



Water as a tool
for a clean environment

High-Pressure Plunger Pumps ARP[®]-Line

150 ARP[®]

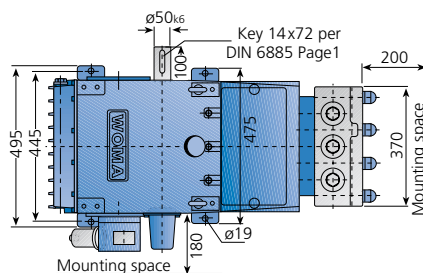
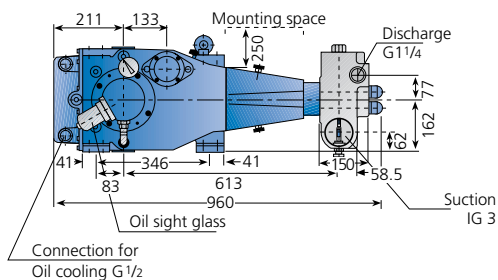
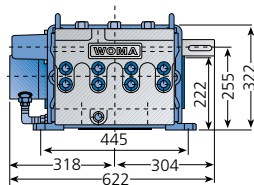
180 ARP[®]

225 ARP[®]

325 ARP[®]



High-Pressure Plunger Pump 180 ARP®



All dimensions in mm
 Thread „M“ as per DIN 13/ISO 261
 Thread „G“ as per DIN ISO 228/1

Performance Chart Pump Type 180 ARP®

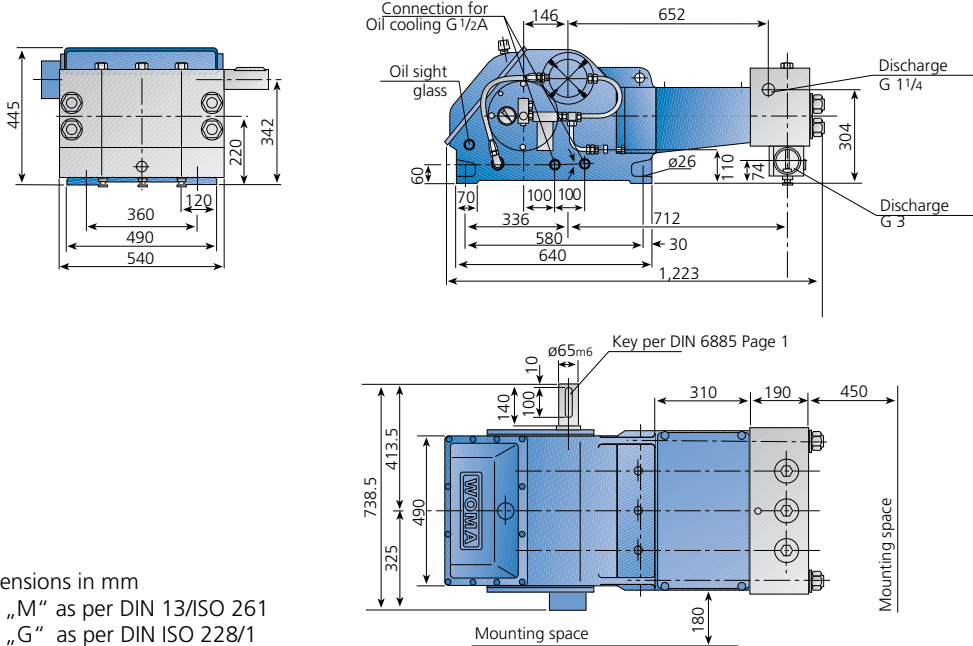
Plunger diameter (mm)	Gear ratio			Crank shaft (Rpm)	Required drive (kW)	Nominal flow rate			Max. permissible operating pressure (psi / bar)
	1,500	1,800	2,100			USG pm	IMPG pm	l/min	
P40	3.04 3.57 4.52	3.57 4.52	4.52	464	75	42.8	35.6	162	3,600/250
				504	81	46.5	38.7	176	
				398	64	36.7	30.5	139	
				493	79	45.4	37.8	172	
				420	67	38.5	32.1	146	
				331	53	30.6	25.5	116	
P45	3.04 3.57 4.52	3.57 4.52	4.52	464	95	54.1	45.1	205	3,600/250
				504	103	58.6	48.8	222	
				398	81	46.5	38.7	176	
				493	100	57.6	47.9	218	
				420	85	48.8	40.7	185	
				331	67	38.5	32.1	146	
P50	3.04 3.57 4.52	3.57 4.52	4.52	464	117	66.8	55.6	253	3,600/250
				504	127	72.6	60.5	275	
				398	100	57.3	47.7	217	
				493	124	71.0	59.2	269	
				420	106	60.5	50.4	229	
				331	83	47.8	39.8	181	
P55	3.04 3.57 4.52	3.57 4.52	4.52	464	121	81.1	67.5	307	3,050/210
				504	132	88.2	73.5	334	
				398	104	69.7	58.1	264	
				493	129	86.3	71.9	327	
				420	110	73.4	61.2	278	
				331	87	58.1	48.4	220	
P60	3.04 3.57 4.52	3.57 4.52	4.52	464	122	96.9	80.7	367	2,600/180
				504	132	105.3	87.8	399	
				398	105	83.1	69.3	315	
				493	130	101.0	85.8	390	
				420	110	87.6	73.0	332	
				331	87	69.2	57.6	262	
P65	3.04 3.57 4.52	3.57 4.52	4.52	464	122	114.0	95.0	432	2,170/150
				504	133	123.8	103.2	469	
				398	105	97.7	81.4	370	
				493	130	121.2	100.9	459	
				420	110	103.2	86.0	391	
				331	87	81.5	68.0	309	

