## **Tool drives**





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The PFERD range includes tool drives for grinding, milling, brushing, cutting and polishing in manual applications as well as in robotic and semi-stationary applications. PFERD is one of only a few manufacturers that can offer a wide range of tools for work on surfaces and cutting of materials, as well as drives designed specifically for these tools, all from a single source.

The wide product range includes air-powered drives, electric drives and flexible shaft drives and thus offers the best solution for almost any working environment.

PFERD tool drives are characterized by their performance and durability. They are less prone to faults and comply with the latest technological standards.



#### **Cost-effectiveness**



Time is money.
The cost-effectiveness of a process is determined by the performance of the tool and the time required. The faster

the grinding process, the greater its costeffectiveness. The best results are achieved by tools that have a consistently high aggressiveness throughout the processing time, in combination with PFERD quality tool drives. These are powerful, durable and less susceptible to faults.

t = €

#### Rotational speed n



The rotational speed n is given in revolutions per minute [RPM]. The required rotational speed is determined from the cutting

speed V in metres per minute [m/min] or in metres per second [m/s] and the diameter of the tool d x  $\pi$  (3.14).

#### Note:

The rotational speed data for the tools relates to their use under load.

$$n = \frac{V}{d x \pi}$$

#### **Cutting speed V**



The cutting speed is the speed at which a tool bit moves through the material in the direction of the cut and removes a chip.

The cutting speed V is given in metres per minute [m/min] or metres per second [m/s]. It depends on the rotational speed of the drive n in revolutions per minute [RPM] and the diameter of the tool d x  $\pi$  (3.14).

 $V = n \times d \times \pi$ 

#### PFERDVALUE - your added value with PFERD

Results from PFERD test laboratories as well as from product tests by independent testing institutions prove that PFERD tools offer measurable added value.

Discover PFERDERGONOMICS and PFERDEFFICIENCY:

As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to increased safety and comfort and thus to health protection.









As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding economic added value.









For more information on this topic, please refer to in our brochure "PFERDVALUE – Your added value with PFERD".

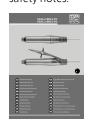


#### Safety information



Please observe the respective safety regulations!

In accordance with legal requirements, all tool drives are accompanied by operating manuals, a CE declaration of conformity, and safety notes.





#### ASK**PFERD**

Do you have questions concerning machining tasks, materials or tool drives?

Or are you looking for recommendations for use, personalized consultation and information on the right choice of tool?



We can answer your questions via WhatsApp with a minimum of fuss: + 49 (0) 162 1376205 + 49 (0) 172 4358151.

### **Tool drives**

### Services



#### Maintenance and repair service

PFERD provides a maintenance and repair service, which includes basic cleaning, repair and final safety checks at our factory. Our qualified specialists will be happy to quickly create a detailed quotation without obligation.

If the repair costs exceed the replacement value, you will also receive a quotation for a new tool drive. Only original PFERD spare parts will be used to repair tool drives. After the repair, you will receive your tool drive in as-new condition.

An experienced team ensures quick repairs processing at the Marienheide works in Germany. Please send any queries to: **pferd.power.tools@pferd.com**.



#### **Repair training**

Worldwide, PFERD offers hands-on training on the safe handling of professional tool drives and expert maintenance. The knowledge provided enables fast on-site repairs and thus reduces downtime. The expert maintenance also extends the service life of the tool drives. On request, the training can also be held on-site at your company. Please contact us for further details.



#### Performance test bench

PFERD has modern performance test benches for quality control, drive optimization and verification of safety guidelines. On request, you will receive a detailed PFERD performance certificate for your professional tool drive.

For each machine type, we perform safety checks according to the current state of the art and write test reports.



#### Advice and products made to order

PFERD offers you individual targeted support to solve your application problems. PFERD's experienced sales representatives and technical advisors are happy to help you select your tool drive – also by visiting you on-site. Please contact us for further details.

If you cannot find the solution for your particular application in our extensive catalogue range, we can develop and produce tool drives in premium PFERD quality on request, tailor-made to meet the requirements of your job.



#### **Guarantee**

Our PFERD guarantee for defects on air grinders, electric grinders and flexible shaft drives as well as on the accessories, is exercised in such a manner that all parts which have material defects will either be repaired or replaced free of charge at our discretion. We shall honour these material defect claims for a maximum of 12 months. This provision shall be invalid if longer periods are prescribed by law.

The warranty shall not cover damage caused by improper handling, the use of spare parts other than our own, or by repairs carried out in workshops other than our own that are unauthorized.

#### **Technical modifications**

Technical developments and ergonomic improvements are continuously incorporated into our design and manufacture. We therefore reserve the right to make technical modifications to our products. In the event of changes to the design, we still ensure the availability of spare parts for four years.



### Online services, spare parts catalogue





All tools and more information: www.pferd.com

A powerful PFERD drive is an investment that pays off. This is because we offer numerous services with all our drives that optimally support you in the operation and maintenance of your machine.

Our website has been optimized for mobile end devices and offers in-depth product information as well as lots of other services about cutting and work on surfaces. Discover the many ways that the PFERD brand adds value and supports users of PFERD products in the best possible way.



#### **Application videos**

Alongside the detailed information and safety notes in our operating instructions, we also provide clear and easy-to-understand assembly and application videos. If you still have any questions, our sales team will be happy to offer you personal support together with our experts from the technical advice team.

You can find all available videos for PFERD tools and tool drives on our website at **www.pferd.com**.



#### Spare parts catalogue

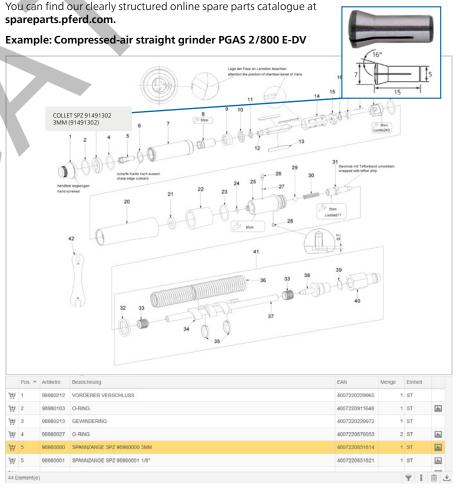
In our online spare parts catalogue, we have compiled all the information about every PFERD drive. Here you will find exploded drawings and other sketches as well as photos and ordering data for each individual spare part for our drives. With just a few clicks, you can select the required spare parts or spare parts kits, add them to your shopping cart and order them online directly from PFERD.

If you ever misplace the operating instructions, you can find them in our spare parts catalogue for download along with other documents such as CE declarations of conformity and illustrated DIY instructions for minor repairs.

In the information area you can see which documents are available for download.



Move your mouse over the different spare parts for your PFERD tool drive to get the exact product specifications. Clicking on the respective code displays more information and a product photo. In the lower part of the image, you have the option of adding the selected spare parts directly to the shopping cart and ordering them.





### **Tool drives**

### Well packaged and presented



#### **PFERD** packaging

PFERD provides tool drives in industrial packaging as standard.

#### Advantages:

- Robust packaging protecting the tools from dirt and damage.
- All the important information is included on the packaging label to facilitate product identification.



#### PFERD packaging label

In addition to the designation and the EAN code, the most important technical information is shown with the help of pictograms.

#### **Advantages:**

- Easier comparison of product features thanks to clear pictograms.
- The label contains information on other accessories.



#### **Explanation of the pictograms used**

General				
80.000 RPM		Rotatio		

onal speed



Belt speed



Power output



25 mm





Matching keys

#### **Tool mounting**





Collets/ stud bolts



Centre hole



Guard



Suitable for disc diameter



Suitable for drum grinder fitting



Belt dimensions

#### Air grinders





Note on use Can be used with/without oil



Air pressure



Air supply hose diameter

#### Electric grinders and flexible shaft drives

230 V	400 \
1~	3~

Voltage



Frequency



Insulated



Protective earthing





Safety extra-low voltage

#### Flexible shafts



Drive-side shaft connection



Handpiece-side sliding coupling

#### **PFERD**TOOL-CENTER

All tool drives can be impressively presented with special supports on the PFERDTOOL-CENTER.

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool. Your PFERD sales representative will be glad to answer any questions you might have.









The PFERD machine designations are structured to provide information about the drive type, as well as designs, throttle types and tool mountings. They also enable you to quickly and easily select the right rotational speed and performance classes for the various machine types.

The following overview provides a concise summary:

Figure	Description				Perfor- mance group	Rotational speed	Designs, Throttle types, Tool mountings
Robot spindles							
	<b>P</b> Pneumatic	<b>G</b> Straight grinder	<b>T</b> Turbine motor	<b>S</b> Collet	<b>1</b> x 100 watts	<b>1000</b> x 100 RPM	RS Robot spindle
	<b>P</b> Pneumatic	<b>G</b> Straight grinder	A Rear exhaust	<b>S</b> Collet	<b>3</b> x 100 watts	<b>370</b> x 100 RPM	<b>RS</b> Robot spindle
							LL Anti-clockwise rotation
	P Pneumatic	<b>W</b> Angle grinder	A Rear exhaust	<b>S</b> Collet	<b>4</b> x 100 watts	<b>180</b> x 100 RPM	RS Robot spindle
Air grinders							
<del></del>	<b>P</b> Pneumatic	<b>G</b> Straight grinder	A Rear exhaust	<b>S</b> Collet	<b>2</b> x 100 watts	<b>800</b> x 100 RPM	<b>E</b> Elastic bearing
	_						<b>Z</b> Two-handed
	-						<b>M</b> Medium length
							<b>V</b> Extended
							<b>DV</b> Ring throttle
							<b>HV</b> Lever throttle
							<b>DS</b> Instant start
	P Pneumatic	W Angle grinder	A Rear exhaust	<b>S</b> Collet	<b>1</b> x 100 watts	<b>800</b> x 100 RPM	<b>DV</b> Ring throttle
							<b>HV</b> Lever throttle
	P Pneumatic	<b>B</b> Belt grinder	A Front exhaust		<b>2</b> x 100 watts	<b>200</b> x 100 RPM	HV Lever throttle
	P Pneumatic	Filing machine			<b>4</b> Stroke length	<b>84</b> x 100 strokes	<b>SV</b> Push-pull throttle
					mm	per minute	<b>HV</b> Lever throttle
衆	MST Marking pen				<b>32</b> x 1000 strokes	per minute	<b>DV</b> Ring throttle
							<b>F</b> Needle gauge: fine





Figure	Description			Perfor- mance group	Rotational speed	Designs, Throttle types, Tool mountings
Electric grinders						
	MIM Micro motor			<b>3</b> x 100 watts	<b>800</b> x 100 RPM	230 V Volts
	<b>E</b> Electric	<b>G</b> Straight grinder	<b>ER</b> Electronically regulated	<b>8</b> x 100 watts	<b>280</b> x 100 RPM	
N. N.	Electric	<b>B</b> Belt grinder	<b>ER</b> Electronically regulated	<b>8</b> x 100 watts	<b>280</b> x 100 RPM	
	<b>E</b> Electric	<b>B</b> Belt grinder	<b>ER</b> Electronically regulated	<b>12</b> x 100 watts	<b>25</b> x 100 RPM	<b>R</b> Pipe belt grinder
	<b>E</b> Electric	<b>W</b> Angle grinder	<b>ER</b> Electronically regulated	<b>17</b> x 100 watts	<b>75</b> x 100 RPM	
	<b>E</b> Electric	S Burnishing machine	ER Electronically regulated	<b>12</b> x 100 watts	<b>25</b> x 100 RPM	7
DIN 10/DIN 15 drive	e systems					
	<b>E</b> Electric	M Motor	<b>ER</b> Electronically regulated	<b>8</b> x 100 watts	<b>280</b> x 100 RPM	<b>BW</b> Flexible shaft
<u> </u>	<b>R</b> Record	U Universal motor	ER Electronically regulated	<b>8</b> x 100 watts	<b>180</b> x 100 RPM	
	MME Mini-Mammoth	electronic	W Alternating current	<b>11</b> x 100 watts	<b>120</b> × 100 RPM	
	ME Mammoth electr	roníc	W Alternating current	<b>18</b> x 100 watts	<b>240</b> x 100 RPM	
	MME Maxi-Mammoth	electronic		<b>40</b> x 100 watts	<b>150</b> x 100 RPM	
	P Pneumatic	M Motor	A Rear exhaust	<b>10</b> x 100 watts	<b>120</b> x 100 RPM	<b>HV</b> Lever throttle
	<b>E</b> Electric	M Motor	<b>ER</b> Electronically regulated	<b>8</b> x 100 watts	<b>280</b> x 100 RPM	







General information



#### Recommendations and prerequisites for cost-effective use of robot spindles

#### 1. Air pressure

The air pressure for operating the robot spindle must not exceed 6.3 bar. A sufficient flow rate must always be ensured. Over-pressure leads to premature and increased levels of wear.

#### 2. Air consumption

All data in this catalogue refers to air consumption in cubic metres per minute [m³/min]. This is the volume of the air when expanded to atmospheric pressure. Unless otherwise indicated, the air consumption figures stated are always for a pressure of 6.3 bar and the maximum consumption of the drive in question. Non-regulated air grinders have the highest consumption at idling speed. Centrifugal force controlled air grinders have their highest air consumption under full load.

#### 3. Rotational speed

Rotational speed data is stated in revolutions per minute [RPM] and refers to the idling speed at a pressure of 6.3 bar. For non-regulated drives, the rotational speed under full load is approximately 50 % of the idling speed. For centrifugal force controlled drives, the speed under full load is approximately 80 to 90 % of the idling speed.

#### 4. Oil mist lubrication

Adequate oil mist lubrication, when required, is of crucial importance for optimum machine operation (oil viscosity at  $40^{\circ}$ C according to ISO VG 22–32 mm<sup>2</sup>/s (cSt)). For special lubricating oil, see page 143.

#### 5. Drives for oil-free compressed air operation

Turbine drives require clean and dry supply air in order to prevent wear. For this reason, they must not be used with oil mist lubrication.

#### 6. Maintenance unit

Installing complete upstream maintenance unit, consisting of a 5  $\mu m$  dirt filter, water separator, pressure reducer and lubricator, is recommended. The maintenance unit should be located no more than approximately 5 m from the tool drive.

The size of the filter pores should be  $3-5 \mu m$ .

#### 7. Air supply hose

The air supply hose must have an inner diameter that at least corresponds to that stated for the drives and if possible should be  $\leq$  5 m long.

#### 8. Fittings

Always use additional fittings such as hose nozzles, self-closing valve couplings etc. with the largest possible inner diameter. It is not advisable to use more than one valve coupling in order to prevent pressure losses.

#### 9. Maintenance

We recommend maintaining the drives at regular intervals.





General information

PFERD robot spindles are manufactured according to the most stringent quality criteria and the latest technological standards, and are ideal for stationary applications in robot cells and machine tools and for installation in transfer lines. Whether you have a general or a specialized application, the comprehensive PFERD range offers the ideal combination of innovative tools and powerful, durable robot spindles – all from a single source.

To ensure an optimum service life, observe the notes and recommendations on how to use robot spindles cost-effectively on page 12.



#### Bottom flange and clamping range

Use the relevant bottom flange to attach the robot spindle. The clamping range is indicated by the following pictogram:



#### **Deflection unit**

Robot spindles with and without deflection are required depending on the operating process being used. On request, all robot spindles can also be supplied with deflection units for fine adjustments.



#### Air supply hose and quick coupling

Most robot spindles are supplied without an air supply hose. Matching hoses and quick couplings are listed on the product pages for the robot spindles so that you can tailor the solution to your needs.



#### Speed throttle

Selected robot spindles come with a speed throttle that enables the drive operating speed to be reduced.

To adjust the rotational speed to the optimum cutting speed of the tool used, the adjusting screw combined with a sintered metal silencer is screwed into the exhaust connection on the relevant drive.

#### **Custom-made products**

If you cannot find the solution for your particular application in our comprehensive product range, we are happy to produce robot spindles to meet your preferences and requirements. Our sales representatives and technical advisers will be happy to assist you in analysing your task. Simply contact us to arrange an appointment. You can find our worldwide sales addresses at www.pferd.com.

On request, robot spindles can be supplied with deflection, in a reversible design, with clockwise or anti-clockwise rotation and with a tool change system.



Straight grinders



#### **PGTS 1/1000 RS**

#### 100,000 RPM / 100 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Stainless steel collet mounting.Very high concentricity in continuous use.

**Included in delivery:** Quick coupling, 3 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGTS 1/1000 RS	234044	clockwise	front	0.32	0.32	15	2.7/4	0.296

#### **Collets**



Group	For shank dia.				
	3	3/32	1/8		
	mm	inch	inch		
	EA	AN 400722	20		
15	851814	851838	851821		

### Key

Designation	EAN 4007220
DM SW 6/8 mm	851791

#### Air supply hose



Designation	EAN 4007220
PIS 4 RS	361016

### **Quick coupling**



Designation	EAN 4007220	
BK 4 mm 1/4"	392218	



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



# Robot spindles for stationary applications Straight grinders

102,5

80,000 RPM / 110 watts



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- High rotational speeds in a compact
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, 3 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGAS 2/800 RS	231616	clockwise	rear	0.20	0.18	23	4/6	0.110

**PGAS 2/800 RS** 

#### **Collets**



Group	F	or shank dia	ì.
	3	3/32	1/8
	mm	inch	inch
	E	AN 400722	0
23	421253	421277	421284

#### Key

Designation	EAN 4007220
EM SW 9 mm	330357
EM SW 10 mm	188514

#### Air supply hose



Designation	EAN
	4007220
DICEDO	269200

#### **Quick coupling**



Designation	EAN
	4007220
BK 6 mm - 1/4"	244326

### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/4	801741



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



Straight grinders



#### PGAS 3/370 RS PGAS 3/370 RS LL

#### 37,000 RPM / 320 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service life

#### PGAS 3/370 RS LL

Anti-clockwise rotation.

#### Included in delivery:

Quick coupling, 6 mm collet, 2 keys.

Designation	EAN 4007220		Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/370 RS	234020	clockwise	rear	0.70	0.50	21	6/8	0.456
PGAS 3/370 RS LL	234051	anti-clockwise	rear	0.80	0.60	21	6/8	0.456

#### **Collets**



Group		For sha	nk dia.	
	3	6	1/8	1/4
	mm	mm	inch	inch
		EAN 40	07220	
21	235447	235430	411544	411551

#### Key

Designation	EAN 4007220
EM SW 14 mm	206836

#### **Bottom flange**



Designation	EAN 4007220
FF 30	415634

#### Air supply hose

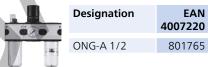
Designation	EAN 4007220	
PLS 8 RS	382295	

#### **Quick coupling**



Designation	EAN 4007220
BK 8 mm - 1/4"	244333

#### **Maintenance unit**







# Robot spindles for stationary applications Straight grinders



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, 6 mm collet, 2 keys.



Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	7	ollet	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/280 RS	234068	clockwise	rear	0.89	0.69		16	10/12	0.750

#### **Collets**



Group			For sha	nk dia.		
	3	6	8	10	12	1/4
	mm	mm	mm	mm	mm	inch
			EAN 40	07220		
16	416372	956984	957004	957028	416389	957035

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Bottom flange**

Designation	EAN 4007220
FF 36	415641

#### Air supply hose



Designation	EAN
	4007220
PLS 12 RS	382332

#### **Quick coupling**



Designation	EAN 4007220
RK 12 mm - 1//1"	2//3/10

#### **Maintenance unit**



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

Straight grinders



#### **PGAS 4/220 RS**

#### 22,000 RPM / 400 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, 6 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/220 RS	228852	clockwise	rear	0.71	0.51	16	10/12	1.661

#### **Collets**



Group			For sha	ank dia.		
	3	6	8	10	12	1/4
	mm	mm	mm	mm	mm	inch
			EAN 40	007220		
16	416372	956984	957004	957028	416389	957035

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Bottom flange**

1959 Allen	Designation	EAN 4007220
	FF 42	415665

#### Air supply hose



Designation	EAN
	4007220
PLS 12 RS	382332

#### **Quick coupling**



Designation	EAN 4007220
RK 12 mm - 1//"	2//3/0

#### Maintenance unit



## Designation EAN 4007220 ONG-A 1/2 801765



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



# Robot spindles for stationary applications Straight grinders



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, 6 mm collet, 2 keys.



Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]
PGAS 8/170 RS	234075	clockwise	rear	1.15	0.95	16	10/12	1.661

#### **Collets**



Group	For shank dia.							
	3	6	8	10	12	1/4		
	mm	mm	mm	mm	mm	inch		
			EAN 40	07220				
16	416372	956984	957004	957028	416389	957035		

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Bottom flange**

	Designation	EAN 4007220
-	FF 46	415672

#### Air supply hose



Designation	EAN
	4007220
PLS 12 RS	382332

#### **Quick coupling**



Designation	EAN
	4007220
BK 12 mm - 1/4"	244340

#### **Maintenance unit**



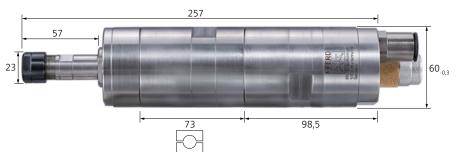


Straight grinders



#### **PGAS 11/58 RS**

#### 5,800 RPM / 1,100 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- High torque due to planetary gear.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, speed throttle, 6 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PGAS 11/58 RS	234082	clockwise	rear	1.58	1.38	16	11/14	16	3.355

#### **Collets**



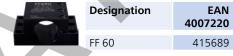
Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	10 mm	12 mm	1/4 inch
			EAN 40	007220		
16	416372	956984	957004	957028	416389	957035

#### Key



	Designation	EAN 4007220
7	EM SW 17 mm	204542
	DM SW 20/22 mm	957059

#### **Bottom flange**



#### Air supply hose



•••		
	Designation	EAN
		4007220
	DIC 1/I DC	202256

#### **Quick coupling**



Designation	EAN 4007220	
RK 14 mm - 1/2"	395103	

**EAN** 

#### Maintenand



ce unit	
Designation	EAN 4007220
ONG-A 1/2	801765

Designation	EAN 4007220	
SF 30 STG-IG 1/2	244975	



# Robot spindles for stationary applications Straight grinders



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- High torque due to planetary gear.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, speed throttle, 6 mm collet, 2 keys.



Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PGAS 4/52 RS	234099	clockwise	rear	0.71	0.51	16	8/10	12	1.140

#### **Collets**



Group			For shar	nk dia.		
	3 mm	6 mm	8 mm	10 mm	12 mm	1/4 inch
			EAN 40	07220		
16	416372	956984	957004	957028	416389	957035

#### Key



<b>Botto</b>	 
DOLLO	amor

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

	Designation	EAN 4007220
1	FF 42	415665

EAN

4007220

392256

#### Air supply hose



#### **Quick coupling**



#### Maintenance unit



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

Straight grinders



## **PGAS 4/24 RS** 2,400 RPM / 380 watts 168



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- High torque due to planetary gear.
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, speed throttle, 6 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	direc-	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PGAS 4/24 RS	234105	clockwise	rear	0.71	0.51	16	8/10	12	1.140

#### **Collets**



Group			For sha	ank dia.			
	3 mm	6 mm	8 mm	10 mm	12 mm	1/4 inch	
			EAN 40	007220			
16	416372	956984	957004	957028	416389	957035	

#### Key



Designation	EAN 4007220

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Bottom flange**

PARTITION OF THE PARTIT	Designation	EAN 4007220
1	FF 42	415665

#### Air supply hose



supply i	1036	
	Designation	EAN
		4007220
	PLS 10 RS	382318

#### **Quick coupling**



Designation	EAN 4007220
 BK 10 mm - 1/4"	392256

### Maintenance unit





Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



# Robot spindles for stationary applications Straight grinders



#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- High torque due to planetary gear.Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer service

#### Included in delivery:

Quick coupling, speed throttle, 6 mm collet, 2 keys.



Designation	EAN 4007220	Rotation direction	direc-	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PGAS 4/12 RS	234112	clockwise	rear	0.71	0.51	16	8/10	12	1.415

#### **Collets**



Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	10 mm	12 mm	1/4 inch
			EAN 40	07220		
16	416372	956984	957004	957028	416389	957035

#### Key



	D. H.	CI	
	<b>Bottom</b>	Tlange	

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

PEND AND AND AND AND AND AND AND AND AND A	Designation	EAN 4007220
5	FF 42	415665

#### Air supply hose



#### **Quick coupling**



Designation	EAN 4007220
RK 10 mm - 1//"	392256

#### Maintenance unit



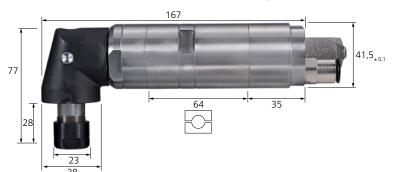
Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

# Robot spindles for stationary applications Angle grinders with collet



#### **PWAS 4/180 RS**

#### 18,000 RPM / 380 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Very high concentricity in continuous use.

**Included in delivery:**Quick coupling, speed throttle, 6 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]		Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PWAS 4/180 RS	242445	clockwise	rear	0.71	0.51	16	8/10	12	1.410

#### **Collets**



Group			For sha	nk dia.		
	3	6	8	10	12	1/4
	mm	mm	mm	mm	mm	inch
			EAN 40	07220		
16	416372	956984	957004	957028	416389	957035

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

### **Bottom flange**

End harris	Designation	EAN 4007220		
-	FF 41.5	415658		

#### Air supply hose



Designation	EAN
	4007220
DIC 10 DC	202210

#### **Quick coupling**



Designation	EAN
	4007220
BK 10 mm - 1/4"	392256

#### **Maintenance unit**





Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



## Robot spindles for stationary applications Angle grinders with threaded spindle



#### Special features:

- Max. tool dia. up to 125 mm.
- Autobalancer on the drive spindle.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys, guard.



Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWA 11/120 RS	395134	clockwise	rear	0.50	1.0	M14	13	22.23	2.430

#### **Clamping flanges**

(1)	Item no.	Designation	EAN 4007220
(3)	1	SPM14 98980036	902189
(4)	2	DHFL 98980039	902226
(5)	3	FLS 98980037	902202
	4	DHTR 98980040	902233
	5	FLS-CC 98980038	902219

#### Key

Designation	4007220
STL SW 35 x 5 mm	193853
SKS SW 4 mm	204450

#### **Bottom flange**

_	
Designation	EAN 4007220
FF 60	/115689

#### Maintenance unit

007220
801765

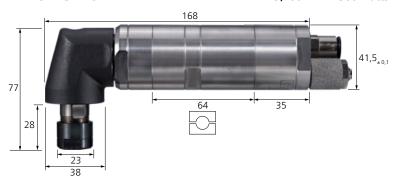


# Robot spindles for stationary applications Angle grinders with collet



#### **PWAS 4/52 RS**

#### 5,200 RPM / 380 watts





#### Special features:

- Ideal for stationary applications in robot stations, machine tools and for installation in transfer lines.
- Very high concentricity in continuous use.

**Included in delivery:**Quick coupling, speed throttle, 6 mm collet, 2 keys.

Designation	EAN 4007220	Rotation direction	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia./ outer dia. of air supply hose [mm]	Inner dia. of exhaust- hose [mm]	Net weight [kg]
PWAS 4/52 RS	388112	clockwise	rear	0.71	0.51	16	8/10	12	1.410

#### **Collets**



Group			For sha	nk dia.					
	3	6	8	10	12	1/4			
	mm	mm	mm	mm	mm	inch			
			EAN 40	07220					
16	416372	956984	957004	957028	416389	957035			

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Bottom flange**

Elebany	Designation	EAN 4007220
V	FF 41.5	415658

#### Air supply hose



	Designation	EAN
		4007220
,	DIC 10 DC	202210

#### **Quick coupling**



Designation	EAN 4007220
BK 10 mm - 1/4"	392256

#### **Maintenance unit**





Designation	EAN 4007220
SF 24 STG-IG 1/4	953259







### Air grinders

#### General information



Air grinders are the "top speed" machines among drives. They achieve higher rotational speeds than electric grinders or flexible shaft drives. Measured against their small size, they have a high power output. The robust and resistant slide vane and turbine motors have a long service life when used as intended and are very easy to service.

#### **Areas of application**

Air grinders are very versatile. They are used economically and reliably in series production and assembly lines, especially in medium and large-sized companies that have a compressed air network.

#### **PFERD** range

PFERD offers straight, angle and belt grinders, as well as special drives. PFERD air grinders are technically up to date and incorporate the latest ergonomic findings and requirements. They have been specially developed for the economic application of grinding and milling tools and cover a wide rotational speed range (110,000–500 RPM) and power range (2,600–75 watts).

#### **Advantages**

- Compact, ergonomic design.
- Low weight.
- High power compared to weight.
- Versatile use.
- Fixed rotational speeds.
- No risk of overloading, can be loaded up to machine standstill.
- Housing insulated against cold and vibration.
- Low-maintenance.
- Easy to service.
- Economical.



#### Criteria for selecting the optimum air grinder

The most important prerequisite for cost-effective work is the selection of the optimum tool. The appropriate drive is selected taking the following criteria into consideration:

#### 1. Rotational speed

The drive should always be selected according to the rotational speed and cutting speed recommendations for the tool. Please refer to catalogue sections 2–8 for these recommendations.

