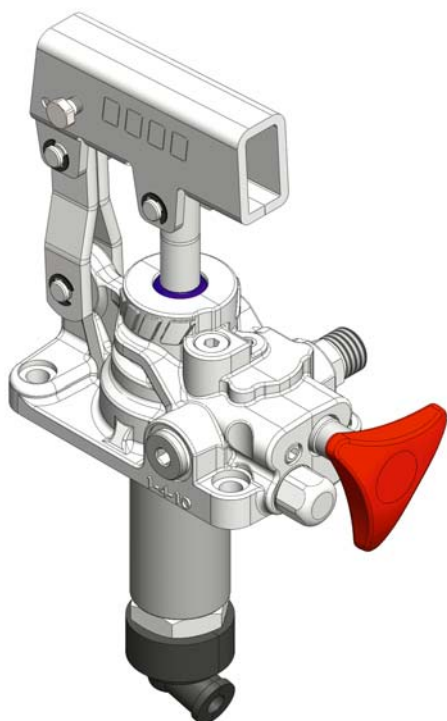


**POMPE A MANO
CON VALVOLA DI MASSIMA
HAND PUMPS WITH RELIEF VALVE**

SERIE
SERIES

**PMS+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 semplice 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 zincatura+sigillatura e lo stelo nichelato.

Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate single 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.

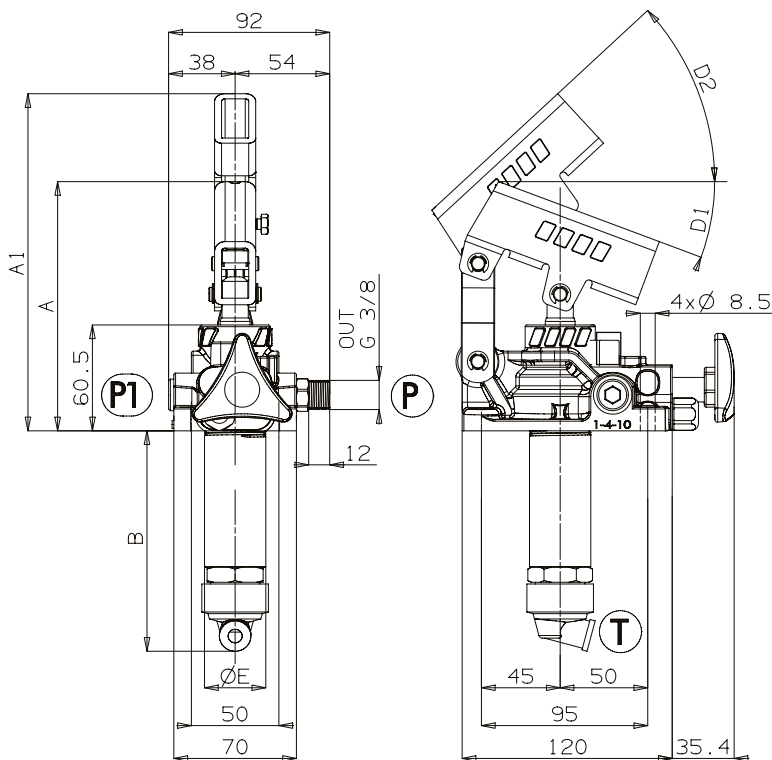
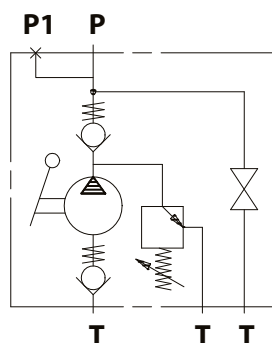
		Codice di ordinazione (senza leva) Order code (without lever)		
		FULCRO 12	FULCRO 25	FULCRO 45
Senza Serbatoio Without Tank		106-019-00013	106-010-00012	106-010-00021
	Con serbatoi With Tank			
Plastica / Plastic Litri / Litres	1	106-018-00014	106-008-00016	106-009-00060
	2	106-018-00023	106-008-00025	106-009-00051
	3	106-018-00032	106-008-00034	106-009-00015
	4	106-018-00036	106-008-00038	106-009-00079
	5	106-018-00041	106-008-00043	106-009-00024
	7	106-018-00050	106-008-00052	106-009-00033
10	106-018-00069	106-008-00061	106-009-00042	

