

# HFR

## Caratteristiche Tecniche

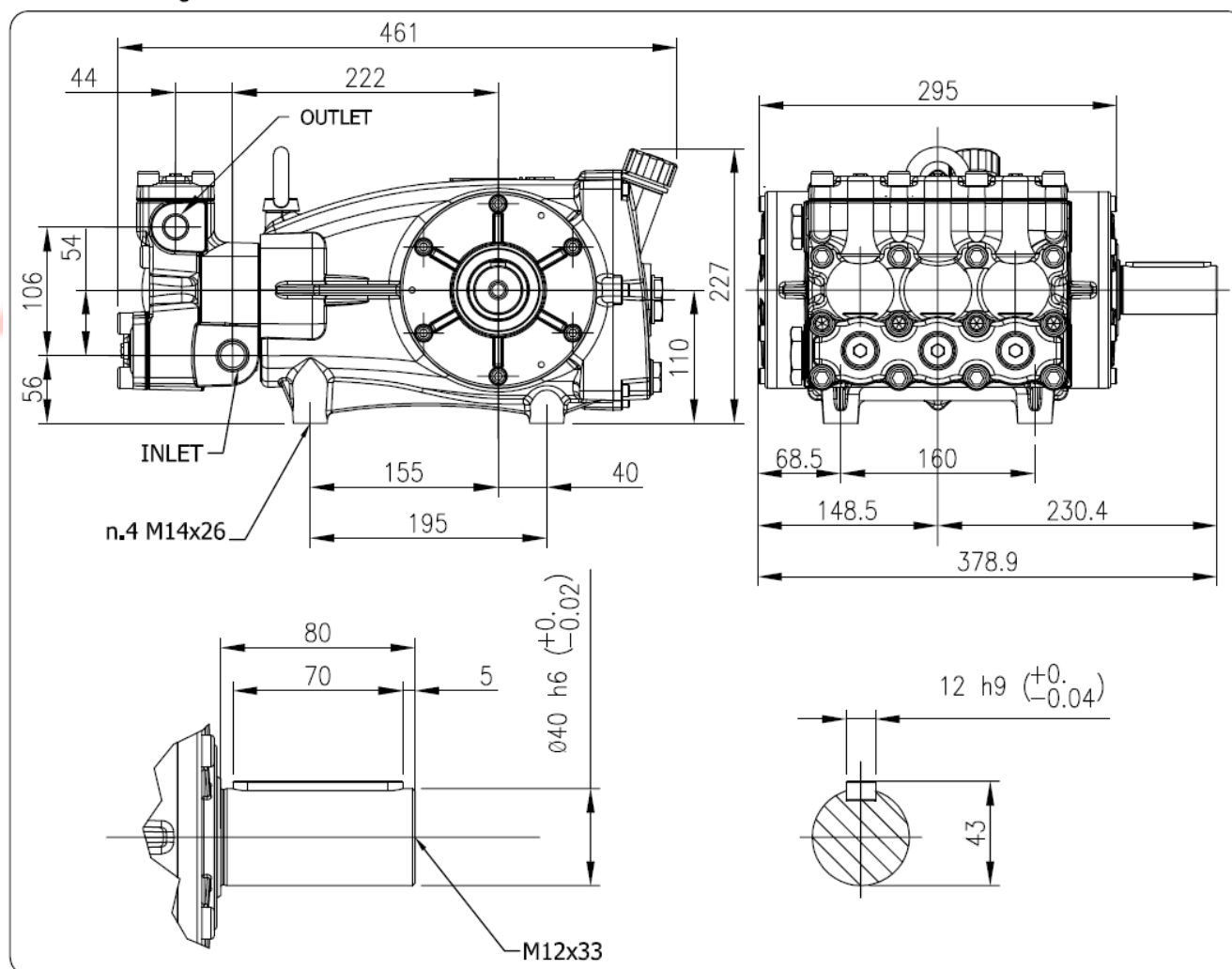
## Albero maschio – Solid shaft

## Technical Characteristics

| Pump<br>Pompa | Pressure<br>Pressione |      | Volume<br>Portata |       | RPM<br>giri/min | Power<br>Potenza |       |
|---------------|-----------------------|------|-------------------|-------|-----------------|------------------|-------|
|               |                       |      | l/min             | GPM   |                 | HP               | kW    |
|               | bar                   | PSI  | 50 Hz             | 50 Hz | 50 Hz           | 50 Hz            | 50 Hz |
| HFR40S        | 280                   | 4060 | 40                | 10.6  | 1000            | 28.6             | 21.1  |
| HFR60S        | 280                   | 4060 | 60                | 15.9  | 1000            | 43.0             | 31.6  |
| HFR80S        | 150                   | 2175 | 80                | 21.1  | 1000            | 30.5             | 22.4  |
| HFR105S       | 150                   | 2175 | 105               | 27.7  | 1000            | 40.3             | 30.0  |
| HFR120S       | 150                   | 2175 | 120               | 31.7  | 1000            | 46.1             | 33.8  |
| HFR40F        | 280                   | 4060 | 40                | 10.6  | 1450            | 28.7             | 21.1  |
| HFR60F        | 280                   | 4060 | 60                | 15.9  | 1450            | 43.0             | 31.6  |
| HFR80F        | 280                   | 4060 | 80                | 21.1  | 1450            | 57.5             | 42.1  |

