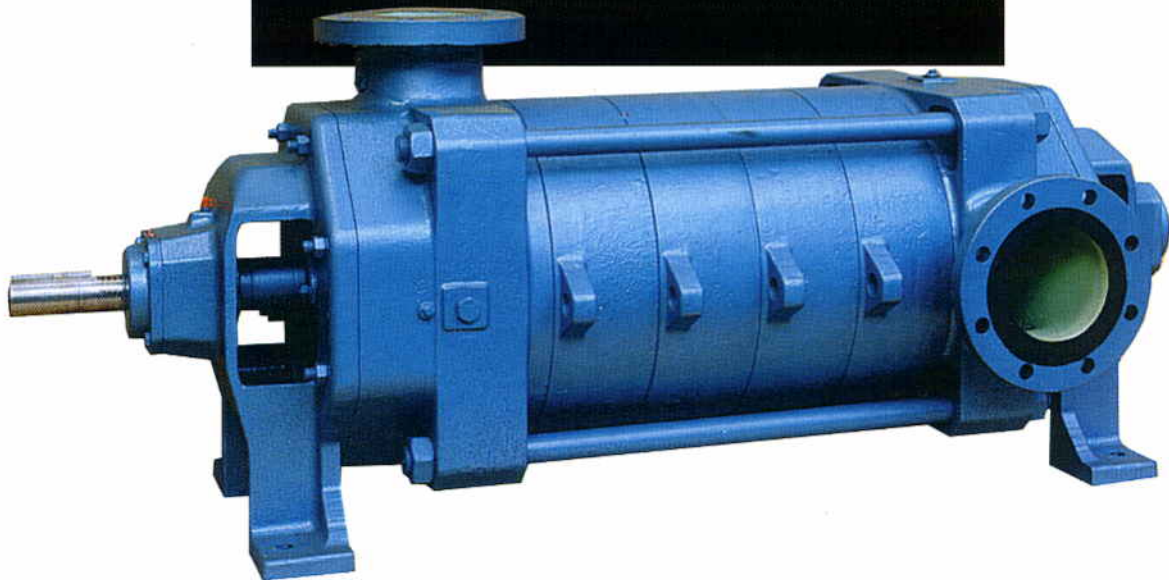


NM Multistage Pumps

25/30 bar



Ingersoll-Dresser Pumps

Multistage water pumps

NM 25/30 bar

In the design and manufacture of the new generation of NM 25/30 bar pumps, the technical expertise and experience of INGERSOLL-DRESSER PUMPS is apparent.

The following features are incorporated in the hydraulic and mechanical design of this pump range :

- improved hydraulics,
- improved safety,
- improved reliability.

The objective was to improve upon current standards to achieve better design, performance and manufacturing targets, thus giving customers the best service.

Many options were analysed bringing together Marketing, Engineering and Manufacturing in a concurrent engineering project assisted by Computer Aided Drafting and Design.

Casting development was evaluated using the latest foundry processes and techniques, ensuring high performance and reliability.

The NM range complies with the latest international standards and specifications used in Europe.



The modular concept gives maximum interchangeability of components with subsequent low inventory costs.

This range consists of 5 sizes and 10 hydraulics respectively identified by : **E** for low flow, **L** for high flow.

The following arrangements are available :

- NM**
- horizontal, 2 bearings,
 - defined by the discharge diameter,
 - adjustable side suction and discharge nozzles.
- FP**
- horizontal, 1 bearing,
 - defined by the suction diameter,
 - axial suction and adjustable side discharge nozzles.
- NMD, NMAD**
- vertically mounted,
 - defined by the discharge diameter,
 - with semi-elastic coupling and thrust bearing housing (NMD),
 - with rigid coupling (NMAD),
 - adjustable side suction and discharge nozzles.

