

# EPSILON TIMBER CRANES

**PALFINGER**

## GRIPPING SOLUTIONS THE NEW M-SERIES



A scenic mountain landscape featuring a dirt road winding through a lush green forest. In the foreground, a logging truck is driving away, kicking up a cloud of dust. The background shows a large, rugged mountain peak under a blue sky with scattered white clouds. The overall scene conveys a sense of ruggedness and natural beauty.

# POWER. WHENEVER.

## PALFINGER EPSILON.

At PALFINGER EPSILON the issue of sustainability starts where others finish. We don't just limit ourselves to a few specific fields when we talk about sustainable solutions. We create forward-thinking, economical and environmentally friendly systems in every area of the company.

Our customers are assured of the best possible product quality, delivered in the shape of efficient, custom-made, ecologically sound solutions. We apply the same high standards to our own work, and that of our employees. The sparing use of resources achieved by developing innovative solutions is of long-term benefit to the environment.

This is what makes PALFINGER EPSILON a partner you can rely on – a life long!

# WE UNITE WHAT BELONGS TOGETHER

The new PALFINGER EPSILON M-Series is a perfect unity of design, comfort and technology. The result is a product that fulfills every individual requirement, and even exceeds expectations.

PALFINGER EPSILON new M-Series sets new standards in design. The new high-seat Masterdrive offers operators absolute comfort and convenience, and the multifunctional command centre provides the ultimate in precision crane manipulation. The new M-Series technology impresses immediately, and thanks to extended boom reach capacities customers benefit from increased operational productivity.

The new PALFINGER EPSILON M-Series is a system that serves every individual requirement, and customers can rely on a product that unites the very best in design, comfort and technology.

The PALFINGER EPSILON M-Series –  
The crane for your requirements.

**PALFINGER** EPSILON  
M122

# FROM PLANS TO CRANES

How we combine theory and practise.

Ensuring excellence in design, comfort and technology requires taking a variety of perspectives. At PALFINGER EPSILON we bring together all the best brains in the business to generate the best possible preconditions for innovative solutions.

Together with experts in the field of industrial design we draw inspiration from a whole range of solutions, conventional and unconventional. We play with concepts and reject them again until, finally, what starts as a vague idea develops into a completely new product.

Concepts may look great on the drawing board but also need to perform out in the real world. That's where Hermann, our highly experienced test driver, comes in. He does a whole range of stringent and tough tests on all the latest developments that come out of PALFINGER EPSILON.

The sophisticated interplay of theory and practice ensures the final product is a perfect combination of design, comfort and technology – so that we can guarantee our customers exactly what they expect:

**Quality you can rely on!**  
**PALFINGER EPSILON.**



# SAFE IN THE SADDLE

Master Drive is the new high seat from PALFINGER EPSILON.

PALFINGER EPSILON has once again raised the bar for comfort and user-friendliness with a new high seat. Masterdrive enables the operator to enjoy full control of all operational commands. Thanks to the benefits of the most sophisticated design and technology this crane can be operated with a minimum of effort. The ergonomic shape of the comfortable and convenient mechanical suspension high seat guarantees great comfort, and the multifunctional arm rest puts every command at the operator's fingertips.

### Multifunctional arm rest

The multifunctional arm rest puts every command at the operator's fingertips.

### Hydraulic servo joysticks

Hydraulic servo joysticks facilitate precise operation.

### High-comfort high seat provides horizontal and vertical suspension

The comfortable, ergonomically-shaped seat from the house of GRAMMER provides maximum manoeuvrability, secure and stable seating, as well as seat heating, weight adjustment options and mechanically adjustable lumbar support.





# ALL UNDER THE HOOD

## EPSHOOD

### Fold-away mechanism

The pneumatic fold-away weather hood facilitates a more compact operating position.

Weather shield hood position

Hood in open position

Extremely compact construction

EPSHOOD –  
The protective hood for safe crane operation.

