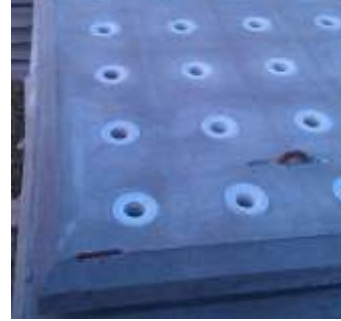


ROMIND T&G



WATER TREATMENT



SUMMARY

WATER TREATMENT EQUIPMENT	2
Filter nozzles for industrial water	2
Filter nozzles for drinking water	8
RESIN TRAP	13

ROMIND T&G

Who are we?

Romind T&G is a Romanian company, with private capital, founded in Bucharest, in 1993.

What we do?

With over more than 20 years of experience, the company is nationally known as the leading manufacturer and supplier of functional components for cooling towers - in cross flow and counter flow - and components for water treatment installations - for industrial and drinkable water.

At the same time, the electrical safety equipment and fall protection systems manufactured by Romind are valued for their technical performance and quality.

Main domains:

- ⊙ Functional components for cooling towers
- ⊙ Engineering services for cooling circuits
- ⊙ Components for water treatment installations
- ⊙ Electrical safety equipment
- ⊙ Fall protection systems
- ⊙ Electrical testing services
- ⊙ Meter seals with stainless steel wire
- ⊙ Lightning protection systems
- ⊙ Fault indicators for power networks

How we do it?

Most of our products are designed in our R&D department. After testing, they are made within our own production departments, where we perform machining operations, plastic injection molding, welding, manual and automated mechanical assembling, laser marking or stamping.

Our main customers:

- ⊙ Companies from oil and gas industry, chemical industry, metallurgical industry, concrete industry, goods and passengers transport companies
- ⊙ Power producers, suppliers and distributors



WATER TREATMENT EQUIPMENT

Romind T&G produces and delivers water treatment components for industrial / drinking water treatment stations or for refurbishing existing ones.

A wide range of filter nozzles is designed and made in accordance with the technical requirements of the customers.

FILTER NOZZLES FOR INDUSTRIAL WATER

The **filter nozzles for industrial water** are used for retaining the granular filtering materials (ion exchange mass, quartz sand, active carbon, hard coal, gravel, etc.) inside the filters. The filter nozzles are made of polypropylene/PVDF, by plastic molding and are mounted on rubberized / metallic plates or on collectors - distributors with round / square section, made of metallic / plastic pipes. Flexible rubber gaskets or rigid polypropylene washers ensure the sealing of the nozzles on the mounting surface.

Operational fluids:

- Raw water;
- Ammonia max. 10%;
- Formaldehyde max. 10%;
- Isopropanol;
- Methanol max. 50%;
- Caustic soda max. 50%;
- Chlorine hydride max. 10%;
- Sulfuric acid max. 10%;
- Salt solution max. 30%.

Operating conditions:

- Maximum working pressure: 10 bar;
- Maximum admissible pressure difference: 6 bar;
- Temperature (PP / PVDF material): max. 80 / 135 °C.

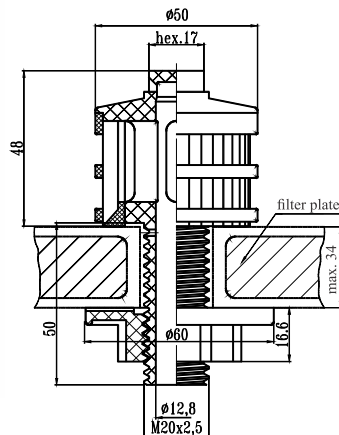
The main component of the nozzles is the filtering element provided with slots of various dimensions:

Type	Number of slots	Slot dimensions	Filtering surface (mm ²)	Filtering element color
24x0,2	24	0,2	96	White
36x0,2	36	0,2	144	White
36x0,4	36	0,4	288	Green
36x0,45	36	0,45	324	Red
24x2,0	24	2	912	White
24x2,6	24	2,6	1248	Yellow

