PMT

Modular Hoisting Drive Gearmotors

A product of Coel Motori Srl, Milano, Italy

www.coelmis.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 runnig

- 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)

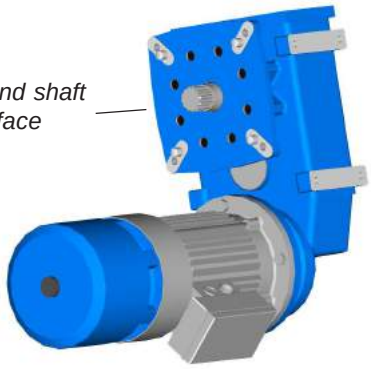
- Versions with forced ventilation, encoders, and many optionals available (see COEL general catalogue for details)

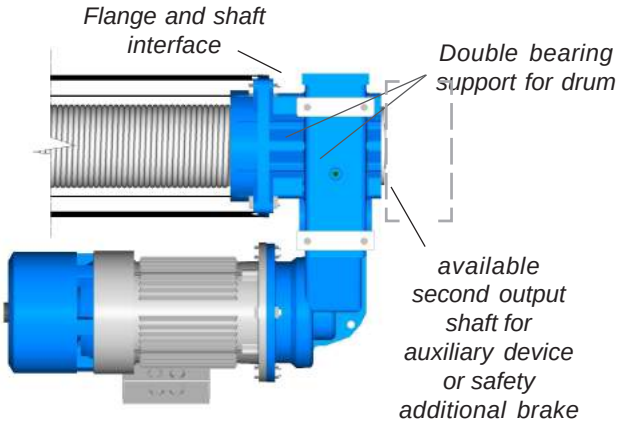
MOUNTING

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 juction (see dimensional drawings of this catalogue for further details).

