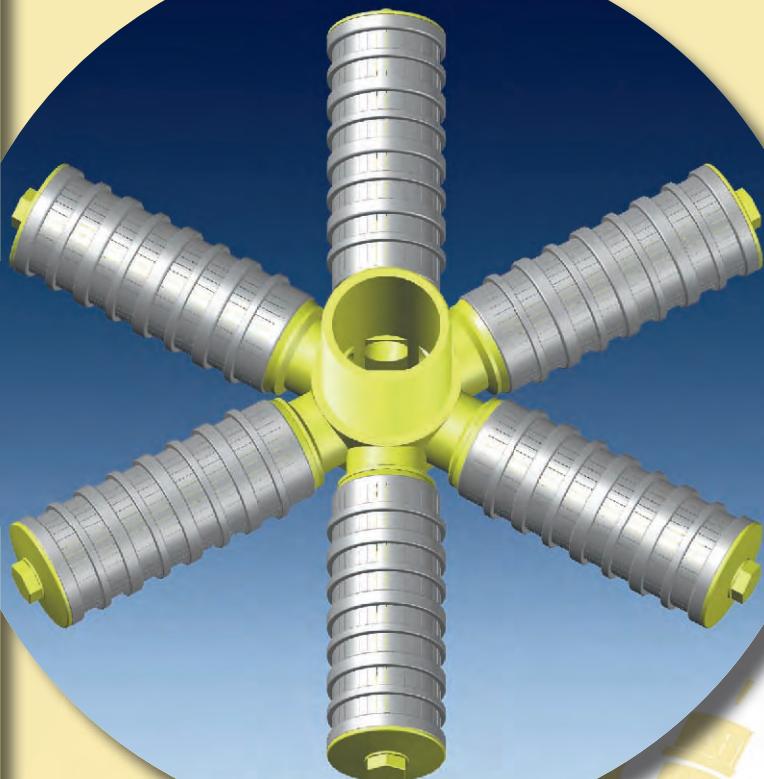
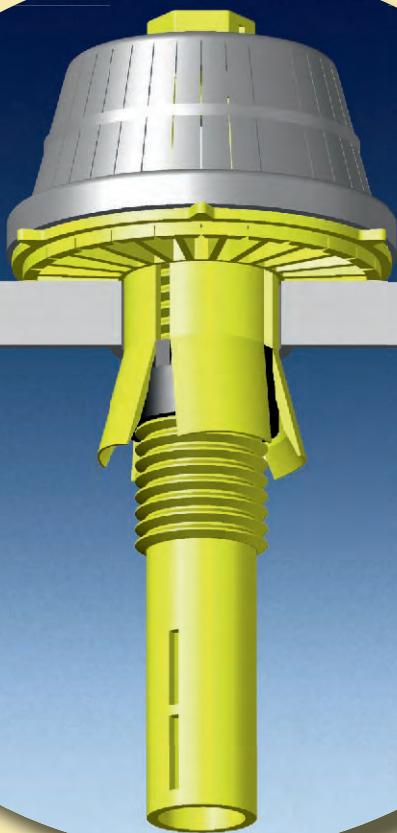


**KSH**



DIN EN ISO 9001-2008



V



## Filterdüsen

Für Wasser und Abwasser-Aufbereitung

## Filter-Nozzles

For water processing and water cleaning

## Crépines à filtre

Pour le traitement et la filtration de l'eau

## Toberas filtrantes

Para el tratamiento y la filtración del agua



## Filterdüsen-Sterne

## Filter-Nozzles-Stars

## Crépines étoiles

## Estrellas para toberas a filtro



Material-beständigkeit	Constancy of the material	Résistance du matériel	Resistencia del Material
<p>Unsere Filterdüsen und Filterdüsensterne werden aus Polypropylen hergestellt. Polypropylen (PP) ist in Abhängigkeit vom Druck zum Beispiel beständig bei 60°C (333 K) gegen:</p> <p>Ammoniak w 10 % Formaldehyd w 10 % Isopropanol w jede Methanol w 50 % Natronlauge 50 % Salzsäure 50 % Schwefelsäure 50 % Sodawasser Ozon 20°C, 50 pphm (0,5mg/L)</p> <p>Polypropylen ist physiologisch unbedenklich.</p> <p>Polypropylen wird bei zunehmenden Frost spröder. Bitte, behandeln Sie Produkte aus PP entsprechend. Bei Kälte empfehlen wir die Filterdüsen und Mutter vor der Montage zu erwärmen.</p>	<p>Our Filter nozzles and Filter nozzles-stars are made of polypropylene. Depending on the drop in pressure for example at 60°C (333 K) Polypropylene (PP) is resistant against:</p> <p>ammonia ag 10 % formaldehyde ag 10 % isopropanol all concentrations methanol ag 50 % caustic soda solutions 50 % hydrochloric acid 50 % sulfuric acid 50 % soda water ozone 20°C, 50 pphm (0,5mg/L)</p> <p>Polypropylene is physiologically unobjectionable.</p> <p>With increasing frost polypropylene gets more sensitive. Please, handle all articles made of polypropylene accordingly. If it is cold we recommend to warm up filter nozzles and nuts before installation.</p>	<p>Nos crépines à filtre sont fabriquées en polypropylène. Le polypropylène (PP) résiste, en fonction de la pression, par exemple à 60°C (333 K) aux produits suivants:</p> <p>ammoniaque aq 10 % formaldéhyde aq 10 % isopropanol aq toute concentration méthanol aq 50 % solution de soude 50 % acide chlorhydrique 50 % acide sulfurique 50 % eau soda ozone 20°C, 50 pphm (0,5mg/L)</p> <p>Le polypropylène est physiologiquement neutre.</p> <p>Le polypropylène devient plus cassant en cas de gel croissant. Veuillez traiter les produits en polypropylène en tenant compte de ce facteur. Lors de basse température nous recommandons le réchauffement des crépines à filtre ainsi que des écrous avant le montage.</p>	<p>Nuestras toberas y estrellas filtrantes 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:</p> <p>amoníaco, 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 (0,5mg/L)</p> <p>El polipropileno es inocuo.</p> <p>A bajas temperaturas la fragilidad del polipropileno aumenta. Deben utilizarse los productos fabricados en PP, teniendo en cuenta la anterior circunstancia. En caso de bajas temperaturas, recomendamos calienten las toberas filtrantes y tuercas antes de su montaje.</p>
<p>Für Heißwasser bis max. 110°C empfehlen wir in Abhängigkeit vom Druck Polypropylen mit chemisch gekoppelter Glasfaser PPGV. Mit dem Einsatz von PPGV ändern sich die angegebenen Maße. Bitte bei Bedarf nachfragen.</p>	<p>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 glass fibres. Using PPGV, the indicated measurements may change. If required, please contact us for information.</p>	<p>Pour de l'eau chaude à température constante allant jusqu'à 110°C max., nous recommandons l'utilisation du polypropylène chargé de fibres de verre. Pour le PPGV, Les dimensions indiquées peuvent changer. Les cas échéant, n'hésitez Pas à nous contacter pour plus d'informations.</p>	<p>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 de fibra de vidrio. Utilizando PPGV, las medidas indicadas pueden variar. En caso necesario, les pedimos que contacten conosotros para especificaciones.</p>
<p>Für Heißwasser bis max. 135°C empfehlen wir in Abhängigkeit vom Druck PVDF. (Bedingt beständig gegen konzentrierte Laugen).</p>	<p>For hot water of a continuous temperature of up to max. 135°C depending on the drop in pressure we recommend PVDF. (Conditionally resistant to concentrated caustic sotutions).</p>	<p>Pour de l'eau chaude à température constante allant jusqu'à 135°C max., nous recommandons l'utilisation du PVDF (résistance limitée aux solutions concentrées).</p>	<p>Para agua caliente a temperatura constante hasta un máx. de 135°C, dependiendo de la presión puntual de entrada, recomendamos utilizar nuestras toberas fabricadas en PVDF. Resisten soluciones concentradas de bases fuertes (con restricciones).</p>
<p>Farben für Schlitze (PP): 0,2 = elfenbein 0,3 = grün 0,35 = weiß 0,5 = grau 0,7 = gelb 0,8 = blau 1,0 = schwarz 1,5 = orange 2,0 = grün</p> <p>Anzugsmoment siehe Montageanleitungen</p> <p>1 mWS = ca. 0,1 bar</p> <p>Gewinde in Anlehnung an DIN ISO 228 für G, BSP ANSI B1.20.1-1983 für NPT, NPSM ANSI B1.1a-1984 für UN</p> <p>Maße in mm.</p> <p>Irrtümer / Druckfehler Technische Änderungen vorbehalten.</p> <p>Alle technischen Informationen verstehen sich ohne jede Gewähr. Es gelten die Angaben des jeweils angeforderten Datenblattes.</p>	<p>Colour of slots (PP): 0,2 = ivory 0,3 = green 0,35 = white 0,5 = grey 0,7 = yellow 0,8 = blue 1,0 = black 1,5 = orange 2,0 = green</p> <p>Tightening torque see at Installation-instruction</p> <p>1 mWS = approx. 0,1 bar</p> <p>Threads in the approach of DIN ISO 228 for G, BSP ANSI B1.20.1-1983 for NPT, NPSM ANSI B1.1a-1984 for UN</p> <p>Dimensions in mm.</p> <p>Error / Pressure Failure We reserve the right to alter specifications.</p> <p>No responsibility is taken for the correctness of the technical information. Only specifically provided data sheets are valid.</p>	<p>Coloration par fente (PP): 0,2 = ivoire 0,3 = vert 0,35 = blanc 0,5 = gris 0,7 = jaune 0,8 = bleu 1,0 = noir 1,5 = orange 2,0 = vert</p> <p>Couple de serrage voir instructions de montage</p> <p>1 m de colonne d'eau = env. 0,1 bar</p> <p>Les fils dans l'approche de DIN ISO 228 pour G, BSP ANSI B1.20.1-1983 pour NPT, NPSM ANSI B1.1a-1984 pour UN</p> <p>Dimension en mm.</p> <p>Sous réserve de fautes ou d'erreurs d'impression et de modifications techniques.</p> <p>Toutes les informations techniques sont sans garantie. Seules les fiches techniques spécifiquement fournies au client sont valables.</p>	<p>Color de las ranuras (PP): 0,2 = marfil 0,3 = verde 0,35 = blanco 0,5 = gris 0,7 = amarillo 0,8 = azul 1,0 = negro 1,5 = naranja 2,0 = verde</p> <p>Par de apriete en el manual de instrucciones</p> <p>1 mWS = aprox. 0,1 bar</p> <p>Número aproximado hilos de rosca según DIN ISO 228 para G, BSP ANSI B1.20.1-1983 para NPT, NPSM ANSI B1.1a-1984 para UN</p> <p>Dimensiones en mm.</p> <p>Error / Fallo de Presión Nos reservamos el derecho de alterar las especificaciones técnicas.</p> <p>Todos informaciones técnicos son sin garantía. Solamente nuestras hojas de datos específicos directamente transmitidos al cliente son válidos.</p>

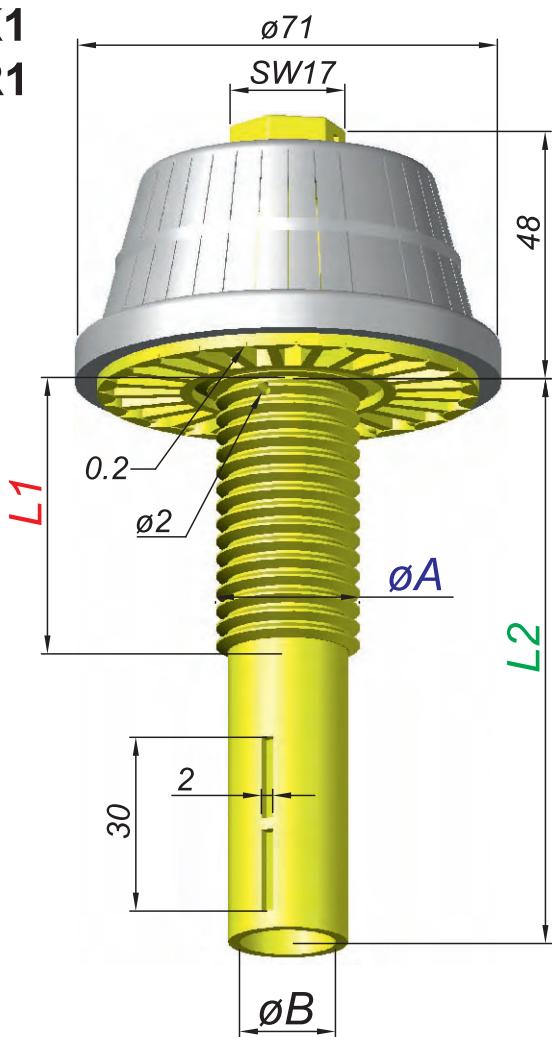
## Filterdüsen

## Filter-Nozzles

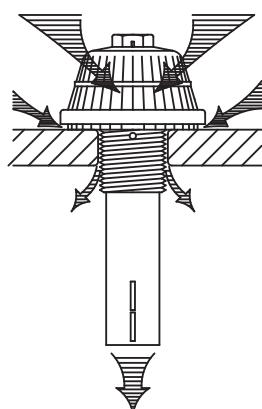
## Crépines à filtre

## Toberas filtrantes

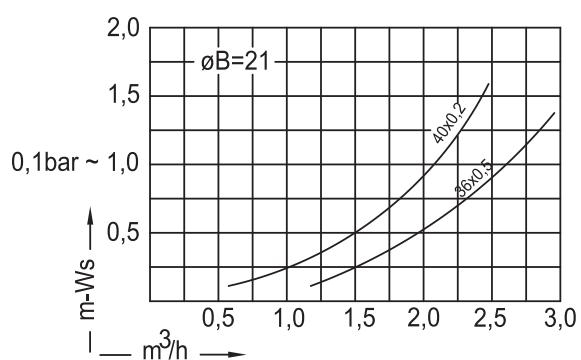
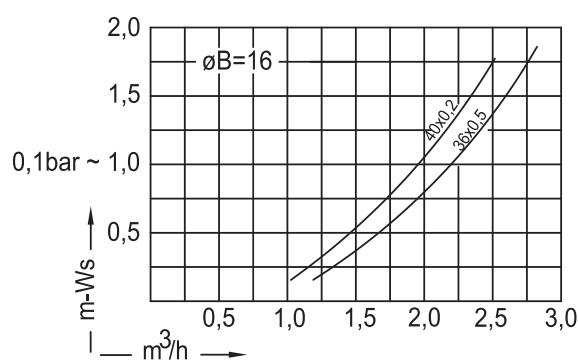
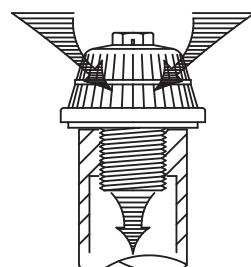
**Typ K1  
/ KR1**



**Typ K1**



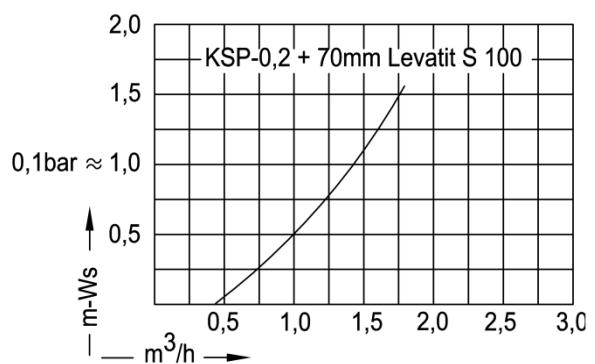
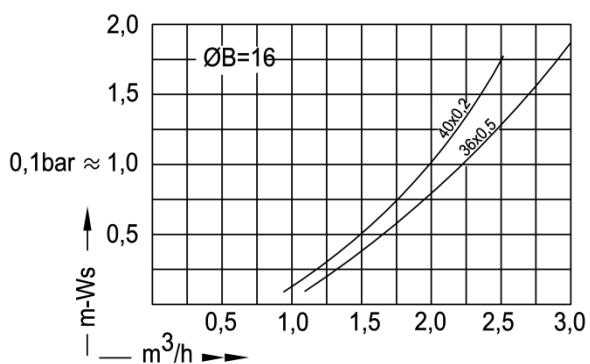
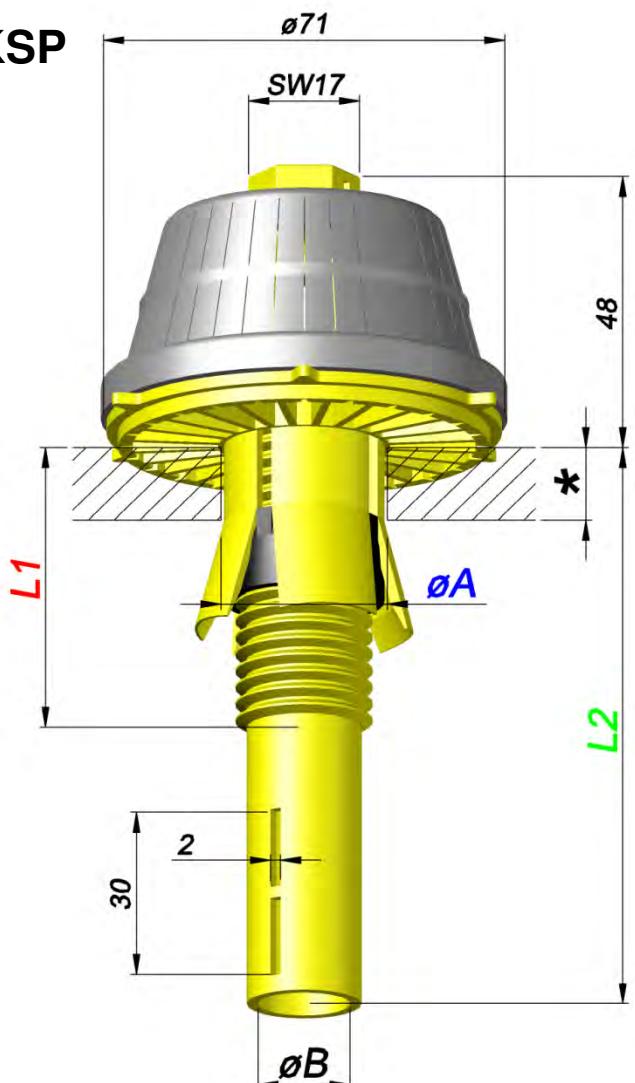
**Typ KR1**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
<b>K1</b> <b>KR1</b>	40x0,2 = 1,95 cm <sup>2</sup> 36x0,35 = 2,96 cm <sup>2</sup> 20x0,5 = 2,35 cm <sup>2</sup> 36x0,5 = 4,23 cm <sup>2</sup> 20x0,8 = 3,78 cm <sup>2</sup> 36x1,0 = 8,46 cm <sup>2</sup> 24x1,5 = 7,05 cm <sup>2</sup> 20x2,0 = 9,50 cm <sup>2</sup>	G1" 33,25 20				80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm <sup>2</sup>
		1¼"WW 32 20, 30, 45, +5+5...					
		M30 x 3,5 30 30					
		G3/4" 26,5 20, 30,45, +5+5...					
		1" WW 25,4 20, 45, +5+5...				80, 110, 140, 200, 250, 300, 350, ...	16 = 2,0 cm <sup>2</sup>
		M24 24 25, 45, +5+5...					
		M22 x 1,5 22 45, +5+5...					
		G1½" 21 15, 20, 40					
		M20 20 45, +5+5...				80, 110, 140, 200, ...	13 = 1,3 cm <sup>2</sup>
		G3/8" 16,7 20					

# Filterdüsen Filter-Nozzles Crépines à filtre Toberas filtrantes

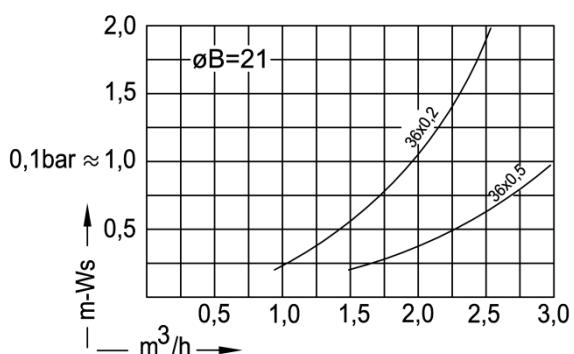
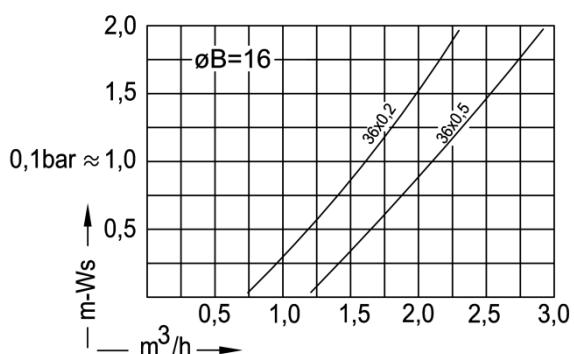
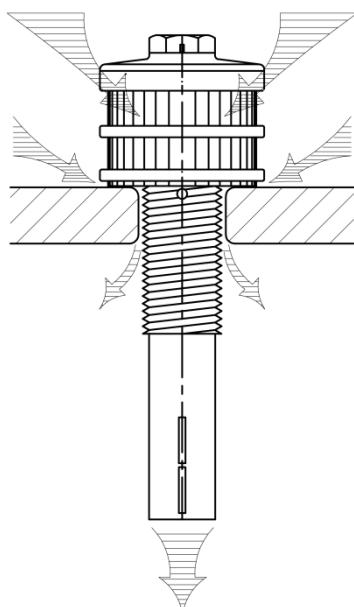
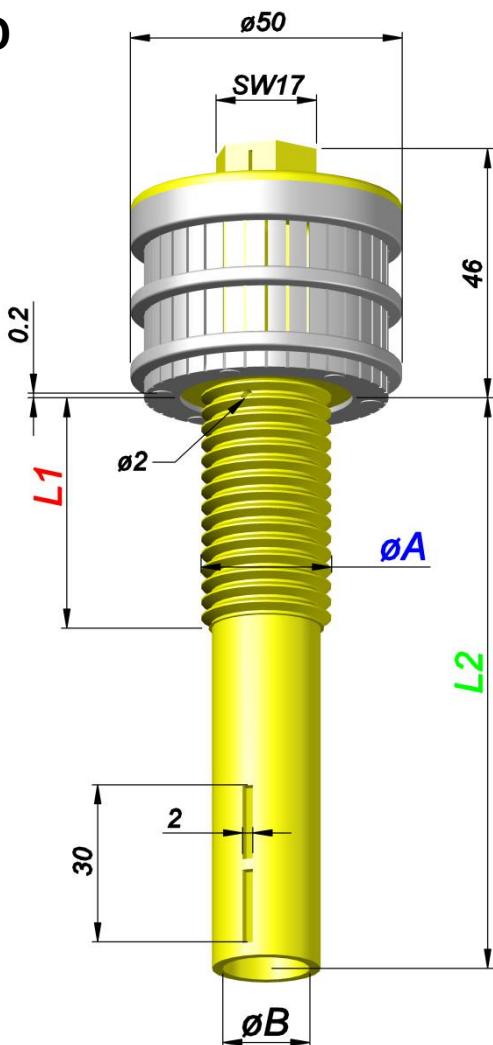
**Typ KSP**



Bestellung Ordering Commande Encargo	Typ Type Type Típico	Schlüsse Slots Fentes Ranuras	*	L1	Schaft Shaft Longueur de tige Tija	L2	ØA	ØB
<b>KSP</b>	$40 \times 0,2 = 1,95 \text{ cm}^2$ $36 \times 0,35 = 2,96 \text{ cm}^2$ $20 \times 0,5 = 2,35 \text{ cm}^2$ $36 \times 0,5 = 4,23 \text{ cm}^2$ $20 \times 0,8 = 3,78 \text{ cm}^2$ $36 \times 1,0 = 8,46 \text{ cm}^2$ $24 \times 1,5 = 7,05 \text{ cm}^2$ $20 \times 2,0 = 9,50 \text{ cm}^2$	8 - 28	50	80, 110, 140, 200, 250	$28-29,5; 29,5-31,5; 31,5-33;$ $33-34,5; 34,5-36;$	$16 = 2,0 \text{ cm}^2$		
		25 - 45	73	110, 140, 200, 250				
		8 - 28	50	80, 110, 140, max. 200	$25-27,5 ; 26,5-28,5$	$13 = 1,3 \text{ cm}^2$		
		25 - 45	73	80, 110, 140, max. 200				

**Filterdüsen**    **Filter-Nozzles**    **Crépines à filtre**    **Toberas filtrantes**

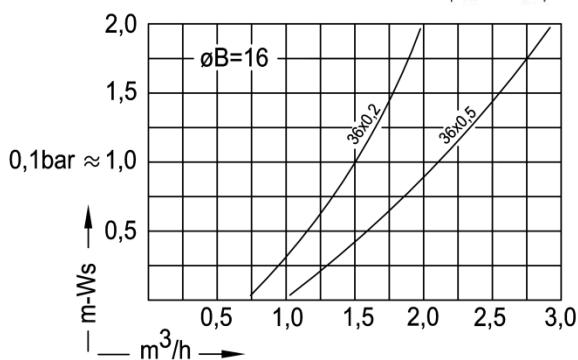
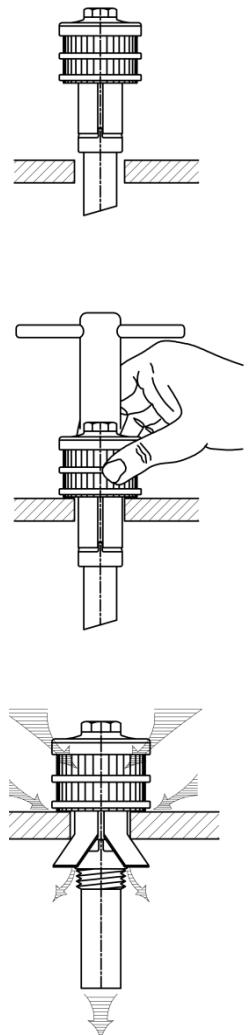
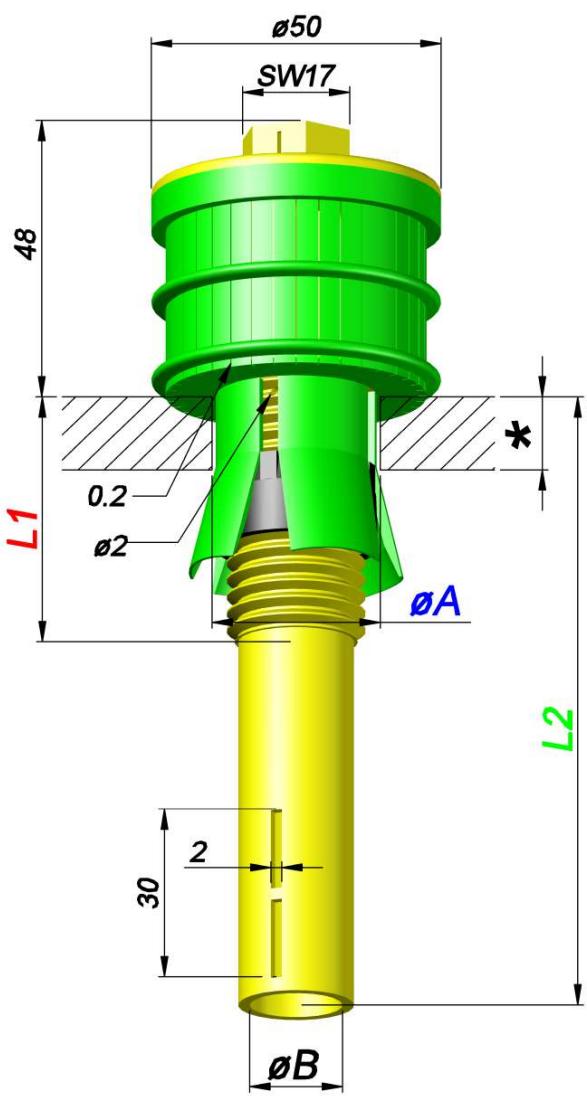
**Typ D**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
<b>D</b>	$24 \times 0,2 = 0,91 \text{ cm}^2$ $36 \times 0,2 = 1,37 \text{ cm}^2$ $36 \times 0,3 = 2,05 \text{ cm}^2$ $36 \times 0,5 = 3,42 \text{ cm}^2$ $36 \times 0,8 = 5,46 \text{ cm}^2$ $24 \times 1,0 = 4,56 \text{ cm}^2$ $24 \times 1,5 = 6,84 \text{ cm}^2$ $20 \times 2,0 = 7,00 \text{ cm}^2$ $8 \times 2,5 = 3,5 \text{ cm}^2$ $8 \times 5,0 = 7,00 \text{ cm}^2$	$1 \frac{1}{4}\text{"WW}$ M30 x 3,5	32	20, 30, 45, +5+5...	80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 $\text{cm}^2$  80, 110, 140, 200, 250, 300, 350, ...	
			30	30			
		G 3/4"	26,5	20, 30, 45, +5+5...			
		1"WW	25,4	20, 45, +5+5...			
		M24	24	25, 45, +5+5...			
		M22 x 1,5	22	45, +5+5...			
		G 1/2"	21	20			
		M20	20	45, +5+5...			
		G 3/8"	16,7	20			

Filterdüsen Filter-Nozzles Crépines à filtre Toberas filtrantes

Typ DSP



Bestellung Ordering Commande Encargo	Typ Type Type Típico	Schlüsse Slots Fentes Ranuras	*	L1	Schaft Shaft Longueur de tige Tija	L2	ØA	ØB
	DSP	36 x 0,2 = 1,37 cm <sup>2</sup>	8 - 28	50	80, 110, 140, 200, 250		28-29,5; 29,5-31,5; 31,5-33;	16 = 2,0 cm <sup>2</sup>
		36 x 0,3 = 2,05 cm <sup>2</sup>	25 - 45	73	110, 140, 200, 250		33-34,5; 34,5-36;	
		36 x 0,5 = 3,42 cm <sup>2</sup>						
		36 x 1,0 = 6,84 cm <sup>2</sup>						
	DSP	36 x 0,2 = 1,37 cm <sup>2</sup>	8 - 28	50	100, 110, 140, max. 200		25-27,5	13 = 1,3 cm <sup>2</sup>
		36 x 0,5 = 3,42 cm <sup>2</sup>	8-28	50	100, 110, 140, max. 200		26 - 28	
			25- 45	73	100, 110, 140, max. 200		25-27,5	
			25- 45	73	100, 110, 140, max. 200		26 - 28	

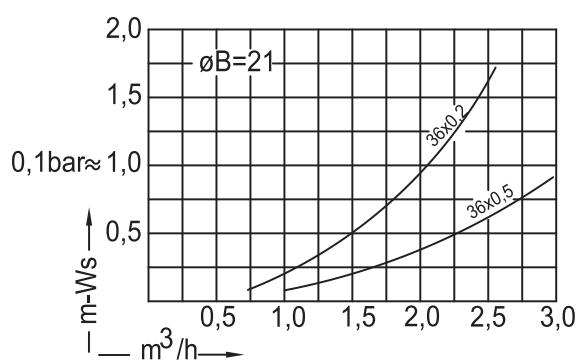
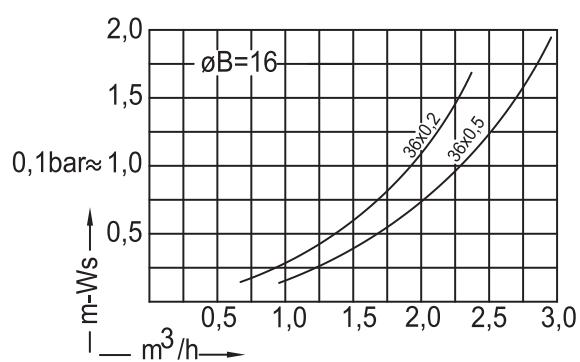
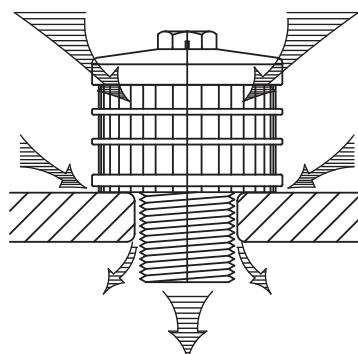
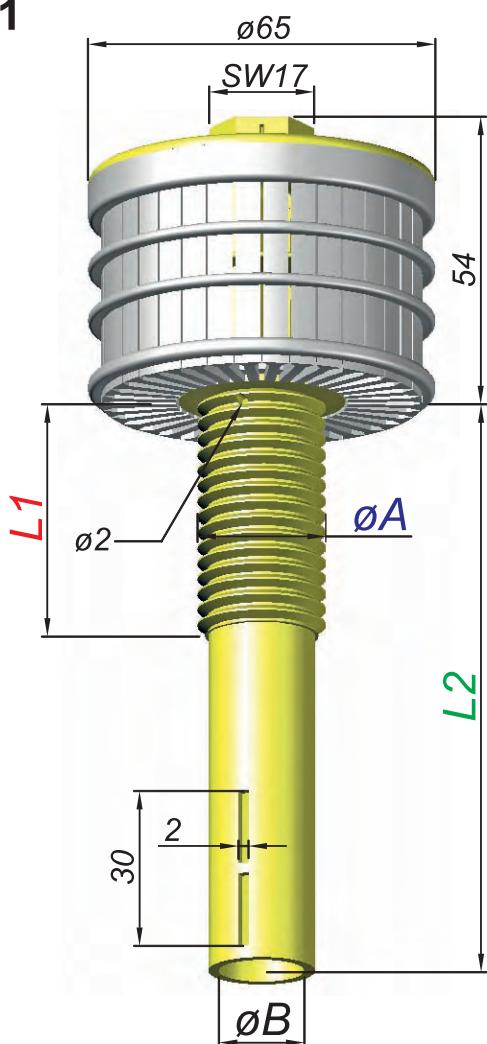
Filterdüsen

