



TGB GROUP  
TECHNOLOGIES



## SLEWING DRIVES CATALOGUE



YOU CALL, WE PRODUCE





*we* *move*

*Your movement solutions*

# TGB Group Technologies

With over 20 years of experience in bearings, gears and power transmission, the TGB Group has become a global leader in the development and production of movement solutions for the industrial and renewable energy markets. The TGB Group has manufacturing facilities on different continents which enables us to provide competitive solutions and customise projects while being able to retain a flexible manufacturing system and offer worldwide deliveries!

Our aim is to forge long lasting relationships with our customers by demonstrating our commitment throughout the engineering process, by exceeding customer expectations, by providing excellent service and by offering the best value for money.

Our knowledge and experience will enable you to make the right choice!

TGB Group Technologies S.L.









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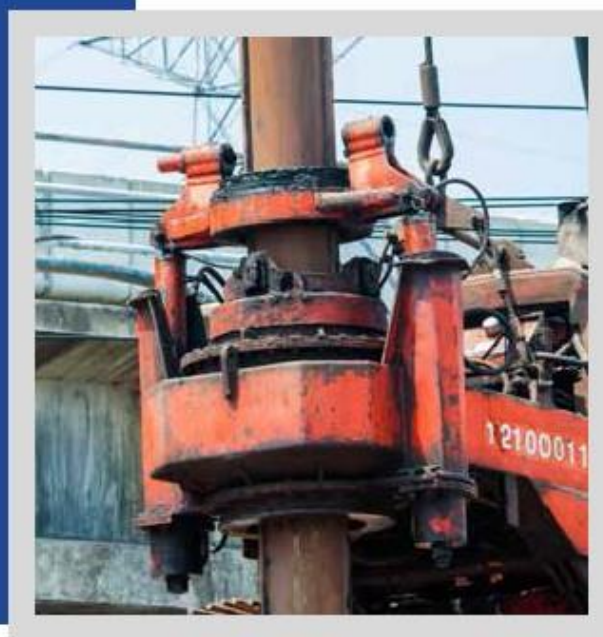
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[www.tgb-group.com](http://www.tgb-group.com)

Vyd. 5 (18. července)











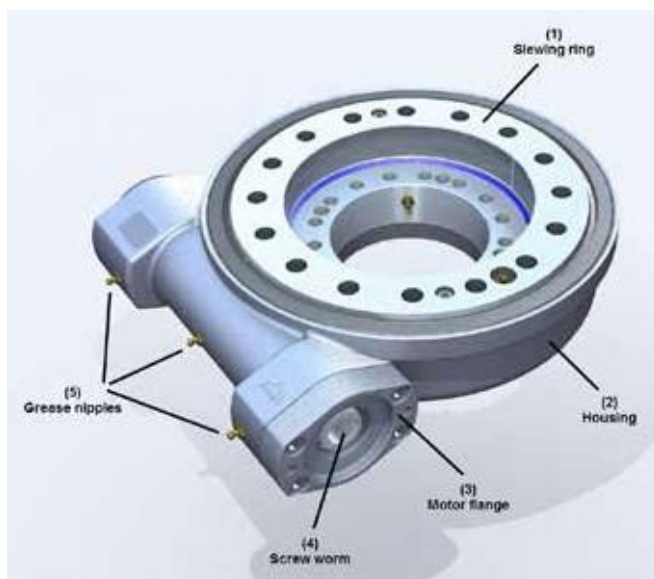


# Základní pokyny

## 1. Úvod

Otočné pohony jsou kompaktní rotační systémy, které jsou určeny k instalaci přímo na zařízení zákazníka, kde zajišťují rotační pohyb konstrukce a zároveň zvládnou velké zatížení a kritické pracovní podmínky díky svému uzavřenému systému.

Otočné pohony se skládají z otočného prstence (1), instalovaného na krytu nebo uvnitř krytu (2), kde je také sestaven šnekový převod (4), což je součást, která má na starosti převod točivého momentu na otočný prsteneček. Uvnitř tohoto krytu je také pár ložisek, která drží šnekový převod pohromadě s příslušnou koncovkou motoru a převodníku (3). Tyto koncovky byly upraveny tak, aby se přímo připevnily k hydraulickému motoru nebo převodovce pomocí redukční příruby. Pohon je vybaven vlastními mazničkami (5), které umožní promazání otočného pohonu v rámci údržby.



Legenda: (1) otočný prsteneček (2) Kryt (3) Příruba motoru (4) Šnekový převod (5) Mazničky

## 2. Otočné pohony skupiny TGB

Skupina TGB připravila různé modely otočných pohonů pro různé způsoby použití.

- **Série BE:** Otočné pohony s vysokou přesností a malou vůlí pro průmyslové použití. Jsou zcela uzavřeny pomocí jazýčkového těsnění, což pro celý systém zajistí krytí IP65. Díky kulovitým zubům otočného prstence a přímému šnekovému převodu je zajištěna plynulost pohybu, ale snižuje se maximální možný točivý moment.
- **Série LBE:** Lehčí verze série BE s hliníkovým krytem, čímž se sníží hmotnost celého systému.
- **Série TE:** Otočný pohon s globoidním šnekovým převodem a šroubovými zuby na otočném prstenci, který dokáže zvládnout vysoké zatížení díky 4 zubům v záběru. Tento druh otočného pohonu je připraven pro použití s vysokým točivým momentem, jako např. v solárních elektrárnách a díky jazýčkovému těsnění zajišťuje krytí IP65.
- **Série TGE:** Nízkonákladový otočný pohon podobný sérii TE s nižší přesností a jednoduchým těsněním mezi otočným prstencem a krytem.
- **Série TGO:** Otevřená verze série TGE pro použití v čistém prostředí.
- **Série TGZ:** Vertikální série s otočným prstencem uvnitř krytu.
- **Série TVR:** Vertikální série, kde jsou použita ložiska nebo pouzdra k upevnění ozubeného kola uvnitř krytu.
- **Série DAD:** Kombinovaná vertikální a horizontální série umožňující plný rotační pohyb v úhlu i v kolmém směru.

Veškeré výše uvedené pohony lze přizpůsobit požadavkům klienta, např. doplnit některé z následujících úprav : drážkový hřídel, otočné prstence s dvojitým vodícím kanálkem, otvory v imperiálních jednotkách, atd.



# Základní pokyny

## 3.Charakteristika otočných pohonů

Otočné pohony se vyznačují určitými vlastnostmi, které by měly být zváženy při výběru té správné série pro příslušné použití. Je nutné zvážit zejména následující body:

- Maximální výstupní rychlost musí být nižší než 1 otáčka za minutu.
- Rozsah standardních pracovních teplot otočného pohonu je stanoven na -20 až 70°C.
- Otočné pohony lze použít jak v horizontální poloze, tak ve vertikální. V případě instalace ve vertikální poloze se doporučuje namontovat otočný pohon se šnekovým převodem v nižší poloze. Další instalační pozice, prosím, projednejte s technickým oddělením skupiny TGB.
- Zátěžová schémata pro jednotlivé pohony uvádějí jejich limity statického zatížení při faktoru bezpečnosti 1. Skupina TGB doporučuje připočíst k zatížení aplikační faktor dle následující tabulky. Abyste zajistili správný výběr pohonu, pak je nutné, aby zatížení v daném případě bylo pod limitní křivkou.

Použití	Podmínky použití	Aplikační faktor
Slévání	Extrémní podmínky	1.5
Stavební stroje / jeřáby	Extrémní podmínky	1.25
Vozidla a instalace na vozidlech	Extrémní podmínky	1.25
Vysokozdvíhací vozíky / Buldozery	Lehké otřesy	1.1
Čistírny odpadních vod	Vibrace	1.25
Větrné turbíny	Riziko nárazů	2.0
Roboti	Pevnost	1.25
Antény	Přesnost	1.5
Nástroje zařízení	Přesnost	1.5
Měřicí technika	Plynulý provoz	2.0

Schématu zatížení také závisí na použitých šroubech. Platí pouze tehdy, pokud jsou pro připevnění otočného pohonu ke konstrukci použity všechny šrouby. Uvažuje se s kvalitou šroubů stupně 10,9, délka závitu by měla být nejméně 1,5násobek průměru šroubu doporučená tloušťka příruby 2násobek průměru šroubu. Pokud se v grafu nezobrazuje křivka šroubu, pak to znamená, že tato křivka je nad grafem otočeného prstence.

V případě dotazů ohledně použití v případě porušení některých z výše uvedených podmínek, nebo při použití různých druhů zatížení doporučujeme obrátit se na technické oddělení skupiny TGB. Pokud zvolený otočný pohon není uzpůsoben vašim podmínkám, doporučujeme prostudovat katalog otočných prstenců, jelikož existuje řada různých produktů s různými vlastnostmi.

Skupina TGB nabízí také možnost řešení upraveného na míru, pokud se žádný z otočných pohonů, které jsou uvedeny v tomto katalogu, nehodí pro vaše podmínky. Skupina TGB může nabídnout pro každé podmínky také kompletní řešení včetně motoru a převodovky vypočtených dle zatížení sděleného zákazníkem.

# Základní pokyny

## 4. Přeprava, manipulace a skladování

Zařízení přepravujte pouze v horizontální poloze, abyste se vyhnuli případným nárazům. Vertikální série by se měly přepravovat a skladovat ve vertikální poloze. S otočným pohonem byste měli manipulovat opatrně a vždy za použití pracovních rukavic. Pro bezpečnou manipulaci pomocí zdvihacího zařízení můžete využít závitové otvory k upevnění šroubů s okem. Zařízení vždy skladujte v horizontální poloze a v uzavřeném prostoru. Chraňte jej před vlhkostí.

## 5. Instalace

Před instalací musí být vyčištěn otočný pohon i konstrukce, na kterou se bude montovat. Není přípustné používat vysokotlaké parní systémy. Před instalací otočného pohonu na konstrukci zkontrolujte, zda otočný pohon není nějak poškozen a zda se plynule pohybuje. Pokud je otočný pohon před instalací hlučný, pak zkontrolujte, je-li dostatečně promazaný.

Měli byste také zkontrolovat, zda je otočný pohon s konstrukcí plně kompatibilní. Styčná plocha musí splňovat určité požadavky s ohledem na maximální odchylku rovinnosti. Maximální hodnoty odchylky rovinnosti může být dosaženo pouze jednou ve 180°. Maximální hodnoty pro každou velikost otočného pohonu jsou uvedeny v následující tabulce.

Velikost otočného pohonu		236	314	435	523	639
Odchylka rovinnosti	[in]	0.004	0.005	0.006	0.006	0.008
	[mm]	0.1	0.12	0.15	0.15	0.2

Otočný pohon musí být namontován bez jakéhokoliv vnějšího zatížení. Je vhodné provést na konstrukci provozní zkoušky před tím, než bude zatížení působit.

Použité šrouby musí být uvedených rozměrů, množství a kvality. Neměly by se používat šrouby s plným závitem a pružné podložky. Měl by být dodržen kotevní poměr (kotevní délka k průměru šroubu) v rozsahu minimálně  $\geq 2$  až maximálně  $\leq 10$  (doporučená hodnota 5). Délka závitu by měla představovat alespoň 1,5násobek průměru šroubu. V případě nedodržení výše uvedeného bude ovlivněna funkce otočného pohonu, životnost a odolnost šroubového spoje. V následující tabulce naleznete doporučené hodnoty utahovacího momentu pro jednotlivé velikosti šroubů.

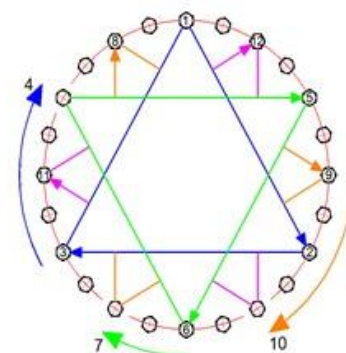
Rozměr montážních šroubů	Utahovací moment (Nm) Stupeň kvality 10,9
M6	15 ± 1
M8	37 ± 3
M10	72 ± 6
M12	126 ± 10
M16	312 ± 25
M20	609 ± 50

Rozměr montážních šroubů	Utahovací moment (lbs·ft) Stupeň kvality 10,9
1/4-20 UNC	12 ± 1
5/16-18 UNC	24 ± 2
3/8-16 UNC	45 ± 4
1/2-13 UNC	110 ± 7
5/8-11 UNC	210 ± 18
3/4-10 UNC	380 ± 36

Při utahování šroubů by měl být dodržen následující postup, aby nedošlo k odchylce mezi silou utažení šroubů:

- Lehce naneste prostředek na pojištění závitů na závit šroubu (poslední tři až pět otáček), aby byl zajištěn jednotný odpor tření.
- Šrouby dotahujte křížem ve 3 krocích: 30%, 80% a 100% utahovacího momentu. Schéma znázorňuje pořadí při dotahování šroubů.

Po dotažení šroubů si udělejte značku na povrchu šroubu a na povrchu konstrukce. To ulehčí kontrolu dotažení šroubů

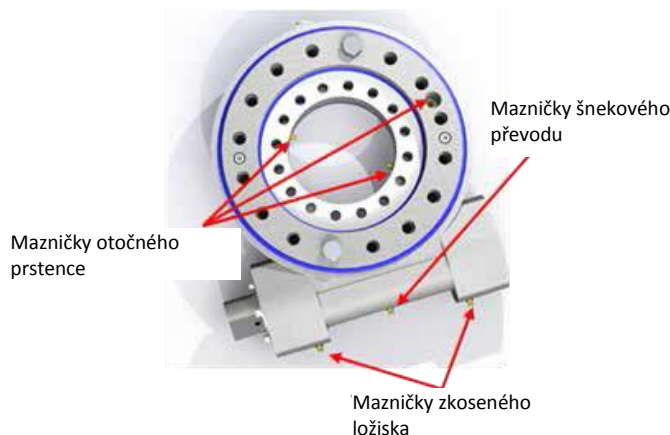




# Základní pokyny

## 6. Mazání

V každých podmínkách je pro plynulý chod otočného pohonu nutné řádné promazání. Veškeré otočné pohony skupiny TGB se dodávají lehce předmazané, ale stejně se doporučuje před zahájením provozu mazivo doplnit. Mazání je nutné u tří částí: kanálek otočného prstence, šnekový převod a ložiska.



Množství potřebné maziva je cca 60cc na šnekový převod, 10cc pro každé zkosené kuličkové ložisko a 10cc na každých 250 mm průměru u kanálku otočného prstence. Při doplňování maziva vstříkňte mazivo popořadě do všech mazniček při současném otáčení otočného pohonu. Otočné pohony se musí promazávat po každém čištění a také před a po delší době nečinnosti.

Promazání je nezbytné kvůli zajištění minimální kvality maziva uvnitř pohonu. Pokud nejsou k dispozici žádné srovnatelné výsledky, pak lze jako orientační použít údaje v následující tabulce.

Provozní podmínky	Intervaly pro mazání otočného prstence a šnekového převodu
Rotační rychlost <0,5 otáček za minutu Neextrémní podmínky prostředí (solární sledovací zařízení)	Každých 400 hodin provozu nebo jednou za 12 měsíců
Rotační rychlost >0,5 otáček za minutu Neextrémní podmínky prostředí (výtah, průmyslové použití)	Každých 200 hodin provozu nebo jednou za 6 měsíců
Extrémní klimatické podmínky (moře / poušť / arktické klima / velmi špinavé prostředí) (tunelovací stroje / ocelárny)	Každých 100 hodin provozu nebo jednou za 3 měsíce
Intervaly pro mazání ložisek	
Veškeré provozní podmínky	Každých 400 hodin nebo jednou za 12 měsíců

Při výběru vhodného typu maziva pro daný způsob použití se obraťte na technické oddělení skupiny TGB.

## 7. Údržba / Bezpečnostní prohlídky

Skupina TGB doporučuje dotažení šroubů na předepsanou hodnotu utahovacího momentu nejdéle po 100 hodinách provozu, aby se upravilo případné uvolnění. Dotažení by se mělo provést v okamžiku, kdy na šroubový spoj nepůsobí vnější zatížení. Tato prohlídka by se nadále měla opakovat každé 3 měsíce provozu. Ve zvláštních provozních podmínkách je nutné četnost prohlídek snížit.

# Série BE



## Popis

Série BE se skládá z přímého šnekového převodu a globoidního otočného prstence, což zaručuje plynulé a řízené otáčení otočného pohonu na úkor maximálního točivého momentu, který ozubení vydrží.

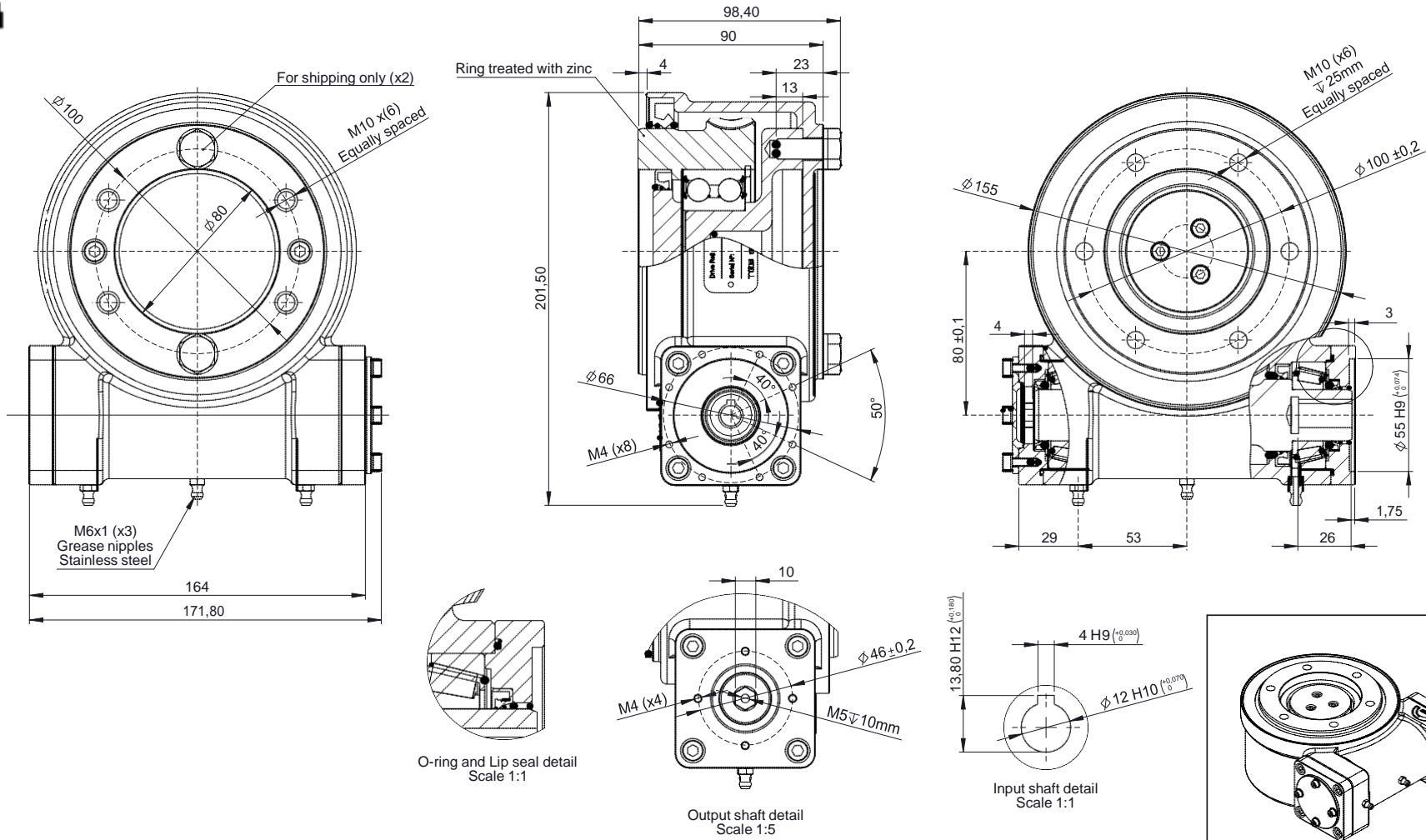
Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

- Robotika, offshore, drapáky, rypadla, návěsy, jeřáby, antény, vysokozdvížené plošiny, vysokozdvížené vozíky, atd.



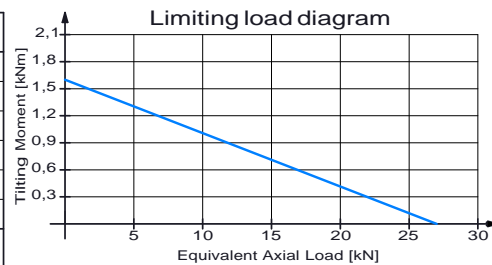
# BE series

Metric

## Main performance parameters

Gear Ratio	62:1	Holding torque	950Nm
Efficiency	30%	Tilting moment	1,6kNm
Self-locking gear	Yes	Radial static load	15kN
Backlash clearance	$<0,34^\circ$	Axial static load	27kN
Maximum torque	800Nm	Radial dynamic load	7,6kN
Nominal torque	400Nm	Axial dynamic load	8,7kN

**Notes:** All slew drive are pre-lubricated. Maximum output speed 1rpm. (loads valid for 10.000 working hours at 0,02rpm). All screws DACROMET treated



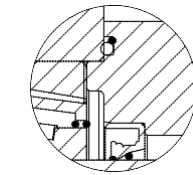
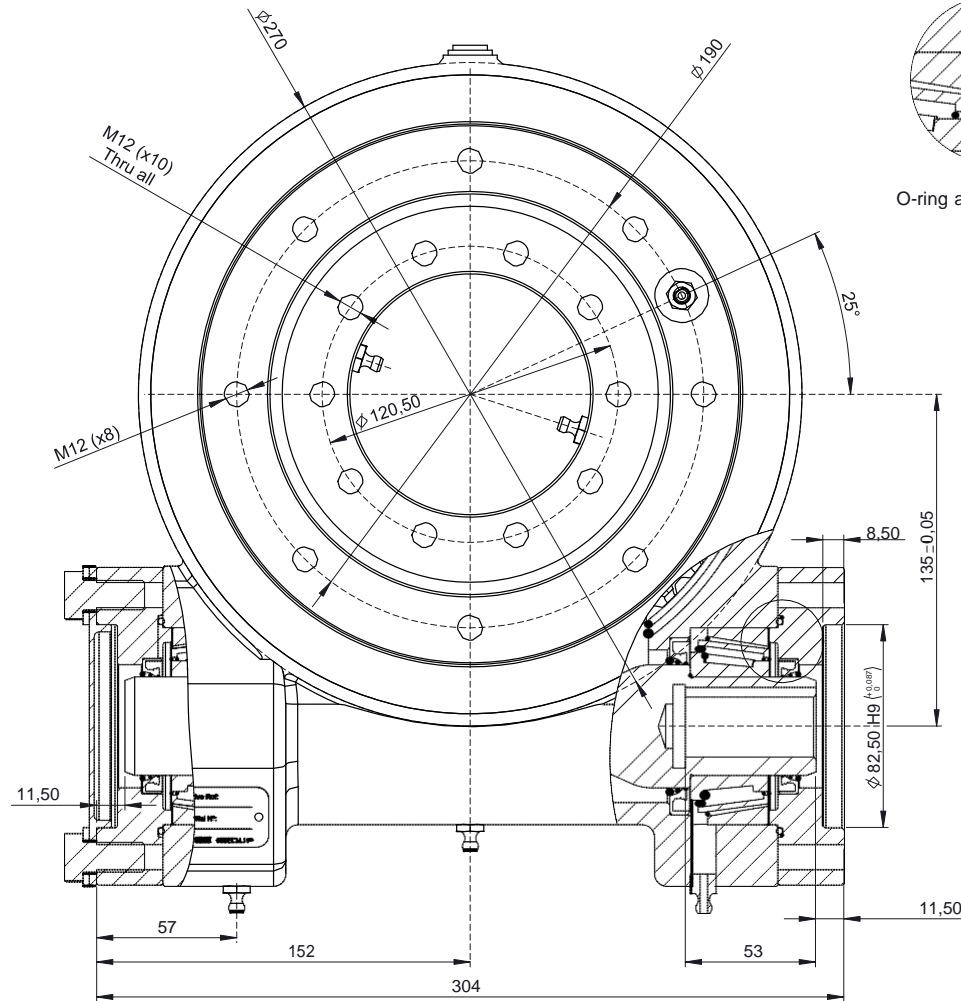
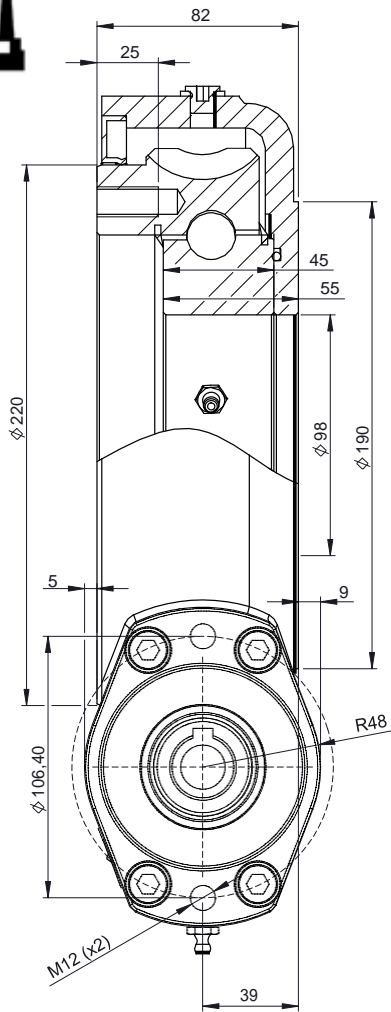
Shaft:  $\phi 2$ mm Keyed shaft

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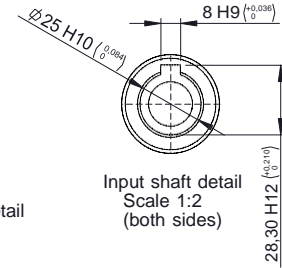
$>1200$	$\pm 1,2$
$>400,0 - 1200$	$\pm 0,8$
$>120,0 - 400,0$	$\pm 0,5$
$>30,0 - 120,0$	$\pm 0,3$
$>6,0 - 30,0$	$\pm 0,2$
$>3,0 - 6,0$	$\pm 0,1$
$>0,3 - 3,0$	$\pm 0,1$
Range of sizes	Unstated tolerance



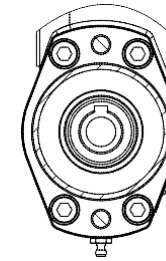
Reference	BE130-Z1-RM	
Units: mm	Denomination	Sales Drawing
MATERIAL:	WEIGHT [kg]: 10,28	NUM. PIECES: 1
SCALE: -	SIZE: -	SHEET: 1 of 1



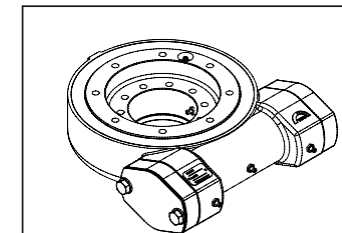
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as Input shaft)

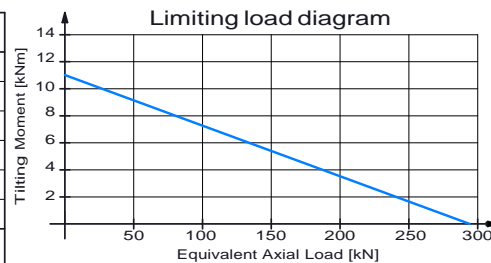


Minimum input torque: 25Nm

**Main performance parameters**

Gear Ratio	44:1	Holding torque	25kNm
Efficiency	40%	Tilting moment	11,2kNm
Self-locking gear	Yes	Radial static load	94kN
Backlash clearance	<0,15°	Axial static load	290kN
Maximum torque	6.500Nm	Radial dynamic load	83kN
Nominal torque	3.380Nm	Axial dynamic load	97kN

Notes: All sleew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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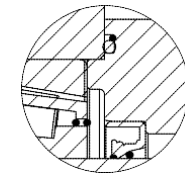
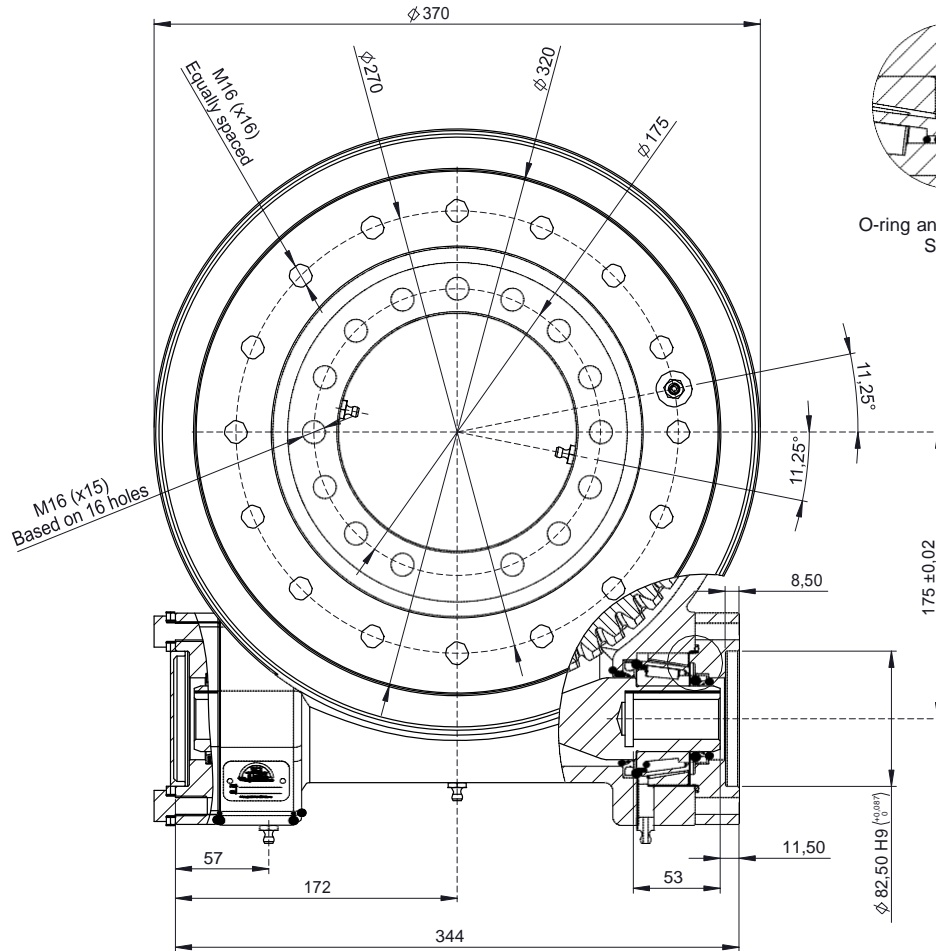
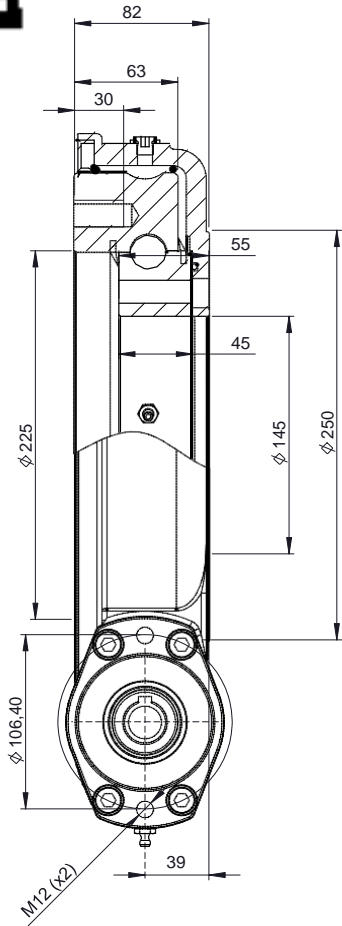
>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance



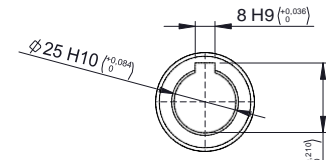
Reference **BE236-Z1** Rev **A**

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 30.33	NUM. PIECES: 1	
SCALE: 1:2	SIZE: A3	SHEET: 1 of 1	

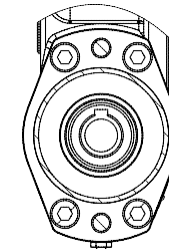
**BE series**  
Metric



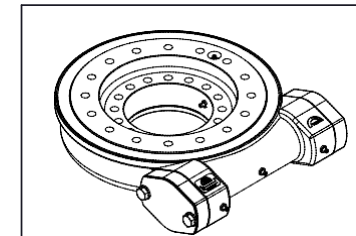
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as Input shaft)

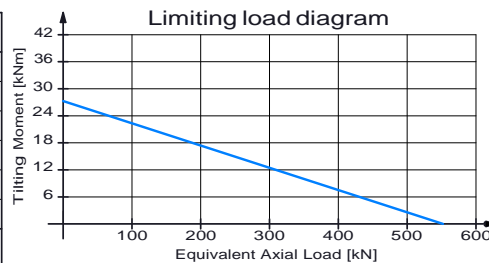


Minimum input torque: 25Nm

### Main performance parameters

Gear Ratio	61:1	Holding torque	34kNm
Efficiency	40%	Tilting moment	27,5kNm
Self-locking gear	Yes	Radial static load	204kN
Backlash clearance	<0,10°	Axial static load	547kN
Maximum torque	9.100Nm	Radial dynamic load	132kN
Nominal torque	4.480Nm	Axial dynamic load	154kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



Reference **BE314-Z1** Rev **C**

Units: mm	Denomination	Sales drawing	
MATERIAL: -	WEIGHT [kg]: 45.68	NUM. PIECES: 1	
SCALE: 1:3	SIZE: A3	SHEET: 1 of 1	

