

# INTRODUCTION

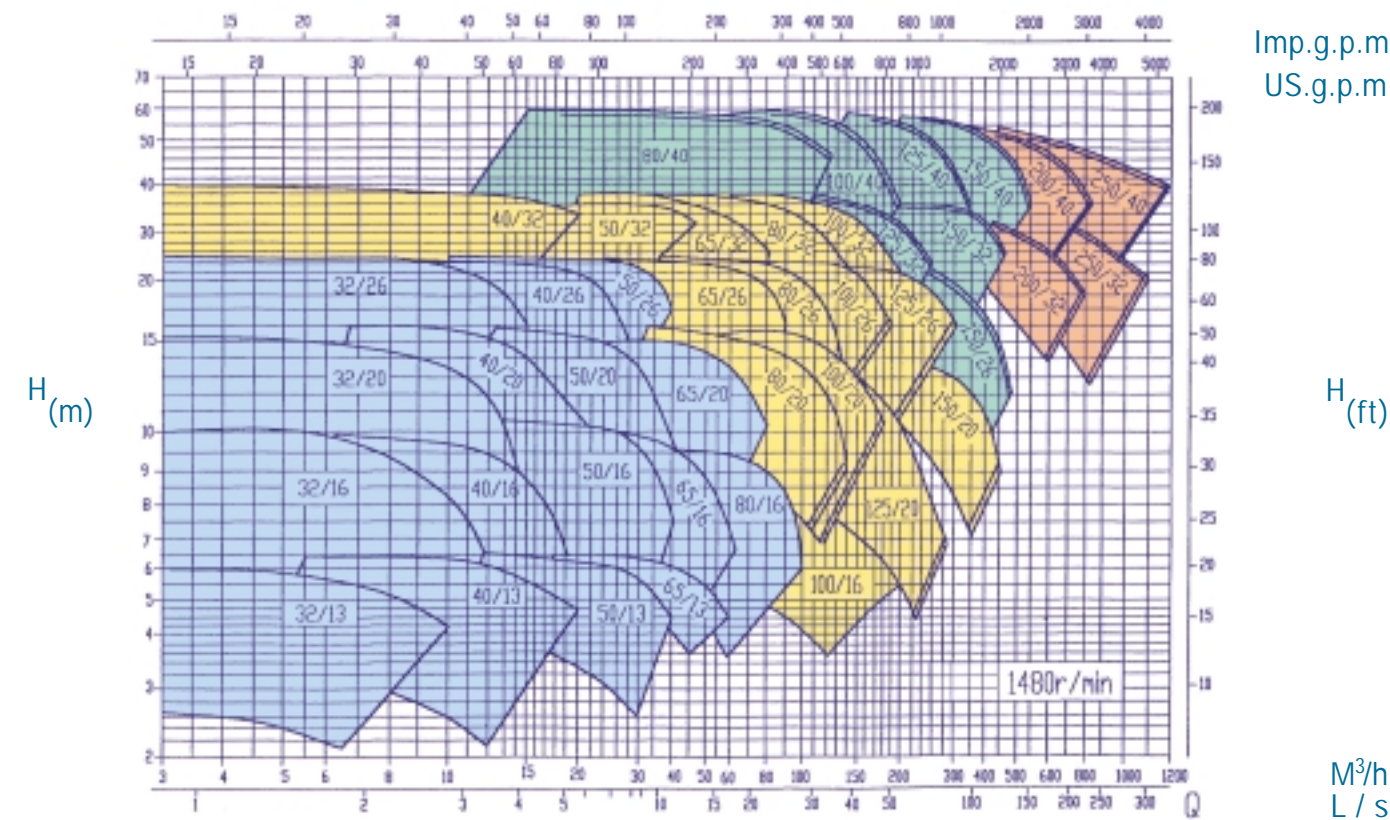
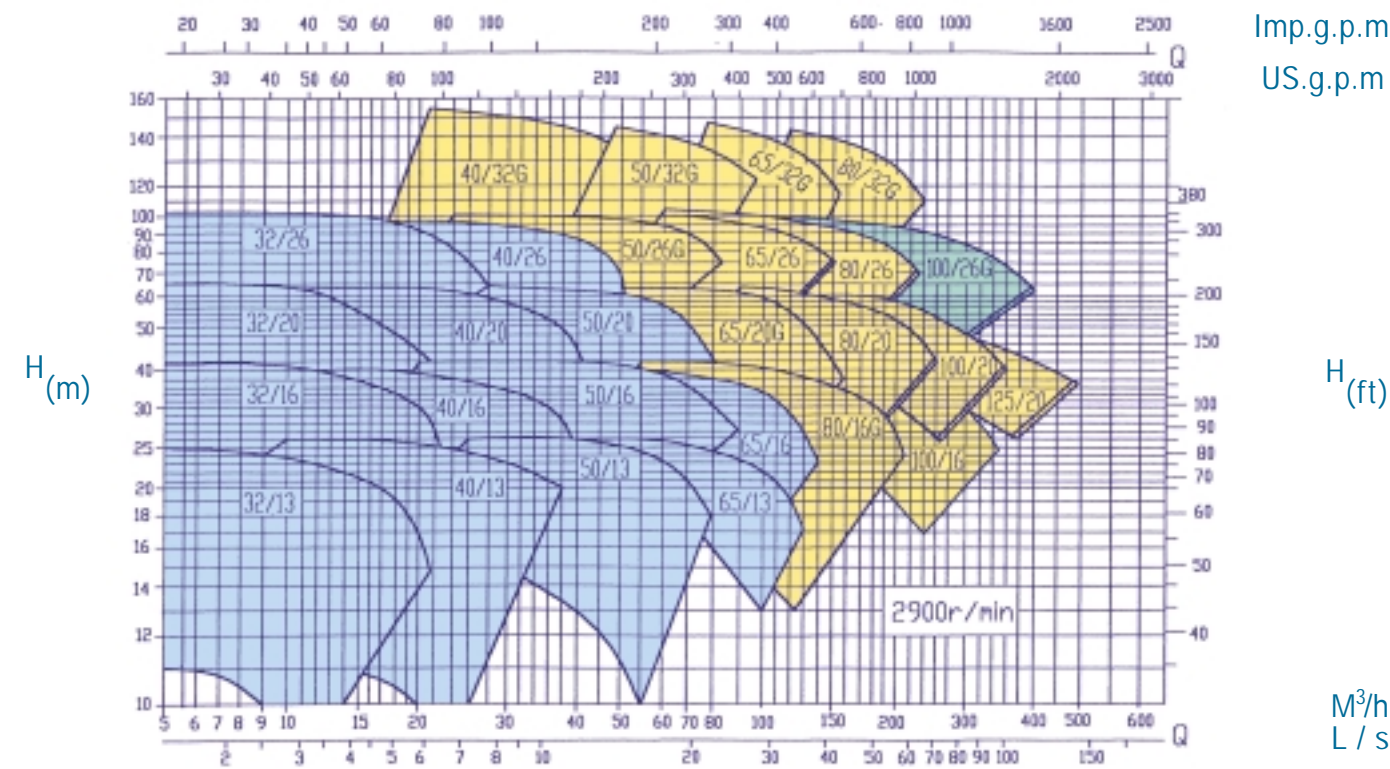


