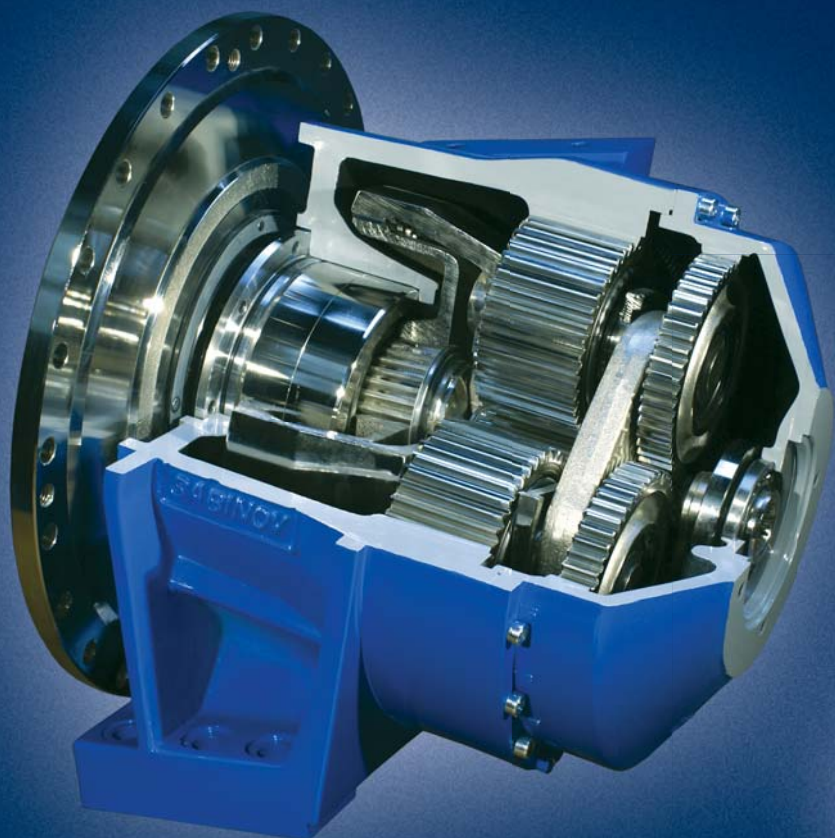


PREVODOVKY do zariadení na výrobu a transport betónu
GEARBOXES to devices for production and transport of concrete



PM – PMC – PMK

PSB



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PREVODOVKY PRE DOMIEŠAČE BETÓNU PM – PMC – PMK

Prevodovky **PM**, **PMC** a **PMK** sú určené pre priamy pohon bubna autodomiešavača betónovej zmesi s úžitkovým obsahom bubna 6 – 16 m³.

Bubon nadstavby autodomiešavača je v aplikácii namontovaný na hnaciu prírubu prevodovky, ktorá prenáša krútiaci moment z hydromotora na bubon autodomiešavača. Prevodovka zároveň slúži na uloženie prednej časti bubna. Prevodovky **PM51** sú dodávané alternatívne **s náhonom na vodné čerpadlo (označenie .1)** a **bez náhonu na vodné čerpadlo (označenie .2)**, pričom pri alternatíve s náhonom na vodné čerpadlo sú možné dve vyhotovenia: **pravé a ľavé**. Na pohon môžu byť použité rôzne typy vyrábaných hydromotorov. Pri pravouhlých prevodovkách **PMK 60** a **PML 60** sú možné dve vyhotovenia – **pravé s označením PMK** a **ľavé s označením PML**.

Aplikácia prevodoviek **PM 62** a **PM 72** predpokladá použitie takeého hydraulického pohonu, ktorý zabezpečí celkový prevod pohonu min. $i=130$.

Pre prevodovky **PM – PMC – PMK** sú charakteristické nasledovné vlastnosti:

- osvedčený princíp náhonu • spoľahlivá prevádzka • unifikovaná konštrukcia • nízka hlučnosť • vysoké výstupné momenty • jednoduchá údržba

Pri objednávaní je potrebné uviesť: typ, vyhotovenie a počet zubov pastorka hydromotora, napr.: **PM51.1, pravá, z=21**.

GEARBOXES FOR TRUCK CONCRETE MIXERS PM – PMC – PMK

Gearboxes **PM**, **PMC** and **PMK** are used for direct drives of truck mounted concrete mixers with the drum capacity from 6 to 16 m³.

