



# PM 550 Series

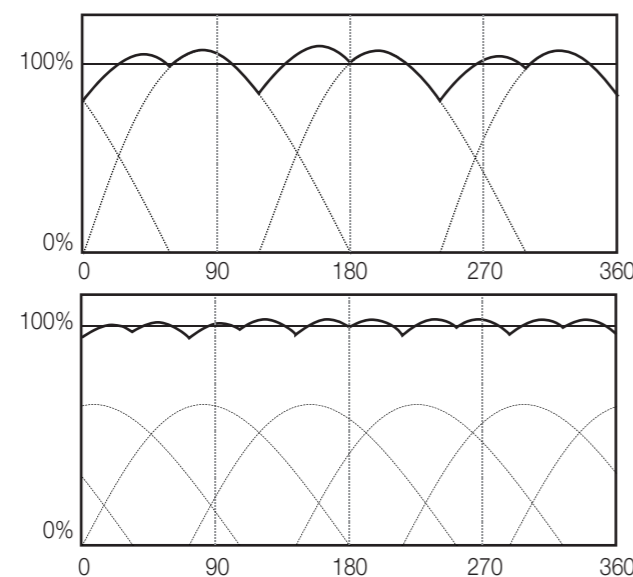
# Plunger Pumps

The new PM 550 series horizontal quintuplex plunger pumps are designed for pumping high pressure water, water emulsion and other fluids\*. Developed specifically for the coal mining industry, the PM 550 are the ideal choice for mission critical applications where severe and continuous a service are required such as:

- Emulsion Hydraulic power to drive Longwall Systems  
Typical pressure up to 35 MPa & up to 42 MPa
- Dust suppression systems on Roof Supports & Coal Shearers  
Raw water pressures up to 12 MPa

## General characteristics

- Compact dimensions
- Low noise
- Forced lubrication system
- 100% Aluminium free
- Easy maintenance
- Low maintenance costs
- Internal double reduction gears with helical gears
- Input shaft can be placed on either side of the pump
- Self adjusting seal packing
- Available with carbon steel or stainless steel hydraulic head



**Triplex**  
Variation over average: 9,27%  
Variation below average: 19,24%  
Total variation: 28,51%

**Quintuplex**  
Variation over average: 2,4%  
Variation below average: 6,17%  
Total variation: 8,57%

For the correct choice of a single acting multi-plunger pump it is essential to understand the pulsations and vibrations that the pump can generate in the hydraulic system. The quintuplex pump creates a steady hydraulic flow with minimal pulsations and vibration: essential characteristics in mission critical applications where severe and continuous service is required.

\* please ask for compatibility

- ### Quintuplex Pumps Advantages Vs Triplex Pumps
- Low vibrations
  - Constant hydraulic flow with minimal pulsation: no pulsation dampener required