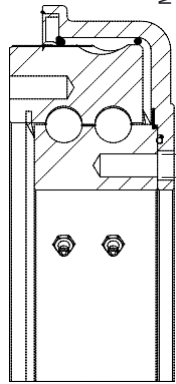
# BE series

Metric

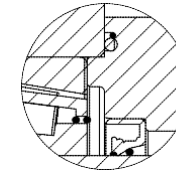
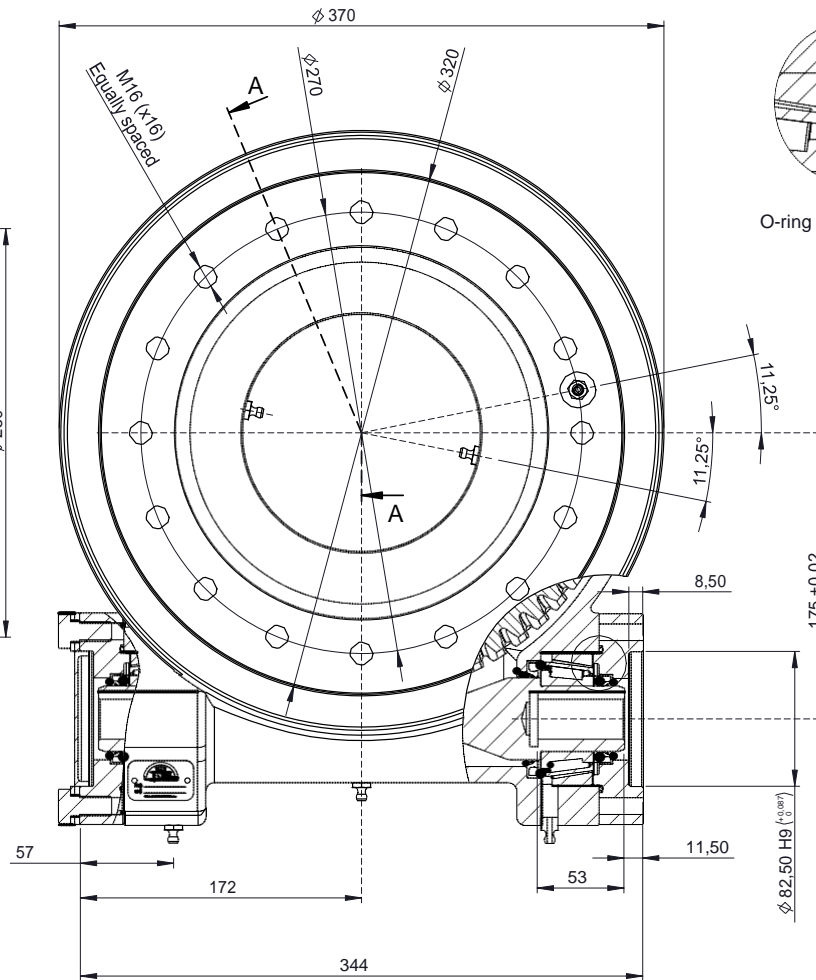
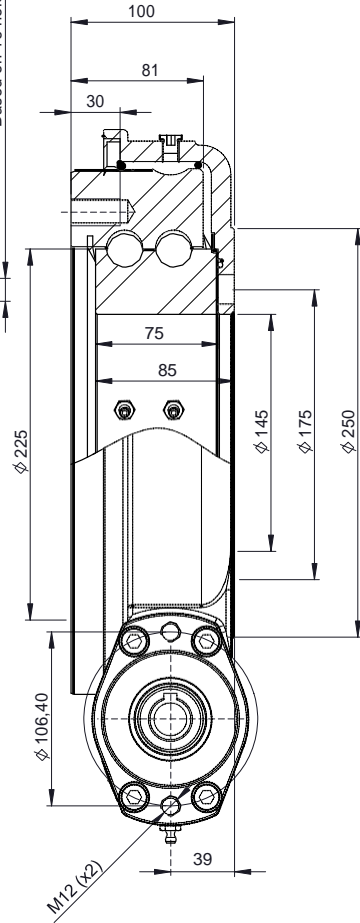




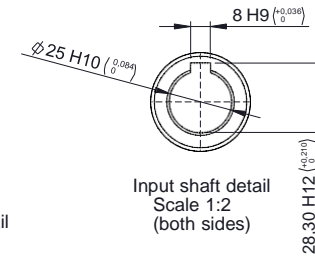
M16 (x14)  $\nabla$  30mm  
Based on 16 holes



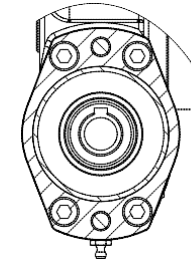
SECTION A-A



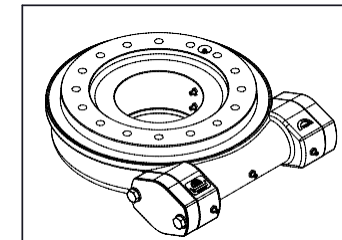
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as input shaft)

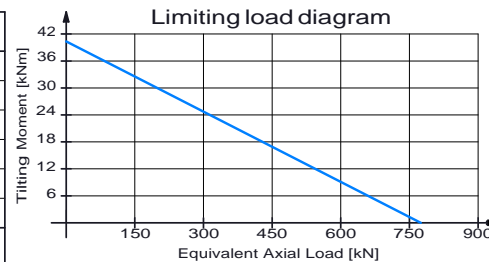


Minimum input torque: 25Nm

Main performance parameters

Gear Ratio	61:1	Holding torque	34 kNm
Efficiency	40%	Tilting moment	40kNm
Self-locking gear	Yes	Radial static load	297kN
Backlash clearance	<0,17°	Axial static load	797kN
Maximum torque	9.100Nm	Radial dynamic load	215kN
Nominal torque	4.480Nm	Axial dynamic load	250kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing$ 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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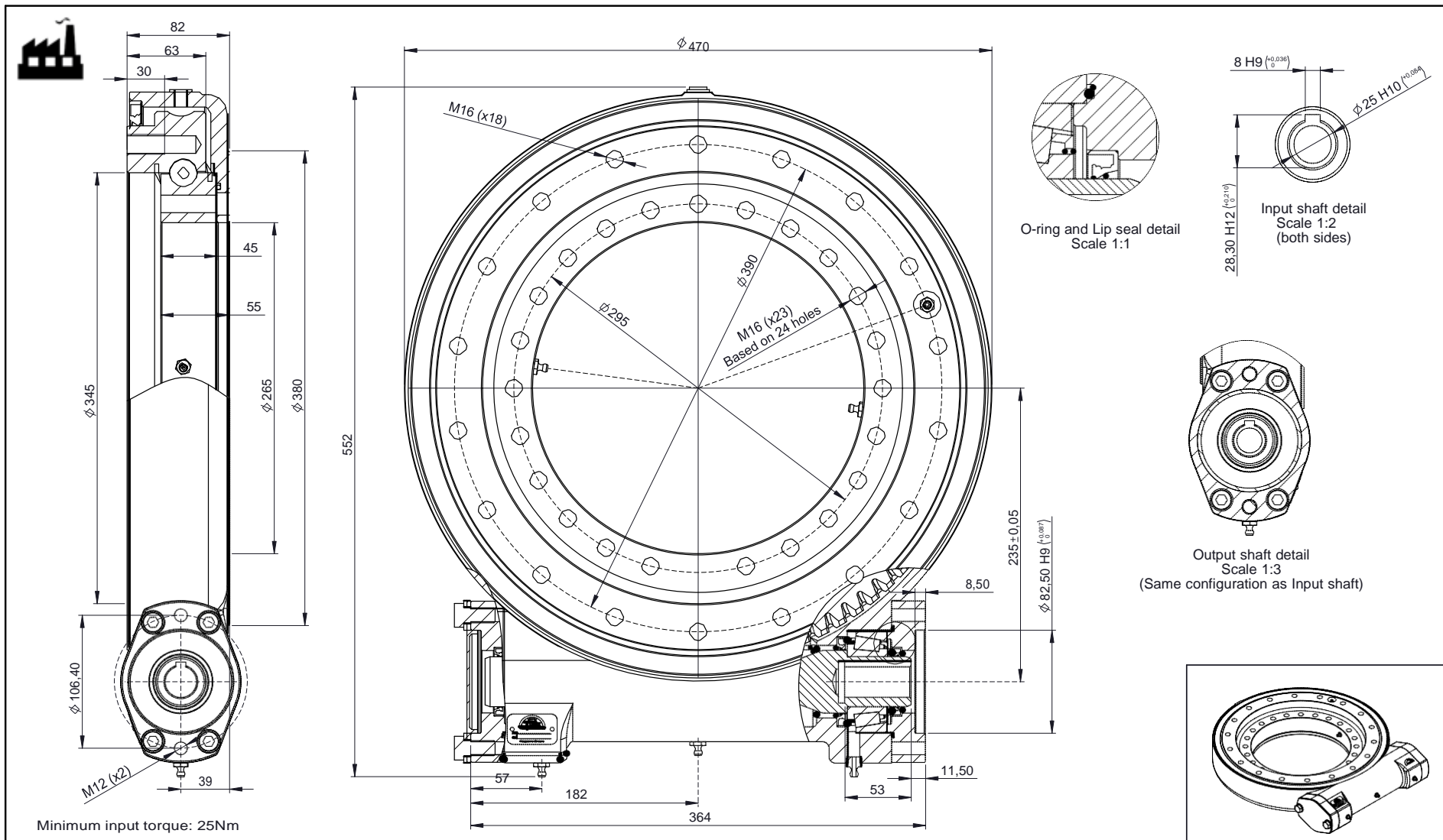
>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance



Reference **BE314-2B-Z1** Rev **C**

Units: mm	Denomination	Sales drawing	
MATERIAL: -	WEIGHT [kg]: 55.45	NUM. PIECES: 1	
SCALE: 1:3	SIZE: A3	SHEET: 1 of 1	

BE series  
Metric

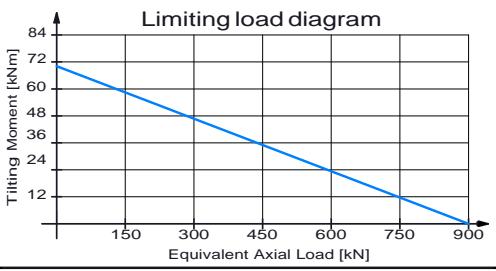


Minimum input torque: 25Nm

**Main performance parameters**

Gear Ratio	85:1	Holding torque	39 kNm
Efficiency	40%	Tilting moment	71,1kNm
Self-locking gear	Yes	Radial static load	338kN
Backlash clearance	<0,17°	Axial static load	905kN
Maximum torque	12.308Nm	Radial dynamic load	157kN
Nominal torque	10.200Nm	Axial dynamic load	183kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



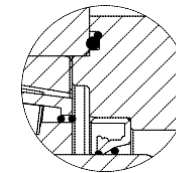
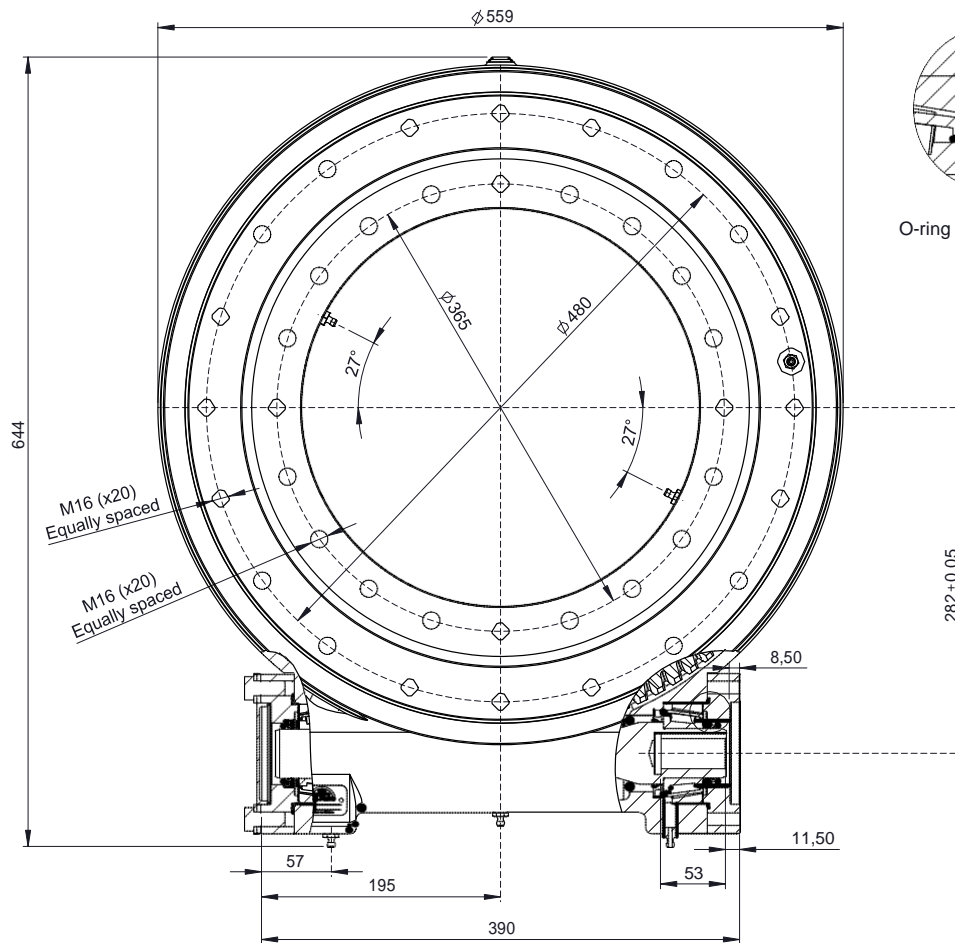
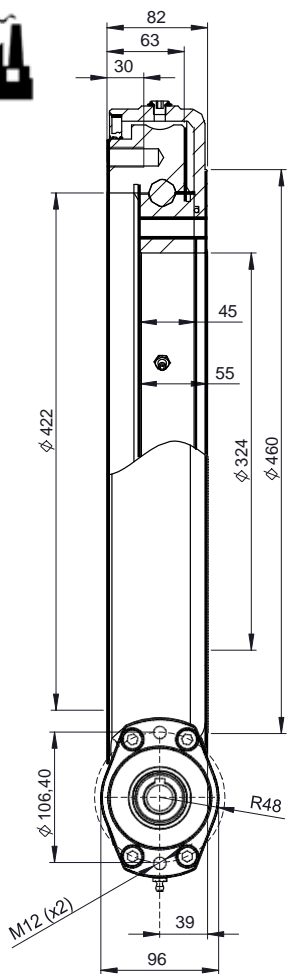
Shaft:  $\varnothing$ 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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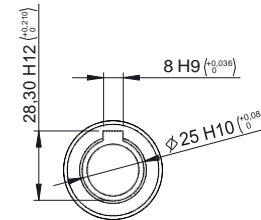


<p>&gt;1200 ±1,2 &gt;400.0 - 1200 ±0.8 &gt;120.0 - 400.0 ±0.5 &gt;30.0 - 120.0 ±0.3 &gt;6.0 - 30.0 ±0.2 &gt;3.0 - 6.0 ±0.1 &gt;0.3 - 3.0 ±0.1 Range of sizes Unstated tolerance</p>		 HFO@TGBGROUP.COM WWW.TGBGROUP.COM	
Reference	BE435-Z1		Rev
			C
Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 61.73	NUM. PIECES: 1	
SCALE: 1:3	SIZE: A3	SHEET: 1 of 1	

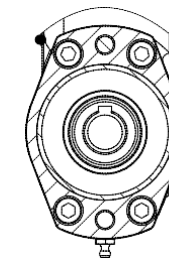
**BE series**  
Metric



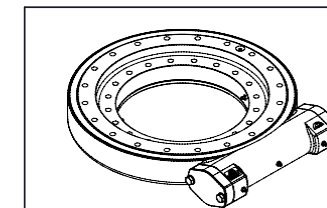
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as Input shaft)

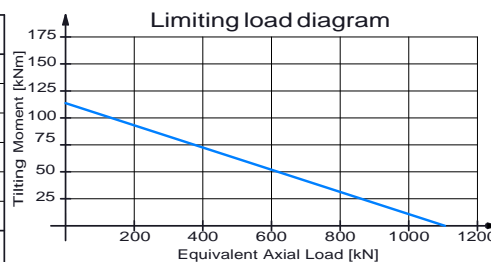


Minimum input torque: 25Nm

### Main performance parameters

Gear Ratio	103:1	Holding torque	41 kNm
Efficiency	40%	Tilting moment	111,6kNm
Self-locking gear	Yes	Radial static load	413kN
Backlash clearance	<0,17°	Axial static load	1107kN
Maximum torque	15.600Nm	Radial dynamic load	170kN
Nominal torque	14.700Nm	Axial dynamic load	198kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing$ 25mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance

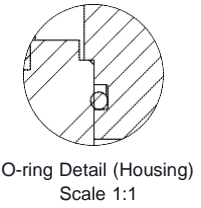
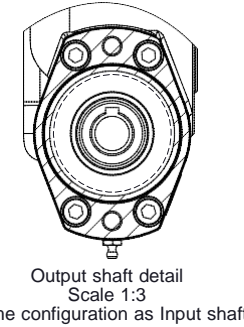
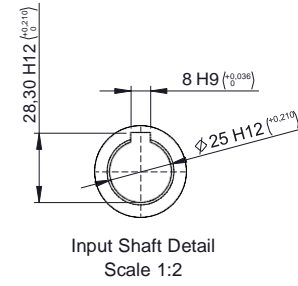
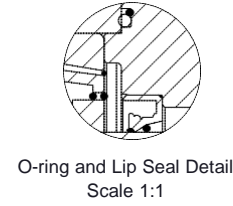
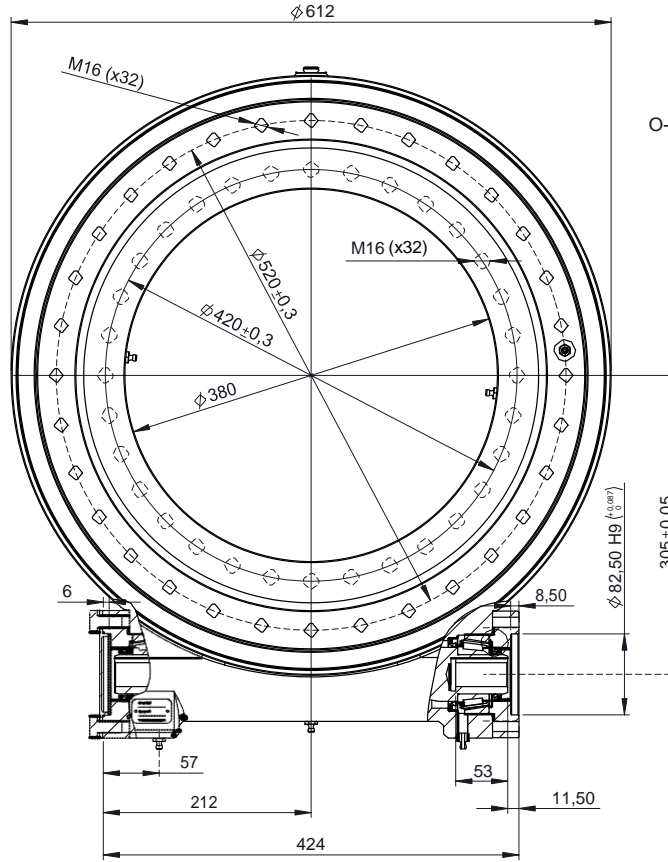
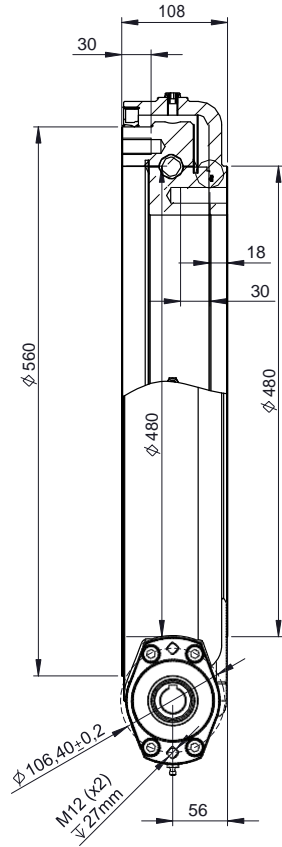


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INFO@TGBGROUP.COM  
WWW.TGBGROUP.COM

Reference **BE523-Z1** Rev **C**

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 82.65	NUM. PIECES: 1	
SCALE: 1:4	SIZE: A3	SHEET: 1 of 1	

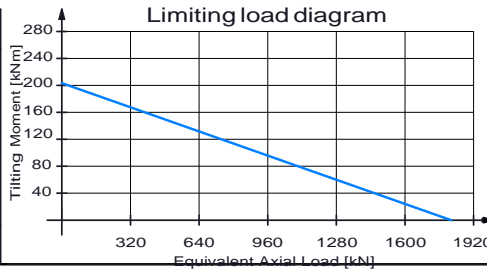
**BE series**  
Metric



Minimum input torque: 25Nm

### Main performance parameters

Gear Ratio	92:1	Holding torque	*35,5kNm
Efficiency	40%	Tilting moment	203,4kNm
Self-locking gear	Yes	Radial static load	675kN
Backlash clearance	<0,17°	Axial static load	1.808kN
Maximum torque	30.000Nm	Radial dynamic load	251kN
Nominal torque	25.000Nm	Axial dynamic load	293kN

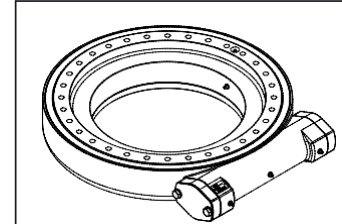


Shaft:  $\varnothing 25$ mm Keyed Shaft  
SAE - 2Bolt Flange

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>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance

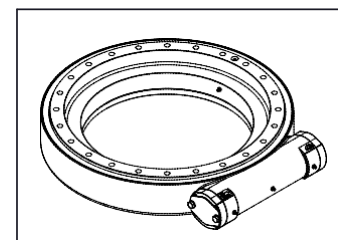
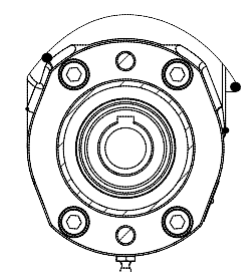
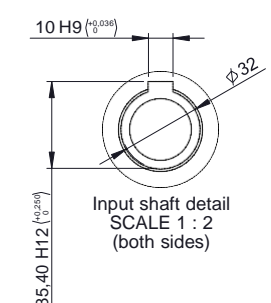
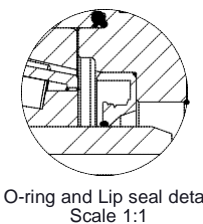
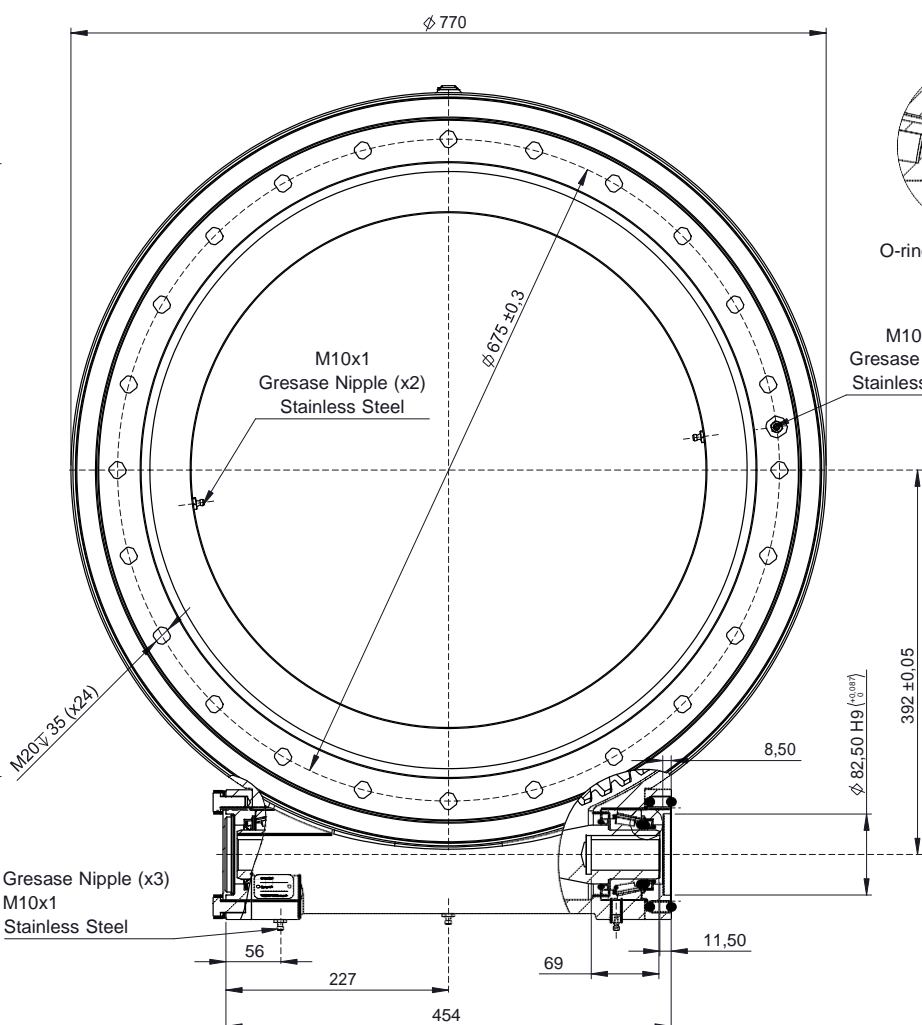
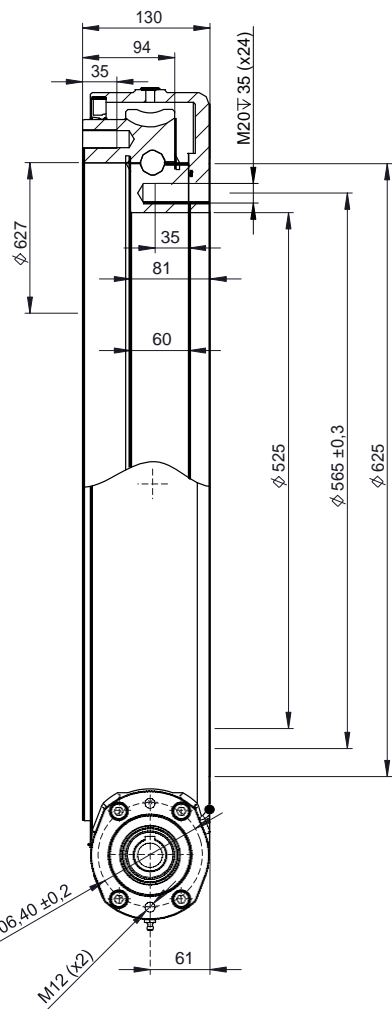


BE600-Z1

Denomination	Sales Drawing		
MATERIAL:	WEIGHT [kg]: 109.55	NUM. PIECES:	1
SCALE:	1:5	SIZE:	A3
		SHEET:	1 of 1

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color: RAL 9005

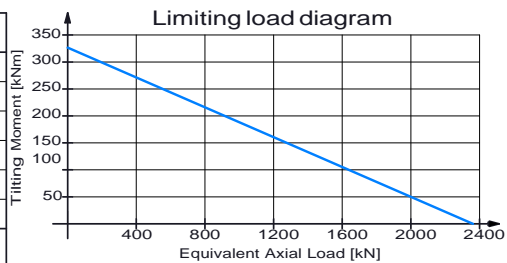
BE series  
Metric



Minimum input torque: 25Nm

**Main performance parameters**

Gear Ratio	102:1	Holding torque	42.8kNm
Efficiency	40%	Tilting moment	325kNm
Self-locking gear	Yes	Radial static load	883kN
Backlash clearance	<0,17°	Axial static load	2364kN
Maximum torque	42.824Nm	Radial dynamic load	280kN
Nominal torque	42.824Nm	Axial dynamic load	327kN



Shaft: Ø25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



Reference **BE700-Z1** Rev **B**

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 173.33	NUM. PIECES: 1	
SCALE: 1:5	SIZE: A3	SHEET: 1 of 1	

**BE series**  
Metric



# Série LBE



## Popis

Série LBE představuje pohony o nízké hmotnosti, které mají stejnou geometrii a rozměry jako pohony BE, ale kryt mají vyroben z hliníku. Tato úprava značně snižuje hmotnost otočného pohonu, což umožňuje jeho použití ve zvláštních případech, kdy je hmotnost kritickým faktorem.

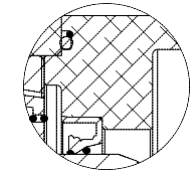
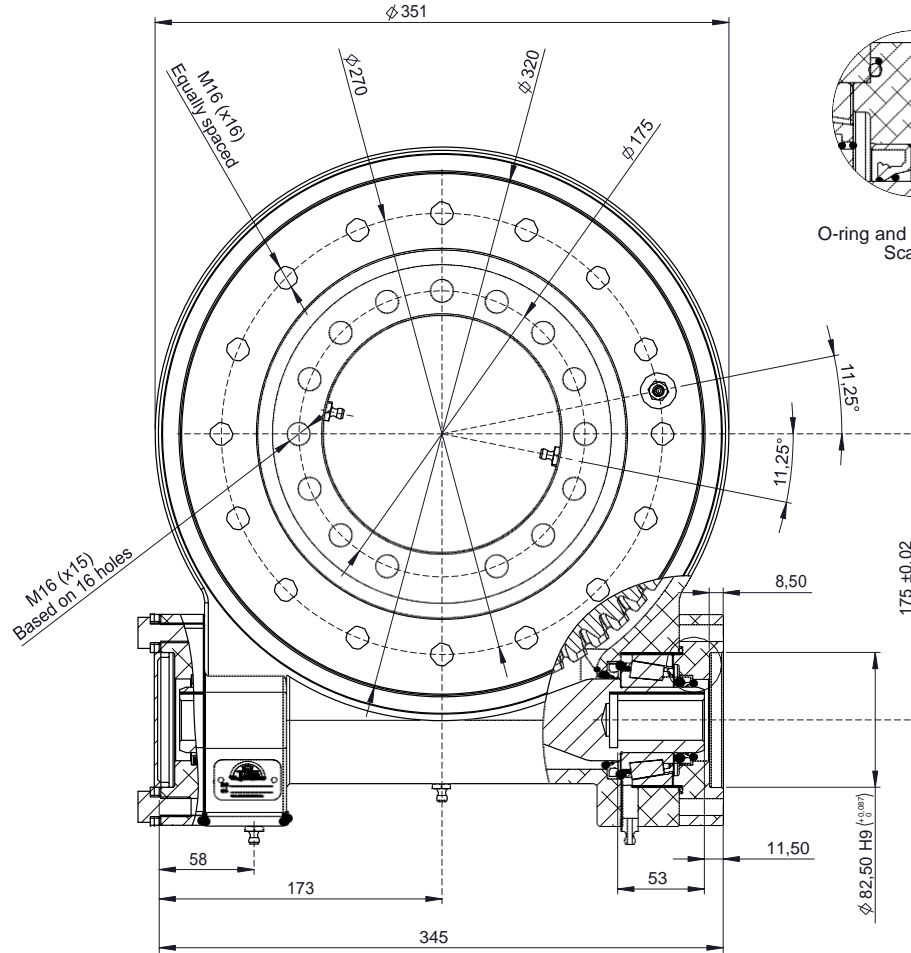
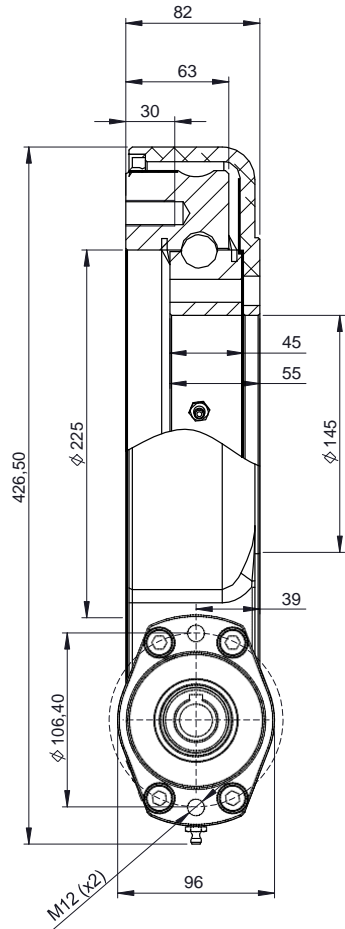
Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

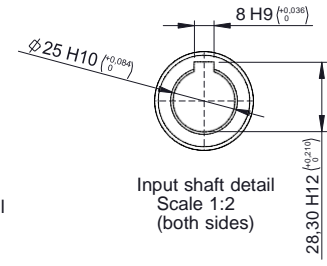
- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- Hliníkový kryt
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

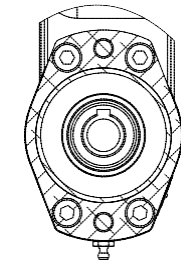
- Robotika, vysokozdvížené plošiny, atd.