The EPSHOOD crane operator hood is a newly developed weather shield and gives the driver excellent protection from the elements while operating the crane. The foldaway mechanism and tinted plastic hood keep out the sun, rain and wind during the whole operating process, making every job a pleasant and comfortable experience.

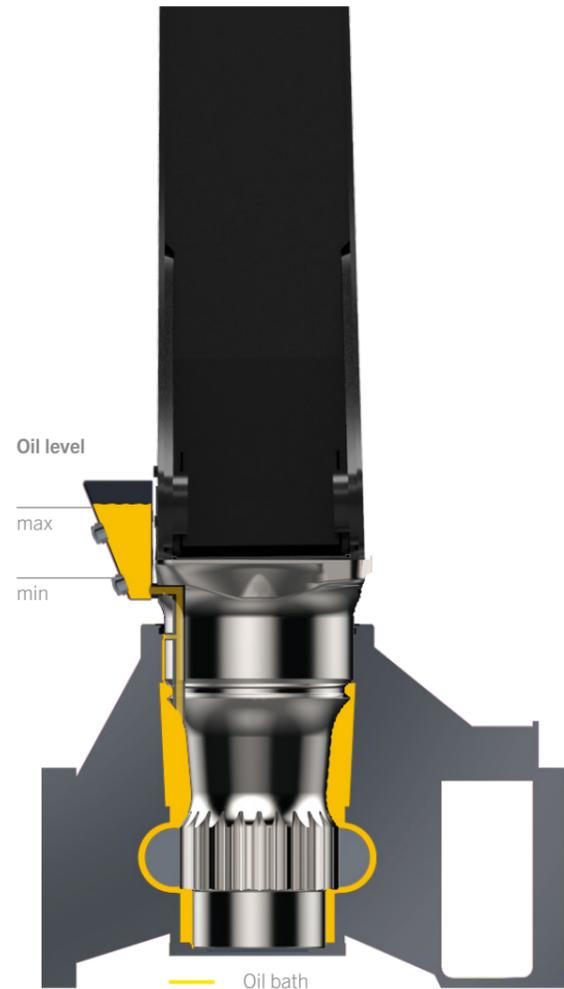


# A PILLAR OF INNOVATION

The crane column in an oil bath.

Convenient care, maintenance and repair are decisive for the professional manipulation of precision machinery. This is another strength of the new PALFINGER EPSILON M-Series, as it offers wellthought-out solutions for low-maintenance operation.

The newly designed crane column mounting ensures the entire pillar mechanism is immersed in an oil bath. This has very positive effects on maintenance requirements and a tangible impact upon internal maintenance expenditure.



# PALFINGER EPSILON

### Service openings

Easily accessible service openings make the replacement of hoses a quick and easy procedure.

### Inside hose routing

The unique, inside hose routing solution ensures the risk of damage is minimised and the cost of wear and tear reduced.

### Rotary distributor

Easily accessible via service opening.

### Finish crane column

Excellent design and perfect functionality.