Filter-Nozzles

Crépines à filtre

Toberas filtrantes

## Typ C1



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
	<b>C1</b>	$36 \times 0,2 = 1,95 \text{ cm}^2$ $36 \times 0,3 = 2,90 \text{ cm}^2$ $36 \times 0,5 = 4,90 \text{ cm}^2$ $36 \times 0,7 = 6,80 \text{ cm}^2$ $36 \times 1,0 = 9,80 \text{ cm}^2$	$1\frac{1}{4}"\text{WW}$ M30 G 3/4" 1"WW M24	32 30 x 3.5 26,5 25,4 24	25, 30, 45 30 20, 45, +5+5... 20, 45, +5+5... 20, 45, +5+5...	80, 110, 140, 200, 250, 300, 350, ...	$21 = 3,4 \text{ cm}^2$
						80, 110, 140, 200, 250, 300, 350, ...	$16 = 2,0 \text{ cm}^2$

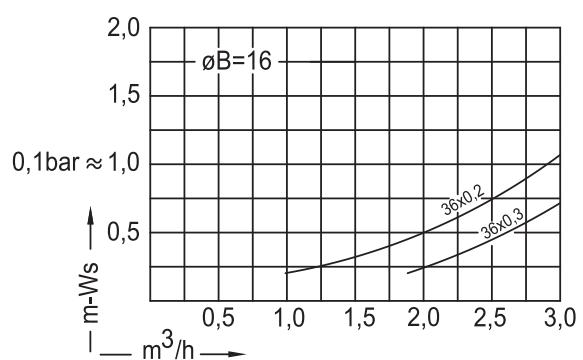
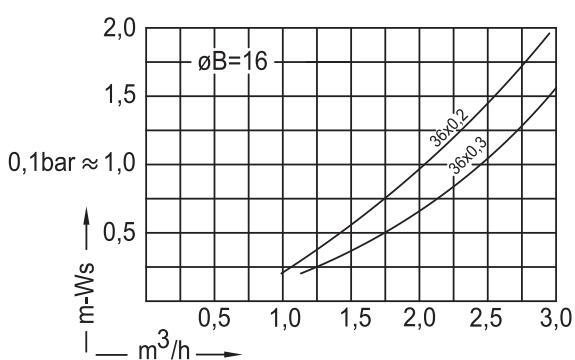
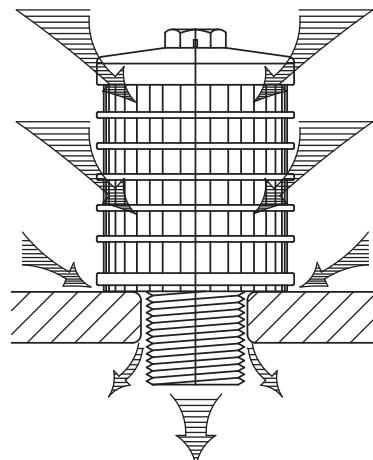
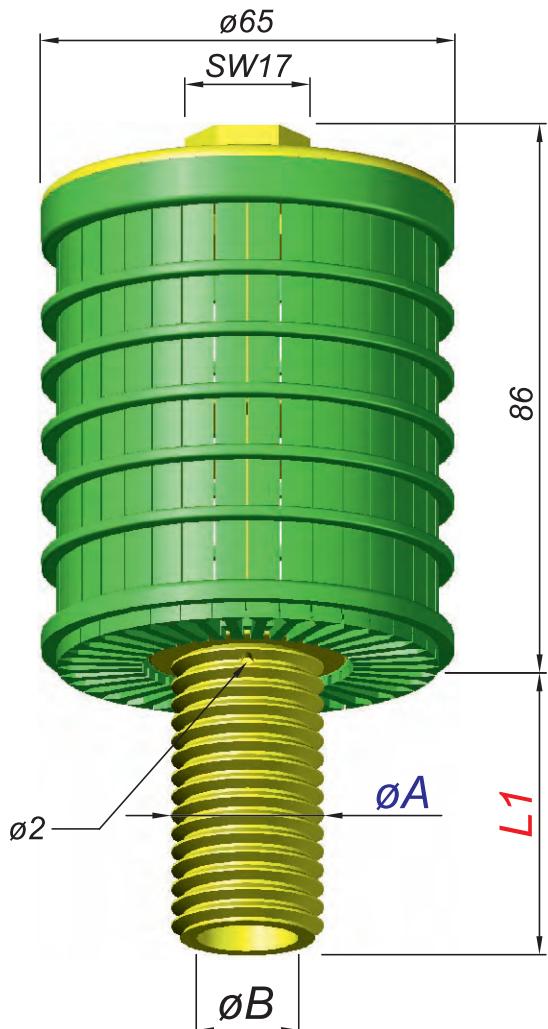
## Filterdüsen

## Filter-Nozzles

## Crépines à filtre

## Toberas filtrantes

### Typ C2



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\phi A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	$L1$	$\phi B$
	C2	$36 \times 0,2 = 3,70 \text{ cm}^2$ $36 \times 0,3 = 5,50 \text{ cm}^2$ $36 \times 0,5 = 9,61 \text{ cm}^2$	1 1/4"WW M30 x 3.5 G 3/4" 1"WW M24	32 30 26,5 25,4 24	25, 30, 45 30 20, 45, +5+5... 45 20, 45, +5+5...		$21 = 3,4 \text{ cm}^2$ $16 = 2,0 \text{ cm}^2$

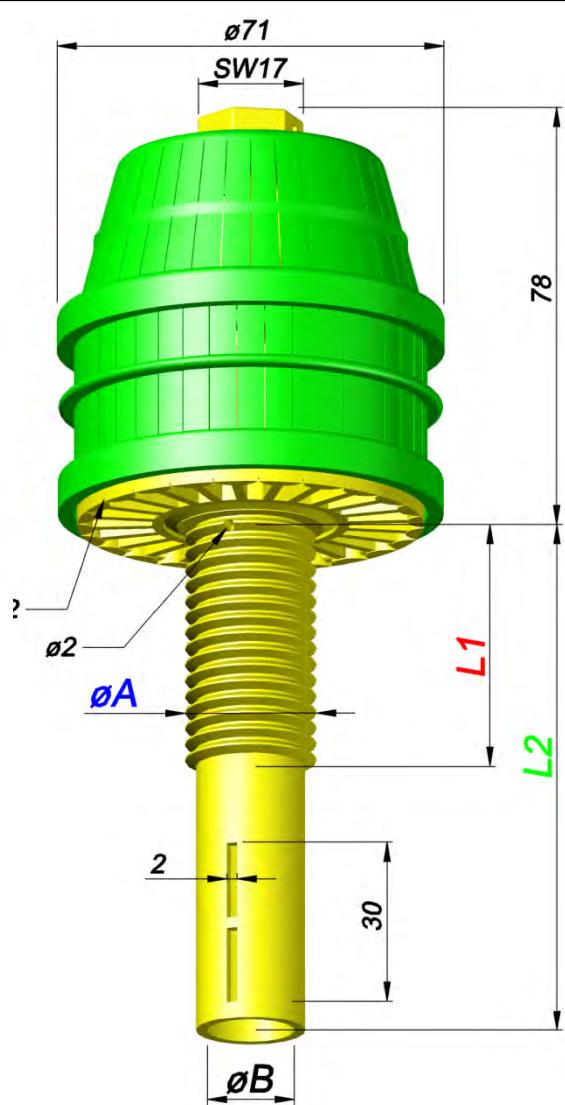
## Filterdüsen

## Filter-Nozzles

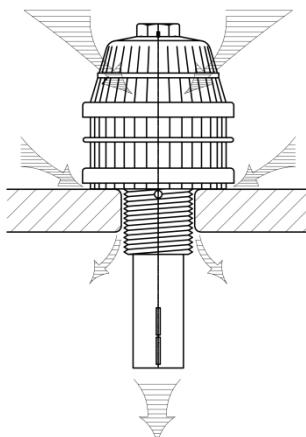
## Crépines à filtre

## Toberas filtrantes

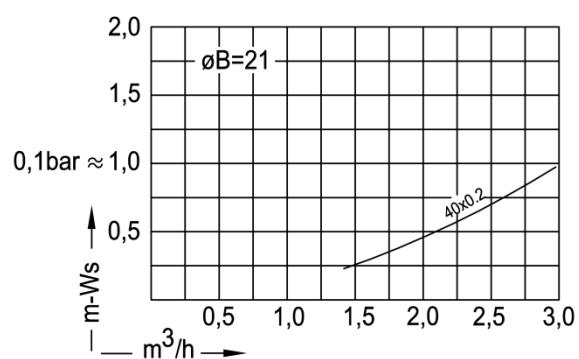
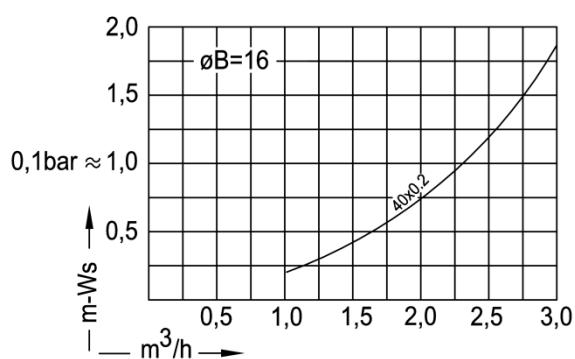
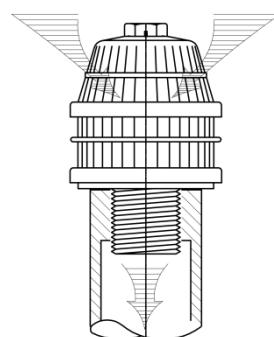
**Typ K2**



**Typ K2**



**Typ KR2**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\emptyset A$	Gewindelänge Thread length Longueur de filetage Largura da rosca	Schaft Shaft Longueur de tige Tija	$\emptyset B$
	<b>K2</b>	$40 \times 0,2 = 3,63 \text{ cm}^2$ $40 \times 0,35 = 6,35 \text{ cm}^2$	1 1/4"WW M30 x 3,5 G 3/4" M24	32 30 26,5 24	25, 45 30 25, 45 25, 45	80, 110, 140, ... 80, 110, 140, ...	21 = 3,4 cm <sup>2</sup> 16 = 2,0 cm <sup>2</sup>
	<b>KR2</b>						

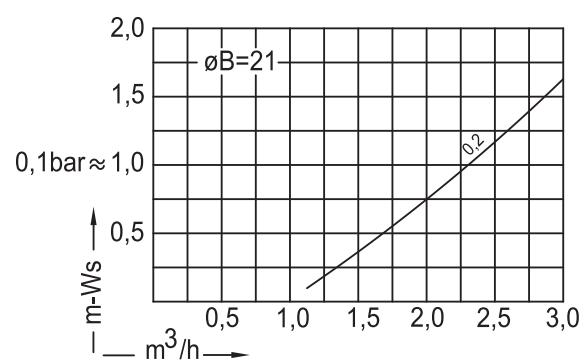
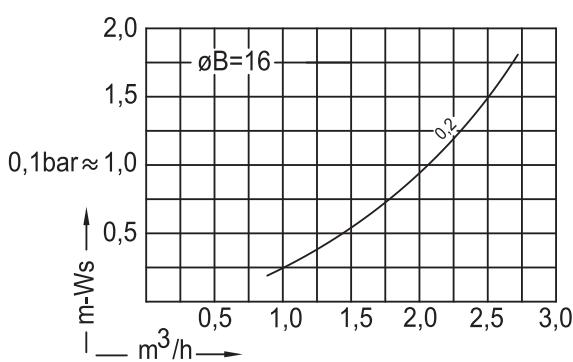
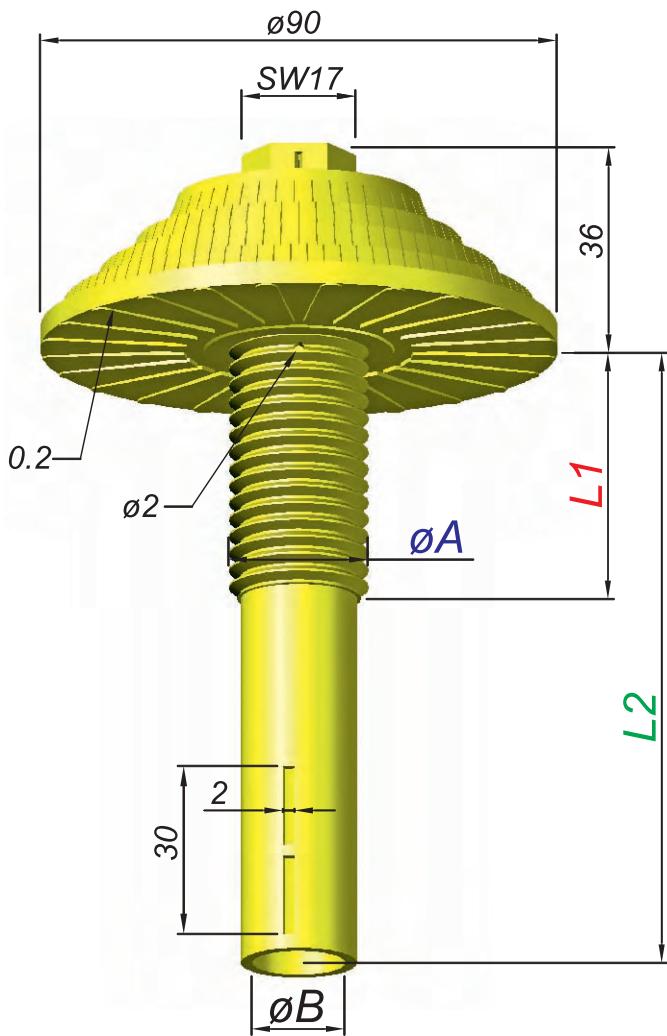
## Filterdüsen

## Filter-Nozzles

## Crépines à filtre

## Toberas filtrantes

Typ P



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	ØA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	ØB
	P	0,2 = 3,0 cm²	1 1/4"WW	32	25, 45, +5 +5 ...	80, 110, 140	21 = 3,4 cm²
			G 3/4"	26,5	20, 45, +5 +5 ...		
			1"WW	25,4	20, 45	80, 110, 140	16 = 2,0 cm²
			M24	24	20, 45, +5 +5 ...		

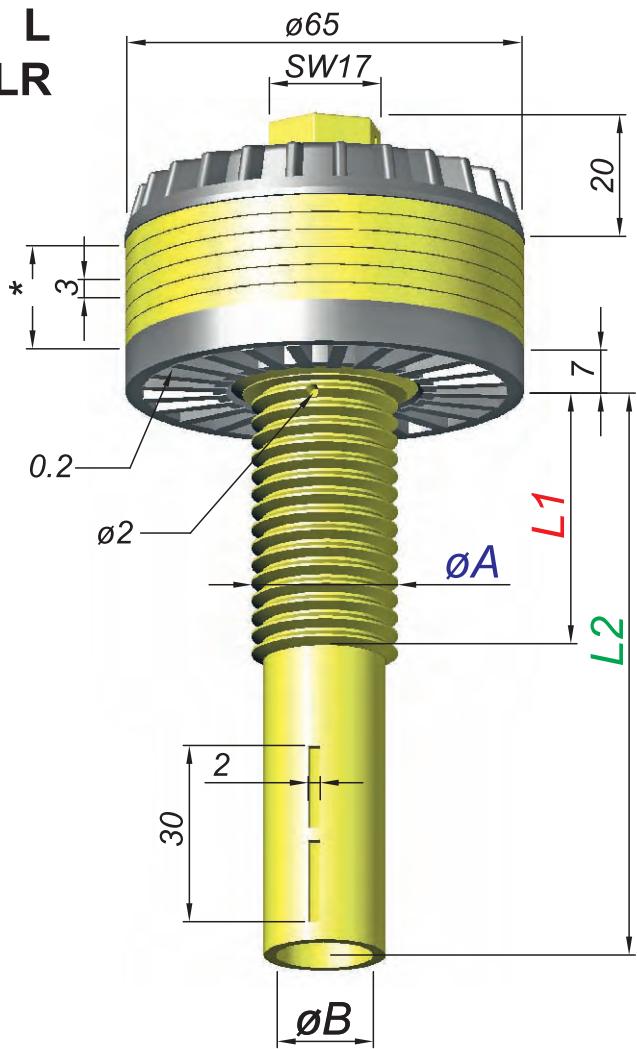
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## Filter-Nozzles

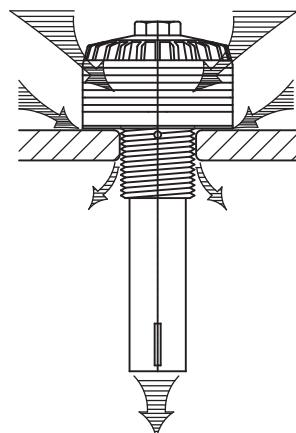
## Crépines à filtre

## Toberas filtrantes

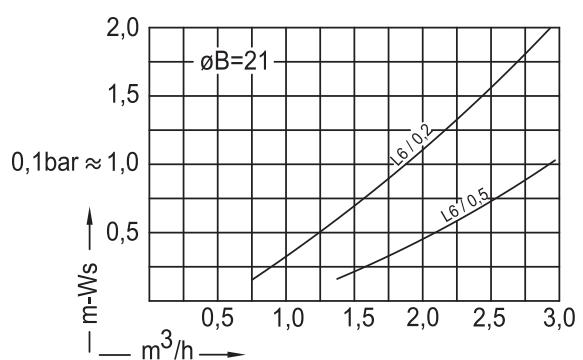
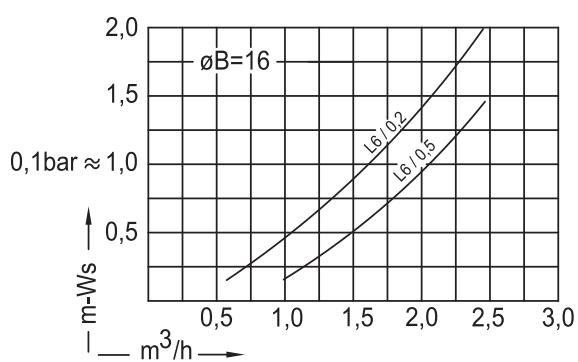
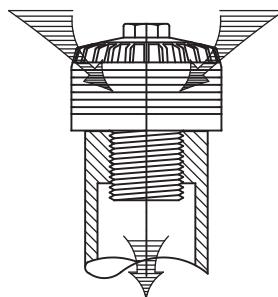
**Typ L  
/ LR**



**Typ L6**



**Typ LR6**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	*	Schlitte Slots Fentes Ranuras	pro Ring per Ring	Gewinde Thread Filetage Rosca	ØA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	ØB
	<b>L</b> <b>LR</b>	2	0,1	= 0,2 cm <sup>2</sup>	1/4"WW	32	20, 30, 45, +5+5...	80, 110, 140, ...	21 = 3,4 cm <sup>2</sup>
		5	0,15	= 0,3 cm <sup>2</sup>	M30	30	30		
		6	0,2	= 0,4 cm <sup>2</sup>	G 3/4"	26,5	20, 30, 45, +5+5...		
		10	0,3	= 0,6 cm <sup>2</sup>	1 "WW	25,4	20, 45, +5+5...		
		12	0,5	= 1,0 cm <sup>2</sup>	M24	24	25, 45, +5+5...	80, 110, 140, ...	16 = 2,0 cm <sup>2</sup>
					M22x1,5	22	45, +5+5...		
					M20	20	45, +5+5...	80, 110, 140, ...	13 = 1,3 cm <sup>2</sup>

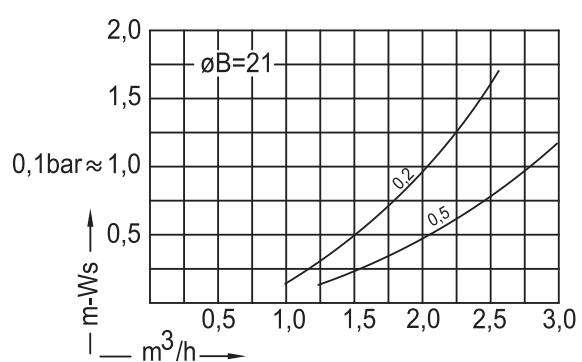
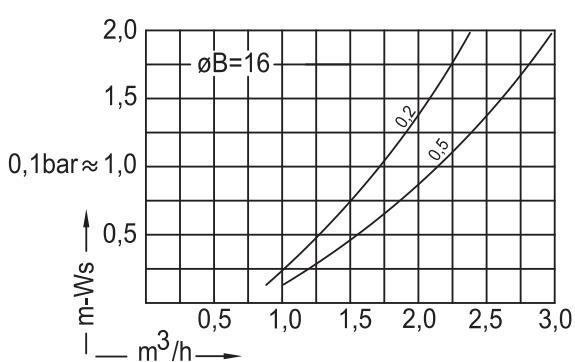
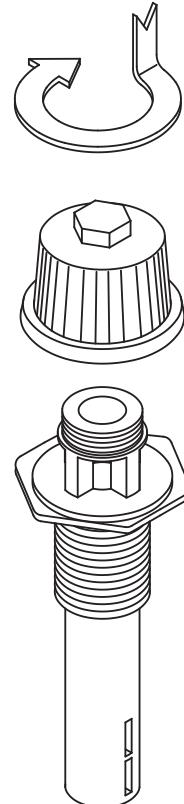
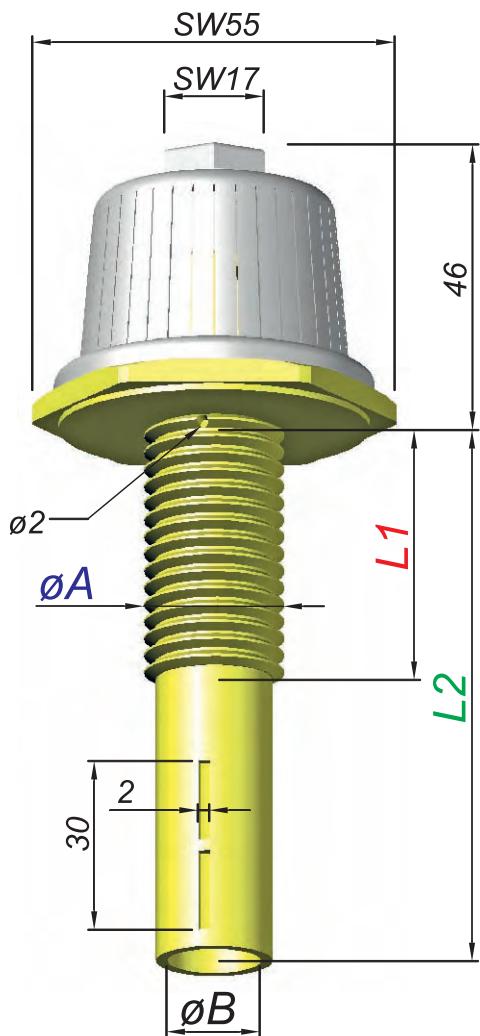
## Filterdüsen

## Filter-Nozzles

## Crépines à filtre

## Toberas filtrantes

### Typ S1



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
	<b>S1</b>	36 x 0,2 = 1,72 cm <sup>2</sup> 36 x 0,35 = 2,65 cm <sup>2</sup> 30 x 0,5 = 3,78 cm <sup>2</sup> 18 x 1,0 = 4,64 cm <sup>2</sup> 18 x 2,0 = 9,29 cm <sup>2</sup>	G 1" 1 1/4"WW M30 G 3/4" 1"WW M24	33,25 32 30 26,5 25,4 24	20 25, 30, 45 30 20, 45, 50, +5 +5... 45 20, 45, 50, +5 +5...	80, 110, 140, 200, 250, 300, 350, ... 80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm <sup>2</sup> 16 = 2,0 cm <sup>2</sup>

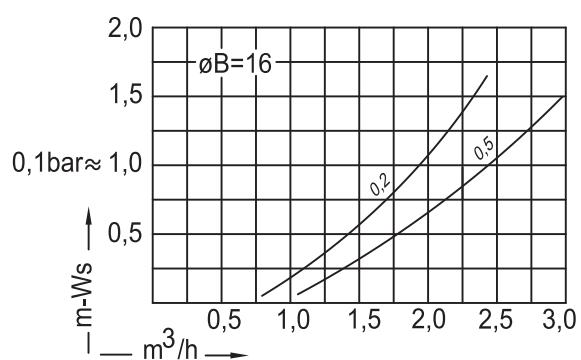
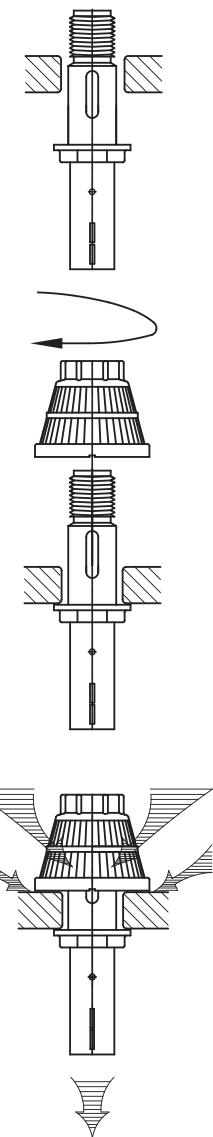
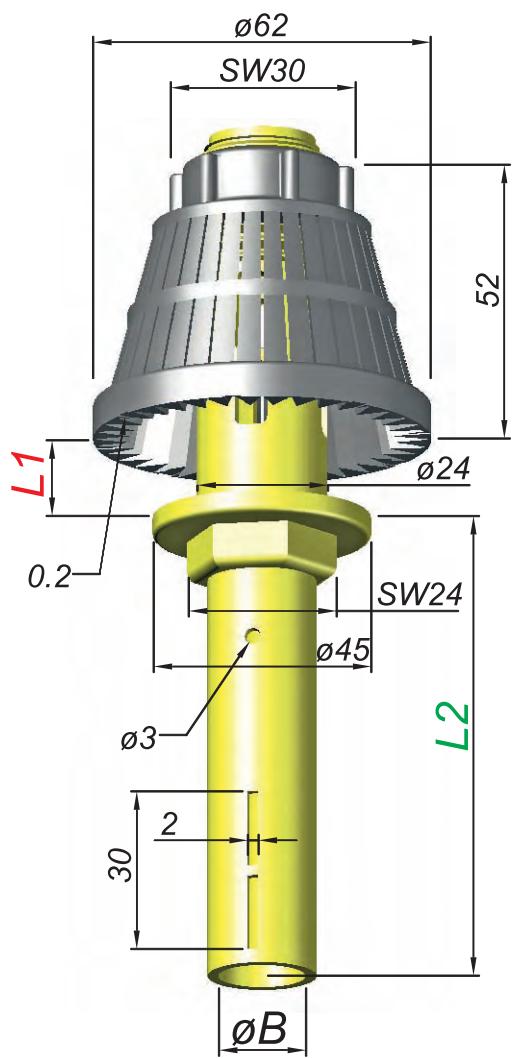
Filterdüsen

Filter-Nozzles

Crépines à filtre

Toberas filtrantes

**Typ S3**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Bodenstärke plate thickness Epaisseur du plancher Espesor placa	<b>L1</b>	Schaft Shaft Longueur de tige Tija	<b>L2</b>	<b><math>\varnothing B</math></b>
	<b>S3</b>	40 x 0,2 = 3,04 cm <sup>2</sup> 40 x 0,5 = 5,84 cm <sup>2</sup> 40 x 0,7 = 8,18 cm <sup>2</sup>		6 - 12 12 - 20 20 - 30 30 - 40	80, 110, 140, ...		16 = 2,0 cm <sup>2</sup>

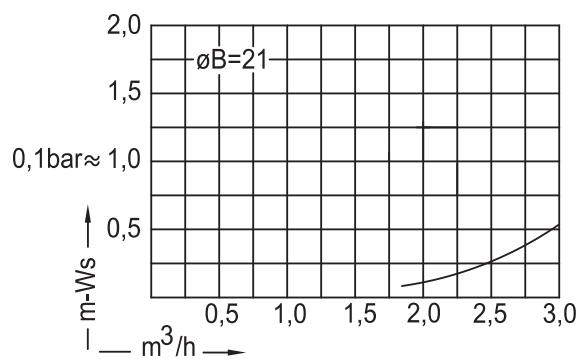
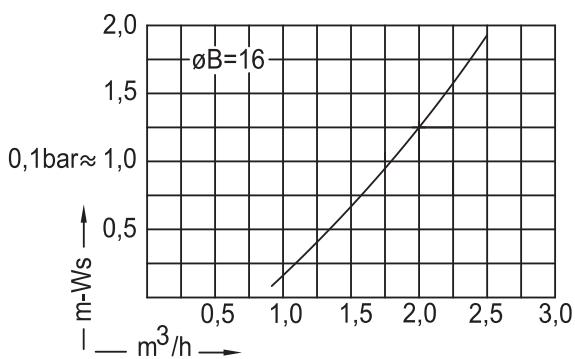
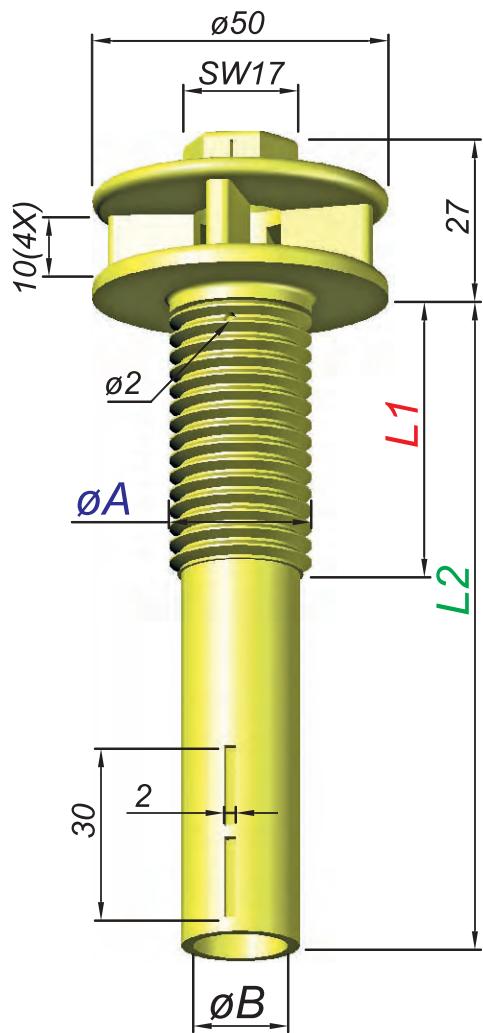
Filterdüsen

Filter-Nozzles

Crépines à filtre

Toberas filtrantes

**Typ G**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
	<b>G</b>	5 = 2,0 cm <sup>2</sup>	G 1"	33,25	20	80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm <sup>2</sup>
			1 1/4"WW	32	20, 30, 45, +5+5...		
			M30 x 3,5	30	30		
			G 3/4"	26,5	20, 30, 45, +5+5...		
			1" WW	25,4	20, 45, +5+5...		16 = 2,0 cm <sup>2</sup>
			M24	24	25, 45, +5+5...		
			M22 x 1,5	22	45, +5+5...		