#### 2. Power output

The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the material to be machined, the cutting characteristics of the tool and the contact pressure.

#### 3. Design, shape and size

Each type of application places specific demands on the design and size of the tool drive. The different designs can be used for various applications, so the ideal drive should be selected for the task at hand, depending on the dimensions, accessibility, type and frequency of the application.

#### 4. Tool mounting

Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 137–142 for an overview of collets and spindle extensions. If you have any further questions, your personal PFERD sales representative will be happy to help you.

#### With or without oil

Turbine and air grinders are marked with the following symbols:



Use only without oil.



Use only with oil.



We are happy to supply you with the perfect oil for PFERD tool drives. For all ordering data and information about PFERD lubricants, please see page 143.



## **Air grinders**General information

#### Recommendations and prerequisites for cost-effective use of air grinders

#### 1. Air pressure

The air pressure for operating the grinder must not exceed 6.3 bar. A sufficient flow rate must always be ensured. Over-pressure leads to premature and higher levels of wear.

#### 2. Air consumption

All data in this catalogue refers to air consumption in cubic metres per minute [m³/min]. This is the volume of the air when expanded to atmospheric pressure. Unless otherwise indicated, the air consumption figures stated are always for a pressure of 6.3 bar and the maximum consumption of the drive in question. Non-regulated air grinders have the highest consumption at idling speed. Centrifugal-force-controlled air grinders have their highest air consumption under full load.

#### 3. Rotational speed

Rotational speed data is stated in revolutions per minute [RPM] and refers to the idling speed at a pressure of 6.3 bar. In the case of non-regulated drives, the rotational speed under full load is approximately 50 % of the idling speed. In the case of centrifugal-force-controlled drives, the speed under full load is approximately 80 to 90 % of the idling speed.

#### 4. Oil mist lubrication

Adequate oil mist lubrication, when relevant, is of crucial importance for optimum machine operation (oil viscosity at 40°C according to ISO VG 22–32 mm²/s (cSt)). For special lubricating oil, see page 143.

#### 5. Drives for oil-free compressed-air operation

Turbine drives require clean and dry supply air in order to prevent wear. For this reason, they must not be used with oil mist lubrication.

#### 6. Maintenance unit

It is recommended to install a complete maintenance unit consisting of a 5  $\mu m$  dirt filter, water separator, pressure reducer and lubricator. The maintenance unit should be located no more than approximately 5 m from the tool drive.

The size of the filter pores should be  $3-5 \mu m$ .

#### 7. In-line fine filter

To ensure trouble-free machine operation, particularly with frequent connection and disconnection, we recommend using the appropriate in-line fine filter, filter size  $5 \mu m$ .

#### 8. Air supply hose

The air supply hose must have an inner diameter that at least corresponds to those stated for the drives and if possible should be  $\leq 5$  m long.

#### 9. Fittings

Always use additional fittings such as hose nozzles, self-closing valve couplings etc. with the largest possible inner diameter. It is not advisable to use more than one valve coupling in order to prevent pressure losses.

#### 10. Noise level

Air tool operators must always wear hearing protection as the process noise emission exceeds 85 dB(A) in many applications, even though the idling noise of the air grinders is low.

#### 11 Vibrations

PFERD air grinders meet the requirements of the EC Machinery Directive regarding vibrations from hand-held or hand-guided machines. This is achieved through:

- Precise concentricity
- Vibration-damping intermediate layers
- Vibration-insulated housing.

#### 12. Maintenance and safety

We recommend:

- Maintenance of the drives at regular intervals
- Wearing personal protective equipment.



## **Air grinders**

## Straight grinders



#### **PGTS 1/1100 DV**

#### 110,000 RPM / 75 watts



#### PFERDVALUE:





#### Special features:

- No oil residues on the workpiece.
- The highest cutting speed for TC burrs and mounted points.

#### Included in delivery:

1.5 m air supply hose with

1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGTS 1/1100 DV	423417	front	ring	0.32	0.15	15	6	0.188

#### **Collets**



Group	For shank dia.						
	3 mm	3/32 inch	1/8 inch				
		N 40072					
15	851814	851838	851821				

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
DM SW 6/8 mm	851791

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 3.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 4.5 mm

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.







#### Special features:

- No oil residues on the workpiece.
- High cutting speed for TC burrs and mounted points.
- Slim air-powered straight grinder with turbine motor.
- Easy guidance thanks to slim, lightweight design.
- Held like a pen.
- Detachable spindle sleeve.

#### Included in delivery:

0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet,

## **PGTA 1/1010** 101,000 RPM / 75 watts 160 PFERDVALUE:

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGTA 1/1010	071199	rear	ring	0.50	0.35	1	5.5	0.190

#### **Collets**



Group	For shank dia.				
	2.34 3 1/8 mm mm inch				
	EAN 4007220				
1	196342	196359	196366		

For dimensions, see table page 140.

•	
к	$\boldsymbol{\omega}$
	CV

Designation	EAN 4007220
EM SW 7 mm	592885

#### In-line fine filter

Designation	EAN 4007220
SE 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 3.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 4.5 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



## Air grinders

## Straight grinders



#### PGT 1/1000

#### 100,000 RPM / 75 watts



#### PFERDVALUE:



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGT 1/1000	653449	front	ring	0.35	0.17	1	5	0.240

#### **Collets**



Group	Fo	r shank d	ia.
	2.34	3	1/8
	mm	mm	inch
	E.A	N 40072	20
1	196342	196359	196366

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 7 mm	592885
EM SW 8 mm	206867

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm:  Dia. up to 5 mm  Dia. 5 to 6 mm  Width ≤ 13 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 3.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 4.5 mm

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Special features:

mounted points. Included in delivery:

No oil residues on the workpiece. High cutting speed for TC burrs and

2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.









#### Special features:

- High cutting speed for TC burrs and mounted points.
- Light and easy to handle.
- Elastically mounted spindle.
- Low vibrations when working.
- Easy guidance thanks to slim, lightweight design.
- Detachable spindle sleeve.

#### PGAS 2/800 E-HV

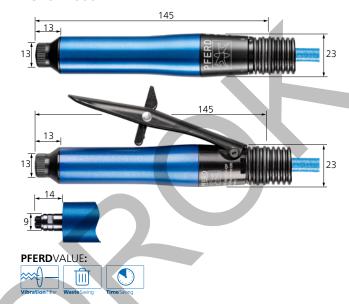
Dead man's switch using safety lever valve.

#### Included in delivery:

0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

#### **PGAS 2/800 E-DV PGAS 2/800 E-HV**

80,000 RPM / 110 watts



EAN 4007220

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 2/800 E-DV	221372	rear	ring	0.27	0.26	15	4.8	0.136
PGAS 2/800 E-HV	221396	rear	lever	0.27	0.26	15	4.8	0.170

#### **Collets**



Group	For shank dia.				
•	3	1/8			
	mm	inch	inch		
	E/	AN 40072	20		
15	851814	851838	851821		

Key Designation DM SW 6/8 mm 851791

For dimensions, see table page 140.

#### **Maintenance unit**





Designation	EAN 4007220	
ONG-A 1/4	801741	

Designation	EAN 4007220	
SF 24 STG-IG 1/4	953259	

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm:  Dia. up to 5 mm  Dia. 5 to 6 mm  Width ≤ 13 mm  Dia. 6 to 10 mm  Width ≤ 10 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 4.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 5.5 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of Note: Please observe the recommended cutting speeds and the max. permitted 10 mm and the max. stated mounted point dimensions.

rotational speeds in catalogue sections 2–8.

## Air grinders

Straight grinders



## **PGAS 1/750** 75,000 RPM / 110 watts 159



#### Special features:

- High cutting speed for TC burrs and mounted points.
- Easy guidance thanks to slim, lightweight design.
- Detachable spindle sleeve.

Included in delivery: 0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]		Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/750	507803	rear	ring	0.35	0.20	1	5	0.142

#### **Collets**



Group	For shank dia.			
	2.34	1/8		
	mm	mm	inch	
	EA	N 40072	20	
1	196342	196359	196366	

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 7 mm	592885

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/4	801741

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm:  Dia. up to 5 mm  Dia. 5 to 8 mm  Width ≤ 13 mm  Dia. 8 to 10 mm  Width ≤ 2 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 4.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 6.0 mm
		and the second s	

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

 $\textbf{Note:} \ Please \ observe \ the \ recommended \ cutting \ speeds \ and \ the \ max. \ permitted \ rotational \ speeds \ in \ catalogue \ sections \ 2–8.$ 





## **Air grinders** Straight grinders



#### Special features:

- High cutting speed for TC burrs and mounted points.
- Light and easy to handle.
- Easy guidance thanks to slim, lightweight design.

#### **PGAS 1/700 HV**

Dead man's switch using safety lever valve.

#### Included in delivery:

0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet,

#### **PGAS 1/700 PGAS 1/700 HV**

70,000 RPM / 100 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/700	948873	rear	ring	0.25	0.12	15	4.8	0.090
PGAS 1/700 HV	101315	rear	lever	0.25	0.12	15	4.8	0.128

#### **Collets**



Group	For shank dia.			
	3 mm	·		
	EA	N 40072	20	
15	851814	851838	851821	

For dimensions, see table page 140.

## Key

**EAN** Designation 4007220 DM SW 6/8 mm 851791

#### **Maintenance unit**



Designation	EAN 4007220
	1007220
ONIC A 1/4	001741

ONG-A 1/4

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm:  Dia. up to 5 mm  Dia. 5 to 8 mm  Width ≤ 13 mm  Dia. 8 to 13 mm  Width ≤ 3 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Shank dia. 3 mm Dia. up to 5.0 mm  CBN grinding points Shank dia. 3 mm Dia. up to 5.5 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.







## Air grinders Straight grinders



## **PGAS 1/600** 60,000 RPM / 110 watts 159



#### Special features:

- High cutting speed for TC burrs and mounted points.
- Easy guidance thanks to slim, lightweight design.
- Detachable spindle sleeve.

Included in delivery: 0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/600	507780	rear	ring	0.28	0.20	1	5	0.142

#### **Collets**



Group	For shank dia.				
·	2.34 mm	3 mm	1/8 inch		
	EA	20			
1	196342	196359	196366		

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 7 mm	592885

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/4	801741

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm  HSS rotary cutters Special cuts Shank dia. 3 mm Dia. 1.6 mm	Mounted points Shank dia. 3 mm:  Dia. up to 6 mm  Dia. 6 to 8 mm  Width ≤ 16 mm  Dia. 8 to 13 mm  Width ≤ 3 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GR Dia. up to 4 mm GHR, LR, TX, LHR Dia. up to 8 mm	Diamond grinding points Shank dia. 3 mm Dia. 3.0 to 5.5 mm  CBN grinding points Shank dia. 3 mm Dia. 5.0 to 5.5 mm

**<sup>\*</sup>Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.









- High cutting speed for TC burrs and mounted points.
- Light and easy to handle.
- Elastically mounted spindle.
- Low vibrations when working.
- Easy guidance thanks to slim, lightweight design.
- Detachable spindle sleeve.

#### PGAS 2/600 E-HV

Dead man's switch using safety lever valve.

#### Included in delivery:

0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

#### **PGAS 2/600 E-DV PGAS 2/600 E-HV**

60,000 RPM / 100 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 2/600 E-DV	221402	rear	ring	0.26	0.24	15	4.8	0.137
PGAS 2/600 E-HV	221419	rear	lever	0.26	0.24	15	4.8	0.171

#### **Collets**



Group	For shank dia.					
	3 mm	3/32 inch	1/8 inch			
		AN 40072				
15	851814	851838	851821			

Key

Designation	EAN 4007220	
DM SW 6/8 mm	851791	

For dimensions, see table page 140.

#### **Maintenance unit**



	Designation	EAN 4007220	Designation	EAN 4007220
: B.	ONG-A 1/4	801741	SF 24 STG-IG 1/4	953259

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm  HSS rotary cutters Special cuts Shank dia. 3 mm Dia. 1.6 mm	Mounted points Shank dia. 3 mm:  Dia. up to 6 mm  Dia. 6 to 8 mm  Width ≤ 16 mm  Dia. 8 to 13 mm  Width ≤ 3 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GR Dia. up to 4 mm GHR, LR, TX, LHR Dia. up to 8 mm	Diamond grinding points Shank dia. 3 mm Dia. 3.0 to 5.5 mm  CBN grinding points Shank dia. 3 mm Dia. 5.0 to 5.5 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



#### **PGAS 1/550** 55,000 RPM / 100 watts 153



#### PFERDVALUE:





#### Special features:

Easy guidance thanks to slim, lightweight design.

#### Included in delivery:

0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet,

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/550	896600	rear	ring	0.25	0.12	15	4.8	0.091

#### **Collets**



Group	For shank dia.					
	3 mm	3/32 inch	1/8 inch			
	EA	N 40072	20			
15	851814	851838	851821			

For dimensions, see table page 140.

#### Key



EAN 4007220

DM SW 6/8 mm 851791

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/4	801741

#### In-line fine filter



#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm  HSS rotary cutters Special cuts Shank dia. 3 mm Dia. up to 1.6 mm	Mounted points Shank dia. 3 mm:  Dia. up to 6 mm  Dia. 6 to 8 mm  Width ≤ 16 mm  Dia. 8 to 13 mm  Width ≤ 3 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GR Dia. up to 4 mm GHR, LR, TX Dia. up to 6 mm GHR, LR, TX, LHR Dia. up to 8 mm	Diamond grinding points Shank dia. 3 mm Dia. 2.8 to 5.5 mm  CBN grinding points Shank dia. 3 mm Dia. up to 5.5 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.









Light and easy to handle.

#### PG 3/500 S

Push-pull throttle version suitable for continuous use.

#### PGAS 3/500 HV

Dead man's switch using safety lever valve.

#### Included in delivery: PG 3/500 S

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGAS 3/500 HV**

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### PG 3/500 S **PGAS 3/500 HV**

50,000 RPM / 200 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	_	Air consumption under load [m³/min]	3 - 4	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/500 S	286326	front	push-pull	0.45	0.24	5	8.5	0.370
PGAS 3/500 HV	286333	rear	lever	0.45	0.24	5	8.5	0.460

Key

#### **Collets**



Group		For shank dia.	
	3 mm, 1/8 inch	6 mm	1/4 inch
		EAN 4007220	
5	299944	299951	606032

Designation	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
CE 24 CTC 1C 1/4	052250

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO, TITANIUM Shank dia. 3 mm Dia. up to 3 mm  HSS rotary cutters Special cuts Shank dia. 3 mm Dia. up to 1.6 mm	Mounted points Shank dia. 3 mm:  Dia. up to 8 mm  Dia. 8 to 10 mm Width ≤ 16 mm  Dia. 10 to 16 mm Width ≤ 4 mm  Shank dia. 6 mm:  Dia. up to 10 mm  Dia. 10 to 13 mm Width ≤ 32 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR Dia. up to 4 mm GHR, LR, TX, LHR Dia. up to 10 mm Abrasive spiral bands and rubber drum holders Dia. up to 8 mm	Diamond grinding points Shank dia. 3 + 6 mm Dia. 3.5 to 7.0 mm  CBN grinding points Shank dia. 3 + 6 mm Dia. 6.0 to 9.0 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



#### **PGAS 3/380 E-DV PGAS 3/380 E-HV**

#### 38,000 RPM / 290 watts





#### Special features:

- Elastically mounted spindle guarantees a longer service life, especially when using TC burrs.
- Low vibrations when working.

#### PGAS 3/380 E-HV

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/380 E-DV	368312	rear	ring	0.70	0.60	6	8	0.472
PGAS 3/380 E-HV	221433	rear	lever	0.70	0.60	6	8	0.512

#### **Collets**

Group			For sha	nk dia.		
	3	6	8	3/32	1/8	1/4
	mm	mm	mm	inch	inch	inch
			EAN 40	07220		
6	212875	212851	212936	234969	212882	212868

К	◂	е	V	1
۰	-	7	J	
	7	0		

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

For dimensions, see table page 140.

#### **Maintenance unit**

#### EAN Designation 4007220 ONG-A 1/2 801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 4 to 6 mm  HSS rotary cutters Special cuts Dia. up to 2.3 mm	Mounted points Shank dia. 3 mm: Día. up to 20 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 16 mm Width ≤ 40 mm Dia. 16 to 25 mm Width ≤ 25 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR Dia. up to 6 mm GHR, LR, TX Dia. up to 15 mm LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 13 mm	Diamond grinding points Shank dia. 3 + 6 mm Dia. 4.5 to 9.0 mm  CBN grinding points Shank dia. 3 + 6 mm Dia. 8.0 to 12.0 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- Very easy to handle and guide.
- High power output with compact design.

#### **PGAS 3/350 HV**

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGAS 3/350 DV PGAS 3/350 HV**

35,000 RPM / 290 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/350 DV	221440	rear	ring	0.60	0.50	6	6	0.401
PGAS 3/350 HV	221457	rear	lever	0.60	0.50	6	c	0.441

#### **Collets**



Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40		II.e.i	
6	212875	212851	212936	234969	212882	212868

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

For dimensions, see table page 140

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

ın-	line	tine	filter	
	_			
-		(Man		

₽	Designation	EAN 4007220
	SF 24 STG-IG 1/4	953259

## Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 4 to 6 mm  HSS rotary cutters Special cuts Dia. up to 2.3 mm	Mounted points Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 6 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 16 mm Width ≤ 40 mm Dia. 16 to 25 mm Width < 25 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR, TX Dia. up to 16 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 15 mm	Diamond grinding points Shank dia. 3 + 6 mm Dia. 4.5 to 10.0 mm CBN grinding points Shank dia. 3 + 6 mm Dia. 8.0 to 14.0 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

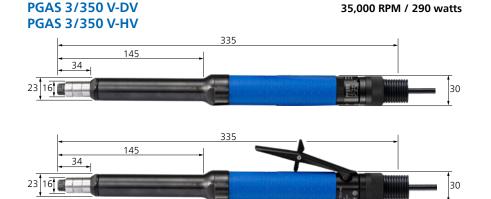
\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.





## Straight grinders







#### Special features:

- Very easy to handle and guide.
- Extended design, ideal for working in hard-to-reach areas.
- High power output with compact design.

#### PGAS 3/350 V-HV

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/350 V-DV	395189	rear	ring	0.60	0.50	6	6	0.740
PGAS 3/350 V-HV	395172	rear	lever	0.60	0.50	6	6	0.780

#### **Collets**



Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	07220		
6	212875	212851	212936	234969	212882	212868

 Designation
 EAN 4007220

 EM SW 11 mm
 206812

 EM SW 14 mm
 206836

For dimensions, see table page 140.

#### **Maintenance unit**



EAN 4007220
801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

## **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 4 to 6 mm  HSS rotary cutters Special cuts Dia. up to 2.3 mm	Mounted points Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 6 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 16 mm Width ≤ 40 mm Dia. 16 to 25 mm Width ≤ 25 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR, TX Dia. up to 16 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 15 mm	Diamond grinding points Shank dia. 3 + 6 mm Dia. 4.5 to 10.0 mm CBN grinding points Shank dia. 3 + 6 mm Dia. 8.0 to 14.0 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO SPG 6/6 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







Easy to handle and guide.

#### PGS 3/300 HV

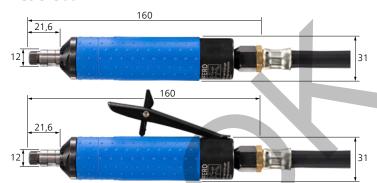
Dead man's switch using safety lever valve.

#### Included in delivery:

2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGS 3/300 DV PGS 3/300 HV**

#### 30,000 RPM / 240 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGS 3/300 DV	430422	front	ring	0.60	0.50	10	8	0.348
PGS 3/300 HV	430446	front	lever	0.60	0.50	10	8	0.384

#### **Collets**



Group	For shank dia.					
	3	5	6	1/8	1/4	
	mm	mm	mm	inch	inch	
		E.	AN 40072	220		
10	331279	398647	331262	331286	738719	

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 9 mm	330357
FM SW 10 mm	188514

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, MICRO, TITANIUM Dia. 4 to 6 mm  HSS rotary cutters Special cuts Dia. up to 2.3 mm	Mounted points Shank dia. 3 mm:  Dia. up to 20 mm  Dia. 20 to 25 mm  Width ≤ 16 mm  Shank dia. 16 mm:  Dia. up to 13 mm  Dia. 13 to 16 mm  Width ≤ 40 mm  Dia. 16 to 25 mm  Width ≤ 25 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR Dia. up to 15 mm TX Dia. up to 19 mm LHR Dia. up to 20 mm	Abrasive spiral bands and rubber drum holders Dia. up to 19 mm  Policap Shank dia. 3 + 6 mm up to 7 mm  Mounted flap wheels Shank dia. 3 + 6 mm up to 20 mm  Polinox Compact grinding wheels PNER Dia. 25 mm	Diamond grinding points Shank dia. 3 + 6 mm Dia. 5.5 to 10.0 mm CBN grinding points Dia. 10 to 15.0 mm	Cut-off wheels EHT Dia. up to 30 mm  Matching arbor Bo 6/6 0-4  Grinding wheels ER Dia. up to 30 mm  Matching arbor BO 6/6 3-10

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

 $\begin{tabular}{ll} \bf Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in \end{tabular}$ catalogue sections 2-8.



## Straight grinders



#### PGS 3/300 Z-DV PGS 3/300 Z-HV

#### 30,000 RPM / 290 watts





#### Special features:

Can be guided precisely thanks to extended, slim housing.

#### PGS 3/300 Z-HV

Dead man's switch using safety lever valve.

#### Included in delivery:

2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGS 3/300 Z-DV	395165	front	ring	0.60	0.50	10	8	0.433
PGS 3/300 Z-HV	415597	front	lever	0.60	0.50	10	8	0.469

#### **Collets**



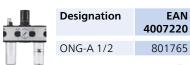
Group	For shank dia.					
	3	5	6	1/8	1/4	
	mm	mm	mm	inch	inch	
		E.	AN 40072	220		
10	331279	398647	331262	331286	738719	9

Key

Designation	EAN 4007220
EM SW 9 mm	330357
EM SW 10 mm	188514

For dimensions, see table page 140.

#### **Maintenance unit**



#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, TITANIUM Dia. 4 to 6 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 6 to 12 mm HSS rotary cutters Special cuts Dia. 3.2 mm	Mounted points Shank dia. 3 mm:  Dia. up to 20 mm  Dia. 20 to 25 mm  Width ≤ 16 mm  Shank dia. 6 mm:  Dia. up to 13 mm  Dia. 13 to 20 mm  Width ≤ 40 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR Dia. up to 15 mm TX Dia. up to 19 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 19 mm POLICAP Shank dia. 3 + 6 mm Dia. up to 7 mm Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 20 mm POLINOX unitized wheels PNER Dia. 25 mm	Diamond grinding points Dia. 5.5 to 10.0 mm  CBN grinding points Dia. 10.0 to 15.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



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#### Special features:

- Very powerful with a compact design.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

# **PGAS 4/300 HV** 30,000 RPM / 440 watts

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/300 HV	221471	rear	lever	0.88	0.84	20	8	0.830

#### **Collets**



Group	For shank dia.				
	3	6	8	10	1/4
	mm	mm	mm	mm	inch
		F	AN 400722	0	
20	233634	312964	233641	233658	233665

EAN Designation 4007220 EM SW 12 mm 239162 EM SW 17 mm 204542

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

## In-line fine filter

	Designation	EAN 4007220
· · · · · · · · · · · · · · · · · · ·	SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, TITANIUM Dia. 4 to 6 mm  Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 6 to 12 mm  HSS rotary cutters Special cuts Dia. 3.2 mm	Mounted points Shank dia. 3 mm:  Dia. up to 20 mm  Dia. 20 to 25 mm Width ≤ 16 mm  Shank dia. 6 mm:  Dia. up to 13 mm  Dia. 13 to 25 mm Width ≤ 40 mm  Dia. 25 mm  Width ≤ 45 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR Dia. up to 15 mm TX Dia. up to 19 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 19 mm POLICAP Shank dia. 3 + 6 mm Dia. up to 7 mm Mounted flap wheels Shank dia. 3 mm Dia. up to 20 mm Shank dia. 6 mm Dia. up to 25 mm POLINOX unitized wheels PNER Dia. 25 mm	Diamond grinding points Dia. 5.5 to 10.0 mm  CBN grinding points Dia. 10.0 to 15.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



## **PGAS 4/300 M-HV** 30,000 RPM / 440 watts 335 135 34



#### Special features:

- Medium length design for use when access is restricted.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/300 M-HV	419717	rear	lever	0.88	0.84	6	8	1.198

#### **Collets**



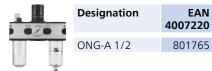
Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	007220		
6	212875	212851	212936	234969	212882	212868

For dimensions, see table page 140.

EAN

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



#### In-line fine filter

	Designation	EAN 4007220
_	SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, TITANIUM Dia. 4 to 6 mm  Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 6 to 12 mm  HSS rotary cutters Special cuts Dia. 3.2 mm	Mounted points Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 16 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 25 mm Width ≤ 40 mm Dia. 25 mm Width ≤ 45 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR Dia. up to 15 mm TX Dia. up to 19 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 19 mm POLICAP Shank dia. 3 + 6 mm Dia. up to 7 mm Mounted flap wheels Shank dia. 3 mm Dia. up to 20 mm Shank dia. 6 mm Dia. up to 25 mm POLINOX unitized wheels PNER Dia. 25 mm	Diamond grinding points Dia. 5.5 to 10.0 mm  CBN grinding points Dia. 10.0 to 15.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. 30 mm  Matching arbors BO 6/6 3-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.





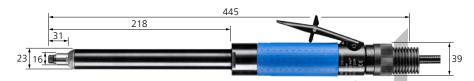


- Extended design, ideal for working in hard-to-reach areas.
- Dead man's switch using safety lever valve.

**Included in delivery:** 1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

## **PGAS 4/300 V-HV**

30,000 RPM / 440 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/300 V-HV	382585	rear	lever	0.88	0.84	6	8	1.421

#### **Collets**



Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	07220		
6	212875	212851	212936	234969	212882	212868

For dimensions, see table page 140.

- 4	
_ y	

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, TITANIUM Dia. 4 to 6 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 6 to 12 mm HSS rotary cutters Special cuts Dia. 3.2 mm	Mounted points Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 16 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 25 mm Width ≤ 40 mm Dia. 25 mm Width ≤ 45 mm	Poliflex fine grinding points Shank dia. 3 + 6 mm Bonds: GR, PUR Dia. up to 8 mm GHR, LR Dia. up to 15 mm TX Dia. up to 19 mm LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 19 mm POLICAP Shank dia. 3 + 6 mm Dia. up to 7 mm Mounted flap wheels Shank dia. 3 mm Dia. up to 20 mm Shank dia. 6 mm Dia. up to 25 mm POLINOX unitized wheels PNER Dia. 25 mm	Diamond grinding points Dia. 5.5 to 10.0 mm  CBN grinding points Dia. 10.0 to 15.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. 30 mm  Matching arbors BO 6/6 3-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



## Straight grinders



#### PG 3/250 S

#### 25,000 RPM / 225 watts





#### Special features:

- Small design.
- Good accessibility thanks to compact design.
- Light and easy to handle.
- Push-pull throttle version suitable for continuous use.
- Constant power delivery due to the centrifugal governor.

