



Ravex

24* godina proizvodnje plastičnih proizvoda

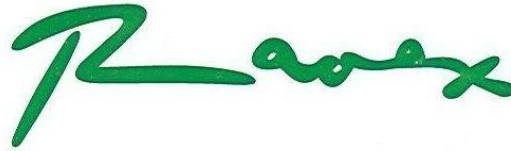
24* years of innovated plastic production

**Filter Nozzles for water processing
water cleaning and aeration**

**Toberas Filtrantes para el tratamiento
del agua de filtración y aireación**

**Filter Düsen für wasser
und abwasser aufbereitung und Belüftung**





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Resistance of the material

Resistencia del Material

Material beständigkeit

Our Filter nozzles are made of polypropylene (PP). Depending on the drop in pressure for example at 60°C (333K) Polypropylene is resistant against:

Ammonia 10%
Formaldehyde 10%
Isopropanol all concentrations
Methanol 50%
Caustic soda solutions 50%
Hydrochloric acid 50%
Sulfuric acid 50%
Soda water
Ozone 20°C, 50 pphm

Polypropylene is physiologically unobjectionable. With increasing frost polypropylene gets more sensitive. Handle all articles made of polypropylene accordingly. If it is cold we recommend to warm up filter nozzles and nuts before installation.

For hot water of a continuous temperature of up to max. 110°C depending on the drop in pressure we recommend polypropylene with chemically combined 30% glass fibres.

Tightening torque when fitting filter nozzles is approx. 0.5 kpm/5 Nm. Max. rpm 430.

1 mWS = approx. 0.1 bar

Threads in approach of DIN ISO 228, ANSI B1.

Dimensions in mm.

Error/Pressure failure: we reserve the right to alter specifications.

Nuestras toberas están fabricadas en polipropileno (PP). Dependiendo de la presión puntual de entrada y por ejemplo a 60°C (333 K), el polipropileno es resistente a:

Amoniaco, sol. 10 %
Formaldehído, sol. 10 %
Isopropanol, cualquier conc.
Metanol, sol. 50 %
Sosa cáustica, sol. 50 %
ácido clorhídrico, conc. 50 %
ácido sulfúrico, conc. 50 %
agua de soda
Ozono 20°C, 50 pphm

El polipropileno es inocuo. A bajas temperaturas la fragilidad del polipropileno aumenta. En caso de bajas temperaturas, recomendamos calienten las toberas filtrantes y tuercas antes de su montaje. Para agua caliente a temperatura constante hasta un máx. de 110°C, y dependiendo de la presión puntual de entrada, recomendamos utilizar nuestras toberas fabricadas en PP reforzadas con el 30% de fibra de vidrio.

Momento de torsión para el montaje, Aprox. 0,5 kpm / 5Nm. Máx. Rmp 430.

1 mWS = aprox. 0,1 bar
Número aproximado hilos de rosca según DIN ISO 228, ANSI B1.

Dimensiones en mm.

Error / Fallo de Presión Nos reservamos el derecho de alterar las especificaciones técnicas.

Unsere Filterdüsen aus Polypropylen (PP) hergestellt. PP ist in Abhängigkeit vom Druck zum Beispiel beständig bei 60°C (333K) gegen:

Ammoniak 10%
Formaldehyd 10%
Isopropanol w jede
Methanol 50%
Natronlauge 50%
Salzsäure 50%
Schwefelsäure 50%
Sodawasser
Ozon 20°C, 50 pphm

Polypropylen ist physiologisch unbedenklich. Polypropylen wird bei zunehmenden Frost spröder. Behandeln Sie Produkte aus PP entsprechend. Bei Kälte empfehlen wir die Filterdüsen und Mutter vor der Montage zu erwärmen.

Für Heisswasser bis max. 110°C empfehlen wir in Abhängigkeit vom Druck Polypropylen mit chemisch gekoppelter 30% Glasfaser.

Anzugsmoment bei der Montage ca. 0.5 kpm/5 Nm. Max. 430 U/min.

1 mWS = ca. 0.1 bar

Gewinde in Anlehnung an DIN ISO 228, ANSI B1.

Masse in mm.

Irrtümer / Druckfehler: technische Änderungen vorbehalten.



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Design

The filter nozzles are available in a wide variety of slot sizes to suit the media; airtubes and tailpipes for air or water backwash can be provided as required.

Conversion chart

Multiply units in left column by proper factor below

LENGTH	mm	cm	m	inch	foot
1 inch	25,4	2,54	0,0254	1	0.0833
1 foot	304,8	30,48	0,3048	12	1
1 mm	1	0,1	0,001	0,0394	0,0033
1 cm	10	1	0,01	0,3937	0,0328
1 m	1000	100	1	39,37	3,281
AREA	inch ²	cm ²			
1 in ² (inch ²)	1	6,452			
1 cm ²	0,155	1			
VOLUME	liter	gallon			
1 litar(liter)	1	0,2642			
1 galon(gallon)	3,785	1			
VOLUME RATE	gallon/min	m ³ /h	liter/h		
1 galon/min	1	0,227	227		
1 m ³ /h	4,403	1	1000		
1 litar/h	0,063	0,001	1		
PRESSURE	lbs./inch ²	bar	1 foot water		
1 lbs./inch ²	1	0,069	2,307		
1 bar	14,5	1	33,45		
1 foot water	0,4335	0,0299	1		

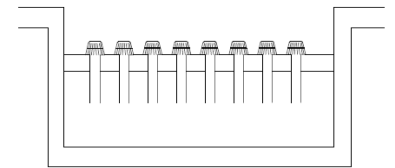
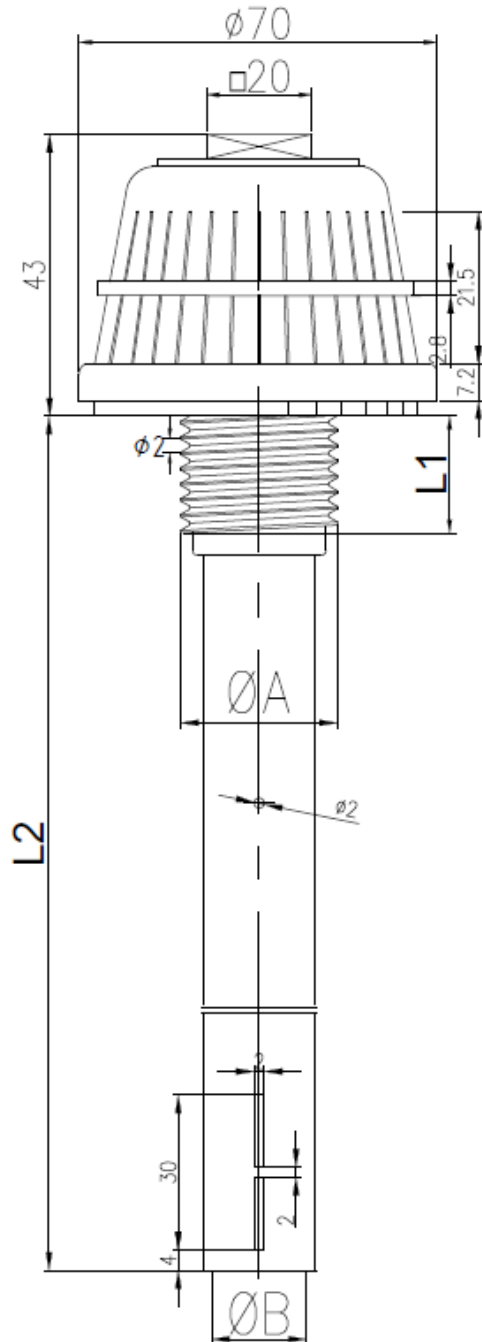


