



# Self-priming pumps



## A series

### Standard design

Self-priming pumps.

The ability to maintain a vacuum under changing suction conditions makes A Series pumps ideally suited for scavenge duties and applications where the inlet pipework is only partially filled, or where the incoming liquid includes entrained air or gas. The construction materials and quick disassembly design make them particularly suitable for a wide variety of applications.

They must be initially filled with liquid for the first start-up; afterwards, a small liquid reservoir remains to enable rapid self-priming to occur even if the suction pipe is emptied.

A 21- A 31: Close-coupled pumps with the impeller directly supported by the electric motor shaft. Easy-opening front cover, by unscrewing three hand-nuts, allows quick inspection without disconnecting the inlet and outlet pipes.

A 41 - A 51 - A 66 - A 81: Close-coupled design with separate IEC motor and flexible coupling. Easy-opening front cover, for quick inspection without disturbing the inlet and outlet pipes.

All CF-8M 1.4408 / AISI 316 Stainless steel parts.

Investment cast, with electro-chemical polishing.

Flow rates up to 50 m<sup>3</sup>/h, heads up to max. 35 m (3,5 bar) (50 Hz).



A 21 - A 31 pump



A 41 - A 51 pump



A 41 - A 51 pump with shroud

### Seals:

Mechanical seals with seats to EN 12756. ISO 3069 standards.  
Single internal mechanical seal  
Single external mechanical seal

### Elastomers (FDA):

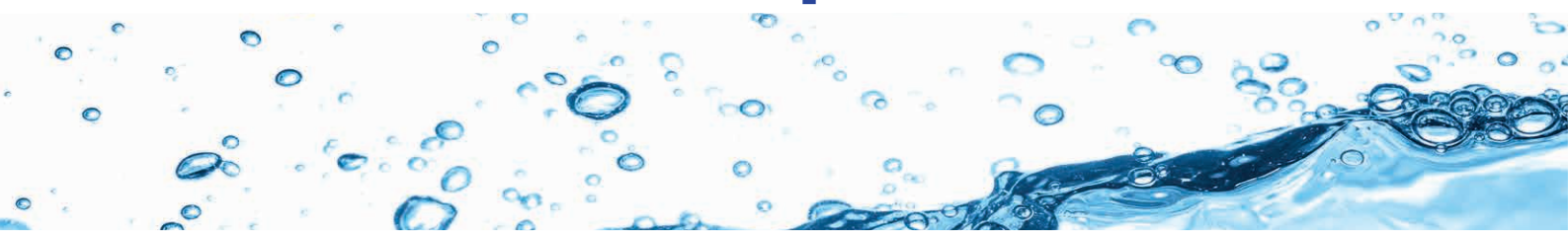
EPDM  
Fluorocarbon (Viton)  
P.T.F.E. (FEP)

