

FM025 Centrifuge

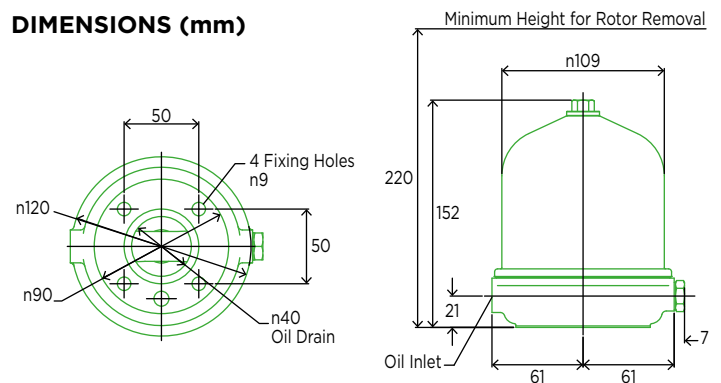
Technical Data



BENEFITS

- Cleaner oil and extended oil life
- Lengthens service intervals
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs
- Cuts waste disposal costs
- Reduces application down time
- Maximises in-service time for vehicle/engine/machine
- Reduces total cost of ownership
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)
- Fast return on investment

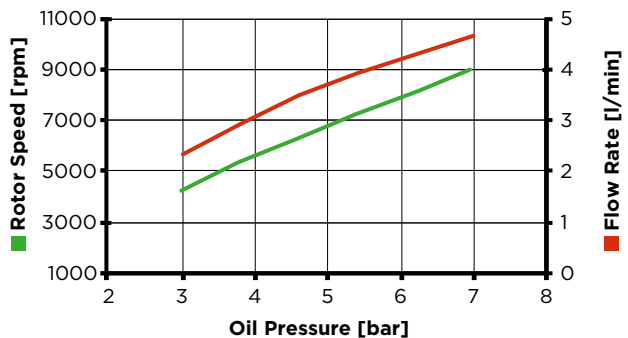
DIMENSIONS (mm)



Model	FM025-4
Part number	6899111701
Oil inlet thread	Side 1/4" B.S.P.
Cut Off Valve (C.O.V.) ratings	1.3 bar
Net weight	1.4 kg
System capacity	5 - 15 litres for lubrication system
Filter dirt capacity	0.25 litres
Filter oil capacity	0.32 litres
Minimum oil feed pipe size	Ø 6 mm internal
Minimum oil drain pipe size	Ø 25 mm internal
Rotor	Cleanable

PERFORMANCE CURVES

Typical Rotor Performance



FM050P-LCB Centrifuge

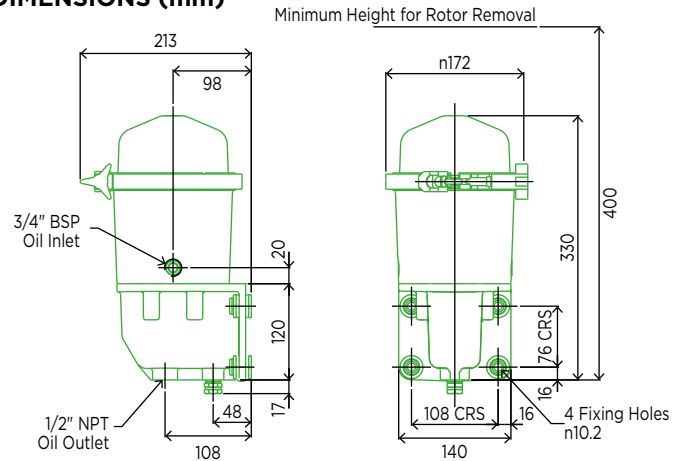
Technical Data



BENEFITS

- Uses compressed air and a float valve assembly to forcibly return the cleaned oil to the engine sump
- Enables remote mounting with a small diameter return hose (e.g. on a vehicle chassis)
- Air consumption is almost nil, air flow to the sump being prevented by the float mechanism
- Prevents oil flow to the air system by a non-return valve
- Cleaner oil and extended oil life
- Lengthens service intervals and reduces application down time
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs and total cost of ownership
- Cuts waste disposal costs
- Maximises in-service time for vehicle/engine/machine
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)

