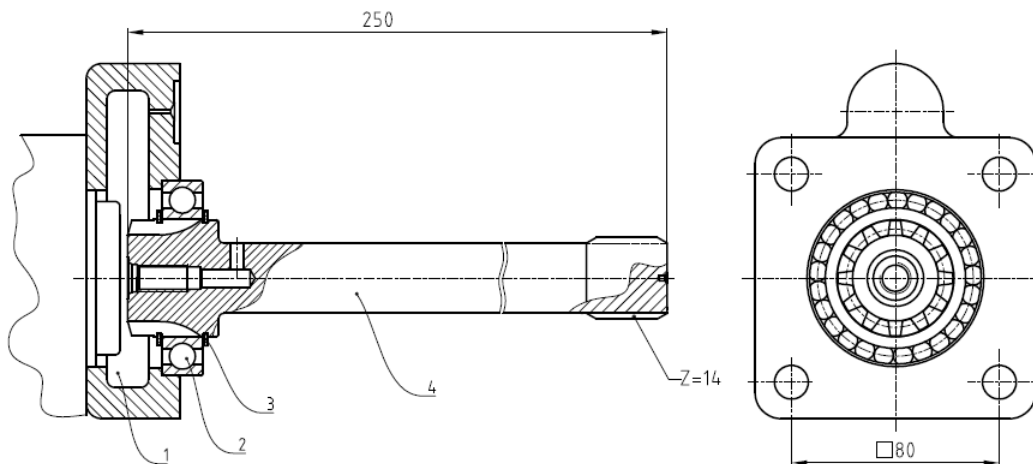


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4007AM

16-S-151 IT; 16-S-181 IT; 16-S-221 IT; 16-S-1621 TD IT; 16-S-1821 TO IT;  
16-S-1921 TD IT; 16-S-2221 TD/TO IT; 16-S-2321 TD IT; 16-S-2331 TD IT;  
16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4007

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>

#### Engine-Kit adapter ratio

16-S-151/221 /13.80	High:- 1 : 0.92	Normal:- 1 : 0.77
/13.85	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.41	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.47	High:- 1 : 0.92	Normal:- 1 : 0.77
/16.53	High:- 1 : 0.92	Normal:- 1 : 0.77
16-S-1621 TD IT; 16-S-1921 TD IT; 16-S-2221 TD IT; 16-S-2321 TD IT; 16-S-2331 TD IT	/16.41	High:- 1 : 0.91 Normal:- 1 : 0.77
16-S-1821 TO IT; 16-S-2221 TO IT; 16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT	/13.80	High:- 1 : 1.09 Normal:- 1 : 0.91

**Note:** For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

**Example:** Gearbox 16-S-151 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: High - 1 : 1.2144 (0.92 x 1.32 = 1.2144)  
Normal - 1 : 1.0164 (0.77 x 1.32 = 1.0164)

**KIT Studs:** KIT VK4007AM for PTO (ratio 1:1.32)

- 2 stud M12x135
- 2 stud M12x170
- 4 nut M12
- 4 washer
- 1 Jute ZF
- 1 Jute IT

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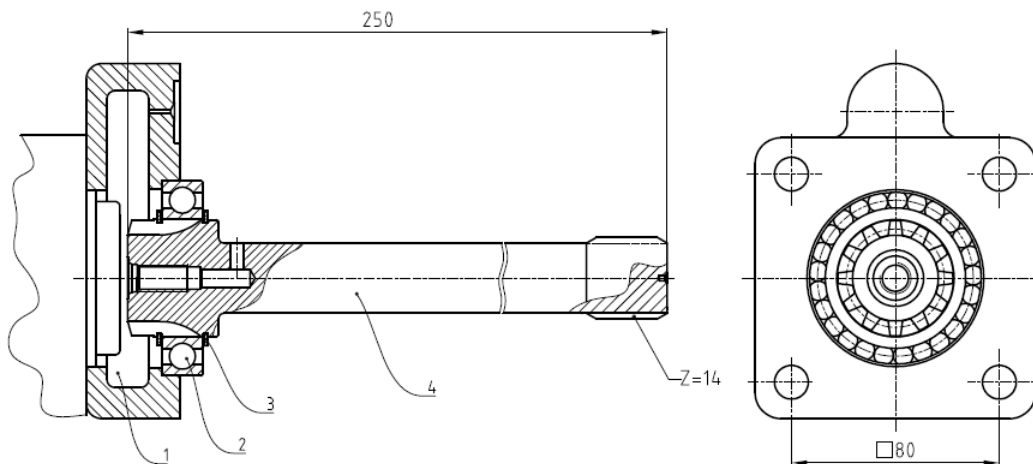


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4007S

16-S-151 IT; 16-S-181 IT; 16-S-221 IT; 16-S-1621 TD IT; 16-S-1821 TO IT;  
16-S-1921 TD IT; 16-S-2221 TD/TO IT; 16-S-2321 TD IT; 16-S-2331 TD IT;  
16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4007

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>
<b>Engine-Kit adapter ratio</b>	
16-S-151/221 /13.80 High:- 1 : 0.92 Normal:- 1 : 0.77	
/13.85 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.41 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.47 High:- 1 : 0.92 Normal:- 1 : 0.77	
/16.53 High:- 1 : 0.92 Normal:- 1 : 0.77	
16-S-1621 TD IT; 16-S-1921 TD IT; 16-S-2221 TD IT; 16-S-2321 TD IT; 16-S-2331 TD IT	/16.41 High:- 1 : 0.91 Normal:- 1 : 0.77
16-S-1821 TO IT; 16-S-2221 TO IT; 16-S-2521 TO IT; 16-S-2721 TO IT; 16-S-2731 TO IT	/13.80 High:- 1 : 1.09 Normal:- 1 : 0.91

#### KIT Studs:

KIT VK4007S for PTO (ratio 1:1)

- 4 stud M12x155
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

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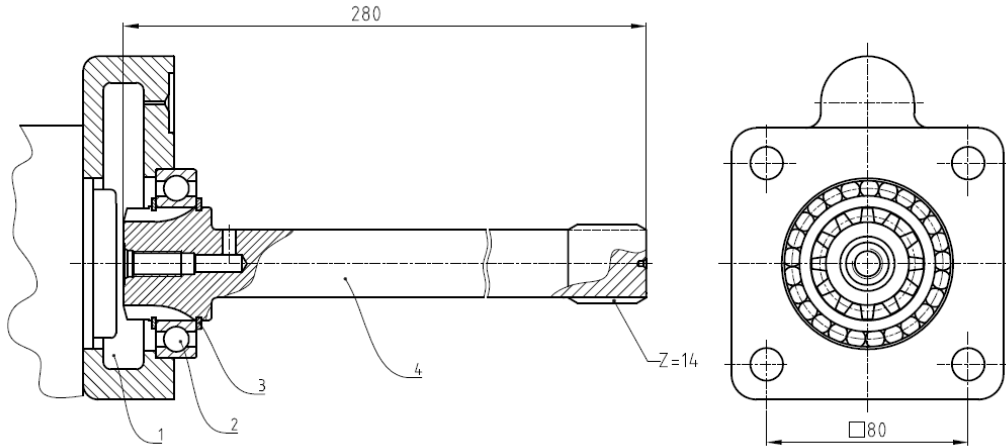


## ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-251 IT; 16-S-2720 TO IT

Ref.VK4008S

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4008

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.3</b>
<b>Engine-Kit adapter ratio</b>	

16-S-251 IT High:- 1 : 0.92 Normal:- 1 : 0.77

16-S-2720 TO IT / 13.80-0.84 High:- 1 : 1.09 Normal:- 1 : 0.91

#### KIT Studs:

KIT VK4008S for PTO (ratio 1:1)

- 4 stud M12x155
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

CTI VK4008S 1004- 2

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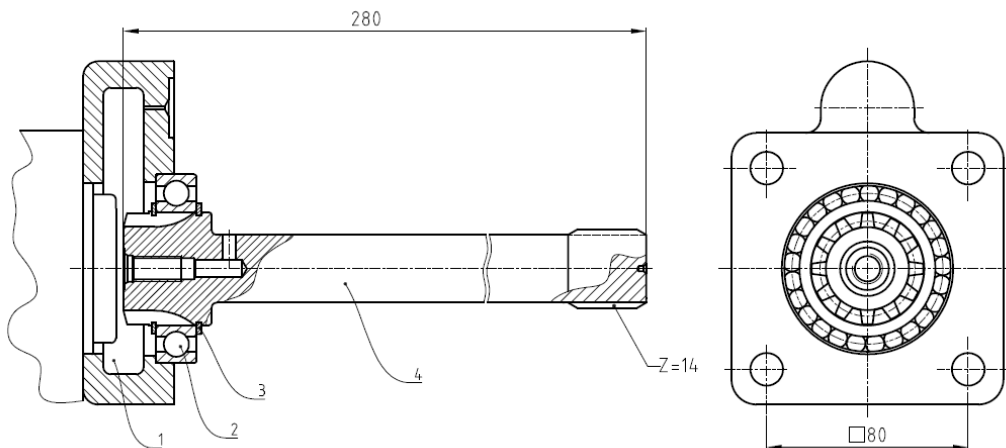


# ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-251 IT; 16-S-2720 TO IT

Ref.VK4008AM

## Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4008

(Dimensions in mm)

## Main Data

Continuous Torque (Nm)	600
Intermittent Torque (Nm)	840
Power (at 1000 r.p.m)	85 H.P. / 64 Kw
Weight (Kg)	2.3
Engine-Kit adapter ratio	

16-S-251 IT High:- 1 : 0.92 Normal:- 1 : 0.77

16-S-2720 TO IT / 13.80-0.84 High:- 1 : 1.09 Normal:- 1 : 0.91

### KIT Studs:

KIT VK4008AM for PTO (ratio 1:1.32)

- 2 stud M12x135
- 2 stud M12x170
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

CTI VK4008AM 1004- 2

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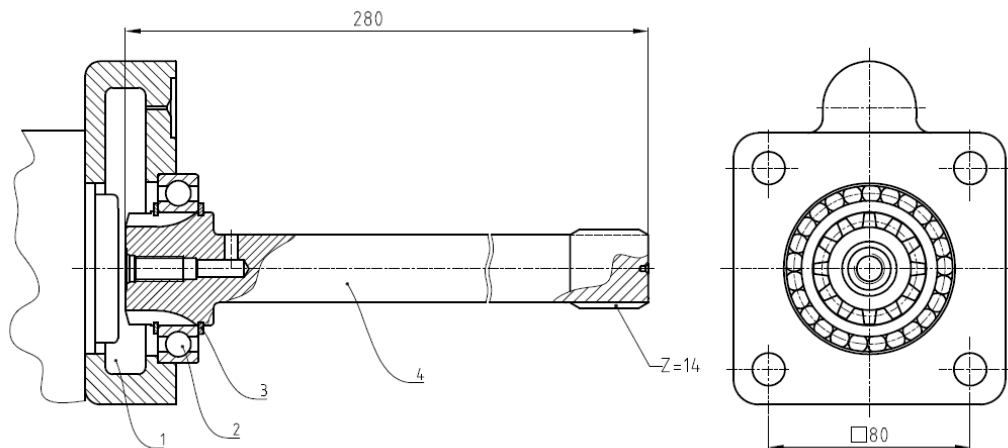


# ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-251 IT; 16-S-2720 TO IT

Ref.VK4008AM

## Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4008

(Dimensions in mm)

## Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.3</b>
<b>Engine-Kit adapter ratio</b>	

16-S-251 IT High:- 1 : 0.92 Normal:- 1 : 0.77

16-S-2720 TO IT / 13.80-0.84 High:- 1 : 1.09 Normal:- 1 : 0.91

### KIT Studs:

KIT VK4008AM for PTO (ratio 1:1.32)

- 2 stud M12x135
- 2 stud M12x170
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

CTI VK4008AM 1004- 2

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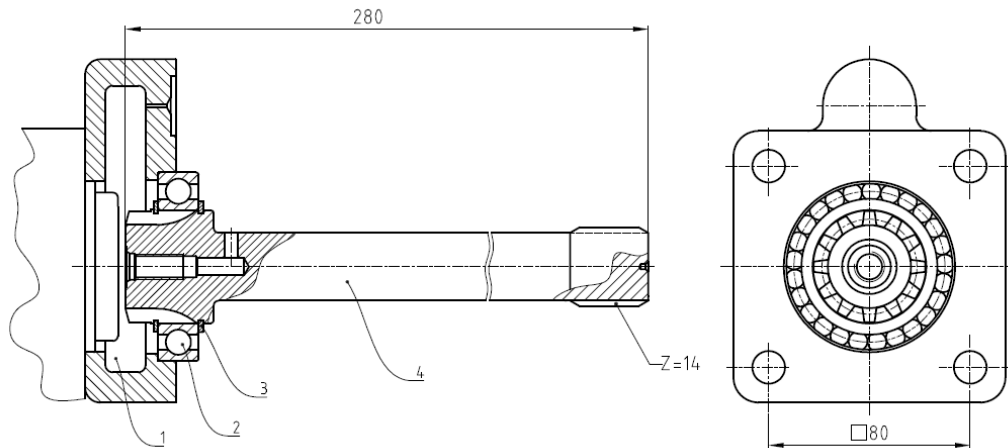


