

SISTEMA[®]

INVERTER / VARIABLE SPEED DRIVERS

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- 12 **SIRIO
SIRIO ENTRY
SIRIO ENTRY XP** *inverter for electric pumps control*

PRESSURE AND FLOW CONTROLLERS

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BRIO2000-M
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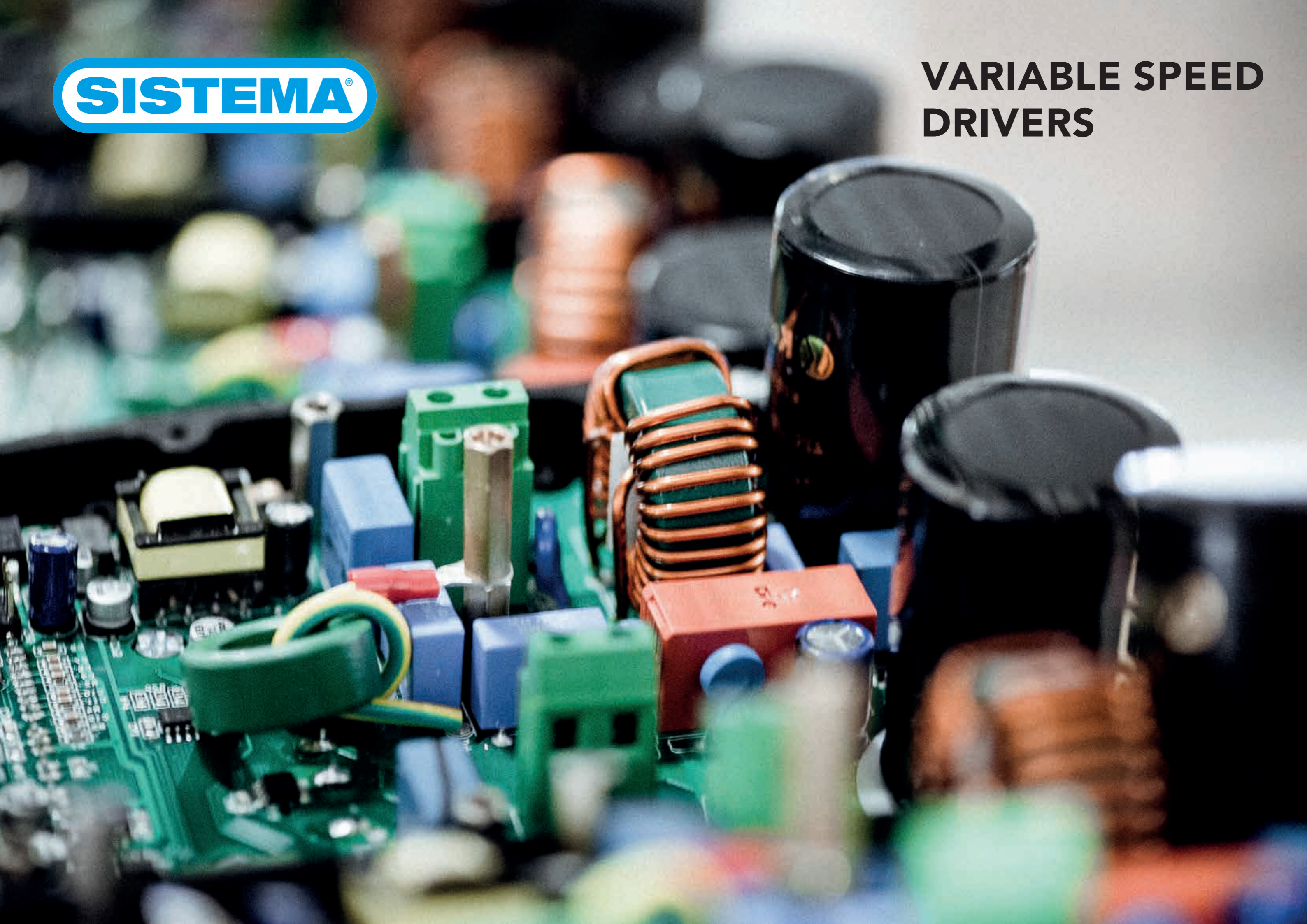
PRESSURE SWITCHES

