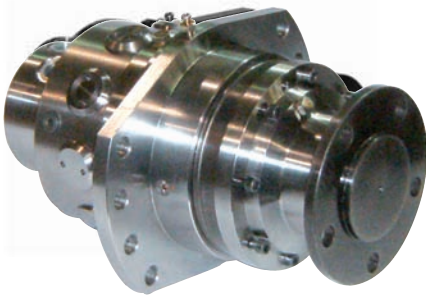


# **WHEEL MOTOR W SERIES TECHNICAL CATALOGUE**



**W 05**

## **INDEX**

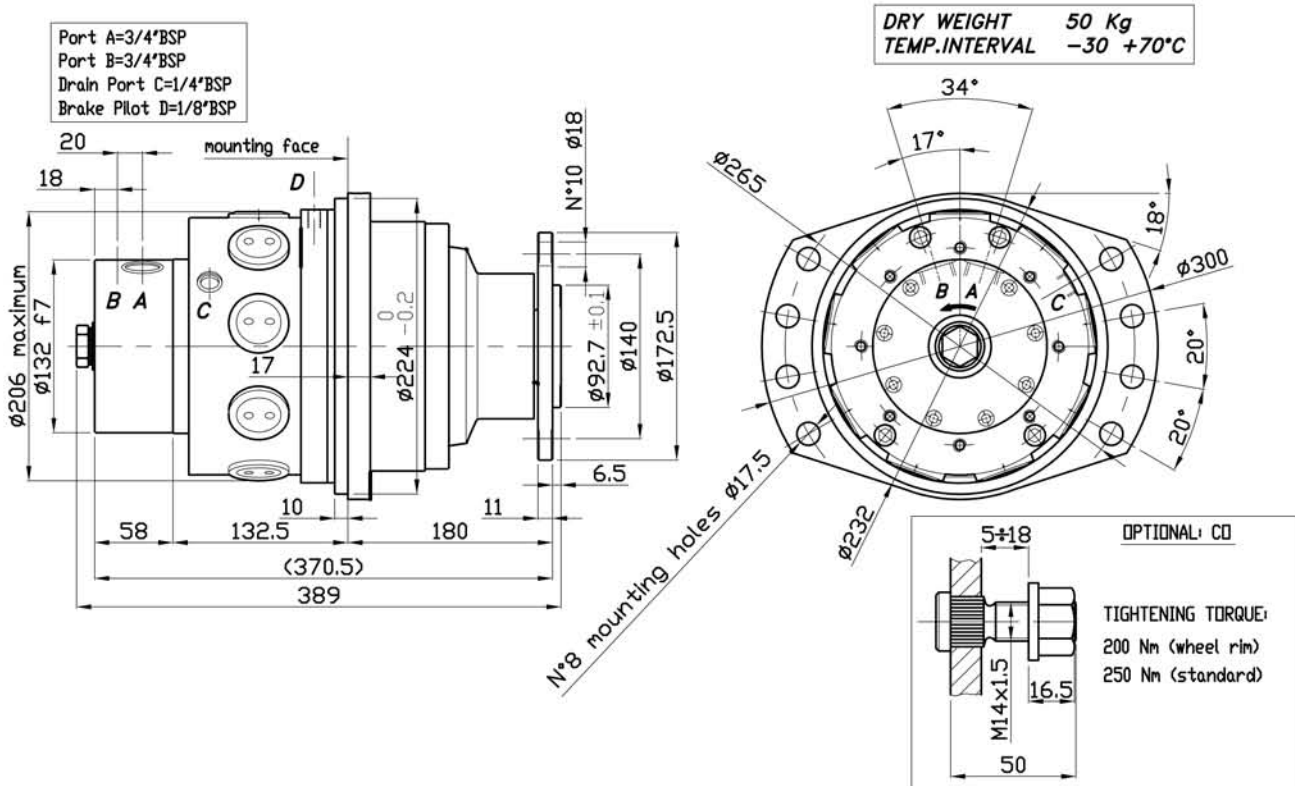
|  |             |    |
|--|-------------|----|
| COMPANY GENERAL INFORMATION - - - - -                              | <i>Pag.</i> | 1  |
| W 05 – G100 (Fixed displacement) (SIZE AND TECHNICAL DATA) - - - - | "           | 3  |
| W 05 – GD100 (Dual displacement) (SIZE) - - - - -                  | "           | 4  |
| W 05 – GD100 (Dual displacement) (TECHNICAL DATA) - - - - -        | "           | 5  |
| FREEWHEELING OPERATION - - - - -                                   | "           | 6  |
| RADIAL LOAD - - - - -  | "           | 6  |
| TACHOMETER - - - - -   | "           | 7  |
| RELIEF AND ANTICAVITATION VALVE - - - - -                          | "           | 7  |
| ORDERING INSTRUCTIONS - - - - -                                    | "           | 8  |
| HYDRAULIC MOTOR FLUIDS RECOMMENDATIONS - - - - -                   | "           | 9  |
| HYDRAULIC MOTOR INSTRUCTIONS AND ADVICES - - - - -                 | "           | 10 |
| GEAR UNIT INSTRUCTIONS AND ADVICES - - - - -                       | "           | 10 |
| HYDRAULIC MOTOR SHAFT SEAL FEATURES - - - - -                      | "           | 11 |
| GEAR UNIT SHAFT SEAL FEATURES - - - - -                            | "           | 12 |
| CONVERSIONS - - - - -  | "           | 13 |
| APPLICATION DATA SHEET - - - - -                                   | "           | 14 |
| CONTACT US - - - - -   | "           | 15 |



