

120 Polishing Points and Wheels, Polishing Sticks



SC Pentagon SRL


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General information

To meet the increasing demand for polishing points, we have developed a large assortment of points manufactured from a variety of raw materials available in different grit sizes and hardness. LUKAS polishing points and sticks have been categorized according to the individual application.



Safety instructions

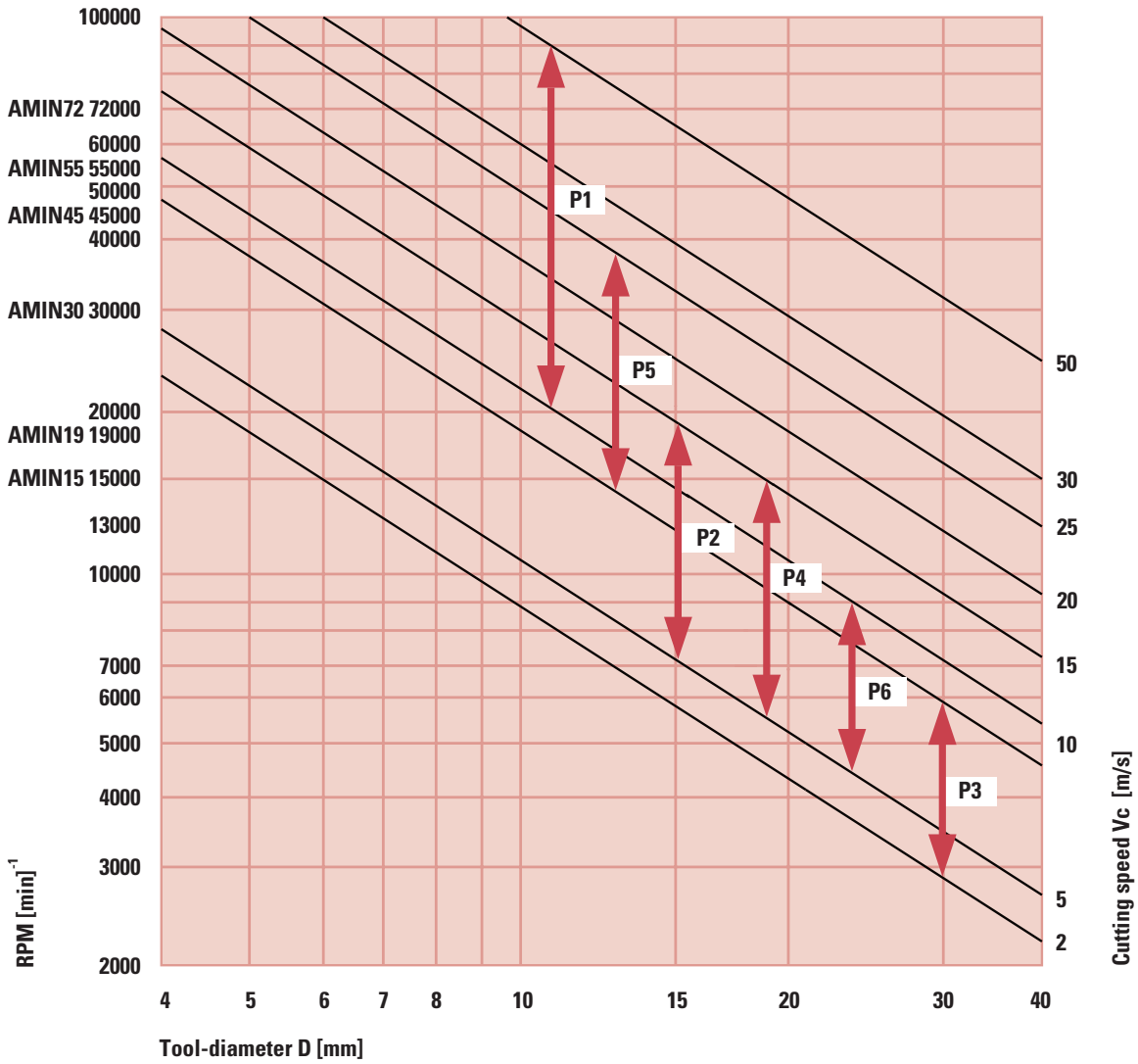
LUKAS polishing points group – P1 and P5 – are manufactured to the EN 12413 safety standards and are allowed to run at a **maximum operating speed of 50 m/s**, group P2 at a safe max. speed of 15 m/s. The permissible maximum operating speed of the product group P6 is 20 m/s.

