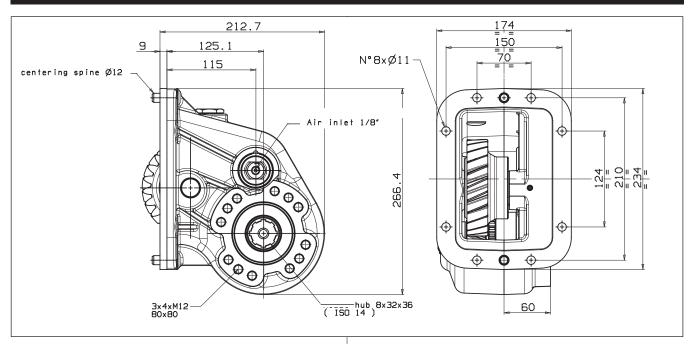
PNEUMATICALLY OPERATED POWER TAKE-OFF



Hyva Partno. PTO only: 021211072
Type Gearbox: SCANIA
Page 1 / 1



Specifications	
Type Gearbox	GR-GRH 900
PTO ratio@1000 eng. rpm	1182 prm
Max torque	480 Nm
Mounting side	Right
Output	Rear
Rotation	Cw

Mounting kit	
Part no.	021461002



228-02417HY subject cto change without notice DO-E 021211072 / 10 01 07 / RV AA

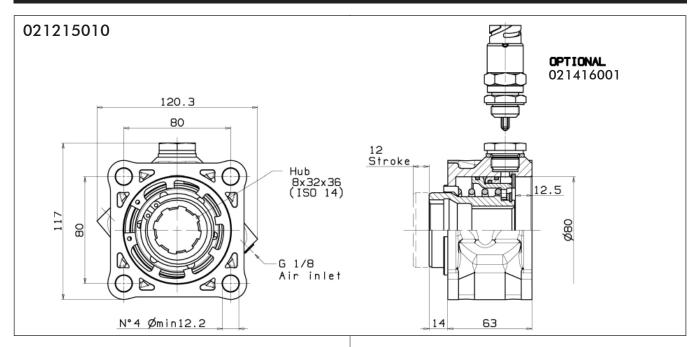
PNEUMATICALLY OPERATED POWER TAKE-OFF



 Hyva
 Partno. PTO:
 021215010/021215011

 Type Gearbox:
 VOLVO-EATON-SCANIA

 Page 1 / 2
 MERCEDES-ZF



Specifications	
Type Gearbox	VOLVO - EATON - ZF MERCEDES - SCANIA
PTO ratio@1000 eng. rpm	SEE INDEX
Max torque	1000 Nm (1)
Mounting side	Rear
Output	Rear
Rotation	Cw

(1) The maximum allowed torque is referred to the PTO only. It is essential to watch the PTO/gearbox application book to get the maximum torque limit of every single transmission.

Mounting kit	
Part no.	SEE INDEX



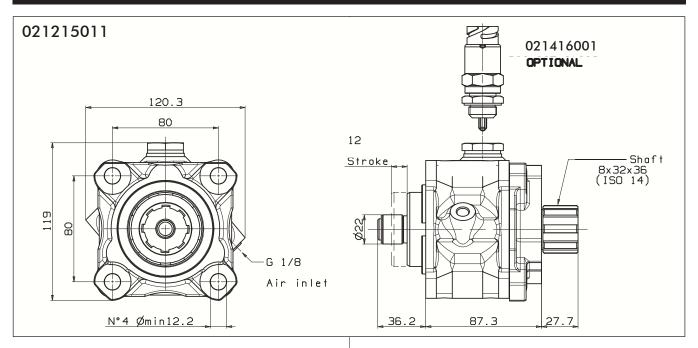
PNEUMATICALLY OPERATED POWER TAKE-OFF



 Hyva
 Partno. PTO:
 021215010/021215011

 Type Gearbox:
 VOLVO-EATON-SCANIA

 Page 2 / 2
 MERCEDES-ZF



Specifications		
Type Gearbox	VOLVO - EATON - ZF MERCEDES - SCANIA	
PTO ratio@1000 eng. rpm	SEE INDEX	
Max torque	1000 Nm (1)	
Mounting side	Rear	
Output	Rear	
Rotation	Cw	

(1) The maximum allowed torque is referred to the PTO only. It is essential to watch the PTO/gearbox application book to get the maximum torque limit of every single transmission.