- pressure switches for water pumps*
- 30 **PM
PT** *pressure switches for water system applications*
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integrated pressure gauge and 3 way fitting*
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LPR/5** *minimum and maximum pressure switches
with manual reset for heating systems*
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VARIABLE SPEED DRIVERS



NETTUNO

INVERTER FOR ELECTRIC PUMPS



Nettuno



Nettuno Universal

Features

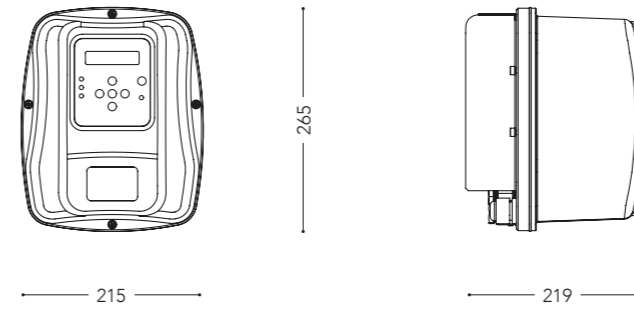
- *Nettuno is an electronic device, employing inverter-based technology, which controls electric pump stopping and starting functions. Thanks to this technology, it can modulate the frequency (Hz) of the motor's input current to adjust the speed (rpm) according to the water demand by the system.*
- *Install a pressure tank with a capacity of at least 2-5 litres*
- *Motor output current control*
- *Constant pressure due to motor pump speed regulation*
- *Energy saving due to less pump absorption*
- *Gradual pump start and stop reduces hammering*
- *Protection against dry running*
- *Automatic reset in event of dry running*
- *Leakages monitoring*
- *Anti-seize function*
- *Possibility to connect more drives to a booster set up to 8 pumps*

Optionals – special arrangements

- *Kit of fixing collars for horizontal pipe. Available sizes 1"1/4 - 1"1/2 - 2" - 2"1/2*
- *Pressure transducer 4÷20mA to be connected to the system delivery. In a booster system with more pumps a single transducer is sufficient to be connected to any one of the inverters.*

