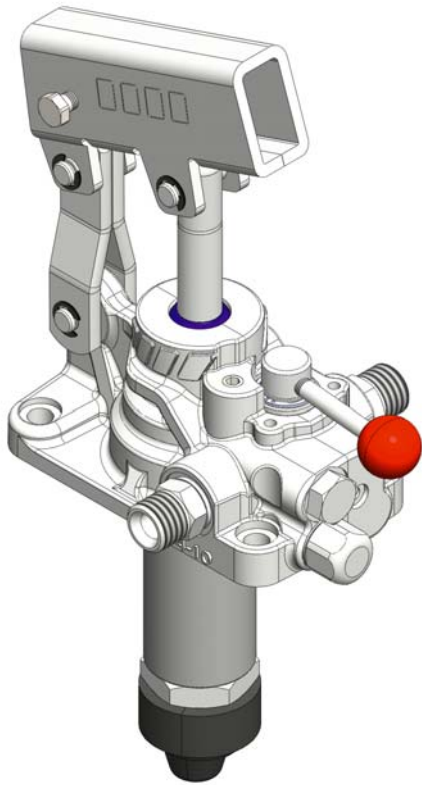


POMPE A MANO CON VALVOLA DI MASSIMA E INVERTITORE DI FLUSSO
HAND PUMPS WITH RELIEF VALVE AND DIRECTIONAL CONTROL VALVE

SERIE
SERIES

PMI+VS
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.

		Codice di ordinazione (senza leva) Order code (without lever)		
		FULCRO 12	FULCRO 25	FULCRO 45
Senza Serbatoio Without Tank		106-021-00019	106-013-00019	106-013-00028
	Con serbatoi With Tank			
Plastica / Plastic Litri / Litres	1	106-020-00010	106-011-00011	106-012-00065
	2	106-020-00029	106-011-00020	106-012-00056
	3	106-020-00038	106-011-00039	106-012-00010
	4	106-020-00042	106-011-00043	106-012-00074
	5	106-020-00047	106-011-00048	106-012-00029
	7	106-020-00056	106-011-00057	106-012-00038
	10	106-020-00065	106-011-00066	106-012-00047

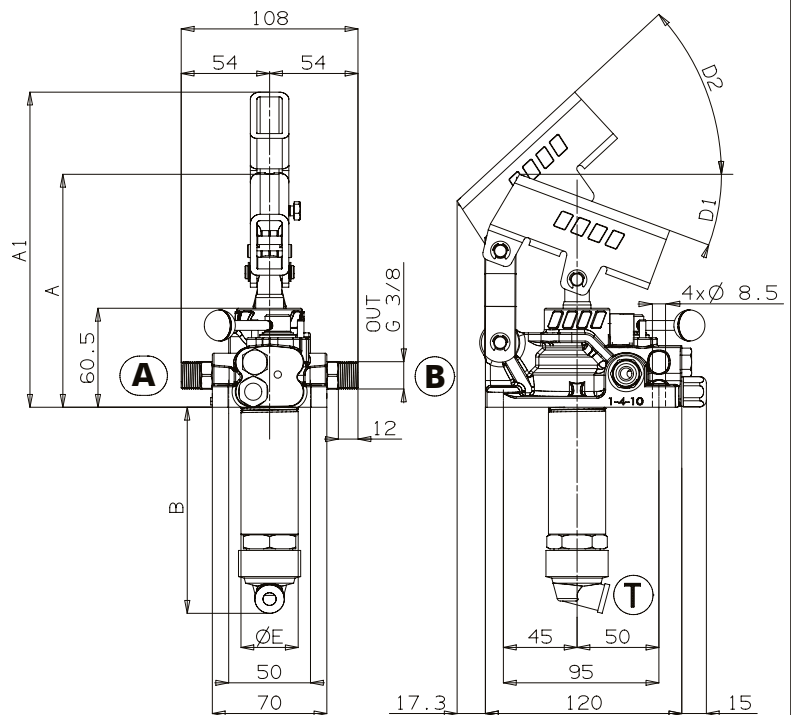
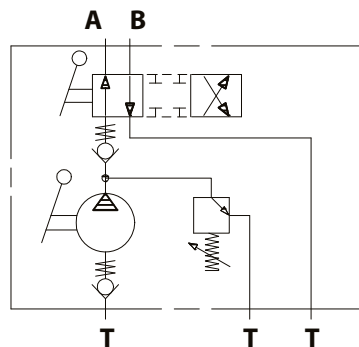
Data: Venerdì 3 novembre 2017

