

# P M T

## *Modular Hoisting Drive Gearmotors*



A product of Coel Motori Srl, Milano, Italy  
[www.coelis.com](http://www.coelis.com)

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**DESCRIPTION**

The PMT gearmotor is a parallel shaft gearbox combined with a safe and reliable brake motor studied for hoisting application.

The design is based on the AMD (advanced modular design) system which allows multiple product configuration thanks to the completely modular design of this system. See dedicated section of this catalogue to check the different possible configuration possibilities.

The modular system also allows the mounting of different types of motors depending on the real need of the application; DC or AC3 phase brake, standard or increased protection degree, for marine application, Explosion proof version and many others.

The PMT drive system is studied in order to obtain the highest possible performance in terms of silent running, reliability, long life, easy maintenance.

**GENERAL FEATURES****GEARBOX**

- 3 stage gearbox
- Fine machining of the gears for low losses and silent running
- Cast Iron construction light weight to combine high mechanical resistance, any environment application and easy handling.
- Modular design prepared for mounting with interface flange, base mounting or customized requirements
- Integrated bearing support of drum and double bearing support with flange interface mounting type
- Output shaft available in DIN 5480 or special design requirement
- Increased axle distance for drum easy mounting

**BRAKE MOTORS**

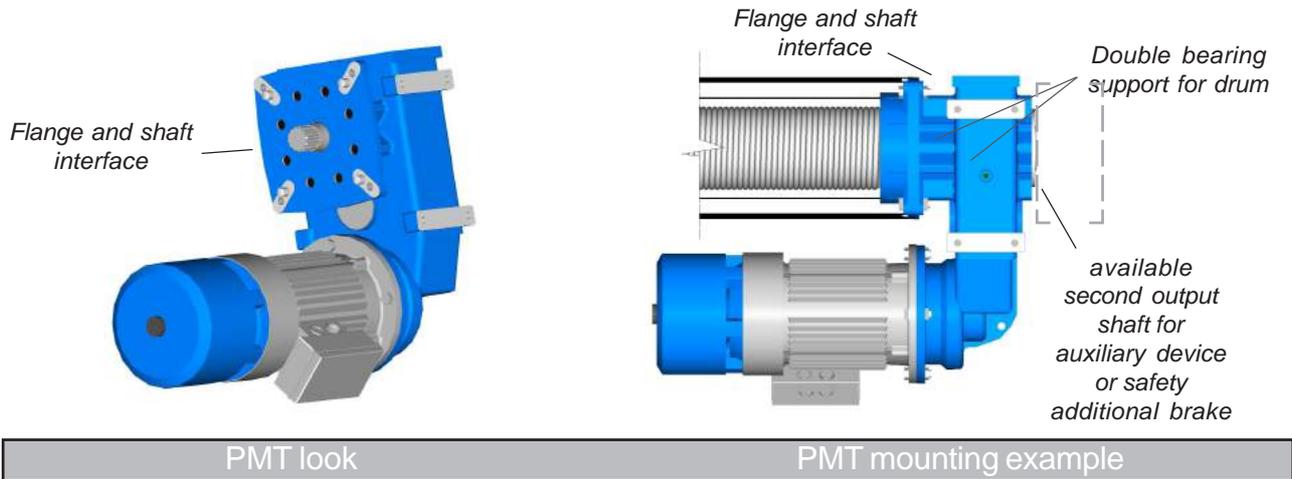
- Heavy duty design
- High starting torque
- High brake torque
- Limited maintenance
- Three phase or DC brake
- Protection degrees from IP54 to IP66 for motor and brake
- Version for marine application
- Explosion proof version (for certification and available zones please contact us)
- Versions with forced ventilation, encoders, and many optionals available (see COEL general catalogue for details)

