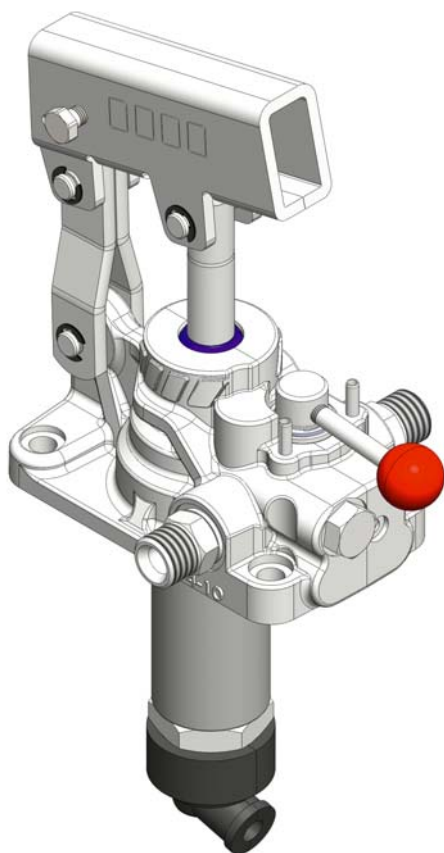


**POMPE A MANO
CON INVERTITORE DI FLUSSO
HAND PUMPS
WITH DIRECTIONAL CONTROL VALVE**

SERIE
SERIES

PMI
12-25-45

Codice fascicolo: 997-400-10610



Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendo che tirando la leva) per impianti a doppio effetto, direttamente flangiabili su serbatoio e con rubinetto di scarico a tenuta conica incorporato. Sono disponibili in tre diverse cilindrate per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento di zincatura+sigillatura e lo stelo nichelato.

Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate double acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve.

These hand pumps can have 3 different sizes to perform various applications and to achieve smoother loads on the lever. They are available with nodular cast-iron body zinc plating+sealed and nickel-plated spool.

Data: Venerdì 3 novembre 2017

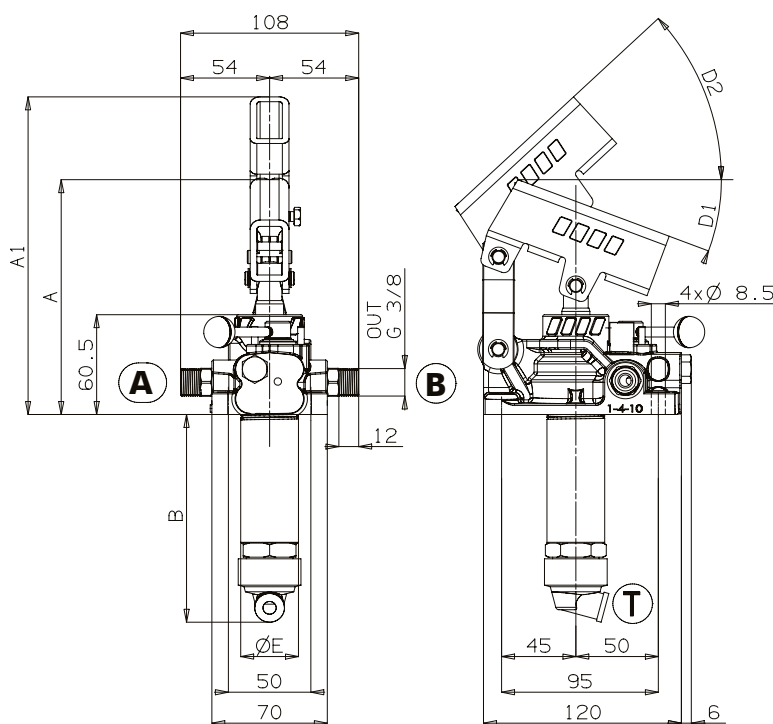
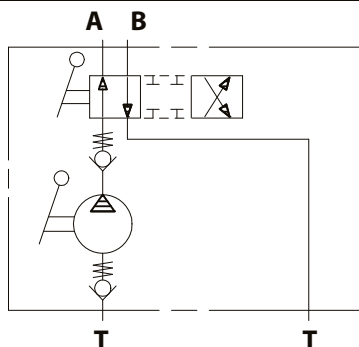
Codice foglio: 997-106-00710 Rev: AP

