

## VERTICAL CENTRIFUGAL PUMPS

The IM series vertical centrifugal pumps with a resin casing, are high performance pumps for fixed installations with the pump immersed directly in the tank. They are driven by a direct drive electric motor (max 3000 RPM) to quickly empty the fluid, with flow rates from 6 to 170 m<sup>3</sup>/hour and head up to 40 m.

The unique construction shape of this type of pump, as well as not using internal mechanical seals (subject to considerable wear), guarantees the collection in the tank of any accidental spillages of fluid. The open impeller design allows them to pump (in continuous flow) even very dirty

fluids with an apparent viscosity up to 500 cps (at 20°C) and small-sized suspended solids. The vast range of construction materials available for the pump allows us to select the best chemical compatibility with the fluid and/or the environment, without neglecting the correct temperature range.

They are driven by the impeller that, integrated with the shaft and the electric motor (direct drive), is rotated at a set speed creating, due to centrifugal effect, a suction on the central duct and a delivery on the peripheral duct.

- Product designed and constructed in Italy
- Constructed in polypropylene or PVDF
- Normalised electric motor
- Support lantern and connection between pump and motor with a flexible coupling
- Usable with fluids containing suspended solids
- Suitable for continuous use



## IM PUMPS CODES ENCODING

ex. IM140P-V-0800-N  
IM140 PP, O-Ring Viton®, altezza colonna 800 mm, motore trifase

IM140	P	V	0800	N
PUMP MODEL	PUMP MATERIAL	O-RING	COLUMN HEIGHT	MOTOR
IM 80 - IM 80 IM 90 - IM 90 IM 95 - IM 95 IM 110 - IM 110 IM 120 - IM 120 IM 130 - IM 130 IM 140 - IM 140 IM 150 - IM 150 IM 155 - IM 155 IM 160 - IM 160 IM 180 - IM 180 IM 200 - IM 200	P - Polypropylene FC - PVDF+CF	D - EPDM V - Viton®	0250 - 250 mm** 0500 - 500 mm 0800 - 800 mm 1000 - 1000 mm 1250 - 1250 mm	N* - Three-phase motor M - Single-phase motor A - ATEX motor

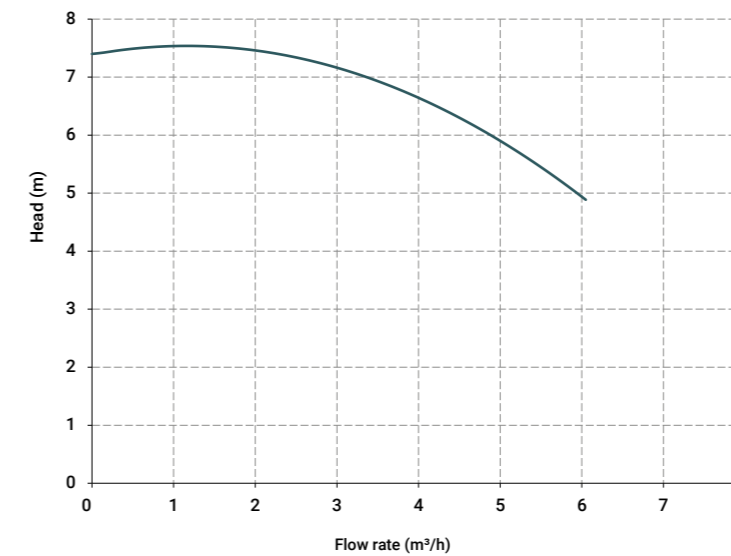
\* Three-phase asynchronous eurotension motor fitted as standard (2 poles) 50Hz  
\*\* Available only for IM 80/90 pumps

## Specifications and types



Suction fittings	G 1 1/2 f or DN 40
Delivery fittings	G 1" m or DN 25
Max flow rate	6 m <sup>3</sup> /h
Max head	7.5 m
Viscosity up to	500 cps
Standard open impeller	Ø 85 mm H 9 mm *
Passing solids	Ø max 7 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).