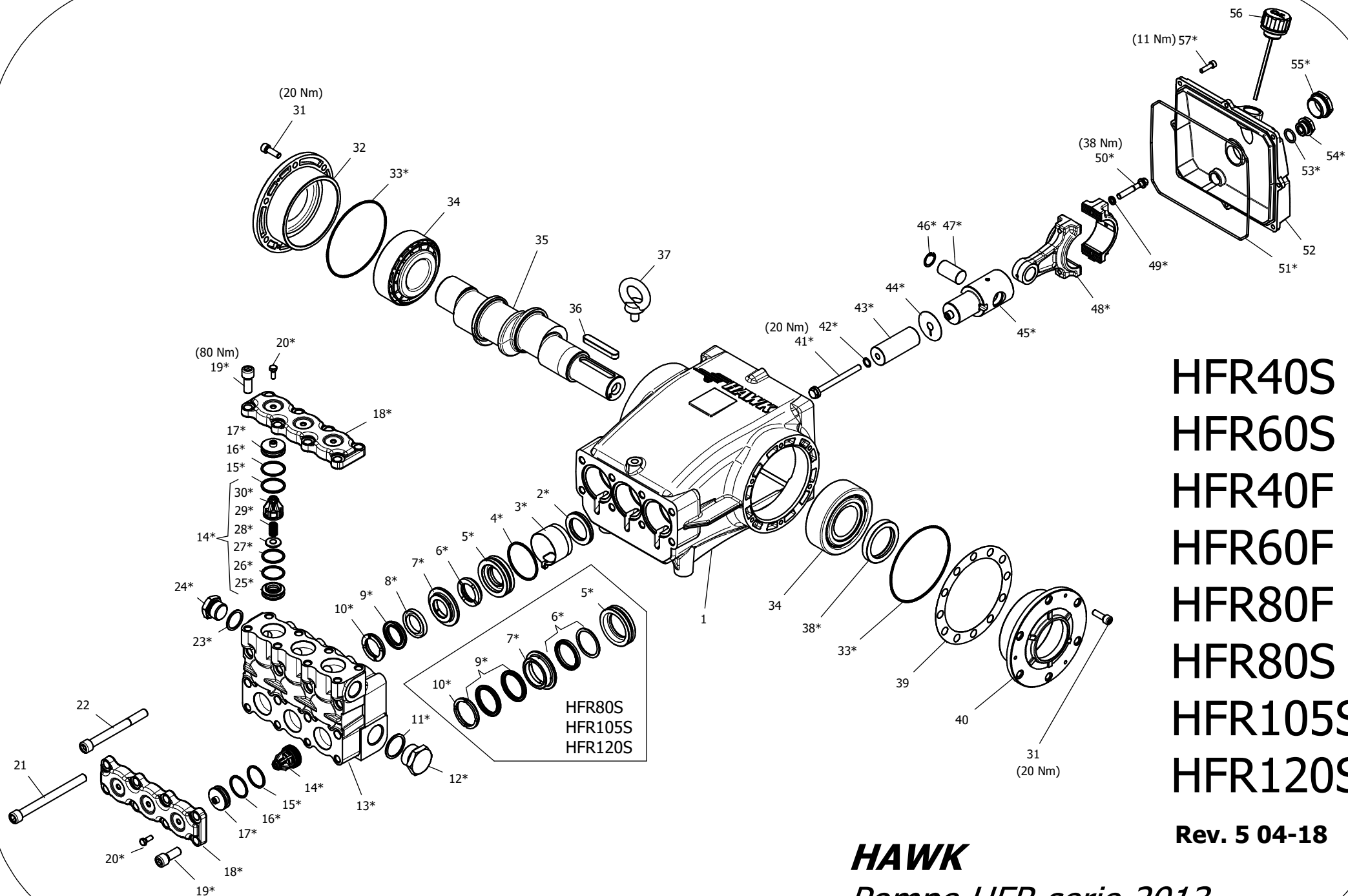
### Dimensioni d'ingombro

### Overall dimensions



**Lubrificazione: Olio SAE 10W40**  
**Capacità: 3.5 Litri**  
**Peso pompa: 49 kg**

**Lubrication: SAE 10W40 Oil**  
**Capacity: 3.5 Litres**  
**Weight: 49 kg**



HFR40S  
HFR60S  
HFR40F  
HFR60F  
HFR80F  
HFR80S  
HFR105S  
HFR120S

Rev. 5 04-18

**HAWK**

*Pompe HFR serie 2013*

*HFR pumps 2013 series*

## HFR 2013 SERIES

### ORDINARY MAINTENANCE KIT / KIT MANUTENZIONE ORDINARIA

| KIT | Item Pos.                            | Part Number Codice | Description              | Descrizione             | Q.TY by Pump<br>Q.TA per Pompa | HFR40S | HFR60S | HFR40F | HFR60F | HFR80F | HFR80S | HFR105S | HFR120S |
|-----|--------------------------------------|--------------------|--------------------------|-------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|
| A   | 3x (4- 6- 8- 9 10)                   | 1.099-807.0        | PLUNGER SEALS DIA. 30 mm | GUARNIZIONI PISTONE Ø30 | 1                              | •      | •      | •      | •      | •      |        |         |         |
|     | 3x (4- 6- 9- 10)                     | 1.099-809.0        | PLUNGER SEALS DIA. 40 mm | GUARNIZIONI PISTONE Ø40 |                                |        |        |        |        |        | •      | •       | •       |
| B   | 14- 15 (25- 26- 27<br>28- 29- 30) 16 | 1.905-704.0        | COMPLETE VALVE           | VALVOLA COMPLETA        | 1                              | •      | •      | •      | •      | •      |        |         |         |
|     |                                      | 1.905-705.0        | COMPLETE VALVE           | VALVOLA COMPLETA        |                                |        |        |        |        |        | •      | •       | •       |

### EXTRAORDINARY MAINTENANCE KIT / KIT MANUTENZIONE STRAORDINARIA

| KIT | Item Pos.                                                         | Part Number Codice | Description                        | Descrizione                            | Q.TY by Pump<br>Q.TA per Pompa | HFR40S | HFR60S | HFR40F | HFR60F | HFR80F | HFR80S | HFR105S | HFR120S |
|-----|-------------------------------------------------------------------|--------------------|------------------------------------|----------------------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|