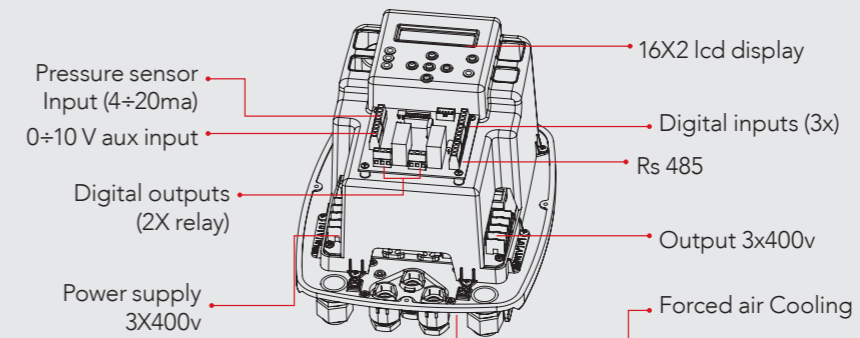


Pressure transducer 4÷20mA 0-6 bar with cable length 2mt

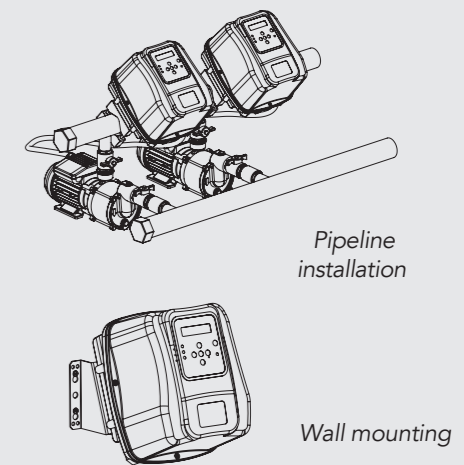


- ✓ QUICK INSTALLATION
- ✓ ENERGY SAVING
- ✓ STEADY PRESSURE

Features



Installation



TECHNICAL DATA	NETTUNO 3P-13A	NETTUNO 3P-9A	NETTUNO 3P-6A	NETTUNO UNIVERSAL
Power supply	Three-phase 400Vac ±10% - 50/60Hz			ingle-phase 230Vac ±10% - 50/60Hz
Motor output	Three-phase 400Vac			1x230V – 10,5A max 3x230V – 9,7A max (selectable)
Max. motor power	13A (7,5 kW – 10 HP)	9A (5,5 kW – 7,5 HP)	6A (3,7kW - 5HP)	
Cooling	Forced air vantilation		Air	Forced air vantilation
Analog inputs	4÷20mA (pressure sensor) 0÷10V (aux.)			4÷20mA (pressure sensor)
I Digital inputs	3 inputs (enable, error, 2° set-point)			
Digital outputs	2 relay (programmable functions)			1 relay (program-mable functions)
Gruppi di pressurizzazione	Up to 8 pumps			

SIRIO

SIRIO ENTRY

SIRIO ENTRY XP

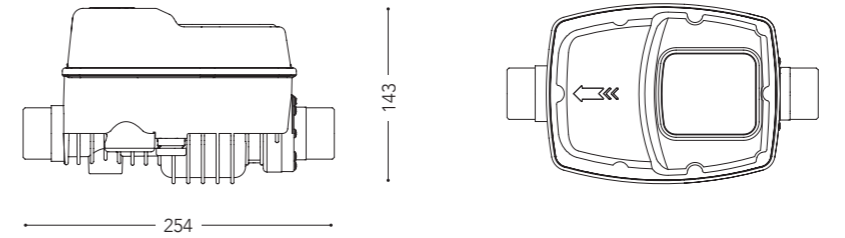
INVERTER FOR
ELECTRIC PUMPS
CONTROL



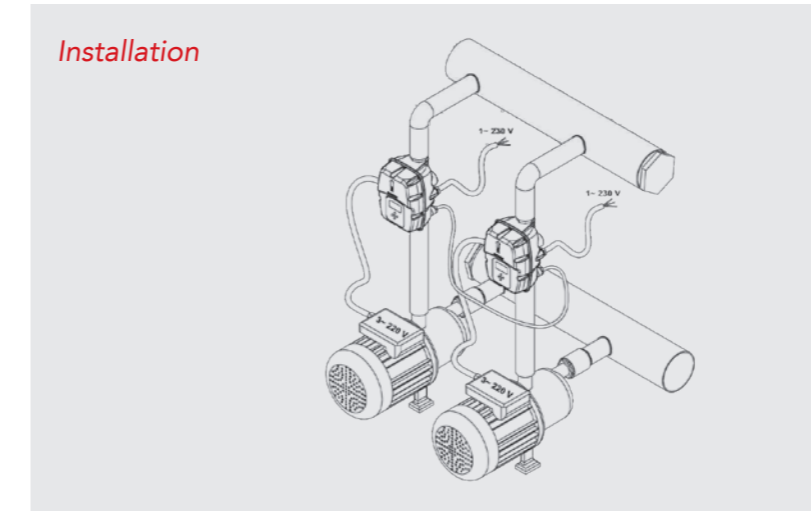
Sirio



Sirio Entry



- ✓ ENERGY SAVING
- ✓ STEADY PRESSURE
- ✓ COMPACT DESIGN



Features

- It controls the starting and stopping of the electric pump and modulates the motor rotations according to the water request from the system. Hammering is reduced and inrush starting current avoided.
- Constant pressure.
- Energy saving.
- Protection against dry running.
- Automatic reset in event of dry running.
- Protection against leakages, over pressure, over heating, rotor blocking and abnormal power supply.
- Motor over current control.
- Digital indication of the pressure, the voltage, the current and the motor frequency.
- Automatic maximum frequency reduction with temperature.
- Programmable input and output for different functions (enable, double set-point, error, master/slave configuration).
- Multilingual display.

Optionals – special arrangements

- I/O expansion card available (1 input + 1 output).
- Cable for connection in twin booster sets 4x0.5 mm² 100 cm (SR-CBL4X05-100).
- Interface module SIRIO X4 (SR-X4-230).
- Power supply protection module (MD-PROT230).
- Version for high speed motor pump (90/100/140 Hz).
- Version for IPM motors.

