

WS102



INFORMAZIONI TECNICHE - TECHNICAL INFORMATION

Portata (L/min)	Flow (L/min)	21
Portata (US Gpm)	Flow (US Gpm)	5,55
Regime di rotazione (rpm)	Rotation regime (rpm)	1450
Pressione (MPa)	Pressure (MPa)	10
Pressione (bar)	Pressure (bar)	100
Pressione (psi)	Pressure (psi)	1450
Potenza (hp)	Power (hp)	5,5
Potenza (kW)	Power (kW)	4,04
Dimensioni d'ingombro L x l x h (mm)	Overall dimensions L x l x h (mm)	317,5x236x180
Peso (kg)	Weight (kg)	14,5

WS102

VERSIONI - VERSIONS

Albero maschio con linguetta - Male shaft (key)	Pag.	3
Albero maschio doppia presa di forza con linguetta - Double male shaft (key)	Pag.	7
Albero maschio con linguetta - vers. ATEX - Male shaft (key) - vers. ATEX	Pag.	10



Albero maschio con linguetta - Male shaft (key)

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
1	47120141	1	TESTATA POMPA D.20-22-24	MANIFOLD
2	99320600	8	VITE TE M8X70 UNI5737 10.9 ZB	HEX-HEAD SCREW M08X70 UNI5737 10.9 Fe/Zn5c1A+De
4	90384100	6	OR D.17,13X2,62 (3068)	O-RING 17,12X2,62 (3068)
5	36200366	6	SEDE VALVOLA ASP. E MANDATA	VALVE SEAT
6	36200176	6	VALVOLA SFERICA	VALVE PLATE
7	94737600	6	MOLLA DM 9,4X14,8 INOX	SPRING D. 9,4X14,8
8	36200251	6	GUIDA VALVOLA ASP. MANDATA	VALVE CAGE
9	90384700	6	OR D.20,24X2,62 (3081)	O-RING 20,29X2,62(3081)
10	98222000	6	TAPPO M24X2X16.5	CAP M24X2X16
11	36703201	6	GR. VALVOLA ASP. MAND.	VALVE ASSY.
12	99303900	8	VITE TCEI M8X16 ZINC. UNI5931	SCREW M 8x16 UNI 5931
13	47151122	1	COPERCHIO LAT. CHIUSO S.47-66	CLOSED SIDE COVER (47-66)
14	90391300	2	OR D.67,95X2,62 (3268)	O-RING 67,95X2,62 (3268)
15	91837500	2	CUSC. RULLI CON. 30X62X21.25-32206	TAPER BEARING
16	90162500	3	ANELLO RADIALE D.22X32X5	OIL SEAL 22x32x5
17	90912600	3	BOCCOLA D.22X25X30	BUSHING 22X25X30
18	47010822	1	CARTER POMPA	CRANKCASE
19	98210600	1	ASTA LIV. OLIO G3/8X64 COMPL.	OIL DIP-STICK G3/8X80
20	90392200	1	OR D.133,02X2,62 (3525)	O-RING D.133.02X 2,62(3525)
21	47021735	1	ALBERO ECC.C.16 SPDF 24x40 (marc. 8)	CRANKSHAFT C.16 S.p.f. U.S.
22	90055700	6	ANELLO SEEGER ALBERI UNI 7435-12	CIRCLIP D.12 UNI 7435
23	91489200	1	LINGUETTA 8X7X35	KEY 8(h9)X7X35 UNI 6604/A
24	97738000	3	SPINOTTO D.13X35.5	CONNECTING-ROD PIN D.13X35,5
25	47050466	3	GUIDA PISTONE - INOX	PISTON GUIDE - S.S.
26	47030001	3	BIELLA COMPLETA	CONNECTING ROD
27	99188400	5	VITE TCEI M6X20 8.8 ZINCATA	SCREW M 6x20 UNI 5931
28	47160622	1	COPERCHIO POSTERIORE	CRANKCASE COVER
29	47221301	1	GRUPPO SPIA LIVELLO OLIO G3/4	OIL SIGHT GLASS ASSY G3/4
30	98204250	1	TAPPO G1/4X9 TE17 ZINC.	PLUG G1/4"x12
31	90358500	4	OR D.10,82X1,78 (2043)	O-RING 10,82X1,78 (2043)
32	99309900	6	VITE TCEI M8X35	SCREW M 8x35 UNI 5931
34	96728600	3	ROSETTA D.14X28X0,5 CU	WASHER 14X28X0,5
35	47040409	3	PISTONE D.20x50	PISTON D. 20x50
36	90506700	3	ANELLO ANTIEST.D.11X14X1,5	ANTI-EXTRUSION RING