Filterdüsen

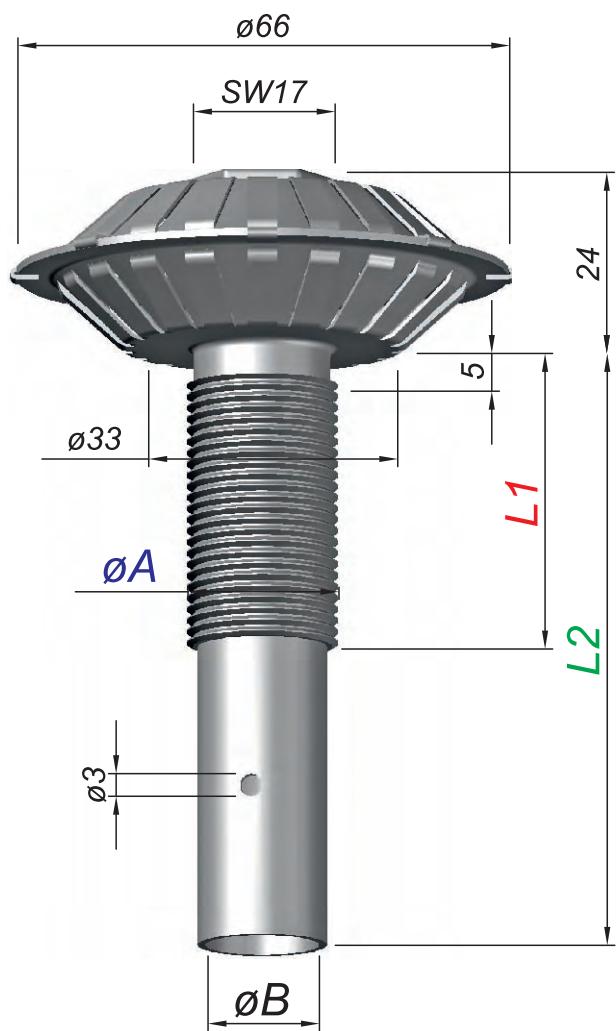
Filter-Nozzles

Crépines à filtre

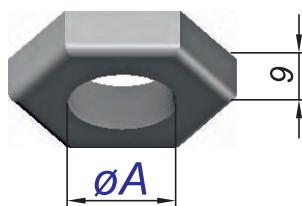
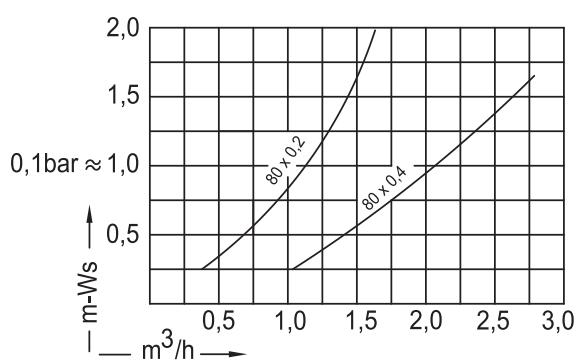
Toberas filtrantes

### Typ V10

V4A  
(316L)



### Typ MUVA

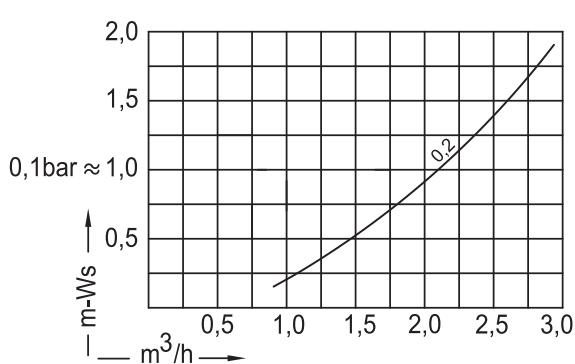
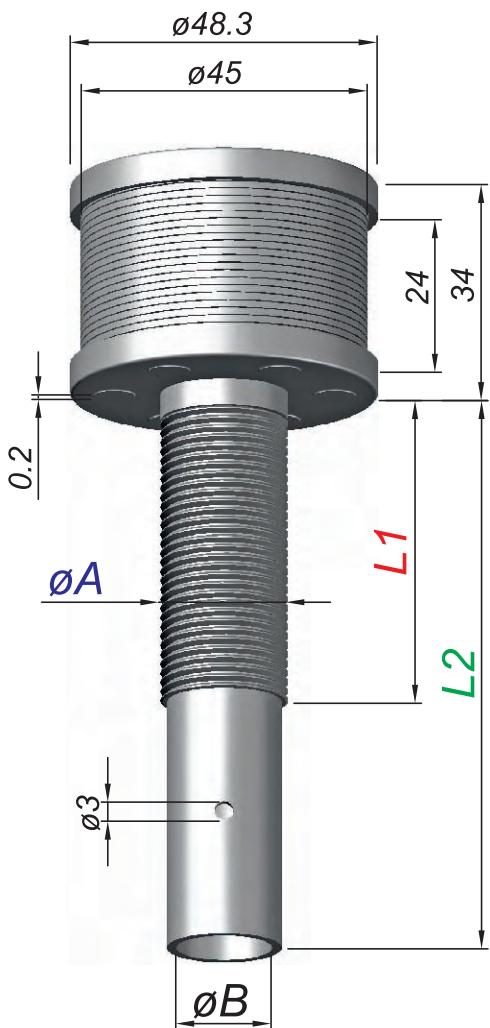
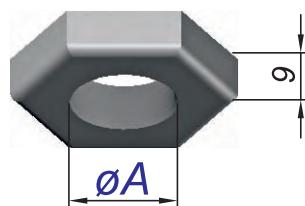


Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	ØA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	Ø2	ØB
	<b>V10</b>	80 x 0,2 = 1,68 cm <sup>2</sup> 80 x 0,4 = 3,52 cm <sup>2</sup>	M20x1,5	20	35 +5 +5 ...	80, 100, ...		16 = 2,0 cm <sup>2</sup>
	<b>MUVA</b>		M20x1,5					

**Filterdüsen****Filter-Nozzles****Crépines à filtre****Toberas filtrantes****Typ V20**

V4A

(316L)

**Typ MUVA**

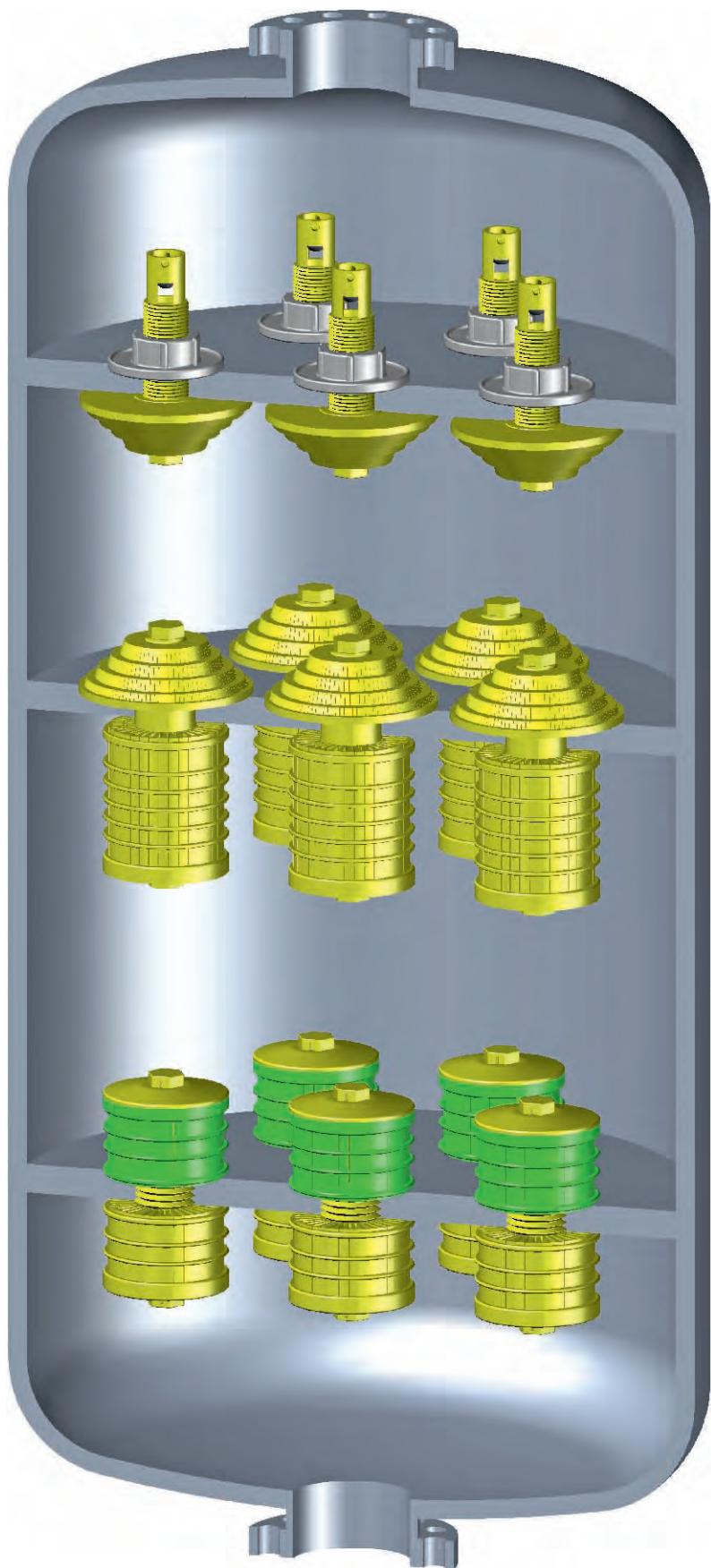
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$L2$	$\varnothing B$
	<b>V20</b>	0,2 = 5,65 cm <sup>2</sup>	M20x1,5	20	40, +5 +5...	80, 100, ...		16 = 2.0 cm <sup>2</sup>
	<b>MUVA</b>		M20x1,5					

**Filterdüsensatz**

für Zwischenböden

**Filter-Nozzles-Set**

For intermediate bottoms

**Crépines à filtre**Assortiment pour planches  
intermédiaires**Conjunto de**Toberas para  
placas intermedias

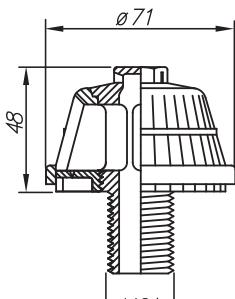
**Filterdüsensatz**  
für Zwischenböden

**Filter-Nozzles-Set**  
For intermediate bottoms

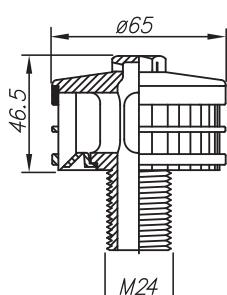
**Crépines à filtre**  
Assortiment pour planches  
intermédiaires

**Conjunto de**  
Toberas para  
placas intermedias

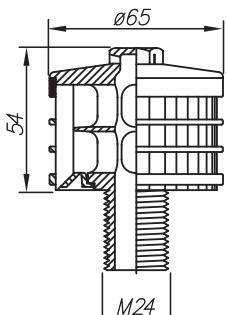
**K1**



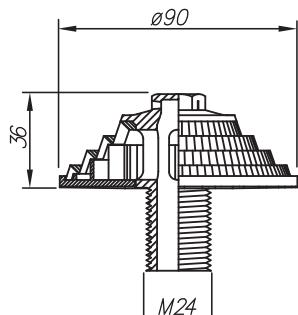
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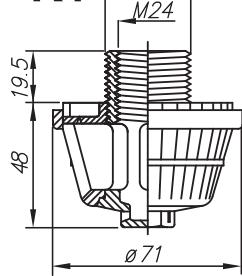
**C1**



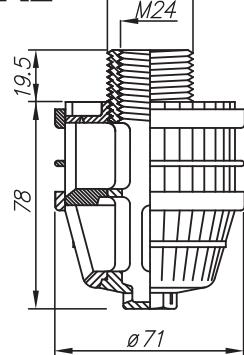
**P**



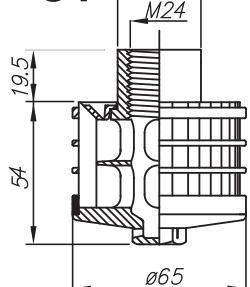
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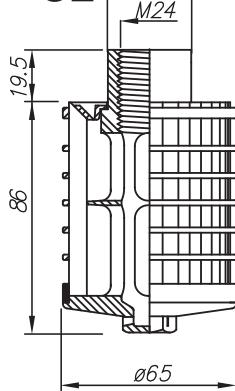
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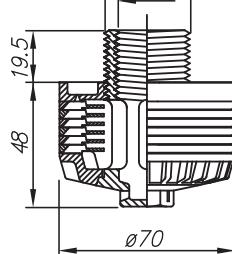
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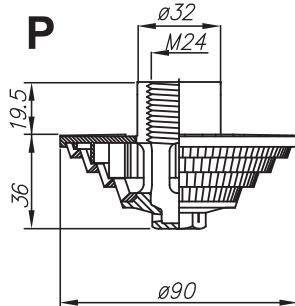
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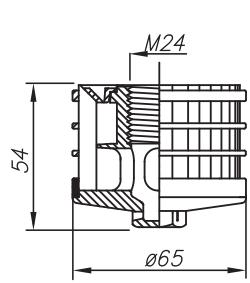
**L6**



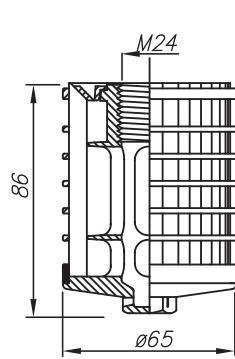
**P**



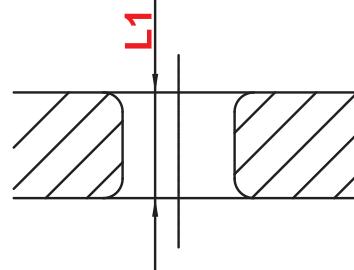
**C1B**



**C2B**



Bestellung Ordering Commande Encargo	Typ obere Düse Type upper nozzle Type crépines supérieures Tipo toberas Superior	Schlitte Slots Fentes Ranuras	Typ untere Düse Type lower nozzle Type crépines inférieures Tipo tobera Inferior	Schlitte Slots Fentes Ranuras	Bodenstärke Plate thickness Epaisseur du plancher Espesor placa	<b>L1</b> = mm
	<b>K1</b>	0,2 0,35 0,5	<b>K1</b>	0,2 0,35 0,5 - 2,0		
	<b>C1</b>	0,2 0,3 0,5	<b>K2</b>	0,2 0,35		
	<b>P</b>	0,2	<b>C1</b>	0,2 0,3 0,5 - 2,0		
	<b>CA</b>	0,4	<b>C1B</b>	0,2 0,3 0,5 - 2,0		
			<b>C2</b>	0,2 0,3		
			<b>C2B</b>	0,2 0,3		
			<b>L</b>	0,2 0,3 0,5		
			<b>P</b>	0,2		



**Gegenstromventil**

Zur besseren Verteilung  
der Regeneriermittel

**Counter Flow Valve**

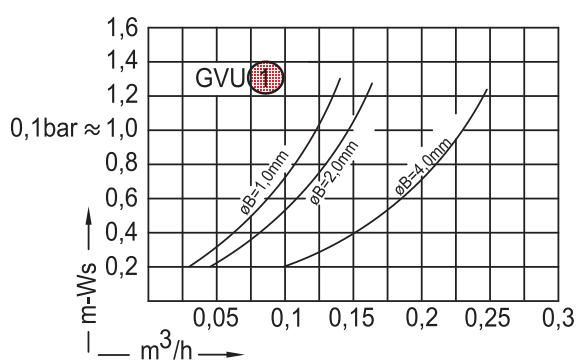
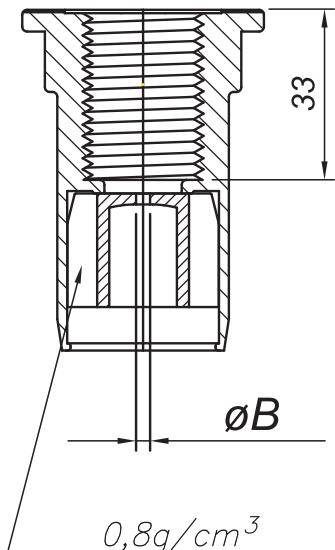
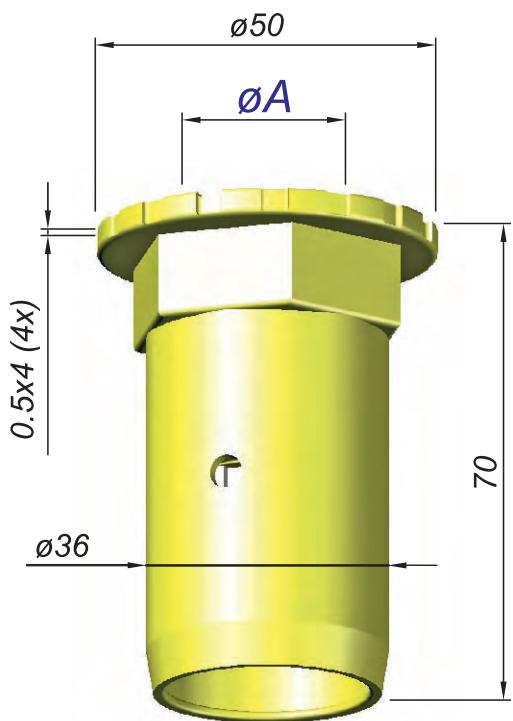
For the uniform distribution  
of the regenerants

**Souape à contre**

Pour une meilleure répartition  
des solutions de régénération

**Valvula de contra**

Para la distribucion uniforme de  
los reactivos de regeneracion

**Typ GVU**

Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Gewinde Thread Filetage Rosca	$\varnothing A$	$\varnothing B$	
<b>GVU</b>	<b>GVU</b>	1 1/4" WW	32	$\varnothing 1,0 - \varnothing 2,0 - \varnothing 3,0 - \varnothing 4,0 - \varnothing 5,0 - \varnothing 6,0 - \varnothing 7,0 \text{ mm}$	
		G 3/4"	26,5		
		M24	24		
		M20	20		

**Gegenstromventil**

Zur besseren Verteilung  
der Regeneriermittel

**Counter Flow Valve**

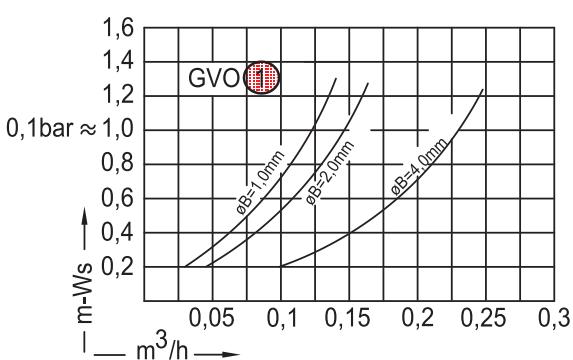
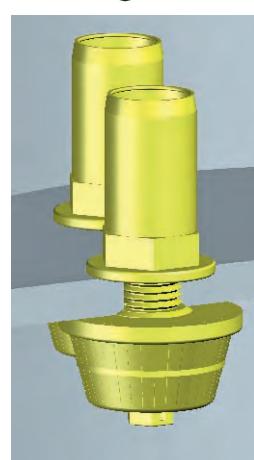
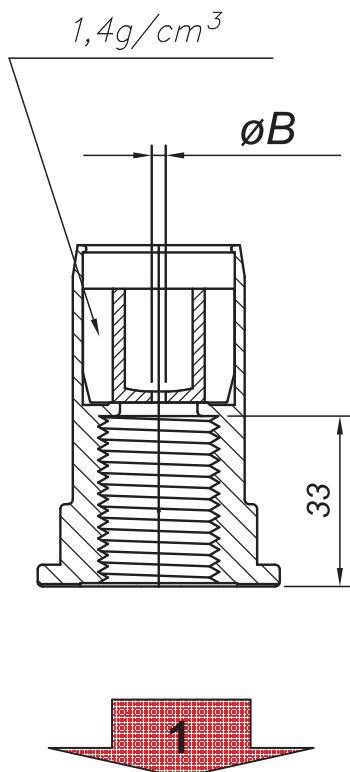
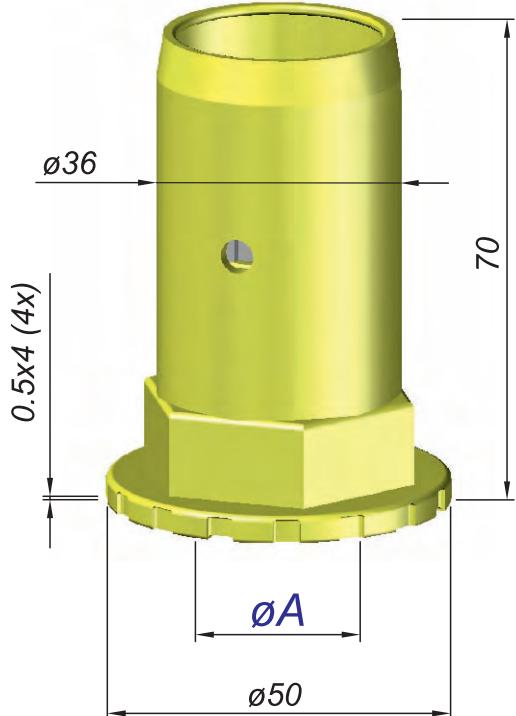
For the uniform distribution  
of the regenerants

**Souape à contre**

Pour une meilleure répartition  
des solutions de régénération

**Valvula de contra**

Para la distribucion uniforme de  
los reactivos de regeneracion

**Typ GVO**

Bestellung Ordering Commande Encargo	Typ Type Type Típia	Gewinde Thread Filetage Rosca	ØA	ØB	
	<b>GVO</b>	1/4" WW	32		
		G 3/4"	26,5		
		M24	24		
		M20	20		
					Ø1,0 - Ø2,0 - Ø3,0 - Ø4,0 - Ø5,0 - Ø6,0 - Ø7,0 mm

**Filterdüsen**

Zur besseren Verteilung  
der Regeneriermittel

**Filter-Nozzles**

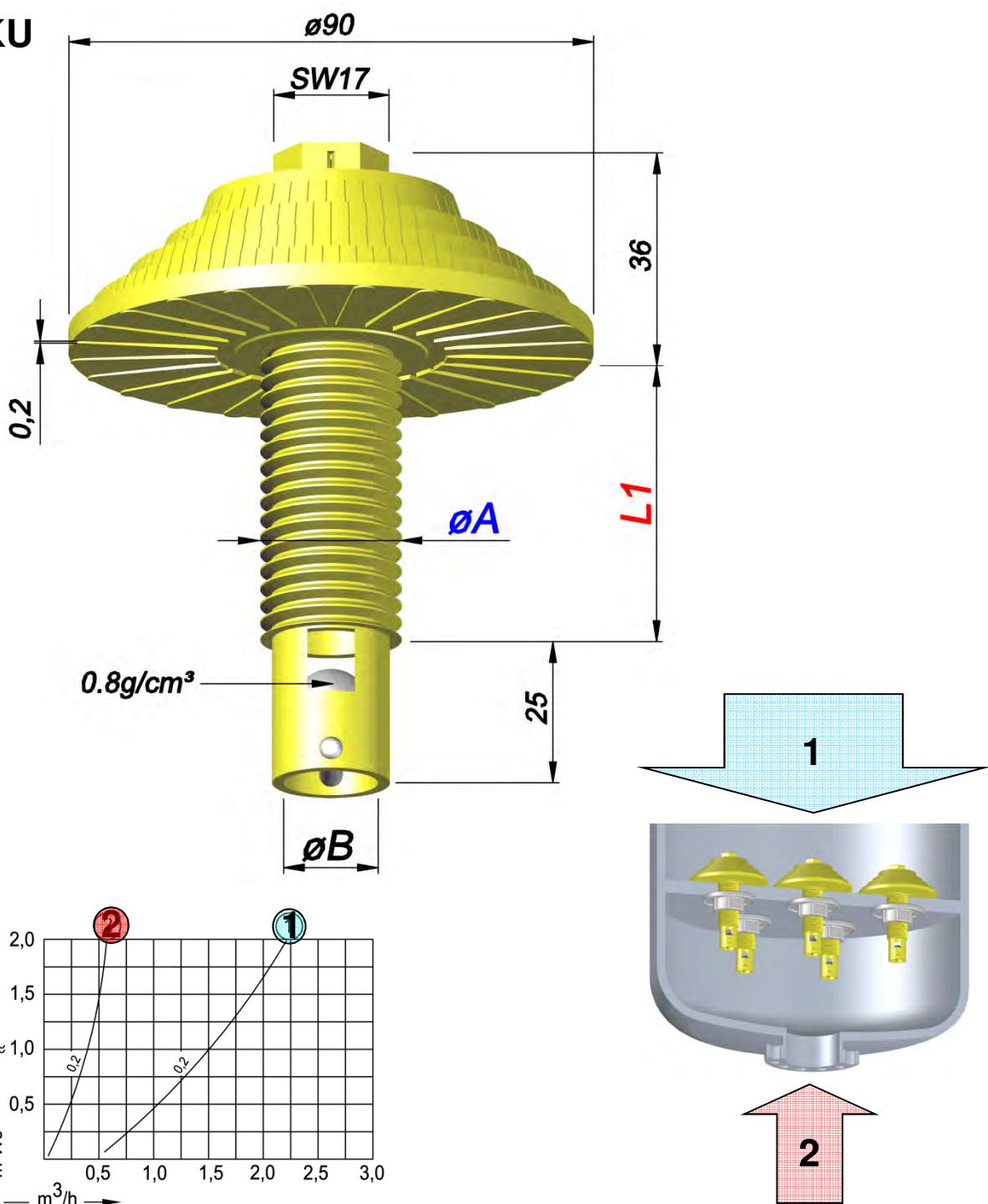
For the uniform distribution  
of the regenerants

**Crépines à filtre**

Pour une meilleure répartition  
des solutions de régénération

**Toberas filtrantes**

Para la distribucion uniforme de  
los reactivos de regeneracion

**Typ PKU**

Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	L1	$\varnothing B$
	<b>PKU</b>	0,2 = 3,0 cm <sup>2</sup> 0,3 = 4,5 cm <sup>2</sup>	M24	24	45, 50, +5 +5...	16 = 2,0 cm <sup>2</sup>

**Filterdüsen**

Zur besseren Verteilung  
der Regeneriermittel

**Filter-Nozzles**

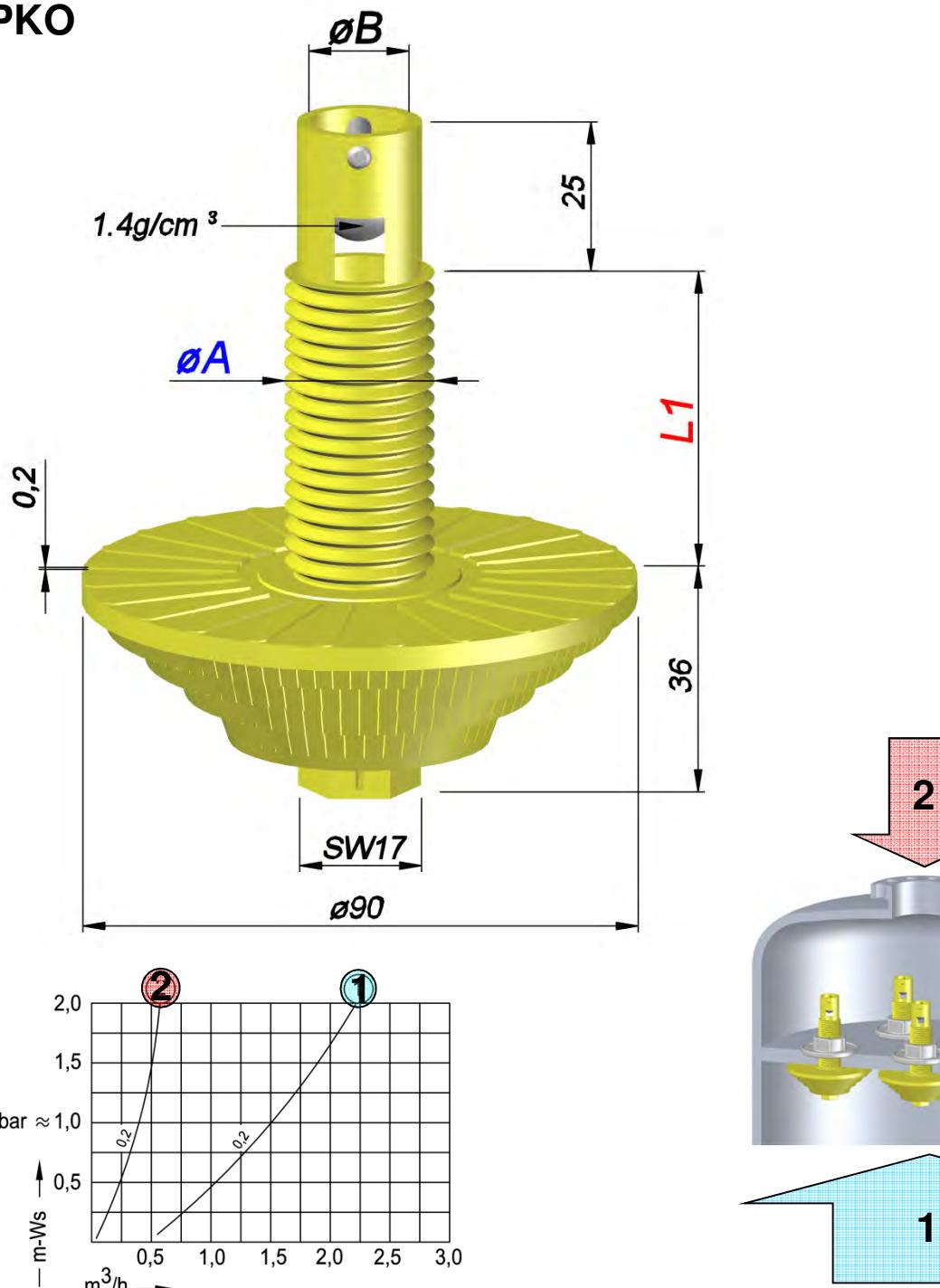
For the uniform distribution  
of the regenerants

**Crépines à filtre**

Pour une meilleure répartition  
des solutions de régénération

**Toberas filtrantes**

Para la distribucion uniforme de  
los reactivos de regeneracion

**Typ PKO**

Bestellung Ordering Commande Encargo	Typ Type Típico	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\phi A$	L1	$\phi B$
	<b>PKO</b>	$0,2 = 3,0 \text{ cm}^2$ $0,3 = 4,5 \text{ cm}^2$	M24	24	45, 50, +5 +5...	$16 = 2,0 \text{ cm}^2$

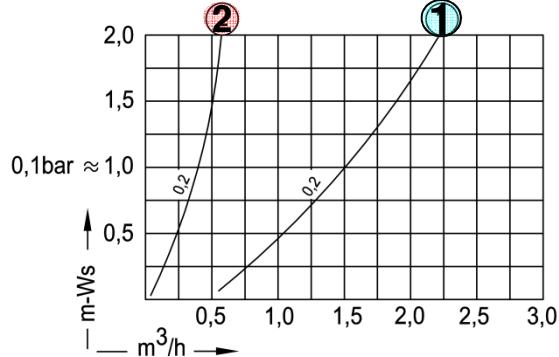
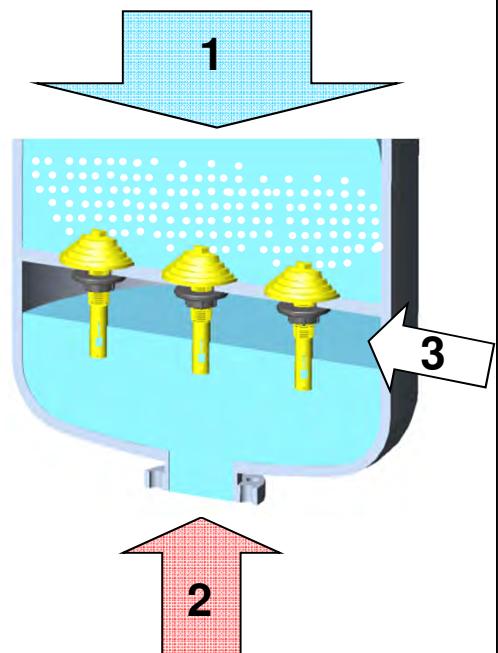
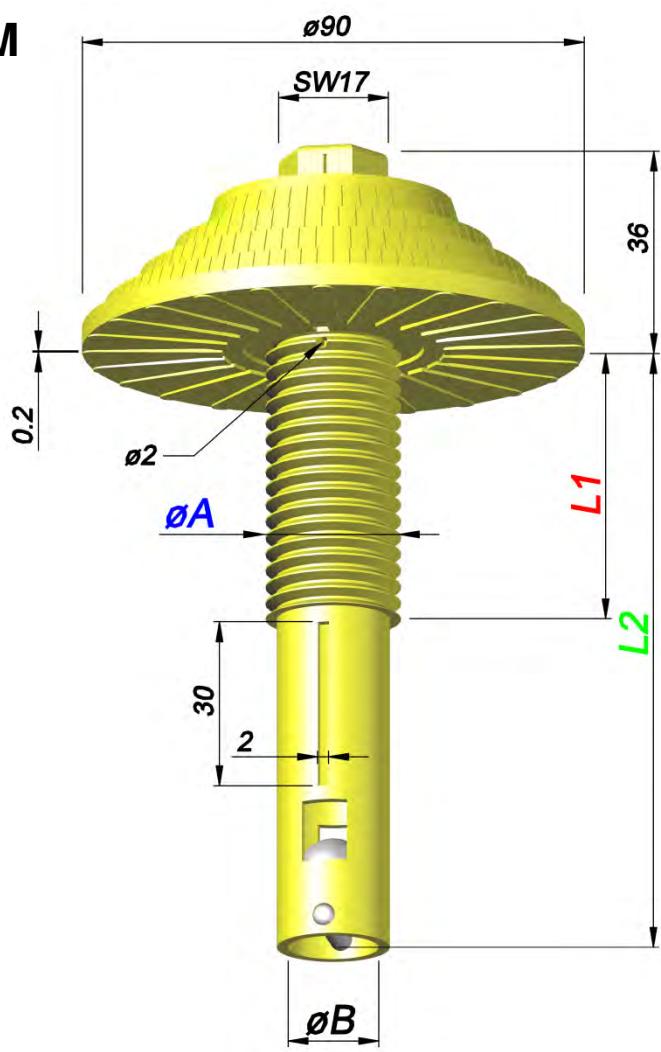
Mischbett  
Filterdüsen

