

# POMPE A PISTONI AD ASSE INCLINATO BENT AXIS PISTON PUMPS

**CODICE FAMIGLIA**  
FAMILY CODE

**614-080**

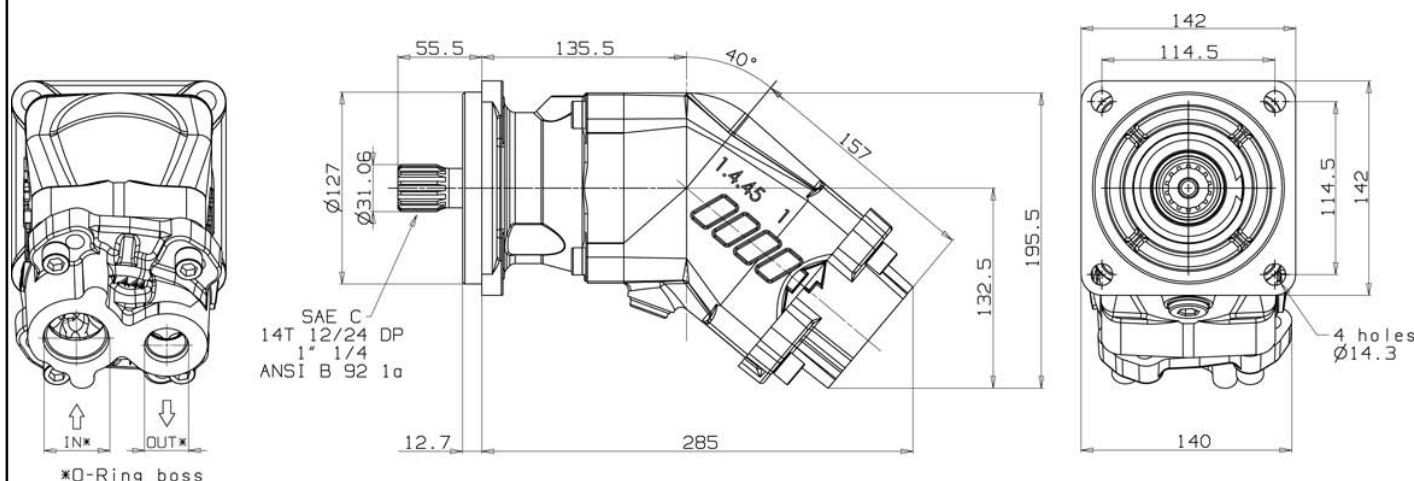
**"HDS"**  
**"MDS"**

Flangia/Flange  
Albero/Shaft  
Cilin./Displ.

**SAE-C**  
**14T 12/24**  
**47-55-64-80**



|                                                                                                                                                                                                                                                                           |                                                                                                                                  |          |                                                            |         |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------|---------|------|
| Fluido idraulico<br>Fluid                                                                                                                                                                                                                                                 | Minerale o sintetico compatibile con guarnizioni:<br>Mineral or synthetic compatible with the following seals:<br>FKM, FPM, HNBR |          |                                                            |         |      |
| Viscosità cinematica consigliata<br>Kinematic viscosity suggested                                                                                                                                                                                                         | T media ambiente (°C)<br>Average ambient temp. (°C)                                                                              | < -40    | -40 ÷ 10                                                   | 10 ÷ 35 | > 35 |
|                                                                                                                                                                                                                                                                           | VG (cSt = mm²/s)                                                                                                                 | 16       | 22                                                         | 32      | 46   |
| Viscosità cinematica ottimale di esercizio<br>Optimale kinematic viscosity                                                                                                                                                                                                |                                                                                                                                  |          | VG= 10 cSt ÷ 100 cSt                                       |         |      |
| Viscosità cinematica max consentita all'avviamento<br>Max kinematic viscosity suggested at the start-up                                                                                                                                                                   |                                                                                                                                  |          | VG= 750 cSt                                                |         |      |
| Indice di viscosità consigliato<br>Viscosity index suggested                                                                                                                                                                                                              |                                                                                                                                  | VI > 100 | Temperatura di esercizio<br>Working temperature            |         |      |
|                                                                                                                                                                                                                                                                           |                                                                                                                                  |          | -15°C ÷ 140°C                                              |         |      |
| Grado di filtrazione<br>Oil filtering                                                                                                                                                                                                                                     |                                                                                                                                  |          | > 200 bar: 10 µm<br>< 200 bar: 25 µm                       |         |      |
| Pres. di aspirazione<br>Inlet pressure                                                                                                                                                                                                                                    |                                                                                                                                  |          | 0,85 ÷ 2 bar<br>assoluti/absolut                           |         |      |
| Senso di rotazione<br>Pump rotation                                                                                                                                                                                                                                       |                                                                                                                                  |          | Unidirezionale (Dx o Sx)<br>Unidirectional (Right or Left) |         |      |
| Verificare che la pompa sia posizionata almeno 100 mm sotto il livello minimo del serbatoio olio. Prima di avviare la pompa effettuare spurgo aria.<br>Verify that pump is, at least, 100 mm under the minimum level of the tank. Before starting the pump bleed the air. |                                                                                                                                  |          |                                                            |         |      |