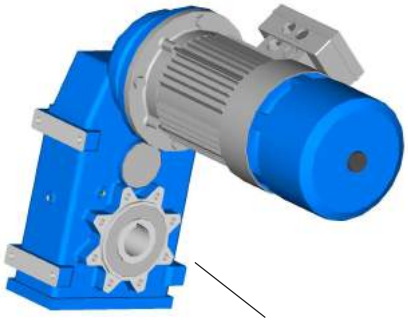
FLANGE AND SHAFT DIRECT ON DRUM

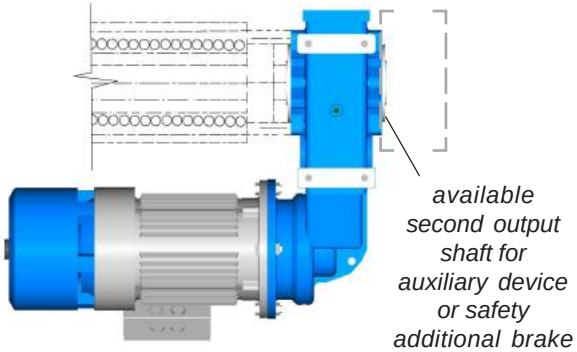




PMT look | PMT mounting example

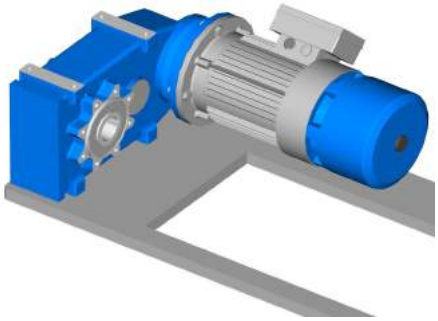
READY FOR MOUNTING DIRECT ON DRUM

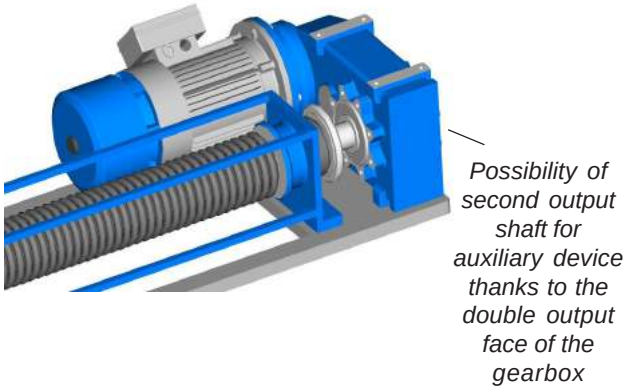




PMT look | PMT mounting example

BASE MOUNTING WITH JUNCTION





PMT look | PMT mounting example

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 tp -50°C

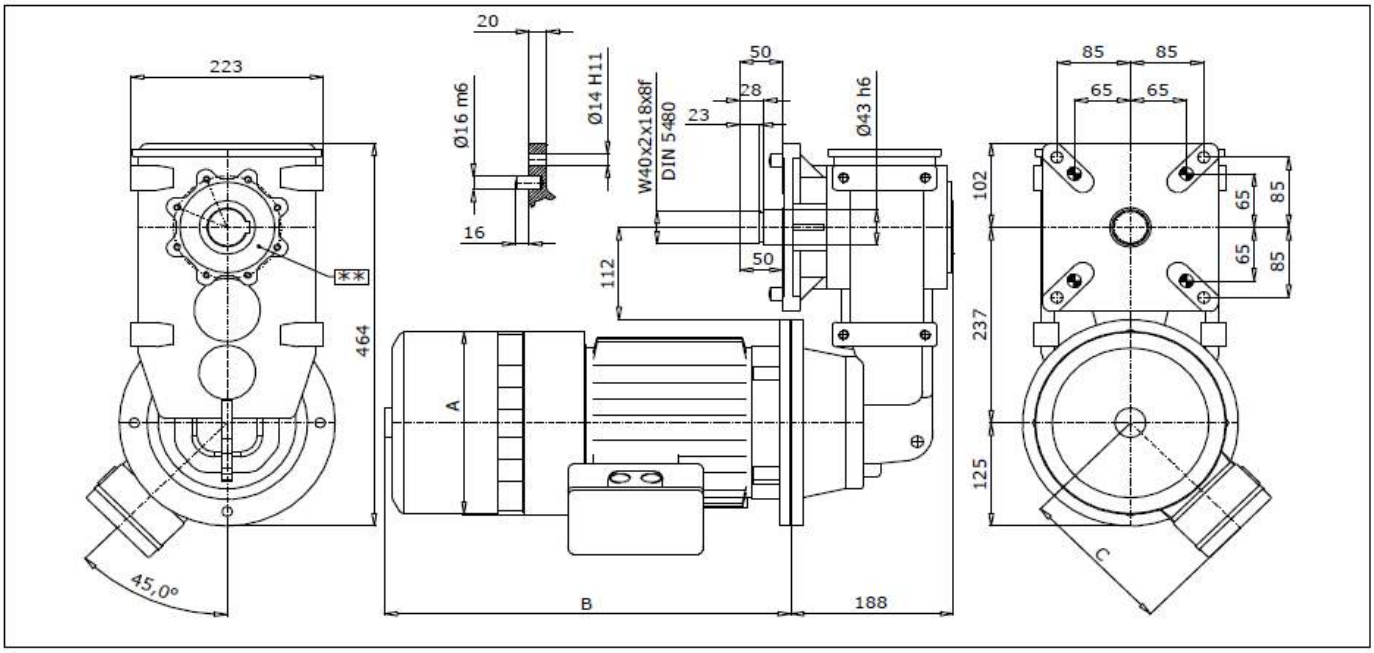
Versions for hazardous location

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%



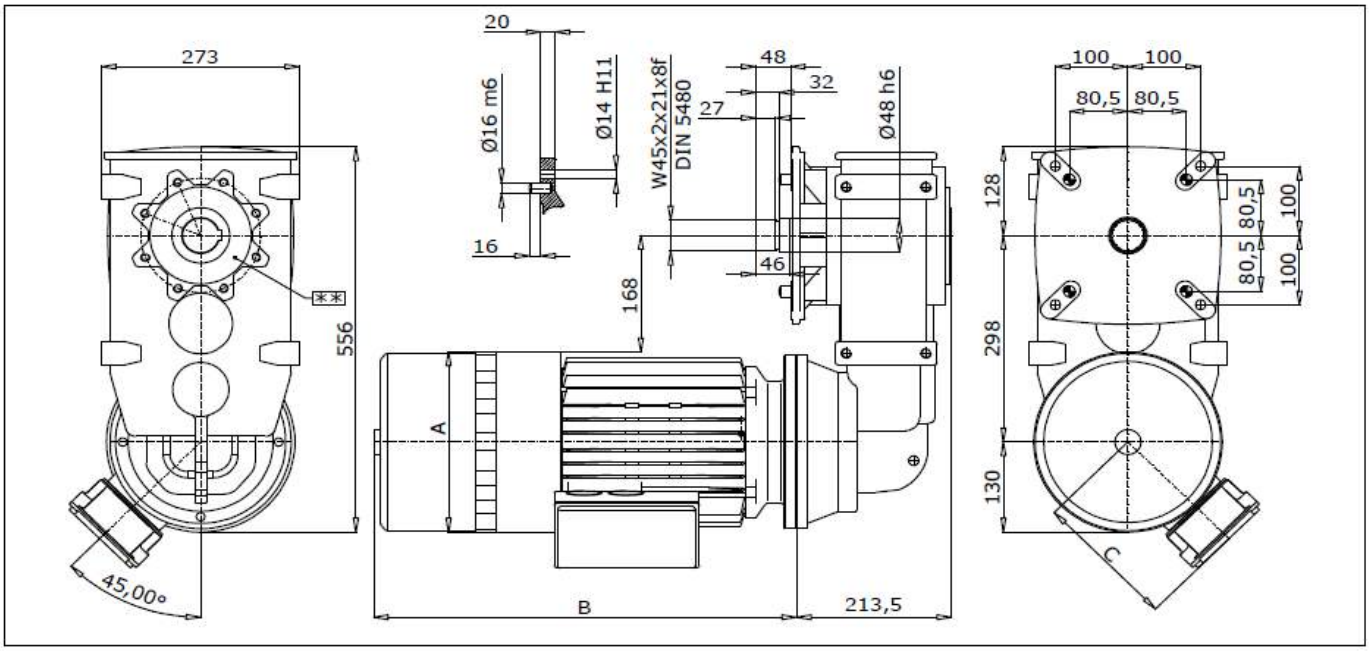
Pos.	Load (t)	ISO	FEM	V (m/min)	P (kW)	f (Hz)	Ratio	Type	Motor related dimensions (mm)