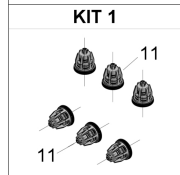
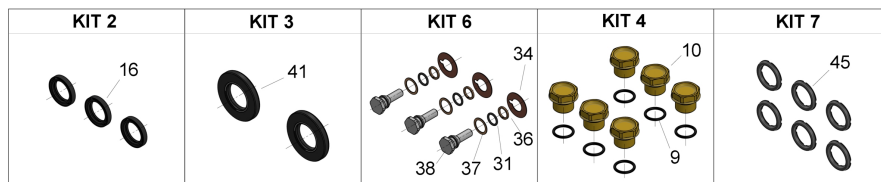
Albero maschio con linguetta - Male shaft (key)

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
37	96728000	3	ROSETTA D.14X18,5X0,5 CU	WASHER 14X18,5X0,5
38	47219566	3	VITE FISSAGGIO PISTONE	PISTON SCREW
39	47151022	1	COPERCHIO LAT. APERTO S.47-66	OPEN SIDE COVER (47-66)
40	97567800	1	SPESSORE D. 74,5X104X0,1	SHIM D.74,5X104X0,1
40	97568000	1	SPESSORE D.74,5X104X0,3	SHIM D.74.5X104X0.3
41	90164800	1	ANELLO RAD. D.30X55X7	OIL SEAL 30x55x7
42	90361600	3	OR D.34,65X1,78 (2137)	O-RING 34,65X1,78 (2137)
43	47080570	3	ANELLO DI FONDO D.20	PACKING RETAINER D. 20x35
44	90270500	3	ANELLO TEN.ALT. D.20X35X7.5/4.5 H.P.	PACKING 20x35x7,5
45	47100051	3	ANELLO DI TESTA D.20	HEAD RING D. 20
46	47216970	3	ANELLO INTERMEDIO D.20	INTERM.RING D. 20 (SPEC.)
47	90270400	3	ANELLO "RESTOP" 20X35X5.5/2	RESTOP RING D. 20 TYPE 6/1
48	47200074	2	PIEDINO FISSAGGIO POMPA	PUMP FOOT
49	99364400	4	VITE TCEI M10X18 8.8 ZINCATA UNI5931	SCREW M 10x18-5931
50	96710600	4	RONDELLA D.10 UNI1751	WASHER 10,2
51	98217600	1	TAPPO G 1/2X10	PLUG G1/2X10
52	96751400	1	ROSETTA D.21,5X27X1,5	WASHER 21,5X27X1,5
53	98210000	1	TAPPO G 3/8X13	PLUG G3/8X13
54	96738000	1	ROSETTA D.17,5X23X1,5 AL.	WASHER 17,5X23X1,5
56	90271000	3	ANELLO TEN.ALT.20X35X8.7 L.P	PACKING D.20X35X9 L.P.
60	97595000	2	SPIA LIVELLO OLIO D.25x7.8 NBR	
61	47151201	1	COPERCHIO LATERALE CARTER CON SPIA OLIO MONTATA S.47-59-66	
63	70211801	1	SPIA LIVELLO OLIO	OIL SIGHT GLASS
64	47160601	1	GR. COPERCHIO POSTERIORE SPIA * 47-S	
65	90387700	1	OR D.39,34X2,62 (3156)	O-RING 39,34X2,62 (3156)
66	90075600	1	ANELLO ZJ45	CIRCLIP D.45 (ZJ45)
67	47151222	1	COPERCHIO LAT. SPIA S.47-66	SIDE CRANKCASE COVER FOR OIL GAUGE
KIT1	34000101	1	KIT 1	KIT 1 INTAKE/DELIVERY VALVE
KIT2	34000201	1	KIT 2	KIT 2 OIL SEAL D. 22X32X5,5
KIT3	34000301	1	KIT 3	KIT 3 OIL SEAL D.30X55X7
KIT4	34000401	1	KIT 4	KIT 4 INTAKE/DEL. VALVE CAPS
KIT6	34000601	1	KIT 6	KIT 6 PISTON BOLT
KIT7	34000701	1	KIT 7	KIT 7 HEAD RING D.20
KIT10	34001001	1	KIT 10	KIT 10 PACKING RETAINER D.20
KIT28	34002801	1	KIT 28	KIT 28 COMPL.SEAL FOR PIST.D20
KIT69	34006901	1	KIT 69	KIT 69 PACKING D.20 W/RESTOP