### Internally routed hoses

# WORTH HIDING

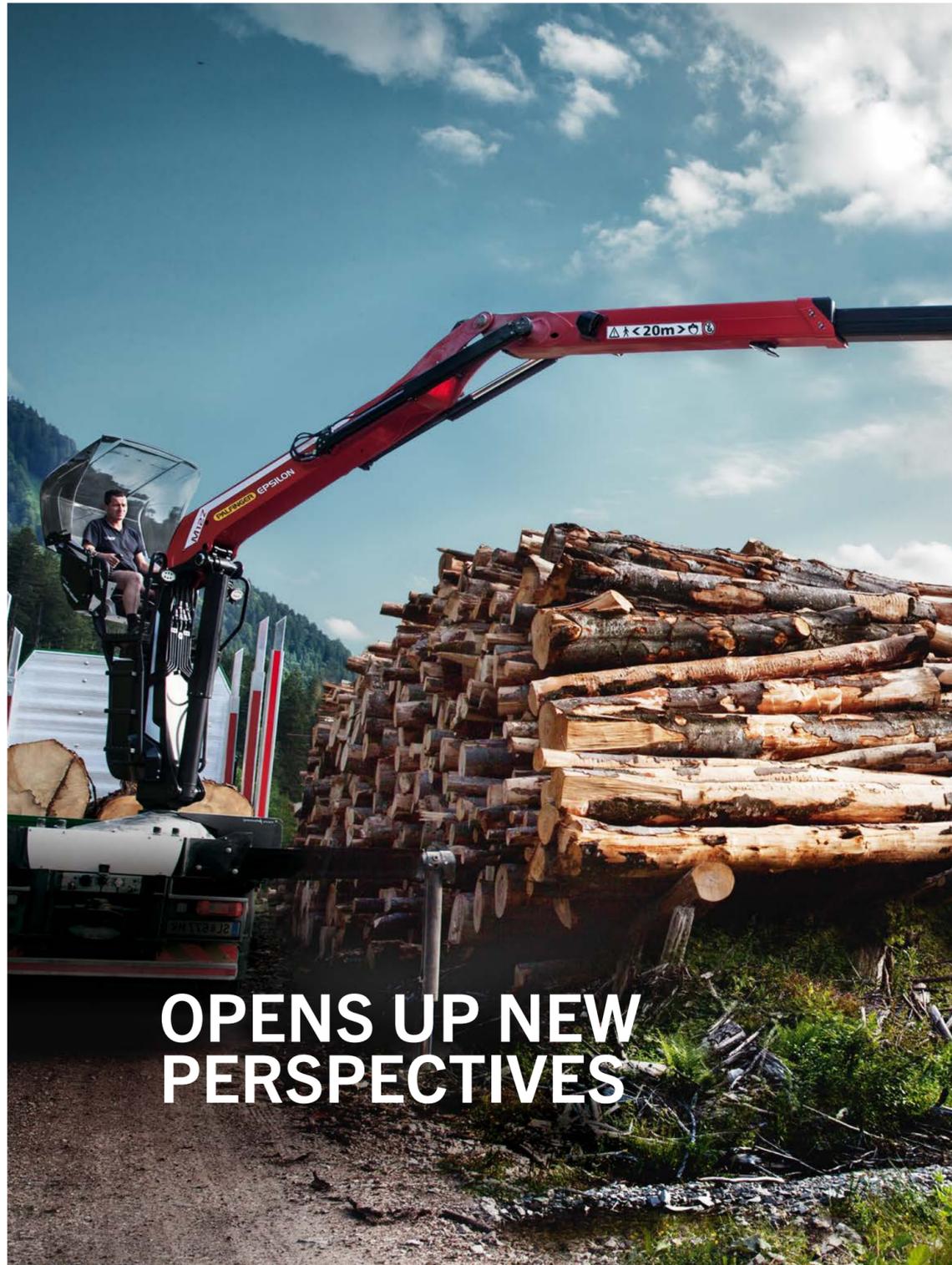
Easily accessible inside hose routing.

No other crane manufacture can offer anything like the ease of service and technical convenience provided by PALFINGER EPSILON. The unique inside hose routing enables crane operators to gain quick and easy on-the-job service access. Inside hose routing also reduces the risk of damage to the hoses. Service openings on the crane make replacement a simple task and help to save time and money.

Service openings



- Rotary distributor
- Hose routing
- Pipe routing



**OPENS UP NEW PERSPECTIVES**



**Outreach double telescope**

The new design of the double telescope system provides up to 900mm more reach than the predecessor. The longest reach in its field.



**DUE TO ITS GREATER REACH**



**Height reduction**

The new arm geometry has made it possible to build an even more compact crane with an extra 100mm of ground clearance.