PARAGON PUMP company was founded by a dedicated pump professional with over thirty (30) years of worldwide experience. The company's goal is to provide high quality products at extremely competitive prices supported by the best customer service in the industry. To assure high quality, performance and reliability, PARAGON PUMPS are manufactured to international standards in facilities with ISO 9001 certification. PARAGON PUMP backs up its commitment to quality with a full one-year (12 months) warranty.



The PARAGON PA Series pumps meet the DIN 24255 specification for end suction, horizontal centrifugal pumps. The PA Series offers many features and benefits that improve performance, increase reliability and reduce maintenance time and cost.

- Heavy-duty cast iron casing with intergral cast feet suitable for 10 bar working pressure. Also available for working pressures up to 16 bar. Centreline discharge assures that the casing is self-venting.
- Flanges to ISO 2048 PN16 as standard. Also available with ASA 125 # or JIS 10k drilling.
- Back pull out design for fast and easy maintenance when fitted with a spacer type coupling because suction and discharge piping and drive motor remain in place.
- Maximum interchangeability for low spare parts inventory with four bearing frames and four shaft sizes for forty-nine (49) sizes of pumps.
- Replaceable wear rings to assure optimum efficiency and performance at all times.
- Shaft seal is available as packing or as mechanical seal to suit all types of applications.
- Double shrouded, hydraulically balanced impellers with back vanes to minimize gland pressure in cast iron or bronze as standard. Also available in stainless steel or zinc free bronze.
- Heavy-duty cast iron bearing housing with greased ball bearings as standard. Also available with oil lubricated bearings.
- Heavy-duty shaft in stainless steel for longer life and to assure product purity.
- Stainless steel shaft sleeve for product purity, longer mechanical seal life and to prevent damage to the shaft from packing or the mechanical seal.
- Operating temperature from -10°C to 105°C as standard. Available for up to 160°C with cooling and suitable mechanical seal selection.
- Suitable for both 50 cycle and 60 cycle speeds up to 3500rpm.