Data: Venerdì 3 novembre 2017

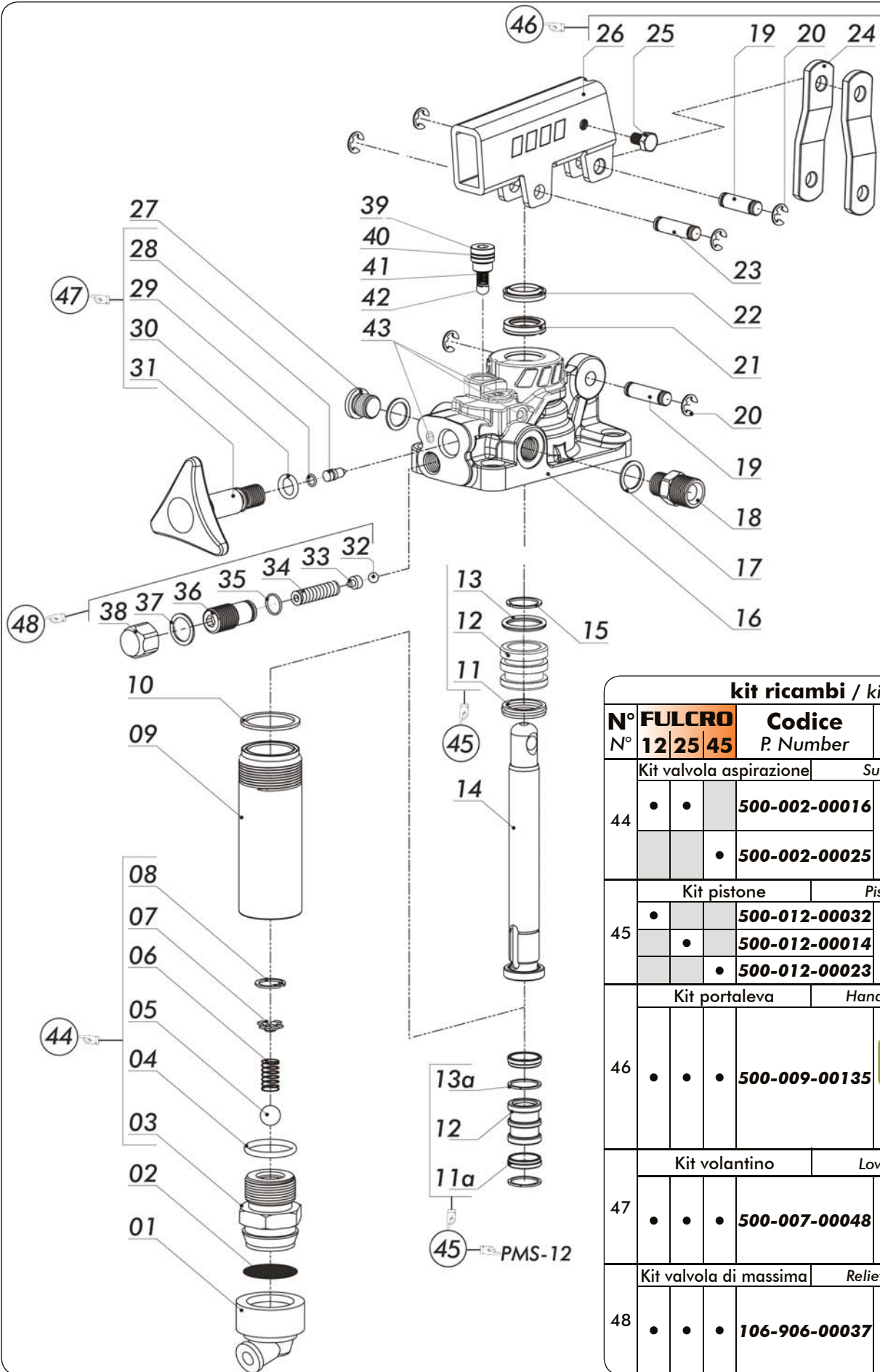
Ingombro
Overall Dimension

	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



Codice foglio: 997-106-01010 Rev: AO



kit ricambi / kit's			
N°	FULCRO	Codice	Gruppo
N°	12 25 45	P. Number	Assembly
44		Kit valvola aspirazione	Suction valve kit
		• • • 500-002-00016	
		• 500-002-00025	
45		Kit pistone	Piston assembly
		• • • 500-012-00032	
		• 500-012-00014	
		• 500-012-00023	
46		Kit portaleva	Hand lever holder kit
		• • • 500-009-00135	
47		Kit volantino	Lowering valve kit
		• • • 500-007-00048	
48		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
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	•	•	•	517-001-00763	Corpo pompa a mano	Hand pump housing	1
				517-001-00781			
				517-001-00807			
17	•	•	•	116-009-00158	Rondella utilizzi	Washer	2
18	•	•	•	116-006-00259	Nipplo utilizzi	Pressure nipple	1
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			
23	•	•	•	526-001-00086	Spinotto	Gudgeon Pin	1
24	•	•	•	538-001-00081	Biella	Brackets	2
25	•	•	•	502-002-00012	Vite blocco leva	Locking lever screw	1
26	•	•	•	539-001-00212	Portaleva	Lever holder	1
27	•	•	•	115-006-00117	Tappo utilizzo	Pressure port plug	1
28	•	•	•	543-004-00023	Spillo tenuta	Pin	1
29	•	•	•	506-000-00589	Guarnizione OR	O-ring	1
30	•	•	•	506-002-00014	Guarnizione OR	O-ring	1
31	•	•	•	500-001-00357	Volantino	Lowering wheel	1