The operating speed to achieve optimal performance generally lies below the maximum permissible operating speed

The maximum permissible R.P.M. is dependent on the overhang length of the shaft. Our polishing mounted points are supplied with identification tickets indicating the maximum R.P.M. for different overhang lengths.

To ensure the safe use of polishing points, please note the following FEPA publications:

- FEPA-safety recommendations for the correct use of abrasive products
- FEPA-safety instructions for bonded abrasives

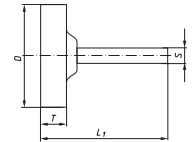
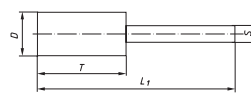


Quality and application P1

These polishing points are available in one grit combination only. The surface finish is similar to a finish with grit size 100. The hard-rubber bond makes these points particularly suitable for finishing castings, hard and soft tool steels and also alloyed steel. There is no loading

with these points. If applied with low pressure, they have a long and economical tool life.

Shape ZY, Cylindrical (according to EN 12413)



Type 1

Type 2

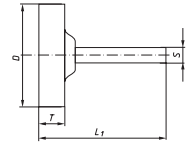
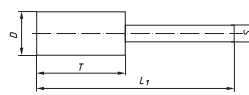
Description	Type	D mm	T mm	S mm	L ₁ mm	
P1ZY 0408.03	1	4	8	3	38	■
P1ZY 0510.03	1	5	10	3	40	■
P1ZY 0610.03	1	6	10	3	40	■
P1ZY 0710.03	1	7	10	3	40	■
P1ZY 0810.03	1	8	10	3	40	■
P1ZY 0816.06	1	8	16	6	56	■
P1ZY 0820.06	1	8	20	6	60	■
P1ZY 1010.03	1	10	10	3	40	■
P1ZY 1013.03	1	10	13	3	43	■
P1ZY 1016.03	1	10	16	3	46	■
P1ZY 1020.06	1	10	20	6	60	■
P1ZY 1303.03	2	13	3	3	33	■
P1ZY 1313.03	1	13	13	3	43	■
P1ZY 1316.03	1	13	16	3	46	■

Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P1ZY 0408.03

Vmax.: 50 m/s

Shape ZY, Cylindrical (according to EN 12413)



Type 1

Type 2

Description	Type	D mm	T mm	S mm	L ₁ mm	
P1ZY 1320.06	1	13	20	6	60	■
P1ZY 1604.03	2	16	4	3	34	■
P1ZY 1616.03	1	16	16	3	46	■
P1ZY 1620.06	1	16	20	6	60	■
P1ZY 1632.06	1	16	32	6	72	■
P1ZY 2006.03	2	20	6	3	36	■
P1ZY 2020.06	1	20	20	6	60	■
P1ZY 2032.06	1	20	32	6	72	■
P1ZY 3210.06	1	32	10	6	50	■
P1ZY 3216.06	1	32	16	6	56	■
P1ZY 4010.06	1	40	10	6	50	○
P1ZY 4020.06	1	40	20	6	60	■
P1ZY 5020.06	1	50	20	6	60	○

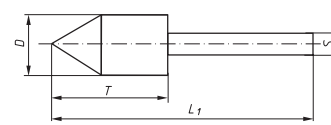
Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P1ZY 1616.03

V_{max}: 50 m/s

124 Polishing Points, group P1

Shape KS, conical pointed nose (according to EN 12413)



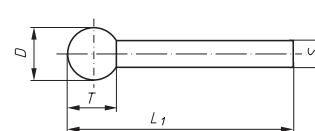
Description	D mm	T mm	S mm	L ₁ mm	
P1KS 1632.06	16	32	6	72	■
P1KS 2032.06	20	32	6	72	○

