

# POMPA AD INGRANAGGI NPH SAE "B" NPH SAE "B" GEAR PUMP

CODICE FAMIGLIA  
FAMILY CODE

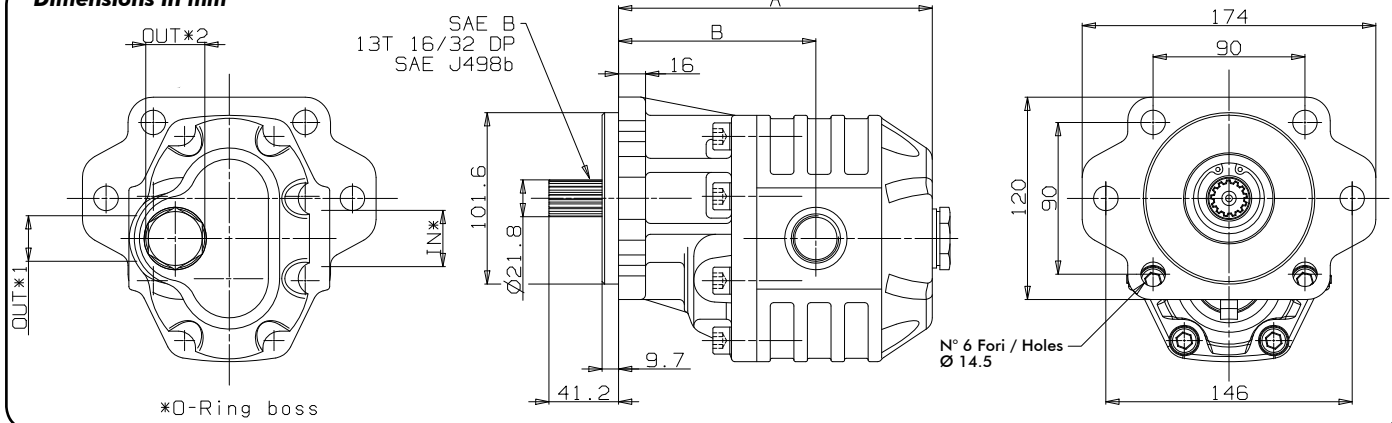
**105-035**  
**105-935**

**NPH SAE "B"**



|                                                                                                                |                                                                                                                                               |          |                                                                        |       |      |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------|-------|------|
| Fluido idraulico<br><i>Fluid</i>                                                                               | Minerale o sintetico compatibile con guarnizioni:<br><i>Mineral or synthetic compatible with the following seals:</i><br>NBR, FKM, FPM, Nylon |          |                                                                        |       |      |
| Viscosità cinematica<br>consigliata<br><i>Kinematic viscosity<br/>suggested</i>                                | T media ambiente (°C)<br><i>Average ambient temp. (°C)</i>                                                                                    | < -10    | -10÷10                                                                 | 10÷35 | > 35 |
|                                                                                                                | VG (cSt = mm²/s)                                                                                                                              | 22       | 32                                                                     | 46    | 68   |
| Viscosità cinematica ottimale di esercizio<br><i>Optimale kinematic viscosity</i>                              |                                                                                                                                               |          | VG= 10 cSt ÷ 100 cSt                                                   |       |      |
| Viscosità cinematica max consentita all'avviamento<br><i>Max kinematic viscosity suggested at the start-up</i> |                                                                                                                                               |          | VG= 750 cSt                                                            |       |      |
| Indice di viscosità consigliato<br><i>Viscosity index suggested</i>                                            |                                                                                                                                               | VI > 100 | Temperatura di esercizio<br><i>Working temperature</i><br>-15°C +100°C |       |      |
| Grado di filtrazione<br><i>Oil filtering</i>                                                                   |                                                                                                                                               |          | > 200 bar: 10 µm<br>< 200 bar: 25 µm                                   |       |      |
| Pressione di aspirazione<br><i>Inlet pressure</i>                                                              |                                                                                                                                               |          | -0,3 ÷ 2 bar                                                           |       |      |
| Senso di rotazione<br><i>Pump rotation</i>                                                                     |                                                                                                                                               |          | Unidirezionale (DX o SX)<br><i>Unidirectional (Right or Left)</i>      |       |      |