## ADAPTER KIT TO POWER TAKE OFFS ZF

16-S-251 IT; 16-S-2720 TO IT

Ref.VK4008S

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4008

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.3</b>
<b>Engine-Kit adapter ratio</b>	

16-S-251 IT High:- 1 : 0.92 Normal:- 1 : 0.77

16-S-2720 TO IT / 13.80-0.84 High:- 1 : 1.09 Normal:- 1 : 0.91

#### KIT Studs:

KIT VK4008S for PTO (ratio 1:1)

- 4 stud M12x155
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

CTI VK4008S 1004- 2

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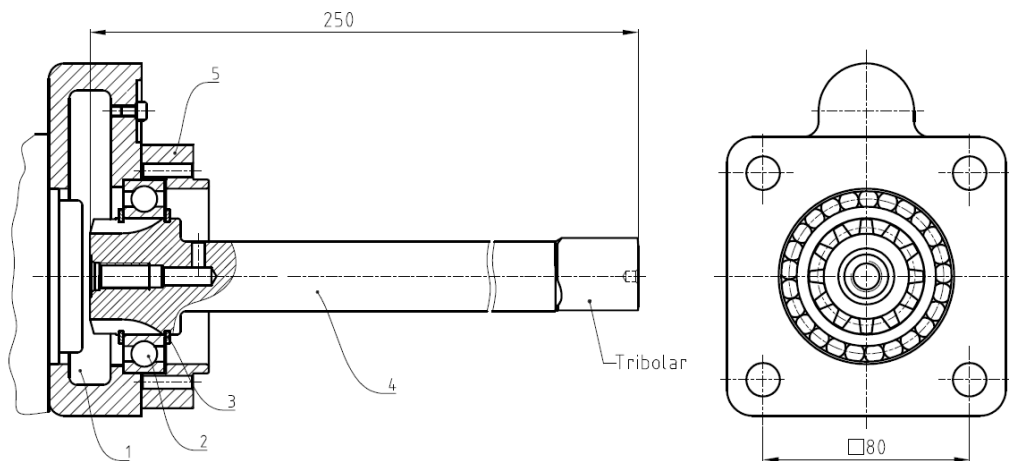
## ADAPTER KIT TO POWER TAKE OFFS

ZF

16-S-150 IT

Ref.VK4009AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4009
- 5 – Spacer flange

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>2.5</b>
<b>Engine-Kit adapter ratio</b>	

16-S-150/ 16.47	High: .- 1 : 0.920	Normal: .- 1 : 0.770
/ 13.80	High: .- 1 : 0.920	Normal: .- 1 : 0.770

#### KIT Studs:

KIT VK4008AM for PTO (ratio 1:1.32)

- 2 stud M12x135
- 2 stud M12x170
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute IT

CTI VK4009AM 0811-1

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown. The gear boxes are in constant change; therefore, ABER is not to be held responsible for any damage resulting from wrong application or application of outdated material.



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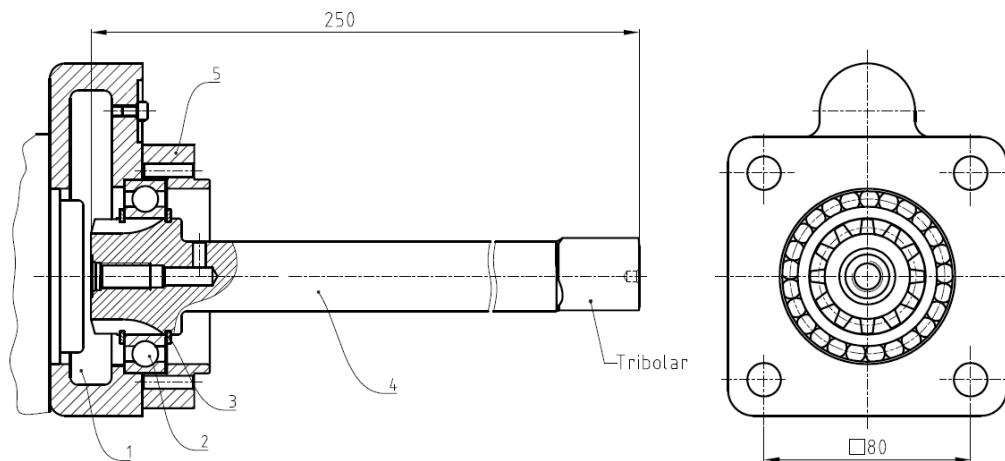
# ADAPTER KIT TO POWER TAKE OFFS

ZF

16-S-150 IT

Ref.VK4009S

## Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4009
- 5 – Spacer flange

(Dimensions in mm)

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>2.5</b>
<b>Engine-Kit adapter ratio</b>	

16-S-150/ 16.47	High: .- 1 : 0.920	Normal: .- 1 : 0.770
/ 13.80	High: .- 1 : 0.920	Normal: .- 1 : 0.770

### KIT Studs:

KIT VK4009S for PTO (ratio 1:1)

- 4 stud M12x170
- 4 nut M12
- 4 washer
- 2 jute ZF
- 1 jute IT

CTI VK4009S 0811- 1

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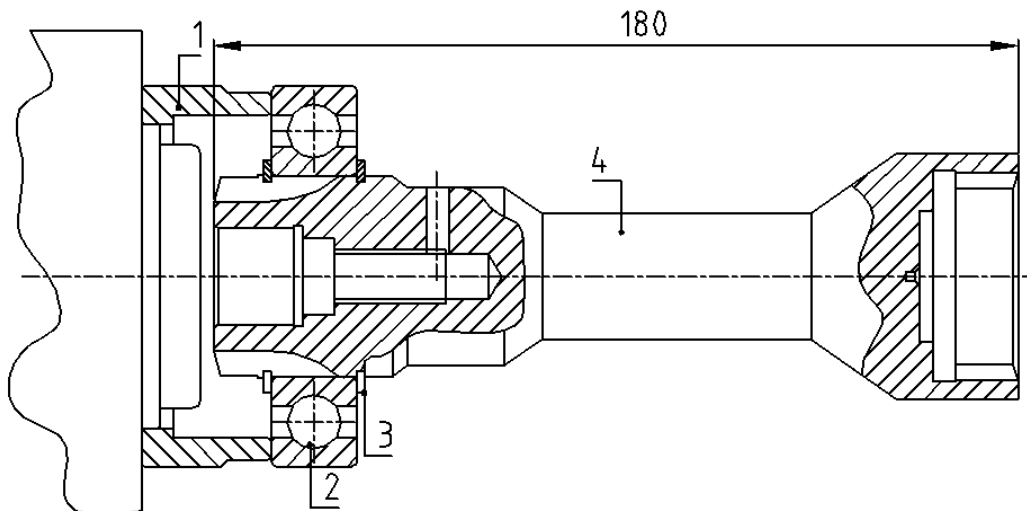


