

POMPE A MANO serie FULCRO

HAND PUMPS FULCRO series

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- PMI 12-25-45 con invertitore di flusso / *with directional control valve* pag. 19
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con valvola di massima e invertitore di flusso / *with relief valve and directional control valve* pag. 25
- PMSE a semplice effetto / *single acting* pag. 31
- Serbatoi completi / *Tank assembly* pag. 33

POMPE A MANO serie ALU

HAND PUMPS ALU series

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POMPE A MANO serie OFFSHORE

HAND PUMPS OFFSHORE series

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- PMI+VS 12-25-45
con valvola di massima e invertitore di flusso / *with relief valve and directional control valve* pag. 27
- Serbatoi completi / *Tank assembly* pag. 37

POMPE A MANO serie FULCRO basse temperature -40°C

HAND PUMPS FULCRO series low temperature -40°C

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con valvola di massima e invertitore di flusso / *with relief valve and directional control valve* pag. 29

POMPE A MANO senza serbatoio

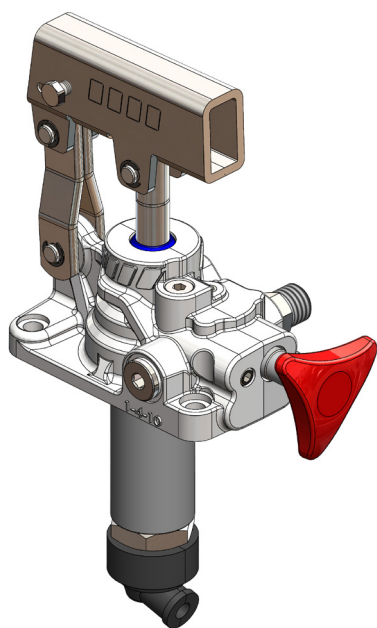
HAND PUMPS without tank

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Posizioni di montaggio pompe a mano

Hand pumps fixing positions pag. 51



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.

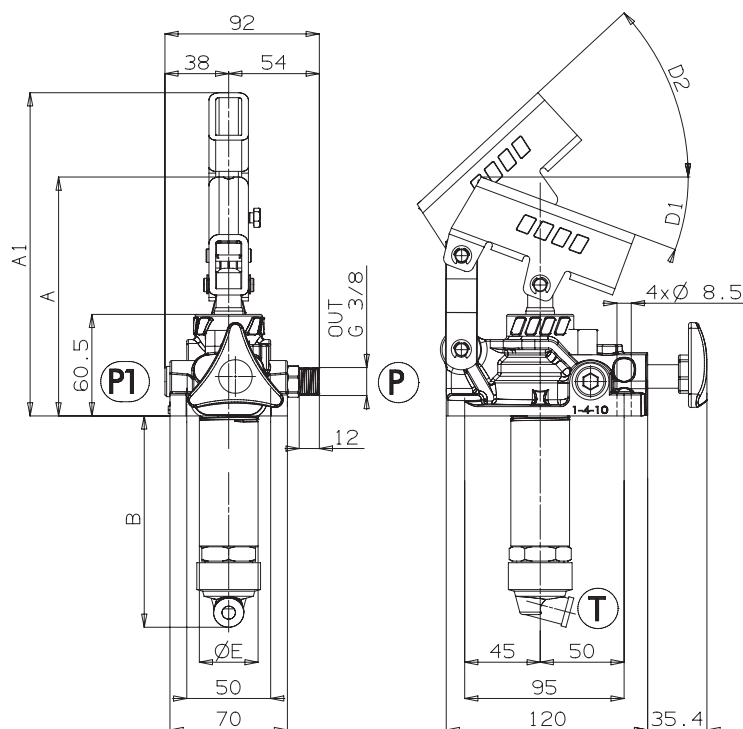
Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate single acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve.

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)

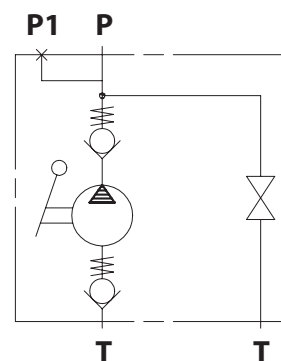
	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10601500017	10600400010	10600400029
Con serbatoio With tank	1	10601400018	10600200012
	2	10601400027	10600200021
	3	10601400036	10600200030
	4	10601400040	10600200037
	5	10601400045	10600200049
	7	10601400054	10600200058
	10	10601400063	10600200067
			10600300066
			10600300057
			10600300011
			10600300075
			10600300020
			10600300039
			10600300048

Ingombro / Dimensions



	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



Dati tecnici / Technical data

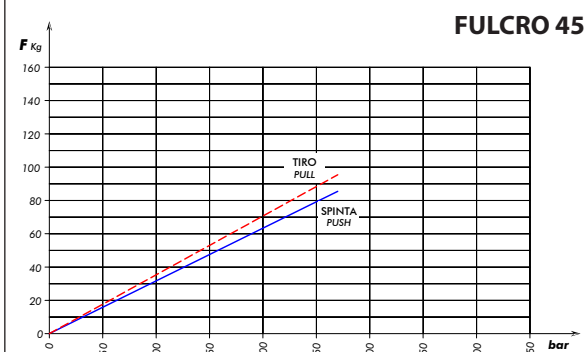
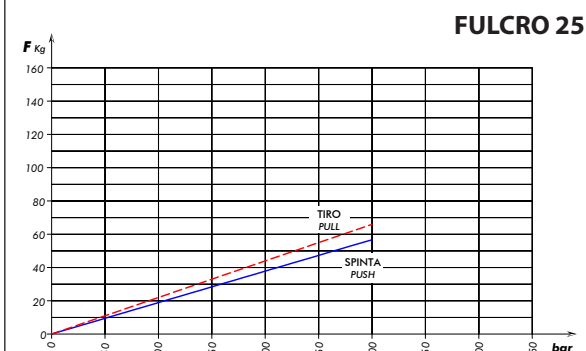
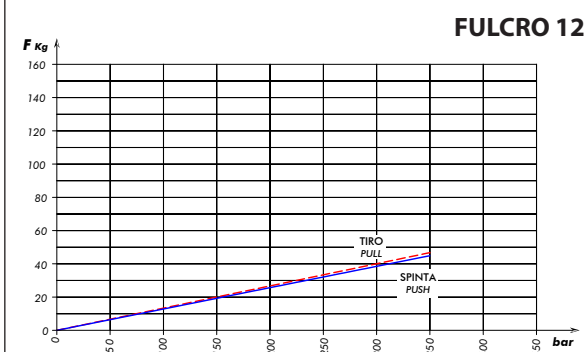
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
FULCRO 45	270	45	23,7	21,3	3,2

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 guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690000408	10690000453	10690000506

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



Collegamenti / Link:

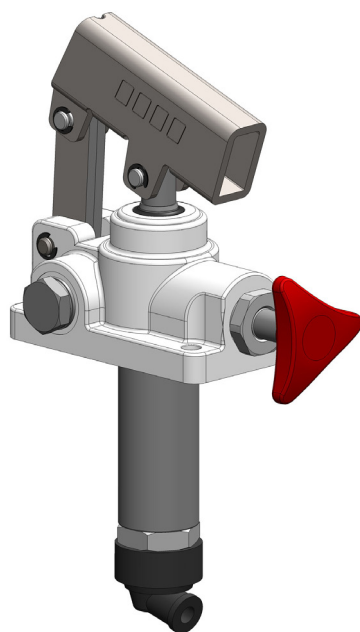
[Ricambi / Spare parts](#)

[Serbatoi / Tanks](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)





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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in alluminio 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 aluminium and nickel-plated spool.

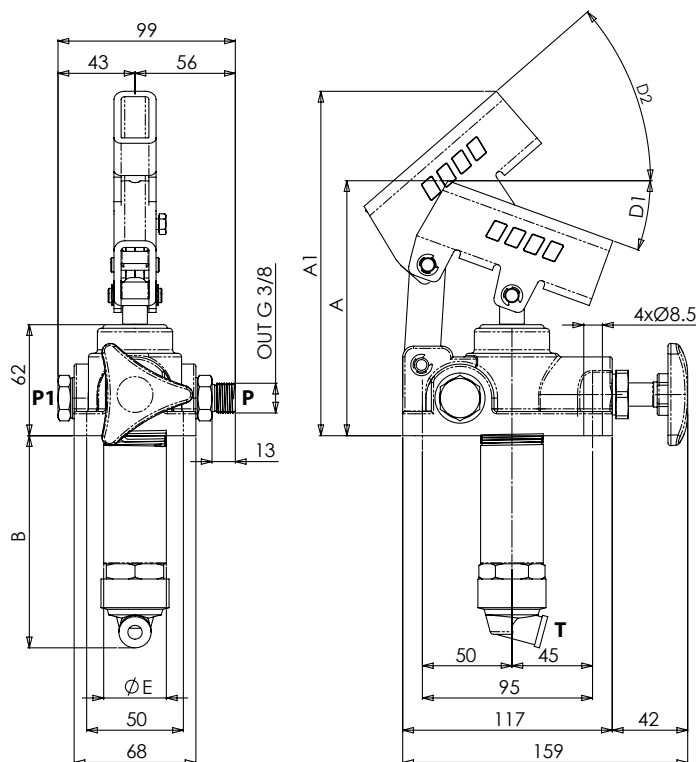
Codice di ordinazione (senza leva) Order code (without lever)

	ALU 12	ALU 25	ALU 45
Senza serbatoio Without tank	10601500035	10600400056	10600400065



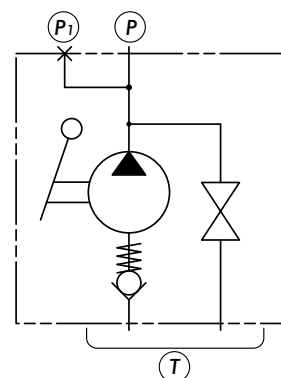
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	A	A1	B	D1	D2	E
	mm	mm	mm	°	°	mm
ALU 12	143	184	120	18,5	45	35
ALU 25	143	192	127	20	45	35
ALU 45	142	192	138	22	45	42

Schema idraulico / Hydraulic layout



Dati tecnici / Technical data

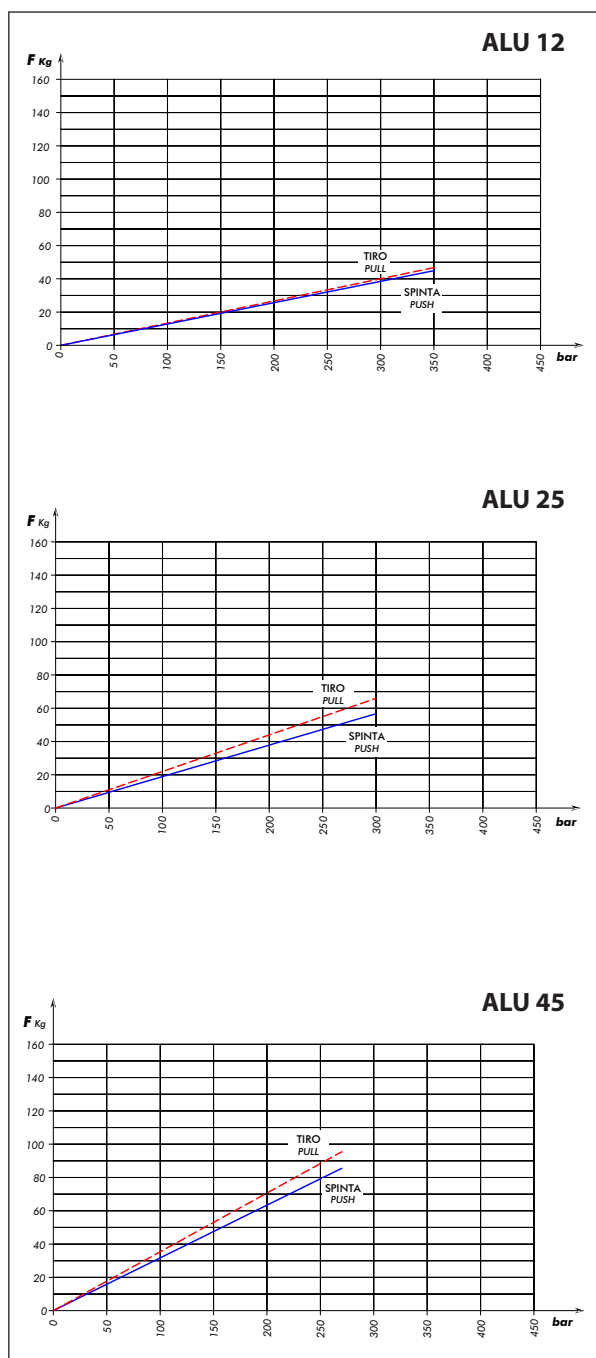
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
ALU 12	350	12	6,1	5,9	2,8
ALU 25	300	25	13,4	11,6	2,9
ALU 45	270	45	23,7	21,3	3,2

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 guarnizioni / Seal kit

ALU 12	ALU 25	ALU 45
10690000702	10690000757	10690000800

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

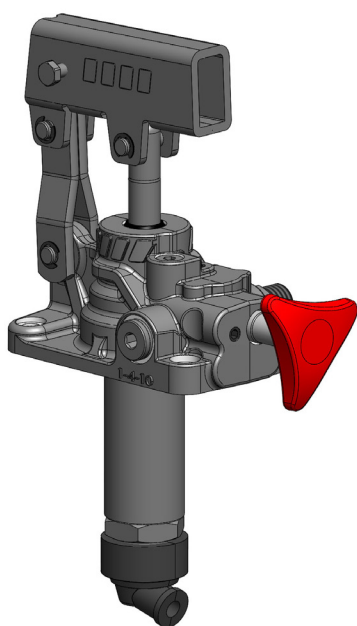


Collegamenti / Link:

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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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. **TRATTAMENTO ALTA RESISTENZA ALLA CORROSIONE (700 ore in nebbia salina).**

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. **HIGH RESISTANCE TREATMENT AGAINST CORROSION (Salt spray test=700 hours).***

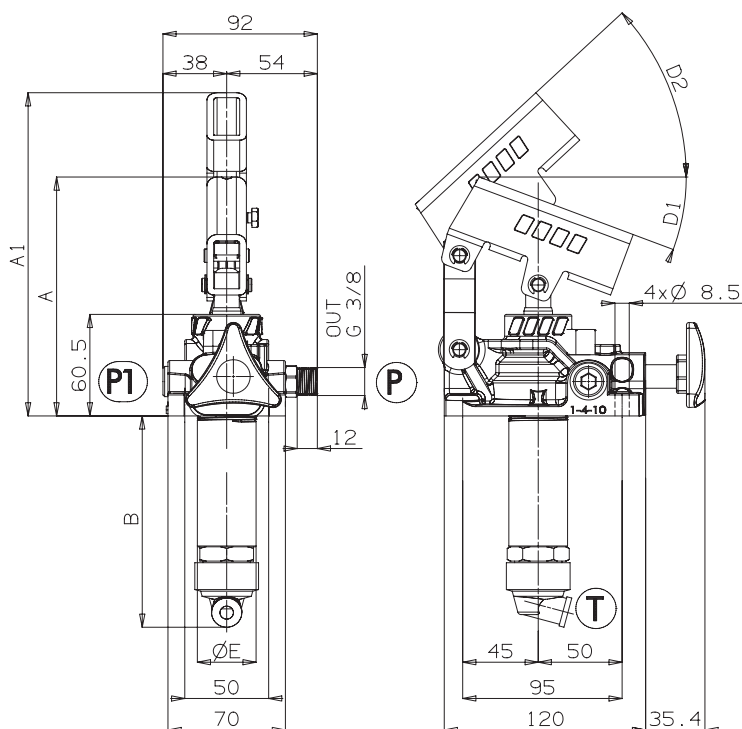
Codice di ordinazione (senza leva) Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10602300124	10602300259	10602300455



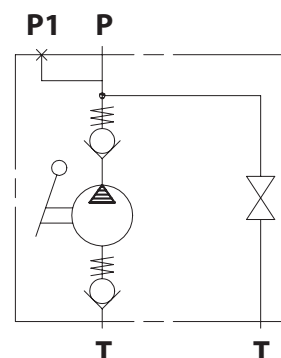
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	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

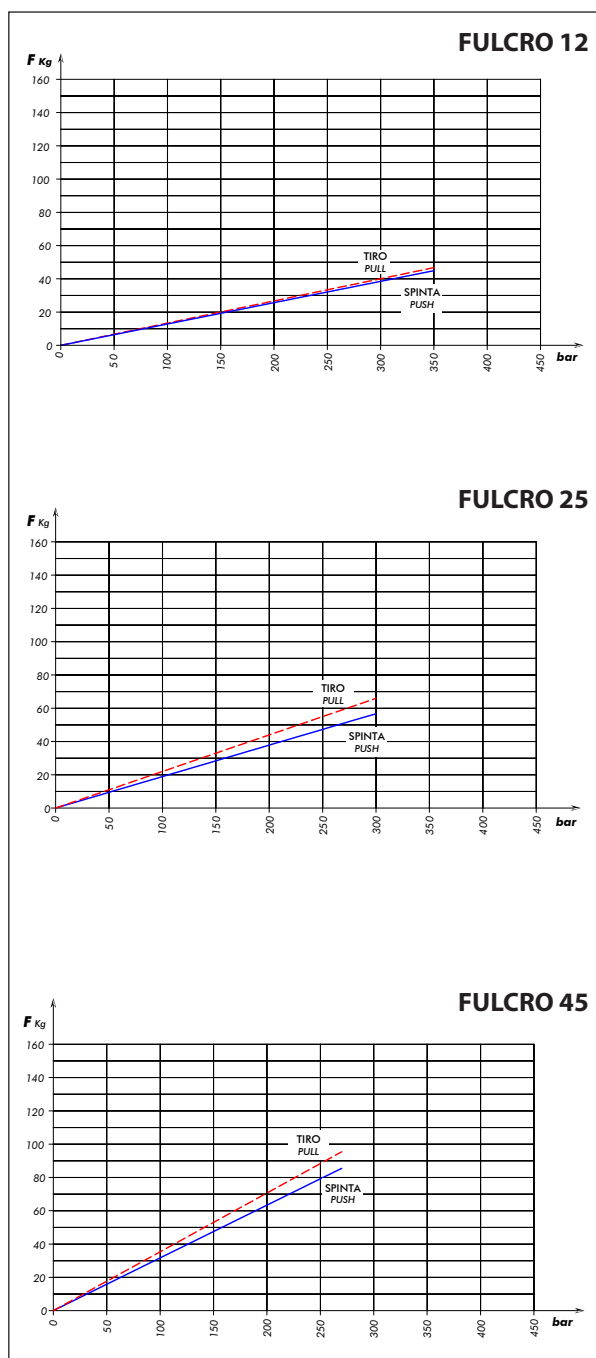


Dati tecnici / Technical data

Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
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			

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

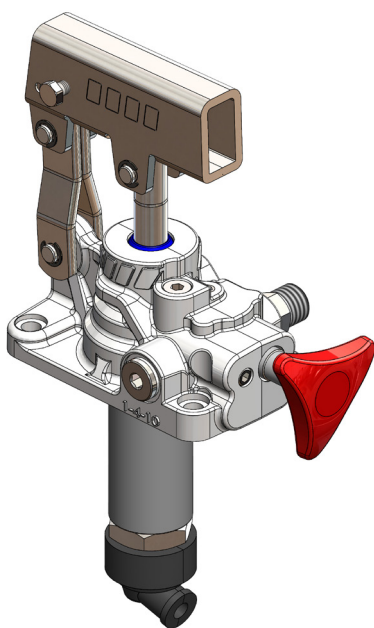


Collegamenti / Link:

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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.

