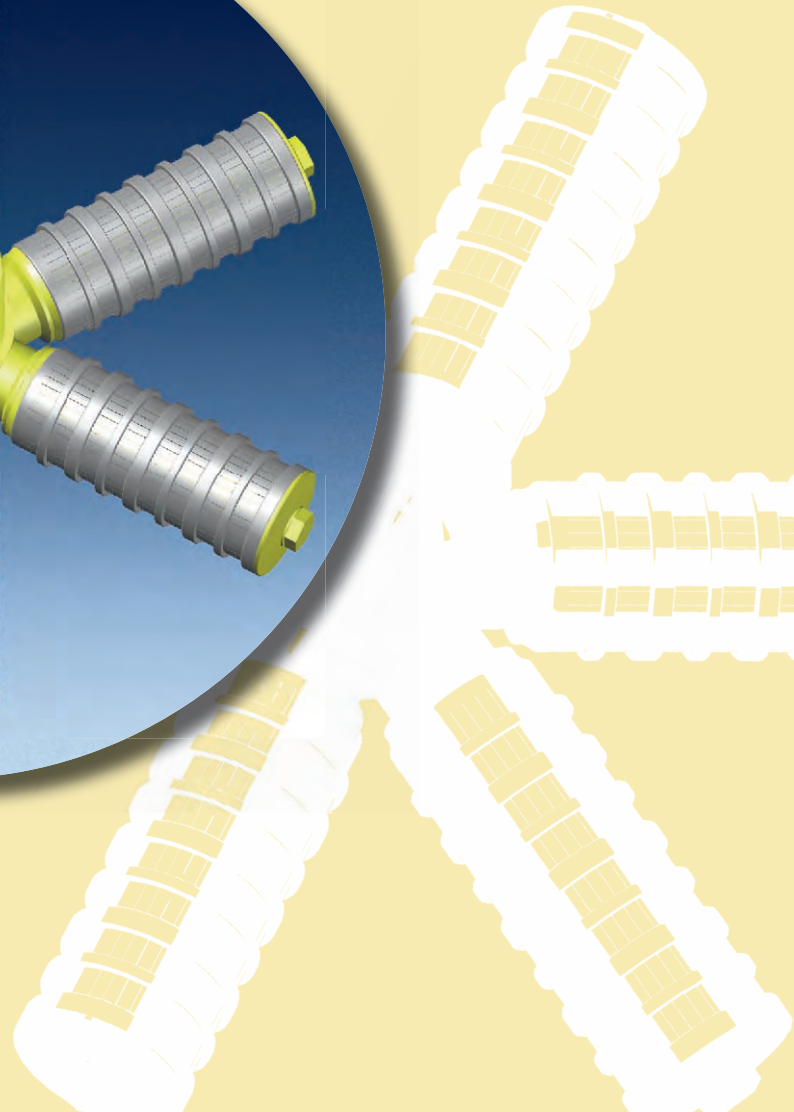
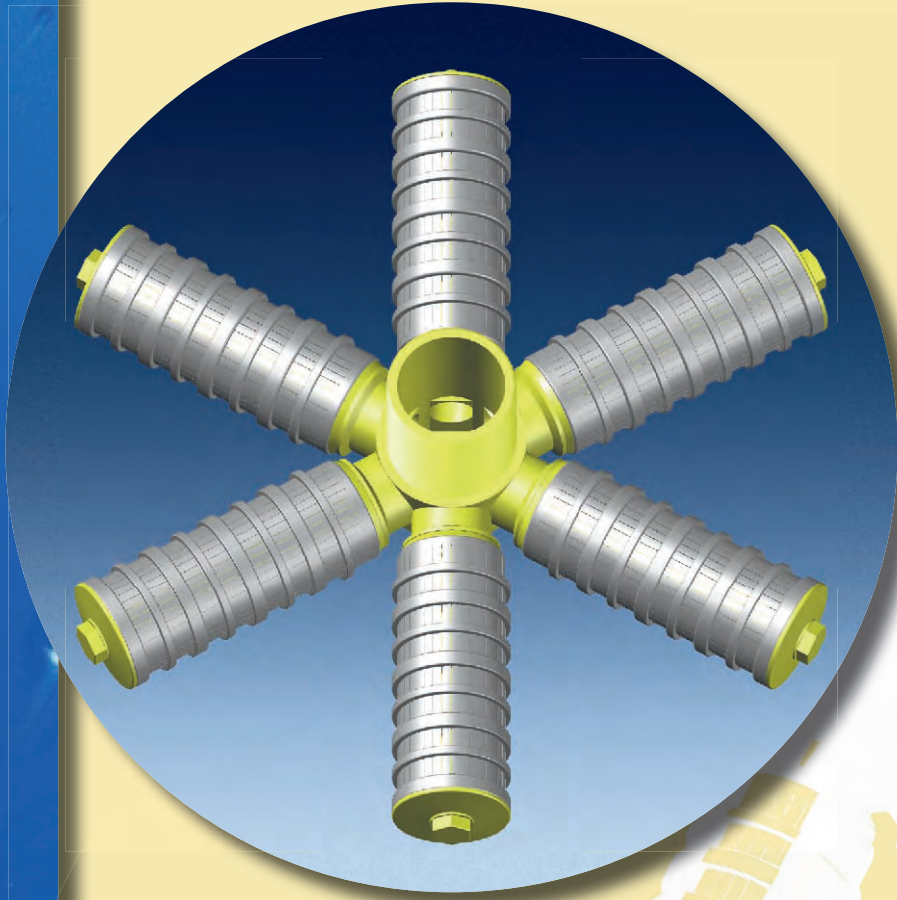
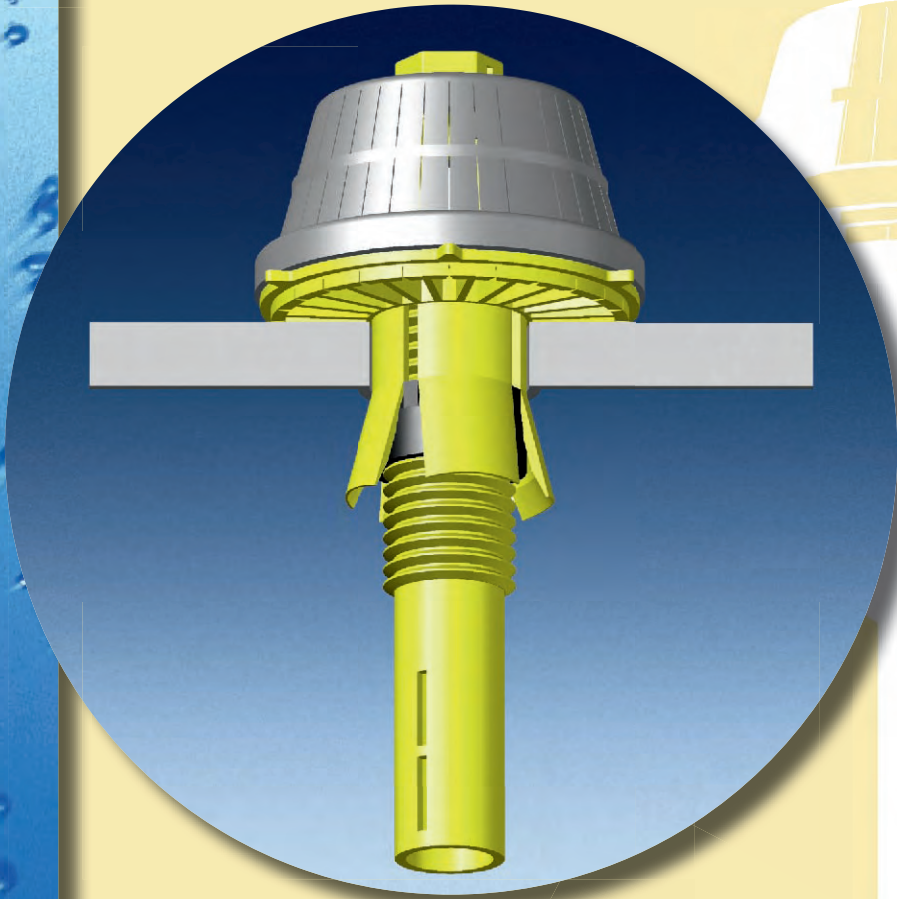


KSH



DIN EN ISO 9001-2008



Material- beständigkeit	Constancy of the material	Résistance du matériel	Resistencia del Material
Unsere Filterdüsen und Filterdüsensterne werden aus Polypropylen hergestellt. Polypropylen (PP) ist in Abhängigkeit vom Druck zum Beispiel beständig bei 60°C (333 K) gegen:	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:	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:	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:
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)	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)	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)	amoniaco, sol. 10 % formaldehído, sol. 10 % isopropanol, cualquier conc. metanol, sol. 50 % sosa cáustica, sol. 50 % ácido clorhídrico, conc. 50 % ácido sulfúrico, conc. 50 % agua de soda Ozono 20°C, 50 pphm (0,5mg/L)
Polypropylen ist physiologisch unbedenklich.	Polypropylene is physiologically unobjectionable.	Le polypropylène est physiologiquement neutre.	El polipropileno es inocuo.
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.	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.	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.	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.
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.	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.	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.	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 con nosotros para especificaciones.
Für Heißwasser bis max. 135°C empfehlen wir in Abhängigkeit vom Druck PVDF. (Bedingt beständig gegen konzentrierte Laugen).	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 solutions).	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).	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).
Farben für Schlitz (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	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	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	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
Anzugsmoment siehe Montageanleitungen	Tightening torque see at Installation-instruction	Couple de serrage voir instructions de montage	Par de apriete en el manual de instrucciones
1 mWS = ca. 0,1 bar	1 mWS = approx. 0,1 bar	1 m de colonne d'eau = env. 0,1 bar	1 mWS = aprox. 0,1 bar
Gewinde in Anlehnung an DIN ISO 228 für G, BSP ANSI B1.20.1-1983 für NPT, NPSM ANSI B1.1a-1984 für UN	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	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	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
Maße in mm.	Dimensions in mm.	Dimension en mm.	Dimensiones en mm.
Irrtümer / Druckfehler Technische Änderungen vorbehalten.	Error / Pressure Failure We reserve the right to alter specifications.	Sous réserve de fautes ou d'erreurs d'impression et de modifications techniques.	Error / Fallo de Presión Nos reservamos el derecho de alterar las especificaciones técnicas.
Alle technischen Informationen verstehen sich ohne jede Gewähr. Es gelten die Angaben des jeweils angeforderten Datenblattes.	No responsibility is taken for the correctness of the technical information. Only specifically provided data sheets are valid.	Toutes les informations techniques sont sans garantie. Seules les fiches techniques spécifiquement fournies au client sont valables.	Todos informaciones técnicas son sin garantía. Solamente nuestras hojas de datos específicos directamente transmitidos al cliente son válidos.

