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Bulletin MSG30-3309-INST/EU

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

Effective: May, 2023
Supersedes: March 01, 2018



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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Content	Page	Inhalt	Seite	Contenu	Page
1) Flow vs. shaft rotation	3	1) Durchfluss- und Wellendrehrichtung	3	1) Sens du débit en fonction du sens de rotation.....	3
2) Suction fitting selection	4	2) Verwendung der richtigen Sauganschlüsse	4	2) Choix du raccord d'aspiration	4
3) Lubricate the spline.....	4	3) Schmierung der Pumpenwelle.....	4	3) Lubrification des cannelures	4
4) No external shaft loads	5	4) Keine äußeren Wellenbelastungen	5	4) Pas d'effort sur l'arbre	5
5) Hydraulic fluid.....	6	5) Hydraulikflüssigkeit	6	5) Fluide hydraulique	6

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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**

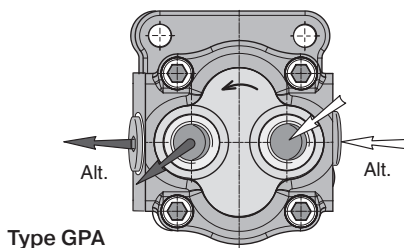
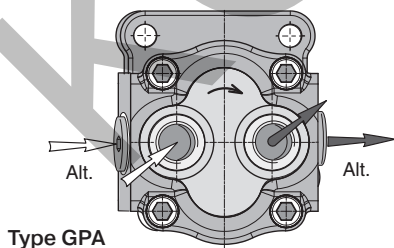
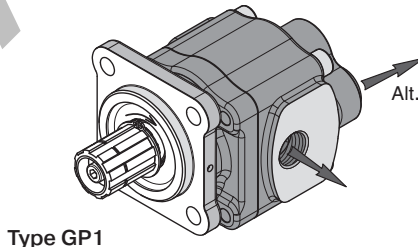
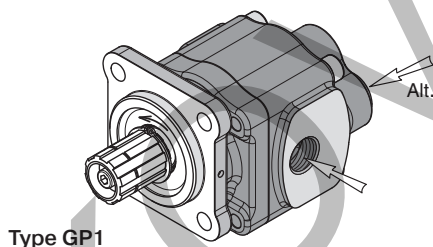
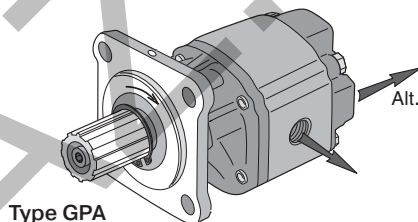
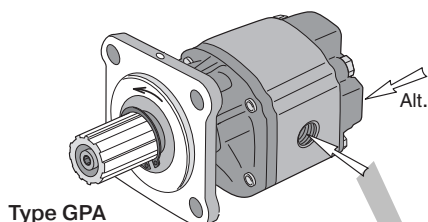
Bitte beachten!

- 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).



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**

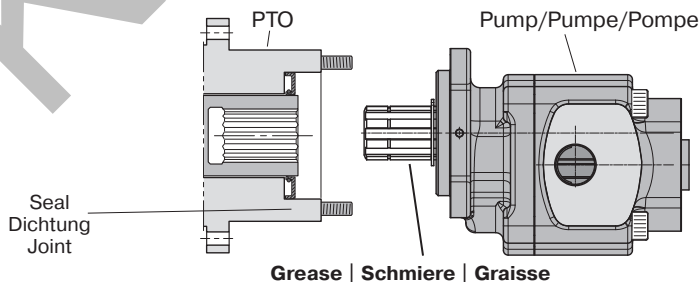
Bitte beachten!

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**

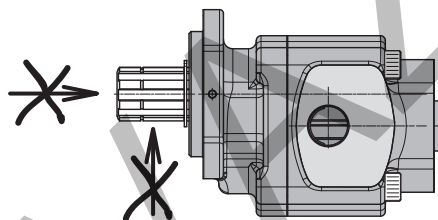
Bitte beachten!

- 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.

KONVANCZ

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 Manger

Pump & Motor Division Europe



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