1	3,2 2,5 2	M5 M6 M7	2m 3m 4m	0,66//4,0 0,8/4,8	0,37/2,5 0,44/3,0	50 60	74	F100LB VIS100+MAK112	A:177 C:164 B:426 A:221 C:240 B:608
2	3,2 2,5 2	M5 M6 M7	2m 3m 4m	0,8/5,0 1,0/6,0	0,45/3,2 0,54/3,8	50 60	63,9	F112 VIS100+MAK112	A:220 C:180 B:471 A:221 C:240 B:608
3	3,2 2,5 2	M5 M6 M7	2m 3m 4m	1,0/6,3 1,2/7,6	0,6/4,0 0,72/4,8	50 60	56,3	F112 VIS112+MAK132SR*	A:220 C:180 B:471 A:260 C:240 B:694
4	2,5 2 1,6	M5 M6 M7	2m 3m 4m	1,3/8,0 1,6/9,6	0,6/4,0 0,72/4,8	50 60	43,7	F112 VIS112+MAK132SR*	A:220 C:180 B:471 A:260 C:240 B:694

Standard Environment ATEX/IEC EX *additional motor support required

PMT 95 PERFORMANCE

Load: ***up to 6,8 tons***
Lifting speed: ***4 - 5 - 6,3 - 8 m/min 4/1 falls***
Drum diameter: ***170 mm***