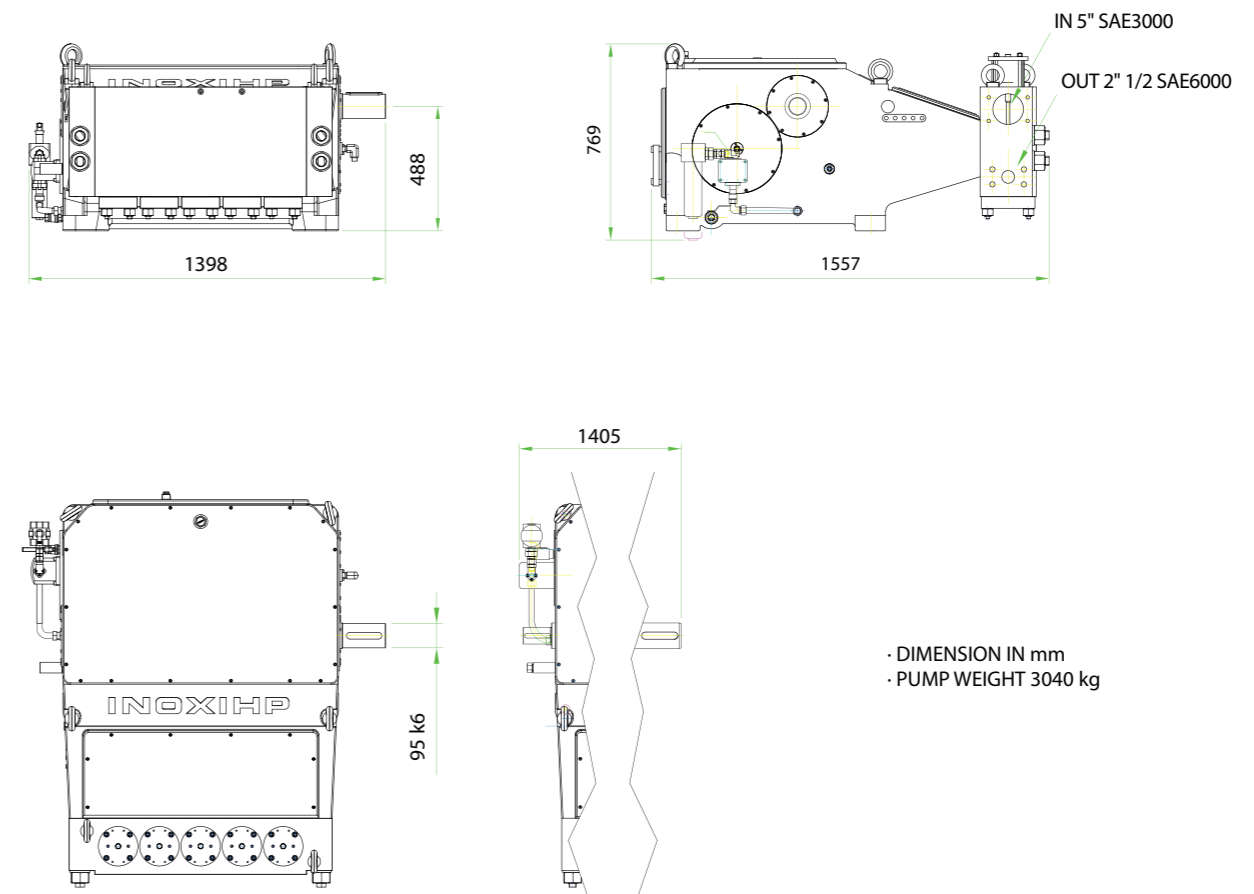
		PM 550 FLOW RATE LPM / US GPM - 50 Hz ELECTRIC MOTOR - MAX ABSORBED POWER 500 kW														
Ø Plunger	6 POLES MOTOR - INPUT SPEED 1000 min-1						4 POLES MOTOR - INPUT SPEED 1500 min-1									
	RATIO L Pump RPM: 253			RATIO M Pump RPM: 282			RATIO L Pump RPM: 380			RATIO M Pump RPM: 422						
	LPM	MPa	US GPM	psi	LPM	MPa	US GPM	psi	LPM	MPa	US GPM	psi				
50	273	50	72	7250	305	50	81	7250	410	50	108	7250	457	50	121	7250
55	330	40	87	5800	369	40	97	5800	496	40	131	5800	553	40	146	5800
60	393	40	104	5800	439	40	116	5800	590	40	156	5800	658	40	174	5800
65	461	33	122	4785	515	33	136	4785	692	33	183	4785	772	33	204	4785
70	535	29	141	4205	597	29	158	4205	803	29	212	4205	896	29	237	4205
75	614	25	162	3625	686	25	181	3625	921	25	243	3625	1028	25	272	3625

		PM 550 FLOW RATE LPM / US GPM - 60 Hz ELECTRIC MOTOR - MAX ABSORBED POWER 500 kW														
Ø Plunger	6 POLES MOTOR - INPUT SPEED 1200 min-1						4 POLES MOTOR - INPUT SPEED 1800 min-1									
	RATIO L Pump RPM: 304			RATIO M Pump RPM: 338			RATIO L Pump RPM: 454			RATIO M Pump RPM: 507						
	LPM	MPa	US GPM	psi	LPM	MPa	US GPM	psi	LPM	MPa	US GPM	psi				
50	328	50	87	7250	366	50	97	7250	492	50	130	7250	548	50	145	7250
55	396	40	105	5800	442	40	117	5800	595	40	157	5800	663	40	175	5800
60	472	40	125	5800	526	40	139	5800	708	37	187	5365	-	-	--	--
65	554	33	146	4785	618	33	163	4785	831	31	220	4495	-	-	--	--
70	642	29	170	4205	716	29	189	4205	963	27	254	3915	-	-	--	--
75	737	25	195	3625	822	25	217	3625	1105	23	292	3335	-	-	--	--

1 MPa = 10 bar

The pump performances are referred to a volumetric efficiency of 100% and a mechanical efficiency of 89%, with water at 20°C.

## Dimensions



· DIMENSION IN mm  
· PUMP WEIGHT 3040 kg