OPERATING LIMITS

	NM	122	152	202	252	352
Maximum working pressure (bar)	suction side	10	10	10	16	16
	discharge side	25	30	35	40	40
	FP	152	202			
	discharge side	25	25			
	NMD/NMAD	122	152	202		
	discharge side	25	30	35		
Test pressure	1,5 maximum working pressure					
Maximum liquid temperature	gland packing 105 °C mechanical seal 80 °C					

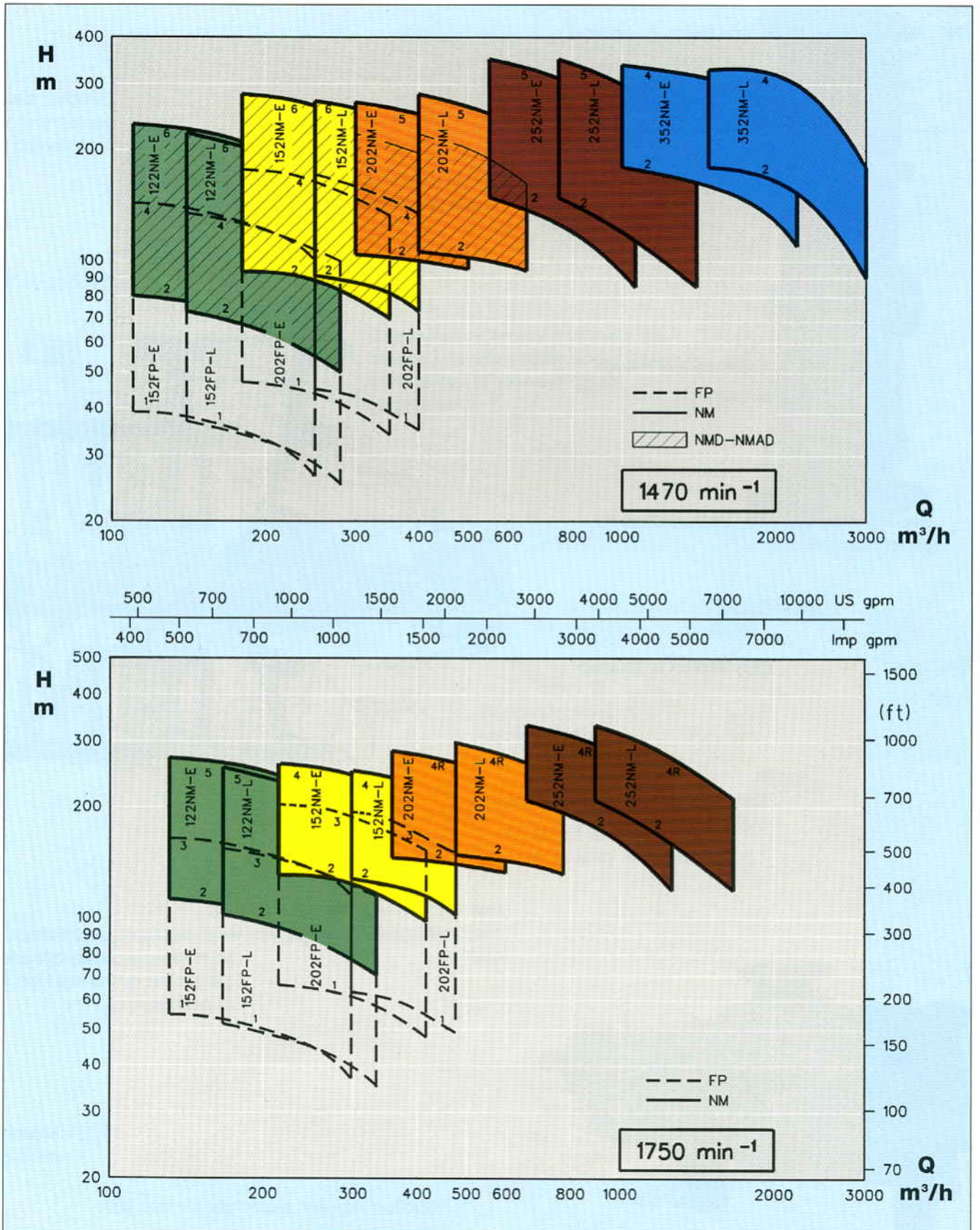
5 sizes

	122	152	202	252	352
NM					
FP	152	202			
NMD/NMAD	122	152	202		

MATERIALS

DESCRIPTION	STANDARD	OPTIONS
Suction casing	Cast iron	
Discharge casing	Cast iron	
Stage casing	Cast iron	
Diffuser	Cast iron	
Wear ring		13 % Chromium stainless steel
Impeller	122 to 252	Cast iron
	352	Bronze
Shaft	NM	13 % Chromium steel
	FP	Steel
Shaft sleeve		13 % Chromium stainless steel
Shaft seal	Gland packing Graphite + PTFE	Mechanical seal Graphite/stainless steel

Coverage charts



Design features

FP Wide open axial suction giving an optimal NPSH value.
One single sealing system to make maintenance easier.