BASSE TEMPERATURE -40°C.

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. **LOW TEMPERATURE -40°C.**

Codice di ordinazione (senza leva)

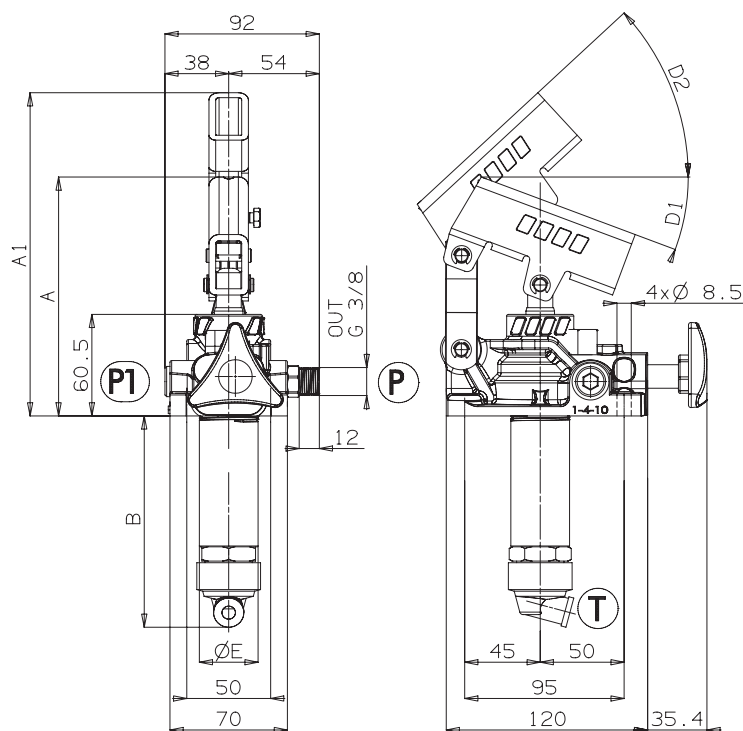
Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio <i>Without tank</i>	10690315177	10690304107	10690304296



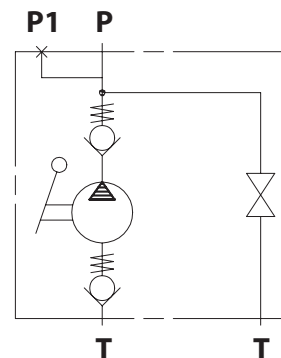
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	A <i>mm</i>	A1 <i>mm</i>	B <i>mm</i>	D1 °	D2 °	E <i>mm</i>
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



Dati tecnici / Technical data

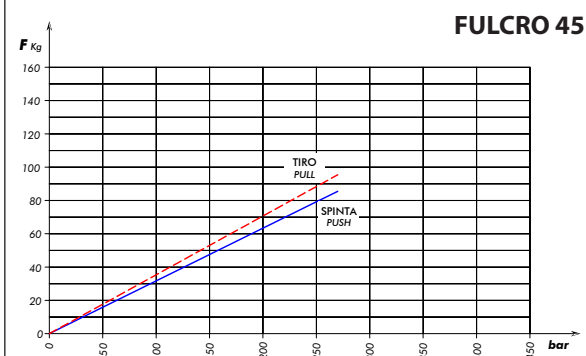
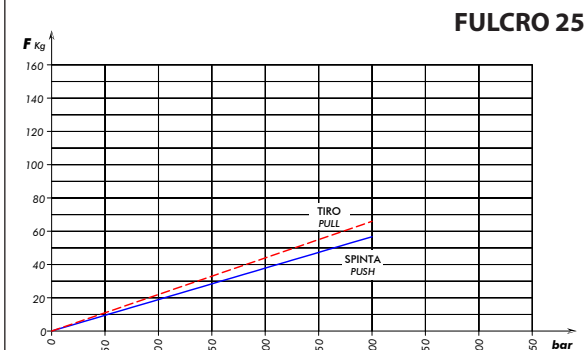
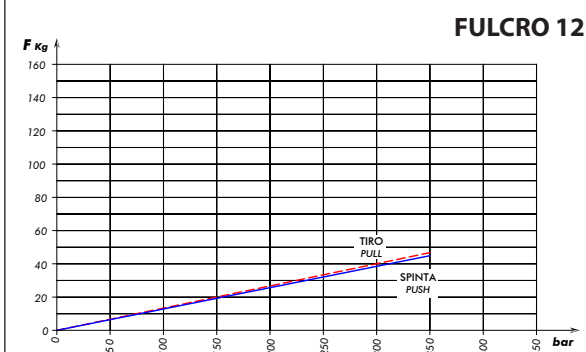
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
FULCRO 45	270	45	23,7	21,3	3,2

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		-40° +100°C			

Kit guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690010086	10690010095	10690010102

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



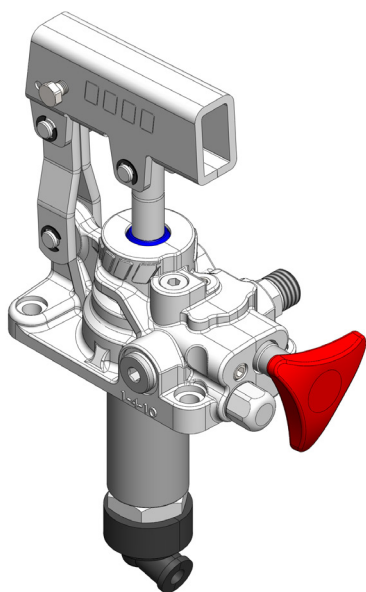
Collegamenti / Link:

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[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)





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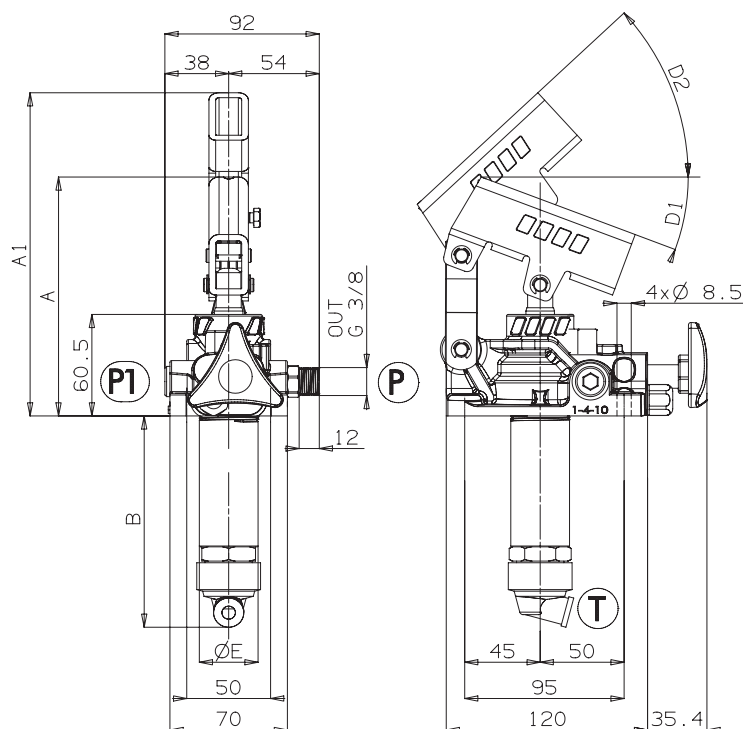
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Codice di ordinazione (senza leva)
Order code (without lever)

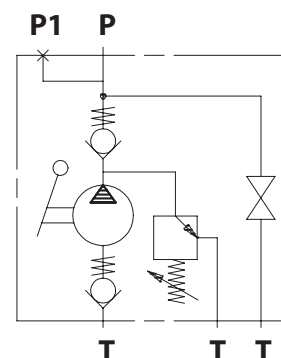
	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10601900013	10601000012	10601000021
Con serbatoio With tank	1	10601800014	10600800016
	2	10601800023	10600800025
	3	10601800032	10600800034
	4	10601800036	10600800038
	5	10601800041	10600800043
	7	10601800050	10600800052
	10	10601800069	10600800061
			10600900060
			10600900051
			10600900015
			10600900079
			10600900024
			10600900033
			10600900042

Ingombro / Dimensions



	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



Dati tecnici / Technical data

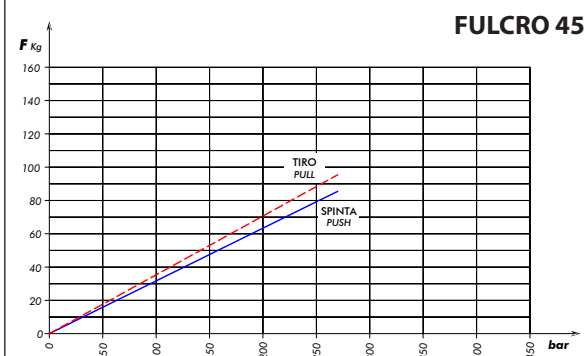
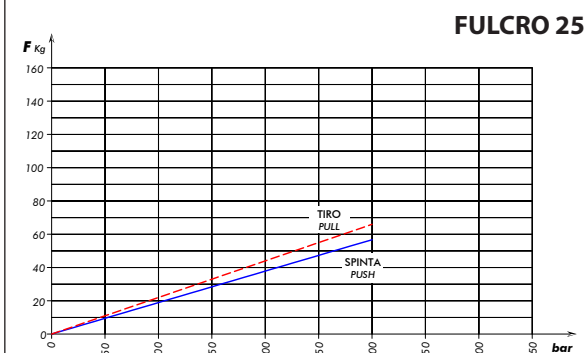
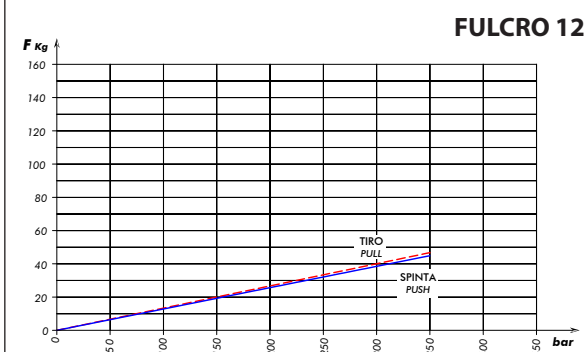
Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
FULCRO 25	160	300	25	13,4	11,6	2,9
FULCRO 45	160	270	45	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 guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690000408	10690000453	10690000506

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



Collegamenti / Link:

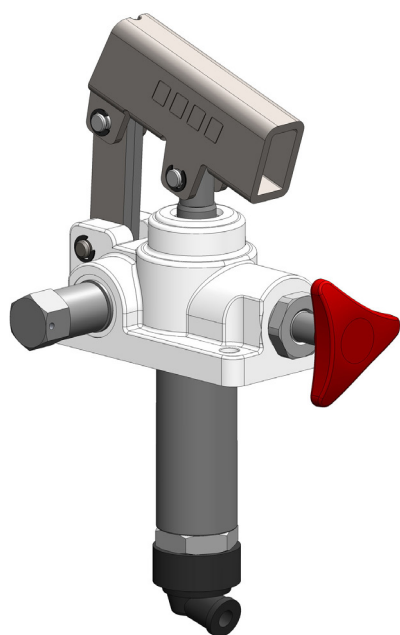
[Ricambi / Spare parts](#)

[Serbatoi / Tanks](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)





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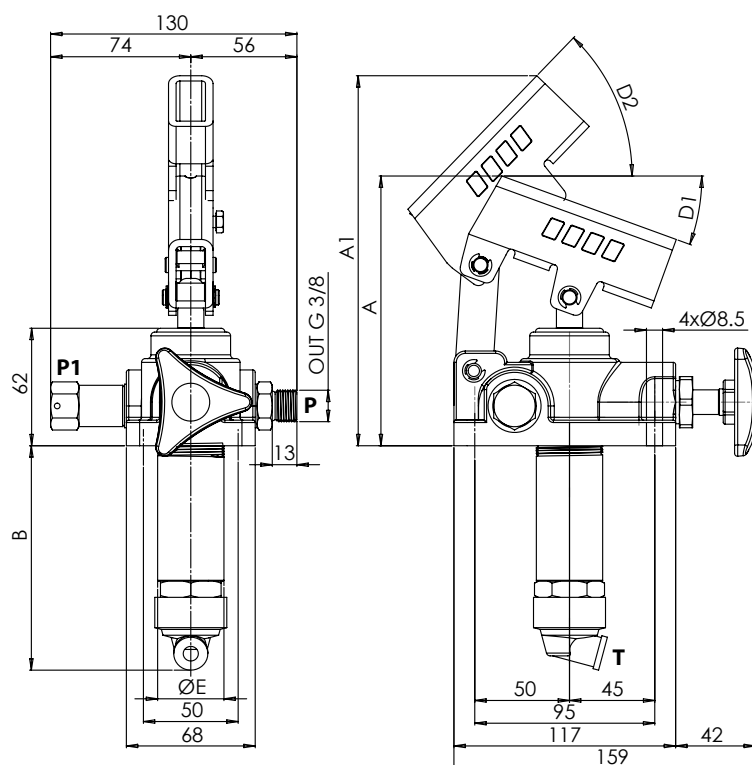
Codice di ordinazione (senza leva)
Order code (without lever)

	ALU 12	ALU 25	ALU 45
Senza serbatoio Without tank	10601900031	10601000058	10601000067



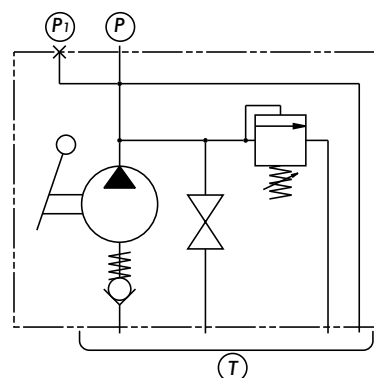
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	A mm	A1 mm	B mm	D1 °	D2 °	E mm
ALU 12	143	184	120	18,5	45	35
ALU 25	143	192	127	20	45	35
ALU 45	142	192	138	22	45	42