| Tipo pompa<br>Pump type | Rotazione<br>Rotation |                      | IN                       | OUT                       |
|-------------------------|-----------------------|----------------------|--------------------------|---------------------------|
|                         | Destra<br>Right       | Sinistra<br>Left     |                          |                           |
| <b>HDS SAE-C 47</b>     | <b>614-080-50473</b>  | <b>614-080-50479</b> | 1 5/8-12 UN-2B<br>SAE 20 | 1 1/16-12 UN-2B<br>SAE 12 |
| <b>HDS SAE-C 55</b>     | <b>614-080-50553</b>  | <b>614-080-50559</b> |                          |                           |
| <b>HDS SAE-C 64</b>     | <b>614-080-50643</b>  | <b>614-080-50649</b> |                          |                           |
| <b>MDS SAE-C 80</b>     | <b>614-080-50803</b>  | <b>614-080-50809</b> |                          |                           |
|                         |                       |                      | ISO 228                  | ISO 228                   |
| <b>HDS SAE-C 47</b>     | 614-080-10473         | 614-080-10479        | G 1 1/4"                 | G 3/4"                    |
| <b>HDS SAE-C 55</b>     | 614-080-10553         | 614-080-10559        |                          |                           |
| <b>HDS SAE-C 64</b>     | 614-080-10643         | 614-080-10649        |                          |                           |
| <b>MDS SAE-C 80</b>     | 614-080-10803         | 614-080-10809        |                          |                           |

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## CARATTERISTICHE TECNICHE DI FUNZIONAMENTO

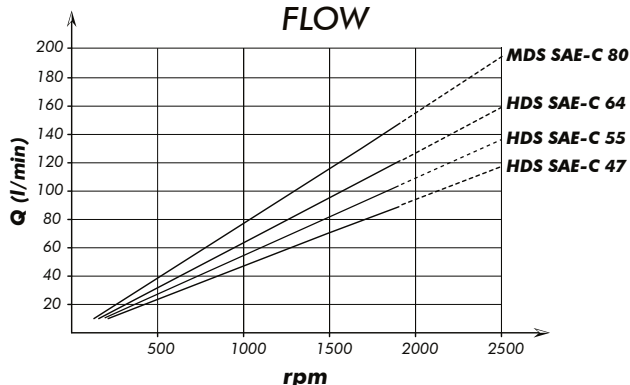
### TECHNICAL FEATURES

| Tipo pompa<br>Pump type | Cilindrata<br>Displacement<br>cm <sup>3</sup> /rev | Pressione<br>Pressure |           | Velocità / Speed |           |           | Velocità min.<br>Min. speed<br>rpm | Peso<br>Weight<br>kg |
|-------------------------|----------------------------------------------------|-----------------------|-----------|------------------|-----------|-----------|------------------------------------|----------------------|
|                         |                                                    | P1<br>bar             | P3<br>bar | V0<br>rpm        | V1<br>rpm | V2<br>rpm |                                    |                      |
| HDS-47                  | 47.13                                              | 350                   | 400       | 2700             | 1900      | 2500      | 300                                | 14                   |
| HDS-55                  | 56.70                                              |                       |           |                  |           |           |                                    |                      |
| HDS-64                  | 63.56                                              |                       |           |                  |           |           |                                    |                      |
| MDS-80                  | 77.25                                              | 250                   | 300       | 2300             | 1800      | 2100      |                                    |                      |