Certifications

UL (Sirio 140Hz 3x230V - Sirio Entry 60 Hz 1x230V) - File E332209

TECHNICAL DATA	SIRIO	SIRIO ENTRY	SIRIO ENTRY XP
Power mains supply	single-phase 230Vac ±10% 50/60Hz		
Motor power output	three-phase 220V~	one-phase 220V~	
Max motor power	2200W - 3Hp 9,7 A	1500W - 2Hp 10,5 A	1800W - 2,4Hp 14 A
Max allowable pressure	800 KPa (8 bar)		
Max fluid temperature	35°C		
Pressure drop	0,1 bar at 150 l/min		
Set-point adjustment range	1,5÷7 bar		
Hydraulic connection	male-male 1" ¼		
Max ambient temperature	40°C	45°C	

Power supply protection module

The module is designed to protect electric devices from overvoltage by disconnecting the connected loads. Three possible tolerance values are envisaged: low, medium, high. Passive protection (gas discharge tube and varistor) against electrical fast transients (voltage surges). The module must be installed upstream of the control device.

Modulo Sirio X4

It allows to connect up to 4 inverter Sirio in twin booster sets at constant pressure.

We suggest to install a 2 lt tank



PRESSURE AND FLOW CONTROLLERS

Bijlo 2000
115-230 V.
50-60Hz
12 A max
TYPE 801
MADE IN ITALY



BRIO2000 BRIO2000-M FLUOMAC

ELECTRONIC
DEVICES FOR ELECTRIC
PUMPS CONTROL



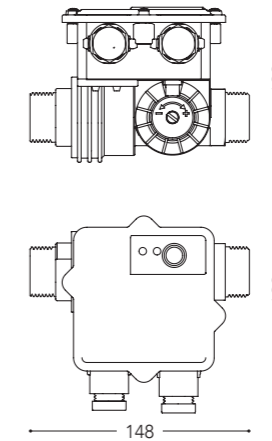
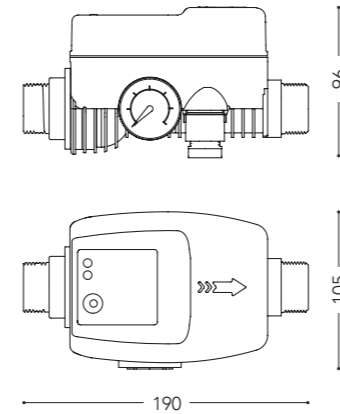
Brio2000



Brio2000-M



Fluomac



Adjustable starting
pressure 1÷3,5 bar



- ✓ BOOSTER SETS
- ✓ COMPACT AND RELIABLE
- ✓ MODERN DESIGN

Features

- It automatizes the start and stop operations of single-phase electric pumps.
- It replaces completely the traditional water system set up consisting on pressure switch and pressure tank.
- It starts the electric pump after a pressure decrease (taps opening) and stops it when the fluid flow interrupts at the maximum pressure level of the electric pump (taps closing).
- It protects against the dry running.
- Starting pressure is adjustable.
- Installation in any position – both vertical and horizontal.
- Easily replaceable electronic printed circuit board.
- No need of maintenance.

Optionals – special arrangements

- Automatic reset after a stop caused by dry running, standard time-interval 60 min/4 tests (BRIO2000-MT).
- Version with electrical cables for motor and line connection.
- Hydraulic connections with revolving nut 1" F for pipe union.
- Versions for 24 V.
- Special plastic fittings for a quick installation.
- T plastic fitting.



BRIO2000-M - CAB



BRIO2000-M - GG



CURVA



RC1M/G



TE

TECHNICAL DATA	BRIO2000 BRIO2000-M	FLUOMAC
Power supply	115-220Vac ±10% 50/60Hz	
Max rated current	12A (2HP) 1500 W	10A (1,5 HP) 1100 W
Starting pressure range	1÷3,5 bar (1,5 bar standard)	
Max allowable pressure	10 bar	
Protection degree	IP 65	IP 54
Max fluid temperature	55°C	
Max ambient temperature	55°C	
Hydraulic connections	1" M	

