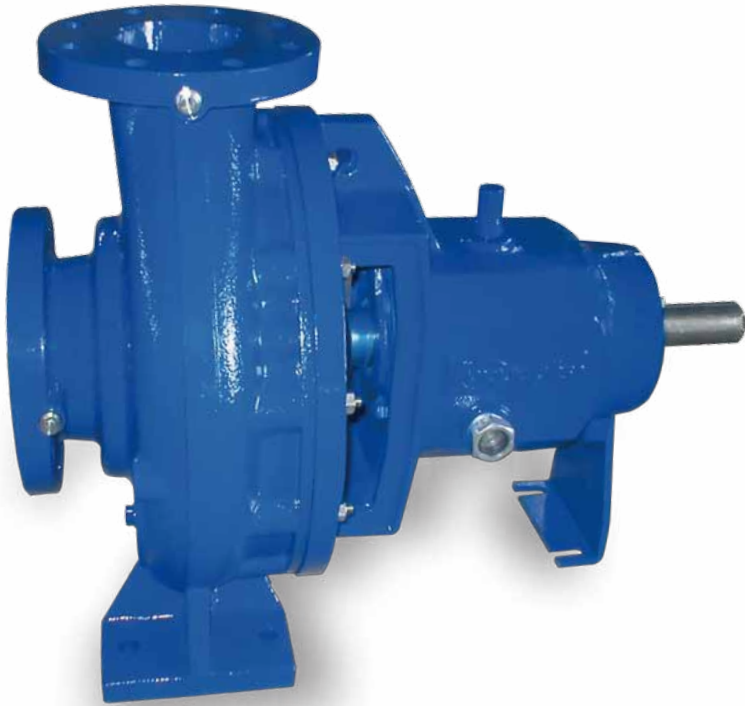


CHEMFLOW

PUMPS

I 196



Chemical Process Pumps Designed for Total Range of Industry Services

- Capacities to 3963 GPM (900m³/h)
- Heads to 529 feet (161m)
- Temperatures to 356°F (180°C)
- Pressures to 228 PSIG (1600 kPa)
- ISO 2858 Standard