Schema idraulico / Hydraulic layout



Dati tecnici / Technical data

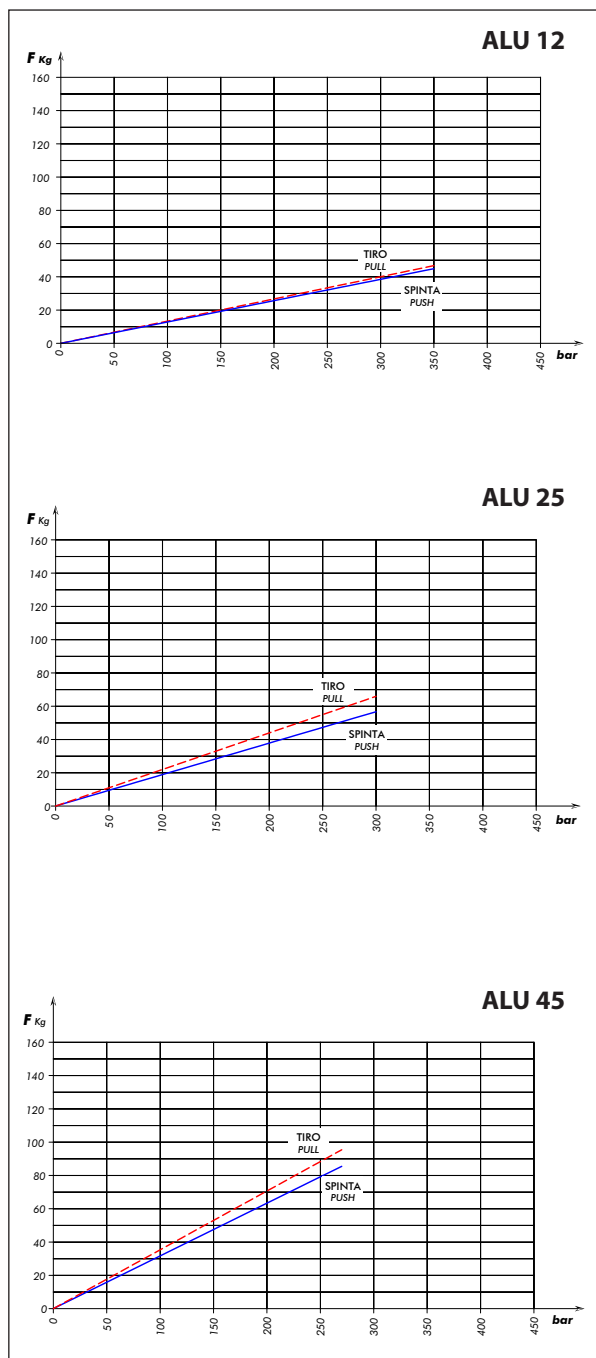
Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
ALU 12	160	300	12	6,1	5,9	2,8
ALU 25	160	300	25	13,4	11,6	2,9
ALU 45	160	270	45	23,7	21,3	3,2

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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 guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690000702	10690000757	10690000800

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



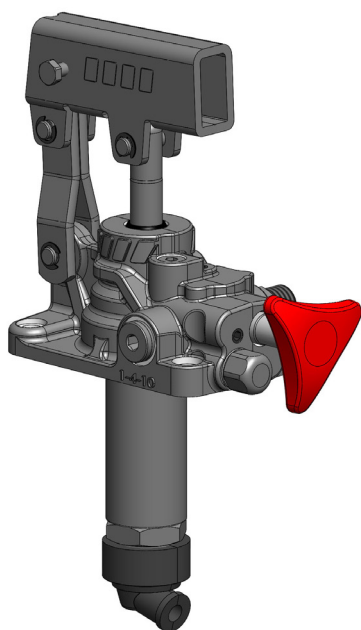
Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)





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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. **TRATTAMENTO ALTA RESISTENZA ALLA CORROSIONE (700 ore in nebbia salina).**

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. **HIGH RESISTANCE TREATMENT AGAINST CORROSION (Salt spray test=700 hours).***

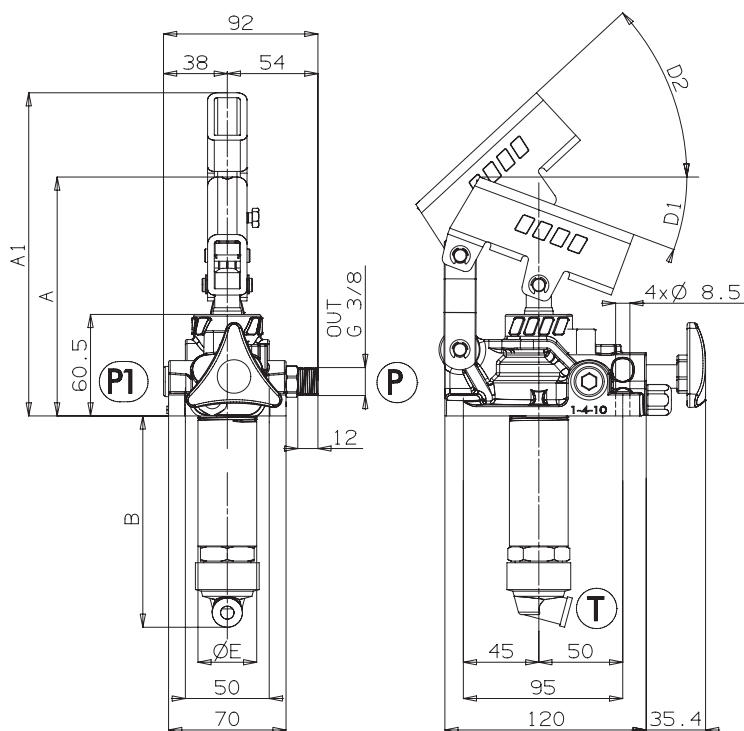
Codice di ordinazione (senza leva) Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10602301123	10602301258	10602301454



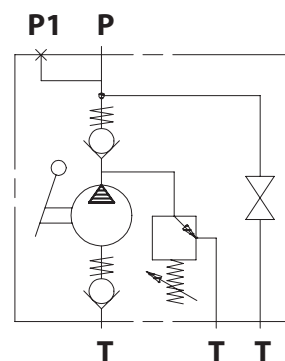
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	A mm	A1 mm	B mm	D1 °	D2 °	E 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

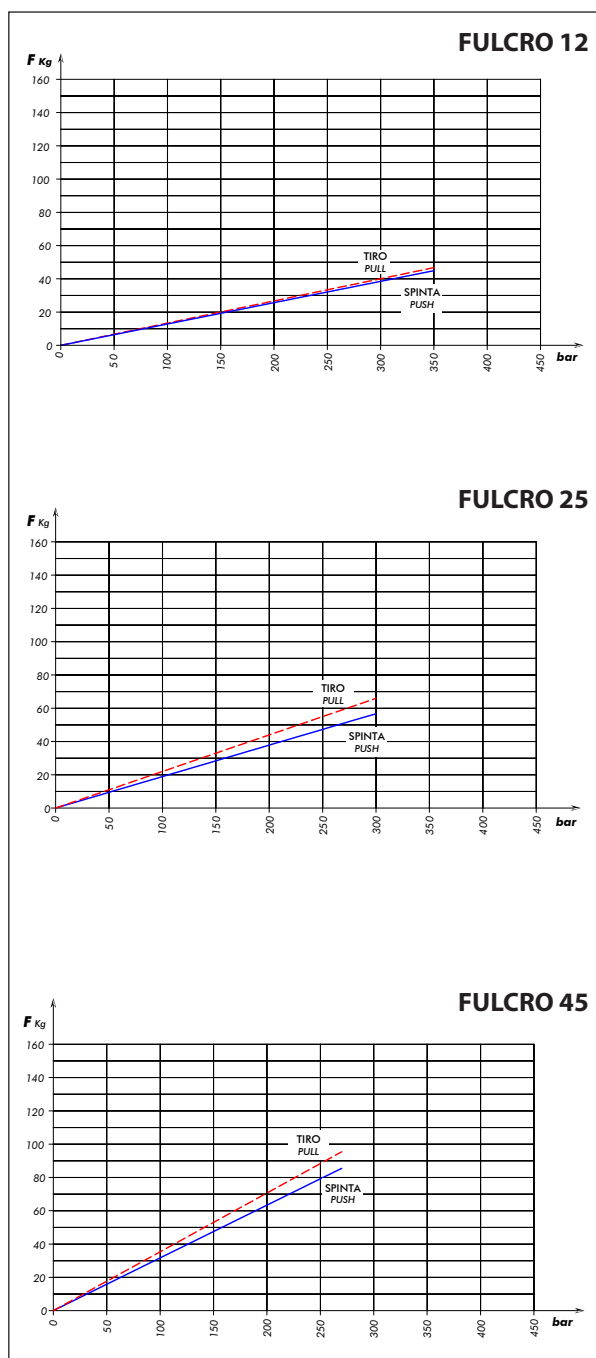


Dati tecnici / Technical data

Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
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			

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

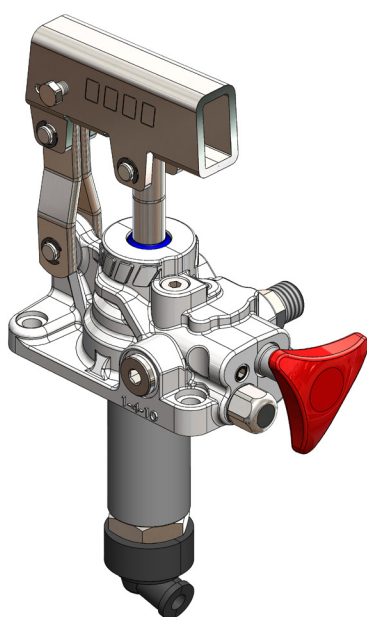


Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



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.

BASSE TEMPERATURE -40°C.

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. **LOW TEMPERATURE -40°C.**

Codice di ordinazione (senza leva)

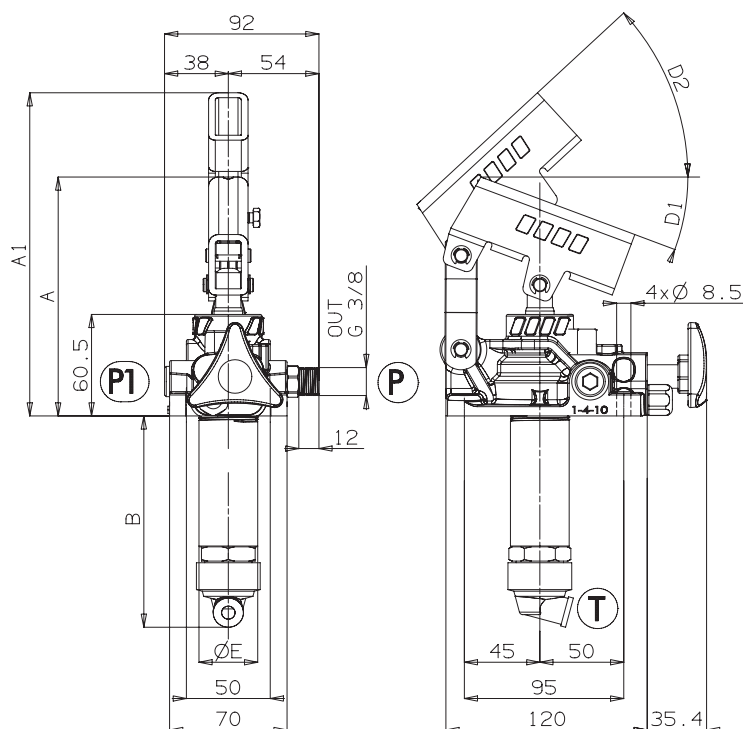
Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio <i>Without tank</i>	10690319137	10690310127	10690310216



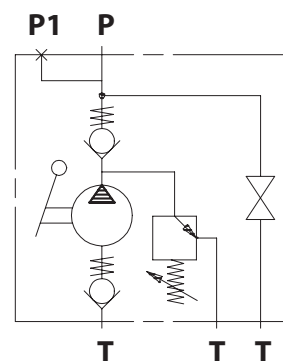
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	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



Dati tecnici / Technical data

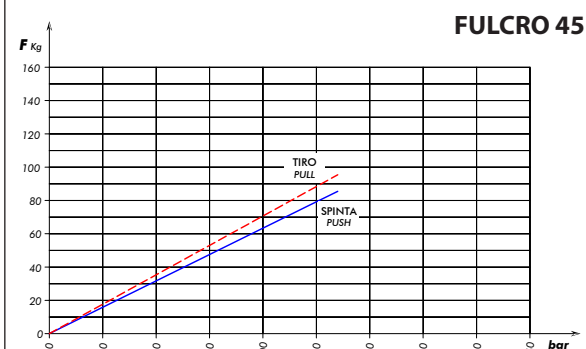
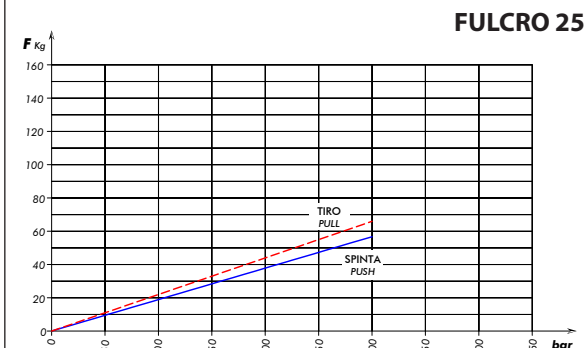
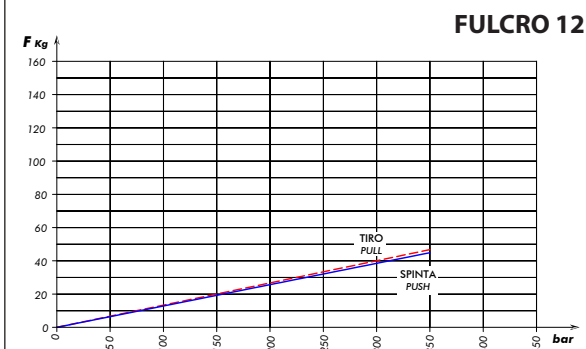
Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
FULCRO 25	160	300	25	13,4	11,6	2,9
FULCRO 45	160	270	45	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		-40° +100°C			

Kit guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690010068	10690010031	10690010077

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



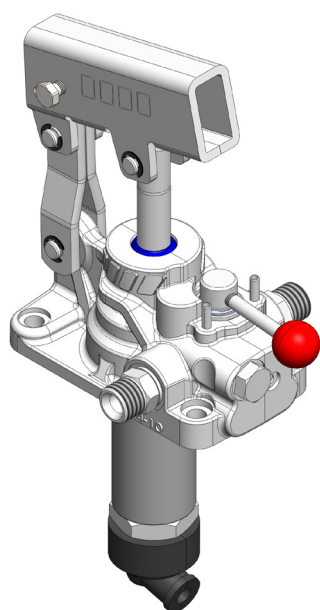
Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)





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 cilindrata 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.

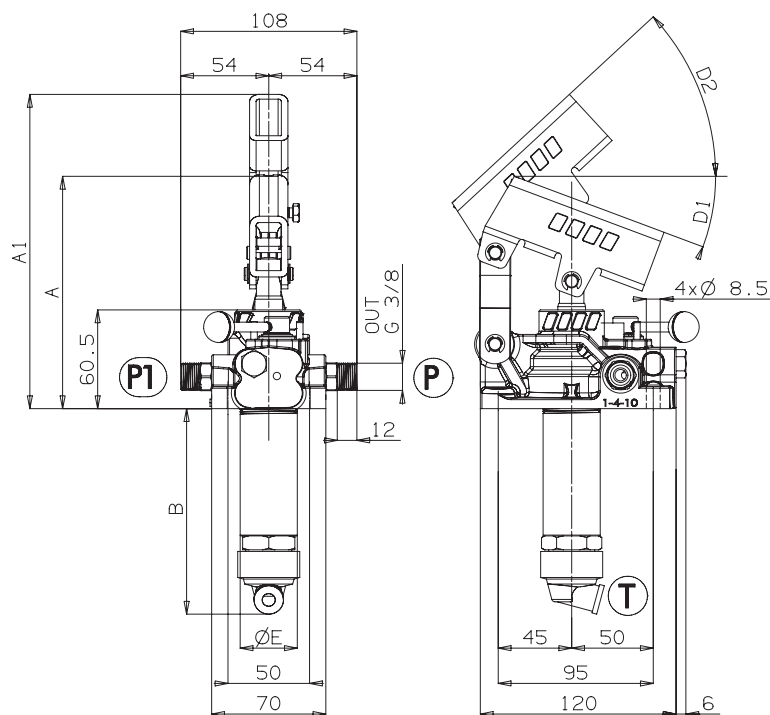
Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate double acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve.