## MOUNTING

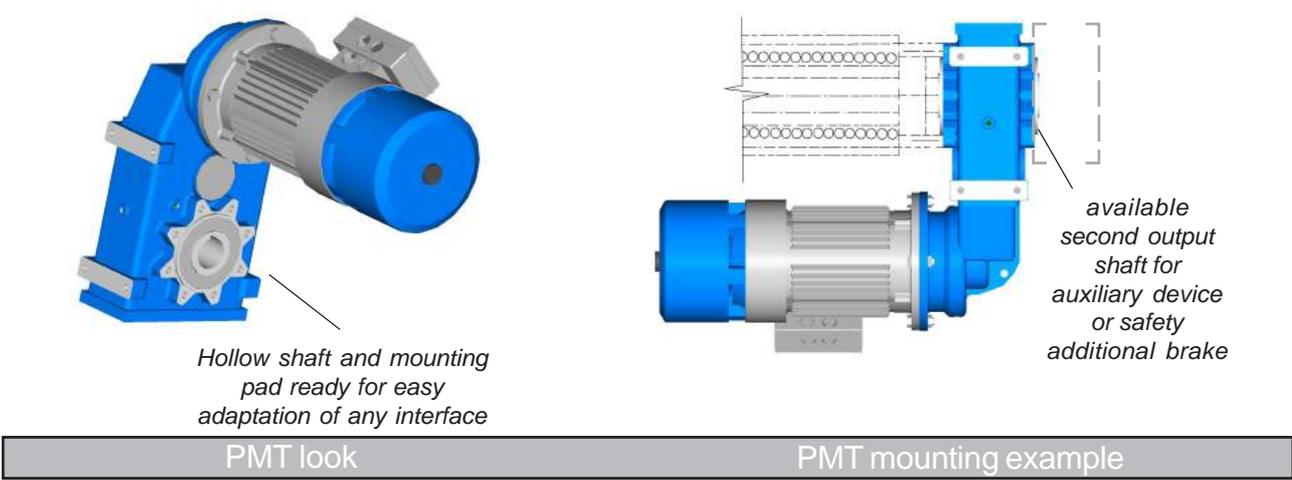
The PMT drive system is designed so to allow different mounting possible solutions.

The main possibilities are: with interface flange and shaft direct on drum, ready for mounting direct on drum (in this case the end user must define his own coupling solution) and base mounting with junction (see dimensional drawings of this catalogue for further details).