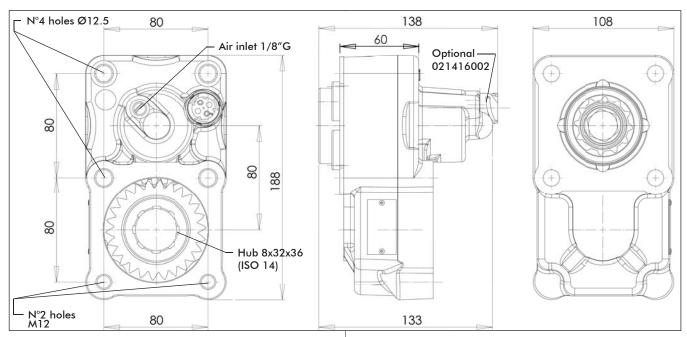
Mounting kit	
Part no.	SEE INDEX



PNEUMATICALLY OPERATED POWER TAKE-OFF

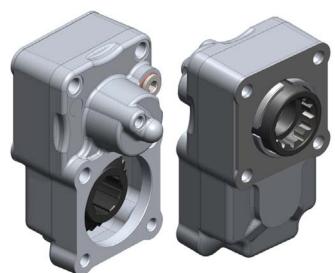


Hyva Partno. PTO: 021215040
Type Gearbox: ZF
Page 1 / 1



Specifications	
Type Gearbox	SEE INDEX
PTO ratio@1000 eng. rpm	SEE INDEX
Internal ratio	1:1,35
Max torque	300 Nm
Mounting side	Rear
Output	Rear
Rotation	Acw





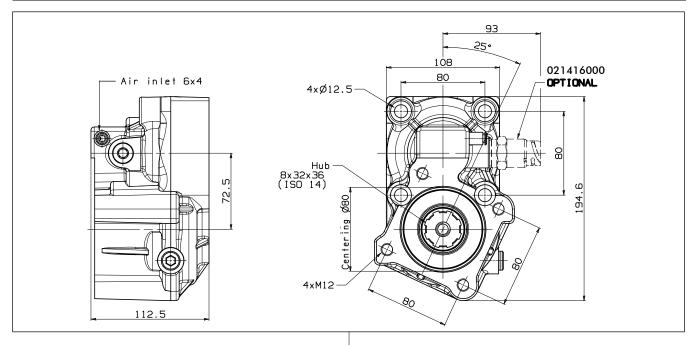
PNEUMATICALLY OPERATED POWER TAKE-OFF



Hyva

Partno. PTO:021220030/021215023/021215050/021215030 Type Gearbox: ZF - IVECO-VOLVO-

Page 1 / 2 MERCEDES - EATON

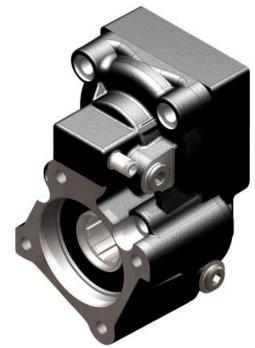


Specifications				
Туре	MERCEDES-IVECO-EATON-ZF-VOLVO			
Gearbox	021220030	021215023	021215050	021215030
PTO ratio@ 1000 eng. rpm	SEE INDEX			
Internal ratio	1:1,8	1:1,53	1:1,33	1:1,1
Max torque	350 Nm	400 Nm	450 Nm	500 Nm
Mounting side	Rear			
Output	Rear			
Rotation	Acw			

Mounting kit	
Part no.	SEE INDEX

Attention

The prop shaft overall dimensions shown in the section "PROP SHAFT CLEARANCE" have been taken from the technical catalogues of the gear-boxes' manufacturers, HYVA BV refuses all responsibility for any change of such dimensions as well as for any gearboxes damages due to higher torque absorption than allowed.