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)

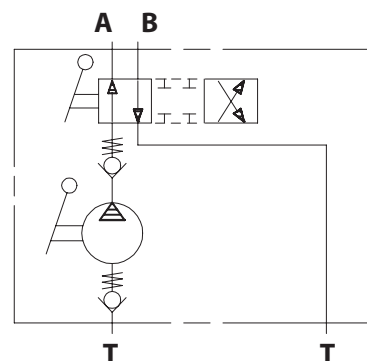
	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10601700015	10600700017	10600700026
Con serbatoio With tank	1	10601600016	10600500019
	2	10601600025	10600500028
	3	10601600034	10600500037
	4	10601600038	10600500041
	5	10601600043	10600500046
	7	10601600052	10600500055
	10	10601600061	10600500064

Ingombro / Dimensions



	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



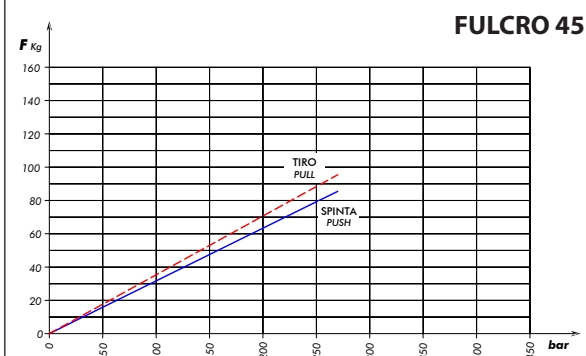
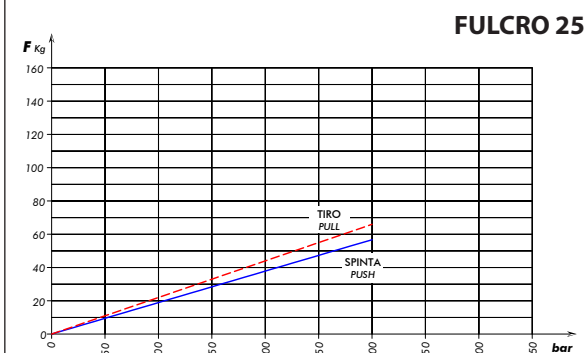
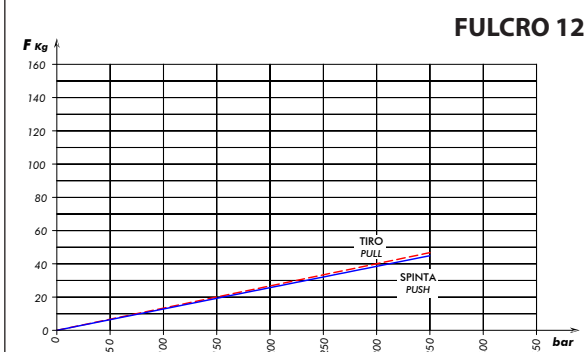
Dati tecnici / Technical data

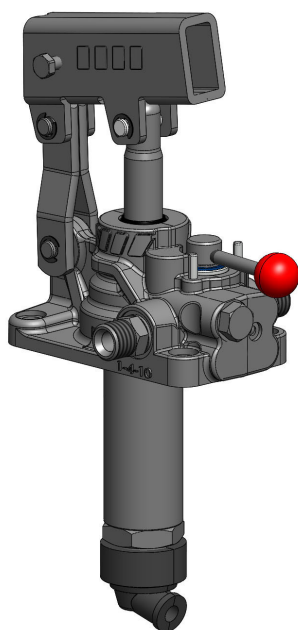
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
FULCRO 45	270	45	23,7	21,3	3,2

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 guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690000551	10690000604	10690000659

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

Collegamenti / Link:
[Ricambi / Spare parts](#)
[Serbatoi / Tanks](#)
[Accessori / Accessories](#)
[Istruzioni di montaggio / Mounting instructions](#)

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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. **TRATTAMENTO ALTA RESISTENZA ALLA CORROSIONE (700 ore in nebbia salina).**

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. **HIGH RESISTANCE TREATMENT AGAINST CORROSION (Salt spray test=700 hours).**

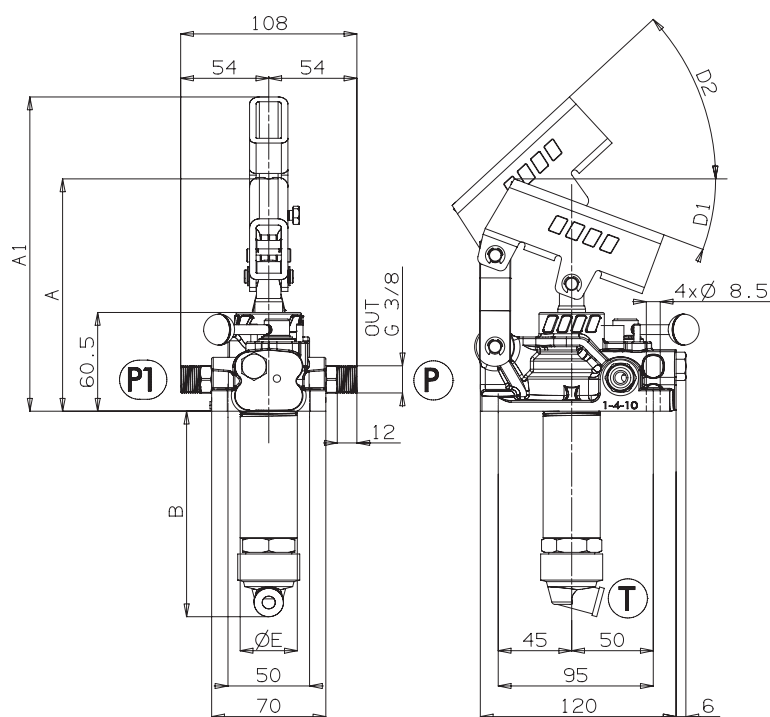
Codice di ordinazione (senza leva)
Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10602200125	10602200250	10602200456



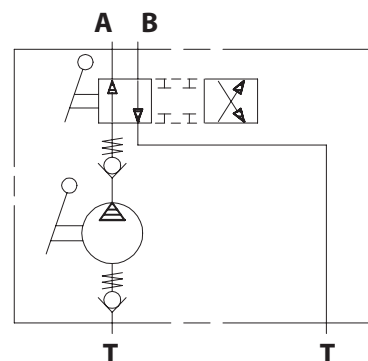
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	A mm	A1 mm	B mm	D1 °	D2 °	E 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

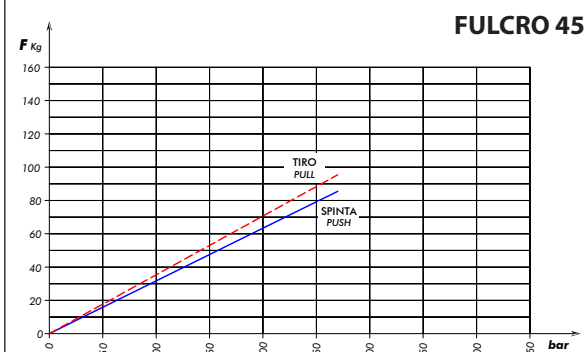
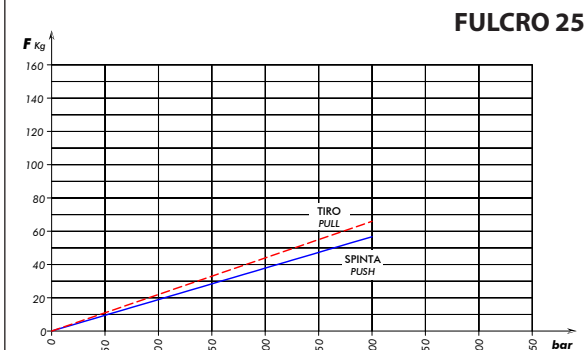
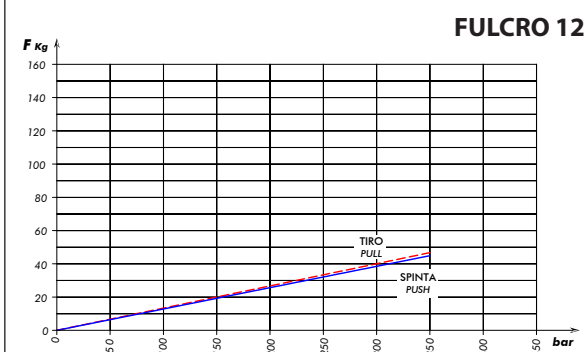
Schema idraulico / Hydraulic layout



Dati tecnici / Technical data

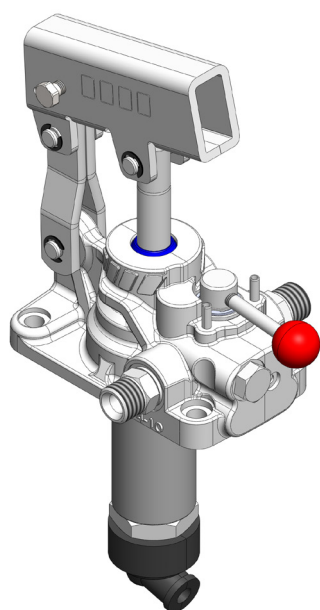
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
FULCRO 45	270	45	23,7	21,3	3,2

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			

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


Collegamenti / Link:

[Ricambi / Spare parts](#)
[Accessori / Accessories](#)
[Istruzioni di montaggio / Mounting instructions](#)

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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. **BASSE TEMPERATURE -40°C.**

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 lower valve. These hand pumps can have 3 different sizes to perform various applications and to achieve smoother loads on the lever. **LOW TEMPERATURE -40°C.**

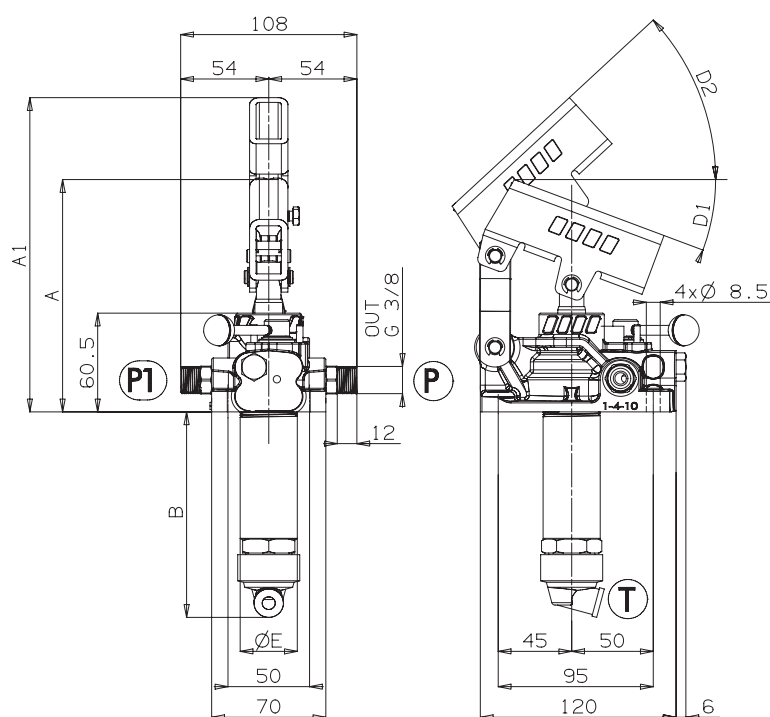
Codice di ordinazione (senza leva)
Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10690317157	10690307177	10690307266



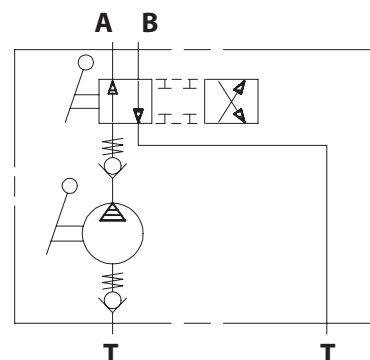
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	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



Dati tecnici / Technical data

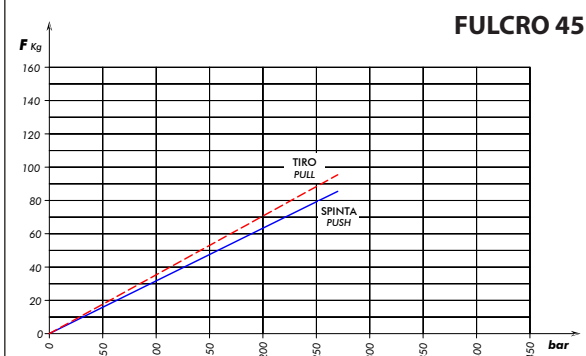
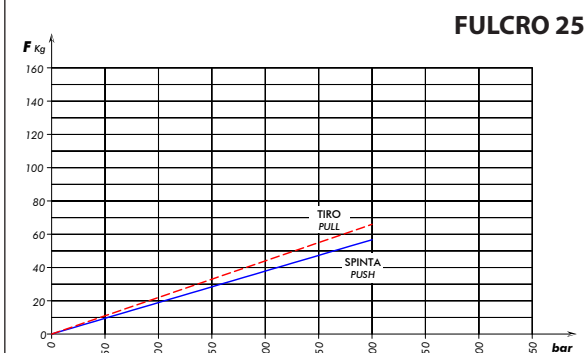
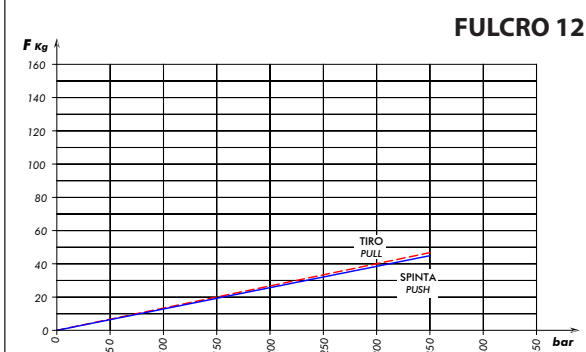
Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	350	12	6,1	5,9	2,8
FULCRO 25	300	25	13,4	11,6	2,9
FULCRO 45	270	45	23,7	21,3	3,2

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		-40° +100°C			

Kit guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690010040	10690010022	10690010059

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

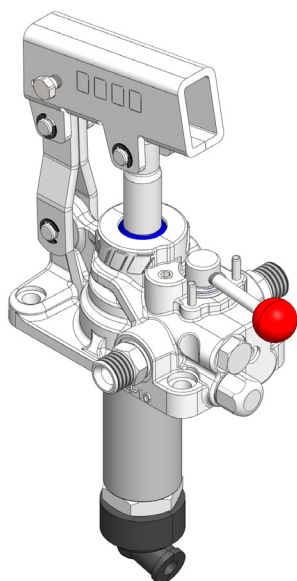


Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendolo 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.

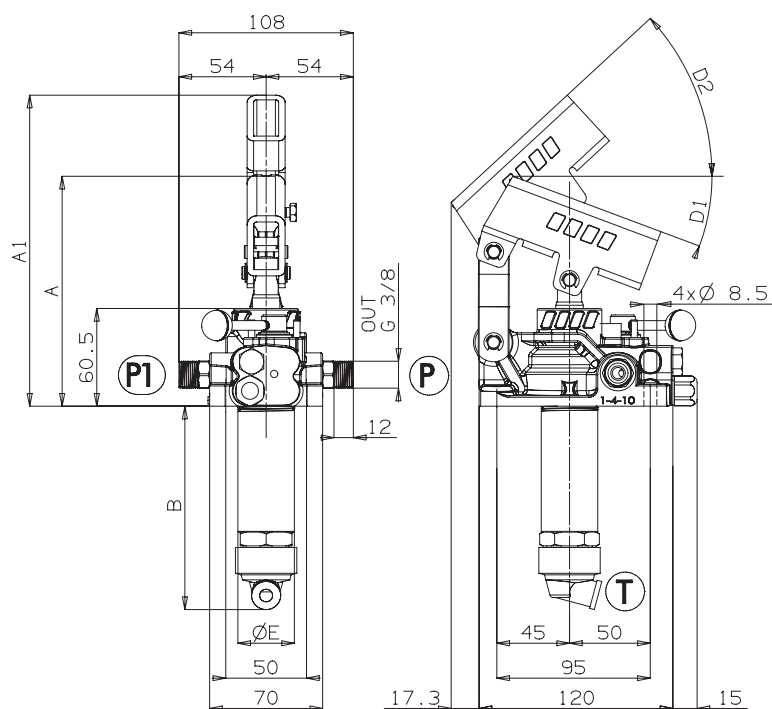
Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate double acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve.