Optional suction and discharge positions to make installation of manometric plugs.

Hydraulic design to achieve low NPSH.

Sealing achieved by O-

Oversized, grease-lubricated radial ball bearings.

Bearing equipped with grease valves for perfect lubrication.

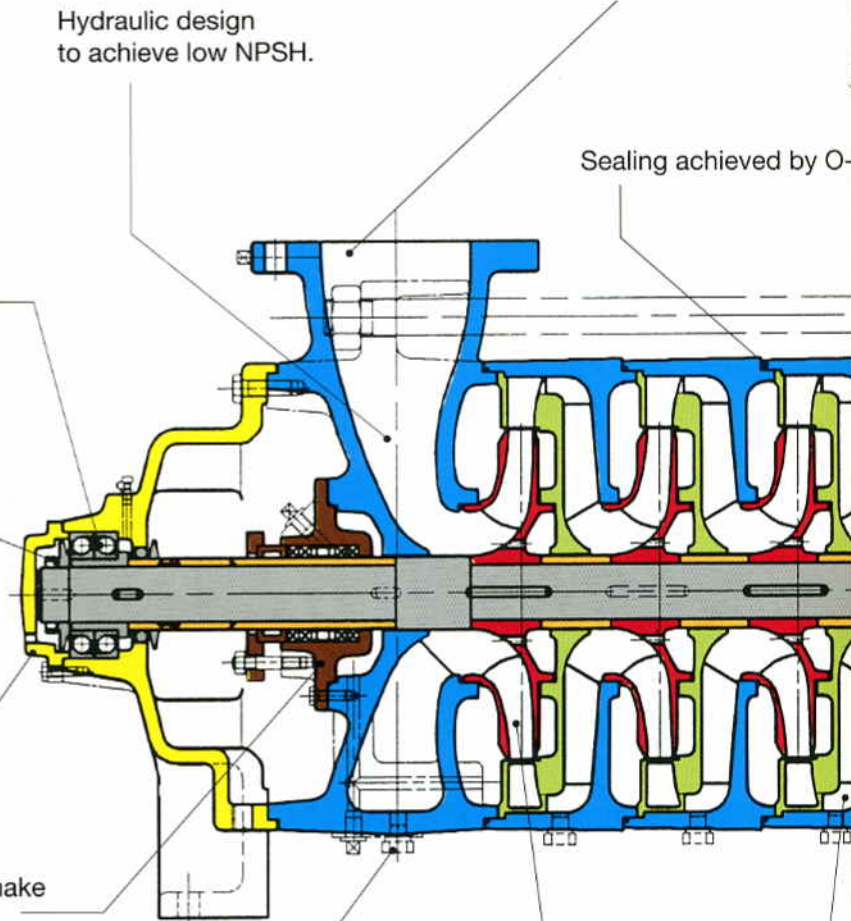
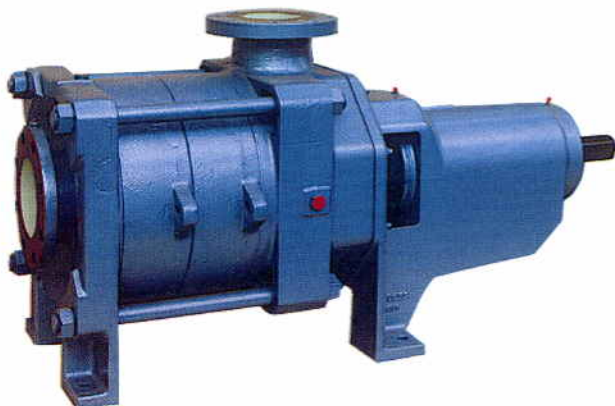
Easy access to bearings.

Removable stuffing box to make maintenance easier.

Hexagonal filling and drain plugs with gasket on each casing.

Impeller having machined shrouds and optimum hydraulic designs to guarantee high level of performance.