### Standard electric motor:

Kw	0.37
HP	0.5
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE1 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

### Column length PP\* weight PVDF\* weight

250	6.5 Kg	7 Kg
500	7.5 Kg	8 Kg
800	10.5 Kg	11 Kg
1000**		

\* The weights refer to the pump without the motor  
\*\* Special version

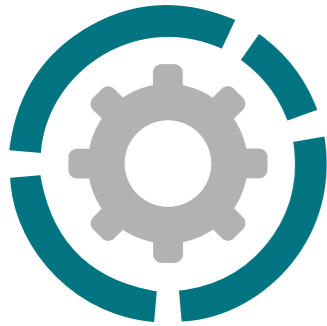
### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS

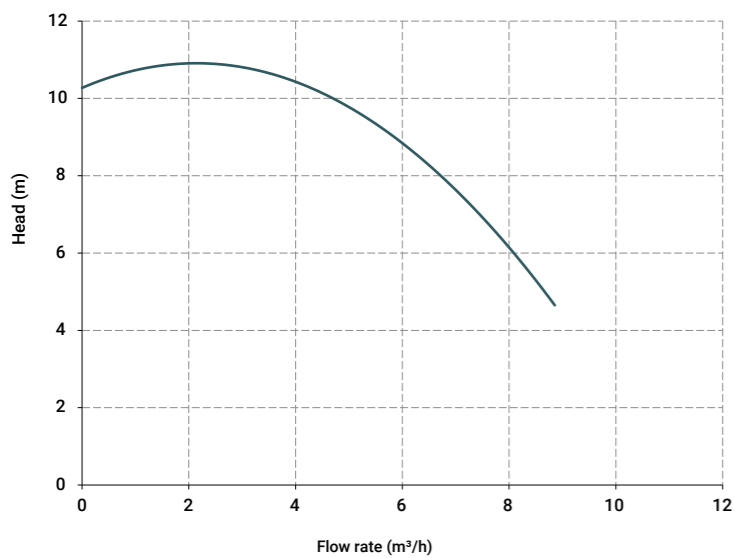


## Specifications and types



Suction fittings	G 1 1/2 f or DN 40 on request
Delivery fittings	G 1" m or DN 25 on request
Max flow rate	9 m3/h
Max head	10.5 m
Viscosity up to	500 cps
Standard open impeller	Ø 97 mm H 12 mm *
Passing solids	Ø max 10 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	0.55
HP	0.75
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

Column length	PP* weight	PVDF* weight
250	6.5 Kg	7 Kg
500	7.5 Kg	8 Kg
800	10.5 Kg	11 Kg
1000**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS

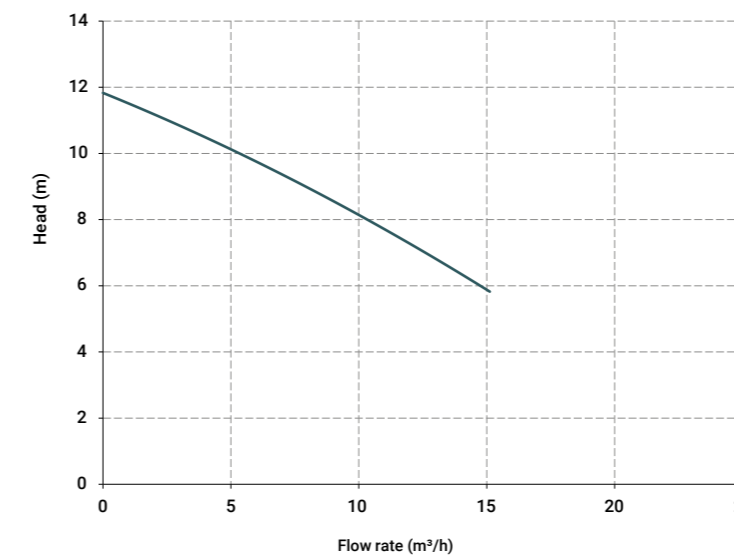


## Specifications and types



Suction fittings	G 2" m or DN 50 on request
Delivery fittings	G 1 1/2 m or DN 40 on request
Max flow rate	13 m3/h
Max head	12 m
Viscosity up to	500 cps
Standard open impeller	Ø 100 mm H 7 mm *
Passing solids	Ø max 6 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	0.75
HP	1
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

Column length	PP* weight	PVDF* weight
500	15 Kg	16 Kg
800	19 Kg	20 Kg
1000	22 Kg	23 Kg
1250	24 Kg	25 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

