

# Valve Platform RM-10 / RM-15

## Load sensing pre-compensated directional control valves



The mobile machine market demands flexible and high performing load sensing solutions, which are key for future machine design. Bosch Rexroth's pre-compensated load sensing design makes the platform easily configurable for machine manufacturers. The Rexroth RM-10/-15 is a general purpose valve platform that provides control solutions to a large range of medium duty machines for on- and off-highway: Snow removal and waste handling as well as skid steer loaders, compact track loaders and compact wheel loaders.

### CUSTOMER BENEFITS

- Flexible and modular design
- More precise function control for operators
- Simplified setup process for the control block
- Compact dimensions
- High operational efficiency reduces energy consumption
- Less hydraulic components necessary
- Compatibility to M4-12 family for specific customer needs

### FUNCTION AND BENEFITS

#### Flexible and modular design

Bosch Rexroth's RM mobile valve portfolio has a modular design and can be easily adapted to customer needs. It ranges from the RM-10 with up to 90 lpm to the RM-15 with up to 150 lpm and shares the same flange or mounting interface with the M4-12. Beyond that the RM family has the standard option to be combined with more compact valves from the ED/EDG family for up to 40 lpm or large flow mobile valves. This wide assortment ensures cross functionality for all flow ranges on a machine.

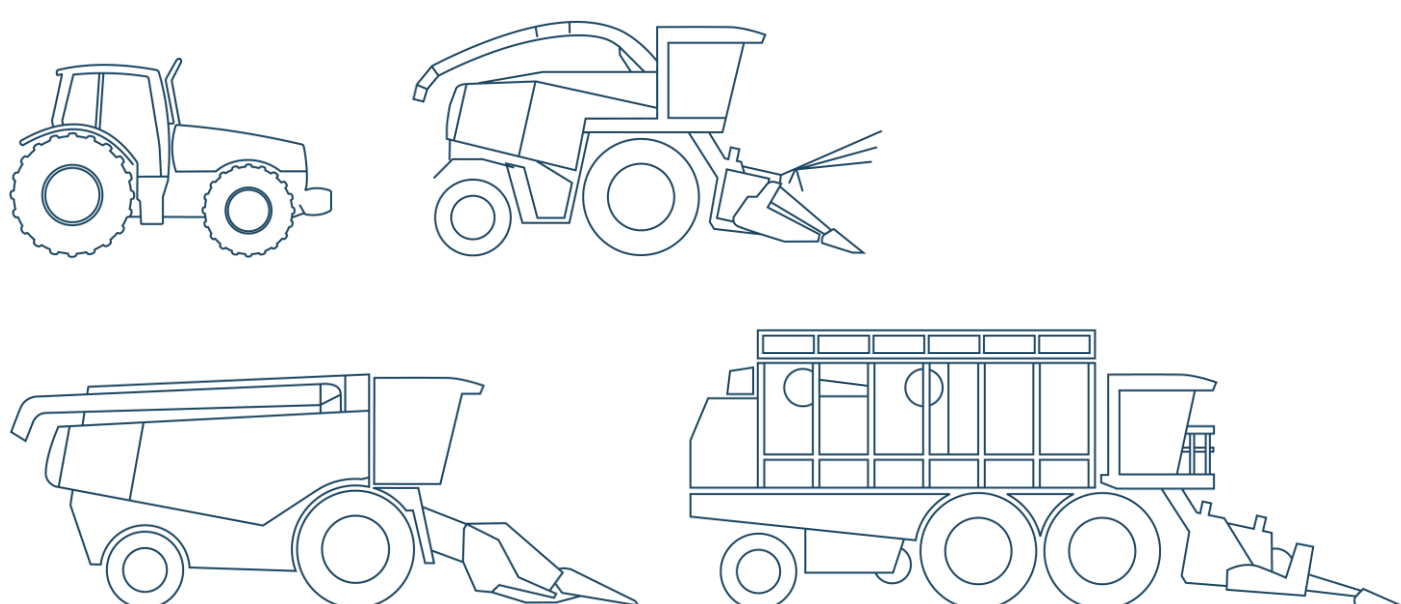
#### Precise function control and simplified setup process

The Rexroth RM platform features an extended spool stroke of 8 mm. This leads to an improved operator experience through finer and more precise function controllability with the joystick, while executing defined movements. The extended spool stroke also allows easier and simplified machine setup and calibration. This way the machine manufacturer benefits from an easier electronics setup for the control block.