Drum is in application directly mounted to the driving flange of the gearbox, which is transmitting torque moment from hydraulic motor to drum.

Gearbox is used to support of front drum part, as well. Gearboxes **PM51** are available **with water pump drive – (version .1)** and **without water pump drive (version .2)**. Two versions are produced by PM51.1: **left and right**. Various types of standard hydromotors can be used.

PMK 60 (right version) and PML 60 (left version) are designed as “right angle” gearboxes.

Application of gearboxes PM 62 and PM 72 is subject to use of such hydraulic drive, which assures total ratio min. $i=130$ of the drive.

Gearboxes **PM – PMC – PMK** are characterised by:

- *verified drive principle *reliable operation *unified design *low noise *high output torque moments *simple maintenance

It is necessary to declare by order: type, version, number of motor shaft splines, for example: **PM51.1, right, z=21**

PM



PMC



PMK



Základné technické údaje / Basic technical data

Typ	Max. obsah bubna	Sklon bubna	Prevod	Max. výstup. moment	Olejová náplň	Hmotnosť Weight [kg]		Max. vstupné otáčky	Teplota okolia
Type	Max. drum capacity [m³]	Drum axis angle	Gear ratio	Max. output torque [Nm]	Oil quantity [l]	.1	.2	Max. input Revolutions [RPM]	Ambient temperature [°C]
PM 51	6 – 7	15°	100	51 000	10	291	286	2 500	- 20° + 40°
	8	12°							
PM 62	9	12°	113	60 000	10	-	290		
	10	11°							
PMC 60	9	12°	148		11	-	312		
	10	11°							
PMK, L 60	9	12°	145		12	-	336		
	10	11°							
PM 72	10 – 11	11°	113	72 000	10	-	295		
	12	10°							
PMC 70	10 – 11	11°	148		11	-	330		
	12	10°							
PMC 90	14 – 16	9°	140	80 000	14	-	390		

1 Dorazový hranol na predný podstavec

Stop block on the front pedestal

2 Poistovacia skrutka príruby (transport)

Fixating bolt of the flange (transport)

3 Olejovník (nalievacia zátku)

Oil gauge (oil filler plug)

4 Vypúšťacia zátku

Oil drain plug

5 Závesné oko

Hanger

6 Krúžok 125×5

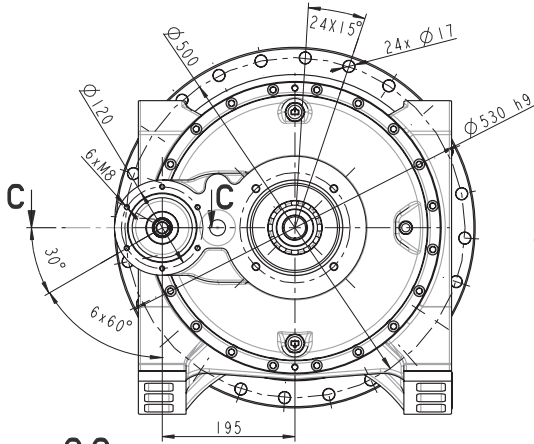
Ring

PM 51

VYHOTOVENIE .1

VERSION .1

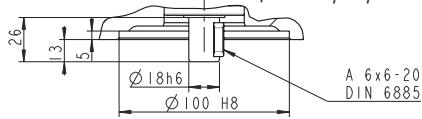
s náhonom vodného čerpadla na ľavej strane
with water pump drive on the left side



C-C

1:2

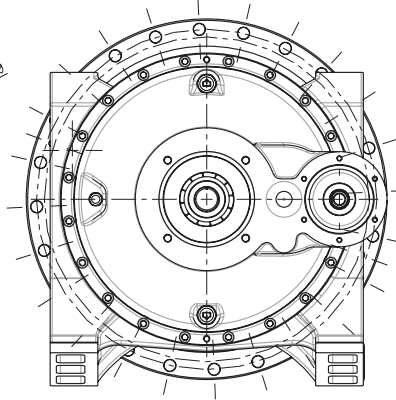
Náhon pre vodné čerpadlo s prevodom do rýchla $u = 0,39$
Drive for water pump $i = 0.39$