| C   | 4- 5- 6- 7- 8- 9- 10                                              | 1.905-702.0        | COMPLETE SEALS PACKING DIA. 30 mm  | PACCO COMPLETO GUARNIZIONI PISTONE Ø30 | 1                              | •      | •      | •      | •      | •      |        |         |         |
|     | 4- 5- 6- 7- 9- 10                                                 | 1.905-703.0        | COMPLETE SEALS PACKING DIA. 40 mm  | PACCO COMPLETO GUARNIZIONI PISTONE Ø40 |                                |        |        |        |        |        | •      | •       | •       |
| D   | 41- 42- 43- 44                                                    | 1.099-813.0        | PLUNGER DIA. 30 mm                 | PISTONE Ø30                            | 3                              | •      | •      | •      | •      | •      |        |         |         |
|     |                                                                   | 1.099-814.0        | PLUNGER DIA. 40 mm                 | PISTONE Ø40                            |                                |        |        |        |        |        | •      | •       | •       |
| E   | 3x (2- 3)                                                         | 1.099-817.0        | PLUNGER OIL SEALS                  | ANELLI TENUTA OLIO ASTA                | 1                              | •      | •      | •      | •      | •      | •      | •       | •       |
| F   | 33- 38- 53- 54- 55- 56                                            | 1.905-706.0        | KIT CRANKCASE SEALS                | KIT TENUTE CARTER                      | 1                              | •      | •      | •      | •      | •      | •      | •       | •       |
| G   | 4- 5- 6- 7- 8- 9- 10<br>11- 12- 13- 14 (25<br>26- 27- 28- 29- 30) | 1.099-818.0        | COMPLETE MANIFOLD 30               | TESTATA COMPLETA Ø30                   | 1                              | •      | •      | •      | •      | •      |        |         |         |
|     | 15- 16- 17- 18- 19-<br>20- 21- 20- 23- 24                         | 1.099-819.0        | COMPLETE MANIFOLD 40               | TESTATA COMPLETA Ø40                   |                                |        |        |        |        |        | •      | •       | •       |
| H   | 41- 42- 44- 45- 46-<br>47 48- 49- 50                              | 1.905-707.0        | CONNECTING ROD<br>PLUNGER ROD ASSY | PREMONTATO ASTA-BIELLA<br>PISTONE      | 3                              | •      | •      | •      | •      | •      | •      | •       | •       |