#### Included in delivery:

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220		Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/250 S	286340	front	push-pull	0.21	0.49	5	8.5	0.370

#### **Collets**



Group		For shank dia.		4
	3 mm, 1/8 inch	6 mm	1/4 inch	
		EAN 4007220		
5	299944	299951	606032	

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831

## Maintenance unit



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND Dia. 6 mm  Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm  HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  up to 20 mm  Width ≤ 50 mm  Dia. 20 to 25 mm  Width ≤ 45 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 10 mm GHR, LR, TX, LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 30 mm Width ≤ 25 mm  POLICAP Dia. up to 16 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 6 mm	Diamond grinding points Dia. 6.0 to 12.0 mm  CBN grinding points Dia. 12.0 to 18.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Elastically mounted spindle.
- Low-vibration use.
- Particularly suitable for use with TC burrs.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/250 E-HV	430484	rear	lever	0.98	0.87	16	8	0.870

#### **Collets**



Group	For shank dia.						
	6 8 10		1/4				
	mm	mm	mm	inch			
	EAN 4007220						
16	956984	957004	957028	957035			

De la constant	Designation	EAN 4007220
Jane Mary	EM SW 17 mm	204542
	DM SW 20/22 mm	957059

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

		A	
4	=	78	
	4		

In-line fine filter

•	
Designation	EAN
	4007220
SF 24 STG-IG 1/4	953259

## **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND Dia. 6 mm  Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm  HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  up to 20 mm Width ≤ 50 mm  Dia. 20 to 25 mm Width ≤ 45 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 10 mm GHR, LR, TX, LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 30 mm Width ≤ 25 mm  POLICAP Dia. up to 16 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 6 mm	Diamond grinding points Dia. 6.0 to 12.0 mm  CBN grinding points Dia. 12.0 to 18.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



## Straight grinders



# PGAS 4/250 HV 25,000 RPM / 440 watts



#### Special features:

- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Very powerful with a compact design.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220		Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/250 HV	382844	rear	lever	0.98	0.87	20	8	0.830

#### **Collets**



Group					
	3	6	8	10	1/4
	mm	mm	mm	mm	inch
		E	AN 400722	0	
20	233634	312964	233641	233658	233665

3

Designation	EAN 4007220
EM SW 12 mm	239162
EM SW 17 mm	204542

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND Dia. 6 mm  Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm  HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  up to 20 mm Width ≤ 50 mm  Dia. 20 to 25 mm Width ≤ 45 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 10 mm GHR, LR, TX, LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 30 mm Width ≤ 25 mm  POLICAP Dia. up to 16 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 6 mm	Diamond grinding points Dia. 6.0 to 12.0 mm  CBN grinding points Dia. 12.0 to 18.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Medium length design for use when access is restricted.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

#### **PGAS 4/250 M-HV**

25,000 RPM / 440 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/250 M-HV	419724	rear	lever	0.98	0.87	6	8	1.198

#### **Collets**



Group			For sha			
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	007220		
6	212875	212851	212936	234969	212882	212868

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220

Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND Dia. 6 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  up to 20 mm Width ≤ 50 mm  Dia. 20 to 25 mm Width ≤ 45 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 10 mm GHR, LR, TX, LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 30 mm Width ≤ 25 mm  POLICAP Dia. up to 16 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 6 mm	Diamond grinding points Dia. 6.0 to 12.0 mm  CBN grinding points Dia. 12.0 to 18.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



## Straight grinders



# PGAS 4/250 V-HV 25,000 RPM / 440 watts



#### Special features:

- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Extended design, ideal for working in hard-to-reach areas.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/250 V-HV	388051	rear	lever	0.98	0.87	6	8	1.421

#### **Collets**



Group	For shank dia.						
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch	
			EAN 40	007220			
6	212875	212851	212936	234969	212882	212868	

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND Dia. 6 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm: up to 20 mm Width ≤ 50 mm Dia. 20 to 25 mm Width ≤ 45 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 10 mm GHR, LR, TX, LHR Dia. up to 20 mm  Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  Mounted flap wheels Shank dia. 3 + 6 mm Dia. up to 30 mm Width ≤ 25 mm  POLICAP Dia. up to 16 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 6 mm	Diamond grinding points Dia. 6.0 to 12.0 mm  CBN grinding points Dia. 12.0 to 18.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. 30 mm  Matching arbor BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. 30 mm  Matching arbor BO 6/6 3-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm applies.

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Very powerful with a compact design.
- Can be guided precisely thanks to comfortable two-handed operation.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

## **PGAS 4/220 Z-HV**

22,000 RPM / 400 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/220 Z-HV	231005	rear	lever	0.98	0.87	20	8	1.221

#### **Collets**



Group		F	or shank dia		
	3	6	8	10	1/4
	mm	mm	mm	mm	inch
		E	AN 4007220		
20	233634	312964	233641	233658	233665

EAN Designation 4007220 EM SW 12 mm 239162 EM SW 17 mm 204542

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	e EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 6 to 10 mm Cut TITANIUM Dia. 6 mm Cut 1, ALU, FVK, FVKS, PLAST, EDGE Dia. 10 to 12 mm	Mounted points Shank dia. 6 mm.  Dia. up to 16 mm  Dia. 16 to 32 mm  Width ≤ 32 mm  Dia. 32 to 40 mm  Width ≤ 20 mm  Shank dia. 8 mm:  Dia. up to 32 mm  Width ≤ 40 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm Poliflex wheels Bond: TX Dia. 25 mm	Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  POLICAP Dia. up to 11 mm  Mounted flap wheels Dia. up to 30 mm Width ≤ 25 mm  POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 8 mm	Diamond grinding points Dia. 7.0 to 15.0 mm CBN grinding points Dia. 13.0 to 20.0 mm Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO 6/6 3-10

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

 $\textbf{Note:} \ \textbf{Please} \ \textbf{observe} \ \textbf{the} \ \textbf{recommended} \ \textbf{cutting} \ \textbf{speeds} \ \textbf{and} \ \textbf{the} \ \textbf{max.} \ \textbf{permitted} \ \textbf{rotational} \ \textbf{speeds} \ \textbf{in}$ catalogue sections 2-8.

## Straight grinders



#### PG 8/220 HV **PGAS 8/220 HV**

#### 22,000 RPM / 600 watts







#### Special features:

- Compact design.
- Dead man's switch using safety lever valve.

#### Included in delivery: PG 8/220 HV

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGAS 8/220 HV**

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]		Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/220 HV	450840	front	lever	0.95	0.85	7	8.5	0.950
PGAS 8/220 HV	286401	rear	lever	0.95	0.85	7	8.5	1.000

#### **Collets**



Group		For sha	nk dia.	
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
		EAN 40	007220	
7	187074	186855	187050	187067

#### Key

9	Designation	EAN 4007220
3	EM SW 9/16"	186831
	EM SW 3/4"	186848

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter



#### **Frequency damper**



Frequency damper **FD** 47-8-28 ID for PGAS 8/220 HV to make use much easier on the ears (EAN: 4007220**776827**).

#### Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 6 to 10 mm Cut TITANIUM Dia. 6 mm Cut 1, ALU, FVK, FVKS, PLAST, EDGE Dia. 10 to 12 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm Poliflex wheels Bond: TX Dia. 25 mm	Abrasive spiral bands and rubber drum holders Dia. up to 22 mm POLICAP Dia. up to 11 mm Mounted flap wheels Dia. up to 30 mm Width ≤ 25 mm POLINOX unitized wheels PNER Dia. 25 mm Felt points Dia. up to 8 mm	Diamond grinding points Dia. 7.0 to 15.0 mm CBN grinding points Dia. 13.0 to 20.0 mm Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO 6/6 3-10

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.





Dead man's switch using safety lever valve.

#### PG 8/220 V-HV

Alternative drive with anti-clockwise rotation available.

#### PGAS 8/220 VS-HV

Exceptionally slim drive extension.

#### Included in delivery: PG 8/220 V-HV

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys (EM SW 9/16", EM SW 3/4").

#### **PGAS 8/220 VS-HV**

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys (EM SW 7/16", EM SW 9/16").

#### PG 8/220 V-HV **PGAS 8/220 VS-HV**

#### 22,000 RPM / 600 watts



#### **PFERD**VALUE:

PGAS 8/220 VS-HV



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/220 V-HV	177167	front	lever	0.95	0.85	7	8.5	1.400
PGAS 8/220 VS-HV	836859	rear	lever	0.95	0.85	5	8.5	1.170

#### **Collets**



Group		For sha	ınk dia.	
	3 mm,	6	8	1/4
	1/8 inch	mm	mm	inch
		EAN 40	007220	
5	299944	299951	-	606032
7	187074	186855	187050	187067

#### Key

	Designation	EAN 4007220
ı	EM SW 7/16"	300480
	EM SW 9/16"	186831
	EM SW 3/4"	186848

## For dimensions, see table page 140.

#### Maintenance unit



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter



#### **Frequency damper**



EAN

4007220

Frequency damper FD **47-8-28 ID** for PGAS 8/220 HV to make use much easier on the ears (EAN: 4007220**776827**).

### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 6 to 10 mm Cut TITANIUM Dia. 6 mm Cut 1, ALU, FVK, FVKS, PLAST, EDGE Dia. 10 to 12 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm Poliflex wheels Bond: TX Dia. 25 mm	Abrasive spiral bands and rubber drum holders Dia. up to 22 mm POLICAP Dia. up to 11 mm Mounted flap wheels Dia. up to 30 mm Width ≤ 25 mm POLINOX unitized wheels PNER Dia. 25 mm Felt points Dia. up to 8 mm	Diamond grinding points Dia. 7.0 to 15.0 mm CBN grinding points Dia. 13.0 to 20.0 mm Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 40 mm  Matching arbor BO 6/6 3-10

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



# **PGAS 10/200 HV**

#### 20,000 RPM / 1,000 watts





#### Special features:

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/200 HV	382257	rear	lever	1.38	1.10	16	13	1.234

#### **Collets**



Group	For shank dia.							
	3 mm	6 mm	8 mm	10 mm	12 mm	1/4 inch		
	EAN 4007220							
16	416372	956984	957004	957028	416389	957035		

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 30 STG-IG 1/2	244975

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 6 to 10 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, EDGE ECS Dia. 10 to 16 mm HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  Dia. up to 32 mm  Dia. 32 to 40 mm  Width ≤ 20 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm  POLIROLL Dia. up to 9 mm  Abrasive spiral bands and rubber drum holders Dia. up to 25 mm  POLICAP Dia. up to 10 mm  Mounted flap wheels Width ≤ 30 mm Dia. up to 30 mm POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 8 mm	Diamond grinding points Dia. 8.0 to 16.0 mm  CBN grinding points Dia. 14.0 to 22.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 30 mm  Matching arbor BO 6/6 3-10	Shank-mounted wheel brushes knotted RBG dia. 76 mm
The same also and the state of the same	on the chaptedia of Chapa	*C-4-1	. This character is a second control of the control		A

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- Very long design, particularly well suited to working in hard-to-reach areas.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

#### **PGAS 10/200 V-HV**

20,000 RPM / 1,000 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/200 V-HV	245538	rear	lever	1.38	1.10	16	13	2.047

#### **Collets**



Group			For sha	nk dia.		
С. Ор	3	6	8	10	12	1/4
	mm	mm	mm	mm	mm	inch
			EAN 40	007220		
16	/16372	956984	957004	957028	116380	057035

416372 956984 957004 957028 416389 957035

EAN Designation 4007220 EM SW 17 mm 204542 DM SW 20/22 mm 957059

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220	
SE 30 STG-IG 1/2	244975	

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 6 to 10 mm Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, EDGE ECS Dia. 10 to 16 mm HSS rotary cutters Cut 3, special cuts Dia. up to 4 mm	Mounted points Shank dia. 6 mm:  Dia. up to 32 mm  Dia. 32 to 40 mm  Width ≤ 20 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm  POLIROLL Dia. up to 9 mm  Abrasive spiral bands and rubber drum holders Dia. up to 25 mm  POLICAP Dia. up to 10 mm  Mounted flap wheels Width ≤ 30 mm Dia. up to 30 mm POLINOX unitized wheels PNER Dia. 25 mm  Felt points Dia. up to 8 mm	Diamond grinding points Dia. 8.0 to 16.0 mm  CBN grinding points Dia. 14.0 to 22.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 30 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 30 mm  Matching arbor BO 6/6 3-10	Shank-mounted wheel brushes knotted RBG dia. 76 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.





## Straight grinders



# **PGAS 4/190 HV** 19,000 RPM / 370 watts



Key

#### **Special features:**

- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Very powerful with a compact design.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/190 HV	388068	rear	lever	0.78	0.72	20	8	0.830

#### **Collets**



Group		F	or shank dia	ı. /		
	3 mm	6 mm	8 mm	10 .mm	1/4 inch	
	111111		AN 400722		IIICII	
20	233634	312964	2336/1	233658	233665	

Designation EAN 4007220 EM SW 12 mm 239162 EM SW 17 mm 204542

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 4 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. up to 30 mm Poliflex fine grinding discs Bond: TX Dia. 25 mm Abrasive spiral bands and rubber drum holders Dia. up to 25 mm	POLICAP Dia. up to 10 mm  POLINOX cross buffs Dia. up to 25 mm  Mounted flap wheels Dia. up to 25 mm  POLISTAR Dia. 20 mm  Felt points Dia. up to 10 mm	Diamond grinding points Dia. 8.0 to 18.0 mm  CBN grinding points Dia. 18.0 to 25.0 mm  Diamond cut-off wheels Dia. 40 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 50 mm  Matching arbors BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Medium length design for use when access is restricted.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

## **PGAS 4/190 M-HV**

19,000 RPM / 370 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/190 M-HV	419731	rear	lever	0.78	0.72	6	8	1.198

#### **Collets**



Group			For sha	nk dia.		
	3	6	8	3/32	1/8	1/4
	mm	mm	mm	inch	inch	inch
			EAN 40	007220		
6	212875	212851	212936	234969	212882	212868

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm
HSS rotary cutters Cut 1, 2, 3, 5, special

Dia. 8 to 12 mm
HSS rotary cutters Cut 1, 2, 3, 5, special
cuts
Dia. 2.3 to 4 mm

Mounted points Shank dia. 6 mm:
Dia. up to 16 mm
Dia. 16 to 32 mm Width $\leq$ 40 mm Dia. 32 to 50 mm Width $\leq$ 25 mm
Shank dia. 8 mm:
Dia. up to 32 mm
Dia. 32 to 50 mm Width ≤ 50 mm

Catalogue section 3*
Mounted points Shank dia. 6 mm:
Dia. up to 16 mm
Dia. 16 to 32 mm Width ≤ 40 mm
Dia. 32 to 50 mm Width ≤ 25 mm
Shank dia. 8 mm:
Dia. up to 32 mm
Dia. 32 to 50 mm Width ≤ 50 mm

Catalogue section 4*	
Poliflex fine grinding	I
points Bonds:	ı
GR, PUR	
Dia. up to 15 mm	
GHR, LR, TX, LHR Dia. up to 30 mm	ı
·	
Poliflex fine grinding discs	ı
Bond:	
TX	ı
Dia. 25 mm	[
Abrasive spiral bands and rubber drum holders	

Dia. up to 25 mm

<b>POLICAP</b> Dia. up to 10 mm
POLINOX cross buffs Dia. up to 25 mm
<b>Mounted flap wheels</b> Dia. up to 25 mm
<b>POLISTAR</b> Dia. 20 mm
Falt mainte

It points	10
a. up to 10 mm B	rl

#### Catalogue section 5 **Diamond grinding** points Dia. 8.0 to 18.0 mm

**CBN** grinding points Dia. 18.0 to 25.0 mm

Diamond cut-off wheels Dia. 40 to 50 mm

atching bors 0 6/10 3 0 8/10 3

#### Catalogue section 6 **Cut-off wheels EHT** Dia. up to 50 mm

Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10

**Grinding wheels ER** Dia. up to 50 mm

Matching arbors BO 6/6 3-10 BO 8/10 6-20 BO SPG 6/6 0-10 BO SPG 6/10 0-10

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated If no shank diameter is given, the shank dia. of 6 mm mounted point dimensions.

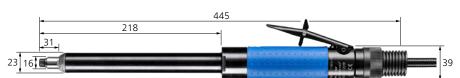


## Straight grinders



#### **PGAS 4/190 V-HV**

19,000 RPM / 370 watts





#### Special features:

- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Extended design, ideal for working in hard-to-reach areas.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/190 V-HV	395400	rear	lever	0.78	0.72	6	8	1.421

#### **Collets**



Group	For shank dia.							
	3	6	8	3/32	1/8	1/4		
	mm	mm	mm	inch	inch	inch		
			EAN 40	07220				
6	212875	212851	212936	234969	212882	212868		

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, ALLROUND Dia. 8 to 12 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 4 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. up to 30 mm Poliflex fine grinding discs Bond: TX Dia. 25 mm Abrasive spiral bands and rubber drum holders Dia. up to 25 mm	POLICAP Dia. up to 10 mm  POLINOX cross buffs Dia. up to 25 mm  Mounted flap wheels Dia. up to 25 mm  POLISTAR Dia. 20 mm  Felt points Dia. up to 10 mm	Diamond grinding points Dia. 8.0 to 18.0 mm  CBN grinding points Dia. 18.0 to 25.0 mm  Diamond cut-off wheels Dia. 40 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 50 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated







- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### PG 8/160 HV

Compact shape.

#### PGAS 8/160 VM-HV

Slim drive extension.

#### Included in delivery: PG 8/160 HV

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGAS 8/160 VM-HV**

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### PG 8/160 HV **PGAS 8/160 VM-HV**

16,000 RPM / 600 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]		Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/160 HV	536339	front	lever	0.34	0.85	7	8.5	0.950
PGAS 8/160 VM-HV	843079	rear	lever	0.34	0.85	7	8.5	1.200

#### **Collets**



Group		For sha	nk dia.	
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
		EAN 40	07220	
7	107074	10000	407050	407067
/	187074	IXDXXX	187050	18/Uh/

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

#### **Maintenance unit**



Designation	EAN
	4007220
ONG-A 1/2	801765

#### In-line fine filter



#### **Frequency damper**



Frequency damper FD 47-8-28 ID for PGAS 8/160 VM-HV to make use much easier on the ears (EAN: 4007220**776827**).

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO Dia. 8 to 12 mm Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 5 mm	Mounted points Shank dia. 6 mm: Dia. up to 50 mm Width ≤ 50 mm Shank dia. 8 mm: Dia. up to 50 mm Width ≤ 50 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. 12 to 30 mm Poliflex fine grinding discs Bond: TX Dia. 25 mm Abrasive spiral bands and rubber drum holders Dia. up to 30 mm	POLICAP Dia. up to 21 mm  Mounted flap wheels Width ≤ 30 mm Dia. up to 40 mm  POLINOX cross buffs Dia. up to 25 mm  POLIROLL Dia. up to 12 mm  POLISTAR Dia. up to 20 mm  Felt points Dia. up to 10 mm	Diamond grinding points Dia. 10.0 to 20.0 mm CBN grinding points Dia. 18.0 to 25.0 mm Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20  Catalogue section 8  Shank-mounted wheel brushes crimped RBU dia. 20 to 40 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



## Straight grinders



# **PGAS 10/160 HV** 16,000 RPM / 1,000 watts



#### Special features:

- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/160 HV	382233	rear	lever	0.70	0.90	16	13	1.234

#### **Collets**

PFERDVALUE:



Group		For shank dia.						
	3	6	8	10	12	1/4		
	mm	mm	mm	mm	mm	inch		
			EAN 40	007220				
16	416372	956984	957004	957028	416389	957035		

For dimensions, see table page 140.

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Maintenance unit**

	Designation	EAN 4007220
	ONG-A 1/2	801765

#### In-line fine filter



Designation	EAN
	4007220
SF 30 STG-IG 1/2	244975

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO Dia. 8 to 12 mm  Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 5 mm	Mounted points Shank dia. 6 mm:  Dia. up to 50 mm Width ≤ 50 mm  Shank dia. 8 mm:  Dia. up to 50 mm Width ≤ 50 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. 12 to 30 mm  Poliflex fine grinding discs Bond: TX Dia. 25 mm  Abrasive spiral bands and rubber drum holders Dia. up to 30 mm	POLICAP Dia. up to 21 mm  Mounted flap wheels Width ≤ 30 mm Dia. up to 40 mm  POLINOX cross buffs Dia. up to 25 mm  POLIROLL Dia. up to 12 mm  POLISTAR Dia. up to 20 mm  Felt points Dia. up to 10 mm	Diamond grinding points Dia. 10.0 to 20.0 mm  CBN grinding points Dia. 18.0 to 25.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20  Catalogue section 8  Shank-mounted wheel brushes crimped RBU dia. 20 to 40 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- Very long design, particularly well suited to working in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

#### **PGAS 10/160 V-HV**

16,000 RPM / 1,000 watts





Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/160 V-HV	231012	rear	lever	0.70	0.90	16	13	2.047

#### **Collets**



Group	For shank dia.					
	3	6	8	10	12	1/4
	mm	mm	mm	mm	mm	inch
			EAN 40	07220		
16	416372	956984	957004	957028	416389	957035

For dimensions, see table page 140.

#### Key



Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Maintenance unit**

	Designation	EAN 4007220
.a:	ONG-A 1/2	801765

#### In-line fine filter



Designation	EAN 4007220
SF 30 STG-IG 1/2	244975

## **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO Dia. 8 to 12 mm Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 5 mm	Mounted points Shank dia. 6 mm: Dia. up to 50 mm Width ≤ 50 mm Shank dia. 8 mm: Dia. up to 50 mm Width ≤ 50 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. 12 to 30 mm  Poliflex fine grinding discs Bond: TX Dia. 25 mm  Abrasive spiral bands and rubber drum holders Dia. up to 30 mm	POLICAP Dia. up to 21 mm  Mounted flap wheels Width ≤ 30 mm Dia. up to 40 mm  POLINOX cross buffs Dia. up to 25 mm  POLIROLL Dia. up to 12 mm  POLISTAR Dia. up to 20 mm  Felt points Dia. up to 10 mm	Diamond grinding points Dia. 10.0 to 20.0 mm CBN grinding points Dia. 18.0 to 25.0 mm Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20  Catalogue section 8  Shank-mounted wheel brushes crimped RBU dia. 20 to 40 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



# **PGAS 4/120 E-HV** 12,000 RPM / 440 watts



#### Special features:

- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.
- Elastically mounted spindle.
- Low-vibration use.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	J. J	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/120 E-HV	430620	rear	lever	0.70	0.98	16	8	1.035

#### **Collets**



Group	For shank dia.					
	6	8 10		1/4		
	mm	mm	mm	inch		
		EAN 40	07220			
16	956984	957004	957028	957035		

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm  Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 3.2 to 6 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 25 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. 8 to 20 mm GHR, LR, TX, LHR Dia. 15 to 40 mm  Abrasive spiral bands and rubber drum holders Dia. up to 30 mm  Mounted flap wheels Dia. up to 30 mm  POLINOX unitized wheels PNER Dia. 50 mm	POLINOX cross buffs Dia. 25 mm  POLISTAR Dia. 30 mm  POLIROLL Dia. up to 15 mm  POLICAP Dia. up to 16 mm  Felt points Dia. up to 15 mm	Diamond grinding points Dia. 15.0 to 20.0 mm  Diamond cut-off wheels Dia. 50 mm  Matching arbors BO 6/10 3 BO 8/10 3  CBN grinding points Dia. up to 30.0 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

**Included in delivery:** 1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

# **PGAS 10/120 HV** 12,000 RPM / 950 watts 46 PFERDVALUE:

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/120 HV	382219	rear	lever	0.50	0.90	16	13	1.234

**Collets** 



Group	For shank dia.							
	3	6	8	10	12	1/4		
	mm	mm	mm	mm	mm	inch		
	EAN 4007220							
16	416372	956984	957004	957028	416389	957035		

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN
	4007220
SF 30 STG-IG 1/2	244975

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 3.2 to 6 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm Catalogue section 4* Poliflex fine grinding points Bonds: GR, PUR Dia. 8 to 20 mm GHR, LR, TX, LHR Dia. 15 to 40 mm	Abrasive spiral bands and rubber drum holders Dia. up to 45 mm  Mounted flap wheels Dia. up to 40 mm  POLINOX unitized wheels PNER Dia. 50 mm  POLINOX cross buffs Dia. 25 mm  POLISTAR Dia. 30 mm  POLIROLL Dia. up to 15 mm  POLICAP Dia. up to 16 mm  Felt points Dia. up to 15 mm	Diamond grinding points Dia. 15.0 to 25.0 mm  Diamond cut-off wheels Dia. 50 mm  Matching arbors BO 6/10 3 BO 8/10 3  CBN grinding points Dia. up to 30.0 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20	Shank-mounted end brushes crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 to 23 mm Shank-mounted wheel brushes crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 mm
		***			0 111 1 1

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated



## Straight grinders



#### **PGAS 10/120 V-HV**

12,000 RPM / 950 watts



#### PFERDVALUE:





#### Special features:

- Very long design, particularly well suited to working in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

## Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/120 V-HV	231029	rear	lever	0.50	0.90	16	13	2.047

#### **Collets**



Group	For shank dia.								
	3	6	8	10	12	1/4			
	mm	mm	mm	mm	mm	inch			
			EAN 40	007220					
16	416372	956984	957004	957028	416389	957035			

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

_	-	
		-

Designation	EAN 4007220
SF 30 STG-IG 1/2	244975

#### **Suitable PFERD tools**

Catalogue section 2 Catalogue	section 3* Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm  Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 3.2 to 6 mm  Catalogue  Poliflex fin- points Bonds: GR, PUR Dia. 8 to 20 GHR, LR, TX	and rubber drum holders Dia. up to 45 mm  Mounted flap wheels Dia. up to 40 mm  Mounted flap wheels Dia. up to 40 mm  POLINOX unitized wheels PNER Dia. 50 mm  POLINOX cross buffs Dia. 25 mm  O mm mm POLISTAR Dia. 30 mm  section 4* POLIROLL Dia. up to 15 mm  POLICAP Dia. up to 16 mm  mm Felt points	Diamond grinding points Dia. 15.0 to 25.0 mm  Diamond cut-off wheels Dia. 50 mm  Matching arbors BO 6/10 3 BO 8/10 3  CBN grinding points Dia. up to 30.0 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20	Shank-mounted end brushes crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 to 23 mm Shank-mounted wheel brushes crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

 $\begin{tabular}{ll} \textbf{Note:} Please observe the recommended cutting speeds and the max. permitted rotational speeds in $(1)$ and $(1)$ are the recommended cutting speeds and the max of the property of the recommendation of the recommendatio$ catalogue sections 2-8.







- Constant power delivery due to the centrifugal governor.
- Compact design.
- Dead man's switch using safety lever valve.

#### Included in delivery: PG 8/100 HV

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

#### **PGAS 8/100 HV**

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

#### PG 8/100 HV **PGAS 8/100 HV**

#### 10,000 RPM / 600 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/100 HV	536438	front	lever	0.17	0.85	7	8.5	0.950
PGAS 8/100 HV	286272	rear	lever	0.17	0.85	7	8.5	1.000

#### **Collets**



Group	For shank dia.						
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch			
		EAN 40	07220				
7	187074	186855	187050	187067			

#### Key

Designation	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter



#### Frequency damper



EAN

4007220

Frequency damper FD 47-8-28 ID for PGAS 8/100 HV to make use much easier on the ears (EAN: 4007220**776827**).

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 3.2 to 6 mm	Mounted points Shank dia. 6 mm:  Dia. up to 16 mm  Dia. 16 to 32 mm  Width ≤ 40 mm  Dia. 32 to 50 mm  Width ≤ 25 mm  Shank dia. 8 mm:  Dia. up to 32 mm  Dia. 32 to 50 mm  Width ≤ 25 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. 8 to 20 mm GHR, LR, TX, LHR Dia. 15 to 40 mm  Abrasive spiral bands and rubber drum holders Dia. up to 30 mm  Mounted flap wheels Dia. up to 30 mm  POLINOX unitized wheels PNER Dia. 50 mm	POLINOX cross buffs Dia. 25 mm  POLISTAR Dia. 30 mm  POLIROLL Dia. up to 15 mm  POLICAP Dia. up to 16 mm  Felt points Dia. up to 15 mm	Diamond grinding points Dia. 15.0 to 20.0 mm  Diamond cut-off wheels Dia. 50 mm  Matching arbors BO 6/10 3 BO 8/10 3  CBN grinding points Dia. up to 30.0 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



#### PG 8/100 V-HV **PGAS 8/100 V-HV PGAS 8/100 VM-HV**

#### 10,000 RPM / 600 watts



#### PFERDVALUE:

PG 8/100 V-HV, PGAS 8/100 V-HV









#### Special features:

- Extended version for work in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### PG 8/100 V-HV, PGAS 8/100 V-HV

- Alternative drive with anti-clockwise rotation available.
- Supported version SU-D32 available on request.

#### **PGAS 8/100 VM-HV**

Slim drive extension.

#### Included in delivery:

Air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI); 6 mm collet, 2 keys.

#### PG 8/100 V-HV

3 m air supply hose

#### PGAS 8/100 V-HV, PGAS 8/100 VM-HV

1 m exhaust hose and 3 m air supply hose.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/100 V-HV	176825	front	lever	0.17	0.85	7	8.5	1.400
PGAS 8/100 V-HV	286289	rear	lever	0.17	0.85	7	8.5	1.400
PGAS 8/100 VM-HV	843086	rear	lever	0.17	0.85	7	8.5	1.200

#### **Collets**



Group		For sha	nk dia.	
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
		EAN 40	07220	
7	187074	186855	187050	187067

For dimensions, see table page 140.

#### Key



Designation	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

#### Maintenance unit



#### Designation **EAN** 4007220 ONG-A 1/2 801765

#### In-line fine filter



Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### Frequency damper





Frequency damper FD 47-8-28 ID for PGAS 8/100 V-HV and PGAS 8/100 VM-HV to make use much easier on the ears (EAN: 4007220**776827**).

#### **Suitable PFERD tools**

Catalogue section 2

TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm Cut 1, ALU, ALLROUND, **EDGE** Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts

**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm

Dia. 16 to 32 mm Width ≤ 40 mm

Dia. 32 to 50 mm Width  $\leq 25 \text{ mm}$ 

Shank dia. 8 mm: Dia. up to 32 mm

Dia. 32 to 50 mm Width  $\leq 25 \text{ mm}$ 

If no shank diameter is given, the shank dia. of

#### Catalogue section 3\* Catalogue section 4\*

Poliflex fine grinding points Bonds: GR, PUR Dia. 8 to 20 mm GHR, LR, TX, LHR Dia. 15 to 40 mm

Abrasive spiral bands and rubber drum holders Dia. up to 30 mm

Mounted flap wheels

Dia. up to 30 mm

**POLINOX** unitized wheels PNER Dia. 50 mm

#### POLINOX cross buffs Dia. 25 mm POLISTAR

Dia, 30 mm **POLIROLL** 

Dia. up to 15 mm **POLICAP** Dia. up to 16 mm

**Felt points** Dia. up to 15 mm

#### Catalogue section 5 Diamond grinding points

Dia. 15.0 to 20.0 mm

Diamond cut-off wheels Dia. 50 mm

Matching arbors BO 6/10 3 BO 8/10 3

**CBN** grinding points Dia. up to 30.0 mm

#### Catalogue section 6 **Cut-off wheels EHT**

Dia. up to 50 mm Matching

arbor BO 6/6 0-4

**Grinding wheels ER** Dia. up to 50 mm

Matching arbors BO 6/6 3-10 BO 8/10 6-20

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in

Dia. 3.2 to 6 mm

6 mm applies.