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)

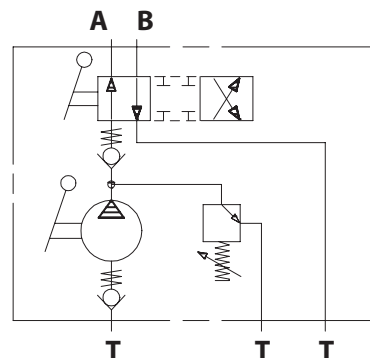
	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10602100019	10601300019	10601300028
Con serbatoio With tank	1	10602000010	10601100011
	2	10602000029	10601100020
	3	10602000038	10601100039
	4	10602000042	10601100043
	5	10602000047	10601100048
	7	10602000056	10601100057
	10	10602000065	10601100066
			10601200047

Ingombro / Dimensions



	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



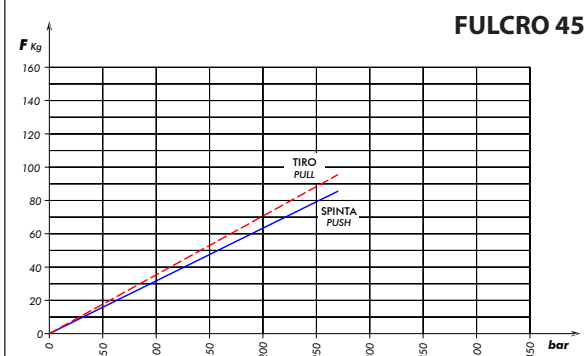
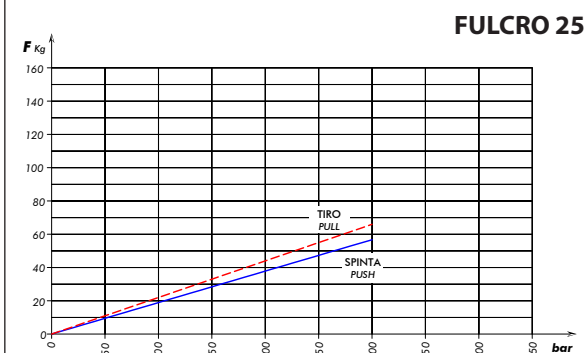
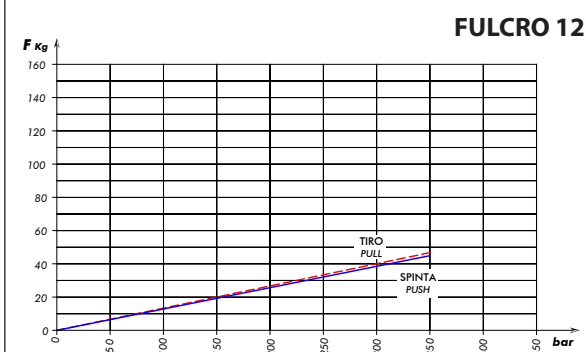
Dati tecnici / Technical data

Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
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			

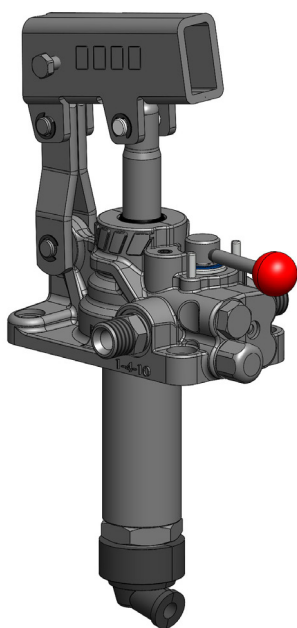
Kit guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690000551	10690000604	10690000659

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


Collegamenti / Link:

[Ricambi / Spare parts](#)
[Serbatoi / Tanks](#)
[Accessori / Accessories](#)
[Istruzioni di montaggio / Mounting instructions](#)

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 cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. **TRATTAMENTO ALTA RESISTENZA ALLA CORROSIONE (700 ore in nebbia salina).**

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. **HIGH RESISTANCE TREATMENT AGAINST CORROSION (Salt spray test=700 hours).**

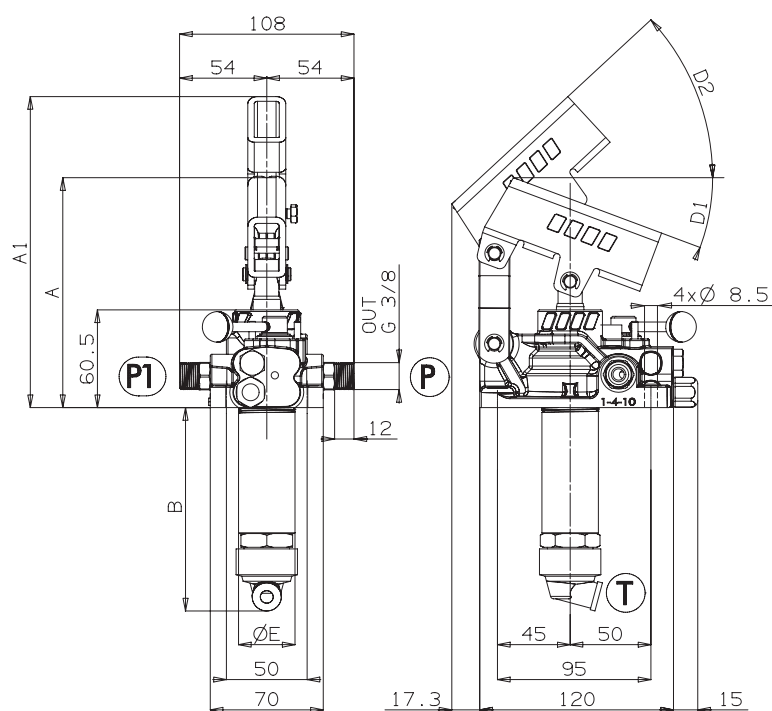
Codice di ordinazione (senza leva) Order code (without lever)

	FULCRO 12	FULCRO 25	FULCRO 45
Senza serbatoio Without tank	10602201124	10602201259	10602201455



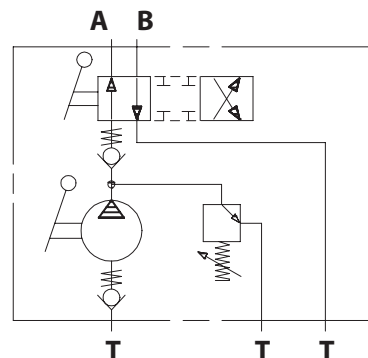
Collegamenti / Link:
[Serbatoi / Tanks](#)

Ingombro / Dimensions



	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



Dati tecnici / Technical data

Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
FULCRO 25	160	300	25	13,4	11,6	2,9
FULCRO 45	160	270	45	23,7	21,3	3,2

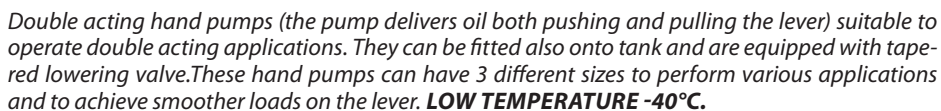


Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



Order code (without lever)



Collegamenti / Link:
[Serbatoi / Tanks](#)

	A <i>mm</i>	A1 <i>mm</i>	B <i>mm</i>	D1 °	D2 °	E <i>mm</i>
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

Dati tecnici / Technical data

Tipo pompa Pump type	Taratura standard Standard pressure setting bar	Taratura massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
			Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
FULCRO 12	160	300	12	6,1	5,9	2,8
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			-40° +100°C		

Kit guarnizioni / Seal kit

FULCRO 12	FULCRO 25	FULCRO 45
10690010111	10690010120	10690010139

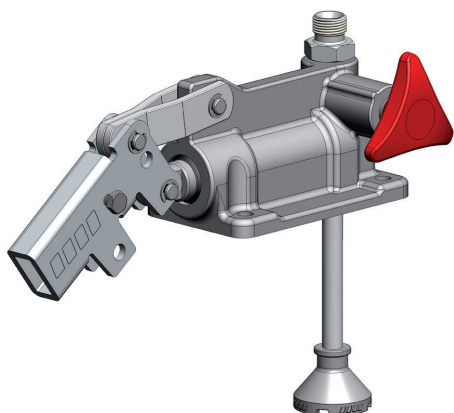


Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



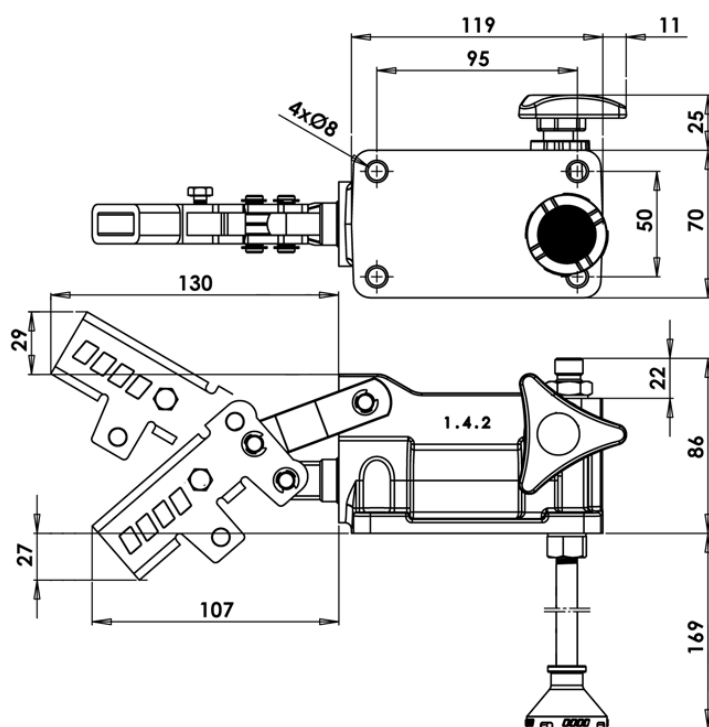
Pompe a mano con azionamento a semplice effetto (la pompa eroga olio solo se si spinge la leva), con rubinetto di scarico per impianti a semplice effetto o senza rubinetto per impianti d'emergenza. Sono disponibili in due diverse cilindrate per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento di zincatura bianca e lo stelo in acciaio cromato.

Hand pumps with simple effect activation (the pump delivers oil only when you push the lever), wheter with drainage tap for simple effect installations or without tap for emergency installations. Available in two different capacities to allow several applications and to limit the effort on the lever in any situation. The body is in cast-iron with white galvanization and the stem is in chromate steel.

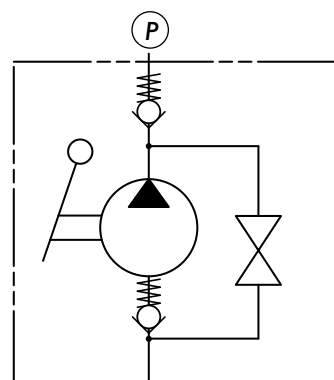
Codice di ordinazione (senza leva) Order code (without lever)

		PMSE 10	PMSE 15
Senza serbatoio Without tank		10603600030	10603600058
Con serbatoio With tank	1	10603000027	10603200025
	2	10603000045	10603200043
	3	10603000063	10603200061
	4	10603000072	10603200070
	5	10603000081	10603200089
	7	10603000900	10603200098
	10	10603000107	10603200105

Ingombro / Dimensions



Schema idraulico / Hydraulic layout



Dati tecnici / Technical data

Tipo pompa <i>Pump type</i>	Pressione massima <i>Max. pressure</i>	Cilindrata <i>Displacement</i>	Peso <i>Weight</i>
	<i>bar</i>	<i>cm³</i>	<i>kg</i>
PMSE 10	350	10	2,3
PMSE 15	300	15	2,4

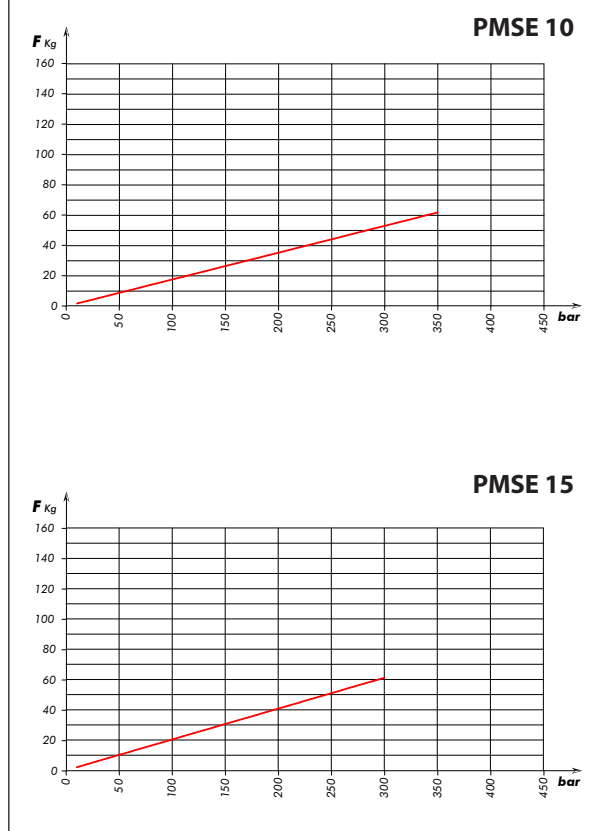
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10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

Kit guarnizioni / Seal kit

PMSE 10 / PMSE 15

10690000104

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



Collegamenti / Link:

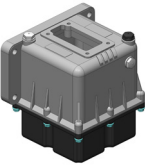
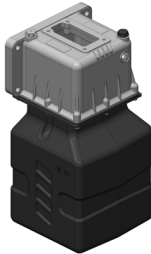
[Serbatoi / Tanks](#)

[Accessori / Accessories](#)

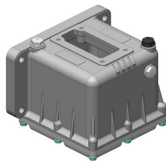
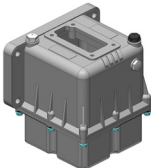
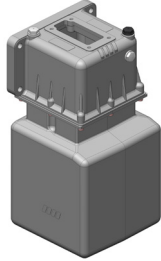
[Istruzioni di montaggio / Mounting instructions](#)



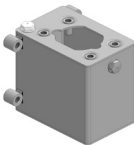
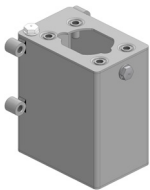
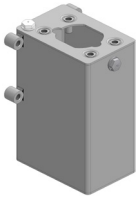
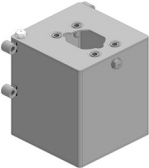
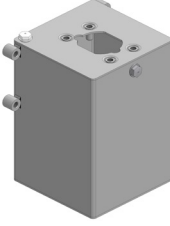
Alluminio-Plastica / Aluminium-Plastic

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
						
1,2 Kg	1,8 Kg	1,9 Kg	1,9 Kg	2 Kg	2,4 Kg	2,9 Kg
10680000105	10680000025	10680000034	10680000040	10680000043	10680000052	10680000061

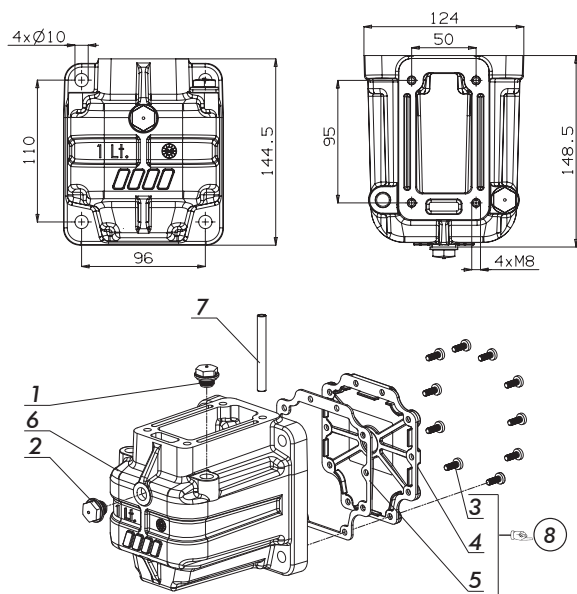
Alluminio / Aluminium

1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	10 litri / 10 litres
				
1,2 Kg	1,9 Kg	2 Kg	2,5 Kg	5,2 Kg
10680000016	10680000203	10680000301	10680000507	10680001006

Acciaio / Steel

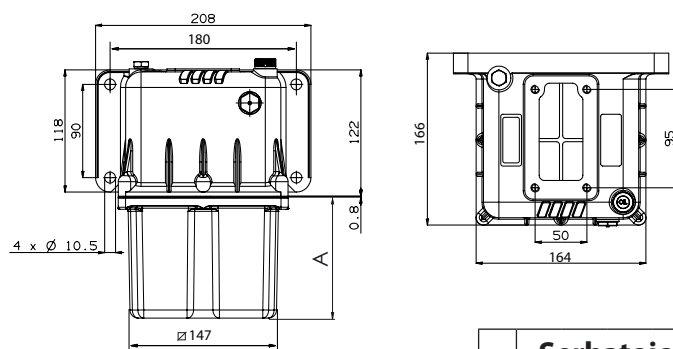
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	7 litri / 7 litres	10 litri / 10 litres
					
2,1 Kg	2,8 Kg	3,5 Kg	4,6 Kg	5,7 Kg	7,5 Kg
10680010014	10680010023	10680010032	10680010050	10680010078	10680010103

Serbatoio 1 litro / Tank 1 litre

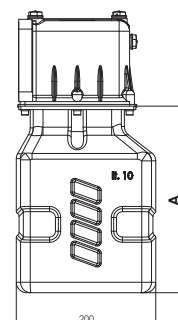


N°	Codice / P. Number		Q.
1	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	50900600121	Tappo livello/Level cap 1/4"	1
3	50200000872	Vite trilobata/Trefoil screw	10
4	50900000912	Coperchio plastica/Plastic cover	1
5	50600002158	Guarnizione/Gasket	1
6	51400300105	Serbatoio/Tank	1
7	54100100011	Tubo aspirazione/Suction pipe	1
Kit ricambio / Kit's			
8	10680001113	Coperchio completo plastica Complete plastic cover	1

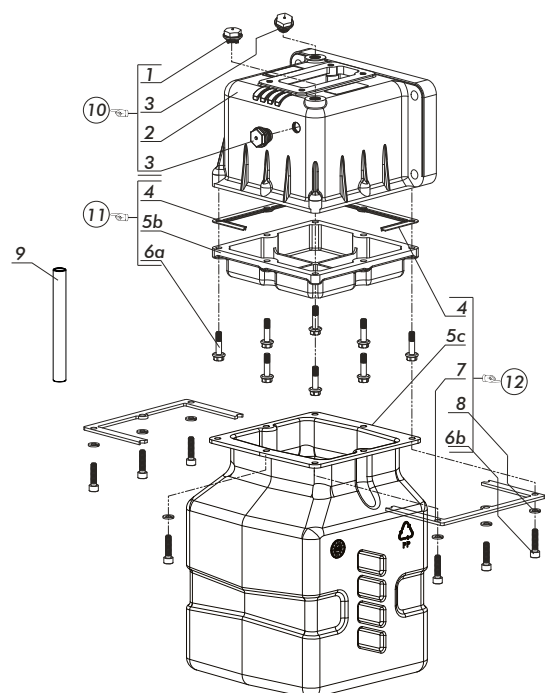
Serbatoi 2/3/4/5/7/10 litri / Tanks 2/3/4/5/7/10 litres