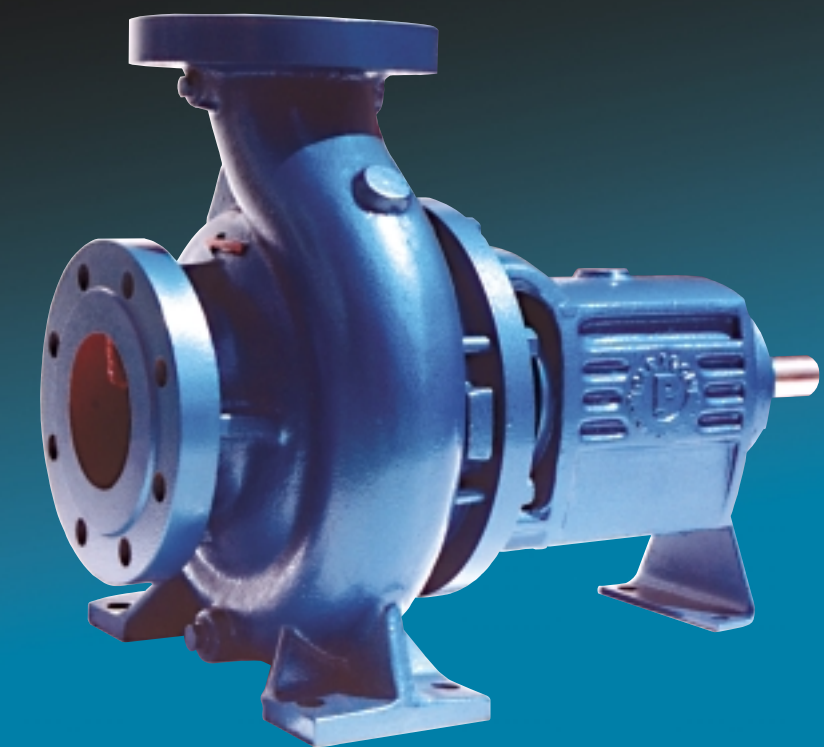
**PARAGON PUMP COMPANY, LLC**  
 18102 Courtney Breeze Drive  
 Tampa, Florida, 33647, USA  
 Tel : (813) 994-3356  
 Fax : (813) 994-1237

**PARAGON PUMP (ASIA) PTE LTD**  
 37 Kallang Pudding Road #08-08  
 Tong Lee Building Block B  
 Singapore 349315  
 Tel : (65) 6841-2818  
 Fax : (65) 6841-5988



PARAGON  
PUMPS

## PA SERIES



Single Stage Back Pull-Out  
End-Suction Centrifugal Pump



# APPLICATIONS

PARAGON PA Series pumps can be used for the following services in the Commercial, Residential, Agricultural, Industrial, Process, Petroleum and Food & Beverage industries.