Albero maschio con linguetta - Male shaft (key)

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
KIT71	34007101	1	KIT 71	KIT 71 INTERMEDIATE RING D.20

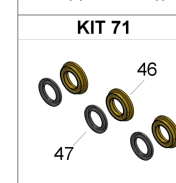
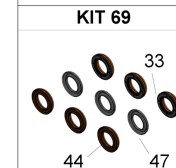
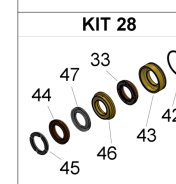
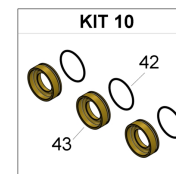
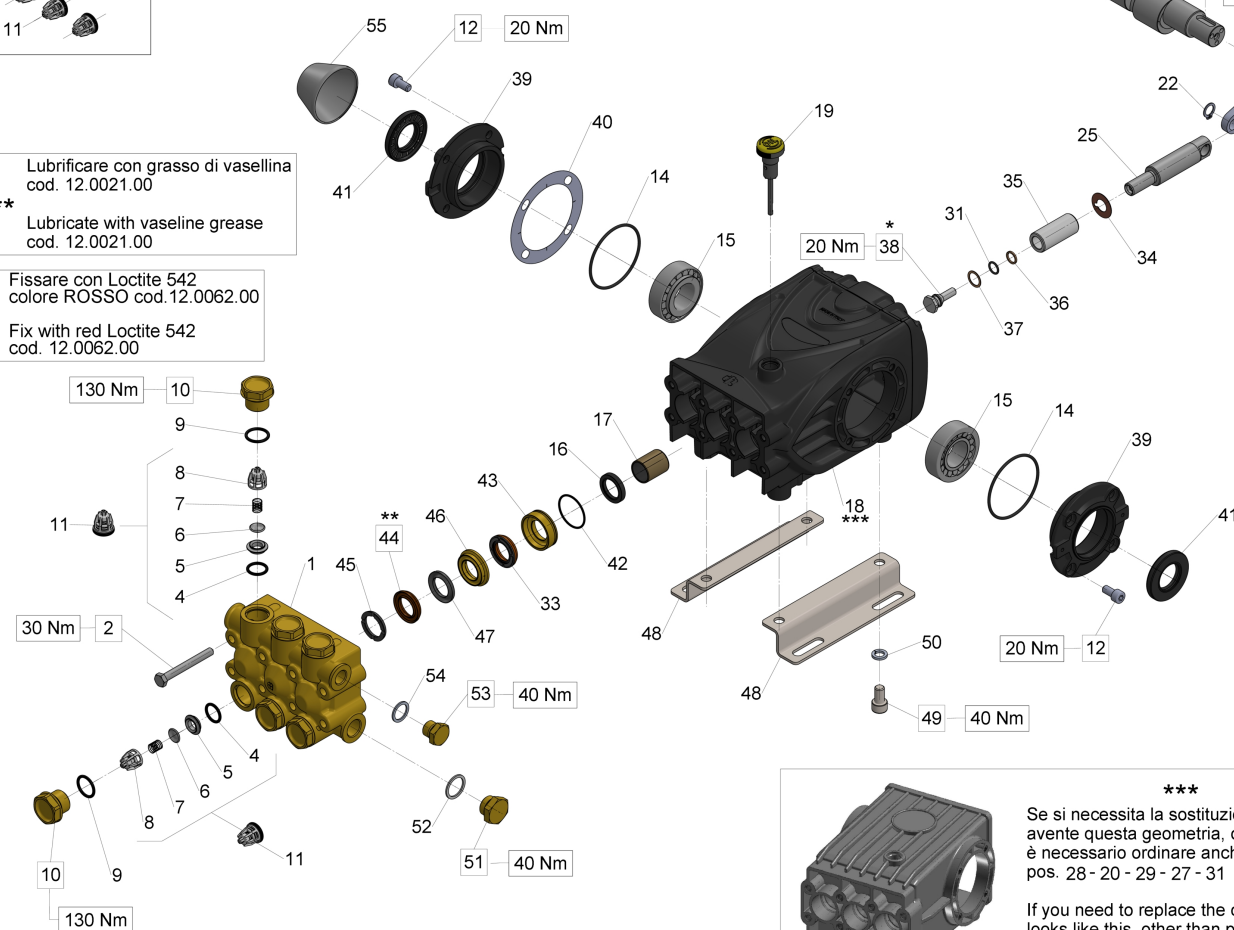
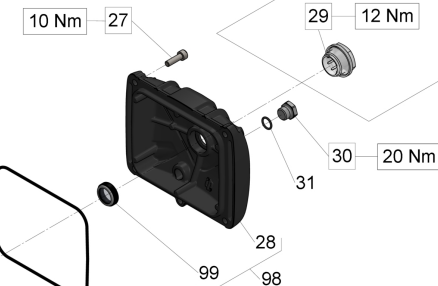
Albero maschio doppia presa di forza con linguetta - Double male shaft (key)