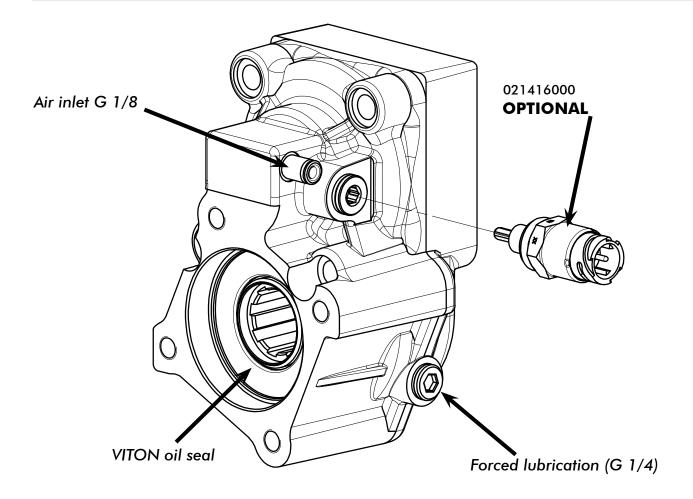


PNEUMATICALLY OPERATED POWER TAKE-OFF

Hyva Partno. PTO:021220030/021215023/021215050/021215030
Type Gearbox: ZF - IVECO - VOLVO-

Page 2 / 2 MERCEDES - EATON

Basic characteristics



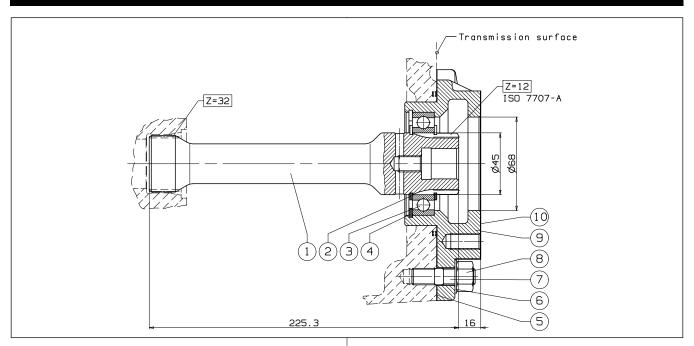
HYVA QUILL SHAFT

QUILL SHAFT



 Hyva
 Partno.:
 021313001

 Gearbox:
 VOLVO



Parts list			
No.	Partno.:	Description	Qty.
1		Quill shaft	1
2		Circlip E 45	2
3		Circlip 75 I	1
4		Ball bearing 45x75x16	1
5		Gasket	1
6		Washer	4
7		Nut M12 CH17 H12	4
8		Stud M12x27 UNI 5911	4
9		Shift-PTO coupling flange	1
10		Gasket	1

General informations

In the mounting phase of the flange onto the gearbox, check the integrity of the OR seal incorporated into the rear surface of the gearbox hatch. If it has deteriorated, replace it with the seal included in our shaft kit.