Rawex

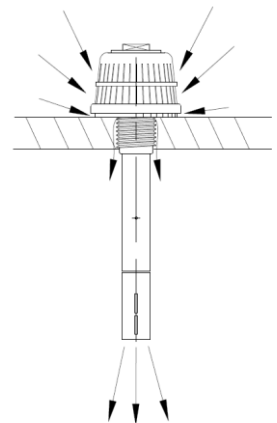
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Type RV001



Filter floor cross section view



Filter Nozzle flow paths

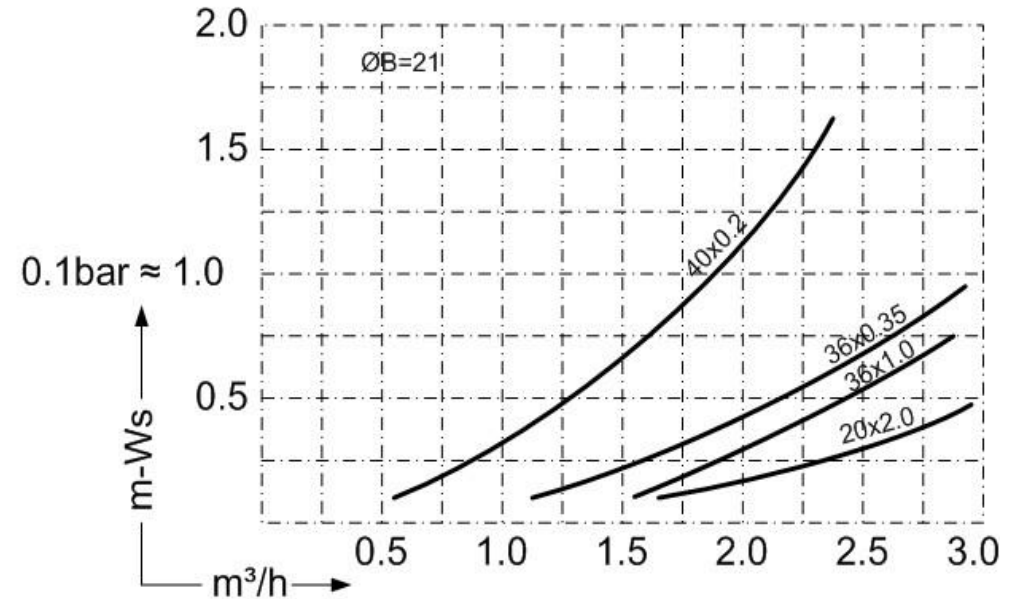
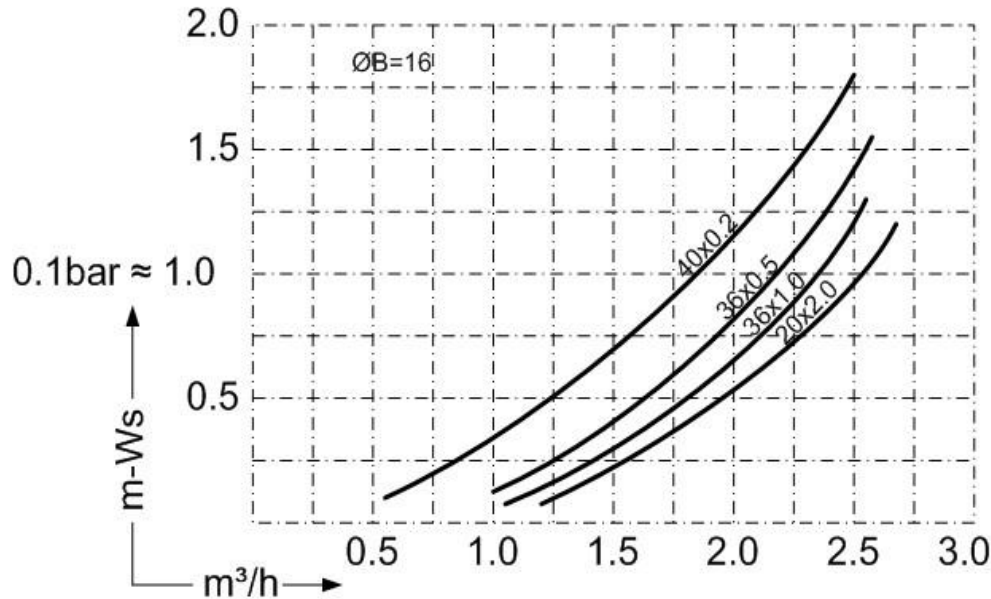
All dimensions in mm unless otherwise noted.



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Type RV001 Ordering Information

Type Tipo Typ	Slots Ranuras Schlitze	Thread Rosca Gewinde	ØA	Thread length L1 Largura de la rosca Gewindelänge	Shaft L2 Tija Schaft	ØB
RV001	40 x 0.20 = 1.76 cm ²	M24x3, M27x1.5, M30x3, M30x3.5, M32x3	33.25	20, ..., 60	40, ..., 450	16, 18.5, 21
	36 x 0.35 = 2.77 cm ²	M24x3, M27x1.5, M30x3, M30x3.5, M32x3	27	20, ..., 60	40, ..., 450	16, 18.5, 21
	18 x 0.40 = 1.58 cm ²	M24x3, M27x1.5, M30x3, M30x3.5, M32x3	27	20, ..., 60	40, ..., 450	16, 18.5, 21
	36 x 0.50 = 3.96 cm ²	M24x3, M27x1.5, M30x3, M30x3.5, W1 ¼"	24	20, ..., 60	40, ..., 450	16, 18.5, 21

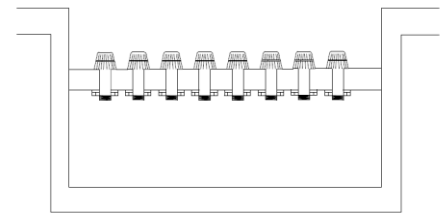
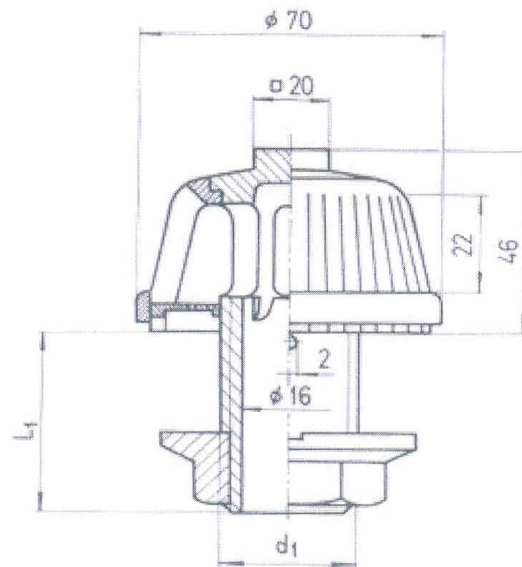


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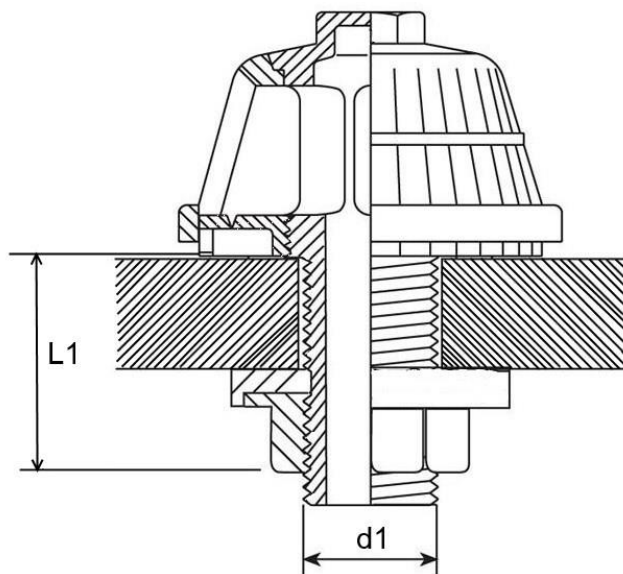
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Type RV002



Filter floor cross section view



All dimensions in mm unless otherwise noted.