Lt 10

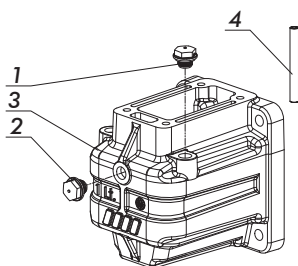
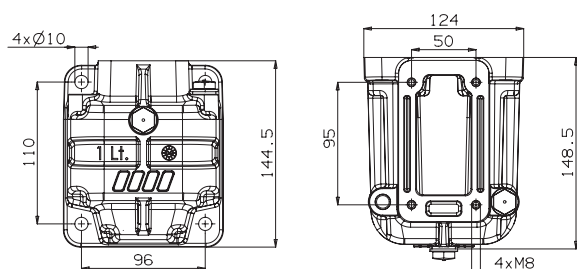


lt	2	3	4	5	7	10
A	24	64	116	174	294	270



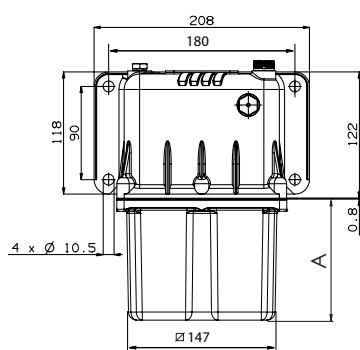
N°	Serbatoio I / Tank						Codice P. Number	Q.	
	2	3	4	5	7	10			
1	.	.	.	.	.	.	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	.	.	.	.	.	.	51400300089	Serbatoio/Tank	1
3	.	.	.	.	.	.	50900600121	Tappo livello/Level cap 1/4"	2
4	.	.	.	.	.	.	50600000463	Guarnizione/Gasket	1
	.	.	.	.	.	.	50600003666		1
5b	.	.	.	.	.	.	51400800020	Coperchio serbatoio Tank cover	1
	.	.	.	.	.	.	51400800039		1
	.	.	.	.	.	.	51400800048		1
	.	.	.	.	.	.	51400800057		1
	.	.	.	.	.	.	51400800075		1
5c	.	.	.	.	.	.	51400910107		1
6a	.	.	.	.	.	.	50200210207	Vite/Screw TE M6x25	8
6b	.	.	.	.	.	.	50200200478	Vite/Screw TCE M6x25	8
7	.	.	.	.	.	.	53800000911	Staffa supporto/ Mounting brackets	2
8	.	.	.	.	.	.	50102400063	Rosetta elastica/ Washer	8
9	.	.	.	.	.	.	54100100020	Tubo aspirazione/Suction pipe	1
	.	.	.	.	.	.	54100400036		1
	.	.	.	.	.	.	54100400152		1
	.	.	.	.	.	.	54100400054		1
	.	.	.	.	.	.	54100400072		1
	.	.	.	.	.	.	54100400081		1
Kit ricambio / Kit's									
10	.	.	.	.	.	.	106-800-01015	Base per serbatoio/Base for tank	1
11	.	.	.	.	.	.	106-800-01024	Coperchio completo serbatoio Complete tank cover	1
	.	.	.	.	.	.	106-800-01033		
	.	.	.	.	.	.	106-800-01042		
	.	.	.	.	.	.	106-800-01051		
	.	.	.	.	.	.	106-800-01060		
12	.	.	.	.	.	.	106-800-01097		

Serbatoio 1 litro / Tank 1 litre



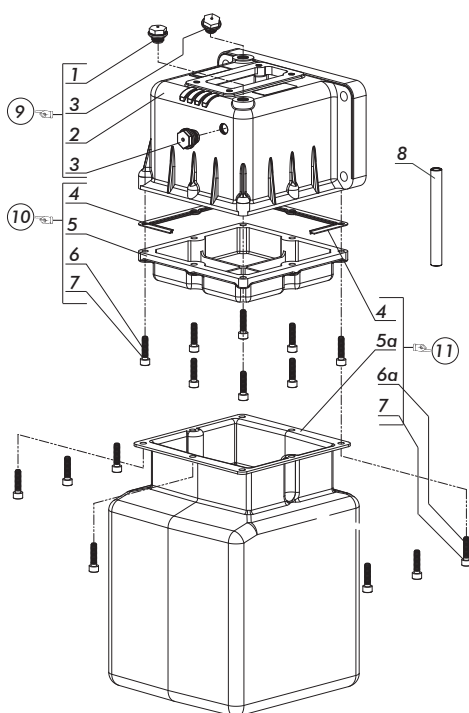
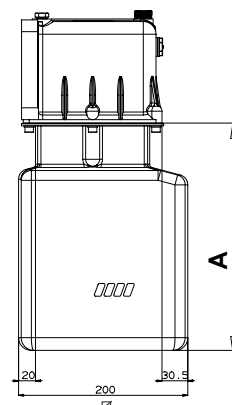
N°	Codice / P. Number		Q.
1	50900500131	Tappo sfiato / Breather cap 1/4"	1
2	50900400098	Tappo livello / Level cap 1/4"	1
3	51400300098	Serbatoio / Tank	1
4	54100100011	Tubo aspirazione/Suction pipe	1

Serbatoi 2/3/4/5/7/10 litri / Tanks 2/3/4/5/7/10 litres

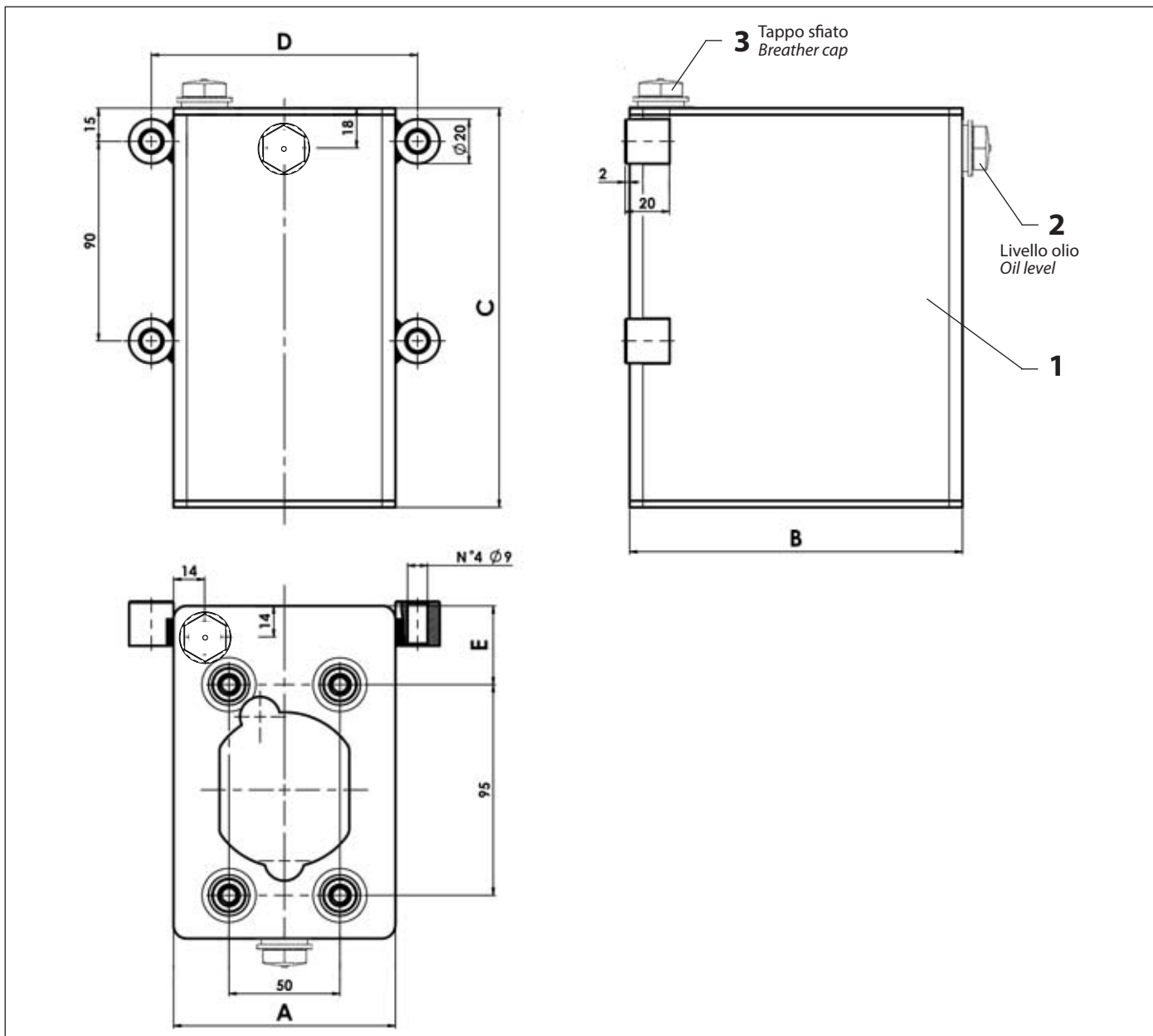


lt	2	3	5	10
A	19	63	174	278

Lt 10



N°	Serbatoio l / tank				Codice P. Number		Q.
	2	3	5	10			
1	.	.	.	.	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	.	.	.	.	51400300089	Serbatoio/Tank	1
3	.	.	.	.	50900600121	Tappo livello/Level cap 1/4"	2
4	.	.	.	.	50700300431	Guarnizione/Gasket	1
	.	.	.	.	51400500069		1
5	.	.	.	.	51400500078	Coperchio serbatoio	1
	.	.	.	.	51400500087	Tank cover	1
5a	.	.	.	.	51400500050		1
6	.	.	.	.	50200200441	Vite/Screw TCE M6x18	8
6a	.	.	.	.	50200200478	Vite/Screw TCE M6x25	8
7	.	.	.	.	50101800052	Rosetta elastica/Washer	8
	.	.	.	.	54100100020		
8	.	.	.	.	54100400036	Tubo aspirazione/Suction pipe	1
	.	.	.	.	54100400054		
	.	.	.	.	54100400081		
Kit ricambio / Kit's							
9	.	.	.	.	10680001015	Base per serbatoio/Base for tank	1
	.	.	.	.	10680002023		
10	.	.	.	.	10680002032	Coperchio completo serbatoio	1
	.	.	.	.	10680002050	Complete tank cover	
11	.	.	.	.	10680002103		



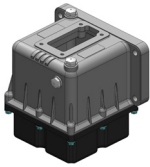
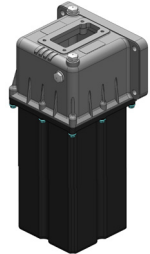
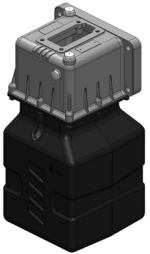
N°	Corpo serbatoio Tank body	Capacità Capacity	A	B	C	D	E
1	51400310014	1 lt	100	150	140	120	35,5
	51400310023	2 lt	100	150	180	120	35,5
	51400310032	3 lt	100	150	247	120	35,5
	51400310050	5 lt	175	175	200	195	61
	51400310078	7 lt	175	175	269	195	61
	51400310103	10 lt	175	175	376	195	61

N°	Codice Code	Q.tà Q.ty
2	50900400098 Livello olio / Oil level	1
3	50900500131 Tappo sfiato / Breather cap	1

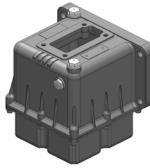
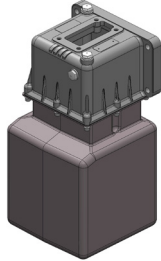
Trattamento superficiale: verniciatura elettrolitica poliestere
Colore: nero RAL 9005 semiopaco

Protective treatment: electrolytic polyester coating
Color: Black RAL 9005

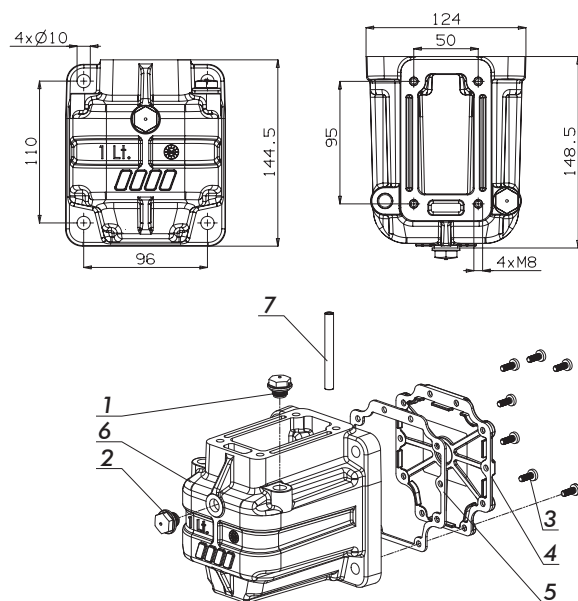
Alluminio-Plastica / Aluminium-Plastic

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
						
1,2 Kg	1,8 Kg	1,9 Kg	1,9 Kg	2 Kg	2,4 Kg	2,9 Kg
10680130019	10680130028	10680130037	10680130046	10680130055	10680130073	10680130108

Alluminio / Aluminium

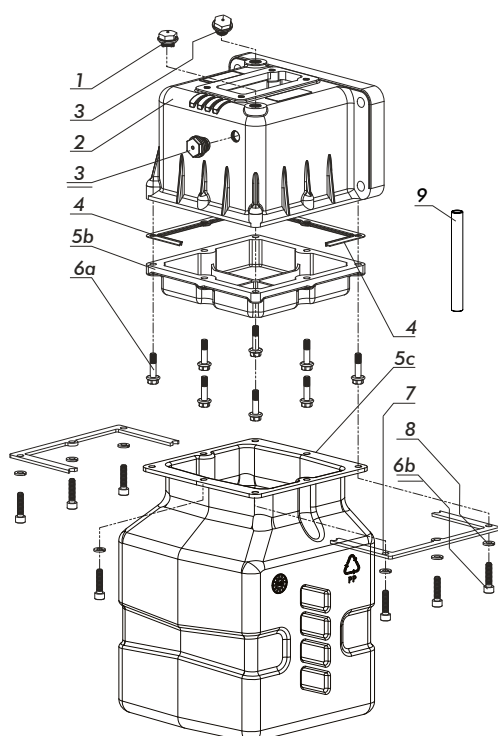
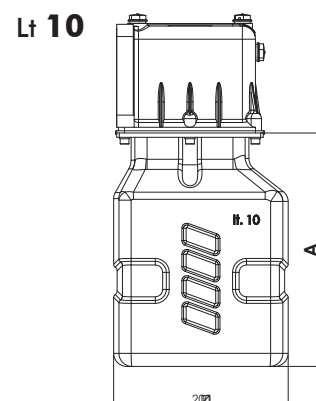
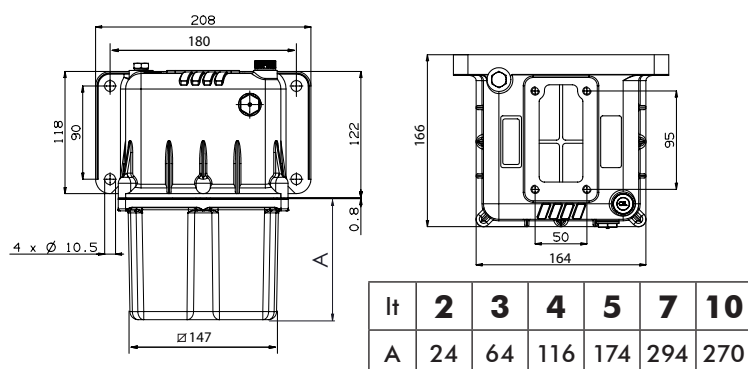
1 litro / 1 litre	2 litri / 2 litres	3 litri / 3 litres	5 litri / 5 litres	10 litri / 10 litres
				
1,2 Kg	1,9 Kg	2 Kg	2,5 Kg	5,2 Kg
10680140017	10680140026	10680140035	10680140053	10680140106

Serbatoio 1 litro / Tank 1 litre



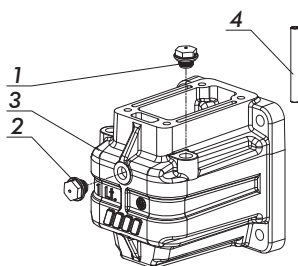
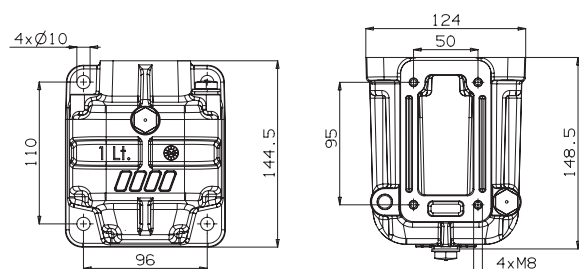
N°	Codice / P. Number		Q.
1	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	50900600121	Tappo livello/Level cap 1/4"	1
3	50200098723	Vite trilobata/Trefoil screw	10
4	50900000912	Coperchio plastica/Plastic cover	1
5	50600002158	Guarnizione/Gasket	1
6	51400391053	Serbatoio/Tank	1
7	54100100011	Tubo aspirazione/xxxx	1