- High torque due to planetary gear.
- Compact, easy-to-handle grinder.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/70 HV	230992	rear	lever	0.60	0.50	6	8	0.850

#### **Collets**



Group	For shank dia.						
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch	
			EAN 40	07220			
6	212875	212851	212936	234969	212882	212868	

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**

applies.

Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 4*
Poliflex fine grinding points Poliflex fine grinding discs Dia. 25 to 50 mm
Mounted flap wheels Dia. 40 to 80 mm
POLINOX mounted grinding wheels Dia. 40 to 80 mm
POLINOX cross buffs Dia. 50 mm

If no shank diameter is given, the shank dia. of 6 mm

POLICLEAN discs/ mounted tools Dia. 75 mm Felt points Mounted felt flap wheels Felt wheels Dia. up to 45 mm Matching arbor

BO 6/6 3-10

Catalogue section 8 Shank-mounted wheel brushes crimped RBU dia. 70 to 100 mm Shank-mounted end brushes knotted PBG dia. 10 to 30 mm

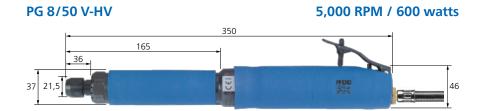
Shank-mounted bevel brushes crimped KBU dia. 80 to 95 mm Shank-mounted cup brushes crimped

TBU dia. 30 to 50 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



## Straight grinders







#### Special features:

- Exceptionally high torque due to reduction
- Can be guided precisely thanks to comfortable two-handed operation.
- Robust design for heavy-duty use.
- Extended version for work in hard-to-reach areas.
- Dead man's switch using safety lever valve.

#### Included in delivery:

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/50 V-HV	176788	front	lever	0.85	0.34	7	8.5	1.600

#### **Collets**



Group		For shank dia.				
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch		
		EAN 40	007220			
7	187074	186855	187050	187067		

For dimensions, see table page 140.

D	esignation	EAN 4007220
EN	И SW 9/16"	186831
ΕN	√ SW 3/4"	186848

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Design	nation EAN 4007220
SF 24 S	TG-IG 1/4 953259

#### **Suitable PFERD tools**

Catalogue section 4*	Y	Catalogue section 8
Poliflex fine grinding points Poliflex fine grinding discs Dia. 25 to 50 mm  Mounted flap wheels Dia. 40 to 80 mm  POLINOX mounted grinding wheels Dia. 40 to 80 mm  POLINOX cross buffs Dia. 50 mm	POLICLEAN discs/ mounted tools Dia. 75 mm  Felt points Mounted felt flap wheels Felt wheels Dia. up to 45 mm  Matching arbor BO 6/6 3-10	Shank-mounted wheel brushes crimped RBU dia. 70 to 100 mm  Shank-mounted end brushes knotted PBG dia. 10 to 30 mm  Shank-mounted bevel brushes crimped KBU dia. 80 to 95 mm  Shank-mounted cup brushes crimped TBU dia. 30 to 50 mm

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.







- High torque due to planetary gear.
- Compact, easy-to-handle grinder.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/35 HV	388075	rear	lever	0.60	0.50	6	8	0.850

#### **Collets**



Group	For shank dia.					
·	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	007220		
6	212875	212851	212936	234969	212882	212868

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220	
SE 24 STG-IG 1/4	953259	

#### **Suitable PFERD tools**

Catalogue section 4*
Poliflex fine grinding points Poliflex fine grinding discs Dia. 25 to 80 mm
Mounted flap wheels Dia. 60 to 80 mm
POLISTAR Dia. 100 mm
POLINOY cross buffs

POLINOX cross buffs Dia. 50 mm POLINOX mounted grinding wheels Dia. 60 to 100 mm

POLICLEAN discs/mounted tools
Dia. 50 and 100 mm

Felt points, mounted felt flap wheels,

felt wheels Dia. up to 60 mm Catalogue section 8

Shank-mounted wheel brushes

crimped

RBU dia. 70 to 100 mm

Shank-mounted end brushes

knotted

PBG dia. 10 to 30 mm

Shank-mounted bevel brushes

crimped

KBU dia. 80 to 95 mm

Shank-mounted cup brushes

crimped

TBU dia. 30 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm applies. \*Catalogue section 4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

## Straight grinders



#### **PGAS 2/5 DS**

#### 500 RPM / 160 watts





#### Special features:

- Easy-to-handle grinder for use of countersinks.
- Instant start enables fast, reliable working.
- Rotational speed regulation for optimum

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 overhead trolley, 6 mm collet, 2 keys.

Designation	EAN 4007220		Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 2/5 DS	419748	rear	Instant start	0.40	0.30	20	6	0.564

#### **Collets**



Group		F	or shank dia	ı.	
	3	6	8	10	1/4
	mm	mm	mm	mm	inch
EAN 4007220					
20	233634	312964	233641	233658	233665

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 12 mm	239162
EM SW 17 mm	204542

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SE 24 STG-IG 1/4	053250

#### **Suitable PFERD tools**

#### Catalogue section 2

#### **Countersink KES**

Dia. up to 30 mm

#### Flat countersink FLS

Dia. up to 11 mm

If no shank diameter is given, the shank dia. of 6 mm applies.







#### Special features:

- Robust, without angular gear.
- Light and easy to handle.
- Smallest, high-revving angle grinder.
- Held like a pen.

#### **PWAS 1/800 HV**

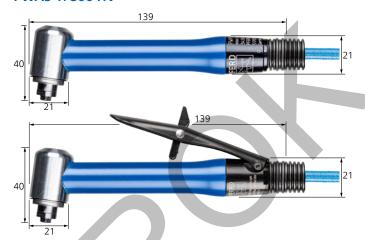
Dead man's switch using safety lever valve.

#### Included in delivery:

0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

#### **PWAS 1/800 DV PWAS 1/800 HV**

80,000 RPM / 75 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWAS 1/800 DV	230985	rear	ring	0.15	0.14	2	4.8	0.094
PWAS 1/800 HV	381168	rear	lever	0.15	0.14	2	4.8	0.134

#### **Collets**



Group	For shank dia.			
	2.34	3	3/32	1/8
	mm	mm	inch	inch
		EAN 40	07220	
2	851999	207840	207864	207857

For dimensions, see table page 140.

Key	

Designation		EAN 4007220
	DM SW 6/8 mm	851791

#### **Maintenance unit**

Designation	EAN 4007220	
ONG-A 1/4	801741	

#### In-line fine filter

Designation	EAN 4007220	
SF 24 STG-IG 1/4	953259	

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs Cut 3 PLUS, 4, 5, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm  ALU cut Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm Dia. 6 to 10 mm Width < 2 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm	Diamond grinding points Dia. up to 4.0 mm Shank dia. 3 mm  CBN grinding points Dia. 3.5 to 5.0 mm Shank dia. 3 mm

<sup>\*</sup>Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

#### Angle grinders with collet



## PWSA 1/250 25,000 RPM / 110 watts



#### Special features:

- Compact design.
- Low angle head height.
- Slim angle head.
- Ideal for work in hard-to-reach areas.
- Light and easy to handle.

#### Included in delivery:

0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 1/250	802588	rear	ring	0.30	0.20	3	5	0.217

#### **Collets**

Group	For sha	For shank dia.		
	3	1/8 inch		
	mm			
	EAN 40	07220		
3	188262	188354		

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 10 mm	188514
EM SW 13/64"	188279

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/4	801741

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### Arbor



Designation	EAN 4007220	Use for
ASD 20 CD 1/4-20 G	308417	COMBIDISC tools, SBH 20. SBHR20

The arbor replaces the collet. It is used for direct mounting of COMBIDISC tools.

#### Suitable PFERD tools

#### Catalogue section 4\*

**Poliflex fine grinding points** Shank dia. 3 mm

Bonds:

GR, PUR

Dia. up to 10 mm GHR, LR, TX, LHR

Dia. up to 20 mm

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

#### **COMBIDISC** abrasive discs

Dia. up to 20 mm with

arbor

ASD 20 CD 1/4-20G

**Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





#### Angle grinders with collet





#### Special features:

- Slim angle head for work in hard-to-reach
- Easy to handle, compact shape.

#### **PWAS 2/200 HV**

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet,

#### **PWAS 2/200 DV PWAS 2/200 HV**

20,000 RPM / 230 watts



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWAS 2/200 DV	419755	rear	ring	0.55	0.45	6	6	0.420
PWAS 2/200 HV	417089	rear	lever	0.55	0.45	6	6	0.460

#### **Collets**



Group			For sha	nk dia.		
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
			EAN 40	007220		
6	212875	212851	212036	23/1060	212882	212868

For dimensions, see table page 140.

#### Key

1	Designation	EAN 4007220
	EM SW 11 mm	206812
	EM SW 14 mm	206836

#### **Maintenance unit**



In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	•	Catalogue section 5	Catalogue section 6	
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND Dia. 6 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. up to 3.2 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 25 mm Width ≤ 32 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 20 mm Abrasive spiral bands and rubber drum holders Dia. up to 22 mm	POLICAP Dia. up to 11 mm Mounted flap wheels Dia. up to 20 mm COMBIDISC abrasive discs Dia. 20 to 25 mm COMBIDISC non- woven discs hard type VRH 20	Diamond grinding points Dia. 8.0 to 15.0 mm CBN grinding points Dia. 15.0 to 20.0 mm Diamond cut-off wheels Dia. 30 mm Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 30 mm Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10	Grinding wheels ER Dia. up to 30 mm Matching arbors BO 6/6 3-10 BO SPG 6/6 0-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10
					1.1 .1 (40	1.1

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.

#### Angle grinders with collet



## **PWSA 4/200 HV** 20,000 RPM / 300 watts



#### Special features:

- Low angle head height.
- Compact design.
- High spindle concentricity.
- Good size/weight to output ratio.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 4/200 HV	598184	rear	lever	0.57	0.42	5	8.5	0.520

#### **Collets**



Group		For shank dia.		
	3 mm, 1/8 inch	6 mm	1/4 inch	
		EAN 4007220		
5	299944	299951	606032	

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831
	EM SW 7/16"

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAI 400722
SF 24 STG-IG 1/4	95325

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 7 to 8 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts	Mounted points Dia. up to 16 mm  Dia. 16 to 32 mm  Width ≤ 32 mm  Dia. 32 to 40 mm  Width ≤ 20 mm	Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  POLICAP Dia. up to 11 mm  Mounted flap wheels Dia. up to 20 mm	Diamond grinding points Dia. 8.0 to 16.0 mm  CBN grinding points Dia. 15.0 to 22.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm	Cut-off wheels EHT Dia. up to 40 mm  Matching arbor BO 6/6 0-4  Grinding wheels ER Dia. up to 40 mm
Dia. up to 4 mm	Catalogue section 4*  Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm	POLINOX unitized wheels PNER Dia. 25 mm COMBIDISC abrasive discs Dia. 20 to 38 mm COMBIDISC non-woven discs hard type VRH 20	Matching arbor BO 6/10 3	Matching arbor BO 6/6 3-10

If no shank diameter is given, the shank dia. of 6 mm applies.

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

**Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



#### **Air grinders** Angle grinders with collet



#### Special features:

- Low angle head height.
- Ideal for work in hard-to-reach areas.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWAS 4/200 HV	417072	rear	lever	0.70	0.60	6	8	0.920

#### **Collets**



Group	For shank dia.						
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch	
			EAN 40	07220			
6	212875	212851	212936	234969	212882	212868	

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**

Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SE 24 STG-IG 1/4	053250

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FER- ROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 7 to 10 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. up to 5 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm  Catalogue section 4* Poliflex fine grinding points Bonds: GR, PUR Dia. up to 12 mm GHR, LR, TX, LHR Dia. up to 25 mm	Abrasive spiral bands and rubber drum holders Dia. up to 22 mm  POLICAP Dia. up to 11 mm  Mounted flap wheels Dia. up to 20 mm  POLINOX unitized wheels PNER Dia. 25 mm  COMBIDISC abrasive discs Dia. 20 to 50 mm  COMBIDISC non-woven discs hard type VRH 20	Diamond grinding points Dia. 8.0 to 15.0 mm  CBN grinding points Dia. 15.0 to 20.0 mm  Diamond cut-off wheels Dia. 30 to 50 mm  Matching arbor BO 6/10 3	Cut-off wheels EHT Dia. up to 40 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Dia. up to 50 mm  Matching arbor BO SPG 6/6 0-10	Grinding wheels ER Dia. up to 40 mm  Matching arbors BO 6/6 3-10 BO SPG 6/6 0-10 Dia. up to 50 mm  Matching arbors BO SPG 6/6 0-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

**Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.

#### Angle grinders with collet







#### Special features:

- Low angle head height.
- Ideal for work in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

4	
Energy Saving	

PFERDVALUE:

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWAS 4/160 HV	417096	rear	lever	0.55	0.60	6	8	1.004

#### **Collets**

Group			For sha	nk dia.			
	3	6	8	3/32	1/8	1/4	
	mm	mm	mm	inch	inch	inch	
			EAN 40	07220			
6	212075	212051	212026	22/060	212002	212060	L

			CAN 4	107220			
							. 4
6	212875	212851	212936	234969	212882	212868	
O	212073	212031	212330	234303	212002	212000	
1.5		1.1	4.40				

For dimensions, see table page 140.

#### Key

Designation	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220	
SF 24 STG-IG 1/4	953259	

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND Dia. 9 to 12 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 2.3 to 5 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 40 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. 32 mm Width ≤ 40 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. up to 15 mm GHR, LR, TX, LHR Dia. 12 to 30 mm POLICAP Dia. up to 13 mm COMBIDISC abrasive discs Dia. 20 to 38 mm	Diamond grinding points Dia. 9.0 to 20.0 mm  CBN grinding points Dia. 18.0 to 20.0 mm  Diamond cut-off wheels Dia. 40 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3	Cut-off wheels EHT Dia. up to 50 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20 BO SPG 6/6 0-10 BO SPG 6/6 0-10 BO SPG 6/10 0-10	Shank-mounted end brushes crimped PBU dia. 10 to 20 mm knotted PBG dia. 19 to 23 mm Shank-mounted wheel brushes crimped RBU dia. 20 to 30 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

**Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.



## **Air grinders**Angle grinders with collet



#### Special features:

- Low angle head height.
- Ideal for work in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet Inner dia. of group air supply hose [mm]	Net weight [kg]
PWAS 4/120 HV	417102	rear	lever	0.50	0.60	6 8	1.004

#### **Collets**



Group										
	3	6	8	3/32	1/8	1/4				
	mm	mm	mm	inch	inch	inch				
		EAN 4007220								
6	212875	212851	212936	234969	212882	212868				

MODE	Designation	EAN 4007220
HUNC	EM SW 11 mm	206812

EM SW 14 mm

206836

For dimensions, see table page 140.

#### **Maintenance unit**



Designation	EAN 4007220
ONG-A 1/2	801765

In-line fine filter						
	Designation	EAN 4007220				
	SF 24 STG-IG 1/4	953259				

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 4*		Catalogue section 6	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO Dia. 10 to 20 mm Cut 1, ALU, ALLROUND, EDGE Dia. up to 16 mm HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 3.2 to 6 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 25 mm	Poliflex fine grinding points Bonds: GR, PUR Dia. 8 to 20 mm GHR, LR, TX, LHR Dia. 15 to 40 mm  Abrasive spiral bands and rubber drum holders Dia. up to 30 mm  Mounted flap wheels Dia. up to 30 mm  POLINOX unitized wheels PNER Dia. 50 mm	POLINOX cross buffs Dia. 25 mm POLISTAR Dia. 30 mm POLIROLL Dia. up to 15 mm POLICAP Dia. up to 16 mm Felt points Dia. up to 15 mm	Diamond grinding points Dia. 12 to 20.0 mm  CBN grinding points Dia. 18.0 to 30 mm  Diamond cut-off wheels Dia. 22 to 50 mm  Matching arbors BO 6/10 3 BO 8/10 3  CBN grinding points Dia. up to 30.0 mm	Cut-off wheels EHT Dia. up to 50 mm  Matching arbors BO 6/6 0-4 BO SPG 6/6 0-10  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 3-10 BO 8/10 6-20 BO SPG 6/6 0-10 BO SPG 6/10 0-10	Shank-mounted end brushes crimped PBU dia. 10 to 20 mm knotted PBG dia. 19 to 23 mm Shank-mounted wheel brushes crimped RBU dia. 20 to 30 mm
If no shank diameter is	given, the shank dia.	*Catalogue sections	3/4: This data applies to	o an unsupported shank	length of 10 mm and t	he max. stated mount-

of 6 mm applies.

ed point dimensions.

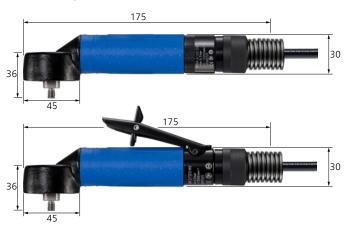
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.

#### Angle grinders with threaded spindle



#### PWA 2/120 DV PWA 2/120 HV

#### 12,000 RPM / 230 watts





#### Special features:

- Special spindle for holding all COMBIDISC tools (use a backing pad without shank).
- Flat angle head for work in hard-to-reach areas.

#### PWA 2/120 HV

Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Net weight [kg]
PWA 2/120 DV	419762	rear	ring	0.55	0.45	1/4"-20 UNC	6	0.476
PWA 2/120 HV	417119	rear	lever	0.55	0.45	1/4"-20 UNC	6	0.516

#### Key

#### EAN

4007220

#### Maintenance unit

## Designation EAN 4007220 ONG-A 1/2 801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



#### SPV-20 CD 1/4-20 UNC,

Designation

EM SW 11 mm

(EAN 4007220**333167**) Female thread 1/4-20 UNC, male thread 1/4-20 UNC. Suitable for drives with spindle 1/4-20 UNC.

#### **Suitable PFERD tools**

Catalogue	section	ո 4

**COMBIDISC abrasive discs** Dia. 20 to 75 mm

**COMBIDISC TX discs** Dia. 50 and 75 mm

**COMBIDISC** non-woven discs

Dia. 20 to 75 mm

POLICLEAN discs

COMBIDISC abrasive disc holders

**SBH 20, 25, 38, 50, 75** without threaded shank

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.







#### Angle grinders with threaded spindle



#### **Special features:**

- Max. tool diameter up to 125 mm.
- Robust design for heavy-duty use.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys, guard, anti-vibration handle.

# PWA 11/120 HV 12,000 RPM / 1,100 watts 285 PFERDVALUE:

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWA 11/120 HV	430897	rear	lever	0.50	1.20	M14	13	22.23	2.100

#### **Clamping flanges**

(1)	Item no.	Designation	EAN 4007220
(3)	1	SPM14 98980036	902189
(4)	2	DHFL 98980039	902226
(5)	3	FLS 98980037	902202
	4	DHTR 98980040	902233
	5	FLS-CC 98980038	902219

ey .	Designation	EAN 4007220
1	STL SW 35 x 5 mm	193853
	SKS SW 4 mm	204450

#### **Maintenance unit**

Designation	EAN 4007220	
 ONG-A 1/2	801765	

#### **In-line fine filter**

Designation	EAN 4007220
SF 30 STG-IG 1/2	244975

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
ALUMASTER High Speed Disc Dia. 115 mm	COMBICLICK fibre discs Dia. up to 125 mm  Matching backing pad CC-GT 115/125  Fibre discs Dia. up to 125 mm  Matching backing pad GT 125	Diamond cut-off wheels CC-GRIND-SOLID- DIAMOND Dia. 125 mm	Cut-off wheels and grinding wheels POLIFAN flap discs CC-GRIND grinding discs Dia. up to 125 mm	Threaded cup brushes crimped TBU dia. 60 to 75 mm M14 Threaded bevel brushes crimped KBU dia. 100 to 125 mm M14 knotted KBG dia. 115 mm M14	Wheel brushes Type for angle grinders crimped RBU dia. 115 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





#### Angle grinders with threaded spindle



#### PWT 26/120 HV M14

#### 12,000 RPM / 2,600 watts





#### Special features:

- Max. tool diameter up to 125 mm.
- M14 threaded spindle for convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key
- Dead man's switch using safety lever valve.

#### Included in delivery:

1/2" female connecting thread, 2 keys, 1 clamping nut, 1 clamping flange, 1 spacer, guard, anti-vibration handle.

Emission Filter	HapticFilter	<b>Time</b> Saving		- 1	
Design	ation		EAN	Exhaust	
			4007220	direction	

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWT 26/120 HV M14	071205	bottom	lever	0.90	2.25	M14	16	22.23	2.200

#### **Clamping flanges**

PFERDVALUE:

(1)	Item no.	Designation	EAN 4007220
(2)	1	SPM 90011450 M14	067444
(3)	2	SPF 90011455	067437
	3	DS 90011460	071533

#### Key

Designation	EAN 4007220
STL SW 35 x 5 mm	193853
SKS SW 5 mm	204467

#### In-line fine filter

## Designation EAN 4007220 SF 35 IG 1/2-IG 1/2 072103

#### **Revolving nozzle**



DGT 1/2 (EAN: 4007220**070949**)

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
ALUMASTER High Speed Disc Dia. 115 mm	COMBICLICK fibre discs Dia. up to 125 mm  Matching backing pad CC-GT 115/125  Fibre discs Dia. up to 125 mm  Matching backing pad GT 125	Diamond cut-off wheels CC-GRIND-SOLID- DIAMOND Dia. 125 mm	Cut-off wheels and grinding wheels POLIFAN flap discs CC-GRIND grinding discs Dia. 125 mm	Wheel brushes Type for angle grinders crimped RBU dia. 115 mm knotted RBG dia. 100 to 125 mm Pipeline wheel brushes knotted RBG dia. 100 to 115 mm	Threaded bevel brushes crimped KBU dia. 100 to 125 mm M14 knotted KBG dia. 100 to 125 mm M14  Threaded cup brushes crimped TBU dia. 60 to 75 mm M14 knotted TBG dia. 60 to 75 mm M14

 $\textbf{Note:} \ \textbf{Please observe the recommended cutting speeds and the max.} \ \textbf{permitted rotational speeds in catalogue sections 2-8}.$ 







#### Angle grinders with threaded spindle



#### Special features:

- Max. tool diameter up to 150 mm.
- M14 threaded spindle for convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one
- Dead man's switch using safety lever valve.

#### Included in delivery:

1/2" female connecting thread, 2 keys, 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

#### PWT 26/100 HV M14

10,000 RPM / 2,600 watts

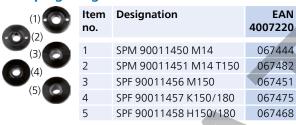


	Emission Filter Haptic Filte	er <b>Time</b> Saving				
е	Air	Air	Spindle	Inner dia. of	Tool	Net
е	consumption	consumption	thread	air supply	mounting	weight
	at idling speed	under load		hose	[mm]	[kg]

204467

#### Designation **EAN** Exhaust Throttle 4007220 direction type [m³/min] [m³/min] [mm] PWT 26/100 HV M14 071212 bottom 0.90 M14 lever 2.25 22.23 2.580

#### **Clamping flanges**



Key		
	Designation	EAN 4007220
	STL SW 35 x 5 mm	193853

SKS SW 5 mm

#### In-line fine filter

Designation	EAN 4007220
SF 35 IG 1/2-IG 1/2	072103

#### **Revolving nozzle**

EAN



#### Suitable PFERD tools

Catalogue section 4	Catalogue section 6	Catalogue section 8	
Fibre discs	Cut-off wheels and grinding wheels	Wheel brushes	Threaded cup brushes
Dia. up to 150 mm	POLIFAN flap discs	Type for angle grinders crimped RBU dia. 115 to 125 mm	crimped TBU dia. 75 mm M14
	CC-GRIND grinding discs	NDO dia. 113 to 123 mm	knotted
	Dia. up to 150 mm	<b>Pipeline wheel brushes</b> knotted RBG dia. 150 mm	TBG dia. 80 mm M14

Note: Observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.



#### Angle grinders with threaded spindle



#### **PWT 26/85 HV M14**

#### 8,500 RPM / 2,600 watts





#### Special features:

- Max. tool diameter up to 180 mm.
- M14 threaded spindle for convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key
- Dead man's switch using safety lever valve.

#### Included in delivery:

1/2" female connecting thread, 2 keys, 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

<b>PFERD</b> V	ALUE:	
Emission Filter	<b>Haptic</b> Filter	Time Saving

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWT 26/85 HV M14	071229	bottom	lever	0.90	2.25	M14	16	22.23	2.800

#### **Clamping flanges**

## (1) Litem no. Designation EAN 4007220 (2) 1 SPM 90011450 M14 067444 2 SPM 90011452 M14 T180 067505 (4) 3 SPF 90011459 M180 067499 4 SPF 90011457 K150/180 067475

SPF 90011458 H150/180

#### Key

Designation	EAN 4007220
STL SW 35 x 5 mm	193853
SKS SW 5 mm	204467

#### In-line fine filter

D	Designation	EAN 4007220
	SF 35 IG 1/2-IG 1/2	072103

#### **Revolving** nozzle

067468

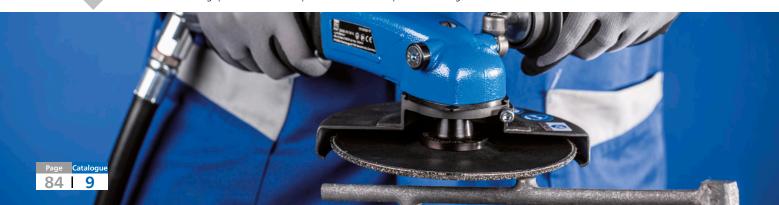


#### DGT 1/2 (EAN: 4007220**070949**)

#### **Suitable PFERD tools**

Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8
Fibre discs	Diamond cut-off wheels	Cut-off wheels and grinding wheels	Wheel brushes
COMBICLICK fibre discs	Dia. 178 mm	POLIFAN flap discs	knotted RBG dia. 178 mm
Dia. up to 180 mm		CC-GRIND grinding discs	Pipeline wheel brushes
		Dia. up to 180 mm	knotted RBG dia. 178 mm
			Threaded cup brushes knotted
			TRG dia 80 to 100 mm M14

Note: Observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.









#### Special features:

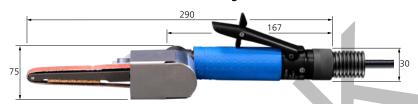
- Incl. belt grinder attachment arm BSVAK 9/9 x 305.
- Easy to handle, compact shape.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key, protective cover.

#### **PBA 2/200 HV**

22 m/s / 330 watts Belt length: 305 mm x belt width 3-12 mm



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBA 2/200 HV	420768	rear	lever	0.55	0.45	6	0.687

#### Key

Designation	EAN 4007220
SKS SW 4 mm	204450

#### **Maintenance unit**



#### In-line fine filter



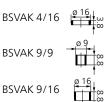


For detailed information and ordering data on abrasive and non-woven short belts, refer to catalogue section 4.

#### Belt grinder attachment arms









- Robust design.Use of the full roller width.
- Extremely slim fixing lugs on the facing roller.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVAK 9/25-1 with conical guide roller (range 1 mm).
- BSVAK 4/16, BSVAK 9/9 and BSVAK 9/16 with pad for stabilisation/support.

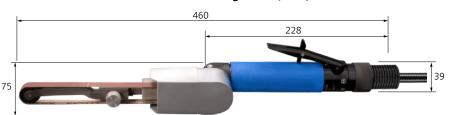
Designation	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVAK 9/25 x 305	544914	9 x 25	3, 6, 9, 12, 16	305	0.083
BSVAK 9/25-1 x 305	544921	9 x 25	3, 6, 9, 12	305	0.082
BSVAK 4/16 x 305	544884	4 x 16	3, 6, 9	305	0.052
BSVAK 9/9 x 305	544891	9 x 9	9, 12	305	0.075
BSVAK 9/16 x 305	544907	9 x 16	9. 12	305	0.088

#### Belt grinders



#### **PBA 4/160 HV**

#### 19.3 m/s / 370 watts Belt length: 520 (610\*) mm x belt width 3-16 mm





#### Special features:

- \*Belt length 610 mm x width 3-20 mm with adapter BSAD 41/36 x 610.
- The belt grinder attachment can be pivoted on the drive system,
- Incl. belt grinder attachment arm.
- Dead man's switch using safety lever valve.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), protective cover, 2 keys.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBA 4/160 HV	420775	rear	lever	0.55	0.60	8	1.286

#### Key

#### Designation **EAN** 4007220 SKS SW 2.5 mm 421291 SKS SW 4 mm 204450

#### **Adapter**

Design	Designation		EAN 7220
BSAD 4	11/36 x 610	39	5967

#### **Maintenance unit**

Designation	EAN 4007220
 ONG-A 1/2	801765

#### In-line fine filter





For further information and ordering data on abrasive and non-woven short belts, refer to the Tool Manual, catalogue section 4.