VYHOTOVENIE .1

VERSION .1

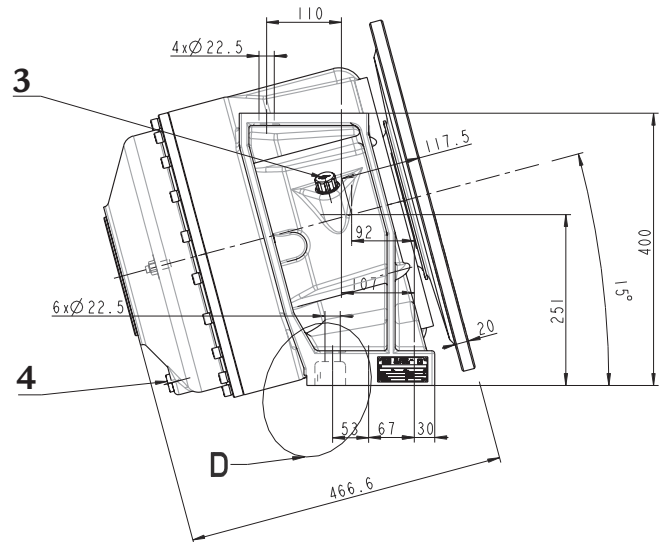
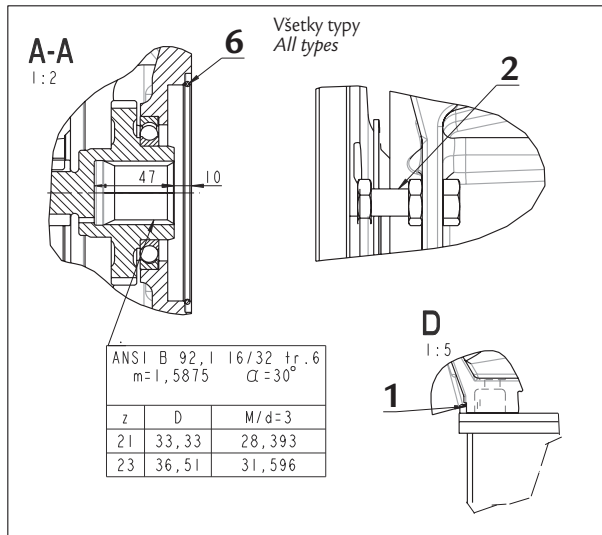
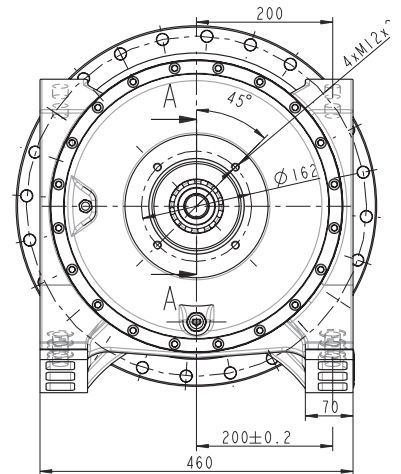
s náhonom vodného čerpadla na pravej strane
with water pump drive on the right side



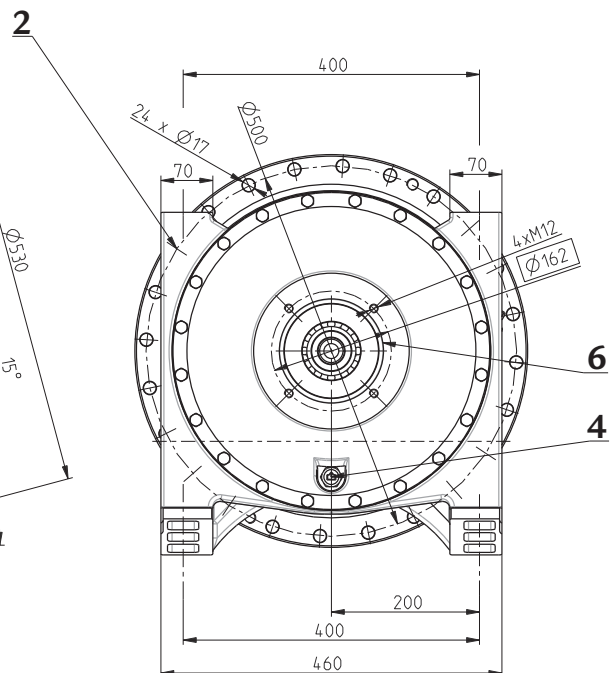
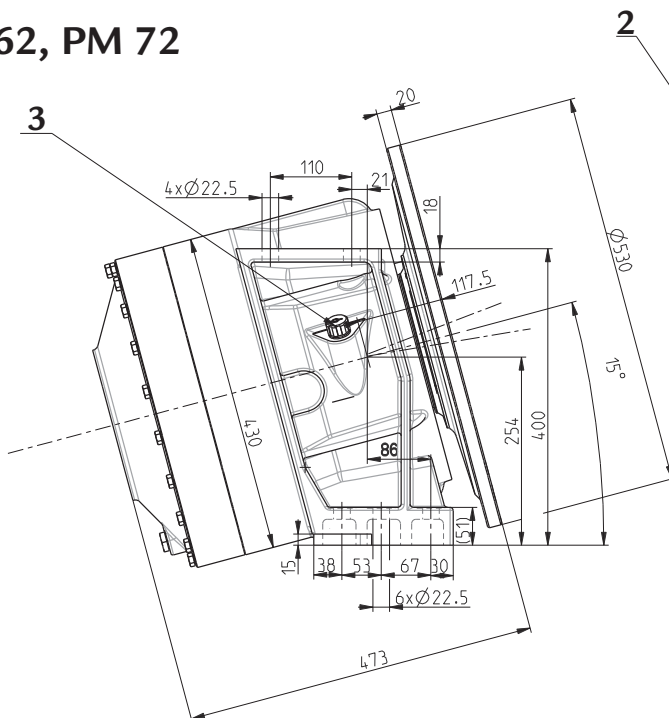
VYHOTOVENIE .2