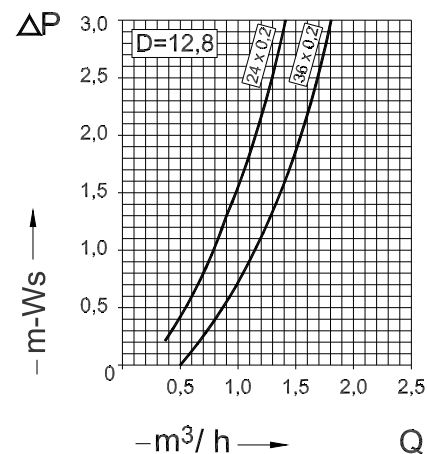




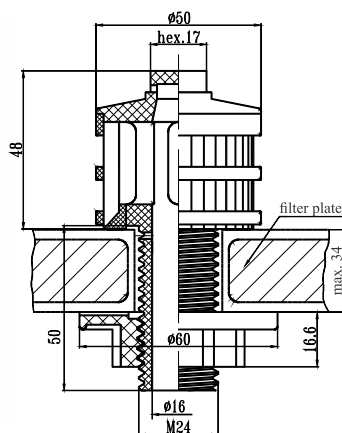
Filter nozzle - Type R - M20



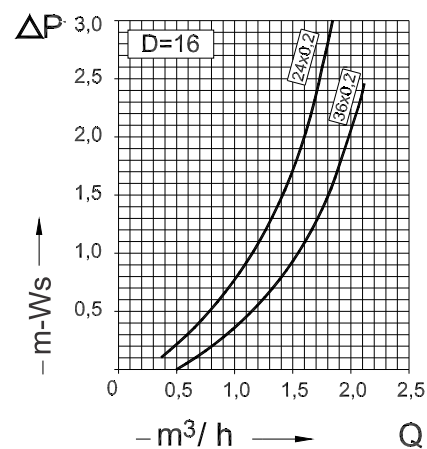
* Mounting hole: $\varnothing 20 \div \varnothing 23$



Filter nozzle - Type R - M24



* Mounting hole: $\varnothing 24 \div \varnothing 27$

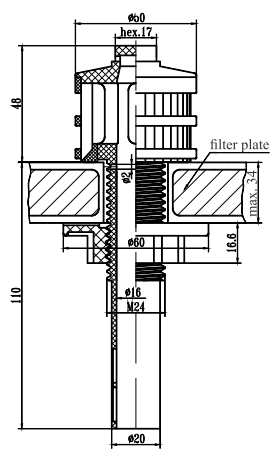


Type	Filtering surface mm ²
R 24x0,2 - M20	96
R 36x0,2 - M20	144
R 36x0,4 - M20	288
R 36x0,45 - M20	324
R 24x2,0 - M20	912
R 24x2,6 - M20	1248

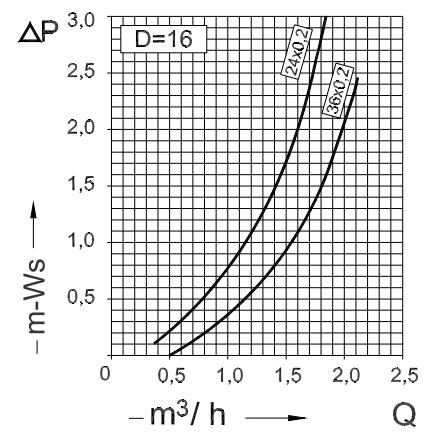
Type	Filtering surface mm ²
R 24x0,2 - M24	96
R 36x0,2 - M24	144
R 36x0,4 - M24	288
R 36x0,45 - M24	324
R 24x2,0 - M24	912
R 24x2,6 - M24	1248