Serbatoi 2/3/4/5/7/10 litri / Tanks 2/3/4/5/7/10 litres



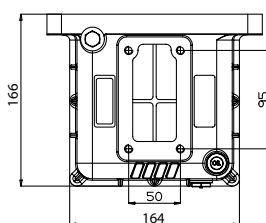
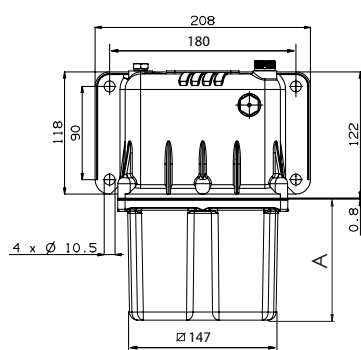
N°	Serbatoio I / Tank						Codice P. Number		Q.
	2	3	4	5	7	10			
1	.	.	.	.	.	.	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	.	.	.	.	.	.	51400390894	Serbatoio/Tank	1
3	.	.	.	.	.	.	50900600121	Tappo livello/Level cap 1/4"	2
4	.	.	.	.	.	.	50600000463	Guarnizione/Gasket	1
	.	.	.	.	.	.	50600003666		1
	.	.	.	.	.	.	51400800020		1
5b	.	.	.	.	.	.	51400800039	Coperchio serbatoio Tank cover	1
	.	.	.	.	.	.	51400800048		1
	.	.	.	.	.	.	51400800057		1
	.	.	.	.	.	.	51400800075		1
5c	.	.	.	.	.	.	51400910107		1
6a	.	.	.	.	.	.	50200292076	Vite/Screw TE M6x25	8
6b	.	.	.	.	.	.	50200294789	Vite/Screw TCE M6x25	8
7	.	.	.	.	.	.	53800093312	Staffa supporto/ Mounting brackets	2
8	.	.	.	.	.	.	50102490636	Rosetta elastica/ Washer	8
9	.	.	.	.	.	.	54100100020	Tubo aspirazione/Suction pipe	1
	.	.	.	.	.	.	54100400036		
	.	.	.	.	.	.	54100400152		
	.	.	.	.	.	.	54100400054		
	.	.	.	.	.	.	54100400072		
	.	.	.	.	.	.	54100400081		

Serbatoio 1 litro / Tank 1 litre



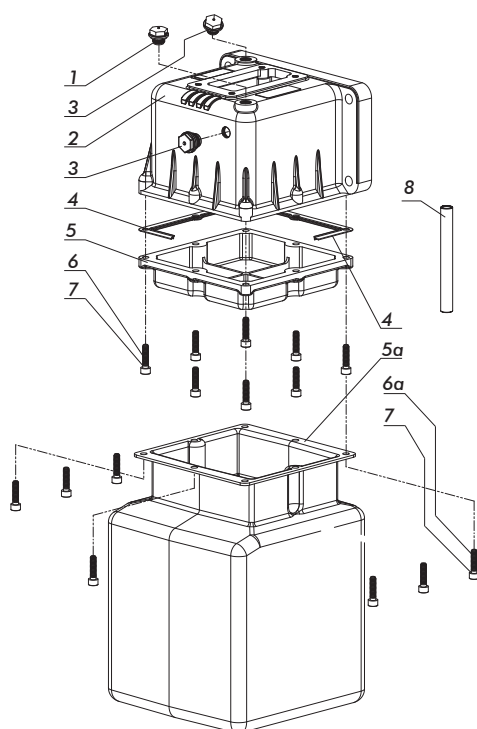
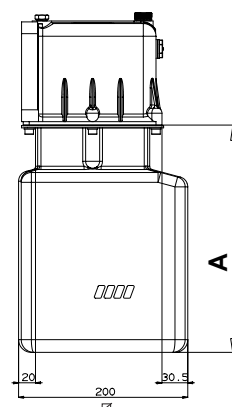
N°	Codice / P. Number		Q.
1	50900500131	Tappo sfiato / Breather cap 1/4"	1
2	50900600121	Tappo livello / Level cap 1/4"	1
3	51400390983	Serbatoio / Tank	1
4	54100100011	Tubo aspirazione/xxxx	1

Serbatoi 2/3/4/5/7/10 litri / Tanks 2/3/4/5/7/10 litres



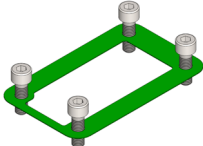
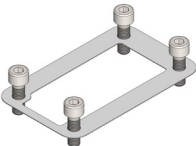
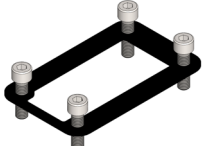
lt	2	3	5	10
A	19	63	174	278

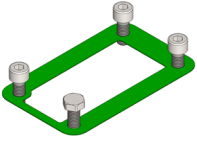
Lt 10



N°	Serbatoio l / tank				Codice P. Number		Q.
	2	3	5	10			
1	.	.	.	.	50900500131	Tappo sfiato/Breather cap 1/4"	1
2	.	.	.	.	51400390894	Serbatoio/Tank	1
3	.	.	.	.	50900600121	Tappo livello/Level cap 1/4"	2
4	.	.	.	.	50700300431	Guarnizione/Gasket	1
5	.	.	.	.	51400590696		1
	.	.	.	.	51400590785	Coperchio serbatoio	1
	.	.	.	.	51400590874	Tank cover	1
5a	.	.	.	.	51400590507		1
6	.	.	.	.	50200294412	Vite/Screw TCE M6x18	8
6a	.	.	.	.	50200294789	Vite/Screw TCE M6x25	8
7	.	.	.	.	50101890527	Rosetta elastica/Washer	8
8	.	.	.	.	54100100020		1
	.	.	.	.	54100400036		
	.	.	.	.	54100400054		
	.	.	.	.	54100400081	Tubo aspirazione/Suction pipe	

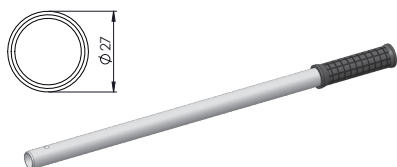
Kit fissaggio / Fixing kit

		Serbatoio alluminio / plastica <i>Aluminium/plastic tanks</i>		Serbatoio acciaio <i>Steel tanks</i>
		PMI/PMS standard	PMI/PMS bassa temperatura <i>low temperature</i>	PMI/PMS standard
				
kit	Prevede la fornitura del kit SEPARATO dal pompante e dal serbatoio. <i>To be ordered if you want to get the hand pump and oil tank LOOSE.</i>	10696000737	10696000693	10696001094
kit + montaggio kit + mounting	Prevede la fornitura del kit MONTATO con il pompante ed il serbatoio. <i>To be ordered if you want to get the hand pump and oil tank MOUNTED together.</i>	10696000808	10696000817	10696001101
Trattamento alta resistenza alla corrosione (700 ore in nebbia salina) <i>High resistance treatment against corrosion (salt spray test = 700 hours)</i>				

		Serbatoio alluminio/plastica <i>Aluminium/plastic tanks</i>
		PMSE
		
kit	Prevede la fornitura del kit SEPARATO dal pompante e dal serbatoio. <i>To be ordered if you want to get the hand pump and oil tank LOOSE.</i>	10696000906

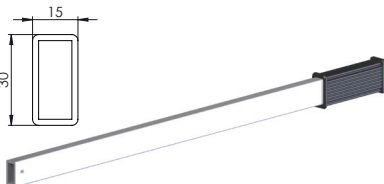
Leva / Lever

Serie/Series PM70



10600000014 L = 600 mm

Serie/Series FULCRO-PM50+VR



10600000078 L = 600 mm

10600000292 L = 590 mm

Serie/Series PMSE-PM20+VR



10600000176 L = 500 mm

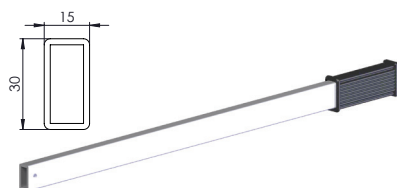
10600000185 L = 350 mm

10600000283 L = 320 mm

Leva / Lever

Trattamento alta resistenza alla corrosione / High resistance treatment against corrosion

Serie/Series OFF-SHORE



10600090785 L = 600 mm

10600091677 L = 860 mm

Maggiorazione ritorno a molla
Spring return

Serie/Series PMS



Maggiorazione ritorno a molla
Spring return

10600000247

Serie/Series PMS ALU

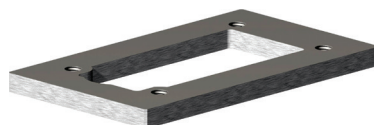


Maggiorazione ritorno a molla
Spring return

10600000041

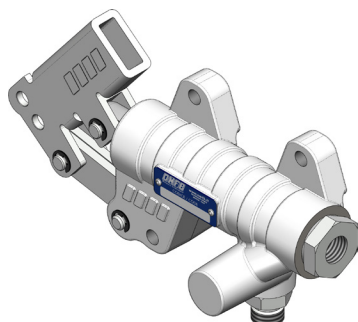
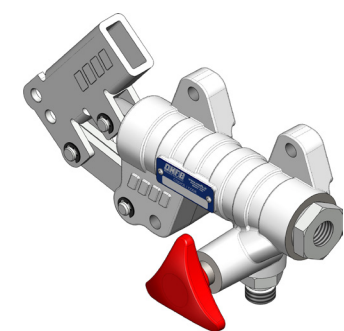
Piastra gruppo pompa
Mounting plate

Serie/Series PMS-PMI



Piastra gruppo pompa PMS-PMI
Mounting plate for tank PMS-PMI

10600000032



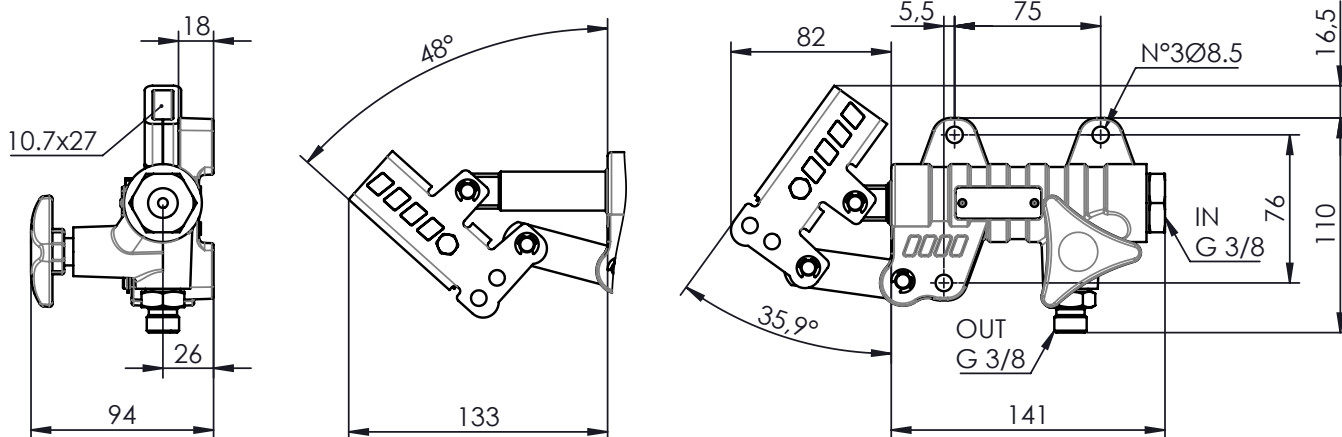
Pompe a mano con azionamento a semplice effetto (la pompa eroga olio solo se si spinge la leva), con rubinetto di scarico per impianti a semplice effetto. Ha il corpo in ghisa con trattamento di zincatura bianca e lo stelo in acciaio cromato.

Hand pumps with simple effect activation (the pump delivers oil only when you push the lever), wheter with drainage tap for simple effect installations or without tap for emergency installations. The body is in cast-iron with white galvanization and the stem is in chromate steel.

Codice di ordinazione (senza leva)
Order code (without lever)

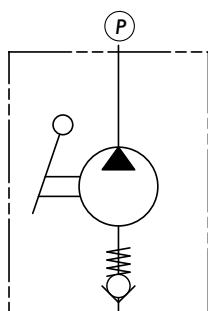
	PMSE 16
con rubinetto with valve	10603800163
senza rubinetto without valve	10603810161

Ingombro / Dimensions

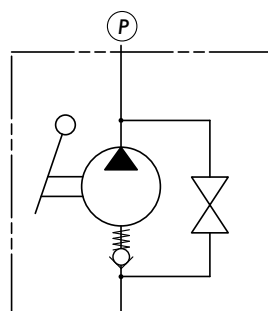


Schema idraulico / Hydraulic layout

senza rubinetto / without valve



con rubinetto / with valve

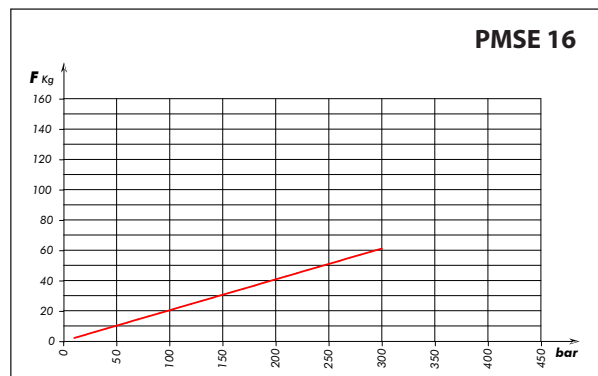


Dati tecnici / Technical data

Tipo pompa <i>Pump type</i>	Pressione massima <i>Max. pressure</i>	Cilindrata <i>Displacement</i>	Peso <i>Weight</i>
	<i>bar</i>	<i>cm³</i>	<i>kg</i>
PMSE 16	300	16	2,4

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

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



Leva / Lever

PMSE 16

10600000176

Kit guarnizioni / Seal kit

PMSE 16

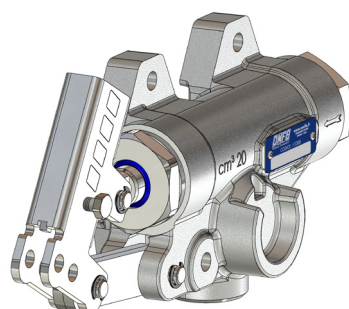
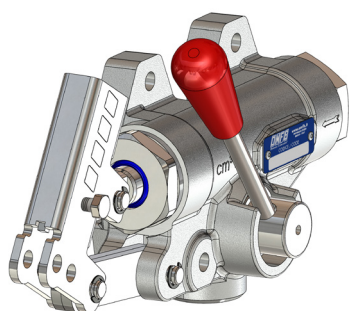
10690000113



Collegamenti / Link:

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



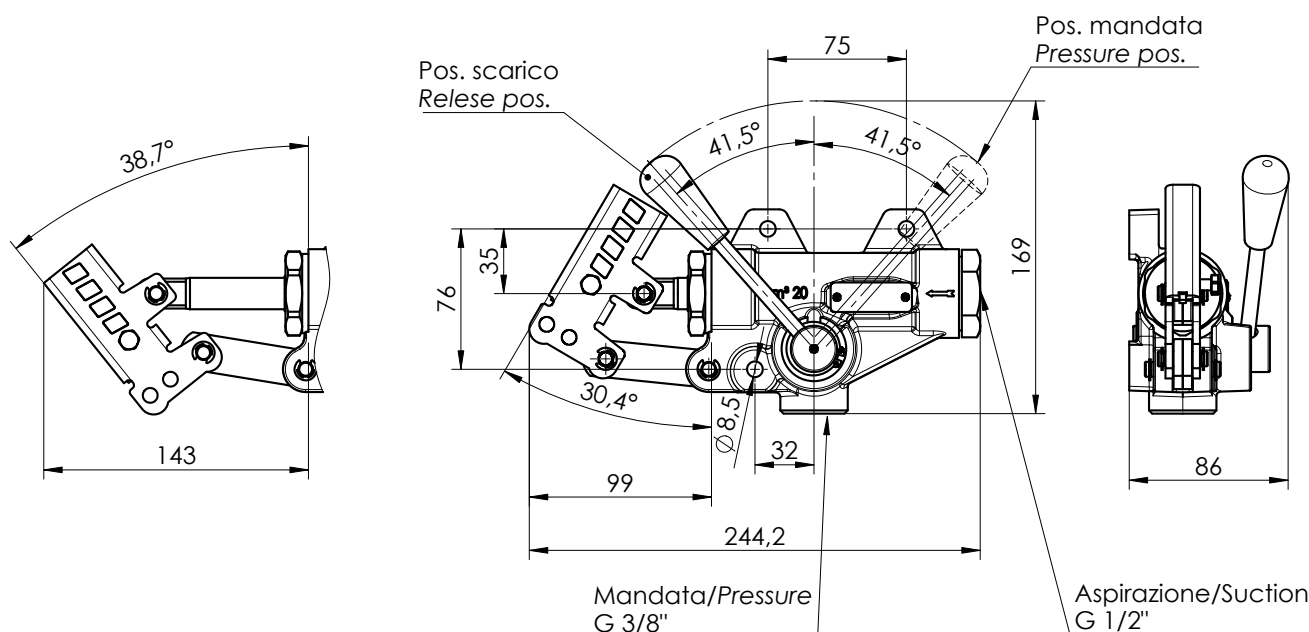
Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendo che tirando la leva), con valvola di non ritorno in mandata e rubinetto di scarico per impianti a semplice effetto o senza rubinetto per impianti d'emergenza. Sono disponibili in tre diverse cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento di zincatura bianca e lo stelo in acciaio nichelato.

Hand pumps with double effect activation (the pump delivers oil both pushing and pulling the lever), with check valve on pressure port and wheter with drainage tap for simple effect installations or without tap for emergency installations. Available in three different capacities to allow several applications and to limit the effort on the lever in any situation. The body is in cast-iron with white galvanization and the stem is in nickered steel.

