

Internal finishing

Introduction & technical information

INTERNAL FINISHING



Introduction & technical information



1. General user information

Brushes for internal finishing are suitable for use with hand-held and stationary tools with drill or jaw chucks and tool spindles. Some products are designed exclusively for manual operation.

2. Typical brushes for internal finishing

Some typical brushes used for internal finishing are shown below. The product overview on the following pages provides details of the whole range.



Finding the right tool

Please check your product choice using the information in the info heading. This will tell you the application for each product and its suitability, as well as providing a summary of the available trim materials suitable for the material being finished.



	NH 650 NMS 1000	Nylon-diamond 400-800	Org. Dib. wire 0.08-0.20	Fluorant brush 60-320	Nocofil WF 120-320	Crimped steel wire 0.15-0.50	Nylon/natural fibre
Internal cleaning, general							
Deburring							
Brushing edges/tapered grooves							
Rust removal							
Cleaning threads/holes							
Plateau finish							

TRIM AND MATERIAL

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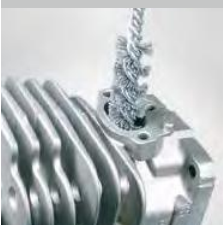
PROFESSIONAL INTERNAL FINISHING

	Product and material	Properties	Use
SITUFT 	Internal brushes with crimped original Osborn wire, fastened in a wing-shaped form.	Quick and easy to clamp in a wide variety of machines using different adapters. Designed for hand-held (e.g. pneumatic and electric tools), as well as stationary machines. The brushes can be clamped in collet chucks, jaw chucks and tool spindles.	For cleaning holes and internal surfaces that are difficult to reach, as well as longitudinal grooves.

 Clockwise or anti-clockwise operation possible using an adapter. Can only be used in a clockwise direction without an adapter. The larger the diameter, the greater the flexibility of the brush.

HELITUF 	Internal brushes with original crimped Osborn wire, fastened in a spiral construction.	Designed for hand-held machines. The brushes can be mounted in drill sockets and on spindles. Chuck mounting is also possible using a Helituf adapter. The spiral-shaped construction simulates a stroke action.	To clean and deburr holes, to brush and deburr edges and tapered grooves.
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 An adapter can be used to increase the total length (incl. brush) to 225 mm.

Micro-abrasive 	Tube brushes with flexible silicon carbide or aluminium oxide trim. Special shaft available upon request.	For use in CNC and NC machines, as well as processing centres.	To clean condensers and boiler pipes, deburr, clean and roughen coated surfaces.
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 Brushes should be 5 - 10% larger than the diameter of the hole.

Internal finishing

Introduction & technical information

	Product and material	Properties	Use
Nylon-diamond  spiral-shaped	Tube brush, spiral-shaped Galvanised twisted wire, stabilised with shaft of pressed brass sleeve.	Flexible trim; after heavy usage and deformation the filaments will recover. Filaments flex rather than break. High flexibility and high performance. Easy clamping in collet and jaw chucks.	Edge rounding, deburring of cross holes, further finishing of honed surfaces. Surface roughness reduced significantly. Ideal for finishing hard components (e.g. ceramic), hardened parts, precision components and parts for aerospace applications.

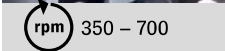


Brushes should be 10 - 15% larger than the diameter of the hole.

Nylon-diamond  wing-shaped	Tube brushes, wing-shaped Galvanised twisted wire, stabilised with shaft of pressed brass sleeve.	Because of their very thin and flexible trim, the life of these brushes is longer than that of conventional brushes with a harder trim.	Deburring and finishing, e.g. of longitudinal grooves.
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Brushes should be 10 - 15% larger than the diameter of the hole.

Novoflex-B  	Sturdy, self-centring honing tool. Flexible design with abrasive spheres.	Suitable for hand-held and honing machines. For use in CNC and NC machines, processing centres and automatic equipment, clamping in tool spindles also possible.	Edge breaks, final finishing of top surfaces. For use in non-round bores and for deburring and finishing of bearing holes during engine production. To create an even, fine-ground surface with a high contact ratio (plateau finish). The resulting cross-hatching is an ideal base for oil film adhesion.
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Lubricants must always be used. We recommend lubricating the Novoflex-B with honing oil before use. Mineral oil, engine oil, water-soluble oil or cooling lubricants can be used as alternatives. Honing time: 20 - 40 sec. The process time can be reduced for deburring longitudinal and cross holes. Clean the bore using hot water and detergent and Osborn nylon tube brushes.