#### Belt grinder attachment arms



BSVA 9/16 BSVA 12/19 BSVA 18/23

- Robust design.
- Extremely slim fixing lugs on the facing roller.
- Use of the full roller width.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVA 9/25-1 with conical guide roller (range 1 mm).
- BSVA 18/23 with metal roller and pad for stabilisation/support.

Designation	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 9/25 x 520	323007	9 x 25	3, 6, 9, 12, 16	520, 610	0.095
BSVA 9/25-1 x 520	494288	9 x 25	3, 6, 9, 12	520, 610	0.095
BSVA 4/16 x 520	322987	4 x 16	3, 6, 9	520, 610	0.060
BSVA 9/16 x 520	322994	9 x 16	9, 12	520, 610	0.096
BSVA 12/19 x 520	323014	12 x 19	12, 16	520, 610	0.107
BSVA 18/23 x 520	349267	18 x 23	20	520, 610	0.150



#### Belt grinders, attachment arms





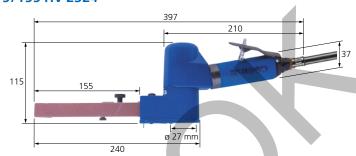
#### **Special features:**

- \*Belt length 610 mm x width 6–12 mm with belt grinder attachment arm BSVA 5/155-4/16 or 9/16.
- The belt grinder attachment can be pivoted on the drive system.
- Balanced handling.
- Dead man's switch using safety lever valve.

#### Included in delivery:

3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 2 keys.

PBS 5/155 HV 824 PBS 5/155 HV 1924 PBS 5/155 HV 2324 Belt lengths: 480 (610\*) mm x width: 6-25 mm



Designation	EAN 4007220	Incl. belt arm	Exhaust direction	-31	Air consumption at idling speed [m³/min]		Belt speed [m/s]	Power output [watts]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBS 5/155 HV 824	792674	1	front	lever	0.60	0.40	21	370	8.5	1.390
PBS 5/155 HV 1924	792681	2	front	lever	0.60	0.40	21	370	8.5	1.390
PBS 5/155 HV 2324	792698	3	front	lever	0.60	0.40	21	370	8.5	1.390

#### Key

## Designation EAN 4007220 SKS SW 3 mm 584538 SKS SW 5/32" 500439

#### Maintenance unit



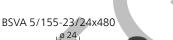
#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

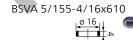
#### **Belt grinder attachment arms**

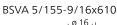














1110



Slim fixing lugs on the facing roller. Asymmetrical arms for flush lateral grinding.

Belt arm guide can be fixed.

 For further information and ordering data on abrasive and non-woven short belts, refer to catalogue section 4.

Designation	EAN 4007220	Belt arm	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 5/155-8/24x480	794098	1	8 x 24	6, 10, 12	480	0.070
BSVA 5/155-19/24x480	794081	2	19 x 24	16, 20	480	0.086
BSVA 5/155-23/24x480	794104	3	23 x 24	25	480	0.088
BSVA 5/155-4/16x610	808054	-	4 x 16	6	610	0.070
BSVA 5/155-9/16x610	801871	-	9 x 16	6, 10, 12	610	0.132

#### Special drives for filing machines



Net weight [kg]

0.180

#### PFGA 07/220

#### Frequency: 22,000 strokes/min





#### PFERDVALUE:



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	er dia. of r supply hose [mm]	Frequency [strokes/ min]	Stroke length [mm]
PFGA 07/220	657638	rear	ring	0.05	0.03	4	22,000	0.7

#### Key

Designation	EAN 4007220
SKS SW 2.5 mm	785980

#### **Maintenance unit**

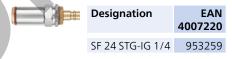


### In-line fine filter

**Special features:**Light and easy to handle.

Included in delivery:

arbor.



For work on surfaces and in hard-to-reach

 Tool mountings: Round shank with dia.
 3 mm, slot mounting of 10x1.5x10 mm (LxWxD) for ceramic fibre files.

0.32 m exhaust hose and 1.5 m air supply hose with 1/4" female threaded connection and threaded quick coupling (STGA), 1 key,

#### **Double nipple**



Designation	EAN 4007220	
DNA 1/4-1/4	178577	





Frequency: 9,000 strokes/min

40

## **Air grinders**Special drives for filing machines



#### Special features:

- Tool mounting dia. 4 mm to 6 mm.Suitable for files with a round shank.
- Smooth running and very precise.
- Very low vibrations.
- Dead man's switch using lever valve.

#### Included in delivery:

1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling

(STGI), 1 key.

<b>PFERD</b> V	'ALUE:
<del>~~</del> )—	
Vibration Filter	

**PF 8/90 HV** 

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Stroke length [mm]	Inner dia. of air supply hose [mm]	Frequency [strokes/ min]	Net weight [kg]
PF 8/90 HV	388099	front	lever	0.078	0.078	8	4.8	9,000	1.038

#### Key

Designation	EAN 4007220
SKS SW 3 mm	584538

#### **Maintenance unit**

Designation	EAN 4007220
ONG-A 1/4	801741

#### **In-line fine filter**

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259

#### **Reducing collets**



These reducing collets fit into an existing collet for 6 mm shank tools and are used as adapters for 3 mm or 4 mm shank tools.

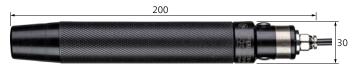
Designation	EAN 4007220	Reducing shank mounting	Net weight [kg]
RZH 63	355862	Dia. from 6 mm to 3 mm	0.004
RZH 64	796153	Dia. from 6 mm to 4 mm	0.004

#### Special drives for filing machines



#### **PF 4/84 SV**

#### Frequency: 8,400 strokes/min



#### PFERDVALUE:





#### Special features:

- Tool mounting dia. 3 mm to 4 mm.
- Suitable for files with a round shank, ceramic fibre files and grinding stones.
- Smooth running and very precise.
- Push-pull throttle for convenient continuous use.
- Very low vibrations.

#### Included in delivery:

1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key.

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]		air supply hose		Net weight [kg]
PF 4/84 SV	388105	front	push-pull	0.03	0.03	4	3	8,400	0.300

#### Key

#### Designation 4007220 SKS SW 3 mm 584538

#### **Maintenance unit**



#### In-line fine filter

Designation	EAN
	4007220
SF 24 STG-IG 1/4	953259

EAN

#### **Adapter**

Designation	EAN
	4007220
AD PF 4.5/4.0	415610

#### **Arbor**



Designation	EAN 4007220
SPSH 3-13 mm 3.1	107577
Only use in conjunction with AD PF	4.5/4.0.

Page Catalog



## **Air grinders**Special drives for marking pens



#### Special features:

- Very high stroke frequency.
- For applying markings and labels on metal, glass and plastics.

#### MST 32 DV F

- With fine engraving needle.
- Also for applying markings and labels on hardened tool steel.

#### MST 32 DV M

With medium engraving needle.

#### MST 32 DV G

■ With coarse engraving needle.

#### Included in delivery:

2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), tungsten carbide engraving needle.

#### MST 32 DV

Frequency: 32,000 strokes/min



Designation	EAN 4007220	Needle width	Throttle type	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Frequency [strokes/ min]	Net weight [kg]
MST 32 DV F	231074	F (fine)	ring	front	0.03	0.02	4	32,000	0.152
MST 32 DV M	231081	M (medium)	ring	front	0.03	0.02	4	32,000	0.152
MST 32 DV G	231098	G (coarse)	ring	front	0.03	0.02	4	32,000	0.152

#### Replacement TC engraving needles for marking pens



Designation	EAN 4007220	Needle tip	Net weight [kg]
HM-GN MST 32 F	241837	F (fine)	0.003
HM-GN MST 32 M	243695	M (medium)	0.003
HM-GN MST 32 G	243701	G (coarse)	0.003

#### **Maintenance unit**





Designation	EAN 4007220
SF 24 STG-IG 1/4	953259



## Air grinders Fittings



Figure	Designation	EAN 4007220
Double nipple		4007220
	<b>DNA 1/4-1/4 R</b> 1/4" male - 1/4" male	178577
	<b>DNA 1/2-1/2 R</b> 1/2" male - 1/2" male	178584
Reducing nipple		
	RNI 1/2-1/4	430316
Threaded nut		
	<b>GWI 1/2-1/2</b> R 1/2" female - R 1/2" female	068250
Sealing ring		
	DR 1/8" dia. 1/8"	189726
	<b>DR 1/4"</b> dia. 1/4" <b>DR 1/2"</b> dia. 1/2"	189733
Threaded quick coupling	DR 1/2" dla. 1/2"	189757
Threated quick coupling	<b>STGA 1/2 NW12</b> R 1/2" male NW12	179239
	STGA 1/2-16/AC R 1/2" male	076378
Self-closing valve couplings v	vith male thread	
	<b>VKA 1/4</b> R 1/4" male	178232
-11-11	VKA 1/2 R 1/2" male	178256
	VKA 1/2 NW 12 R 1/2" male	178249
	SVKA 1/4 DK	957080
	SVKA 1/2 DK	957097
Self-closing valve couplings w	vith female thread	
400	<b>VKI 1/4</b> R 1/4" female	178270
10-10	VKI 1/2 R 1/2"	178287







#### General information



Electric grinders are universal all-rounders. They offer a high power output in relation to their size and weight. They are particularly suitable for use with grinding tools that require a constant rotational speed.

#### **Areas of application**

Electric grinders can be used for nearly every application. They are used in many industries in different processes. The stepless electronic rotational speed control allows the use of various types of tools on one single tool drive. Electric grinders are not suitable for use in boiler construction and in very dusty conditions (especially work on aluminium).

#### The PFERD product range

PFERD provides a wide range of electric grinders: micro motors, straight and angle grinders, a system for work on edges, burnishing machines and belt grinders. PFERD electric grinders meet the highest technical standards and incorporate the latest ergonomic findings and requirements. They were specially developed for the economic application of grinding, milling, brushing, cutting and polishing tools, and cover a wide rotational speed range (80,000–900 RPM) and power range (1,750–260 watts). PFERD electric grinders have an electronic speed control for constant rotational speed values.

#### **Advantages**

- Compact, ergonomic design.
- Low weight.
- Sophisticated.
- High performance.
- Suitable for universal use.
- Simple power supply.
- Low-maintenance
- Easy to service.
- Economical.

#### **Equipment/special features**

#### Smooth start-up:

The electronically regulated smooth start-up ensures a jolt-free start-up of the grinder.

#### Undervoltage protection/restart protection:

Should the power supply fail, PFERD electric grinders do not start up again inadvertently. The grinder will only restart after it has been switched off and on again.



#### Standards, safety, general guidelines

PFERD electric grinders:

- Bear the CE mark,
- Are insulated and comply with protection class II
- Have safety extra-low voltage
- Are protectively earthed in accordance with protection class I



- EC Machinery Directive
- EC Low-Voltage Directive
- Electromagnetic Compatibility

National regulations must be observed.



#### Criteria for selecting the optimum electric grinder

The most important prerequisite for cost-effective work is selection of the optimum tool. The appropriate tool drive is selected taking the following criteria into consideration:

#### 1. Design, shape and size

Each type of application places specific demands on the design and size of the tool drive. The different designs can be used for various applications: The ideal tool drive should be selected for the task at hand depending on the dimensions, accessibility, type and frequency of the application.

#### 2. Rotational speed

The tool drive should always be selected according to the rotational speed and cutting speed recommendations for the tool. Please refer to catalogue sections 2–8 for these recommendations.

#### 3. Power output

The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the material to be machined, the cutting characteristics of the tool and the contact pressure.

#### 4. Tool mounting

Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Refer to pages 137–142 for an overview of collets and spindle extensions.

If you have any further questions, your personal PFERD sales representative will be happy to help you.



#### Micro motor system

#### **Special features:**

- Control device for stepless rotational speed control of micro motor handpieces.
- Rotational speed control is possible by hand or foot switch.
- Max. 80,000 RPM clockwise rotation.
- Max. 30,000 RPM anti-clockwise rotation.
- 2 switchable connection sockets for micro motor handpieces.
- 4 free rotational speed storage spaces per connected handpiece.
- High power stability.

#### Included in delivery:

2 m power cable, 2 handpiece supports.

#### MIM STG3S 3/800 80,000-1,000 RPM / 350 watts







Designation	EAN 4007220	Micro motor handpieces [RPM]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Net weight [kg]
MIM STG3S 3/800 230 V	101889	80,000-1,000	230	50	2.980

#### Special features:

- Control device for rotational speed control of micro motor handpieces.
- Max. 60,000 RPM clockwise rotation.
- Max. 30,000 RPM anti-clockwise rotation.
- Stepless rotational speed control is possible by hand or foot switch.
- High power stability.

#### Included in delivery:

2 m power cable, 2 handpiece supports.

#### MIM STG2S 3/600 60,000-1,000 RPM / 260 watts

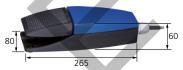






Designation	EAN 4007220	Micro motor handpieces [RPM]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Net weight [kg]
MIM STG2S 3/600 230 V	071236	60,000-1,000	230	36	2.338

#### Vario foot switch MIM FU-R



Designation	EAN 4007220
MIM FU-R	071250

Compatible with STG3S + STG2S. Vario = Stepless rotational speed

#### On/off foot switch MIM FU-E/A

T	Designation	EAN 4007220
141	MIM FU-E/A	104033
	Compatible with	STG3S.
135		

#### **Extension cable** MIM VLK HAS/WZS 3 m



Designation	EAN 4007220
MIM VLK HAS/WZS 3 m	071403
Compatible with STG3S an	d STG2S.

#### Micro motor handpieces



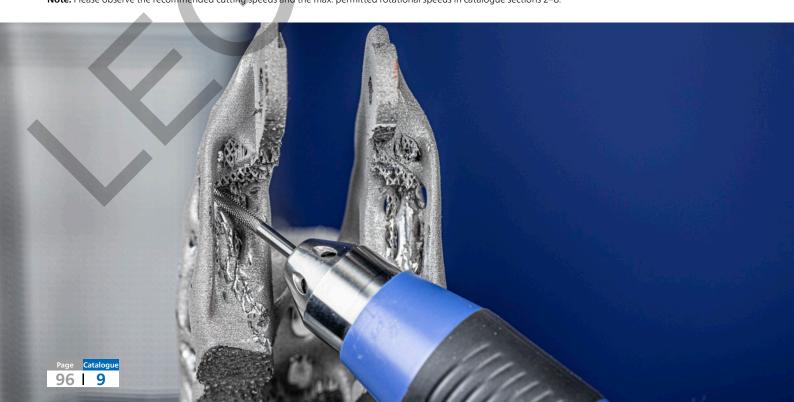
Choose the suitable handpieces for your individual application. Information and ordering data for micro motor handpieces can be found on page 97.

## **Electric grinders**Micro motor system



Tool mounting	Rotational speed	Drives	Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
Rota rang		al speed	13,000-80,000 RPM	25,000-80,000 RPM	2,000-80,000 RPM		7,000-80,000 RPM	1,200-15,000 RPM
Dia. 2.35 mm + 3 mm	1,000-80,000 RPM	MIM HA 3/800 SP3	TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, MICRO Shank dia. 3 mm Dia. up to 3 mm	Mounted points Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 10 mm	Poliflex fine grinding points Shank dia. 3 mm Bonds: GHR Dia. up to 4 mm LR, TX Dia. up to 6 mm		Diamond grinding points Shank dia. 3 mm Dia. up to 4.5 mm CBN grinding points Shank dia. 3 mm Dia. up to 5.5 mm	
Rota rang		al speed	13,000-60,000 RPM	25,000-60,000 RPM	2,000-60,000 RPM		7,000-60,000 RPM	1,200–15,000 RPM
Dia. 2.35 mm + 3 mm	1,000–50,000 RPM 1,000–60,000 RPM	MIM HAS 3/500 SP3 NIM HAS 2/600 SP3 VS-SP3 NIM HAS 3/600 SP3 NIM HAS 3/600 SP3	TC burrs Cut 3 PLUS, 4, 5, ALU, INOX, TITANIUM, MICRO Shank dia. 3 mm Dia. up to 4 mm  HSS rotary cutters Special cuts Shank dia. 3 mm Dia. up to 1.6 mm	Mounted points Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 10 mm	POLICAP Shank dia. 2.35 + 3 mm Dia. up to 7 mm  Felt points Shank dia. 2.35 + 3 mm Dia. up to 4 mm  Abrasive spiral bands and rubber drum holders Shank dia. 3 mm Dia. up to 8 mm  Poliflex fine grinding points	Mounted flap wheels Shank dia. 3 mm Dia. up to 10 mm Dia. 15 to 15 mm Width ≤ 10 mm	Diamond grinding points Shank dia. 3 mm Dia. 3.0 to 6.0 mm CBN grinding points Shank dia. 3 mm Dia. up to 6.0 mm	Miniature shank- mounted end brushes crimped PBU dia. 5 mm Miniature shank- mounted wheel brushes crimped RBU dia. 16 mm Miniature shank- mounted cup brushes crimped TBU dia. 15 mm
ā	1,000-30,000 RPM	MIM WZS 3/300 90° S3 MIM WZS 3/300 45° S3		Mounted points Shank dia: 3 mm: Dia. up to 3 mm	Shank dia. 3 mm Dia. up to 6 mm	Mounted flap wheels Shank dia. 3 mm Dia. up to 10 mm		

\*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions. Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





#### Micro motor handpieces

#### Recommendations for use:

- The specified power output can only be achieved at the highest rotational speed.
- If you have lower power output requirements and apply little contact pressure, the handpieces can be taken down to 1,000 RPM.
- Recommended rotational speed for operation: At least half the maximum rotational speed.

#### **Special features:**

- High power stability.
- Very high concentricity.
- Brushless motor.
- Automatic speed limitation.
- Start interlock without clamped tool.
- Extremely energy-efficient and quiet in comparison to air grinders.

#### Included in delivery:

2 keys, 3 mm collet, 1.8 m handpiece cable.

#### Ordering notes:

- SP = keyless fast clamping system.
- S = changing tools with 2 keys.
- VS = with extended spindle.

#### **Compatible with STG3S:** MIM HAS 3/800 SP3

80,000-1,000 RPM / 350 watts



#### Compatible with STG3S and STG2S:

#### **MIM HAS 2/600 SP3**

60,000-1,000 RPM / 260 watts



#### MIM HAS 3/600 SP3

60,000-1,000 RPM / 260 watts



#### MIM HAS 3/600 S3

50,000-1,000 RPM / 260 watts



#### **MIM HAS 3/500 VS-SP3**

50,000-1,000 RPM / 260 watts



#### MIM WZS 3/300/90° S3

30,000-1,000 RPM / 260 watts



#### MIM WZS 3/300 45° S3

30,000-1,000 RPM / 260 watts



#### **PFERD**VALUE:











Designation	EAN 4007220	RPM	Low voltage [volts]	Power consumption [watts]	Power output [watts]	Collet group	Incl. keys	Net weight [kg]
Compatible with STG3S								
MIM HAS 3/800 SP3	101896	80,000-1,000	50	350	180	17	MIM SPS DK D7, MIM ARS HA D 23.5	0.330
Compatible with STG3S and STG2S								
MIM HAS 2/600 SP3	071274	60,000-1,000	36/50	260	150	17	MIM SPS DK D7	0.260
MIM HAS 3/600 SP3	071281	60,000-1,000	36/50	260	150	17	MIM SPS DK D 7, MIM ARS HA D 23.5	0.315
MIM HAS 3/600 S3	071304	60,000-1,000	36/50	260	150	19	DM SW 10/10 mm, MIM-DSTS SW11xD 2.4 mm	0.393
MIM HAS 3/500 VS-SP3	071298	50,000-1,000	36/50	260	150	17	MIM SPS DK D7, MIM ARS HA D 23.5	0.325
MIM WZS 3/300 90° S3	071328	30,000-1,000	36/50	260	120	18	MIM ARH, DM SW 4/4 mm	0.238
MIM WZS 3/300 45° S3	071342	30,000-1,000	36/50	260	120	18	MIM ARH, DM SW 4/4 mm	0.185

#### **Collets**



For shank dia.					
2.35 mm	3 mm	1/8 inch			
E/	N 40072	20			
071465	071458	071472			
071496	071489	071502			
102756	071526	102565			
	2.35 mm EA 071465 071496	2.35 3 mm mm EAN 40072: 071465 071458			

For dimensions, see table page 140.



Designation	EAN 4007220
DM SW 4/4 mm	071441
DM SW 10/10 mm	071366
MIM ARH	071359
MIM SPS DK D 7	071410
MIM ARS HA D 23.5	071434
MIM-DSTS SW11xD 2.4 mm	072158

#### Straight grinders



#### **EGER 8/280**

#### 28,000 RPM / 750 watts



#### Special features:

- Stepless rotational speed control.
- Digital electronics for constant rotational
- Overload protection.Smooth start-up to protect people, tools and the drive.

#### Included in delivery:

4 m power cable, 6 mm collet, 2 keys.

#### PFERDVALUE:



Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
EGER 8/280	232125	28,000-8,500	230	750	410	22	1.800

#### **Collets**

Group		For sh	ank dia.	
	3	6	8	1/4
	mm	mm	mm	inch
		EAN 4	007220	
22	409848	409855	409862	409831

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 13 mm	410318
EM SW 17 mm	204542

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON- FERROUS, CAST, TOUGH, TOUGH-S,	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 40 mm Width ≤ 40 mm	Abrasive spiral bands and rubber drum holders Dia. up to 30 mm  POLICAP Dia. up to 13 mm  POLIROLL Dia. up to 12 mm  Mounted flap wheels Dia. up to 30 mm  Poliflex fine grinding points Dia. 8 to 25 mm  Felt points Dia. up to 12 mm	Diamond grinding points Dia. 6.0 to 20.0 mm  CBN grinding points Dia. 12.0 to 25.0 mm  Diamond cut-off wheels Dia. 22 to 50 mm  Matching arbors BO 3/1.7 1 BO 6/10 3 BO 8/10 3	Cut-off wheel EHT Dia. up to 50 mm  Grinding wheels ER Dia. up to 50 mm  Matching arbors BO 6/6 0-4 BO 6/6 3-10 BO 8/10 6-20	Shank-mounted end brushes crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 mm Shank-mounted wheel brushes crimped RBU dia. 20 to 40 mm knotted RBG dia. 76 mm Shank-mounted bevel brushes crimped KBU dia. 50 mm

applies.

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2-8.



Straight grinders

#### **Special features:**

- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.Smooth start-up to protect people, tools and the drive.

#### Included in delivery:

4 m power cable, 6 mm collet, 2 keys.

#### **EGER 8/90**

9,000 RPM / 710 watts



#### PFERDVALUE:



Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
EGER 8/90	232040	9,000-2,500	230	710	410	22	1.800

#### **Collets**



Group	For shank dia.				
	3	6 8		1/4	
	mm mm mm		mm	inch	
		EAN 4	007220		
22	409848	409855	409862	409831	

For dimensions, see table page 140.

Designation	EAN 4007220
EM SW 13 mm	410318
EM SW 17 mm	204542

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
TC burrs Cut 3, 3 PLUS, 4, 5, NON-FERROUS, TOUGH, TOUGH-S, EDGE Dia. 16 to 20 mm  HSS rotary cutters Cut 1, 2, 3, 5, special cuts Dia. 7 to 8 mm	Mounted points Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 40 mm Width ≤ 40 mm	Poliflex fine grinding points Bond: PUR Dia. 15 to 32 mm Poliflex mounted texturing points PU-STRUC Dia. up to 32 mm POLIROLL cartridge rolls Dia. 18 mm POLISTAR Dia. 30 to 50 mm POLINOX mounted grinding wheels POLINOX unitized wheels PNER Dia. up to 50 mm Overlap slotted discs Dia. 30 to 50 mm	POLINOX cross buffs Dia. up to 38 mm  POLICLEAN mounted tools Dia. up to 50 mm  Felt points Mounted felt flap wheels Dia. 30 to 40 mm  Felt wheels Dia. up to 30 mm  Mounted flap wheels Dia. up to 50 mm	Diamond grinding points Dia. 12.0 to 20.0 mm  CBN grinding points Dia. 25.0 mm  Diamond cut-off wheels Dia. 22 to 50 mm  Matching arbors BO 3/1.7 1 BO 6/10 3 BO 8/10 3	Shank-mounted end brushes crimped PBU dia. 10 to 30 mm crimped with ring PBUR dia. 13 to 25 mm knotted PBG dia. 10 to 30 mm Shank-mounted bevel brushes crimped KBU dia. 70 mm Shank-mounted cup brushes crimped TBU dia. 30 to 50 mm Shank-mounted wheel brushes crimped RBU dia. 50 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm \*Catalogue sections 3/4: This data applies to an unsupported shank length of 10 mm and the max. stated

mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

#### Angle grinders



#### UWER 18/120 SI UWER 18/110 SI

11,500–2,800 RPM / 1,750 watts 11,000–2,700 RPM / 1,750 watts



#### PFERDVALUE:



#### Special features:

- Max. tool dia. up to
  - 115 mm for UWER 18/120 SI
- 125 mm for UWER 18/110 SI
- Robust design for heavy-duty use.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection with anti-kickback function.
- Restart protection in case of power failure (USP).
- Lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

#### Included in delivery:

4 m power cable, 1 clamping flange, 1 quickmounting nut, surface guard, anti-vibration handle.

Designation	EAN 4007220	RPM	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
UWER 18/120 SI 230 V	957110	11,500-2,800	230	1,750	1,150	M14	22.23	2.800
UWER 18/110 SI 230 V	957127	11,000-2,700	230	1,750	1,150	M14	22.23	2.800

#### **Clamping flanges**





Designat	ion	EAN 4007220
SPF 98970	0043	853115
SSM14 98	970042	853108

Rey		
	Designation	EAN 4007220
	STL SW 35 x 5 mm	193853

#### **Guards**



Designation	EAN 4007220	Tool cover dia. [mm]	Use for
H 45-115 HT-\$V	964316	115	Cut-off grinding
H 45-115 FL-SV	881361	115	Surface grinding
H 45-125 HT-SV	843277	125	Cut-off grinding
H 45-125 FL-SV	843284	125	Surface grinding

#### **Suitable PFERD tools**

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
ALUMASTER High Speed Disc	Velcro-backed abrasive discs Fibre discs COMBICLICK tools POLICLEAN discs Self-adhesive discs Unmounted flap wheels for angle grinders POLINOX threaded grinding wheels	Diamond cut-off wheels CC-GRIND-SOLID- DIAMOND	Cut-off wheels and grinding wheels POLIFAN flap discs CC-GRIND grinding discs	Wheel brushes crimped Type for angle grinders knotted Pipeline wheel brushes knotted Threaded bevel brushes crimped knotted	Threaded cup brushes crimped knotted  Composite disc brushes crimped

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



9,500-2,300 RPM / 1,750 watts

Angle grinders

#### Special features:

- Max. tool diameter up to 150 mm.
- Robust design for heavy-duty use.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection with anti-kickback function.
- Restart protection in case of power failure
- Lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

#### Included in delivery:

4 m power cable, 1 clamping flange, 1 quickmounting nut, surface guard, anti-vibration

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**UWER 18/95 SI** 



Designation	EAN 4007220	RPM	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
UWER 18/95 SI 230 V	101384	9,500-2,300	230	1,750	1,150	M14	22.23	3.000

#### **Clamping flanges**



Design
SPF 98

_	
Designation	EAN 4007220
SPF 98970043	853115
SSM14 98970042	853108

#### Key

Designation	400	EAN 07220
STL SW 35 x 5 mm	1:	93853

#### **Guards**



Designation	EAN 4007220	Tool cover dia. [mm]	Use for
H 51-150 HT-SV	968628	150	Cut-off grinding
H 51-150 FL-SV	101964	150	Surface grinding

#### **Suitable PFERD tools**

Catalogue section 4	Catalogue section 6	Catalogue section 8	
Fibre discs	Cut-off wheels and grinding wheels POLIFAN flap discs CC-GRIND grinding discs	Wheel brushes knotted Pipeline wheel brushes knotted	Threaded cup brushes crimped knotted Composite disc brushes crimped

Note: Observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.

#### EDGE FINISH system for work on edges



#### **EDGE FINISH system for** work on edges in transport case (TK)



#### UWER 18/110 EF-R3/45° TK and **UWER 18/110 EF-30° TK**

The drive and tools are supplied in a sturdy plastic case for optimal storage.

#### Included in delivery:

- UWER 18/110 EF with 4 m power cable, 3 keys and anti-vibration handle.
- Cutting insert holder with guide bearing.
- Bolt set for cutting inserts.
- The ordering data for cutting inserts can be found in the table below and in catalogue section 2.

#### Key



Designation	EAN
	4007220
SKS SW 5 mm	204467
HS 40-42	019122
SDR TX 15K	007419

#### **UWER 18/110 EF**

#### 11,000-2,750 RPM / 1,750 watts



#### Special features:

- Max. chamfer height of 6 mm.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Restart protection in case of power failure (USP).
- Anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

#### Included in delivery:

4 m power cable, 3 keys, anti-vibration handle.