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Type RV002 Ordering Information

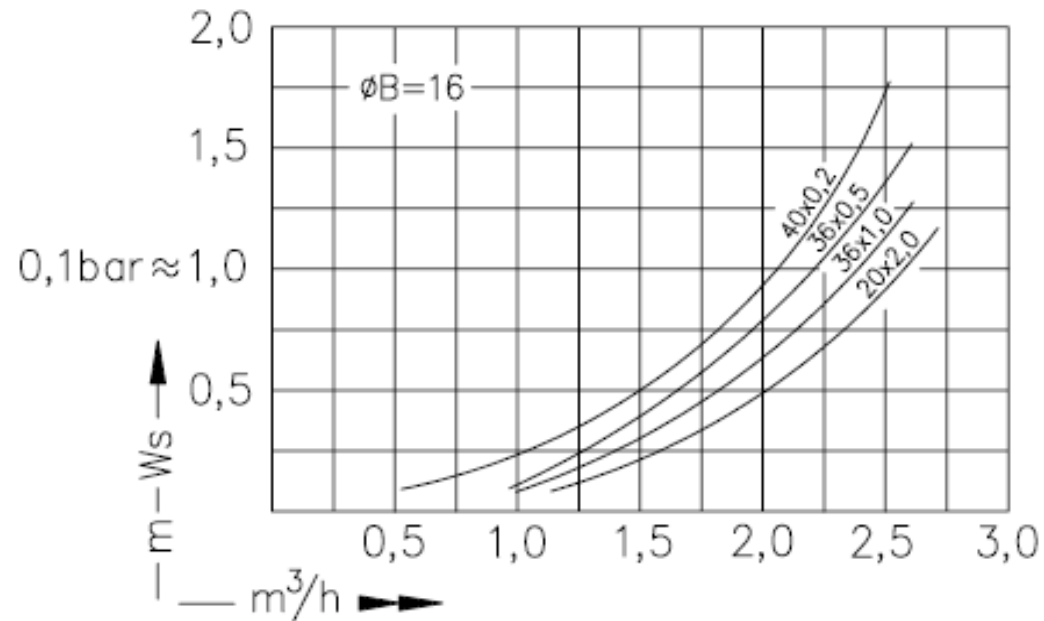
Type Tipo Typ	Slots Ranuras Schlitze	d1	Thread length L1 Largura de la rosca Gewindelänge
RV002	40 x 0.2 = 1.76 cm ²	M24,M27, R3/4“, R5/4“	20,45,60
	36 x 0.5 = 3.96 cm ²	M24, M27,R3/4“, R5/4“	20,45,60



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Type RV003 Ordering Information

Type Tipo Typ	Slots Ranuras Schlitze	Thread Rosca Gewinde	ØA	Thread length L1 Largura de la rosca Gewindelänge	Shaft L2 Tija Schaft	ØB
RV003	40 x 0.20 = 1.76 cm ²	M24x3, M27x1.5	24,33	20,...,60	40,...,180	16,18.5
	36 x 0.35 = 2.77 cm ²	M24x3, M27x1.5	24,27,33	20,...,60	40,...,180	16,18.5
	18 x 0.40 = 1.58 cm ²	M24x3, M27x1.5	24,27,33	20,...,60	40,...,180	16,18.5
	36 x 0.50 = 3.96 cm ²	M24x3, M27x1.5, W1¼"	24,27,33	20,...,60	40,...,180	16,18.5

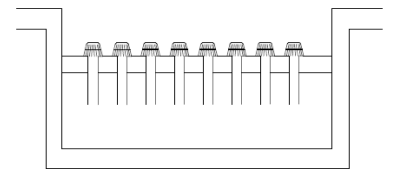
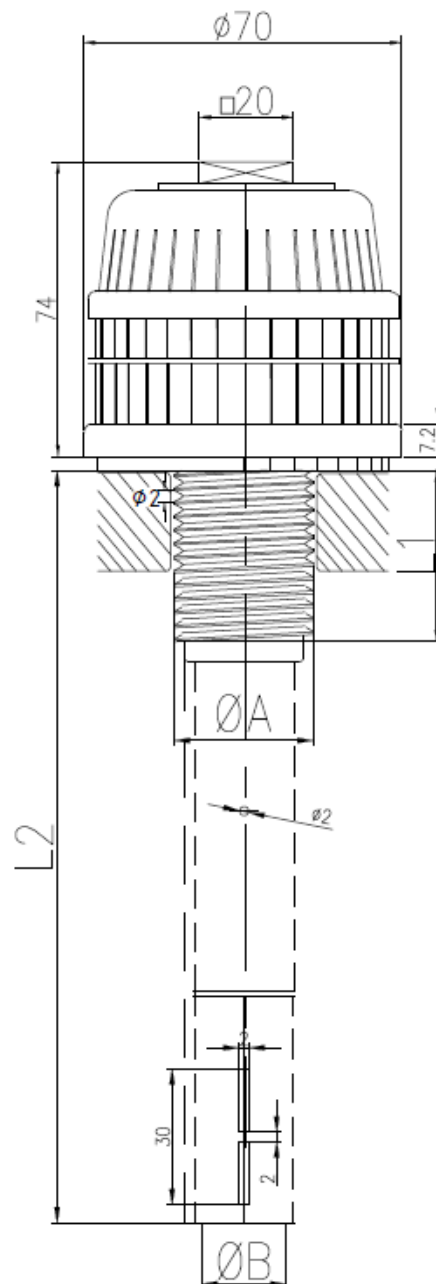