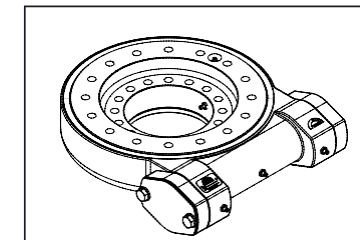
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as Input shaft)

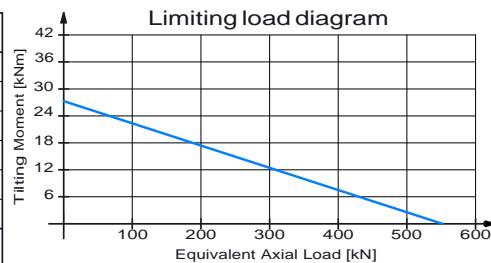


Minimum input torque: 25Nm

**Main performance parameters**

Gear Ratio	61:1	Holding torque	28 kNm
Efficiency	40%	Tilting moment	27,5kNm
Self-locking gear	Yes	Radial static load	204kN
Backlash clearance	<0,17°	Axial static load	547kN
Maximum torque	9.100Nm	Radial dynamic load	132kN
Nominal torque	4.480Nm	Axial dynamic load	154kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing$ 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance



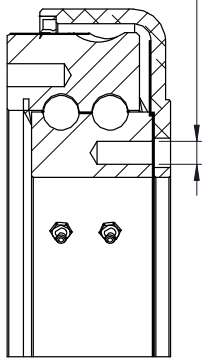
Reference **LBE314-Z1** Rev D

Units: mm	Denomination	Sales drawing	
MATERIAL: -	WEIGHT [kg]: 34.82	NUM. PIECES: 1	
SCALE: 1:3	SIZE: A3	SHEET: 1 of 1	

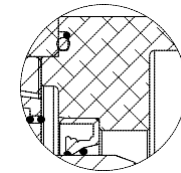
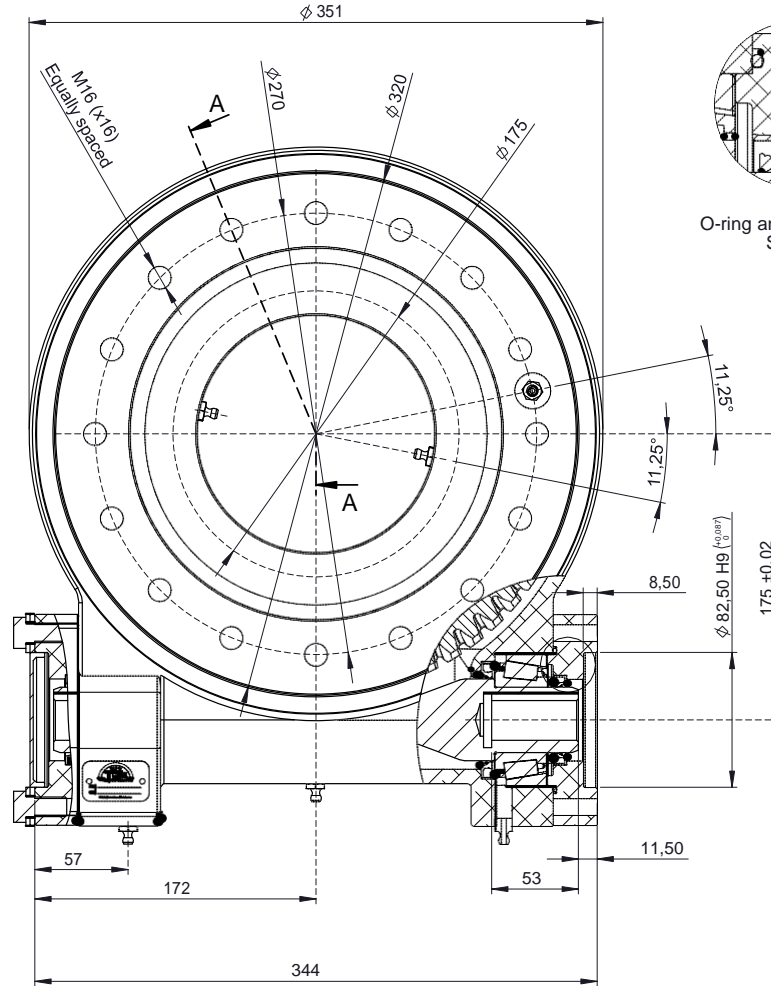
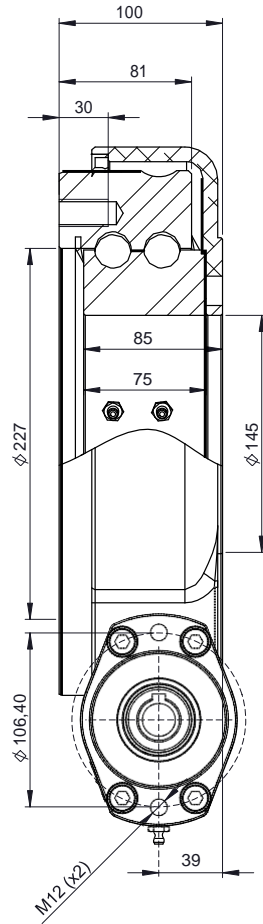
**LBE series**  
Metric



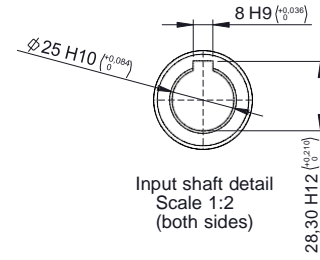
M16 (x14)  $\nabla$ 30mm  
Based on 16 holes



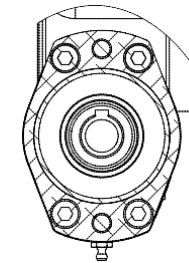
SECTION A-A



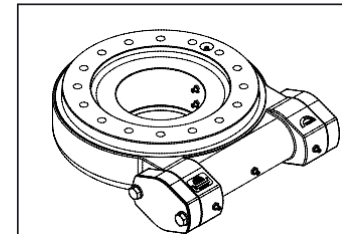
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2  
(both sides)



Output shaft detail  
Scale 1:3  
(Same configuration as Input shaft)

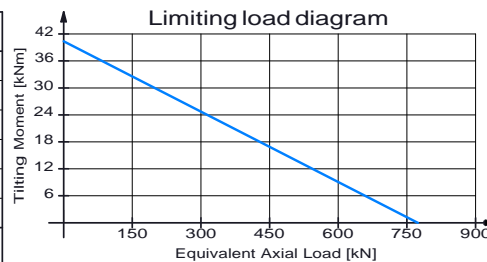


Minimum input torque: 25Nm

Main performance parameters

Gear Ratio	61:1	Holding torque	28 kNm
Efficiency	40%	Tilting moment	40,5kNm
Self-locking gear	Yes	Radial static load	297kN
Backlash clearance	<0,17°	Axial static load	797kN
Maximum torque	9.100Nm	Radial dynamic load	215kN
Nominal torque	4.480Nm	Axial dynamic load	250kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005



Shaft:  $\varnothing$ 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

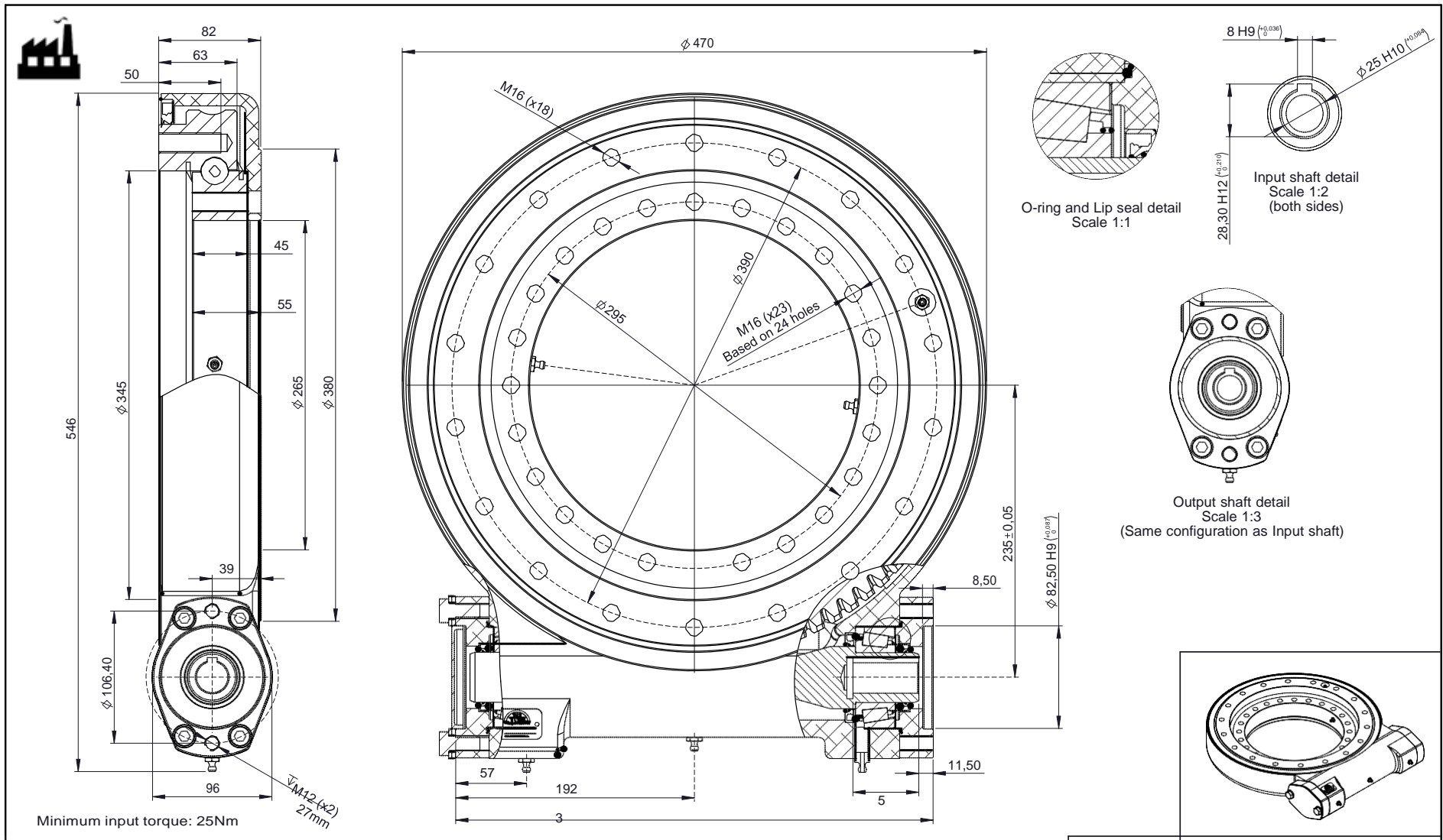
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TGBgroup reserve changes of manufacture without previous  
advice and duty of communication.

>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance



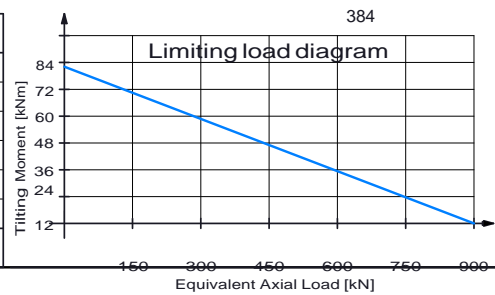
Reference	LBE314-2B-Z1		Rev	C
Units: mm	Denomination	Sales drawing		
MATERIAL: -	WEIGHT [kg]: 44.71	NUM. PIECES: 1		
SCALE: 1:3	SIZE: A3	SHEET: 1 of 1		

LBE series  
Metric



Minimum input torque: 25Nm

Main performance parameters			
Gear Ratio	85:1	Holding torque	33,5 kNm
Efficiency	40%	Tilting moment	71,1kNm
Self-locking gear	Yes	Radial static load	338kN
Backlash clearance	<0,17°	Axial static load	905kN
Maximum torque	12.300Nm	Radial dynamic load	157kN
Nominal torque	10.200Nm	Axial dynamic load	183kN



Shaft: 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1.2	 info@TGBGROUP.EE www.TGBGROUP.EE
>400.0 - 1200	±0.8	
>120.0 - 400.0	±0.5	
>30.0 - 120.0	±0.3	
>6.0 - 30.0	±0.2	
>3.0 - 6.0	±0.1	
>0.3 - 3.0	±0.1	
Range of sizes	Unstated tolerance	
Reference	LBE435-Z1	
Denomination	Sales Drawing	
MATERIAL:	WEIGHT [kg]: 47.81	NUM. PIECES: 1

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Standard paint: For corrosion category C3-M - Color RAL 9005

SCALE: 1:3 SIZE: A3 SHEET: 1 of 1

LBE series  
Metric



# Série TGO



## Popis

Série TGO představuje otevřenou verzi série TGE, takže vnitřní komponenty jsou úplně stejné, ale kryt nezakrývá otočný prsteneц tak, jako u předchozích sérií.

## Hlavní oblasti použití

- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

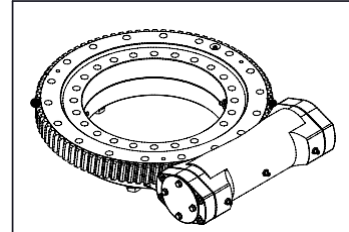
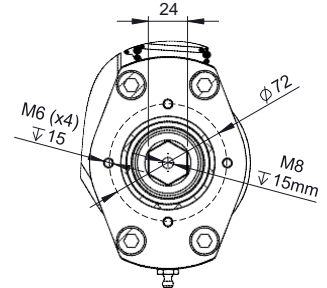
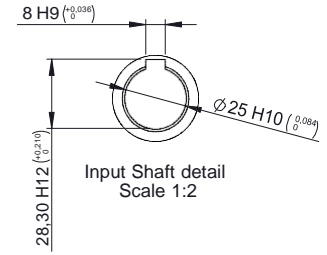
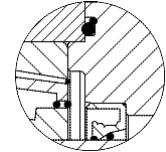
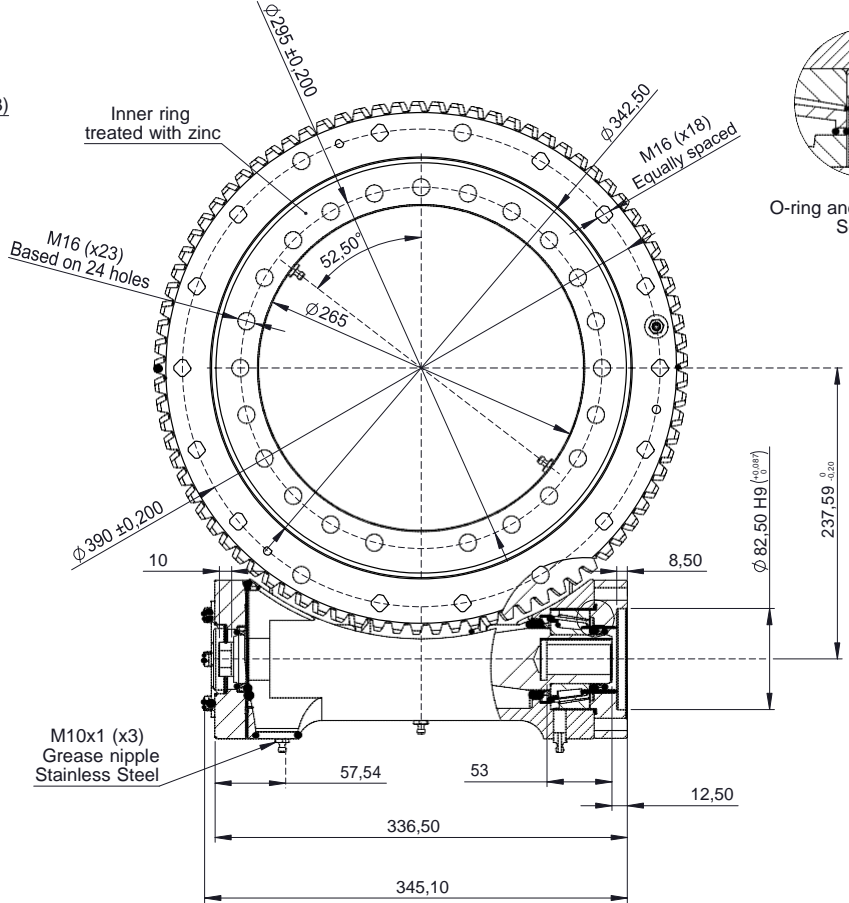
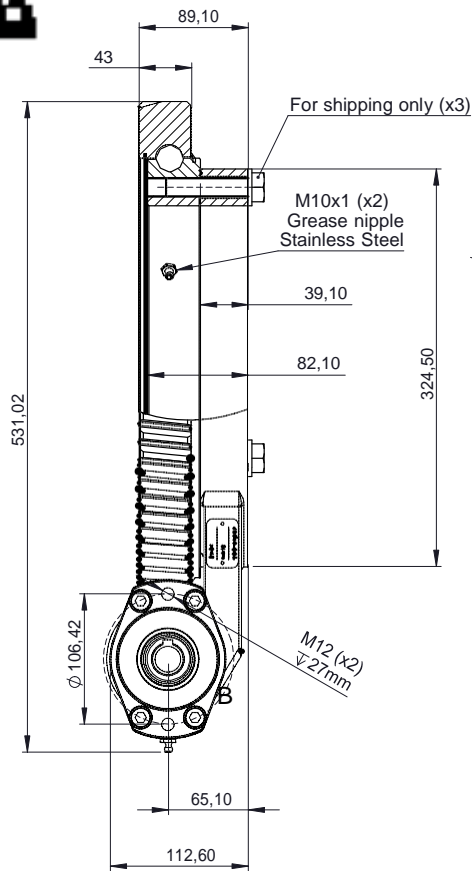
- Cisterny, jeřáby, atd.



# TGO series

Metric

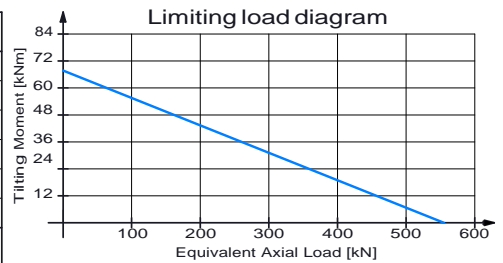
30



### Main performance parameters

Gear Ratio	85:1	Holding torque	43.2kNm
Efficiency	40%	Tilting moment	67,8kNm
Self-locking gear	Yes	Radial static load	222kN
Backlash clearance	<0,17°	Axial static load	555kN
Maximum torque	12.308Nm	Radial dynamic load	117kN
Nominal torque	10.200Nm	Axial dynamic load	133kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unrated tolerance



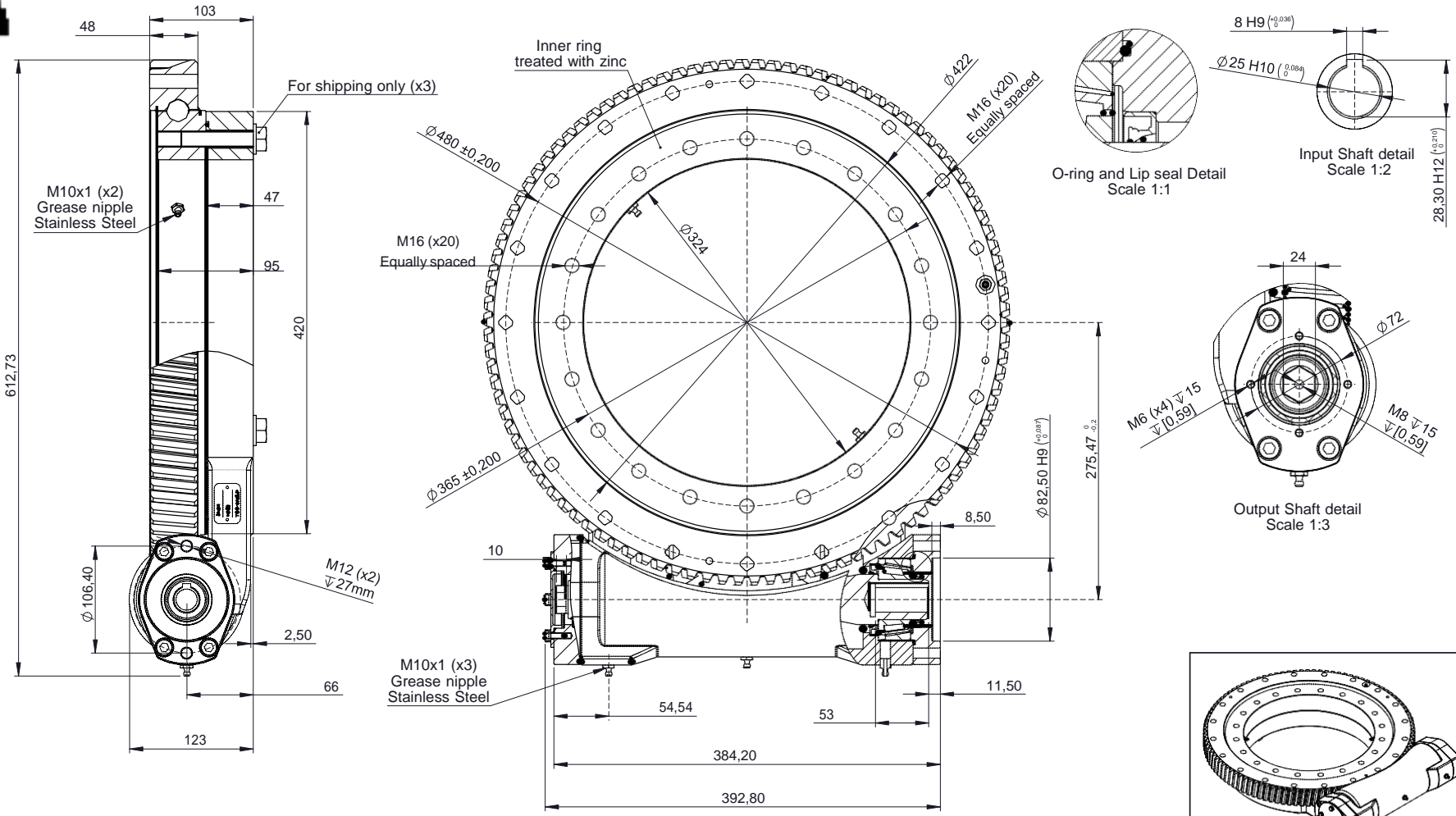
Reference: TGO435-Z0-RM Rev: A

Units: mm	Denomination: Sales Drawing	WEIGHT [kg]: 49.17	NUM. PIECES: 1
MATERIAL: -	SCALE: -	SIZE: -	SHEET: 1 of 1



# TGO series

Metric

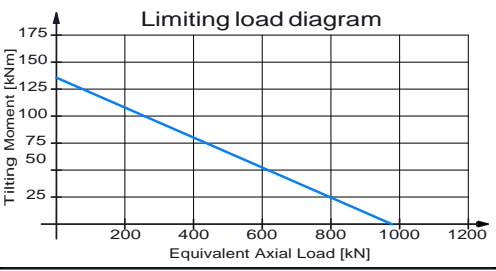


31

### Main performance parameters

Gear Ratio	102:1	Holding torque	65,1kNm
Efficiency	40%	Tilting moment	135,6kNm
Self-locking gear	Yes	Radial static load	391kN
Backlash clearance	<0,15°	Axial static load	977kN
Maximum torque	18.034Nm	Radial dynamic load	205kN
Nominal torque	15.096Nm	Axial dynamic load	235kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

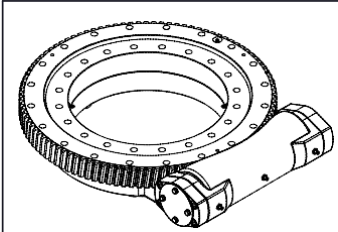
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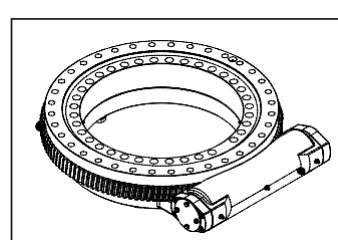
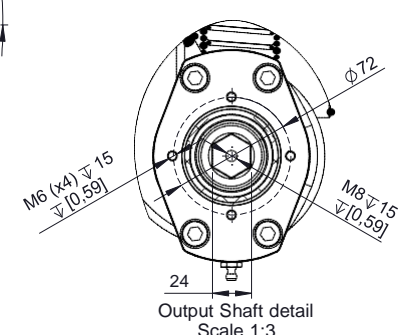
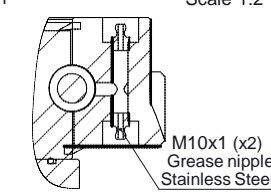
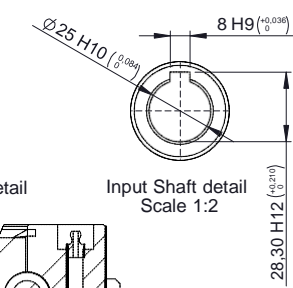
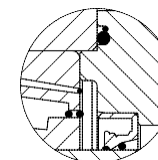
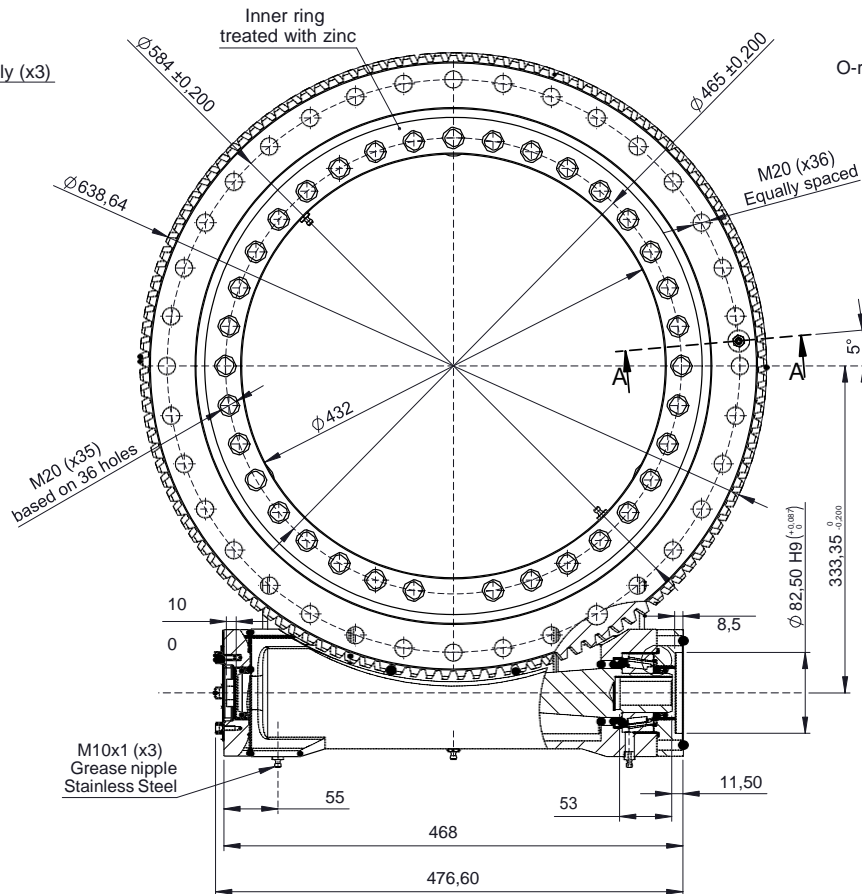
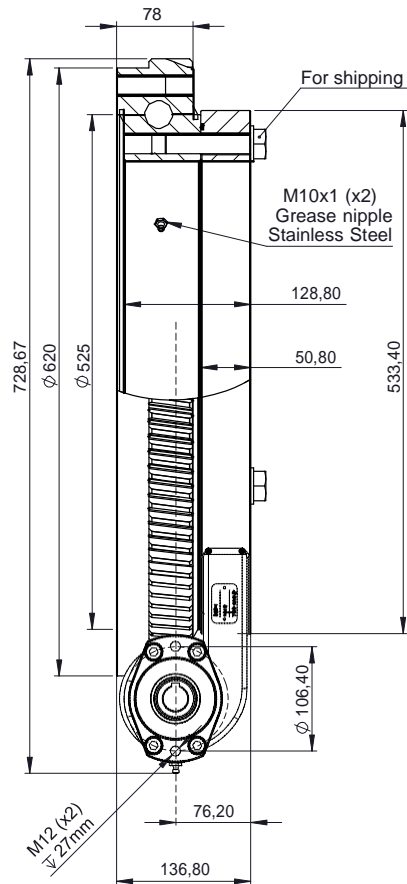
>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unstated tolerance



Reference **TGO523-Z0-RM** Rev **A**

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 78.63	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	





# TGO series

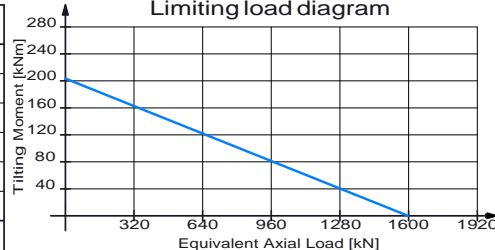
Metric

## Main performance parameters

Gear Ratio	125:1	Holding torque	95,2kNm
Efficiency	40%	Tilting moment	203,4kNm
Self-locking gear	Yes	Radial static load	640kN
Backlash clearance	<0,15°	Axial static load	1.598kN
Maximum torque	30.500Nm	Radial dynamic load	336kN
Nominal torque	23.500Nm	Axial dynamic load	384kN

Notes: All stew drive are pre-lubricated. Maximum output speed 1rpm.

Limiting load diagram



Shaft: Ø25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



Reference	TGO639-Z0-RM		Rev	A	
Denomination	Sales Drawing				
MATERIAL:	-	WEIGHT [kg]:	129.69	NUM. PIECES:	1
SCALE:	-	SIZE:	-	SHEET:	1 of 1



# Série se 2 šneky



## Popis

Série se dvěma šneky zahrnuje otočné pohony určené ke zvládnutí vyššího točivého momentu než u předešlých sérií, jelikož jsou poháněny dvěma šnekovými převody zároveň, díky čemuž otočný pohon zvládne téměř dvojnásobnou sílu ozubení.

Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

- Jeřáby, vysokozdvizné vozíky, atd.



109  
81  
43

490

28,30 H12<sup>+0,210</sup><sub>0</sub>

8 H9<sup>+0,036</sup><sub>0</sub>

25 H10<sup>0,084</sup><sub>0</sub>

O-ring and Lip seal detail  
Scale 1:1

Input shaft detail  
Scale 1:2

24

440

M16 (x18)  
Equally spaced

390

295

M16 (x23)  
Based on 24 holes

72 0,2

M8 15mm

342

43

64

265

342,50

M10x1 (x2)  
Grease nipple  
Stainless steel

M6 (x4)  
15mm

Output shaft detail  
Scale 1:3

10

8,50

82,50 H9<sup>+0,087</sup><sub>0</sub>

237,567 0,02

106,40

M12 (x2)  
21mm

49,50

M10x1 (x3)  
Grease nipple  
Stainless steel

57

177

354

M10x1 53  
Grease nipple Stainless steel

11,50  
Main performance parameters

84

Limiting load diagram

>1200 ±1.2  
>400.0 - 1200 ±0.8  
>120.0 - 400.0 ±0.5

Gear Ratio

Efficiency

Self-locking gear

Backlash clearance

85:1

40%

Yes  
<0,

# Double worm series

Metric

17°

Holdin → 47.5kNm 72  
g → 67.8kNm 60  
torque → 222kN 48  
Tilting → 53kN 36  
Shaft: 25mm  
keyed shaft g  
Flange: SA  
2 Bolt Flange

Radial  
Static  
load  
Axial  
Static  
load  
21.960mm  
18.350mm  
Notes: All slew drive are pre-lubricated

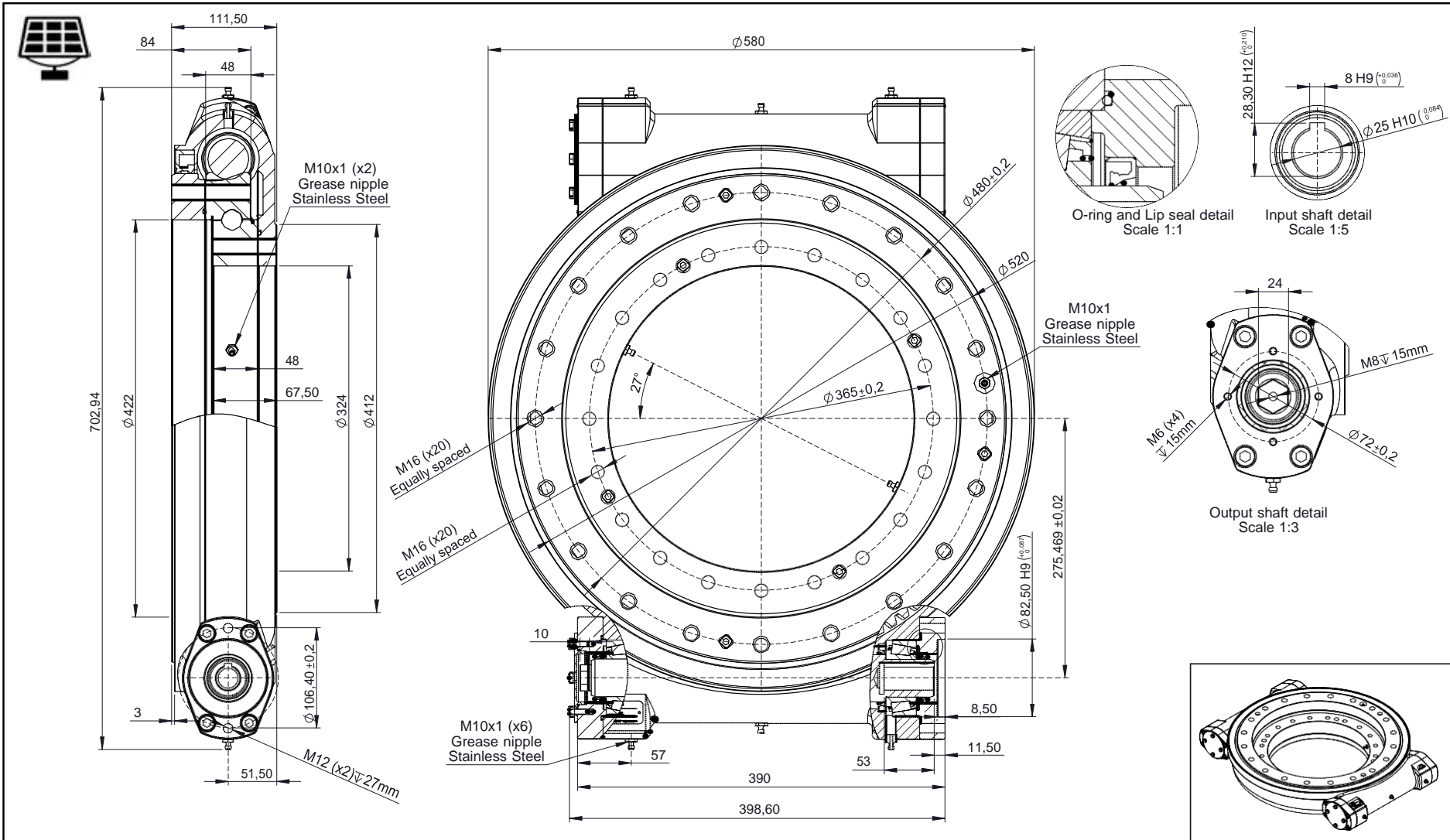
Radial dynamic load 117kN  
Axial dynamic load 133kN

Equivalent Axial Load [kN]  
200 300 400 500 600

TE43  
5-2-  
Z0-  
RM

Safety Drawing  
RIGHT [10] 84.38  
NUM. PIECES: 1  
SHEET: 1 of 1

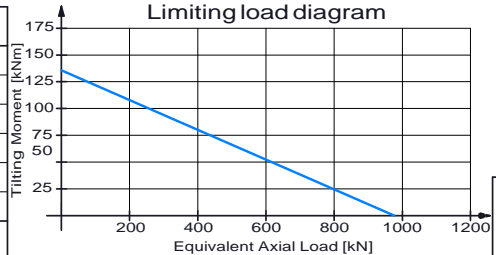
TGB GROUP  
www.TGBgroup.cz

Main performance parameters

Gear Ratio	102:1	Holding torque	72,3kNm
Efficiency	40%	Tilting moment	135,6kNm
Self-locking gear	Yes	Radial static load	391kN
Backlash clearance	<0,15°	Axial static load	977kN
Maximum torque	27.051Nm	Radial dynamic load	205kN
Nominal torque	22.650Nm	Axial dynamic load	235kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



Shaft:  $\phi 25$  Key Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unrated tolerance

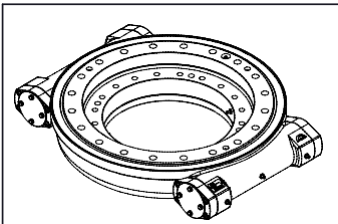


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www.TGBgroup.cz

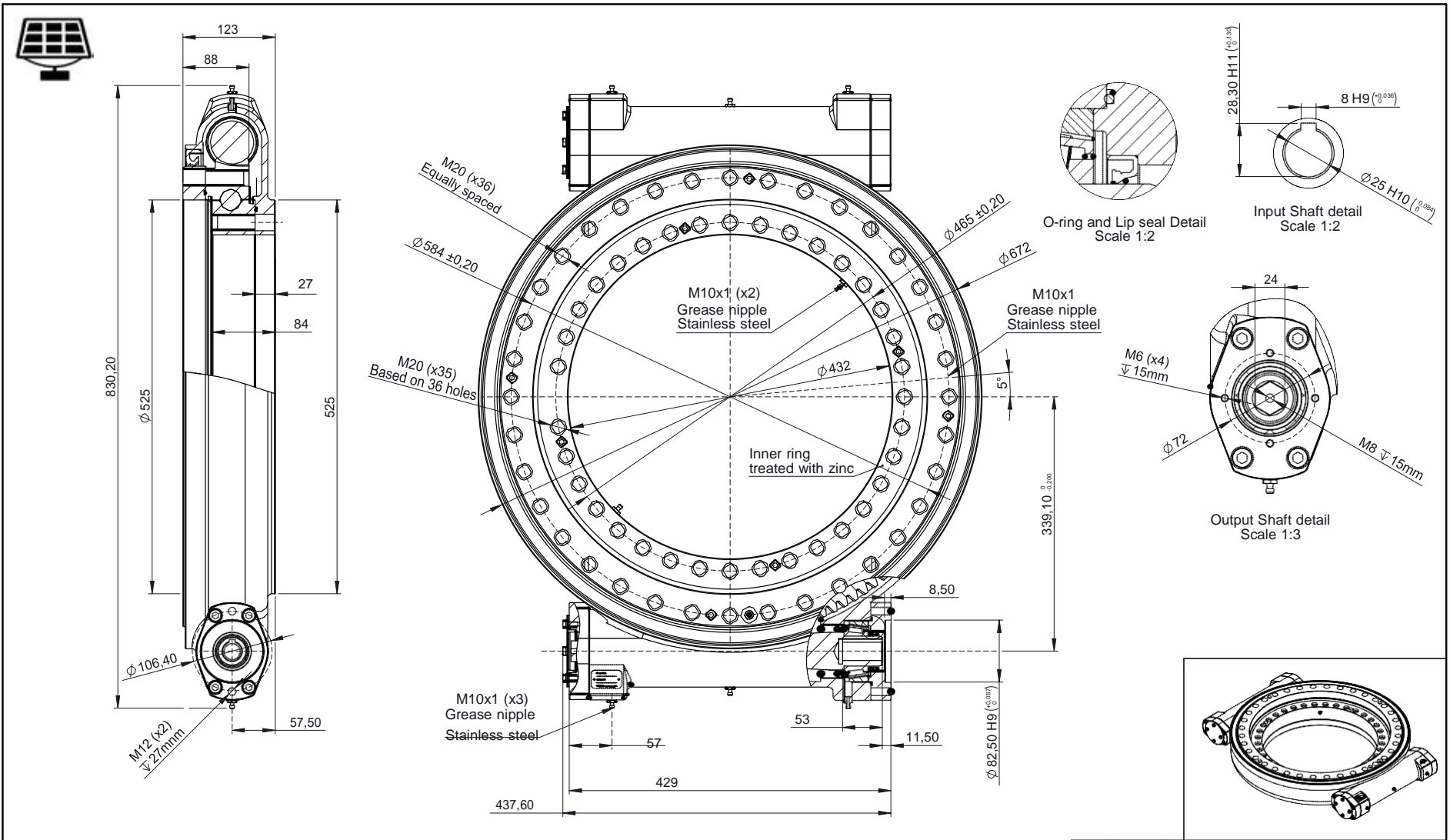
Reference **TE523-2-Z0-RM** Rev **A**

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]:	108.30	NUM. PIECES: 1
SCALE: -	SIZE: A3	SHEET: 1 of 1	

Double worm series  
Metric



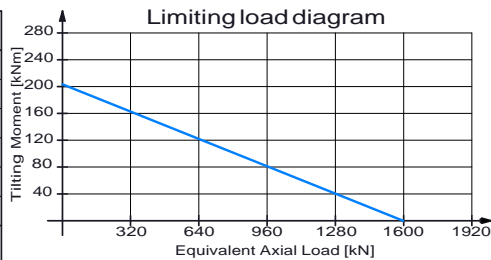




**Main performance parameters**

Gear Ratio	125:1	Holding torque	105,7kNm
Efficiency	40%	Tilting moment	203,4kNm
Self-locking gear	Yes	Radial static load	640kN
Backlash clearance	<0,15°	Axial static load	1.598kN
Maximum torque	54.900Nm	Radial dynamic load	336kN
Nominal torque	42.100Nm	Axial dynamic load	384kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.