### Connections:

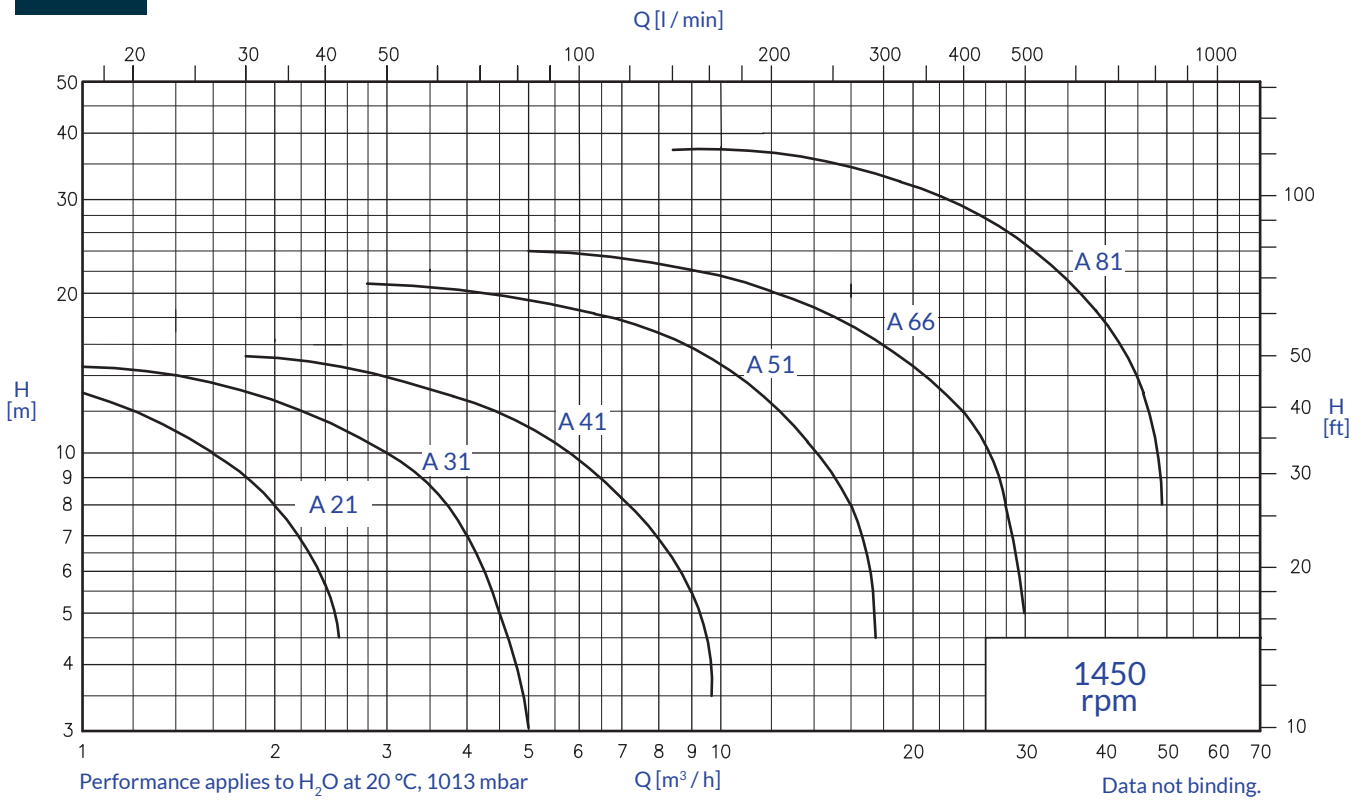
DIN - SMS - IDF - BS / RJT - DS - CLAMP and EN 1092-1 PN16 flanges to suit most international standards.

### Applications

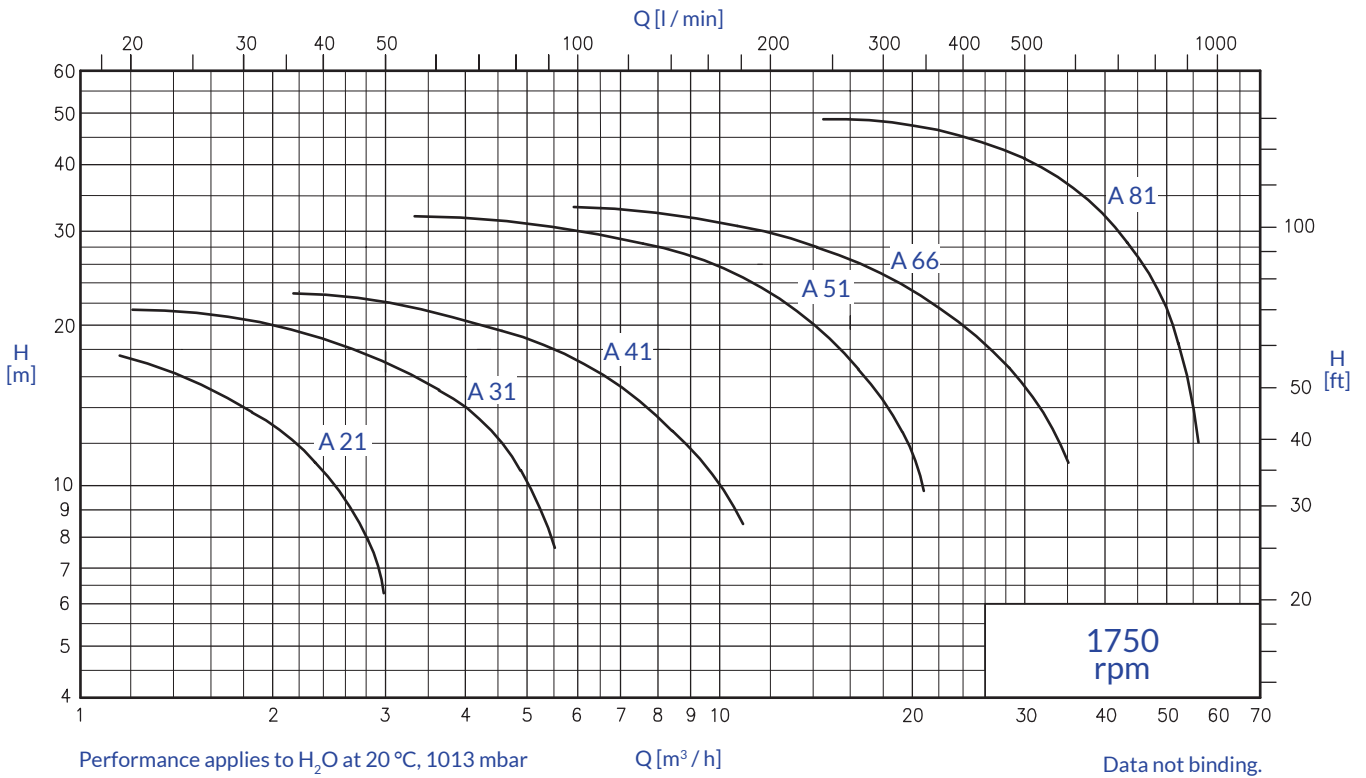
A Series pumps are suitable for a wide range of liquids (CIP solutions, juices, milk, whey, syrups, oil, wine, water, spirits, chemical and pharmaceutical media).