Internal finishing

Introduction & technical information

Product and material	Properties	Use
Novoflex-S  rpm approx. 600	Flat brush with wing-shaped trim material, double wire core. Shaped on the outer contact surfaces to provide a larger working surface. Flexible trim; after heavy usage and deformation the filaments will recover. Filaments flex rather than break. These honing brushes are used in a clockwise, oscillating movement. Easy clamping in collet and jaw chucks.	Surface finishing of workpieces that do not require deburring, e.g. internal finishing of pipes, manufacture of piston pumps, engines.

i Brushes should be up to 25% larger than the diameter of the hole.

Novoflex-H  rpm approx. 600 – 1,400	Spiral-shaped trim material Very long and reliable brush life. High contact surface with component to be finished because of special flat bristle. Large trim thickness.	Deburring, surface finishing of bores and cylindrical workpieces, e.g. engines, pumps, hydraulic and pneumatic cylinders, brake cylinders.
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i Brushes should be 10 - 15% larger than the diameter of the hole. Please use product in an oscillating motion.

Novoflex-HF  rpm approx. 600 – 1,400	Spiral-shaped trim material. High contact surface with component to be finished because of special flat bristle. Suitable for large differences between brush and hole diameters. Lighter trim.	Deburring, surface finishing of bores and cylindrical workpieces, e.g. engines, pumps, hydraulic and pneumatic cylinders, brake cylinders.
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i Brushes should be 10 - 15% larger than the diameter of the hole. Please use product in an oscillating motion.

Internal finishing

Introduction & technical information

	Product and material	Properties	Use
Hole cleaning brushes, nozzle cleaning brushes, fitting brushes, terminal post brushes	In crimped wire or nylon With handle	For manual use	Internal cleaning of a wide range of materials, from steel or copper to wood and plastic.
			
Stove pipe cleaner, percussion brush	Different shapes, some with stamped thread or eyelets Trim material: crimped wire, flat wire or nylon.	For manual use Can be lengthened with shaft.	Chimney cleaning
			

Internal finishing

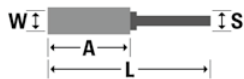
SITUFT®

crimped Osborn wire



PREMIUM

Double wire core for compressed air and electric tools. Adapter to fix in various power tools.



W = workpiece diameter



USAGE

	NH-EOS/NHS-000	Nylon-Dam 429-866	Org. Oils Wire 038 0-20	Abrasive Impregn 80-320	RoughWTF 100-200	Crimp stainless 015-0-50
Internal cleaning	☐	☒	☒	☒	☒	☒
Deburring	☐	☒	☒	☒	☒	☒
Brush edges/tapered grooves	☐	☒	☒	☒	☒	☒
Derust	☐	☒	☒	☒	☒	☒
Thread/drill hole cleaning	☐	☒	☒	☒	☒	☒
Plateau finish	☐	☒	☒	☒	☒	☒

TRIM AND MATERIAL

Products available with:

Steel wire crimped



mm						Osborn 0,08	RRP	Osborn 0,13	RRP	Osborn 0,20	RRP
W	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€	
6,4	14	54	2,38	12	9907-035 021 *	5,50	9907-035 023 *	4,65			
8,2	14	54	2,38	12	9907-035 031 *	5,85	9907-035 032 *	5,70			
9,8	14	54	2,38	12	9907-035 041	5,95	9907-035 042 *	5,85			
11	14	54	2,38	12	9907-035 051	6,05	9907-035 052 *	5,95			
13	14	54	3,18	12	9907-035 061	5,85	9907-035 062 *	5,30			
14,3	16	54	3,18	12	9907-035 081	6,45	9907-035 082	5,40			
16,3	16	54	3,18	12	9907-035 086	7,20	9907-035 087 *	5,40			
18	16	54	3,18	12			9907-035 092	5,70			
19	16	54	3,18	12	9907-035 096	7,45	9907-035 097	5,80			
21	16	57	3,18	12			9907-035 102	5,80			
22,8	16	57	3,18	12			9907-035 107	6,15			
25,4	16	57	3,18	12			9907-035 117	6,30			
28,6	16	57	3,18	12			9907-035 127	6,45			
32	16	57	3,18	12			9907-035 137	6,50			

* Parts included in the SITUFT®Set (Order-No. 9907-035 000).

mm					Osborn 0,13	RRP				
W	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
6,4	14	54	2,38	12	9907-035 181	6,50				
13	14	54	3,18	12	9907-035 197	8,15				
19	16	54	3,18	12	9907-035 213	9,65				
16,3	16	54	3,18	12	9907-035 205	8,60				
22,8	16	57	3,18	12	9907-035 221	9,85				
25,4	16	57	3,18	12	9907-035 229	10,45				

* Parts included in the SITUFT®Set (Order-No. 9907-035 000).