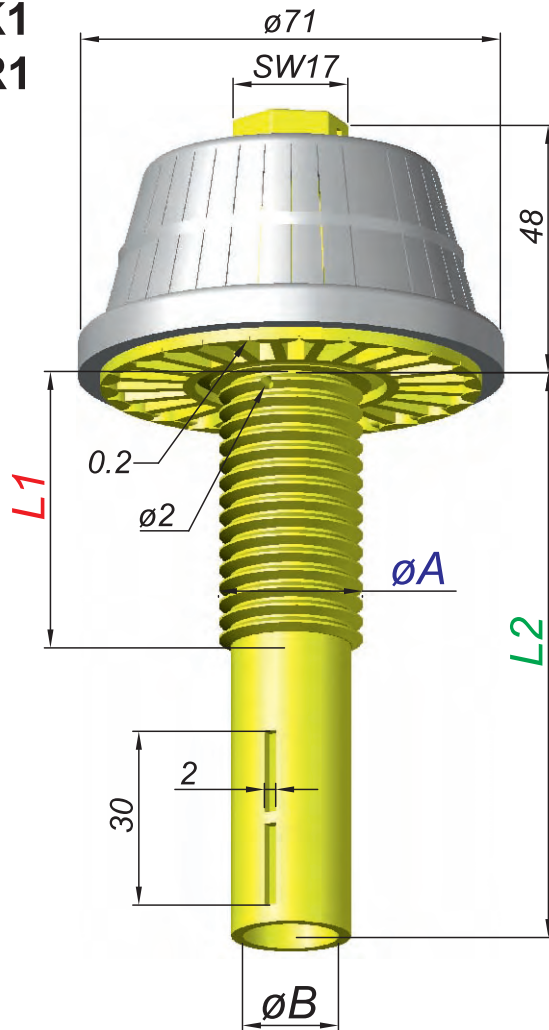
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Filter-Nozzles

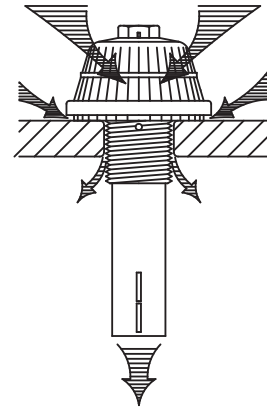
Crépines à filtre

Toberas filtrantes

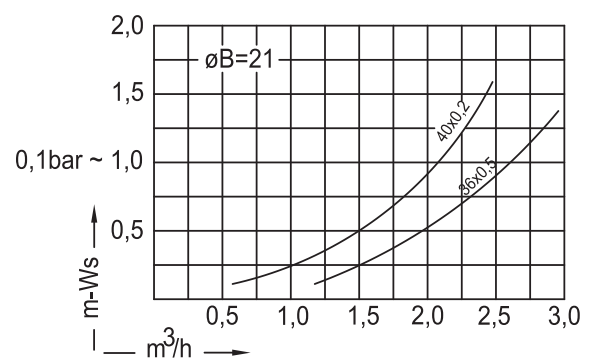
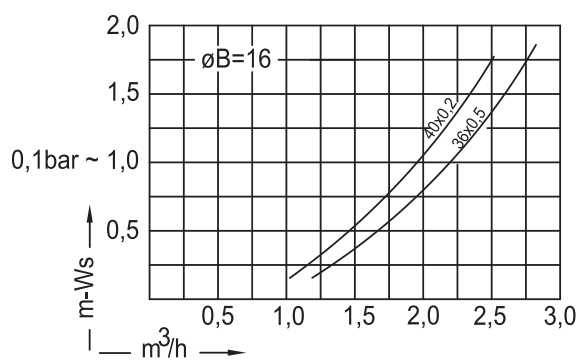
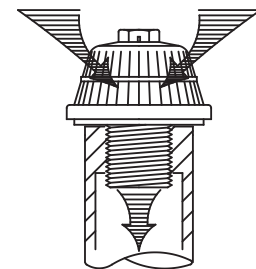
Typ K1
/ KR1



Typ K1



Typ KR1



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	ϕA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	ϕB			
✉	K1 KR1	40x0,2 = 1,95 cm ² 36x0,35 = 2,96 cm ² 20x0,5 = 2,35 cm ² 36x0,5 = 4,23 cm ² 20x0,8 = 3,78 cm ² 36x1,0 = 8,46 cm ² 24x1,5 = 7,05 cm ² 20x2,0 = 9,50 cm ²	G1"	33,25	20	80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm ²			
			1 1/4" WW	32	20, 30, 45, +5+5...					
			M30 x 3.5	30	30					
						G3/4"	26,5	20, 30, 45, +5+5...	80, 110, 140, 200, 250, 300, 350, ...	16 = 2,0 cm ²
			1" WW	25,4	20, 45, +5+5...					
			M24	24	25, 45, +5+5...					
						M22 x 1,5	22	45, +5+5...	80, 110, 140, 200, ...	13 = 1,3 cm ²
			G1/2"	21	15, 20, 40					
			M20	20	45, +5+5...					
						G3/8"	16,7	20		

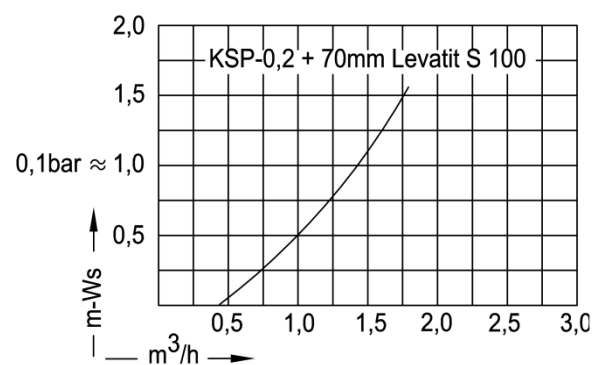
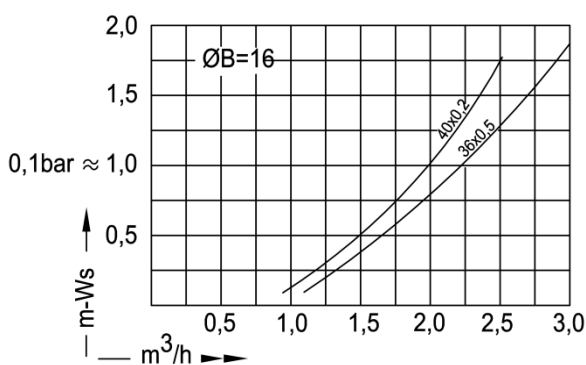
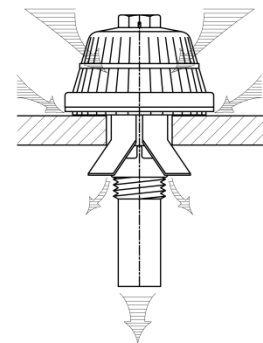
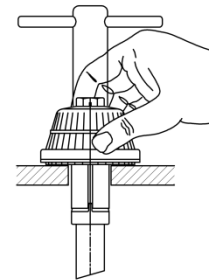
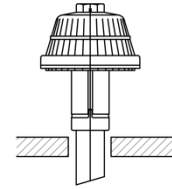
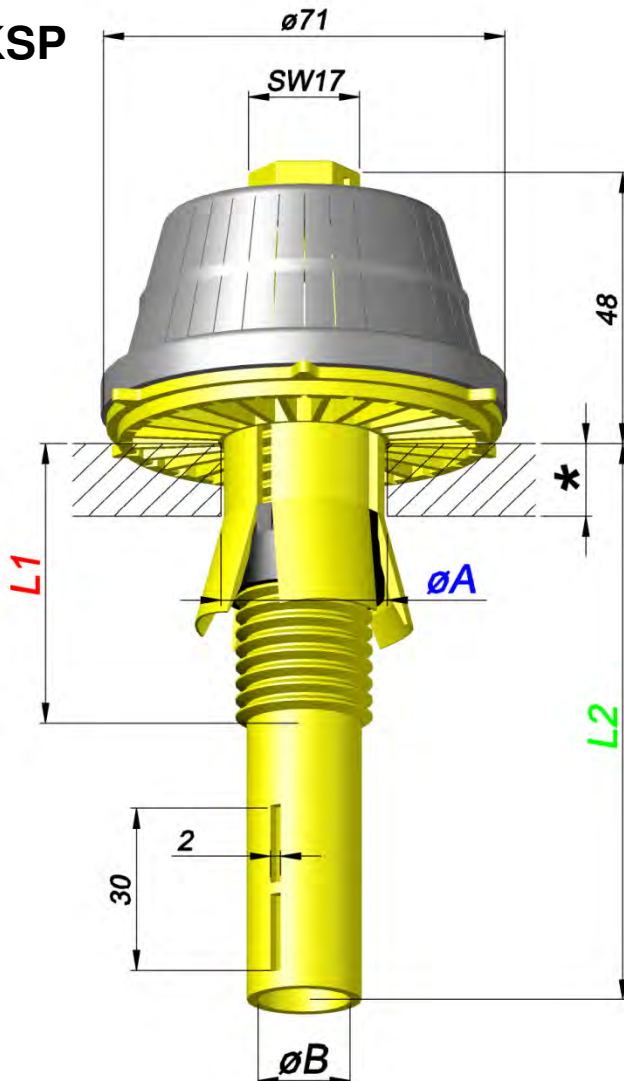
Filterdüsen