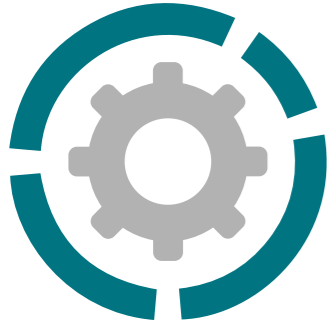
### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS

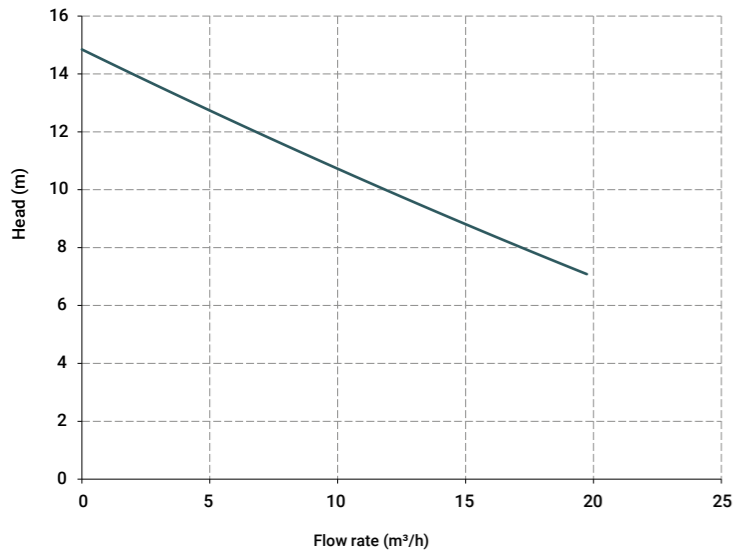


## Specifications and types



Suction fittings	G 2" m or DN 50 on request
Delivery fittings	G 1 1/2 m or DN 40 on request
Max flow rate	20 m <sup>3</sup> /h
Max head	15 m
Viscosity up to	500 cps
Standard open impeller	Ø 120 mm H 8 mm *
Passing solids	Ø max 6 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

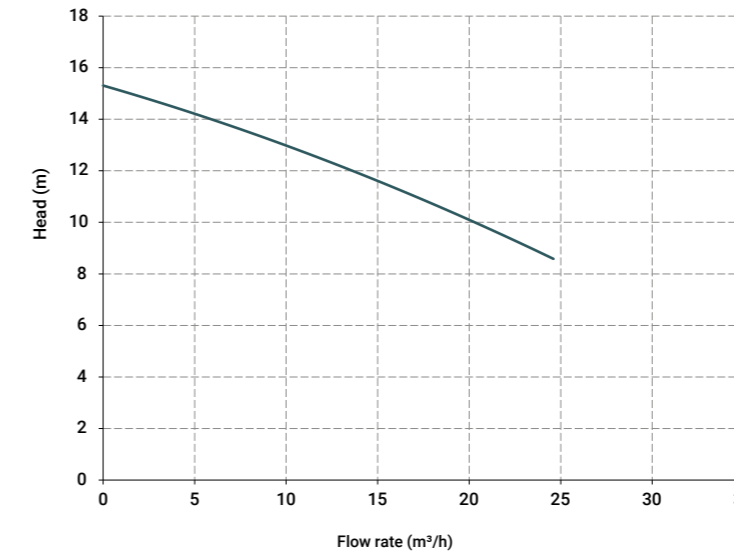


## Specifications and types



Suction fittings	G 2" m or DN 50 on request
Delivery fittings	G 1 1/2 m or DN 40 on request
Max flow rate	25 m <sup>3</sup> /h
Max head	15.5 m
Viscosity up to	500 cps
Standard open impeller	Ø 125 mm H 8 mm *
Passing solids	Ø max 6 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).