Designation	EAN 4007220	RPM	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]		Incl. cutting insert holder	Matching cuttinginsert holder	Net weight [kg]
EDGE FINISH UWER 18/110 EF-R3/45° TK 230V <sup>1)</sup>	004272	11,000- 2,750	230	1,750	1,150	M14	EF-WSP-A R3/45°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF-30° TK 230V <sup>1)</sup>	004364	11,000- 2,750	230	1,750	1,150	M14	EF-WSP-A 30°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF 230V <sup>2)</sup>	973172	11,000- 2,750	230	1,750	1,150	M14		EF-WSP-A R3/45°, EF-WSP-A 30°	3.640

<sup>1)</sup> The cutting inserts are not included in delivery. Please order these separately (see catalogue section 2).

#### Selecting suitable cutting inserts:

To determine the most suitable cutting insert, proceed as follows:

- **1** Select the material group to be machined.
- 2 Select the cutting inserts.

Material group	Matching cutting inserts	EAN 4007220	Recommend- ed rotational speed range [RPM]	Max. depth of cut per process step [mm]	Max. chamfer width/radius to be created [mm]
Steel	EF-WSP-F STEEL	005118	8,700-7,100	3	6
	EF-WSP-R3 STEEL	005101	8,700–7,100	-	3
Stainless steel (INOX)	EF-WSP-F INOX	071182	8,000-7,500	2	3
Aluminium	EF-WSP-F ALU	039533	11,000	6	6

#### Ordering notes:

- Packaging unit: 1 piece each.
- Set contains: 3 pieces.



<sup>2)</sup> The cutting insert holder with guide bearing, cutting inserts and screw set are not included in delivery. Please order these separately (see catalogue section 2).



Angle grinders

#### Special features:

- Max. tool dia. up to 125 mm.
- Adjusted rotational speed range for tools with low cutting speeds.
- Stepless rotational speed control.Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.

#### Included in delivery:

4 m power cable, 1 clamping flange, 1 clamping nut, 1 key, surface guard, antivibration handle.

#### **EWER 17/75**

#### 7,500 RPM / 1,700 watts



Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting hole dia. [mm]	Net weight [kg]
EWER 17/75	395127	7.500-2.700	230	1.700	1.000	M14	22.23	2.810

#### **Clamping flanges**



Designation	EAN 4007220
SPF 98960180	420935
SPM 98960181	420942

#### Key

Designation	EAN 4007220
STL SW 35 x 5.3 mm	420959

#### **Suitable PFERD tools**

Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
Velcro-backed abrasive discs Fibre discs COMBICLICK tools POLICLEAN discs Self-adhesive discs Unmounted flap wheels for angle grinders POLINOX threaded grinding wheels Dia. 65 to 125 mm	Diamond cut-off wheels CC-GRIND-SOLID- DIAMOND Dia. 125 mm	POLIFAN flap discs CC-GRIND grinding discs Dia. up to 125 mm	Wheel brushes crimped Type for angle grinders RBU dia. 115 to 125 mm knotted RBG dia. 100 to 125 mm  Pipeline wheel brushes knotted RBG dia. 100 to 125 mm  Threaded bevel brushes crimped KBU dia. 100 to 125 mm knotted KBG dia. 100 to 125 mm	Threaded cup brushes crimped TBU dia. 60 to 100 mm M14 knotted TBG dia. 65 to 80 mm M14  Composite disc brushes crimped DBU dia. 75 mm

Note: Observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.



#### Burnishing machines



#### **ESER 17/75**

## •

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#### 7,500 RPM / 1,700 watts

- Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.
- Two keyways for increased power transmission on drum tools.
- Drive spindle with CD-R mounting for felt discs with dia. 50 mm to protect the workpiece.
- M14 drive spindle for mounting drum tools with female thread.

#### Included in delivery:

4 m power cable, hand guard, anti-vibration handle, detachable drive spindle.

Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Max. tool dia. [mm]	Tool mounting dia. x width [mm]	Net weight [kg]
ESER 17/75	217771	7,500-2,700	230	1,700	1,000	125	19 x 100	3.065

#### **Suitable PFERD tools**

Catalogue section 4	Catalogue section 8
Flap drums Dia. 100 x 100 mm	Wheel brushes for burnishing machines Grinding drum mounting dia. 19x100 mm crimped WBU dia. 100 mm

**Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





## **Electric grinders**Burnishing machines

2,500 RPM / 1,200 watts

#### Special features:

- Low-speed burnishing machine with high torque and stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.
- Two keyways for increased power transmission on drum tools.
- Drive spindle with CD-R mounting for felt discs with dia. 50 mm to protect the workpiece.
- M14 drive spindle for mounting drum tools with female thread.

#### Included in delivery:

4 m power cable, hand guard, anti-vibration handle, detachable drive spindle.

# 369 227 72 PFERDVALUE:

4
Energy Saving

**ESER 12/25** 

Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Max. tool dia. [mm]	Tool mounting dia. x width [mm]	Net weight [kg]
ESER 12/25	217788	2,500-900	230	1,200	750	125	19 x 100	3.340

#### **Suitable PFERD tools**

Catalogue section 4	(	Catalogue section 8
Poliflex texturing rollers		Wheel brushes for burnishing machines
POLINOX grinding drums		Grinding drum mounting dia. 19x100 mm rimped
Dia. 100 x 100 mm	1	WBU dia. 100 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



#### Belt grinders



#### **EBER 8/280**

#### 32 m/s / 800 watts Belt length: 520 (610\*) mm x width 3-20 mm



#### PFERDVALUE:



#### Special features:

- Belt length 520 mm x width 3–20 mm
- \*Belt length 610 mm possible with adapter EBSA 610.
- Keyless belt arm change.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

Included in delivery: 4 m power cable, 1 belt arm BSVA 9/24x520, protective cover SDVH.

Designation	EAN 4007220	Belt speed [m/s]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
EBER 8/280	232781	32–12	230	800	550	2.100

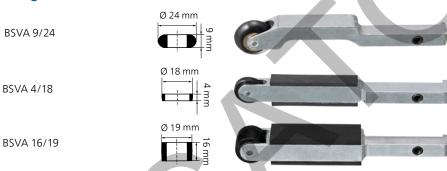
#### **Protective cover**

#### Designation **EAN** 4007220 SDVH 407981

#### Electric belt grinder adapter



#### Belt grinder attachment arms



#### Special features:

- Robust design.
- Use of the full roller width.
- Extremely slim fixing lugs on the facing

Designation	4	EAN 007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 9/24 x 520		247891	9 x 24	3, 6, 9, 12, 16	520, 610	0.073
BSVA 4/18 x 520		247907	4 x 18	3, 6, 9	520, 610	0.060
BSVA 16/19 x 520		247914	16 x 19	16, 20	520, 610	0.100



#### **Electric grinders** Pipe belt grinders

#### **Special features:**

- Stepless rotational speed control.
- Digital electronics for constant rotational
- Overload protection.Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.
- \*Telescopic arm for using different belt lengths.
- Lockable guide roller for greater contact pressure or a large surface contact angle.
- Fixed side plates to protect the workpiece.

#### Included in delivery:

4 m power cable, 1 key, 2 rolls.

#### **EBER 17/75 R**

22.8 m/s / 1,700 watts Belt length: 610-820 mm x width 12-40 mm



#### PFERDVALUE:



ı	Designation	EAN 4007220	Belt speed [m/s]	Suitable belt width [mm]	Suitable belt length [mm]	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
E	EBER 17/75 R	217757	22.8-8.2	12–40	610, 650, 760, 780, 820	230	1,700	1,000	4.027

#### Key





EAN 4007220

420881

For further information and ordering data on abrasive and non-woven short belts, refer to the Tool Manual, catalogue section 4.

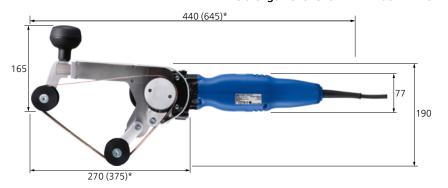


#### Pipe belt grinders



#### **EBER 12/25 R**

#### 7.6 m/s / 1,200 watts Belt length: 610–820 mm x width 12–40 mm



#### Special features:

- Low-speed pipe belt grinder with stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.
- \*Adjustable telescopic arm for using different belt lengths.
- Lockable guide roller for greater contact pressure or a large surface contact angle.
- Fixed side plates on the rolls to protect the workpiece.

#### Included in delivery:

4 m power cable, 1 key, 2 rolls.

#### PFERDVALUE:



Designation	EAN 4007220	Belt speed [m/s]	Suitable belt width [mm]	Suitable belt length [mm]	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
EBER 12/25 R	217764	7.6–2.7	12–40	610, 650, 760, 780, 820	230	1,200	750	4.212

#### Key



Designation	EAN 4007220
SKHS SW 5 mm	420881



For further information and ordering data on abrasive and non-woven short belts, refer to the Tool Manual, catalogue section 4.







#### General information



Drive systems with DIN 10/DIN 15 are multi-speed machines. They cover a wide rotational speed range and have stepless electronic adjustment to match individual tool requirements. The drives have very high drive outputs.

They can also be used with compact handpieces or extensions to work in difficult-to-reach areas.

The drives with rigid extensions are excellent solutions for customer-specific applications.

#### **Areas of application**

The drive systems can be used almost anywhere. They are used successfully in many industrial sectors for different processes. The rotational speed control allows the use of various tools on one single drive.

#### The PFERD product range

PFERD offers various types of drives, as well as a comprehensive range of matching flexible shafts, handpieces, angle drives, burnishing machines and rigid extensions.

PFERD drives and their accessories are extremely robust, technically up to date and incorporate the latest ergonomic findings and requirements. This product range was developed especially for the economic application of grinding, milling, brushing, cut-off and polishing tools and covers a wide rotational speed range (28,000–100 RPM) and power range (6,100–710 watts).

#### **Advantages**

- Very compact and ergonomic handpieces.
- Very low weight of the handpieces.
- Sophisticated.
- Very high performance.
- Highly versatile.
- Simple power supply.
- Low-maintenance.
- Easy to service.
- Economical.



#### Flexible shafts (BW) and accessories

Standard flexible shafts consist of three components which can be combined in different ways:

#### Flexible core (SE)

The flexible core consists of four to ten layers of wire, conforming to DIN 2076, and is specially designed for high-speed clockwise rotation. The coupling is securely press-fitted to the core.

#### Flexible casing (SCH)

The flexible casing consists of oil-resistant rubber; the interior being a flat steel spiral and the outside being solid rubber. The connection couplings are pressed on firmly and encased in a rubber sheath as reinforcement.

#### Handpiece (HA)

The handpieces are light and easy to handle relative to their power output transmission, and cover a wide rotational speed range. Because of low noise emissions, continuous operation with little fatigue is possible. Replaceable collets enable a wide range of tools to be mounted. The sliding coupling allows quick handpiece changes.



#### The following combination options are also available:

#### Rigid extension (STV)

A rigid extension allows work in hard-to-reach areas.

#### Angle drives (WT)

If you use an angle drive instead of a handpiece, flexible shafts can be used as an angle grinder.

#### **Burnishing angle drive (SWT)**

If you use a burnishing angle drive instead of a handpiece, flexible shafts can be used as a burnishing machine.

#### Belt sander (BSG)

The belt sander has an elastic spindle bearing "E". If you use a belt sander instead of a handpiece, flexible sha

If you use a belt sander instead of a handpiece, flexible shafts can be used as a belt grinder.



## In addition to the standard flexible shafts, PFERD also offers special flexible shafts:

#### Flexible shafts with remote control (FS-BW)

The remote control enables the device to be switched on and off directly on the handpiece, increasing safety in the workplace.

#### Special flexible shafts PST-T

These special flexible shafts have no handpiece for tool mounting purposes. The POLISTAR-TUBE grinding tools are attached directly to the core of the flexible shaft with a screw.



General information

#### **Recommendations for use**

Correctly setting up the flexible shaft drive will extend the service life of the flexible shaft. If a flexible shaft is bent on the motor side or handpiece side, this will cause it to heat up and fail



Flexible shaft drive set up correctly: flexible shaft curves gently without any bends.



Flexible shaft drive set up incorrectly: flexible shaft bent on the motor side and/or handpiece side.

#### Repair

It is not possible to repair cores and flexible casings. Use pre-assembled new parts.

#### Radius of curvature

When using flexible shafts, please ensure that the shafts are not bent beyond the specified radius of curvature. The smallest possible radius of curvature is given for each flexible shaft.



#### Applying grease

After approximately 100 operating hours, the core of the flexible shaft must be serviced. The core and casing must be degreased and new special shaft grease must be applied to the core. Only use the recommended grease and a non-linting cleaning cloth.

The appropriate maintenance sets can be found on page 143.





Clean the casing with the tube brush from the maintenance set.



Degrease the core with a non-linting cleaning cloth.



Then apply new special shaft grease to the core.

### General information



#### How to find the matching flexible shaft to your drive

Here you will find a selection of flexible shafts for the individual drives in accordance with the following explanation.

Flexible shafts and handpieces/attachments must always be selected according to the required rotational speed and power output. Maximum cost-effectiveness is achieved through the combination of a high-performance tool and an optimal drive.

#### O Drive

Alternative drives with DIN 10 connection. (Exceptions DIN 15).

#### Plexible shaft (BW)

Possible flexible shafts.

#### **3** Catalogue page

Reference to the catalogue page on which the drives or the appropriate flexible shaft/handpieces are shown.

#### O Rotational speed [RPM]

Rotational speed and power output ranges for which the flexible shaft is suitable. Power output and rotational speed range of the drive system.

## **6** Rotational speed ranges of the flexible shafts and handpieces

#### **6** Connection

Drive-side connection DIN 10 / DIN 15 and handpiece-side connections (G16 to G28 and DPF, SRF).

#### **7** Suitable flexible shaft

- ideally suitable
- o suitable
- unsuitable

<b>3</b> see page		•	113	114	115	116	117	118	119
Drive motor		EMER 8/280 BW	EMER 8/90 BW	RUER 8/180 SI	MMEW 11/120	MEW 18/240 ME 22/240	MEW 18/150 ME 22/150	MME 40/150 DIN 15	
4 Rotational speed range	e [RPM]	: <b>•</b>	28,000-	9,000-	18,000-	12,000-	24,000-	15,000-	15,000-
<ul><li>❷ Flexible shafts</li></ul>	see page ▼	<b>⊙</b> Drive [RPM] ▼	8,500	2,500	500	800	100	100	100
BW 4 DIN 10/G16	120	40,000-15,000	<b>7</b> °	-	0	-	0	0	-
BW 4 PST-T DIN 10 <b>6</b>	127	7,650- 1,500		•	•	•	0	0	-
BW 6 DIN 10/G16	121	25,000-11,000	•	-	•	0	•	0	_
BW 6 DIN 10/DPF BW 6 DIN 10/SRF	122	18,000- 9,000	0	-	•	0	0	0	-
BW 7 DIN 10/G22	123	25,000-11,000	•	-	0	0	•	0	-
BW 7 PST-T DIN 10	127	4,250- 1,500	-	0	0	•	0	0	-
BW 10 SE 11 DIN 10/G28	124	18,000- 750	0	0	-	0	•	•	-
BW 10 SE 11 DIN 15/G28	124	18,000- 750	0	0	-	-	-	-	•
BW 12 DIN 10/G28	125	12,000- 850	-	-	-	-	•	•	-
BW 12 DIN 15/G28	125	12,000- 850	-	-	-	-	-	-	•
FS-BW 7 DIN 10/G22	120	25,000–11,000	•	-	0	0	•	0	-
FS-BW 10 DIN 10/G28	120	18,000- 750	0	0	-	0	•	•	-
FS-BW 12 DIN 10/G28	120	12,000- 850		-		-	•	•	-

<sup>• =</sup> ideally suitable  $\circ$  = suitable - = unsuitable

All data is also valid for flexible shaft versions without handpieces and 2-metre versions.



## **Drive systems with DIN 10/DIN 15**Flexible shaft drives – EL motors for flexible shafts and accessories

#### Special features:

- Flexible shaft drive with DIN 10 connection.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).
- Pipe stand protects the drive.

#### Included in delivery:

4 m power cable, 2 keys.

#### Ordering notes:

■ The drive is supplied without flexible shaft, please order separately.

# **EMER 8/280 BW** 28,000 RPM / 750 watts PFERDVALUE:

Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
EMER 8/280 BW	395318	28,000-8,500	230	750	410	10	455 x 120 x 120	2.500

#### Key

	Designation	EAN 4007220
C	STS D4 mm	205020

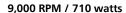






## **EMER 8/90 BW**

PFERDVALUE:





#### connection.

Special features:

- Flexible shaft drive with DIN 10
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).
- Pipe stand protects the drive.

#### Included in delivery:

4 m power cable, 2 keys.

#### **Ordering notes:**

The drive is supplied without flexible shaft, please order separately.

#### **Dimensions** Designation EAN Rotational Voltage **Power** Flexible Net **Power** 4007220 [volts] consumption output shaft LxWxH weight speed [RPM] 50-60 Hz [watts] [watts] connection [mm] [kg] [DIN] EMER 8/90 BW 217825 9,000-2,500 410 10 455 x 120 x 120 230 710 2.500

#### Key

	Designation	EAN 4007220
C	STS D4 mm	205020





### Flexible shaft drives for Record Universal Motor and accessories

#### **RUER 8/180 SI**

#### **Special features:**

- Robust design for heavy-duty use.
- Stepless rotational speed control.
- Electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure (USP).
- The KDR 8/180 SI combi-speed control can be used as a table-top or foot control. In table-top operation the rotational speed can be controlled individually using the potentiometer. For foot-controlled operation, the maximum rotational speed is preset using the potentiometer. Control is then achieved using the foot pedal. Only for use with motor RUER 8/180 SI.
- Very low noise generation.
- Particularly suitable for use in tool and mould construction.

#### 18,000 RPM / 1,020 watts

#### Included in delivery:

2.5 m power cable, 2.25 m connection cable, 2 keys.

#### Ordering notes:

The drive is supplied without flexible shaft, please order separately.

#### PFERDVALUE:







Designation	EAN 4007220	RPM	Voltage [volts] 50-60 Hz	Power con- sumption [watts]	Power output [watts]	Flexible shaft con- nection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUER 8/180 SI 230 V	807408	18,000–500	230	1,020	600	10	222 x 98 x 98	1.650

For dimensions and net weight refer to the motor.

#### Key

	Designation	EAN
		4007220
C	STS D4 mm	205020

#### **Accessories for tool drives RUER**

**Table stand TS L 1400** with screw clamp for attachment to bench tops up to 65 mm in thickness.

The telescopic system allows individual height adjustment up to maximum 140 cm. Max. 10 kg carrying capacity.

#### Support TSA L 1400

This support matches the table stand and allows optimum placement of the various handpieces, ready for use.

#### Ordering notes:

Please order support separately.



Designation	EAN 4007220		Net weight [kg]
TS L 1400	657683	Table stand	2.170
TSA L 1400	657690	Handpiece support	0.450







#### **MMEW 11/120**

#### Special features:

- Robust design for heavy-duty use.
- Stepless rotational speed control.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).
- Very low noise generation.
- Mounted grinding and polishing tools with diameter ≥ 60 mm are not suitable for continuous use with the Mini-Mammoth Electronic.

12,000 RPM / 1,100 watts

#### Included in delivery:

2.5 m power cable, 2 keys.

#### Ordering notes:

The drive is supplied without flexible shaft, please order separately. Hanging design, on request. Version with foot switch, on request.

#### PFERDVALUE:

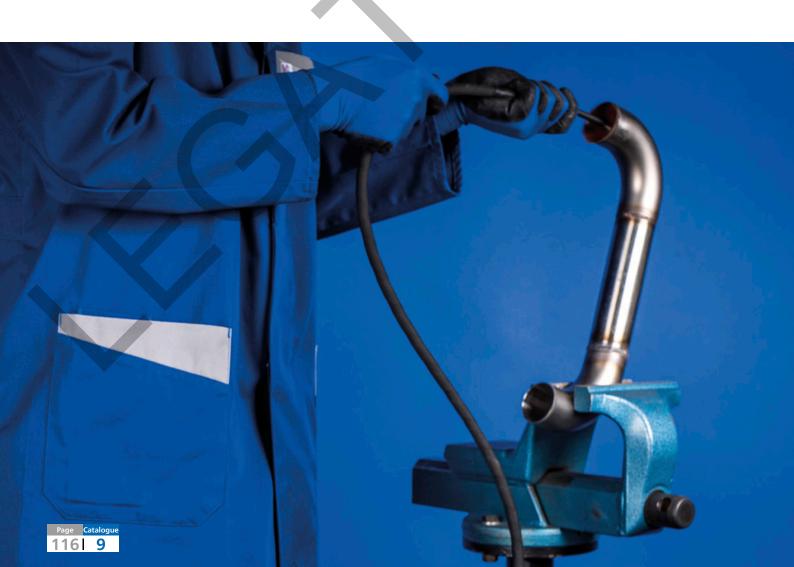




Designation	EAN 4007220	RPM	Voltage [volts] 50-60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
MMEW 11/120 230 V	657478	12,000-800	230	1,100	800	10	270 x 160 x 180	7.900

#### Key

	Designation	EAN 4007220
C	STS D4 mm	205020



### Flexible shaft drives for Mammoth Electronic and accessories

#### MEW 18/240 ME 22/240

#### Special features:

- With max. rotational speed 24,000 RPM.
- Most powerful and stable torque.
- Stepless rotational speed control.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).
- Very low noise generation.
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- High torque, even within low rotational speed ranges.
- Frequency inverter for maintaining constant rotational speed.
- Easy to service, easy-to-remove housing with four main modules.

24,000 RPM / 2,000 watts 24,000 RPM / 2,700 watts

#### Included in delivery:

MEW 18/240 with 1-phase AC

4 m power cable with plug, 2 Allen keys.

#### ME 22/240 with 3-phase AC

4 m power cable without plug, 2 keys.

#### Ordering notes:

■ The drive is supplied without flexible shaft, please order separately.

#### PFERDVALUE:









Designation	EAN 4007220	RPM	Voltage [volts] 50-60 Hz	Power con- sumption [watts]	Power output [watts]	 ble shaft nnection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
MEW 18/240 230V	101674	24,000-100	200-240	2,000	1,500	10	445 x 200 x 320	24.500
ME 22/240 400V	101681	24,000-100	380-480	2,700	2,200	10	445 x 200 x 320	24.500

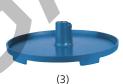
#### Key

	Designation	EAN 4007220
C	STS D4 mm	205020

#### **Accessories for Mammoth Electronic**











(5)





#### (1) Remote control cable FSTK 22

For extension of the removable operating console with cover plate for protection of the drive (cable length 4 m).

#### (2) Foot switch FSE 22

For easy drive switch-on/switch-off (cable length 4 m).

With protective cover.

#### (3) Base FME

Stable base with pivot device.

#### (4) Overhead trolley B1 ME

Drive can be used in hanging position, shaft support available.

#### (5) Overhead trolley B2 ME

Drive on castors can be used in hanging position.

#### (6) Base trolley WA D ME

Trolley with tool tray, 4 steerable wheels of which 2 are lockable. Dimensions L x W x H: 500 x 500 x 510 mm.

#### (7) Shaft support WAL 4-12

Support for flexible shaft that can be mounted onto the side of the drive.

Designation	EAN 4007220	Description	Net weight
	4007220		[kg]
FSTK 22	772812	(1) Remote control cable	0.635
FSE 22	772799	(2) Foot switch	1.000
FME	617977	(3) Base	2.000
B1 ME	617984	(4) Overhead trolley	1.200
B2 ME	617991	(5) Overhead trolley on castors	1.800
WA D ME	618028	(6) Base trolley	14.200
WAL 4-12	618004	(7) Shaft support	0.460

### Flexible shaft drives for Mammoth Electronic and accessories





#### MEW 18/150 ME 22/150

#### Special features:

- Most powerful and stable torque.
- Stepless rotational speed control (with overdrive ST 103 DIN 10 up to max. 40,000 RPM).
- Overload protection.
- Restart protection in case of power failure (USP).
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- High torque over the entire rotational speed range.
- Frequency inverter for maintaining constant rotational speed.

15,000 RPM / 2,700 watts 15,000 RPM / 2,000 watts

#### Included in delivery:

MEW 18/150 with 1-phase AC

4 m power cable with plug, 2 keys.

ME 22/150 with 3-phase AC

4 m power cable without plug, 2 keys.

#### Ordering notes:

The drive is supplied without flexible shaft, please order separately.

#### PFERDVALUE:









Designation	EAN 4007220	RPM	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
ME 22/150 400V	758694	15,000-100	380-480	2,700	2,200	10	445 x 200 x 320	24.500
MEW 18/150 230V	788738	15,000-100	200-240	2,000	1,500	10	445 x 200 x 320	24.500

#### Key

	Designation	EAN 4007220
C	STS D4 mm	205020

#### **Accessories for Mammoth Electronic**











(5)





(7)

#### (6) Base trolley WA D ME

Trolley with tool tray, 4 steerable wheels of which 2 are lockable.

Dimensions L x W x H: 500 x 500 x 510 mm.

#### (7) Shaft support WAL 4-12

Support for flexible shaft that can be mounted onto the side of the drive.

#### (1) Remote control cable FSTK 22

For extension of the removable operating console with cover plate for protection of the drive (cable length 4 m).

#### (2) Foot switch FSE 22

For easy drive switch-on/switch-off (cable length 4 m).

With protective cover.

### (5) Overhead trolley B2 ME

shaft support available.

Stable base with pivot device.

(4) Overhead trolley B1 ME

Drive on castors can be used in hanging position.

Drive can be used in hanging position,

Designation	EAN 4007220	Description	Net weight [kg]
FSTK 22	772812	(1) Remote control cable	0.635
FSE 22	772799	(2) Foot switch	1.000
FME	617977	(3) Base	2.000
B1 ME	617984	(4) Overhead trolley	1.200
B2 ME	617991	(5) Overhead trolley on castors	1.800
WA D ME	618028	(6) Base trolley	14.200
WAL 4-12	618004	(7) Shaft support	0.460



### Flexible shaft drives for Maxi-Mammoth Electronic and accessories

#### MME 40/150

#### Special features:

- Most powerful and stable torque.
- Stepless rotational speed control 100 to 15,000 RPM.
- MME 40/150 with 3-phase AC.
- I/O interface for remote control with safety extra-low voltage.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).
- Very low noise generation.
- Removable operating console with possibility of extension.
- High torque over the entire rotational speed range.
- Frequency inverter for maintaining constant rotational speed.
- Base with pivot device for easy guidance of flexible shafts and adherence to the max. permissible radius of curvature.
- Suitable for tools up to diameter 300 mm.
- Easy to service, easy-to-remove housing with four main modules.

#### 15,000 RPM / 6,100 watts

#### Recommendations for use:

The Maxi-Mammoth Electronic is the most powerful drive motor provided by PFERD. It is suitable for use in combination with flexible shafts for grinding and polishing work with high power output requirements.

#### Included in delivery:

4 m power cable without plug, 2 keys.

#### Ordering notes:

The drive motor is supplied without flexible shafts, please order separately.

#### PFERDVALUE:











Designation	EAN 4007220	RPM	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
MME 40/150 400 V	832486	15,000-100	340-480	6,100	4,000	15	470 x 220 x 490	36.160

#### Key

	Designation	EAN 4007220
C	STS D6 mm	205037

#### **Accessories for Maxi-Mammoth Electronic**









#### (1) Remote control cable FSTK 40

For extension of the removable operating console with cover plate for protection of the motor (cable length 4 m).

#### (2) Foot switch FSE 22

For easy drive switch-on/switch-off (cable length 4 m) via the remote control interface. With protective cover.

#### (3) Base trolley WA D ME

Trolley with tool tray and 4 steerable wheels, 2 with parking brake.

Dimensions L x W x H: 500 x 500 x 510 mm.

Designation	EAN 4007220	Voltage [volts]	Description	Net weight [kg]
FSTK 40	847053	24	(1) Remote control cable	0.635
FSE 22	772799	24	(2) Foot switch	1.000
WA D ME	618028	-	(3) Base trolley	14.200

## **Drive systems with DIN 10/DIN 15** Flexible shaft 4 and handpieces





#### Flexible shaft 4

#### 40,000-24,000 RPM



#### Recommendations for use:

- The rotational speed should not fall below or exceed the specified ranges.
- With low power output requirements, it is possible to fall below the rotational speed
- The radius of curvature should not be smaller than 100 mm.

#### Ordering notes:

- Special lengths available on request.
- Cores and casings with double-sided sliding coupling on request.

Designation	EAN 4007220	Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Incl. keys	Net weight [kg]
Flexible shaft inc. handpiece	(HA 4 G16)						
BW 4 DIN 10/G16	427699	40,000–24,000	10 / 30	16 / 16	13 x 1,390	EM SW 11 mm, EM SW 12 mm	0.630
Flexible shaft without handp	iece						
BW 4 DIN 10/G16 oHA	427712	40,000-24,000	10 / 30	16 / 16	13 x 1,329		0.450
Replacement casing							
SCH 4 DIN 10/G16	427729	-	10 / 30	16 / 16	13 x 1,300		0.330
Replacement core							
SE 4 DIN 10/G16	427705	40,000-24,000	10 / M10	16 / 3.5/2.45	4 x 1,329		0.120

#### **Handpieces**





HA 4 G16

WZA 490° G16

New generation of handpieces with significantly better ergonomics.

