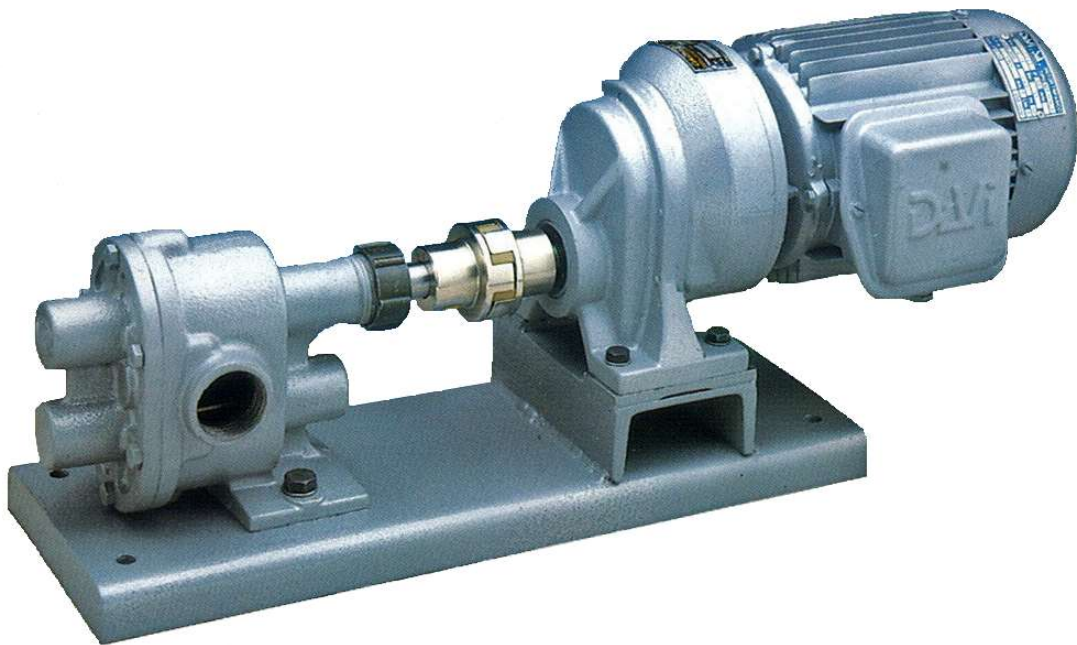


## Gear Pump "A" Type

**NTD** has included in its supply line a new wide range of gear pumps "A" type.



Gear pumps "A" type are used in many applications including those installations where high revolutions are not necessary such as circulation of highly viscous liquids, lacquers, paints and varnishes, syrups, soaps and cosmetics, asphalt, diluted glycerines, colourants and disinfectants, alcohol-based inks, lubricants and refrigerants for machines, oils, etc.

### Types:

- 1) All in iron:** This pump includes cast iron casing, carbon steel gears and tempered steel shafts.
- 2) Iron and bronze:** This pump includes cast iron casing, bronze gears, manganese and stainless steel shafts (14%).
- 3) All in bronze:** This pump includes bronze casing and gear and stainless steel shafts (18/8).
- 4) Stainless steel:** Ask for further information.

### Operating Characteristics

RPM in this kind of pumps must range from 100 to 800, guaranteeing long durability.

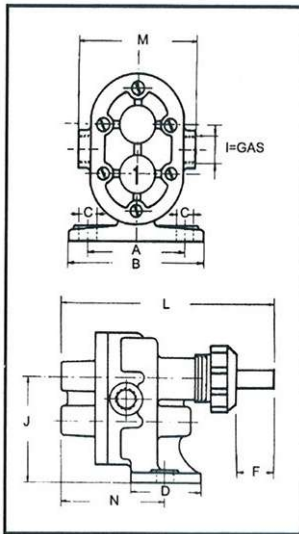
Outlet flow is directly proportional to the number of revolutions in pump of same size.

Viscosity can range from 1 and 250°C causing no variations in the pump characteristics.

Temperature can rise up to 100°C with the subsequent suction loss that it brings along.

Maximum pressure operating with water can reach up to 5 kp/cm<sup>2</sup> and in case of oils up to 12 kp/cm<sup>2</sup>. For higher r.p.m. or higher pressure requirements, we offer other pumps. Please contact us in that case.

Gear pump "A" type is available in 12 different sizes.