Packing unit: 10 pcs. per type

Ordering example: P1KS 1632.06

Vmax.: 50 m/s

Shape KU, Spherical (according to EN 12413)



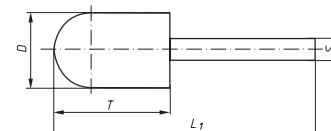
Description	D mm	T mm	S mm	L ₁ mm	
P1KU 0808.03	8	8	3	38	■
P1KU 1616.06	16	16	6	55	■

Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P1KU 1616.06

Vmax.: 50 m/s

Shape WR, Cylindrical round nose (according to EN 12413)



Description	D mm	T mm	S mm	L ₁ mm	
P1WR 1632.06	16	32	6	72	○
P1WR 2032.06	20	32	6	72	○

Packing unit: 10 pcs. per type

Ordering example: P1WR 1632.06

Vmax.: 50 m/s



■ delivery ex-stock

▲ quick delivery

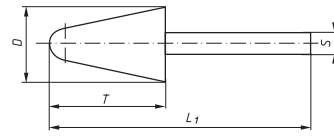
○ available as special service



reground service, please enquire



**Shape KE,
Conical round nose
(according to EN 12413)**



Description	D mm	T mm	S mm	L ₁ mm	
P1KE 2032.06	20	32	6	72	■

Packing unit: 10 pcs. per type

Ordering example: P1KE 2032.06

V_{max.}: 50 m/s

**Assortment,
Polishing points, group
P1**

	Description	Contents	
	Assortment 114 14-pieces	P1ZY 0408.03; P1ZY 0510.03; P1ZY 0610.03; P1ZY 0710.03; P1ZY 0810.03; P1ZY 1010.03; P1ZY 1013.03; P1ZY 1016.03; P1ZY 1303.03; P1ZY 1313.03; P1ZY 1316.03; P1ZY 1604.03; P1ZY 1616.03; P1ZY 2006.03	■

Packing unit: 1 pc. per type

Ordering example: Assortment 114

V_{max.}: 50 m/s

126 Polishing Points, group P2

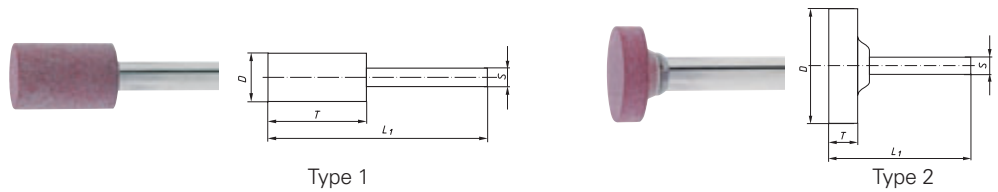
Quality and application P2

The polishing points of this group are available in the five grit sizes as detailed below. The soft rubber bond results in a very soft grinding action. Polishing Points, group 2, are used where pre-machined surfaces require a smooth or mirror finish. We can also supply

polishing wheels up to 200 mm diameter in this product group; available grit sizes as illustrated below. Exact dimension and prices on request.



Color	black	pale grey	red	brown	green
Grit size	46	80	120	220	280



Shape ZY, Cylindrical

Description	Type	D mm	T mm	S mm	L ₁ mm	Grit				
						46	80	120	220	280
P2ZY 0408.03	1	4	8	3	38	○	■	■	■	■
P2ZY 0510.03	1	5	10	3	40	○	■	■	■	■
P2ZY 0610.03	1	6	10	3	40	○	■	■	■	■
P2ZY 0810.03	1	8	10	3	40	■	■	■	■	■
P2ZY 0816.06	1	8	16	6	56	○	■	■	■	■
P2ZY 1010.03	1	10	10	3	40	■	■	■	■	■
P2ZY 1020.06	1	10	20	6	60	○	■	■	■	■
P2ZY 1313.03	1	13	13	3	43	○	■	■	■	■
P2ZY 1316.03	1	13	16	3	46	○	○	■	○	○
P2ZY 1320.06	1	13	20	6	60	■	■	■	■	■
P2ZY 1616.03	1	16	16	3	46	○	○	■	○	○
P2ZY 1620.06	1	16	20	6	60	○	■	■	■	■

Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P2ZY 1320.06 Grit 120



V_{max.}: 15 m/s

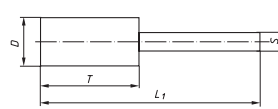
■ delivery ex-stock

▲ quick delivery

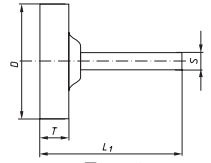
○ available as special service

Ⓢ regrind service, please enquire





Type 1



Type 2

Shape ZY, Cylindrical

Description	Type	D mm	T mm	S mm	L ₁ mm	Grit				
						46	80	120	220	280
P2ZY 1632.06	1	16	32	6	72	○	■	■	■	○
P2ZY 2020.06	1	20	20	6	60	■	■	■	■	■
P2ZY 2032.06	1	20	32	6	72	○	■	■	■	■
P2ZY 2510.06	2	25	10	6	50	○	○	■	○	○
P2ZY 3210.06	1	32	10	6	50	○	○	■	■	○
P2ZY 3216.06	1	32	16	6	56	○	○	○	○	○
P2ZY 3220.06	1	32	20	6	60	○	○	■	○	○
P2ZY 3232.06	1	32	32	6	72	○	○	■	○	■
P2ZY 4010.06	2	40	10	6	50	○	○	■	○	○
P2ZY 4016.06	1	40	16	6	56	○	○	○	○	○
P2ZY 4020.06	1	40	20	6	60	■	○	■	○	○
P2ZY 5020.06	1	50	20	6	60	○	○	○	○	○

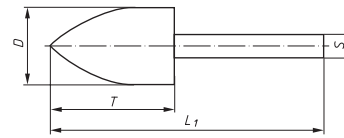
Packing units: 10 pcs. per type

Ordering example: P2ZY 1632.06 Grit 120

Vmax.: 15 m/s

128 Polishing Points, group P2

Shape SP, Arch pointed nose



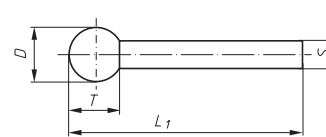
Description	D mm	T mm	S mm	L ₁ mm	Grit				
					46	80	120	220	280
P2SP 1320.06	13	20	6	60	○	○	■	○	○
P2SP 2032.06	20	32	6	72	○	○	○	■	○

Packing unit: 10 pcs. per type

Ordering example: P2SP 1320.06 Grit 120

V_{max.}: 15 m/s

Shape KU, Spherical



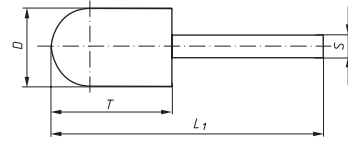
Description	D mm	T mm	S mm	L ₁ mm	Grit				
					46	80	120	220	280
P2KU 0808.03	8	8	3	38	○	○	■	○	○
P2KU 1010.03	10	10	3	40	○	○	■	○	○
P2KU 1616.06	16	16	6	56	○	○	■	■	○
P2KU 2020.06	20	20	6	60	○	○	○	○	○
P2KU 3232.06	32	32	6	72	○	○	○	○	○

Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P2KU 1616.06 Grit 120

V_{max.}: 15 m/s

Shape WR, Cylindrical round nose



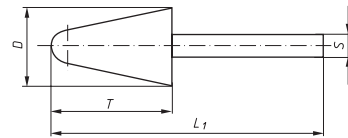
Description	D mm	T mm	S mm	L ₁ mm	Grit				
					46	80	120	220	280
P2WR 1632.06	16	32	6	72	○	○	■	○	○