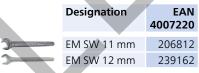
#### Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Incl. keys	Net weight [kg]
HA 4 G16	388150	6	40,000	24 x 120	-	6	EM SW 11 mm, EM SW 12 mm	0.180
WHA 4 90° G16	423127	6	20,000	70 x 113	1.8:1	6	EM SW 11 mm, EM SW 14 mm	0.250

For all available collets, see page 140.

#### Key





Maintenance set **P-SET BW 4/6** (EAN 4007220182970)

1201 9



# **Drive systems with DIN 10/DIN 15**Flexible shaft 6 and handpieces

#### **Recommendations for use:**

- The rotational speed should not fall below or exceed the specified ranges.
- With low power output requirements, it is possible to fall below the rotational speed range.
- The radius of curvature should not be smaller than 140 mm.

#### Ordering notes:

Special lengths available on request.



Designation	EAN 4007220	Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Incl. keys	Net weight [kg]
Flexible shaft inc. handpiece	(HA 4 G16)						
BW 6 DIN 10/G16	422663	25,000–11,000	10 / 30	16 / 16	16 x 1,643	EM SW 11 mm, EM SW 12 mm	1.190
Flexible shaft without handp	iece						
BW 6 DIN 10/G16 oHA	658406	25,000-11,000	10 / 30	16 / 16	16 x 1,583		1.100
Replacement casing							
SCH 6 DIN 10/G16	658390	-	10 / 30	16 / 16	16 x 1,553		0.740
Replacement core							
SE 6 DIN 10/G16	657829	25,000-11,000	10 / M10	16 / 3.5/2.45	6 x 1,583		0.270
BW 6 DIN 10/G16 oHA  Replacement casing  SCH 6 DIN 10/G16  Replacement core	658406 658390	-	10 / 30	16 / 16	16 x 1,553	EM SW 12 mm	0.740

#### **Handpieces**





HA 4 G16

WZA 4 90° G16

New generation of handpieces with significantly better ergonomics.

#### Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Incl. keys	Net weight [kg]
HA 4 G16	388150	6	40,000	24 x 120	-	6	EM SW 11 mm, EM SW 12 mm	0.180
WHA 4 90° G16	423127	6	20,000	70 x 113	1.8:1	6	EM SW 11 mm, EM SW 14 mm	0.250

For all available collets, see page 140.

	Designation	EAN 4007220
C	EM SW 11 mm	206812
-	EM SW 12 mm	239162



Maintenance set **P-SET BW 4/6** (EAN 4007220**182970**)

## Flexible shaft 6 Z and handpieces





#### Recommendations for use:

- The rotational speed should not fall below or exceed the specified ranges.
- With low power output requirements, it is possible to fall below the rotational speed range.
- The radius of curvature should not be smaller than 140 mm.

#### Ordering notes:

Special lengths available on request.

Designation	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]
Flexible shaft (without handpie	ce having dup	lex spring coupli	ng DPF)				
BW 6 Z DIN 10/DPF oHA	657720	18,000-9,000	1,460-600	10 / 30	DPF / 10	12 x 1,250	0.800
Flexible shaft (without handpiece having expansion ring coupling SRF)							
BW 6 Z DIN 10/SRF oHA	657737	18,000-9,000	1,460-600	10 / 30	SRF / 10	12 x 1,250	0.800
BW 6 Z DIN 10/DPF oHA  Flexible shaft (without handpie	657720 ce having exp	18,000–9,000 ansion ring coupl	1,460–600 ling SRF)				

#### **Handpieces**



All handpieces are suitable for use with the handpiece-side couplings DPF and SRF.

#### Handpiece HA 6 Z SP 3.0

- Handpiece with quick-coupling system.
- Version with 2.34 mm collet on request.

#### Angle handpieces with telescopic system Telescoping fixed to maximum length

- WZT 6 3.0 Dimensions 35 x 255 mm.
- WZT 6 45° 6.0 Dimensions 45 x 260 mm.

#### Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Trans- mission ratio	Collet group	Incl. keys	Net weight [kg]
HA 6 Z DPF/SRF	657751	6	18,000	DPF/SRF / 10	24 x 140	-	13	EM SW 9 mm, STS D 2.5 mm	0.131
HA 6 Z SP 3.0 DPF/SRF	657768	3	18,000	DPF/SRF / 10	22 x 139	-	-	-	0.109
WZ 6 DPF/SRF	657775	6	18,000	DPF/SRF / 10	50 x 170	1.25:1	13	EM SW 9 mm, SKS SW 4 mm	0.225
WZT 6 3.0 DPF/SRF	657782	3	18,000	DPF/SRF / 10	35 x 170	1.38:1	14	EM SW 7 mm	0.170
WZT 6 45° 6.0 DPF/SRF	657799	6	18,000	DPF/SRF / 10	45 x 200	1.53:1	13	EM SW 9 mm, EM SW 14 mm	0.210

For all available collets, see page 140.

#### Key

	Designation	EAN 4007220
- total	EM SW 7 mm	592885
H-14-1-1-1-1	EM SW 9 mm	330357
THE RESERVE	EM SW 14 mm	206836
	STS D 2.5 mm	205013
	SKS SW 4 mm	204450



Maintenance set P-SET BW 4/6 (EAN 4007220182970)



## **Drive systems with DIN 10/DIN 15**Flexible shaft 7 and handpieces

#### **Recommendations for use:**

- The rotational speed should not fall below or exceed the specified ranges.
- With low power output requirements, it is possible to fall below the rotational speed range.
- The radius of curvature should not be smaller than 140 mm.

#### Ordering notes:

- Special lengths available on request.
- Cores and casings with double-sided sliding coupling on request.

## Flexible shaft 7 25,000-11,000 RPM BW 7 BW 7 oHA SCH 7 SE 7

		_	_						
Designation	EAN 4007220	Rotational speed range [RPM]		Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Incl. keys	Net weight [kg]		
Flexible shaft inc. handpiece (HA 7 G22)									
BW 7 DIN 10/G22	428504	25,000-11,000	10 / 30	22 / 22	18 x 1,654	EM SW 11 mm, EM SW 14 mm	1.536		
BW 7 DIN 10 G22 2m	427842	25,000-11,000	10 / 30	22 / 22	18 x 2,154	EM SW 11 mm, EM SW 14 mm	1.986		
Flexible shaft without handpied	ce								
BW 7 DIN 10/G22 oHA	428573	25,000-11,000	10 / 30	22 / 22	18 x 1,589	-	1.250		
BW 7 DIN 10/G22 2m oHA	429266	25,000-11,000	10 / 30	22 / 22	18 x 2,089	-	1.700		
Replacement casing					*				
SCH 7 DIN 10/G22	428580	-	10 / 30	22 / 22	18 x 1,553	-	0.850		
SCH 7 DIN 10/G22 2m	429273	-	10 / 30	22 / 22	18 x 2,053	-	1.100		
Replacement core									
SE 7 DIN 10/G22	428566	25,000-11,000	10 / M10	22 / 5/3.85	7 x 1,589	-	0.400		
SE 7 DIN 10/G22 2m	428344	25,000-11,000	10 / M10	22 / 5/3.85	7 x 2,089	-	0.600		

#### **Handpieces**



WHA 7 90° G22 HA 7 G22

New generation of handpieces with significantly better ergonomics.

#### Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Incl. keys	Net weight [kg]
HA 7 G22	388167	6	25,000	27 x 132	-	6	EM SW 11 mm, EM SW 14 mm	0.286
WHA 7 90° G22	423134	6	17,100	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.520

For all available collets, see page 140.

Key

	Designation	EAN 4007220
) a man or man	EM SW 11 mm	206812
1	EM SW 14 mm	206836





Maintenance set P-SET BW 7 (EAN 4007220182994)

## **Drive systems with DIN 10/DIN 15** Flexible shaft 10 and handpieces



### Flexible shaft 10 SE 11 BW 10

BW 10 oHA

SCH 10

SE 11

18,000-750 RPM

#### Recommendations for use:

- The rotational speed should not fall below or exceed the specified ranges.
- The radius of curvature should not be smaller than 170 mm.

#### Ordering notes:

- Special lengths available on request.
- Cores and casings with double-sided sliding coupling on request.

Designation	EAN 4007220	Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Incl. keys	Net weight [kg]
Flexible shaft inc. handpiece (HA	10 G28)						
BW 10 SE 11 DIN 10/G28	415702	18,000–750	10 / 30	28 / 28	22 x 1,683	EM SW 11 mm, EM SW 15 mm	2.663
BW 10 SE 11 DIN 10/G28 2m	420904	18,000–750	10 / 30	28 / 28	22 x 2,173	EM SW 11 mm, EM SW 15 mm	3.113
BW 10 SE 11 DIN 15/G28	431825	18,000–750	15 / 40	28 / 28	22 x 1,700	EM SW 11 mm, EM SW 15 mm	2.713
Flexible shaft without handpiece							
BW 10 SE 11 DIN 10/G28 oHA	423233	18,000-750	10 / 30	28 / 28	22 x 1,600	-	2.232
BW 10 SE 11 DIN 10/G28 2m oHA	423240	18,000-750	10 / 30	28 / 28	22 x 2,200	-	2.682
BW 10 SE 11 DIN 15/G28 oHA	432242	18,000-750	15 / 40	28 / 28	22 x 1,611	-	2.282
Replacement casing							
SCH 10 DIN 10/G28	420911	-	10 / 30	28 / 28	22 x 1,553	-	1.430
SCH 10 DIN 10/G28 2m	420928		10 / 30	28 / 28	22 x 2,053	-	1.580
SCH 10 DIN 15/G28	432266	-	10 / 40	28 / 28	22 x 1,570	-	1.430
Replacement core							
SE 11 DIN 10/G28	169377	18,000-750	10 / M10	28 / 7.5/5.85	11 x 1,600	-	0.802
SE 11 DIN 10/G28 2m	142929	18,000-750	10 / M10	28 / 7.5/5.85	11 x 2,100	-	1.102
SE 11 DIN 15/G28	432259	18,000-750	15 / M14	28 / 7.5/5.85	11 x 1,611	-	0.852

#### **Handpieces**







New generation of handpieces with significantly better ergonomics.

#### Handpieces HA 12 G28

Handpiece with clamping nut for maximum clamping force.

Collets up to 12 mm available.

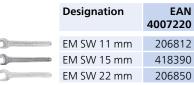
#### Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Incl. keys	Net weight [kg]
HA 10 G28	388174	6	18,000	35 x 160	-	6	EM SW 11 mm EM SW 15 mm	0.431
HA 12 G28	395196	6	18,000	35 x 170	-	12	EM SW 22 mm	0.545
WHA 10 90° G28	423141	6	17,100	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.579

For all available collets, see page 140.

#### Key





Angle drive WT 10 G28 (EAN 4007220**419809**)

Maintenance set P-SET BW 10/12 (EAN 4007220182987)



Belt sander BSG 10/35 E G28 (EAN 4007220183212) BSG 10/50 E G28 (EAN 4007220**183199**)

Flexible shaft adapter **BWA G28/DIN 10** (EAN 4007220**912515**)



Flexible shaft 12 and handpieces

#### **Recommendations for use:**

- The rotational speed should not fall below or exceed the specified ranges.
- The radius of curvature should not be smaller than 240 mm.

#### Ordering notes:

- Special lengths available on request.
- Cores and casings with double-sided sliding coupling on request.

## Flexible shaft 12 12,000-850 RPM BW 12 BW 12 oHA SCH 12 SE 12

Designation	EAN 4007220	speed range	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Incl. keys	Net weight [kg]		
Flexible shaft inc. handpie	ce (HA 12 G	i28)							
BW 12 DIN 10/G28	429280	12,000-850	10 / 30	28 / 28	25 x 2,173	EM SW 22 mm	4.295		
BW 12 DIN 15/G28	429570	12,000-850	15 / 40	28 / 28	25 x 2,187	EM SW 22 mm	4.345		
Flexible shaft without handpiece									
BW 12 DIN 10/G28 oHA	429327	12,000-850	10 / 30	28 / 28	25 x 2,102	-	3.750		
BW 12 DIN 15/G28 oHA	429600	12,000-850	15 / 40	28 / 28	25 x 2,112	-	3.800		
Replacement casing									
SCH 12 DIN 10/G28	429358	-	10 / 30	28 / 28	25 x 2,045	-	2.450		
SCH 12 DIN 15/G28	429617	-	15 / 40	28 / 28	25 x 2,059	-	2.500		
Replacement core									
SE 12 DIN 10/G28	429297	12,000-850	10 / M10	28 / 7.5/5.85	12 x 2,102	-	1.300		
SE 12 DIN 15/G28	429594	12,000-850	15 / M14	28 / 7.5/5.85	12 x 2,112	-	1.300		

#### **Handpieces**





HA 12 G28



New generation of handpieces with significantly better ergonomics.

#### Handpieces HA 12 G28

Handpiece with clamping nut for maximum clamping force. Collets up to 12 mm available.

Included in delivery:

1 collet, 2 keys.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Incl. keys	Net weight [kg]
HA 10 G28	388174	6	18,000	35 x 160	-	6	EM SW 11 mm, EM SW 15 mm	0.431
HA 12 G28	395196	6	18,000	35 x 170	-	12	EM SW 22 mm	0.545
WHA 10 90° G28	423141	6	17,100	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.579

For all available collets, see page 140.

#### Key

	Designation	EAN
		4007220
) a seminar	EM SW 11 mm	206812
	EM SW 15 mm	418390
1611	EM SW 22 mm	206850



Angle drive WT 10 G28 (EAN 4007220**419809**)





Belt sander BSG 10/35 E G28 (EAN 4007220183212) BSG 10/50 E G28 (EAN 4007220183199)



Flexible shaft adapter **BWA G28/DIN 10** (EAN 4007220**912515**)

## **Drive systems with DIN 10/DIN 15**Remote control for flexible shafts and accessories



#### Remote control for flexible shafts



Convenient operation from the workstation. Alternative to the foot switch.

#### Advantages:

- Switch on and off directly on the handpiece.
- Quickly change the handpiece.
- Enhanced safety thanks to fast switch-off.

#### Recommendations for use:

Only use with the ME 22/150, MEW 18/150, ME 22/240, MEW 18/240.

#### Ordering notes:

Special lengths available on request.

Designation	EAN 4007220	Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	H	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]
Flexible shaft 7							
FS-BW 7 DIN10/G22 2M oHA	432280	25,000-11,000	10 / 30		22 / 22	18 x 2,087	2.000
FS-SCH 7 DIN10/G22 2M	432297	-	10 / 30		22 / 22	18 x 2,053	1.400
SE 7 DIN 10/G22 2M	428344	25,000-11,000	10 / M10		22 / 5/3.85	7 x 2,089	0.600
Flexible shaft 10							
FS-BW 10 DIN10/G28 2M oHA	432303	18,000-750	10 / 30		28 / 28	22 x 2,100	3.012
FS-SCH 10 DIN10/G28 2M	432310	-	10 / 30		28 / 28	22 x 2,053	1.910
SE 11 DIN 10/G28 2M	142929	18,000-750	10 / M10		28 / 7.5/5.85	11 x 2,100	1.102
Flexible shaft 12							
FS-BW 12 DIN10/G28 2M oHA	432327	12,000-850	10 / 30		28 / 28	25 x 2,102	4.080
FS-SCH 12 DIN10/G28 2M	432334	-	10 / 30		28	25 x 2,045	2.780
SE 12 DIN 10/G28	429297	12,000-850	10 / M10		28 / 7.5/5.85	12 x 2,102	1.300





### Special flexible shafts for inner grinding of pipes and accessories

#### Flexible shafts PST-T for pipe grinding

These special flexible shafts do not have a handpiece for tool mounting and are particularly flexible in the front section. The POLISTAR-TUBE grinding tools are attached directly to the core of the flexible shaft with screws (INOX type). POLINOX flexible tools PNST are screwed on with adapter AD M4 or AD M5 (accessories). This combination is highly suitable for gradual fine grinding and cleaning of inner surfaces of pipes and pipe bends. Both pipe bend ends can be deburred from the entry side.

#### **Recommendations for use:**

- Flexible shaft motors with stepless rotational speed regulation are recommended as tool drives.
- Before the POLISTAR-TUBE and the shaft are introduced into the pipe, the tool should be preformed and adjusted to the pipe diameter.
- At the moment of introduction, it is recommended to reduce the respective operating speed of the POLISTAR-TUBE.

#### ■ The grinding of pipes with more than three bends should be performed from both ends whenever possible. ■ When the tool flaps emerge at the end

- of the pipe, they can be withdrawn while in rotation. This way, the rear side of the POLISTAR-TUBE deburrs the pipe end and at the same time polishes the inside of the tube during the reverse motion.
- All flexible shaft drives with rotational speed range 7,650-1,500 RPM and flexible shaft connection DIN 10 can be used.



#### **Ordering notes:**

Special lengths available on request.

7,650-1,500 RPM

#### Flexible shaft 4 PST-T DIN 10/M4 (1.5 m)

This flexible shaft is exclusively for use with POLISTAR-TUBE PST dia. 50, 60, 70 and 80 mm.

Maintenance set P-SET BW 4/6 for flexible shafts (EAN 4007220182970).

#### Flexible shaft 7 PST-T DIN 10/M5 (2.0 m)

This flexible shaft is exclusively for use with POLISTAR-TUBE PST dia. 90 and 100 mm. Maintenance set P-SET BW 7 for flexible shafts (EAN 4007220182994).

#### Flexible shaft 4 PST-T Flexible shaft 7 PST-T

4,250-1,500 RPM BW 4 PST-T BW 7 PST-T SE 4 PST-T

SE 7 PST-T SCH 4 PST-SCH 7 PST-T

Designation	EAN 4007220	Rotational speed range [RPM]	coupling	Dimensions dia. x length [mm]	Fastening threads	Tool mounting [mm]	Net weight [kg]		
Flexible shaft									
BW 4 PST-T DIN 10/M4 1.5 m	432341	7,650-1,500	10 / 30	13 x 1,550	M4	4	0.480		
BW 7 PST-T DIN 10/M5 2 m	432372	4,250-1,500	10 / 30	18 x 2,052	M5	5	1.320		
Pre-assembled replacement core	2								
SE 4 PST-T DIN 10/M4 1.5 m	432358	7,650–1,500	10 / M10	4 x 1,540	M4	4	0.124		
SE 7 PST-T DIN 10/M5 2 m	432389	4,250-1,500	10 / M10	7 x 2,042	M5	5	0.447		
Pre-assembled replacement casing									
SCH 4 PST-T DIN 10/M4 1.5 m	432365	_	10 / 30	13 x 1,550	-	-	0.353		

10 / 30

#### Accessories for flexible shafts BW 4 PST-T, 7 PST-T

432396

AD M4/8-32 UNC AD M5/8-32 UNC

SCH 7 PST-T DIN 10/M5 2 m

FLS M4 FLS M5

EM SW 7 mm EM SW 8 mm



Designation	EAN 4007220	Tool mounting [mm]	Suitable for	Net weight [kg]
AD M4/8-32 UNC	922750	8-32 UNC	BW 4 PST-T	0.002
AD M5/8-32 UNC	922767	8-32 UNC	BW 7 PST-T	0.003
FLS M4	833667	4 mm	BW 4 PST-T	0.002
FLS M5	833674	5 mm	BW 7 PST-T	0.003
EM SW 7 mm	592885	-	BW 4 PST-T	0.008
EM SW 8 mm	206867	-	BW 7 PST-T	0.014

18 x 2,052

#### **Suitable PFERD tools**

#### Catalogue section 4

POLISTAR-TUBE Dia. 50 mm for inside pipe dia. 35 to 40 mm

Dia. 60 mm for inside pipe dia. 40 to 45 mm Dia. 70 mm for inside pipe dia. 45 to 50 mm Dia. 80 mm for inside pipe dia. 50 to 55 mm Dia. 90 mm for inside pipe dia. 55 to 60 mm Dia. 100 mm for inside pipe dia. 60 to 65 mm

#### POLINOX cross buffs

Dia. up to 50 mm

Please observe the recommended and maximum permitted rotational speeds of the tool for the rotational speed setting of the motor.



0.871

# **Drive systems with DIN 10/DIN 15** Handpieces and accessories





#### **Handpieces**



Much more ergonomic flexible shaft handpieces.

#### Handpieces HA12 G28

■ Handpiece with clamping nut for maximum clamping force.

Collets up to 12 mm available.

Included in delivery:

2 keys, 1 collet.

Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Trans- mission ratio	Collet	Incl. keys	Net weight [kg]
Straight handpieces							,		
HA 4 G16	388150	6	40,000	16 / 16	24 x 120		6	EM SW 11 mm, EM SW 12 mm	0.180
HA 7 G22	388167	6	25,000	22 / 22	30 x 130	-	6	EM SW 11 mm, EM SW 14 mm	0.286
HA 10 G28	388174	6	18,000	28 / 28	35 x 160	-	6	EM SW 11 mm, EM SW 15 mm	0.431
HA 12 G28	395196	6	18,000	28 / 28	35 x 170	-	12	EM SW 22 mm	0.545
Angle handpieces									
WHA 4 90° G16	423127	6	20,000	16 / 16	70 x 113	1.8:1	6	EM SW 11 mm, EM SW 14 mm	0.250
WHA 7 90° G22	423134	6	17,100	22 / 22	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.520
WHA 10 90° G28	423141	6	17,100	28 / 28	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.579

For all available collets, see page 140.

#### Key

	Designation	EAN 4007220
James and the	EM SW 9 mm	330357
1	EM SW 11 mm	206812
<b>—</b>	EM SW 12 mm	239162
1	EM SW 14 mm	206836
)	EM SW 15 mm	418390
J	EM SW 17 mm	204542
1000	EM SW 22 mm	206850



# Drive systems with DIN 10/DIN 15 Handpieces and accessories

### Handpieces DPF/SRF

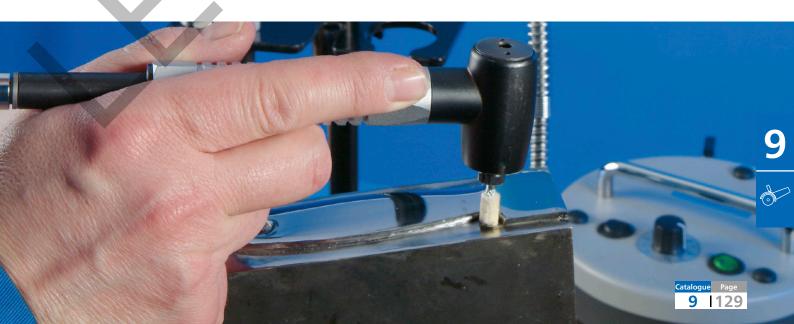


Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Trans- mission ratio	Collet group	Incl. keys	Net weight [kg]
Straight handpieces									
HA 6 Z DPF/SRF	657751	6	18,000	DPF/SRF / 10	24 x 140	-	13	EM SW 9 mm, STS D 2.5 mm	0.131
HA 6 Z SP 3.0 DPF/SRF	657768	3	18,000	DPF/SRF / 10	22 x 139	-		-	0.109
Angle handpieces									
WZ 6 DPF/SRF	657775	6	18,000	DPF/SRF / 10	50 x 170	1.25:1	13	EM SW 9 mm, SKS SW 4 mm	0.225
Angle handpieces with	telescopic	system							
WZT 6 3.0 DPF/SRF	657782	3	18,000	DPF/SRF / 10	35 x 170	1.38:1	14	EM SW 7 mm	0.170
WZT 6 45° 6.0 DPF/SRF	657799	6	18,000	DPF/SRF / 10	45 x 200	1.53:1	13	EM SW 9 mm, EM SW 14 mm	0.210

For all available collets, see page 140.

#### Key

	Designation	EAN 4007220
Daniel man	EM SW 7 mm	592885
) a succession of	EM SW 9 mm	330357
1	EM SW 14 mm	206836
C	STS D 2.5 mm	205013
	SKS SW 4 mm	204450



## Angle drive and accessories





#### **Angle drive WT 10 G28**

Can be connected to all flexible shafts with G28 connection (instead of the handpiece). Connection to flexible shaft can be pivoted 360°. Enables flexible shaft drives to be used as angle grinders.

#### Included in delivery:

1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys, anti-vibration handle, guard dia 125 mm

Designation	EAN 4007220	Drive operating speed n max. [RPM]	Transmission ratio	Output speed at n max [RPM]	Spindle thread	Tool mounting [mm]	Net weight [kg]
WT 10 G28	419809	18,000	1.5:1	12,000	M14	22.23	1.438

#### **Clamping flanges**

(2)	lte no.
(3)	1
(4)	2
(5)	3
	4

Item no.	Designation	EAN 4007220
1	SPM14 98980036	902189
2	DHFL 98980039	902226
3	FLS 98980037	902202
4	DHTR 98980040	902233
5	FLS-CC 98980038	902219

#### Key

Designation	EAN 4007220
SKS SW 4 mm	204450
STL SW 35 x 5 mm	193853



#### **Burnishing angle drive SWT 10 G28**

Can be connected to all flexible shafts with G28 connection instead of the handpiece. Connection to flexible shaft can be pivoted 360°. Enables flexible shaft drives to be used as burnishing machines.

#### Included in delivery:

Hand guard, anti-vibration handle, detachable drive spindle.

Designation	EAN 4007220	Drive operat- ing speed n max. [RPM]	Transmission ratio	Output speed at n max [RPM]	Spindle thread	Tool mounting [mm]	Net weight [kg]
SWT 10 G28	429754	18,000	1.5:1	12,000	M14	19x100	1.901



# **Drive systems with DIN 10/DIN 15**Belt sanders, grinding drum drives

#### **Belt sanders**

#### Special features:

- Elastically mounted spindle.
- Can be connected to flexible shafts without handpiece.

#### Included in delivery:

#### Ordering notes:

More detailed information and ordering data for grinding belts and non-woven belts can be found in catalogue section 4. BSG 10/35 E G28

BSG 10/50 E G28



Designation	EAN 4007220	Max. RPM	Matches flexible shafts of types	Matches handpiece-side flexible shaft coupling G/dia. [mm]	Matching belts	Dimensions D x L [mm]	Incl. keys	Net weight [kg]
BSG 10/35 E G28	183212	7,000	BW 10, BW 12	28 / 28	VB 35/450, BA 35/450	35 x 450	SKST SW 17 mm	1.500
BSG 10/50 E G28	183199	7,000	BW 10, BW 12	28 / 28	VB 50/450, BA 50/450	50 x 450	SKST SW 17 mm	1.580

#### Key

Designation	EAN 4007220
 SKST SW 17 mm	193822

#### Replacement rollers for belt sanders

#### Recommendations for use:

Drive roller, soft:

For seamless fine grinding on stainless steel (INOX), we recommend the soft type drive roller (approx. 25 Shore).



ULR



Designation	EAN 4007220	Description	D x T [mm]	Suitable for belt sanders	Net weight [kg]
ULR BSG 10/35 E	183229	Guide roller	50 x 30	BSG 10/35 E G28	0.125
ATR BSG 10/35 E	183236	Drive roller	100 x 30	BSG 10/35 E G28	0.250
ATR-W BSG 10/35 E	801826	Drive roller, soft	100 x 30	BSG 10/35 E G28	0.250
ULR BSG 10/50 E	183205	Guide roller	50 x 40	BSG 10/50 E G28	0.145
ATR BSG 10/50 E	183090	Drive roller	100 x 40	BSG 10/50 E G28	0.300
ATR-W BSG 10/50 E	746424	Drive roller, soft	100 x 40	BSG 10/50 E G28	0.300

## **Drive systems with DIN 10/DIN 15** Handpieces for rigid extensions



#### **Handpieces for rigid extensions**

Rigid extensions combined with air-power and stepless speed-regulated electric motors provide the ideal solution for use on hardto-reach workpieces, e.g. during cleaning or milling work. They are frequently used as they can be adapted to the workpiece geometry.

New generation of handpieces with significantly better ergonomics.

#### Included in delivery:

2 keys, 1 collet.



Designation	EAN 4007220	Incl. collet dia. [mm]	Max. RPM	Handpiece- side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Trans- mission ratio	Collet group	Incl. keys	Net weight [kg]
Straight handpieces									
HA 4 G16/G22 STV	423035	6	25,000	16 / 22	20 x 120		6	EM SW 11 mm, EM SW 12 mm	0.135
HA 7 G22 STV	419779	6	25,000	22 / 22	27 x 130	-	6	EM SW 11 mm, EM SW 14 mm	0.259
HA 10 G28 STV	419786	6	18,000	28 / 28	33 x 160	-	6	EM SW 11 mm, EM SW 15 mm	0.480
HA 12 G28 STV	419793	6	18,000	28 / 28	33 x 170	-	12	EM SW 22 mm	0.512
Angle handpieces			•						
WHA 7 90° G22 STV	432143	6	17,100	22 / 22	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.520
WHA 10 90° G28 STV	432150	6	17,100	28 / 28	67 x 165	1:1	6	EM SW 11 mm, EM SW 14 mm	0.579

#### Key

	Designation	EAN 4007220
) e	EM SW 11 mm	206812
	EM SW 12 mm	239162
) - read	EM SW 14 mm	206836
)-	EM SW 15 mm	418390
) - m	EM SW 22 mm	206850

#### **Combination options**





Rigid extensions STV

Max. 25,000 RPM (STV9 and STV13)

#### **Special features:**

- Rigid extensions for hard-to-reach areas.
- No risk of overloading the drive motor
- when used in conjunction with DL motors.