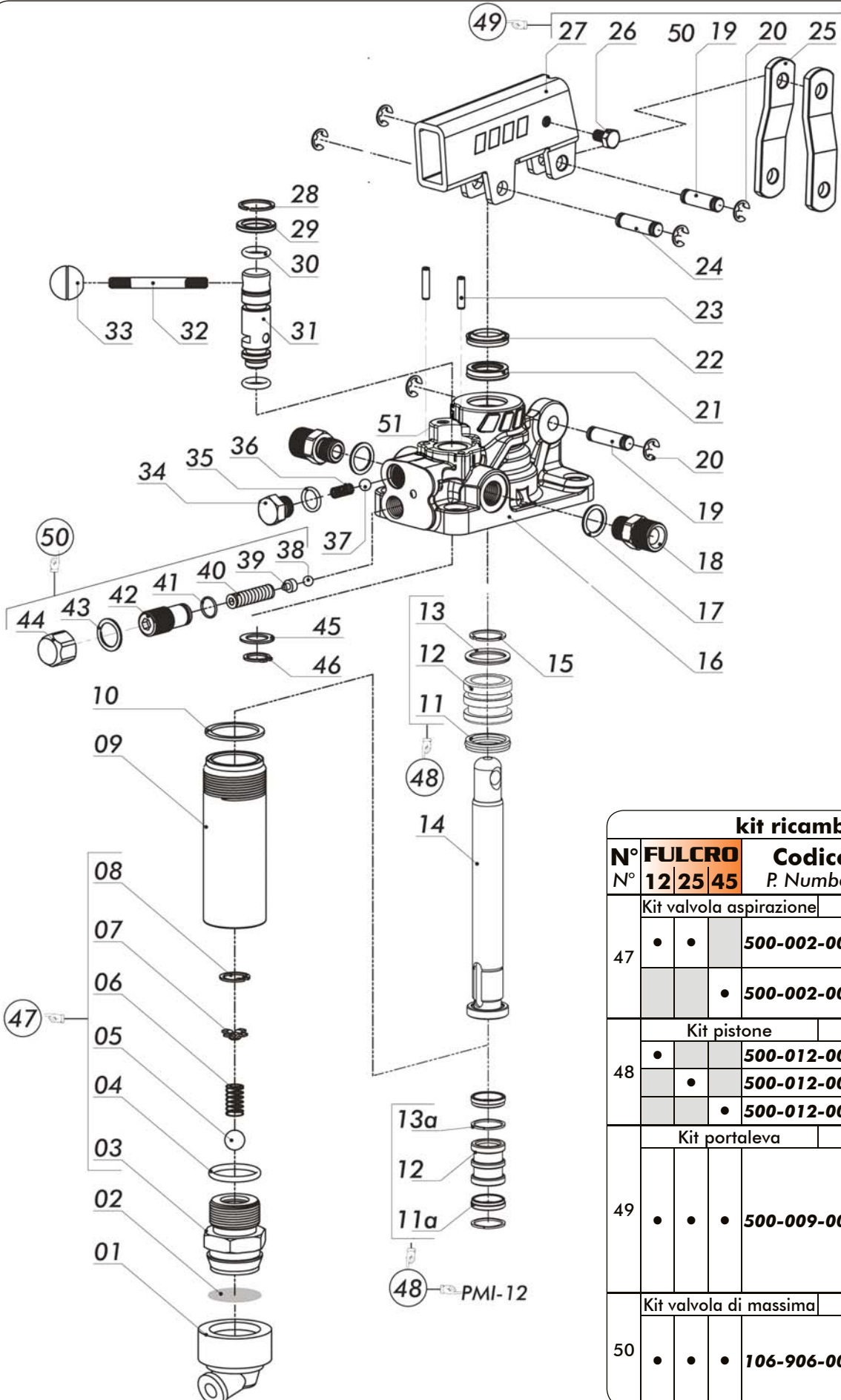
Codice foglio: 997-106-01310 Rev: AQ

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
47		Kit valvola aspirazione	Suction valve kit
	•	•	500-002-00016
		•	500-002-00025
48		Kit pistone	Piston assembly
	•	•	500-012-00032
		•	500-012-00014
		•	500-012-00023
49		Kit portaleva	Hand lever holder kit
	•	•	•
		•	500-009-00135
50		Kit valvola di massima	Relief valve assembly
	•	•	•
		•	106-906-00037