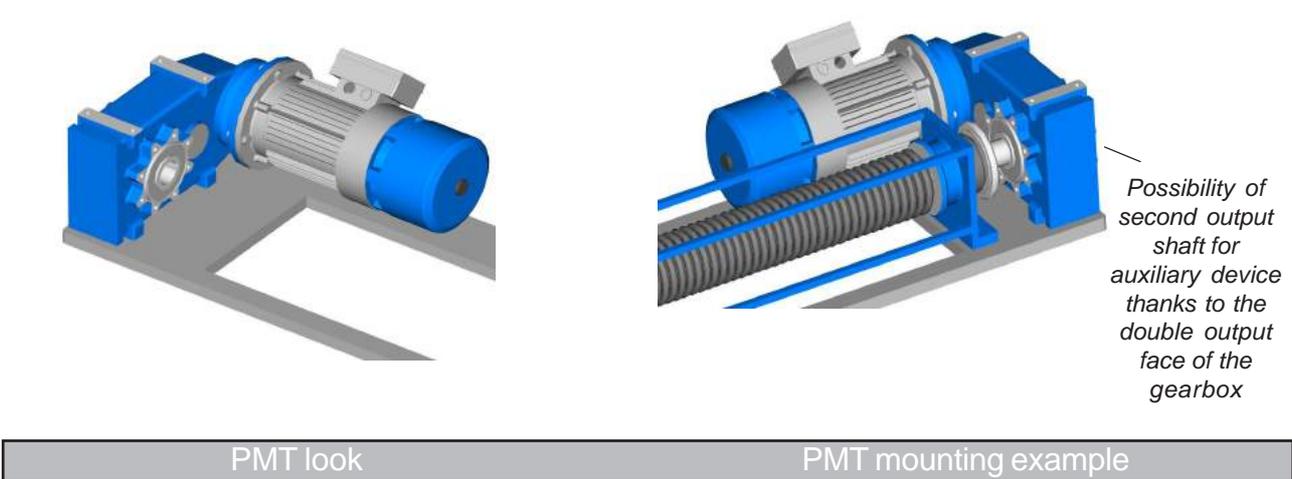
### FLANGE AND SHAFT DIRECT ON DRUM



### READY FOR MOUNTING DIRECT ON DRUM



### BASE MOUNTING WITH JUNCTION



## VERSIONS

The PMT gearmotor is a parallel shaft gearbox combined with a safe and reliable brake motor studied for hoisting application.

The design allows multiple product configuration, 2 or 4 falls.

The modular system also allows the mounting of different types of motors depending on the real need of the application; DC or AC3 phase brake, standard or increased protection degree, for marine application, Explosion proof version and many others.

The PMT drive system is studied in order to obtain the highest possible performance in terms of silent running, reliability, long life, easy maintenance.

Customized solutions are also available; please contact us for further details.

*5 to 20 Tons capacity  
Drum mounting ready with integrated bearing support  
DIN 5480 output shaft or special on request*

## AVAILABLE VERSIONS



*IP66 version for marine environment*



*Versions for low temperature environment up to -50°C*



*Versions for hazardous location*



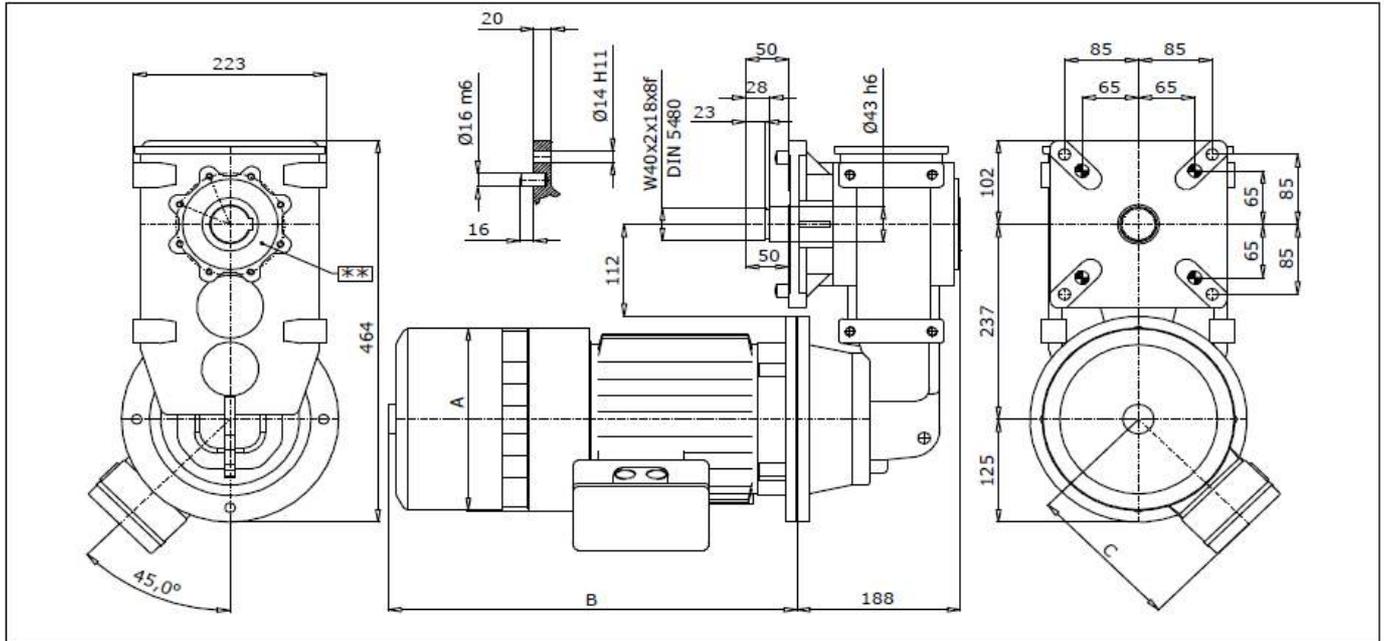
*Versions equipped with additional safety brake*