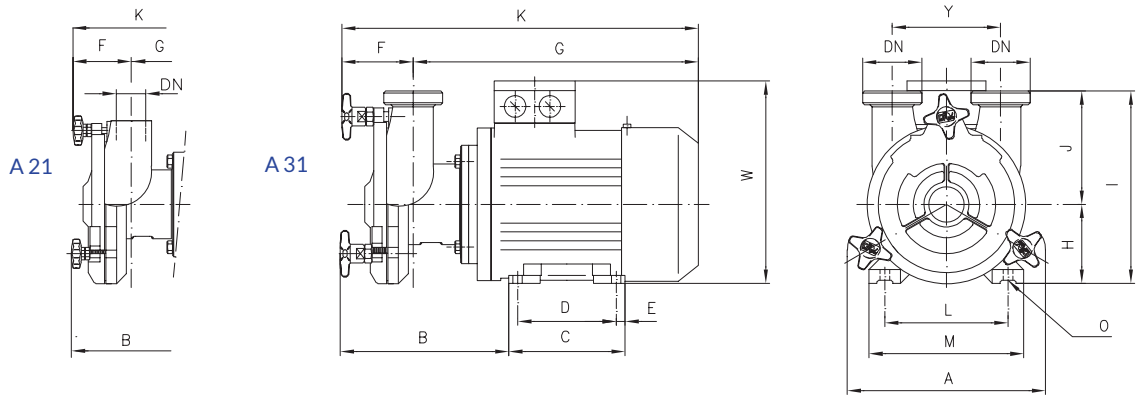
## GENERAL DIAGRAM - 50 Hz



## GENERAL DIAGRAM - 60 Hz

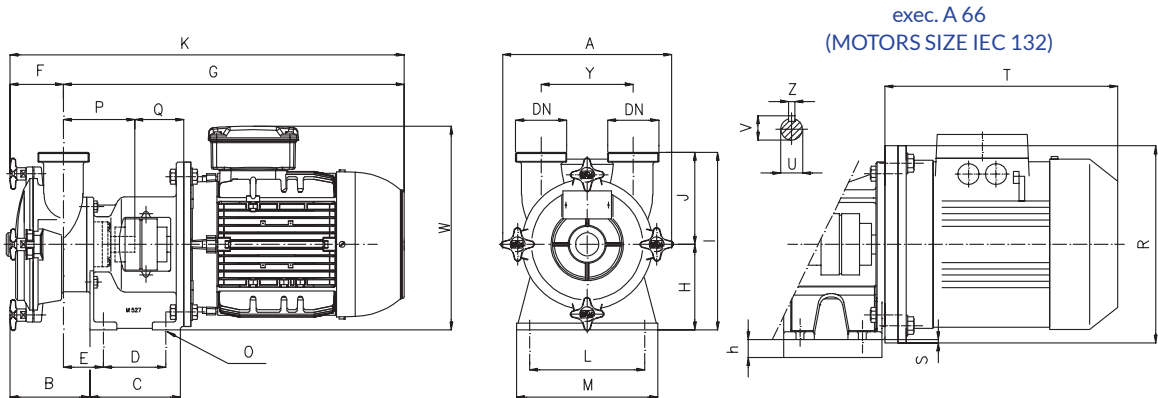


# OVERALL DIMENSIONS



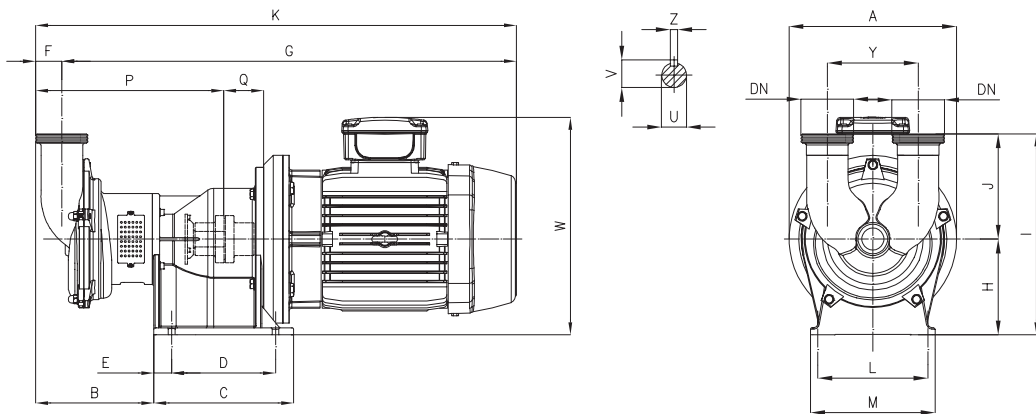
Dimensions not binding - DN = GAS (BSP female) connection on A21  
DN = DIN 11851 male threaded connection for A31

| Pumps | 1450 rpm. | kW   | DN    | A   | B   | C   | D   | E | F  | G     | K     | H  | J   | I   | Y   | L   | M   | O | P | Q | W   |
|-------|-----------|------|-------|-----|-----|-----|-----|---|----|-------|-------|----|-----|-----|-----|-----|-----|---|---|---|-----|
| A 21  | 1450 rpm. | 0,37 | 3/4"G | 170 | 149 | 106 | 90  | 8 | 62 | 268   | 330   | 71 | 84  | 155 | 80  | 112 | 132 | 7 | - | - | 192 |
|       |           | 0,55 | 3/4"G | 170 | 152 | 118 | 100 | 9 | 62 | 286,5 | 348,5 | 80 | 84  | 164 | 80  | 125 | 150 | 9 | - | - | 210 |
| A 31  | 1450 rpm. | 0,55 | 32    | 203 | 175 | 118 | 100 | 9 | 75 | 295,5 | 370,5 | 80 | 117 | 197 | 110 | 125 | 150 | 9 | - | - | 210 |
|       |           | 0,75 | 32    | 203 | 175 | 118 | 100 | 9 | 75 | 295,5 | 370,5 | 80 | 117 | 197 | 110 | 125 | 150 | 9 | - | - | 210 |



Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors  
(\*) Bearing frame designed for direct coupling with motor frame ...