Filter-Nozzles

Crépines à filtre

Toberas filtrantes

Typ KSP



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	*	L1	Schaft Shaft Longueur de tige Tija	L2	$\varnothing A$	$\varnothing B$
✉	KSP	40 x 0,2 = 1,95 cm ²	8 - 28	50	80, 110, 140, 200, 250		28-29,5; 29,5-31,5; 31,5-33;	16 = 2,0 cm ²
		36 x 0,35 = 2,96 cm ²	25 - 45	73	110, 140, 200, 250		33-34,5; 34,5-36;	
		20 x 0,5 = 2,35 cm ²						
		36 x 0,5 = 4,23 cm ²	8 - 28	50	80, 110, 140, max. 200		25-27,5 ; 26,5-28,5	13 = 1,3 cm ²
		20 x 0,8 = 3,78 cm ²	25 - 45	73	80, 110, 140, max. 200			
		36 x 1,0 = 8,46 cm ²						
24 x 1,5 = 7,05 cm ²								
		20 x 2,0 = 9,50 cm ²						

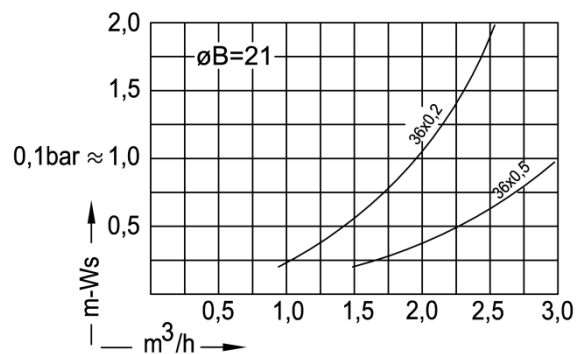
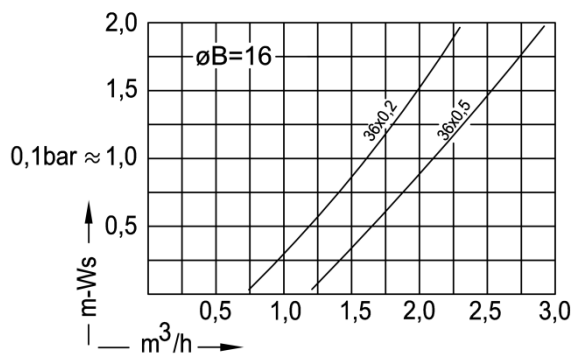
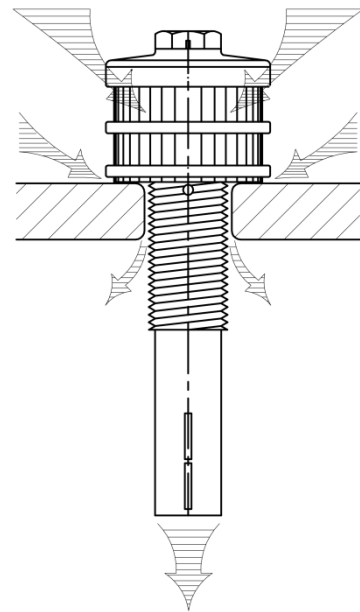
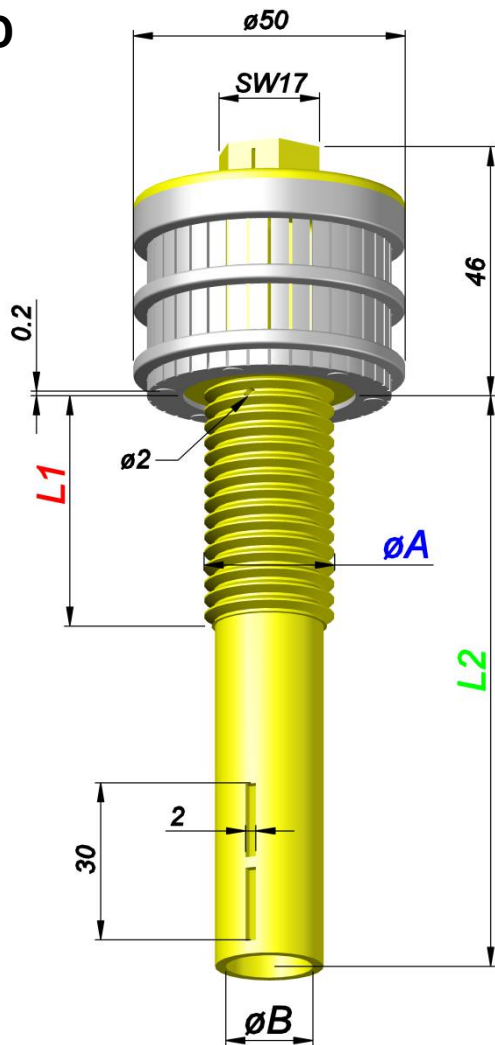
Filterdüsen

Filter-Nozzles

Crépines à filtre

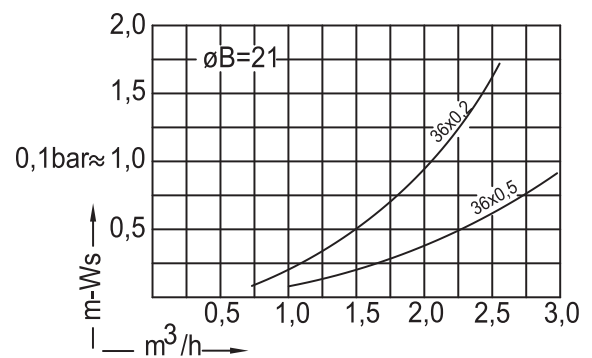
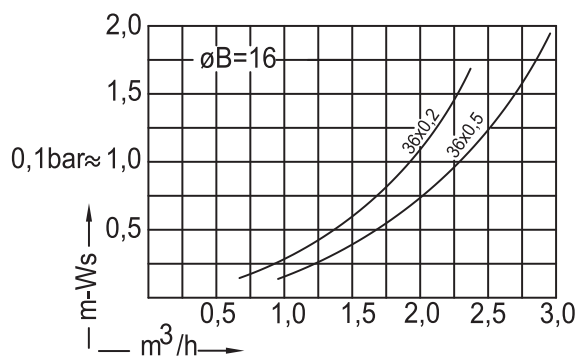
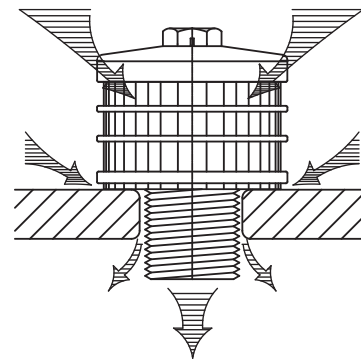
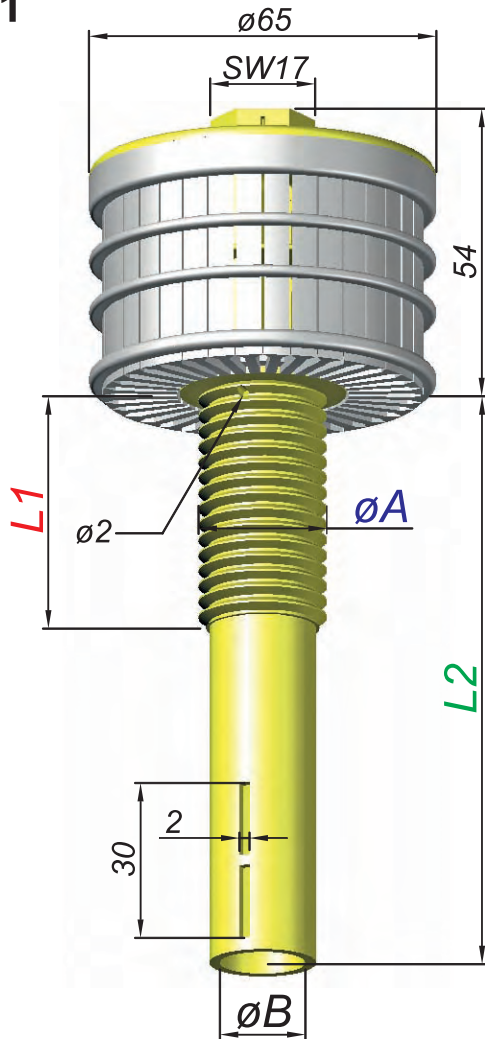
Toberas filtrantes

