



Spitzdüsen

Geballte Kraft nach vorne durch 4 Vorstrahl-Düsen. Die scharfen Kanten schneiden, zerreißen und durchbohren jede Verstopfung. Hergestellt aus verschleißfestem, gehärtetem Stahl. Alle Düsen ab Art. 60.050 sind mit Keramikeinsätzen ausgerüstet. Dadurch wird der Wirkungsgrad im Vergleich zu direkt gebohrten Düsen erheblich gesteigert. Die Lebensdauer wird um ein Mehrfaches erhöht.

Einsatzgebiet

- Durchdringen von total verstopften Rohren
- Öffnen von Verwurzungen
- Öffnen von gefrorenen Leitungen
- Ausspülen von Stahlrohren nach Pressvortrieb



Pointed nozzles

Concentrated powerful advance by means of 4 front jet nozzles. The sharp edges cut, break and penetrate through every kind of blockage. Made of wear-resistant, hardened steel. All nozzles from art. 60.050 onward are provided with ceramic inserts. Because of this, the efficiency is considerably higher compared with those nozzles with drilled holes and the service life is several times longer.

Applications

- Penetrating of completely clogged pipes
- Opening of interlaced roots
- Opening of frozen pipelines
- Flushing out at hydraulic thrust boring

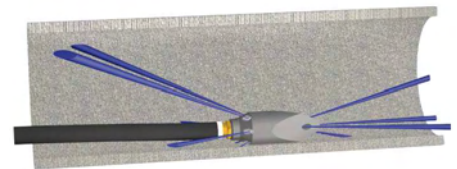
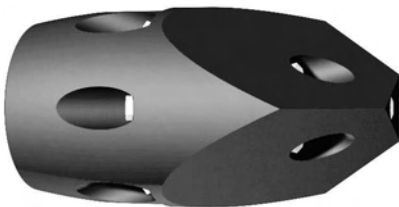


Buses pointues

















Toute l'énergie est concentrée vers l'avant au travers des 4 jets frontaux. Les arêtes tranchantes découpent, déchirent et transpercent chaque obstruction. Fabrication en acier trempé résistant à l'usure. A partir de l'art. 60.050, toutes les buses sont munies d'inserts céramique interchangeables. L'efficacité, comparée au percement direct, est considérablement améliorée et la durée de vie considérablement augmentée.















Domaine d'application












- Passage dans les conduites totalement bouchées
- Ouverture dans un réseau de racines
- Percer une conduite gelée
- Rinçage des tubes acier lors de forages pousse-tube



Spitzdüsen 1/8" - 1 1/4" | Pointed nozzles 1/8" - 1 1/4" | Buses pointues 1/8" - 1 1/4"

					
	60.012SL15	60.025SL15	60.025SL30	60.038-30	60.038-60
	1/8	1/4	1/4	3/8	
	20 - 40	22 - 50	22 - 50	28 - 100	
	15	20	30	30	60
	3 × Ø 0.95	3 × Ø 0.90	4 × Ø 1.35	3 × Ø 1.30	3 × Ø 1.50
	4 × Ø 0.50	4 × Ø 0.60	4 × Ø 0.70	4 × M4	4 × M4
	25°	25°		20°	
	15°	15°		15°	
	16 × 25	20 × 33		25 × 40	25 × 40
	0.020	0.034	0.032	0.060	0.060
	350				
	—	—		—	

			
	60.050	0061.0504	61.050
	1/2	M4	1/2
	40 - 150		40 - 150
	50		50
	3 × M6		3 × M6
	4 × M4		3 × M4
	25°		25°
	15°		15°
	32 × 55		32 × 82
	0.140		0.145
	350		350
	x		x

	Anschlussgewinde ["] Connecting thread ["] Raccord fileté ["]		Schubstrahl Thrust jet Jet de poussée		Strahlwinkel vorne Jet angle forward Angle de jet avant		Recycling Recycling Recyclage
	Anwendungsbereich [mm] Application range [mm] Champ d'application [mm]		Frontstrahl Front jet Jet frontal		Abmessungen [mm] Measures [mm] Dimensions [mm]		Maximaldruck [bar] Maximum pressure [bar] Pression maximale [bar]
	min. l/min bei 100 bar min. l/min at 100 bar min. l/min à 100 bar		Strahlwinkel hinten Jet angle backward Angle de jet arrière		Gewicht [kg] Weight [kg] Poids [kg]	*	optional Frontstrahl optional front jet optional jet frontal