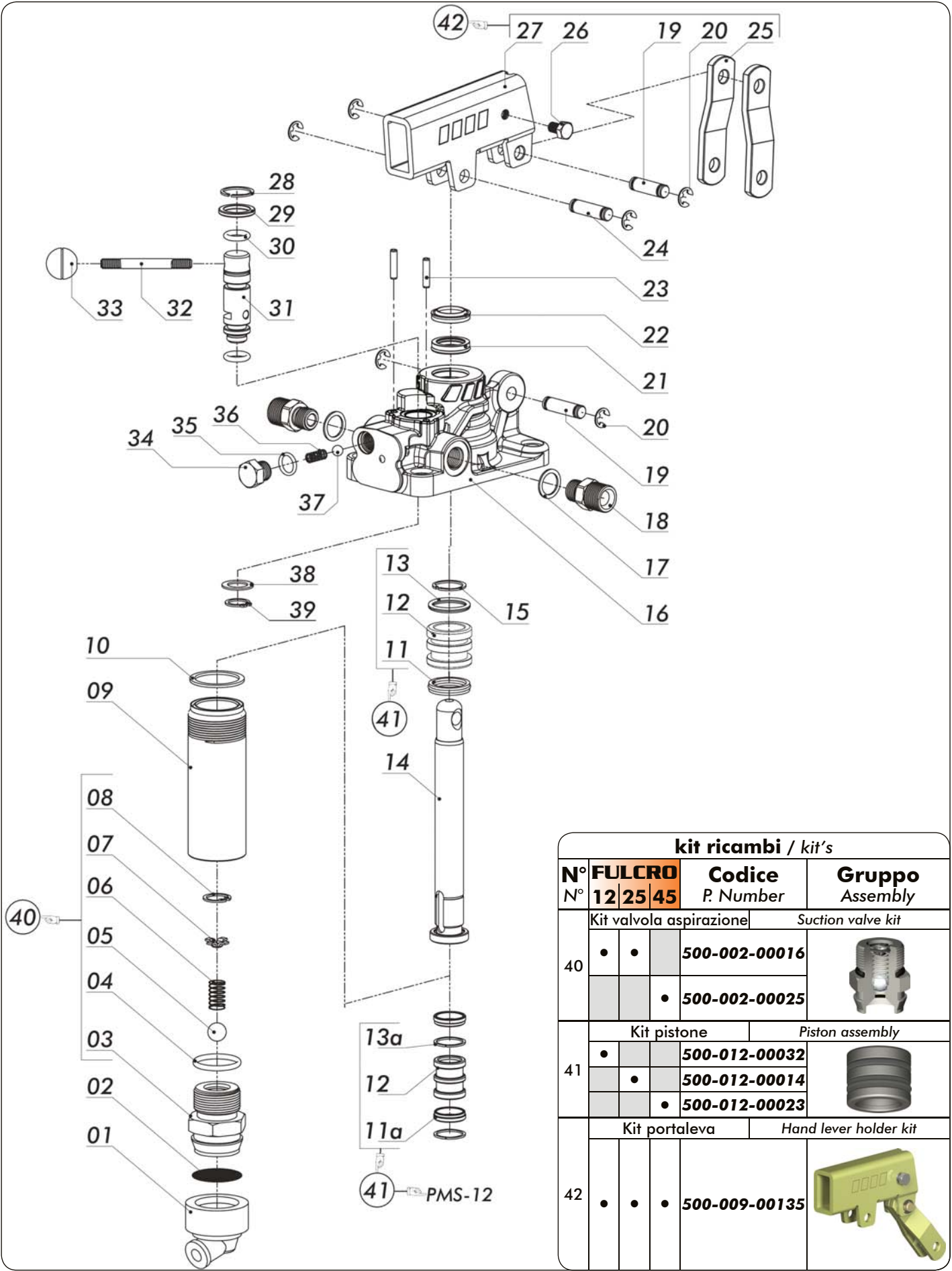
		Codice di ordinazione (senza leva) Order code (without lever)		
		FULCRO 12	FULCRO 25	FULCRO 45
Senza Serbatoio Without Tank		106-017-00015	106-007-00017	106-007-00026
Con serbatoi With Tank Litri / Litres	Plastica / Plastic			
	1	106-016-00016	106-005-00019	106-006-00063
	2	106-016-00025	106-005-00028	106-006-00054
	3	106-016-00034	106-005-00037	106-006-00018
	4	106-016-00038	106-005-00041	106-006-00072
	5	106-016-00043	106-005-00046	106-006-00027
	7	106-016-00052	106-005-00055	106-006-00036
	10	106-016-00061	106-005-00064	106-006-00045




Ingombro
Overall Dimension

	A	A1	B	D1	D2	E
	mm	mm	mm	°	°	mm
FULCRO 12	143	187	120	18,5	45	35
FULCRO 25	142	193	127	20	45	35
FULCRO 45	141	193	138	20	45	42