Typ D



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	ϕA	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	ϕB
	D	24 x 0,2 = 0,91 cm ²	1 1/4" WW	32	20, 30, 45, +5+5...	80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm ²
		36 x 0,2 = 1,37 cm ²	M30 x 3,5	30	30		
		36 x 0,3 = 2,05 cm ²	G 3/4"	26,5	20, 30, 45, +5+5...	80, 110, 140, 200, 250, 300, 350, ...	16 = 2,0 cm ²
		36 x 0,5 = 3,42 cm ²	1" WW	25,4	20, 45, +5+5...		
		36 x 0,8 = 5,46 cm ²	M24	24	25, 45, +5+5...		
		24 x 1,0 = 4,56 cm ²	M22 x 1,5	22	45, +5+5...		
		24 x 1,5 = 6,84 cm ²	G 1/2"	21	20	80, 110, 140, 200, ...	13 = 1,3 cm ²
		20 x 2,0 = 7,00 cm ²	M20	20	45, +5+5...		
		8 x 2,5 = 3,5 cm ²	G 3/8"	16,7	20		
		8 x 5,0 = 7,00 cm ²					

Typ C1



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	Gewinde Thread Filetage Rosca	0A	Gewindelänge Thread length Longueur de filetage Largura de la rosca	L1	Schaft Shaft Longueur de tige Tija	L2	0B
✉	C1	36 x 0,2 = 1,95 cm²	1¼"WW	32	25, 30, 45	80, 110, 140, 200, 250, 300, 350, ...	21 = 3,4 cm²		
		36 x 0,3 = 2,90 cm²	M30	30 x 3.5	30				
		36 x 0,5 = 4,90 cm²	G 3/4"	26,5	20, 45, +5+5...				
		36 x 0,7 = 6,80 cm²	1"WW	25,4	20, 45, +5+5...				
		36 x 1,0 = 9,80 cm²	M24	24	20, 45, +5+5...				
						80, 110, 140, 200, 250, 300, 350, ...	16 = 2,0 cm²		

Filterdüsen

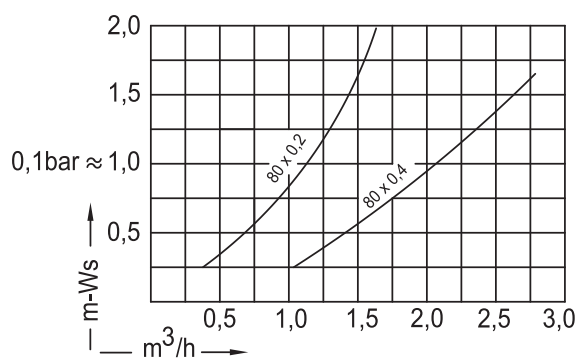
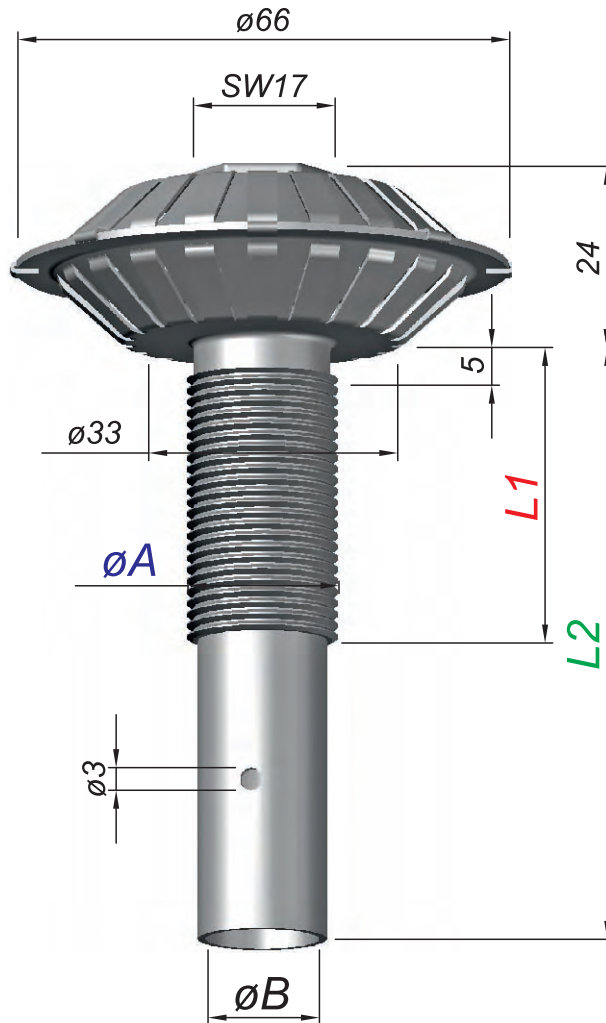
Filter-Nozzles

Crépines à filtre

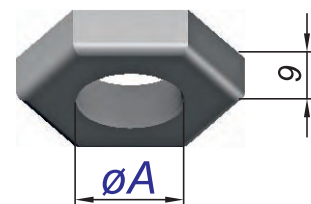
Toberas filtrantes

Typ V10

V4A
(316L)



Typ MUVA



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze 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	$\varnothing B$
	V10	80 x 0,2 = 1,68 cm ² 80 x 0,4 = 3,52 cm ²	M20x1,5	20	35 +5 +5 ...	80, 100, ...	16 = 2,0 cm ²
	MUVA		M20x1,5				

Filterdüsen

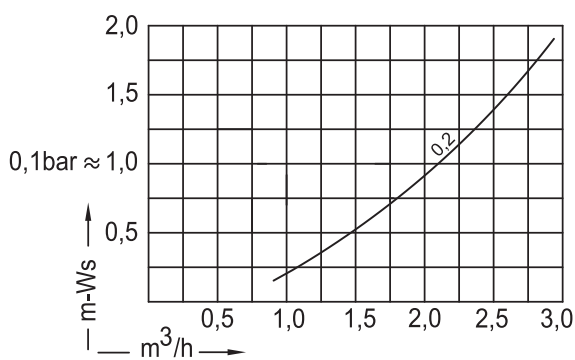
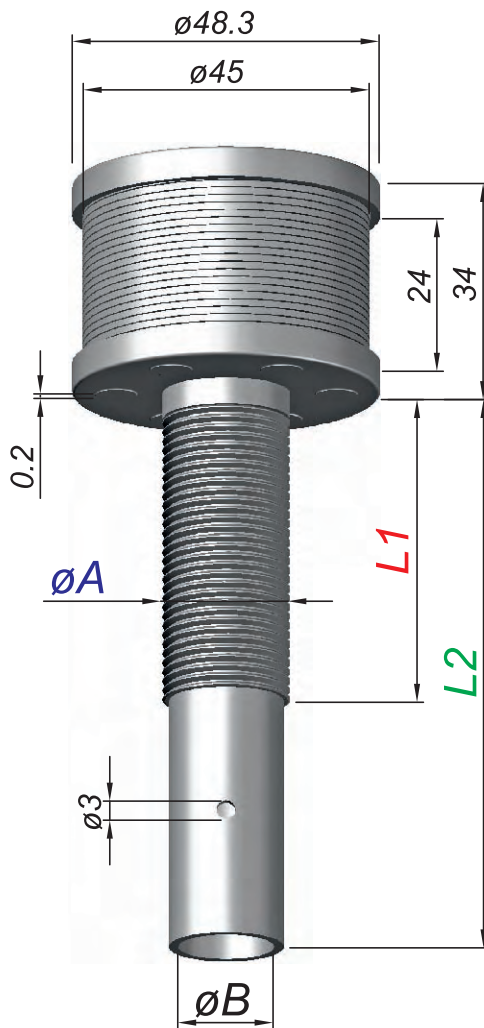
Filter-Nozzles

Crépines à filtre

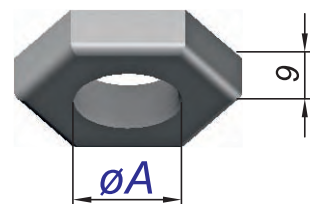
Toberas filtrantes

Typ V20

V4A
(316L)



Typ MUVA



Bestellung Ordering Commande Encargo	Type 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
	V20	0,2 = 5,65 cm ²	M20x1,5	20	40, +5 +5...	80, 100, ...	16 = 2.0 cm ²
	MUVA		M20x1,5				

