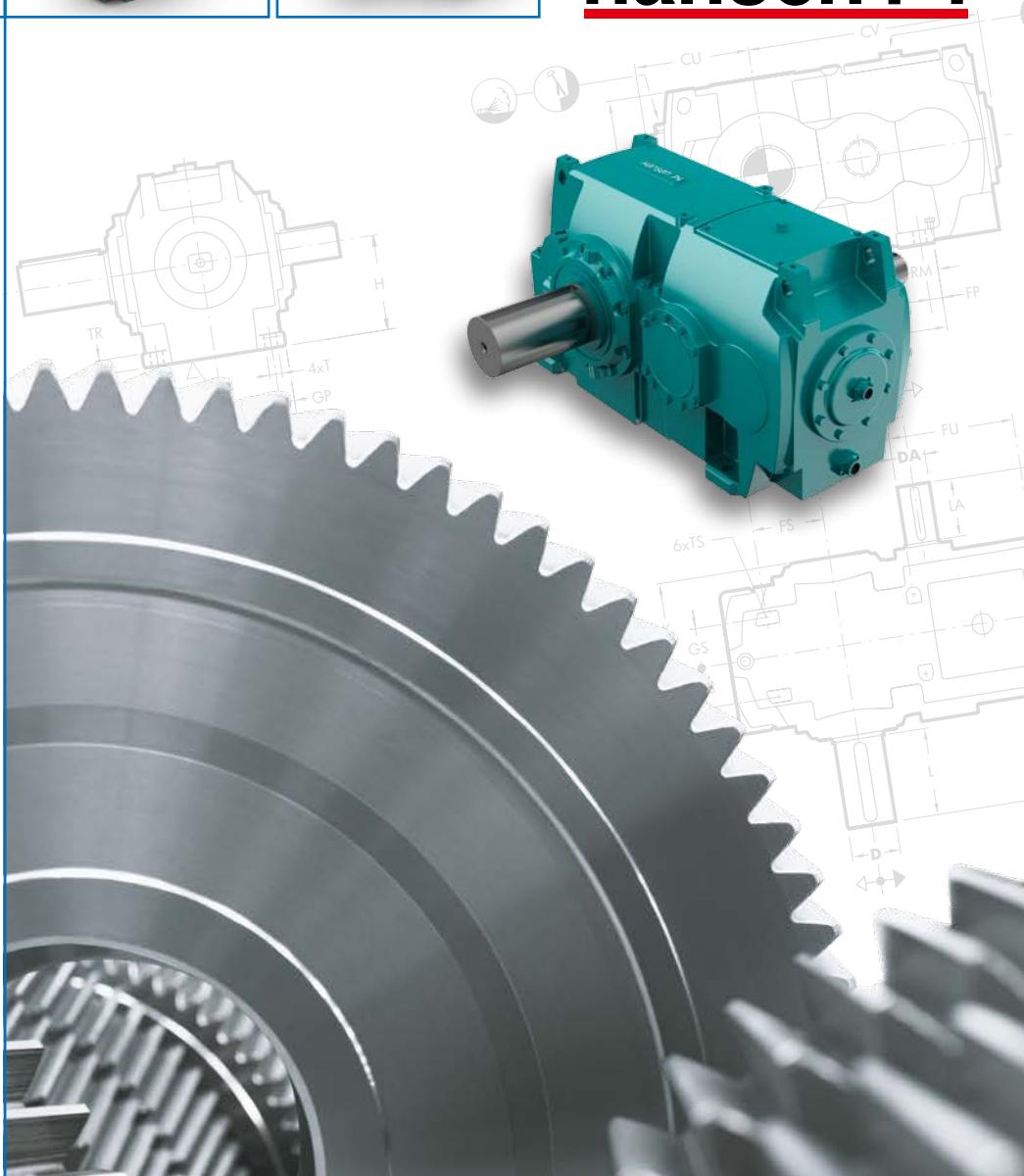


# standardized heavy duty single stage gear units



## Hansen P4



**Sumitomo Drive Technologies**  
*Always on the Move*



S.I.T., S.A. | Tfno. 943 457200 | [www.sitsa.es](http://www.sitsa.es) | [atencioncliente@sitsa.es](mailto:atencioncliente@sitsa.es)

**Hansen®**  
industrial gearboxes

## STANDARDIZED HEAVY DUTY SINGLE STAGE GEAR UNITS

With the new range of heavy duty single stage gear units, Hansen Industrial Transmissions extends its current single stage offering into the multi-megawatt power range. These single stage gear units make use of the proven Hansen P4 technology and are especially suitable to drive large pumps, blowers, compressors, refiners, etc.

### ■ MATCHING THE DRIVE TO THE APPLICATION

Being able to closely match the optimal working speed is important for the performance of these applications. An extensive and highly optimized gear set range is available to match the customers' requirements; all gear sets are optimized and designed by evaluating their mechanical, dynamic and noise properties. In almost all cases a ratio within 1% of the requested ratio can be selected and supplied within the standard lead time.

To enhance the robustness of these single stage gear units, the high speed shaft bearing arrangement is designed with a separate thrust bearing to ensure that the axial and radial forces will be accommodated by two separate bearings. As a result the load distribution over the rollers is optimized.

Continuous lubrication and cooling of bearings and gears are critical to ensure long, trouble

free operation of multi-megawatt drives. The pressure lubrication system is especially designed for this product range optimizing oil lubrication of the bearings and oil distribution over the gears, also at high circumferential speeds.

Foaming due to air entrainment is a common problem in case the oil is recirculated through the cooling and lubrication system too quickly. As the gear unit housing forms a large oil sump, the oil has sufficient time to settle and foaming problems are avoided.