# TECHNICAL DETAILS

## MZ

### 1. Outreach

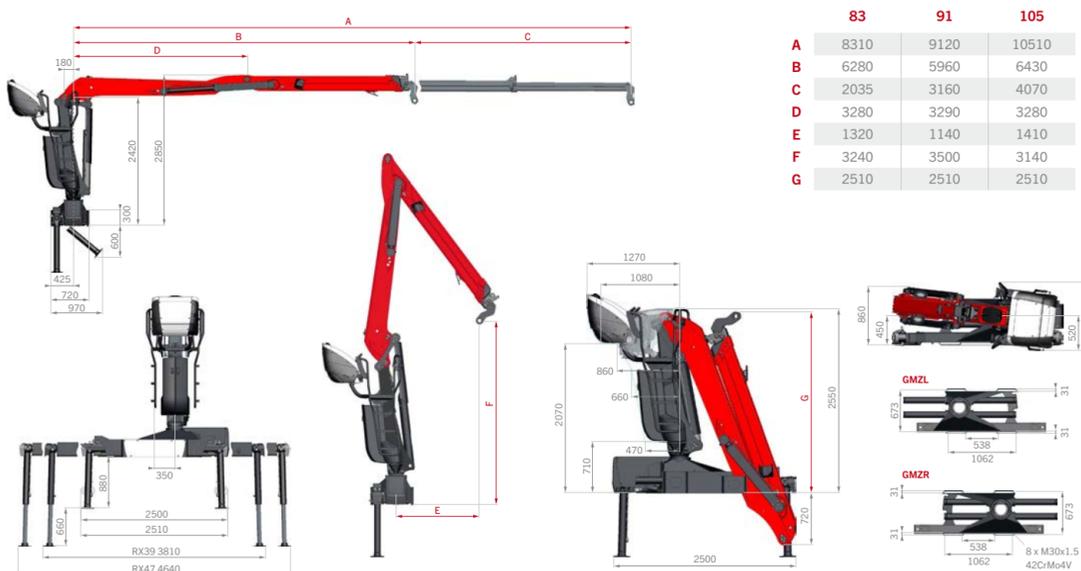
**83**=8,30 m  
**91**=9,10 m  
**105**=10,50 m

### 2. Details

	[kNm]	M10Z			M12Z		
		<b>83</b>	<b>91</b>	<b>105</b>	<b>83</b>	<b>91</b>	<b>105</b>
Lifting moment net	[kNm]	93	91	87	109	107	104
Slewing torque net	[kNm]	24			28		
Slewing angle	[°]	425			425		
Max. Outreach	[m]	8,3	9,1	10,5	8,3	9,1	10,5
Operating pressure	[bar]	230			260		
Recommended pump capacity	1K l/min	1x80			1x80		
	2K l/min	2x70			2x70		
	1K LS l/min	1x150			1x150		
Dead weight without lin/rotator	[kg]	2180	2230	2280	2220	2270	2320

### 3. Dimensions

Fixed size | variable size



### 4. Lifting power

		<b>83</b>							
		3m	4m	5m	6m	7m	8m		
	M10Z83	3100	2320	1840	1510	1280	990		
	M12Z83	3630	2720	2160	1790	1510	1170		
	M10Z91	3040	2270	1790	1480	1250	1070		
	M12Z91	3580	2680	2120	1750	1480	1280		
	M10Z105	2900	2170	1730	1420	1190	1020	890	680
	M12Z105	3470	2600	2070	1700	1430	1230	1080	800