Filterdüsenatz

für Zwischenböden

Filter-Nozzles-Set

For intermediate bottoms

Crépines à filtre

Assortiment pour planches intermédiaies

Conjuto de

Toberas para placas intermedias

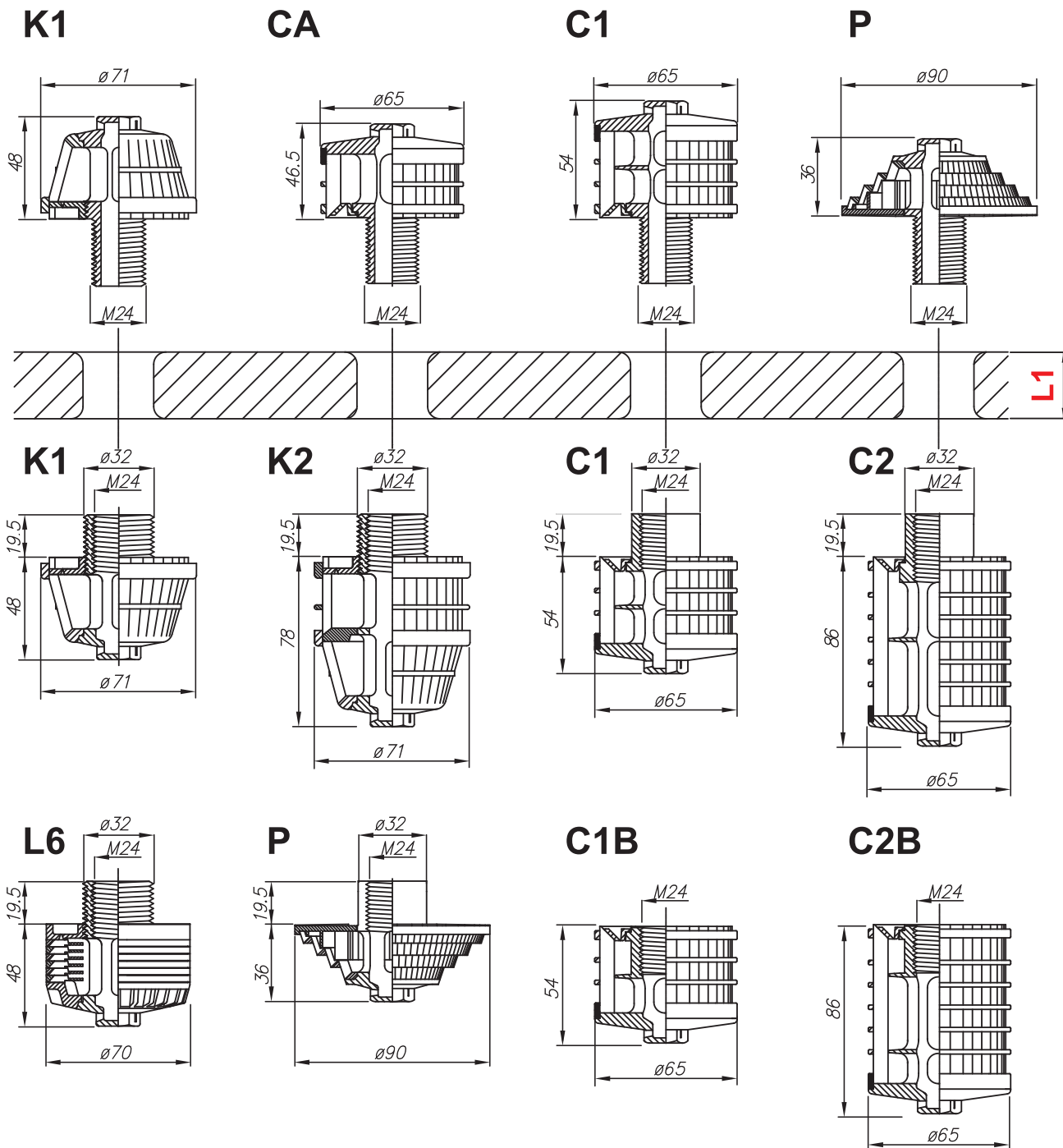


Filterdüsenatz
für Zwischenböden

Filter-Nozzles-Set
For intermediate bottoms

Crépines à filtre
Assortiment pour planches
intermédiaies

Conjuto de
Toberas para
placas intermedias



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

Gegenstromventil

Zur besseren Verteilung der Regeneriermittel

Counter Flow Valve

For the uniform distribution of the regenerants

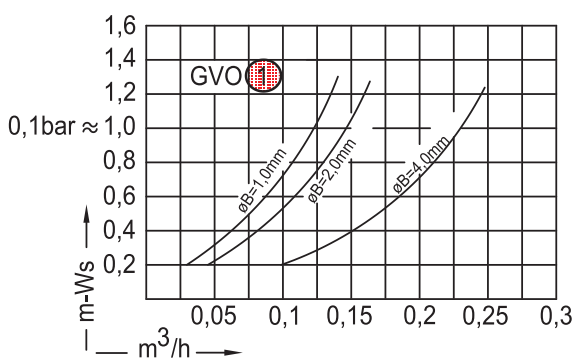
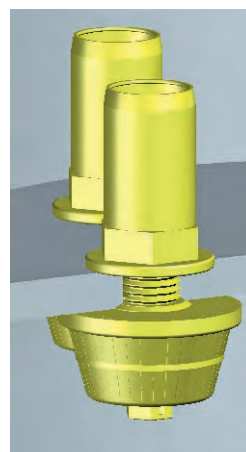
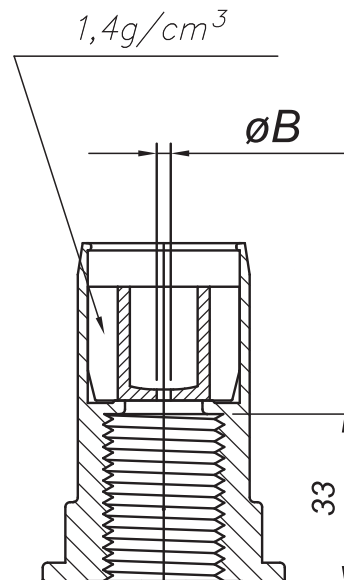
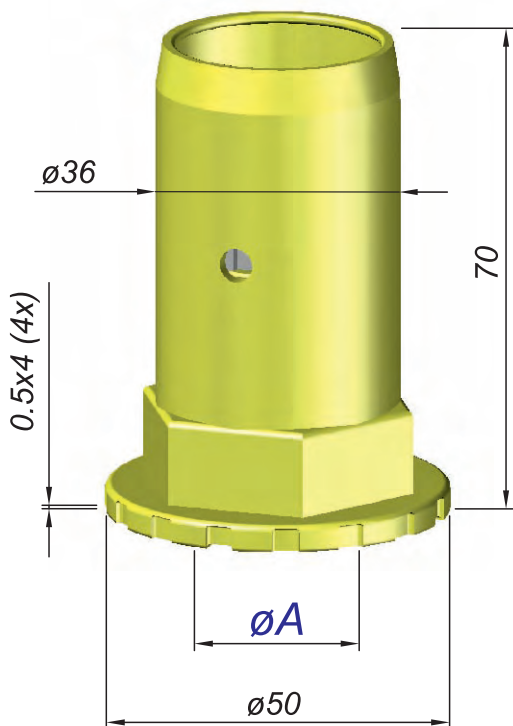
Soupape à contre


Pour une meilleure répartition des solutions de régénération

Valvula de contra

Para la distribución uniforme de los reactivos de regeneracion

Typ GVO



Bestellung Ordering Commande Encargo	Type Type Type Tipa	Gewinde Thread Filetage Rosca	øA	øB
	GVO	1¼" WW	32	ø1,0 - ø2,0 - ø3,0 - ø4,0 - ø5,0 - ø6,0 - ø7,0 mm
		G 3/4"	26,5	
		M24	24	
		M20	20	

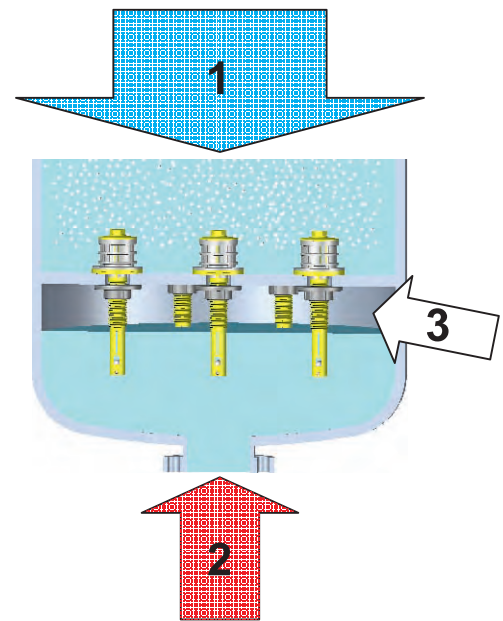
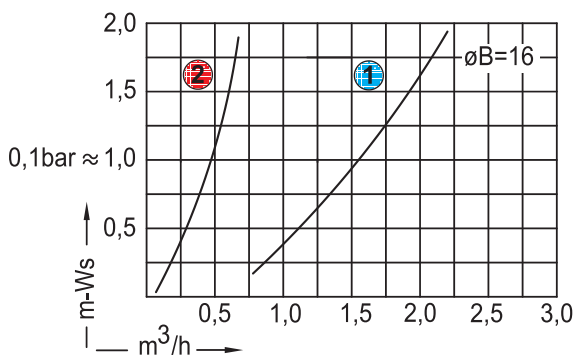
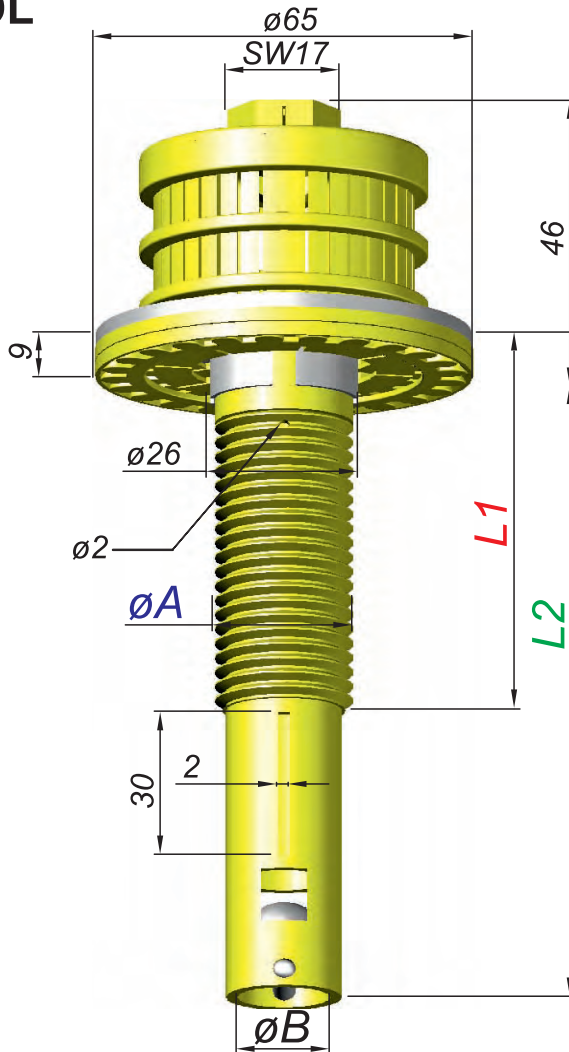
Filterdüsen