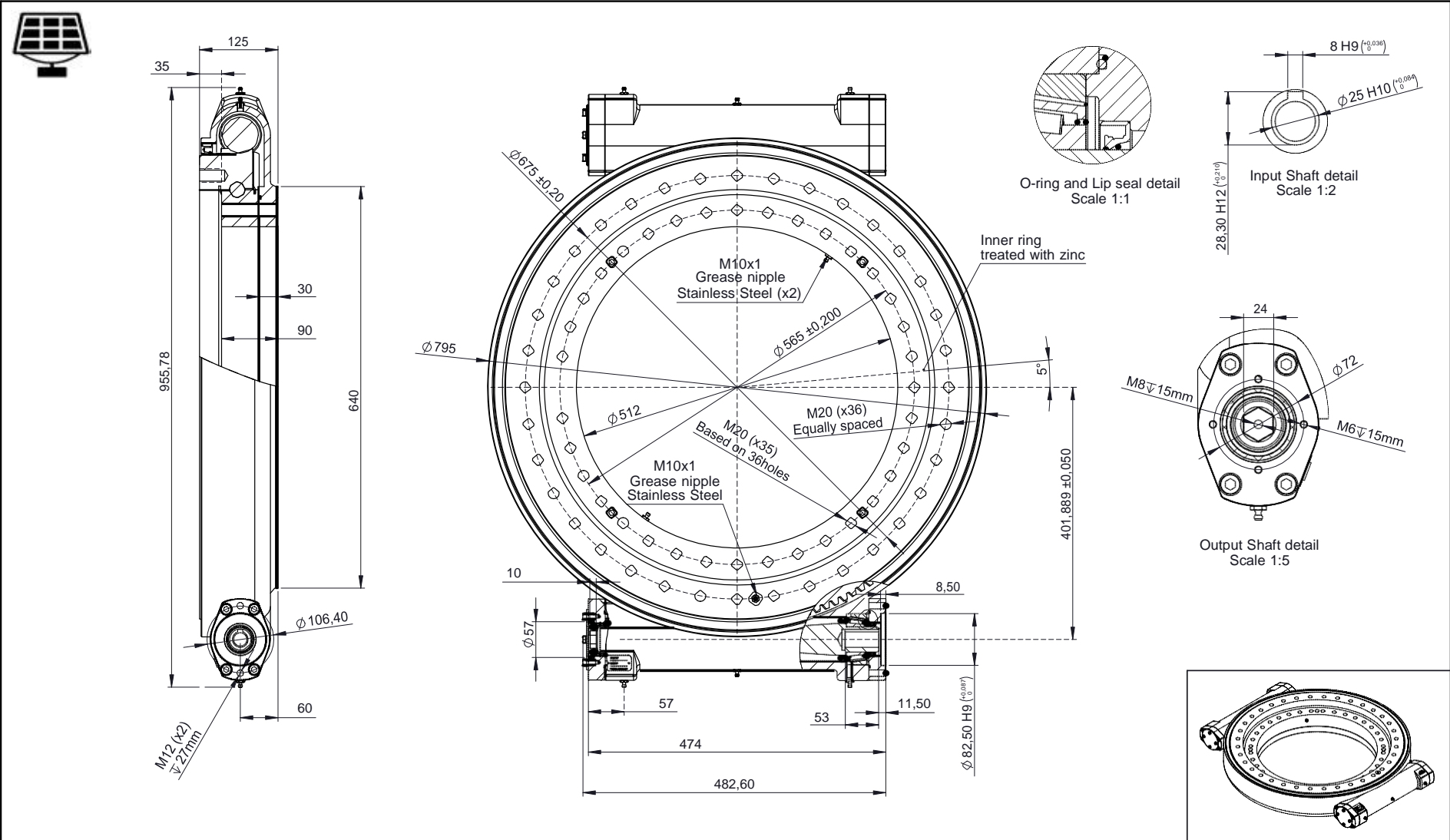


Shaft:  $\phi 25$ mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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<table border="1"> <tr> <td>&gt;1200</td> <td><math>\pm 1,2</math></td> </tr> <tr> <td>&gt;400.0 - 1200</td> <td><math>\pm 0,8</math></td> </tr> <tr> <td>&gt;120.0 - 400.0</td> <td><math>\pm 0,5</math></td> </tr> <tr> <td>&gt;30.0 - 120.0</td> <td><math>\pm 0,3</math></td> </tr> <tr> <td>&gt;6.0 - 30.0</td> <td><math>\pm 0,2</math></td> </tr> <tr> <td>&gt;3.0 - 6.0</td> <td><math>\pm 0,1</math></td> </tr> <tr> <td>&gt;0.3 - 3.0</td> <td><math>\pm 0,1</math></td> </tr> <tr> <td>Range of sizes</td> <td>Unstated tolerance</td> </tr> </table>	>1200	$\pm 1,2$	>400.0 - 1200	$\pm 0,8$	>120.0 - 400.0	$\pm 0,5$	>30.0 - 120.0	$\pm 0,3$	>6.0 - 30.0	$\pm 0,2$	>3.0 - 6.0	$\pm 0,1$	>0.3 - 3.0	$\pm 0,1$	Range of sizes	Unstated tolerance	<p><b>TGB GROUP</b> info@TGBgroup.es www.TGBgroup.es</p>
>1200	$\pm 1,2$																
>400.0 - 1200	$\pm 0,8$																
>120.0 - 400.0	$\pm 0,5$																
>30.0 - 120.0	$\pm 0,3$																
>6.0 - 30.0	$\pm 0,2$																
>3.0 - 6.0	$\pm 0,1$																
>0.3 - 3.0	$\pm 0,1$																
Range of sizes	Unstated tolerance																
Reference	TE639-2-Z0-RM	Rev	B														
Units: mm	Denomination	Sales Drawing															
MATERIAL: -	WEIGHT [kg]: 134.08	NUM. PIECES: 1															
SCALE: 1:5	SIZE: A3	SHEET: 1 of 1															

**Double worm series**  
Metric



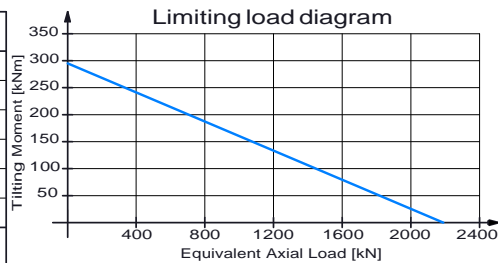
# Double worm series

Metric

### Main performance parameters

Gear Ratio	150:1	Holding torque	193.2kNm
Efficiency	40%	Tilting moment	300 kNm
Self-locking gear	Yes	Radial static load	832kN
Backlash clearance	<0,15°	Axial static load	2190 kN
Maximum torque	67520Nm	Radial dynamic load	411 kN
Nominal torque	52740Nm	Axial dynamic load	517kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft: 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>12500	±1.2	>400.0 - 1200	±0.8	<p><b>TGB GROUP</b>                  INOEX TGB GROUP, s.r.l.                  www.TGBgroup.es</p>
>120.0 - 400.0	±0.5	>30.0 - 120.0	±0.3	
>6.0 - 30.0	±0.2	>3.0 - 6.0	±0.1	
>0.3 - 3.0	±0.1	Range of sizes	Unlimited tolerance	
Reference				
TE760-2-Z0-RM				
Units: mm		Denomination	Sales Drawing	Rev
MATERIAL: -		WEIGHT [kg]: 209.89	NUM. PIECES: 1	A
SCALE: -		SIZE: -	SHEET: 1 of 1	

# Série TE



## Popis

Série TE zahrnuje otočné pohony, ktoré sa skladajú z globoidného šnekového prevodu a spirálovitého otočného prstence, čo zaisťuje vysoký kontaktný pomer medzi ozubením šnekového prevodu ozubením otočného prstence (3 až 4 zuby jsou vždy v kontaktu). Díky této skutečnosti dokáže tato série otočných pohonů zvládnout vysoké hodnoty při udržení točivého momentu, což je poměrně kritické pro solární sledovací zařízení, kde otočné pohony musí odolat vysoké zátěži způsobené poryvy větru.

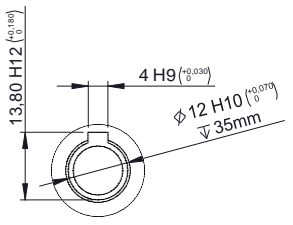
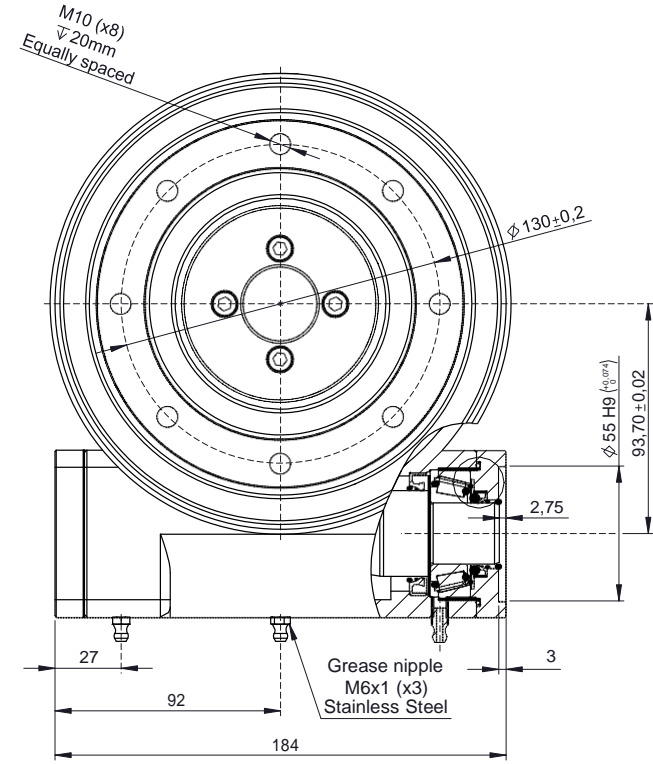
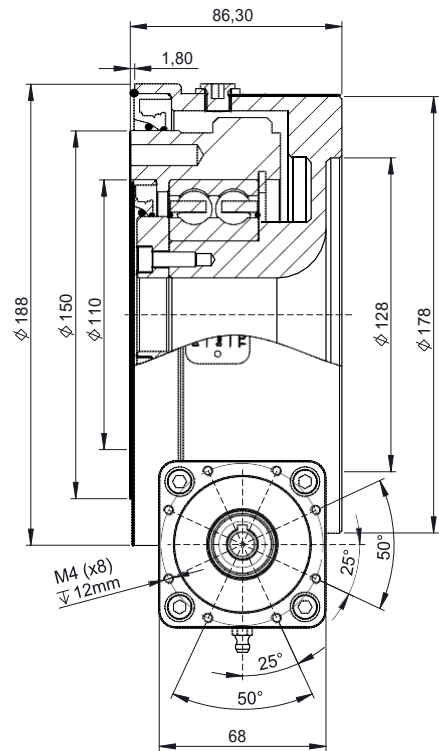
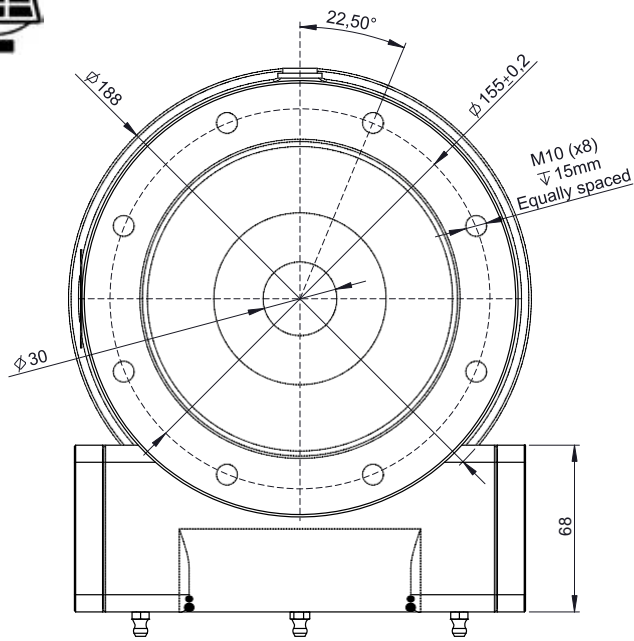
Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zaisťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

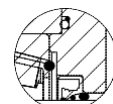
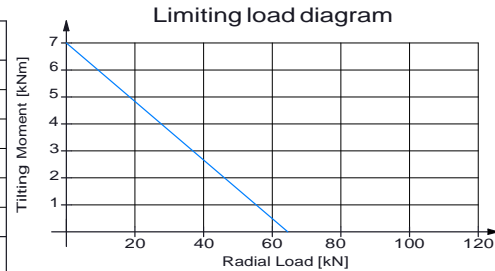
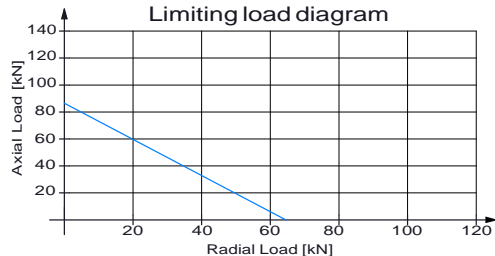
- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zaisťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

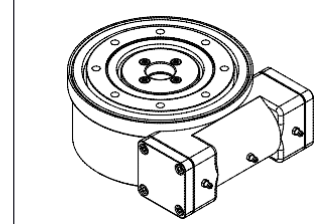
- Solární sledovací zařízení



Input shaft detail  
Scale 1:1



O-ring and Lip seal detail  
Scale 1:1



**Main performance parameters**

Gear Ratio	62:1	Holding torque	5kNm
Efficiency	30%	Tilting moment	7,1kNm
Self-locking gear	Yes	Radial static load	64kN
Backlash clearance	<0,26°	Axial static load	84kN
Nominal torque	600Nm	Axial dynamic load	98kN

Notes: All sleew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated

>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated



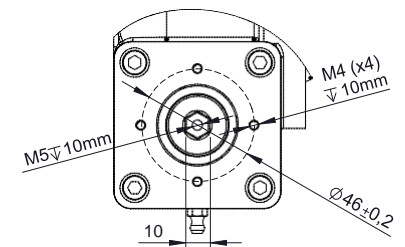
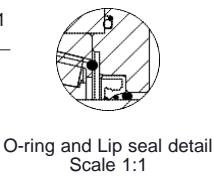
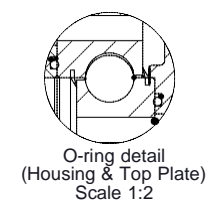
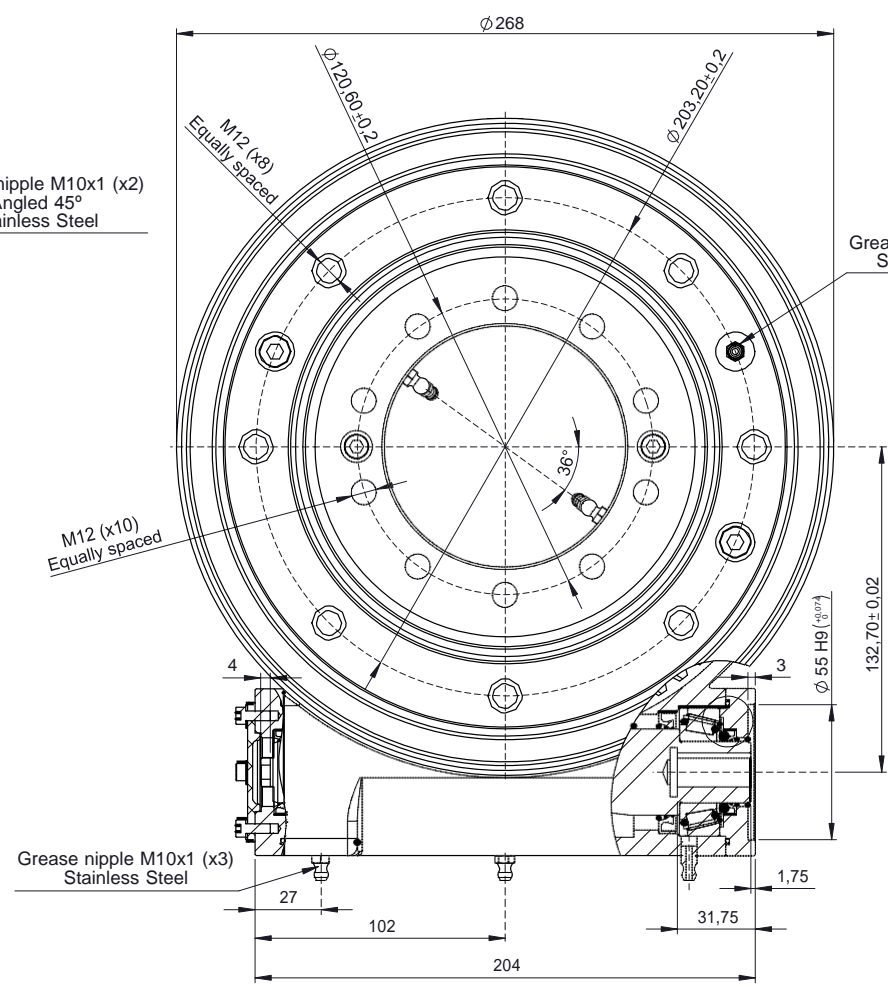
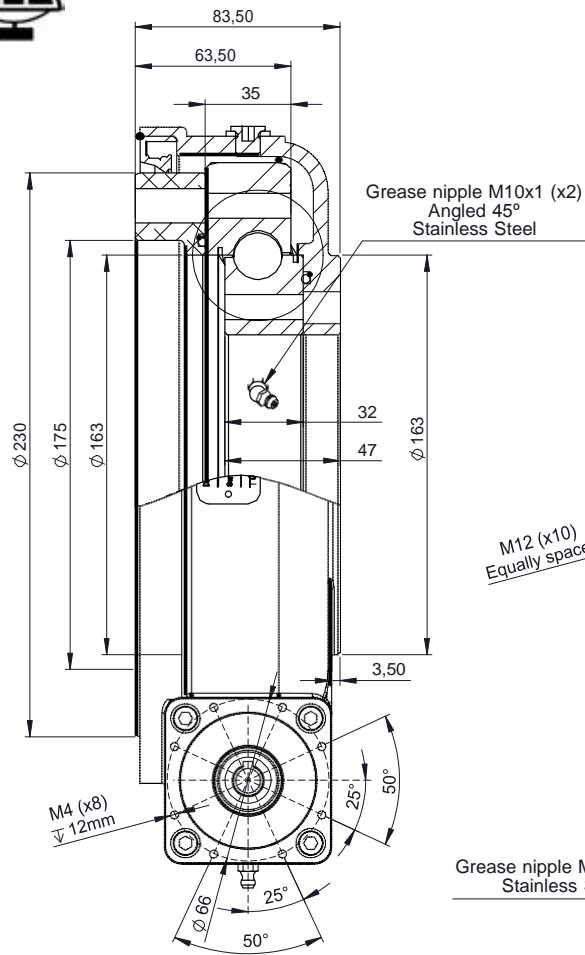
SHAFT:  $\phi$  12mm Keyed Shaft

Reference **TE160-Z1-RM** Rev B

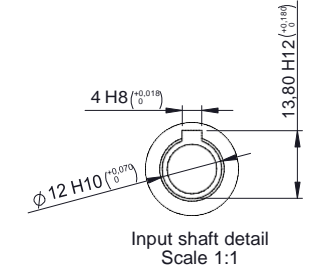
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Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 14.00	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	





Output shaft detail Scale 1:2



Input shaft detail Scale 1:1

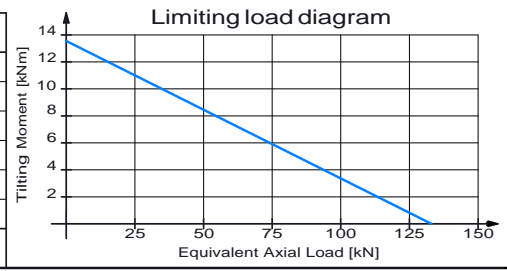
# TE series

Metric

## Main performance parameters

Gear Ratio	71:1	Holding torque	9,4kNm
Efficiency	40%	Tilting moment	13,6kNm
Self-locking gear	Yes	Radial static load	53kN
Backlash clearance	<0,20°	Axial static load	133kN
Maximum torque	1.458Nm	Radial dynamic load	28kN
Nominal torque	1.042Nm	Axial dynamic load	32kN

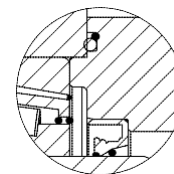
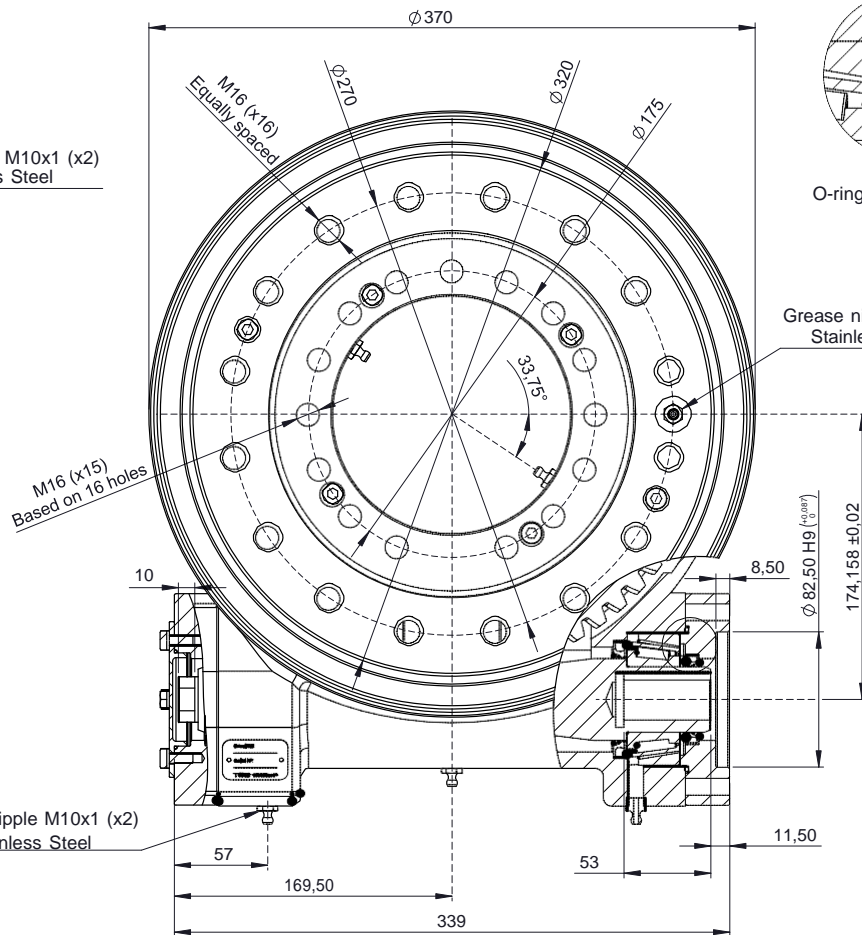
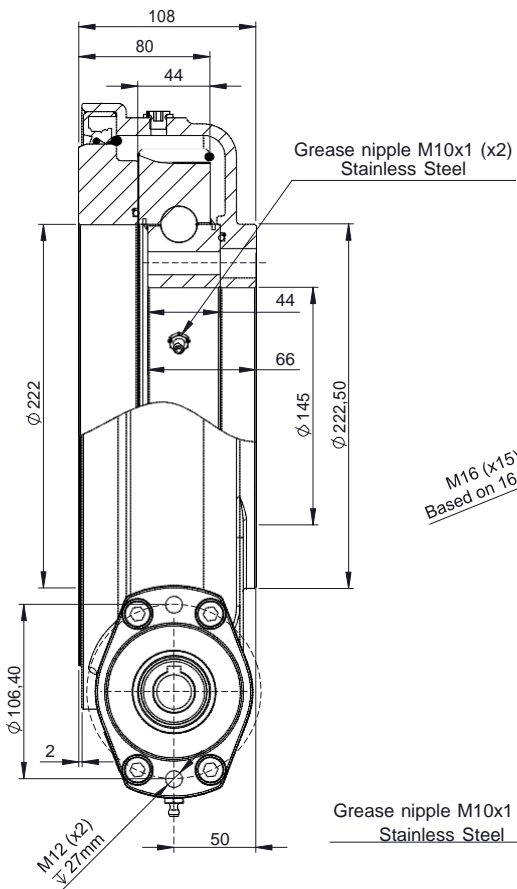
Notes: All sleew drive are pre-lubricated. Maximum output speed 1rpm. All screws DACROMET treated



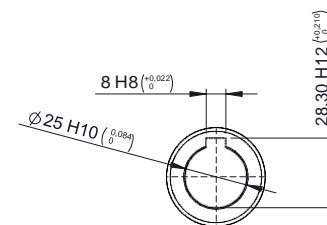
Shaft:  $\varnothing$ 12mm Keyed shaft

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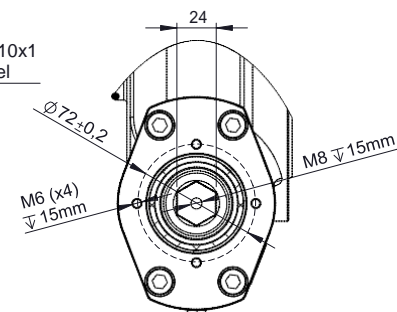
<p>&gt;400.0 - 1200 ±0,8 &gt;120.0 - 400.0 ±0,5 &gt;30.0 - 120.0 ±0,3 &gt;6.0 - 30.0 ±0,2 &gt;3.0 - 6.0 ±0,1 &gt;0.3 - 3.0 ±0,1 Range of sizes Unstated tolerance</p>		<p>TGB GROUP INGENIERIA TGB GROUP, S.L. WWW.TGBGROUP.ES</p>	
Reference		TE236-Z0-RM	
Denomination		Sales Drawing	
MATERIAL:	-	WEIGHT [kg]:	18.27
SCALE:	-	SIZE:	-
NUM. PIECES:		1	
SHEET:		1 of 1	



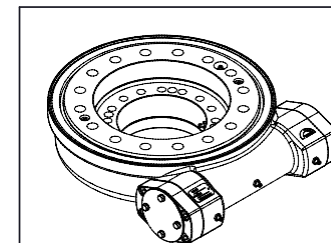
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2



Output shaft detail  
Scale 1:3



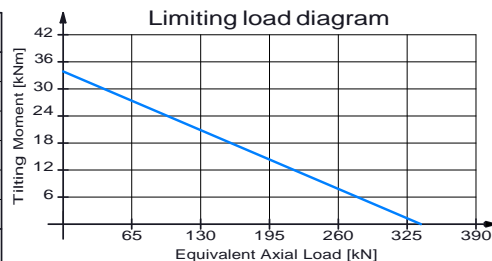
# TE series

Metric

## Main performance parameters

Gear Ratio	61:1	Holding torque	35kNm
Efficiency	40%	Tilting moment	33,9kNm
Self-locking gear	Yes	Radial static load	135kN
Backlash clearance	<0,17°	Axial static load	338kN
Maximum torque	8.835Nm	Radial dynamic load	71kN
Nominal torque	7.320Nm	Axial dynamic load	81kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



Shaft:  $\phi$ 25mm keyed shaft  
Flange: SAE - 2Bolt Flange

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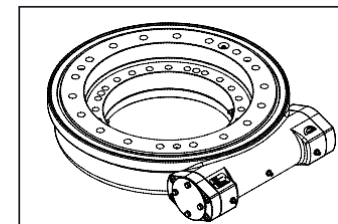
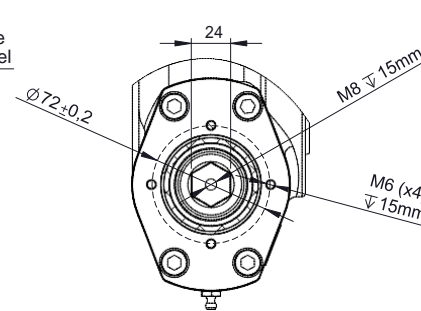
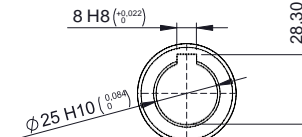
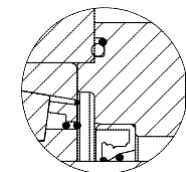
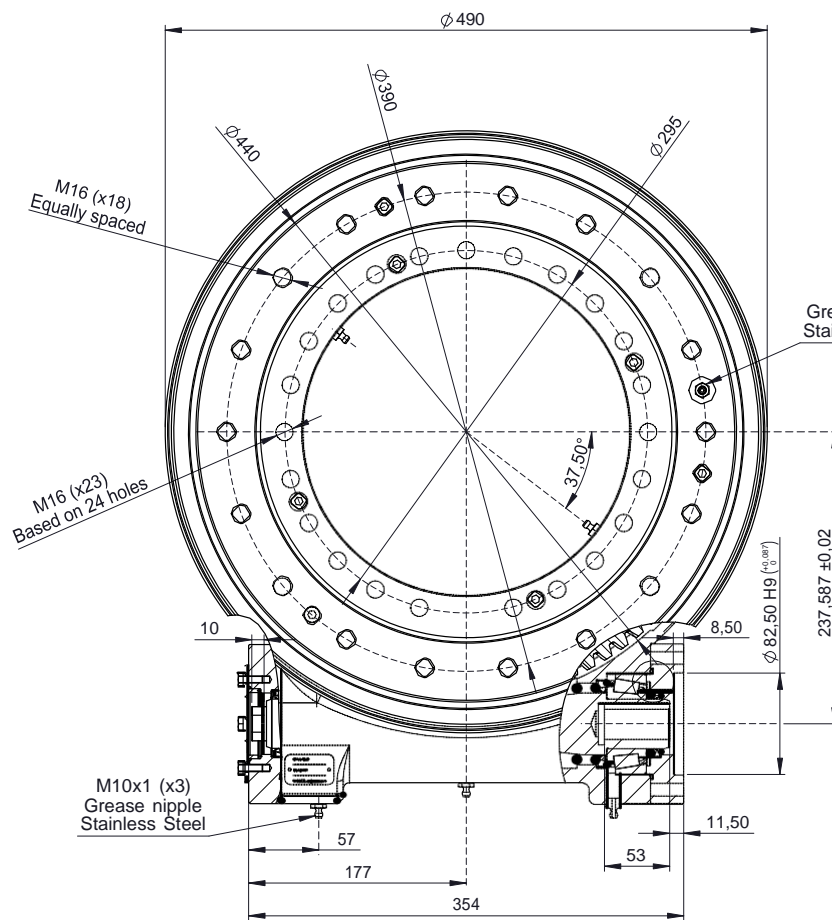
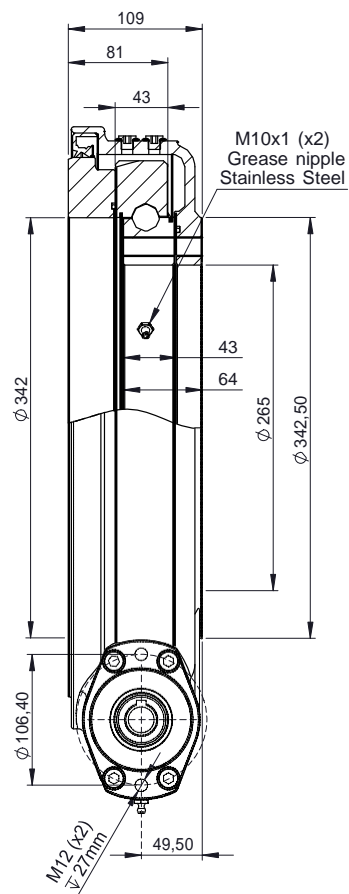
Units: mm