Lubrificare con grasso di vasellina
cod. 12.0021.00
**
Lubricate with vaseline grease
cod. 12.0021.00

Fissare con Loctite 542
colore ROSSO cod.12.0062.00
*
Fix with red Loctite 542
cod. 12.0062.00

SPIA LIVELLO OLIO VECCHIA VERSIONE
OIL LEVEL INDICATOR OLD VERSION



Se si necessita la sostituzione del carter
avente questa geometria, oltre alla pos.18 ,
è necessario ordinare anche i componenti
pos. 28 - 20 - 29 - 27 - 31

If you need to replace the crankcase that
looks like this, other than pos. 18, you need to
order also components pos. 28 - 20 - 29 - 27 - 31

Albero maschio doppia presa di forza con linguetta - Double male shaft (key)

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
1	47120141	1	TESTATA POMPA D.20-22-24	MANIFOLD
2	99320600	8	VITE TE M8X70 UNI5737 10.9 ZB	HEX-HEAD SCREW M08X70 UNI5737 10.9 Fe/Zn5c1A+De
4	90384100	6	OR D.17,13X2,62 (3068)	O-RING 17,12X2,62 (3068)
5	36200366	6	SEDE VALVOLA ASP. E MANDATA	VALVE SEAT
6	36200176	6	VALVOLA SFERICA	VALVE PLATE
7	94737600	6	MOLLA DM 9,4X14,8 INOX	SPRING D. 9,4X14,8
8	36200251	6	GUIDA VALVOLA ASP. MANDATA	VALVE CAGE
9	90384700	6	OR D.20,24X2,62 (3081)	O-RING 20,29X2,62(3081)
10	98222000	6	TAPPO M24X2X16.5	CAP M24X2X16
11	36703201	6	GR. VALVOLA ASP. MAND.	VALVE ASSY.
12	99303900	8	VITE TCEI M8X16 ZINC. UNI5931	SCREW M 8x16 UNI 5931
14	90391300	2	OR D.67,95X2,62 (3268)	O-RING 67,95X2,62 (3268)
15	91837500	2	CUSC. RULLI CON. 30X62X21.25-32206	TAPER BEARING
16	90162500	3	ANELLO RADIALE D.22X32X5	OIL SEAL 22x32x5
17	90912600	3	BOCCOLA D.22X25X30	BUSHING 22X25X30
18	47010822	1	CARTER POMPA	CRANKCASE
19	98210600	1	ASTA LIV. OLIO G3/8X64 COMPL.	OIL DIP-STICK G3/8X80
20	90392200	1	OR D.133,02X2,62 (3525)	O-RING D.133.02X 2,62(3525)
21	47020035	1	ALBERO ECC. C.16 DOPPIA P.D.F.	CRANKSHAFT C.16 D.p.f.
22	90055700	6	ANELLO SEEGER ALBERI UNI 7435-12	CIRCLIP D.12 UNI 7435
23	91487700	1	LINGUETTA 8X7X25 UNI 6604-A	KEY 8(h9)X7X25 UNI 6604/A
24	97738000	3	SPINOTTO D.13X35.5	CONNECTING-ROD PIN D.13X35,5
25	47050466	3	GUIDA PISTONE - INOX	PISTON GUIDE - S.S.
26	47030001	3	BIELLA COMPLETA	CONNECTING ROD
27	99188400	5	VITE TCEI M6X20 8.8 ZINCATA	SCREW M 6x20 UNI 5931
28	47160622	1	COPERCHIO POSTERIORE	CRANKCASE COVER
29	47221301	1	GRUPPO SPIA LIVELLO OLIO G3/4	OIL SIGHT GLASS ASSY G3/4
30	98204250	1	TAPPO G1/4X9 TE17 ZINC.	PLUG G1/4"x12
31	90358500	4	OR D.10,82X1,78 (2043)	O-RING 10,82X1,78 (2043)
32	99309900	6	VITE TCEI M8X35	SCREW M 8x35 UNI 5931
33	90271000	3	ANELLO TEN.ALT.20X35X8.7 L.P	PACKING D.20X35X9 L.P.
34	96728600	3	ROSETTA D.14X28X0,5 CU	WASHER 14X28X0,5
35	47040409	3	PISTONE D.20x50	PISTON D. 20x50
36	90506700	3	ANELLO ANTIEST.D.11X14X1,5	ANTI-EXTRUSION RING
37	96728000	3	ROSETTA D.14X18,5X0,5 CU	WASHER 14X18,5X0,5
38	47219566	3	VITE FISSAGGIO PISTONE	PISTON SCREW