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Type RV004



Filter floor cross section view

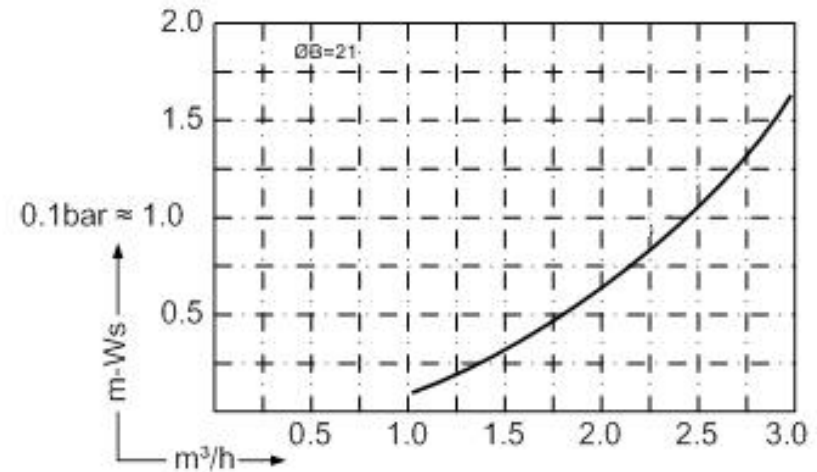
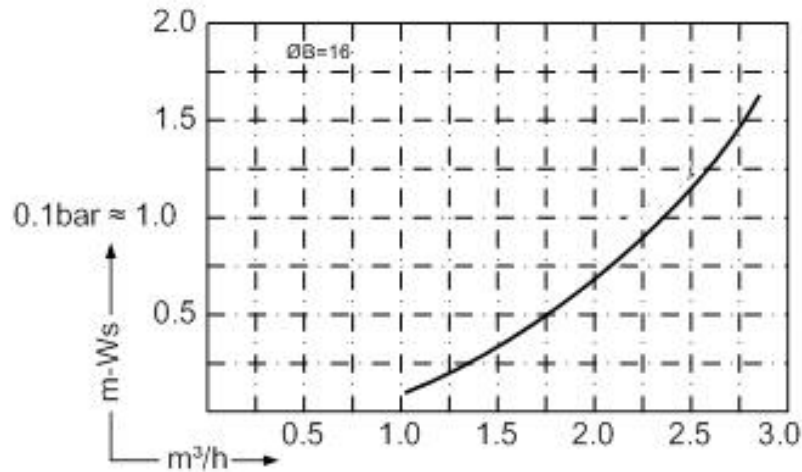
All dimensions in mm unless otherwise noted.



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Type RV004 Ordering Information

Type Tipo Typ	Slots Ranuras Schlitze	Thread Rosca Gewinde	Thread length Largura de la rosca Gewindelänge L1	Shaft Tija Schaft L2	ØA	ØB
RV004	36 x 0.35 = 2.65 cm ² 40 x 0.2 = 2.00 cm ² Total = 4.65 cm ²	M24 M27x1.5 M30x3	20,...,60	60,...,180	24, 27, 30	16,18.5

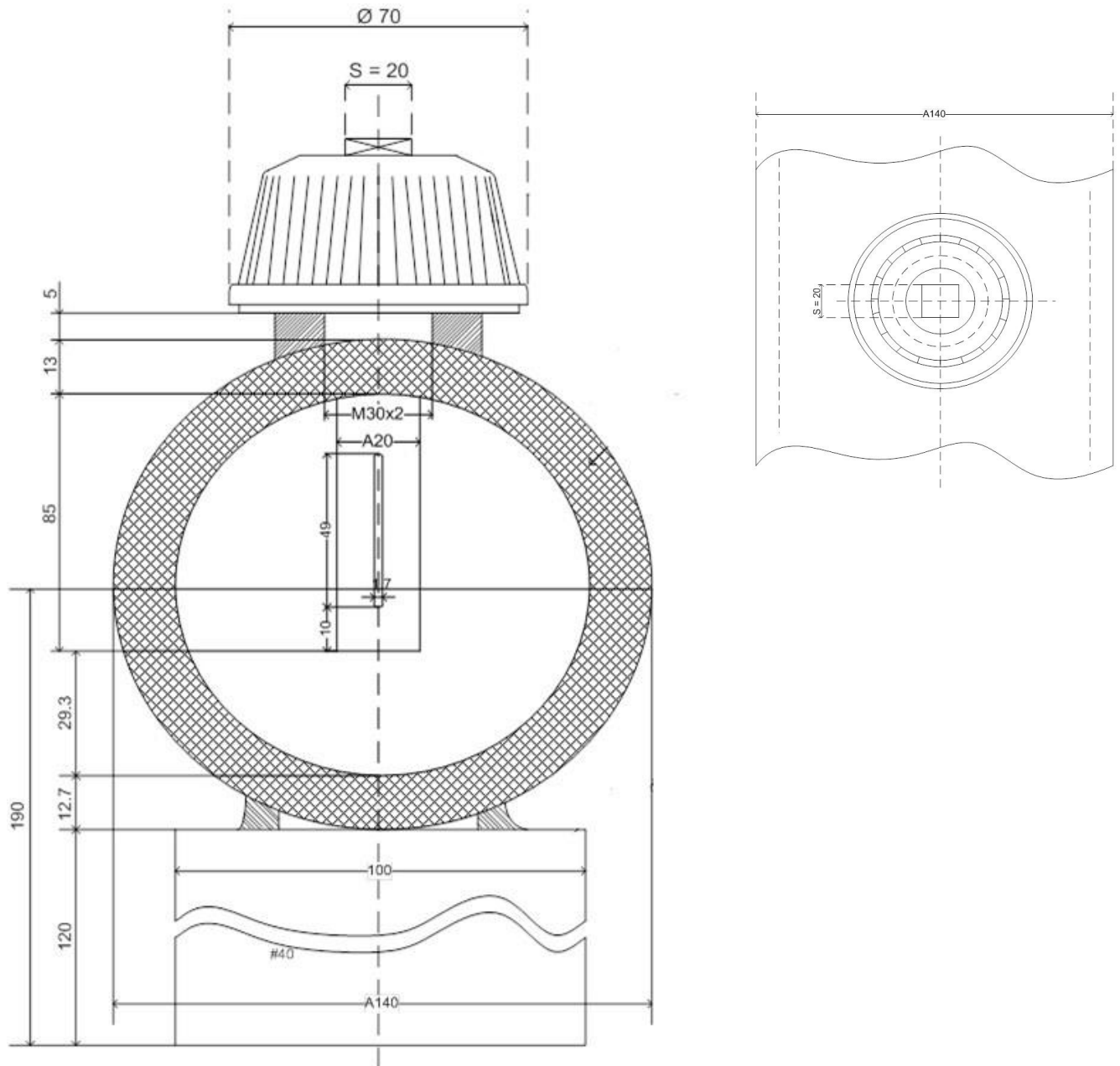


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Type RV005



All dimensions in mm unless otherwise noted.



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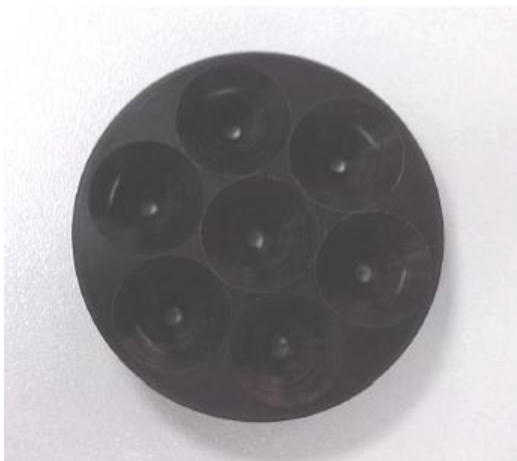
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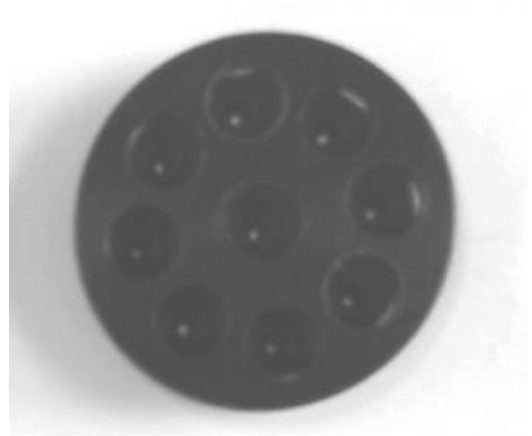
Type RV006 Aeration nozzles