Because high peripheral speeds at the shaft ends quickly wear out (or even burn) standard radial oil seals, the contactless and maintenance-free Oil Lock™ system is used as a standard on the high and the low speed shaft. Grease purged labyrinth seals can be offered upon request.

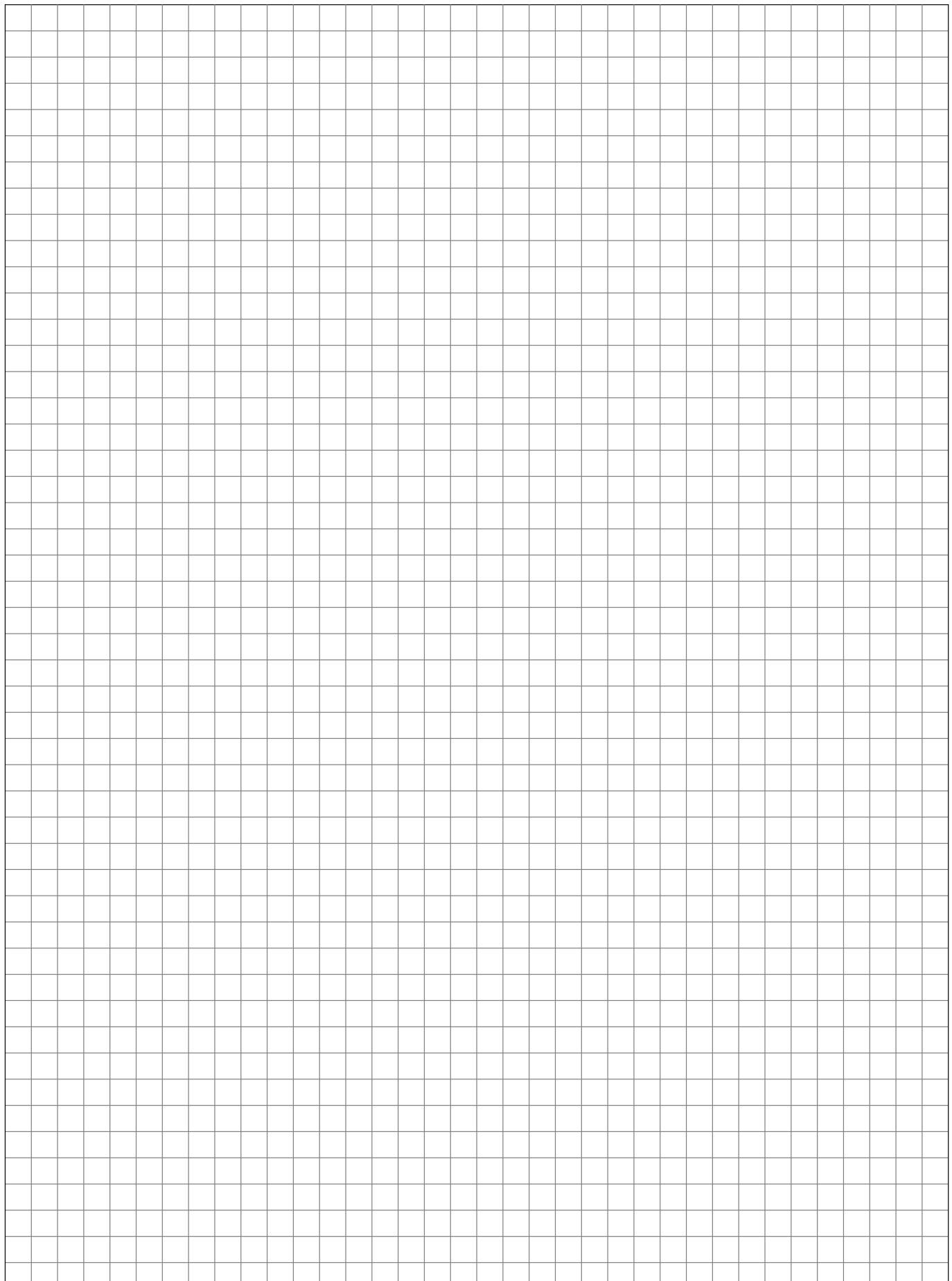




## WHY HANSEN INDUSTRIAL GEARBOXES?



- We match the drive to the application and offer proven reliability under the most severe conditions.
- In depth engineering and support and complete documentation before and after the order.
- One-stop-shopping for complete drive package solutions.
- The horizontal split housing design makes it easy to open for inspection and service on the spot.
- Easy to remove inspection cover with O-seal above the oil level
- Connection points for the cooling group provided as a standard
- A wide range of intermediate ratios is available.
- Worldwide Hansen Industrial gearboxes services network 24/24h-7/7 services@hansenindustrialgearboxes.com or +32 3 450 12 34



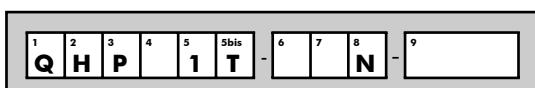
**HANSEN P4 GEAR UNITS**  
**Heavy duty single stage gear units**

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**DESCRIPTION****Heavy duty single stage gear units****The gear unit**

The mechanical power ratings shown in the tables relate respectively to input speeds of 1800, 1500, 1200 and 1000 RPM at the high speed shaft. They are also valid for asynchronous speeds which are max. 3% lower than the synchronous speeds.  
Interpolation will yield power rating values for intermediate speeds.  
For all other input speeds, please refer to Hansen Industrial Transmissions nv (H.I.T.).