# ADAPTER KIT TO POWER TAKE OFFS ZF

5-90 GP ; 5-92 GP ; 4-120 GP

Ref. VK4015S  
VK4015AM

## Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4015

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 C.V. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>1.7</b>
<b>Engine-Kit adapter ratio</b>	
5-90 GP / 13	1:0.890
5-90 GP / 13.01	1:0.890
4-120 GP / 10.91	1:0.800
/ 8.05	1:0.970
/ 9.16	1:0.850

### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

### Example:

Gearbox 5-90 GP / 13.01 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: 1 : 1.174 (0.890 x 1.32 = 1.174)

### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4015S / VK4015AM 0811-1

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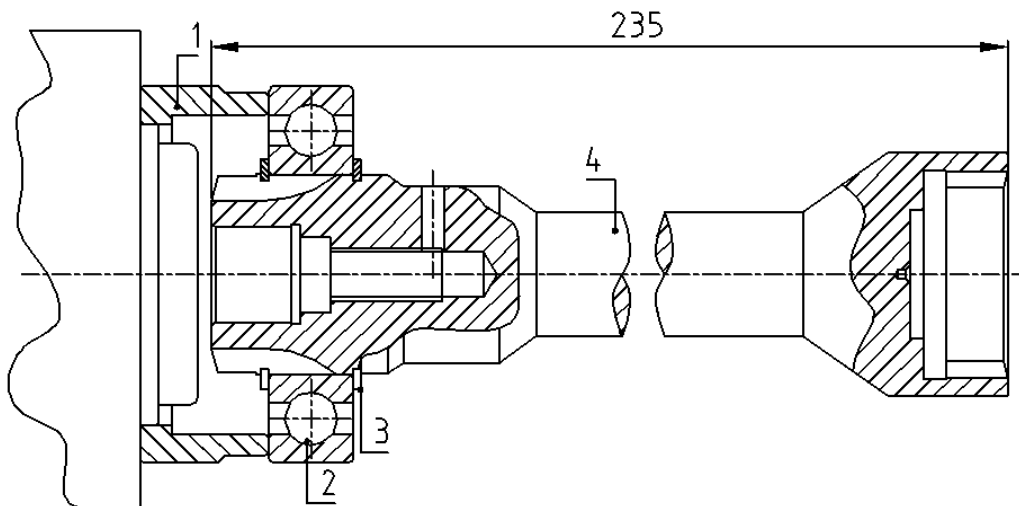


**ADAPTER KIT TO POWER TAKE OFFS  
ZF**

5-110 GPA

Ref. VK4016S  
VK4016AM

**Main Dimensions**



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4016

**Main Data**

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 C.V. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>2</b>
<b>Engine-Kit adapter ratio</b>	<b>1:0.830</b>

**Note :**

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4016S / VK4016AM 0811-1

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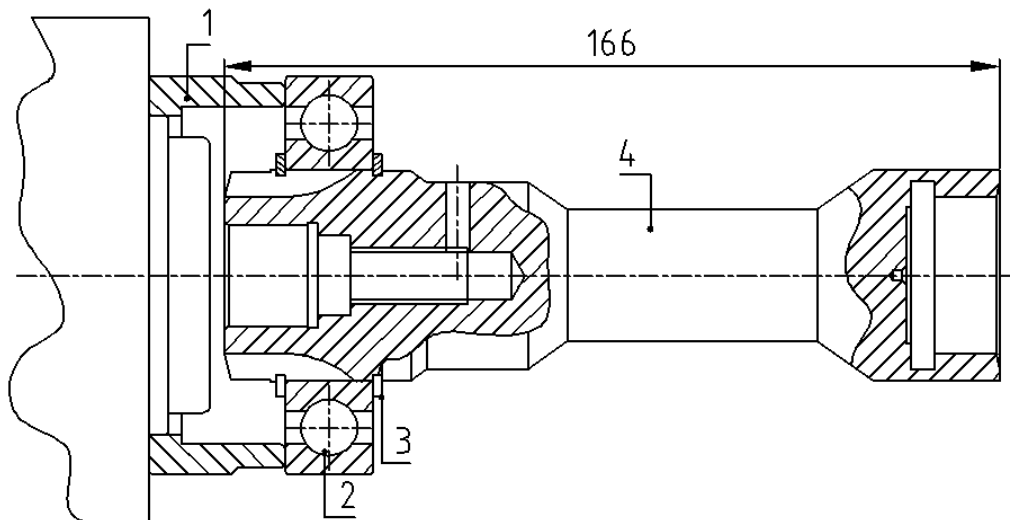


# ADAPTER KIT TO POWER TAKE OFFS ZF

5-110 GP ; 5-111 GP ; 4-150 GP

Ref. VK4017S  
VK4017AM

## Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4017

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 C.V. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>1.7</b>
<b>Engine-Kit adapter ratio</b>	
5-110 GP / 11.2	1:0.975
/ 13.1	1:0.830
/ 9.72	1:0.830
5-111 GP / 13.04	1:0.820
4-150 GP / 9.19	1:0.820

### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

### Example:

Gearbox 5-110 GP / 11.2 Adapter Kit + ZF S6-90 (Ref. TF4002MP) Internal Ratio 1:1.32

Final ratio: 1 : 1.287 (0.975 x 1.32 = 1.287)

### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4017S / VK4017AM 0811-1

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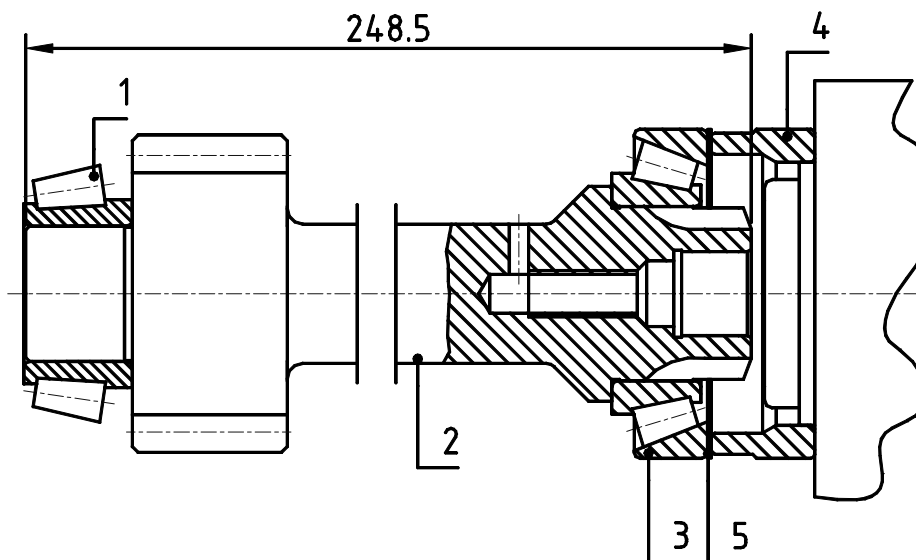