Packing unit: 10 pcs. per type

Ordering example: P2WR 1632.06 Grit 120

V_{max.}: 15 m/s

Shape KE, Conical round nose



Description	D mm	T mm	S mm	L ₁ mm	Grit				
					46	80	120	220	280
P2KE 1020.06	10	20	6	60	○	■	■	○	○

Packing unit: 10 pcs. per type

Ordering example: P2KE 1020.06 Grit 80

V_{max.}: 15 m/s

Membership Certificate

The Organization for the Safety of Abrasives (oSa[®])

herewith grants to the company

LUKAS-ERZETT
Vereinigte Schleif- und Fräswerkzeugfabriken GmbH & Co. KG

based on the Application Form, oSa[®]-Constitution and Conditions of Use for the oSa[®] Trademark the right until withdrawn to use the oSa[®] mark in the described colours for the abrasives notified.

The membership also covers affiliated companies on condition that these fulfill the requirements stipulated in § 6 para. 1 of the oSa[®]-Constitution and § 2.4 of the Conditions of Use for the oSa[®]-Trademark respectively.

This right applies to the designation of the registered tools as well as their packaging or labelling.

Bonn, 01 June 2001
Executive Board

Organization for the Safety of Abrasives (oSa[®]) • Oxfordstraße 8 • D-53111 Bonn • Germany

130 Elastic polishing sticks, group P4

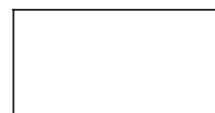
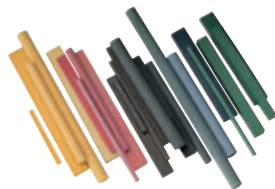


Quality and application P4

A mixture of abrasive grit Al₂O₃ or Silicon Carbide and fillers is bonded by various hardness grades of duroplastic elastomers. Consequently, the polishing sticks within this product group have a relatively dense structure. We offer grades i.e. from soft to hard. These polishing sticks are mainly used off-hand in the mould and die industry.

Color Qualities

pale grey	SiC 80 soft
grey	SiC 80 hard
pale blue	SiC 150 soft
blue	SiC 150 hard
pale green	SiC 240 soft
green	SiC 240 hard
beige	EKW 80 soft
dark beige	EKW 80 hard
pale red	EKW 150 soft
red	EKW 150 hard
pale brown	EKW 240 soft
brown	EKW 240 hard



Polishing sticks, flat

Description	H mm	B mm	L mm	
P4SF 0612.070	6	12	70	▲
P4SF 0612.140	6	12	140	▲
P4SF 0816.070	8	16	70	▲
P4SF 0816.140	8	16	140	▲
P4SF 0816.210	8	16	210	▲
P4SF 1020.070	10	20	70	▲
P4SF 1020.140	10	20	140	▲
P4SF 1020.210	10	20	210	▲
P4SF 1020.280	10	20	280	▲

Packing unit: 10 pcs. per type

Ordering example: P4SF 0612.070 EKW 80 hard

All items are available within a few days ex-intermediate stock.



■ delivery ex-stock

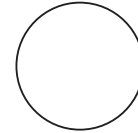
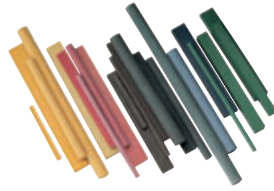
▲ quick delivery

○ available as special service



regrind service, please enquire





Polishing sticks, round

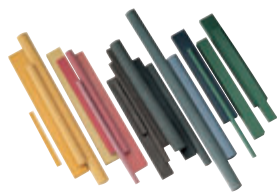
Description	Ø mm	L mm		
P4SR 0006.070	6	70		▲
P4SR 0006.140	6	140		▲
P4SR 0010.070	10	70		▲
P4SR 0010.140	10	140		▲
P4SR 0010.210	10	210		▲
P4SR 0012.070	12	70		▲
P4SR 0012.140	12	140		▲
P4SR 0012.210	12	210		▲
P4SR 0012.280	12	280		▲
P4SR 0015.070	15	70		▲
P4SR 0015.140	15	140		▲
P4SR 0015.210	15	210		▲
P4SR 0015.280	15	280		▲

Packing unit: 10 pcs. per type

Ordering example: P4SR 0010.140 EKW 240 soft

All items are available within a few days ex-intermediate stock.