**Coding****Type**

- 1 : series      **Q** : Hansen P4
- 2 :                **H** : horizontal low speed shaft
- 3 :                **P** : parallel shafts
- 4 :                Size: **G, H, J, K**
- 5 :                number of stages: **1**
- 5bis:             **T** : heavy duty single stage gear unit with horizontal split housing

**Shaft arrangement**

- 6 : high speed shaft extension:    **L**: left  
    **R**: right
- 7 : low speed shaft extension:    **L**: left  
    **R**: right
- 8 : low speed shaft extension:    **N**: normal solid shaft

**Ratio**

- 9 : nominal ratio

**Basic components****Helical gears**

Designed and rated in accordance with AGMA for maximum load capacity, minimum losses and quiet operation.  
All geared components are manufactured from alloy steel, gas carburized, hardened and precision ground.  
Within the published range special ratios within 1% of the requested ratio can generally be offered.

**Low speed shafts**

The low speed shaft is only available in solid version.

**Bearings**

Heavy duty bearings of the cylindrical or spherical roller bearing type and 4-point contact ball bearing type.  
Bearing life calculated in compliance with DIN ISO 281 Bld1 : 2003-04

**Bearing life:**

The absorbed power  $P_a$  in the table at page 6 relates to the bearing life  $L_{10nm}$  as indicated.  
For other bearing life and the related maximum absorbed power  $P_a$ , refer to Hansen Industrial Transmissions nv.

**Housings and covers**

Made from grey pearlitic cast iron.  
Machined on CNC machining centers.  
Designed to ensure strength and rigidity.

**Systems****Lubrication**

Lubricants: mineral and synthetic oils  
Lubricants should always contain adequate EP-additive. See service manual for the list of approved oils.  
Pressure lubrication of gears and controlled lubrication for bearings is standard.

**Cooling**

Heat generated in the gear unit due to losses, can be dissipated by:

- oil to water cooling system or
- oil to air cooling system

Contact Hansen Industrial Transmissions nv for detailed information.

**Sealing**

- |         |  |
|---------|--|
| Static: | <ul style="list-style-type: none"> <li>• Generalized use of sealing compound</li> <li>• Inspection cover: O-ring</li> </ul>  |
| Rotary: | <ul style="list-style-type: none"> <li>• Oil Lock™: - dual purpose labyrinth           <ul style="list-style-type: none"> <li>- maintenance free</li> <li>- oil return to sump</li> </ul> </li> <li>• Grease purged labyrinth seal optional</li> </ul> |

**Shipping conditions****Inspection prior to shipment**

- No load test
- Conformance check to the order acknowledgment

**Protection****Standard painting system**

- As a standard, Hansen gear units are provided with a painting system that is suitable to be applied in the atmospheric-corrosivity category "C1" according to ISO 12944-2 (and ISO 12944-5).  
The choice of colour has no influence on the technical quality of the painting system.  
Other painting systems can be offered to meet the required atmospheric-corrosivity category for your application.

- Inner side housing: oil resistant paint
- Inner components: sprayed with rust preventive oil

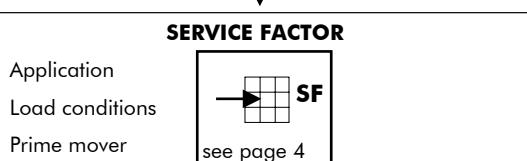
**Shaft extensions**

Protected with rust preventing coating

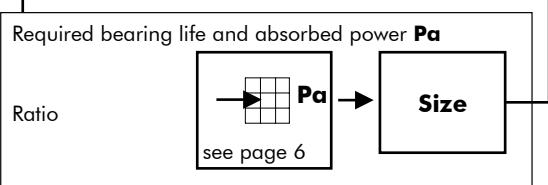
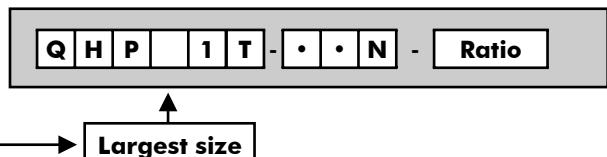
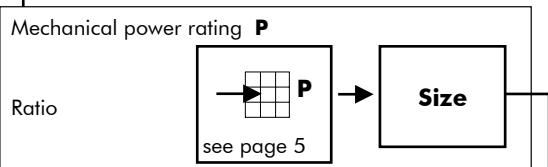
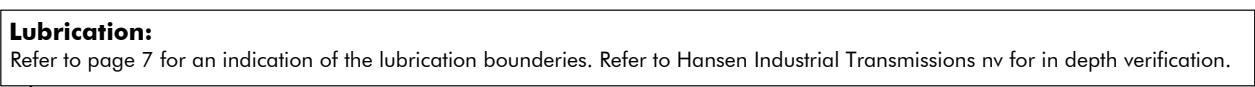
**Lubricants**

- Units are shipped without oil
- Grease lubrication points are factory filled

For information relating to storage, handling, installation, starting-up and maintenance, refer to the Service Manual which is supplied with each unit.

**SELECTION****Procedure****Heavy duty single stage gear units****S  
E  
L  
E  
C  
T  
I  
O  
N****Mechanical power rating**

$$P \geq \text{Actual absorbed power } P_a \text{ and} \\ \text{Motor power } P_m \times SF_{min}$$