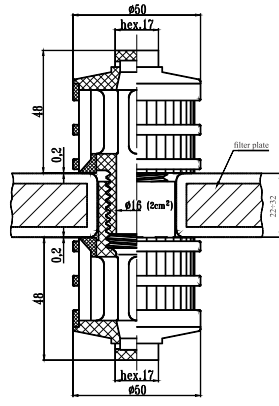
Filter nozzle - Type RC



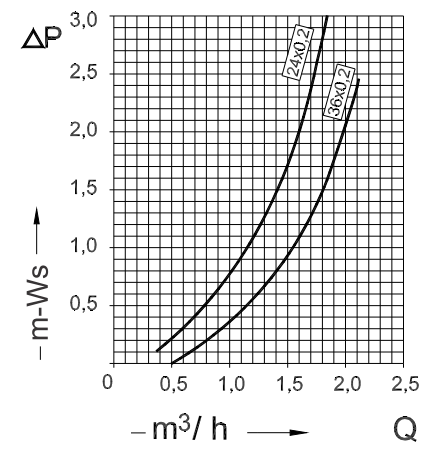
* Mounting hole: Ø24 ÷ Ø27



Filter nozzle - Type RF



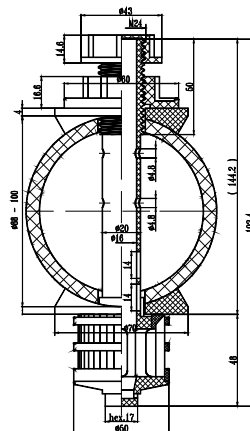
* Mounting hole: Ø30 ÷ Ø34



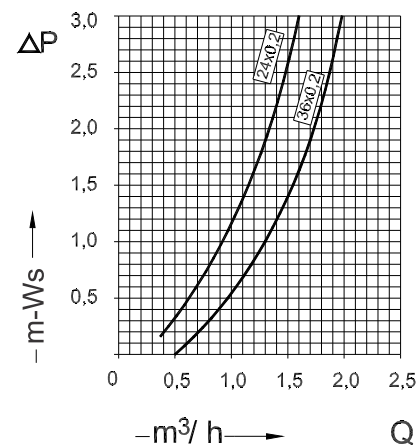
Type	Filtering surface mm ²
RC 24x0,2 - M24	96
RC 36x0,2 - M24	144
RC 36x0,4 - M24	288
RC 36x0,45 - M24	324
RC 24x2,0 - M24	912
RC 24x2,6 - M24	1248

Type	Filtering surface mm ²
RF-24x0,2-Ø30-24x0,2-RD	96
RF-36x0,2-Ø30-36x0,2-RD	144
RF-36x0,4-Ø30-36x0,4-RD	288
RF-36x0,45-Ø30-36x0,45-RD	324
RF-24x2-Ø30-24x2-RD	912
RF-24x2,6-Ø30-24x2,6-RD	1248

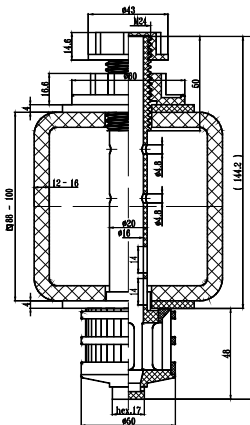
Filter nozzle - Type RCD R



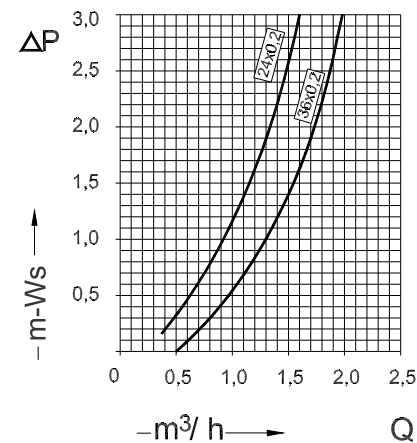
* Mounting hole: $\varnothing 24 \div \varnothing 27$



Filter nozzle - Type RCD P



* Mounting hole: $\varnothing 24 \div \varnothing 27$



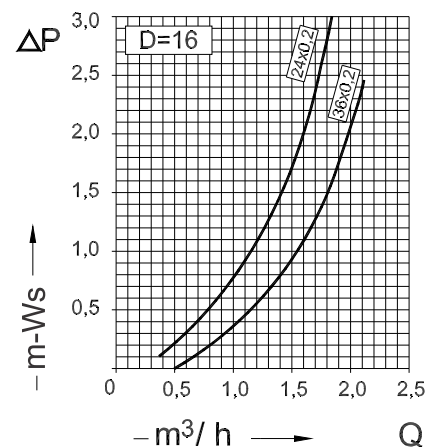
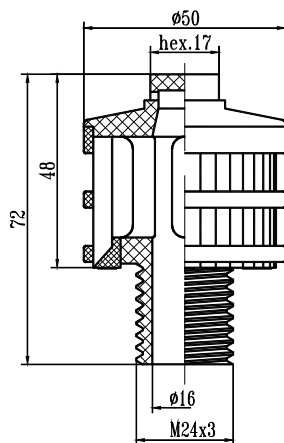
Type	Filtering surface mm ²
RCD 24x0,2 - M24-R	96
RCD 36x0,2 - M24-R	144
RCD 36x0,4 - M24-R	288
RCD 36x0,45 - M24-R	324
RCD 24x2,0 - M24-R	912
RCD 24x2,6 - M24-R	1248

Type	Filtering surface mm ²
RCD 24x0,2 - M24-R	96
RCD 36x0,2 - M24-R	144
RCD 36x0,4 - M24-R	288
RCD 36x0,45 - M24-R	324
RCD 24x2,0 - M24-R	912
RCD 24x2,6 - M24-R	1248