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
				537-002-00037			
9	•	•	•	537-002-00019	Cilindro acciaio	Steel stem	1
				537-002-00028			
				116-009-01255			
10	•	•	•	116-009-01308	Rondella tenuta cilindro	Washer	1
				506-000-00516			
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	•	•	•	517-001-00503	Corpo pompa a mano	Hand pump housing	1
				517-001-00521			
				517-001-00549			
17	•	•	•	116-009-00158	Rondella utilizzi	Washer	2
18	•	•	•	116-006-00259	Nipplo utilizzi	Pressure nipple	2
19	•	•	•	526-001-00095	Spinotto lunghezza 26mm	Gudgeon Pin 26mm	2
20	•	•	•	501-015-00028	Anello elastico	Circlip	6
				506-000-01926			
21	•	•	•	506-000-01935	Guarnizione a labbro	Lip seal	1
				506-000-01944			
				506-000-02729			
22	•	•	•	506-000-02701	Guarnizione raschiapolvere	Wiper seal	1
				506-000-02738			
				501-004-00058			
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	2
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	•	•	•	512-005-01428	Molla valvola di ritegno	Non-return valve spring	1
37	•	•	•	510-009-00054	Sfera tenuta di ritegno	Non-return ball	2
38	•	•	•	510-009-00045	Sfera tenuta valvola di massima	Relief valve ball	1
39	•	•	•	542-001-00073	Pistone guidamolla	Guide-spring pin	1
40	•	•	•	512-005-00312	Molla valvola di massima	Relief valve spring	1
41	•	•	•	506-019-10102	Guarnizione OR	O-ring	1
42	•	•	•	504-000-00458	Grano registro valvola di massima	Setting screw for relief valve	1
43	•	•	•	116-009-00201	Rondella tenuta valvola di massima	Washer	1
44	•	•	•	540-006-00116	Tappo chiusura valvola di massima	Relief valve cover	1
45	•	•	•	530-001-00489	Distanziale	Spacer	1
46	•	•	•	501-002-00103	Anello elastico	Circlip	1
51	•	•	•	504-010-00018	Grano conico 1/16" NPTF	Conical plug 1/16" NPTF	1

Dati Tecnici Technical data

Tipo pompa Pump type	Taratura standard Standard pressure setting	Taratura massima Max. pressure setting	Cilindrata Displacement			Peso Weight
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,9
FULCRO 25	160	300	25	13,4	11,6	2,9
FULCRO 45	160	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

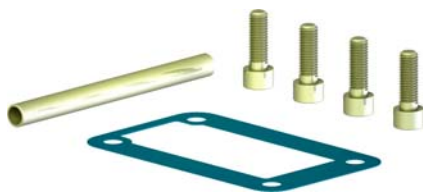
FULCRO 12	FULCRO 25	FULCRO 45
106-900-00551	106-900-00604	106-900-00659



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



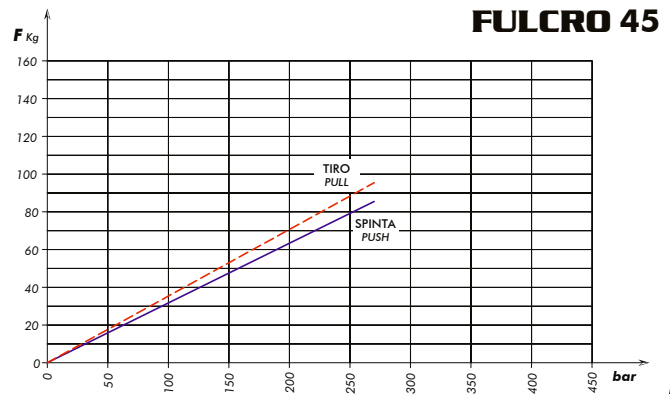
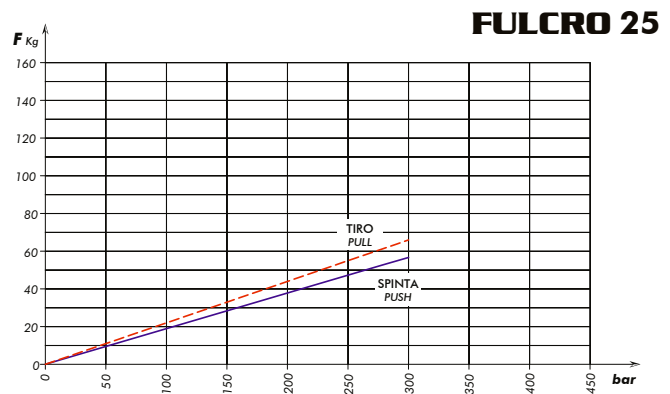
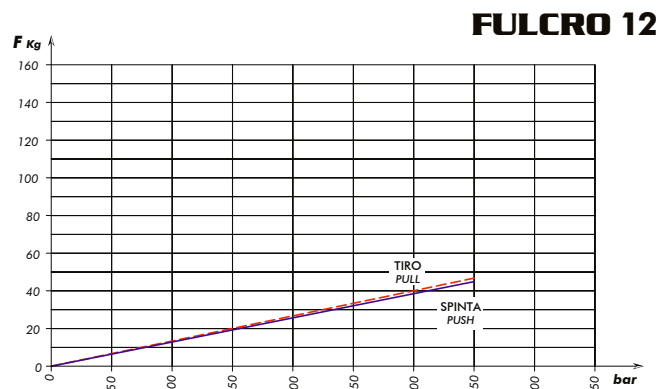
106-000-00078 AST. CON IMP.PMS/PMI L.600 MM 35x15
 LEVER FOR PMS/PMI L. 600 MM 35x15