>1200	$\pm$ 1.2
>400.0 - 1200	$\pm$ 0.8
>120.0 - 400.0	$\pm$ 0.5
>30.0 - 120.0	$\pm$ 0.3
>6.0 - 30.0	$\pm$ 0.2
>3.0 - 6.0	$\pm$ 0.1
>0.3 - 3.0	$\pm$ 0.1
Range of sizes	Unstated tolerance



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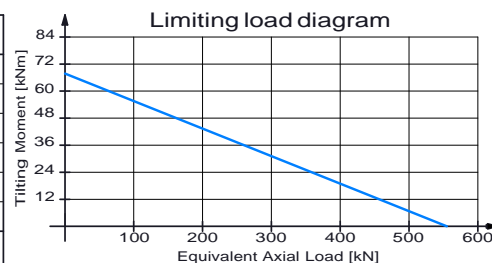
Reference	TE314-Z0-RM		Rev	A
Denomination	Sales drawing			
MATERIAL:	-	WEIGHT [kg]:	48.65	NUM. PIECES: 1
SCALE:	-	SIZE:	-	SHEET: 1 of 1



### Main performance parameters

Gear Ratio	85:1	Holding torque	43.2kNm
Efficiency	40%	Tilting moment	67,8kNm
Self-locking gear	Yes	Radial static load	222kN
Backlash clearance	<0,17°	Axial static load	555kN
Maximum torque	12.308Nm	Radial dynamic load	117kN
Nominal torque	10.200Nm	Axial dynamic load	133kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



Shaft:  $\phi 25\text{mm}$  Keyed Shaft  
Flange: SAE - 2Bolt Flange

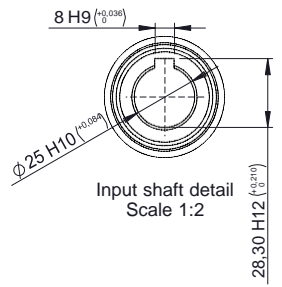
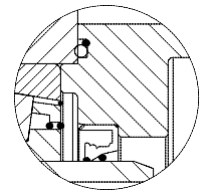
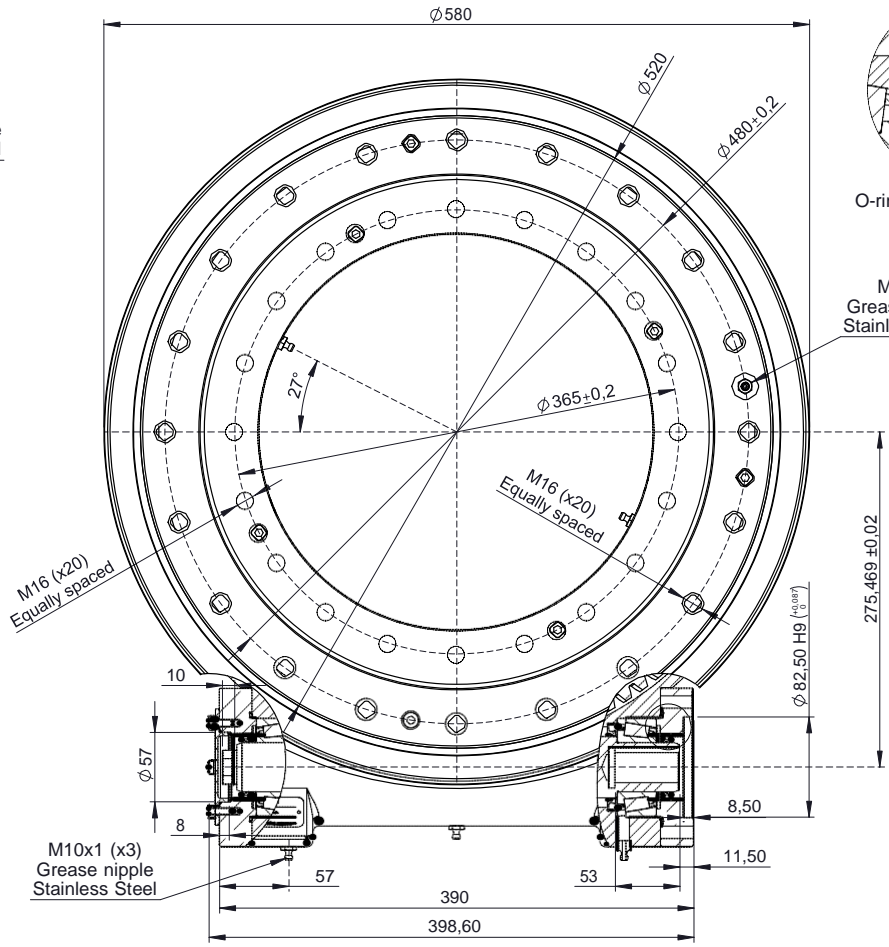
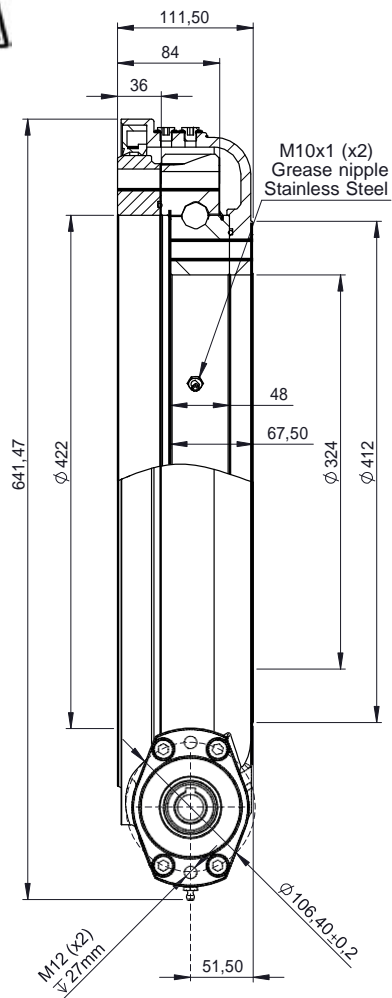
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>1200	±1,2
>400,0 - 1200	±0,8
>120,0 - 400,0	±0,5
>30,0 - 120,0	±0,3
>6,0 - 30,0	±0,2
>3,0 - 6,0	±0,1
>0,3 - 3,0	±0,1
Range of sizes	Unstated tolerance

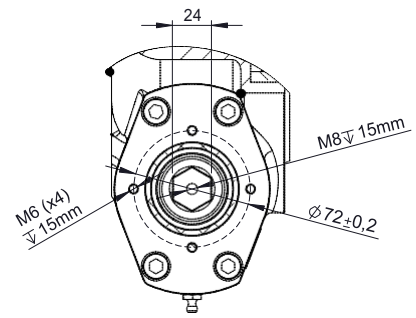


Reference	TE435-Z0-RM	Rev	A
Units: mm	Denomination	Sales Drawing	
MATERIAL:	WEIGHT [kg]: 70.34	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	

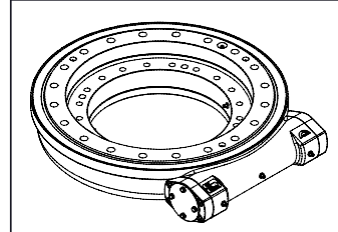
TE Series  
Metric



M10x1 Grease nipple Stainless Steel

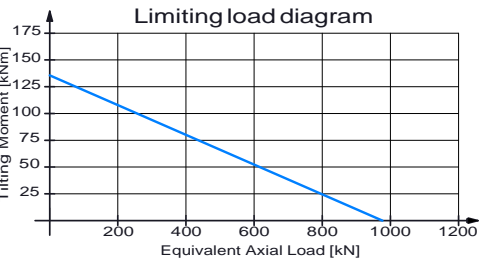


Output shaft detail Scale 1:5



Main performance parameters			
Gear Ratio	102:1	Holding torque	65,1kNm
Efficiency	40%	Tilting moment	135,6kNm
Self-locking gear	Yes	Radial static load	391kN
Backlash clearance	<0,15°	Axial static load	977kN
Maximum torque	18.034Nm	Radial dynamic load	205kN
Nominal torque	15.096Nm	Axial dynamic load	235kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



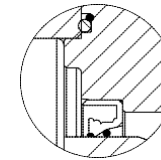
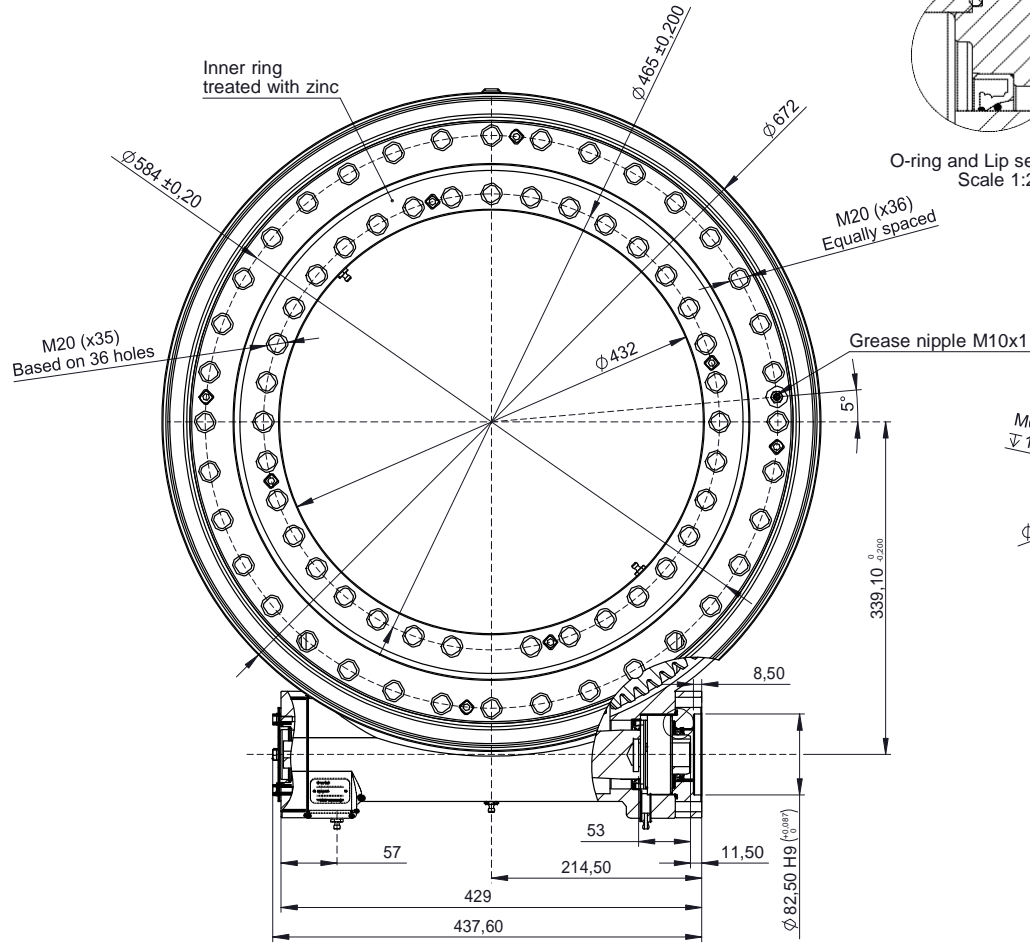
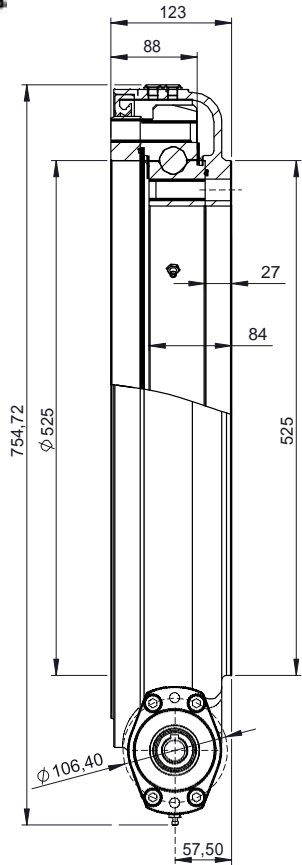
Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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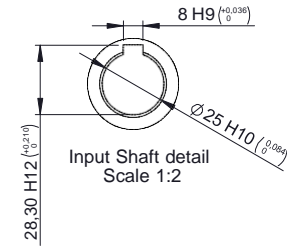
<p>TGBGROUP www.TGBgroup.es</p>			
Reference	TE523-Z0-RM	Rev	B
Denomination Sales Drawing			
MATERIAL: -	WEIGHT [kg]: 94.52	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	

TE series  
Metric

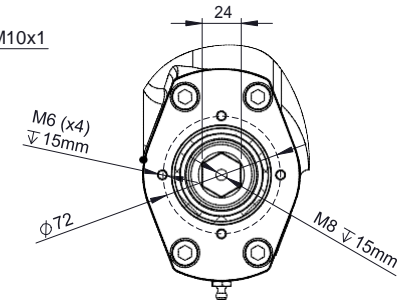




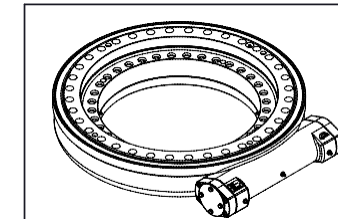
O-ring and Lip seal Detail  
Scale 1:2



Input Shaft detail  
Scale 1:2



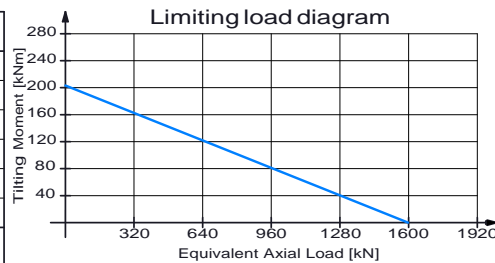
Output Shaft detail  
Scale 1:3



### Main performance parameters

Gear Ratio	125:1	Holding torque	95,2kNm
Efficiency	40%	Tilting moment	203,4kNm
Self-locking gear	Yes	Radial static load	640kN
Backlash clearance	<0,15°	Axial static load	1.598kN
Maximum torque	30.500Nm	Radial dynamic load	336kN
Nominal torque	23.500Nm	Axial dynamic load	384kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft: Ø25mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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Units: mm

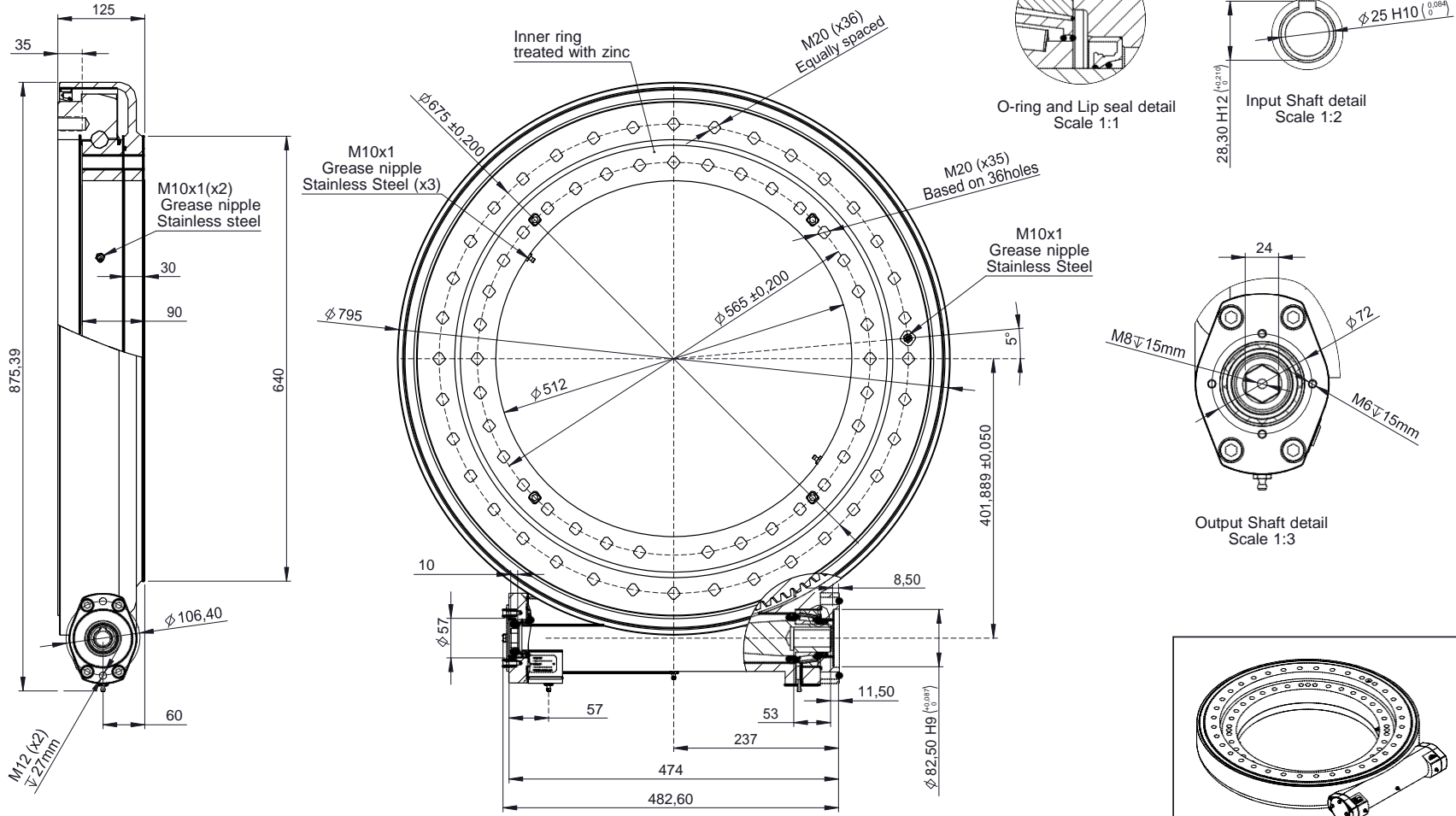
>125:1	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unlimited tolerance



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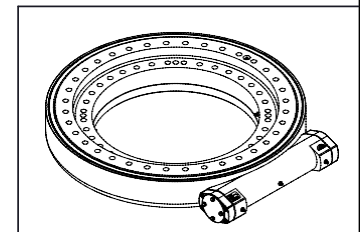
Reference	TE639-Z0-RM		Rev	A	
Denomination	Sales Drawing				
MATERIAL:	-	WEIGHT [kg]:	118.54	NUM. PIECES:	1
SCALE:	-	SIZE:	-	SHEET:	1 of 1

**TE series**  
Metric



# TE Series

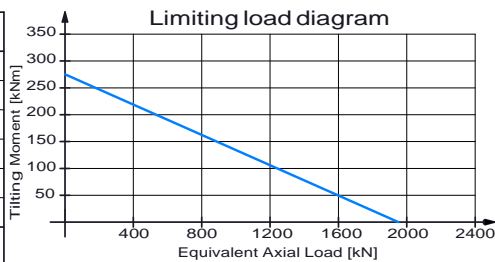
Metric



### Main performance parameters

Gear Ratio	150:1	Holding torque	142.5kNm
Efficiency	40%	Tilting moment	277kNm
Self-locking gear	Yes	Radial static load	770kN
Backlash clearance	<0,15°	Axial static load	1926kN
Maximum torque	45320Nm	Radial dynamic load	405kN
Nominal torque	35260Nm	Axial dynamic load	463kN

Notes: All stew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft: 25mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unrelated tolerance



Reference	TE760-Z0-RM		Rev	A
Units: mm	Denomination	Sales Drawing		
MATERIAL:	-	WEIGHT [kg]:	192.73	NUM. PIECES: 1
SCALE:	-	SIZE:	-	SHEET: 1 of 1

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# Série TGE



## Popis

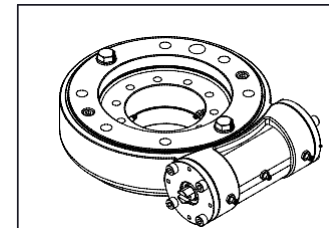
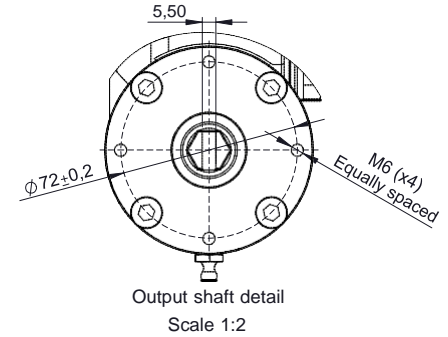
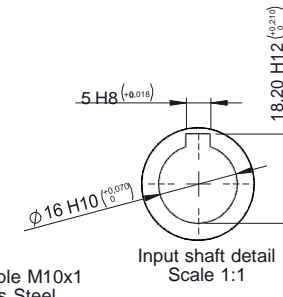
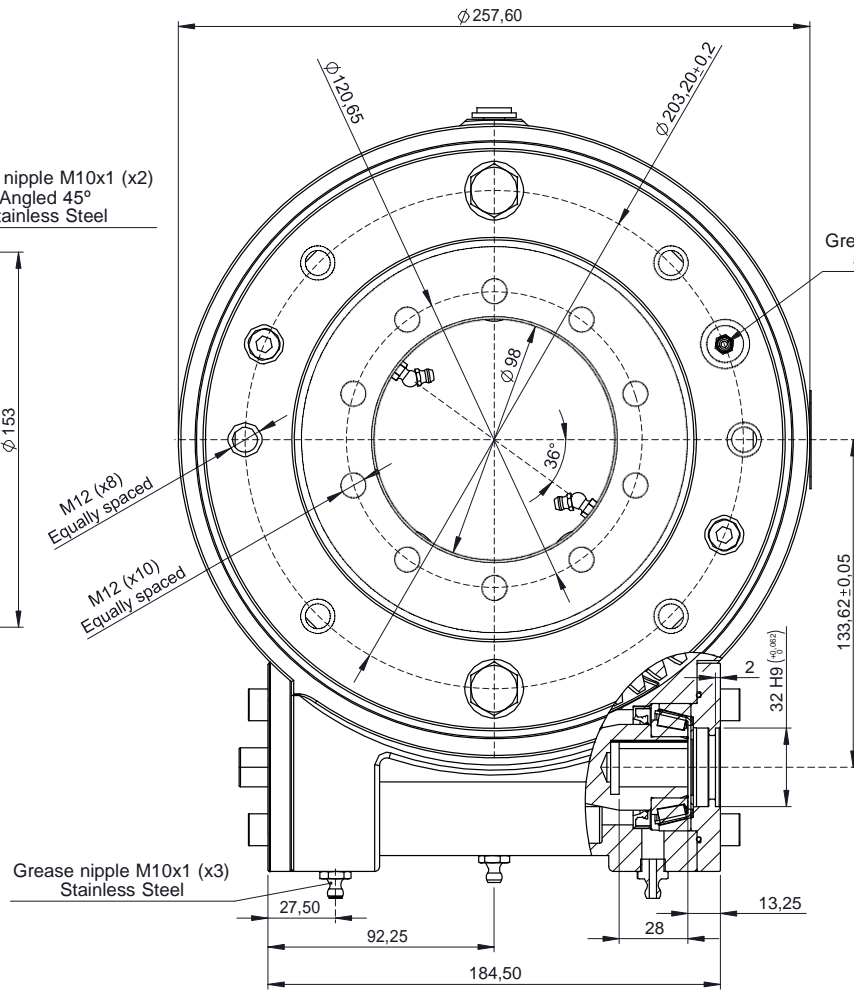
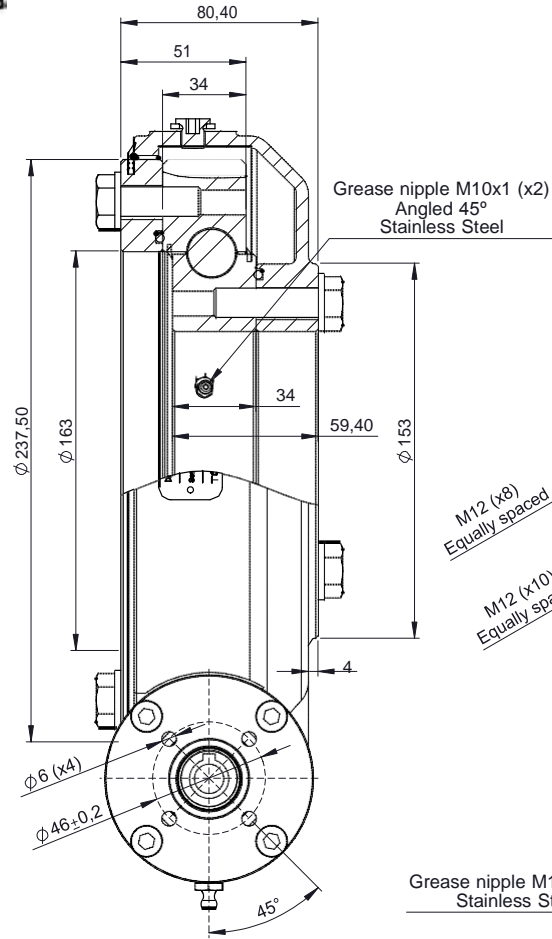
Série TGE představuje nejstandardnější a nízkonákladové otočné pohony, jelikož mají standardní těsnění, které chrání vnitřní součásti otočného pohonu. Vnitřní součásti tohoto otočného pohonu zahrnují spirálový otočný prstenec spolu s globoidním šnekovým převodem, který dokáže zvládnout i vysoké zatížení díky počtu zubů, které jsou v kontaktu mezi oběma částmi. Tato série se hodí pro standardní případy použití, kde nejsou žádné speciální požadavky vzhledem k prostředí.

## Hlavní vlastnosti

- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

- Stavební stroje, použití ve vnitřních prostorech, atd.



# TGE series

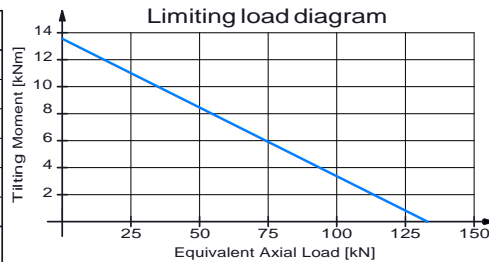
Metric

47

### Main performance parameters

Gear Ratio	71:1	Holding torque	9,4kNm
Efficiency	40%	Tilting moment	13,6kNm
Self-locking gear	Yes	Radial static load	53kN
Backlash clearance	<0,20°	Axial static load	133kN
Maximum torque	1.458Nm	Radial dynamic load	28kN
Nominal torque	1.042Nm	Axial dynamic load	32kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated

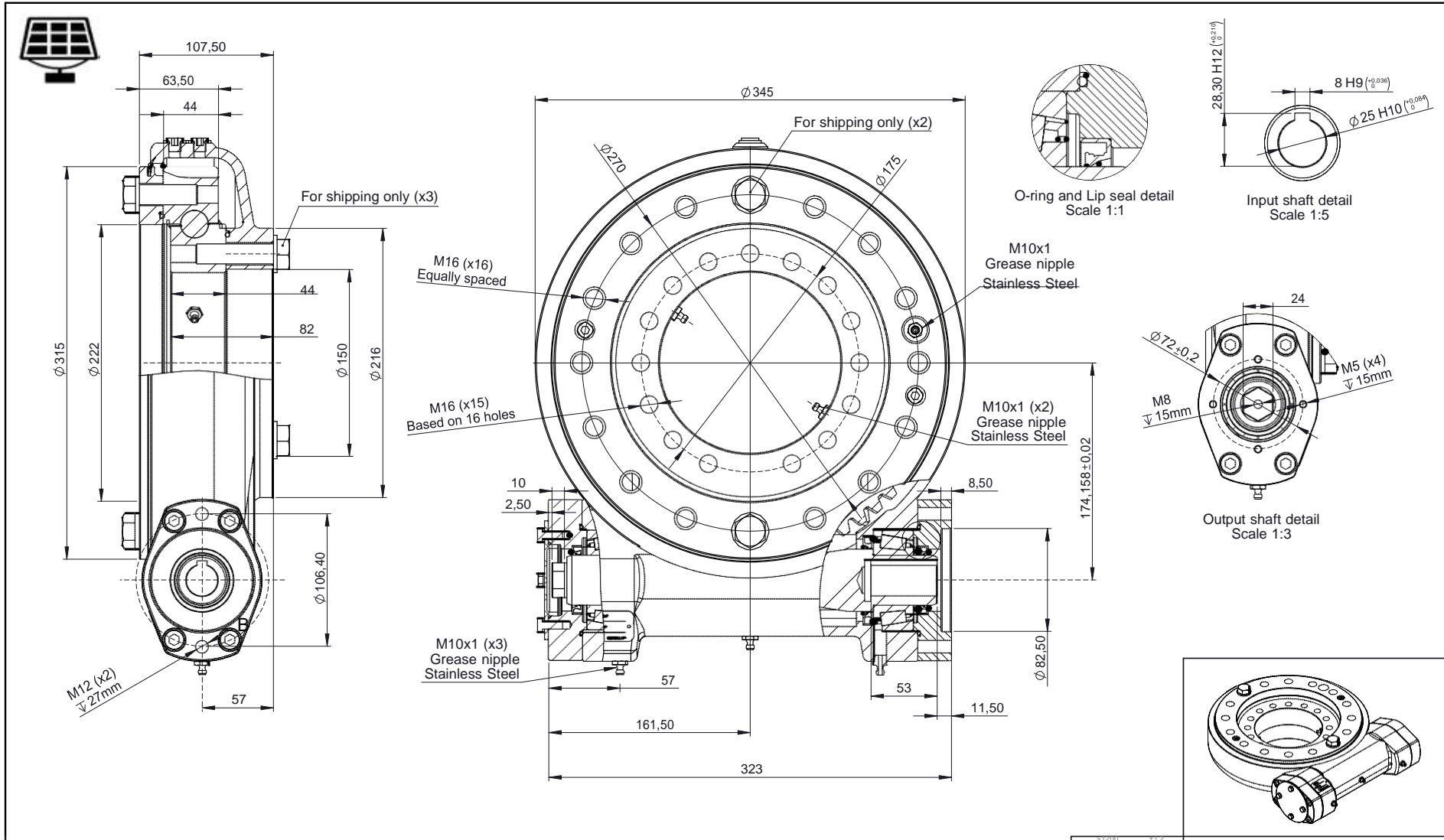


Shaft:  $\varnothing 16$ mm Keyed Shaft

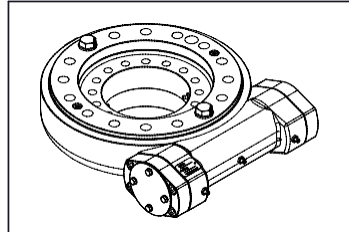
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>1200	±1,2	>400,0 - 1200	±0,8	<p><b>TGBGROUP</b> www.TGBgroup.es</p>
>120,0 - 400,0	±0,5	>120,0 - 400,0	±0,5	
>30,0 - 120,0	±0,3	>30,0 - 120,0	±0,3	
>6,0 - 30,0	±0,2	>6,0 - 30,0	±0,2	
>3,0 - 6,0	±0,1	>3,0 - 6,0	±0,1	
>0,3 - 3,0	±0,1	>0,3 - 3,0	±0,1	
Range of sizes	Unlimited tolerance			
Reference	TGE236-Z1-RM			Rev A
Units: mm	Denomination	Sales Drawing		
MATERIAL: -	WEIGHT [kg]: 19.52	NUM. PIECES: 1		
SCALE: -	SIZE: -	SHEET: 1 of 1		



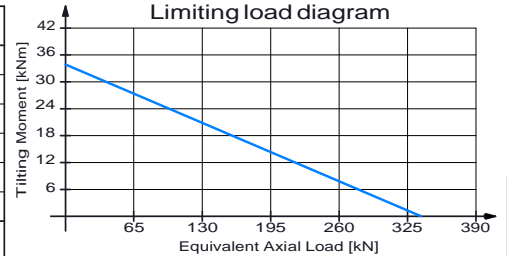


TGE Series  
Metric



Main performance parameters			
Gear Ratio	61:1	Holding torque	35kNm
Efficiency	40%	Tilting moment	33,9kNm
Self-locking gear	Yes	Radial static load	135kN
Backlash clearance	<0,17°	Axial static load	338kN
Maximum torque	8.835Nm	Radial dynamic load	71kN
Nominal torque	7.320Nm	Axial dynamic load	81kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.