Type of Gearbox		
VOLVO	AT 2412CATO 3112C WITH OR WITHOUT RETARDER	



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HYVA QUILL SHAFT

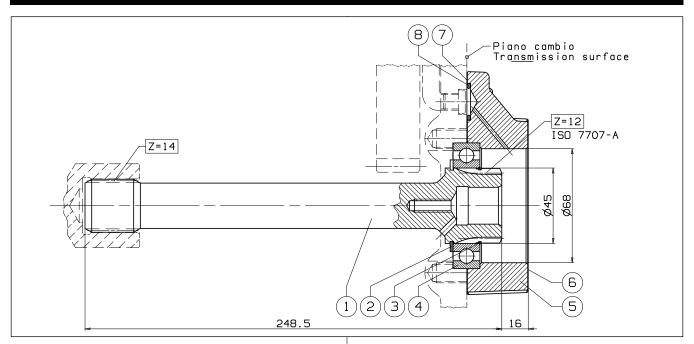
QUILL SHAFT



 Hyva
 Partno.:
 021314002

 Gearbox:
 ZF

 Page 1 / 1
 ZF



Parts list		
Partno.:	Description	Qty.
	Quill shaft	1
	Circlip E 45	1
	Bearing back-up ring	1
	Ball bearing 45x75x16	1
	Bearing-holding flange	1
	Gasket	1
	Gasket	1
	O-ring 3068	1
		Partno.: Description Quill shaft Circlip E 45 Bearing back-up ring Ball bearing 45x75x16 Bearing-holding flange Gasket Gasket

General informations

N.B. The TCE \varnothing 10x1 plug can be removed from the transmission to guarantee adequate lubrication for the PTOs that are working in demanding conditions (high power and turns and/or prolonged working times). In the shaft kit assembly phase, confirm the correct position of the O-R pos.8 and gasket pos.7



093-06071HY subject cto change without notice DO-E 021314002 / 10 03 16 / RV AA

HYVA QUILL SHAFT

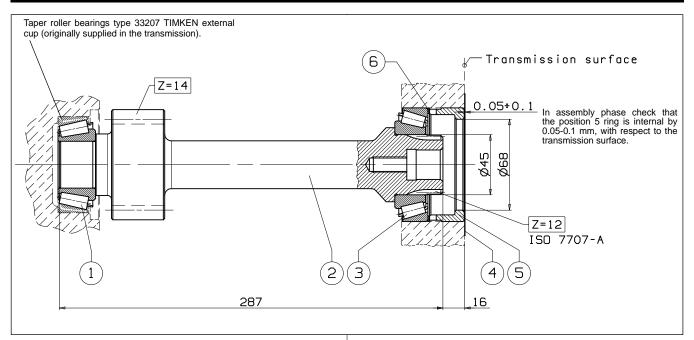
Quill shaft



 Hyva
 Partno.:
 021314003

 Gearbox:
 ZF

 Page 1 / 1
 Company of the page 1 / 1



Parts list			
No.	Partno.:	Description	Qty.
1		Tapered roller bearing	1
2		Quill shaft	1
3		Tapered roller bearing eur. 32209	1
4		Gasket	1
5		PTO guiding ring	1
6		0.5 thickness ring bearing backlash register	1
		0.3 thickness ring bearing backlash register	2
		0.2 thickness ring bearing backlash register	2

General informations

In the SHAFT KIT assembly phase it is very important to guarantee correct axial play of the TAPER ROLLER BEARINGS. On completion of assembly, the AXIAL PLAY should be min. 0.05 max 0.1 mm.

For definition and recording of PLAY, proceed as follows:

- 1) Assemble the complete shaft kit in the transmission, slightly pushing the EXTERNAL BEARING CUP against the inside of the bearing, checking that the shaft DOES NOT have any more play, but can be manually turned.
- 2) Put some rings (pos.6) between the bearing and the PTO (pos.5) combining the various thicknesses until the PTO guide ring is IN-SIDE by 0.05-0.1 mm with respect to the trasmission plan (this will be the AXIAL play defined for the TAPER ROLLER BEARINGS).

Type of Gearbox ZF ECOMID 9S-109/12.91 - 9S-1110 TO/9.48 - 9S1310 TO/9.48 - 16S-109/13.31 - 16S-109/13.41



093-05036HY subject cto change without notice DO-E 021314003 / 10 03 16 / RV AA