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	$\varnothing A$	Gewindelänge Thread length Longueur de filetage Largura de la rosca	Schaft Shaft Longueur de tige Tija	$\varnothing B$
	MDL	24 x 0,2 = 0,91 cm ² 36 x 0,2 = 1,37 cm ²	M24	24	60	120	16 = 2,0 cm ²

Filterdüsen für Drainagesystem

Filter-Nozzles for Drainage system

Système de drainage

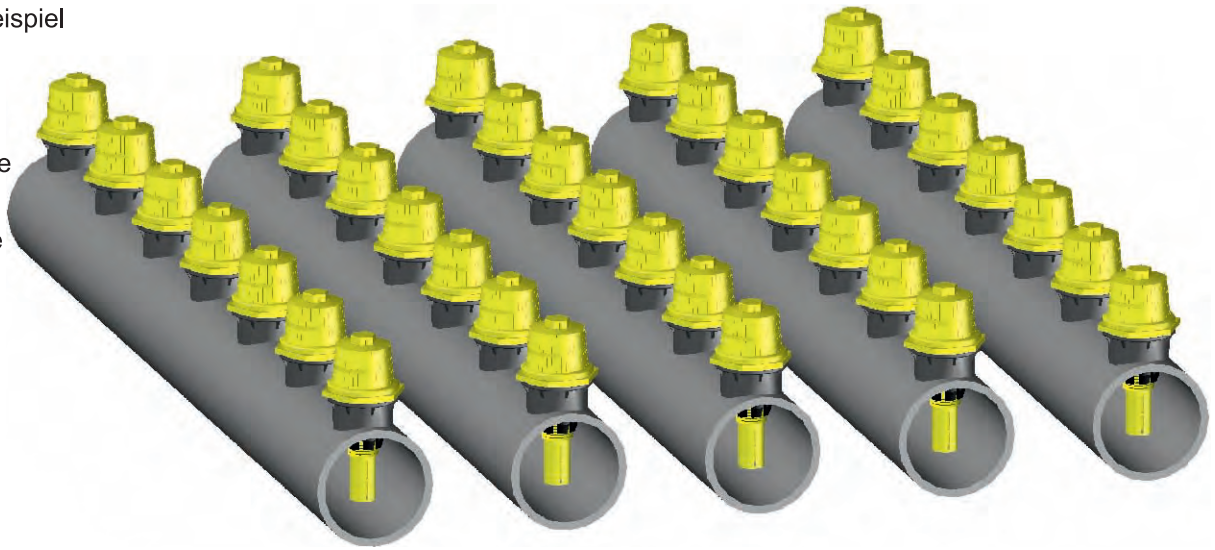
Sistemas de drenaje

Montagebeispiel

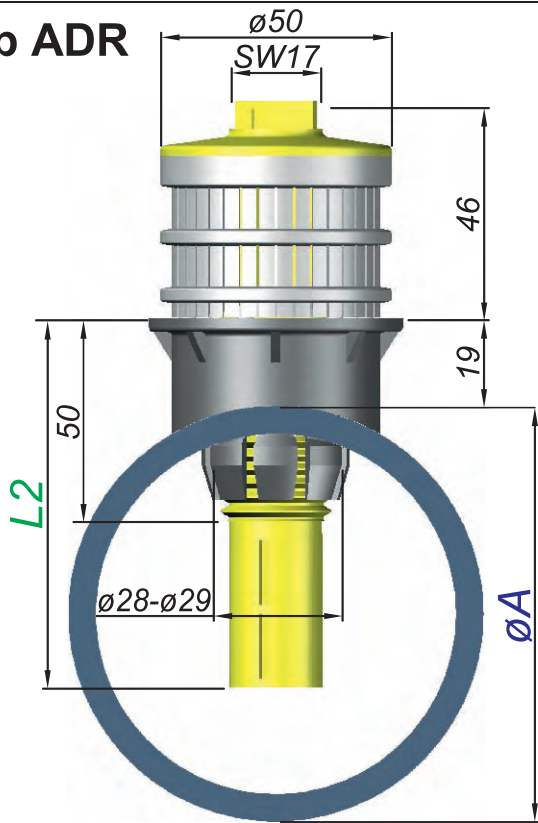
Installation procedure

Exemple de montage

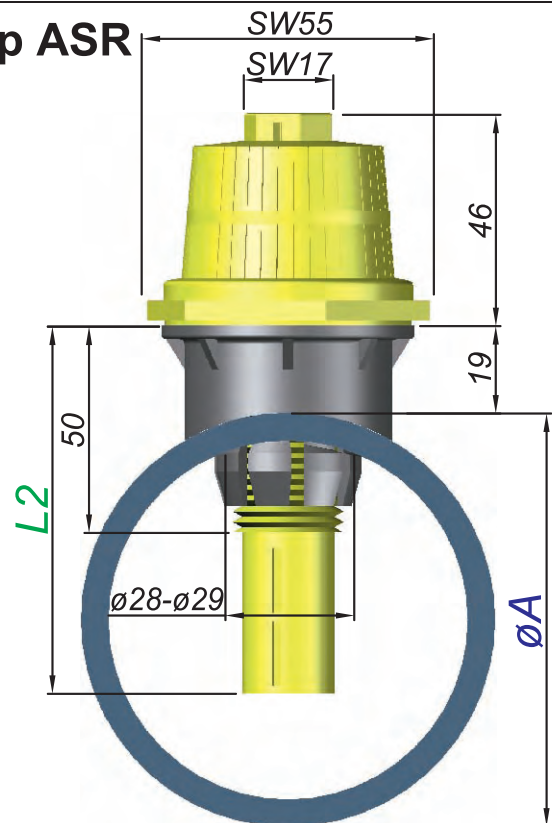
Ejemplo de montaje



Typ ADR



Typ ASR



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	ØA	Schaft Shaft Longueur de tige Tija	L2	Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitze Slots Fentes Ranuras	ØA	Schaft Shaft Longueur de tige Tija	L2
	ADR	24 x 0,2 = 0,91 cm ² 36 x 0,2 = 1,37 cm ² 36 x 0,3 = 2,05 cm ² 36 x 0,5 = 3,42 cm ² 36 x 0,8 = 5,46 cm ² 24 x 1,0 = 4,56 cm ² 24 x 1,5 = 6,84 cm ² 20 x 2,0 = 7,00 cm ² 8 x 5,0 = 7,00 cm ²	60,3 63 75 90 110	Nach Angabe according detail selon détails adecuado detalle		ASR	36 x 0,2 = 1,72 cm ² 36 x 0,35 = 2,65 cm ² 30 x 0,5 = 3,78 cm ² 18 x 1,0 = 4,64 cm ² 18 x 2,0 = 9,29 cm ²	60,3 63 75 90 110	Nach Angabe according detail selon détails adecuado detalle		