Schema Idraulico / Hydraulic layout





kit ricambi / kit's			
N°	FULCRO	Codice	Gruppo
N°	12 25 45	P. Number	Assembly
40		Kit valvola aspirazione / Suction valve kit	
	• •	500-002-00016	
	•	500-002-00025	
41		Kit pistone / Piston assembly	
	•	500-012-00032	
	•	500-012-00014	
	•	500-012-00023	
42		Kit portaleva / Hand lever holder kit	
	• • •	500-009-00135	

40

41

41 PMS-12

N°	FULCRO			Codice P. Number	Descrizione Description	Q.
	12	25	45			
1	•	•	•	506-000-00392	Guarnizione portafiltro Suction cap	1
2	•	•	•	550-001-00012	Filtro acciaio rotondo Steel strainer	1
3	•	•	•	540-005-00019	Corpo valvola di aspirazione Suction valve casing	1
	•	•	•	540-005-00037		
4	•	•	•	506-002-00201	Guarnizione OR O-ring	1
	•	•	•	506-003-00095		
5	•	•	•	510-009-00116	Sfera tenuta Ball	1
6	•	•	•	512-005-00689	Molla valvola di aspirazione Spring for suction valve	1
7	•	•	•	550-001-00101	Guidamolla Spring-guide	1
8	•	•	•	501-001-00113	Anello elastico Circlip	1
9	•	•	•	537-002-00037	Cilindro acciaio Steel stem	1
	•	•	•	537-002-00019		
	•	•	•	537-002-00028		
10	•	•	•	116-009-01255	Rondella tenuta cilindro Washer	1
	•	•	•	116-009-01308		
11a	•	•	•	506-000-00516	Guarnizione speciale Special gasket	2
11	•	•	•	506-000-00258	Guarnizione speciale Special gasket	1
	•	•	•	506-000-00267		
12	•	•	•	532-002-00082	Pistone Piston	1
	•	•	•	532-002-00028		
	•	•	•	532-002-00037		
13a	•	•	•	550-004-00046	Anello antiestrusore Locking ring	2
13	•	•	•	506-002-00158	Guarnizione OR O-ring	1
	•	•	•	506-002-00229		
14	•	•	•	535-001-00121	Stelo Piston rod	1
	•	•	•	535-001-00069		
	•	•	•	535-001-00078		
15	•	•	•	501-011-00086	Anello elastico Circlip	1
	•	•	•	501-011-00111		
	•	•	•	501-011-00148		
16	•	•	•	517-001-00496	Corpo pompa a mano Hand pump housing	1
	•	•	•	517-001-00512		
	•	•	•	517-001-00530		
17	•	•	•	116-009-00158	Rondella utilizzi Washer	2
18	•	•	•	116-006-00259	Niplo utilizzi Pressure nipple	2
19	•	•	•	526-001-00095	Spinotto lunghezza 26mm Gudgeon Pin 26mm	2
20	•	•	•	501-015-00028	Anello elastico Circlip	6
21	•	•	•	506-000-01926	Guarnizione a labbro Lip seal	1
	•	•	•	506-000-01935		
	•	•	•	506-000-01944		
22	•	•	•	506-000-02729	Guarnizione raschiapolvere Wiper seal	1
	•	•	•	506-000-02701		
	•	•	•	506-000-02738		
23	•	•	•	501-004-00058	Spina elastica Spring pins	2
24	•	•	•	526-001-00086	Spinotto Gudgeon Pin	1
25	•	•	•	538-001-00081	Biella Brackets	2
26	•	•	•	502-002-00012	Vite blocco leva Locking lever screw	1
27	•	•	•	539-001-00212	Portaleva Lever holder	1
28	•	•	•	501-011-00102	Anello elastico Circlip	1
29	•	•	•	506-000-00963	Guarnizione protezione stelo Seal	1
30	•	•	•	506-002-00041	Guarnizione OR O-ring	1
31	•	•	•	536-001-00030	Stelo invertitore Diverter rod	1
32	•	•	•	539-004-00031	Leva per invertitore Directional control lever	1
33	•	•	•	509-001-00073	Pomello rosso Red knob	1
34	•	•	•	540-003-00360	Tappo valvola di ritegno Non-return valve cover	1
35	•	•	•	506-019-10200	Guarnizione OR O-ring	1
36	•	•	•	512-005-00312	Molla valvola di ritegno Non-return valve spring	1
37	•	•	•	510-009-00054	Sfera tenuta di ritegno Non-return ball	3
38	•	•	•	530-001-00489	Distanziale Spacer	1
39	•	•	•	501-002-00103	Anello elastico Circlip	1