## ML

### 1. Outreach

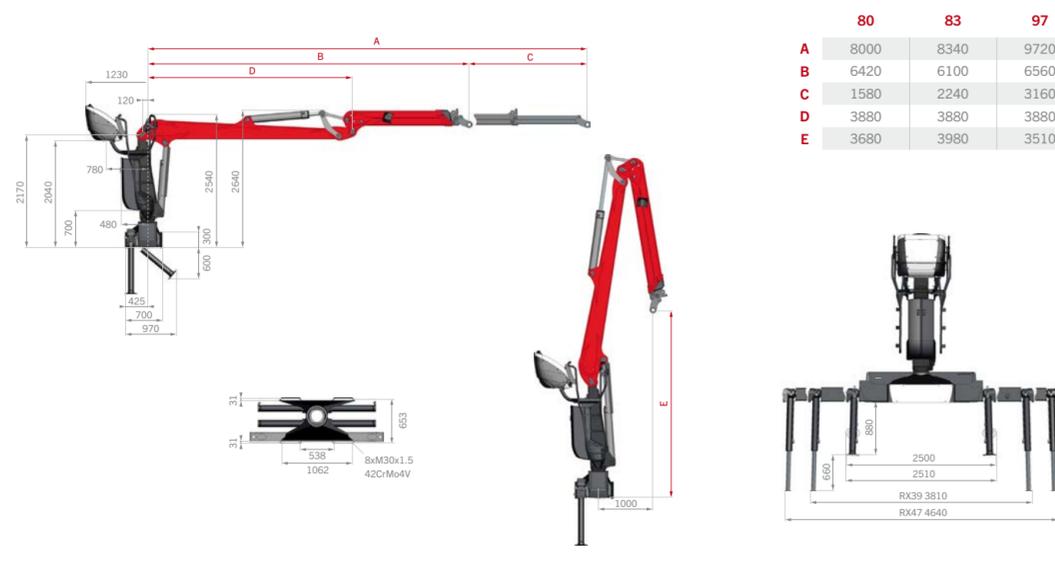
**80**=8,00 m  
**83**=8,30 m  
**97**=9,70 m

### 2. Details

	[kNm]	M10L			M12L		
		<b>80</b>	<b>83</b>	<b>97</b>	<b>80</b>	<b>83</b>	<b>97</b>
Lifting moment net	[kNm]	97	95	93	115	113	110
Slewing torque net	[kNm]	24			28		
Slewing angle	[°]	425			425		
Max. Outreach	[m]	8,0	8,3	9,7	8,0	8,3	9,7
Operating pressure	[bar]	220			250		
Recommended pump capacity	1K l/min	1x80			1x80		
	2K l/min	2x70			2x70		
	1K LS l/min	1x150			1x150		
Dead weight without link/rotator	[kg]	2000	2050	2120	2070	2120	2190

### 3. Dimensions

Fixed size | variable size



### 4. Lifting power

		<b>80</b>						
		3m	4m	5m	6m	7m	8m	
	M10L80	3230	2420	1930	1590	1360	1190	
	M12L80	3830	2860	2270	1880	1600	1360	
	M10L83	3160	2370	1880	1560	1320	1150	
	M12L83	3770	2830	2240	1860	1580	1370	
	M10L97	3070	2320	1820	1500	1270	1090	960
	M12L97	3690	2760	2190	1800	1530	1320	1170

Net lifting capacity not including lifting unit

# YOUR PARTNER FOR THE FUTURE

Each and every PALFINGER EPSILON product is far more than just the sum of its parts. Throughout the entire company we adhere to the very latest standards, and on behalf of our customers we strive unceasingly to provide sustainable, innovative, bespoke solutions. We consider customer satisfaction to be of the utmost importance; so you can rely on PALFINGER EPSILON to deliver long-lasting, low-maintenance products that are economical to run in terms of costs and the consumption of resources.

We are constantly working on the development of solutions to offer long-term viability. We give our staff at the development centre plenty of encouragement and set them plenty of challenges; and today's reconstruction work on the company headquarters is taking place to guarantee we have the necessary capacity to serve customers in the years to come.

Working in cooperation with our partners we continue to do everything within our power to provide innovative, custom-built products that deliver the best possible solutions for your needs.

**PALFINGER EPSILON.**



New development centre and assembly

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