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Bulletin MSG30-3309-INST/EU

Installation and start-up information Hydraulic Pumps Series GPA-GP1

Effective: May, 2023
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GPA



GP1

**Important installation information
for truck gear pumps**

**Wichtige Installationsinformationen
für LKW-Zahnradpumpen**

**Informations importantes pour l'installation
Pompes à engrenages pour camions**



ENGINEERING YOUR SUCCESS.

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1) Flow vs. shaft rotation

Please note!

- The gear pumps are bi-directional (and internally drained)
- Port connector assembly:
 - Screw in the connector until it firmly touches the pump housing; then tighten the connector 30° ($1/12$ turn).

**1) Durchfluss- und
 Wellendrehrichtung**

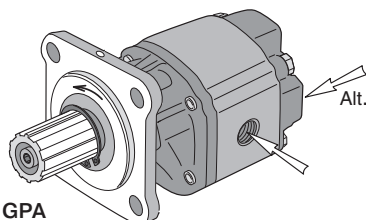
Bitte beachten!

- Die Zahnradpumpen sind für beide Drehrichtungen vorgesehen (die Leckölabfuhr ist intern)
- Montage der Ölschlüsse:
 - Ölschlüsse mit Schrauben an das Pumpengehäuse handfest montieren, dann die Schrauben 30° ($1/12$ Umdrehung) anziehen.

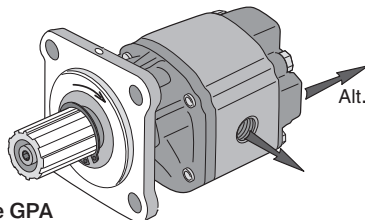
**1) Sens du débit en fonction
 du sens de rotation**

Veillez noter!

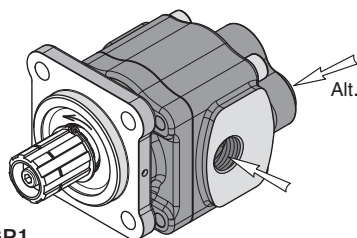
- Ces pompes sont bi-directionnelles (avec drain interne)
- Montage du raccord sur l'orifice:
 - Visser le raccord jusqu'au contact avec le corps de la pompe puis serrer fermement d' $1/12$ de tour (30 degrés).



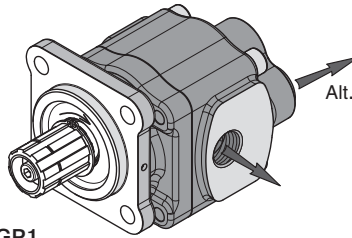
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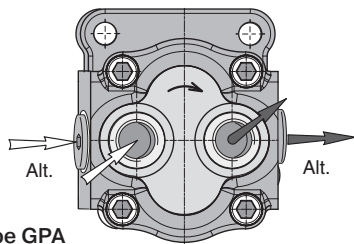
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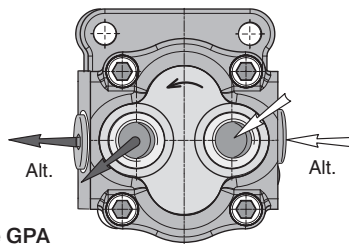
Type GP1



Type GP1



Type GPA



Type GPA

Left hand rotating pump
 Linksdrehende Pumpe
 Pompe rotation gauche

Right hand rotating pump
 Rechtsdrehende Pumpe
 Pompe rotation droite

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2) Suction fitting selection

Flow - Flow speed [m/s] at
indicated line size [mm/in]

2) Verwendung der richti-
gen Sauganschlüsse

Fördermenge -
Durchflussgeschwindigkeit
[m/s] bei den angegebenen
Leitungsabmessungen [mm/zoll]

2) Choix du raccord
d'aspiration

Débit - Vitesse d'écoulement
[m/s] pour la dimension
indiquée [mm/pouce]

[l/min]	19 / 3/4"	25 / 1"	32 / 1 1/4"	38 / 1 1/2"	50 / 2"
5	0.3	0.2	0.1	< 0.1	< 0.1
15	0.9	0.5	0.3	0.2	0.1
25	1.5	0.8	0.5	0.4	0.2
40	-	1.4	0.8	0.6	0.3
60	-	2.0	1.2	0.9	0.5
80	-	-	1.7	1.2	0.7
100	-	-	-	1.5	0.8

Please note!
The gear pump must not be
installed more than 0.5 m
above the min. oil level in the
reservoir.

Bitte beachten!
Die Pumpe muss nicht mehr als
0,5 m über dem Ölstand im Tank
montiert werden.

Veillez noter!
La pompe à engrenages doit
être installée au maximum
0,5 m au dessus du niveau mini
du reservoir.