Technical data:

- ▶ Oil capacity: approx. 8 l
- ▶ Weight: approx. 360 kg net

- ▶ Stroke: 95 mm/3.74 inch
- ▶ Inlet pressure required: 1.5–3 bar/20–45 psi
- ▶ Rod force: 51 kN

High-Pressure Plunger Pump 225 ARP®



All dimensions in mm
 Thread „M“ as per DIN 13/ISO 261
 Thread „G“ as per DIN ISO 228/1

Performance Chart Pump Type 225 ARP®

Plunger diameter (mm)	Gear ratio			Crank shaft (Rpm)	Required drive (kW)	Nominal flow rate			Max. permissible operating pressure (psi/bar)
	1,500	1,800	2,100			USG pm	IMPG pm	l/min	
P 55	2.96	3.46	4.10	512	171	108	91	410	3,260/225
				520	173	110	92	416	
				439	146	93	78	351	
	3.46	4.10	4.10	506	169	107	90	406	
				433	145	92	77	347	
				365	122	77	65	293	
P 60	2.96	3.46	4.10	512	172	129	108	490	2,750/190
				520	175	131	110	497	
				439	148	110	93	420	
	3.46	4.10	4.10	506	170	128	107	484	
				433	146	109	92	414	
				365	123	92	78	350	
P 65	2.96	3.46	4.10	512	171	152	128	576	2,320/160
				520	173	154	130	585	
				439	146	130	110	494	
	3.46	4.10	4.10	506	169	150	126	570	
				433	145	129	108	488	
				365	122	109	91	412	

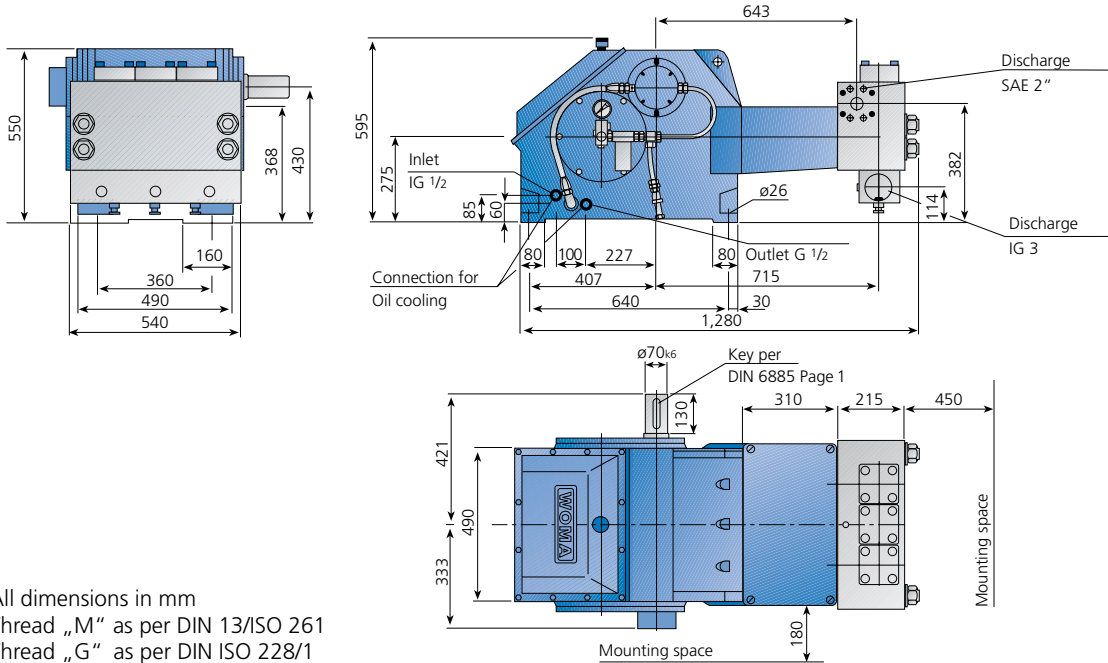
Technical data:

- ▶ Oil capacity: approx. 18 l
- ▶ Weight: approx. 650 kg net

- ▶ Stroke: 115 mm/4.52 inch
- ▶ Inlet pressure required: 3–5 bar/45–75 psi
- ▶ Rod force: 53.5 kN

Technical Data

High-Pressure Plunger Pump 325 ARP®



All dimensions in mm
 Thread „M“ as per DIN 13/ISO 261
 Thread „G“ as per DIN ISO 228/1