Ease of Maintenance

- Back Pull-out Design
- Maximum Interchangeability



Optimum Hydraulic Performance

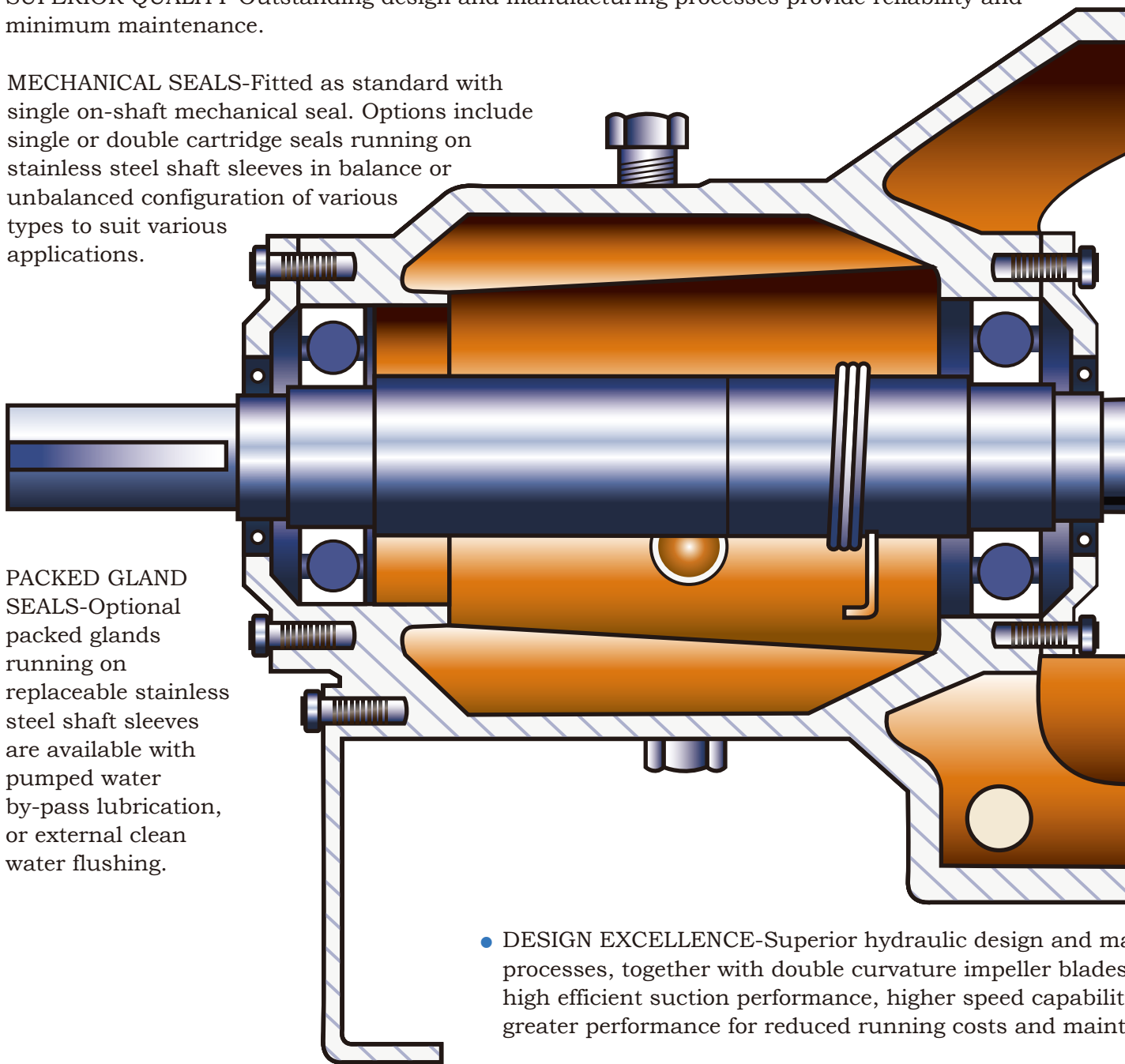
- Closed Impeller
- Full 50/60 Hz Coverage
- 31 Sizes

Heavy Duty Industrial

- ISO2858 STANDARD - Ensures dimensional interchangeability with pumps conforming to ISO258 8 plus more stringent mechanical requirements of ISO5199 standard.
- HEAVY DUTY BEARINGS- Fitted as standard with heavy duty thrust ball bearings with lubricant from oil lubricated fitted with breather, oil level and drain plugs, or with grease lubrication with bearings either sealed for life or with grease nipple lubricated. Labyrinth shaft seals are available as option.
- RIGID SHAFT-Heavy duty design type 316 or optional 431 stainless steel shaft for minimum deflection, smoother running and longer bearing life. Water slinger prevents intrusion of gland leakage into shaft
- ROBUST BEARING HOUSING-High strength cast iron bearing housing.
- 2 YEAR WARRANTY
- SUPERIOR QUALITY-Outstanding design and manufacturing processes provide reliability and minimum maintenance.