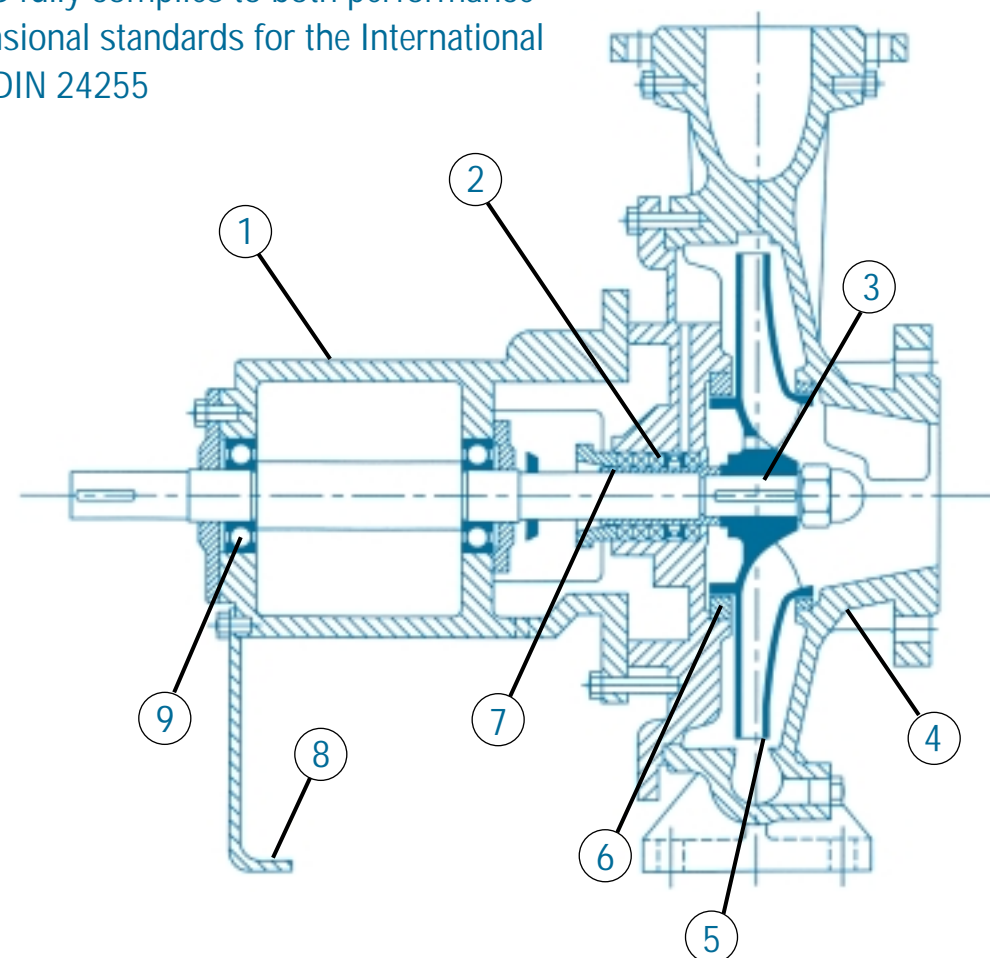
- Air Conditioning
- Fire Protection
- Plumbing
- Circulating
- Transfer
- Pressure Boosting
- Cooling Towers
- Irrigation
- Water Treatment & Supply



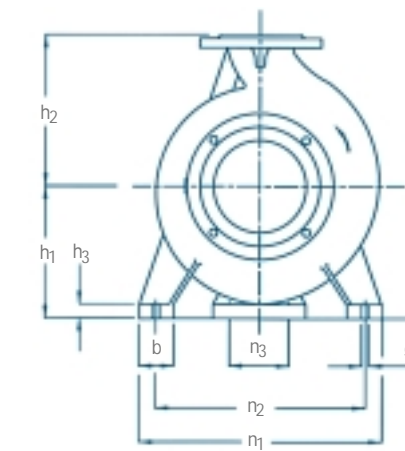
# PARAGON PUMP

Range from 32mm to 250mm discharge

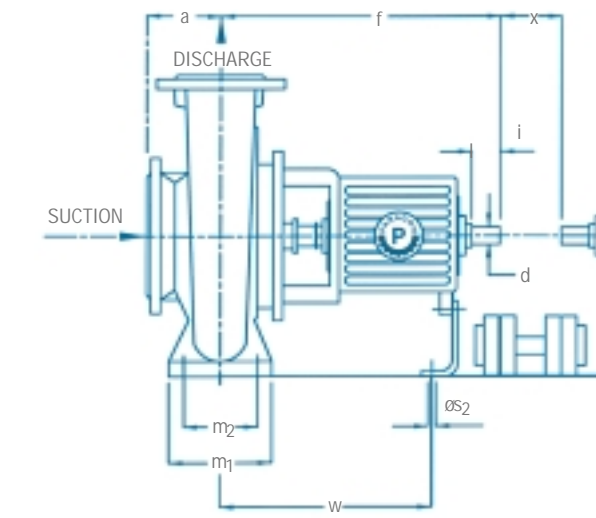
PA SERIES fully complies to both performance and dimensional standards for the International Standard DIN 24255