# SIZE

W 05 – GD100

DUAL DISPLACEMENT



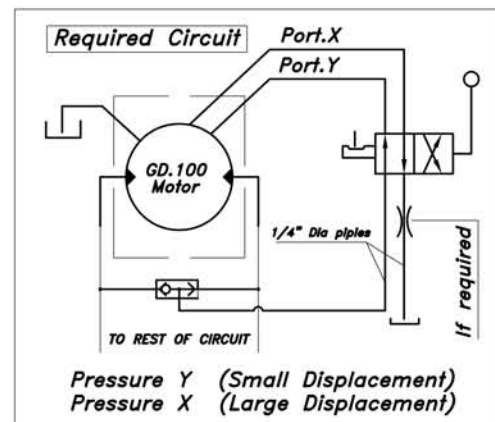
W 05 – GD100

DUAL DISPLACEMENT

**NOTES**

*Displacement change system is realized HYDRAULICALLY & requires system pressure for operation*  
*One port must be presurised continuously to maintain given capacity, other port is connected to drain*

**Displacement change required Circuit**



(\* ) for the hydraulic circuit, please refer to freewheeling application (pag. 6)

# W05 - GD 100

# TECHNICAL DATA

The W05 - GD100 it is a dual displacement wheel motor. The user can choose between two displacements. In the bottom of the page the technical wheel motor technical characteristics are shown, both for the maximum and minimum motor displacement. For closed loop circuit applications please contact ItalgrouP technical department.

## Displacement change during the motor functioning

The user can choose between two displacements, acting on the hydraulic circuit. When the X port is at high pressure (system pressure) and the Y port is at low pressure (drain pressure), the motor functions at the maximum displacement, otherwise, when the Y port is at high pressure (system pressure) and the X port is at low pressure (drain pressure), the motor functions at the minimum displacement. When the X and Y ports are at low pressure the motor automatically switch in the maximum displacement.

### Maximum displacement technical data

| Gear code | Gear ratio | Motor displacement<br>cc/Rev | Output torque |          | Working pressure |                | Total displacement<br>cc/Rev | Max output speed<br>Rpm | Max freewheeling speed (*)<br>Rpm | Max power |    |
|-----------|------------|------------------------------|---------------|----------|------------------|----------------|------------------------------|-------------------------|-----------------------------------|-----------|----|
|           |            |                              | Nm (cont)     | Nm (max) | continuos<br>bar | maximum<br>bar |                              |                         |                                   | kW        | HP |
| 1         | 1:3.55     | 101.6                        | 1400          | 1970     | 250              | 350            | 361                          | 620                     | 560                               | 60        | 82 |
| 2         | 1:4.28     | 101.6                        | 1680          | 2350     | 250              | 350            | 432                          | 520                     | 470                               | 60        | 82 |
| 3         | 1:5.6      | 101.6                        | 2250          | 3100     | 250              | 350            | 565                          | 390                     | 360                               | 60        | 82 |
| 4         | 1:6.75     | 101.6                        | 2700          | 3800     | 250              | 350            | 681                          | 325                     | 300                               | 60        | 82 |

### Minimum displacement technical data

| Gear code | Gear ratio | Motor displacement<br>cc/Rev | Output torque |          | Working pressure |                | Total displacement<br>cc/Rev | Max output speed<br>Rpm | Max freewheeling speed (*)<br>Rpm | Max power |    |
|-----------|------------|------------------------------|---------------|----------|------------------|----------------|------------------------------|-------------------------|-----------------------------------|-----------|----|
|           |            |                              | Nm (cont)     | Nm (max) | continuos<br>bar | maximum<br>bar |                              |                         |                                   | kW        | HP |
| 1         | 1:3.55     | 50.9                         | 700           | 985      | 250              | 350            | 180                          | 670                     | 560                               | 23        | 32 |
| 2         | 1:4.28     | 50.9                         | 840           | 1175     | 250              | 350            | 216                          | 560                     | 470                               | 23        | 32 |
| 3         | 1:5.6      | 50.9                         | 970           | 1410     | 220              | 320            | 283                          | 430                     | 360                               | 23        | 32 |
| 4         | 1:6.75     | 50.9                         | 1060          | 1700     | 200              | 320            | 341                          | 355                     | 300                               | 23        | 32 |

(\*) for the hydraulic circuit, please refer to page 6 (Freewheeling operation).

## Brake technical data

| Oil quantity gear unit | [l]  |
|------------------------|------|
| NB                     | 0.32 |
| PB                     | 0.32 |
| WB                     | 0.8  |

| Gear code | max braking torque [Nm] | release pressure [bar] | max pressure [bar] |
|-----------|-------------------------|------------------------|--------------------|
| 1         | 1850                    | 13                     | 350                |
| 2         | 2250                    | 13                     | 350                |
| 3         | 2900                    | 13                     | 350                |
| 4         | 3500                    | 13                     | 350                |

#### NOTES

*Displacement change system is realized HYDRAULICALLY & requires system pressure for operation*  
*One port must be pressurised continuously to maintain given capacity, other port is connected to drain*

#### Displacement change required Circuit