132 Elastic polishing sticks, group P4



Polishing sticks, square

Description	H mm	B mm	L mm	
P4SV 0606.070	6	6	70	▲
P4SV 0606.140	6	6	140	▲
P4SV 1010.070	10	10	70	▲
P4SV 1010.140	10	10	140	▲
P4SV 1010.210	10	10	210	▲
P4SV 1212.140	12	12	140	▲
P4SV 1212.210	12	12	210	▲
P4SV 1515.070	15	15	70	▲
P4SV 1515.140	15	15	140	▲
P4SV 1515.210	15	15	210	▲
P4SV 1515.280	15	15	280	▲

Packing unit: 10 pcs. per type

Ordering example: P4SV 1212.210 EKW 80 soft

All items are available within a few days ex-intermediate stock.

Quality and application P5

The polishing points of this group are characterised by their special structure and bonding i.e. fibre reinforced. This makes them ideally suitable for precision machining of metals, low and high alloy steels.

They are available in the following grit sizes and are marked with a red ring on the shank.



Colour
Grit

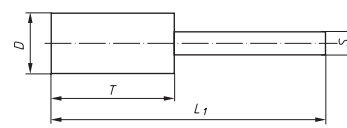
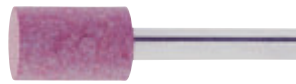
black
46

pale grey
80

red
120

134 Polishing Points, group P5

**Shape ZY, Cylindrical
(according to DIN 69170)**



Description	D mm	T mm	S mm	L ₁ mm	Grit			
						46	80	120
P5ZY 0408.03	4	8	3	38	○	■	■	
P5ZY 0510.03	5	10	3	40	○	■	■	
P5ZY 0610.03	6	10	3	40	○	■	■	
P5ZY 0810.03	8	10	3	40	○	■	■	
P5ZY 0816.06	8	16	6	56	■	■	■	
P5ZY 1010.03	10	10	3	40	○	■	■	
P5ZY 1020.06	10	20	6	60	■	■	■	
P5ZY 1313.03	13	13	3	43	○	○	■	
P5ZY 1316.03	13	16	3	46	○	■	○	
P5ZY 1320.06	13	20	6	60	○	■	■	
P5ZY 1616.03	16	16	3	46	○	○	○	
P5ZY 1620.06	16	20	6	60	○	■	■	
P5ZY 1632.06	16	32	6	72	■	■	○	
P5ZY 2020.06	20	20	6	60	○	■	■	
P5ZY 2032.06	20	32	6	72	■	○	■	
P5ZY 3232.06	32	32	6	72	○	■	○	
P5ZY 4016.06	40	16	6	56	○	○	■	

Packing units: shank 3 mm = 20 pcs. per type, shank 6 mm = 10 pcs. per type

Ordering example: P5ZY 0510.03 Grit 80

V_{max}: 50 m/s



■ delivery ex-stock

▲ quick delivery

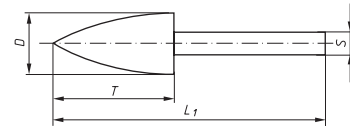
○ available as special service



regrind service, please enquire



**Shape SP,
Arch pointed nose
(according to DIN 69170)**



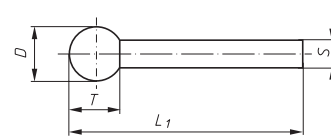
Description	D mm	T mm	S mm	L ₁ mm	Grit		
					46	80	120
P5SP 2032.06	20	32	6	72	○	■	○

Packing unit: 10 pcs. per type

Ordering example: P5SP 2032.06 Grit 80

V_{max.}: 50 m/s

**Shape KU,
Spherical
(according to DIN 69170)**



Description	D mm	T mm	S mm	L ₁ mm	Grit		
					46	80	120
P5KU 0808.03	8	8	3	38	○	■	○

Packing unit: 20 pcs. per type

Ordering example: P5KU 0808.03 Grit 80

V_{max.}: 50 m/s

Quality and application P6

The finishing tools of this group are manufactured with the very resilient PU-type bond.