SITUFT®-Set

crimped Osborn wire



PREMIUM

SITUFT® Set: 12 brushes D6 to D32 and two adapters. Parts in this set are marked by an asterisk in the previous table.



USAGE

AGE	NIA-EON/NAS 1000	Nylon Dams 450-800	Org. Oils Wre 0.08-0.20	Aluminum Inerts 80-320	FlowK VWF 100-200	Cryst. Alkalines 0.75-0.50
Internal cleaning						
Deburring						
Brush edges/tapered grooves						
Derust						
Thread/drill hole cleaning						
Plateau finish						

TRIM AND MATERIAL

Products available with:

Steel wire crimped 



		RRP				
pcs.	Order-No.	€	Order-No.	€	Order-No.	€
1	9907-035 000	107,00				

Internal finishing



Adapter to fix in various power tools. 9907-075131 suitable for shank dia. 2,38mm; 9907-075132 suitable for shank dia. 3,18mm.

mm			RRP					
Ø	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
6	85	1	9907-075 131 *	10,10				
10	85	1	9907-075 132 *	10,10				

* Parts included in the SITUFT®Set (Order-No. 9907-035 000).



Double wire core for automatic or manual applications. Adapter available to extend length up to max. 225mm (details below).



USAGE		TRIM AND MATERIAL	
	Internal cleaning	Products available with:	
	Deburring	Steel wire crimped	Steel
	Brush edges/tapered grooves	Stainless steel	Cast steel
	Derust		Stainless steel
	Thread/drill hole cleaning		Non-ferrous metal
Plateau finish			Aluminium
			Soft wood
			Hard wood

mm					Osborn 0,13	RRP	Osborn 0,20	RRP		
W	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
6,4	25	89	3,18	12	9907-036 012	4,25				
8,3	25	89	3,18	12	9907-036 017	4,25				
11	25	89	3,18	12	9907-036 022 *	4,60	9907-036 023	4,20		
12,7	25	89	3,18	12	9907-036 027 *	4,60				
14,3	25	89	3,18	12	9907-036 032	4,75	9907-036 033 *	4,50		
16	25	89	3,18	12	9907-036 037 *	4,75				
17,5	25	89	3,18	12	9907-036 042	5,05	9907-036 043 *	4,85		
19	25	89	3,18	12	9907-036 047 *	5,05				
21	25	89	3,18	12	9907-036 052	5,15	9907-036 053 *	5,00		
22	25	89	3,18	12	9907-036 057 *	5,20				
23,8	25	89	3,18	12	9907-036 062	5,40	9907-036 063 *	5,20		
25,4	25	89	3,18	12	9907-036 067 *	5,45				
27	25	89	3,18	12	9907-036 072	5,45	9907-036 073 *	5,20		
30	25	89	3,18	12	9907-036 082 *	5,85				
33,4	25	89	3,18	12			9907-036 093	6,15		

* Parts included in the HELITUF®Set (Order-No. 9907-036 000).

mm					Osborn 0,13	RRP	Osborn 0,20	RRP		
W	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
6,4	25	89	3,18	12	9907-036 139	7,35				
11	25	89	3,18	12	9907-036 147	7,40				
12,7	25	89	3,18	12	9907-036 151	7,45				
14,3	25	89	3,18	12	9907-036 155	7,95	9907-036 156	7,45		
17,5	25	89	3,18	12	9907-036 163	8,10	9907-036 164	7,90		
21	25	89	3,18	12	9907-036 171	8,60	9907-036 172	8,35		
23,8	25	89	3,18	12	9907-036 179	9,20				
27	25	89	3,18	12	9907-036 187	10,00	9907-036 188	9,50		
33,4	25	89	3,18	12			9907-036 204	10,20		

* Parts included in the HELITUF®Set (Order-No. 9907-036 000).