## PERFORMANCE

## PMT 85

**Load:** up to 3,2 tons  
**Lifting speed:** 4 - 5 - 6,3 - 8 m/min 4/1 falls  
**Drum diameter:** 140 mm

Note: the following specifications are showing data at 50Hz. For motors at 60Hz, powers and hoisting speeds are increased of 20%



Pos.	Load (t)	ISO	FEM	V (m/min)	P (kW)	f (Hz)	Ratio	Type	Motor related dimensions (mm)
1	3,2	M5	2m	0,66//4,0	0,37/2,5	50	74	F100LB	A:177 C:164
	2,5	M6	3m		0,8/4,8	0,44/3,0		60	VIS100+MAK112
	2	M7	4m						
2	3,2	M5	2m	0,8/5,0	0,45/3,2	50	63,9	F112	A:220 C:180
	2,5	M6	3m		1,0/6,0	0,54/3,8		60	VIS100+MAK112
	2	M7	4m						
3	3,2	M5	2m	1,0/6,3	0,6/4,0	50	56,3	F112	A:220 C:180
	2,5	M6	3m		1,2/7,6	0,72/4,8		60	VIS112+MAK132SR*
	2	M7	4m						
4	2,5	M5	2m	1,3/8,0	0,6/4,0	50	43,7	F112	A:220 C:180
	2	M6	3m		1,6/9,6	0,72/4,8		60	VIS112+MAK132SR*
	1,6	M7	4m						