Mixbed  
Filter-Nozzles

Crépines à filtre  
Pour lit mélange

Toberas filtrantes  
Para lechos mixtos

**Typ M**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	$L1$	Schaft Shaft Longueur de tige Tija	$\varnothing B$
	<b>M</b>	0,2 = 3,0 cm <sup>2</sup> 0,3 = 4,5 cm <sup>2</sup>	G 3/4" M24	26,5 24	50	110	16 = 2,0 cm <sup>2</sup>	

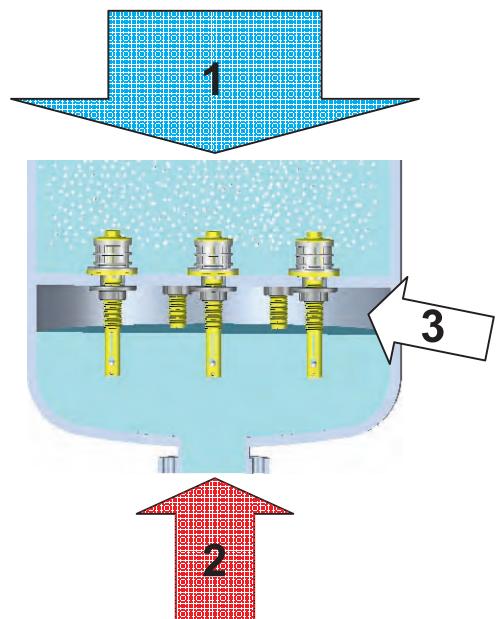
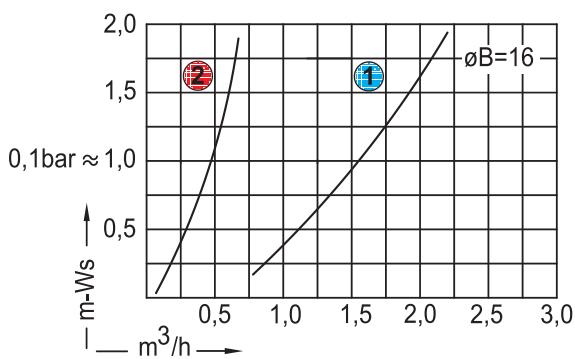
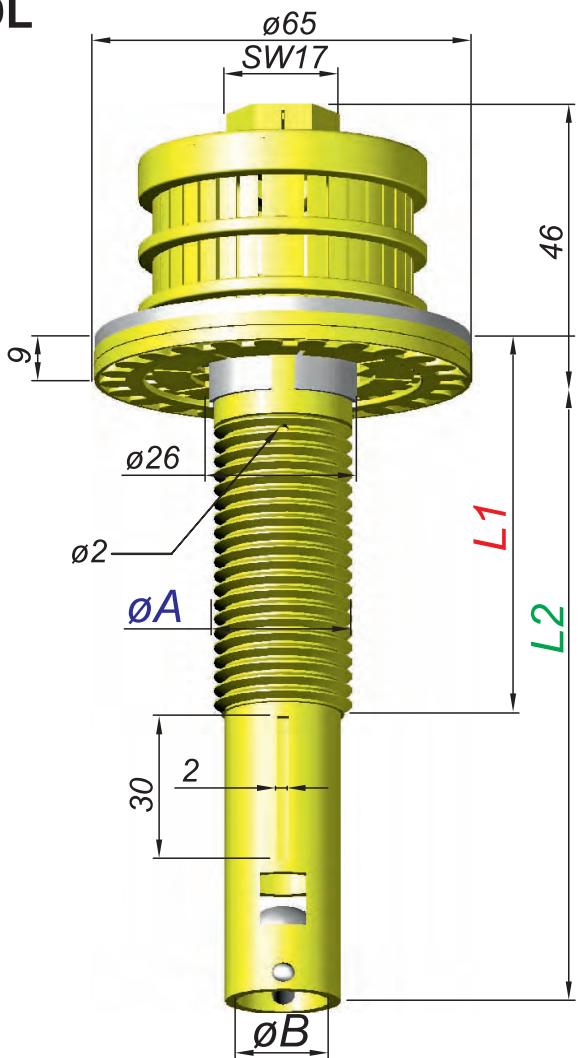
Filterdüsen

Filter-Nozzles

Crépines à filtre

Toberas filtrantes

## Typ MDL



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	ØA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	ØB
	<b>MDL</b>	24 x 0,2 = 0,91 cm <sup>2</sup> 36 x 0,2 = 1,37 cm <sup>2</sup>	M24	24	60	120	16 = 2,0 cm <sup>2</sup>

## Filterdüsen für Drainagesystem

## Filter-Nozzles for Drainage system

## Système de drainage

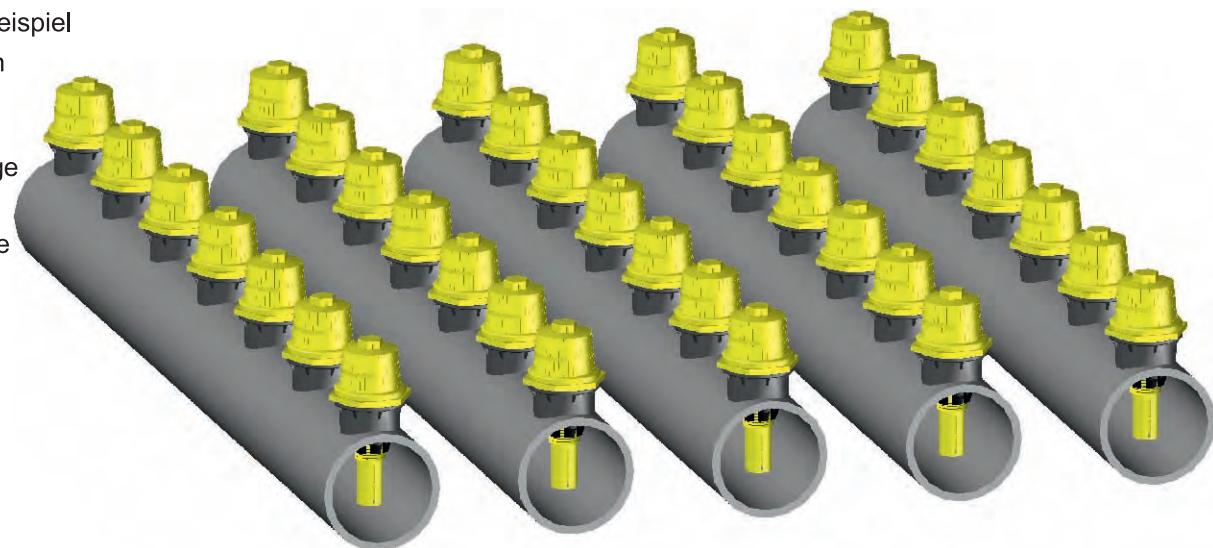
## Sistemas de drenaje

Montagebeispiel

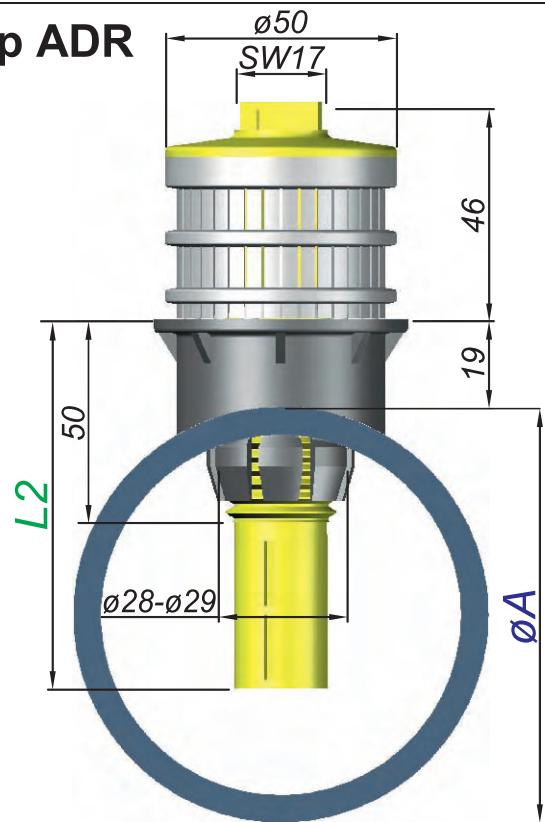
Installation  
procedure

Exemple  
de montage

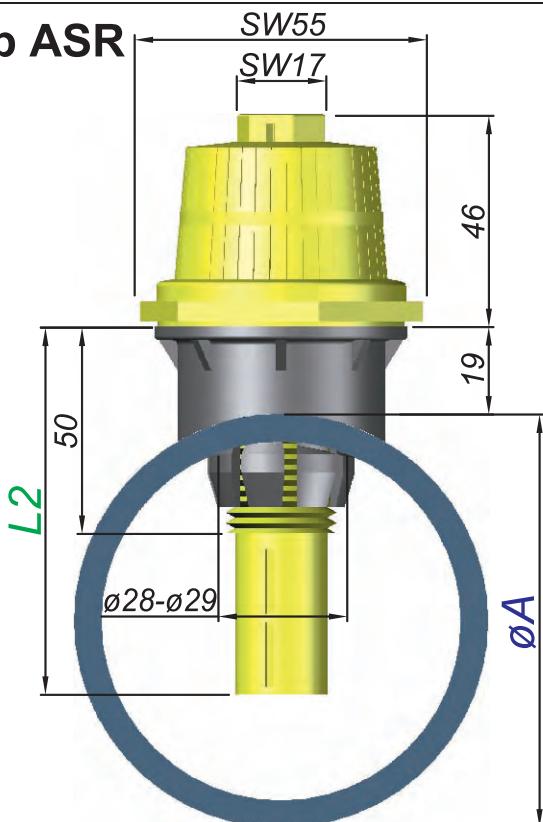
Ejemplo  
de montaje



### Typ ADR



### Typ ASR



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	$\varnothing A$	Schaft Shaft Longueur de tige Tija	L2	Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	$\varnothing A$	Schaft Shaft Longueur de tige Tija
	<b>ADR</b>	$24 \times 0,2 = 0,91 \text{ cm}^2$ $36 \times 0,2 = 1,37 \text{ cm}^2$ $36 \times 0,3 = 2,05 \text{ cm}^2$ $36 \times 0,5 = 3,42 \text{ cm}^2$ $36 \times 0,8 = 5,46 \text{ cm}^2$ $24 \times 1,0 = 4,56 \text{ cm}^2$ $24 \times 1,5 = 6,84 \text{ cm}^2$ $20 \times 2,0 = 7,00 \text{ cm}^2$ $8 \times 5,0 = 7,00 \text{ cm}^2$	60,3 63 75 90 110	Nach Angabe according detail selon détails adecuado detalle		<b>ASR</b>	$36 \times 0,2 = 1,72 \text{ cm}^2$ $36 \times 0,35 = 2,65 \text{ cm}^2$ $30 \times 0,5 = 3,78 \text{ cm}^2$ $18 \times 1,0 = 4,64 \text{ cm}^2$ $18 \times 2,0 = 9,29 \text{ cm}^2$	60,3 63 75 90 110	Nach Angabe according detail selon détails adecuado detalle	

## Filterdüsen für Drainagesystem

## Filter-Nozzles for Drainage system

## Système de drainage

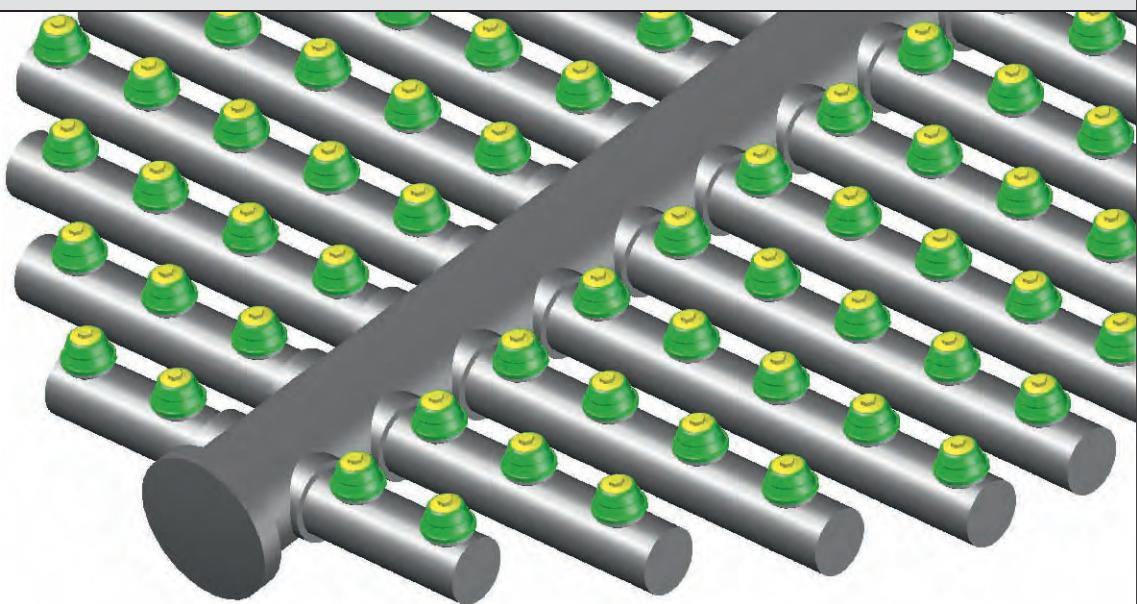
## Sistemas de drenaje

Montagebeispiel

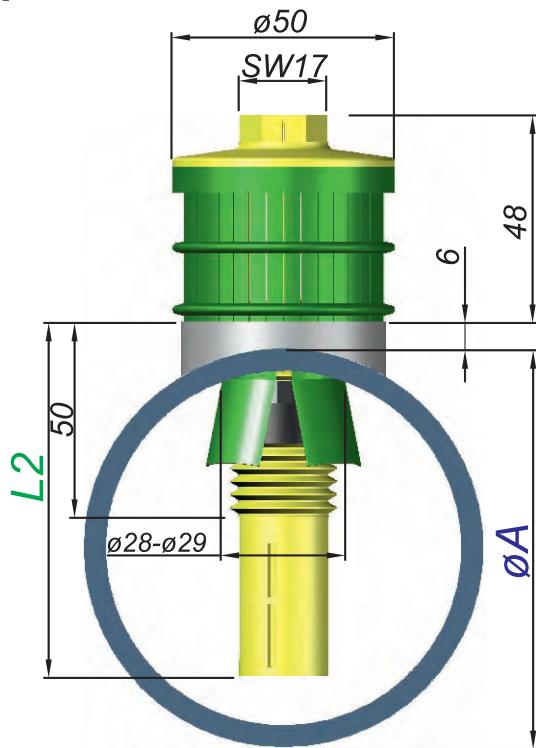
Installation  
procedure

Exemple  
de montage

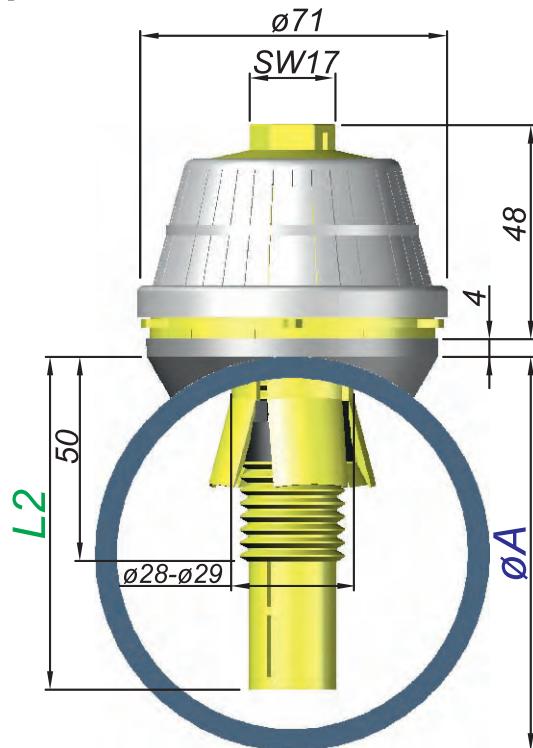
Ejemplo  
de montaje



### Typ ADSP



### Typ AKSP



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	$\varnothing A$	Schaft Shaft Longueur de tige Tija	L2	Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	$\varnothing A$	Schaft Shaft Longueur de tige Tija	L2
	<b>ADSP</b>	36 x 0,2 = 1,37 cm <sup>2</sup> 36 x 0,3 = 2,05 cm <sup>2</sup> 36 x 0,5 = 3,42 cm <sup>2</sup> 36 x 1,0 = 6,84 cm <sup>2</sup>	60,3 63 75 90 114 147 165 219 273 324	Nach Angabe according detail selon détails adecuado detalle			<b>AKSP</b>	40 x 0,2 = 1,95 cm <sup>2</sup> 36 x 0,35 = 2,96 cm <sup>2</sup> 20 x 0,5 = 2,35 cm <sup>2</sup> 36 x 0,5 = 4,23 cm <sup>2</sup> 20 x 0,8 = 3,78 cm <sup>2</sup> 36 x 1,0 = 8,46 cm <sup>2</sup> 24 x 1,5 = 7,05 cm <sup>2</sup> 20 x 2,0 = 9,50 cm <sup>2</sup>	60,3 63 75 90 114 147 165 219 273 324	Nach Angabe according detail selon détails adecuado detalle	

## Filterdüsen für Drainagesystem

## Filter-Nozzles for Drainage system

## Système de drainage

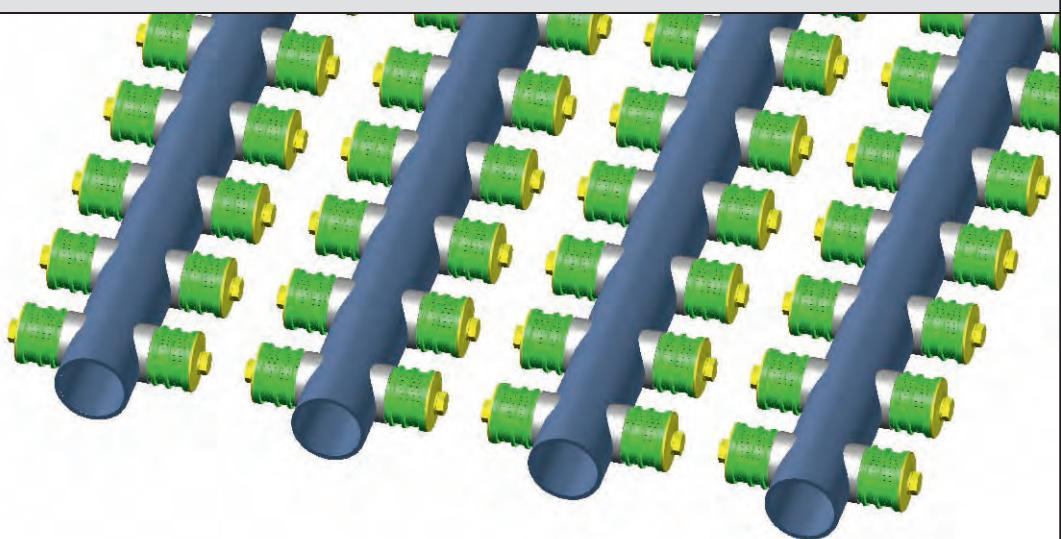
## Sistemas de drenaje

Montagebeispiel

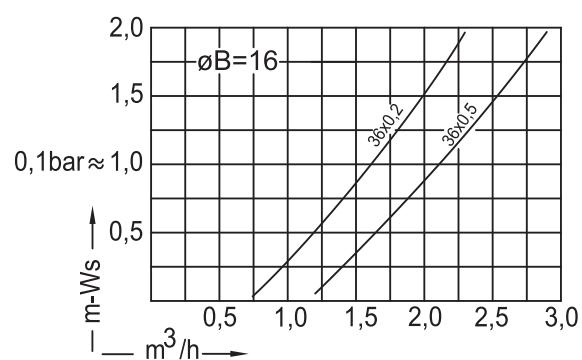
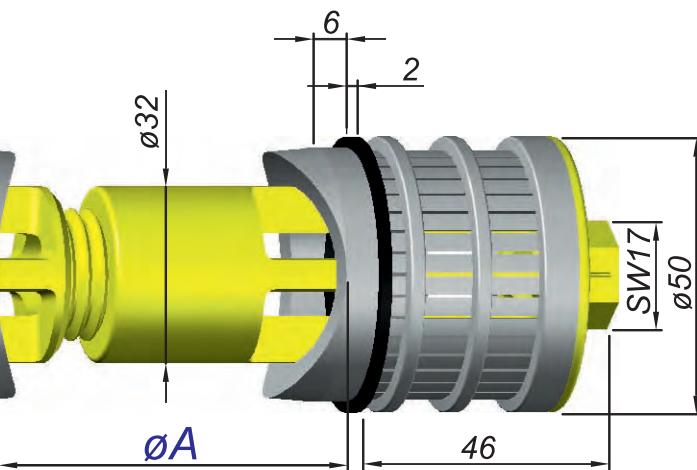
Installation procedure

Exemple de montage

Ejemplo de montaje



### Typ DDR



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	ØA
	<b>DDR</b>	$24 \times 0,2 = 0,91 \text{ cm}^2$ $36 \times 0,2 = 1,37 \text{ cm}^2$ $36 \times 0,3 = 2,05 \text{ cm}^2$ $36 \times 0,5 = 3,42 \text{ cm}^2$ $12 \times 0,8 = 1,82 \text{ cm}^2$ $12 \times 1,0 = 2,28 \text{ cm}^2$ $24 \times 1,0 = 4,56 \text{ cm}^2$ $24 \times 1,5 = 6,84 \text{ cm}^2$ $20 \times 2,0 = 7,00 \text{ cm}^2$ $8 \times 5,0 = 7,00 \text{ cm}^2$	60,3 ; 63 ; 75 ; 90 ; 114 ; 147 ; 165 ; 219 ; 273 ; 324

## Filterdüsen für Drainagesystem

## Filter-Nozzles for Drainage system

## Système de drainage

## Sistemas de drenaje

Montagebeispiel

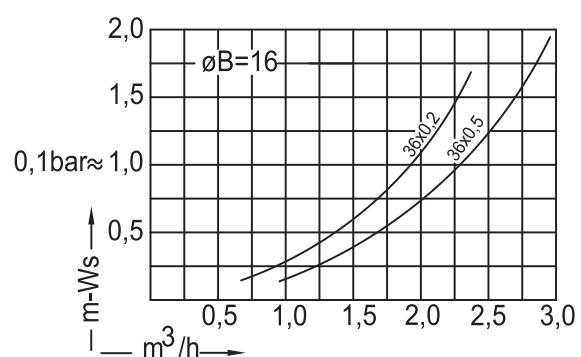
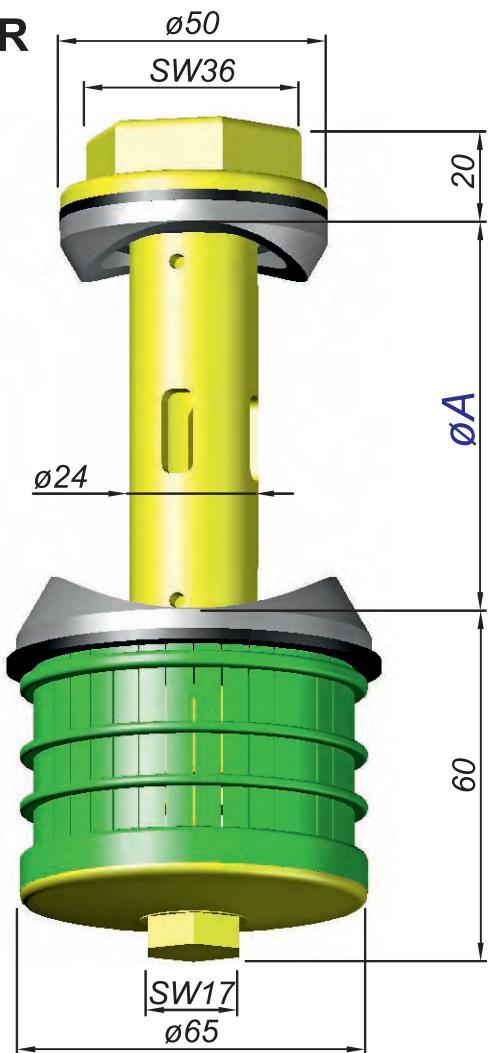
Installation  
procedure

Exemple  
de montage

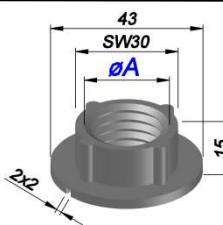
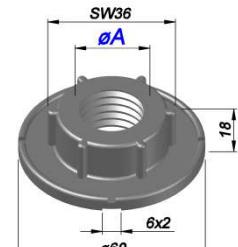
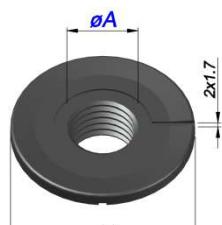
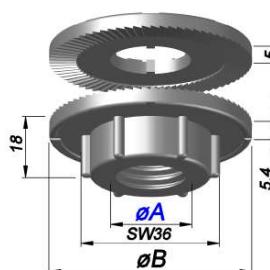
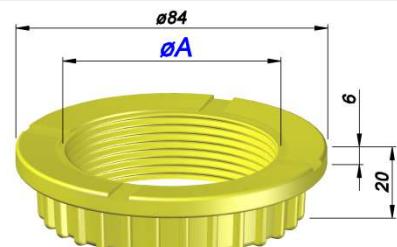
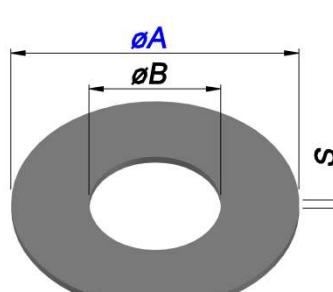
Ejemplo  
de montaje

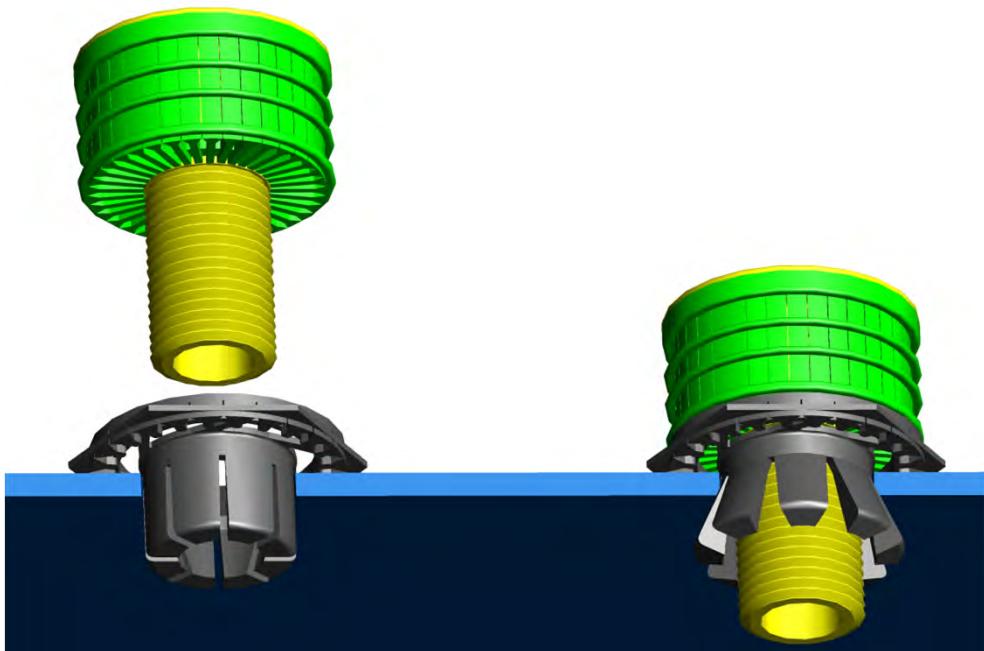
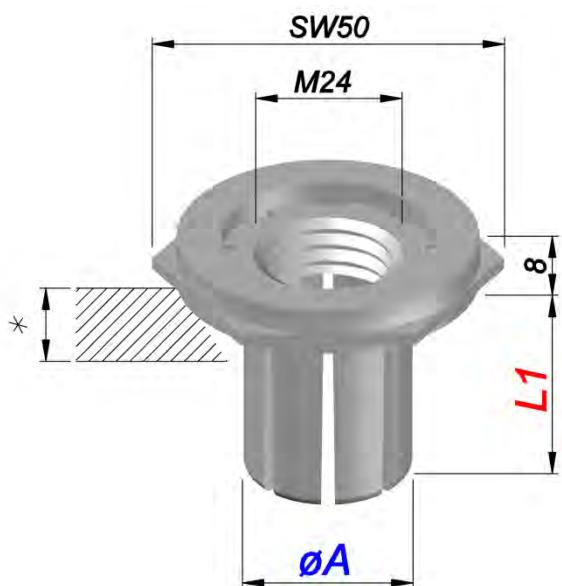
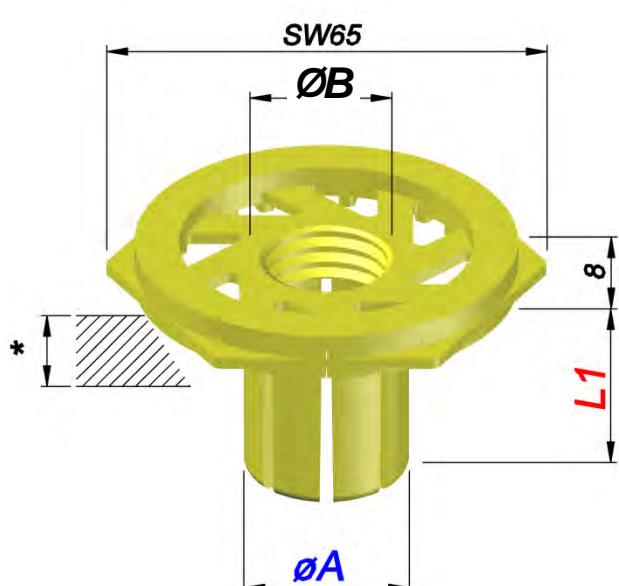