- 1. Bearing Housing**  
Rugged cast iron construction with four bearing housing covering the complete range of forty nine pumps for maximum interchangeability.
- 2. Stuffing Box**  
Standard stuffing box includes gland packing and lantern ring with internal flushing or single mechanical seal with internal or external flush.
- 3. Shaft**  
One piece stainless steel shaft in four sizes covering the complete range of forty nine pumps for maximum interchangeability.
- 4. Casing**  
The cast iron volute casing is heavy duty design with integrally cast feet, vertical top centreline discharge and axial suction nozzle with cast inlet vane to improve flow into the impeller and reduce required NPSH.
- 5. Impeller**  
Double shrouded type, hydraulically balanced and positive drive shaft key and domed impeller lock nut.
- 6. Wear Rings**  
Replaceable wear rings are standard on all casings and on rear covers for larger pumps which assures hydraulic performance and reduces maintenance time and cost.
- 7. Shaft Sleeve**  
Replaceable fully machined, positively driven, hook type stainless steel shaft sleeve prevents damage to the shaft from gland packing or mechanical seal and reduces maintenance cost.
- 8. Support Foot**  
Removable and adjustable support foot provides added rigidity and ease of maintenance.
- 9. Bearings**  
All pumps come with grease lubricated ball bearings as standard. Permanently, sealed greased bearings or oil lubricated bearing also available.



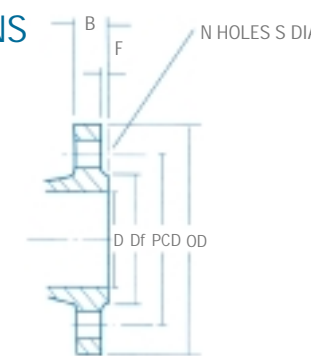
END ELEVATION



SIDE ELEVATION

PUMP SIZE	BEARING HOUSING	SUCTION	DISCHARGE	PUMP DIMENSIONS				FOOT DIMENSIONS										SHAFT END	COUPLING KEY	NET WEIGHT Kg		
				a	f	h <sub>1</sub>	h <sub>2</sub>	b	m <sub>1</sub>	m <sub>2</sub>	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	h <sub>3</sub>	øS <sub>1</sub>	øS <sub>2</sub>	w				x	d
32-13	25	50	32	80	360	112	140	50	100	70	190	140	100	14	14	14	267	140	24	50	8x7	28
32-16	25	50	32	80	360	132	160	50	100	70	240	190	100	14	14	14	267	140	24	50	8x7	36
32-20	25	50	32	80	360	160	180	50	100	70	240	190	110	14	14	14	267	140	24	50	8x7	43
32-26	25	50	32	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8x7	63
40-13	25	65	40	80	360	112	140	50	100	70	210	160	100	14	14	14	267	140	24	50	8x7	31
40-16	25	65	40	80	360	132	160	50	100	70	240	190	100	14	14	14	267	140	24	50	8x7	37
40-20	25	65	40	100	360	160	180	50	100	70	265	212	110	14	14	14	267	140	24	50	8x7	46
40-26	25	65	40	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8x7	63
40-32	35	65	40	125	470	200	250	67	125	95	350	280	110	14	14	14	342	140	32	80	10x8	96
40-32G	45	65	40	125	525	200	250	67	125	95	350	280	110	14	14	14	367	140	42	110	12x8	96
50-13	25	65	50	100	360	132	160	50	100	70	240	190	100	14	14	14	267	140	24	50	8x7	34
50-16	25	65	50	100	360	160	180	50	100	70	265	212	110	14	14	14	267	140	24	50	8x7	38
50-20	25	65	50	100	360	160	200	50	100	70	265	212	110	14	14	14	267	140	24	50	8x7	48
50-26	25	65	50	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8x7	65
50-26G	35	65	50	100	470	180	225	65	125	95	320	250	110	14	14	14	342	140	32	80	10x8	65
50-32	35	65	50	128	470	225	280	65	125	95	350	280	110	16	14	14	342	140	32	80	10x8	101
50-32G	45	65	50	128	525	225	280	65	125	95	350	280	110	16	14	14	367	140	42	110	12x8	101
65-13	25	80	65	100	360	160	180	65	125	95	280	212	110	14	14	14	267	140	24	50	8x7	40
65-16	25	80	65	100	360	160	200	65	125	95	280	212	110	14	14	14	267	140	24	50	8x7	44
65-20	25	80	65	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8x7	54
65-20G	35	80	65	100	465	180	225	65	125	95	320	250	110	14	14	14	337	140	32	80	10x8	54
65-26	35	80	65	100	470	200	250	80	160	120	360	280	110	16	18	14	342	140	32	80	10x8	83
65-32	35	80	65	125	470	225	280	80	160	120	400	315	110	16	18	14	342	140	32	80	10x8	110
65-32G	45	80	65	125	525	225	280	80	160	120	400	315	110	16	18	14	367	140	42	110	12x8	110
80-16	25	100	80	125	360	180	225	65	125	95	320	250	110	14	14	14	330	140	24	50	8x7	55
80-16G	35	100	80	125	457	180	225	65	125	95	320	250	110	14	14	14	342	140	32	80	10x8	55
80-20	25	100	80	125	470	180	250	65	125	95	345	280	110	14	14	14	342	140	32	80	10x8	72
80-26	25	100	80	125	470	200	280	80	160	120	400	315	110	16	18	14	342	140	32	80	10x8	92
80-32	25	100	80	125	470	250	315	80	160	120	400	315	110	16	18	14	342	140	32	80	10x8	120
80-32G	45	100	80	125	525	250	315	80	160	120	400	315	110	16	18	14	367	140	42	110	12x8	120
80-40	45	100	80	125	530	280	355	80	160	120	440	355	110	18	18	14	370	140	42	110	12x8	162
100-16	35	125	100	125	470	200	245	80	160	120	360	280	110	15	18	14	350	140	32	80	10x8	71
100-20	35	125	100	125	475	200	280	80	160	120	360	280	110	16	18	14	342	140	32	80	10x8	87
100-26	35	125	100	140	470	225	280	80	160	120	400	315	110	16	18	14	367	140	32	80	10x8	110
100-26G	45	125	100	140	525	225	280	80	160	120	400	315	110	16	18	14	367	140	42	110	12x8	110
100-32	35	125	100	140	470	250	315	100	160	120	400	315	110	16	18	14	342	140	32	80	10x8	134
100-40	45	125	100	140	530	280	355	80	200	150	500	400	110	18	23	14	370	140	42	110	12x8	177
125-20	35	150	125	140	470	250	315	80	160	120	400	315	110	16	18	14	342	140	32	80	10x8	111
125-26	35	150	125	140	470	250	355	100	160	120	400	315	110	16	18	14	342	140	32	80	10x8	115
125-32	45	150	125	140	530	280	355	100	200	150	500	400	110	18	23	14	370	140	42	110	12x8	163
125-40	45	150	125	140	530	315	400	100	200	150	500	400	110	18	23	14	370	140	42	110	12x8	190
150-20	35	200	150	160	495	280	400	100	200	150	550	450	110	18	23	14	367	140	32	80	10x8	140
150-26	45	200	150	160	530	280	400	100	200	150	550	350	110	18	23	14	370	140	42	110	12x8	164
150-32	45	200	150	160	530	280	400	100	200	150	550	450	110	18	23	14	370	140	42	110	12x8	175
150-40	45	200	150	160	530	315	450	100	200	150	550	450	110	18	23	14	370	140	42	110	12x8	210
200-32	55	250	200	225	670	315	435	100	200	150	550	450	110	30	23	14	504	140	48	110	14x9	270
200-40	55	250	200	225	670	315	460	100	200	150	550	450	110	30	23	14	504	140	48	110	14x9	310
250-32	55	300	250	250	670	400	500	100	270	180	500	400	110	30	28	14	504	140	48	110	14x9	331
250-40	55	300	250	250	670	450	505	125	270	210	600	500	110	30	28	14	504	140	48	110	14x9	415