**Largest size**

# SELECTION

## Application classification - Service Factor SF

### Heavy duty single stage gear units

APPLICATION	SF min			
	10h / 24h		24h / 24h	
	on Pa	on Pm	on Pa	on Pm
<b>Blowers</b>				
Centrifugal			1,5	1,25
Lobe, vane			1,5	1,25
<b>Compressors</b>				
Centrifugal			1,5	1,25
Lobe	1,5	1,25	1,75	1,25
Waterring	1,5	1,25	1,75	1,5
Reciprocating, multi-cylinder	1,75	1,5	1,75	1,5
Reciprocating, single-cylinder	2	1,75	2	1,75
<b>Crushers</b>				
Stone, ore, concrete		2		2,25
garbage		1,5		1,75
<b>Energy conversion</b>				
Frequency converters		1,5		1,75
Water turbines (small)			2	1,75
<b>Fans</b>				
Dry cooling towers	1,75	1,5	2	1,75
Wet cooling towers	1,75	1,5	2	1,75
Large fans (industrial, mining)	1,5	1,25	1,75	1,25
<b>Mills</b>				
Ball, rod	1,75	1,5	2	1,75
Autogene	2	1,5	2	1,75
<b>Pulp and Paper</b>				
Breaker stack			1,5	1,25
Chipper				2,5
Calenders			1,5	1,25
Super calenders			1,5	1,25
Coating rolls			1,5	1,25
Couch			1,5	1,25
Dryers (anti-friction bearings)			1,5	1,25
Lumpbreaker			1,5	1,25
Metering rolls			1,5	1,25
Presses (felt/suction)			1,5	1,25
Presses: size press			1,5	1,25
Reel (surface type)			1,5	1,25
Refiner				1,5
Spools (Starter/MT, Hope/ Paper rolls)			1,25	1,25
Thermal rolls			1,5	1,25
Vacuum pump				1,75
Centrifugal				1,75
Waterring				1,75
Piston				2
Windup, unwind			1,75	1,5
Wire: turning, return			1,5	1,25
<b>Pumps</b>				
Centrifugal			1,5	1,25
Proportioning			1,5	1,25
Rotary gear type, lobe, vane			1,5	1,25
Reciprocating, multi-cylinder	1,5	1,25	1,75	1,5
Reciprocating, single-cylinder	1,75	1,5	2	1,75

Pa = absorbed power

Pm = nameplate rating of the electric drive motor (or generator) at the motor (or generator) rated base speed.

- These minimum service factors SF are empirical values based on AGMA specifications and our experience.
- They apply for "State of the art" designed driven machines and normal operating conditions.
- They apply for electric motors as prime movers. If prime mover is a multicylinder combustion motor, 0,25 has to be added to the SF.
- For multiple drives consider the actual load sharing.
- Refer to us for special designed applications or special operating conditions.
- Other applications not listed : refer to Hansen Industrial Transmissions nv

Gear unit	Réducteur à engrenages	Zahnradgetriebe	Reductor	Q
Horizontal low speed shaft	Arbre P.V. horizontal	Langsamdr. Welle: horizontal	Eje lento horizontal	H
Parallel shafts	Arbres parallèles	Stirnräder	Ejes paralelos	P
Size	Taille	Baugröße	Tamaño	G ► K
Single stage	Un étage	Einstufig	Una etapa	1
Heavy duty single stage gear units	Réducteurs à un étage et à haute puissance	Einstufige Hochleistungsgetriebe	Reducidores de una etapa y de alta potencia	T
Mechanical power ratings	Puissances mécaniques nominales	Nennleistungen	Potencias mecánicas nominales	P (kW)

$i_N$	min <sup>-1</sup>		P (kW)				$i_{ex}$		J (kgm <sup>2</sup> )	
			Size - Taille - Baugröße - Tamaño				Size - Taille - Baugröße - Tamaño			
	n <sub>1</sub>	n <sub>2</sub>	G	H	J	K	G	H	J	K
2,5	1800	720	5700	7600	9100	12100				
	1500	600	4800	6400	7650	10100	2,4783	2,48	2,48	2,5417
	1200	480	3850	5100	6200	8050	1,618	3,025	4,139	7,251
	1000	400	3250	4250	5200	6700				
2,8	1800	640	5200	6850	8350	10950				
	1500	540	4350	5700	7000	9100	2,7895	2,7826	2,7826	2,8182
	1200	430	3500	4550	5650	7300	1,405	2,646	3,645	6,439
	1000	360	2950	3800	4750	6050				
3,15	1800	570	4800	6200	7900	9550				
	1500	480	4000	5150	6600	8050	3,1176	3,0952	3,1579	3,1304
	1200	380	3250	4100	5350	6500	1,33	2,343	3,138	5,672
	1000	320	2700	3400	4500	5450				
3,55	1800	510	3600	5450	6750	8050				
	1500	420	3000	4550	5700	6750	3,55	3,5263	3,5789	3,5652
	1200	340	2450	3600	4600	5450	1,129	2,006	2,873	4,888
	1000	280	2050	3000	3850	4600				
4	1800	450	3200	4400	6200	7450				
	1500	375	2700	3700	5200	6250	4,0556	3,95	3,9375	3,9524
	1200	300	2150	3000	4200	5050	0,96	1,825	2,534	4,325
	1000	250	1800	2500	3550	4250				
4,5	1800	400	2950	4050	5300	6650				
	1500	330	2500	3400	4450	5600	4,2941	4,4444	4,4375	4,4737
	1200	265	2000	2750	3600	4500	0,898	1,566	2,199	3,827
	1000	220	1700	2300	3000	3800				
5	1800	360		3250	4100	6050				
	1500	300		2700	3400	5100		4,9474	4,9474	4,9375
	1200	240		2200	2750	4100	1,361	1,927	3,326	
	1000	200		1850	2300	3450				
5,6	1800	320			3300	5550				
	1500	270			2750	4650			5,4667	5,2667
	1200	215			2200	3750		1,718	3,057	
	1000	180			1850	3150				

**Remark:** for intermediate ratios not listed in this table, refer to Hansen Industrial Transmissions nv.

**Remarque:** pour les rapports de réduction intermédiaires non mentionnés dans ce tableau, consulter Hansen Industrial Transmissions nv.

**Bemerkung:** für Zwischen-Übersetzungen die in dieser Tabelle nicht aufgeführt sind, wenden Sie sich an Hansen Industrial Transmissions nv.

**Nota:** para los índices de reducción intermedio que no se mencionan en esta tabla, véase Hansen Industrial Transmisiones nv.