Certificazioni / Certifications



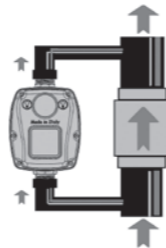
TÜV, Germany

BRIO TANK

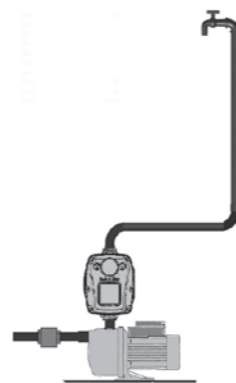


ELECTRONIC DEVICE FOR ELECTRIC PUMPS CONTROL

Installation in a by-pass mode



Adjustable starting pressure 1÷3,5 bar

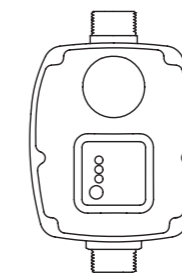
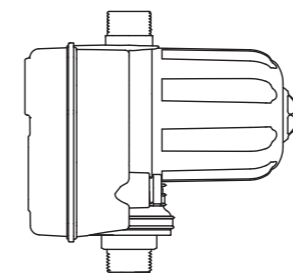


Features

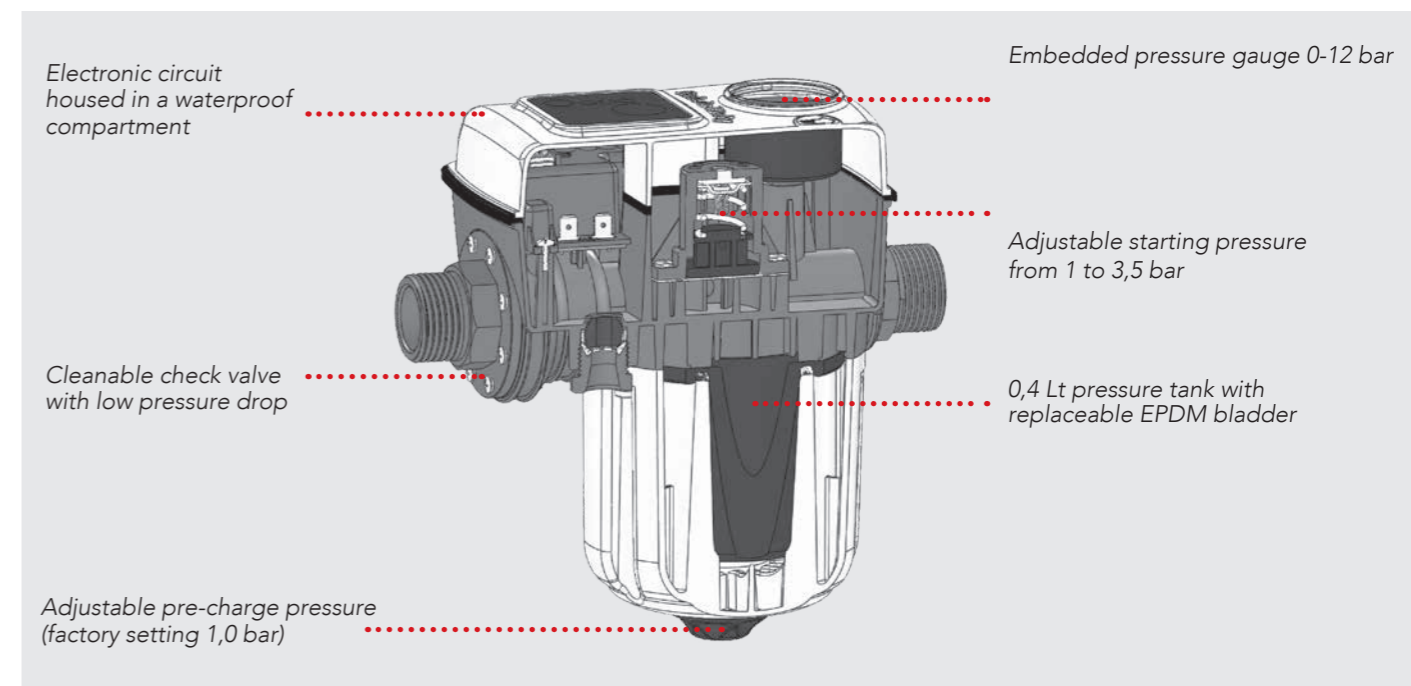
- It automatizes the start and stop operations of single-phase electric pumps up to 2HP.
- It replaces completely the traditional water system set up consisting on pressure switch and pressure tank.
- It starts the electric pump after a pressure decrease (taps opening) and stops it when the fluid flow interrupts at the maximum pressure level of the electric pump (taps closing).
- A small 0,4 l water tank is integrated and it prevents unlikely frequent start and stop of the pump in case of small request of water and in case of leakages on the installation.
- Replaceable EPDM bladder of the pressure tank.
- Adjustable pre-charge pressure (factory setting 1 bar) of the pressure tank.
- Integrated pressure gauge.
- It protects against the dry running and water hammering.
- Starting pressure is adjustable.
- Installation in any position - both vertical and horizontal.
- Electronic printed circuit board housed in a waterproof compartment protecting against water condensation.