Dati Tecnici
Technical data

Tipo pompa Pump type	Pressione massima Max. Pressure bar	Cilindrata Displacement			Peso Weight Kg
		Completa / Full cm ³ /ciclo	Tiro / Pull cm ³ /ciclo	Spinta / Push cm ³ /ciclo	
FULCRO 12	350	12	6,1	5,9	2,9
FULCRO 25	300	25	13,4	11,6	2,8
FULCRO 45	270	45	23,7	21,3	3,2

Fluido idraulico Fluid	Minerale o sintetico compatibile con guarnizioni: Mineral or synthetic compatible with the following seals: NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata Kinematic viscosity suggested	T media ambiente (°C) Average ambient temp. (°C)	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm ² /s)	22	32	46	68
Temperatura di utilizzo Working temperature		-15° +110°C			

Kit di guarnizioni
Seal kit

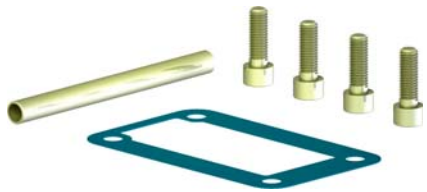
FULCRO 12	FULCRO 25	FULCRO 45
106-900-00551	106-900-00604	106-900-00659



106-000-00032 PIA.APP.GRP.PMP. PMS-PMI
 MOUNTING PLATE FOR TANK PMS-PMI



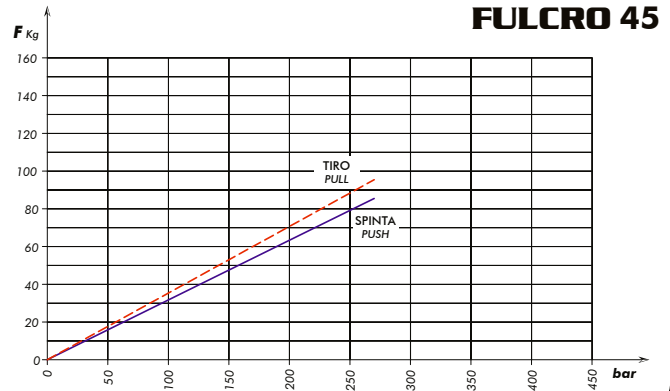
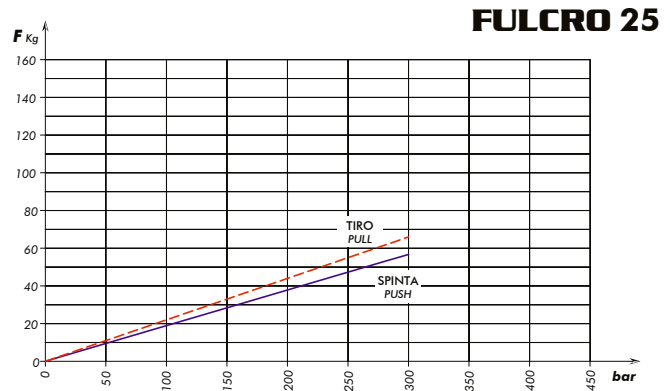
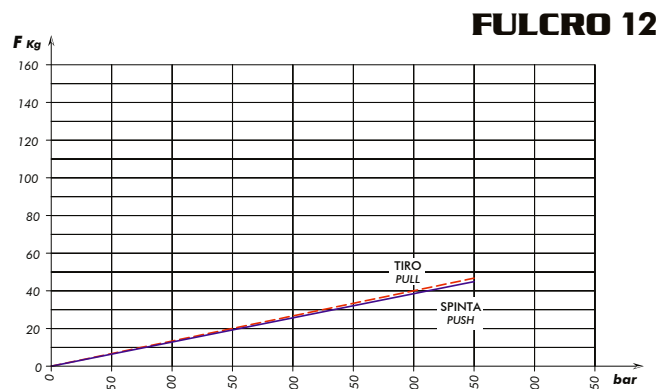
106-000-00078 AST. CON IMP.PMS/PMI L.600 MM 35x15
 LEVER FOR PMS/PMI L. 600 MM 35x15



106-960-00700 KIT MONTAGGIO POMPE PMS/PMI
 MOUNTING KIT FOR PUMPS PMS/PMI

Sforzo in fase di pompaggio con leva standard
Load while pumping with standard lever