Aeration Nozzle with Butterfly Valve



Aeration Nozzle 3 mm hole



Aeration Nozzle 1.5 mm hole



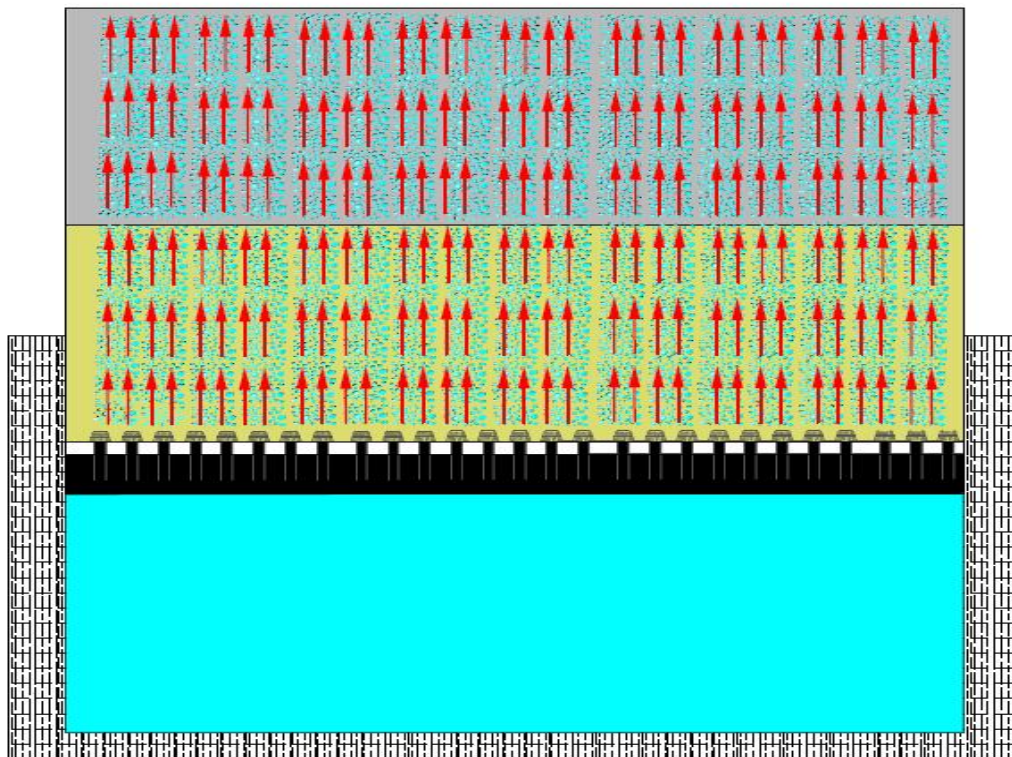
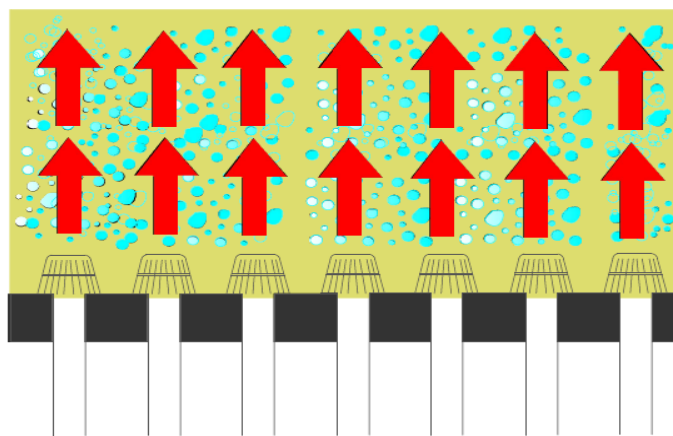
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Underdrain Distribution Backwash Efficiency

Laboratory testing on RAVEX Filter Nozzles show that with density of 56 nozzles/m² RAVEX Filter Nozzles perform very good Backwash Efficiency. Backwashing of filter floor is **without any dead space**.



Backwashing: Air and water flow in filter floor cross section



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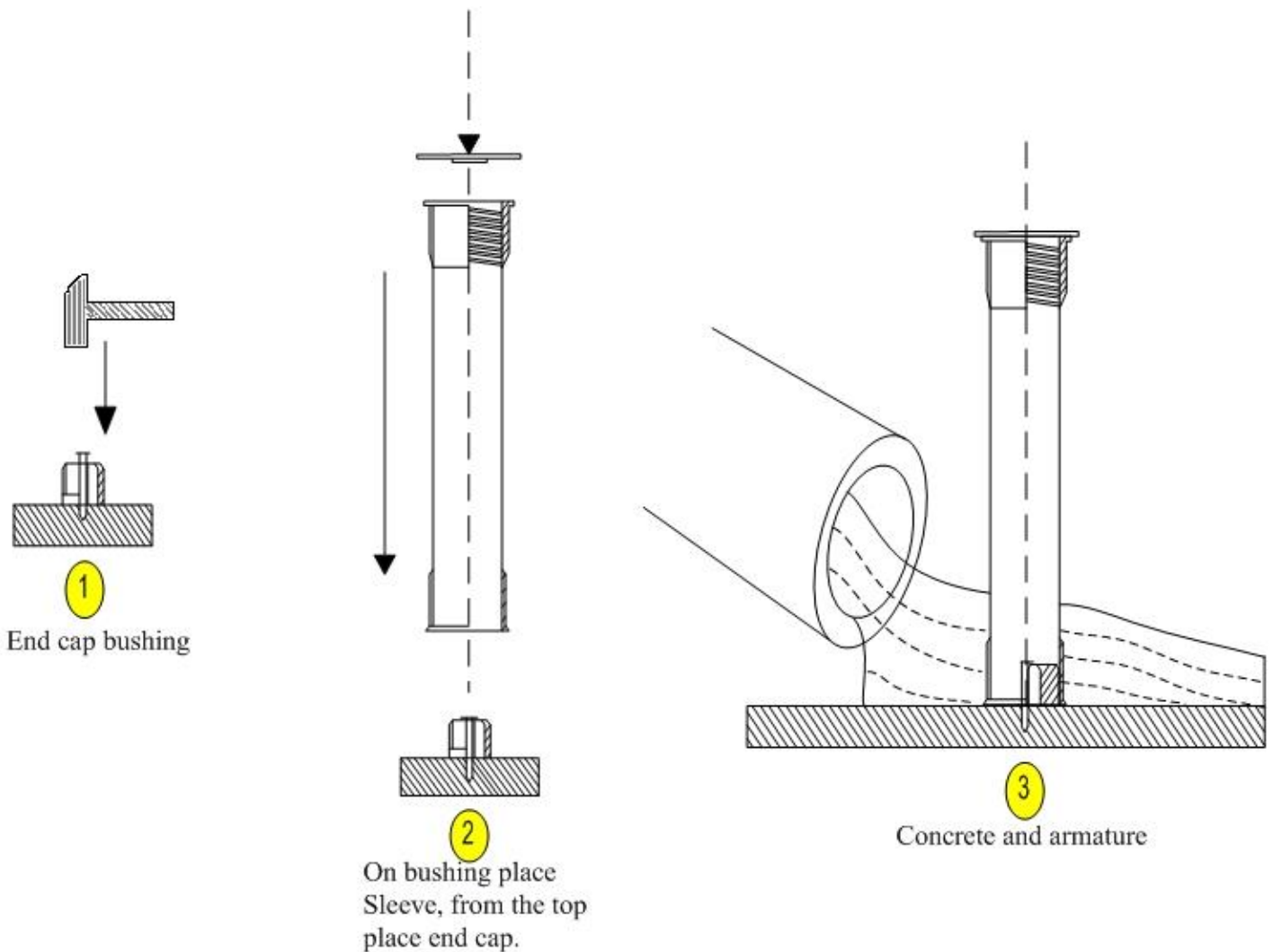
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Installation procedure - standard method

Recommended Torque: 5 Nm (0.5 kgm).