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



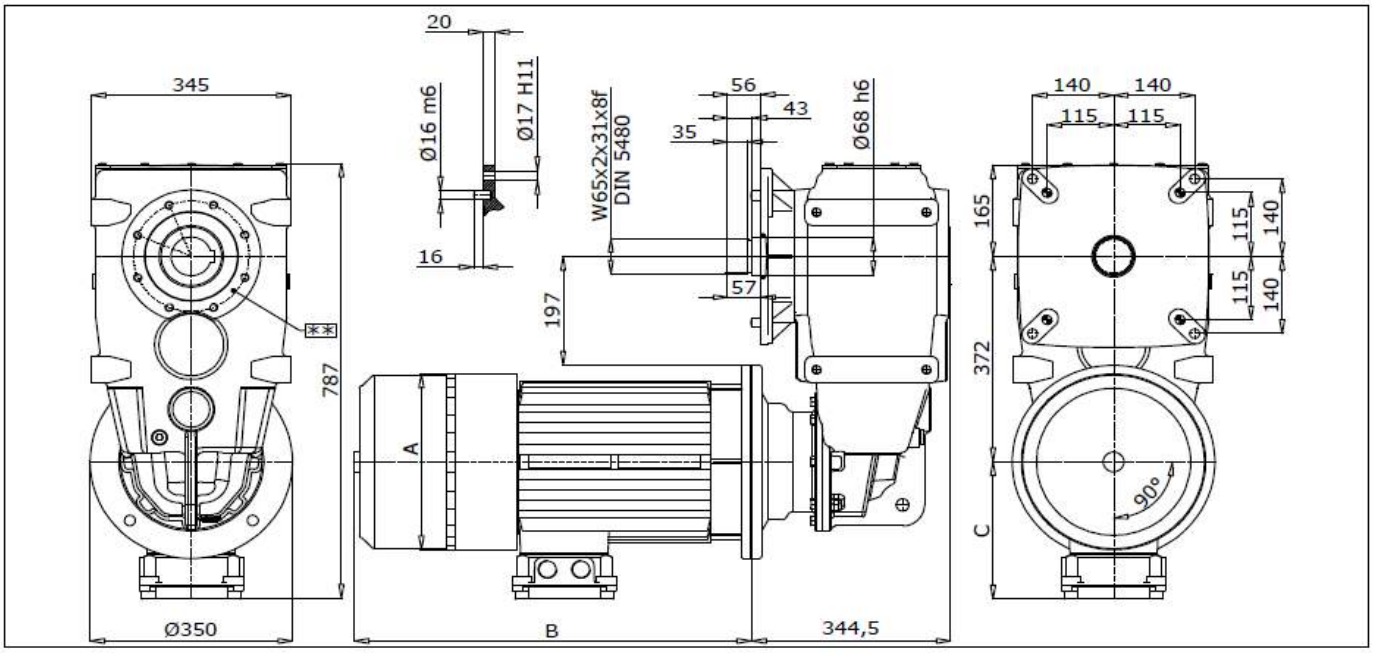
Pos.	Load (t)	ISO	FEM	v (m/min)	P (kW)	f (Hz)	Ratio	Type	Motor related dimensions (mm)
1	6,8	M5	2m	0,66/4,0	0,8/4,9	50	98,4	F132MR	A:260 C:197 B:583
				0,8/4,8	1,0/5,9	60		VIS112+MAK132MR*	A:260 C:240 B:734
2	6,8	M5	2m	0,8/5,0	1,0/6,1	50	74,2	F132MR	A:260 C:197 B:583
				1,0/6,0	1,2/7,3	60		VIS112+MAK132MR*	A:260 C:240 B:734
3	6,8	M4	1Am	1,0/6,3	1,3/7,7	50	65,4	F132LXR	A:260 C:197 B:654
				1,2/7,6	1,6/9,2	60		VIS132+MAK160LR*	A:317 C:265 B:831
4	6,8	M4	1Am	1,3/8,0	1,6/9,8	50	46,9	F132LXR	A:260 C:197 B:654
				1,6/9,6	1,9/11,8	60		VIS132+MAK160LR*	A:317 C:265 B:831