Internal finishing

Tube & internal brushes straight wire



USAGE		Material	
Internal cleaning	☒	Non-ferrous metal	☒
Deburring	☒	Steel	☒
Brush edges/tapered grooves	☒	Cast steel	☒
Derust	☒	Stainless steel	☒
Thread/drill hole cleaning	☒	Non-ferrous metal	☒
Plateau finish	☒	Aluminium	☒
		Soft wood	☒
		Hard wood	☒

TRIM AND MATERIAL		Products available with:	
Steel wire straight	☒	Steel	☒
		Cast steel	☒
		Stainless steel	☒
		Non-ferrous metal	☒
		Aluminium	☒
		Soft wood	☒
		Hard wood	☒

mm		mm		mm		0,25		0,30		0,35	
Ø	A	L	G	pcs.	Order-No.	RRP	€	Order-No.	RRP	Order-No.	RRP
25	100	160	1/2 Zoll BSW	5	0003-810 125	10,80					
28	100	160	1/2 Zoll BSW	5	0003-810 128	11,20					
30	100	160	1/2 Zoll BSW	5	0003-810 130	11,25					
32	100	160	1/2 Zoll BSW	5				0003-810 132	11,25		
38	100	160	1/2 Zoll BSW	5				0003-810 138	11,70		
40	100	160	1/2 Zoll BSW	5				0003-810 140	12,00		
44	100	160	1/2 Zoll BSW	5				0003-810 144	12,05		
50	100	160	1/2 Zoll BSW	5				0003-810 150	12,25		
57	100	160	1/2 Zoll BSW	5				0003-810 157	12,75		
63	100	160	1/2 Zoll BSW	5						0002-808 163	8,95
75	100	160	1/2 Zoll BSW	5						0002-808 175	10,00

mm		mm		mm		0,40		0,50		RRP	
Ø	A	L	G	pcs.	Order-No.	RRP	€	Order-No.	RRP	Order-No.	€
63	100	160	1/2 Zoll BSW	5	0003-810 163	13,00					
69	100	160	1/2 Zoll BSW	5	0003-810 169	13,15					
75	100	160	1/2 Zoll BSW	5	0003-810 175	13,65					
82	100	160	1/2 Zoll BSW	5	0003-810 182	14,35					
100	100	160	1/2 Zoll BSW	5				0002-808 100	11,65		
101	100	160	1/2 Zoll BSW	5				0003-810 100	15,70		

Wire handles for radiator brushes



Flexible - with a thread to extend heating element brushes and tube brushes.

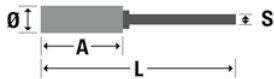
mm		mm		mm		Steel wire		RRP		RRP	
G	L	G	L	pcs.	Order-No.	RRP	€	Order-No.	RRP	Order-No.	€
1/2 Zoll BSW	1000			10	0002-819 110	9,80					
M 6	1000			10	1132-819 110	9,80					
M 12	1000			5	0003-819 112	13,10					
5/16 Zoll BSW	1000			10	1103-819 110	9,80					

Tube & internal brushes

abrasive trim



Zinc-plated twisted shaft with single trim spiral. For cross-hole deburring, control units, O-ring grooves and cylindrical components.



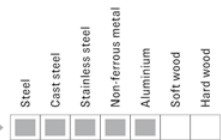
USAGE

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TRIM AND MATERIAL

Products available with:

Abrasive bristle 



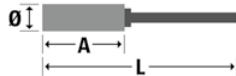
mm					NHS 1000	RRP	NHA 600	RRP		
Ø	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
0,7	12	100	0,42	12	0003-056 400	19,35				
1,2	12	100	0,47	12	0003-056 403	18,55				
1,9	18	100	0,74	12	0003-056 406	18,00				
2,2	18	100	0,93	12	0003-056 409	16,80				
2,6	25	100	1,08	12	0003-056 412	15,90				
3,2	25	100	1,66	12	0003-056 415	15,65				
3,5	25	100	1,66	12	0003-056 418	15,65				
4,2	25	125	2,20	12						
4,8	25	125	2,20	12			0003-056 425	15,40		
5,5	25	125	2,20	12			0003-056 427	14,85		
6,6	25	125	3,00	12			0003-056 428	14,50		
8,2	25	125	3,00	12			0003-056 429	14,10		
9,8	25	125	3,40	12			0003-056 432	13,55		
11,5	25	125	3,40	12			0003-056 435	14,55		
13	25	125	4,20	12			0003-056 436	14,05		
16	25	125	4,20	12			0003-056 438	14,15		
17,5	25	125	4,20	12			0003-056 441	15,25		
19,4	25	125	5,60	12			0003-056 442	15,40		
22,6	25	125	5,60	12			0003-056 444	15,55		
25,8	25	125	6,20	12			0003-056 447	15,90		
							0003-056 450	16,40		

Tube & internal brushes

abrasive filament



Deburring cross-holes, control parts,
O-Ring grooves and cylindrical bores.
Recommendation: Brushes should be 10-15%
larger than the bore.