  Special lengths and options for workpiece adaptation available on request.
- The potential bending point and the bending radius depend on the STV type and the desired bend.
- Bent types available as from a minimum length of 500 mm (see 1st and 5th figure).

#### **DA 27 and DA 33**

Shortest extension.

#### Included in delivery:

STV9

3 mm collet, 3 keys.

STV13

6 mm collet, 3 keys.

STV20 inc. HA 4 G16/G22 STV

6 mm collet, 2 keys.

#### **Rigid extensions DIN 10**

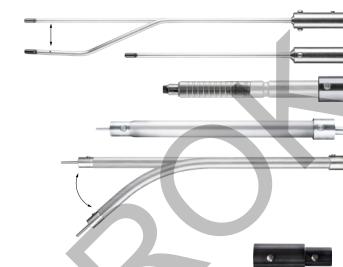


STV20

STV27 STV33

DA 27 DA 33

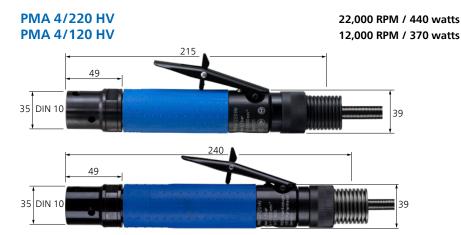
SE DA 27 **SE DA 33** 



Designation	EAN 4007220	Sliding coupling [G]	Dia. x length [mm]	Max. bending radius [mm]	Matching tool mounting/ matching handpiece	Incl. keys	Net weight [kg]
Rigid extensions							
STV9 L300	035092	-	9 x 300	150	Collet group 2	DM SW 6/7 mm, SKS 4 mm	0.430
STV9 L500	035108	-	9 x 500	150	Collet group 2	DM SW 6/7 mm, SKS 4 mm	0.520
STV9 L800	035115	-	9 x 800	150	Collet group 2	DM SW 6/7 mm, SKS 4 mm	0.640
STV9 L1000	035122	-	9 x 1,000	150	Collet group 2	DM SW 6/7 mm, SKS 4 mm	0.720
STV13 L300	733004		13 x 300	150	Collet group 10	DM SW 9/11 mm, SKS 4 mm	0.520
STV13 L500	768242		13 x 500	150	Collet group 10	DM SW 9/11 mm, SKS 4 mm	0.670
STV13 L800	035139	-	13 x 800	150	Collet group 10	DM SW 9/11 mm, SKS 4 mm	0.890
STV13 L1000	035146		13 x 1,000	150	Collet group 10	DM SW 9/11 mm, SKS 4 mm	1.040
STV20 L200	429778	16/22	20 x 200	150	HA4 G16/G22 STV	EM SW 11 mm, EM SW 14 mm	0.400
STV20 L400	429785	16/22	20 x 400	150	HA4 G16/G22 STV	EM SW 11 mm, EM SW 14 mm	0.630
STV20 L600	429792	16/22	20 x 600	150	HA4 G16/G22 STV	EM SW 11 mm, EM SW 14 mm	0.890
STV27 L250	429808	22	27 x 250	250	HA 7 G22 STV, WHA 7 G28 STV	-	0.550
STV27 L500	429815	22	27 x 500	250	HA 7 G22 STV, WHA 7 G28 STV,	-	0.930
STV33 L250	429822	28	33 x 250	300	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	-	1.025
STV33 L500	429839	28	33 x 500	300	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	-	2.100
STV33 L1000	429846	28	33 x 1,000	300	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	-	3.250
Direct connectio	n and replac	cement core					
DA 27 DIN 10	317372	22	30 x 90	-	HA 7 G22 STV, WHA 7 G28 STV	-	0.204
DA 33 DIN 10	179475	28	30 x 100	-	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	-	0.305
SE DA 27 DIN10	811566	22	7 x 125	-	-	-	0.035
SE DA 33 DIN10	284179	28	12 x 153	-	-	-	0.107

## DL motors DIN 10 for rigid extensions





#### Special features:

- Air-power motor for rigid extensions with DIN 10 motor connection.
- Very powerful with a compact design.
- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed.
- Dead man's switch using safety lever valve.

#### PMA 4/220 HV:

Very powerful with a compact design.

#### PMA 4/120 HV:

Constant power delivery due to the centrifugal governor.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection, threaded quick coupling (STGI), 2 keys.

## PFERDVALUE: PMA 4/120 HV

Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Con- nection coupling [DIN]	Inner dia. of air supply hose [mm]	Net weight [kg]
PMA 4/220 HV	388082	rear	lever	0.98	0.87	10	8	0.913
PMA 4/120 HV	395158	rear	lever	0.50	0.87	10	8	0 995

#### Key

<b>&gt;</b>	Designation	EAN 4007220
	STS D 4 mm	205020

#### Maintenance unit

Widilitecilai	ice dilic	
	Designation	EAN 4007220
	ONG-A 1/2	801765

#### In-line fine filter

Designation	EAN 4007220
SF 24 STG-IG 1/4	953259





DL motors DIN 10 for rigid extensions



#### Special features:

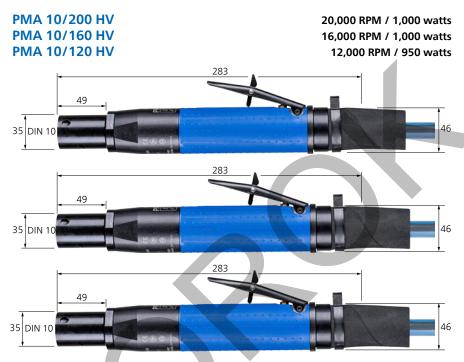
- Powerful air-power motor for rigid extensions with DIN 10 motor connection.
- Dead man's switch using safety lever valve.

#### PMA 10/160 HV, PMA 10/120 HV:

Constant power delivery due to the centrifugal governor.

#### Included in delivery:

1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 2 keys.



#### PFERDVALUE:

PMA 10/160 HV, PMA 10/120 HV



Designation	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Con- nection coupling [DIN]	Inner dia. of air supply hose [mm]	Net weight [kg]
PMA 10/200 HV	384374	rear	lever	1.38	1.10	10	13	1.200
PMA 10/160 HV	231036	rear	lever	0.70	0.90	10	13	1.200
PMA 10/120 HV	231043	rear	lever	0.50	0.90	10	13	1.200

#### Key

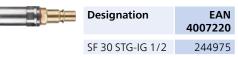
Designation	EAN 4007220
STS D 4 mm	205020

#### **Maintenance unit**

411	
4	-

Designation	EAN 4007220
ONG-A 1/2	801765

#### In-line fine filter





EL motors DIN 10 for rigid extensions



### **EMER 8/280** 28,000 RPM / 750 watts **EMER 8/90** 9,000 RPM / 710 watts 430 195 35 DIN 10 195 35 DIN 10

#### Special features:

- Electric motor for rigid extensions with DIN 10 motor connection.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure (USP).

**Included in delivery:** 4 m power cable, 2 keys.

#### PFERDVALUE:

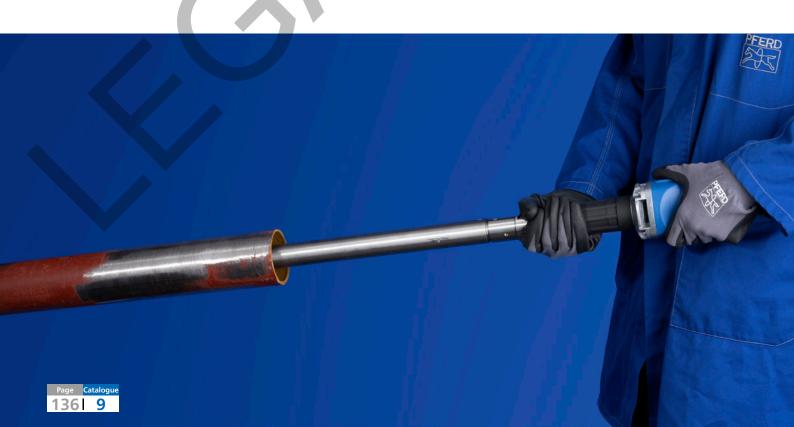




Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power con- sumption [watts]	Power output [watts]	Connection [DIN]	Net weight [kg]
EMER 8/280	217795	28,000-8,500	230	750	410	10	2.030
EMER 8/90	217818	9,000-2,500	230	710	410	10	2.030

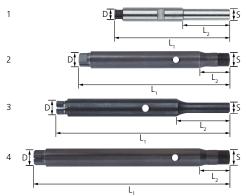
#### Key

>	Designation	EAN 4007220
	STS D 4 mm	205020





#### **Extensions for drive spindles**



With drive spindle extensions, shanks of grinding and milling tools can be extended. They allow access to difficult-to-reach areas. The extensions are clamped into the collet of the machine (air or electric grinder) or into the flexible shaft handpiece.

Drive spindle extensions are a cost-effective alternative to special made-to-order burrs and mounted points with long shanks.

### Safety notes:

Caution! When using spindle extensions, please observe the valid safety regulations and the accident prevention regulations.

When working with long shank lengths, it is vital that the tool is inserted into the workpiece (e.g. bores, pipes, ducts or keyways) before the drive system is switched on. The extension must not run freely with the tool outside the workpiece.

If this rule is not observed, there is an increased risk of accidents! In unfavourable conditions, the extension with the tool clamped in it may buckle. The extensions are only intended for manual use in connection with suitable air grinders, electric



grinders or flexible shaft handpieces for tools with standard shanks. The extension and a tool permitted for use at the appropriate rotational speed are clamped into an impact-free collet on the device. Do not clamp on the transition radius.

Clamping of a second extension or of tools with excessively long shanks is not permitted.

Item no.	Designation	EAN 4007220	Max. RPM	Shank mounting dia. S [mm]	Tool mounting [mm]	Overall length L <sub>1</sub> [mm]	Mounting pin length L <sub>2</sub> [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]
Metri	c version										
1	SPV 50-3 S6	185285	44,000	6	3	76	30	9.5	3	14	0.028
1	SPV 50-3 S8	185254	44,000	8	3	78	30	9.5	3	14	0.035
2	SPV 75-6 SPG6	333143	20,000	SPG6	6	104	Special	12	6	10	0.073
3	SPV 36-6 S6	061411	20,000	6	6	58	18	12	6	10	0.025
3	SPV 50-6 S8	604205	20,000	8	6	95	30	12	6	10	0.055
3	SPV 75-6 S8	185278	20,000	8	6	120	30	12	6	10	0.076
4	SPV 100-6 SPG6	656051	20,000	SPG6	6	129	Special	12	6	10	0.096
5	SPV 100-6 S8	185261	20,000	8	6	144	30	12	6	10	0.100
6	SPV 150-3 S6	185308	10,000	6	3	150	30	11.5	-	-	0.055
7	SPV 150-6 S8	185315	10,000	8	6	150	30	13.5	-	-	0.082
8	SPV 150-8 S8	184400	10,000	8	8	150	30	15.9	-	-	0.110

Item	Designation	EAN	Max.	Shank	Tool	Overall	Mounting	Max.	Incl.	Collet	Net
no.		4007220	RPM	mounting	mounting	length L,	pin length L,	spindle	collet	group	weight
				dia. S	[inch]	[inch]	[inch]	dia. D	dia.		[kg]
				[inch]				[inch]	[inch]		
Impe	rial version										
1	SPV 50-1/8 S1/4	851913	44,000	1/4	1/8	3.07	1.18	0.37	1/8	14	0.028
2	SPV 75-1/4 SPG6	851944	20,000	SPG6	1/4	4.09	Special	0.47	1/4	10	0.073
2	SPV 75-1/4 S3/8	851937	20,000	3/8	1/4	4.72	1.18	0.47	1/4	10	0.077
4	SPV 100-1/4 SPG6	851951	20,000	SPG6	1/4	5.08	Special	0.47	1/4	10	0.096
5	SPV 100-1/4 S3/8	851982	20,000	3/8	1/4	5.67	1.18	0.47	1/4	10	0.100
6	SPV 150-1/8 S1/4	851890	10,000	1/4	1/8	5.91	1.18	0.45	-	-	0.055
7	SPV 150-1/4 S3/8	851906	10,000	3/8	1/4	5.91	1.18	0.53	-	-	0.082

For all available collets, see page 140.





### **Accessories for tool drives**

#### **Extensions**



#### **Extensions for drive spindles**



With drive spindle extensions, shanks of grinding and milling tools can be extended. They allow access to difficult-to-reach areas and particularly deep cores. The extensions are clamped into the collet of the machine (air- or electric-powered) or into the flexible shaft handpiece. They must also be guided by hand.

Drive spindle extensions are a cost-effective alternative to special made-to-order burrs and mounted points with long shanks.

#### Safety notes:

Caution! When using spindle extensions, please observe the valid safety regulations and the accident prevention regulations. Please do not clamp tools which are too large on the extension since they are driven by a core. The extension and machine must be guided in a line. Levering and tilting result in damage to the extension.

When working with long shank lengths, it is essential that the tool is inserted into the workpiece (e.g. bores, pipes, ducts or keyways) before the drive system is switched on.

The extensions are only intended for manual use in conjunction with suitable air grinders, electric grinders or flexible shaft handpieces for tools with standard shanks. The extension and a tool permitted for use at the appropriate rotational speed are clamped into an impact-free collet on the device. Do not clamp on the transition radius.

Clamping of a second extension or of tools with excessively long shanks is not permitted.

#### Included in delivery:

- 1. 2x DM SW 6/7 mm
- 2. 2x DM SW 9/11 mm

Item no. incl. in deliv- ery	Designation	EAN 4007220	Max. RPM	Shank mounting dia. S [mm]	Tool mounting [mm]	Overall length L <sub>1</sub> [mm]	Mounting pin length L <sub>2</sub> [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]
1	SPVH9 L300-3 S6	748718	25,000	6	3	406	28	9	3	2	0.130
1	SPVH9 L500-3 S6	907641	25,000	6	3	606	28	9	3	2	0.340
1	SPVH9 L800-3 S6	938218	25,000	6	3	906	28	9	3	2	0.520
1	SPVH9 L1000-3 S6	101926	25,000	6	3	1,106	28	9	3	2	0.640
2	SPVH13 L300-6 S6	971741	25,000	6	6	406	28	13	6	10	0.320
2	SPVH13 L500-6 S6	854365	25,000	6	6	606	28	13	6	10	0.500
2	SPVH13 L800-6 S6	101957	25,000	6	6	906	28	13	6	10	0.770
2	SPVH13 L1000-6 S6	936313	25,000	6	6	1,106	28	13	6	10	0.950
2	SPVH13 L300-6 S8	739105	25,000	8	6	406	28	13	6	10	0.322
2	SPVH13 L500-6 S8	730478	25,000	8	6	606	28	13	6	10	0.502
2	SPVH13 L800-6 S8	739129	25,000	8	6	906	28	13	6	10	0.772
2	SPVH13 L1000-6 S8	793602	25,000	8	6	1,106	28	13	6	10	0.952

For all available collets, see page 140.







Collets

#### The fast way to the best collet

- 1 To find the collet group for the selected tool drive, please refer to the overview below.
- **2** Based on the collet group, determine the first part of the designation and the EAN on the following page.
- **3** Using the required diameter, determine the second part of the designation and EAN.
- 4 By joining together the designation and EAN you will obtain the full details that you need for an order.

#### **O** Ordering example: Collet group 16 SPZ 98980 268 = Collet 3 mm for air grinder PGAS 10/200 HV:

The full designation is SPZ 98980 268 and the full **EAN** is **4007220416372**.

#### **Overview of collet groups**

Page	Drives/handpieces	<b>⊙</b> Collet group
14	PGTS 1/1000 RS	15
15	PGAS 2/800 RS	23
16	PGAS 3/370 RS	21
16	PGAS 3/370 RS LL	21
17	PGAS 4/280 RS	16
18	PGAS 4/220 RS	16
19	PGAS 8/170 RS	16
20	PGAS 11/58 RS	16
21	PGAS 4/52 RS	16
22	PGAS 4/24 RS	16
23	PGAS 14/12 RS	16
24	PWAS 4/180 RS	16
26	PWAS 4/52 RS	16
30	PGTS 1/1100 DV	15
31	PGTA 1/1010	1
32	PGT 1/1000	1
33	PGAS 2/800 E-DV	15
33	PGAS 2/800 E-HV	15
34	PGAS 1/750	1
35	PGAS 1/700	15
35	PGAS 1/700 HV	15
	PGAS 1/600	1
37	PGAS 2/600 E-DV	15
37	PGAS 2/600 E-HV	15
38	PGAS 1/550	15
	PG 3/500 S	5
	PGAS 3/500 HV	5
40	PGAS 3/380 E-DV	6
40	PGAS 3/380 E-HV	6
	PGAS 3/350 DV	6
41	PGAS 3/350 HV	6
	PGAS 3/350 V-DV	6
42	PGAS 4/350 V-HV	6
	PGS 3/300 DV	10
43	PGS 3/300 HV	10
	PGS 3/300 Z-DV	10
	PGS 3/300 Z-HV	10
_	PGAS 4/300 HV	20
	PGAS 4/300 M-HV	6
	PGAS 4/300 V-HV	6
	PG 3/250 S	5
	PGAS 4/250 E-HV	16
	PGAS 4/250 HV	20
	PGAS 4/250 M-HV	6
	PGAS 4/250 V-HV	6

	Page	Drives/handpieces	O Collet group
	53	PGAS 4/220 Z-HV	20
	54	PG 8/220 HV	7
	54	PGAS 8/220 HV	7
	55	PG 8/220 V-HV	7
	55	PGAS 8/220 VS-HV	5
	56	PGAS 10/200 HV	16
	57	PGAS 10/200 V-HV	16
	58	PGAS 4/190 HV	20
	59	PGAS 4/190 V-HV	6
	60	PGAS 4/190 V-HV	6
	61	PG 8/160 HV	7
	61	PGAS 8/160 VM-HV	7
	62	PGAS 10/160 HV	16
	63	PGAS 10/160 V-HV	16
	64		16
	65	PGAS 10/120 HV	16
	66	PGAS 10/120 V-HV	16
	67	PG 8/100 HV	7
	67	PGAS 8/100 HV	7
l	68	PG 8/100 V-HV	7
	68	PGAS 8/100 V-HV	7
	68	PGAS 8/100 VM-HV	7
1	69	PGAS 3/70 HV	6
	70	PG 8/50 V-HV	7 6
	71 72	PGAS 3/35 HV PGAS 2/5 DS	20
	73	PWAS 1/800 DV	20
	73	PWAS 1/800 HV	2
	74	PWSA 1/250	3
	75	PWAS 2/200 DV	6
	75	PWAS 2/200 HV	6
	76	PWSA 4/200 HV	5
	77	PWAS 4/200 HV	6
	78	PWAS 4/160 HV	6
	79	PWAS 4/120 HV	6
	97	MIM HAS 3/800 SP3	17
	97	MIM HAS 2/600 SP3	17
	97	MIM HAS 3/600 SP3	17
	97	MIM HAS 3/600 S3	19
	97	MIM HAS 3/500 VS-SP3	17
	97	MIM WZS 3/300 90°S3	18
	97	MIM WZS 3/300 45°S3	18
	98	EGER 8/280	22
	99	EGER 8/90	22
	128	HA 4 G16	6

Page	Drives/handpieces	O Collet
		group
128	WHA 4 90° G16	6
	HA 6 Z DPF/SRF	13
	WZ 6 DPF/SRF	13
	WZT 6 3.0 DPF/SRF	14
129		13
	HA 7 G22	6
128		6
128		6
128		12
128		6
132		6
	HA 7 G22 STV	6
132		6
132		12
132		6
132		6
133		2
133		10
137		3
	SPV 50-3 S8	3
	SPV 75-6 SPG6	10
	SPV 36-6 S6	10
	SPV 50-6 S8	10
137		10
137		10
137		10
137		14
137		10
137		10
137		10
137		10
138		2
138		10





# Accessories for tool drives Collets





Collet	0				<b>⊚</b> Des	ignation	and EA	N supple	ement			
group	Designation EAN	2.34	3	5	Dia. [mm 6	] 8	10	12	3/32	Dia. [ 1/8	inch] 1/4	3/8
1 7 16°	SPZ 91491 <b>4007220</b>	301 <b>196342</b>	302					-	307	303 <b>196366</b>		
2 8 15° 1M5	SPZ 94701 <b>4007220</b>	604 <b>851999</b>	601 <b>207840</b>						603 <b>207864</b>	602 <b>207857</b>		
7,5 16,6 28UNF	SPZ 90000 <b>4007220</b>		273 <b>188262</b>							282 <b>188354</b>		
4	SPZ 95771 <b>4007220</b>		703 <b>349311</b>		701 <b>349298</b>					704 <b>349328</b>	702 <b>349304</b>	
5 25° 7,62	SPZ 90000 <b>4007220</b>		339 <b>299944</b>		340 <b>299951</b>					339 <b>299944</b>	301 <b>606032</b>	
6 12.5 M10 x 0.75	SPZ 95032 <b>4007220</b>		503 <b>212875</b>	506 <b>212899</b>	501 <b>212851</b>	517 <b>212936</b>			516 <b>234969</b>	504 <b>212882</b>	502 <b>212868</b>	
7 13,6 11,34	SPZ 90000 <b>4007220</b>		145 <b>187074</b>		123 <b>186855</b>	143 <b>187050</b>				145 <b>187074</b>	144 <b>187067</b>	100 <b>186633</b>
8 16.5 M14 x 1	SPZ 95203 <b>4007220</b>				402 <b>213674</b>	405 <b>213704</b>	407 <b>213711</b>				403 <b>213681</b>	409 <b>213728</b>
9 12,1 8	SPZ 91490 <b>4007220</b>	009 <b>195864</b>	011 <b>195888</b>	016 <b>195925</b>	018 <b>195932</b>				009 <b>195864</b>	019 <b>195949</b>	020 <b>195956</b>	
10 M8 x 0,75	SPZ 95766 <b>4007220</b>		301 <b>331279</b>	304 <b>398647</b>	303 <b>331262</b>					302 <b>331286</b>	351 <b>738719</b> ued on ne	

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# Accessories for tool drives Collets

Col		<b>@</b> Designation	<ul><li></li></ul>										
gio	ир	EAN	2.34	3	5	6	8	10	12	3/32	1/8	1/4	3/8
11	14,4	SPZ 91490 <b>4007220</b>	909 <b>196212</b>	912 <b>196236</b>	917 <b>196274</b>	919 <b>196281</b>	923 <b>196304</b>			909 <b>196212</b>	927 <b>196335</b>	926 <b>196328</b>	
12	20,6	SPZ 91490 <b>4007220</b>			203 <b>195987</b>	204 <b>195994</b>	206 <b>196014</b>	208 <b>196038</b>	209 <b>196045</b>			210 <b>196052</b>	211 <b>196069</b>
13	11° M8 x 0,75	SPZ 90101 <b>4007220</b>	823 <b>668252</b>	830 <b>668269</b>	850 <b>668306</b>	860 <b>668313</b>				823 <b>668252</b>	818 <b>668320</b>	814 <b>668337</b>	
14	8 X X 0,5	SPZ 90110 <b>4007220</b>	423 <b>668382</b>	430 <b>668399</b>						423 <b>668382</b>	418 <b>668405</b>		
15	15° M5 X 0,8	SPZ 98980 <b>4007220</b>		000 <b>851814</b>						002 <b>851838</b>	001 <b>851821</b>		
16	17 28 17 28	SPZ 98980 <b>4007220</b>		268 <b>416372</b>		163 <b>956984</b>	164 <b>957004</b>	165 <b>957028</b>	269 <b>416389</b>			166 <b>957035</b>	
20	16 M12	SPZ 98980 <b>4007220</b>		262 <b>233634</b>		261 <b>312964</b>	263 <b>233641</b>	264 <b>233658</b>				265 <b>233665</b>	
21	011.4	SPZ 98980 <b>4007220</b>		311 <b>235447</b>		310 <b>235430</b>					398 <b>411544</b>	399 <b>411551</b>	
22	110° M1212,50	SPZ 98960 <b>4007220</b>		171 <b>409848</b>		172 <b>409855</b>	173 <b>409862</b>					170 <b>409831</b>	
23	8.5 13.2	SPZ 98980 <b>4007220</b>		660 <b>421253</b>						661 <b>421277</b>	662 <b>421284</b>		
											Continu	ied on ne	xt page





## **Accessories for tool drives**





Co	llet	0				O Des	ignation	and EA	N supple	ment			
gre	oup	Designation			I	Dia. [mm]					Dia. [i	inch]	
		EAN	2.35	3	5	6	8	10	12	3/32	1/8	1/4	3/8
17	4.5 4.1 M3	SPZ 900140 <b>4007220</b>	51 <b>071465</b>	50 <b>071458</b>							52 <b>071472</b>		
18	4,75 4,1 M4 x0,35	SPZ 900140 <b>4007220</b>	61 <b>071496</b>	60 <b>071489</b>							62 <b>071502</b>		
19	10.9 7.98 M7.5 x 0,5	SPZ 900140 <b>4007220</b>	73 <b>102756</b>	71 <b>071526</b>		70 <b>071519</b>					72 <b>102565</b>	74 <b>104453</b>	

#### **Reducing collets and adapter**

RZH 63 RZH 6234 RZH 64



AF M5 CD 1/4-20UNC



These reducing collets fit into an existing collet for 6 mm shank tools and are used as adapters for 2.34 mm, 3 mm or 4 mm shank tools.

Designation	EAN 4007220	Reducing shank mounting	Suitable	for	Net weight [kg]
RZH 6234	184486	Dia. from 6 mm to 2.34 mm		-	0.004
RZH 63	355862	Dia. from 6 mm to 3 mm		-	0.004
RZH 64	796153	Dia. from 6 mm to 4 mm		-	0.004
AF M5 CD 1/4-20 UNC	064702		cordless angle grinder with SBH/SBHR 20, 25, 38	50	0.006

#### **Arbor**



BO SPG 6/6 0-10



BO SPG 6/10 0-10

Refer to catalogue section 4 and catalogue section 8 for more versions.  $\label{eq:catalogue}$ 

Designation	EAN 4007220	Shank holder	Tool mounting [mm]	Suitable for	Net weight [kg]
BO SPG 6/6 0-10	104590	SPG6	Dia. 6 x 0-10	All drives with SPG6	0.035
BO SPG 6/10 0-10	104606	SPG6	Dia. 10 x 0-10	All drives with SPG6	0.035



## **Accessories for tool drives**

Maintenance accessories

#### **Lubricant and maintenance sets**







#### (1+2) Special lubricating oil

For air-powered devices with oil mist lubrication.

Protects against icing up.

#### Advantages:

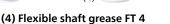
- Good spray qualities.
- Good lubrication qualities.
- Low viscosity.
- Protects against corrosion.
- Highly water-resistant.

#### (3) Special grease FT 5

For use when re-greasing angle heads and when installing ball bearings.







Grease with special lubrication and adhesive properties for flexible shafts BW 4 to BW 12.

After approximately 100 operating hours, the core of the flexible shaft must be serviced. Degrease the core and casing and reapply the special shaft grease to the core.



(5) Maintenance set consisting of:1 hose brush for removing the old grease from the flexible casing.

2 non-linting cleaning cloths (400 x 330 mm).

Degrease the core with a cleaning cloth (do not use cotton waste!).

Apply new grease onto a second cloth and pull the core through.

#### Ordering notes:

All items in the maintenance set are also available separately.

Designation	EAN 4007220	Contents	Use for		Net weight [kg]		
5 L ONG OEL	179321	(1) Special lubricating oil 5 L	Oil mist device	1	4.900		
1 L ONG OEL	179338	(2) Special lubricating oil 1 L	Oil mist device	1	0.990		
FT 5	181249	(3) Special grease 100 g	Ball bearing, angle head	1	0.100		
FT 4	156780	(4) Flexible shaft grease 450 g	Flexible shafts	1	0.450		
P-Set BW 4/6	182970	(5) 2 cloths, flexible shaft grease FT 4, hose brush BW 4/6	BW 4, BW 6	1	0.770		
P-Set BW 7	182994	(5) 2 cloths, flexible shaft grease FT 4, hose brush BW 7	BW 7	1	0.770		
P-Set BW 10/12	182987	(5) 2 cloths, flexible shaft grease FT 4, hose brush BW 10/12	BW 10, BW 12	1	0.770		



## **Quality tools from a single source**



Catalogue section 1

Files



Catalogue section 4

Fine grinding and polishing tools



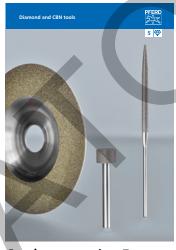
Catalogue section 7

Cut-off wheels for stationary applications



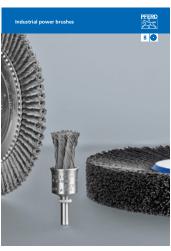
Catalogue section 2

Milling tools



Catalogue section 5

Diamond and CBN tools



**Catalogue section 8** 

Industrial power brushes



**Catalogue section 3** 

Mounted points



**Catalogue section 6** 

Cut-off wheels, flap discs and grinding wheels



**Catalogue section 9** 

Tool drives