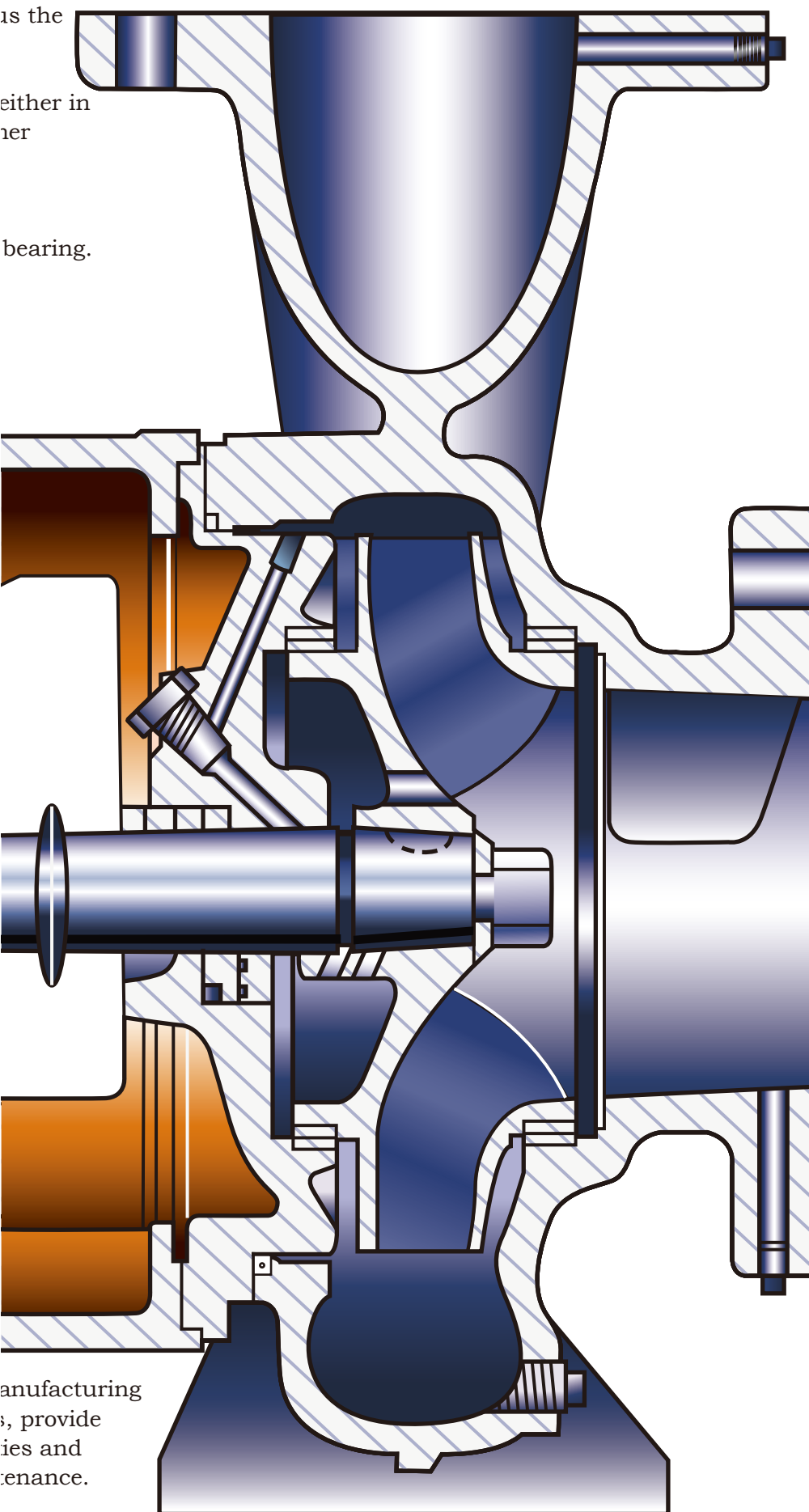
- MECHANICAL SEALS-Fitted as standard with single on-shaft mechanical seal. Options include single or double cartridge seals running on stainless steel shaft sleeves in balance or unbalanced configuration of various types to suit various applications.

- PACKED GLAND SEALS-Optional packed glands running on replaceable stainless steel shaft sleeves are available with pumped water by-pass lubrication, or external clean water flushing.