VERSION .2

bez náhonu vodného čerpadla
without water pump drive



PM 62, PM 72



PMC 70

Technical drawing showing three views of the PMC 70 pump assembly with dimensions:

- Perspective View (Left):**
 - Overall width: 150
 - Overall height: 110
 - Top flange thickness: 20
 - Internal width: 107
 - Internal height: 92
 - Bottom flange thickness: 51
 - Overall depth: 530
 - Mounting holes: 4x $\varnothing 22.5$
 - Internal mounting holes: 6x $\varnothing 22.5$
 - Internal dimensions: 15, 38, 53, 67, 188
 - Overall length: 531
- Side View (Middle):**
 - Overall height: 400
 - Mounting flange thickness: 252
 - Mounting angle: 15°
- Front View (Right):**
 - Overall width: 400
 - Overall height: 460
 - Mounting flange thickness: 70
 - Internal width: 130.5
 - Mounting holes: 24 x $\varnothing 17$
 - Internal mounting holes: 6x $\varnothing 22.5$

Technical drawing of the LED light fixture showing front, side, and detail views with dimensions:

- Front View (Left):** Shows a circular lens with a diameter of $\varnothing 162$ mm. The mounting bracket has 4x M12 holes. The mounting angle is 60° .
- Side View (Right):** Shows the profile of the fixture with a total width of 150 mm and a mounting hole diameter of $4 \times \varnothing 22.5$ mm. The mounting bracket has 6x $\varnothing 22.5$ mm holes. The mounting plate has a width of 150 mm and a height of 20 mm. The mounting bracket has a height of 53 mm and a mounting hole diameter of $\varnothing 20$ mm.
- Detail View (Bottom):** Shows the internal LED chip with a diameter of $\varnothing 15$ mm and a mounting hole diameter of $\varnothing 10.7$ mm. The mounting plate has a width of 150 mm and a height of 20 mm. The mounting bracket has a height of 53 mm and a mounting hole diameter of $\varnothing 20$ mm.
- Overall Dimensions:** The total width is 506 mm, the total height is 618 mm, and the mounting bracket has a height of 251 mm.
- Other Dimensions:** The mounting bracket has a height of 400 mm, a width of 150 mm, and a mounting hole diameter of $\varnothing 330$ mm.

PREVODOVKY PRE STACIONÁRNE BETONÁRKY – PSB

Prevodovky typu PSB slúžia na pohon stacionárnych betonárik. Vyrábané sú v 5-tich veľkostiach: PSB 500, PSB 1000, PSB 1500, PSB 2500 a PSB 3000, podľa objemu bubna betonárky.

Prevodovky PSB 500 a 1000 sú dvojstupňové planétové prevodovky dodávané ako kompaktný celok s elektromotorom. Elektromotor je s prevodovkou spojený cez prírubu, pričom centrálné koleso 1. stupňa je nasadené priamo na hriadeľ elektromotora.