### Typ SCR

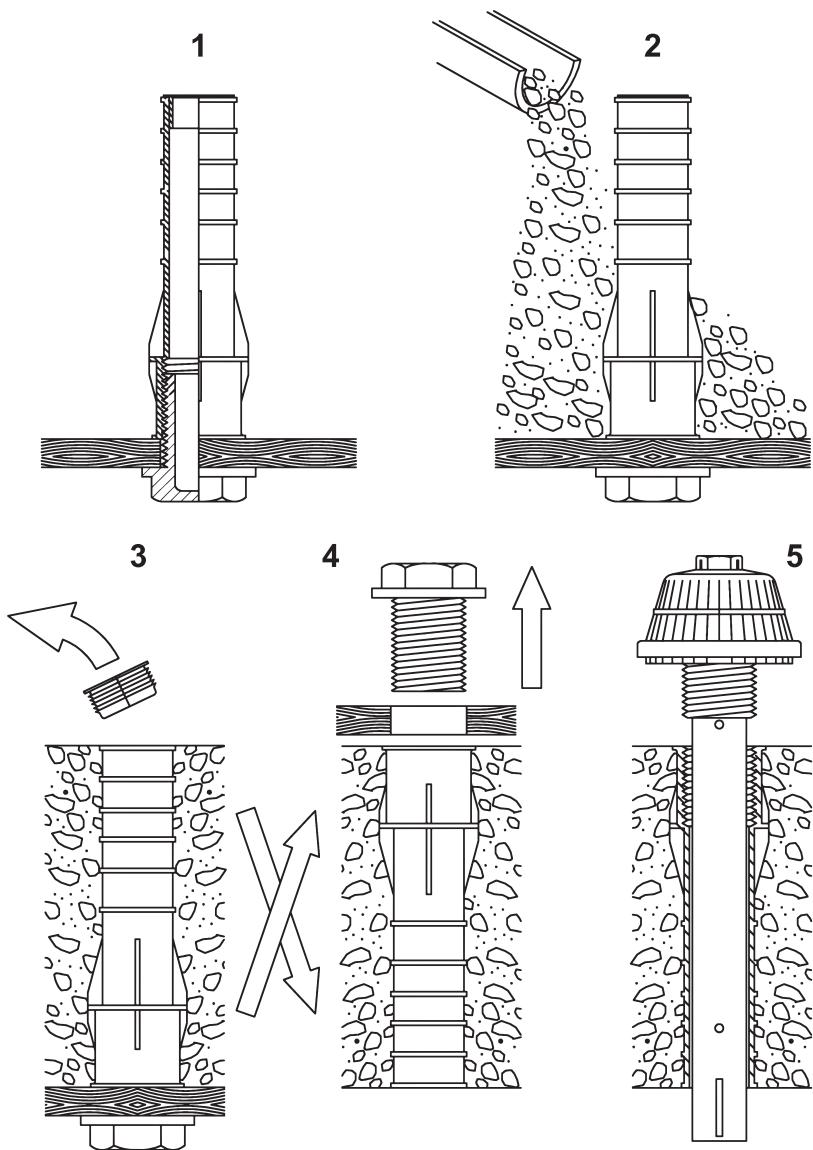
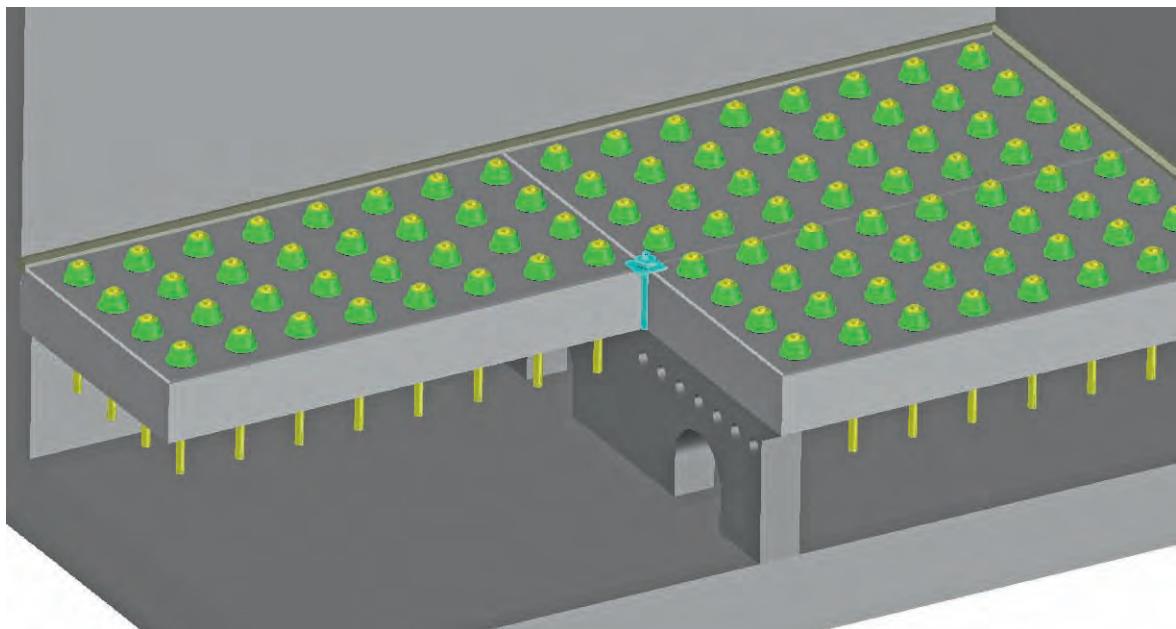


Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	ØA
	<b>SCR</b>	$36 \times 0,2 = 1,95 \text{ cm}^2$ $36 \times 0,3 = 2,90 \text{ cm}^2$ $36 \times 0,5 = 4,90 \text{ cm}^2$ $36 \times 0,7 = 6,80 \text{ cm}^2$ $36 \times 1,0 = 9,80 \text{ cm}^2$	60,3 ; 63 ; 75 ; 90 ; 114 ; 147 ; 165 ; 219 ; 273 ; 324

Muttern und Scheiben	Nuts and Washers	Ecrous et joints	Tuerca y Arandela				
<b>Typ MU43</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	Gewinde Thread Filetage Rosca	<b>øA</b>		
			<b>MU43</b>	1"WW M24 M22x1,5 M20	G1/2" G3/8"		
<b>Typ MU60</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	Gewinde Thread Filetage Rosca	<b>øA</b>		
			<b>MU60</b>	1 1/4" WW 1"WW G 3/4" M24 M22x1,5 M20 M30			
<b>Typ MUL60</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	Gewinde Thread Filetage Rosca	<b>øA</b>		
			<b>MUL60</b>	1 1/4" WW 1"WW G 3/4" M24 M22x1,5 M20			
<b>Typ MUZ</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	Gewinde Thread Filetage Rosca	<b>øA</b>	<b>øB</b>	
			<b>MUZ</b>	M24	50		
				1 1/4"WW G 3/4" M24	60		
<b>Typ MU84</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	Gewinde Thread Filetage Rosca	<b>øA</b>		
			<b>MU84</b>	G 2" G 1 1/2"			
<b>Typ DP</b> <b>Typ DG</b>		Bestellung Ordering Commande Encargo	Typ Type Type Típa	<b>øA</b>	<b>øB</b>	<b>S</b>	
			<b>DP</b>	50	32; 30; 28; 25; 21	2	PP
				50	32; 25	5	
				70	32; 30; 25	7	
			<b>DG</b>	70	32; 30; 28; 25; 21	2	EPDM (KTW)
				90	32; 30; 28	7	
					32; 28; 25; 21	2	

**Dübel****Expanding  
ring (dowel)****Douilles  
expansives****Anillas de  
expansion****Typ DB50****Typ DB65**

Bestellung Ordering Commande Encargo	Typ Type Type Típico	<b>ØA</b>	Bodenstärke plate thickness Epaisseur du plancher Espesor placa	*	<b>L1</b>	Bestellung Ordering Commande Encargo	Typ Type Type Típico	<b>ØA</b>	Bodenstärke plate thickness Epaisseur du plancher Espesor placa	*	<b>ØB</b>	<b>L1</b>
		<b>DB50</b>	ø28	8 - 12 - elfenbein / ivory	36	<b>DB65</b>	ø28	8 - 12 - elfenbein / ivory	M24	36		
				12 - 17 - grau / grey								
				17 - 22 - schwarz / black								
				22 - 27 - blau / blue								
									ø32	8 - 12 - elfenbein / ivory	M24	30
							ø38	12 - 17 - grau / grey				
								17 - 22 - schwarz / black				
								8 - 12 - elfenbein / ivory	1¼"WW	30		
								12 - 17 - grau / grey				
								17 - 22 - schwarz / black				

**Montagebeispiel****Installation  
procedure****Exemple de montage  
sur plancher béton****Ejemplo  
de montaje**

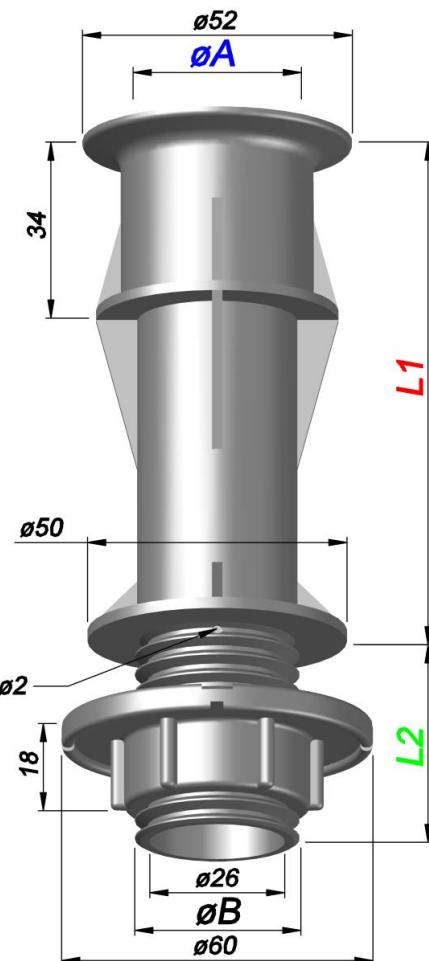
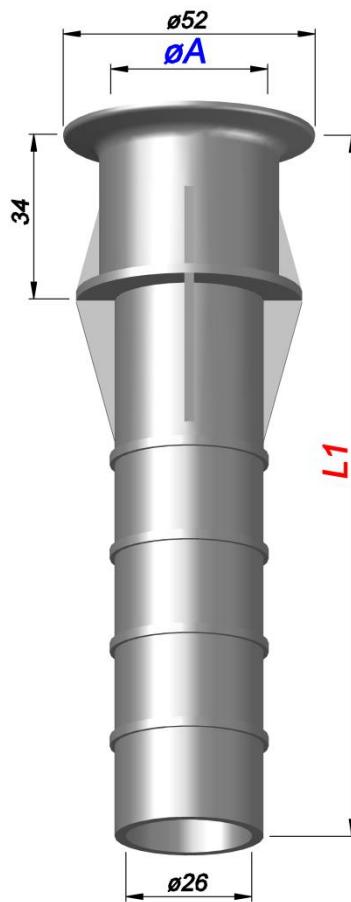
## Buchsen für Beton- Filterböden

## Sleeves for concrete - floors

## Douilles et accessoires pour planchers béton

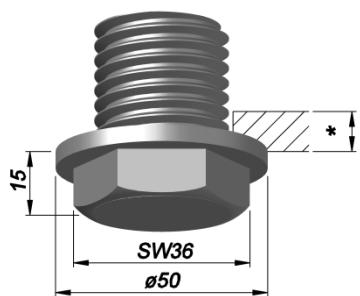
## Casquillos para fondos de filtros de hormigon

### Typ B32

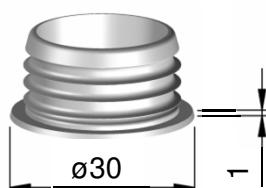


Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca	ØA	L1	Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca	ØA	ØB	L1	L2
	<b>B32</b>	1 1/4"WW 1"WW		60, +10, +10, ... - 500		<b>BM32</b>	1 1/4"WW	1 1/4"WW	60, +10, +10,	40	

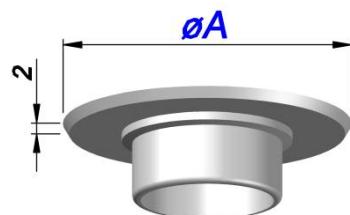
### Typ SR



### Typ EA



### Typ EG



Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca	ØA	Bodenstärke plate thickness Epaisseur du plancher Espesor placa	*	Bestellung Ordering Commande Encargo	Typ Type Type Típico		Bestellung Ordering Commande Encargo	Typ Type Type Típico	ØA
	<b>SR</b>	1 1/4"WW 1"WW G1" G3/4" M24		= mm			<b>EA</b>			<b>EG50</b>	54

Buchsen  
für Rohre

Special lateral  
sleeves

douilles pour tuyaux  
et planchers béton

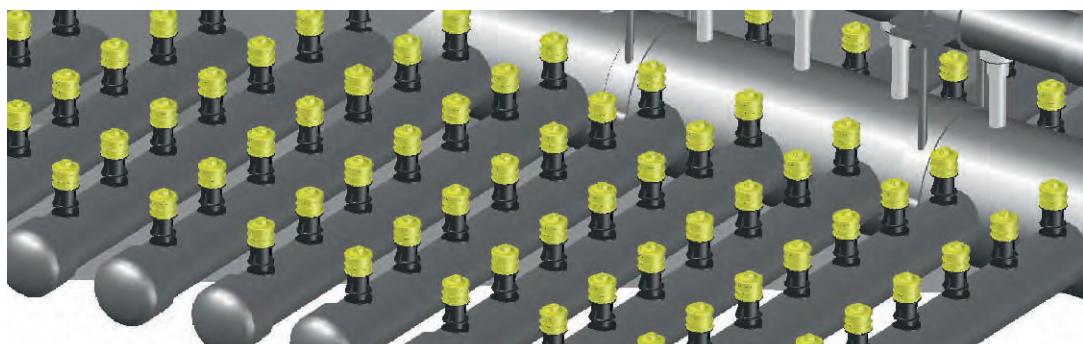
Casquillos  
para tubería

Montagebeispiel

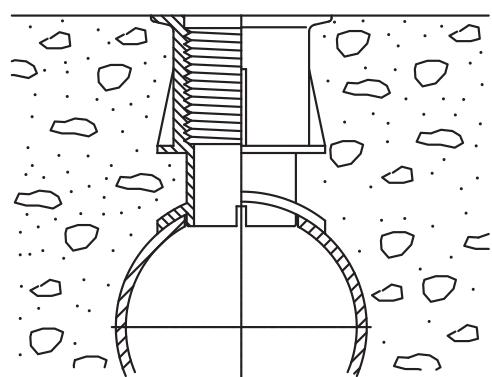
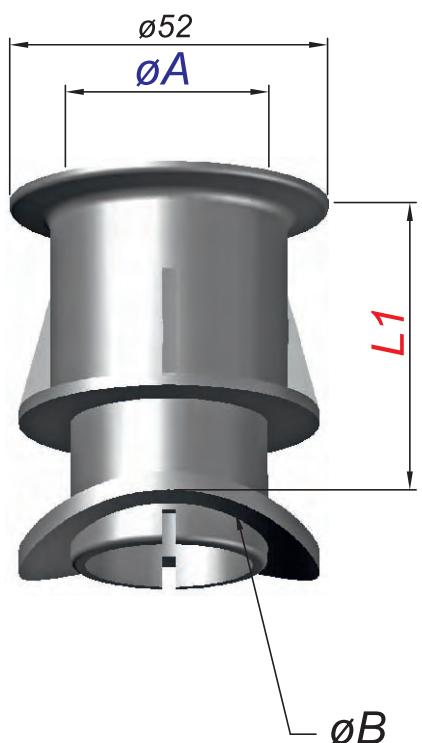
Installation  
procedure

Exemple  
de montage

Ejemplo  
de montaje



## Typ BR32



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	L1	ØB	Gewinde Thread Filetage Rosca	ØA
	BR32	15	90; 110	1 1/4"WW	
		50	75; 90; 110; 324		

Anschluß-  
armatur

Manifold  
head

Raccord pour  
bouteilles  
échangeuses d'ions

Racor Adaptador  
para Botellas de  
intercambio Iónico

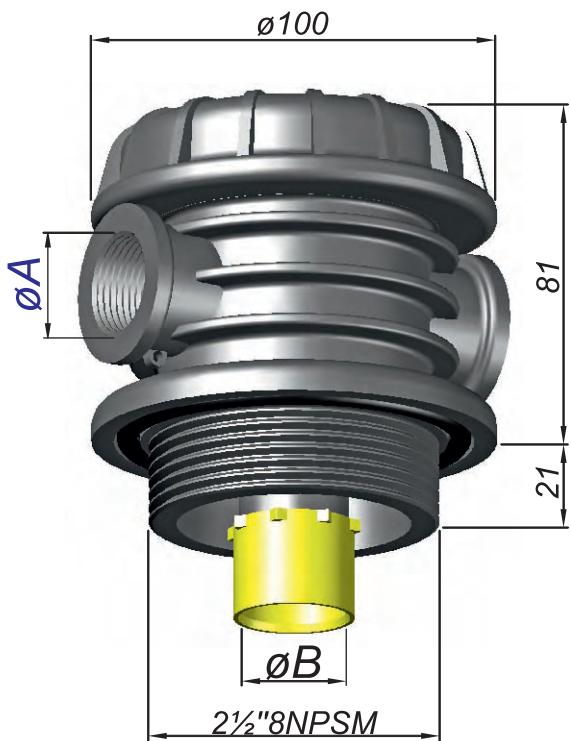
### Typ ANA2



P max. 8 bar – 120 PSI

T max. 45°C – 110° F

### Typ ANA2



Bestellung Ordering Commande Encargo	Typ Type Type Típa	$\varnothing A$	$\varnothing B = \text{mm}$
		1/4"NPT	1" $\varnothing 25,4$
		13/16	$\varnothing 20,64$
		G 3/4"	1,05" $\varnothing 26,67$
		3/4"NPT	25 $\varnothing 25,2$

### Typ ANA-S

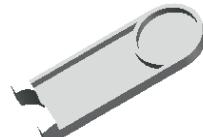


Bestellung Ordering Commande Encargo

Typ Type Type Típa

ANA-S

### Typ ANA-K



Bestellung Ordering Commande Encargo

Typ Type Type Típa

ANA-K

Anschluß-  
armatur

Manifold  
head

Raccord pour  
bouteilles  
échangeuses d'ions

Racor Adaptador  
para Botellas de  
intercambio Iónico

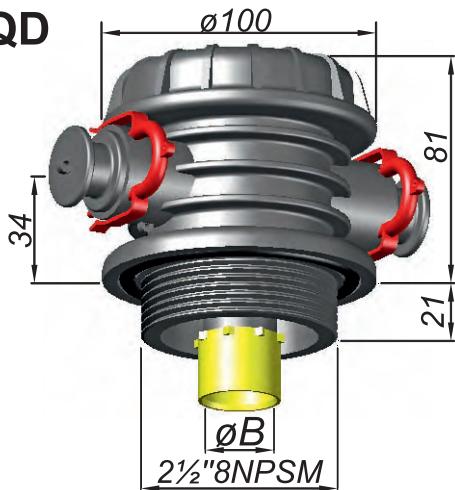
### Typ ANA2-QD



P max. 8 bar – 120 PSI

T max. 45°C – 110°F

### Typ ANA2-QD



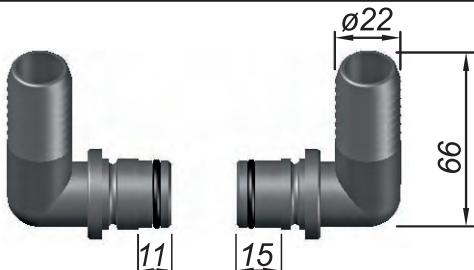
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	ØB = mm
		1" Ø 25,4
		13/16" Ø 20,64
		1,05" Ø 26,67
		25 Ø 25,2

### Typ QD-G3/4"



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	
		QD-G3/4"

### Typ QDHE



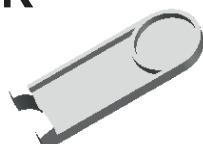
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	
		QDHE

### Typ ANA-S



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	
		ANA-S

### Typ ANA-K



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	
		ANA-K

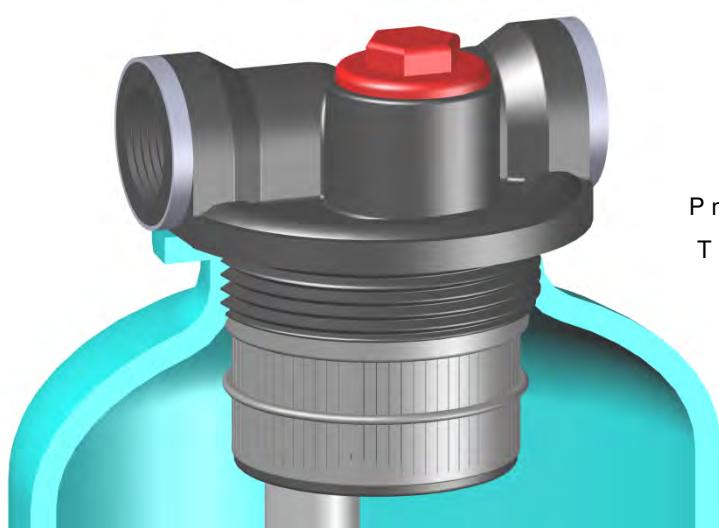
**Anschuß-  
armatur**

**Manifold  
head**

**Raccord pour  
bouteilles  
échangeuses d'ions**

**Racor Adaptador  
para Botellas de  
intercambio Iónico**

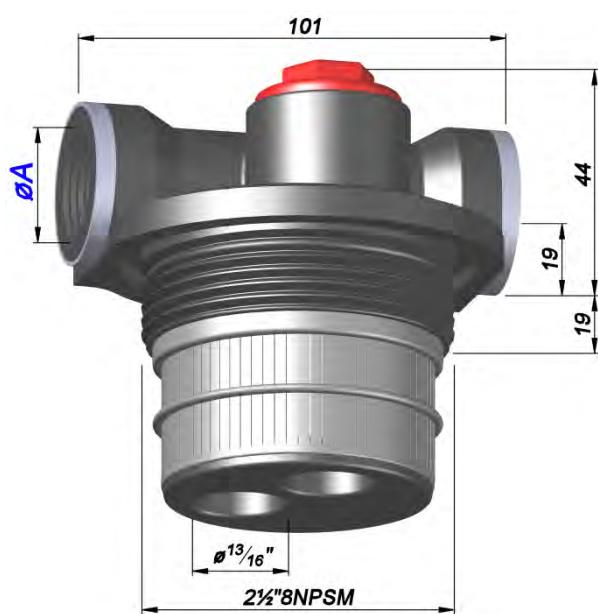
**Typ ANA3**



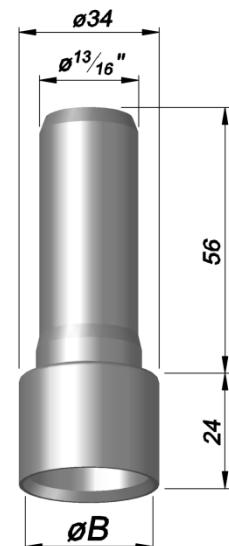
P max. 8 bar – 120 PSI

T max. 45 °C – 110 °F

**Typ ANA3**



**Typ RA-L**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	$\varnothing A$	Schlitte Slots Fentes Ranuras
	<b>ANA3</b>	G 3/4" 3/4"NPT	0,2 0,3 0,5

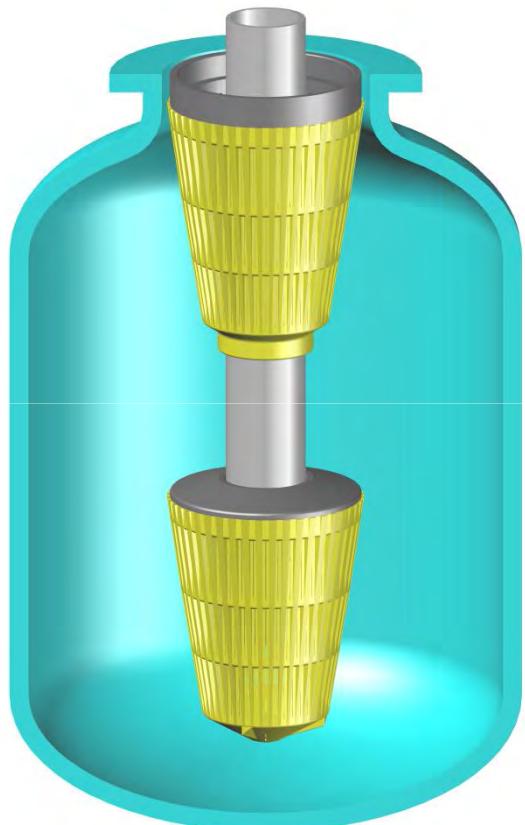
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	$\varnothing B$	= mm
	<b>RA-L</b>	25	$\varnothing 25,2$

**Filterdüsen-  
für Düsenstab**

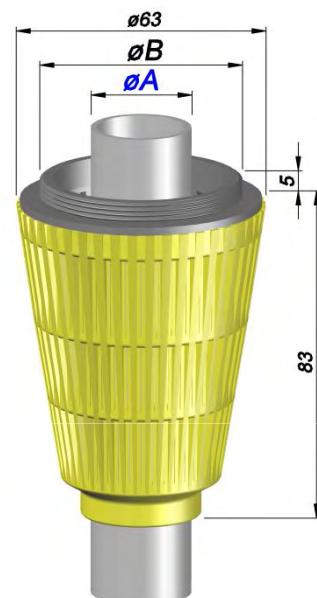
**Filter-Nozzles  
for Distributor**

**Crépines pour  
distributeur**

**Toberas  
de distribucion**



**Typ GDO**

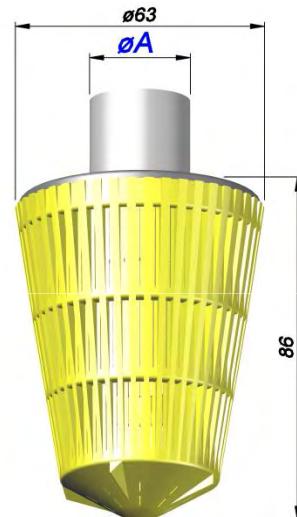


Bestellung Ordering Commande Encargo	Typ Type Type Típico	Schlitte Slots Fentes Ranuras	ØB	ØA	=mm
	GDO	0,2 = 5,22cm <sup>2</sup>	2"20 Ø 60,5 Ø 60 QD	32 13/16 1" 1,05" 25	Ø 32 Ø 20,64 Ø 25,4 Ø 26,67 Ø 25,2

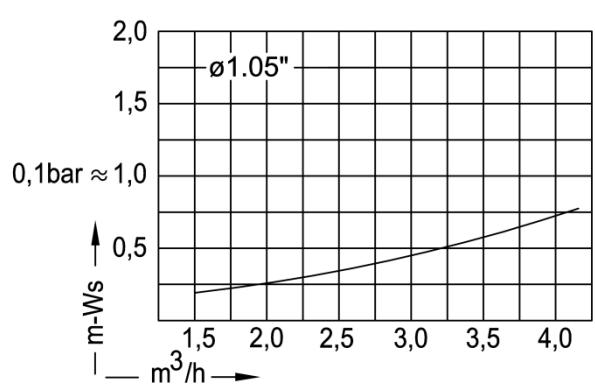
**Typ GDUK**



**Typ GDU**



Bestellung Ordering Commande Encargo	Typ Type Type Típico	Schlitte Slots Fentes Ranuras	ØA	=mm
	GDU GDUK	0,2 = 5,22cm <sup>2</sup>	1" 13/16 1,05" 25 1/2"	Ø 25,4 Ø 20,64 Ø 26,67 Ø 25,2 Ø 21,4

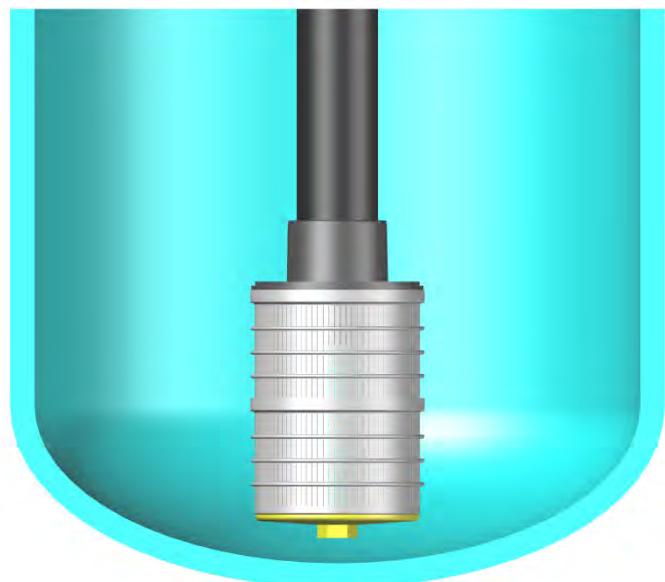


**Filterdüsen-  
für Düsenstab**

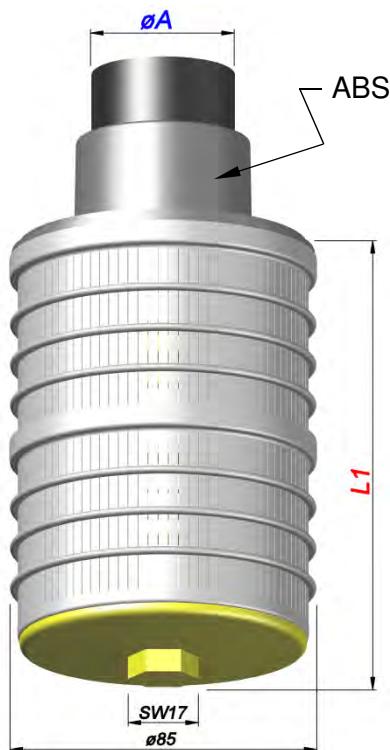
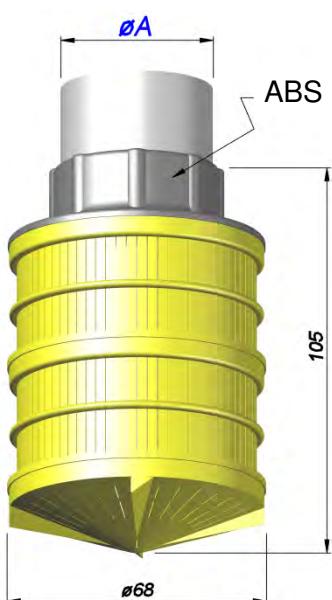
**Filter-Nozzles  
for Distributor**

**Crépines pour  
distributeur**

**Toberas  
de distribucion**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA
	<b>GLU</b>	0,2 0,3 0,5	3/4"NPT Ø 24,4



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA	Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA	Länge Length Longueur Largura	Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA
	<b>GWU</b>	0,2 = 6,91 cm <sup>2</sup> 0,3 = 11,03 cm <sup>2</sup> 0,5 = 17,94 cm <sup>2</sup>	Ø32 Ø40		<b>GRU</b>	0,2 0,5 0,63	ø 40 ø 50 ø 63	73 ; 126		<b>GCU</b>	0,2 0,3 0,5	3/4"NPT Ø 24,4

## Entleerungs- Entnahme-Filterdüsen

## Drain- Nozzles

## Crépines de draînage

## Toberas de drenaje

Montagebeispiel

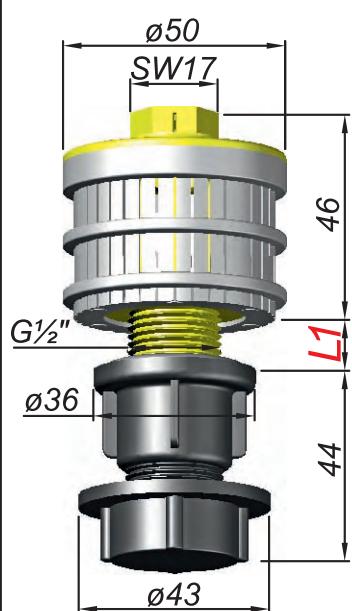
Installation  
procedure

Exemple  
de montage

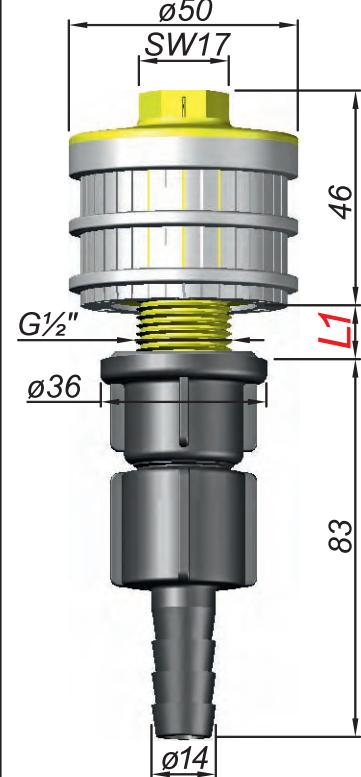
Ejemplo  
de montaje



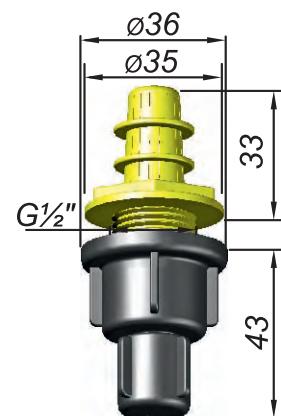
**Typ EDK**



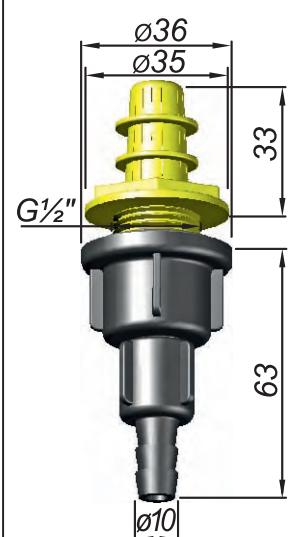
**Typ ED**



**Typ EHK**



**Typ EH**



Bestellung  
Ordering  
Commande  
Encargo

Typ  
Type  
Type  
Tipa

Schlitte  
Slots  
Fentes  
Ranuras

Bodenstärke  
Plate thickness  
Epaisseur du plancher  
Espesor placa

L1

Bestellung  
Ordering  
Commande  
Encargo

Typ  
Type  
Type  
Tipa

Bestellung  
Ordering  
Commande  
Encargo

Typ  
Type  
Type  
Tipa



**ED  
EDK**

36 x 0,2 = 1,37 cm<sup>2</sup>  
36 x 0,5 = 3,42 cm<sup>2</sup>

Nach Angabe  
according detail  
selon détails  
adecuado detalle



**EHK - 0,2**



**EH - 0,2**

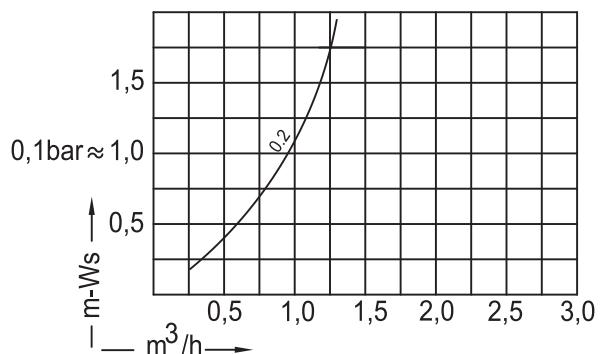
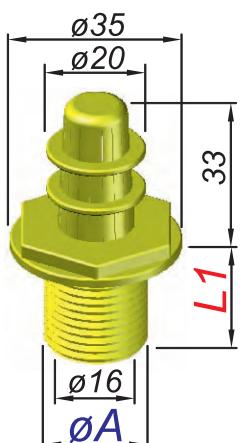
## Entleerungs- Entnahme-Filterdüsen