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%



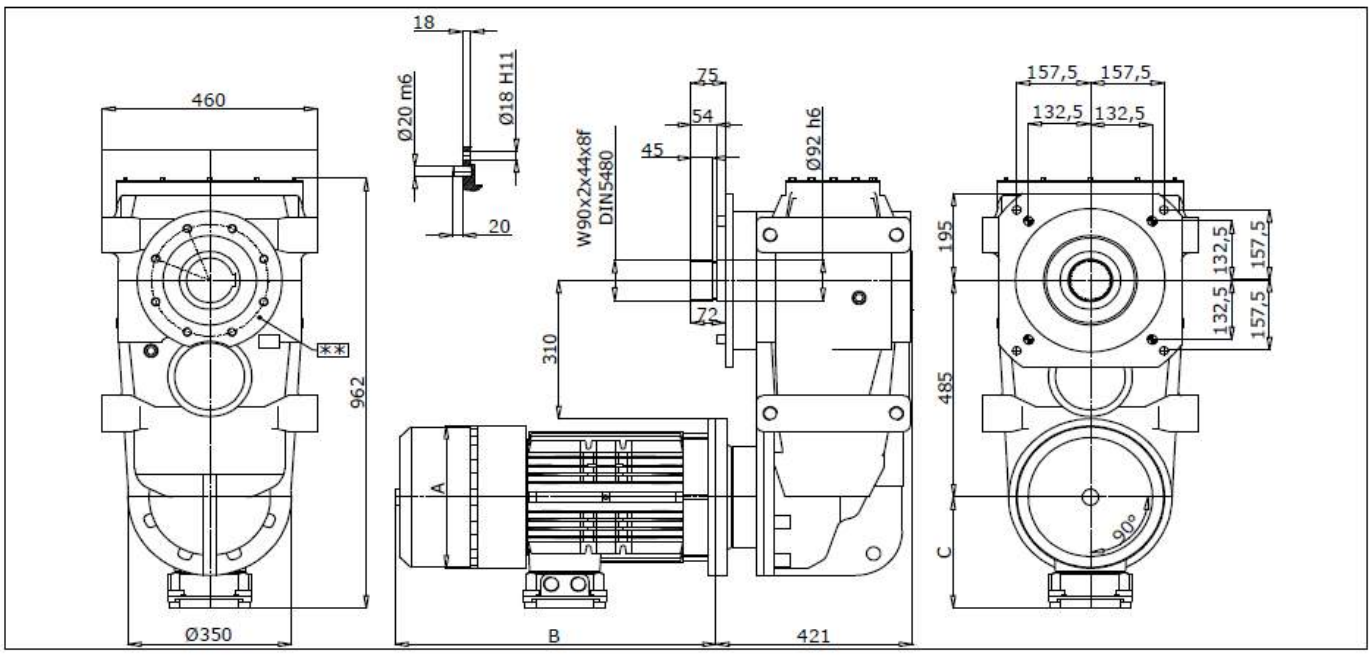
Pos.	Load (t)	ISO	FEM	V (m/min)	P (kW)	f (Hz)	Ratio	Type	Motor related dimensions (mm)
1	10 8 6,3 5	M5 M6 M7 M7	2m 3m 4m 4m	0,66//4,0 0,8/4,8	1,2/7,6 1,44/9,1	50 60	163,1	F132LX VIS132+MAK160LR	A:256 C:197 B:636 A:317 C:265 B:831
2	10 8 6,3 5	M5 M6 M7 M7	2m 3m 4m 4m	0,8/5,0 1,0/6,0	1,5/9,5 1,8/11,4	50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

Standard Environment ATEX/IEC EX

PERFORMANCE — PMT 135

Load: ***up to 20 tons***
Lifting speed: ***4 - 5 - 6,3 - 8 m/min 4/1 falls***
Drum diameter: ***295 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	16 12,5 10 8	M5 M6 M7 M7	2m 3m 4m 4m	0,66/4,0 0,8/4,8	2,0/12,5 2,4/15,0	50 60	168,7	F132LX VIS132+MAK160LR	A:256 C:197 B:636 A:317 C:265 B:831
2	20 16 12,5 10	M4 M5 M6 M7	1Am 2m 3m 4m	0,66/4,0 0,8/4,8	2,6/16,0 3,2/19,2	50 60	168,7	F160L VIS160+MAK180L	A:314 C:249 B:687 A:348 C:302 B:929
3	16 12,5 10 8	M4 M5 M6 M7	1Am 2m 3m 4m	0,8/5,0 1,0/6,0	2,6/16,0 3,2/19,2	50 60	134,1	F160L VIS160+MAK180L	A:314 C:249 B:687 A:348 C:302 B:929
4	12,6 10 8 6,3	M4 M5 M6 M7	1Am 2m 3m 4m	1,0/6,3 1,2/7,6	2,6/16,0 3,2/19,2	50 60	110,1	F160L VIS160+MAK180L	A:314 C:249 B:687 A:348 C:302 B:929
5	10 8 6,3 5	M4 M5 M6 M7	1Am 2m 3m 4m	1,3/8,0 1,6/9,6	2,6/16,0 3,2/19,2	50 60	84	F160L VIS160+MAK180L	A:314 C:249 B:687 A:348 C:302 B:929

Standard Environment ATEX/IEC EX

PMT

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