### Standard electric motor:

Kw	1.1
HP	1.5
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

### Column length

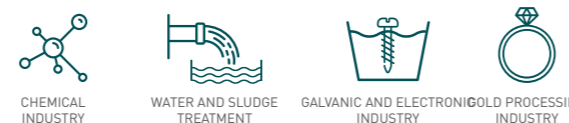
Column length	PP* weight	PVDF* weight
500	15 Kg	16 Kg
800	19 Kg	20 Kg
1000	22 Kg	23 Kg
1250	24 Kg	25 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



### Standard electric motor:

Kw	1.5
HP	2
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

### Column length

Column length	PP* weight	PVDF* weight
500	15 Kg	16 Kg
800	19 Kg	20 Kg
1000	22 Kg	23 Kg
1250	24 Kg	25 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

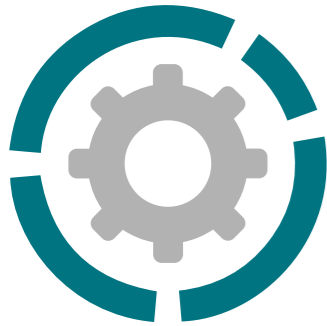
### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS

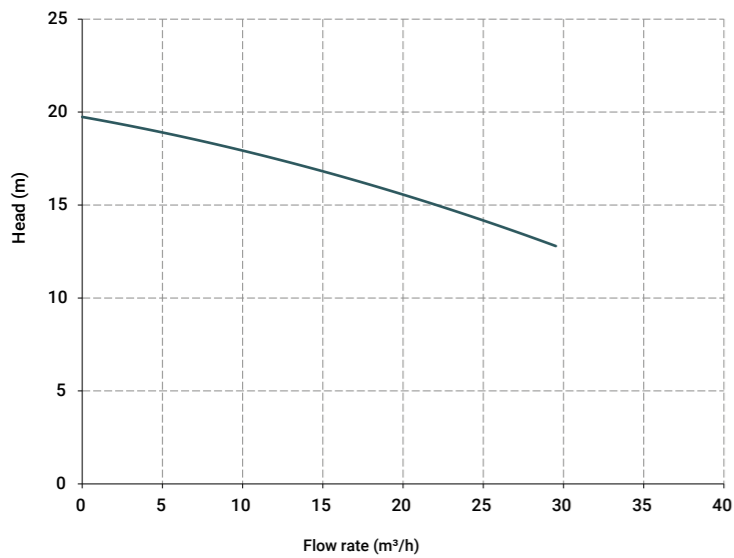


## Specifications and types



Suction fittings	G 2" m or DN 50 on request
Delivery fittings	G 1 1/2 m or DN 40 on request
Max flow rate	30 m <sup>3</sup> /h
Max head	20 m
Viscosity up to	500 cps
Standard open impeller	Ø 130 mm H 8 mm *
Passing solids	Ø max 6 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	2.2
HP	3
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

### Column length

Column length	PP* weight	PVDF* weight
500	15 Kg	16 Kg
800	19 Kg	20 Kg
1000	22 Kg	23 Kg
1250	24 Kg	25 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



PP



PVDF

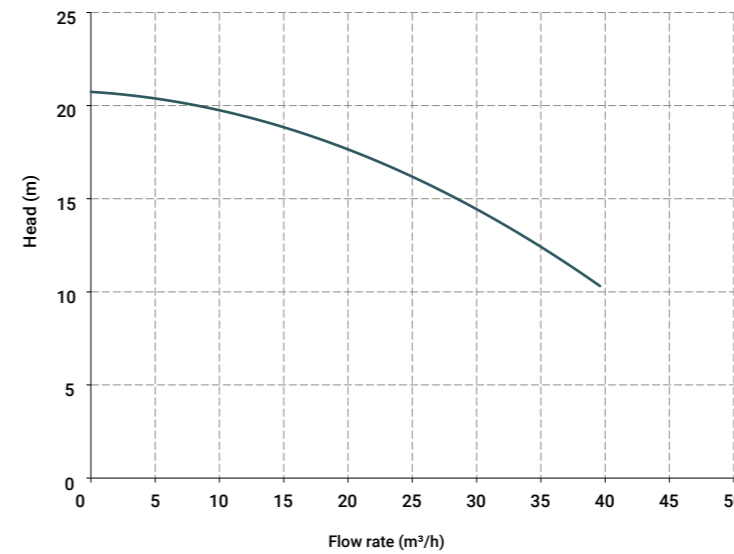


## Specifications and types



Suction fittings	G 2" m or DN 50 on request
Delivery fittings	G 1 1/2 m or DN 40 on request
Max flow rate	40 m <sup>3</sup> /h
Max head	21 m
Viscosity up to	500 cps
Standard open impeller	Ø 130 mm H 14 mm *
Passing solids	Ø max 12 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	3
HP	4
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
SINGLE-PHASE	on request
ATEX	on request