- DESIGN EXCELLENCE-Superior hydraulic design and manufacturing processes, together with double curvature impeller blades provide high efficient suction performance, higher speed capability and greater performance for reduced running costs and maintenance.
- 1600kPa PRESSURE RATING

Centrifugal Pumps



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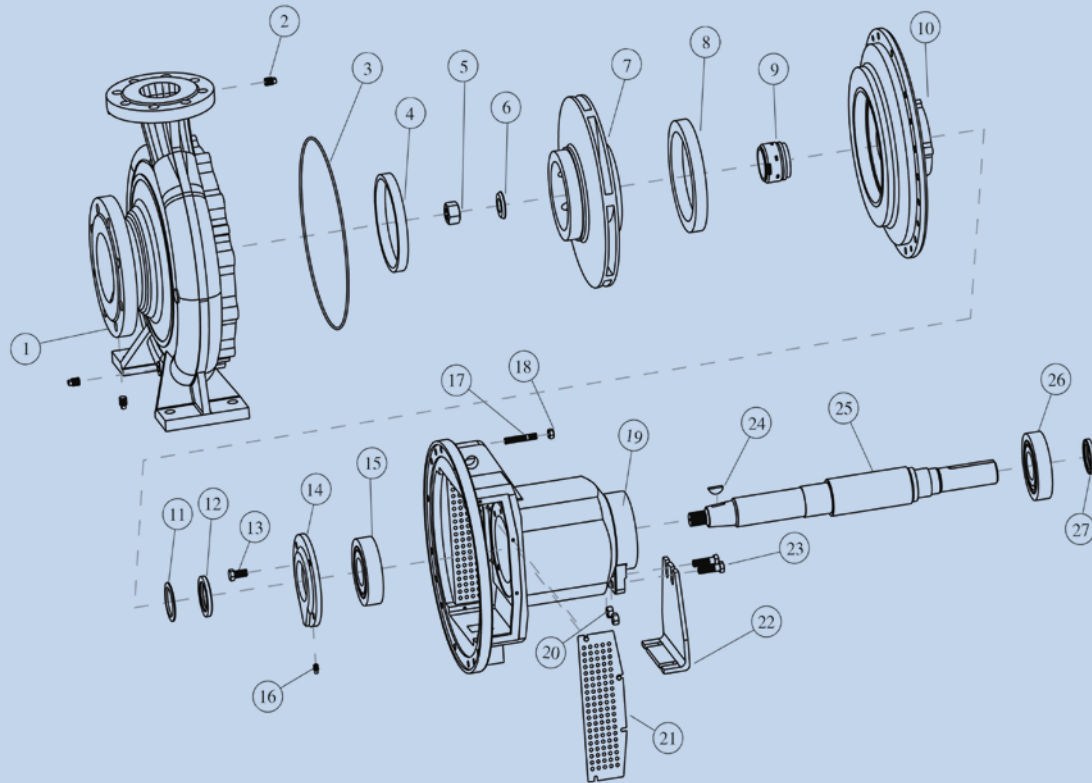
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- **WET END MATERIAL OPTIONS** Cast Iron
AS1830/T260
Stainless Steel
AS2074/H6B
Zinc Free Bronze
S1565/C90250 SG Iron
AS1831/400-12
- **TAPER MOUNTED IMPELLER-** Impeller is taper mounted and keyed to shaft for positive driven and ease of removal.
- **WEAR RINGS-** Replaceable stainless steel or zinc free bronze wear rings are available for pump impeller and casing where abrasive liquids are pumped.
- **'O'RING OPTIONS-** Reusable 'O' ring body seals in "Viton" as standard and "Teflon" or Graphite as options.
- **FLANGES-AS2129-Table "E".**
Optional drillings on request.
- **STANDARD TAPPINGS-** Volute drain plug, suction flange tapping for suction gauge and discharge flange tapping for pressure gauge.