Codice di ordinazione (senza leva) Order code (without lever)

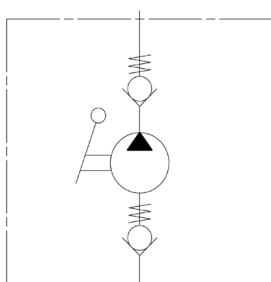
	PM 20+VR
con rubinetto with valve	10600130017
senza rubinetto without valve	10600130044

Ingombro / Dimensions

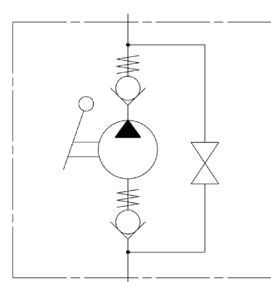


Schema idraulico / Hydraulic layout

senza rubinetto / without valve



con rubinetto / with valve

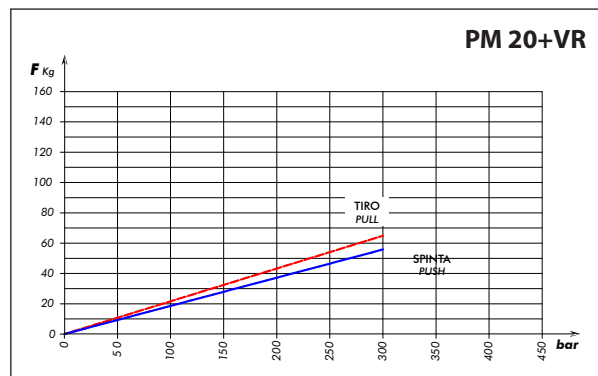


Dati tecnici / Technical data

Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
PM 20+VR	300	20	10,8	9,2	3,4

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			

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



Leva / Lever

PM 20+VR

10600000176

Kit guarnizioni / Seal kit

PM 20+VR

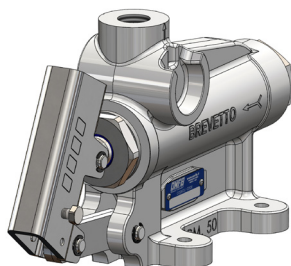
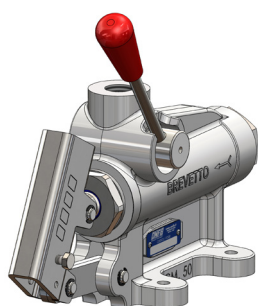
10690000131



Collegamenti / Link:

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



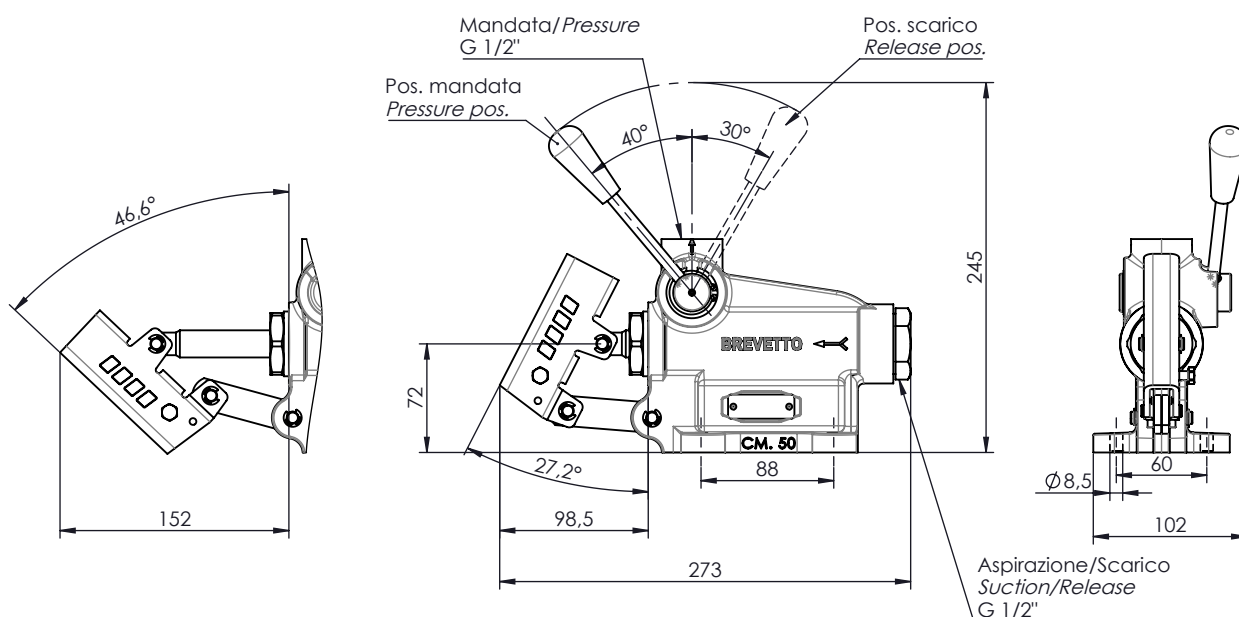
Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendo che tirando la leva), con valvola di non ritorno in mandata e rubinetto di scarico per impianti a semplice effetto o senza rubinetto per impianti d'emergenza. Sono disponibili in tre diverse cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento di zincatura bianca e lo stelo in acciaio nichelato.

Hand pumps with double effect activation (the pump delivers oil both pushing and pulling the lever), with check valve on pressure port and wheter with drainage tap for simple effect installations or without tap for emergency installations. Available in three different capacities to allow several applications and to limit the effort on the lever in any situation. The body is in cast-iron with white galvanization and the stem is in nickered steel.

Codice di ordinazione (senza leva) Order code (without lever)

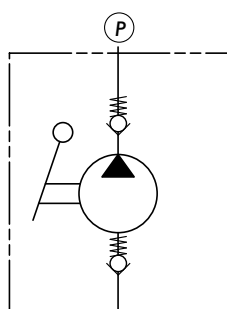
	PM 50+VR
con rubinetto with valve	10600130026
senza rubinetto without valve	10600130053

Ingombro / Dimensions

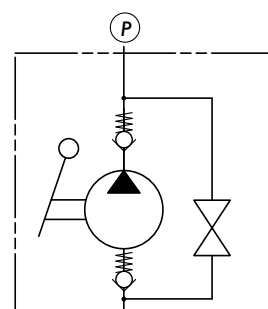


Schema idraulico / Hydraulic layout

senza rubinetto / without valve



con rubinetto / with valve

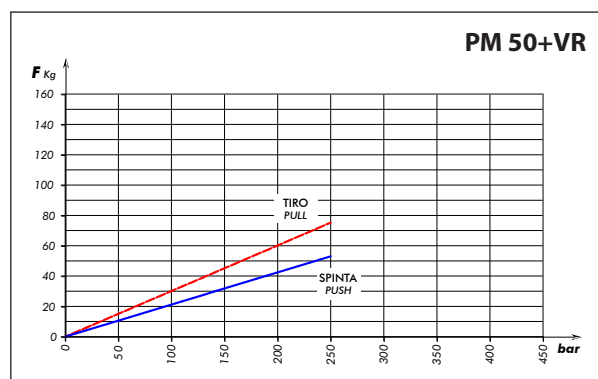


Dati tecnici / Technical data

Tipo pompa Pump type	Pressione esercizio Working pressure <i>bar</i>	Pressione massima Max. pressure <i>bar</i>	Cilindrata Displacement			Peso Weight <i>kg</i>
			Completa / Full <i>cm³</i>	Tiro / Pull <i>cm³</i>	Spinta / Push <i>cm³</i>	
PM 50+VR	220	250	50	29,8	20,7	5

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			

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



Leva / Lever

PM 50+VR

10600000078

Kit guarnizioni / Seal kit

PM 50+VR

10690000122

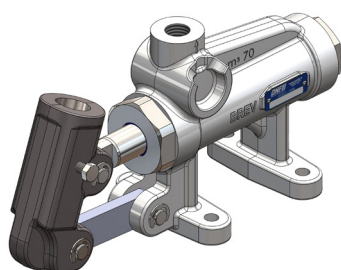
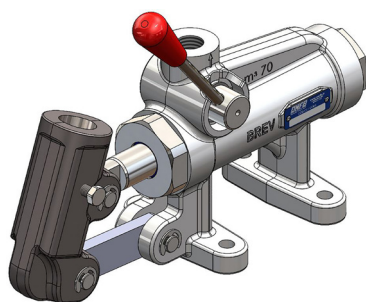


Collegamenti / Link:

[Ricambi / Spare parts](#)

[Accessori / Accessories](#)

[Istruzioni di montaggio / Mounting instructions](#)



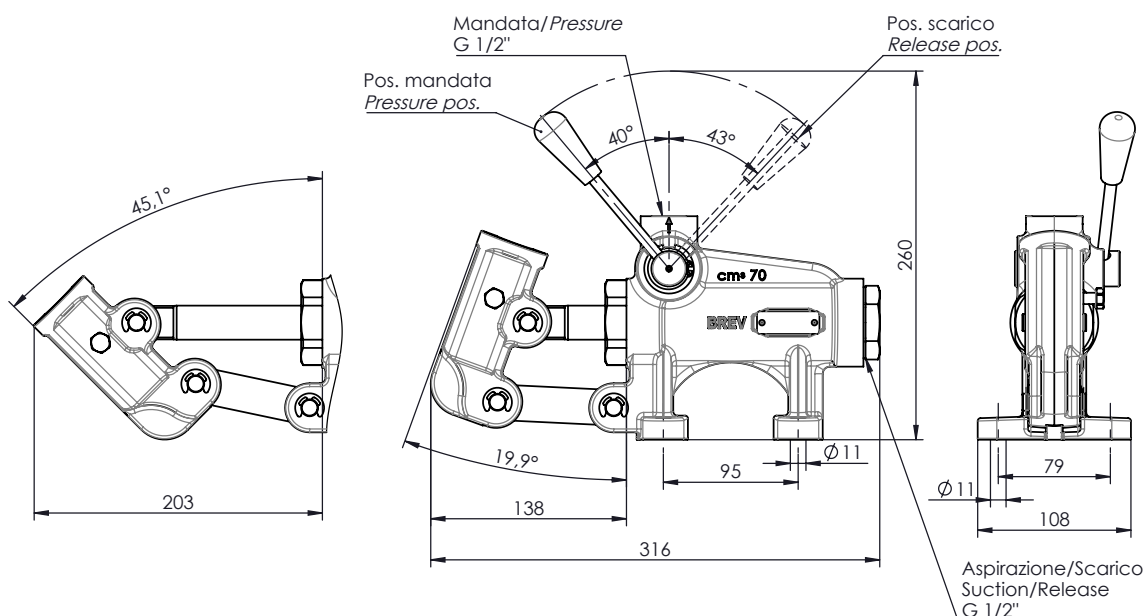
Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendo che tirando la leva), con rubinetto di scarico per impianti a semplice effetto o senza rubinetto per impianti d'emergenza. Sono disponibili in tre diverse cilindrata per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento di zincatura bianca e lo stelo in acciaio nichelato.

Hand pumps with double effect activation (the pump delivers oil both pushing and pulling the lever) wheter with drainage tap for simple effect installations or without tap for emergency installations. Available in three different capacities to allow several applications and to limit the effort on the lever in any situation. The body is in cast-iron with white galvanization and the stem is in nickeled steel.

Codice di ordinazione (senza leva) Order code (without lever)

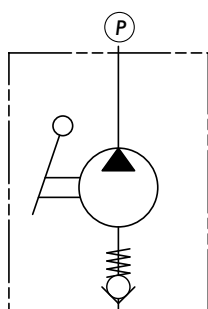
	PM 70
con rubinetto with valve	10600100031
senza rubinetto without valve	10600100068

Ingombro / Dimensions

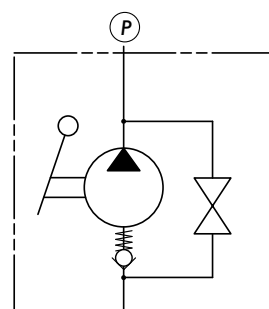


Schema idraulico / Hydraulic layout

senza rubinetto / without valve



con rubinetto / with valve



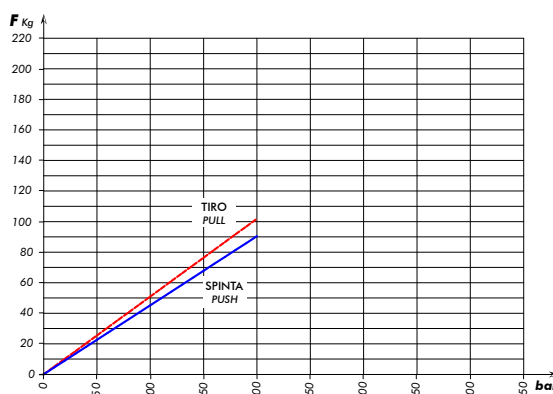
Dati tecnici / Technical data

Tipo pompa Pump type	Pressione massima Max. pressure setting bar	Cilindrata Displacement			Peso Weight kg
		Completa / Full cm ³	Tiro / Pull cm ³	Spinta / Push cm ³	
PM 70	200	70	37,1	32,9	7,2

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			

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

PM 70



Leva / Lever

PM 70

10600000014

Kit guarnizioni / Seal kit

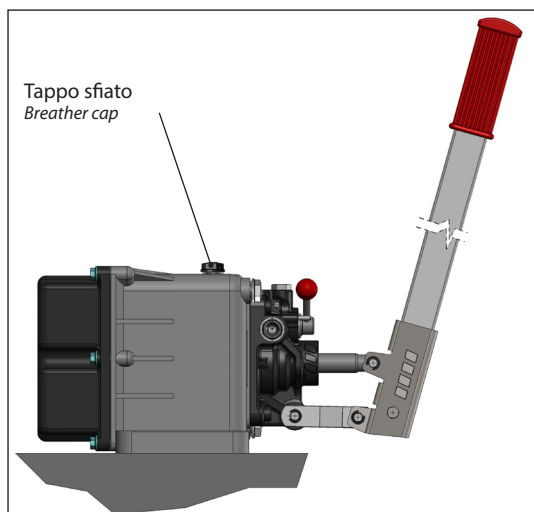
PM 70

10690000042



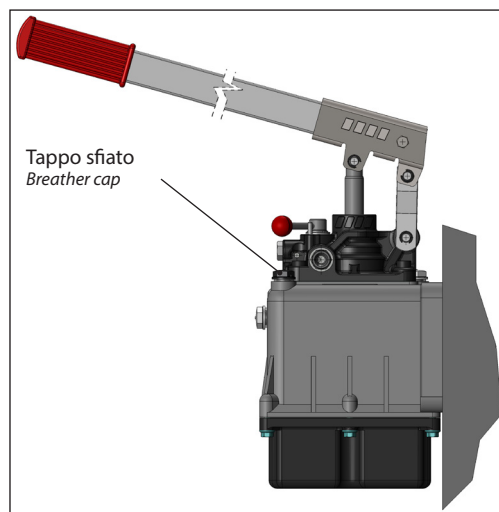
Collegamenti / Link:

[Accessori / Accessories](#)
[Istruzioni di montaggio / Mounting instructions](#)



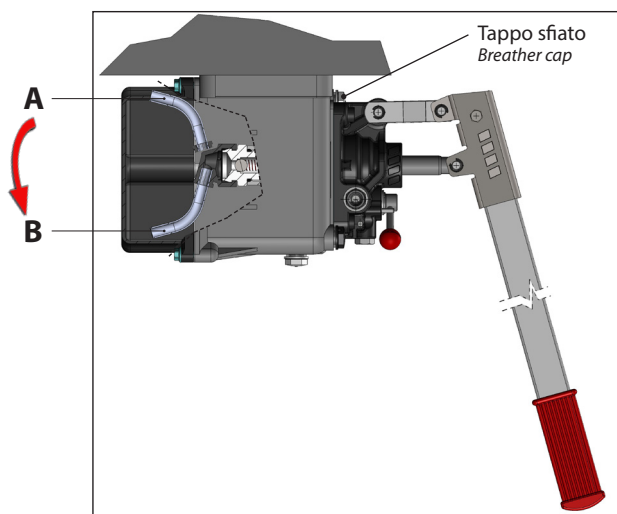
Applicazione 1. Il tappo sfiato deve essere nella posizione indicata in figura.

Application 1. The breather cap has to be in the position indicated in a picture.



Applicazione 2. Il tappo sfiato deve essere nella posizione indicata in figura.

Application 2. The breather cap has to be in the position indicated in a picture.



Applicazione 3. Per questo tipo di applicazione ruotare il tubo interno di aspirazione dalla posizione **A** alla posizione **B**. Il tappo sfiato deve essere nella posizione indicata in figura.

*Application 3. In this application rotate the internal suction pipe from position **A** to **B**. The breather cap has to be placed as per position indicated in the picture.*

Nelle applicazioni 1 e 3, soprattutto in presenza di serbatoi di grande capacità, è consigliabile interporre al tappo di sfiato un raccordo a L maschio/femmina da G 1/4" per evitare piccole fuoriuscite di olio.

For applications 1 and 3, especially for what concerns large reservoirs, it is advisable to use an "L" shape male/female G1/4" adaptor for the breather cap to avoid little oil leakage.



cod. 10090000231
optional - da ordinare separatamente
to be order separately