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










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

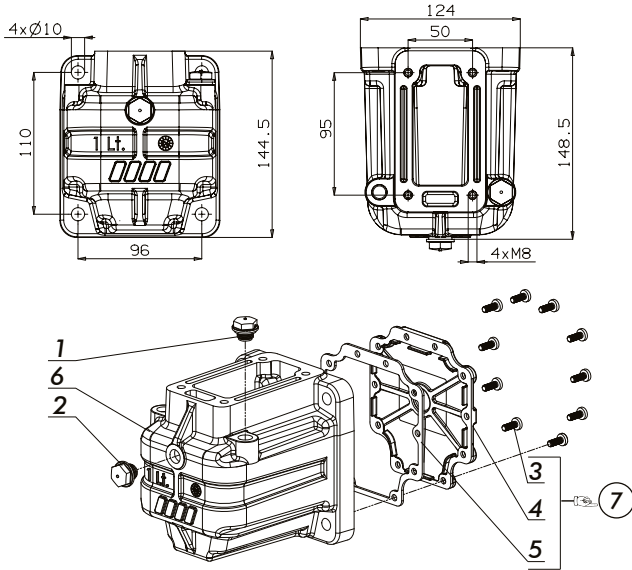
					
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	10 litri / 10 litres	
CODICE DI ORDINAZIONE ORDER CODE		CAPACITÀ CAPACITY	DESCRIZIONE DESCRIPTION		PESO WEIGHT
106-800-00016		1	SRB. CMP. PM S/1/ TANK 1 LT		1,2
106-800-00203		2	SRB. CMP. PM S/2/ TANK 2 LT		1,9
106-800-00301	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

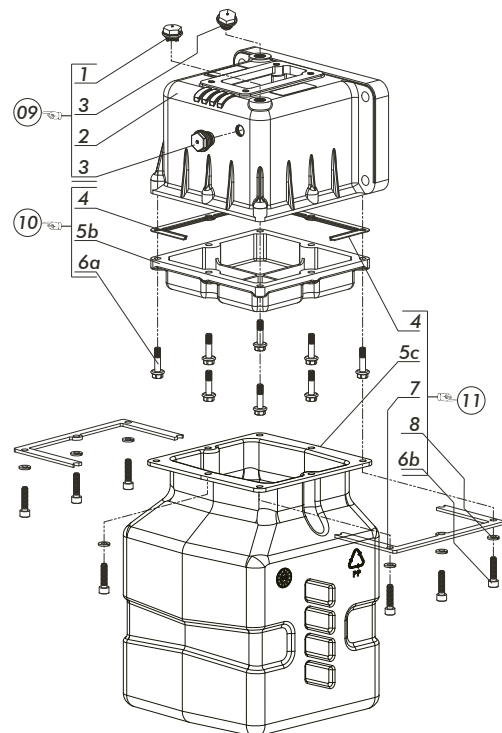
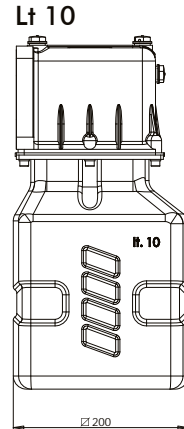
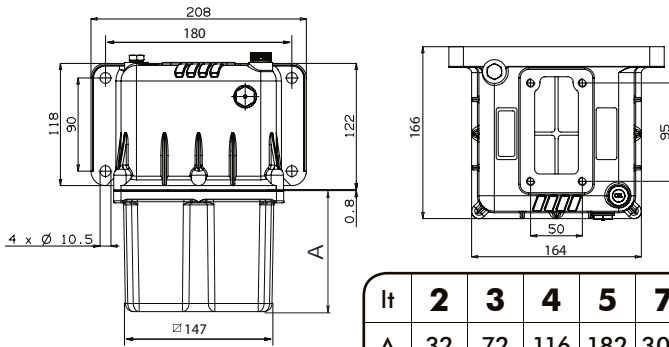
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SERBATOIO/Tank 1 LITRO/litre