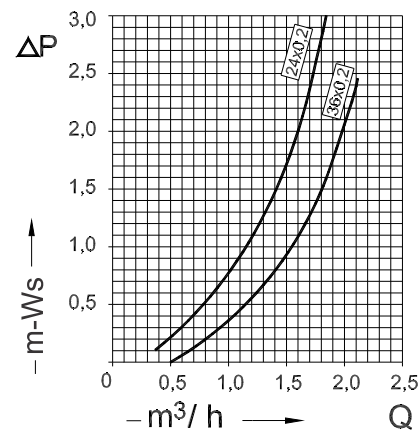
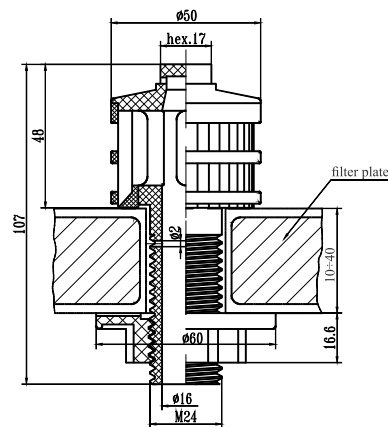




Filter nozzle - Type RD



Filter nozzle - Type RL

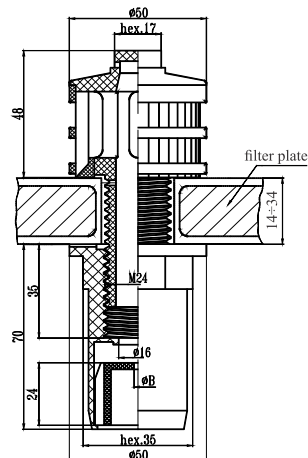


* Mounting hole: Ø24 ÷ Ø27

Type	Filtering surface mm ²
RD 24x0,2 - M24	96
RD 36x0,2 - M24	144
RD 36x0,4 - M24	288
RD 36x0,45 - M24	324
RD 24x2,0 - M24	912
RD 24x2,6 - M24	1248

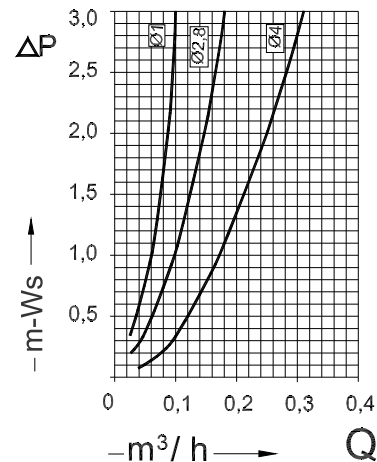
Type	Filtering surface mm ²
RL-24x0,2-M24	96
RL-36x0,2-M24	144
RL-36x0,4-M24	288
RL-36x0,45-M24	324
RL-24x2,0-M24	912
RL-24x2,6-M24	1248

Filter nozzle - Type RS

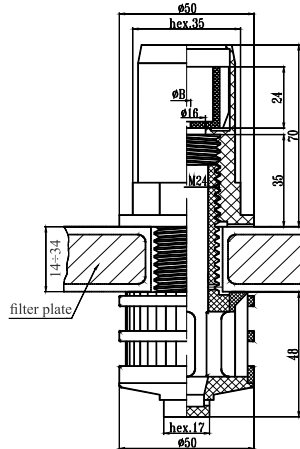


* Mounting hole: Ø24 ÷ Ø27

** Valve hole ØB: Ø2 or Ø2,8

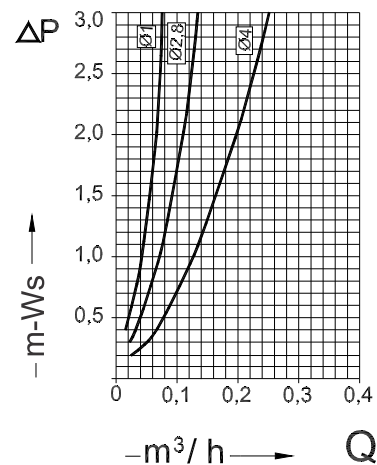


Filter nozzle - Type RSD



* Mounting hole: Ø24 ÷ Ø27

** Valve hole ØB: Ø2 or Ø2,8



Type	Filtering surface mm ²
RS 24x0,2 - M24	96
RS 36x0,2 - M24	144
RS 36x0,4 - M24	288
RS 36x0,45 - M24	324
RS 24x2,0 - M24	912
RS 24x2,6 - M24	1248

Type	Filtering surface mm ²
RSD 24x0,2 - M24	96
RSD 36x0,2 - M24	144
RSD 36x0,4 - M24	288
RSD 36x0,45 - M24	324
RSD 24x2,0 - M24	912
RSD 24x2,6 - M24	1248





FILTER NOZZLES FOR DRINKING WATER

The **filter nozzles for drinking water** are used for retaining the granular filtering materials (quartz sand, gravel, etc.) inside the filters. The filter nozzles are made of polypropylene /PVDF, by plastic molding and are mounted on concrete plates or on collectors - distributors with round / square section, made of metallic / plastic pipes and it is used a filtering element of 36x0,4. Flexible rubber gaskets or rigid polypropylene washers ensure the sealing of the nozzles on the mounting surface.