### Column length

Column length	PP* weight	PVDF* weight
500	15 Kg	16 Kg
800	19 Kg	20 Kg
1000	22 Kg	23 Kg
1250	24 Kg	25 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



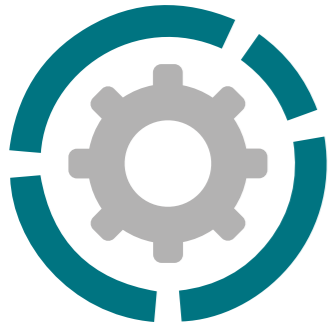
PP



PVDF

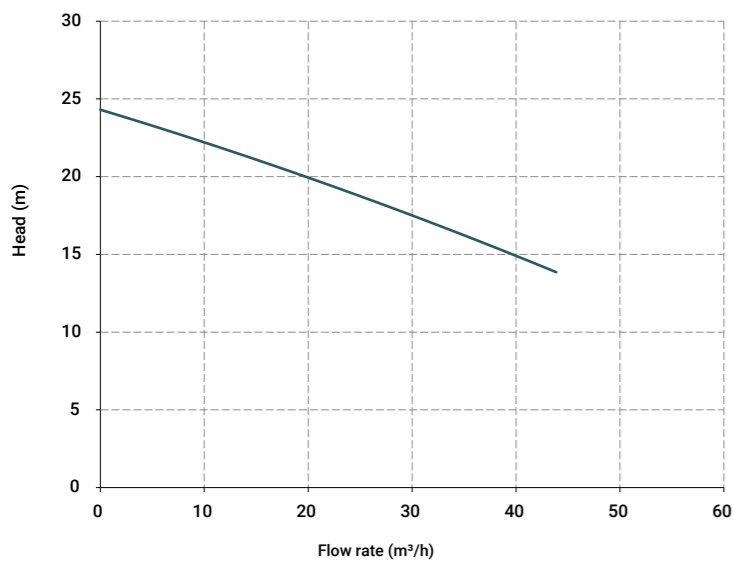


## Specifications and types



Suction fittings	G 2" 1/2 f or DN 65 on request
Delivery fittings	G 2" m or DN 50 on request
Max flow rate	42 m <sup>3</sup> /h
Max head	24 m
Viscosity up to	500 cps
Standard open impeller	Ø 160 mm H 4 mm -10° *
Passing solids	Ø max 2 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	4
HP	5.5
Box	B5
RPM	2900
THREE-PHASE 230/400 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C	
+ 45°C	
Aluminium/Cast iron	on request
ATEX	

### Column length

Column length	PP* weight	PVDF* weight
500	28 Kg	30 Kg
800	31 Kg	33 Kg
1000	33 Kg	35 Kg
1250	36 Kg	38 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS

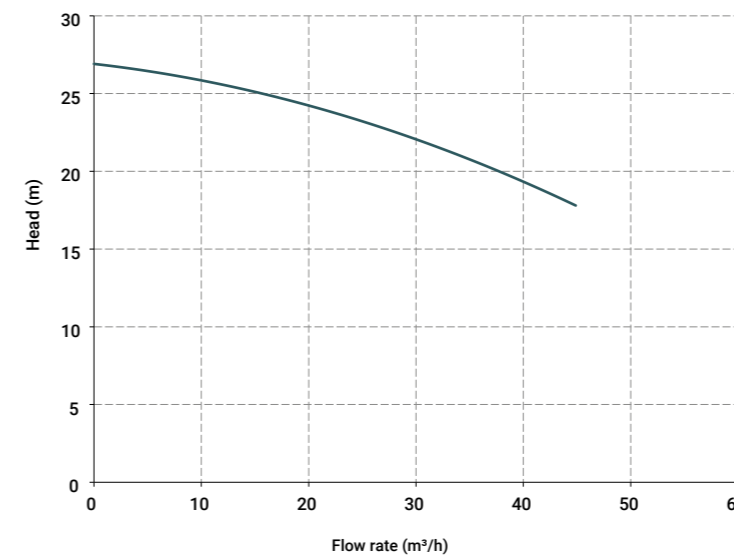


## Specifications and types



Suction fittings	G 2" 1/2 f or DN 65 on request
Delivery fittings	G 2" m or DN 50 on request
Max flow rate	42 m <sup>3</sup> /h
Max head	27 m
Viscosity up to	500 cps
Standard open impeller	Ø 162 mm H 4 mm -10° *
Passing solids	Ø max 2 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	5.5
HP	7.5
Box	B5
RPM	2900
THREE-PHASE 400/690 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C	
+ 45°C	
Aluminium/Cast iron	on request
ATEX	