- They can easily be shaped to any desired profile.
- They generate excellent surface finish in a very short cycle time.
- They generate little heat during grinding.

These polishing points and wheels are used to improve surface finishes and geometry. The main applications are the finishing and polishing of steel, brass, precious metal, sintered metals, plastic. They are also

used to generate patterned surface finishes. They can be used with or without coolant. When grinding wet, the coolant must be neutral (pH 7). For dressing, LUKAS dressing sticks can be used (please see catalogue group 6 accessories). The following grades are available:

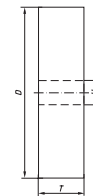
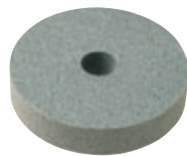
W = soft, very resilient

M = medium, resilient for general purpose

H = hard elastic, mainly used for flat surfaces.

The PU-bond contains Siliconcarbide "S" or Aluminium Oxide "A" abrasive grain available in the FEPA grit sizes 24 to 240.

Polishing Wheels Shape S1



Description	D mm	T mm	H mm	Grit							
				S 46 M	S 46 H	S 80 H	S 150 H	S 240 H			
P6S1 15020.20	150	20	20	--	--	■	■	--			
P6S1 20025.20	200	25	20	--	--	■	■	--			

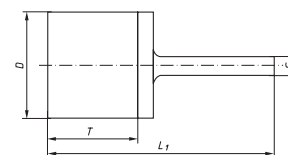
Packing unit: 1 pc. per type

Ordering example: P6S1 15020.20 S150H

V_{max}: 20 m/s

These polishing wheels are supplied in a hard-elastic bond in the two grit sizes 80 and 150. This bond type allows minimal conformity to the workpiece profile but has a good stockremoval rate.

Marbling points Shape ZY, Cylinder



Description	D mm	T mm	S mm	L ₁ mm	Grit							
					S 46 M	S 46 H	S 80 H	S 150 H	S 240 H			
P6MA 3030.06	30	30	6	77	■	■	--	--	--			
P6MA 4030.06	40	30	6	77	■	■	--	--	--			
P6MA 5030.06	50	30	6	77	■	■	--	--	--			

Packing unit: 1 pc. per type

Ordering example: P6MA 3030.06 S 46 M

V_{max}: 20 m/s

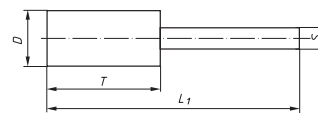
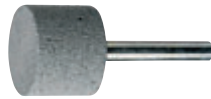
■ delivery ex-stock

▲ quick delivery

○ available as special service

Ⓢ regrind service, please enquire

Polishing points Shape ZY, Cylindrical



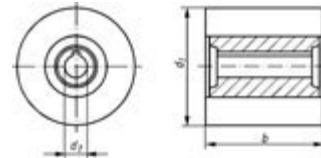
Description	D mm	T mm	S mm	L ₁ mm	Grit						
					S 46 H	S 80 H	S 150 H	S 240 H			
P6ZY 1620.03	16	20	3	50	■	■	■	■			
P6ZY 2020.06	20	20	6	60	■	--	■	--			
P6ZY 2520.06	25	20	6	60	--	■	--	--			
P6ZY 3030.06	30	30	6	60	■	--	■	■			

Packing unit: 10 pcs. per type

Ordering example: P6ZY 1620.03 S 46 H

Vmax.: 20 m/s

Polishing roll, LSP



Description	d ₁ mm	b mm	d ₂ mm		Grit						
					S 24 W	S 24 M	S 46 W	S 80 W	S 80 M		
LSP 100050	100	50	19		○	■	--	○	■		
LSP 100100	100	100	19		○	■	■	■	■		

Packing unit: 1 pc. per type

Ordering example: LSP 100100 S 24 M

Machines to suit page 225.

Vmax.: 16 m/s