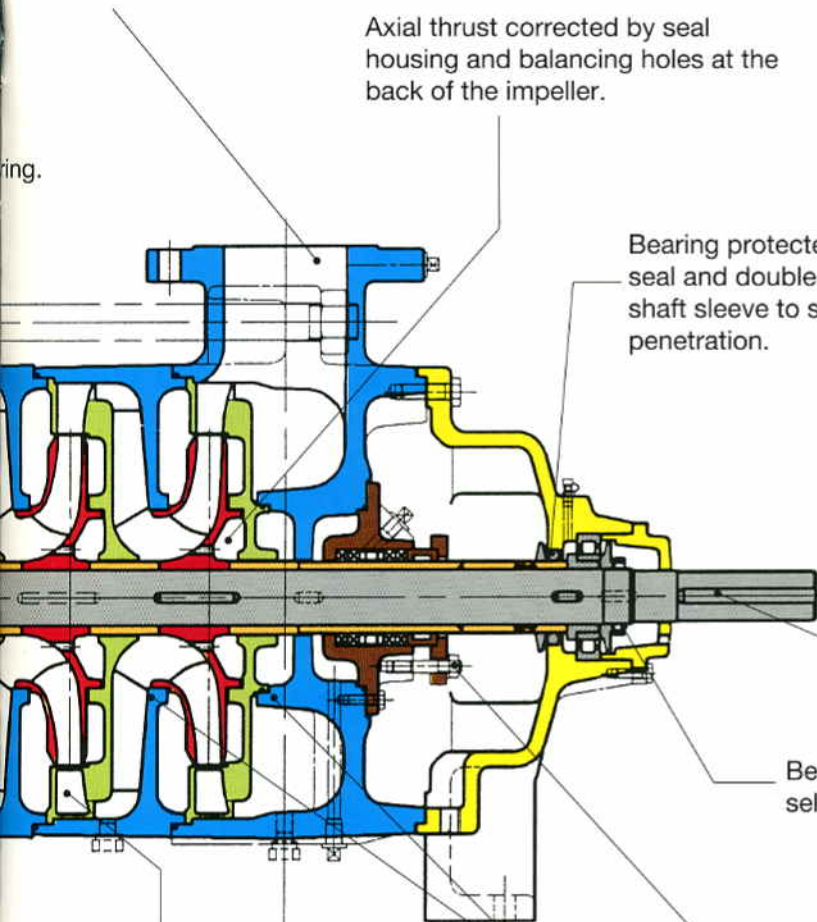
Machined internal parts for the best efficiency.



* Suction impeller, especially for size 352.

charge nozzle
ation easier, with

ring.



Axial thrust corrected by seal housing and balancing holes at the back of the impeller.

Bearing protected by a thrower, lip seal and double sealing under the shaft sleeve to stop any liquid penetration.

Oversized and protected shaft ensuring high reliability.

Bearing located by a self-locking nut.

Stainless steel studs and nuts for easy adjustment.

Shrouded diffuser positively located within the stages.

Allowance to fit wear rings.

surface to maintain



NMD
NMAD

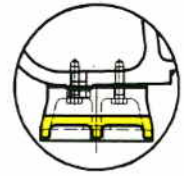
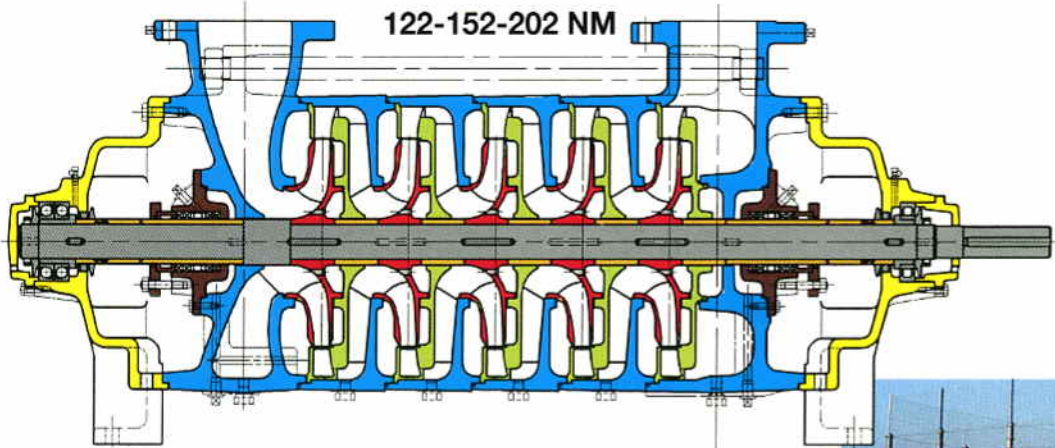
Vertically mounted to reduce space required at ground level.