Max RPM: 400.

In lower temperatures polypropylene becomes more brittle. If nozzles are to be installed in cold weather, we recommend that all polypropylene materials are first warmed before installation. When using with hot water (max. continuous temperature up to 110°C) polypropylene with chemically combined 30% glass fiber is recommended.



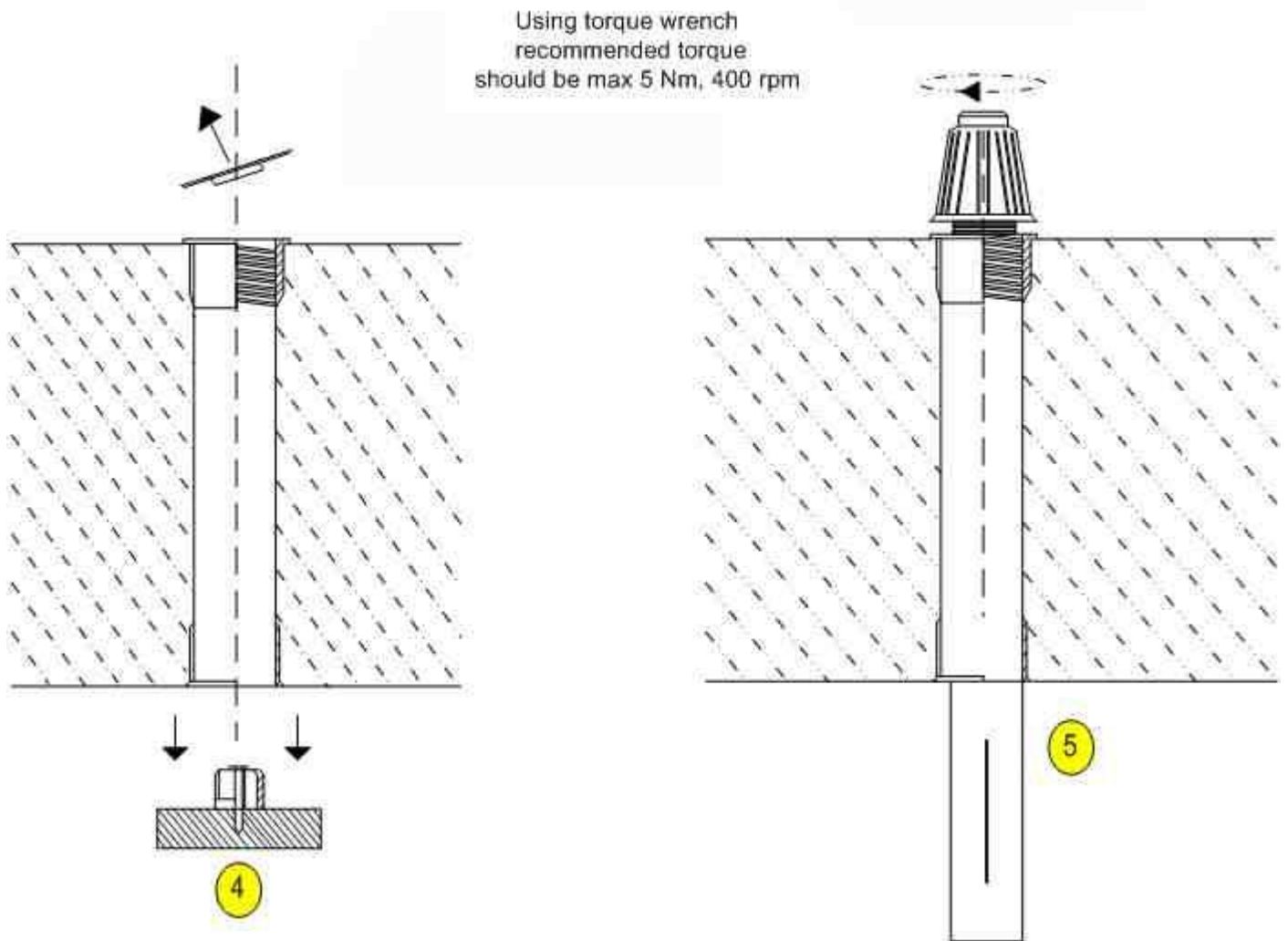


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Installation procedure - standard method



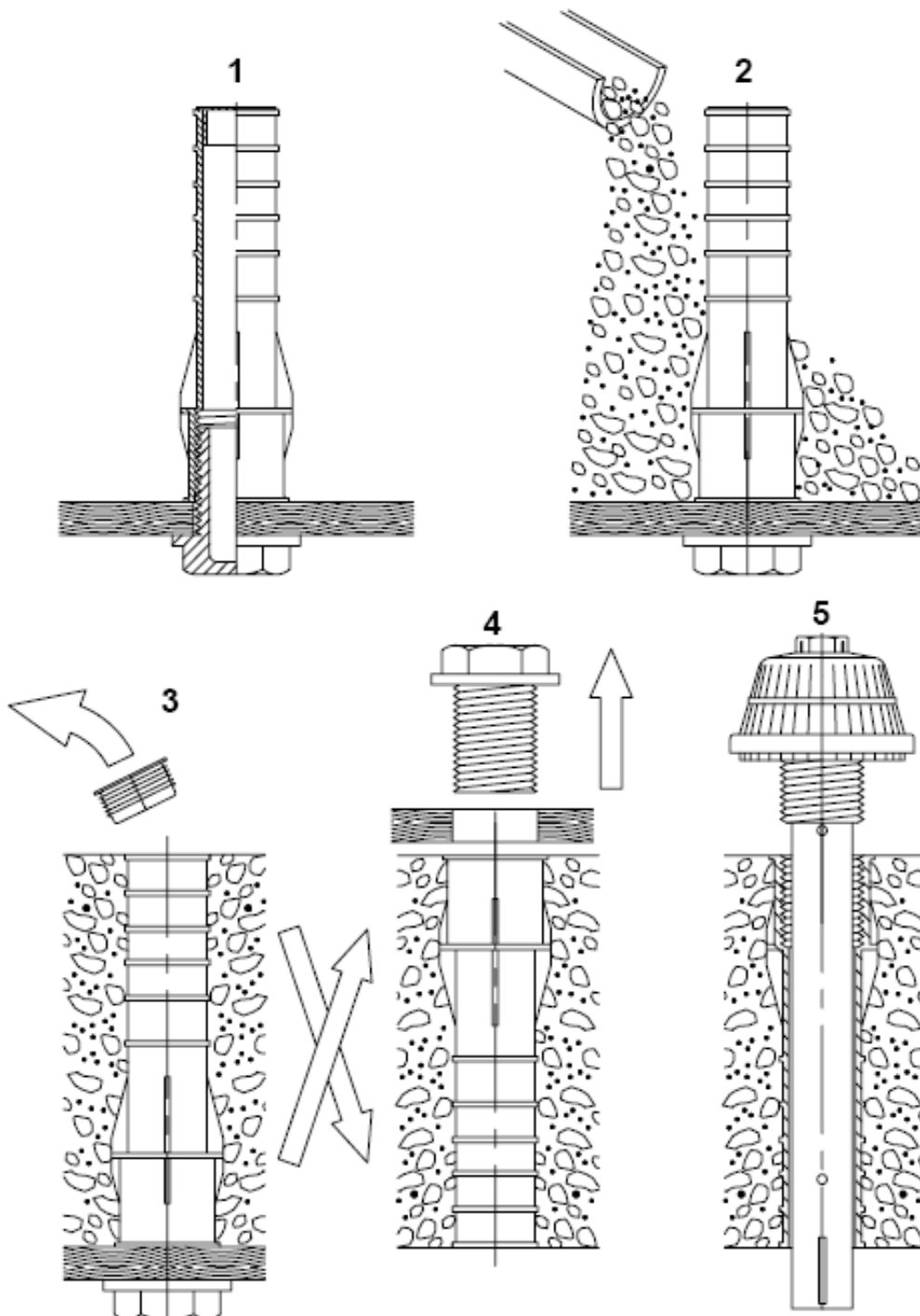


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Installation procedure - reverse method