# ADAPTER KIT TO POWER TAKE OFFS ZF

9-S-75/13.16 ; 9-S-75/9.56

Ref. VK4018S  
VK4018AM

## Main Dimensions



- 1 – Bearing
- 2 – Adapter Shaft VK4018
- 3 – Bearing
- 4 – Washer
- 5 – Adjustment Washer

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>4,3</b>
<b>Engine to PTO ratio</b>	
9-S-75 / 13.16	.- 1 : 0.610
9-S-75 / 9.56	.- 1 : 0.850

### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

### Example:

Gearbox 9-S-75 / 13.16 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: .- 1 : 0.805 (0.610 x 1.32 = 0.805)

### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4018S / VK4018AM 0811-1

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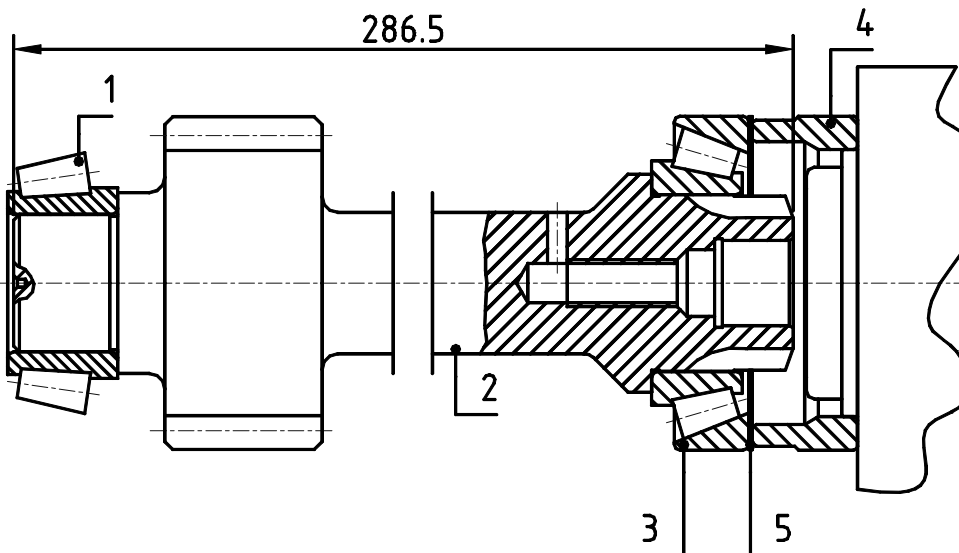


# ADAPTER KIT TO POWER TAKE OFFS ZF

9-S-109/10.25 ; 9-S-109/10.24 ; 16-S-109/11.86 ; 16-S-109/13.53

Ref. VK4019S  
VK4019AM

## Main Dimensions



- 1 – Bearing
- 2 – Adapter Shaft VK4019
- 3 – Bearing
- 4 – Adapter Flange
- 5 – Adjustment Washer

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>4.7</b>
<b>Engine to PTO ratio</b>	
9-S-109 / 10.25	.- 1 : 0.770
16-S-109 / 11.86	High .- 1 : 0.880
	Normal .- 1 : 0.750
16-S-109 / 13.53	High .- 1 : 0.930
	Normal .- 1 : 0.790

### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

### Example:

Gearbox 9-S-109 / 10.25 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: .- 1 : 1.016 (0.770 x 1.32 = 1.016)

### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

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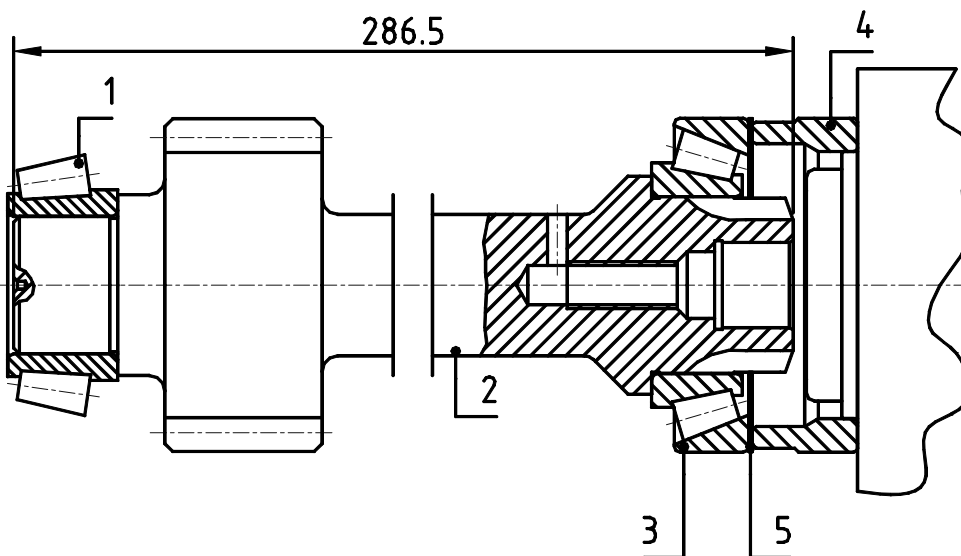


# ADAPTER KIT TO POWER TAKE OFFS ZF

9-S-109/12.92 ; 16-S-109/13.04 ; 16-S-109/13.30 ;  
16-S-109/13.42 ; 8-S-109

Ref. VK4020S  
VK4020AM

## Main Dimensions



- 1 – Bearing
- 2 – Adapter Shaft VK4020
- 3 – Bearing
- 4 – Adapter Flange
- 5 – Adjustment Washer

## Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>4.7</b>
<b>Engine to PTO ratio</b>	
9-S-109 / 12.92	.- 1 : 0.720
16-S-109 / 13.30	High .- 1 : 0.930
	Normal .- 1 : 0.790
16-S-109 / 13.42	High .- 1 : 0.930
	Normal .- 1 : 0.790

### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

### Example:

Gearbox 9-S-109 / 12.92 Adapter Kit + ZF S6-90 (Ref. TF4002AMP) Internal Ratio 1:1.32

Final ratio: .- 1 : 0.950 (0.720 x 1.32 = 0.950)

### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

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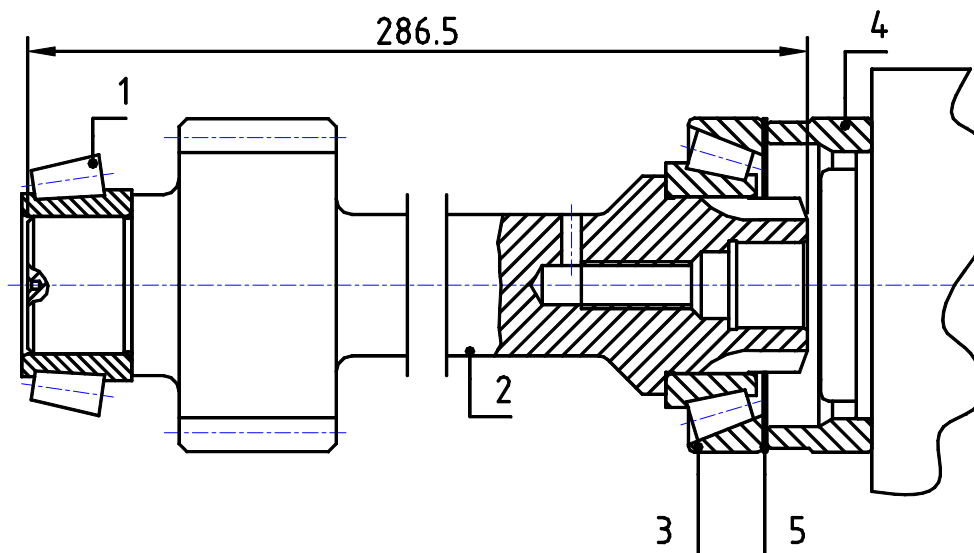


## ADAPTER KIT TO POWER TAKE OFFS ZF

9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9S-1110 TO/9,48 ;  
9S 1310 TO/9,48

Ref. VK4021S  
VK4021AM

### Main Dimensions



- 1 – Bearing
- 2 – Adapter Shaft VK4021
- 3 – Bearing
- 4 – Adapter Flange
- 5 – Adjustment Washer

### Main Data

<b>Continuous Torque (Nm)</b>	<b>300</b>
<b>Intermittent Torque (Nm)</b>	<b>420</b>
<b>Power (at 1000 r.p.m)</b>	<b>42 H.P. / 32 Kw</b>
<b>Weight (Kg)</b>	<b>4.7</b>
<b>Engine to PTO ratio</b>	
9-S-109 / 12.91 - 1 : 0.72	
9-S-1110 TO / 9.48 - 0.75 (Volvo ZTO 1109) - 1 : 0.97	
9-S-1310 TO / 9.48 - 1 : 0.97	
16-S-109 / 13.31 High - 1 : 0.90	
Normal - 1 : 0.75	

#### Note 1:

For getting the correct ratio is necessary to multiply the above mentioned ratio by the internal ratio in all S6-90 releases.

#### Example:

Gearbox 9-S-109 / 12.91 Adapter Kit + ZF S6-90 (Ref. TF4002MP) Internal Ratio 1:1.32

Final ratio: - 1 : 0.950 (0.720 x 1.32 = 0.950)

#### Note 2:

Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4021S / VK4021AM 1004- 2

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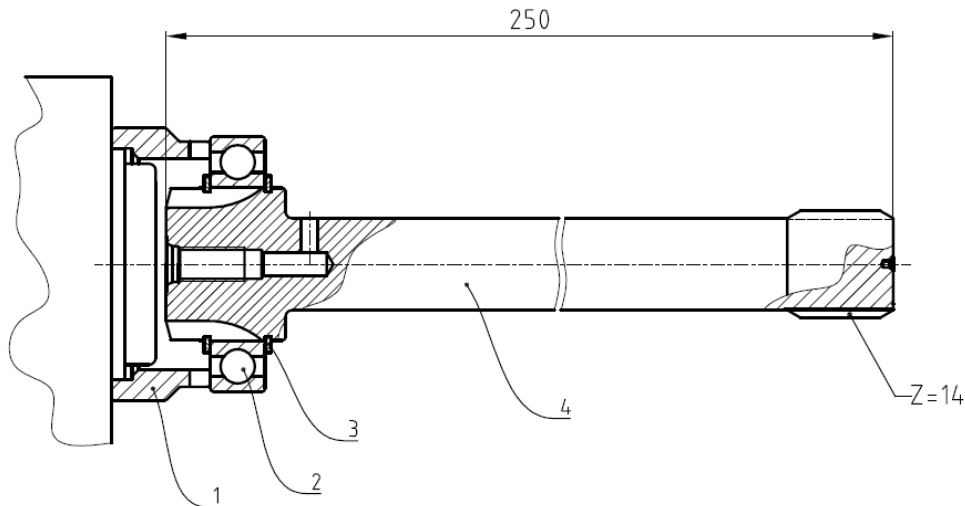


## ADAPTER KIT TO POWER TAKE OFFS ZF

12-AS-1800; 12-AS-2301; 16-AS-2200; 16-AS-2601; 12AS-1630TD;  
12AS-1930TD; 12AS-2130TD; 12AS-2131TD; 12AS-2140TD; 12AS-2340TD;  
12AS-2430TD; 12AS-2540 TD; 12AS-1930 TO; 12AS-2130 TO; 12AS-2330 TO;  
12AS-2530 TO; 12AS-2540 TO; 12AS-2740 TO; 12AS-2940 TO; 16AS-2230 TD;  
16AS-2601 DD; 16AS-2601 OD; 16AS-2630 TO

Ref. VK4022S  
VK4022AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4022

(Dimensions in mm)

### Main Data

Continuous Torque (Nm)	600
Intermittent Torque (Nm)	840
Power (at 1000 r.p.m)	85 H.P. / 64 Kw
Weight (Kg)	2
Engine-Kit adapter ratio	