“Q.TY by Pump” => Necessary quantity to repair one pump  
 “Q.TA’ per Pompa” => Quantità necessaria per riparare una pompa

## TOOL KIT

| Part Number<br>Codice | Description | Descrizione | Q.TY by<br>Pump<br>Q.TA<br>per<br>Pompa | HFR40S | HFR60S | HFR40F | HFR60F | HFR80F | HFR80S | HFR105S | HFR120S |
|-----------------------|-------------|-------------|-----------------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|
| 1.904-204.0           | TOOL-KIT    | TOOL-KIT    | 1                                       | •      | •      | •      | •      | •      | •      | •       | •       |

### IMPORTANT

### IMPORTANTE

\* Part available **ONLY** in kit  
Disponibile **SOLO** in kit

(...) Parts pre-assembled  
Parti pre-assemblate

## PARTS LIST LISTA PARTI

| Item Pos | Part Number Codice | Description          | Descrizione                  | KIT   | Q.TY<br>Q.TÀ | HFR40S | HFR60S | HFR40F | HFR60F | HFR80F | HFR80S | HFR105S | HFR120S |
|----------|--------------------|----------------------|------------------------------|-------|--------------|--------|--------|--------|--------|--------|--------|---------|---------|
| 1        | 9.851-902.0        | CRANKCASE            | CARTER                       |       | 1            |        |        |        |        |        |        |         |         |
| 2*       |                    | PLUNGER OIL SEAL     | ANELLO RADIALE               | E     | 3            | •      | •      | •      | •      | •      | •      | •       | •       |
| 3*       |                    | PLASTIC BUSHING      | BOCCOLA CORTECO ASTE         | E     | 3            |        |        |        |        |        |        |         |         |
| 4*       |                    | "O" RING Ø2.62X56,82 | "O" RING Ø2.62X56,82         | A-C-G | 3            |        |        |        |        |        |        |         |         |
| 5*       |                    | PRESSURE RING 30MM   | PRESSORE "U" Ø30             | C-G   | 3            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | PRESSURE RING 40MM   | PRESSORE "U" Ø40             |       |              |        |        |        |        |        | •      | •       | •       |
| 6*       |                    | "VB" SEAL, Ø30x45    | ANELLO TENUTA VB Ø30x45      | A-C-G | 3            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | "VB" SEAL, Ø40 LP    | ANELLO TENUTA VB Ø40 LP      |       |              |        |        |        |        |        | •      | •       | •       |
| 7*       |                    | INTERMED. RING 30MM  | DIFFUSORE INTER. Ø30         | C-G   | 3            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | INTERMED. RING 40MM  | DIFFUSORE INTER. Ø40         |       |              |        |        |        |        |        | •      | •       | •       |
| 8*       |                    | BACK RING Ø30        | ANELLO ANTIESTRUSIONE Ø30    | A-C-G | 3            | •      | •      | •      | •      | •      |        |         |         |
| 9*       |                    | "V" SEAL, Ø30X45     | ANELLO TENUTA "V" Ø30X45     | A-C-G | 3            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | "V" SEAL, Ø40X50X5,5 | ANELLO TENUTA "V" Ø40X50X5,5 | A-C-G | 6            |        |        |        |        |        | •      | •       | •       |
| 10*      |                    | SUPPORT RING Ø30     | DIFFUSORE "V" Ø30            | C-G   | 3            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | SUPPORT RING Ø40     | DIFFUSORE "V" Ø40            | C-G   |              |        |        |        |        |        | •      | •       | •       |
| 11*      |                    | COPPER WASHER        | GUARNIZIONE RAME G1          | G     | 1            |        |        |        |        |        |        |         |         |
|          |                    | BONDED SEAL 1" ¼ NBR | BONDED SEAL 1" ¼ NBR         | G     |              | •      | •      | •      | •      | •      | •      | •       | •       |