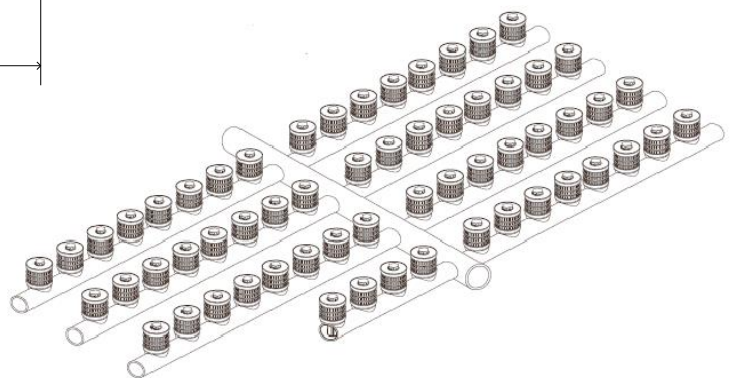
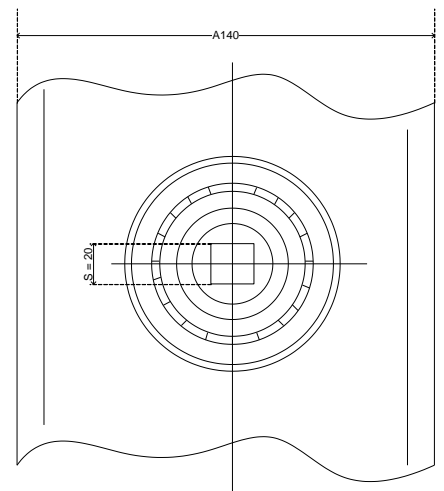
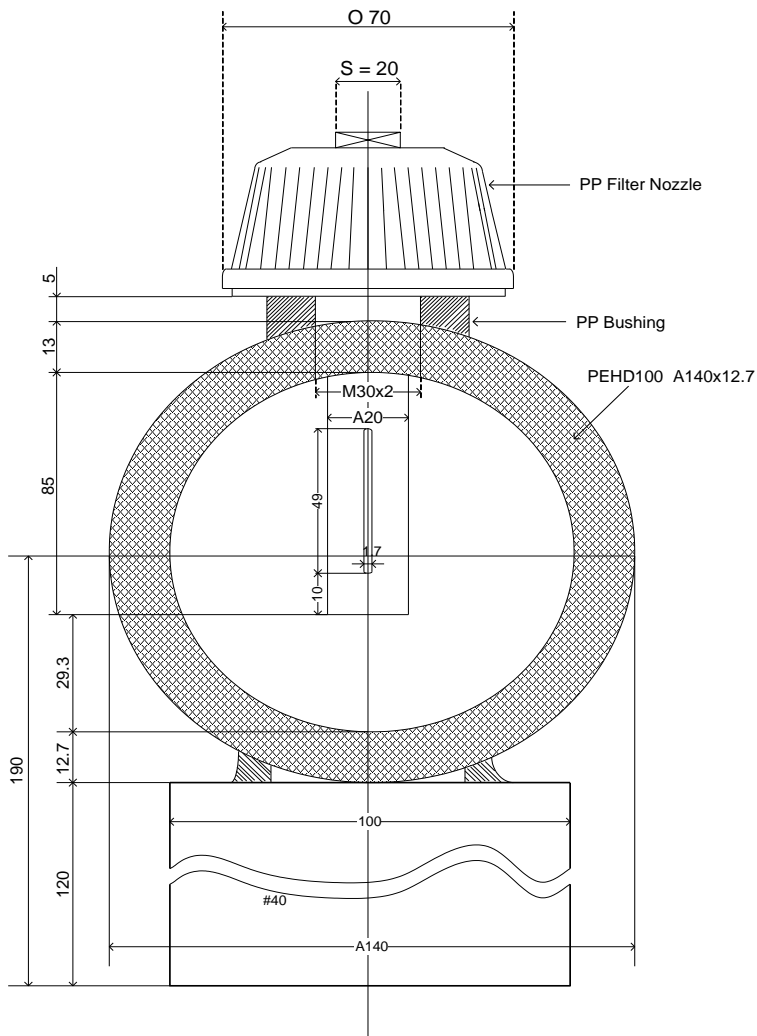


Rmax

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Installation Procedure – Lateral Systems



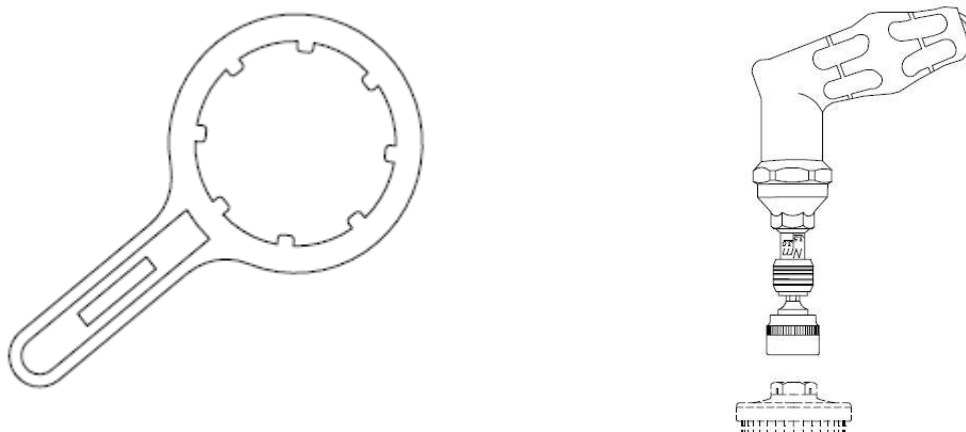
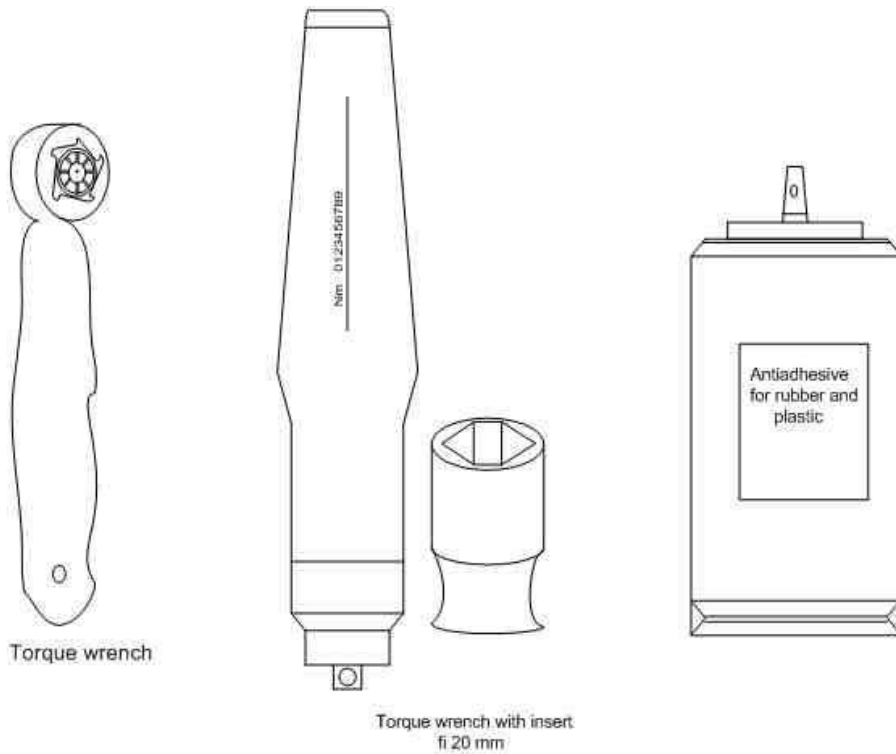