## Drain- Nozzles

## Crépines de draînage

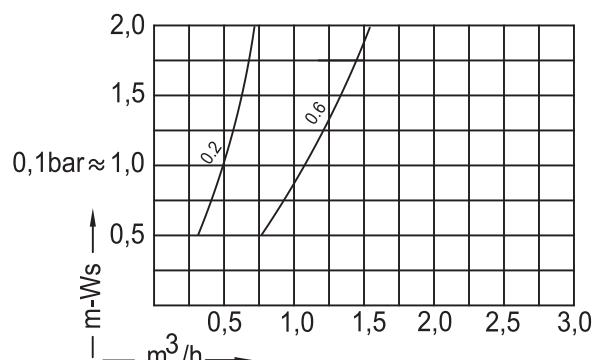
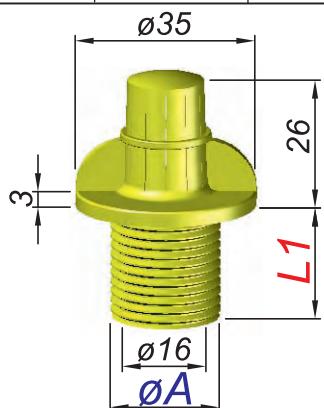
## Toberas de drenaje

### Typ E



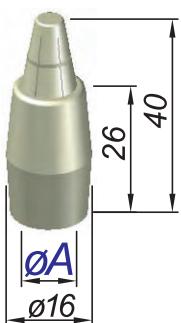
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitzte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	Gewindelänge Thread length Longueur de filetage Largura da rosca
	<b>E</b>	$0,2 = 1,0\text{cm}^2$	G 1/2"	8
			G 3/4"	17

### Typ E2



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitzte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	Gewindelänge Thread length Longueur de filetage Largura da rosca
	<b>E2</b>	$0,2 = 0,28\text{cm}^2$	G 1/2"	22
		$0,6 = 0,84\text{cm}^2$	7/8"WW	16

### Typ ES10



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitzte Slots Fentes Ranuras	<b>ØA</b>
	<b>ES10</b>	0,2	6
			8
			10

**Verteiler**

**distributor**

**Distributeur**

**Distribuidor**

Montagebeispiel

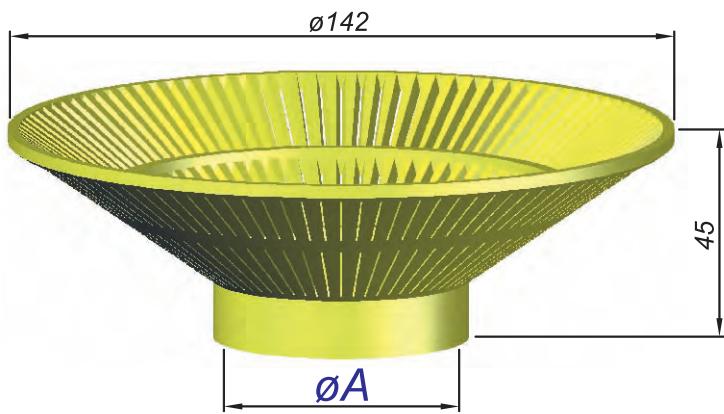
Installation  
procedure

Exemple  
de montage

Ejemplo  
de montaje

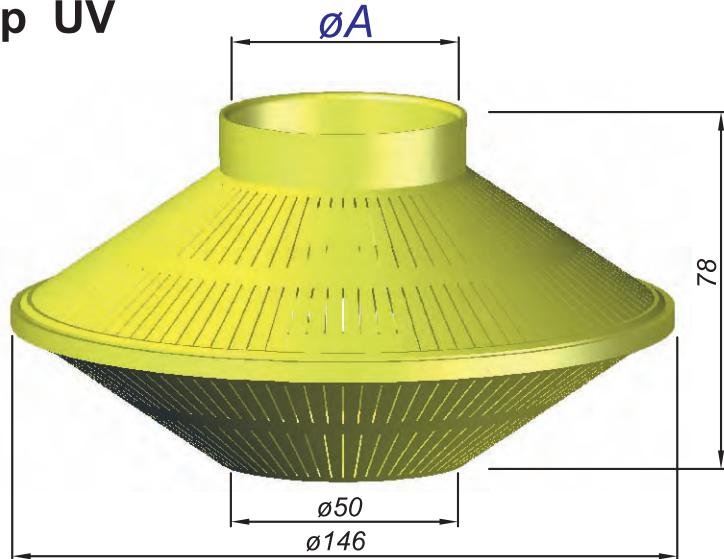


### **Typ OV**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA
	<b>OV</b>	0,25	Ø1,9" Ø50

### **Typ UV**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	ØA
	<b>UV</b>	0,25 = 17,96 cm <sup>2</sup>	Ø1,9" Ø50

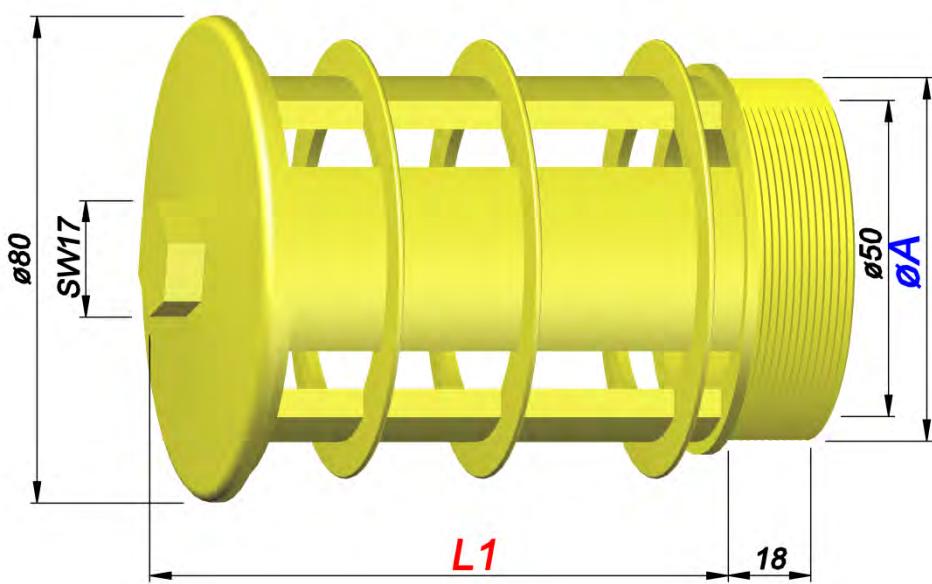
Obere Verteiler

Top distributor

Distributeur supérieur

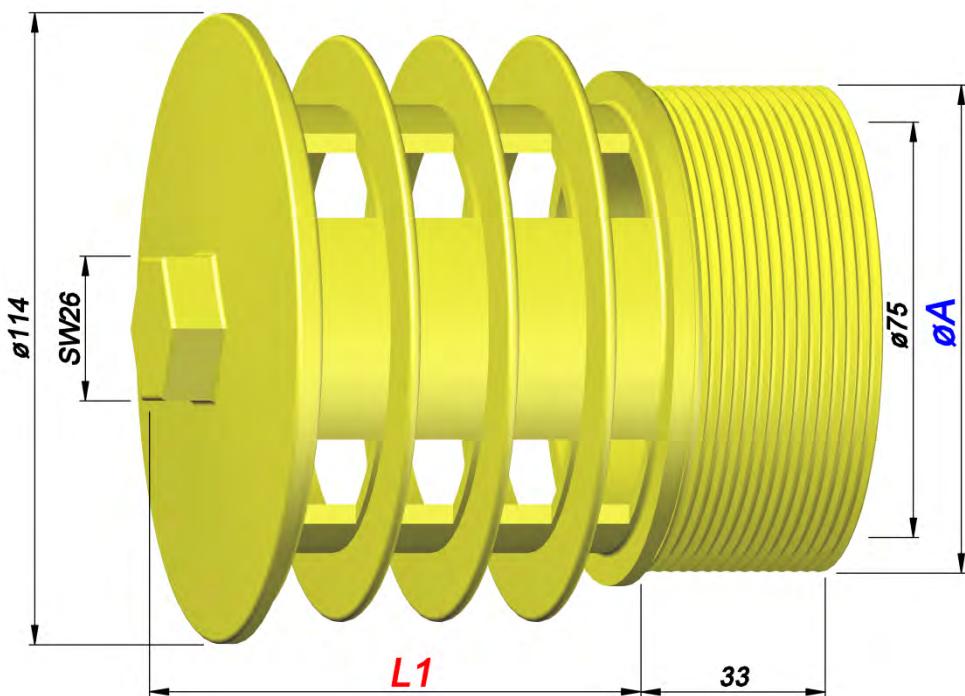
Distribuidor superior

R2P



Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca
	<b>R2P</b>	G 2"	L1	42, 95, 155

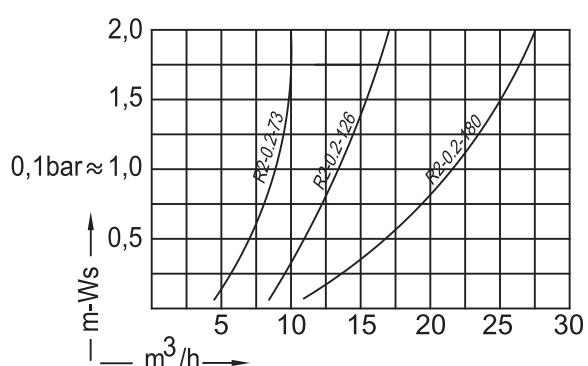
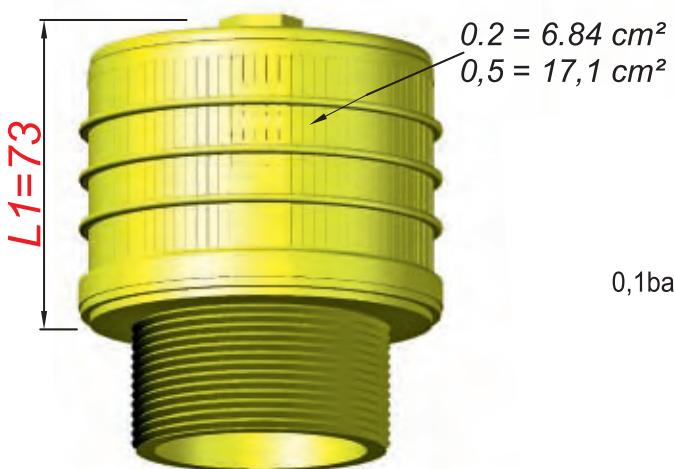
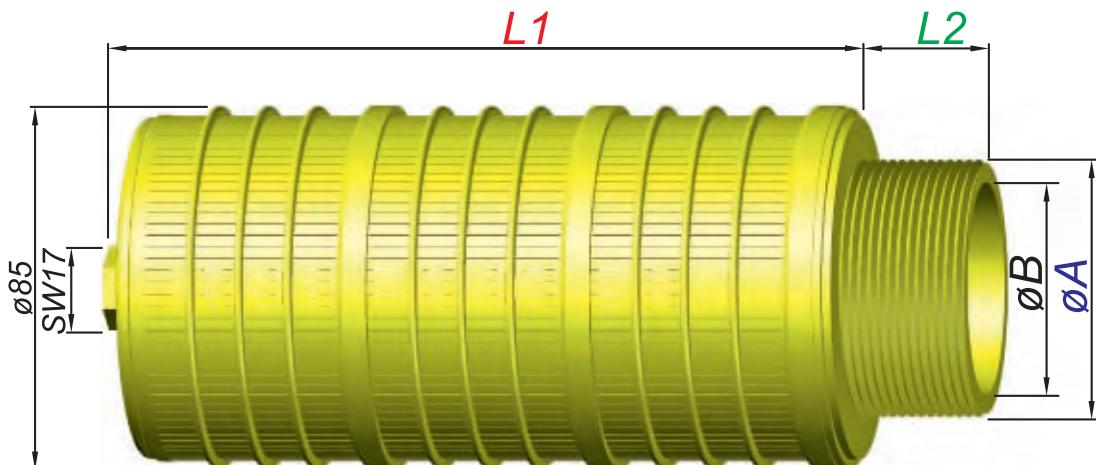
R3P



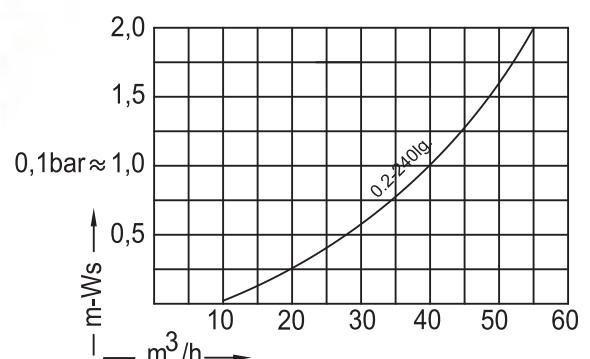
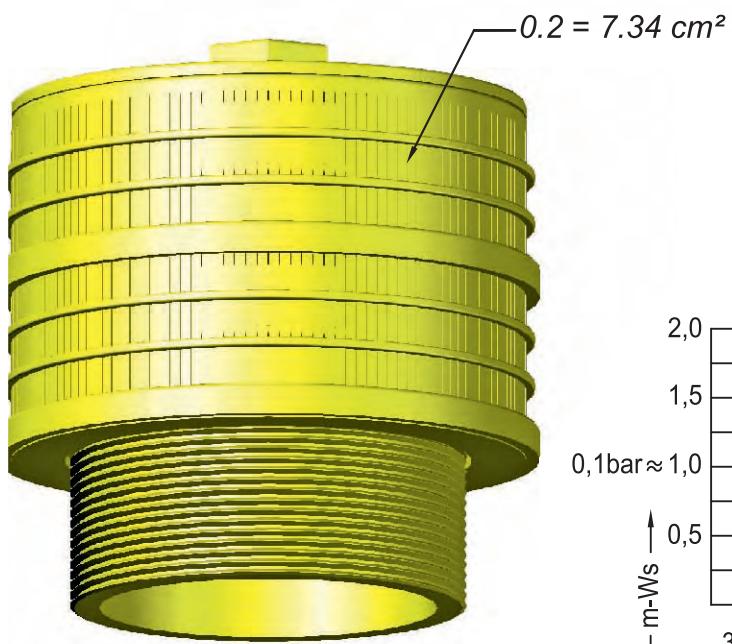
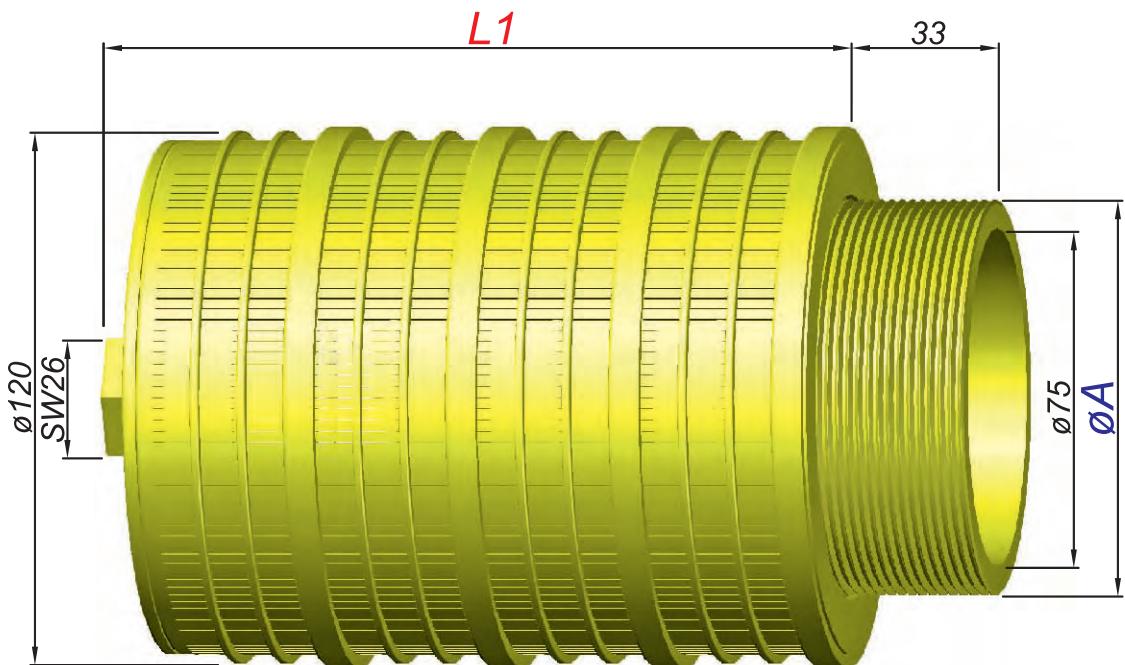
Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca	$\varnothing A$	Länge Length Longueur Largura
	<b>R3P</b>	G 3" 3" NPT 4" 8UN	L1	96, 168, 240

**Filterdüsen**    **Filter-Nozzles**    **Crépines à filtre**    **Toberas filtrantes**

**Typ R2**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	$\varnothing A$	$\varnothing B$	$L_2$	Kopflänge Headlength Longueur de tête Longitude de la cabeza	$L_1$
<b>R2</b>	0,2	G 2"	$\varnothing 50$	30, 55		73, 126, 180, 231, 284, 338, 389, 442, 496, 547, 600, 654, 705,	
		G 1½"	$\varnothing 38$	30, 55			
		G 2"	1 1/4"NPT	30			
		G 2"	1 1/2"NPT	30			
		Ø 68	G 2"	30			
		1 1/2"NPT	1 1/4"NPT	30			
		2 ½" 8NPSM	Ø60	20			

**Filterdüsen****Filter-Nozzles****Crépines à filtre****Toberas filtrantes****Typ R3**

Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	$\varnothing A$	Kopflänge Headlength Longueur de tête Longitude de la cabeza	L1
	<b>R3</b>	0,2 0,5	G 3" 3"NPT 4" 8UN	168, 240, 312, 384, 456, 528, 600, 672, 744, 816, 888, 960, 1032, 1104, 1176, 1248, 1320 ...	

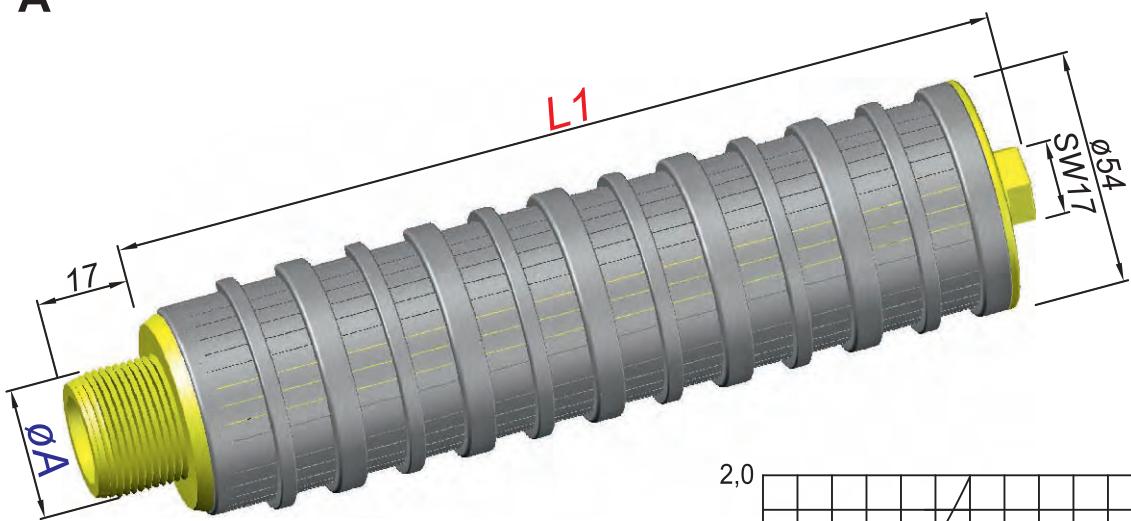
## Filterdüsen-Arme

## Filter-Nozzles Arms

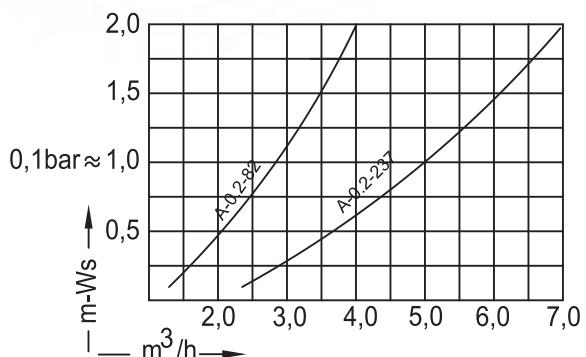
## Crépines bras

## Brazos de toberas a filtro

### Typ A



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	<b>ØA</b>
	<b>A</b>	0,2 0,5 1,0 2,0	M30x2 3/4"NPT G 3/4" G 1"	



Länge Length Longueur Largura	<b>L1</b>	<b>Ø = mm</b>	A	SG6	SK6	SO6	SO8	SK8	SK6F	SK8F
82		259	258		258					
113		321	316		316					
144		383	374		374					
175		445	432		432					
206		507	491		491		520	520	491	520
237		569	549		549		580	580	549	580
268		631	607		607		640	640	607	640
299		693	665		665		699	699	665	699
330		755	724		724		759	759	724	759
361		817	782		782		819	819	782	819
392		879	840		840		879	879	840	879
423		941	898		898		939	939	898	939
454		1003	957		957		999	999	957	999
485		1065	1015		1015		1059	1059	1015	1059
516		1127	1073		1073		1119	1119	1073	1119
547		1189	1131		1131		1179	1179	1131	1179
578		1251	1189		1189		1239	1239	1189	1239
609		1313	1247		1247		1299	1299	1247	1299
640							1359	1359	1305	1359
671							1419	1419	1363	1419
702							1479	1479	1421	1479
733							1539	1539	1479	1539
764							1599	1599	1537	1599
795							1659	1659	1595	1659

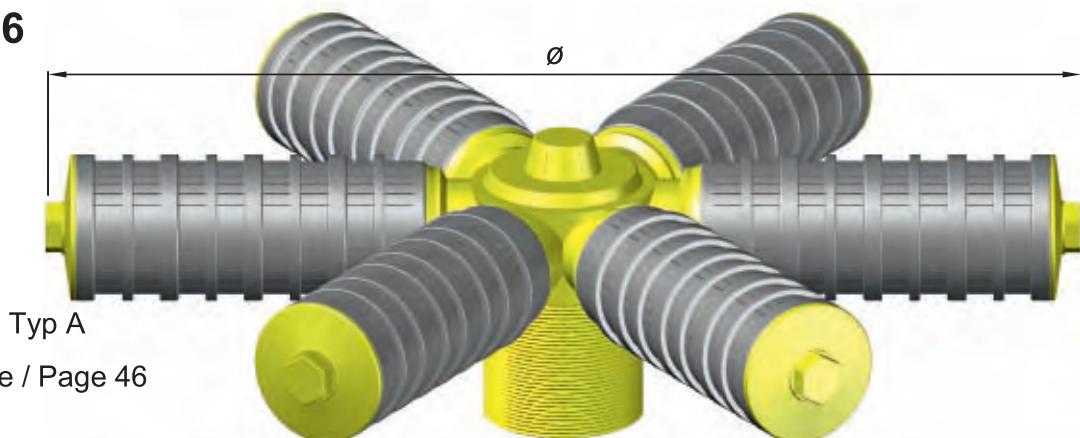
**Filterdüsen-Sterne  
mit 6 Armen**

**Filter-Nozzles-Stars  
with 6 arms**

**Crépines  
étoiles  
à 6 bras**

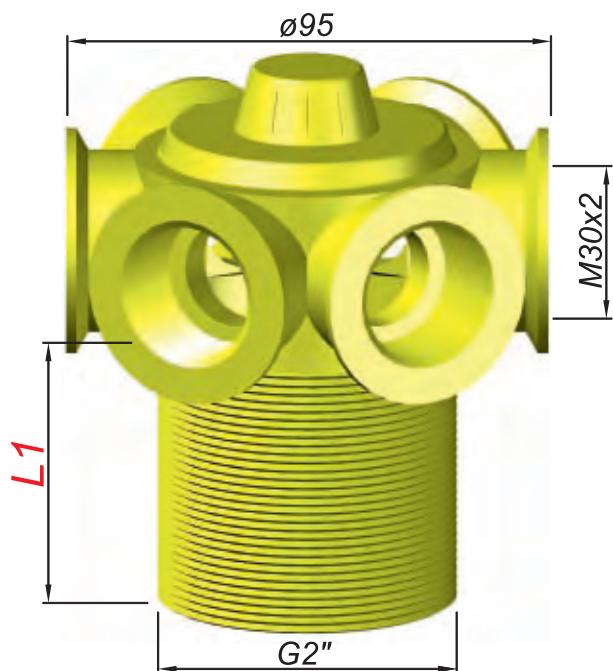
**Estrellas para  
tuberías a filtro  
con 6 brazos**

**Typ SG6**

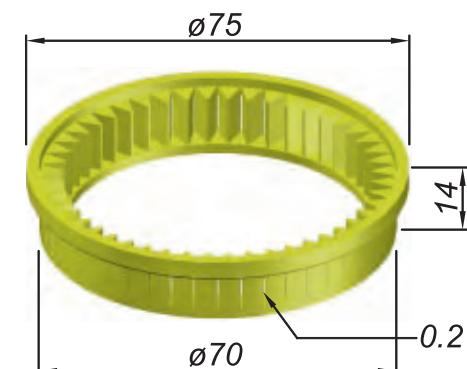


Seite / Page 46

**Typ MSG6**

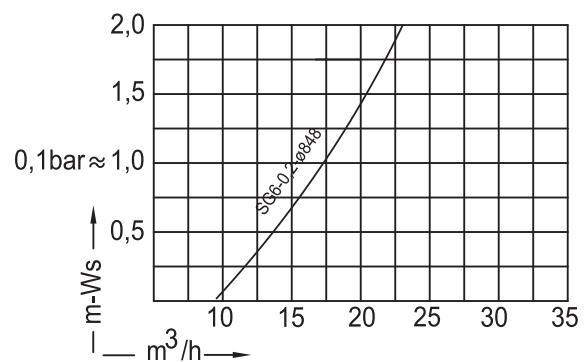


**Typ ER**



Bestellung Ordering Commande Encargo	Typ Type Type Típico
	<b>ER</b>

Bestellung Ordering Commande Encargo	Typ Type Type Típico	<b>L1</b>
	<b>MSG6</b>	25 55



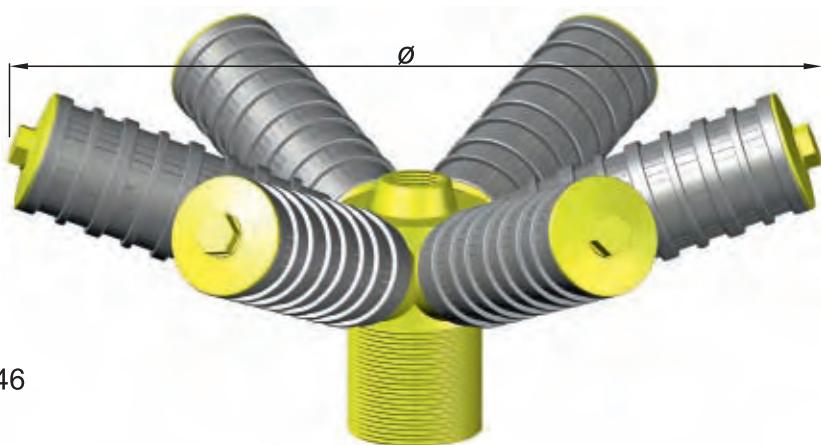
**Filterdüsen-Sterne  
mit 6 Armen**

**Filter-Nozzles-Stars  
with 6 arms**

**Crépines  
étoiles  
à 6 bras**

**Estrellas para  
toberas a filtro  
con 6 brazos**

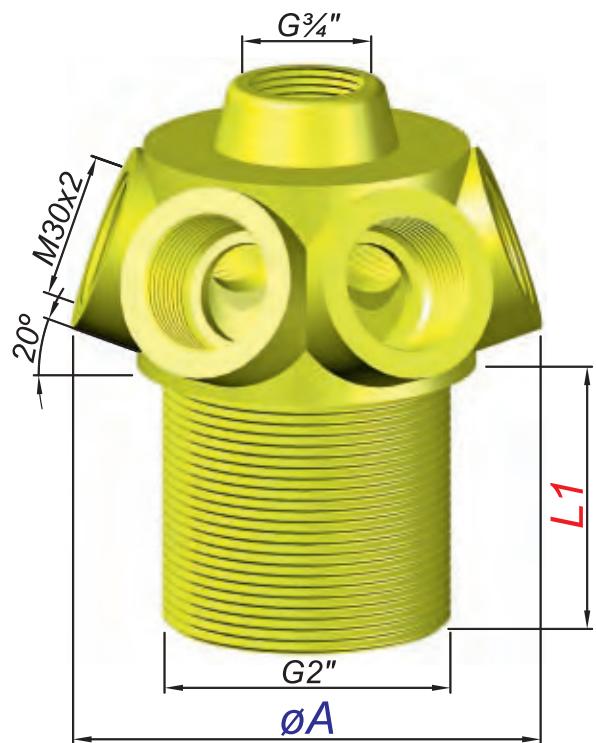
**Typ SK6**



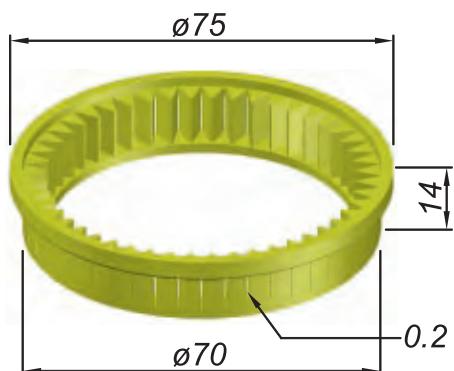
Typ A

Seite / Page 46

**Typ MSK6**

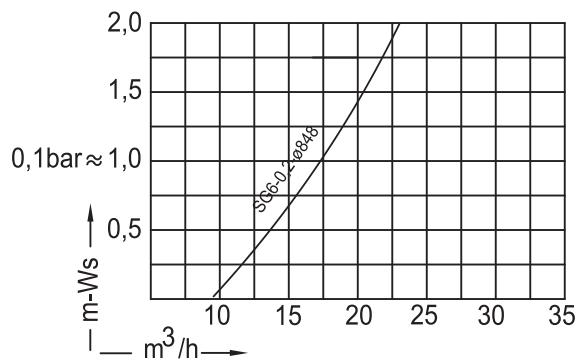


**Typ ER**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa
	<b>ER</b>

Bestellung Ordering Commande Encargo	Typ Type Type Tipa	L1	ØA
	<b>MSK6</b>	55	98 110