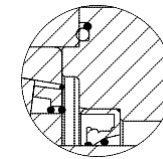
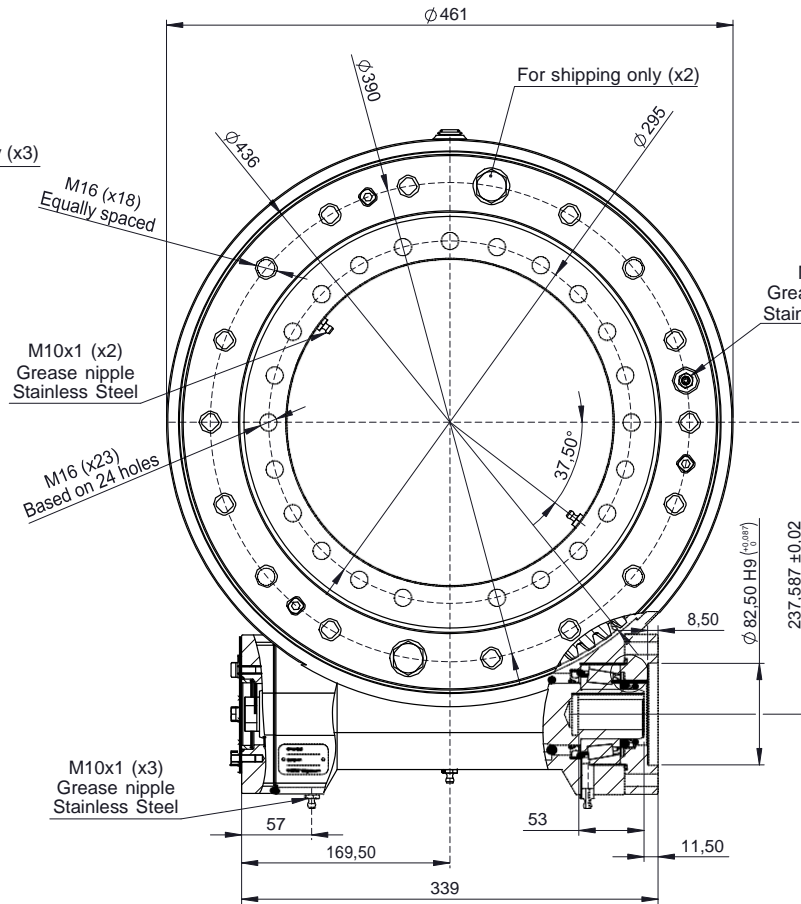
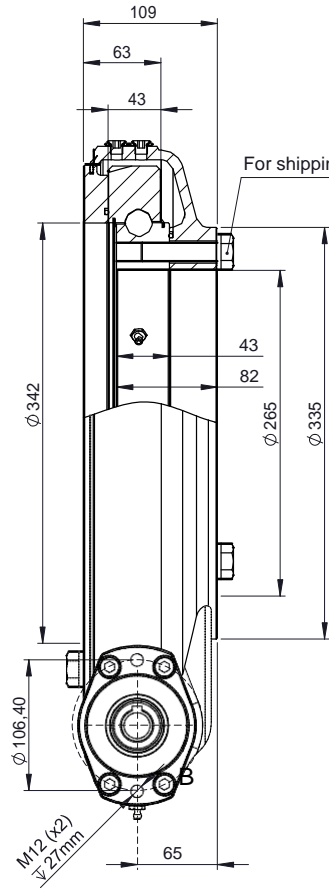


Shaft:  $\varnothing 25\text{mm}$  Keyed Shaft  
Flange: SAE - 2Bolt Flange

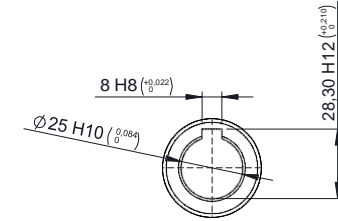
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<p>Reference <b>TGE314-Z0-RM</b></p>		Rev	A
<p>Denomination <b>Sales Drawing</b></p>			
MATERIAL: -	WEIGHT [kg]: 45,14	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	

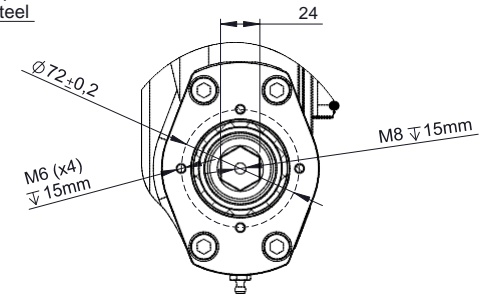




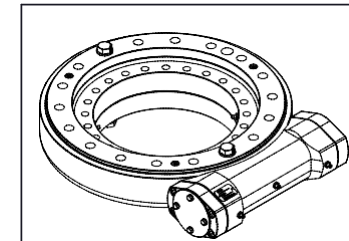
O-ring and Lip seal detail  
Scale 1:1



Input shaft detail  
Scale 1:2



Output shaft detail  
Scale 1:3

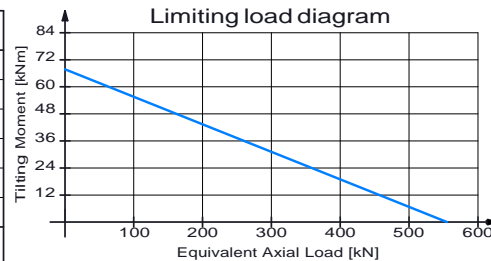


**Main performance parameters**

Gear Ratio	85:1	Holding torque	43.2kNm
Efficiency	40%	Tilting moment	67,8kNm
Self-locking gear	Yes	Radial static load	222kN
Backlash clearance	<0,17°	Axial static load	555kN
Maximum torque	12.308Nm	Radial dynamic load	117kN
Nominal torque	10.200Nm	Axial dynamic load	133kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated

**Limiting load diagram**



Shaft:  $\varnothing 25\text{mm}$  Keyed Shaft  
Flange: SAE - 2Bolt Flange

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>1200	±1,2
>400,0 - 1200	±0,8
>120,0 - 400,0	±0,5
>30,0 - 120,0	±0,3
>6,0 - 30,0	±0,2
>3,0 - 6,0	±0,1
>0,3 - 3,0	±0,1
Range of sizes	Unstated tolerance

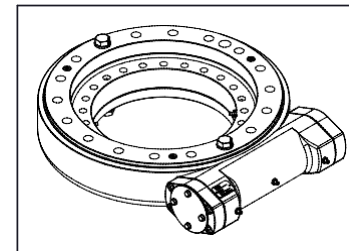
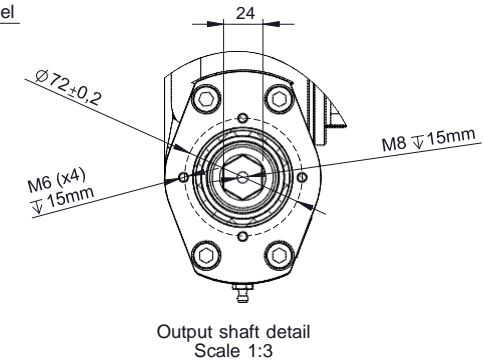
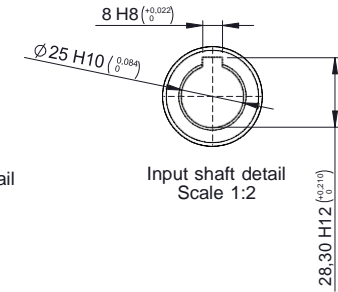
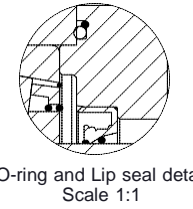
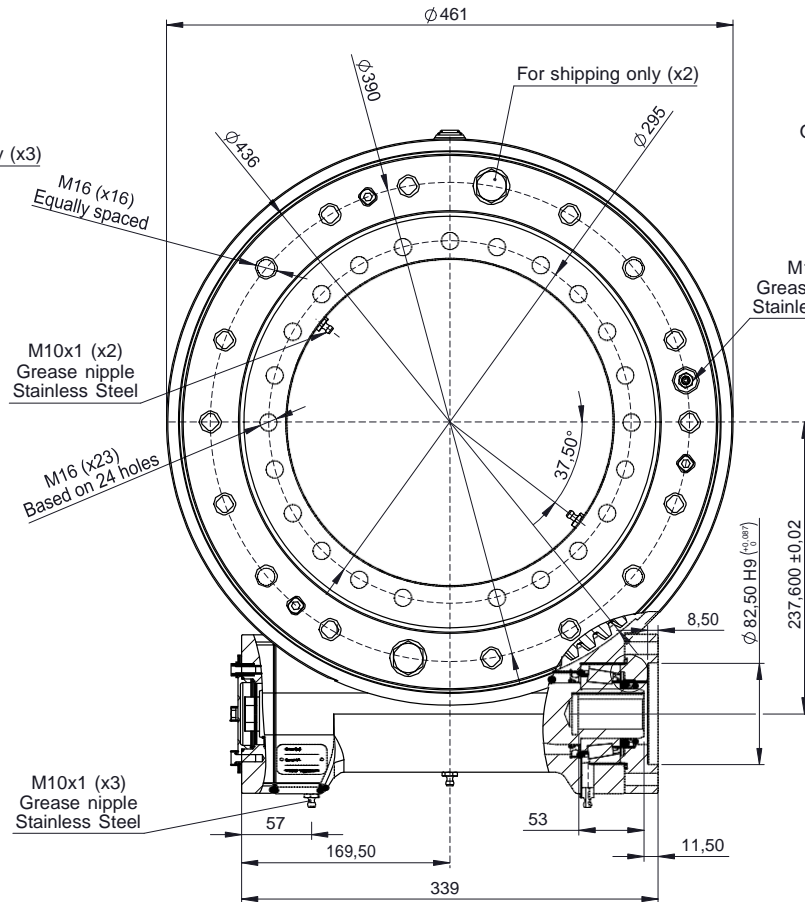
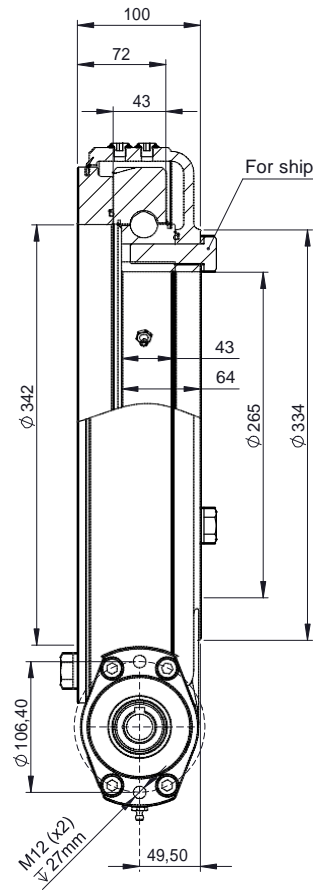


**TGBGROUP**  
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www.TGBgroup.cz

Reference	TGE435-Z0-RM	Rev	B
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Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]:	63.67	NUM. PIECES: 1
SCALE: -	SIZE: -	SHEET: 1 of 1	

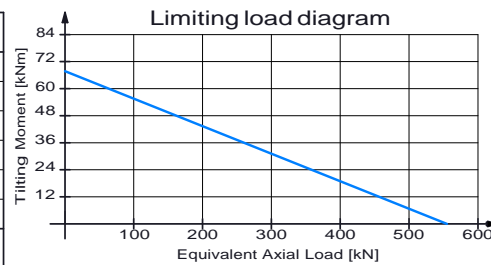
**TGE Series**  
Metric



### Main performance parameters

Gear Ratio	85:1	Holding torque	43.2kNm
Efficiency	40%	Tilting moment	67,8kNm
Self-locking gear	Yes	Radial static load	222kN
Backlash clearance	<0,17°	Axial static load	555kN
Maximum torque	12.308Nm	Radial dynamic load	117kN
Nominal torque	10.200Nm	Axial dynamic load	133kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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Range of sizes	Unstated tolerance
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1

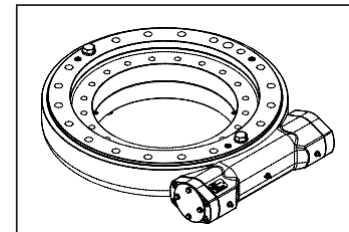
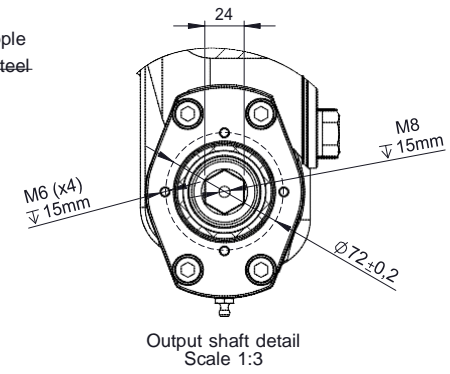
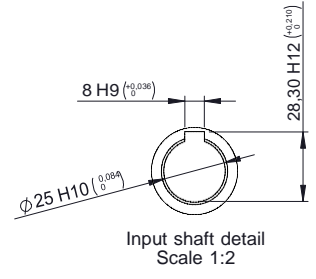
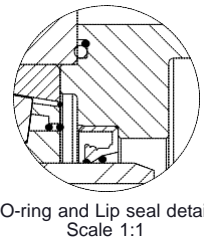
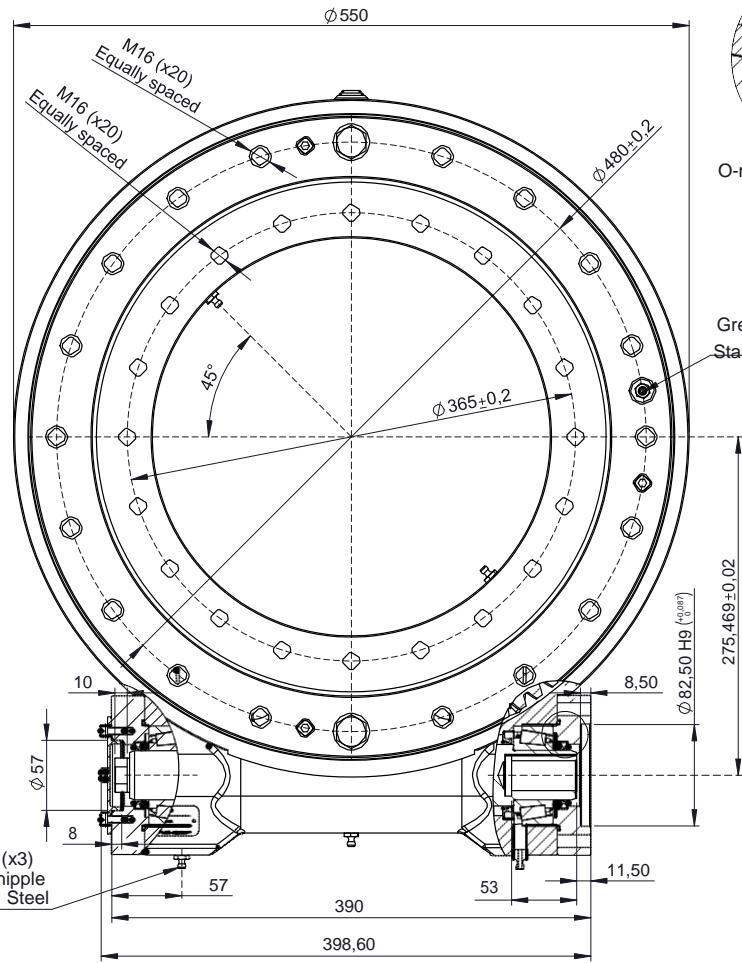
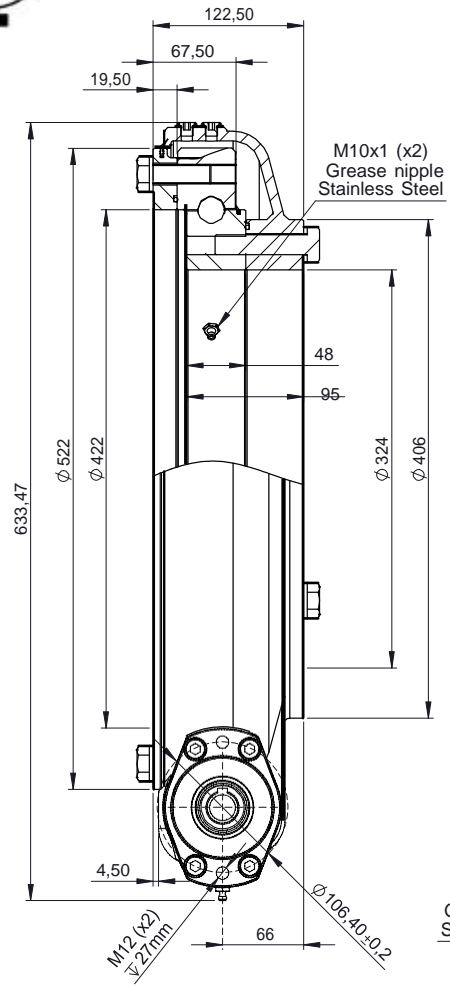


Reference: TGETN435-Z0-RM Rev B

Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 64.42	NUM. PIECES: 1	
SCALE: 1:4	SIZE: A3	SHEET: 1 of 1	

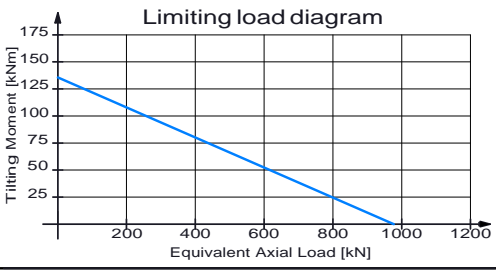
# TGE Series

Metric



Main performance parameters			
Gear Ratio	102:1	Holding torque	65,1kNm
Efficiency	40%	Tilting moment	135,6kNm
Self-locking gear	Yes	Radial static load	391kN
Backlash clearance	<0,15°	Axial static load	977kN
Maximum torque	18.034Nm	Radial dynamic load	205kN
Nominal torque	15.096Nm	Axial dynamic load	235kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated



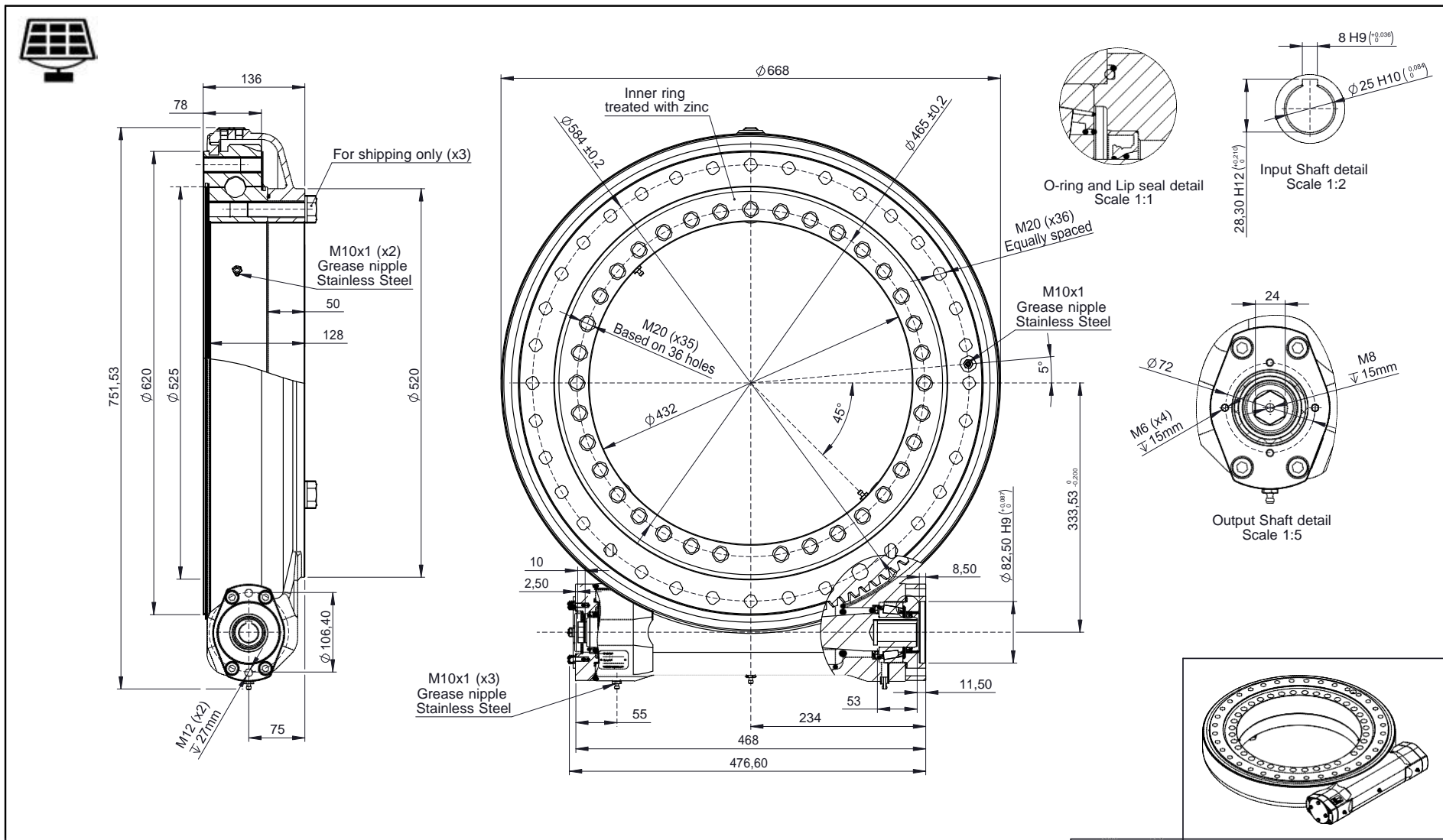
Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2 Bolt Flange

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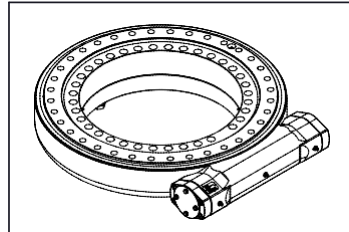
<table border="1"> <tr> <td>&gt;400.0 - 1200</td> <td>±0.8</td> </tr> <tr> <td>&gt;120.0 - 400.0</td> <td>±0.5</td> </tr> <tr> <td>&gt;30.0 - 120.0</td> <td>±0.3</td> </tr> <tr> <td>&gt;6.0 - 30.0</td> <td>±0.2</td> </tr> <tr> <td>&gt;3.0 - 6.0</td> <td>±0.1</td> </tr> <tr> <td>&gt;0.3 - 3.0</td> <td>±0.1</td> </tr> <tr> <td>Range of sizes</td> <td>Unstated tolerance</td> </tr> </table>		>400.0 - 1200	±0.8	>120.0 - 400.0	±0.5	>30.0 - 120.0	±0.3	>6.0 - 30.0	±0.2	>3.0 - 6.0	±0.1	>0.3 - 3.0	±0.1	Range of sizes	Unstated tolerance	<p>TGB GROUP www.TGBgroup.es</p>	
>400.0 - 1200	±0.8																
>120.0 - 400.0	±0.5																
>30.0 - 120.0	±0.3																
>6.0 - 30.0	±0.2																
>3.0 - 6.0	±0.1																
>0.3 - 3.0	±0.1																
Range of sizes	Unstated tolerance																
Reference TGE523-Z0-RM			Rev A														
Denomination Sales Drawing																	
MATERIAL: -	WEIGHT [kg]: 92.72	NUM. PIECES: 1															
SCALE: -	SIZE: -	SHEET: 1 of 1															

TGE Series  
Metric



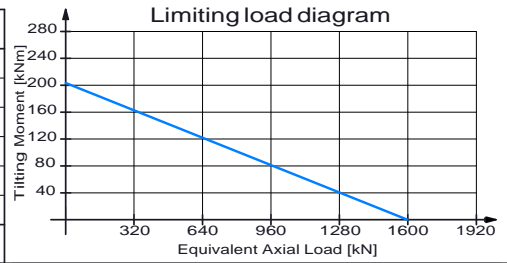


TGE series  
Metric



Main performance parameters			
Gear Ratio	125:1	Holding torque	95,2kNm
Efficiency	40%	Tilting moment	203,4kNm
Self-locking gear	Yes	Radial static load	640kN
Backlash clearance	<0,15°	Axial static load	1.598kN
Maximum torque	30.500Nm	Radial dynamic load	336kN
Nominal torque	23.500Nm	Axial dynamic load	384kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated

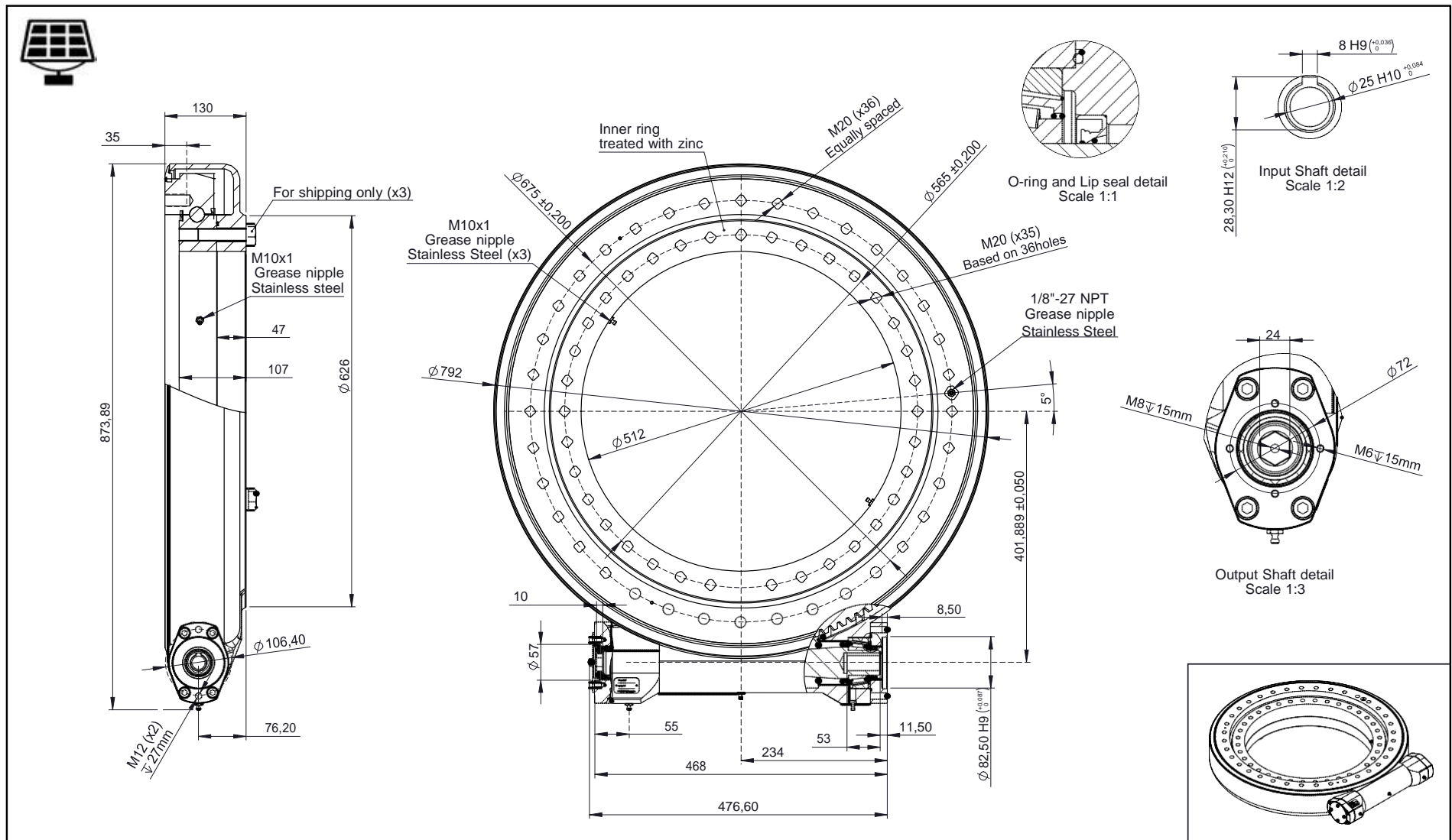


Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2bolt Flange

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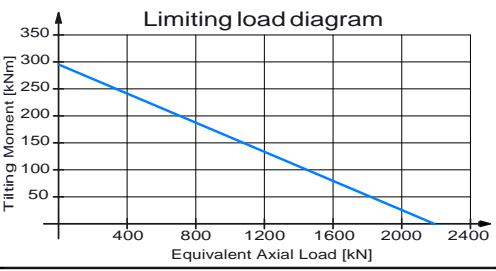
Reference	TGE639-Z0-RM		Rev
			B
Units: mm	Denomination	Sales Drawing	
	MATERIAL: -	WEIGHT [kg]: 136.59	NUM. PIECES: 1
	SCALE: 1:5	SIZE: A3	SHEET: 1 of 1





Main performance parameters			
Gear Ratio	150:1	Holding torque	142.5kNm
Efficiency	40%	Tilting moment	300 kNm
Self-locking gear	Yes	Radial static load	832kN
Backlash clearance	<0,15°	Axial static load	2190 kN
Maximum torque	45320Nm	Radial dynamic load	411 kN
Nominal torque	35260Nm	Axial dynamic load	517kN

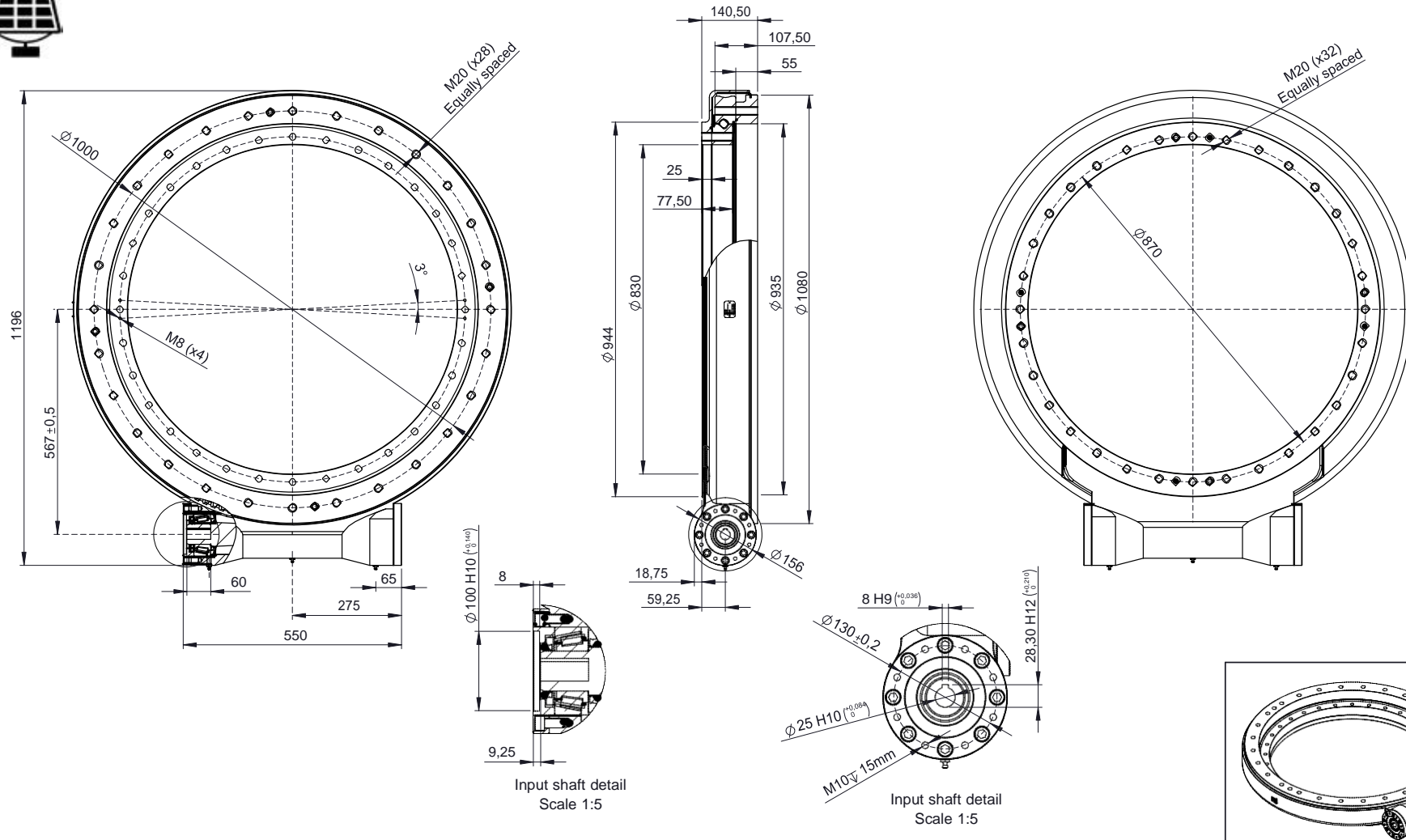
Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft:  $\varnothing 25$ mm Keyed Shaft  
Flange: SAE - 2Bolt Flange

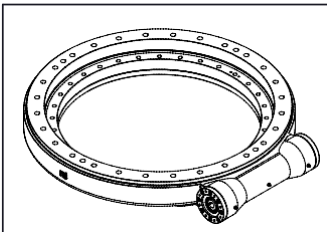
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<table border="1"> <tr> <td>&gt;1200</td> <td>±1,2</td> </tr> <tr> <td>&gt;400.0 - 1200</td> <td>±0,8</td> </tr> <tr> <td>&gt;120.0 - 400.0</td> <td>±0,5</td> </tr> <tr> <td>&gt;30.0 - 120.0</td> <td>±0,3</td> </tr> <tr> <td>&gt;6.0 - 30.0</td> <td>±0,2</td> </tr> <tr> <td>&gt;3.0 - 6.0</td> <td>±0,1</td> </tr> <tr> <td>&gt;0.3 - 3.0</td> <td>±0,1</td> </tr> <tr> <td>Range of sizes</td> <td>Unstated tolerance</td> </tr> </table>		>1200	±1,2	>400.0 - 1200	±0,8	>120.0 - 400.0	±0,5	>30.0 - 120.0	±0,3	>6.0 - 30.0	±0,2	>3.0 - 6.0	±0,1	>0.3 - 3.0	±0,1	Range of sizes	Unstated tolerance	<p><b>TGB GROUP</b> info@TGBgroup.es www.TGBgroup.es</p>	
>1200	±1,2																		
>400.0 - 1200	±0,8																		
>120.0 - 400.0	±0,5																		
>30.0 - 120.0	±0,3																		
>6.0 - 30.0	±0,2																		
>3.0 - 6.0	±0,1																		
>0.3 - 3.0	±0,1																		
Range of sizes	Unstated tolerance																		
Reference		TGE760-Z0-RM																	
		Rev A																	
Units: mm		Denomination Sales Drawing																	
MATERIAL: -	WEIGHT [kg]: 194.69	NUM. PIECES: 1																	
SCALE: -	SIZE: -	SHEET: 1 of 1																	



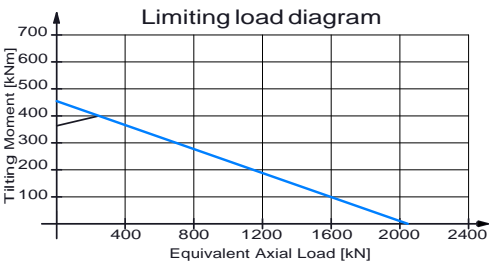
# TGE series

Metric



Main performance parameters			
Gear Ratio	150:1	Holding torque	90kNm
Efficiency	40%	Tilting moment	450kNm
Self-locking gear	Yes	Radial static load	800kN
Backlash clearance	<0,15°	Axial static load	2.100kN
Maximum torque	72.500Nm	Radial dynamic load	400kN
Nominal torque	30.000Nm	Axial dynamic load	500kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft:  $\varnothing 25\text{mm}$  Keyed Shaft

Range of sizes	Unstated tolerance
>400.0 - 1200	$\pm 0.8$
>120.0 - 400.0	$\pm 0.5$
>30.0 - 120.0	$\pm 0.3$
>6.0 - 30.0	$\pm 0.2$
>3.0 - 6.0	$\pm 0.1$
>0.3 - 3.0	$\pm 0.1$



Reference		TGE1050-Z0-LM		Rev	A
Units: mm					
Denomination TGE1050 - Sales Drawing					
MATERIAL:	-	WEIGHT [kg]:	303.61	NUM. PIECES:	1
SCALE:	-	SIZE:	-	SHEET:	1 of 1

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# Série DADA



## Popis

Série DADA představuje naše otočné pohony větší velikosti, které dokážou zvládnout vysoké zatížení v točivém a klopném momentu s pomocí své odolné geometrie. Díky válcovému šnekovému převodu a globoidnímu otočnému prstenci tato série pohonů zaručuje malý odpor a plynulý provoz i při velké zátěži.

Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

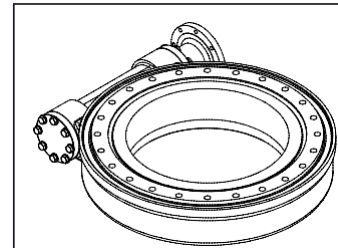
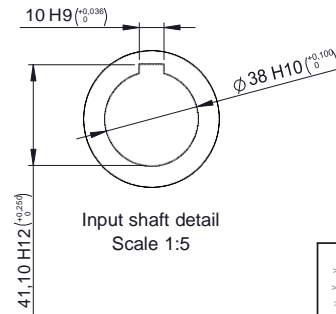
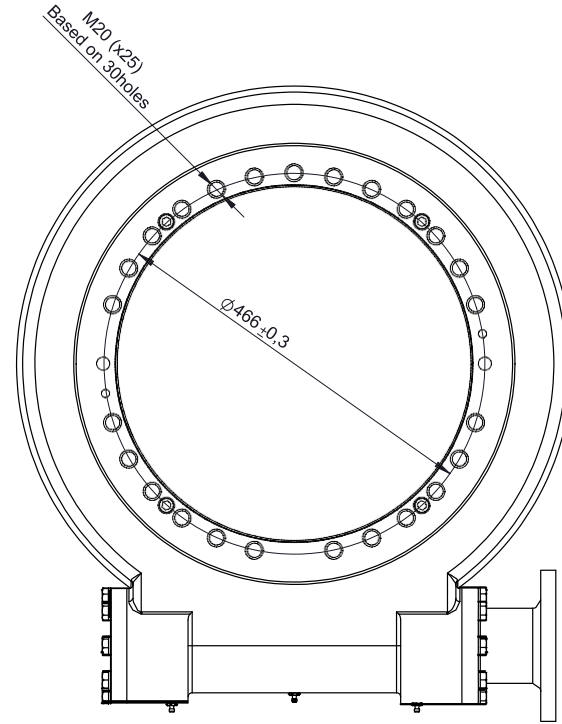
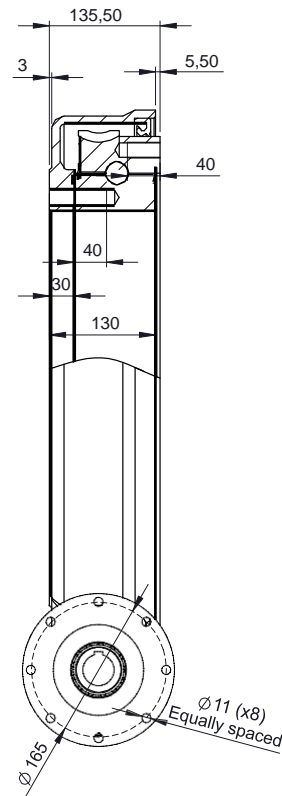
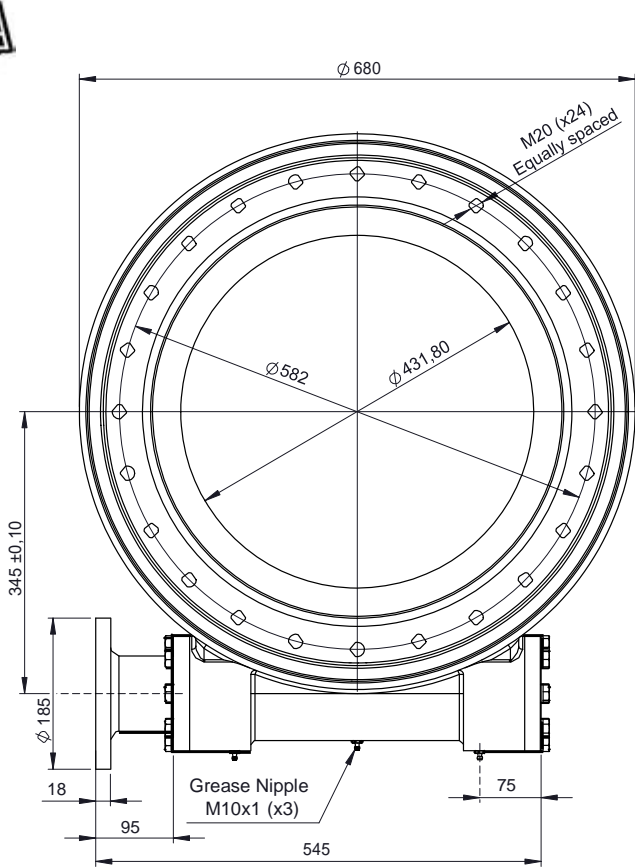
## Hlavní vlastnosti

- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických jednotkách; typy hřídele: hřídel s drážkou

## Hlavní oblasti použití

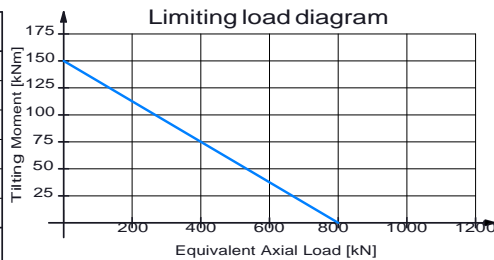
- Solární sledovací zařízení, přístavní jeřáby, atd.





### Main performance parameters

Gear Ratio	102:1	Holding torque	84kNm
Efficiency	34%	Tilting moment	150kNm
Self-locking gear	Yes	Radial static load	315kN
Backlash clearance	<0.03° (<0.5mrad)	Axial static load	800kN
Maximum torque	50.000Nm	Radial dynamic load	160kN
IP	55	Axial dynamic load	380kN



Shaft:  $\varnothing 8$ mm keyed shaft

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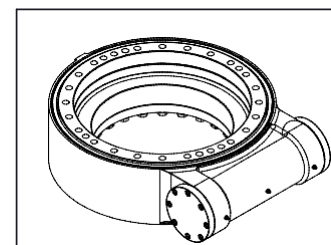
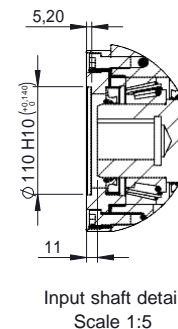
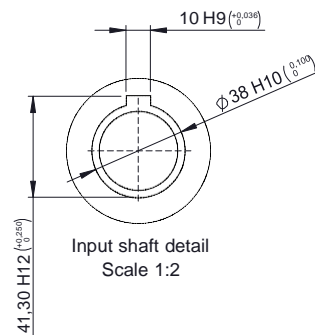
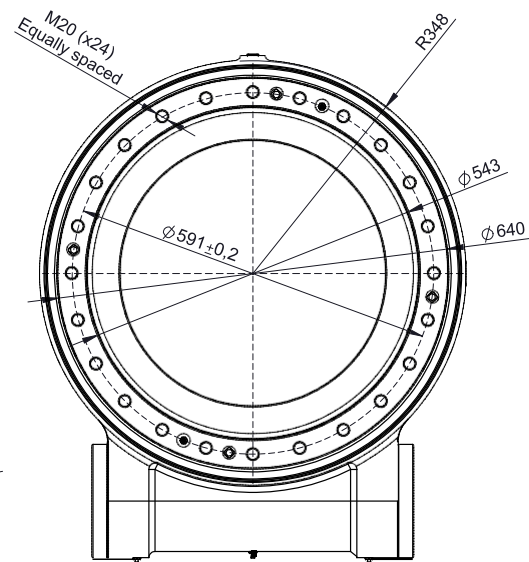
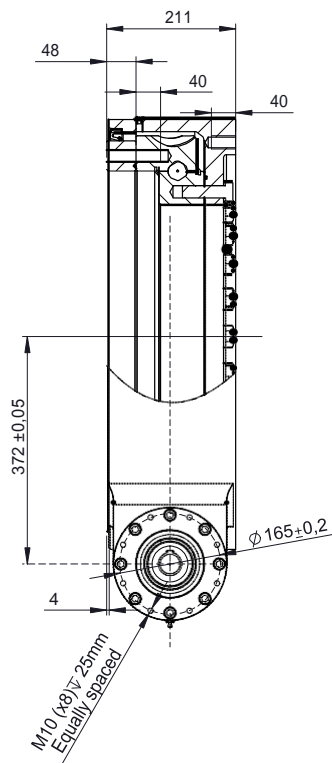
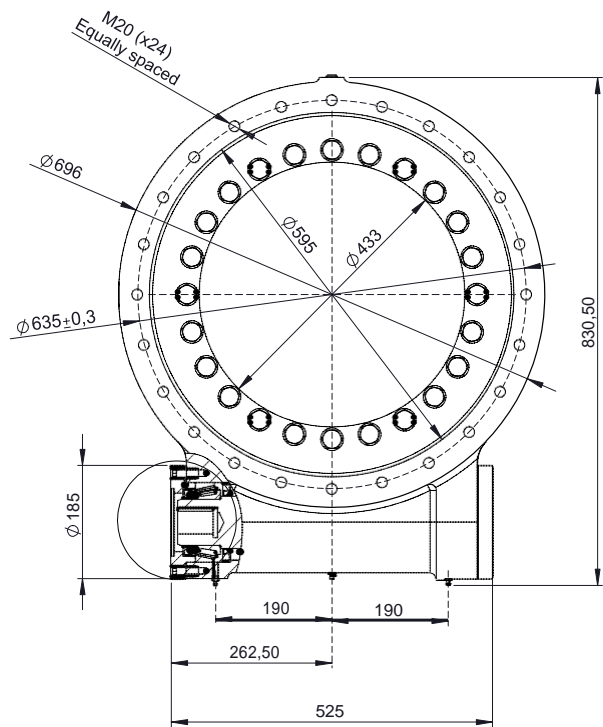
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



Reference	DADA6-Z0-LM		Rev	B
Units: mm	Denomination	Sales Drawing		
MATERIAL: -	WEIGHT [kg]: 183.23	NUM. PIECES: 1		
SCALE: -	SIZE: -	SHEET: 1 of 1		



57

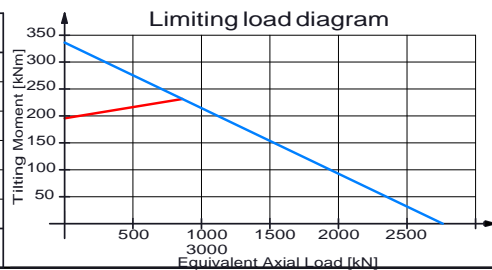


DADA series

Main performance parameters

Gear Ratio	80:1	Holding torque	105kNm
Efficiency	30%	Tilting moment	340kNm
Self-locking gear	Yes	Radial static load	1.242kN
Backlash clearance	<0,03°	Axial static load	2.755kN
Maximum torque	50.000Nm	Radial dynamic load	312kN
Nominal torque	28.000Nm	Axial dynamic load	688kN

Notes: All sleew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft: Ø8mm keyed shaft

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>1200	±1,2
>400.0 - 1200	±0,8
>120.0 - 400.0	±0,5
>30.0 - 120.0	±0,3
>6.0 - 30.0	±0,2
>3.0 - 6.0	±0,1
>0.3 - 3.0	±0,1
Range of sizes	Unlimited tolerance



Reference: DADA8S-Z0-RM Rev A

Units: mm	Denomination: Sales Drawing
MATERIAL: -	WEIGHT [kg]: 300.68
SCALE: -	SIZE: -
NUM. PIECES: 1	SHEET: 1 of 1

# Vertikální série



## Popis

Vertikální série zahrnuje otočné pohony opatřené patkou, která umožňuje přímou montáž na konstrukci, na níž bude otočný pohon pracovat ve vertikální poloze. Místo otočného prstence tento se druh otočného pohonu skládá z ozubeného prstence instalovaného do krytu pomocí ložisek nebo pouzder.

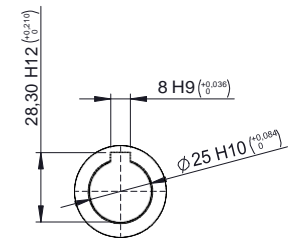
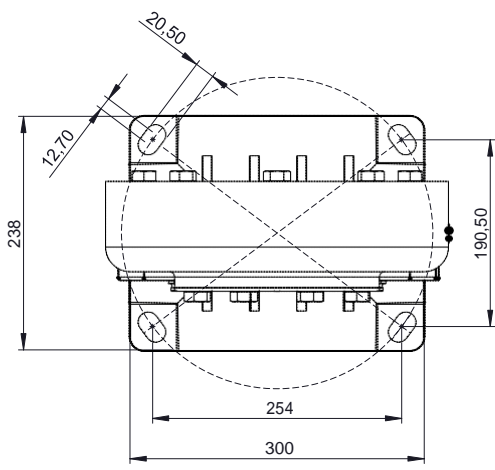
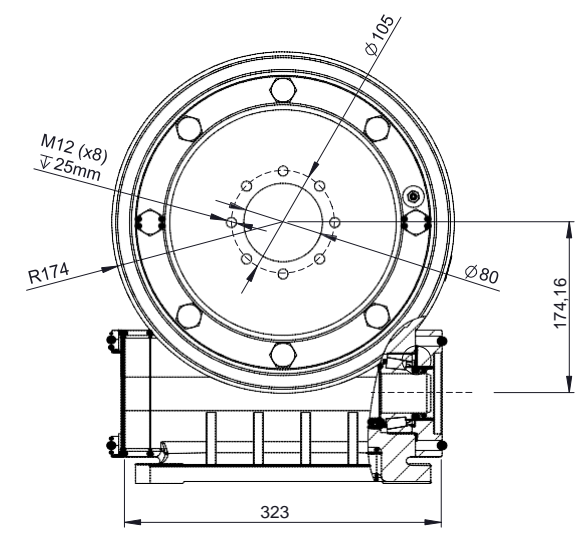
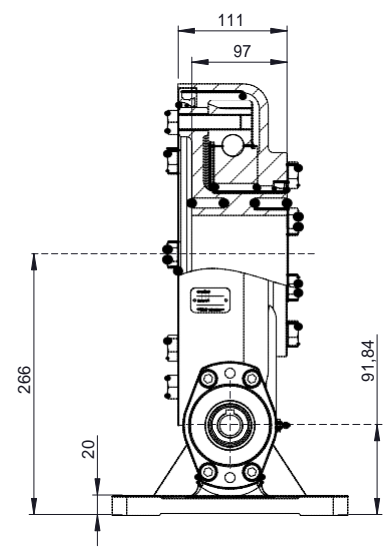
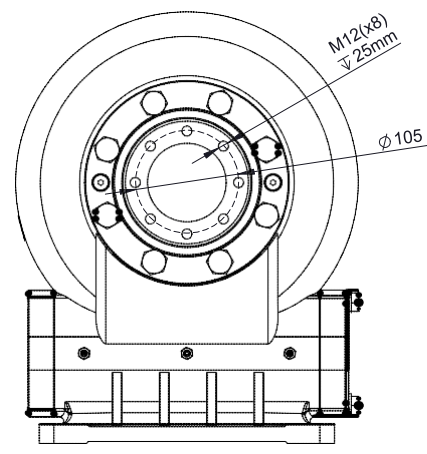
Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

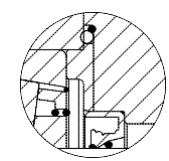
- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- velikosti v metrických a imperiálních jednotkách; typy hřídele: hřídel s drážkou nebo drážkový hřídel

## Hlavní oblasti použití

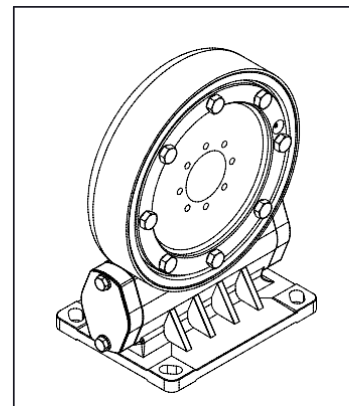
- Solární sledovací zařízení (1 osa – horizontální osa otáčení)



Input shaft detail  
 Scale 1:2



Lip seal detail  
 Scale 1:1

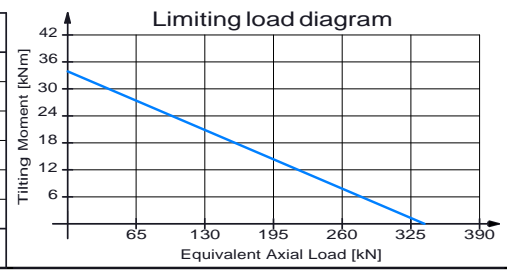


Vertical series

Main performance parameters

Gear Ratio	61:1	Holding torque	35kNm
Efficiency	40%	Tilting moment	33,9kNm
Self-locking gear	Yes	Radial static load	135kN
Backlash clearance	<0,17°	Axial static load	338kN
Maximum torque	8.835Nm	Radial dynamic load	71kN
Nominal torque	7.320Nm	Axial dynamic load	81kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.



Shaft:  $\phi$ 25mm keyed shaft

>1200	$\pm$ 1.2
>400.0 - 1200	$\pm$ 0.8
>120.0 - 400.0	$\pm$ 0.5
>30.0 - 120.0	$\pm$ 0.3
>6.0 - 30.0	$\pm$ 0.2
>3.0 - 6.0	$\pm$ 0.1
>0.3 - 3.0	$\pm$ 0.1
Range of sizes	Unlimited tolerance



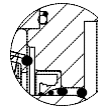
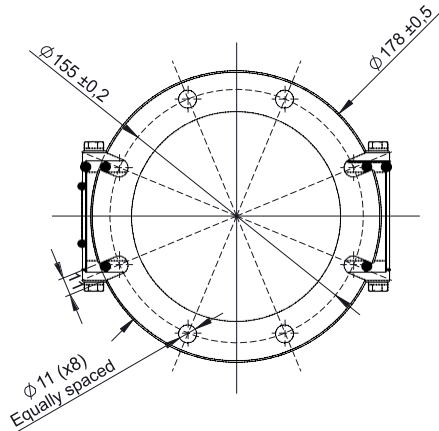
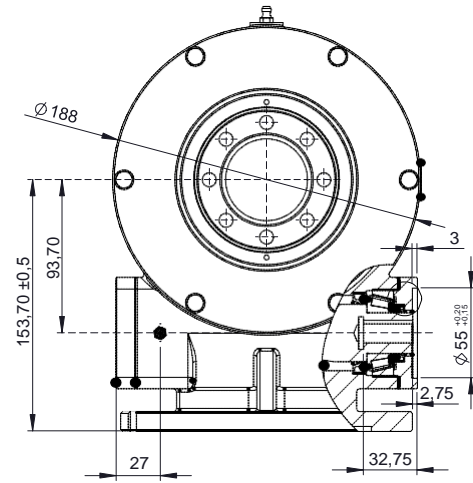
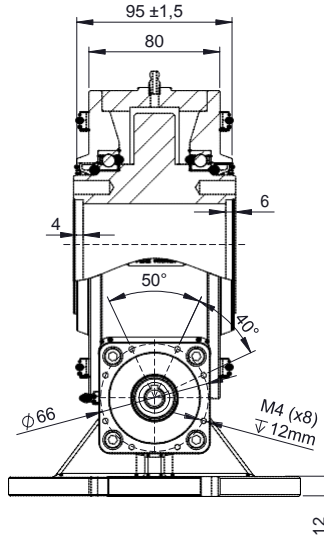
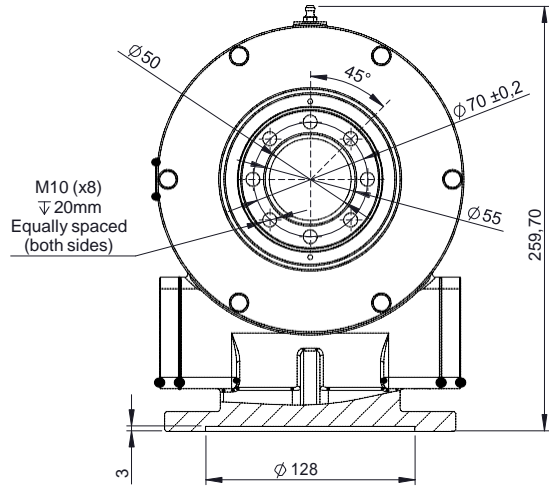
**TGBGROUP**  
 INFO@TGBGROUP.ES  
 WWW.TGBGROUP.ES

Reference	TGZ314-Z1-RM	Rev	A
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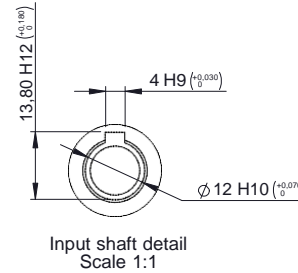
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Units: mm	Denomination	Sales Drawing	
MATERIAL: -	WEIGHT [kg]: 66.15	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	

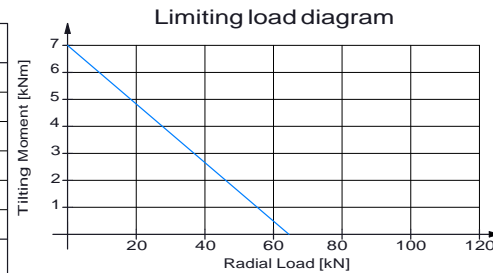
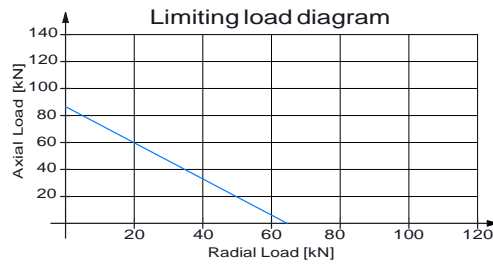
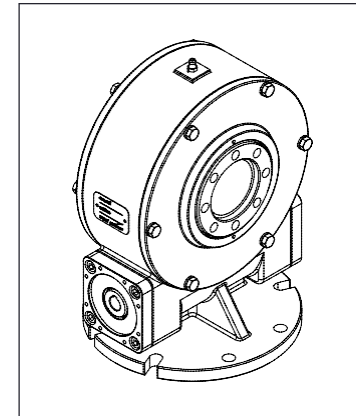




O-ring and Lip seal detail Scale 1:1



Input shaft detail Scale 1:1



Main performance parameters

Gear Ratio	62:1	Holding torque	4kNm
Efficiency	30%	Tilting moment	852Nm
Self-locking gear	Yes	Radial static load	32kN
Backlash clearance	<0,20°	Axial static load	12.8kN
Nominal torque	600Nm	Axial dinamic load	12kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm. All screws DACROMET treated

>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated

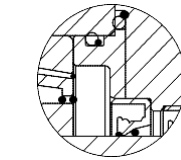
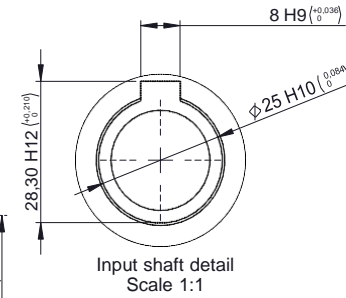
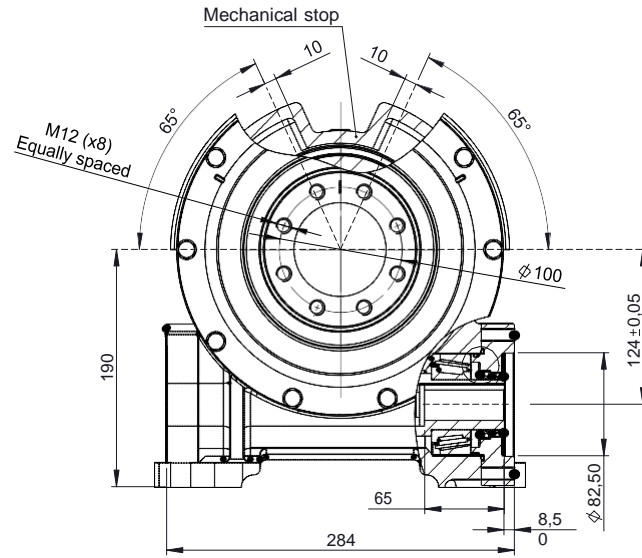
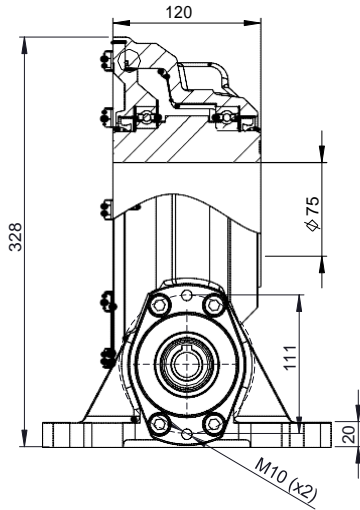
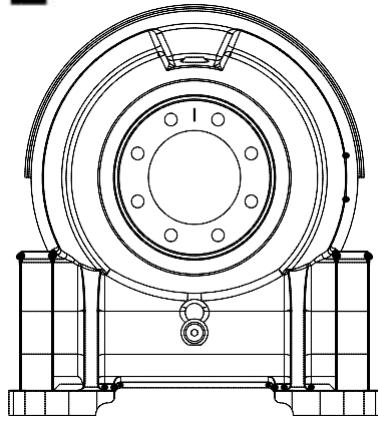


Shaft: Ø2mm keyed shaft

Reference	TVR160-Z0-RM	Rev	A
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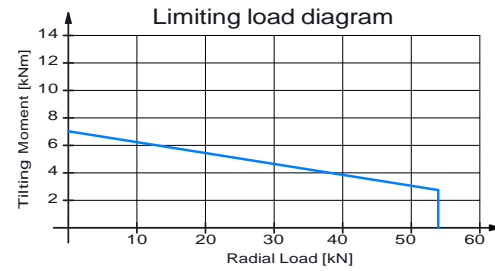
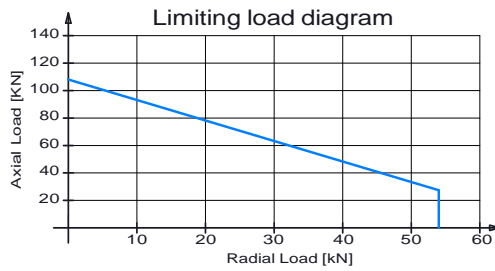
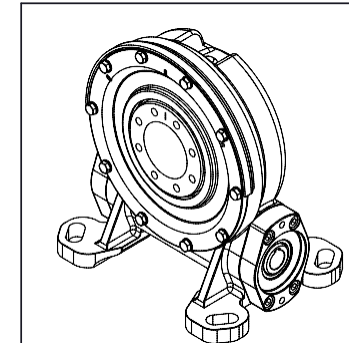
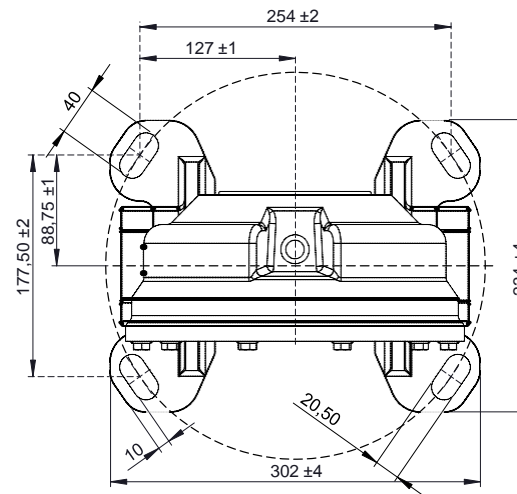
Units: mm	Denomination	Sales Drawing	
MATERIAL:	WEIGHT [kg]:	18.27	NUM. PIECES: 1
SCALE:	SIZE:	-	SHEET: 1 of 1



O-ring and Lip seal detail  
Scale 1:1



O-ring on Top Plate detail  
Scale 1:1



### Main performance parameters

Gear Ratio	40:1	Holding torque	34kNm
Efficiency	40% ±5%	Tilting moment	7kNm
Self-locking gear	Yes	Radial static load	54kN
Backlash clearance	<0,20°	Axial static load	108kN
Maximum torque	9.600Nm	Radial dynamic load	49kN
Nominal torque	7.000Nm	Axial dynamic load	98kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated. Standard paint for corrosion category C3-M - Grey RAL 7040

Note: This slewing drive is only able to turn 120° due to the mechanical stop on the upper part of the drive

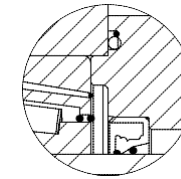
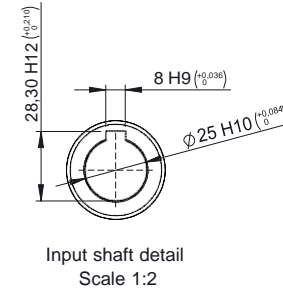
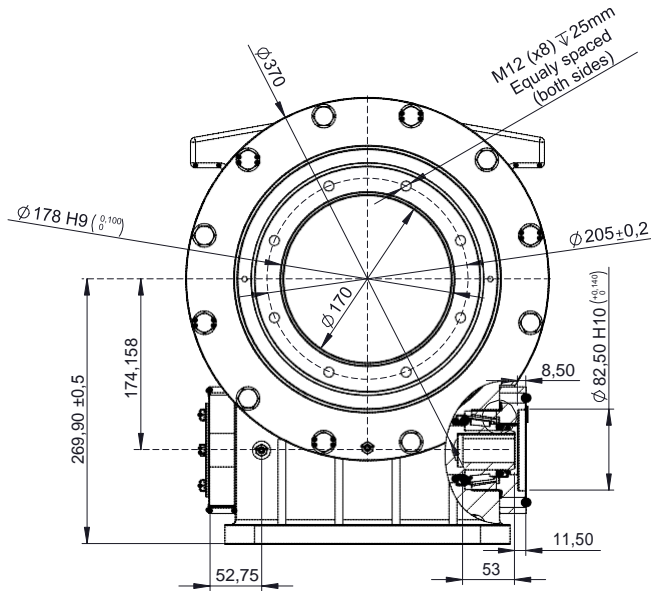
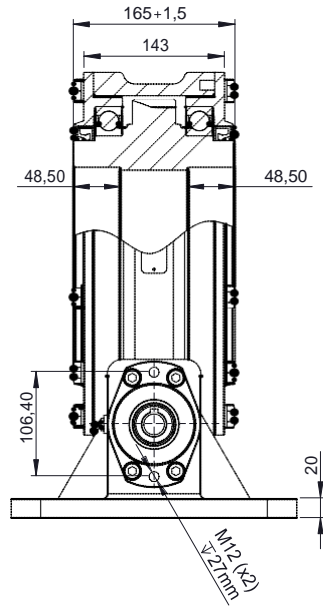
Shaft:  $\varnothing$ 25mm keyed shaft

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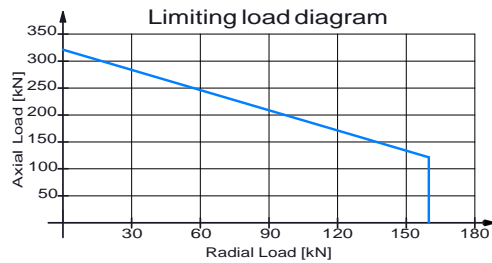
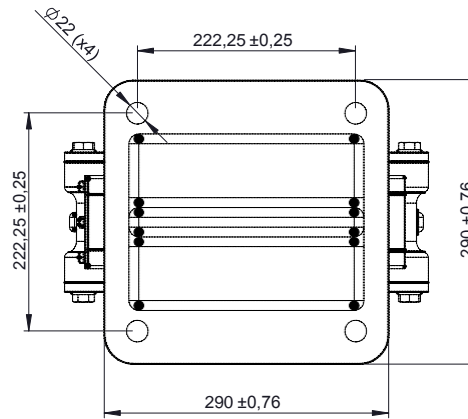
>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



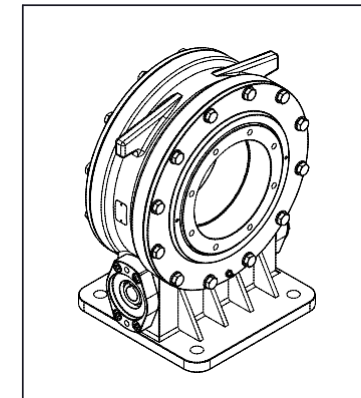
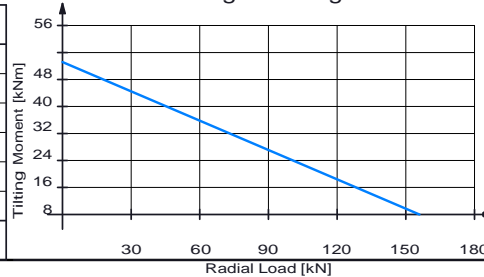
Reference	TVR200-Z17-RM		Rev	A
Units: mm	Denomination	Sales Drawing		
MATERIAL:	-	WEIGHT [kg]:	38.80	NUM. PIECES: 1
SCALE:	1:4	SIZE:	A3	SHEET: 1 of 1



O-ring and Lip seal detail  
Scale 1:1



Limiting load diagram



Main performance parameters

Gear Ratio	61:1	Holding torque	35kNm
Efficiency	40%	Tilting moment	33,9kNm
Self-locking gear	Yes	Radial static load	135kN
Backlash clearance	<0,17°	Axial static load	338kN
Maximum torque	8.835Nm	Radial dynamic load	71kN
Nominal torque	7.320Nm	Axial dynamic load	81kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.