FLANGE DIMENSIONS



Flange Data

D	OD	B	Df	F	N	S	PCD
32	140	18	78	2	4	18	100
40	150	18	88	3	4	18	110
50	165	20	102	3	4	18	125
65	185	20	122	3	4	18	145
80	200	22	138	3	8	18	160
100	220	24	158	3	8	18	180
125	250	26	188	3	8	18	210
150	285	26	212	3	8	22	240
200	340	30	268	3	12	22	295
250	405	32	320	3	12	26	355
300	460	32	370	4	12	26	410

Dimensions in mm

TECHNICAL INFORMATION  
MATERIALS OF CONSTRUCTION

Design: DIN 24255

Operating pressure: 1000 kpa standard, 1600 kpa optional.

Hydrostatic Test pressure: 1500 kpa standard, 2400 kpa optional.

Operation temperature: -10°C to 105°C standard, 160°C optional.

Operation speeds: 50 Hz, 1450 and 2900 rpm.

60 Hz, 1750 and 3500 rpm.

	Bronze Fitted (BF)	All Iron (AL)	Stainless Steel (SS)
Casing	Cast Iron	Cast Iron	Stainless Steel
Impeller	Bronze	Cast Iron	Stainless Steel
Wear Ring	Bronze	Cast Iron	Stainless Steel
Shaft	Stainless Steel	Carbon Steel	Stainless Steel
Shaft Sleeve	Stainless Steel	Stainless Steel	Stainless Steel
Gland	Cast Iron	Cast Iron	Stainless Steel