I196 (mechanical seal internal installed grease lubrication pump) Exploded View Drawing



1. Pump casing 2. Plug 3. O-ring 4. Seal ring 5. Impeller nut 6. Impeller gasket 7. Impeller 8. Seal ring 9. Mechanical seals
10. Casing cover 11. Thrower 12. Framework oil seal 13. Bolt 14. Bearing cover 15. Bearing 16. Forced filling oil cup 17. Stud 18. Nut
10. Suspension 20. Nut 21. Protective screening 22. Suspension support foot 23. Bolt 24. Key 25. Shaft 26. Bearing 27. Framework oil seal

Features

- Heavy duty casing with integral foot and multi-ribbed discharge flange
- Accepts multiple seal arrangements
- Optional non-contacting labyrinth seal
- Heavy-duty radial and thrust bearings
- Two piece bearing housing
- Back pullout design

Reduced Running Costs

Superior hydraulic design and high technology manufacturing methods produce significantly higher efficiencies for less power consumption and minimum maintenance ...features which guarantee Chemflow I196 Pump users continuing savings in all applications.

International Standard

Conforming with ISO2858 Standard means dimensional interchangeability with other makes of pumps, manufactured to the same international standard, however because of design superiority Chemflow I196 Pumps exceed the performance standard.

General Purpose Pumps

Chemflow I196 Pumps offer top efficiency and reliability for a full range of general purpose water transfer applications in industry, building services and irrigation.

Special design features of Chemflow I196 Pumps include taper mounted and keyed impeller for easy removal from shaft during servicing and positive locking during operation; heavy duty shaft with large capacity impeller end bearing for safe operation at high speed; AS1830/T260 cast iron volute for added safety; reusable "O" ring body seal; minimum number of parts for full range (only four shaft modules) reduces spare parts stocking; hydraulically and dynamically balanced impellers; and highly efficient suction performance from double curvature impeller vanes.