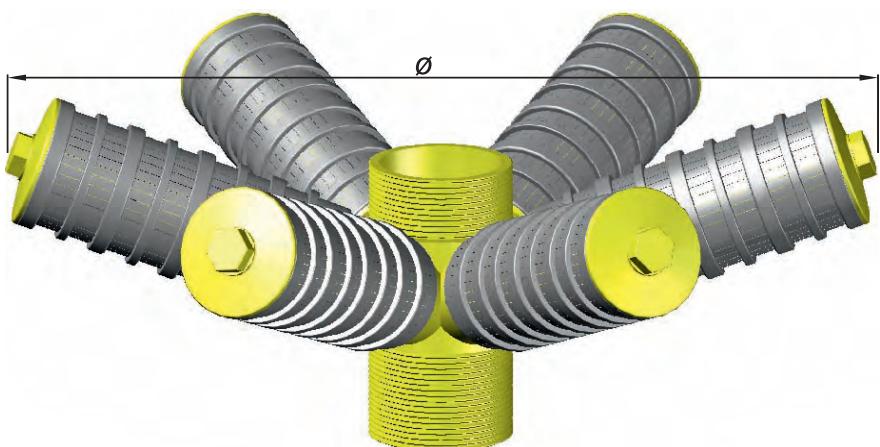
Filterdüsen-Sterne  
mit 6 Armen

Filter-Nozzles-Stars  
with 6 arms

Crépines  
étoiles  
à 6 bras

Estrellas para  
tuberías a filtro  
con 6 brazos

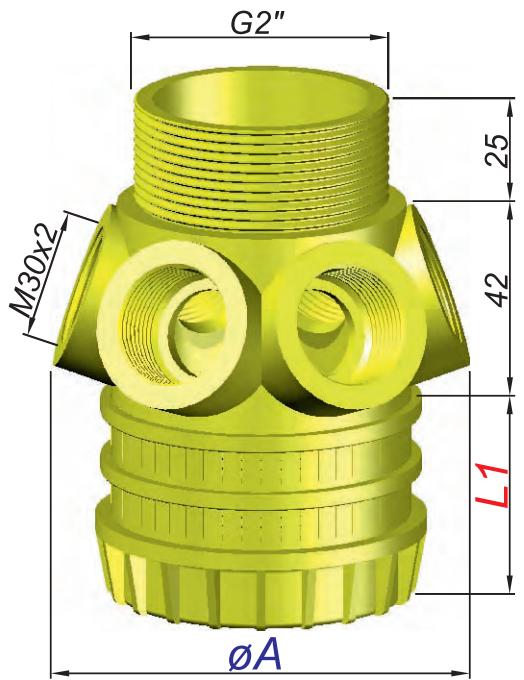
## Typ SO6



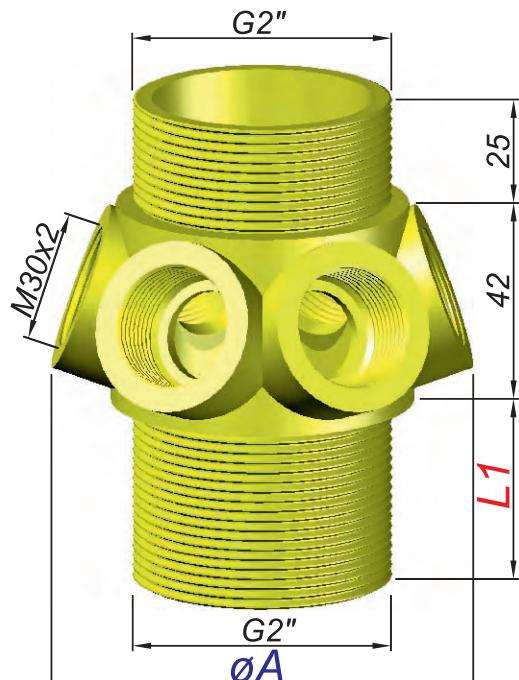
Typ A

Seite / Page 46

## Typ MSO6

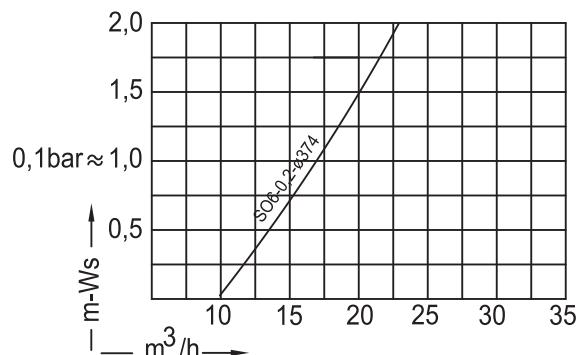


## Typ MSO60



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	L1	ØA
	ER	25 50	98 110

Bestellung Ordering Commande Encargo	Typ Type Type Tipa	L1	ØA
	MSO6	20	98 110
	MSO61	34	
	MSO62	46	
	MSO63	58	



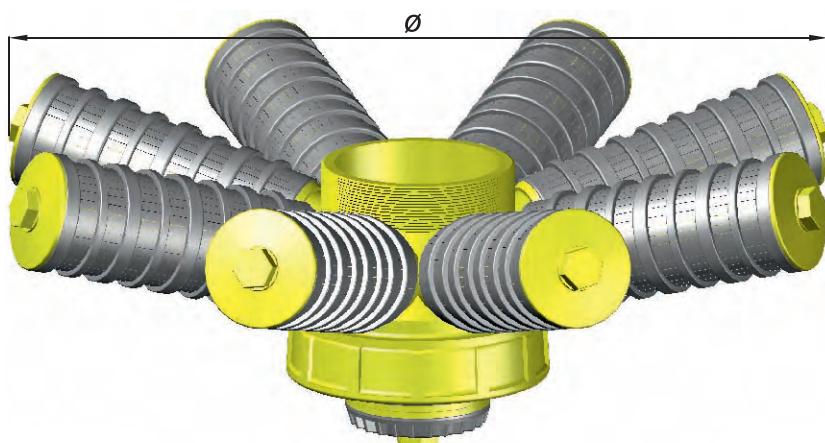
**Filterdüsen-Sterne  
mit 8 Armen**

**Filter-Nozzles-Stars  
with 8 arms**

**Crépines  
étoiles  
à 8 bras**

**Estrellas para  
toberas a filtro  
con 8 brazos**

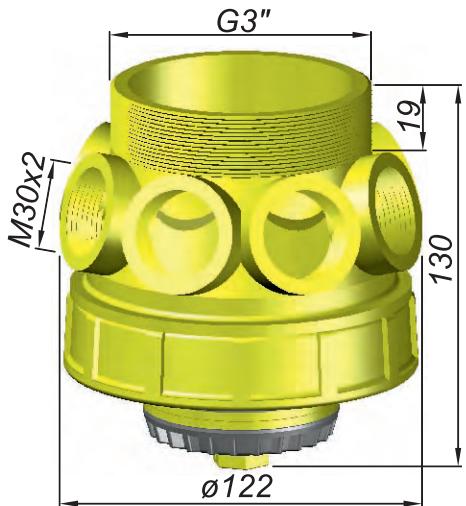
**Typ SO8**



Typ A

Seite / Page 46

**Typ MSO8**



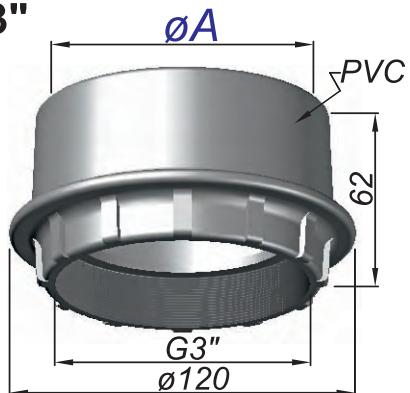
Bestellung Ordering Commande Encargo	Typ Type Type Tipa
	<b>MSO8</b>

**Typ MSO16**

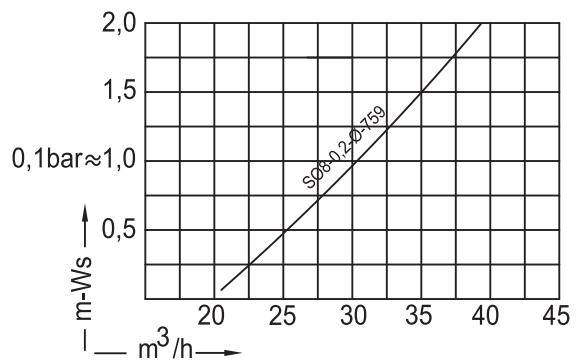


Bestellung Ordering Commande Encargo	Typ Type Type Tipa
	<b>MSO16</b>

**Typ GR3"**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	<b>ØA</b>
	<b>GR3"</b>	90



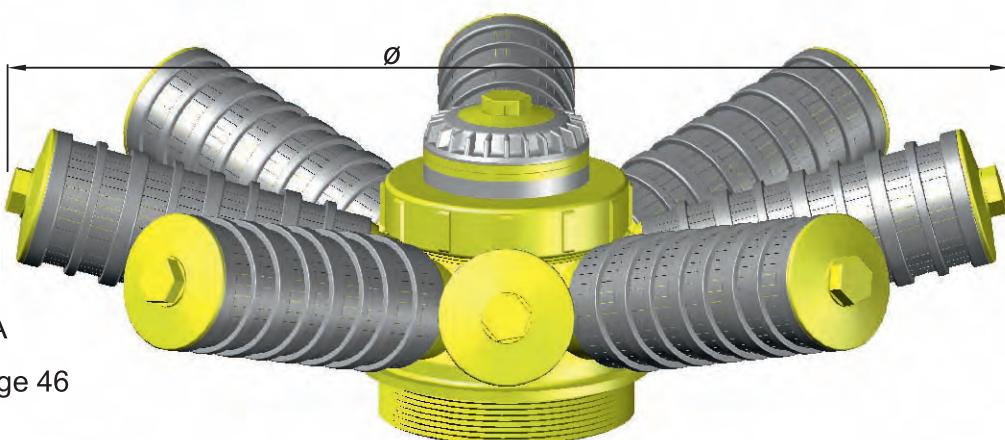
## Filterdüsen-Sterne mit 8 Armen

## Filter-Nozzles-Stars with 8 arms

## Crépines étoiles à 8 bras

## Estrellas para toberas a filtro con 8 brazos

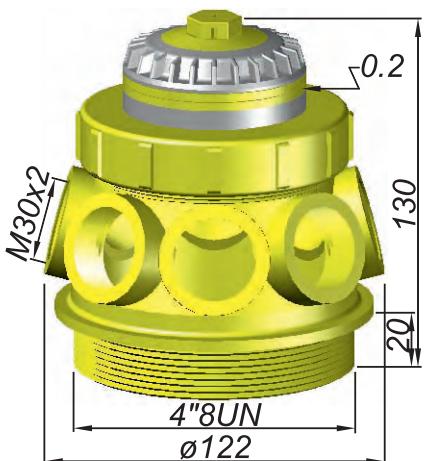
### Typ SK8



Typ A

Seite / Page 46

### Typ MSK8

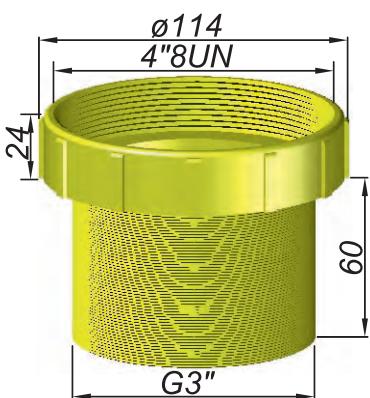


Bestellung Ordering Commande Encargo	Typ Type Type Típico
	<b>MSK8</b>

### Typ MSK16

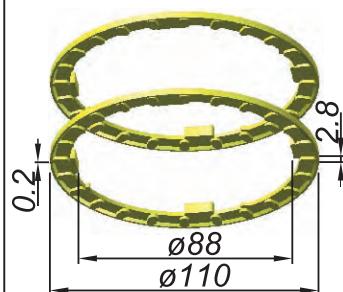


### Typ GR4"-3"

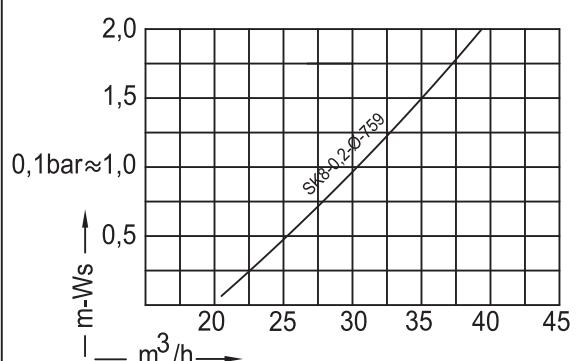


Bestellung Ordering Commande Encargo	Typ Type Type Típico
	<b>GR4"-3"</b>

### Typ ER3



Bestellung Ordering Commande Encargo	Typ Type Type Típico
	<b>ER3</b>



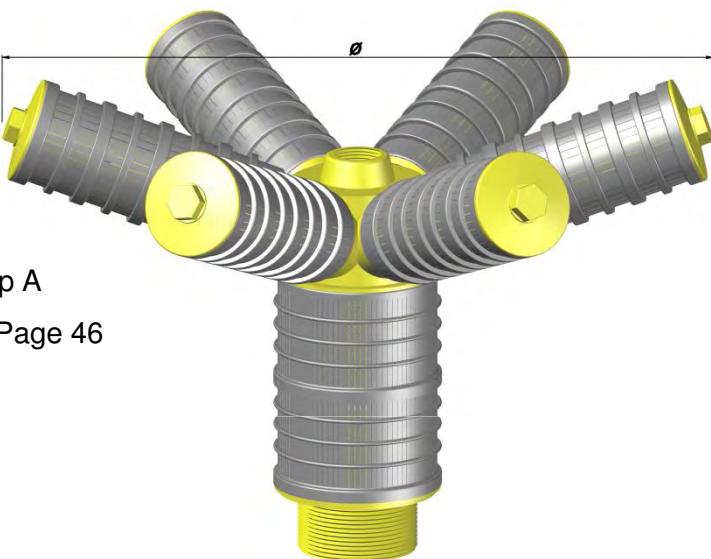
**Filterdüsen-Sterne  
mit 6 Armen**  
für Flanschtank

**Filter-Nozzles-Stars  
with 6 arms**  
for Flange tank

**Crépines étoiles  
à 6 bras**

**Estrellas para  
toberas a filtro  
con 6 brazos**

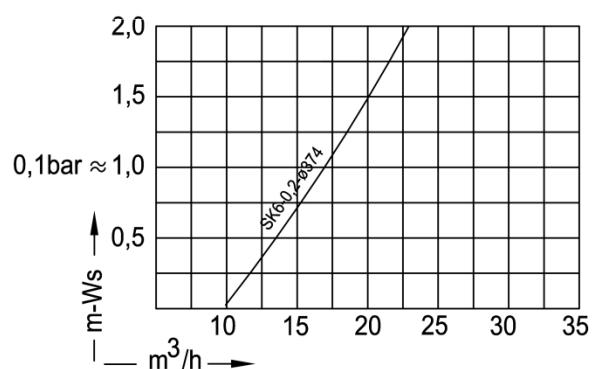
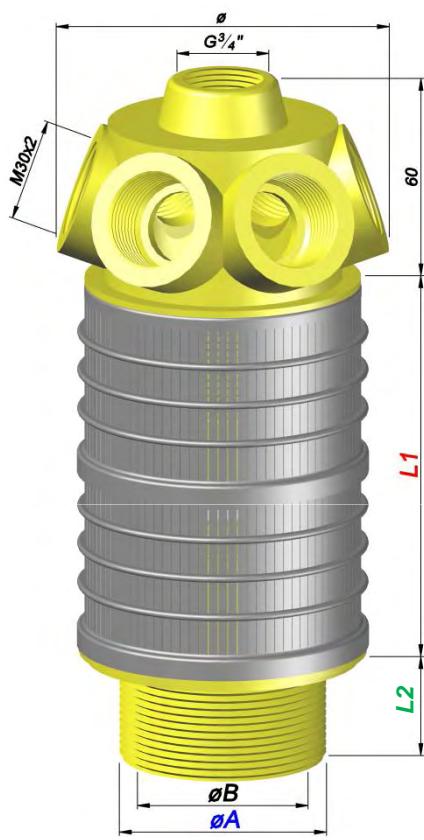
### Typ SK6F



Typ A

Seite / Page 46

### Typ MSK6F



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Ø	ØA	ØB	L2	L1
	<b>MSK6F</b>	0,2 0,5	98 110	G 2" G 2" G 2" Ø 68 2 1/2" 8NPSM	Ø 50 1 1/4"NPT 1 1/2"NPT G 2" Ø 60	33	64, 116, 170 20

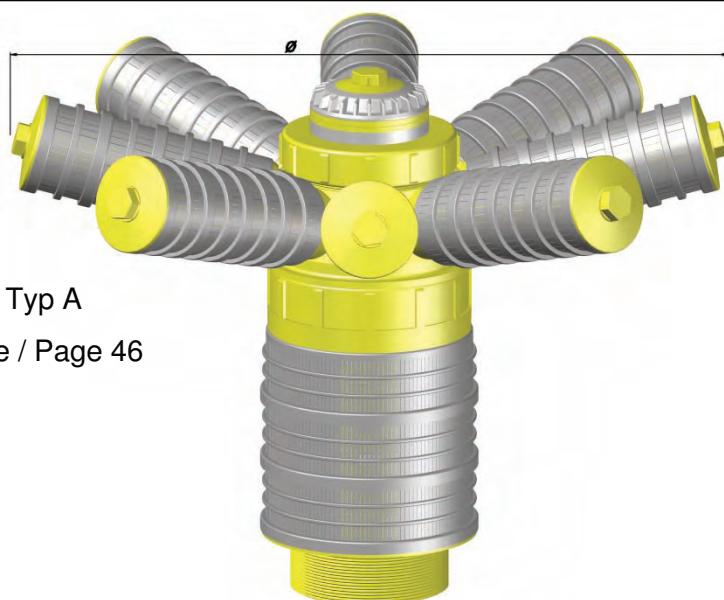
**Filterdüsen-Sterne  
mit 8 Armen**  
für Flanschtank

**Filter-Nozzles-Stars  
with 8 arms**  
for Flange tank

**Crépines étoiles  
à 8 bras**

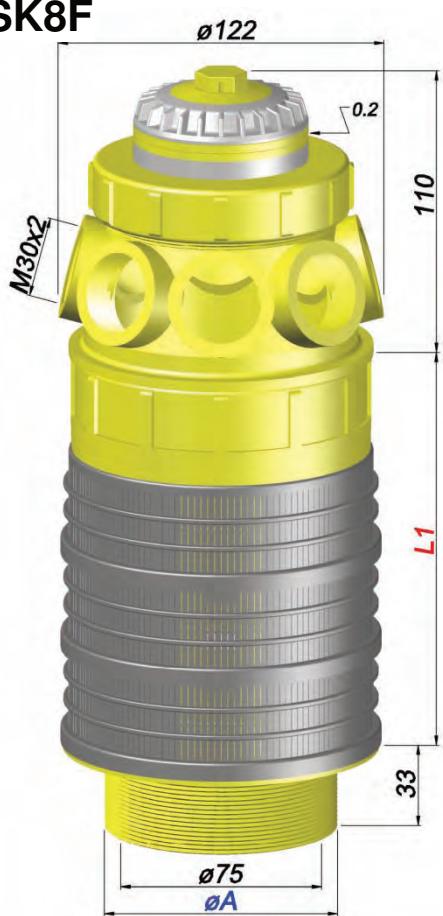
**Estrellas para  
tuberías a filtro  
con 8 brazos**

### Typ SK8F

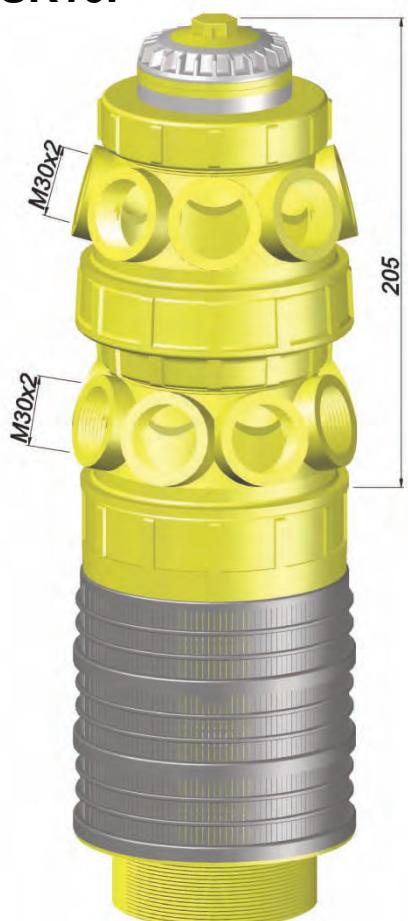


Seite / Page 46

### Typ MSK8F



### Typ MSK16F



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	ØA	Länge Length Longueur Largura
	<b>MSK8F</b>	0,2	G 3" 3"NPT 4" 8UN	115, 150, 190, 228

Bestellung Ordering Commande Encargo	Typ Type Type Tipa
	<b>MSK16F</b>

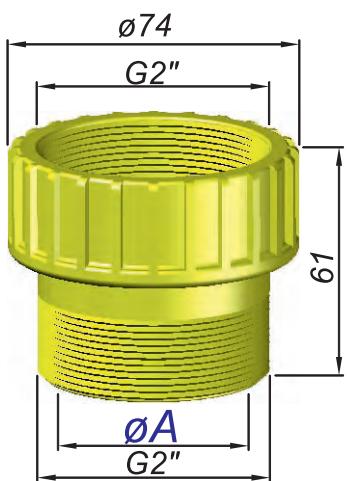
## Adapter und Verbinde

## Adapter and Connector

## Adaptateur et raccord

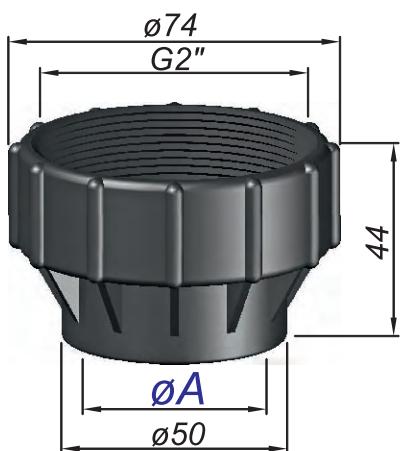
## Adaptador y conector

### Typ GR2"



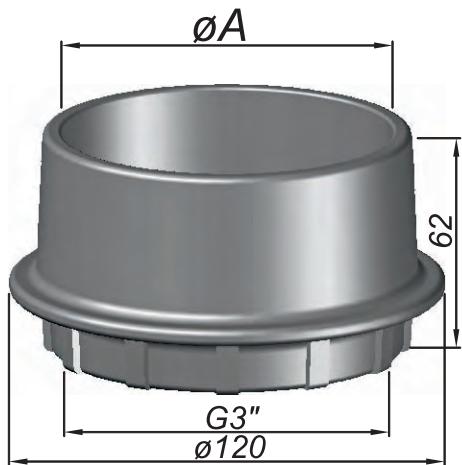
Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>GR2"</b>	G 1 1/2" G 1 1/4"

### Typ GR2"

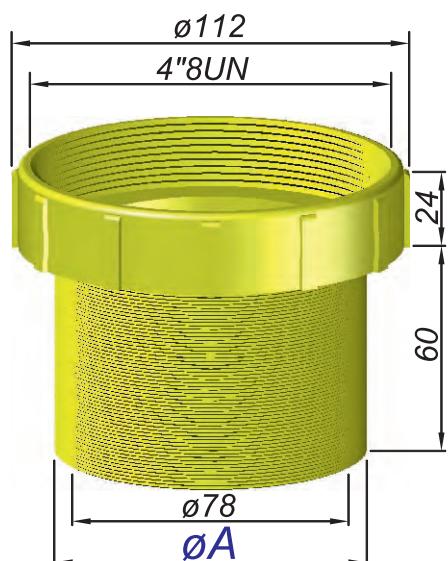


Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>GR2"</b>	Ø 40 Ø 50 Ø 60,3 Ø 63

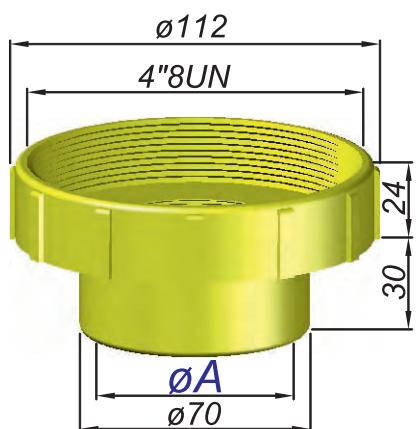
### Typ GR3"



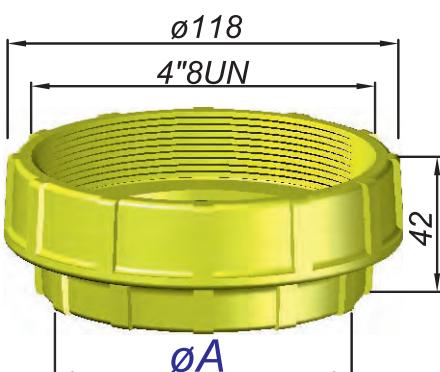
Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>GR3"</b>	Ø 90 3" ( US )

**Adapter und Verbinde****Adapter and Connector****Adaptateur et raccord****Adaptador y conector****Typ GR4"**

Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>GR4"</b>	G 3"

**Typ GR4"**

Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>GR4"</b>	G 2"

**Typ VB4"**

Bestellung Ordering Commande Encargo	Typ Type Type Típico	Gewinde Thread Filetage Rosca
	<b>VB4"</b>	G 3"

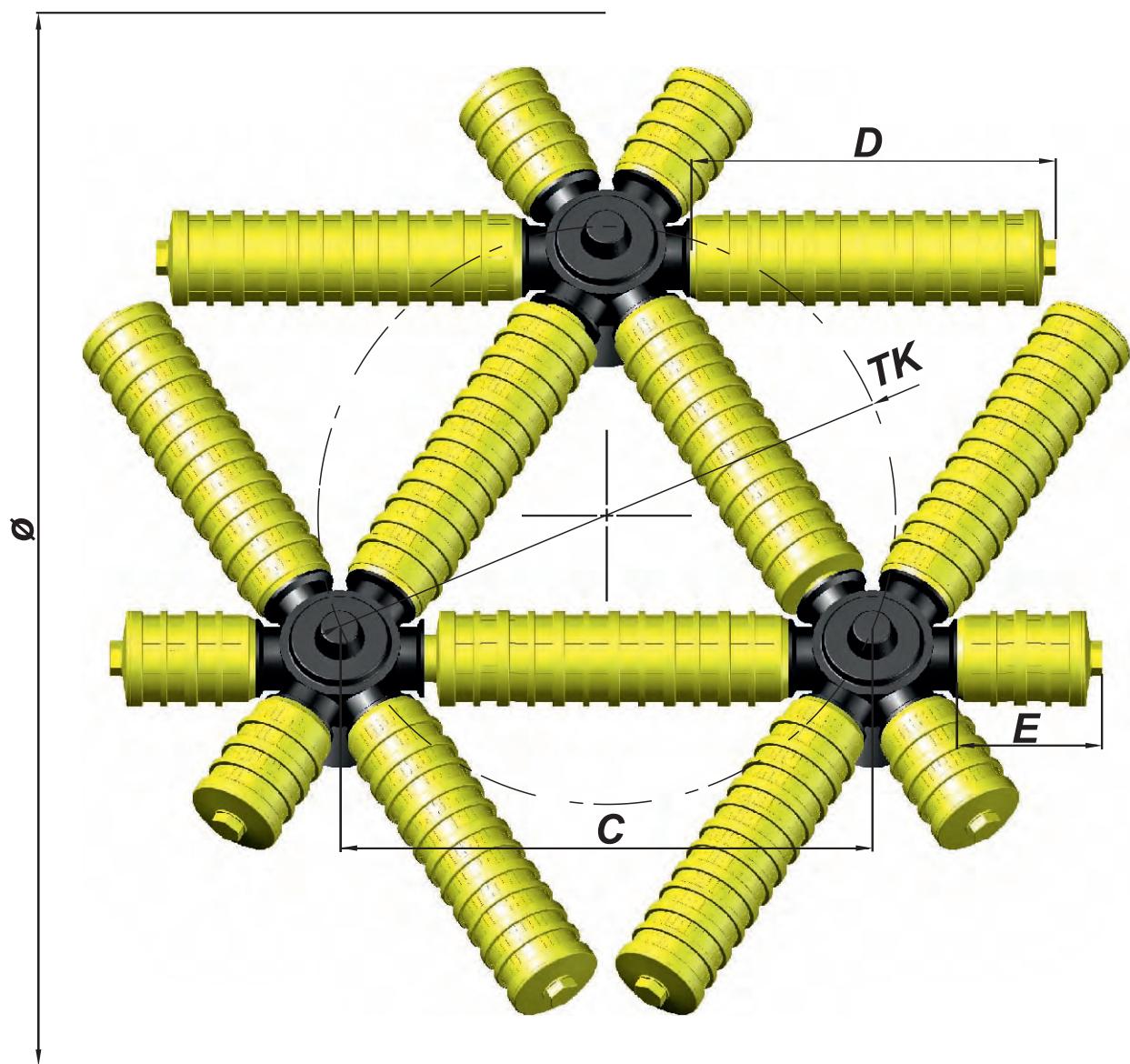
## Drainage-system

## Drainage system

## Système de drainage

## Systema de drenaje

**Typ SD3**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	Ø	TK	C	D	E
	SD3	0,2 0,5	600	308	265	175	82
			700	344	298	206	82
			800	416	362	268	144
			900	452	392	299	144
			1000	522	454	361	175
			1100	522	454	361	237
			1200	522	454	361	299

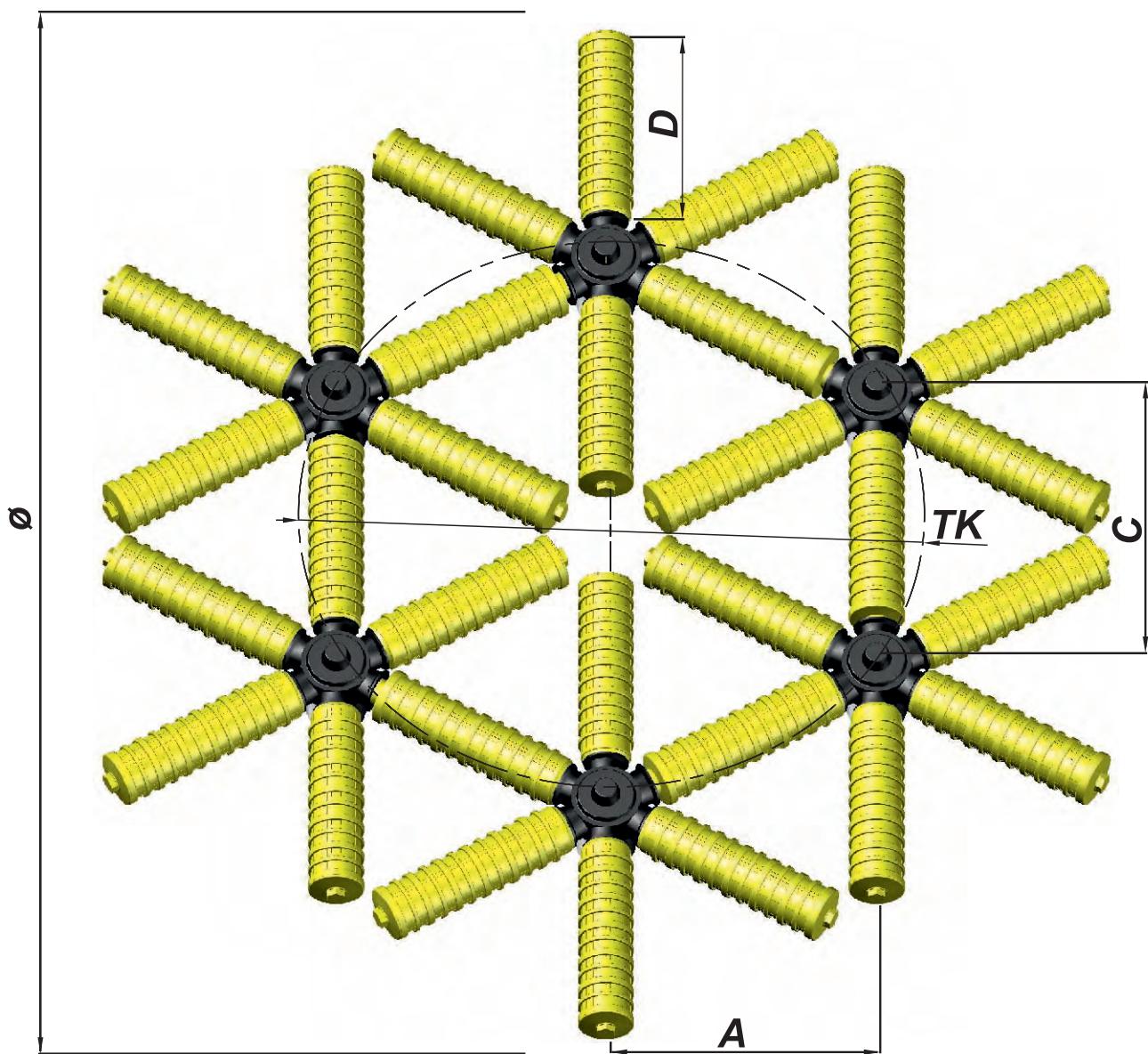
## Drainage-system

## Drainage system

## Système de drainage

## Systema de drenaje

**Typ SD6**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	$\varnothing$	TK	C	D	A
	<b>SD6</b>	0,2 0,5	800	408	204	113	176,7
			1000	536	268	175	232,1
			1200	600	300	206	259,8
			1300	664	332	237	287,5
			1400	728	364	268	315,2
			1500	788	394	299	341,2
			1700	852	426	330	368,9
			1800	912	456	361	394,9