### Column length

Column length	PP* weight	PVDF* weight
500	28 Kg	30 Kg
800	31 Kg	33 Kg
1000	33 Kg	35 Kg
1250	36 Kg	38 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

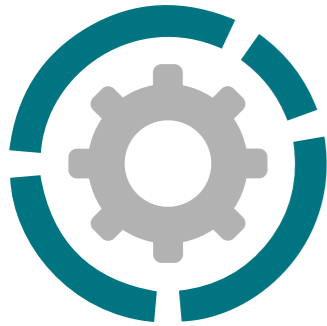
PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



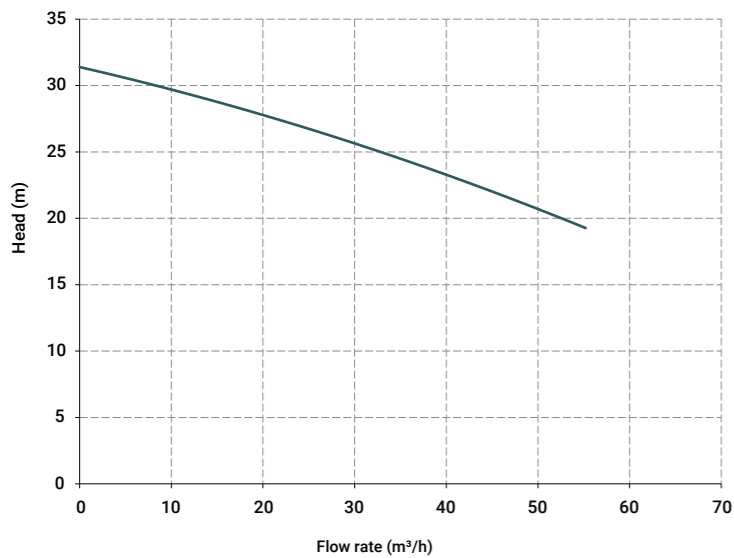


## Specifications and types



Suction fittings	G 2" 1/2 f or DN 65 on request
Delivery fittings	G 2" m or DN 50 on request
Max flow rate	55 m <sup>3</sup> /h
Max head	32 m
Viscosity up to	500 cps
Standard open impeller	Ø 162 mm H 11 mm -10° *
Passing solids	Ø max 9 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	7.5
HP	10
Box	B5
RPM	2900
THREE-PHASE 400/690 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
ATEX	on request

### Column length

Column length	PP* weight	PVDF* weight
500	31 Kg	33 Kg
800	34 Kg	36 Kg
1000	36 Kg	38 Kg
1250	39 Kg	41 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