32	•	•	•	510-009-00045	Sfera tenuta valvola di massima	Relief valve sealing ball	1
33	•	•	•	542-001-00073	Guidamolla	Spring-guide	1
34	•	•	•	512-005-01428	Molla valvola di massima	Spring	1
35	•	•	•	506-019-10102	Anello	O-ring	1
36	•	•	•	504-000-00458	Grano registro valvola di massima	Setting screw for relief valve	1
37	•	•	•	116-009-00201	Rondella tenuta valvola di massima	Washer	1
38	•	•	•	540-006-00116	Tappo chiusura valvola di massima	Relief valve cover	1
39	•	•	•	540-003-00477	Tappo valvola di ritegno	Plug	1
40	•	•	•	506-019-09150	Guarnizione ORM 0090-15	ORM 0090-15	1
41	•	•	•	512-005-00509	Molla	Spring	1
42	•	•	•	510-009-00054	Sfera 1/4" (Ø6.35)	Ball 1/4" (Ø6.35)	1
43	•	•	•	504-010-00018	Grano conico 1/16" NPTF	Conical plug 1/16" NPTF	3

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 bar	300 bar	12	6,1	5,9	2,8 Kg
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
106-900-00408	106-900-00453	106-900-00506



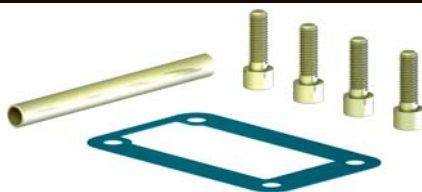
106-000-00032 PIA.APP.GRP.PMP. PMS-PMI
 MOUNTING PLATE FOR TANK PMS-PMI



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



106-000-00247 MAGGIORAZIONE RITORNO A MOLLA X PMS
 SPRING RETURN FOR PMS

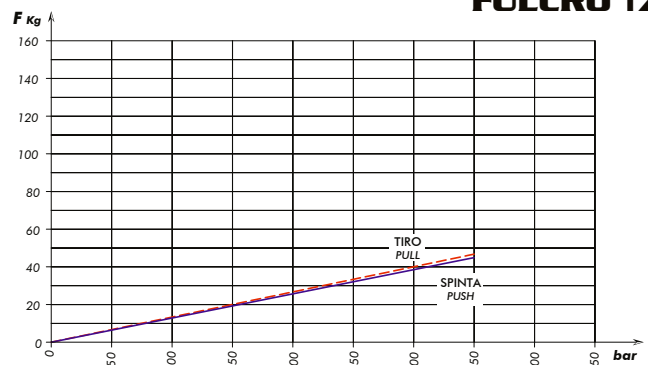


106-960-00700 KIT MONTAGGIO POMPE PMS/PMI
 MOUNTING KIT FOR PUMPS PMS/PMI

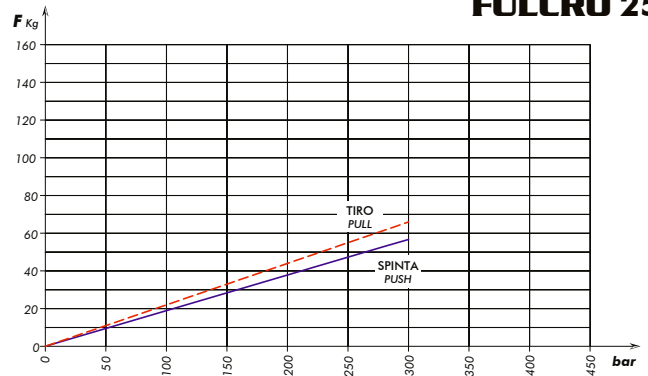
Sforzo in fase di pompaggio con leva standard