Albero maschio doppia presa di forza con linguetta - Double male shaft (key)

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
39	47151022	2	COPERCHIO LAT. APERTO S.47-66	OPEN SIDE COVER (47-66)
40	97567800	1	SPESSORE D. 74,5X104X0,1	SHIM D.74,5X104X0,1
40	97568000	1	SPESSORE D.74,5X104X0,3	SHIM D.74.5X104X0.3
41	90164800	2	ANELLO RAD. D.30X55X7	OIL SEAL 30x55x7
42	90361600	3	OR D.34,65X1,78 (2137)	O-RING 34,65X1,78 (2137)
43	47080570	3	ANELLO DI FONDO D.20	PACKING RETAINER D. 20x35
44	90270500	3	ANELLO TEN.ALT. D.20X35X7.5/4.5 H.P.	PACKING 20x35x7,5
45	47100051	3	ANELLO DI TESTA D.20	HEAD RING D. 20
46	47216970	3	ANELLO INTERMEDIO D.20	INTERM.RING D. 20 (SPEC.)
47	90270400	3	ANELLO "RESTOP" 20X35X5.5/2	RESTOP RING D. 20 TYPE 6/1
48	47200074	2	PIEDINO FISSAGGIO POMPA	PUMP FOOT
49	99364400	4	VITE TCEI M10X18 8.8 ZINCATA UNI5931	SCREW M 10x18-5931
50	96710600	4	RONDELLA D.10 UNI1751	WASHER 10,2
51	98217600	1	TAPPO G 1/2X10	PLUG G1/2X10
52	96751400	1	ROSETTA D.21,5X27X1,5	WASHER 21,5X27X1,5
53	98210000	1	TAPPO G 3/8X13	PLUG G3/8X13
54	96738000	1	ROSETTA D.17,5X23X1,5 AL.	WASHER 17,5X23X1,5
55	47212451	1	CAPPELOTTO PROTEZ.P.D.F.	SHAFT PROTECTOR
98	47160601	1	GR. COPERCHIO POSTERIORE SPIA * 47-S	
99	97595000	1	SPIA LIVELLO OLIO D.25x7.8 NBR	
KIT1	34000101	1	KIT 1	KIT 1 INTAKE/DELIVERY VALVE
KIT2	34000201	1	KIT 2	KIT 2 OIL SEAL D. 22X32X5,5
KIT3	34000301	1	KIT 3	KIT 3 OIL SEAL D.30X55X7
KIT4	34000401	1	KIT 4	KIT 4 INTAKE/DEL. VALVE CAPS
KIT6	34000601	1	KIT 6	KIT 6 PISTON BOLT
KIT7	34000701	1	KIT 7	KIT 7 HEAD RING D.20
KIT10	34001001	1	KIT 10	KIT 10 PACKING RETAINER D.20
KIT28	34002801	1	KIT 28	KIT 28 COMPL.SEAL FOR PIST.D20
KIT69	34006901	1	KIT 69	KIT 69 PACKING D.20 W/RESTOP
KIT71	34007101	1	KIT 71	KIT 71 INTERMEDIATE RING D.20