| 12*      |                    | BRASS PLUG G1"       | TAPPO G1" OTTONE             | G     | 1            |        |        |        |        |        |        |         |         |
|          |                    | BRASS PLUG G1" 1/4   | TAPPO G1" ¼ OTTONE           | G     |              |        |        |        |        |        |        |         |         |
| 13*      |                    | MANIFOLD HOUSING Ø30 | TESTATA Ø30                  | G     | 1            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | MANIFOLD HOUSING Ø40 | TESTATA Ø40                  |       |              |        |        |        |        |        | •      | •       | •       |
| 14*      |                    | VALVE ASSEMBLY       | VALVOLA PREMONTATA           | B-G   | 6            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | VALVE ASSEMBLY       | VALVOLA PREMONTATA           |       |              |        |        |        |        |        | •      | •       | •       |
| 15*      |                    | "O" RING Ø2.62X31,42 | "O" RING Ø2.62X31,42         | B-G   | 6            |        |        |        |        |        |        |         |         |
| 16*      |                    | BACK RING            | ANELLO ANTIESTRUSIONE        | B-G   | 6            |        |        |        |        |        |        |         |         |
| 17*      |                    | VALVE PLUG           | TAPPO VALVOLA                | G     | 6            |        |        |        |        |        |        |         |         |
| 18*      |                    | VALVES COVER         | COPERCHIO VAM                | G     | 2            |        |        |        |        |        |        |         |         |
| 19*      |                    | VALVE COVER SCREW    | VITE TCEI M12X30 UNI 5931    | G     | 12           | •      | •      | •      | •      | •      | •      | •       | •       |
| 20*      |                    | VALVE PLUG SCREW     | VITE TE M6X16 UNI 5739       | G     | 6            |        |        |        |        |        |        |         |         |
| 21       | 9.851-471.0        | MANIFOLD STUD BOLT   | VITE TCEI M12X140 UNI 5931   |       | 4            |        |        |        |        |        |        |         |         |
| 22       | 9.851-472.0        | MANIFOLD STUD BOLT   | VITE TCEI M12X120 UNI 5931   |       | 4            |        |        |        |        |        |        |         |         |
| 23*      |                    | COPPER WASHER        | GUARNIZIONE RAME G 3/4       | G     | 1            |        |        |        |        |        |        |         |         |
| 24*      |                    | INOX PLUG G3/4       | TAPPO G3/4 INOX              | G     | 1            |        |        |        |        |        |        |         |         |
| 25*      |                    | VALVE SEAT           | SEDE VALVOLA                 | B-G   | 6            | •      | •      | •      | •      | •      |        |         |         |
|          |                    | VALVE SEAT           | SEDE VALVOLA                 | B-G   | 6            |        |        |        |        |        | •      | •       | •       |
| 26*      |                    | BACK RING            | ANELLO ANTIESTRUSORE         | B-G   | 6            |        |        |        |        |        |        |         |         |
| 27*      |                    | "O" RING Ø2.62X28.25 | "O" RING Ø2.62X28.25         | B-G   | 6            | •      | •      | •      | •      | •      | •      | •       | •       |
| 28*      |                    | VALVE PLATE          | PIATTELLO VALVOLA            | B-G   | 6            |        |        |        |        |        |        |         |         |
| 29*      |                    | VALVE SPRING         | MOLLA VALVOLA                | B-G   | 6            |        |        |        |        |        |        |         |         |