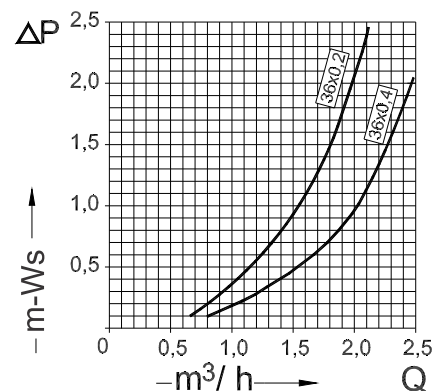
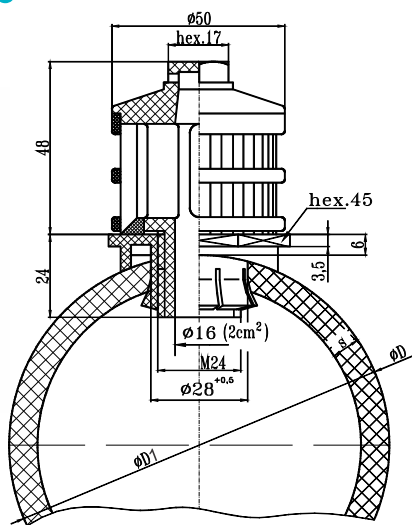
Operating conditions:

- Maximum working pressure: 10 bar;
 - Maximum admissible pressure difference: 6 bar;
- Temperature (PP / PVDF material): max. 80 / 135 °C.

The main component of the nozzles is the filtering element provided with slots of various dimensions (see page 2).



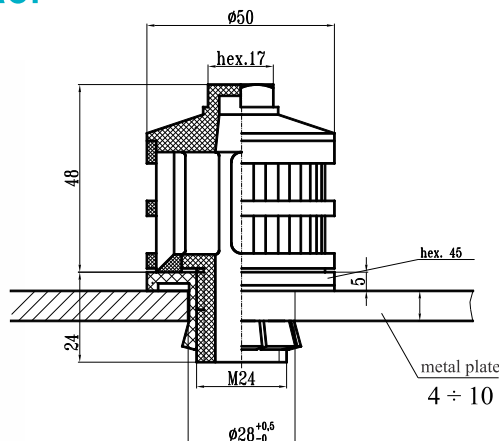
Filter nozzle - Type RAC



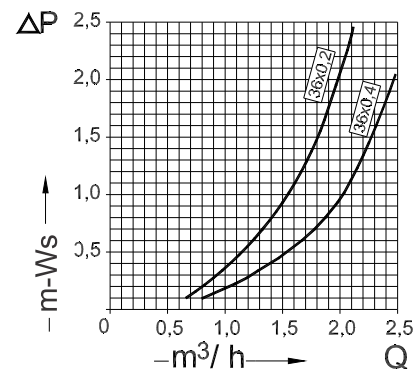
Type	Filtering surface mm ²	Pipe diameter ØD	Pipe thickness s (mm)	Mounting hole ØD1	
RAC ØD 24x0,2 - ØD1	96	Ø60	5±0,5	Ø28 ^{+0,5 0}	
RAC ØD 36x0,2 - ØD1	144	Ø90	6,7±1	Ø28 ^{+0,5 0}	Ø29 ^{+0,5 0}
RAC ØD 36x0,4 - ØD1	288	Ø110	8,2±2	Ø28 ^{+0,5 0}	Ø29 ^{+0,5 0}
RAC ØD 36x0,45 - ØD1	324	Ø150	7,5±2	Ø28 ^{+0,5 0}	Ø29 ^{+0,5 0}
RAC ØD 24x2,0 - ØD1	912	Ø160	10±2	Ø28 ^{+0,5 0}	Ø29 ^{+0,5 0}
RAC ØD 24x2,6 - ØD1	1248				