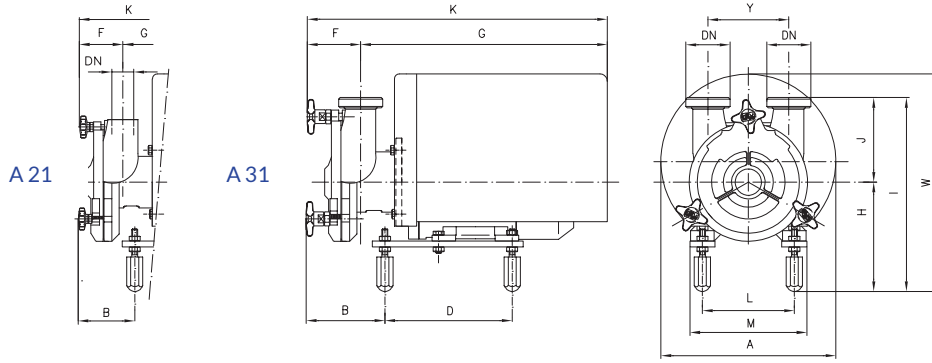
| Pumps | 1450 rpm | kW  | DN | A   | B   | C   | D  | E    | F   | G   | K   | H   | h  | J   | I   | Y   | L   | M   | O  | P   | Q  | R   | S | T   | U  | V    | W   | Z | PAM(*) |
|-------|----------|-----|----|-----|-----|-----|----|------|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|----|-----|---|-----|----|------|-----|---|--------|
| A 41  | 1450 rpm | 1,1 | 40 | 250 | 116 | 132 | 89 | 53,5 | 79  | 452 | 531 | 122 | -  | 120 | 242 | 120 | 135 | 175 | 12 | 117 | 54 | -   | - | -   | 20 | 22,5 | 272 | 6 | 90     |
|       |          | 1,5 | 40 | 250 | 116 | 132 | 89 | 53,5 | 79  | 452 | 531 | 122 | -  | 120 | 242 | 120 | 135 | 175 | 12 | 117 | 54 | -   | - | -   | 20 | 22,5 | 272 | 6 | 90     |
| A 51  | 1450 rpm | 2,2 | 50 | 273 | 127 | 138 | 95 | 59,5 | 88  | 499 | 587 | 130 | -  | 140 | 270 | 140 | 175 | 215 | 12 | 119 | 64 | -   | - | -   | 20 | 22,5 | 290 | 6 | 100    |
|       |          | 4   | 50 | 273 | 127 | 138 | 95 | 59,5 | 88  | 521 | 609 | 130 | -  | 140 | 270 | 140 | 175 | 215 | 12 | 119 | 64 | -   | - | -   | 20 | 22,5 | 284 | 6 | 112    |
| A 66  | 1450 rpm | 4   | 65 | 307 | 182 | 150 | 95 | 74   | 133 | 540 | 673 | 145 | -  | 185 | 330 | 180 | 190 | 230 | 12 | 137 | 65 | -   | - | -   | 25 | 28   | 299 | 8 | 112    |
|       |          | 5,5 | 65 | 307 | 182 | 150 | 95 | 74   | 133 | 600 | 732 | 145 | 15 | 185 | 330 | 180 | 190 | 230 | 12 | 137 | 65 | 300 | 5 | 393 | 25 | 28   | 299 | 8 | 132    |



Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors  
(\*) Bearing frame designed for direct coupling with motor frame ...

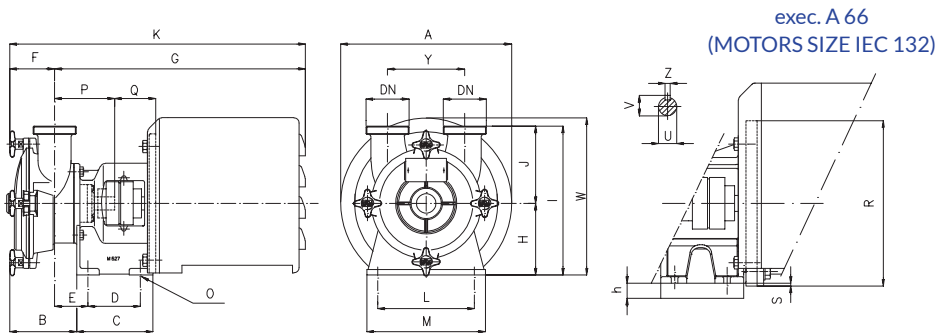
| Pumps | 1450rpm | kW  | DN | A   | B   | C   | D   | E   | F  | G   | K    | H   | J   | I   | Y   | L   | M   | O  | P   | Q   | U  | V  | W     | Z  | PAM(*) |
|-------|---------|-----|----|-----|-----|-----|-----|-----|----|-----|------|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|-------|----|--------|
| A 81  | 1450rpm | 9,2 | 80 | 326 | 247 | 292 | 214 | 233 | 55 | 833 | 888  | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 83  | 32 | 35 | 406,5 | 10 | 132    |
|       |         | 11  | 80 | 350 | 247 | 292 | 214 | 233 | 55 | 994 | 1049 | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 123 | 32 | 35 | 464   | 10 | 160    |
|       |         | 15  | 80 | 350 | 247 | 292 | 214 | 233 | 55 | 994 | 1049 | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 123 | 32 | 35 | 464   | 10 | 160    |