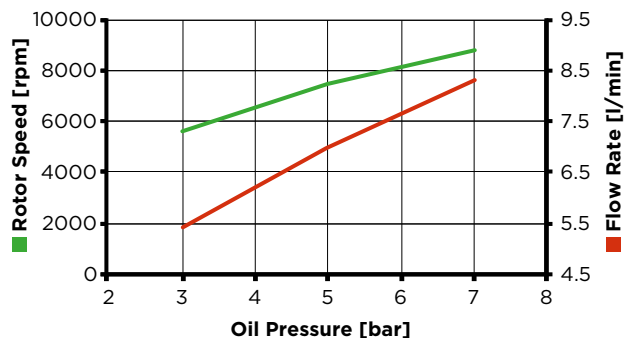
DIMENSIONS (mm)



Model	FM050P-LCB
Part number	68 991 52 001
Oil connection	3/4 B.S.P.
Air connection	1/4" NPT
Cut Off Valve (C.O.V.) ratings	1.3 bar
Net weight	4.9 kg
System capacity	15–90 litres for lubrication systems
Filter dirt capacity	0.50 litres
Filter oil capacity	1.125 litres
Minimum oil feed pipe size	Ø 9.5 mm internal
Minimum oil drain pipe size	Ø 12 mm internal
Rotor	Plastic, disposable

PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



FM090 Centrifuge

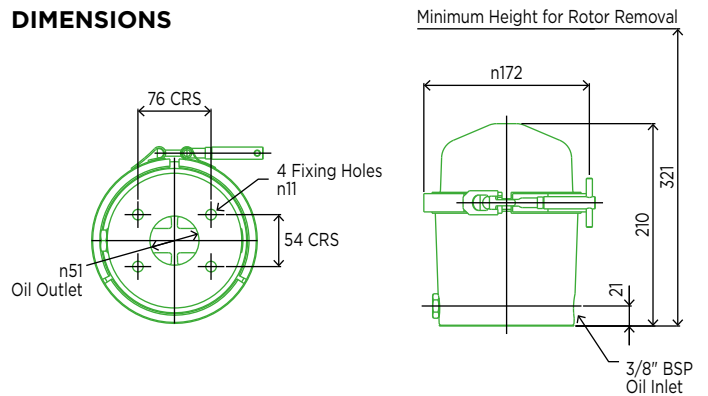
Technical Data



BENEFITS

- Cleaner oil and extended oil life
- Lengthens service intervals
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs
- Cuts waste disposal costs
- Reduces application down time
- Maximises in-service time for vehicle/engine/machine
- Reduces total cost of ownership
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)
- Fast return on investment
- Cleanable metal rotor

DIMENSIONS

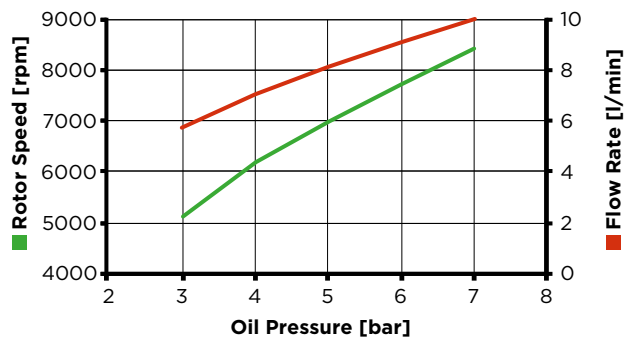


Model	FM090-31
Part number	68 991 42 101
Oil inlet thread	3/8" B.S.P.*
Cut Off Valve (C.O.V.) ratings	1.3 bar*
Net weight	3.5 kg
System capacity	15 – 90 litres
Rotor dirt capacity	0.9 litres
Rotor oil capacity	1.125 litre
Minimum oil feed pipe size	Ø 9.5 mm internal
Minimum oil drain pipe size	Ø 38 mm internal

*Can be tailored to suit customer requirements
Other features can be included to suit specific customer requirements

PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



FM090-LCB Centrifuge

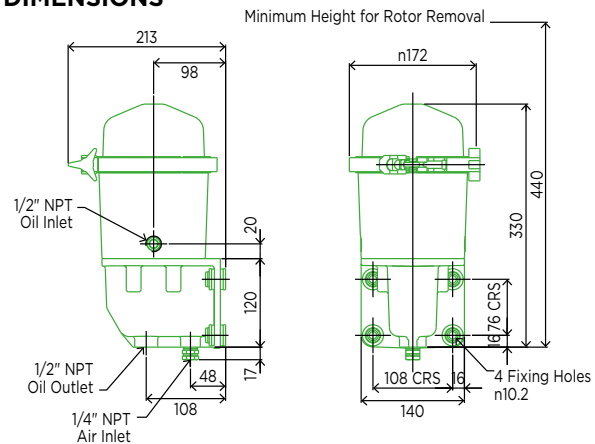
Technical Data



BENEFITS

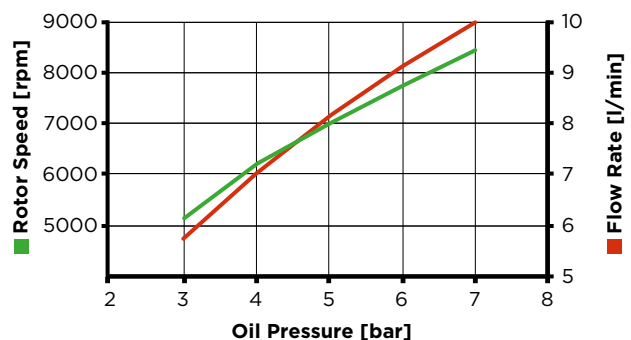
- Cleaner oil and extended oil life
- Lengthens service intervals and reduces application down time
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs and total cost of ownership
- Cuts waste disposal costs
- Maximises in-service time for vehicle/engine/machine
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)
- Uses compressed air and a float valve assembly to forcibly return the cleaned oil to the engine sump
- Enables remote mounting with a small diameter return hose (e.g. on a vehicle chassis)
- Air consumption is almost nil, air flow to the sump being prevented by the float mechanism
- Prevents oil flow to the air system by a non-return valve

DIMENSIONS



PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



Model	FM090-LCB Transit
Part number	68 991 39 301
Oil connection	1/2" NPT
Air connection	1/4" NPT
Cut Off Valve (C.O.V.) ratings	1.3 bar*
Net weight	6 kg
Rotor dirt capacity	0.9 litres
Rotor oil capacity	1.125 litres
Maximum air consumption	36 litres/hour
Minimum oil drain pipe size	Ø 12 mm internal
Minimum oil feed pipe size	Ø 9.5 mm internal

*Can be tailored to suit customer requirements
Oil inlet threads can also be tailored to suit customer requirements

FM200 Centrifuge

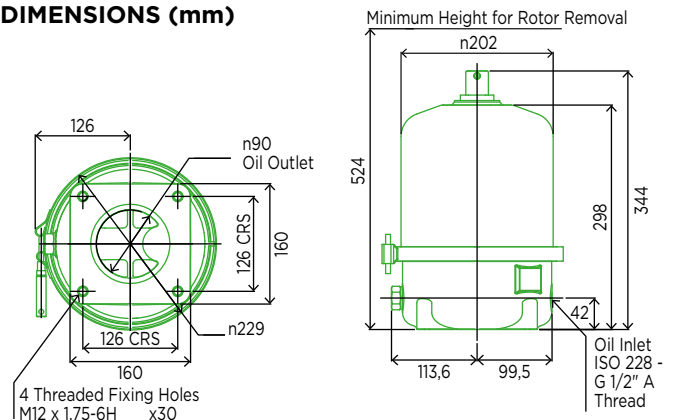
Technical Data



BENEFITS

- Cleaner oil and extended oil life
- Lengthens service intervals
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs
- Cuts waste disposal costs
- Reduces application down time
- Maximises in-service time for vehicle/engine/machine
- Reduces total cost of ownership
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)

DIMENSIONS (mm)

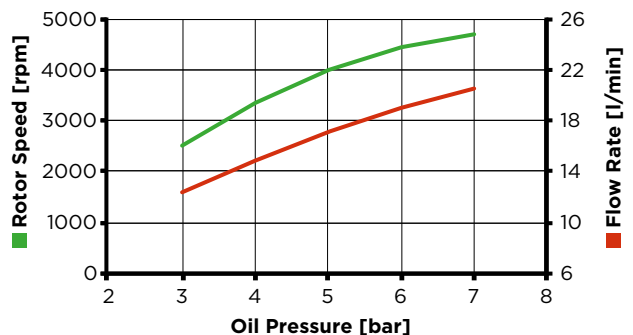


Model	FM200-21
Part number	68 991 19 701
Oil inlet thread	1/2" B.S.P.*
Cut Off Valve (C.O.V.) ratings	2.5 bar*
Threaded fixing holes	M12
Net weight	9.5 kg
System capacity	40 - 170 litres
Rotor dirt capacity	2 litres
Rotor oil capacity	2.3 litres
Minimum oil feed pipe size	Ø 12 mm internal
Minimum oil drain pipe size	Ø 50 mm internal