>400.0 - 1200	±0.8	<p>TGB GROUP INFORM@TGBGROUP.ES WWW.TGBGROUP.ES</p>	
>1200	±1.2		
>120.0 - 400.0	±0.5		
>30.0 - 120.0	±0.3		
>6.0 - 30.0	±0.2		
>3.0 - 6.0	±0.1		
>0.0 - 3.0	±0.1		
Range of sizes	Unrated tolerance		
Reference	TVR314-Z0-RM	Rev	A

Shaft: 25mm keyed shaft

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Units: mm

Denomination

Sales Drawing

MATERIAL

WEIGHT [kg]: 101.85

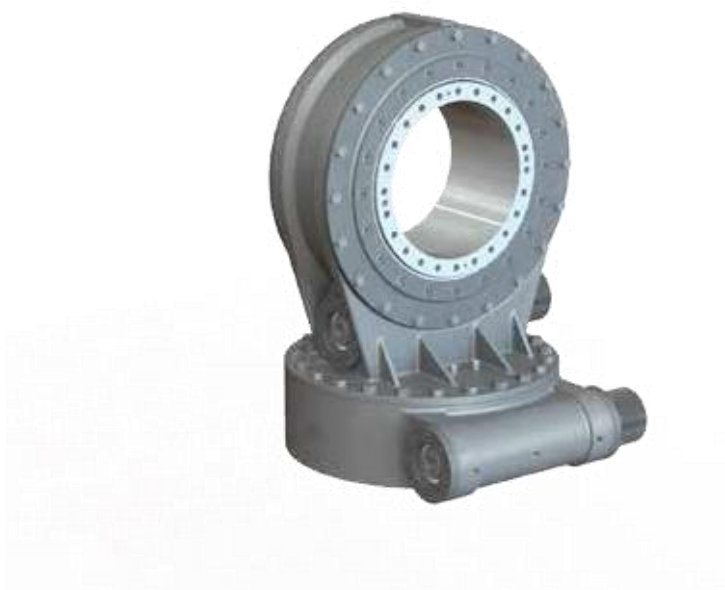
NUM. PIECES: 1

SCALE:

SIZE:

SHEET: 1 of 1

# Série DAD



## Popis

Série pohonů s dvěma osami (Dual Axis Drive) představuje kombinaci vertikálního a horizontálního otočného pohonu, která umožňuje pohyb v obou osách tak, aby bylo možné použít jednu hotovou součástku, která zajistí veškeré pohyby vyžadované od solárního sledovacího zařízení.

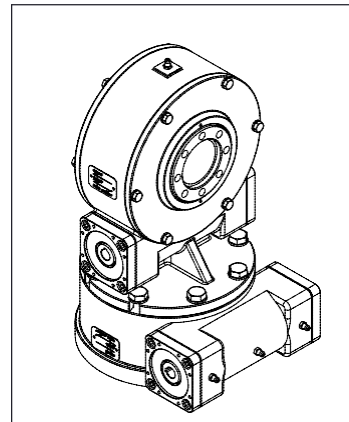
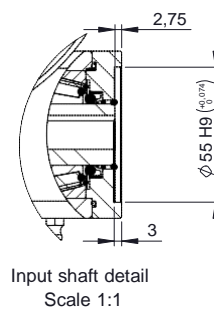
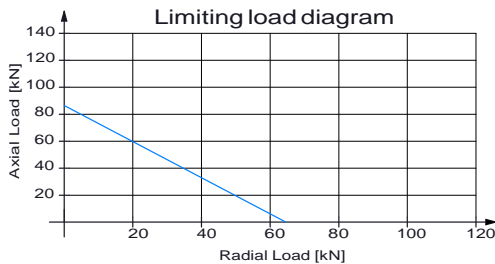
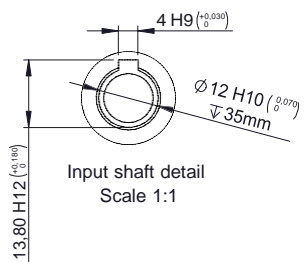
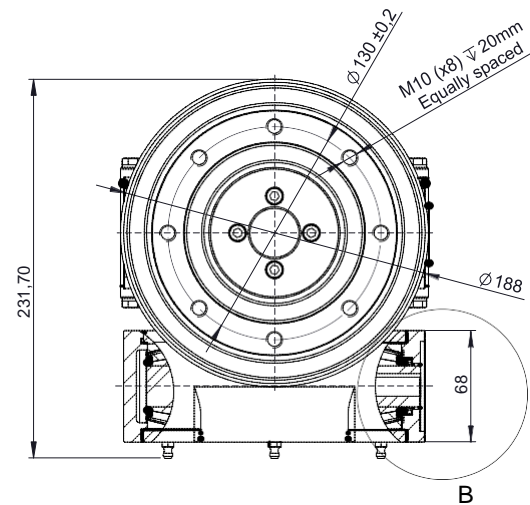
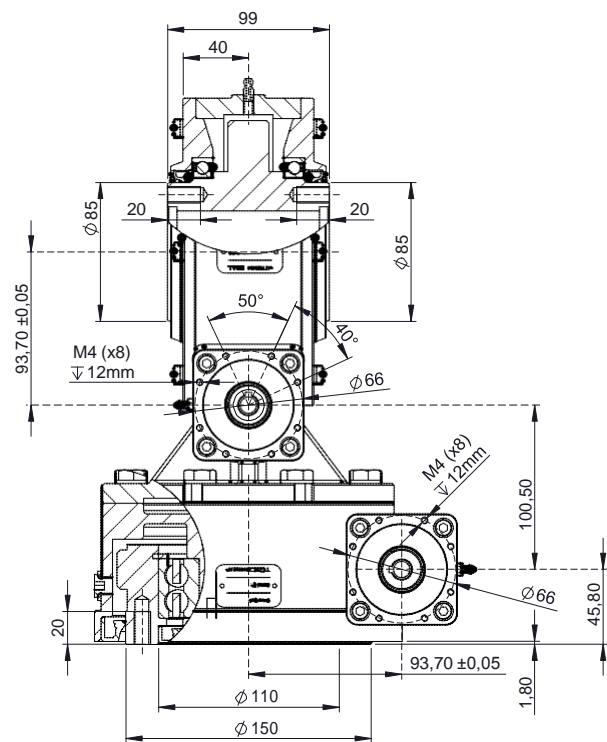
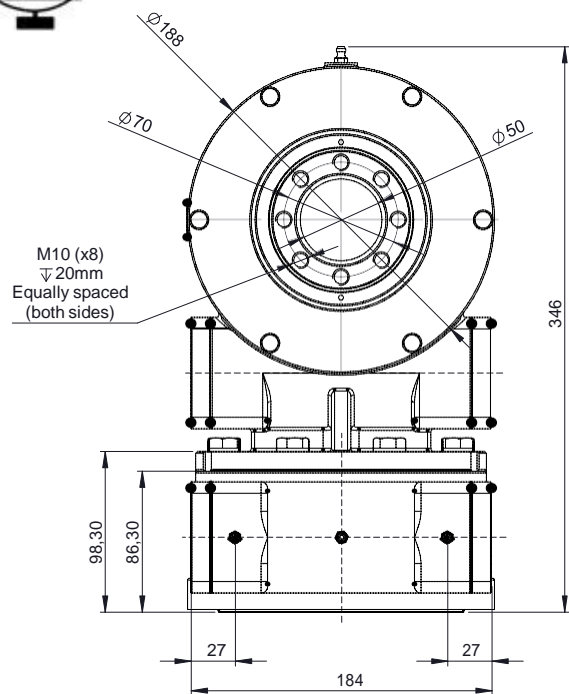
Tento druh otočného pohonu obsahuje vnější jazýčkové těsnění, které zajišťuje vyšší ochranu proti prachu a vodě.

## Hlavní vlastnosti

- HNBR jazýčkové těsnění – odolné vůči UV záření
- Stupeň krytí: IP 65
- může být dodáno v různých barvách nebo se speciálním nátěrem zajišťujícím zvláštní ochranu proti korozi
- - velikosti v metrických jednotkách; typy hřídele: hřídel s drážkou

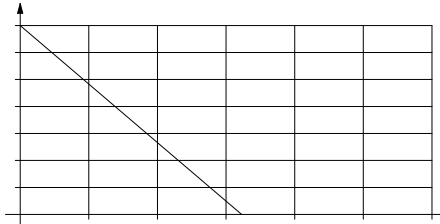
## Hlavní oblasti použití

- Solární sledovací zařízení (2 osy)




Main performance parameters			
Gear Ratio	62:1	Holding torque	5kNm
Efficiency	30%	Tilting moment	7.1kNm
Self-locking gear	Yes	Radial static load	64kN
Backlash clearance	<0,20°	Axial static load	84kN
Maximum torque	1.200Nm	Radial dynamic load	45kN
Nominal torque	600Nm	Axial dynamic load	59kN

**Notes:** All slew drive are pre-lubricated. Maximum output speed 1rpm.  
All screws DACROMET treated

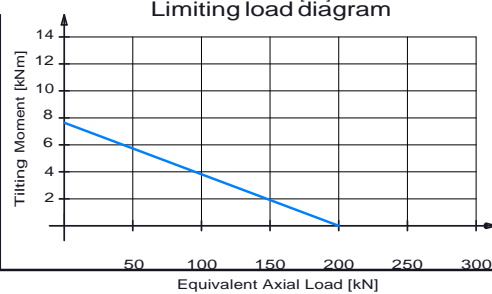
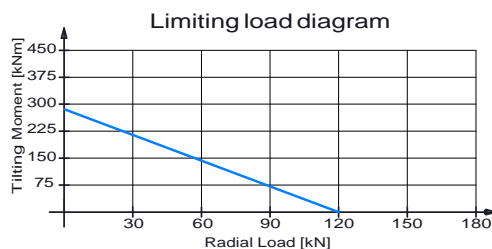
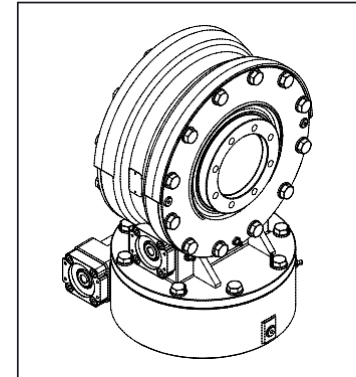
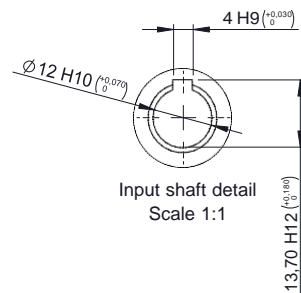
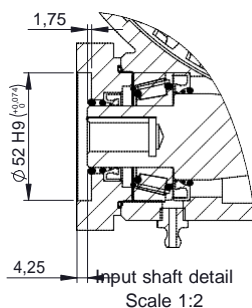
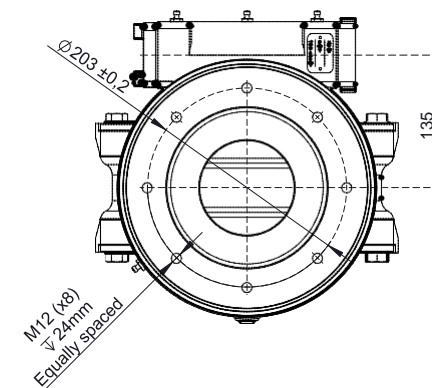
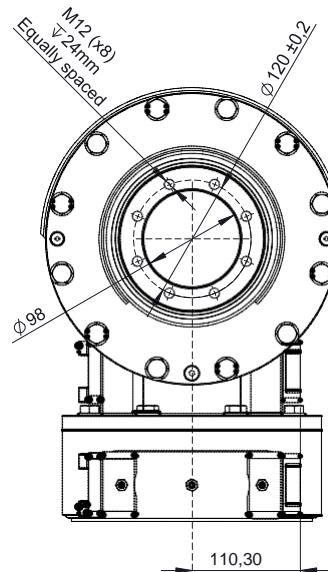
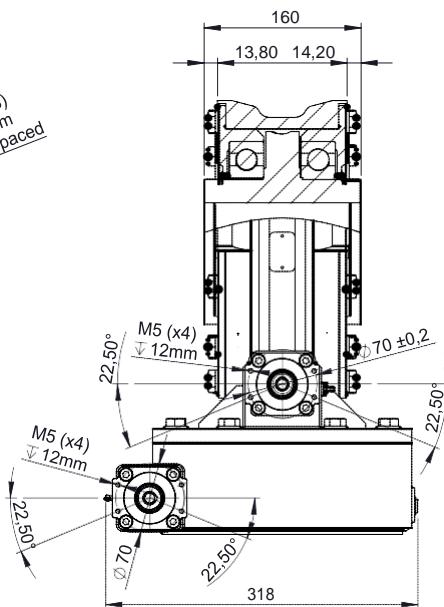
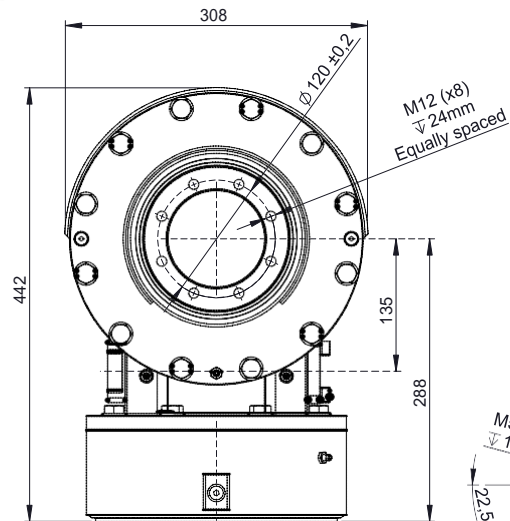


Shaft:  $\varnothing 2$ mm keyed shaft

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>1200	±1.2	 <b>TGBGROUP</b> 11733 TGBgroup, s.r.l. www.TGBgroup.es	
>400.0 - 1200	±0.8		
>120.0 - 400.0	±0.5		
>30.0 - 120.0	±0.3		
>6.0 - 30.0	±0.2		
>3.0 - 6.0	±0.1		
>0.3 - 3.0	±0.1	Range of sizes Unlimited tolerance	
Reference	DAD160-Z0		Rev
Denomination			A
Sales Drawing			
MATERIAL: -	WEIGHT [kg]: 32.56	NUM. PIECES: 1	
SCALE: -	SIZE: -	SHEET: 1 of 1	





### Main performance parameters

Gear Ratio	46:1	Holding torque	10,8kNm
Efficiency	40%	Tilting moment	7,5kNm
Self-locking gear	Yes	Radial static load	75kN
Backlash clearance	<0,1°	Axial static load	200kN
Maximum torque	5.680N	Radial dynamic load	77kN
Nominal torque	m	Axial dynamic load	55kN
2.800Nm			

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.

>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance

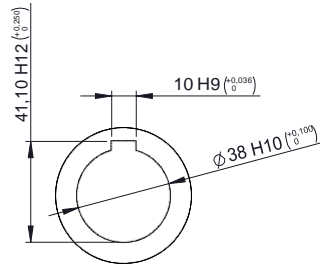


Reference	DAD5-Z1-LM		Rev	A
Denomination	Sales Drawing			
MATERIAL:	WEIGHT [kg]:	90.33	NUM. PIECES:	1
SCALE:	SIZE:	SHEET: 1 of 1		

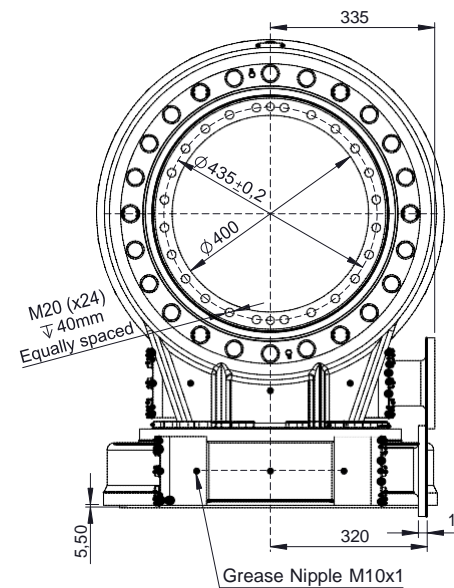
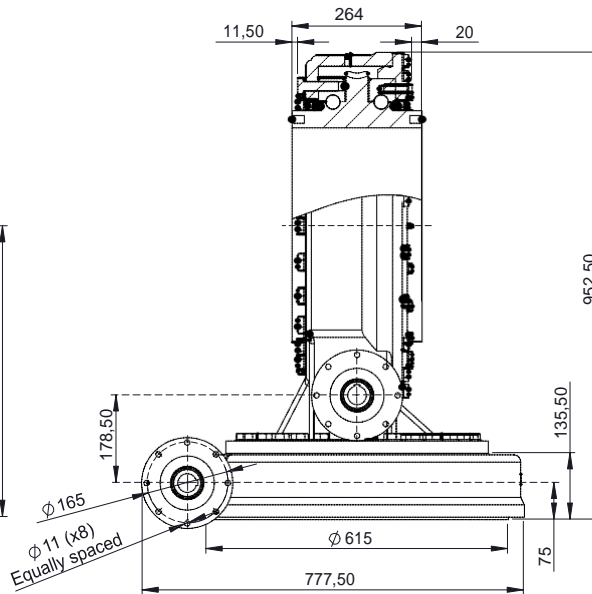
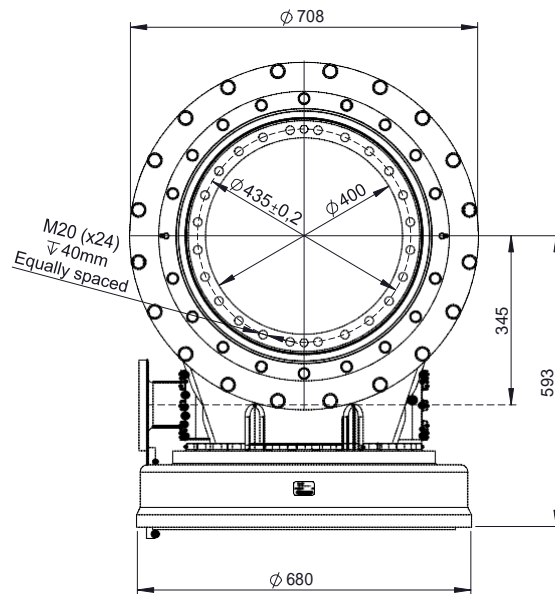
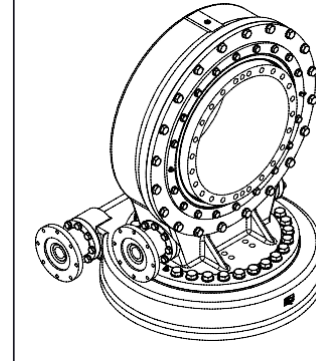
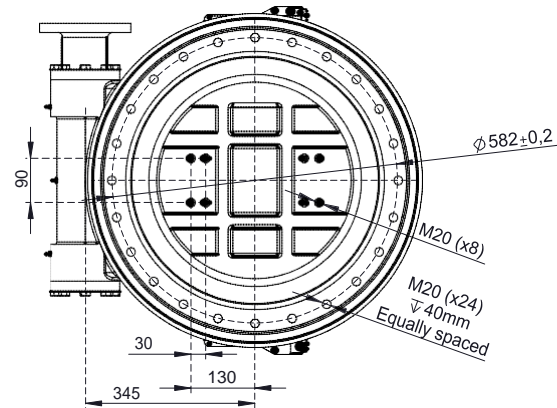
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Units: mm





Input shaft detail  
Scale 1:2



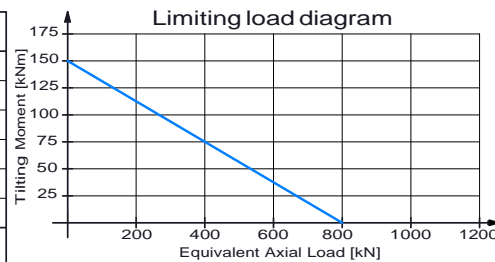
66

DAD series

Main performance parameters

Gear Ratio	102:1	Holding torque	84kNm
Efficiency	34%	Tilting moment	150kNm
Self-locking gear	Yes	Radial static load	315kN
Backlash clearance	<0.03° (<0.5mrad)	Axial static load	800kN
Maximum torque	50.000Nm	Radial dynamic load	160kN
IP	55	Axial dynamic load	380kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm. Greased with molybdenum disulfur complex grease

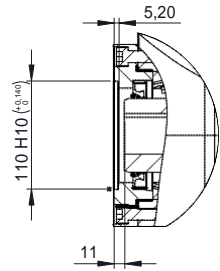
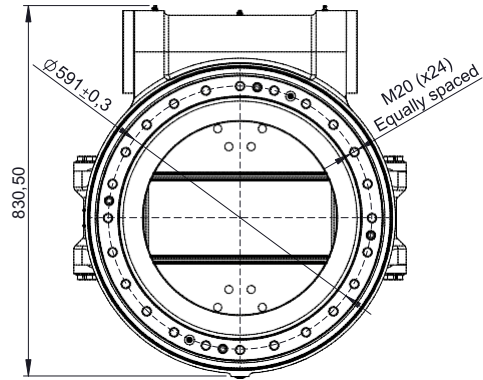


Shaft:  $\varnothing 8$ mm keyed shaft

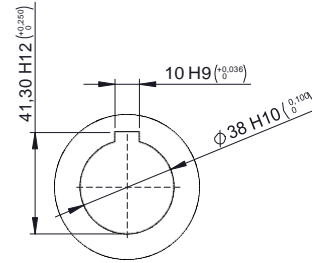
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>1200	±1.2	<p><b>TGB GROUP</b> ING: TGBGROUP.ES WWW.TGBGROUP.ES</p>
>400.0 - 1200	±0.8	
>120.0 - 400.0	±0.5	
>30.0 - 120.0	±0.3	
>6.0 - 30.0	±0.2	
>3.0 - 6.0	±0.1	
>0.3 - 3.0	±0.1	Unstated tolerance.

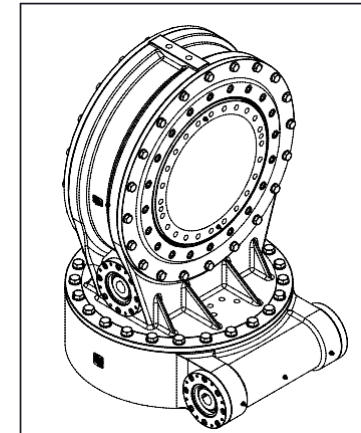
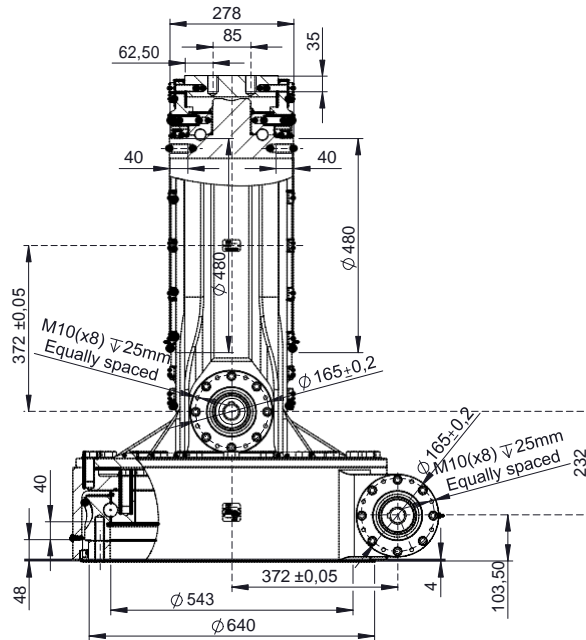
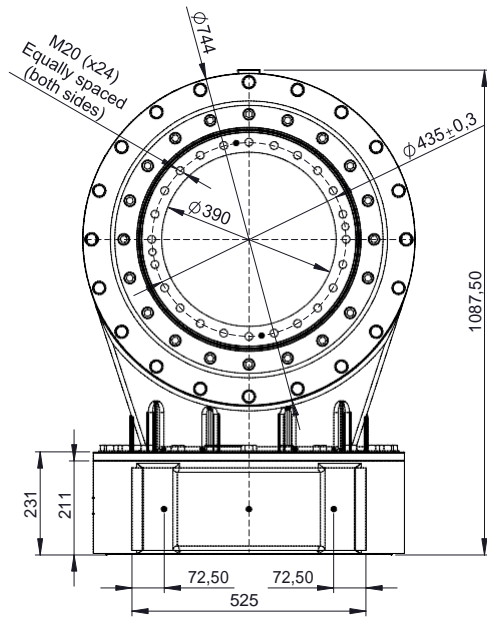
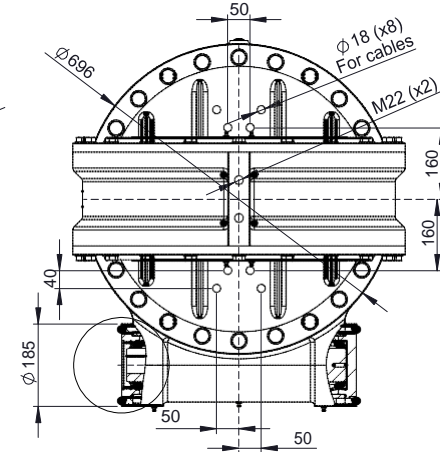
Reference	DAD6-Z0-LM		Rev	B
Units: mm	Denomination	Sales Drawing		
MATERIAL: -	WEIGHT [kg]: 598.25	NUM. PIECES: 1		
SCALE: -	SIZE: -	SHEET: 1 of 1		



Input shaft detail  
Scale 1:5



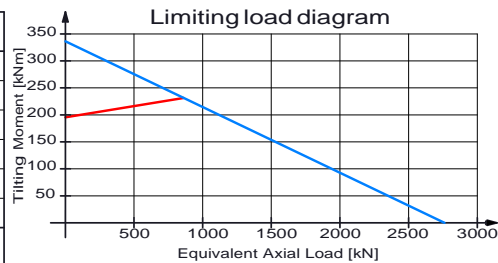
Input shaft detail  
Scale 1:2



Main performance parameters

Gear Ratio	80:1	Holding torque	105kNm
Efficiency	30%	Tilting moment	340kNm
Self-locking gear	Yes	Radial static load	1.242kN
Backlash clearance	<math><0.03^\circ</math>	Axial static load	2.755kN
Maximum torque	50.000Nm	Radial dynamic load	312kN
Nominal torque	28.000Nm	Axial dynamic load	688kN

Notes: All slew drive are pre-lubricated. Maximum output speed 1rpm.  
Ingress Protection Grade: IP 65



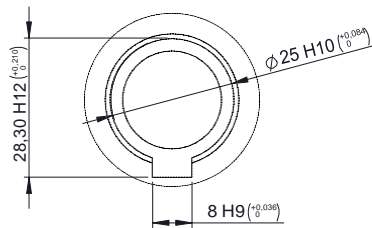
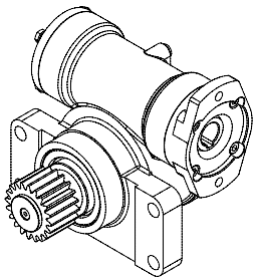
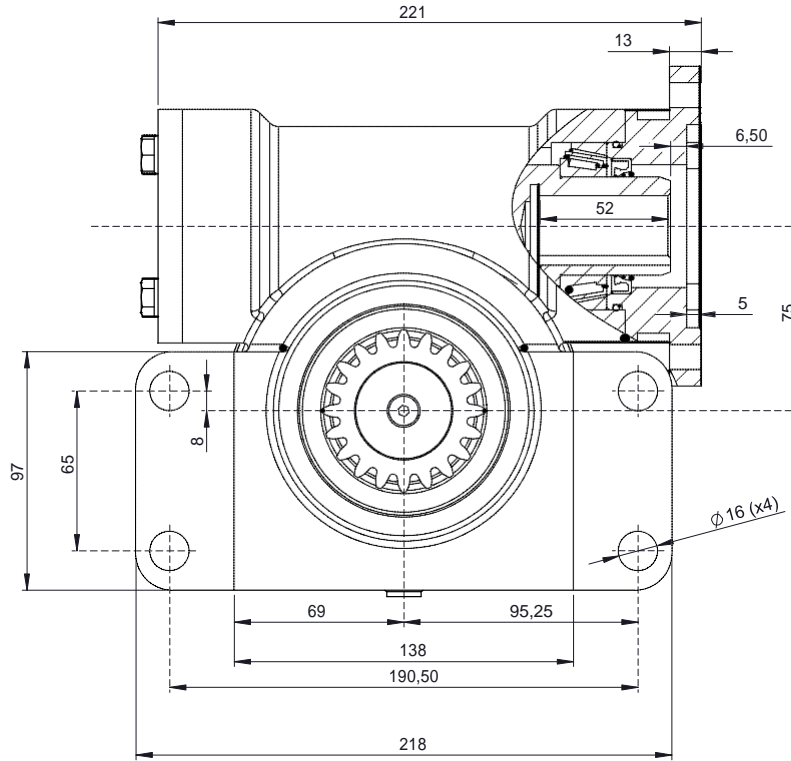
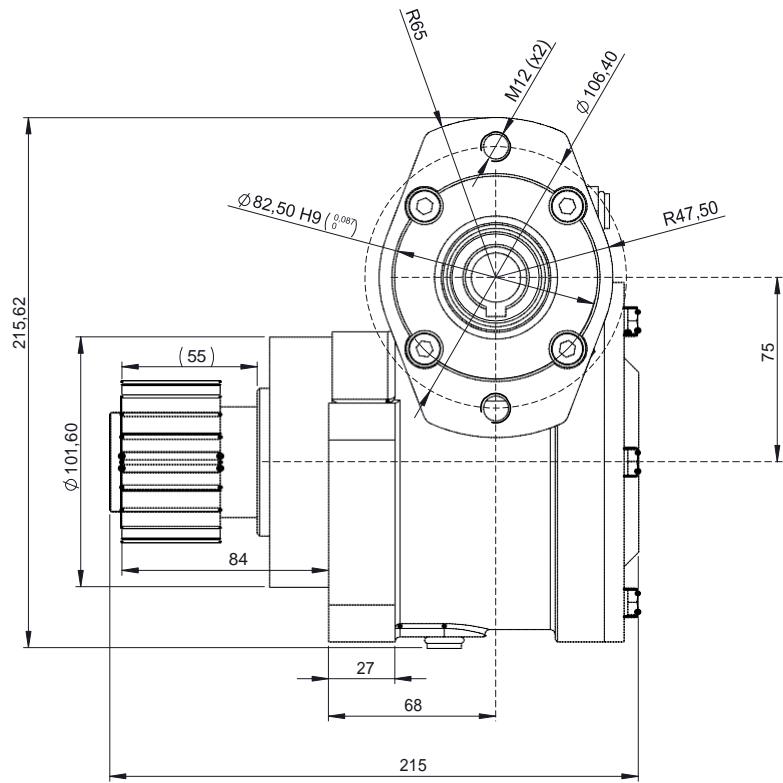
Shaft:  $\phi 8$ mm keyed shaft

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>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unrated tolerance



Reference	DAD8S-Z0-RM		Rev	A
Units: mm	Denomination	Sales Drawing		
MATERIAL: -	WEIGHT [kg]: 926.12	NUM. PIECES: 1		
SCALE: -	SIZE: -	SHEET: 1 of 1		



Input shaft detail  
Scale 1:1

Main performance parameters

Gear Ratio	30:1	Nominal torque	900Nm
Pinion	Customer Requirements	Efficiency	40%

Notes: All slew drives are pre-lubricated.

>1200	±1.2
>400.0 - 1200	±0.8
>120.0 - 400.0	±0.5
>30.0 - 120.0	±0.3
>6.0 - 30.0	±0.2
>3.0 - 6.0	±0.1
>0.3 - 3.0	±0.1
Range of sizes	Unstated tolerance



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Reference	TRP30-Z0-RM	Rev	A
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		MATERIAL: -	WEIGHT [kg]: 20.77	NUM. PIECES: 1
	SCALE: -	SIZE: -	SHEET: 1 of 1	

# Příslušenství

AC / DC / Hydraulické motory



Šnekové převodovky



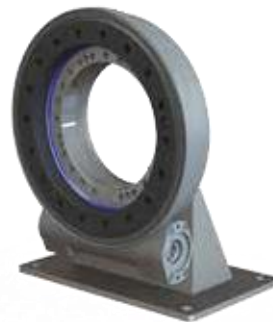
Brzdy



Skupina TGB může dodat kompletní řešení pro různé případy použití díky dodávce pohonů s upraveným motorizací nebo brzdou.

Skupina TGB také nabízí různé příslušenství, které lze použít k montáži našich pohonů na konstrukce zákazníka. Níže jsou uvedeny některé příklady tohoto příslušenství, které obvykle dodáváme.

Vertikální držák



Příruba s hranatou koncovkou





# Poptávkový formulář

Zakázka	Datum	Klient			
Požadovaný otočný prsteneč	Ref.	E <input type="checkbox"/> I <input type="checkbox"/> SD <input type="checkbox"/>			
Požadovaný otočný pohon					
Pracovní pozice	Horizontální <input type="checkbox"/>	Vertikální <input type="checkbox"/>			
Výstupní točivý moment	Jmenovitý	[kNm]			
	Maximální	[kNm]			
	V zádrži	[kNm]			
Výstupní rychlost	Jmenovitá (průběžná)	[ot./min.]			
	Maximální (okamžitá)	[ot./min.]			
Kombinované jmenovité zatížení	Axiální	[kN]			
	Radiální	[kN]			
	Klopný moment	[kNm]			
Kombinované maximální zatížení	Axiální	[kN]			
	Radiální	[kN]			
	Klopný moment	[kNm]			
Požadovaná životnost [v hod.]					
Provozní podmínky	Minimální teplota	[°C]			
	Maximální teplota	[°C]			
	Pracoviště / místo				
Zátěžový případ 1	Zatížení	[kN o kNm]	Provozní doba nebo stupně otočení	Čas mezi cykly	Počet Cyklů za hodinu
	Výstupní točivý moment				
	Axiální				
	Radiální				
	Klopný moment				
Zátěžový případ 2 (je-li třeba)	Zatížení	[kN o kNm]	Provozní doba nebo stupně otočení	Čas mezi cykly	Počet Cyklů za hodinu
	Výstupní točivý moment				
	Axiální				
	Radiální				
	Klopný moment				
Zátěžový případ 3 (je-li třeba)	Zatížení	[kN o kNm]	Provozní doba nebo stupně otočení	Čas mezi cykly	Počet Cyklů za hodinu
	Výstupní točivý moment				
	Axiální				
	Radiální				
	Klopný moment				
Motorizace	AC <input type="checkbox"/> DC <input type="checkbox"/> Hydraulický <input type="checkbox"/>	Poznámka:			
Pastorek					
Limitní rozměry	Šířka	Délka	Výška		

Poznámky



*we* *move*

*Your movement solutions*



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