Motor-pump self-alignment.

One single sealing system to simplify maintenance.

Bearing bush lubricated by liquid.

Specifications



252-352 NM

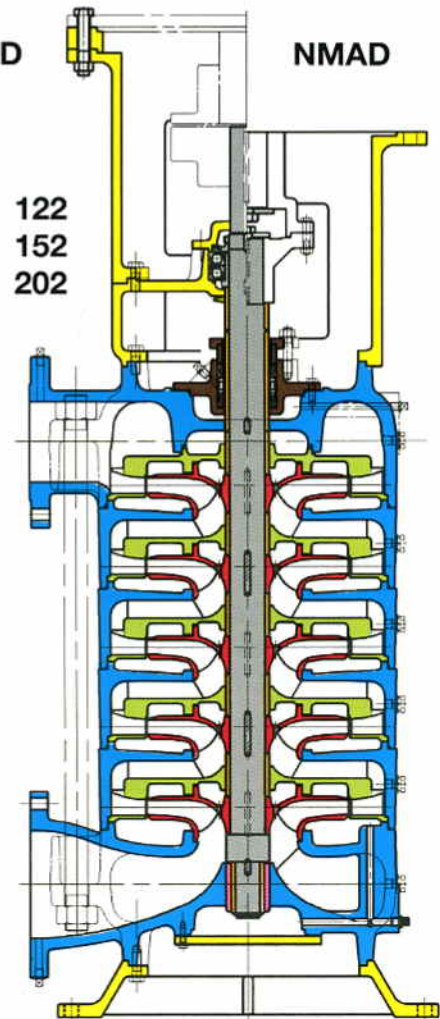


Item	Description	FP	NM	NMD	NMAD
●	Suction casing	X	X	X	X
●	Discharge casing	X	X	X	X
●	Stage casing	X	X	X	X
●	Diffuser	X	X	X	X
●	Impeller	X	X	X	X
●	Suction impeller		352		
●	Shaft	X	X	X	X
●	Shaft sleeve	X	X	X	X
●	Stuffing box housing	X	X	X	X
●	Gland	X	X	X	X
●	Bearing housing	X	X		
●	Radial ball/roller bearing	X	X	X	X
●	Motor stool			X	X
●	Bearing carrier			X	
●	Bearing bush			X	X
●	Baseplate			X	X
●	Removable support foot		252 352		