Performance Chart Pump Type 325 ARP®

Plunger diameter (mm)	Gear ratio			Crank shaft (Rpm)	Required drive (kW)	Nominal flow rate			Max. permissible operating pressure (psi / bar)
	Pinion shaft (Rpm)					USG pm	IMPG pm	l/min	
P 55	1,500	1,800	2,100	496	244	117	99	446	4,270/295
				500	245	118	99	449	
		425	209	100	85	382			
	2,96	3,60	4,23	506	249	120	101	455	
				416	204	99	83	374	
		354	174	84	71	318			
P 60	1,500	1,800	2,100	496	247	140	118	533	3,620/250
				500	249	141	119	537	
		425	212	120	101	457			
	2,96	3,60	4,23	506	252	143	121	544	
				416	207	118	99	448	
		354	176	100	84	381			
P 65	1,500	1,800	2,100	496	244	165	139	628	3,040/210
				500	246	167	140	633	
		425	210	142	119	539			
	2,96	3,60	4,23	506	249	169	142	641	
				416	205	139	117	527	
		354	175	118	99	449			

Technical data:

- ▶ Oil capacity: approx. 30 l
- ▶ Weight: approx. 995 kg net
- ▶ Stroke: 130 mm/5.12 inch
- ▶ Inlet pressure required: 3–5 bar/45–75 psi
- ▶ Rod force: 70 kN

Technical Characteristics

The technique

- ▶ All parts attacked by accelerated wear are very easy of access and can be simply removed and reinstalled
- ▶ The suction and pressure pipes which are difficult of access do not need to be released
- ▶ Reliable sealing even at abrasive attack is due to the elastic behavior of the needle valve inserts
- ▶ Valve seats made from corrosion resistant steel consist of two precisely manufactured seat surfaces that can be used twice by tilting
- ▶ Working areas of the cylinders can be evacuated under depressurized conditions due to lifting the valve lifter

General aspects

- ▶ Suitable for the transport of water containing grained and fibrous solids of different size and geometrical shape
- ▶ For very coarse impurities, the superposition of a filter in the supply line is required

Permissible limits

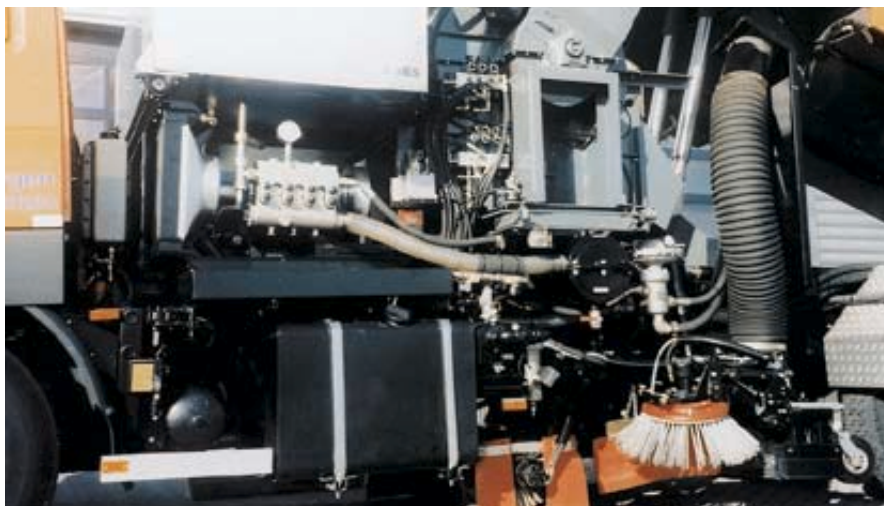
- ▶ Temperature: max. 45 °C
 - ▶ Solid concentration*: 1.5 % to 3 %
 - ▶ Grain size: 50 µm to 350 µm
- * in mass percent, depends on the grain size



Pneumatically operated discharge valve for the control of ARP® high-pressure plunger pumps



Stationary high-pressure waterjetting system with a high-pressure plunger pump type 325 ARP®



High-pressure plunger pump type 180 ARP®, installed in a municipal vehicle



WOMA Apparatebau GmbH

Werthauer Str. 77-79 · D-47226 Duisburg
P.O. Box 14 18 20 · D-47208 Duisburg
Phone +49 2065 304-0 · Fax +49 2065 304-200
Internet: <http://www.woma.de>
E-mail: info@woma.de

Your Canadian Representative:
aquapower
a division of aquachem corp.
75 Fernstaff Court #3
Concord, ON L4K 3P8

Ph.: 905-761-7255
Fax: 905-761-7256
info@aquachem.ca

Delivery Programme

High-pressure plunger pumps
High-pressure water jet systems
High-pressure water tools
and accessories

Fields of Application

Agriculture
Automotive and aviation industry
Beverage industry
Cement industry
Chemical industry
Construction and concrete industry
Engineering industry
Food industry
Glass, porcelain, ceramic industry
Iron, steel and metal industry
Mining
Municipal services
Offshore industry
Power industry
Public transport
Pulp and paper industry
Ship building
Wood working industry