60.075



0061.0504



61.075



3/4
 60 - 250
 100
 3 × M6
 4 × M4
 25°
 15°
 Ø x L
 38 × 80
 0.320
 350
 x

3/4
 60 - 250
 100
 3 × M6
 3 × M4
 25°
 15°
 38 × 104.5
 0.325
 350
 x



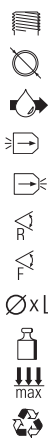
60.100



0061.1004


















61.100




























1
 100 - 300
 150
 6 × M6
 4 × M6
 25°
 15°
 Ø x L
 48 × 90
 0.550
 250
 x

1
 100 - 300
 150
 6 × M6
 3 × M6
 25°
 15°
 48 × 123.5
 0.560
 250
 x

	Anschlussgewinde [“] Connecting thread [“] Raccord fileté [“]		Schubstrahl Thrust jet Jet de poussée		Strahlwinkel vorne Jet angle forward Angle de jet avant		Recycling Recycling Recyclage
	Anwendungsbereich [mm] Application range [mm] Champ d'application [mm]		Frontstrahl Front jet Jet frontal		Abmessungen [mm] Measures [mm] Dimensions [mm]		Maximaldruck [bar] Maximum pressure [bar] Pression maximale [bar]
	min. l/min bei 100 bar min. l/min at 100 bar min. l/min à 100 bar		Strahlwinkel hinten Jet angle backward Angle de jet arrière		Gewicht [kg] Weight [kg] Poids [kg]	*	optional Frontstrahl optional front jet optional jet frontal

		
60.100L	0061.1004	61.100L
 1	M6	1
 150 - 400		150 - 400
 200		200
 6 × M10		6 × M10
 3 × M8		3 × M8
 1 × M6		
 25°		25°
 15°		15°
 ØxL 68 × 187		68 × 220
 2.700		2.715
 250		250
 x		x

		
60.100L80	0061.1254	61.100L80
 1	M8	1
 150 - 500		150 - 500
 200		200
 6 × M10		6 × M10
 4 × M8		3 × M8
 10°		10°
 15°		15°
 ØxL 79 × 218		79 × 260
 4.680		4.705
 250		250
 x		x

	Anschlussgewinde ["] Connecting thread ["] Raccord fileté ["]		Schubstrahl Thrust jet Jet de poussée		Strahlwinkel vorne Jet angle forward Angle de jet avant		Recycling Recycling Recyclage
	Anwendungsbereich [mm] Application range [mm] Champ d'application [mm]		Frontstrahl Front jet Jet frontal		Abmessungen [mm] Measures [mm] Dimensions [mm]		Maximaldruck [bar] Maximum pressure [bar] Pression maximale [bar]
	min. l/min bei 100 bar min. l/min at 100 bar min. l/min à 100 bar		Strahlwinkel hinten Jet angle backward Angle de jet arrière		Gewicht [kg] Weight [kg] Poids [kg]	*	optional Frontstrahl optional front jet optional jet frontal














60.125



0061.1004



61.125

	1 1/4
	150 - 400
	200
	6 × M6
	4 × M6
	20°
	15°
	Ø x L 58 × 100
	0.925
	250
	x

M6

1 1/4
150 - 400
200
6 × M6
3 × M6
20°
15°
Ø x L 58 × 133
0.940
250
x














60.125L



0061.1254














61.125L

	1 1/4
	200 - 800
	300
	6 × M10
	4 × M8
	10°
	15°
	Ø x L 98 × 258
	8.400
	250
	x

M8

1 1/4
200 - 800
300
6 × M10
3 × M8
10°
15°
Ø x L 98 × 300
8.425
250
x

	Anschlussgewinde ["] Connecting thread ["] Raccord fileté ["]		Schubstrahl Thrust jet Jet de poussée		Strahlwinkel vorne Jet angle forward Angle de jet avant		Recycling Recycling Recyclage
	Anwendungsbereich [mm] Application range [mm] Champ d'application [mm]		Frontstrahl Front jet Jet frontal		Abmessungen [mm] Measures [mm] Dimensions [mm]		Maximaldruck [bar] Maximum pressure [bar] Pression maximale [bar]
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