Standard Features

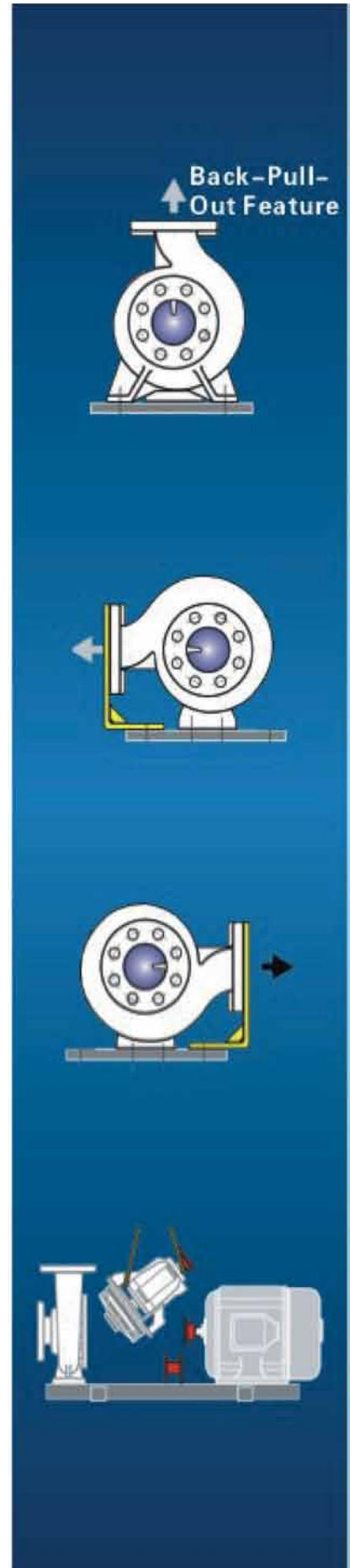
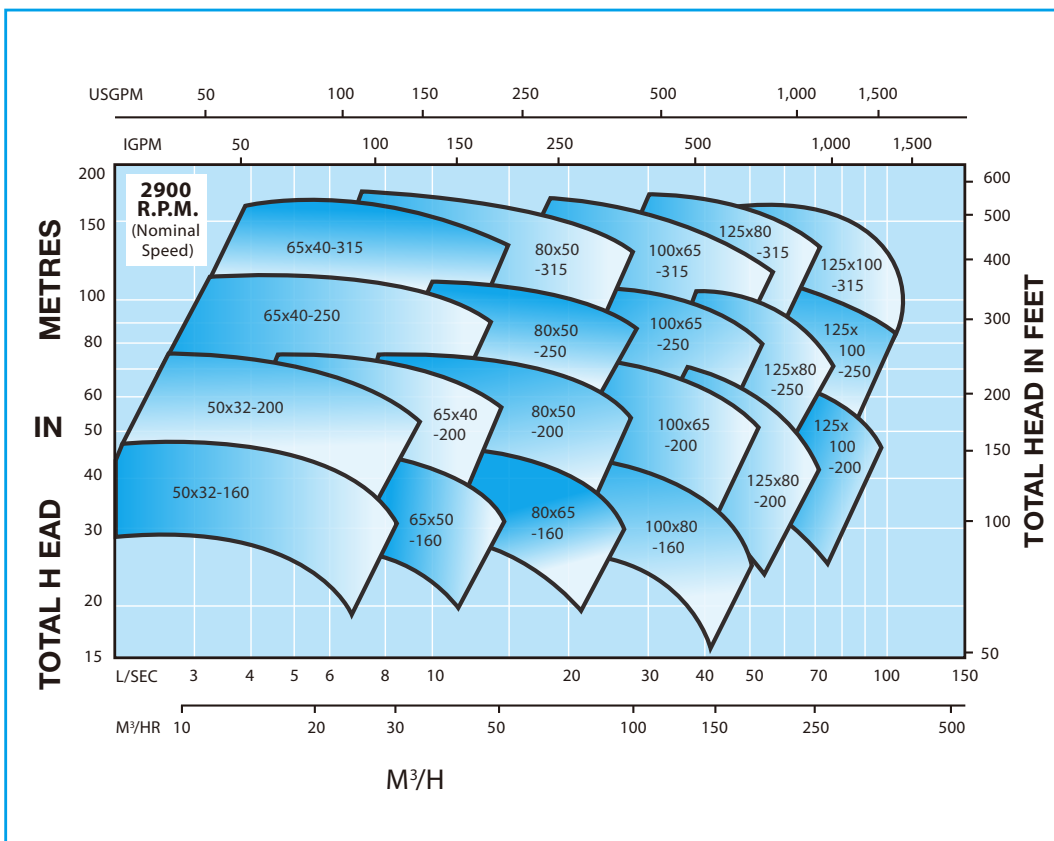
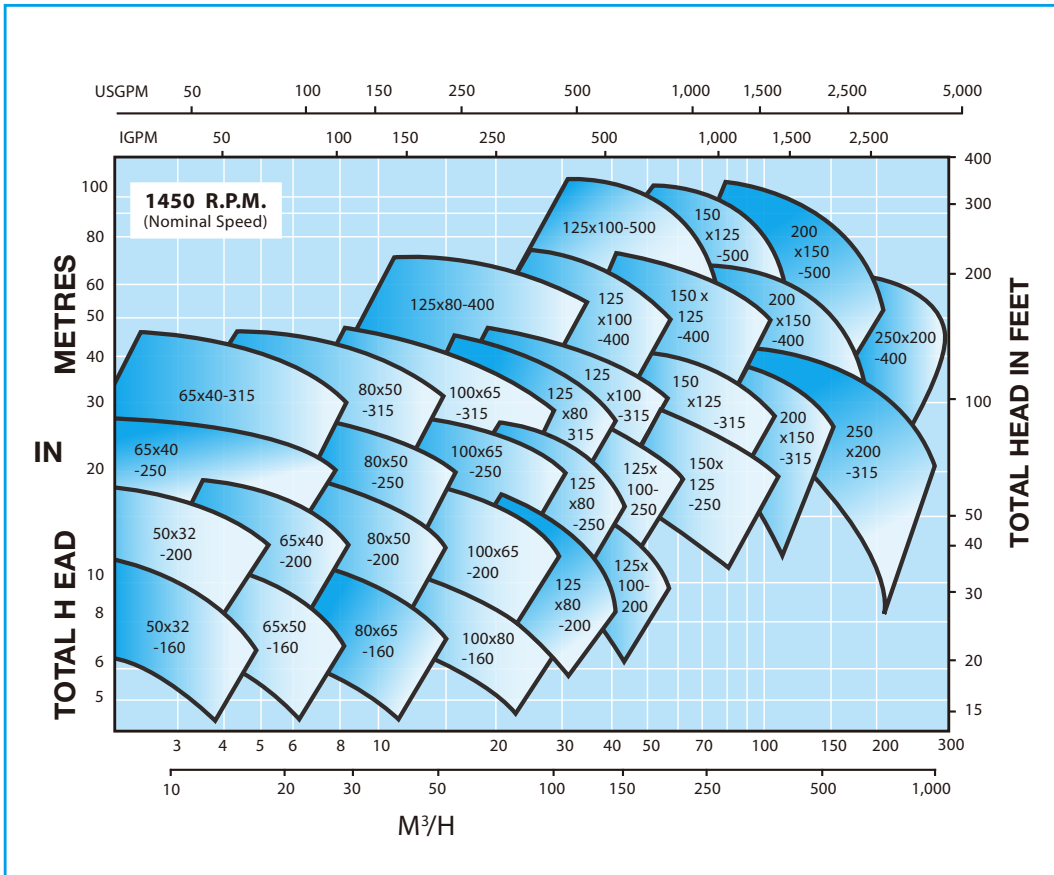
Type 431 stainless steel shaft; rugged cast iron volute with integral suction and discharge flanges and mounting feet; pressure rated to 1600kPa (160 metres head); cast iron impeller and backplate; stainless steel impeller nut; cast iron bearing housing with sealed for life grease packed bearings (standard sizes readily available from most bearing suppliers); lip type shaft seals to protect bearings; single mechanical seal.