## Dimensions in mm



| Tipo<br>pompa<br>Pump type | Rotazione / Rotation |                 | IN                        | OUT 1                     | OUT 2 | A     | B     | Peso<br>Weight | A    | B    | Peso<br>Weight |
|----------------------------|----------------------|-----------------|---------------------------|---------------------------|-------|-------|-------|----------------|------|------|----------------|
|                            | Destra / Right       | Sinistra / Left |                           |                           |       |       |       |                |      |      |                |
| NPH-17 SAE-B               | 105-035-00177        | 105-035-00186   | 3/4-16 UNF-2B<br>SAE 8    | 3/4-16 UNF-2B<br>SAE 8    |       | 150   | 101   | 12             | 5,91 | 3,98 | 26.4           |
| NPH-22 SAE-B               | 105-035-00220        | 105-035-00239   |                           |                           |       | 153.5 | 103   | 12.3           | 6.04 | 4.11 | 27.1           |
| NPH-27 SAE-B               | 105-035-00275        | 105-035-00284   | 1 1/16-12 UN-2B<br>SAE 12 |                           |       | 156   | 105.5 | 12.4           | 6.14 | 4.15 | 27.3           |
| NPH-34 SAE-B               | 105-035-00346        | 105-035-00355   |                           |                           |       | 161   | 106.5 | 12.5           | 6.34 | 4.19 | 27.5           |
| NPH-43 SAE-B               | 105-035-00435        | 105-035-00444   | 1 5/16-12 UN-2B<br>SAE 16 | 1 1/16-12 UN-2B<br>SAE 12 |       | 167   | 111.5 | 13.3           | 6.57 | 4.39 | 29.3           |
| NPH-51 SAE-B               | 105-035-00515        | 105-035-00524   |                           |                           |       | 172   | 112   | 13.5           | 6.77 | 4.41 | 29.7           |
| NPH-61 SAE-B               | 105-035-00613        | 105-035-00622   | 1 5/8-12 UN-2B<br>SAE 20  |                           |       | 178   | 118   | 14             | 7.01 | 4.65 | 30.8           |
| NPH-73 SAE-B               | 105-035-00739        | 105-035-00748   |                           |                           |       | 186   | 117   | 14.5           | 7.32 | 4.61 | 31.9           |
| NPH-82 SAE-B               | 105-035-00828        | 105-035-00837   | 1 5/8-12 UN-2B<br>SAE 20  |                           |       | 191   | 122   | 15             | 7.52 | 4.80 | 33             |
|                            |                      |                 | ISO 228                   | ISO 228                   |       |       |       |                |      |      |                |
| NPH-17 SAE-B               | 105-935-00178        | 105-935-00187   | G 1/2"                    | G 1/2"                    |       | 150   | 101   | 12             | 5,91 | 3,98 | 26.4           |
| NPH-22 SAE-B               | 105-935-00221        | 105-935-00230   |                           |                           |       | 153.5 | 103   | 12.3           | 6.04 | 4.11 | 27.1           |
| NPH-27 SAE-B               | 105-935-00276        | 105-935-00285   | G 3/4"                    |                           |       | 156   | 105.5 | 12.4           | 6.14 | 4.15 | 27.3           |
| NPH-34 SAE-B               | 105-935-00347        | 105-935-00356   |                           |                           |       | 161   | 106.5 | 12.5           | 6.34 | 4.19 | 27.5           |
| NPH-43 SAE-B               | 105-935-00436        | 105-935-00445   | G 1"                      | G 3/4"                    |       | 167   | 111.5 | 13.3           | 6.57 | 4.39 | 29.3           |
| NPH-51 SAE-B               | 105-935-00516        | 105-935-00525   |                           |                           |       | 172   | 112   | 13.5           | 6.77 | 4.41 | 29.7           |
| NPH-61 SAE-B               | 105-935-00614        | 105-935-00623   | G 1-1/4"                  |                           |       | 178   | 118   | 14             | 7.01 | 4.65 | 30.8           |
| NPH-73 SAE-B               | 105-935-00730        | 105-935-00749   |                           |                           |       | 186   | 117   | 14.5           | 7.32 | 4.61 | 31.9           |
| NPH-82 SAE-B               | 105-935-00829        | 105-935-00838   |                           |                           |       | 191   | 122   | 15             | 7.52 | 4.80 | 33             |

## CARATTERISTICHE TECNICHE DI FUNZIONAMENTO

| Tipo pompa   | Cilindrata<br><br>cm³/rev | Pressione     |               |               | Velocità<br>max.<br>continua<br><br>rpm | Velocità<br>max.<br>intermittente<br><br>rpm | Velocità<br>minima<br><br>rpm |
|--------------|---------------------------|---------------|---------------|---------------|-----------------------------------------|----------------------------------------------|-------------------------------|
|              |                           | P1<br><br>bar | P2<br><br>bar | P3<br><br>bar |                                         |                                              |                               |
| NPH-17 SAE-B | 17.04                     | 290           | 315           | 325           | 2500                                    | 3000                                         | 300                           |
| NPH-22 SAE-B | 22.15                     |               |               |               |                                         |                                              |                               |
| NPH-27 SAE-B | 26.18                     |               |               |               |                                         |                                              |                               |
| NPH-34 SAE-B | 33.88                     | 280           | 300           | 310           | 2200                                    | 2800                                         |                               |
| NPH-43 SAE-B | 43.12                     | 270           | 290           | 300           | 2000                                    | 2500                                         |                               |
| NPH-51 SAE-B | 50.82                     | 240           | 260           | 280           |                                         |                                              |                               |
| NPH-61 SAE-B | 60.06                     | 220           | 240           | 250           | 1800                                    | 2000                                         |                               |
| NPH-73 SAE-B | 72.88                     | 200           | 220           | 220           | 1600                                    | 1800                                         |                               |
| NPH-82 SAE-B | 81.08                     | 190           | 200           | 200           | 1500                                    |                                              |                               |