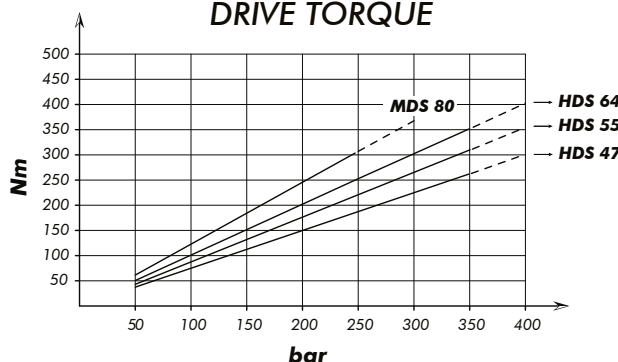
P1=Pressione massima continua Max. continuous pressure (100%)  
P3=Pressione massima di punta Max. peak pressure (6 sec.max)

V0=Massima continua vuoto Max. continuous speed without load  
V1=Massima continua Max. continuous speed  
V2=Massima intermittente Max. intermittent speed

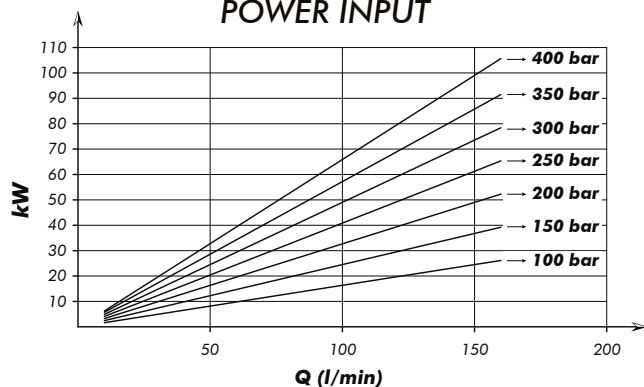
### PORTATA FLOW



### COPPIA ASSORBITA DRIVE TORQUE



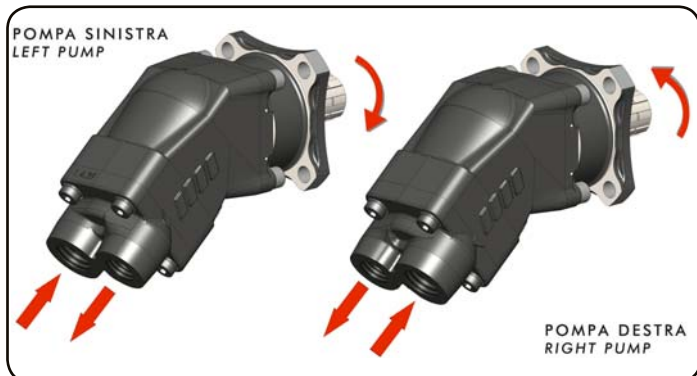
### POTENZA ASSORBITA POWER INPUT



### SCELTA DEL TUBO DI ASPIRAZIONE HOW TO CHOOSE THE SUCTION PIPE SIZE

| Q Portata<br>Flow<br>l/min | Ø interno min. tubo<br>Min pipe diam.<br>mm inch |         | Velocità flusso<br>Flow speed<br>(m/s) |
|----------------------------|--------------------------------------------------|---------|----------------------------------------|
| 20                         | 25                                               | 1"      | 0,68                                   |
| 30                         | 32                                               | 1" 1/4  | 0,62                                   |
| 40                         | 32                                               |         | 0,83                                   |
| 50                         | 38                                               | 1" 1/2  | 0,74                                   |
| 60                         | 38                                               |         | 0,88                                   |
| 70                         | 40                                               | 1" 9/16 | 0,93                                   |
| 80                         | 45                                               | 1" 3/4  | 0,84                                   |
| 90                         | 45                                               |         | 0,94                                   |
| 100                        | 50                                               | 2"      | 0,85                                   |
| 110                        | 50                                               |         | 0,93                                   |
| 120                        | 60                                               | 2" 3/8  | 0,71                                   |
| 130                        | 60                                               |         | 0,77                                   |
| 140                        | 60                                               |         | 0,83                                   |
| 150                        | 60                                               |         | 0,88                                   |
| 160                        | 63                                               | 2" 1/2  | 0,86                                   |
| 170                        | 63                                               |         | 0,91                                   |
| 180                        | 63                                               |         | 0,96                                   |

Per garantire corrette condizioni di aspirazione la velocità del flusso non deve superare 1 m/sec.  
To ensure the proper suction pipe size the flow speed should not exceed 1m/sec.



**Kit guarnizioni / Seal Kit**  
108-903-00223