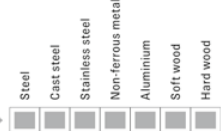
USAGE

	NH-600/NHS	Nylon Dura 400-600	Org. Ocu. Wire 0.08-0.20	Abrasive impregn 80-120	Rough/WF 200-200	Crimp stainless 0.18-0.50
Internal cleaning						
Deburring						
Brush edges/tapered grooves						
Derust						
Thread/drill hole cleaning						
Plateau finish						

TRIM AND MATERIAL

Products available with:

Abrasive bristle

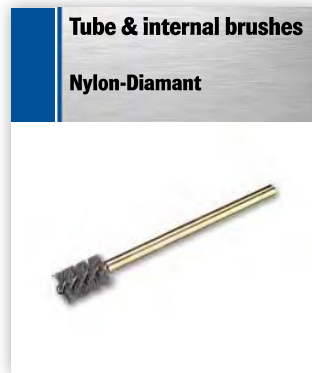


mm				Novofil 80	RRP	Novofil 120	RRP	Novofil 320	RRP	
Ø	A	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€	
6	50	125	12			0003-056 306	9,95	0003-056 326	9,95	
7	50	125	12			0003-056 307	9,95	0003-056 327	9,95	
8	50	125	12			0003-056 308	9,95	0003-056 328	9,95	
10	50	125	12		0003-056 010	8,15	0003-056 310	8,15	0003-056 330	8,15
13	50	125	12		0002-056 011	8,40	0002-056 311	8,40	0002-056 331	8,40
16	50	125	12		0002-056 012	8,65	0002-056 312	8,65	0002-056 332	8,65
19	65	125	12		0002-056 013	9,00	0002-056 313	9,00	0002-056 333	9,00
22	65	125	12		0002-056 014	9,05	0002-056 314	9,05	0002-056 334	9,05
25	65	125	12		0002-056 015	9,30	0002-056 315	9,30	0002-056 335	9,30
32	65	125	12		0002-056 016	11,25	0002-056 316	11,25	0002-056 336	11,25
38	65	125	12	0002-056 017	11,95	0002-056 317	11,95	0002-056 337	11,95	
50	65	125	12	0002-056 018	13,35	0002-056 318	13,35	0002-056 338	13,35	

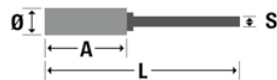


Items available immediately from stock are printed in bold type.
Please contact us for other sizes/materials: service@osborn.de

Internal finishing



Zinc-plated twisted shaft with brass stabilising sleeve.



USAGE		Nylon-Diamant	
Internal cleaning	☐	Yes	Yes
Brush edges/tapered grooves	☐	Yes	Yes
Derust	☐	Yes	Yes
Thread/drill hole cleaning	☐	Yes	Yes
Plateau finish	☐	Yes	Yes

TRIM AND MATERIAL

Products available with:

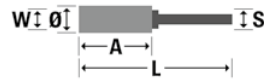
Nylon-Diamant

Trim	Material
☒	Steel
☒	Cast steel
☒	Stainless steel
☒	Non-ferrous metal
☒	Aluminium
☒	Soft wood
☒	Hard wood