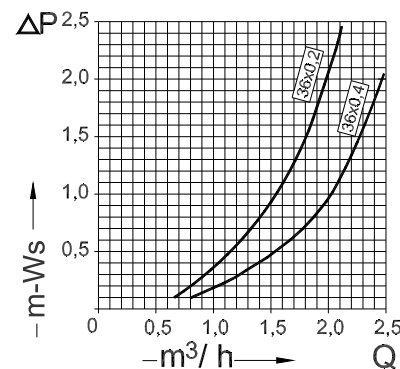
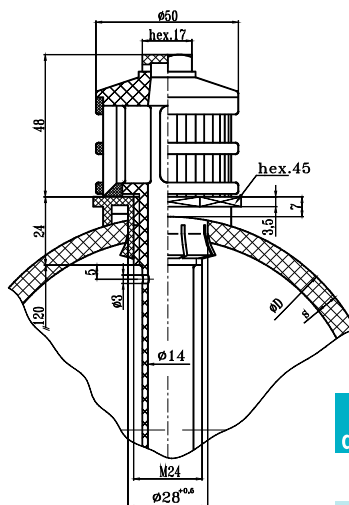
Filter nozzle - Type RACP



* Mounting hole: $\varnothing 28^{+0.5}_0$



Filter nozzle - Type RAD



Pipe diameter $\varnothing D$	Pipe thickness s (mm)	Mounting hole $\varnothing D1$
$\varnothing 150$	$7,5 \pm 2$	$\varnothing 28 / \varnothing 29^{+0.5}_0$
$\varnothing 160$	10 ± 2	$\varnothing 28 / \varnothing 29^{+0.5}_0$

Type	Filtering surface mm^2
RACP 24x0,2 - "S"	96
RACP 36x0,2 - "S"	144
RACP 36x0,4 - "S"	288
RACP 36x0,45 - "S"	324
RACP 24x2,0 - "S"	912
RACP 24x2,6 - "S"	1248

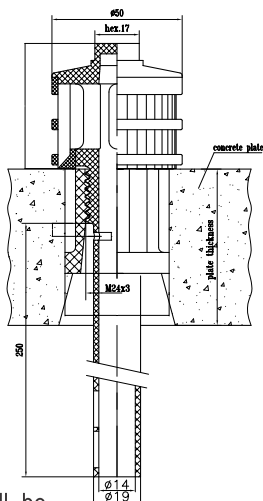
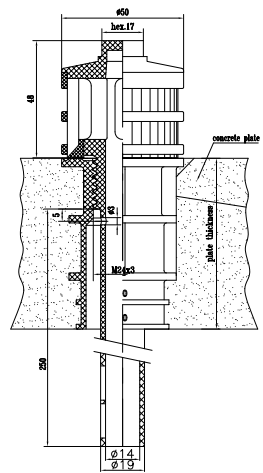
Type	Filtering surface mm^2
RAD $\varnothing D$ 24x0,2 - $\varnothing D1$	96
RAD $\varnothing D$ 36x0,2 - $\varnothing D1$	144
RAD $\varnothing D$ 36x0,4 - $\varnothing D1$	288
RAD $\varnothing D$ 36x0,45 - $\varnothing D1$	324
RAD $\varnothing D$ 24x2,0 - $\varnothing D1$	912
RAD $\varnothing D$ 24x2,6 - $\varnothing D1$	1248



Filter nozzle - type RAP - M24



Filter nozzle - type RAP - M30

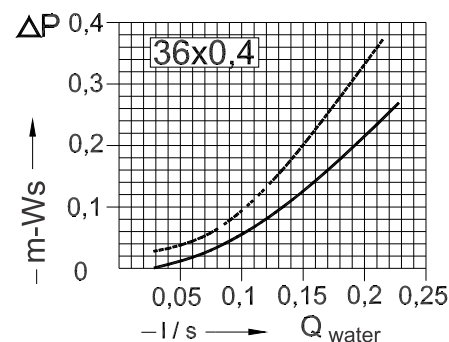
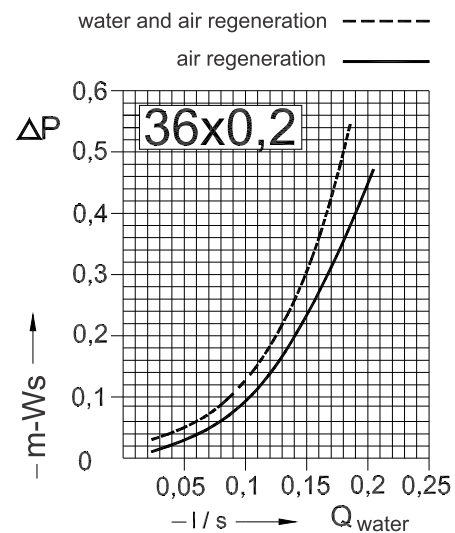


RAP filter nozzles for new concrete plates

(delivered together with the M24 sleeves that will be mounted in the concrete plate) or

RAP filter nozzles for existent concrete plates provided with M24 sleeves (delivered without M24 sleeves)