Prevodovky PSB 1500, PSB 2500 a PSB 3000 sú riešené ako dvojstupňové planétové prevodovky s kužeľovou predlohou. Na strane vstupného hriadeľa sú vybavené prírubou, umožňujúcou pripojenie k elektromotoru cez kardanový hriadeľ.

Okrem štandardných prevodových pomerov je možnosť objednať si aj neštandardné prevody v rozsahu, ktorý je uvedený v tabuľke.

GEARBOXES FOR STATIONARY CONCRETE MIXERS – PSB

Gearboxes PSB serve as the drives of stationary concrete mixers in the batching plants. They are produced in 5 sizes: PSB 500, PSB 1000, PSB 1500, PSB 2500 and PSB 3000 based on the drum capacity of mixer.

Gearboxes PSB 500 and PSB 1000 are two-stage planetary gearboxes delivered as compact sets with el. motor. Gearbox is connected with el. motor through the flange, sun gear of the 1st stage is located directly on the shaft of el. motor.

Gearboxes PSB 1500, PSB 2500 and PSB 3000 are two-stage planetary gearbox with bevel countershaft. Output shaft is equipped by the flange that allows connecting to the driven machine by cardan shaft.

The gearbox can be also supplied with non-standard gear ratios that are specified within Basic technical data.

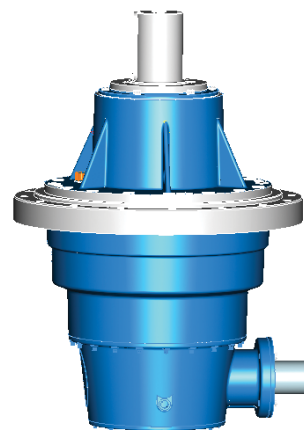
PSB 500



PSB 1000



PSB 1500, 2500, 3000



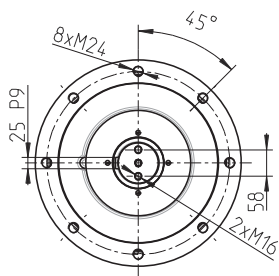
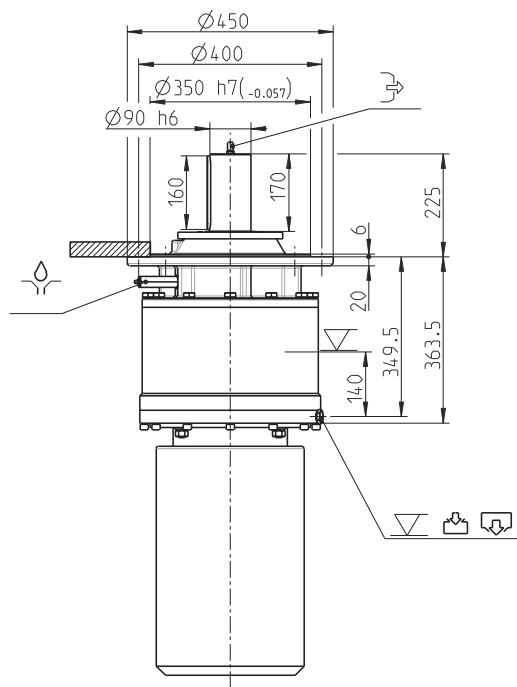
Základné technické údaje / Basic technical data

Typ	Prevod	Otáčky výst. hriadeľa	Krúť. moment na výst. hriadeľ	Elektromotor	Výkon el. motora	Max. objem miešača	Hmotnosť prevodovky	Hmotnosť elektromotora
Type	Gear ratio	Output shaft [RPM]	Output shaft torque [Nm]	Electric motor	El. motor power [kW]	Max. mixer capacity [dm ³]	Gearbox weight [kg]	Electric motor weight [kg]
PSB 500	45 (10 – 63)	32,4 (150 – 12)	4421 (4300 – 7800)	VF160L04	15 (9 – 68)	500	216	140
PSB 1000 P	43 (16 – 63)	22,65 (89 – 10)	12653 (7000 – 13000)	VF225M06	30 (66 – 11)	1000	325	360
PSB 1000 B	36 (16 – 63)	27,08 (89 – 10)	7757 (7000 – 13000)	VF200L06	22 (66 – 11)	1000	305	290
PSB 1500	63 (31,5 – 112)	22,03 (47 – 6,5)	15845 (max. 25000)	–	37	1500	652	–
PSB 2500	64,7	22,85	23900	–	55	2500	688	–
PSB 3000	65,6	22,61	32600	–	75	3000	910	–