Albero maschio con linguetta - vers. ATEX - Male shaft (key) - vers. ATEX

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
1	47120141	1	TESTATA POMPA D.20-22-24	MANIFOLD
2	99320600	8	VITE TE M8X70 UNI5737 10.9 ZB	HEX-HEAD SCREW M08X70 UNI5737 10.9 Fe/Zn5c1A+De
4	90384100	6	OR D.17,13X2,62 (3068)	O-RING 17,12X2,62 (3068)
5	36200366	6	SEDE VALVOLA ASP. E MANDATA	VALVE SEAT
6	36200176	6	VALVOLA SFERICA	VALVE PLATE
7	94737600	6	MOLLA DM 9,4X14,8 INOX	SPRING D. 9,4X14,8
8	36200251	6	GUIDA VALVOLA ASP. MANDATA	VALVE CAGE
9	90384700	6	OR D.20,24X2,62 (3081)	O-RING 20,29X2,62(3081)
10	98222000	6	TAPPO M24X2X16.5	CAP M24X2X16
11	36703201	6	GR. VALVOLA ASP. MAND.	VALVE ASSY.
12	99303900	8	VITE TCEI M8X16 ZINC. UNI5931	SCREW M 8x16 UNI 5931
14	90391300	2	OR D.67,95X2,62 (3268)	O-RING 67,95X2,62 (3268)
15	91837500	2	CUSC. RULLI CON. 30X62X21.25-32206	TAPER BEARING
16	90162500	3	ANELLO RADIALE D.22X32X5	OIL SEAL 22x32x5
17	90912600	3	BOCCOLA D.22X25X30	BUSHING 22X25X30
18	47010822	1	CARTER POMPA	CRANKCASE
19	98210700	1	TAPPO CON ASTA G3/8X64 D.4+FILTRO	OIL DIPSTICK G3/8X64 D4+FILTER ATEX
20	90392200	1	OR D.133,02X2,62 (3525)	O-RING D.133.02X 2,62(3525)
21	47021735	1	ALBERO ECC.C.16 SPDF 24x40 (marc. 8)	CRANKSHAFT C.16 S.p.f. U.S.
22	90055700	6	ANELLO SEEGER ALBERI UNI 7435-12	CIRCLIP D.12 UNI 7435
23	91489200	1	LINGUETTA 8X7X35	KEY 8(h9)X7X35 UNI 6604/A
24	97738000	3	SPINOTTO D.13X35.5	CONNECTING-ROD PIN D.13X35,5
25	47050466	3	GUIDA PISTONE - INOX	PISTON GUIDE - S.S.
26	47030001	3	BIELLA COMPLETA	CONNECTING ROD
27	99188400	5	VITE TCEI M6X20 8.8 ZINCATA	SCREW M 6x20 UNI 5931
28	47160622	1	COPERCHIO POSTERIORE	CRANKCASE COVER
29	47221301	1	GRUPPO SPIA LIVELLO OLIO G3/4	OIL SIGHT GLASS ASSY G3/4
30	98203600	1	TAPPO G1/4X8 PER Sonda D.6 SS	PLUG G1/4x8 FOR PROBE D.6 S.S.
31	90358500	4	OR D.10,82X1,78 (2043)	O-RING 10,82X1,78 (2043)
32	99309900	6	VITE TCEI M8X35	SCREW M 8x35 UNI 5931
34	96728600	3	ROSETTA D.14X28X0,5 CU	WASHER 14X28X0,5
35	47040409	3	PISTONE D.20x50	PISTON D. 20x50
36	90506700	3	ANELLO ANTIEST.D.11X14X1,5	ANTI-EXTRUSION RING
37	96728000	3	ROSETTA D.14X18,5X0,5 CU	WASHER 14X18,5X0,5
38	47219566	3	VITE FISSAGGIO PISTONE	PISTON SCREW
39	47151022	1	COPERCHIO LAT. APERTO S.47-66	OPEN SIDE COVER (47-66)