**Note :** Adapter Kit is supplied without studs. Please use those that are provided with the PTO.

CTI VK4022S / VK4022AM 0811-1

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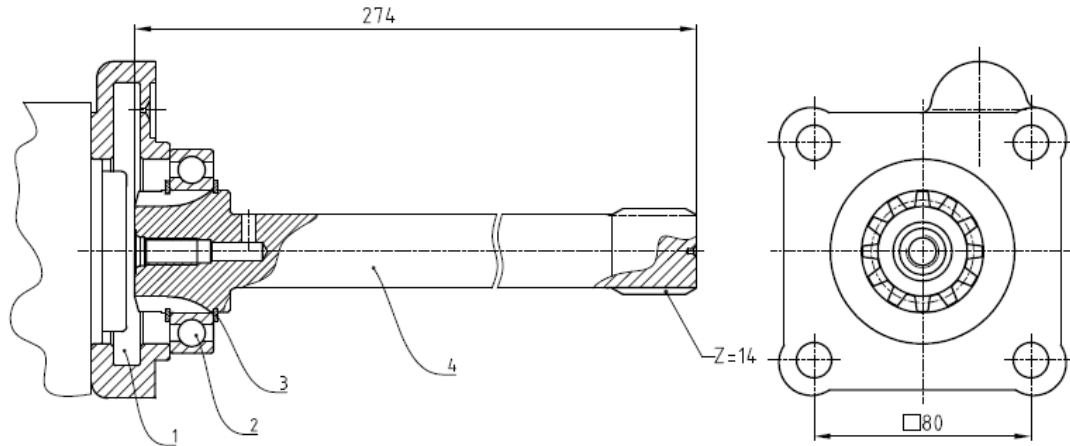


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4023S

12-AS-1800 IT; 12-AS-1631 TD IT; 12-AS-1931 TD/TO IT; 12-AS-2131 TD/TO IT;  
12-AS-2141 TD IT; 12-AS-2301 TD/TO IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT;  
12-AS-2331 TO IT; 12-AS-2531 TO IT; 12-AS-2541 TO IT; 12-AS-2741 TO IT;  
12-AS-2941 TO IT;  
16-AS-2200 IT; 16-AS-2231 TD IT; 16-AS-2601 TD/TO IT; 16-AS-2631 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4023

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.9</b>
<b>Engine-Kit adapter ratio</b>	
12-AS-1631 TD IT; 12-AS-1931 TD IT; 12-AS-2131 TD IT; 12-AS-2141 TD IT; 12-AS-2301 TD IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT	/15.68-1.0 1:0.82
12-AS-1800 IT	/14.89-1.0 1:0.76
12-AS-1931 TO IT; 12-AS-2131 TO IT; 12-AS-2301 TO IT; 12-AS-2331 TO IT; 12-AS-2531 TO IT;	/12.33-0.78 1:1.35
12-AS-2541 TO IT; 12-AS-2741 TO IT; 12-AS-2941 TO IT;	/12.29-0.78 1:1.35
16-AS-2200 IT	/15.89-1.0 1:0.71
16-AS-2231 TD IT; 16-AS-2601 TD IT	/17.03-1.0 1:0.76
16-AS-2601 TO IT; 16-AS-2631 TO IT	/14.12-0.83 1:1.11

#### KIT Studs:

KIT VK4023S for PTO (ratio 1:1)

- 4 stud M12x135
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute AS

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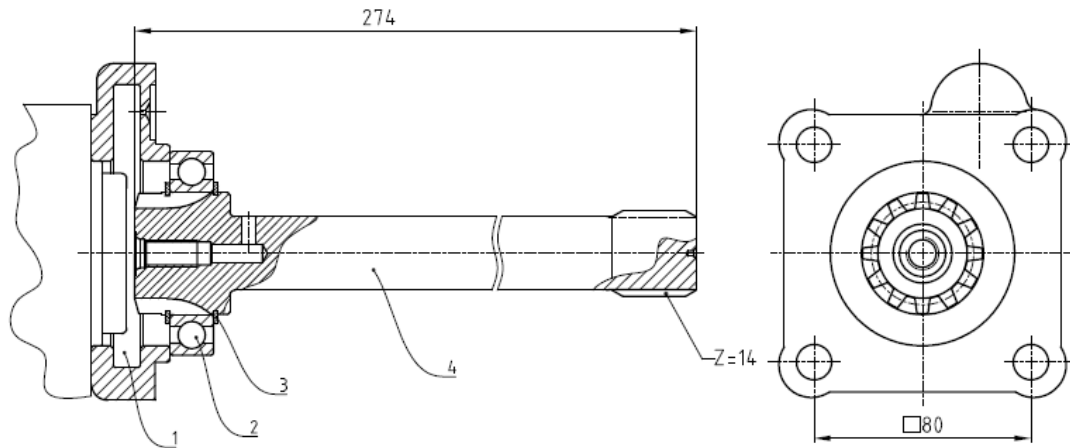


## ADAPTER KIT TO POWER TAKE OFFS ZF

12-AS-1800 IT; 12-AS-1631 TD IT; 12-AS-1931 TD/TO IT; 12-AS-2131 TD/TO IT;  
12-AS-2141 TD IT; 12-AS-2301 TD/TO IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT;  
12-AS-2331 TO IT; 12-AS-2531 TO IT; 12-AS-2541 TO IT; 12-AS-2741 TO IT;  
12-AS-2941 TO IT;  
16-AS-2200 IT; 16-AS-2231 TD IT; 16-AS-2601 TD/TO IT; 16-AS-2631 TO IT

Ref.VK4023AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4023

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.9</b>
<b>Engine-Kit adapter ratio</b>	
12-AS-1631 TD IT; 12-AS-1931 TD IT; 12-AS-2131 TD IT; 12-AS-2141 TD IT; 12-AS-2301 TD IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT	/15.68-1.0 1:0.82
12-AS-1800 IT	/14.89-1.0 1:0.76
12-AS-1931 TO IT; 12-AS-2131 TO IT; 12-AS-2301 TO IT; 12-AS-2331 TO IT; 12-AS-2531 TO IT;	/12.33-0.78 1:1.35
12-AS-2541 TO IT; 12-AS-2741 TO IT; 12-AS-2941 TO IT;	/12.29-0.78 1:1.35
16-AS-2200 IT	/15.89-1.0 1:0.71
16-AS-2231 TD IT; 16-AS-2601 TD IT	/17.03-1.0 1:0.76
16-AS-2601 TO IT; 16-AS-2631 TO IT	/14.12-0.83 1:1.11

#### **KIT Studs:**

KIT VK4023AM for PTO (ratio 1:1.32)

- 2 stud M12x113
- 2 stud M12x150
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute AS

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown. The gear boxes are in constant change; therefore, ABER is not to be held responsible for any damage resulting from wrong application or application of outdated material.