**i<sub>N</sub>** Nominal ratio  
**n<sub>1, 2</sub>** Nominal speed  
**i<sub>ex</sub>** Exact ratio  
**J** Moments of inertia J related to the HSS

Rapport nominal  
Vitesse nominale  
Rapport exact  
Moments d'inertie J rapportés à l'arbre G.V.

Nennübersetzung  
Nenndrehzahl  
Exakte Übersetzung  
Massenträgheitsmomente J beziehen sich auf die SDW

Índice nominal  
Velocidades nominales  
Indice exactos  
Momentos de inercia J relativos al eje rápido

Gear unit	Réducteur à engrenages	Zahnradgetriebe	Reductor	Q
Horizontal low speed shaft	Arbre P.V. horizontal	Langsamdr. Welle: horizontal	Eje lento horizontal	H
Parallel shafts	Arbres parallèles	Stirnräder	Ejes paralelos	P
Size	Taille	Baugröße	Tamaño	G ► K
Single stage	Un étage	Einstufig	Una etapa	1
Heavy duty single stage gear units	Réducteurs à un étage et à haute puissance	Einstufige Hochleistungsgetriebe	Reductores de una etapa y de alta potencia	T
Maximum absorbed power	Puissance absorbée maximale	Maximale Abtriebsleistung	Potencia absorbida máxima	Pa (kW)
Bearing life	Durée de vie des roulements	Lagerlebensdauer	Tiempo de vida de los rodamientos	L10nm

			Pa (kW)											
			Size - Taille - Baugröße - Tamaño											
i <sub>N</sub>	min <sup>-1</sup>		G	H	J	K	G	H	J	K	G	H	J	K
	n <sub>1</sub>	n <sub>2</sub>	L10nm : 40.000 h				L10nm : 60.000 h				L10nm : 100.000 h			
2,5	<b>1800</b>	<b>720</b>	3200	3900	4800	5500	3000	3600	4500	5100	2750	3300	4100	4600
	<b>1500</b>	<b>600</b>	2700	3300	4100	4800	2550	3100	3800	4400	2350	2800	3500	4000
	<b>1200</b>	<b>480</b>	2200	2700	3400	3900	2050	2500	3100	3600	1900	2300	2850	3300
	<b>1000</b>	<b>400</b>	1900	2300	2850	3300	1750	2100	2650	3100	1600	1950	2400	2800
2,8	<b>1800</b>	<b>640</b>	3000	3600	4400	5100	2800	3300	4100	4700	2600	3100	3800	4200
	<b>1500</b>	<b>540</b>	2550	3000	3800	4400	2350	2850	3500	4100	2150	2600	3300	3700
	<b>1200</b>	<b>430</b>	2050	2500	3100	3600	1950	2300	2900	3300	1800	2150	2650	3000
	<b>1000</b>	<b>360</b>	1750	2100	2600	3000	1650	1950	2450	2800	1500	1800	2250	2550
3,15	<b>1800</b>	<b>570</b>	2700	3300	4100	4900	2500	3100	3800	4600	2300	2850	3500	4200
	<b>1500</b>	<b>480</b>	2250	2800	3500	4200	2100	2600	3200	3900	1950	2400	3000	3600
	<b>1200</b>	<b>380</b>	1850	2250	2850	3400	1750	2100	2650	3200	1600	1950	2450	2950
	<b>1000</b>	<b>320</b>	1550	1950	2400	2900	1450	1800	2250	2700	1350	1650	2050	2450
3,55	<b>1800</b>	<b>510</b>	2300	3000	3700	4400	2100	2800	3400	4100	1900	2550	3100	3800
	<b>1500</b>	<b>420</b>	1950	2550	3100	3800	1800	2350	2950	3500	1600	2150	2700	3300
	<b>1200</b>	<b>340</b>	1650	2050	2600	3100	1450	1950	2400	2900	1350	1750	2200	2650
	<b>1000</b>	<b>280</b>	1400	1750	2200	2650	1250	1600	2000	2450	1150	1500	1850	2250
4	<b>1800</b>	<b>450</b>	2000	2800	3400	4000	1800	2600	3200	3800	1650	2400	2950	3400
	<b>1500</b>	<b>375</b>	1700	2400	2950	3500	1550	2250	2750	3200	1400	2050	2550	3000
	<b>1200</b>	<b>300</b>	1400	1950	2400	2850	1250	1800	2250	2650	1150	1650	2050	2450
	<b>1000</b>	<b>250</b>	1200	1650	2050	2400	1100	1550	1900	2200	980	1400	1750	2050
4,5	<b>1800</b>	<b>400</b>	1900	2550	3100	3700	1700	2350	2900	3400	1550	2200	2650	3100
	<b>1500</b>	<b>330</b>	1600	2150	2650	3200	1450	2000	2500	2950	1350	1850	2300	2700
	<b>1200</b>	<b>265</b>	1350	1750	2200	2600	1200	1650	2050	2400	1100	1500	1850	2200
	<b>1000</b>	<b>220</b>	1150	1500	1850	2200	1050	1400	1700	2000	930	1250	1550	1850
5	<b>1800</b>	<b>360</b>		2350	2700	3400		2200	2500	3200		2000	2200	2950
	<b>1500</b>	<b>300</b>		2000	2350	2950		1850	2150	2750		1700	1950	2550
	<b>1200</b>	<b>240</b>		1650	1950	2450		1500	1800	2250		1400	1600	2050
	<b>1000</b>	<b>200</b>		1400	1700	2050		1300	1550	1900		1200	1350	1750
5,6	<b>1800</b>	<b>320</b>			2350	3200			2150	3000			1950	2750
	<b>1500</b>	<b>270</b>			2050	2800			1900	2600			1700	2400
	<b>1200</b>	<b>215</b>			1700	2300			1550	2100			1400	1950
	<b>1000</b>	<b>180</b>			1450	1950			1350	1800			1150	1650