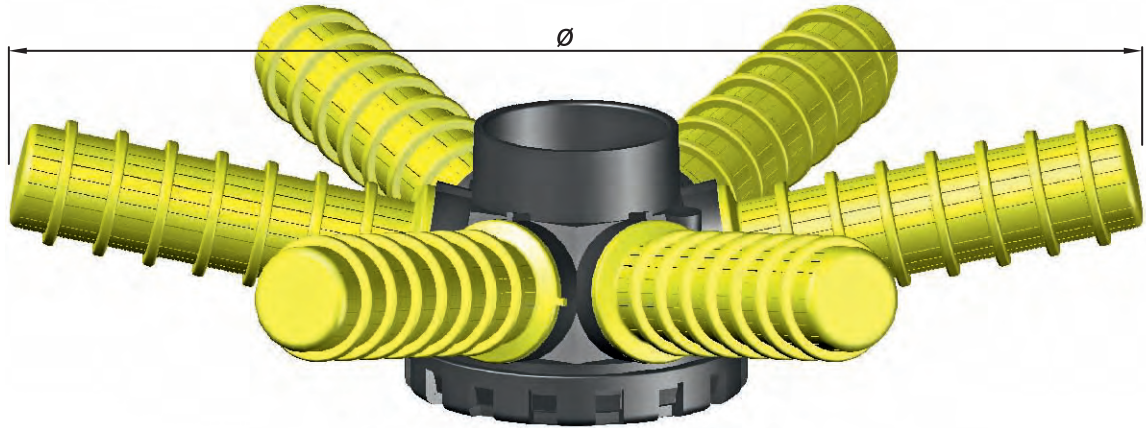
Filterdüsen-Sterne
mit 6 Armen

Filter-Nozzles-Stars
with 6 arms

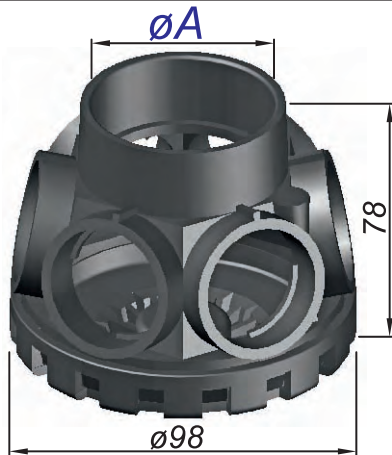
Crépines
étoiles
à 6 bras

Estrellas para
toberas a filtro
con 6 brazos

Typ SS6

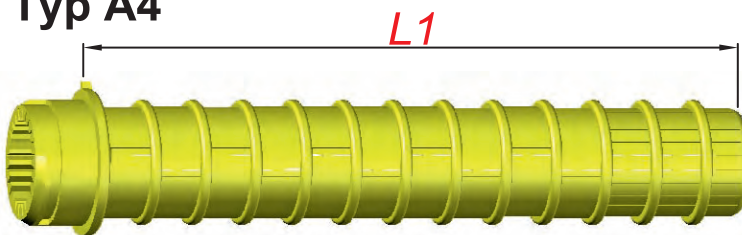


Typ MSS6



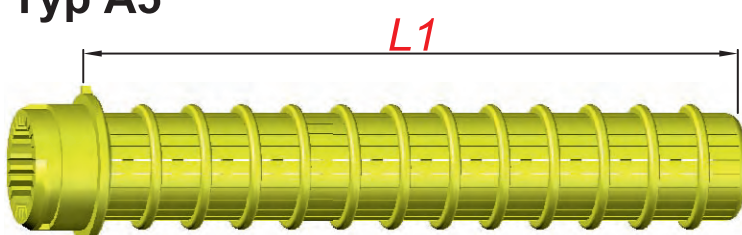
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	ØA	Material Material Materiau Material
	MSS6	ø 1.05" ø 1" ø 1¼" ø 1.9" ø 50	ABS

Typ A4



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

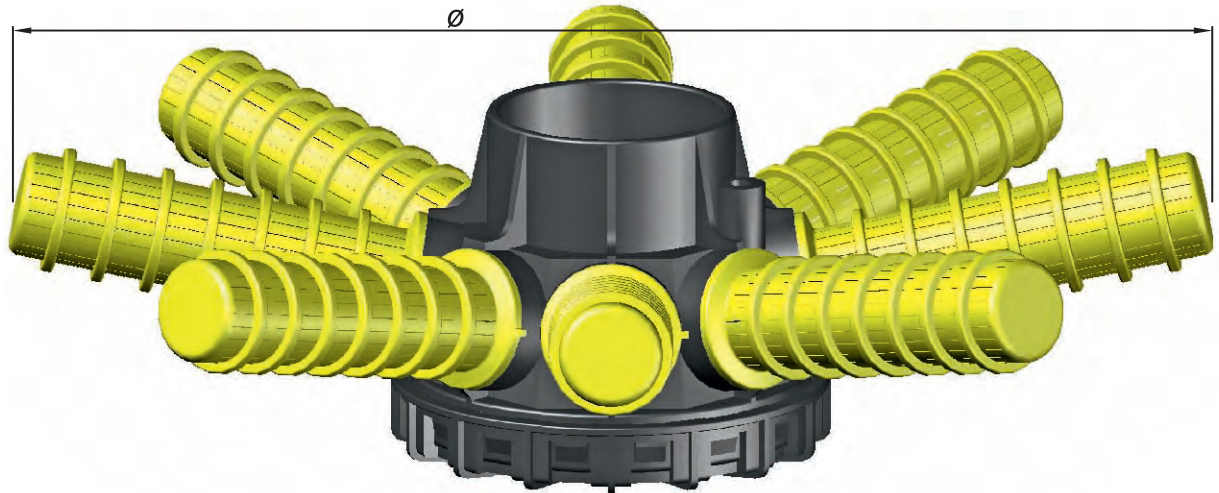
Filterdüsen-Sterne
mit 8 Armen

Filter-Nozzles-Stars
with 8 arms

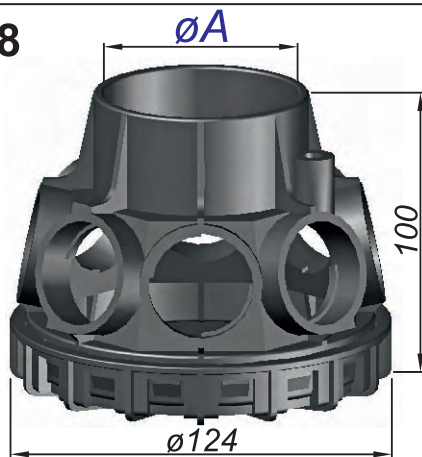
Crépines étoiles
à 8 bras

Estrellas para
toberas a filtro
con 8 brazos

Typ SS8

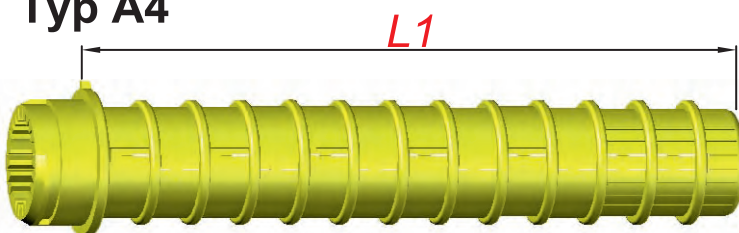


Typ MSS8



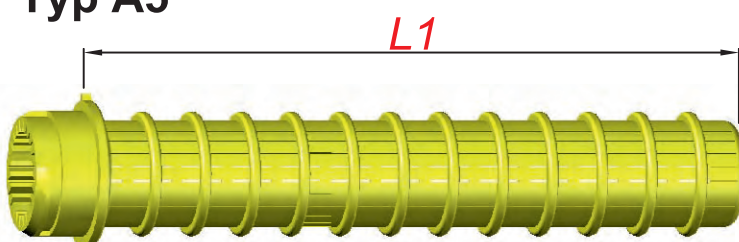
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	ø A	Material Material Materiau Material
	MSS8	ø 60,3 ø 63	ABS

Typ A4



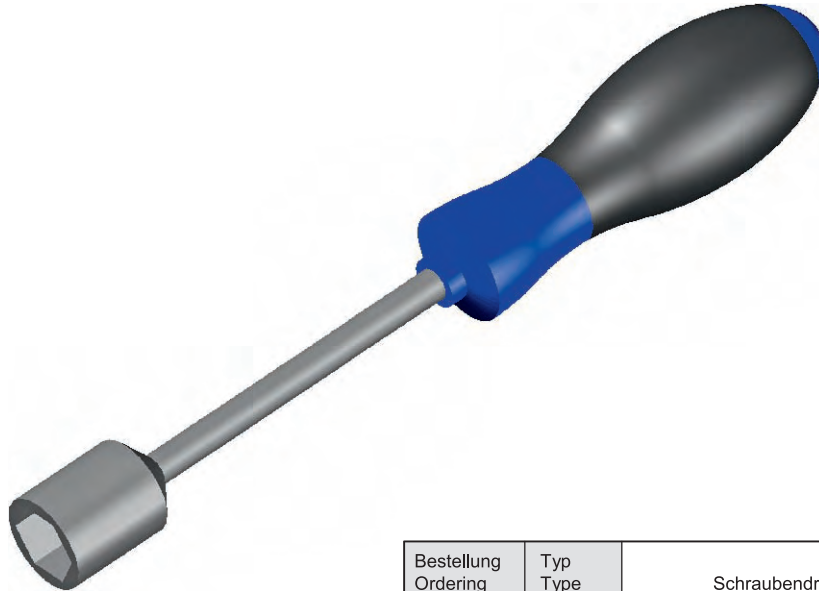
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	L1	= ø
	A4	0,25	143	= ø 397
			185	= ø 479
			210	= ø 532
		teilweise geschlossen partially closed		

Typ A5



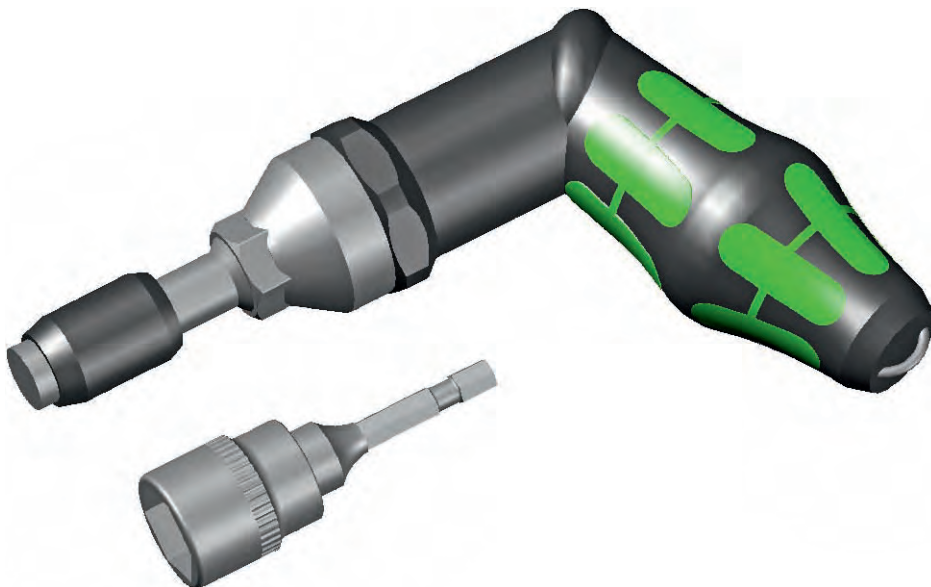
Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schlitz Slots Fentes Ranuras	L1	= ø
	A5	0,25	85	= ø 284
			113	= ø 338
			143	= ø 397
			185	= ø 479
			210	= ø 532
			240	= ø 586
			270	= ø 644
			312	= ø 726