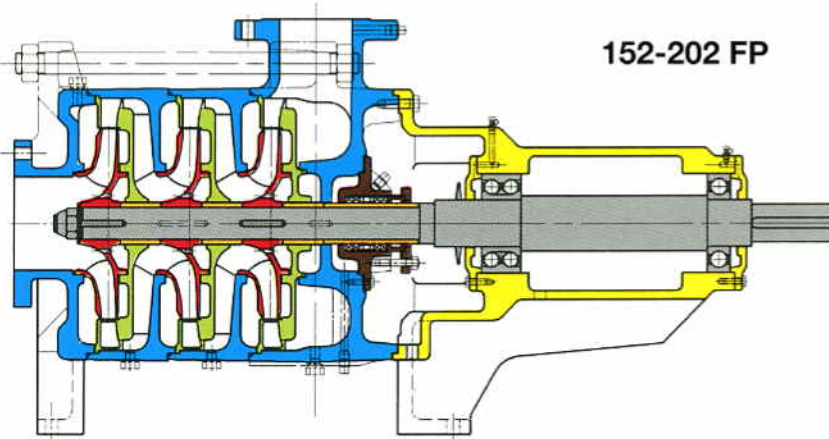
NMD

NMAD

122
152
202

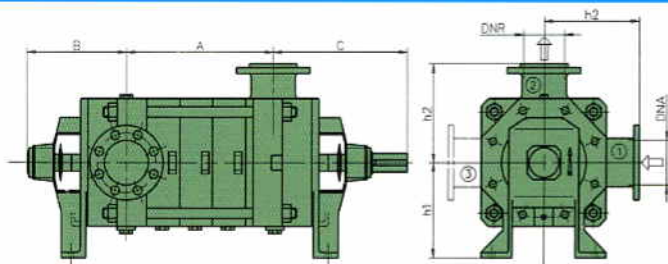


152-202 FP



Dimensions

NM

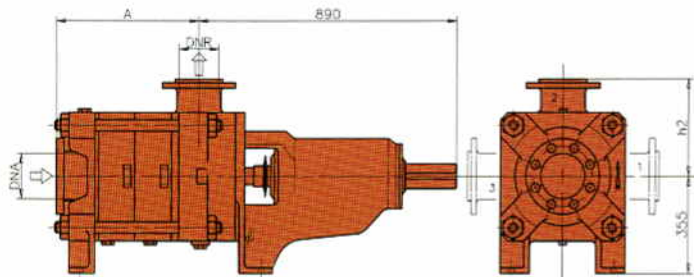


Optional suction and discharge side position (1 - 2 - 3)

PUMP	DNA	DNR	A + Z	B	C	h1	h2	Weight + M	
122 NM	150 PN 10	125 PN 40	341	140	378	535	315	350	75
152 NM	200 PN 10	150 PN 40	374	150	482	635	355	400	120
202 NM	250 PN 10	200 PN 40	505	190	516	675	400	450	200
252 NM	300 PN 16	250 PN 40	620	235	512	740	500	550	320
352 NM	450 PN 16	300 PN 40	805	290	640	863	600	750	3900

* A for 2 stages - Add Z per additional stage
 ** Weight for 2 stages - Add M per additional stage

FP

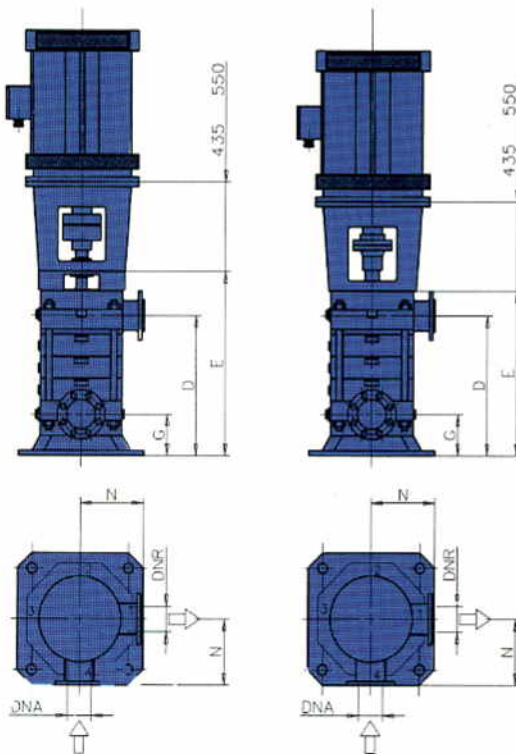


Optional discharge side position (1 - 2 - 3)

PUMP	DNA	DNR	A + Z	h2	Weight + M	
152 FP	150 PN 10	125 PN 25	240	140	350	75
202 FP	200 PN 10	150 PN 25	268	150	400	120

* A for 1 stage - Add Z per additional stage
 ** Weight for 1 stage - Add M per additional stage

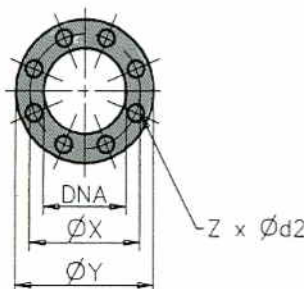
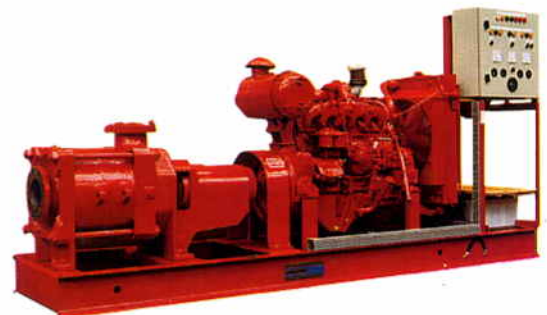
**NMD
 NMAD**