PP



PVDF

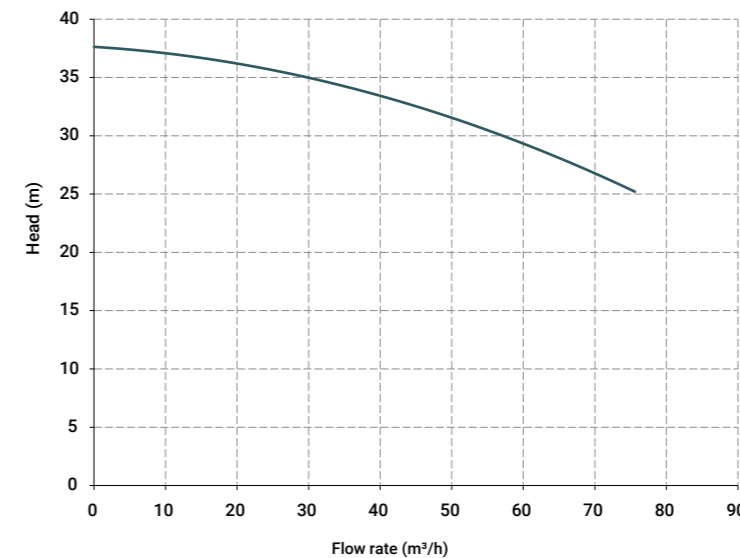


## Specifications and types



Suction fittings	G 2" 1/2 f or DN 65 on request
Delivery fittings	G 2" m or DN 50 on request
Max flow rate	75 m <sup>3</sup> /h
Max head	38 m
Viscosity up to	500 cps
Standard open impeller	Ø 176 mm H 13 mm -10° *
Passing solids	Ø max 11 mm

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

### Standard electric motor:

Kw	11
HP	15
Box	B5
RPM	2900
THREE-PHASE 400/690 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	
ATEX	on request

### Column length

Column length	PP* weight	PVDF* weight
500	31 Kg	33 Kg
800	34 Kg	36 Kg
1000	36 Kg	38 Kg
1250	39 Kg	41 Kg
1400**		

\* The weights refer to the pump without the motor  
\*\* Special version

### Operating temperature:

PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

### MAIN APPLICATION SECTORS



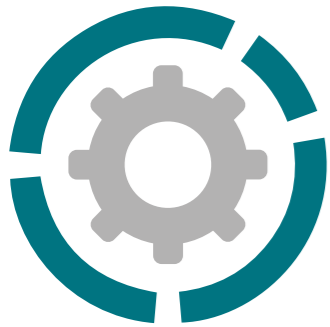
PP



PVDF

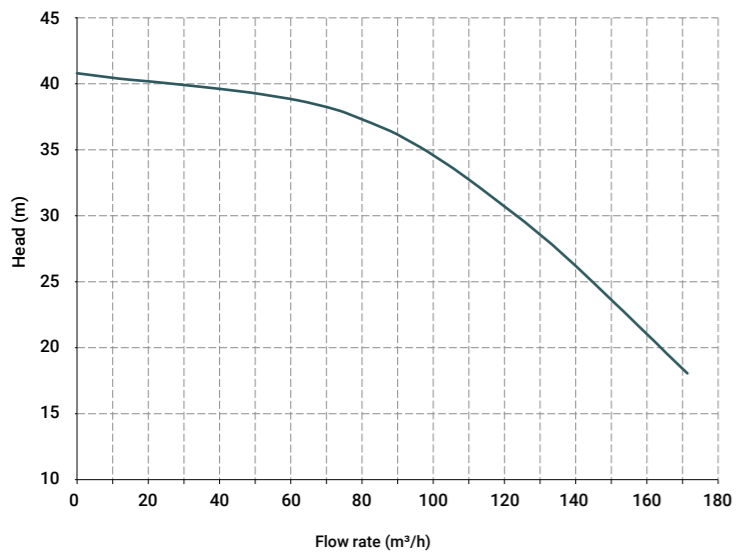


## Specifications and types



Suction fittings	G 3" 1/2 f or DN 90 on request
Delivery fittings	G 3" m or DN 80 on request
Max flow rate	170 m <sup>3</sup> /h
Max head	41 m
Viscosity up to	500 cps
Standard open impeller	Ø 175 mm H 18.4 mm *
Passing solids	Ø max 15 mm
Available column length (mm)	800 / 1000 / 1250

\* Special versions are available on request for the fluid pumped



The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials and 50 Hz two-pole motor (2900 rpm).

Standard electric motor:	
Kw	18.5
HP	25
Box	B5
RPM	2900
THREE-PHASE 400/690 V	
50/60 Hz	
2 poles	
IE3 efficiency class	
IP55 protection rating	
Ambient temperature -30°C + 45°C	
Aluminium/Cast iron	on request
ATEX	