i<sub>N</sub> Nominal ratio  
n<sub>1,2</sub> Nominal speed

Rapport nominal  
Vitesse nominale

Nennübersetzung  
Nenndrehzahl

Índice nominal  
Velocidades nominales

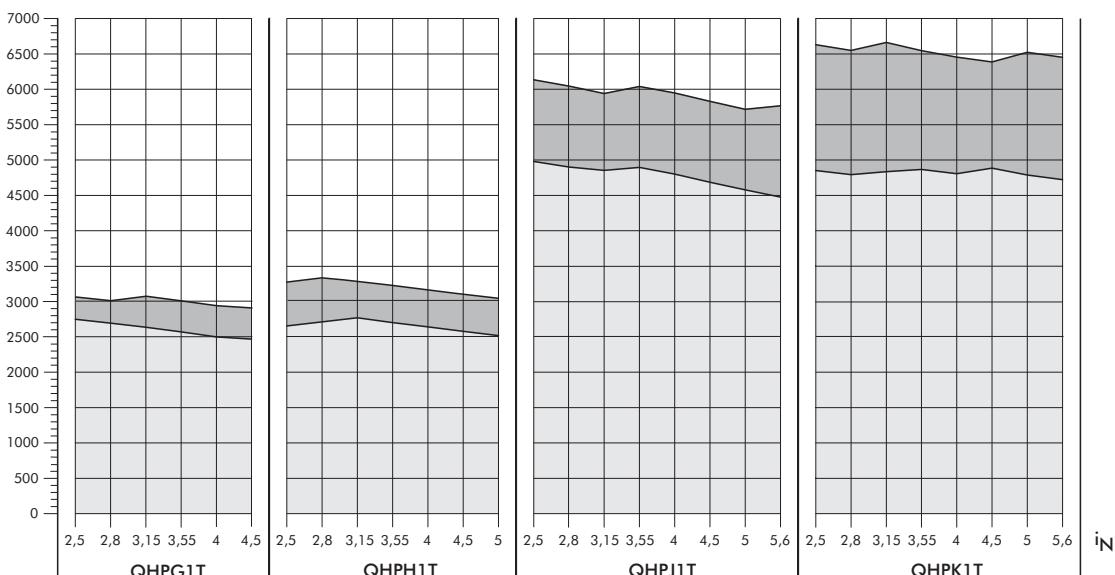


**Hansen®**  
industrial gearboxes

Gear unit	Réducteur à engrenages	Zahnradgetriebe	Reducer	Q
Horizontal low speed shaft	Arbre P.V. horizontal	Langsamdr. Welle: horizontal	Eje lento horizontal	H
Parallel shafts	Arbres parallèles	Stirnräder	Ejes paralelos	P
Size	Taille	Baugröße	Tamaño	G ▶ K
Single stage	Un étage	Einstufig	Una etapa	1

Heavy duty single stage gear units	Réducteurs à un étage et à haute puissance	Einstufige Hochleistungsgetriebe	Reducidores de una etapa y de alta potencia	T
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Lubrication	Lubrification	Schmierung	Lubrificación
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 $P_a$  (kW)**E**

The above mentioned graph gives an indication of the lubrication boundaries. Refer to Hansen Industrial Transmissions nv for an in-depth verification.



Gear unit's oil volume is sufficiently large to lubricate the gear unit.



Special measures should be taken to ensure the lubrication. Refer to Hansen Industrial Transmissions nv.



Additional external oil volume is required.

Graph valid under the following conditions:

- Oil temperature at gear unit's oil inlet: 70°C
- Input speed  $n_1$ : 1500 or 1000 min<sup>-1</sup>
- Viscosity of mineral oil: ISO VG 220
- Motor pump 50Hz - 1500 min<sup>-1</sup>

**F**

Le graphique ci-dessus donne une indication des limites de la lubrification. Consulter Hansen Industrial Transmissions nv pour une vérification détaillée.



Le volume d'huile du réducteur est suffisamment grand pour lubrifier le réducteur



Des mesures spéciales doivent être prises pour assurer la lubrification. Consulter Hansen Industrial Transmissions nv.



Un volume d'huile externe supplémentaire est nécessaire.

Le graphique est valable pour les conditions suivantes:

- La température d'huile à l'entrée d'huile du réducteur: 70°C
- Vitesse d'entrée  $n_1$ : 1500 ou 1000 min<sup>-1</sup>
- Viscosité de l'huile minérale: ISO VG 220
- Motopompe 50Hz - 1500 min<sup>-1</sup>

**D**

Das oben erwähnte Diagramm gibt einen Hinweis auf die Schmierung Grenzen. Hansen Industrial Transmissions nv rückfragen für eine gründliche Überprüfung.



Getriebe Öl-Volumen ist ausreichend um das Getriebe zu schmieren



Besondere Maßnahmen sollten ergriffen werden um die Schmierung zu gewährleisten. Hansen Industrial Transmissions nv rückfragen.



Zusätzliche externe Ölvolume erforderlich.

Das Diagramm ist gültig für die folgenden Bedingungen:

- Ölttemperatur am Getriebe Öl-Einlass: 70°C
- Antriebsdrehzahl  $n_1$ : 1500 oder 1000 min<sup>-1</sup>
- Öl-Viskosität für Mineralöl: ISO VG 220
- Motorpumpe 50Hz - 1500 min<sup>-1</sup>

**S**

El gráfico mencionado anteriormente da una indicación de los límites de lubricación. Consulte Hansen Industrial Transmisiones nv para una verificación en profundidad.



El volumen de aceite del reducer es suficientemente grande como para lubricar el reducer.



Deben tomarse medidas especiales para garantizar la lubricación. Consulte Hansen Industrial Transmisiones nv.



Un volumen externo adicional de aceite es necesario.