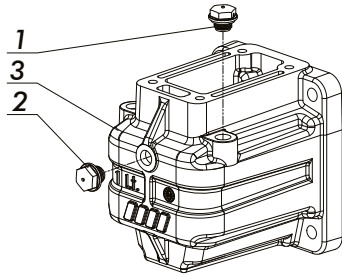
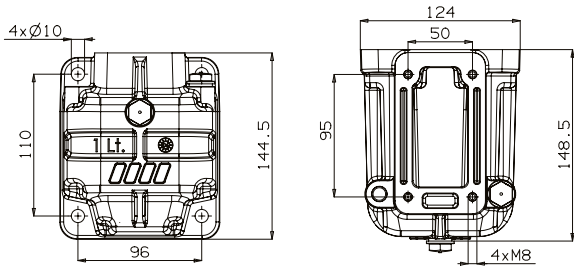
N°	Codice / P. Number		Q.
1	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	509-006-00121	Tappo livello/Level cap 1/4"	1
3	502-000-00872	Vite trilobata/Trefoil screw	10
4	509-000-00912	Coperchio plastica/Plastic cover	1
5	506-000-02158	Guarnizione/Gasket	1
6	514-003-00105	Serbatoio/Tank	1
KIT RICAMBIO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

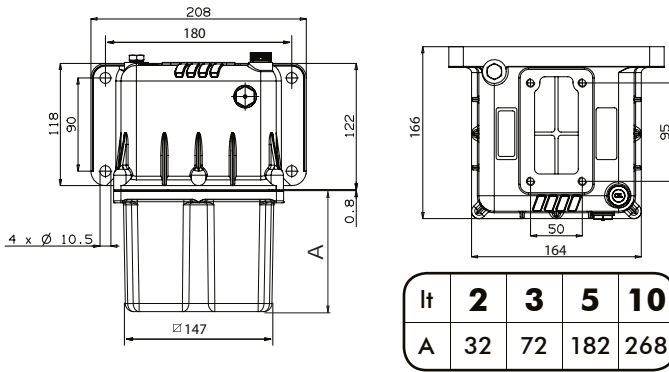
SERBATOIO/Tank 1 LITRO/litre



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

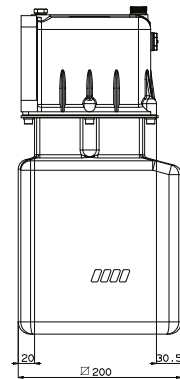
Codice fascicolo: 997-400-10610

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



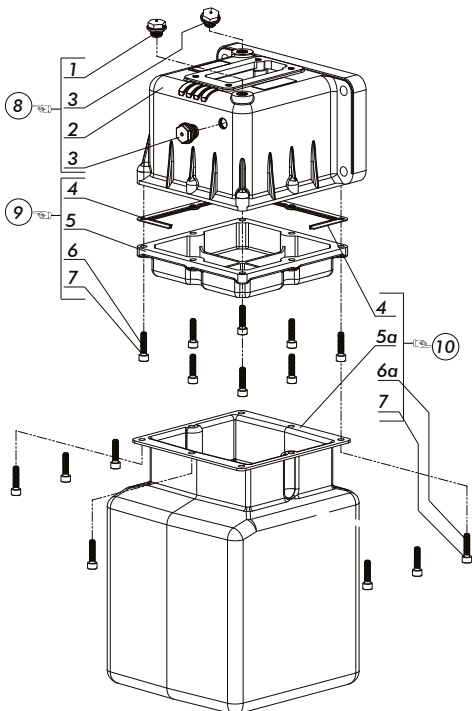
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A	32	72	182	268