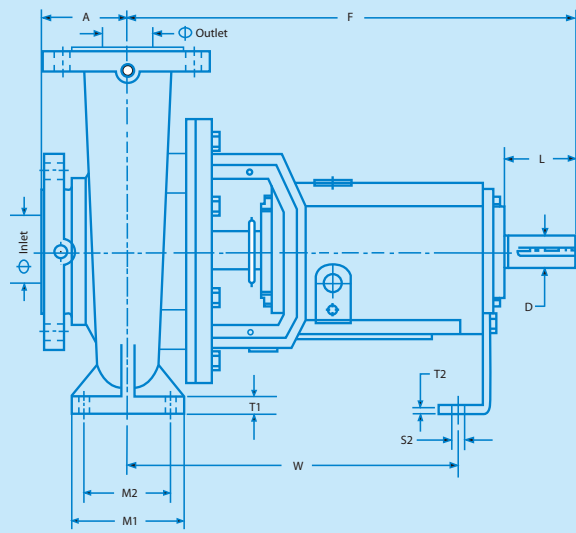
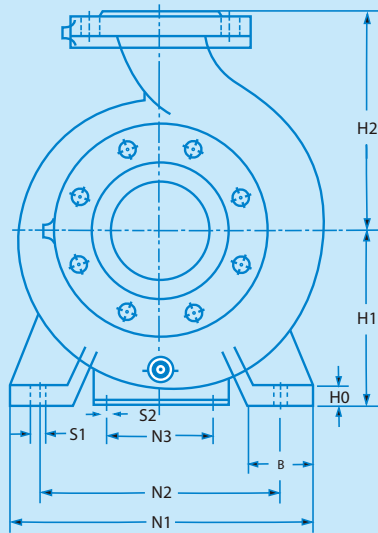
Optional Materials

Zinc-free bronze impeller, type 316 stainless steel shaft and Molybond coating.