3) Lubricate the spline

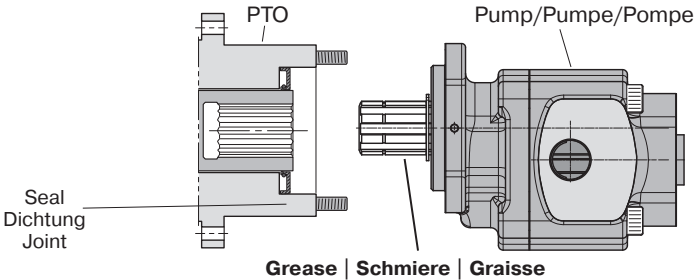
Please note!
When the PTO has a sealed-off
output sleeve (as shown in the
illustration), the gear pump
shaft spline **must be lubri-
cated with a heat-resistant
grease before start-up**;
repeat periodically
(at least once a year).

3) Schmierung der
Pumpenwelle

Bitte beachten!
Wenn der Nebenantrieb eine
abgedichtete Abtriebsmuffe
hat (siehe Abbildung) muss
die Vielkeilwelle der Zahnrad-
pumpe **vor Inbetriebnahme
mit einem hitzebeständigen
Schmierfett geschmiert
werden**; mehrfach periodisch,
mindestens einmal im Jahr.

3) Lubrification des
cannelures

Veillez noter!
Quand la prise de mouvement
(PTO) possède son propre
joint d'étanchéité (comme
montré sur l'illustration), l'arbre
cannelé de la pompe **doit être
monté avec une graisse
résistant à la température** ;
cette opération doit être répé-
tée périodiquement.



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4) No external shaft loads

Please note!

- No external radial or axial shaft loads are allowed on the pump shaft.
- In case of radial and/or axial shaft loads an external, bearing supported coupling must be utilized.

**4) Keine äußeren Wellen-
belastungen**

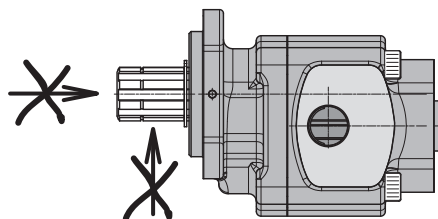
Bitte beachten!

- Die Pumpenwelle darf nicht radial oder axial belastet werden.
- Im Falle von radialen und/oder axialen Wellenbelastungen ist eine separate Lagerabstützung erforderlich.

4) Pas d'effort sur l'arbre

Veuillez noter!

- Les efforts radiaux ou axiaux sur l'arbre de la pompe ne sont pas autorisés.
- En cas d'efforts radiaux et/ou axiaux ils doivent être supportés par des roulements.



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5) Hydraulic fluid

Use, exclusively, good quality hydraulic fluid with anti-foam and anti-wear additives. The fluid must meet the following specifications:
DIN 51 524 / 51 525 (type HLP).

Viscosity

Acceptable:
- 8 – 800 cSt (mm²/s)

Recommended:

- 22 cSt (in cold climate)
- 37 cSt (in temperate climate)
- 46 cSt (in hot climate)

Temperature

- Min. - 15 °C
- Max. + 80 °C
- Cold start: -25 °C to -15 °C
(< 20 bar, < 1 500 rpm)

Filtration

- Suction line:
Not recommended
- Pressure line: 10 to 25 µm.

5) Hydraulikflüssigkeit

Es dürfen nur hochwertige Hydraulikflüssigkeiten auf Mineralbasis verwendet werden.

Zulässig sind HLP-Hydrauliköle nach DIN 51 524 / 51 525.

Viskosität

Zulässige Viskosität:
- 8 – 800 cSt (mm²/s)

Empfohlene Viskosität:

- 22 cSt (bei kalter Umgebungstemperatur)
- 37 cSt (normaler Umgebungstemperatur)
- 46 cSt (heißer Umgebungstemperatur)

Temperatur

- min. - 15 °C
- max. + 80 °C
- Kaltstart: -25 °C bis -15 °C
(< 20 bar, < 1 500 U/min)

Filterung

- Saugleitungsfilter vermeiden
- Druck- oder Rücklauffilter:
10 bis 25 µm.

5) Fluide hydraulique

Utiliser exclusivement un fluide hydraulique de bonne qualité avec additifs anti-mousse et anti-usure.

Le fluide doit être conforme aux normes DIN 51 524 / 51 525 (type HLP).

Viscosité

Acceptable:
- 8 à 800 cSt (mm²/s)

Recommandé

- 22 cSt (climat froid)
- 37 cSt (climat tempéré)
- 46 cSt (climat chaud)

Température

- Mini - 15 °C
- Maxi + 80 °C
- Démarrage à froid:
-25 °C à -15 °C
(inf à 20 bar et inf à 1500 tr/mn)

Filtration

- Aspiration : non recommandée
- Pression : 10 à 25 µm.

Position notification regarding Machinery Directive 2006/42/EC:

Products made by the Pump & Motor Division Europe (PMDE) of Parker Hannifin are excluded from the scope of the machinery directive following the “Cetop” Position Paper on the implementation of the Machinery Directive 2006/42/EC in the Fluid Power Industry.

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- ISO 13849-1:2015
- SS-EN ISO 4413:2010

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Christian Jäger

General Manager

Pump & Motor Division Europe



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