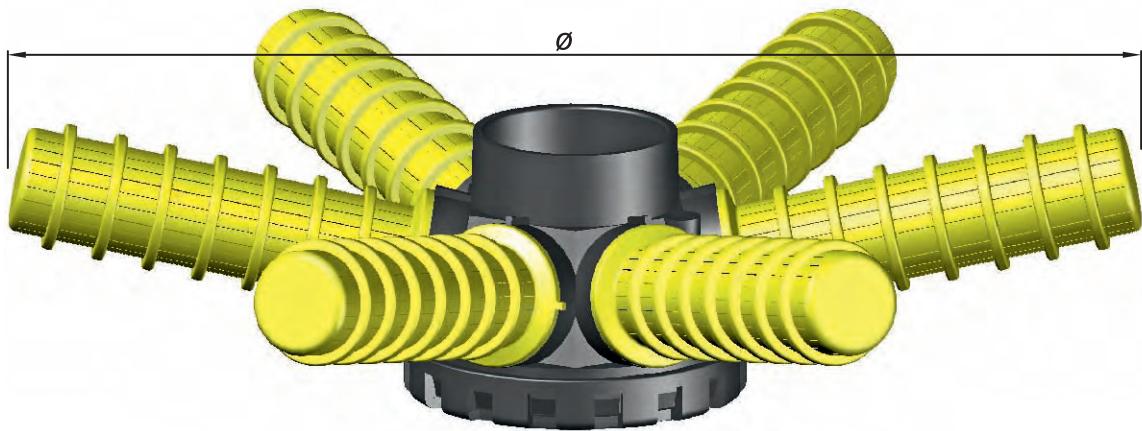
Filterdüsen-Sterne  
mit 6 Armen

Filter-Nozzles-Stars  
with 6 arms

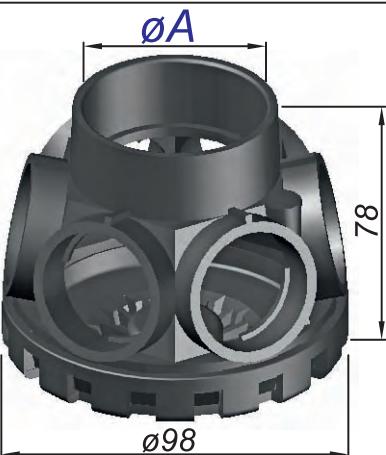
Crépines  
étoiles  
à 6 bras

Estrellas para  
tuberías a filtro  
con 6 brazos

### Typ SS6

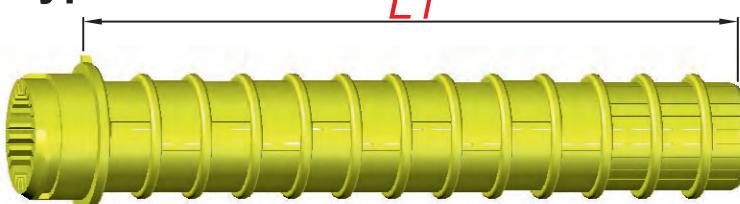


### Typ MSS6



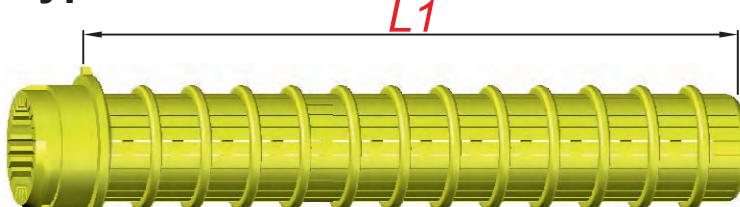
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	ØA	Material Material Materiu Material
	MSS6	Ø 1.05" Ø 1" Ø 1 1/4" Ø 1.9" Ø 50	ABS

### Typ A4



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	L1	= Ø
	A4	0,25	143 = Ø 373 185 = Ø 460 210 = Ø 510	
			teilweise geschlossen	
			partially closed	

### Typ A5



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlüsse Slots Fentes Ranuras	L1	= Ø
	A5	0,25	85 = Ø 260 113 = Ø 314 143 = Ø 373 185 = Ø 460 210 = Ø 510	

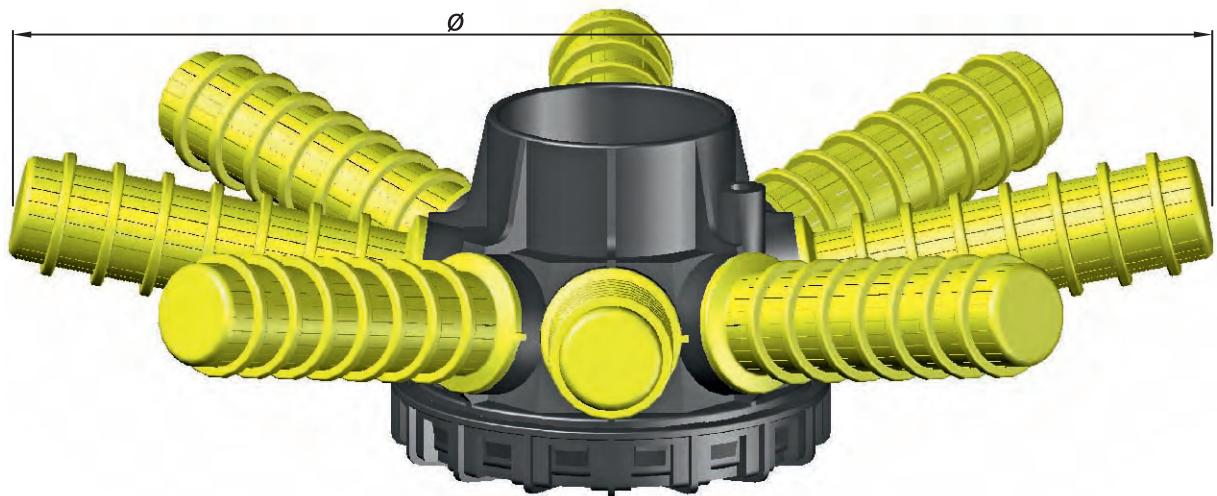
Filterdüsen-Sterne  
mit 8 Armen

Filter-Nozzles-Stars  
with 8 arms

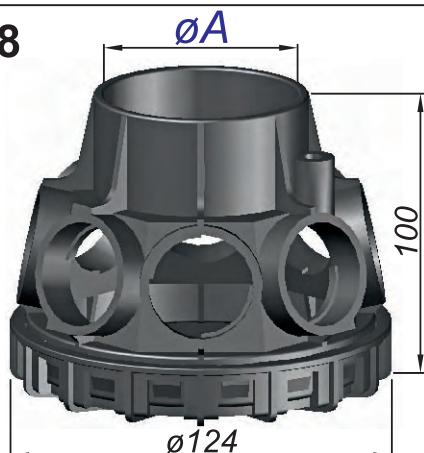
Crépines étoiles  
à 8 bras

Estrellas para  
tuberías a filtro  
con 8 brazos

### Typ SS8

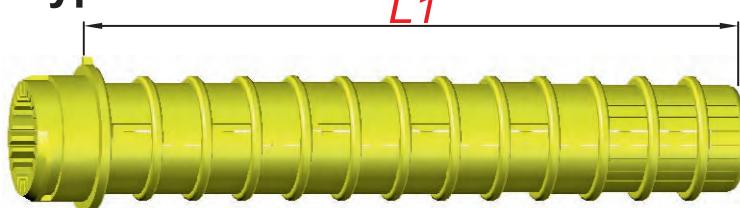


### Typ MSS8



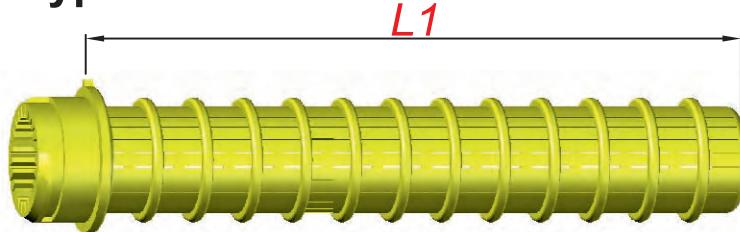
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	$\varnothing A$	Material Material Materiau Material
	MSS8	$\varnothing$ 60,3 $\varnothing$ 63	ABS

### Typ A4



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	$L1$	$= \varnothing$
	A4	0,25	143 185 210	$= \varnothing$ 397 $= \varnothing$ 479 $= \varnothing$ 532
			teilweise geschlossen	
			partially closed	

### Typ A5



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	$L1$	$= \varnothing$
	A5	0,25	85 113 143 185 210 240 270 312	$= \varnothing$ 284 $= \varnothing$ 338 $= \varnothing$ 397 $= \varnothing$ 479 $= \varnothing$ 532 $= \varnothing$ 586 $= \varnothing$ 644 $= \varnothing$ 726

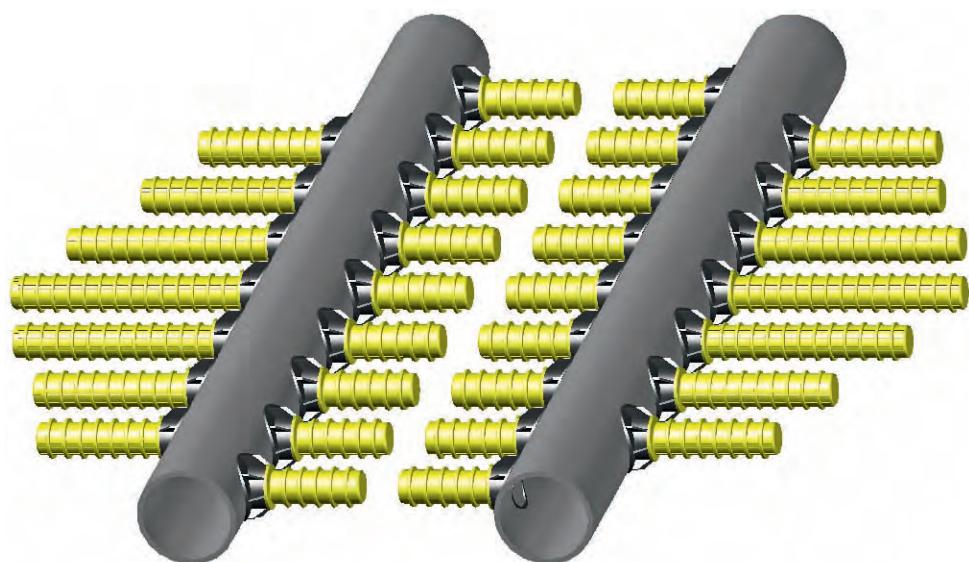
**Filterdüsen-Arme**

**Filter-Nozzles Arms**

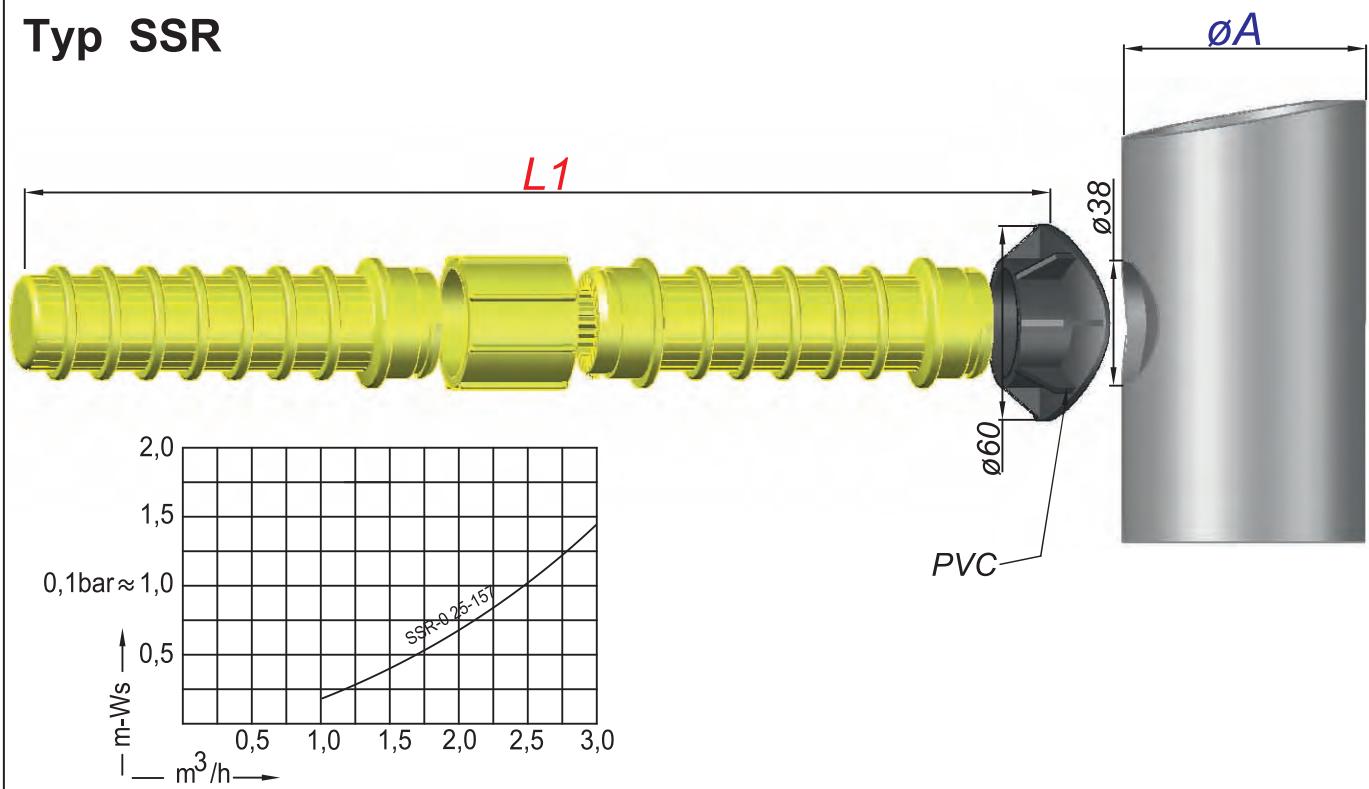
**Crépines bras**

**Brazos de toberas a filtro**

**Typ SSR**

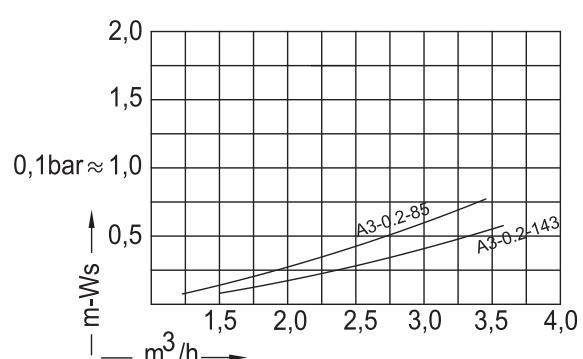
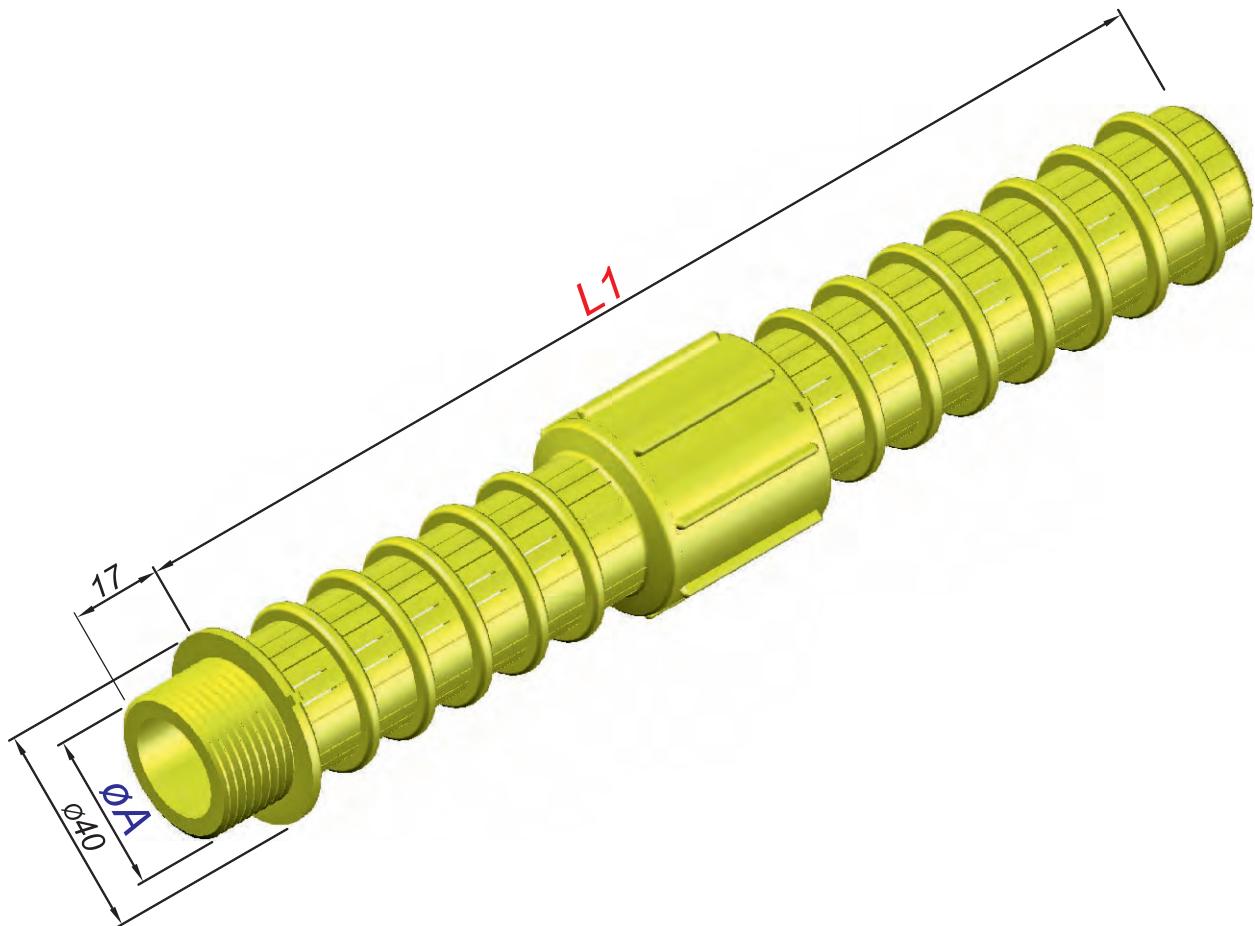


**Typ SSR**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	$\varnothing A$	Länge Length Longueur Largura	L1
	<b>SSR</b>	0,25	$\varnothing 63$ $\varnothing 75$ $\varnothing 90$ $\varnothing 114$	99, 127, 157, 199, 224, 254, 284, 326, 351, 381, 411, 453, 480, 508, 538, 580, 607, 635, 665, 707, 734, 762, 792, 834, 861, 889, 919, 961, 988, 1016, 1046, 1088 ...	

**Typ A3**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitte Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	$\varnothing A$	Länge Length Longueur Largura	L1
	<b>A3</b>	0,25	G 3/4" M30x2		212, 240, 270, 312, 337, 367, 397, 439, 464, 494, 524, 566, 591, 621, 651, 693, 820, 947, 1074, ...	
			G 1"		85, 113, 143, 185, 210, 240, 270, 312, 337, 367, 397, 439, 464, 494, 524, 566, 591, 621, 651, 693, 820, 947, 1074, ...	

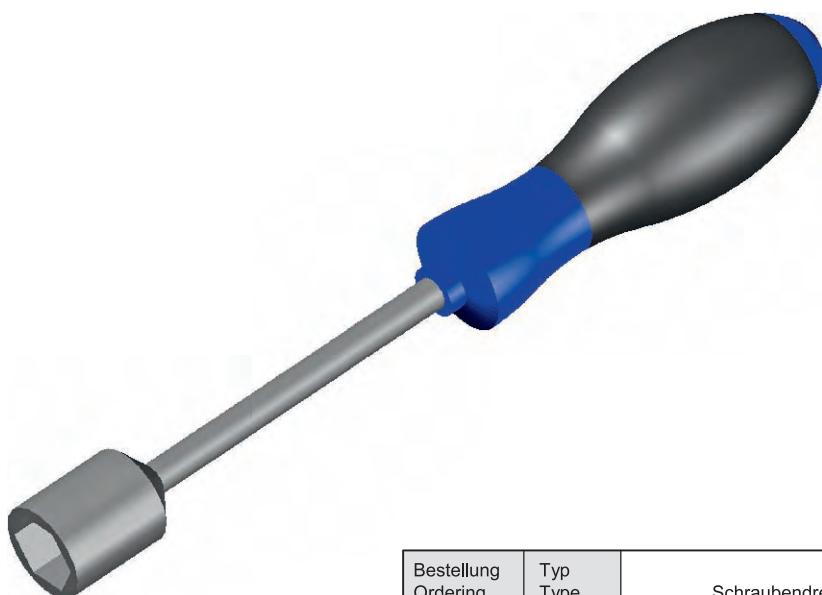
**Handwerkzeuge**

**Hand-tools**

**Outils à main**

**Herramientas de mano**

## **Typ HSD**



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schraubendreher Screwdriver
	<b>HSD</b>	SW17

## **Typ DSD**



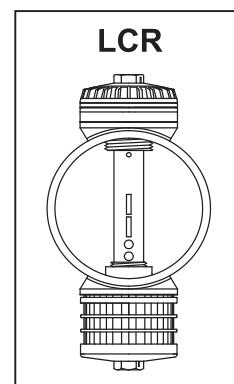
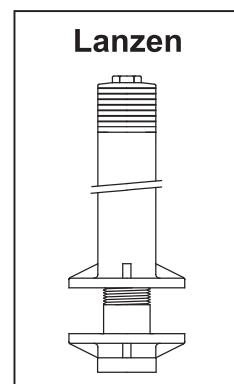
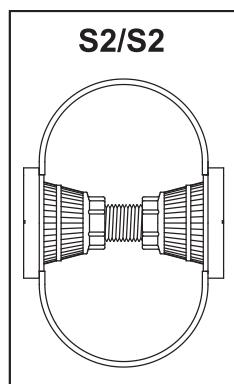
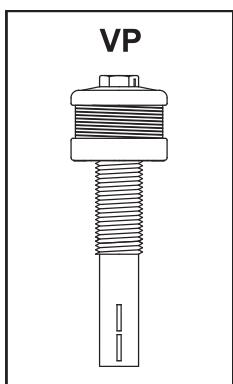
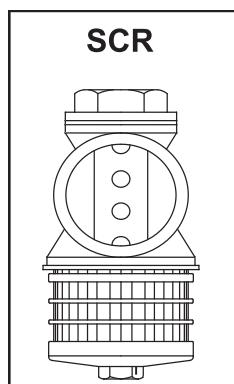
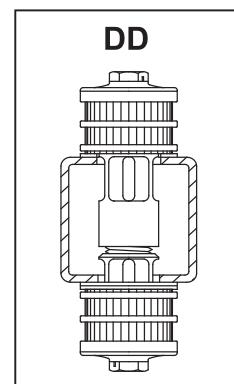
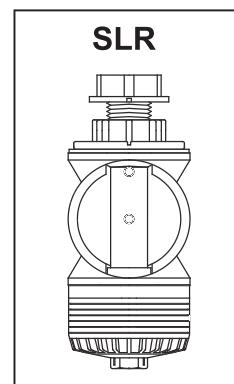
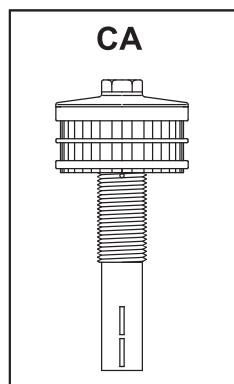
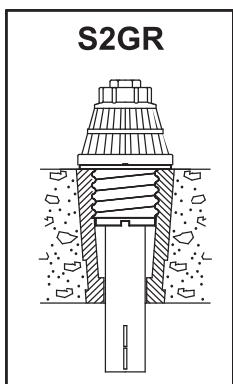
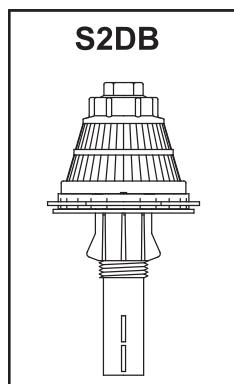
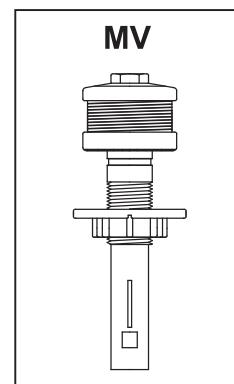
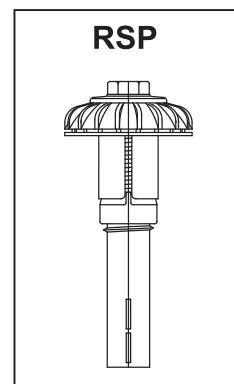
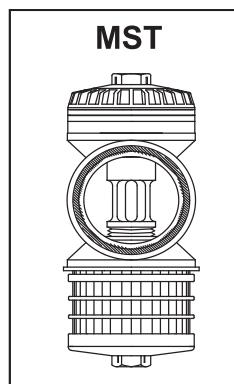
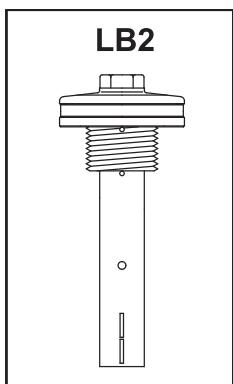
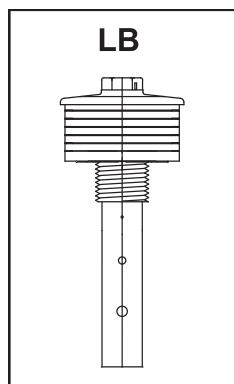
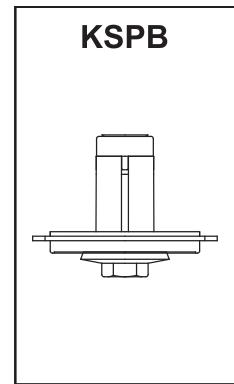
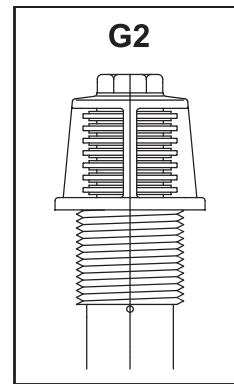
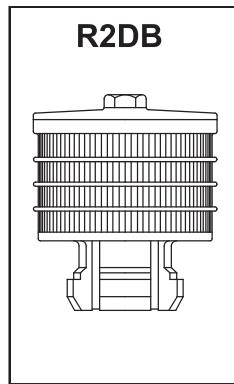
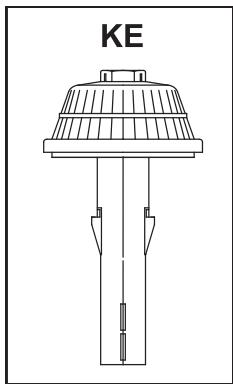
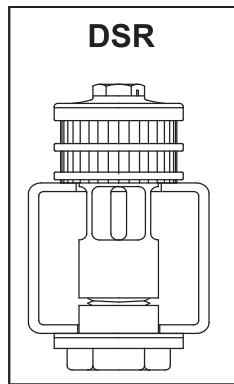
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Drehmoment - Schraubendreher Torque screwdriver Tounevis à déclenchement Atornillador con limitador de par
	<b>DSD</b>	SW17      3-6 Nm

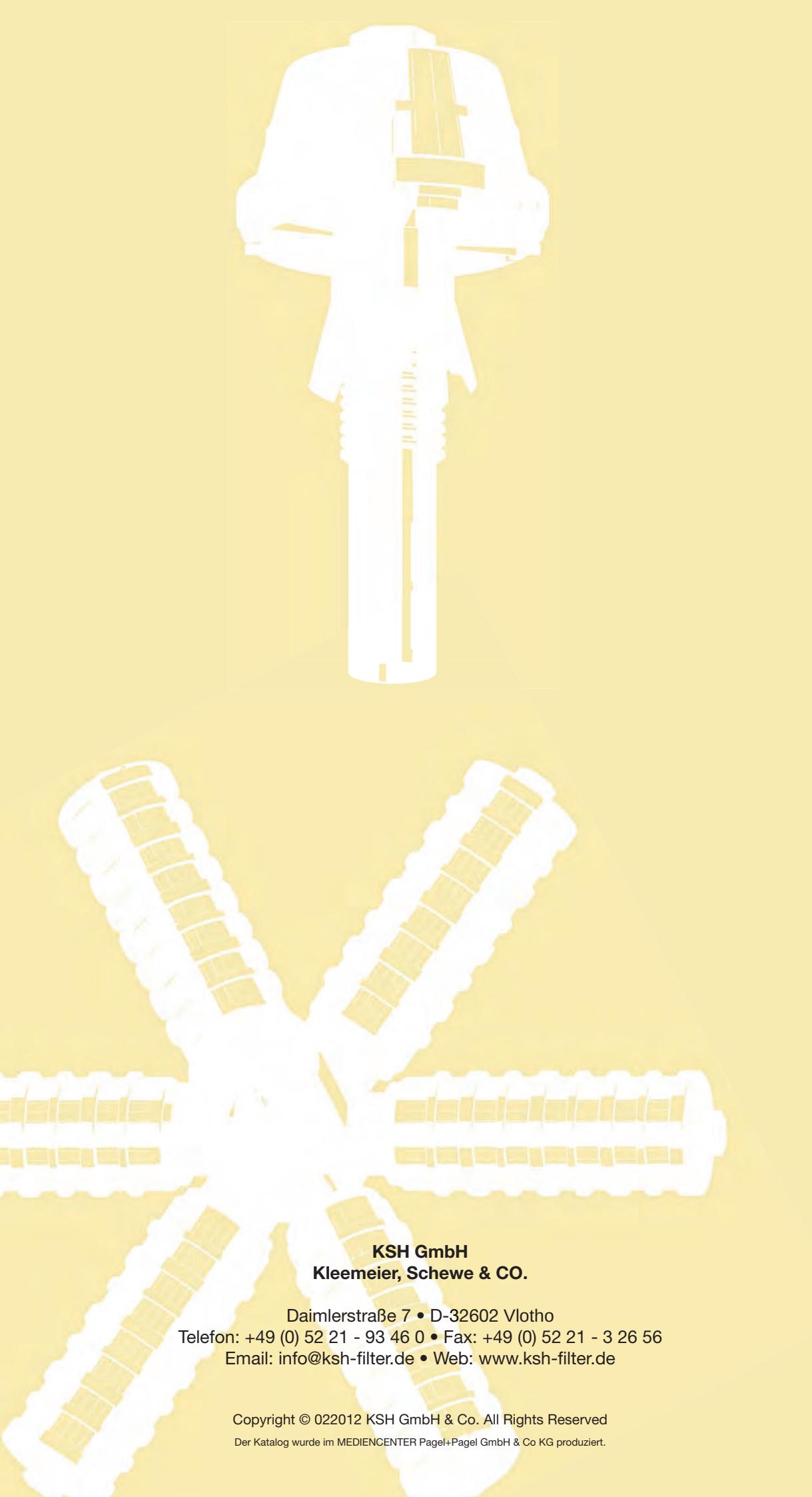
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