| Item Pos | Part Number Codice | Description              | Descrizione                   | KIT | Q.TY Q.TÀ | HFR40S | HFR60S | HFR40F | HFR60F | HFR80F | HFR80S | HFR105S | HFR120S |
|----------|--------------------|--------------------------|-------------------------------|-----|-----------|--------|--------|--------|--------|--------|--------|---------|---------|
| 30*      |                    | VALVE CAGE               | GABBIA VALVOLA                | B-G | 6         |        |        |        |        |        |        |         |         |
| 31       | 9.851-468.0        | BEARING HOUSING SCREW    | VITE TCEI M8X25 UNI 5931      |     | 12        |        |        |        |        |        |        |         |         |
| 32       | 9.850-646.0        | CLOSED BEARING SCREW     | FLANGIA CHIUSA                |     | 1         | •      | •      | •      | •      | •      | •      | •       | •       |
| 33*      |                    | "O" RING Ø2.62X120.32    | "O" RING Ø2.62X120.32         | F   | 2         |        |        |        |        |        |        |         |         |
| 34       | 9.850-353.0        | ROLLER BEARING           | CUSCINETTO 32310 RULLI CONICI |     | 2         |        |        |        |        |        |        |         |         |
| 35       | 9.850-181.0        | SINGLE-ENDED CRANCKSHAFT | ALBERO SINGOLA P.D.F          |     | 1         | •      |        |        |        |        |        |         |         |
|          | 9.850-182.0        | " " "                    | " " "                         |     | 1         |        | •      |        |        |        |        |         |         |
|          | 9.850-183.0        | " " "                    | " " "                         |     | 1         |        |        | •      |        |        |        |         |         |
|          | 9.850-184.0        | " " "                    | " " "                         |     | 1         |        |        |        | •      |        | •      |         |         |
|          | 9.850-185.0        | " " "                    | " " "                         |     | 1         |        |        |        |        | •      |        | •       |         |
|          | 9.850-186.0        | " " "                    | " " "                         |     | 1         |        |        |        |        |        |        |         | •       |
| 36       | 9.850-449.0        | CRANKSHAFT KET           | CHIAVETTA                     |     | 1         |        |        |        |        |        |        |         |         |
| 37       | 9.851-454.0        | EYEBOLT                  | GOLFARE M12                   |     | 1         |        |        |        |        |        |        |         |         |
| 38*      |                    | CRANKSHAFT SEAL          | ANELLO RADIALE                | F   | 1         |        |        |        |        |        |        |         |         |
| 39       | 9.850-549.0        | SHIM                     | DISTANZIALE                   |     | 1         | •      | •      | •      | •      | •      | •      | •       | •       |
| 40       | 9.850-645.0        | BEARING HOUSING          | FLANGIA APERTA                |     | 1         |        |        |        |        |        |        |         |         |
| 41*      |                    | PLUNGER BOLT             | VITE PISTONE                  | D-H | 3         |        |        |        |        |        |        |         |         |
| 42*      |                    | "O" RING Ø1.78X11.11     | "O" RING Ø1.78X11.11          | D-H | 3         |        |        |        |        |        |        |         |         |
| 43*      |                    | PLUNGER DIA. 30          | PISTONE Ø30                   | D   | 3         | •      | •      | •      | •      | •      |        |         |         |
|          |                    | PLUNGER DIA. 40          | PISTONE Ø40                   | D   |           |        |        |        |        |        | •      | •       | •       |
| 44*      |                    | COPPER SPACER            | ROSETTA RAME PISTONE          | D   | 3         |        |        |        |        |        |        |         |         |
| 45*      |                    | PLUNGER ROD              | ASTA PISTONE                  | H   | 3         |        |        |        |        |        |        |         |         |
| 46*      |                    | SNAP RING                | ANELLO Ø22                    | H   | 6         |        |        |        |        |        |        |         |         |
| 47*      |                    | CONNECTING ROD PIN       | SPINOTTO                      | H   | 3         |        |        |        |        |        |        |         |         |
| 48*      |                    | CONNECTING ROD           | BIELLA                        | H   | 3         |        |        |        |        |        |        |         |         |
| 49*      |                    | SPRING WASHER            | ROSETTA ELASTICA Ø8           | H   | 6         |        |        |        |        |        |        |         |         |
| 50*      |                    | CONNECTING ROD SCREW     | VITE BIELLA                   | H   | 6         | •      | •      | •      | •      | •      | •      | •       | •       |
| 51*      |                    | "O" RING Ø2.62X209.23    | "O" RING Ø2.62X209.23         | F   | 1         |        |        |        |        |        |        |         |         |
| 52       | 9.850-386.0        | CRANKCASE COVER          | COPERCHIO CARTER              |     | 1         |        |        |        |        |        |        |         |         |
| 53*      |                    | "O" RING Ø2.62X17.13     | "O" RING Ø2.62X17.13          | F   | 1         |        |        |        |        |        |        |         |         |
| 54*      |                    | BRASS PLUG G 1/2         | TAPPO OTTONE G 1/2            | F   | 1         |        |        |        |        |        |        |         |         |
| 55*      |                    | SIGHT GLASS, G 1"        | SPIA LIVELLO OLIO G1"         | F   | 1         |        |        |        |        |        |        |         |         |
| 56*      |                    | OIL DIP STICK G ¾        | TAPPO SFIATO OLIO G 3/4       | F   | 1         |        |        |        |        |        |        |         |         |
| 57       | 9.851-480.0        | COVER SCREW              | VITE COPERCHIO                |     | 5         |        |        |        |        |        |        |         |         |