Load while pumping with standard lever

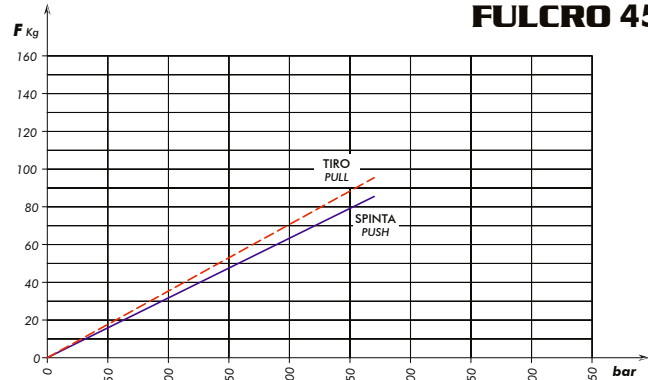
FULCRO 12



FULCRO 25



FULCRO 45










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

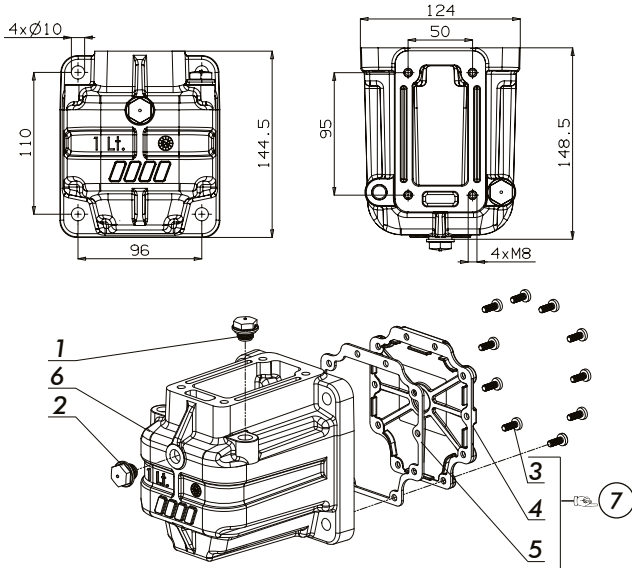
					
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	10 litri / 10 litres	
CODICE DI ORDINAZIONE ORDER CODE		CAPACITÀ CAPACITY	DESCRIZIONE DESCRIPTION		PESO WEIGHT
106-800-00016		1	SRB. CMP. PM S/1/ TANK 1 LT		1,2
106-800-00203		2	SRB. CMP. PM S/2/ TANK 2 LT		1,9
106-800-00301	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

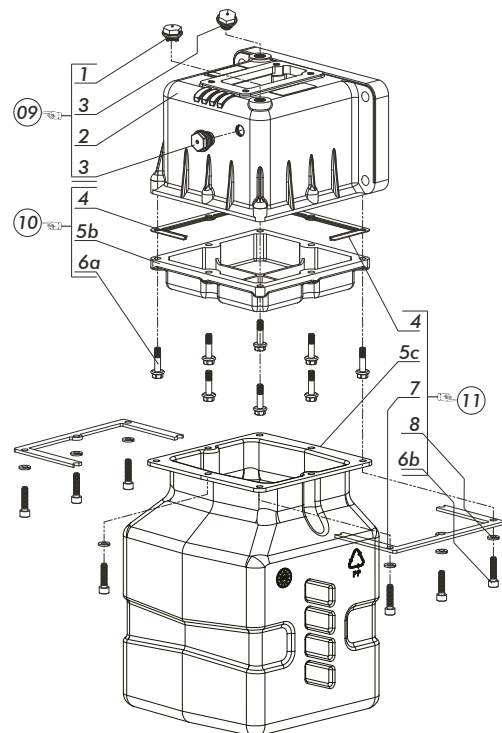
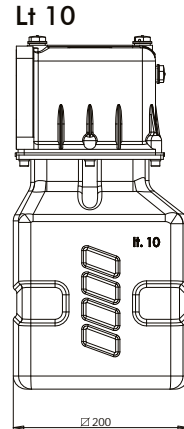
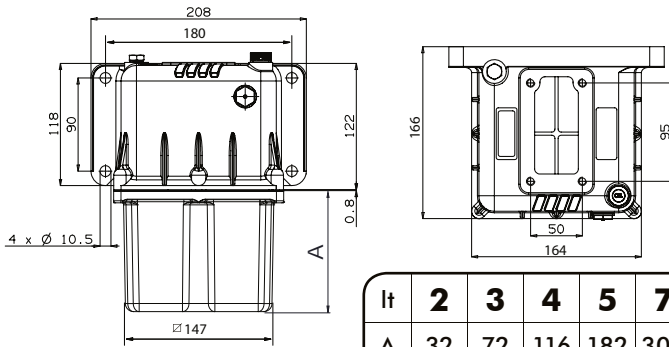
pag.45