Load while pumping with standard lever










SERBATOI COMPLETI POMPE A MANO TANKS ASSEMBLY HAND PUMPS

CODICE FAMIGLIA
FAMILY CODE





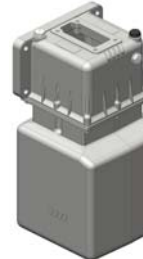
106-800

SERBATOI TANKS







ALLUMINIO/PLASTICA - ALUMINIUM/PLASTIC

						
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	4 litri / 4 litres	5 litri / 5 litres	7 litri / 7 litres	10 litri / 10 litres
CODICE DI ORDINAZIONE ORDER CODE		CAPACITÀ CAPACITY	DESCRIZIONE DESCRIPTION			PESO WEIGHT
106-800-00105		1	SRB. CMP. PM S/1/ TANK 1 LT			4
106-800-00025		2	SRB. CMP. PM S/2/ TANK 2 LT			1,8
106-800-00034		3	SRB. CMP. PM S/3/ TANK 3 LT			1,9
106-800-00040		4	SRB. CMP. PM S/4/ TANK 4 LT			1,9
106-800-00043		5	SRB. CMP. PM S/5/ TANK 5 LT			2
106-800-00052		7	SRB. CMP. PM S/7/ TANK 7 LT			2,4
106-800-00061		10	SRB. CMP. PM S/10/ TANK 10 LT			2,9

ALLUMINIO - ALUMINIUM

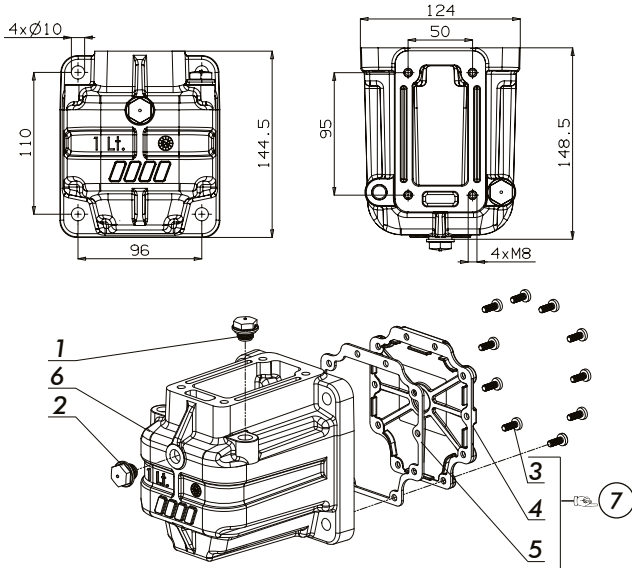
					
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	10 litri / 10 litres	
CODICE DI ORDINAZIONE ORDER CODE		CAPACITÀ CAPACITY	DESCRIZIONE DESCRIPTION		PESO WEIGHT
106-800-00016		1	SRB. CMP. PM S/1/ TANK 1 LT		1,2
106-800-00203		2	SRB. CMP. PM S/2/ TANK 2 LT		1,9
106-800-00301		3	SRB. CMP. PM S/3/ TANK 3 LT		2
106-800-00507		5	SRB. CMP. PM S/5/ TANK 5 LT		2,5
106-800-01006		10	SRB. CMP. PM S/10/ TANK 10 LT		5,2

ACCIAIO - STEEL

						
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	7 litri / 7 litres	10 litri / 10 litres	
CODICE DI ORDINAZIONE ORDER CODE		CAPACITÀ CAPACITY	DESCRIZIONE DESCRIPTION			PESO WEIGHT
106-800-10014		1	SRB. CMP. PM S/1/ TANK 1 LT			2,1
106-800-10023		2	SRB. CMP. PM S/2/ TANK 2 LT			2,8
106-800-10032		3	SRB. CMP. PM S/3/ TANK 3 LT			3,5
106-800-10050		5	SRB. CMP. PM S/5/ TANK 5 LT			4,6
106-800-10078		7	SRB. CMP. PM S/7/ TANK 7 LT			5,7
106-800-10103		10	SRB. CMP. PM S/10/ TANK 10 LT			7,5