El gráfico es válido para las siguientes condiciones:

- Temperatura del aceite en la entrada de aceite del reducer: 70°C
- Velocidad de entrada  $n_1$ : 1500 o 1000 min<sup>-1</sup>
- Viscosidad del aceite mineral: ISO VG 220
- Motobomba 50Hz - 1500 min<sup>-1</sup>

 $i_N$ 

Nominal ratio

Absorbed power

Rapport nominal

Puissance absorbée

Nennübersetzung

Abtriebsleistung

Índice nominal

Potencia absorbida

<b>Hansen P4</b>	Gear unit	Réducteur à engrenages	Zahnradgetriebe	Reducer	<b>Q</b>
97QU-HP1N90013 A	Horizontal low speed shaft	Arbre P.V. horizontal	Langsamdr. Welle: horizontal	Eje lento horizontal	<b>H</b>
	Parallel shafts	Arbres parallèles	Stimnräder	Ejes paralelos	<b>P</b>
	Size	Taille	Baugröße	Tamaño	<b>G ▶ K</b>
<b>mm</b>	Single stage	Un étage	Einstufig	Una etapa	<b>1</b>
	Heavy duty single stage gear units	Réducteurs à un étage et à haute puissance	Einstufige Hochleistungsgetriebe	Reductores de una etapa y de alta potencia	<b>T</b>

The user is responsible for the provision of **safety guards** and correct installation of all equipment.

Certified di-  
mensions  
upon request.

**Les dispositifs de protection** doivent être prévus par l'utilisateur. Celui-ci est responsable de l'installation correcte de l'ensemble.

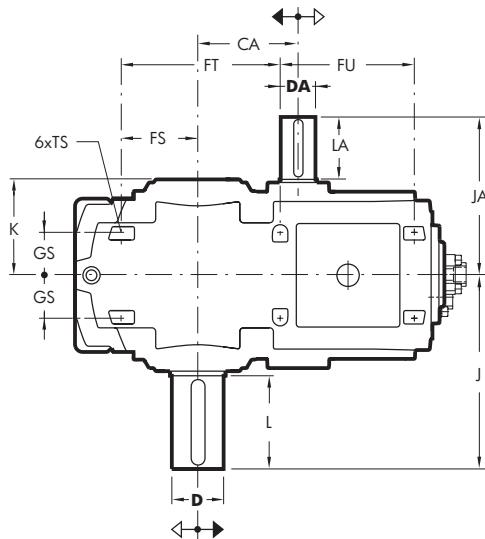
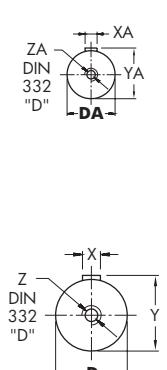
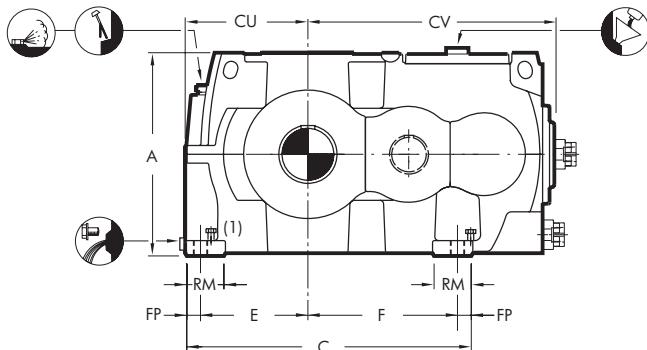
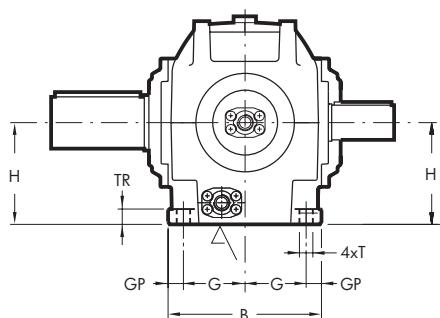
Dimensions définitives sur demande.

Der Benutzer ist verantwortlich für die Bestellung der **Schutzhäuben** und das fachgemäße Aufstellen der gesamten Ausrüstung.

Verbindl. Ab-  
messungen  
auf Wunsch.

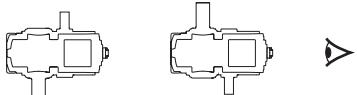
El usuario es responsable de proporcionar **dispositivos de seguridad** y de la correcta instalación de todo el equipo.