SERBATOIO/Tank 1 LITRO/litre



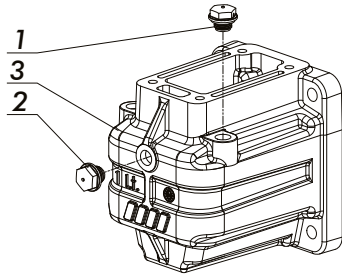
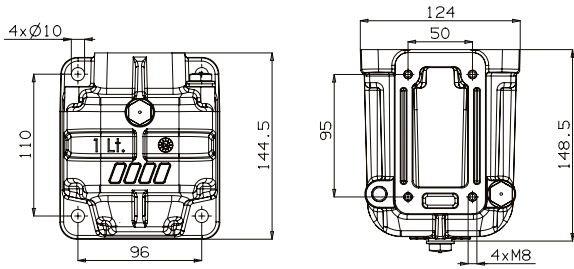
N°	Codice / P. Number		Q.
1	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	509-006-00121	Tappo livello/Level cap 1/4"	1
3	502-000-00872	Vite trilobata/Trefoil screw	10
4	509-000-00912	Coperchio plastica/Plastic cover	1
5	506-000-02158	Guarnizione/Gasket	1
6	514-003-00105	Serbatoio/Tank	1
KIT RICAMBIO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

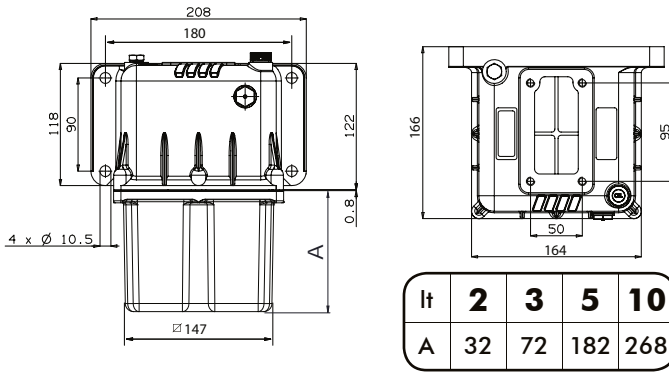
SERBATOIO/Tank 1 LITRO/litre



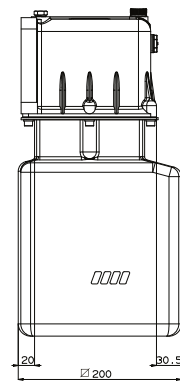
N°	Codice / P. Number		Q.
1	509-005-00131	Tappo sfiato/Breather cap 1/4"	1
2	509-006-00121	Tappo livello/Level cap 1/4"	1
3	514-003-00098	Serbatoio/Tank	1