Type	Filtering surface mm ²
RAP 24x0,2 - M24	96
RAP 36x0,2 - M24	144
RAP 36x0,4 - M24	288
RAP 36x0,45 - M24	324
RAP 24x2,0 - M24	912
RAP 24x2,6 - M24	1248



RAP filter nozzles for existent concrete plates, provided with M30 sleeves (provided together with a long reduction $l_f=27\text{mm}$ or a short reduction $l_f=17\text{mm}$)

Type	Filtering surface mm ²
RAP 24x0,2 - M30xl _f	96
RAP 36x0,2 - M30xl _f	144
RAP 36x0,4 - M30xl _f	288
RAP 36x0,45 - M30xl _f	324
RAP 24x2,0 - M30xl _f	912
RAP 24x2,6 - M30xl _f	1248

Set of plugs for mounting the new sleeves of the RAP nozzles



The set of plugs for mounting the new sleeves of the RAP nozzles is composed of a threaded plug M24x3, provided with a hexagonal head in order to allow the fixing of the sleeve on the concrete forming and a plug with an outer diameter of 31 mm that can be mounted on the other end of the sleeve, to prevent the entry of concrete into the sleeve during the casting operation. Both plugs are made of plastic and can be reused hundreds of times.

Tehchnical characteristics	Threaded plug	Conical plug
Thread dimension	M24	-
Diameter (mm)	-	Ø 31
Active area length (mm)	39	22

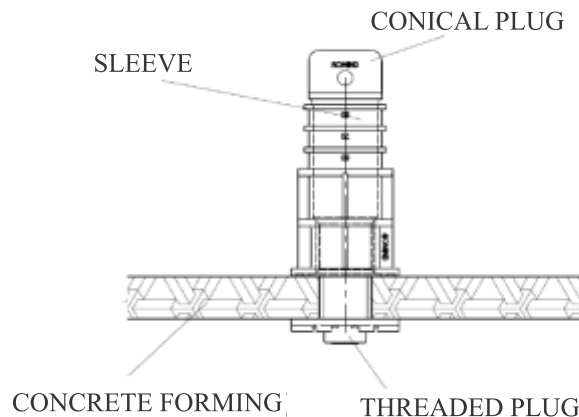
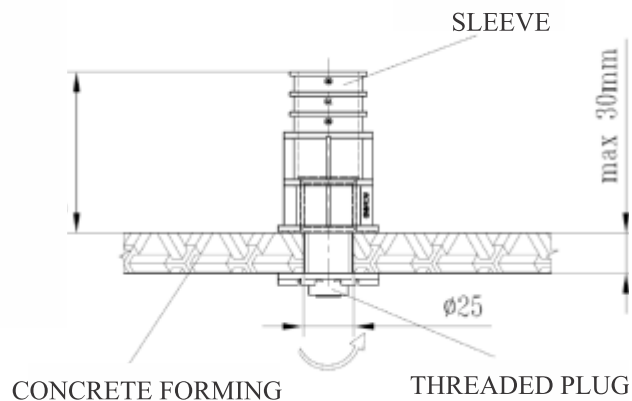


General mounting instructions of the sleeves of the RAP nozzles in the concrete plates, at their casting.

Before mounting, the components must be verified as: sleeve + threaded plug + conical plug. In the concrete forming must be made holes of Ø 25 mm diameter at the mounting distance of the RAP filter nozzles (according with correspondent drawing).

1. In the Ø 25 holes of the concrete forming the threaded plugs are introduced, in the inferior part, and, on the opposite part, the sleeves are screwed. The tightening is made by applying on the threaded plugs a maximum torque of $1,5 \div 2$ Nm.

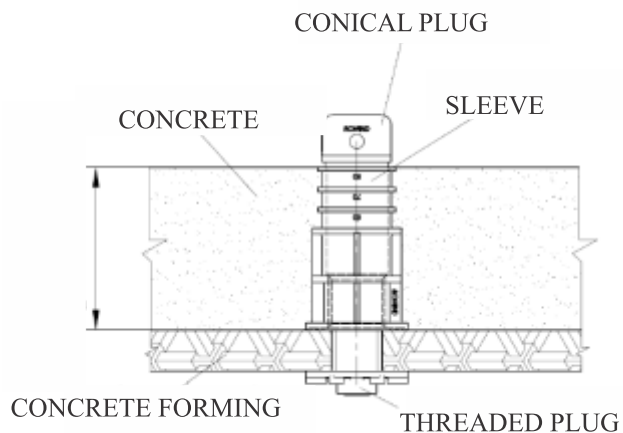
2. In the upper end of the sleeve is mounted the conical plug.