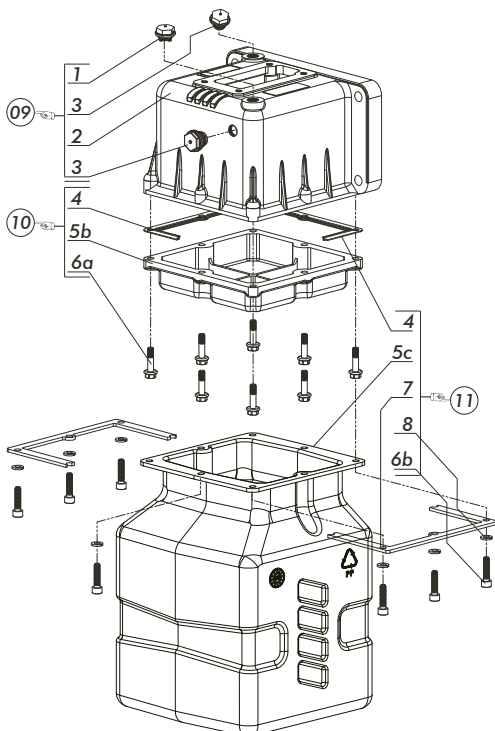
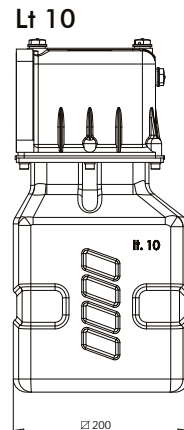
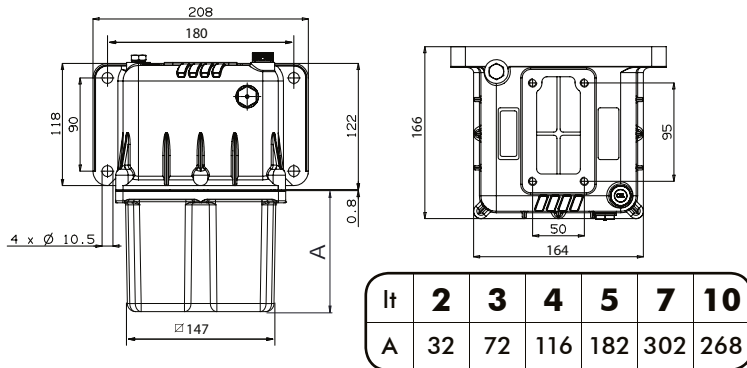
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SERBATOIO/Tank 1 LITRO/litre



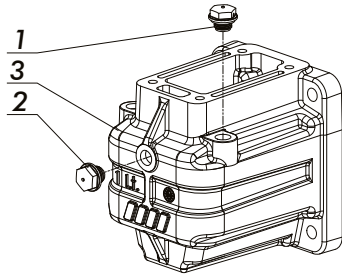
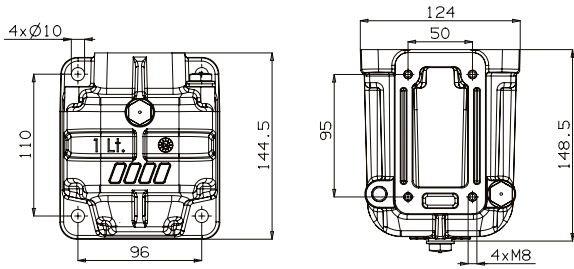
N°	Codice / P. Number		Q.
1	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	509-006-00121	Tappo livello/Level cap 1/4"	1
3	502-000-00872	Vite trilobata/Trefoil screw	10
4	509-000-00912	Coperchio plastica/Plastic cover	1
5	506-000-02158	Guarnizione/Gasket	1
6	514-003-00105	Serbatoio/Tank	1
KIT RICAMBIO / KIT'S			
7	106-800-01113	Coperchio completo plastica Complete plastic cover	1

SERBATOI/Tanks 2/3/4/5/7/10 LITRI/litres



N°	Serbatoio l / tank						Codice P. Number		Q.
	2	3	4	5	7	10			
1	•	•	•	•	•	•	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	•	•	•	•	•	•	514-003-00089	Serbatoio/Tank	1
3	•	•	•	•	•	•	509-006-00121	Tappo livello/Level cap 1/4"	2
4	•	•	•	•	•	•	506-000-00463	Guarnizione/Gasket	1
	•	•	•	•	•	•	506-000-01435		1
5b	•	•	•	•	•	•	514-008-00020	Coperchio serbatoio Tank cover	1
	•	•	•	•	•	•	514-008-00039		1
	•	•	•	•	•	•	514-008-00048		1
	•	•	•	•	•	•	514-008-00057		1
5c	•	•	•	•	•	•	514-008-00075	Coperchio serbatoio Tank cover	1
	•	•	•	•	•	•	514-009-10107		1
6a	•	•	•	•	•	•	502-002-10207	Vite/Screw TE M6x25	8
6b	•	•	•	•	•	•	502-002-00478	Vite/Screw TCE M6x25	8
7	•	•	•	•	•	•	538-000-00331	Staffa supporto/ Mounting brackets	2
8	•	•	•	•	•	•	501-024-00063	Rosetta elastica/ Washer	8
KIT RICAMBIO / KIT'S									
9	•	•	•	•	•	•	106-800-01015	Base per serbatoio/Base for tank	
	•	•	•	•	•	•	106-800-01024		
	•	•	•	•	•	•	106-800-01033		
10	•	•	•	•	•	•	106-800-01042	Coperchio completo serbatoio Complete tank cover	
	•	•	•	•	•	•	106-800-01051		
	•	•	•	•	•	•	106-800-01060		
	•	•	•	•	•	•	106-800-01097		
11	•	•	•	•	•	•	106-800-01097		