*Can be tailored to suit customer requirements

PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



FM400 Centrifuge

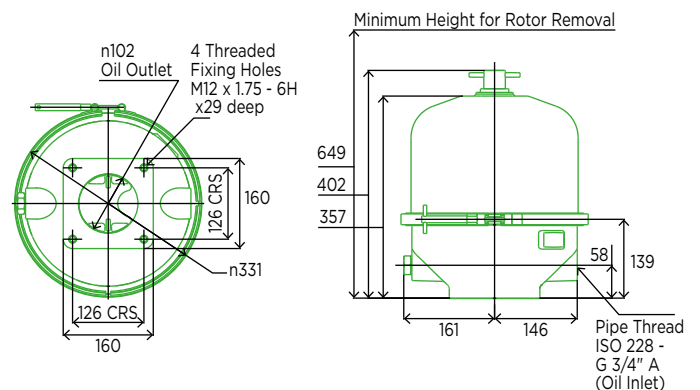
Technical Data



BENEFITS

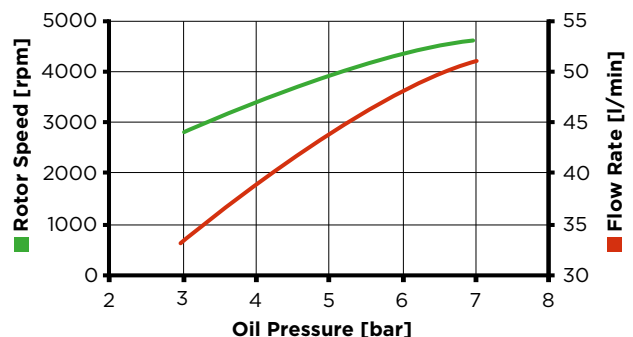
- Cleaner oil and extended oil life
- Lengthens service intervals
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs
- Cuts waste disposal costs
- Reduces application down time
- Maximises in-service time for vehicle/engine/machine
- Reduces total cost of ownership
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)

DIMENSIONS (mm)



PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



Model	FM400-23
Part number	68 991 38 801
Oil inlet thread	3/4" B.S.P.*
Cut Off Valve (C.O.V.) ratings	2.5 bar*
Threaded fixing holes	M12
Net weight	22 kg
System capacity	200 - 1,500 litres
Rotor dirt capacity	4 litres
Rotor oil capacity	4.5 litres
Minimum oil feed pipe size	Ø 19 mm internal
Minimum oil drain pipe size	Ø 76 mm internal

*Can be tailored to suit customer requirements

FM600 Centrifuge

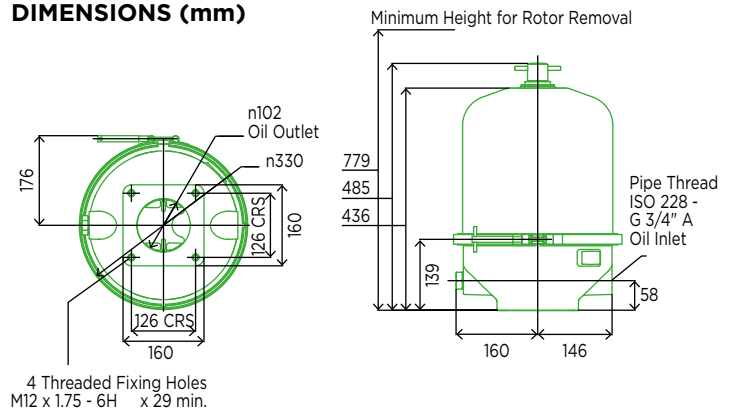
Technical Data



BENEFITS

- Cleaner oil and extended oil life
- Lengthens service intervals
- Reduces engine wear
- Enhances long-term preventative maintenance
- Reduces maintenance costs
- Cuts waste disposal costs
- Reduces application down time
- Maximises in-service time for vehicle/engine/machine
- Reduces total cost of ownership
- Helps ensure clean combustion and fuel efficiency
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)

DIMENSIONS (mm)