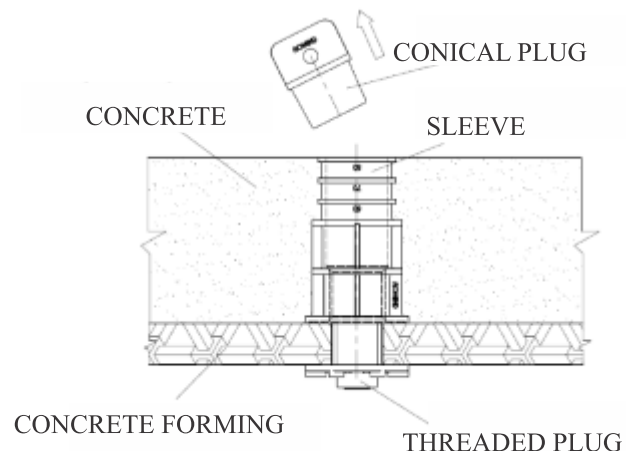


3. After mounting all the sleeves and plugs, the concrete is poured up to the superior level of the sleeve - thus it is formed the appropriate plate thickness.

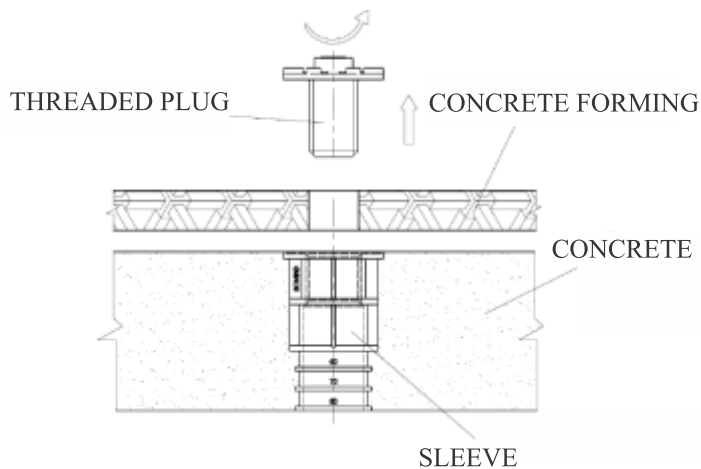
It is recommended the use of a vibrating plate to ensure the concrete plate quality.



4. After the concrete is hardened, the plugs are dismounted.



5. The concrete forming is rotated by 180 degrees and all the threaded plugs are removed.



Observation: the plugs are recovered and reused in order to make the next concrete plates.



RESIN TRAP - CML-Dn type

The resin traps are designed to prevent the loss of media in the event of underdrain failure, lateral failure, strainer failure and filter nozzle failure. They are designed in various types, allowing a wide range of fluid flow rates (between 20 and 200 m3/h) and having the dimensions of the coupling flanges adapted to the assembly conditions.

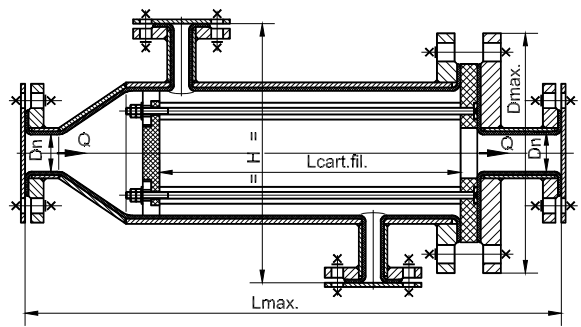
At request, beside the basic types, there can be made resin traps with different dimensions adapted to the beneficiary's request.

The resin trap consist of:

- **rubberized body** provided with inlet, outlet, vent and drain flanged fittings;
- **filtering cartridge**, made of circular filtering elements from polypropylene, assembled with stainless steel ties.



Technical characteristics	
Working fluid	softened water, demineralized water
Fluid hardness	acid or alkaline (pH 2 ÷ 12)
Maximum working pressure	10 bar
Loss of pressure (bar)	0,1 ÷ 0,2 (according to the clogging level)
Working temperature	max. 80°C
Slots dimensions (mm)	0,25 ± 0,050
Fittings (according EN ISO)	flanges PU 10



Type	Dn inlet/outlet	Q (m ³ /h)	Lmax (mm)	Dmax (mm)	Lcart. fil. (mm)	Number of bulged disks	H (mm)	Dn drain
CML-50	50	20	500	285	221	125	-	-
CML-80	80	40	600	285	340	195	-	-
CML-100	100	80	760	395	402	335	432	25
CML-125	125	100	830	395	476	397	432	25
CML-150	150	150	900	505	510	443	516	25
CML-200	200	200	1030	505	700	608	516	25
CML-250	250	300	1080	505	750	650	516	25