mm						Grit 400	RRP	Grit 800	RRP	
W	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
2	20	100	1	2	0008-852 002	70,65	0008-852 802	70,65		
2,5	20	100	1	2	0018-852 002	74,20	0018-852 802	74,20		
3	20	100	1,5	2	0008-852 003	77,15	0008-852 803	77,15		
3,5	20	100	1,5	2	0018-852 003	79,95	0018-852 803	79,95		
4	20	115	3	2	0008-852 004	82,55	0008-852 804	82,55		
5	20	115	3	2	0008-852 005	86,95	0008-852 805	86,95		
6	20	115	3	2	0008-852 006	91,70	0008-852 806	91,70		
7	20	115	3	2	0008-852 007	94,95	0008-852 807	94,95		
8	20	115	3	2	0008-852 008	102,00	0008-852 808	102,00		
9	20	115	3	2	0008-852 009	108,00	0008-852 809	108,00		
10	20	115	4	2	0008-852 010	113,00	0008-852 810	113,00		
12	20	115	6	2	0008-852 012	117,00	0008-852 812	117,00		
15	20	115	6	2	0008-852 015	120,00	0008-852 815	120,00		
17	20	115	6	2	0008-852 017	125,00	0008-852 817	125,00		
19	20	115	6	2	0008-852 019	127,00	0008-852 819	127,00		
22	20	115	6	2	0008-852 022	134,00	0008-852 822	134,00		
25	20	115	6	2	0008-852 025	141,00	0008-852 825	141,00		



Flexible, self-centering honing tool. Achieves a plateau finish. Due to cross grinding a good carrier for oil film adhesion.



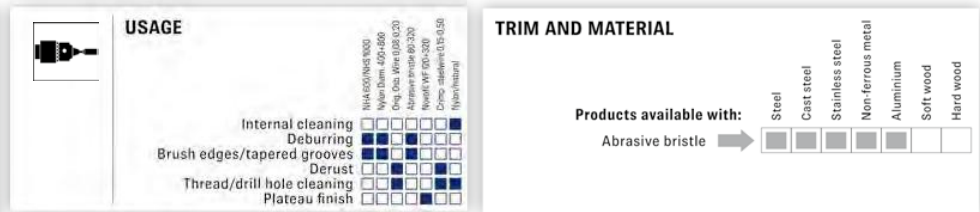
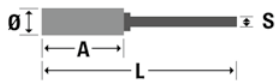
W = workpiece diameter

mm						Grit SIC 120	RRP	Grit SIC 180	RRP	Grit SIC 240	RRP
W	Ø	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
7	8	50	200	3,6	1			9828-036 308	20,25		
8	9	50	200	3,6	1	9818-036 309	21,05	9828-036 309	21,05		
9	10	50	200	3,6	1	9818-036 310	21,90	9828-036 310	21,90		
10	11	60	200	3,6	1	9818-036 311	22,35	9828-036 311	22,35	9838-036 311	23,70
11	12	60	200	3,6	1	9818-036 312	22,85	9828-036 312	22,85		
12	13	60	200	3,6	1	9818-036 313	23,25	9828-036 313	23,25	9838-036 313	24,60
14	15,5	60	200	3,6	1	9818-036 316	23,70	9828-036 316	23,70		
16	18	60	200	4,6	1					9838-036 315	25,15
18	20	60	200	4,6	1	9818-036 318	25,15	9828-036 318	25,15	9838-036 318	26,65
20	22	70	200	4,6	1	9818-036 320	25,65	9828-036 320	25,65	9838-036 320	27,20
22	25	70	200	4,6	1	9818-036 322	26,10	9828-036 322	26,10	9838-036 322	27,65
24	27	70	200	5,1	1	9818-036 325	27,05	9828-036 325	27,05	9838-036 325	26,65
25	28	70	200	5,1	1	9818-036 327	28,00	9828-036 327	28,00		
27	30	70	200	5,1	1	9818-036 328	28,85	9828-036 328	28,85	9838-036 328	30,55
29	32	70	200	5,1	1	9818-036 330	29,80	9828-036 330	29,80	9838-036 330	31,55
32	35	70	200	5,7	1	9818-036 332	30,70	9828-036 332	30,70	9838-036 332	32,55
35	38	70	200	5,7	1	9818-036 335	32,25	9828-036 335	32,25	9838-036 335	34,20
38	41	70	200	5,7	1	9818-036 338	33,75	9828-036 338	33,75		
41	45	70	200	5,7	1	9818-036 341	35,30	9828-036 341	35,30		
45	48	70	200	5,7	1	9818-036 345	36,80	9828-036 345	36,80	9838-036 345	39,05
48	51	70	200	6,5	1	9818-036 348	38,35	9828-036 348	38,35	9838-036 348	40,65
48	51	76	203	6,5	1	9818-036 351	39,80	9828-036 351	39,80	9838-036 351	41,15
51	54	70	200	6,5	1	9818-036 354	40,90	9828-036 354	40,90	9838-036 355	43,40
54	57	70	200	6,5	1	9818-036 357	41,35	9828-036 357	41,35	9838-036 357	43,80
57	60	70	200	7,3	1	9818-036 360	42,05	9828-036 360	42,05	9838-036 360	44,60
60	64	70	200	7,3	1	9818-036 364	42,80	9828-036 364	42,80		

