

TECHNICAL SPECIFICATION

Document ID: Meva RS technical specification EN

Revision: 17.14

MEVA
by Nordic Water

Rotoscreen RS

General information

The Meva Rotoscreen is a self-cleaning fine screen, designed for separation of solids in waste water. The Rotoscreen is suitable for installation in incoming channels at municipal wastewater treatment plants and process industries, where a separation within the range 2-6 mm is required. It has a very low flow resistance, which results in a low head loss. This is of great advantage when it is installed in an open channel.

The Rotoscreen has an exact slot width during operation. This is ensured by a robust bar fixing device and replaceable intermediate spacers. The design causes the screening mat to be transported upwards with a circular motion. The screen is resistant to sand, gravel etc, due to the automatic anti-blockage protection at the bottom of the channel.

The Rotoscreen is manufactured in several versions differentiated by discharge height. Each model comes in multiple widths, adapted to even channel widths. It is delivered fully encapsulated with a ventilation connection to eliminate odors.



Illustration may differ from drawing.

Manufacturing standards	
Screen	EC Machinery Directive 2006/42/EC, EU standards EN ISO 12100 1&2, EN ISO 14121-1

Surface finish	
Surface treatment	Electro polished
Painted parts standard color	RAL 4002
Painting standard	BSK 07 ISO 12944 C3 A3.03

Dimensions	
Slot widths	2-6 mm
Frame	5 mm
Bars	3 mm

Electrical specification	
Voltage	3x400 V
Frequency	50 Hz
Enclosure	IP 55

Construction materials	
Main parts	Stainless steel EN 1.4307 or EN 1.4404
End blade spacer	Polyoximetylen
Axle bearing	Carbon steel
Bearing for chain tensioner	Nylon 6G
Bushing	Nylon
Chain	Carbon steel
Channel sealing	Armed NBR
Clamp sleeve	Carbon steel
Connecting rod bearing	Carbon steel PMEY 30
Flexible coupling	Aluminum, Rubber (only for Swedrive gearbox)
Gear box	Cast iron etc.
Greasing brush, round	Plastic etc.
Handle	Thermoplastic
Handle, insert	ABS
Intermediate spacer	Plastic
Junction box	FRP, Polycarbonate, Polyamide, Polyurethane
Lock, incl clamp	Polyamide, Stainless EN 1.4301
Motor	Aluminum, Cast iron.
Oil/grease canister	Simalube
Pivot bushing	Carbon steel E355 SS1650
Roller for home position limit switch	PVC
Eccentric bolt	Carbon steel
Drive shaft	Carbon Steel EN S355J2
Slider for automatic chain tensioner	Polyethylene
Sprocket	Carbon steel E355

For further information, see next page.

Options	
Color [other than standard]	<i>Painted parts</i>

ATEX options	
ATEX designation zone 1: II 2G Ex h IIB T3 Gb	
ATEX designation zone 2: II 3G Ex h IIB T3 Gc	
<i>ATEX directive 2014/34/EU, Standard EN ISO 800 79-36 & 37</i>	

Motor options	
Anti-condensation heater	<i>Motor option</i>
Enclosure	<i>Motor option</i>
Weather protection	<i>Motor option</i>
Thermistor	<i>Motor option</i>

Material options	
Sprockets	<i>Material</i>

Additional accessories	
Drip plate	<i>Additional accessory</i>
Electric control panel	<i>Additional accessory</i>
Safety switch	<i>Additional accessory</i>
Spray bar	<i>Additional accessory</i>
Support legs	<i>Other than standard</i>

Transport and handling	
Screen	Transported on wooden pallet
Accessories	Transported in a cardboard box
Other packaging options may be available upon request.	

Documentation	
Machine card	
Operation & maintenance manual	
Dimensional drawing	
Control philosophy	
Further documents are available upon request	

Accessories	
Documentation	
Oil canisters, 2 pcs	
Square key, 1 pcs	
Supporting leg lids, 2 pcs (only included on certain machine models)	

Model	RS 10	RS 14	RS 19	RS 22	RS 23
Gearbox	Swedrive / SEW	Swedrive / SEW	SEW	SEW	SEW
Motor	SEW	SEW	SEW	SEW	SEW
Power	0,75 - 1,1 kW	0,37 - 2,2 kW	1,5 - 3 kW	1,5 - 3 kW	1,5 - 3 kW
Overload sensor	Telemecanique RM4-JA32Q	Telemecanique RM4-JA32Q	Emotron ELFI M20	Emotron ELFI M20	Emotron ELFI M20
Home position limit switch	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2
Drawing No.	DD-RS10	DD-RS14	DD-RS19	DD-RS22	DD-RS23
Support leg - Drawing No.	P1-11198	P1-11104	P1-11930	P1-11930	P1-11930

Model	RS 26	RS 29	RS 35	RS 39	RS 47
Gearbox	SEW	SEW	SEW	SEW	SEW
Motor	SEW	SEW	SEW	SEW	SEW
Power	1,5 - 3 kW	1,5 - 3 kW	2,2 - 5,5 kW	2,2 - 5,5 kW	3 - 5,5 kW
Overload sensor	Emotron ELFI M20	Emotron ELFI M20	Emotron ELFI M20	Emotron ELFI M20	Emotron ELFI M20
Home position limit switch	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2	Telemecanique XS6 18B1MAL2
Drawing No.	DD-RS26	DD-RS29	DD-RS35	DD-RS39	DD-RS47
Support leg - Drawing No.	P1-11930	P1-11587	P1-11587	P1-11587	P1-11587