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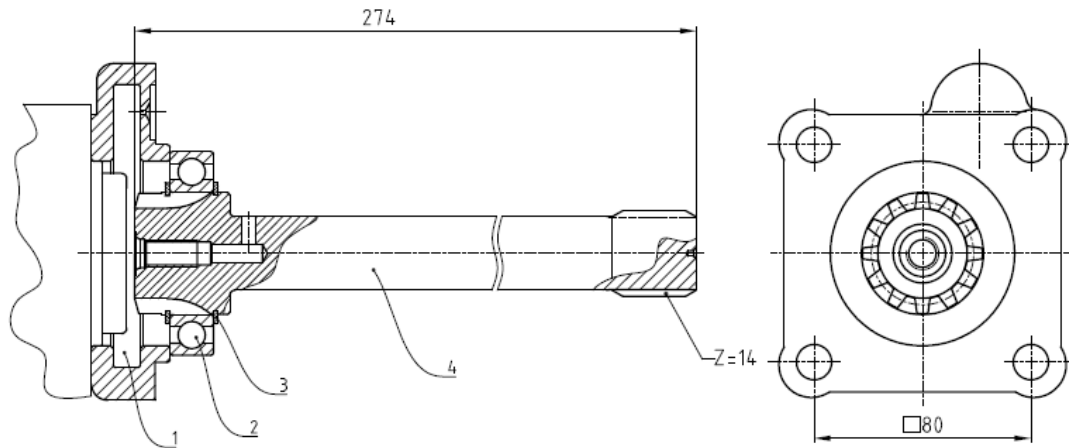


## ADAPTER KIT TO POWER TAKE OFFS ZF

12-AS-1800 IT; 12-AS-1631 TD IT; 12-AS-1931 TD/TO IT; 12-AS-2131 TD/TO IT;  
12-AS-2141 TD IT; 12-AS-2301 TD/TO IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT;  
12-AS-2331 TO IT; 12-AS-2531 TO IT; 12-AS-2541 TO IT; 12-AS-2741 TO IT;  
12-AS-2941 TO IT;  
16-AS-2200 IT; 16-AS-2231 TD IT; 16-AS-2601 TD/TO IT; 16-AS-2631 TO IT

Ref.VK4023AM

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4023

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.9</b>
<b>Engine-Kit adapter ratio</b>	
12-AS-1631 TD IT; 12-AS-1931 TD IT; 12-AS-2131 TD IT; 12-AS-2141 TD IT; 12-AS-2301 TD IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT	/15.68-1.0 1:0.82
12-AS-1800 IT	/14.89-1.0 1:0.76
12-AS-1931 TO IT; 12-AS-2131 TO IT; 12-AS-2301 TO IT; 12-AS-2331 TO IT; 12-AS-2531 TO IT;	/12.33-0.78 1:1.35
12-AS-2541 TO IT; 12-AS-2741 TO IT; 12-AS-2941 TO IT;	/12.29-0.78 1:1.35
16-AS-2200 IT	/15.89-1.0 1:0.71
16-AS-2231 TD IT; 16-AS-2601 TD IT	/17.03-1.0 1:0.76
16-AS-2601 TO IT; 16-AS-2631 TO IT	/14.12-0.83 1:1.11

#### KIT Studs:

KIT VK4023AM for PTO (ratio 1:1.32)

- 2 stud M12x113
- 2 stud M12x150
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute AS

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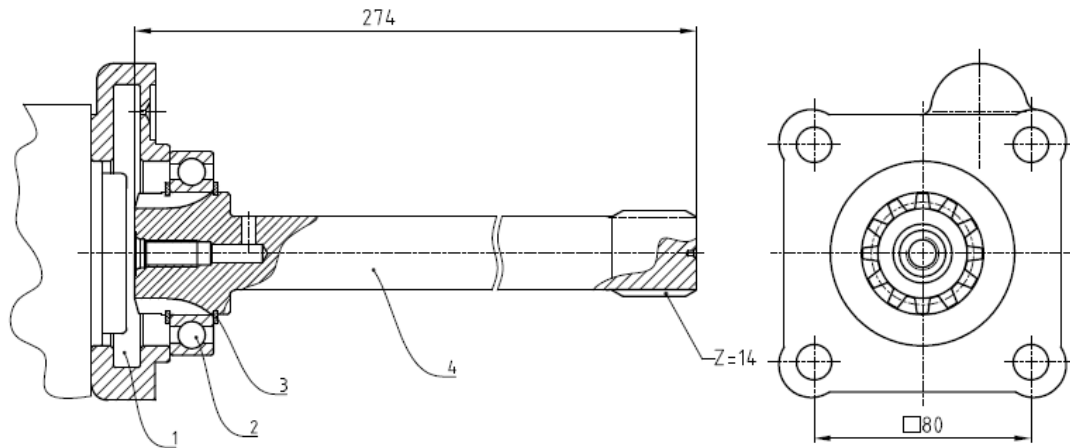


## ADAPTER KIT TO POWER TAKE OFFS ZF

Ref.VK4023S

12-AS-1800 IT; 12-AS-1631 TD IT; 12-AS-1931 TD/TO IT; 12-AS-2131 TD/TO IT;  
12-AS-2141 TD IT; 12-AS-2301 TD/TO IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT;  
12-AS-2331 TO IT; 12-AS-2531 TO IT; 12-AS-2541 TO IT; 12-AS-2741 TO IT;  
12-AS-2941 TO IT;  
16-AS-2200 IT; 16-AS-2231 TD IT; 16-AS-2601 TD/TO IT; 16-AS-2631 TO IT

### Main Dimensions



- 1 – Spacer
- 2 – Bearing
- 3 – Circlip
- 4 – Adapter shaft VK4023

(Dimensions in mm)

### Main Data

<b>Continuous Torque (Nm)</b>	<b>600</b>
<b>Intermittent Torque (Nm)</b>	<b>840</b>
<b>Power (at 1000 r.p.m)</b>	<b>85 H.P. / 64 Kw</b>
<b>Weight (Kg)</b>	<b>2.9</b>
<b>Engine-Kit adapter ratio</b>	
12-AS-1631 TD IT; 12-AS-1931 TD IT; 12-AS-2131 TD IT; 12-AS-2141 TD IT; 12-AS-2301 TD IT; 12-AS-2341 TD IT; 12-AS-2431 TD IT	/15.68-1.0 1:0.82
12-AS-1800 IT	/14.89-1.0 1:0.76
12-AS-1931 TO IT; 12-AS-2131 TO IT; 12-AS-2301 TO IT; 12-AS-2331 TO IT; 12-AS-2531 TO IT;	/12.33-0.78 1:1.35
12-AS-2541 TO IT; 12-AS-2741 TO IT; 12-AS-2941 TO IT;	/12.29-0.78 1:1.35
16-AS-2200 IT	/15.89-1.0 1:0.71
16-AS-2231 TD IT; 16-AS-2601 TD IT	/17.03-1.0 1:0.76
16-AS-2601 TO IT; 16-AS-2631 TO IT	/14.12-0.83 1:1.11

#### KIT Studs:

KIT VK4023S for PTO (ratio 1:1)

- 4 stud M12x135
- 4 nut M12
- 4 washer
- 1 jute ZF
- 1 jute AS

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