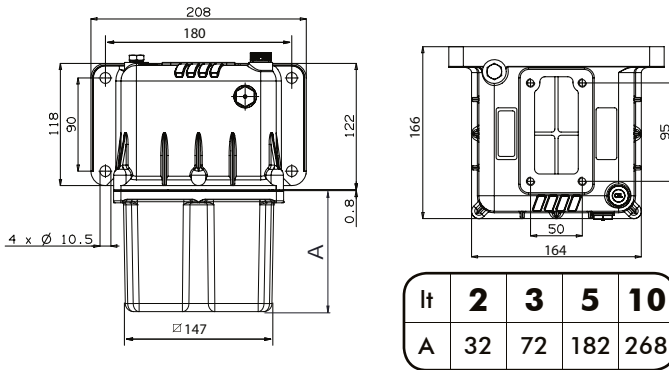
SERBATOIO/Tank 1 LITRO/litre



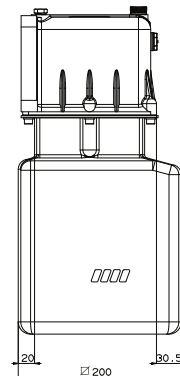
N°	Codice / P. Number		Q.
1	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	509-006-00121	Tappo livello/Level cap 1/4"	1
3	514-003-00098	Serbatoio/Tank	1