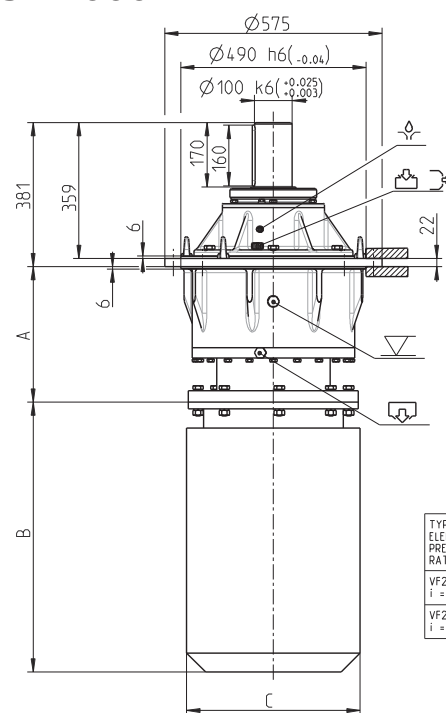
Požiadavky na iné veľkosti prevodoviek typu PSB a na neštandardné technické parametre je potrebné prekonzultovať s výrobcom.

It is necessary to consult all requests for non-standard sizes of gearboxes PSB and/or non-standard technical parameters the gearbox producer.