Operating temperature:	
PP	from +3°C to +65°C
PVDF	from +3°C to +95°C

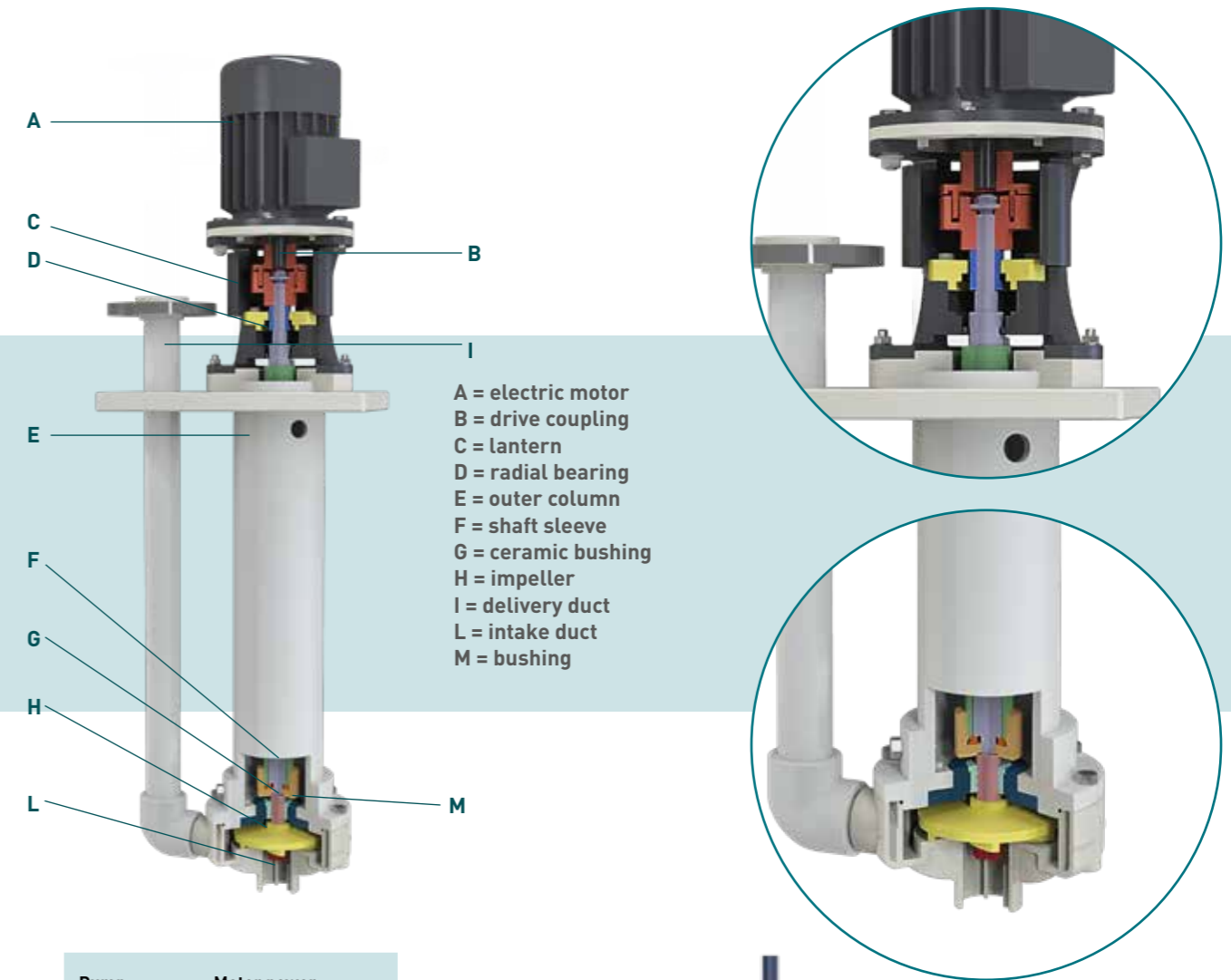


### MAIN APPLICATION SECTORS

CHEMICAL INDUSTRY

WATER AND SLUDGE TREATMENT

GALVANIC AND ELECTRONIC INDUSTRY



Pump	Motor power
IM 80	0.37 Kw - 0.5 HP
IM 90	0.55 Kw - 0.75 HP
IM 95	0.75 Kw - 1 HP
IM 110	1.1 Kw - 1.5 HP
IM 120	1.5 Kw - 2 HP
IM 130	2.2 Kw - 3 HP
IM 140	3 Kw - 4 HP
IM 150	4 Kw - 5.5 HP
IM 155	5.5 Kw - 7.5 HP
IM 160	7.5 Kw - 10 HP
IM 180	11 Kw - 15 HP
IM 200	18.5 Kw - 25 HP