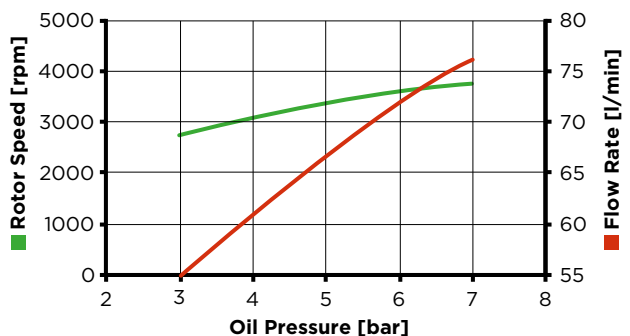


Model	FM600-23
Part number	68 991 18 901
Oil inlet thread	3/4" B.S.P.*
Cut Off Valve (C.O.V.) ratings	2.5 bar*
Threaded fixing holes	M12
Net weight	25 kg
System capacity	200 - 1,500 litres**
Rotor dirt capacity	6 litres
Rotor oil capacity	6.5 litres
Minimum oil feed pipe size	Ø 19 mm internal
Minimum oil drain pipe size	Ø 76 mm internal

*Can be tailored to suit customer requirements
**Systems with a higher capacity can be supplied.

PERFORMANCE CURVES

Typical Rotor Performance for SAE 30 Oil @ 100°C



Remote Mounting Base

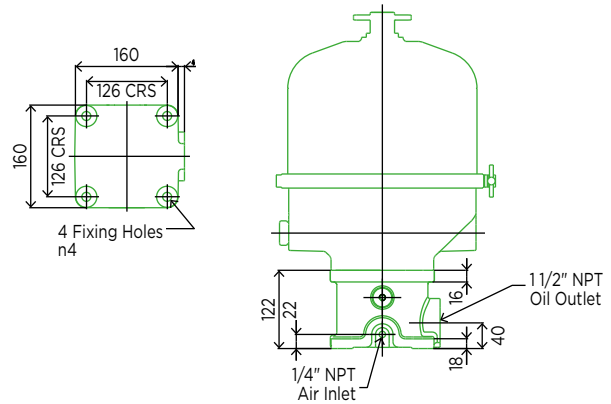
FM200, FM400 and FM600

Technical Data



Many engine installations are compact with little space in which to mount a centrifuge directly on to an engine. To overcome this problem and the normal centrifuge requirements for a gravity oil return to the engine, FM200, FM400 and FM600 centrifuges can be supplied with a remote mounting base, which uses compressed air to maintain a positive pressure inside the centrifuge, eliminating the need for gravitational oil return. This device contains a float operated valve, which admits compressed air to forcibly return oil to the engine even through smaller than normal pipes. The float action controls the oil level within the remote mounting base and does not allow air to enter the oil return to the engine. The remote mounting base requires an external compressed air supply at a pressure between 0.5 and 3 bar. Since significant quantities do not flow out of the centrifuge into the engine, air consumption is near zero. If the system pressure exceeds 3 bar, a pressure regulator should be fitted.

DIMENSIONS (mm)



Model	Remote Mounting Base
Part number	68 991 11 101
Recommended oil return hose diameters	FM200: Ø 25 mm internal, FM400 and FM600: Ø 37 mm internal
Attached directly to	FM200, FM400 and FM600

Note: Remote mounting base will not operate if air pressure drops below 0.5 bar.

**We can also supply combined retrofit packages which include both:
The Centrifuge assembly and the Remote Mounting Base**

Model	Part number
FM 200 RMB	68 991 52 401
FM 400 RMB	68 991 52 501
FM 600 RMB	68 991 52 601

Standard hose kit are also available for a complete retrofit.

Please contact MANN+HUMMEL for further details.