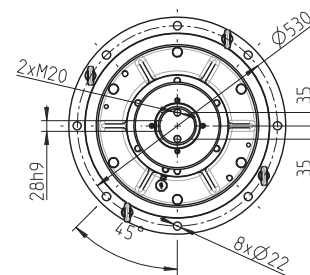
PSB 500



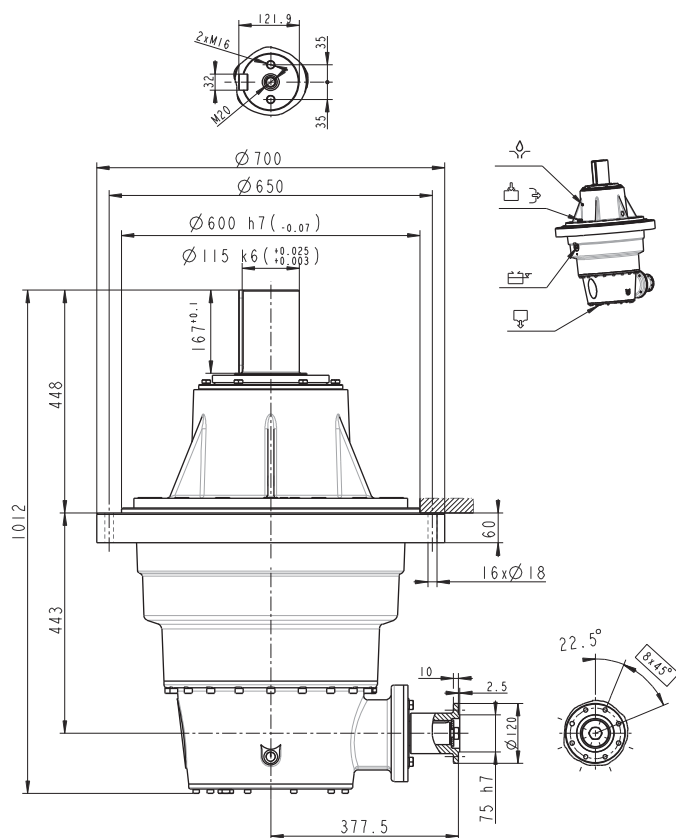
PSB 1000



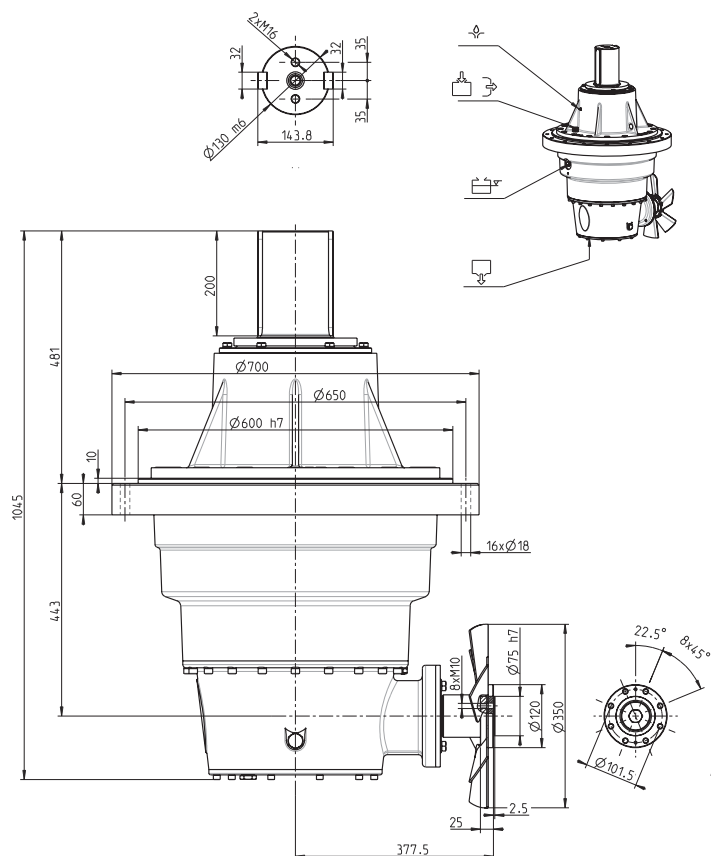
TYP. ELEKTROMOTORA ELEKTROMOTOR TYPE PREVOD RATIO	A	B	C
VF200L-06 $i = 36$	293.45	700	$\varnothing 416$
VF225M06 $i = 43$	358.5	683	$\varnothing 485$