### Max. Revolutions according to viscosity

| VISCOSITY ENGLER | PUMP N° |     |     |       |         |       |     |
|------------------|---------|-----|-----|-------|---------|-------|-----|
|                  | 0       | 1   | 2   | 3 - 4 | 5 - 5,5 | 6 - 7 | 10  |
| 20° C            | 800     | 800 | 800 | 800   | 500     | 500   | 500 |
| 50° C            | 800     | 800 | 800 | 635   | 500     | 400   | 300 |
| 100° C           | 650     | 600 | 500 | 400   | 350     | 250   | 200 |
| 150° C           | 415     | 380 | 320 | 250   | 225     | 160   | 130 |
| 200° C           | 325     | 300 | 250 | 200   | 175     | 125   | 100 |

### Dimensions Type A

| No.   | Tube        | Shaft |    | Clamping system |     |     |     | Pump |     |     |     |
|-------|-------------|-------|----|-----------------|-----|-----|-----|------|-----|-----|-----|
|       |             | E Ø   | F  | A               | B   | age | D   | J    | K   | L   | M   |
| OO    | 1/4"        | 12    | 25 | 45              | 68  | 11  | 30  | 52   | 65  | 130 | 57  |
| O     | 1/4"        | 13    | 34 | 52              | 80  | 11  | 40  | 60   | 70  | 146 | 62  |
| 1     | 3/8"        | 14    | 30 | 65              | 95  | 11  | 60  | 75   | 80  | 160 | 80  |
| 2     | 1/2"        | 16    | 40 | 72              | 100 | 11  | 60  | 86   | 85  | 175 | 95  |
| 3     | 3/4"        | 19    | 40 | 80              | 105 | 11  | 65  | 95   | 105 | 220 | 88  |
| 4     | 1"          | 19    | 40 | 80              | 105 | 11  | 65  | 95   | 130 | 240 | 105 |
| 5     | 1 1/4"      | 21    | 50 | 80              | 110 | 11  | 80  | 115  | 140 | 270 | 120 |
| 5,5   | 1" - 1 1/4" | 24    | 53 | 80              | 110 | 11  | 80  | 115  | 170 | 312 | 126 |
| 5,5 R | 1" - 1 1/4" | 25    | 53 | 80              | 140 | 11  | 80  | 127  | 167 | 312 | 140 |
| 6     | 1 1/2"      | 25    | 60 | 140             | 170 | 11  | 110 | 150  | 150 | 340 | 165 |
| 7     | 2 1/2"      | 25    | 60 | 140             | 170 | 11  | 110 | 150  | 170 | 360 | 168 |
| 10    | 3"          | 30    | 70 | 180             | 220 | 13  | 180 | 190  | 190 | 470 | 220 |

### Table of Performances

| N°    | Flow without pressure Lit/min |            |            |            |
|-------|-------------------------------|------------|------------|------------|
|       | 250 r.p.m.                    | 350 r.p.m. | 500 r.p.m. | 800 r.p.m. |
| OO    | 1,8                           | 2,5        | 3,6        | 5,6        |
| O     | 3,5                           | 5          | 7          | 10         |
| 1     | 5                             | 7          | 10         | 15         |
| 2     | 8                             | 11         | 16         | 24         |
| 3     | 15                            | 21         | 30         | 48         |
| 4     | 22                            | 32         | 45         | 72         |
| 5     | 34                            | 49         | 68         | 110        |
| 5,5   | 48                            | 67         | 96         | -          |
| 5,5 R | 65                            | 90         | 130        | -          |
| 6     | 75                            | 105        | 150        | -          |
| 7     | 84                            | 117        | 168        | -          |
| 10    | 185                           | 260        | 370        | -          |

| N°    | Motor power in HP at 500 rpm |           |               |
|-------|------------------------------|-----------|---------------|
|       | Up to 10m                    | Water 40m | Oil 25°E 5bar |
| OO    | 0,1                          | 0,5       | 0,2           |
| O     | 0,12                         | 0,2       | 0,3           |
| 1     | 0,15                         | 0,25      | 0,4           |
| 2     | 0,2                          | 0,4       | 0,75          |
| 3     | 0,25                         | 0,6       | 0,8           |
| 4     | 0,3                          | 0,9       | 1,5           |
| 5     | 0,6                          | 1,5       | 3             |
| 5,5   | 1                            | 2         | 3             |
| 5,5 R | 1,25                         | 3         | 4             |
| 6     | 1,25                         | 3         | 4             |
| 7     | 1,5                          | 4         | 5,5           |
| 10    | 4                            | 10        | 15            |

A wide range of gear pumps are available. Please, ask for more details.