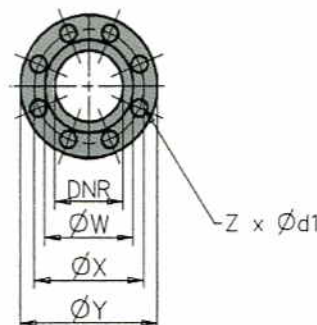
Optional suction and discharge side position (1 - 2 - 3 - 4)

PUMP	DNA	DNR	D + Z	E	G	N	Weight + M without motor		
122 NMD	150 PN 10	125 PN 40	566	140	853	225	350	520	75
152 NMD	200 PN 10	150 PN 40	620	150	915	246	400	795	120
202 NMD	250 PN 10	200 PN 40	765	190	1111	270	450	950	200
122 NMAD	150 PN 10	125 PN 40	566	140	698	225	350	490	75
152 NMAD	200 PN 10	150 PN 40	620	150	760	246	400	765	120
202 NMAD	250 PN 10	200 PN 40	765	190	911	270	450	920	200

* D & E for 2 stages - Add Z per additional stage
 ** Weight for 2 stages - Add M per additional stage



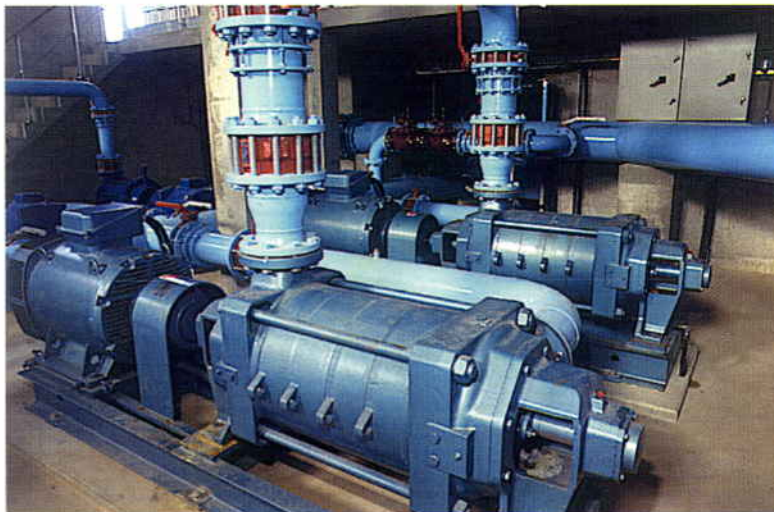
DNA	PN	X	Y	Z x Ø2
150	10	240	285	8 x 23
200	10	295	343	8 x 23
250	10	355	406	12 x 28
300	16	410	483	12 x 28
450	16	585	640	20 x 31



DNR	PN	W	X	Y	Z x Ø2
125	40	185,5	220	279	8 x 28
150	40	216	250	318	8 x 28
200	40	270	320	381	12 x 31
250	40	345	385	450	12 x 31
350	40	465	510	584	16 x 37

Global Strength and Local Commitment

- Water supply and cold water circulation
- Sprinkling and irrigation
- Boosting
- Fire protection
- Boiler feed
- Drainage



OUR COMPANY

47 factories in 18 countries with a workforce of over 8 000. That's the worldwide strength of INGERSOLL-DRESSER PUMPS, but it's our local involvement that sets us apart. A network of sales offices, agents and distributors, supported by fast response centres with pump repair and service facilities, combines global resources with specific regional expertise to help you improve performance and reduce operating costs.

OUR COMMITMENT

Our main concerns are respect for the environment, conservation of natural resources and saving of energy.

Our ability to satisfy individual demands from a proven international knowledge and product base, gives us the edge.

Demands for a safer environment have increased pressure on both users and pump manufacturers.

The NM water pump is designed and manufactured according to modern technologies which will give you reliability in the most severe conditions of service. That's why we maintain a permanent and rigorous control at each stage of design, manufacture and testing.

Human resources and the latest technology together with commitment to Total Quality explain the excellent performance of thousands of pumps operating in various water industry and associated applications.

Answering specific industry questions and solving unique customer problems so cost-efficiently is only possible through Ingersoll-Dresser's global strength and local commitment.

To discover how you can make the most of this best of all possible worlds, talk to your local representative now.



Ingersoll-Dresser Pumps