Internal finishing



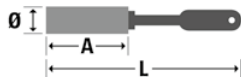
Oscillating use at approx. 600-1400 min-1.
Version with very dense trim.



mm					Grit 120	RRP	Grit 320	RRP		
Ø	A	L	S	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
38	50	125	6,35	2	9907-036 304	80,65	9907-036 305	80,65		
42	50	125	6,35	2	9907-036 491	85,10				
46	50	125	6,35	2	9907-036 489	90,20				
51	50	125	6,35	2	9907-036 306	93,60				
51	50	125	6,35	12			9907-036 307	93,60		
56	50	125	6,35	2	9907-036 486	99,45	9907-036 487	99,45		
63	90	160	9,53	2	9907-036 308	95,10	9907-036 309	95,10		
76	100	160	9,53	2	9907-036 310	110,00	9907-036 311	110,00		
89	100	160	9,53	2	9907-036 312	116,00				
102	100	160	9,53	2	9907-036 314	198,00	9907-036 315	198,00		
115	100	152	9,53	2	9907-036 316	221,00				
127	125	230	12,7	2	9907-036 318	246,00				
140	125	235	12,7	2	9907-036 320	280,00				
153	140	230	12,7	2	9907-036 322	284,00				



To clean the inside of steel, wood or plastic products. To remove chippings and loose particles.

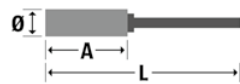


mm				0,15	RRP	0,20	RRP	0,30	RRP
Ø	A	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
15	100	280	10	0002-892 215	9,50	0002-892 220	9,80	0002-892 225 0002-892 230	10,00 10,40
20	100	280	10						
25	100	280	10						
30	100	280	10						

Internal finishing

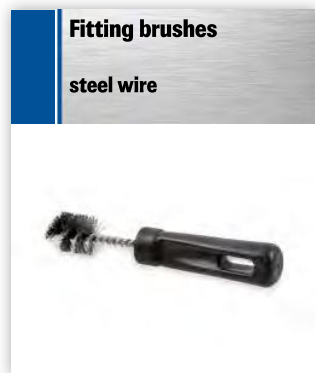


Double wire cable and loop.

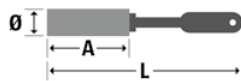


mm				Steel wire Crimped	RRP	Brass Crimped	RRP	Stainless Crimped	RRP
Ø	A	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
4	100	300	20	0003-816 204	7,30	0003-816 504	7,95	0003-816 304	12,00
5	100	300	20	0003-816 205	7,35	0003-816 505	7,95	0003-816 305	12,00
6	100	300	20	0003-816 206	7,35	0003-816 506	7,85	0003-816 306	12,00
8	100	300	20	0003-816 208	6,30	0003-816 508	7,85	0003-816 308	8,70
10	100	300	20	0003-816 210	6,30	0003-816 510	7,55	0003-816 310	8,70
12	100	300	20	0003-816 212	6,70	0003-816 512	7,55	0003-816 312	8,70
15	100	300	20	0002-816 215	6,80	0002-816 515	7,70	0002-816 315	9,00
18	100	300	20	0002-816 218	6,85	0002-816 518	7,70	0002-816 318	9,00
20	100	300	20	0002-816 220	6,85	0002-816 520	7,70	0002-816 320	9,00
25	100	300	20	0002-816 225	7,20	0002-816 525	8,60	0002-816 325	9,15
30	100	300	20	0002-816 230	7,30	0002-816 530	8,80		

mm				Nylon	RRP				
Ø	A	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
3	100	300	1	0003-816 803	2,40				
4	100	300	20	0003-816 804	2,40				
5	100	300	20	0003-816 805	2,40				
6	100	300	20	0003-816 806	2,40				
8	100	300	20	0003-816 808	2,40				
10	100	300	20	0003-816 810	2,50				
12	100	300	20	0003-816 812	2,50				
15	100	300	20	0003-816 815	2,80				
18	100	300	20	0003-816 818	2,80				
20	100	300	20	0003-816 820	2,95				
25	100	300	20	0003-816 825	3,05				
30	100	300	20	0003-816 830	3,15				



To clean the inside of tubes and solder fittings made of copper or red brass.