## TECHNICAL FEATURES

| Pump type    | Displacement<br><br>inch³/giro | Pressure      |               |               | Max.<br>continuous<br>speed<br><br>rpm | Max.<br>intermitt<br>speed<br><br>rpm | Min. speed<br><br>rpm |
|--------------|--------------------------------|---------------|---------------|---------------|----------------------------------------|---------------------------------------|-----------------------|
|              |                                | P1<br><br>psi | P2<br><br>psi | P3<br><br>psi |                                        |                                       |                       |
| NPH-17 SAE-B | 1.04                           | 4205          | 4567,5        | 4712,5        | 2500                                   | 3000                                  | 300                   |
| NPH-22 SAE-B | 1.35                           |               |               |               |                                        |                                       |                       |
| NPH-27 SAE-B | 1.60                           |               |               |               |                                        |                                       |                       |
| NPH-34 SAE-B | 2.07                           | 4060          | 4350          | 4495          | 2200                                   | 2800                                  |                       |
| NPH-43 SAE-B | 2.63                           | 3915          | 4205          | 4350          | 2000                                   | 2500                                  |                       |
| NPH-51 SAE-B | 3.06                           | 3480          | 3770          | 4060          |                                        |                                       |                       |
| NPH-61 SAE-B | 3.66                           | 3190          | 3480          | 3625          | 1800                                   | 2000                                  |                       |
| NPH-73 SAE-B | 4.45                           | 2900          | 3190          | 3190          | 1600                                   | 1800                                  |                       |
| NPH-82 SAE-B | 4.95                           | 2755          | 2900          | 2900          | 1500                                   |                                       |                       |

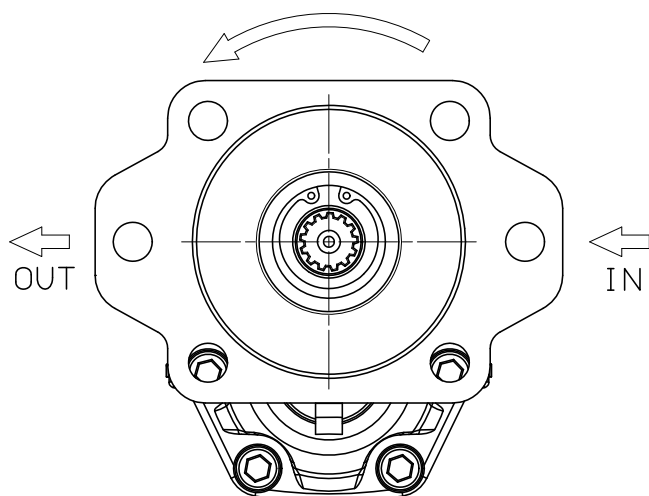
P1=Pressione max. continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure (100%)  
Max. intermittent pressure (20 sec.max.)  
Max. peak pressure (6 sec.max.)

## SENSO DI ROTAZIONE POMPA

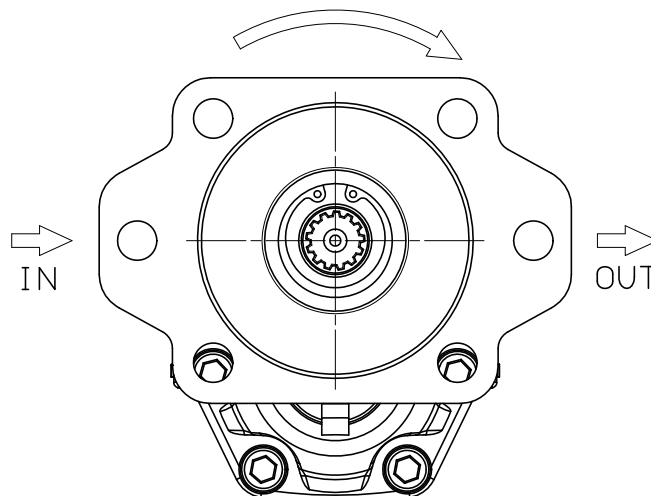
## DIRECTION OF ROTATION

**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



FRONT

**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump



FRONT