Leadership in Filtration

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HUMMEL**

FM400 SOLAS Centrifuge

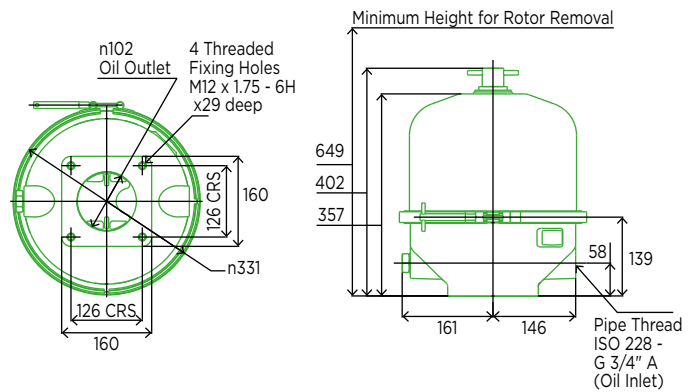
Technical Data



BENEFITS

- Cleaner oil
- Reduces engine wear and application down time
- Enhances long-term preventative maintenance
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)
- Removal of submicron containment particles
- Controls the harmful effects of burning highly contaminating fuels
- Supports NOx reduction technologies
- Complements MANN+HUMMEL oil filter and other automatic filter technology
- Flexible installation options
- Attractive return on investment

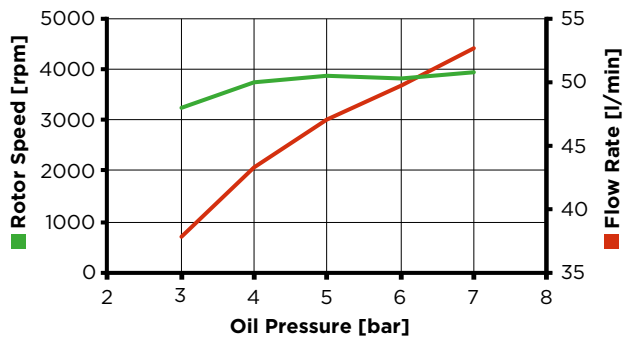
DIMENSIONS (mm)



Model	FM400 SOLAS
Part number	6899154701 - Side Feed 6899155301 - Base Feed
Oil connection	G3/4"A - Side Feed Ø 19 mm - Base Feed
Cut Off Valve (C.O.V.) ratings	Ratings can be tailored
Net weight	22 kg
System capacity	200 to 1,500 litres
Rotor dirt capacity	4 litres
Rotor oil capacity	4.5 litres
Minimum oil feed pipe size	Ø 19 mm internal
Minimum oil drain pipe size	Ø 76 mm internal
Rotor	Cleanable with paper insert

PERFORMANCE CURVES

Typical Rotor Performance For SAE 30 Oil @ 75 °C



FM600 SOLAS Centrifuge

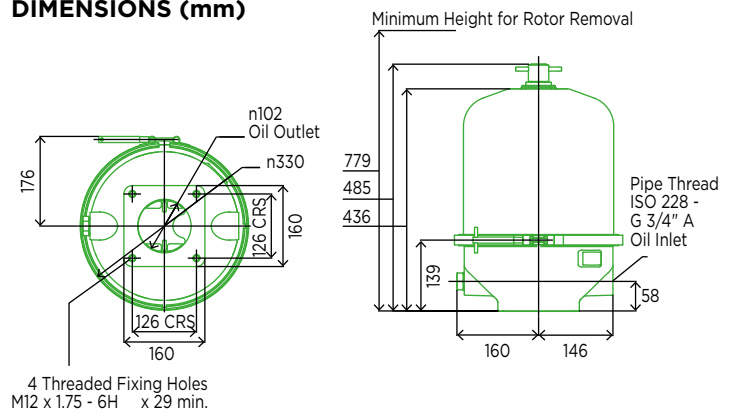
Technical Data



BENEFITS

- Cleaner oil
- Reduces engine wear and application down time
- Enhances long-term preventative maintenance
- Supports engine technology for the reduction of exhaust emissions (e.g. exhaust gas recirculation)
- Removal of submicron containment particles
- Controls the harmful effects of burning highly contaminating fuels
- Supports NOx reduction technologies
- Complements MANN+HUMMEL oil filter and other automatic filter technology
- Flexible installation options
- Attractive return on investment

DIMENSIONS (mm)



Model	FM600 SOLAS
Part number	6899154601 - Side Feed 6899155201 - Base Feed
Oil connection	G3/4\"A - Side Feed Ø 19 mm - Base Feed
Cut Off Valve (C.O.V.) ratings	Ratings can be tailored
Net weight	25 kg
System capacity	200 to 1,500 litres
Rotor dirt capacity	6 litres
Rotor oil capacity	6.5 litres
Minimum oil feed pipe size	Ø 19 mm internal
Minimum oil drain pipe size	Ø 76 mm internal
Rotor	Cleanable with paper insert

PERFORMANCE CURVES

Typical Rotor Performance For SAE 30 Oil @ 75 °C