Codice fascicolo: 997-400-10610

SERBATOI/Tanks 2/3/4/5/7/10 LITRI/litres

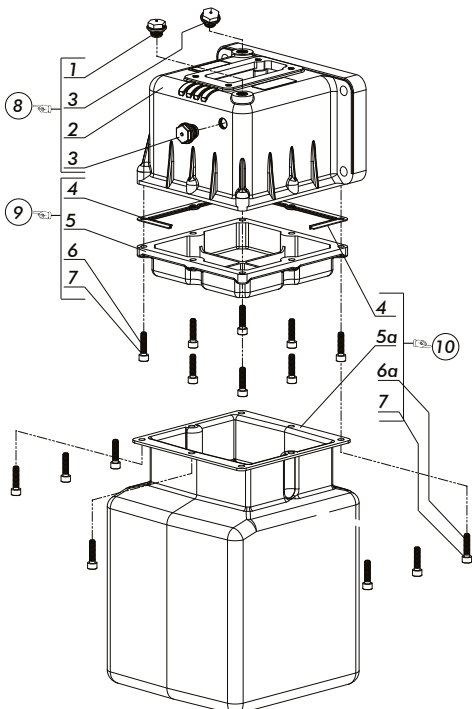


Lt 10

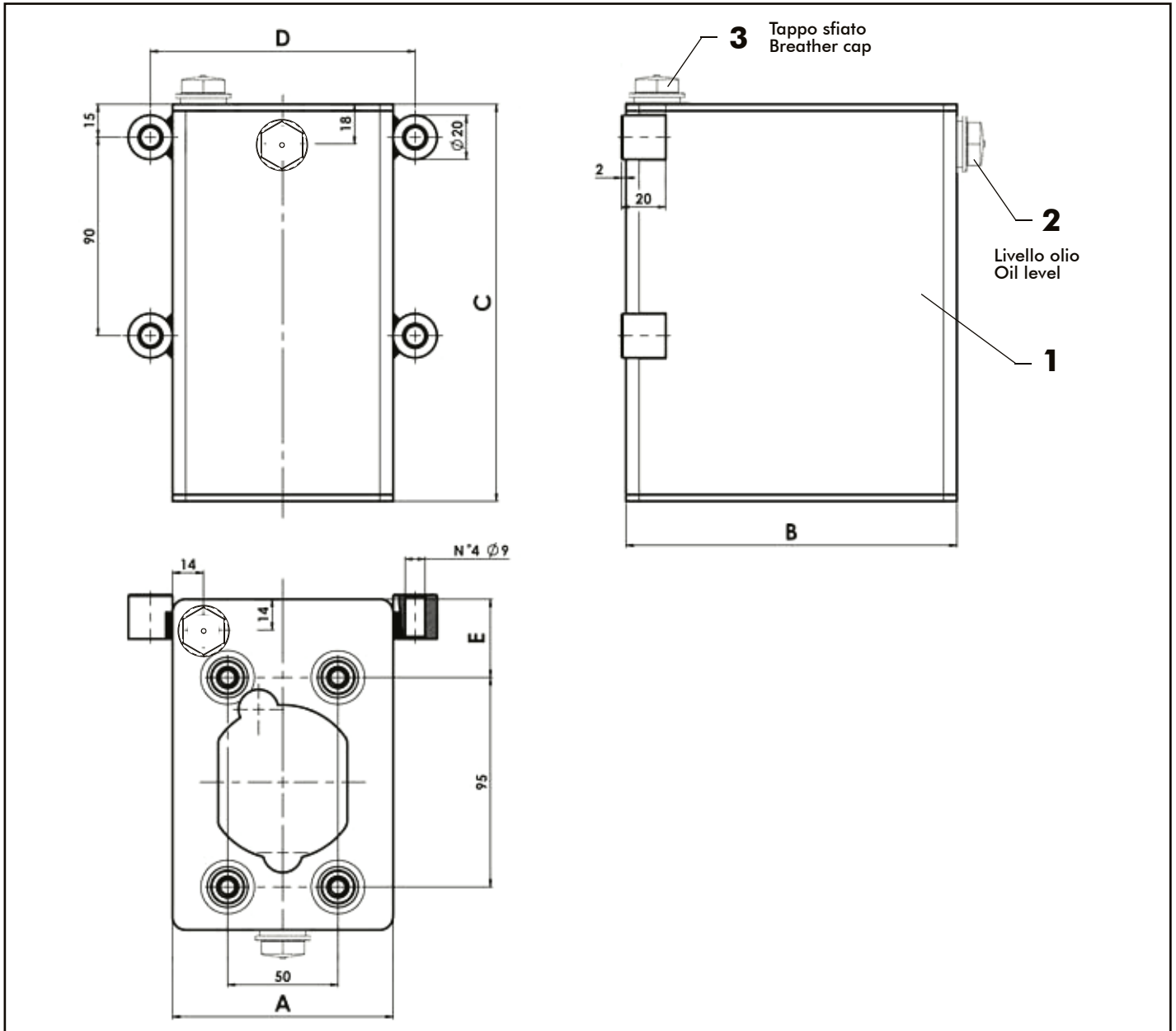


Data: Giovedì 14 settembre 2017

Codice foglio: 997-106-80010 Rev: A1



N°	Serbatoio l / tank				Codice P. Number		Q.
	2	3	5	10			
1	•	•	•	•	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	•	•	•	•	514-003-00089	Serbatoio/Tank	1
3	•	•	•	•	509-006-00121	Tappo livello/Level cap 1/4"	2
4	•	•	•	•	507-003-00431	Guarnizione/Gasket	1
5	•				514-005-00069		1
		•			514-005-00078	Coperchio serbatoio	1
			•		514-005-00087	Tank cover	1
5a				•	514-005-00050		1
6	•	•	•	•	502-002-00441	Vite/Screw TCE M6x18	8
6a				•	502-002-00478	Vite/Screw TCE M6x25	8
7	•	•	•	•	501-018-00052	Rosetta elastica/Washer	8
KIT RICAMBIO / KIT'S							
8	•	•	•	•	106-800-01015	Base per serbatoio/Base for tank	
9	•				106-800-02023		
		•			106-800-02032	Coperchio completo serbatoio	
			•		106-800-02050	Complete tank cover	
10				•	106-800-02103		



N°	Corpo serbatoio Tank body	Capacità Capacity	A	B	C	D	E
1	514-003-10014	1 lt	100	150	140	120	35,5
	514-003-10023	2 lt	100	150	180	120	35,5
	514-003-10032	3 lt	100	150	247	120	35,5
	514-003-10050	5 lt	175	175	200	195	61
	514-003-10078	7 lt	175	175	269	195	61
	514-003-10103	10 lt	175	175	376	195	61

N°	Codice Code	Q.tà Q.ty
2	509-004-00098 Livello olio / Oil level	1
3	509-005-00131 Tappo sfiato / Breather cap	1

Trattamento superficiale: verniciatura elettrolitica poliestere
Colore: nero RAL 9005 semiopaco

Protective treatment: electrolytic polyester coating
Color: Black RAL 9005