mm				0,12 Steel wire	RRP	0,20 Steel wire	RRP	0,26 Steel wire	RRP
Ø	A	L	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
6	25	160	12	0003-075 250	6,00				
10	25	160	12	0003-075 251	6,10				
13	25	160	12			0003-075 252	6,15		
16	25	160	12			0003-075 253	6,15		
19	28	160	12			0003-075 254	6,25		
23	25	160	12			0003-075 255	6,25		
26	25	160	12			0003-075 256	6,45		
29	32	160	12					0003-075 257	6,55
33	35	160	12					0003-075 258	6,70
43	38	160	6					0003-075 259	6,80
56	45	160	6					0003-075 260	7,00

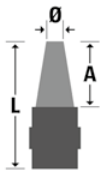
Internal finishing

Battery terminal brush

steel wire



To clean batteries (pole and clamp cleaning).



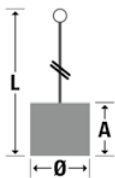
mm				Steel wire Crimped	RRP				
Ø	T	L		Order-No.	€	Order-No.	€	Order-No.	€
15/ 25	65	120	12	0008-493 100	9,80				

Stove pipe cleaners

crimped wire



With a flexible, galvanised wire handle.



mm				0,30 Crimped	RRP				
Ø	A	L		Order-No.	€	Order-No.	€	Order-No.	€
125	120	2000	10	0002-824 213	11,70				
125	120	3000	10	0002-825 213	13,25				
140	120	3000	10	0002-825 214	13,90				
160	120	3000	10	0002-825 216	14,30				
210	120	2000	10	0002-824 221	13,75				



Items available immediately from stock are printed in bold type.
Please contact us for other sizes/materials: service@osborn.de

Internal finishing



mm			Steel wire	RRP					
Ø	G	pcs.	Order-No.	€	Order-No.	€	Order-No.	€	
100	M12 x175	5	0003-890 100	8,05					
125	M12 x175	5	0003-890 125	8,15					
150	M12 x175	5	0003-890 150	8,30					
200	M12 x175	5	0003-890 200	9,55					
250	M12 x175	5	0003-890 250	10,25					
300	M12 x175	5	0003-890 300	10,70					
350	M12 x175	5	0003-890 350	11,35					



mm			2,4 x 0,4	RRP					
Ø	G	pcs.	Order-No.	€	Order-No.	€	Order-No.	€	
200x200	M12 x175	5	0003-896 200	12,10					
250x250	M12 x175	5	0003-896 250	14,15					
300x300	M12 x175	5	0003-896 300	17,80					
350x350	M12 x175	5	0003-896 350	25,20					



mm			PPN Green	RRP					
Ø	G	pcs.	Order-No.	€	Order-No.	€	Order-No.	€	
150	M12 x175	5	0003-890 815	9,85					
200	M12 x175	5	0003-890 820	11,85					
250	M12 x175	5	0003-890 825	13,00					
300	M12 x175	5	0003-890 830	16,40					

Face brushes

Nylon



mm				PPN Green	RRP			
Ø	G	pcs.		Order-No.	€	Order-No.	€	Order-No.
150	M12 x175	5		0003-870 815	12,20			
200	M12 x175	5		0003-870 820	14,25			
250	M12 x175	5		0003-870 825	15,45			
300	M12 x175	5		0003-870 830	19,05			

Handle

for face brushes



mm					RRP	RRP			
Ø	L	G	pcs.	Order-No.	€	Order-No.	€	Order-No.	€
18	1000	M12	5	0003-824 100	10,10	0003-844 100 *	13,60		
18	1500	M12	5	0003-824 150	11,35				
18	2000	M12	5	0003-824 200	13,80	0003-844 200 *	17,00		
20	1000	M12	5	0003-834 100	19,80				
20	1500	M12	5	0003-834 150	21,85				
20	2000	M12	5	0003-834 200	23,70				

*self-locking

Plastic covered, not flexible.

Sewer cleaning brushes

Elaston



mm					Elaston crimped	RRP			
Ø	T	K	A	pcs.	Order-No.	€	Order-No.	€	Order-No.
80	15	40	100	1	0001-385 108	148,00			
105	25	50	100	1	0001-385 110	172,00			
150	35	80	150	1	0001-385 115	209,00			
200	50	100	200	1	0001-385 120	271,00			
250	50	150	230	1	0001-385 125	417,00			

Plastic body with eyelets on both sides.