Codice fascicolo: 997-400-10610

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

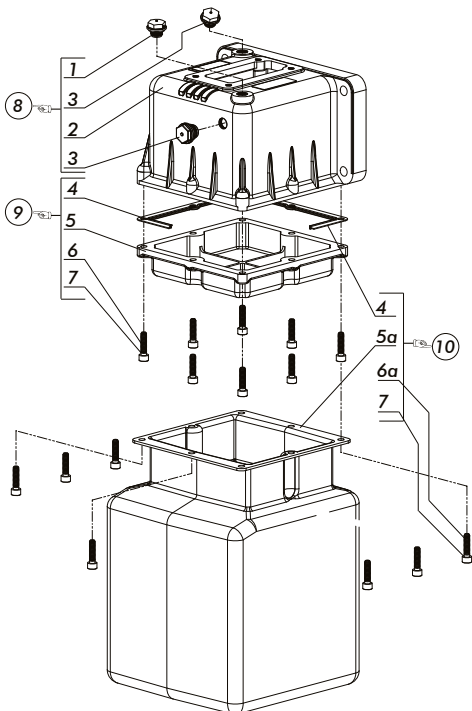


Lt 10

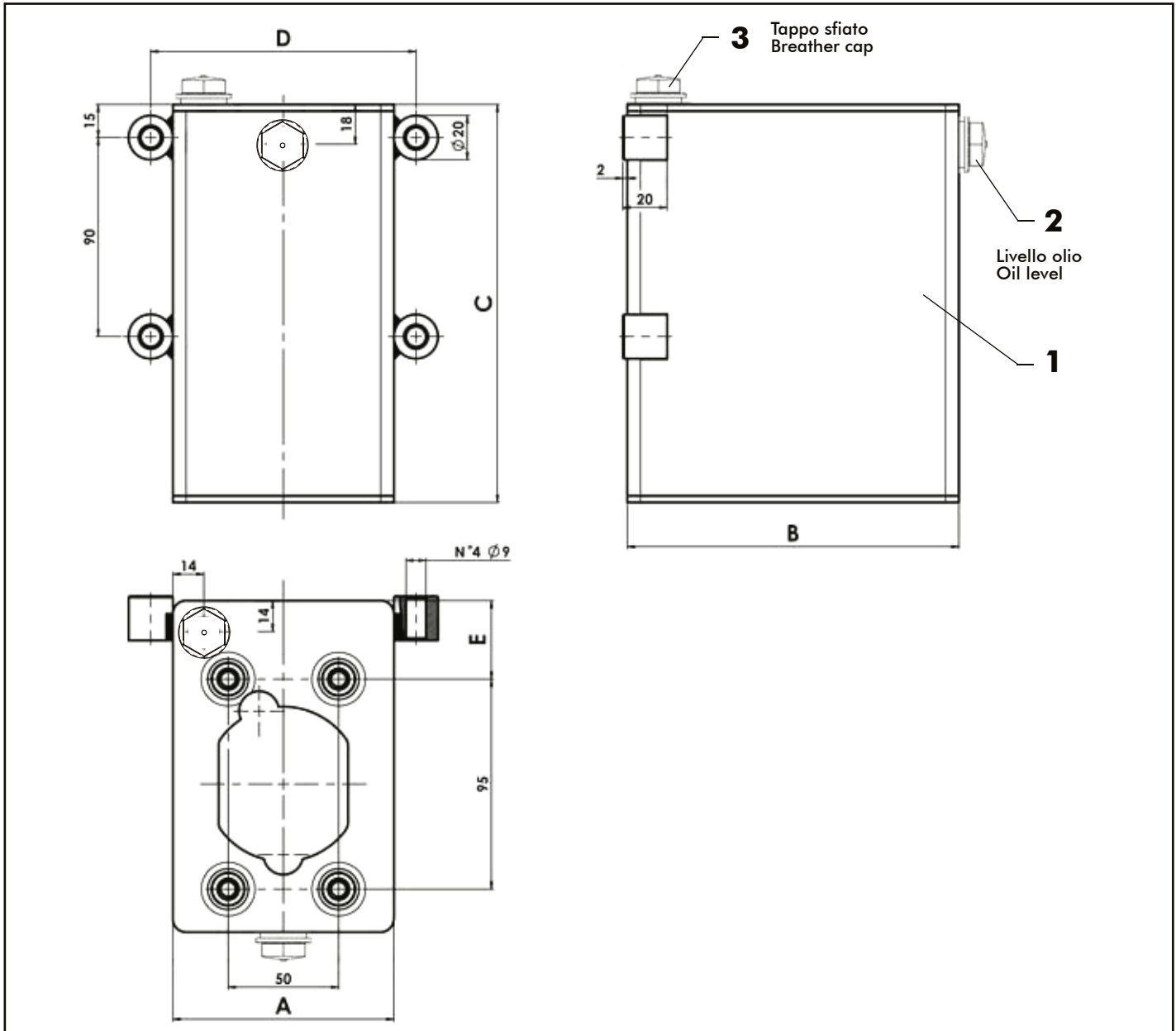


Data: Giovedì 14 settembre 2017

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