Standard Environment

ATEX/IEC EX

\*additional motor support required

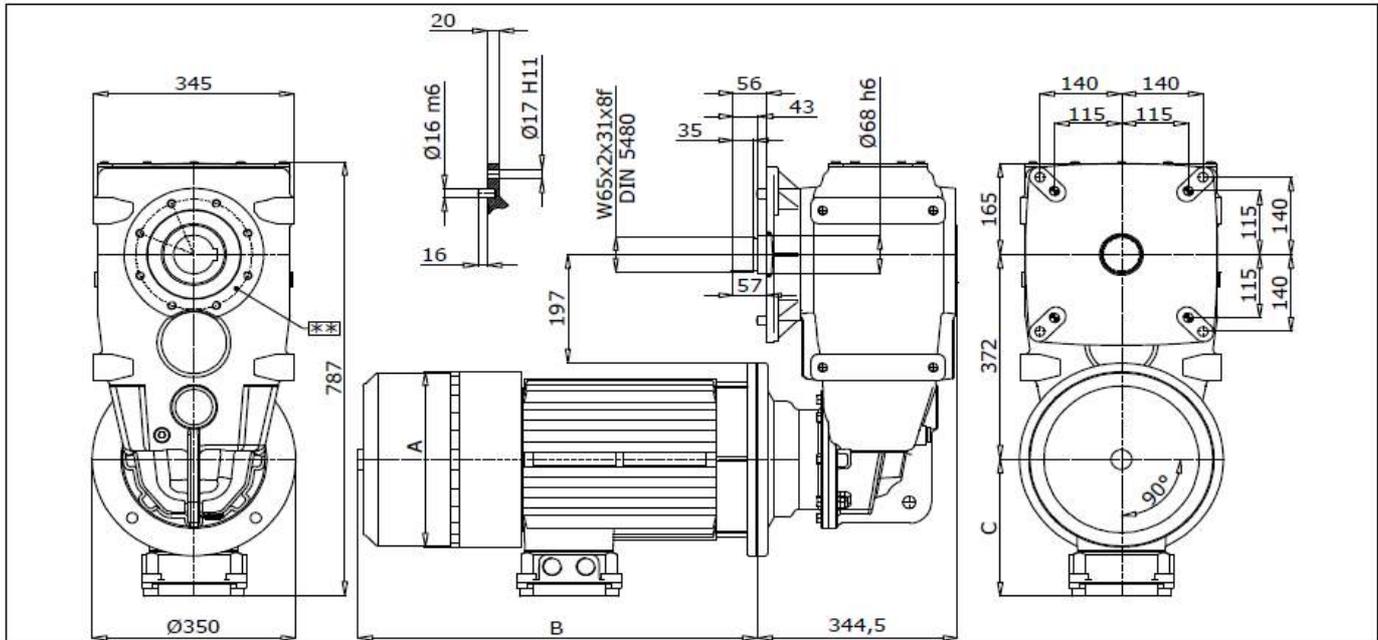


## PERFORMANCE

## PMT 115

**Load:** up to 12,5 tons  
**Lifting speed:** 4 - 5 - 6,3 - 8 m/min 4/1 falls  
**Drum diameter:** 266 mm

Note: the following specifications are showing data at 50Hz. For motors at 60Hz, powers and hoisting speeds are increased of 20%



Pos.	Load (t)	ISO	FEM	V (m/min)	P (kW)	f (Hz)	Ratio	Type	Motor related dimensions (mm)
1	10	M5	2m	0,66//4,0	1,2/7,6	50	163,1	F132LX	A:256 C:197
	8	M6	3m					B:636	
	6,3	M7	4m	0,8/4,8	1,44/9,1	60		VIS132+MAK160LR	A:317 C:265
	5	M7	4m					B:831	
2	10	M5	2m	0,8/5,0	1,5/9,5	50	121,2	F132LX	A:256 C:197
	8	M6	3m					B:636	
	6,3	M7	4m	1,0/6,0	1,8/11,4	60		VIS132+MAK160LR	A:317 C:265
	5	M7	4m					B:831	
3	8	M5	2m	1,0/6,3	1,5/9,5	50	103,9	F132LX	A:256 C:197
	6,3	M6	3m					B:636	
	5	M7	4m	1,2/7,6	1,8/11,4	60		VIS132+MAK160LR	A:317 C:265
	4	M7	4m					B:831	
4	6,3	M5	2m	1,3/8,0	1,5/9,5	50	73,8	F132LX	A:256 C:197
	5	M6	3m					B:636	
	4	M7	4m	1,6/9,6	1,8/11,4	60		VIS132+MAK160LR	A:317 C:265
	3,2	M7	4m					B:831	
5	12,5	M5	2m	0,66/4,0	1,5/9,5	50	163,1	F132LX	A:256 C:197
	10	M6	3m					B:636	
	8	M7	4m	0,8/4,8	1,8/11,4	60		VIS132+MAK160LR	A:317 C:265
	6,3	M7	4m					B:831	
6	12,5	M4	1Am	0,8/5,0	2,0/12,5	50	121,2	F132LX	A:256 C:197
	10	M5	2m					B:636	
	8	M6	3m	1,0/6,0	2,4/15,0	60		VIS132+MAK160LR	A:317 C:265
	6,3	M7	4m					B:831	
7	10	M4	1Am	1,0/6,3	2,0/12,5	50	103,9	F132LX	A:256 C:197
	8	M5	2m					B:636	
	6,3	M6	3m	1,2/7,6	2,4/15,0	60		VIS132+MAK160LR	A:317 C:265
	5	M7	4m					B:831	
8	8	M4	1Am	1,3/8,0	2,0/12,5	50	73,8	F132LX	A:256 C:197
	6,3	M5	2m					B:636	
	5	M6	3m	1,6/9,6	2,4/15,0	60		VIS132+MAK160LR	A:317 C:265
	4	M7	4m					B:831	

Standard Environment

ATEX/IEC EX



**P M T**



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