Typ HSD



Bestellung Ordering Commande Encargo	Typ Type Type Tipa	Schraubendreher Screwdriver
	HSD	SW17

Typ DSD



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

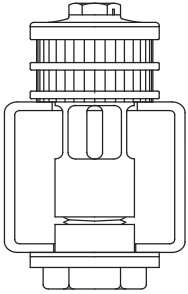
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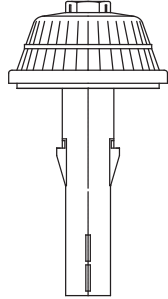
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fabrication spéciale
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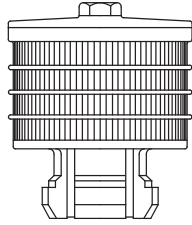
DSR



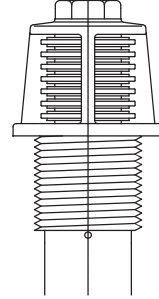
KE



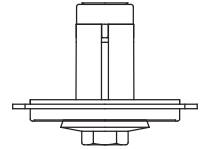
R2DB



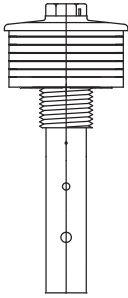
G2



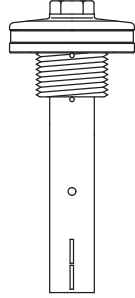
KSPB



LB



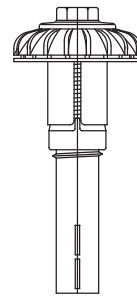
LB2



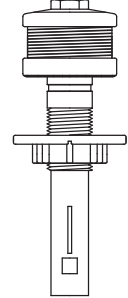
MST



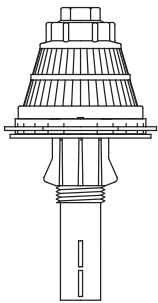
RSP



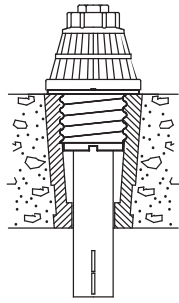
MV



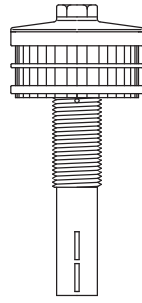
S2DB



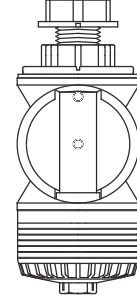
S2GR



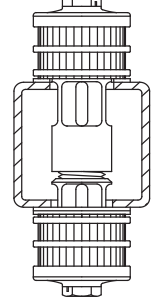
CA



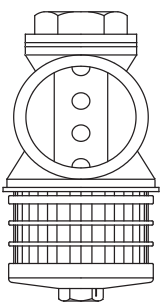
SLR



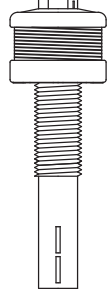
DD



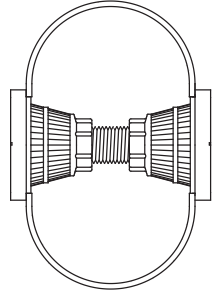
SCR



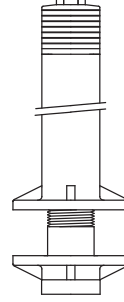
VP



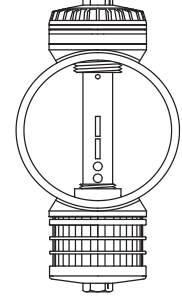
S2/S2

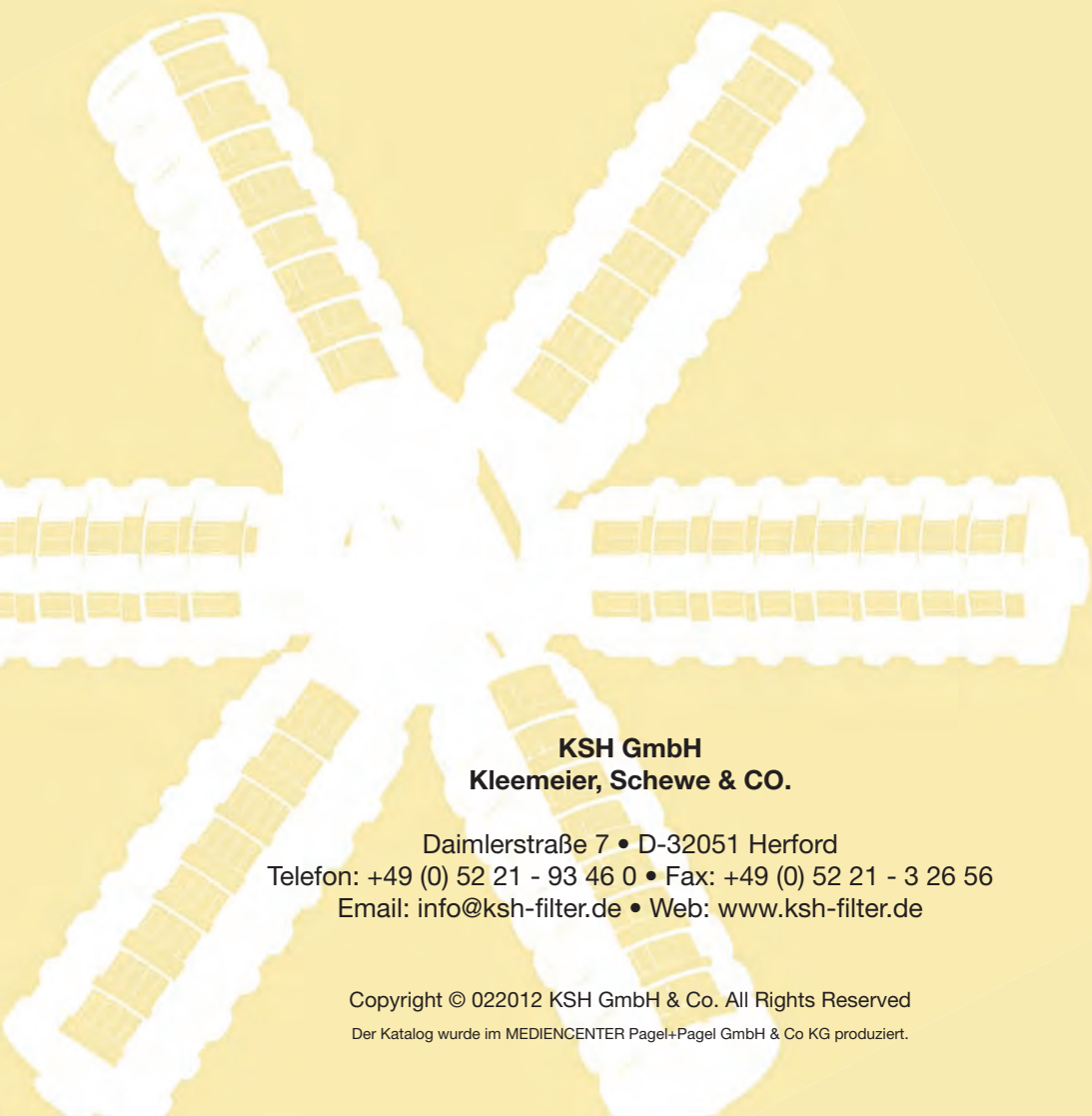
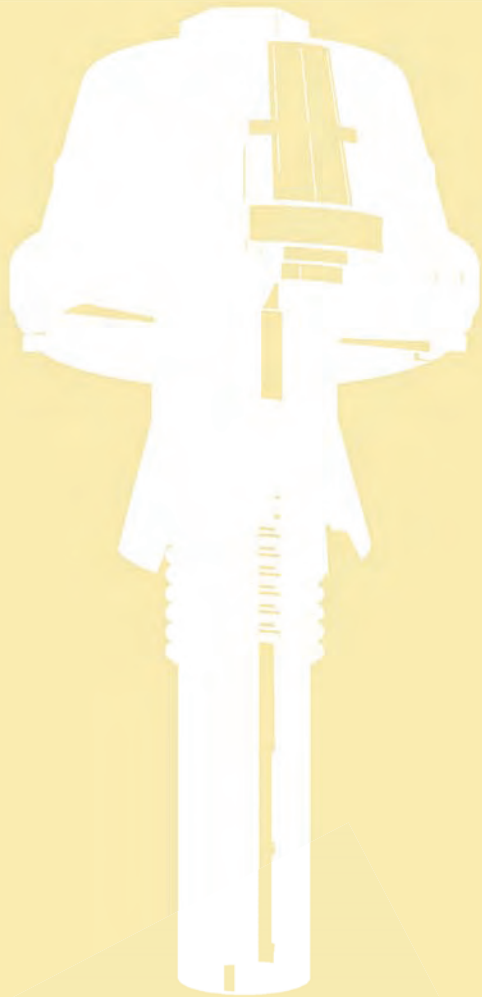


Lanzen



LCR





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