Hydraulic Coverage Model I196

Performance Chart





PUMP SIZE			SHAFT NO.	PUMP DIMENSIONS				MOUNTING DIMENSIONS									BOLT HOLES		SHAFT END		GAP	PUMP MASS
INLET	OUTLET	IMP DIA		A	F	H1	H2	B	M1	M2	N1	N2	N3	T1	T2	W	S1	S2	D	L	X	KG
50	32	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	43
50	32	200	1	80	385	160	180	50	100	70	240	190	110	13	6	285	M12	M12	24	50	100	49
65	50	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	44
65	40	200	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	51
65	40	250	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	100	71
65	40	315	2	125	500	200	250	65	125	95	345	280	110	16	6	370	M12	M12	32	80	100	90
80	65	160	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	49
80	50	200	1	100	385	160	200	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	53
80	50	250	2	125	500	185	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	100	76
80	50	315	2	125	500	225	280	65	125	95	345	280	100	18	6	370	M12	M12	32	80	100	94
100	80	160	2	100	500	160	200	65	125	95	280	212	110	14	6	370	M12	M12	32	80	100	68
100	65	200	2	100	500	180	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	140	72
100	65	250	2	125	500	200	250	80	160	120	360	280	110	16	6	370	M16	M12	32	80	140	84
100	65	315	3	125	530	225	280	80	160	120	400	315	110	18	6	370	M16	M12	48	110	140	122
125	80	200	2	125	500	180	250	65	125	95	345	280	110	16	6	320	M12	M12	32	80	140	81
125	80	250	2	125	500	225	280	80	160	120	400	315	110	18	6	320	M12	M12	32	80	140	88
125	80	315	3	125	530	250	315	80	160	120	400	315	110	20	8	370	M16	M12	48	110	140	130
125	80	400	3	125	530	280	355	80	160	120	435	355	110	20	8	370	M16	M12	48	110	140	163
125	100	200	2	125	500	200	280	80	160	120	350	280	110	17	6	370	M16	M12	32	80	140	87
125	100	250	3	140	530	225	280	80	160	120	400	315	110	18	8	370	M16	M12	48	110	140	122
125	100	315	3	140	530	250	315	80	160	120	400	315	110	19	8	370	M16	M12	48	110	140	138
125	100	400	3	140	530	280	355	100	200	150	500	400	110	20	8	370	M20	M12	48	110	140	175
125	100	500	4	160	670	355	450	100	210	150	540	450	110	25	10	370	M20	M16	60	110	180	378
150	125	250	3	140	530	250	355	80	160	120	400	315	110	19	8	370	M16	M12	48	110	140	135
150	125	315	3	140	530	280	355	100	200	150	500	400	110	20	8	370	M20	M12	48	110	140	156
150	125	400	3	140	530	315	400	100	200	150	500	400	110	21	8	370	M20	M12	48	110	140	193
150	125	500	4	160	670	355	450	100	210	150	540	450	110	25	10	370	M20	M16	60	110	180	402
200	150	315	4	160	670	315	400	100	210	150	540	450	140	20	10	500	M20	M16	60	110	180	274
200	150	400	4	160	670	315	450	100	210	150	540	450	140	25	10	500	M20	M16	60	110	180	339
200	150	500	4	160	670	400	500	100	210	150	540	450	140	25	10	500	M20	M16	60	110	180	426
250	200	315	4	180	670	315	450	100	210	150	540	450	140	25	10	500	M20	M16	60	110	180	314
250	200	400	4	180	670	355	500	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	340

Standard Flangd Drilling to AS2129-1982 Table“E”
 Other drilling options available upon request.
 Dimensions in millimetres.