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Filter Nozzles Installation Tools





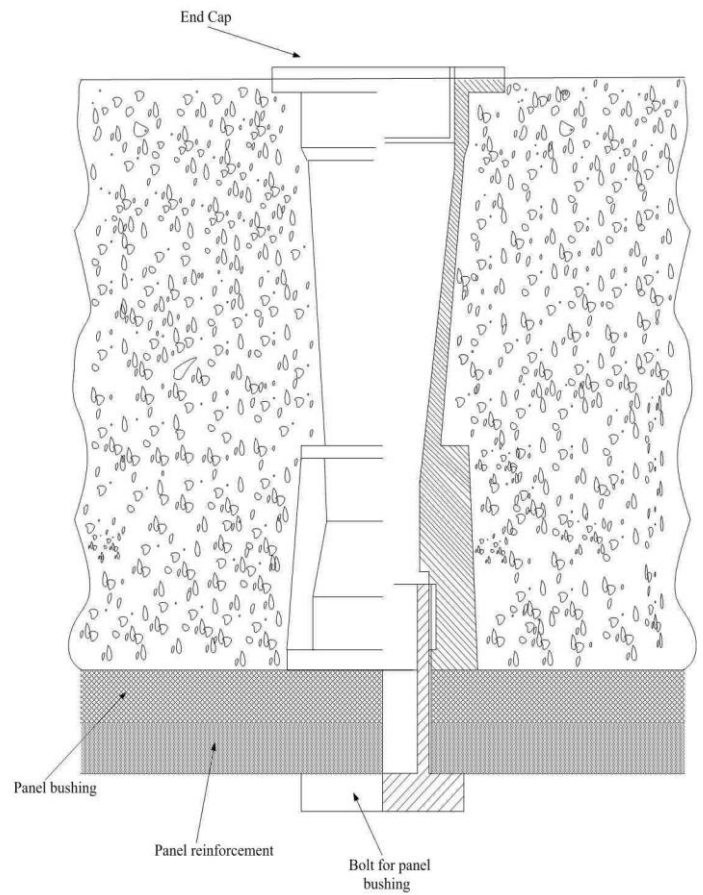
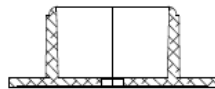
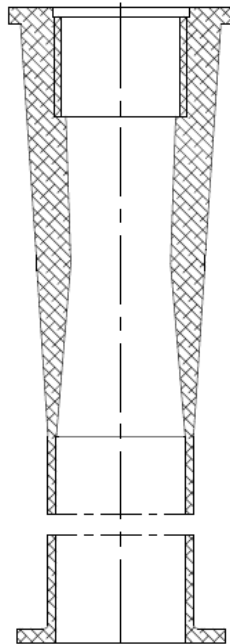
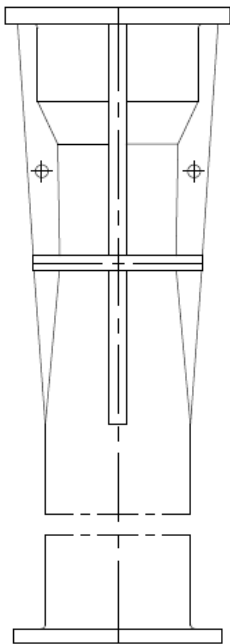
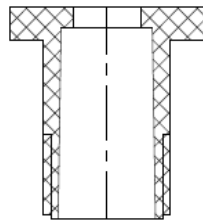
Rawax

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Filter Nozzle Sleeves

- Wide variety of Sleeve size
- Suitable for flat panels



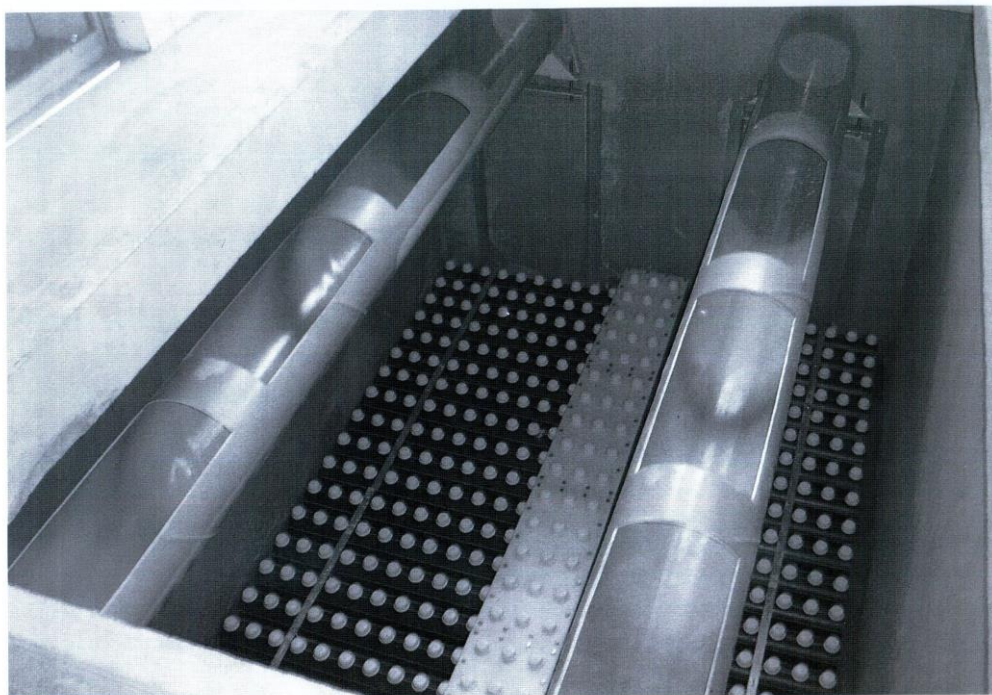


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Filter Nozzles for Concrete Floors





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RAVEX

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About us

RAVEX d.o.o., Vrbas is a private company founded in 1991. Since then we manufacture filter nozzles for water treatment. Our references and satisfied customers give us the right to say that we are the largest manufacturer of Filter Nozzles for Water Treatment in South Eastern Europe region.

For more information please contact us:

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