#### Compact dimensions

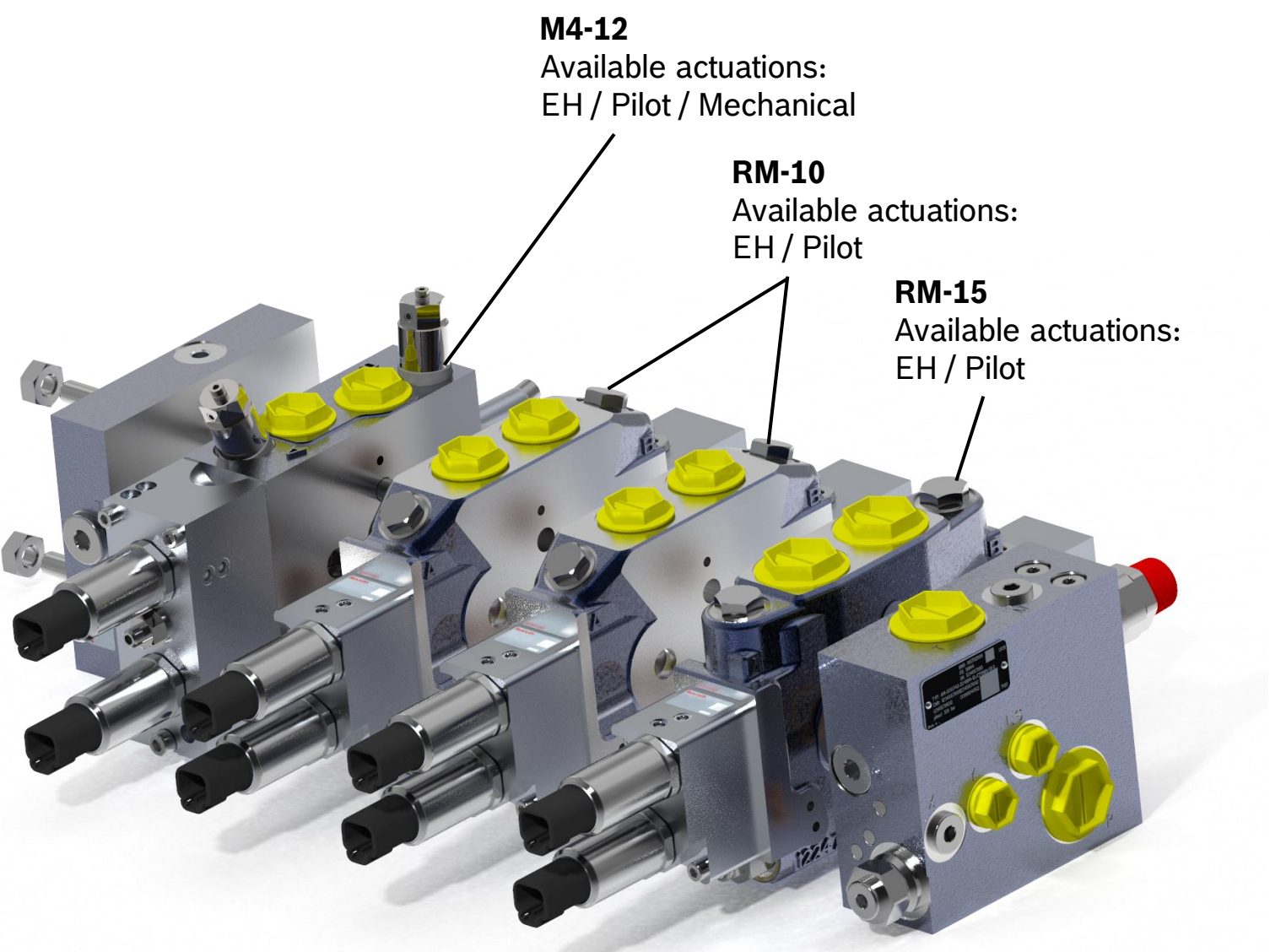
The RM-10 section was designed with a reduced width by 4 mm versus the RM-15 to ensure least possible required length. The compact valve design enables manufacturers of mobile working machines to use limited installation space efficiently.

### APPLICATIONS



TECHNICAL DATA

Valve Platform RM-10 / RM-15	
Variants:	RM-10, RM-15
Version	Standard
Pump Pressure:	280 bar (4050 psi)
Work Port Pressure:	320 bar (4640 psi)
Flow:	Inlet: 200 lpm (53 gpm) RM-10: up to 90 lpm (24 gpm) RM-15: up to 150 lpm (40 gpm)
Available actuations:	Proportional Electric Hydraulic Pilot
Data sheet:	64955



RM-10 / RM-15 with compatibility to M4-12

High operational efficiency reduces energy consumption

The RM-10/-15 platform from Bosch Rexroth is designed to increase energy efficiency of the hydraulic controls. Multiple features have been included into the platform like the section specific load sensing relief to optimize controllability. The internal oil channels of the RM are designed to reduce pressure drop to only 5 bar.

Less hydraulic components necessary

Cutting edge engineering reduces leakage over the main spool to only 10 cc/min at 100 bar. This feature means that no additional counterbalance valves on the main control block are needed. The result is an overall smaller package size and a smaller number of components.

Compatibility to M4-12 family for specific customer needs

For the majority of customer applications the RM-10/-15 is the right fit. In case of additional functionality or specific requirements, like higher pressure or A and B specific load sense signal, an M4-12 section can be used without any transition or intermediate plate (like in assembly on the left).