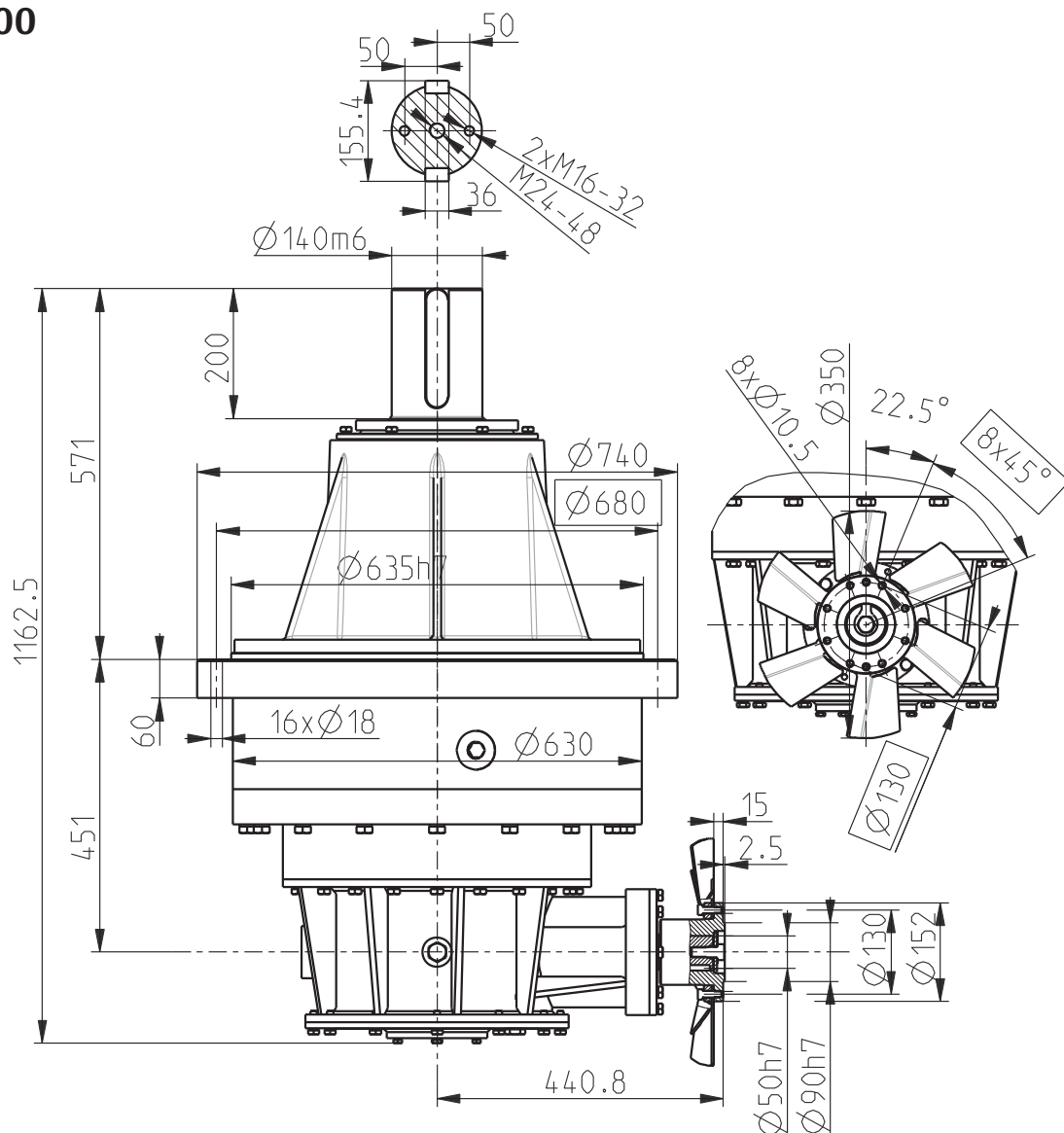
PSB 1500



PSB 2500

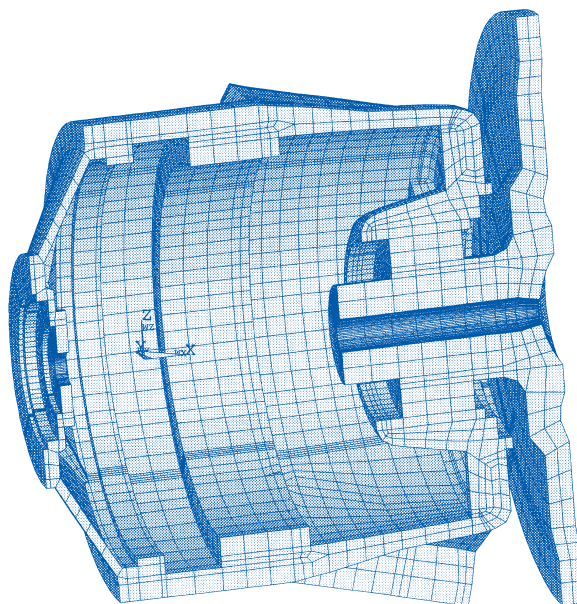


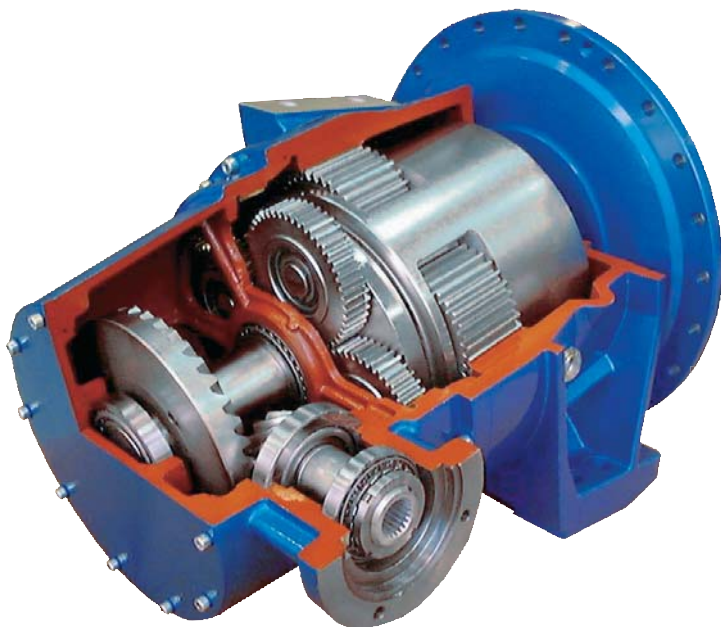
PSB 3000



Prevodovky PM a PSB sú konštruované pomocou špeciálnych konštrukčných programov pri zohľadnení výsledkov napäťovej analýzy metódou konečných prvkov a so zreteľom na dosiahnutie vysokej prevádzkovej bezpečnosti a hospodárnosti.

Design of PM and PSB gearboxes was supported by special design software with respect to results of tension analysis made by method of finite elements and with sight of achieving high working reliability and economy.





OSVEDČENÝ PRINCÍP NÁHONU
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LOW NOISE

JEDNODUCHÁ ÚDRŽBA
SIMPLE MAINTENANCE