Lt 10

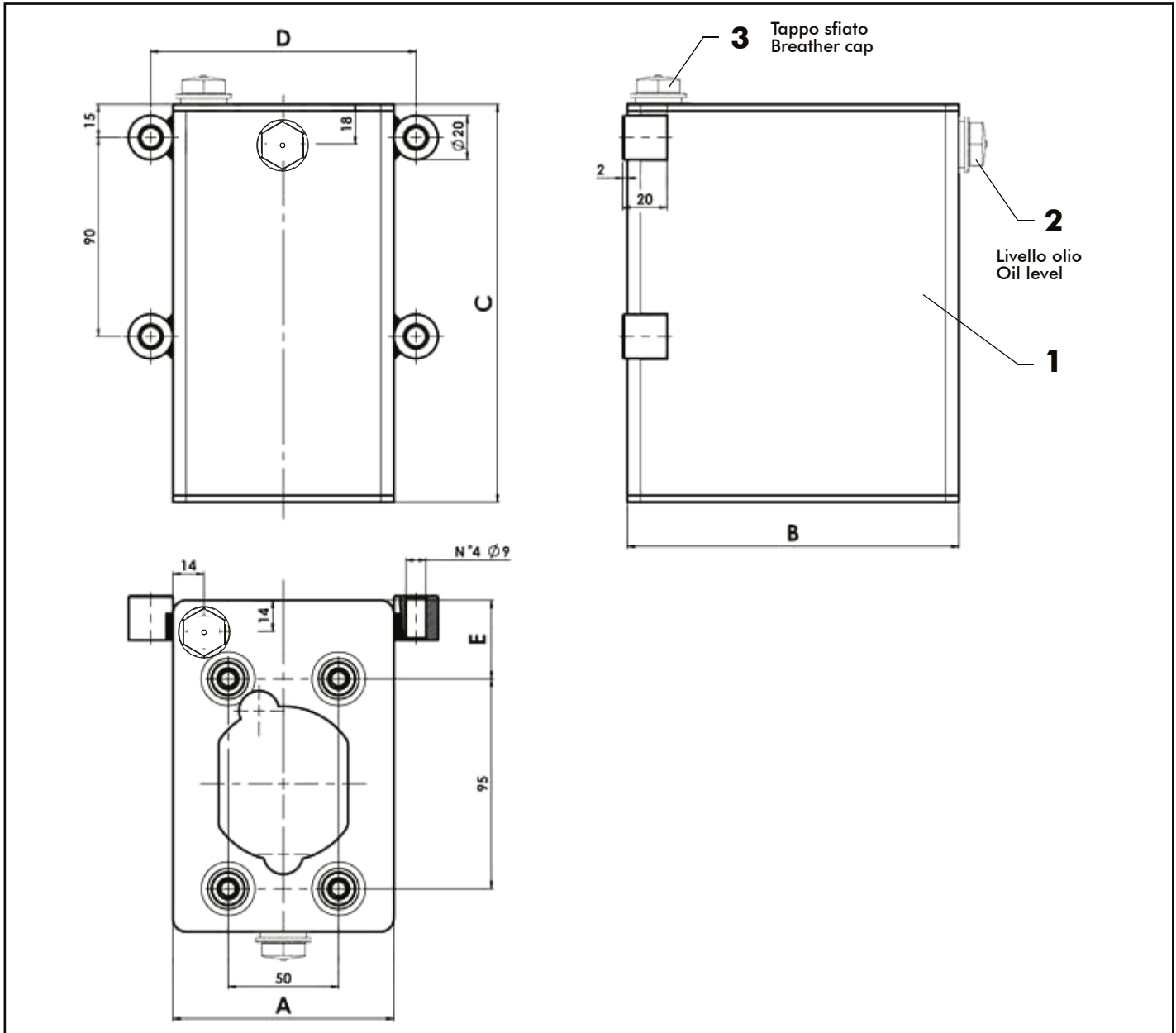


Data: Giovedì 14 settembre 2017

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"
2	•	•	•	•	514-003-00089	Serbatoio/Tank
3	•	•	•	•	509-006-00121	Tappo livello/Level cap 1/4"
4	•	•	•	•	507-003-00431	Guarnizione/Gasket
5	•				514-005-00069	
		•			514-005-00078	Coperchio serbatoio
			•		514-005-00087	Tank cover
5a				•	514-005-00050	
6	•	•	•	•	502-002-00441	Vite/Screw TCE M6x18
6a				•	502-002-00478	Vite/Screw TCE M6x25
7	•	•	•	•	501-018-00052	Rosetta elastica/Washer
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