Plano de  
dimensiones  
certificado  
previa  
petición



RL

LR



## **Shaft arrangements** (top view)

## **Dispositions des arbres** (vue en plan)

## **Wellenanordnungen**

## **Disposiciones de ejes**

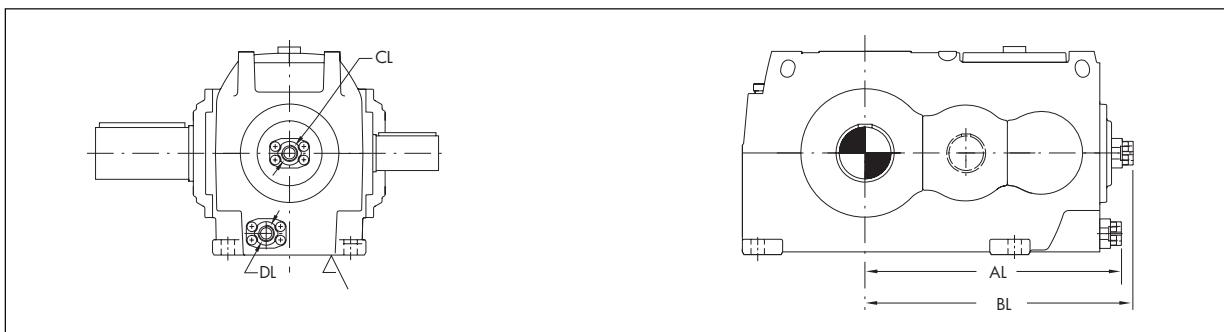
(1) 4 x jacking screw for gear unit sizes J and K	Type Tipo	A	B	C	CA	CU	CV	E	F	FP	FS	FT	FU	G	GP	GS	H	J	JA	K	RM	T	TR	TS	kg	Litres Litros
(1) 4 x vis de réglage pour les réducteurs tailles J et K	<b>QHPG1T</b>	760	550	965	341	400	848	350	515	50	240	487	487	225	50	160	375	649	540	313	130	42	60	M20	1700	85
(1) 4 x Einstellschraube für Getriebeausführungen J	<b>QHPH1T</b>	760	550	1087	413	450	920	400	587	50	290	610	487	225	50	160	375	705	540	313	130	42	60	M20	2200	90
(1) 4 x Einstellschraube für Getriebeausführungen K	<b>QHPJ1T</b>	910	640	1175	417	490	984	365	620	95	293	580	550	270	50	190	450	752	636	364	190	42	60	M24	2700	145
(1) 4 x Einstellschraube für Getriebeausführungen L	<b>QHPK1T</b>	910	640	1200	425	510	1010	415	600	95	340	700	550	270	50	190	450	817	641	360	190	42	60	M24	2900	155

und K  
(1) 4 x tornillo  
de reglaje  
para el  
reductores de  
tamaño J y K

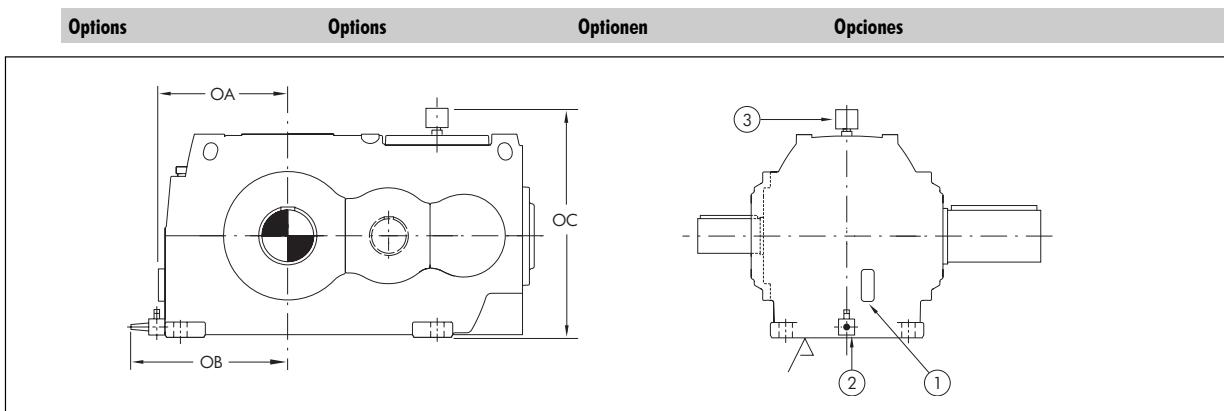
mm

Gear unit	Réducteur à engrenages	Zahnradgetriebe	Reducer	Q
Horizontal low speed shaft	Arbre P.V. horizontal	Langsamdr. Welle: horizontal	Eje lento horizontal	H
Parallel shafts	Arbres parallèles	Stirnräder	Ejes paralelos	P
Size	Taille	Baugröße	Tamaño	G ▶ K
Single stage	Un étage	Einstufig	Una etapa	1

Heavy duty single stage gear units	Réducteurs à un étage et à haute puissance	Einstufige Hochleistungsgetriebe	Reducidores de una etapa y de alta potencia	T
Connection for lubrication system SAE flange	Raccord pour système de lubrification Bride SAE	Anschluss für Schmieranlage SAE-Flansch	Conexión para sistema de lubricación Brida SAE	



Type Tipo	AL	BL	CL	DL
<b>QHPG1T</b>	843	887	G 1 1/2"	G 2"
<b>QPHH1T</b>	915	959	G 1 1/2"	G 2"
<b>QHPJ1T</b>	979	1023	G 1 1/2"	G 2"
<b>QHPK1T</b>	1057	1101	G 1 1/2"	G 2"



Type - Tipo <b>QHP.1T</b>	Position - Posición	Size - Taille - Baugröße - Tamaño			
		G	H	J	K
Oil sight glass - Voyant d'huile Ölschauglas - Visor de aceite	①	OA	430	480	520
Drain cock - Robinet de vidange Ölablaßhahn - Tapón de vaciado	②	OB	510	560	665
Dust-proof breather plug - Bouchon d'aération anti-poussière Entlüfter mit Staubfilter - Tapón aireación anti-polvo	③	OC	905	905	1065

The above mounting positions and dimensions may vary for gear units equipped with other additional accessories.

Les positions de montage et les dimensions peuvent varier pour des réducteurs équipés d'autres accessoires supplémentaires.

Die obigen Einbaulagen und Abmessungen können für Getriebe mit anderem zusätzlichen Zubehör ausgestattet variieren.

Las posiciones de montaje y dimensiones pueden variar para reductores equipados con otros accesorios adicionales.

Hansen Industrial Transmissions nv commits

to be a pioneering innovator.

The production of high performance gear units stems from an interactive partnership with our clients, the end users and the actively engaged manpower of our global enterprise. Embracing design, manufacturing and customer services,

Hansen Industrial Transmissions has grown into a world leader in its field.

Today, we set standards for both product and working environment, inciting a knowing environment to seize all new and inspiring technologies.



**Sumitomo Drive Technologies**

*Always on the Move*



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