# OVERALL DIMENSIONS (INCLUDING SHROUD)



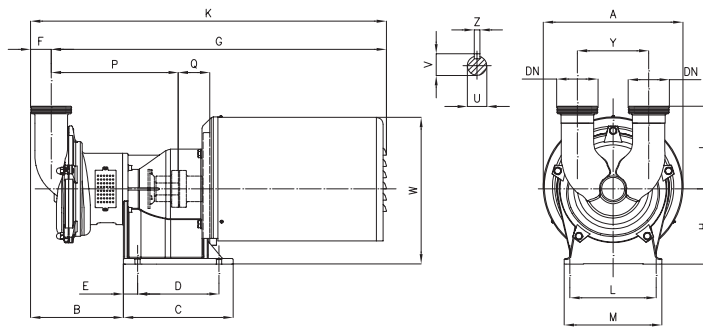
Dimensions not binding - DN = GAS (BSP female) connection on A21  
 DN = DIN 11851 male threaded connection for A31

| Pumps | 1450 rpm | kW    | DN  | A   | B | C   | D | E  | F   | G   | K   | H   | J   | I   | Y   | L   | M | O | P | Q | W   |
|-------|----------|-------|-----|-----|---|-----|---|----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|---|---|-----|
| A 21  | 0,55     | 3/4"G | 238 | 88  | - | 173 | - | 62 | 336 | 398 | 153 | 85  | 238 | 80  | 125 | 150 | - | - | - | - | 301 |
| A 31  | 0,55     | 32    | 238 | 111 | - | 173 | - | 75 | 334 | 409 | 153 | 117 | 270 | 110 | 125 | 150 | - | - | - | - | 301 |
|       | 0,75     | 32    | 238 | 111 | - | 173 | - | 75 | 334 | 409 | 153 | 117 | 270 | 110 | 125 | 150 | - | - | - | - | 301 |



Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors  
 (\*) Bearing frame designed for direct coupling with motor frame ...

| Pumps | 1450 rpm | kW | DN  | A   | B   | C  | D    | E   | F   | G   | K   | H  | h   | J   | I   | Y   | L   | M  | O   | P  | Q   | R | S  | U    | V   | W | Z   | PAM (*) |
|-------|----------|----|-----|-----|-----|----|------|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|----|-----|---|----|------|-----|---|-----|---------|
| A 41  | 1,1      | 40 | 297 | 116 | 132 | 89 | 53,5 | 79  | 549 | 631 | 122 | -  | 120 | 242 | 120 | 135 | 175 | 12 | 117 | 51 | -   | - | 20 | 22,5 | 313 | 6 | 90  |         |
|       | 1,5      | 40 | 297 | 116 | 132 | 89 | 53,5 | 79  | 549 | 631 | 122 | -  | 120 | 242 | 120 | 135 | 175 | 12 | 117 | 51 | -   | - | 20 | 22,5 | 313 | 6 | 90  |         |
| A 51  | 2,2      | 50 | 333 | 127 | 138 | 95 | 59,5 | 88  | 607 | 704 | 130 | -  | 140 | 270 | 140 | 175 | 215 | 12 | 119 | 61 | -   | - | 20 | 22,5 | 337 | 6 | 100 |         |
|       | 4        | 50 | 333 | 127 | 138 | 95 | 59,5 | 88  | 607 | 704 | 130 | -  | 140 | 270 | 140 | 175 | 215 | 12 | 119 | 61 | -   | - | 20 | 22,5 | 337 | 6 | 112 |         |
| A 66  | 4        | 65 | 369 | 182 | 150 | 95 | 74   | 133 | 667 | 800 | 145 | -  | 185 | 330 | 180 | 190 | 230 | 12 | 137 | 62 | -   | - | 25 | 28   | 360 | 8 | 112 |         |
|       | 5,5      | 65 | 369 | 182 | 150 | 95 | 74   | 133 | 667 | 800 | 145 | 15 | 185 | 330 | 180 | 190 | 230 | 12 | 137 | 62 | 300 | 5 | 25 | 28   | 360 | 8 | 132 |         |



Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors  
 (\*) Bearing frame designed for direct coupling with motor frame ...

| Pumps | 1450 rpm | kW | DN  | A   | B   | C   | D   | E  | F    | G    | K   | H   | J   | I   | Y   | L   | M  | O   | P   | Q  | U  | V   | W  | Z   | PAM (*) |
|-------|----------|----|-----|-----|-----|-----|-----|----|------|------|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|-----|----|-----|---------|
| A 81  | 9,2      | 80 | 432 | 247 | 292 | 214 | 233 | 55 | 1036 | 1090 | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 83  | 32 | 35 | 434 | 10 | 132 |         |
|       | 11       | 80 | 432 | 247 | 292 | 214 | 233 | 55 | 1036 | 1090 | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 123 | 32 | 35 | 475 | 10 | 160 |         |
|       | 15       | 80 | 432 | 247 | 292 | 214 | 233 | 55 | 1036 | 1090 | 200 | 220 | 420 | 190 | 230 | 260 | 14 | 339 | 123 | 32 | 35 | 475 | 10 | 160 |         |