Albero maschio con linguetta - vers. ATEX - Male shaft (key) - vers. ATEX

Ref.	Codice - Part n°	Qtà - Qty	Descrizione	Description
40	97567800	1	SPESSORE D. 74,5X104X0,1	SHIM D.74,5X104X0,1
40	97568000	1	SPESSORE D.74,5X104X0,3	SHIM D.74.5X104X0.3
41	90164800	1	ANELLO RAD. D.30X55X7	OIL SEAL 30x55x7
42	90361600	3	OR D.34,65X1,78 (2137)	O-RING 34,65X1,78 (2137)
43	47080570	3	ANELLO DI FONDO D.20	PACKING RETAINER D. 20x35
44	90270500	3	ANELLO TEN.ALT. D.20X35X7.5/4.5 H.P.	PACKING 20x35x7,5
45	47100051	3	ANELLO DI TESTA D.20	HEAD RING D. 20
46	47216970	3	ANELLO INTERMEDIO D.20	INTERM.RING D. 20 (SPEC.)
47	90270400	3	ANELLO "RESTOP" 20X35X5.5/2	RESTOP RING D. 20 TYPE 6/1
48	47200074	2	PIEDINO FISSAGGIO POMPA	PUMP FOOT
49	99364400	4	VITE TCEI M10X18 8.8 ZINCATA UNI5931	SCREW M 10x18-5931
50	96710600	4	RONDELLA D.10 UNI1751	WASHER 10,2
51	98217600	1	TAPPO G 1/2X10	PLUG G1/2X10
52	96751400	1	ROSETTA D.21,5X27X1,5	WASHER 21,5X27X1,5
53	98210000	1	TAPPO G 3/8X13	PLUG G3/8X13
54	96738000	1	ROSETTA D.17,5X23X1,5 AL.	WASHER 17,5X23X1,5
56	90271000	3	ANELLO TEN.ALT.20X35X8.7 L.P	PACKING D.20X35X9 L.P.
60	97595000	2	SPIA LIVELLO OLIO D.25x7.8 NBR	
61	47151201	1	COPERCHIO LATERALE CARTER CON SPIA OLIO MONTATA S.47-59-66	
63	70211751	1	VETRINO PER SPIA LIVELLO OLIO	
64	47160601	1	GR. COPERCHIO POSTERIORE SPIA * 47-S	
65	90387700	1	OR D.39,34X2,62 (3156)	O-RING 39,34X2,62 (3156)
66	90075500	1	ANELLO SEEGER PER FORO D.45	STOP RING J45 UNI7437
69	96693950	1	ROSETTA D.6.4X11X0.7 DIN6798 INOX	WASHER 6.4x11.0x0.7 D6798A INOX
70	99180900	1	VITE TCEI M06X10 UNI5931 INOX	SCREW M06X10 5931 A2-70
71	47151222	1	COPERCHIO LAT. SPIA S.47-66	SIDE CRANKCASE COVER FOR OIL GAUGE
KIT1	34000101	1	KIT 1	KIT 1 INTAKE/DELIVERY VALVE
KIT2	34000201	1	KIT 2	KIT 2 OIL SEAL D. 22X32X5,5
KIT3	34000301	1	KIT 3	KIT 3 OIL SEAL D.30X55X7
KIT4	34000401	1	KIT 4	KIT 4 INTAKE/DEL. VALVE CAPS
KIT6	34000601	1	KIT 6	KIT 6 PISTON BOLT
KIT7	34000701	1	KIT 7	KIT 7 HEAD RING D.20
KIT10	34001001	1	KIT 10	KIT 10 PACKING RETAINER D.20
KIT28	34002801	1	KIT 28	KIT 28 COMPL.SEAL FOR PIST.D20
KIT69	34006901	1	KIT 69	KIT 69 PACKING D.20 W/RESTOP
KIT71	34007101	1	KIT 71	KIT 71 INTERMEDIATE RING D.20