Optionals – special arrangements

- Automatic reset after a stop caused by dry running, standard time-interval 60 min/4 tests.
- Version with electrical cables for motor and line connection.
- Revolving nut fitting 1" F.
- Pressure gauge showing the tank pre-charge pressure.
- Versions for 12-24Vdc



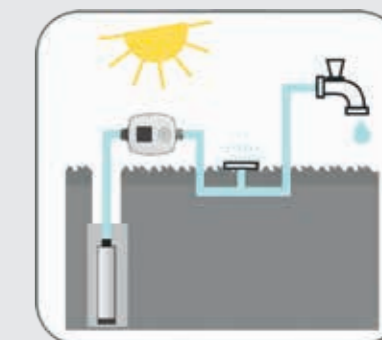
- ✓ NO HAMMERING
- ✓ COMPACT
- ✓ ENHANCED FEATURES



TECHNICAL DATA	BRIO TANK
Power supply	230Vac ±10% 50/60Hz
Max rated current	12A (2HP) 1500 W
Starting pressure range	1÷3,5 bar (1,5 bar standard)
Max allowable pressure	10 bar
Protection degree	IP 65
Max fluid temperature	35°C
Max ambient temperature	45°C
Hydraulic connections	1" M

Green Technology inside
Stand-by power consumption
<0.25 W

Application



BRIO TOP

ELECTRONIC DIGITAL DEVICE FOR ELECTRIC PUMPS



Digital pressure switch mode

To be used as electronic pressure switch for water systems with pressure tank. The functioning is regulated according to two pressure thresholds (electric pump start and stop according to the minimum and maximum pressure set values).



Automatic low and pressure control mode

To be used as flow and pressure controller, without pressure tank. The functioning is regulated by the start pressure and by the flow (the pump starts when the pressure drops and it stops when there is no flow). It is not possible to set a maximum pressure value.

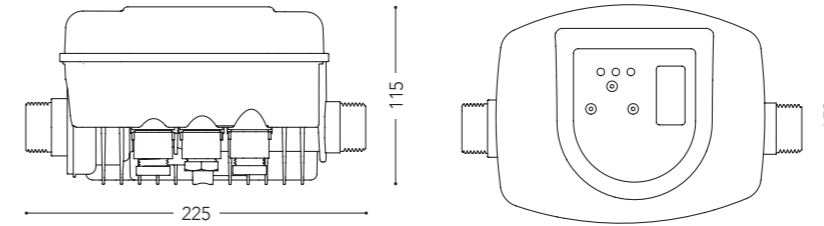


Features

- Suitable for water pumping systems with pressure tank as **digital pressure switch**, or as **flow and pressure controller**.
- Pressure values adjustable via digital display.
- Pressure values and motor current showed on the display.
- Automatically controls starting and stopping of **single phase electric pumps up to 16A (3 HP)**.
- **Protection against dry running.**
- **Automatic reset** in event of dry running.
- **Motor over current control** which trips in the event of overload or with the rotor blocked.
- **Anti-freeze protection** which starts up the pump when the ambient temperature falls below 4°C.
- **Rotor anti-blocking function** used to prevent seizure of mechanical parts during prolonged periods of pump inactivity.
- **Overpressure protection** able to stop the electric pump at a set threshold.
- Installation in any position – **both vertical and horizontal**.
- **Operation in master/slave configuration** into twin booster sets.
- **Terminals for remote connection** (1 input + 1 output).
- **Alarm log** for simple analysis of any system malfunctions.

Optionals – special arrangements

- Version with electrical cables for motor and line connection.
- Hydraulic connections with revolving nut 1" F for pipe union.
- 1" plastic elbow for a quick installation of the device on the electric pump.



- ✓ TOTAL PROTECTION
- ✓ INNOVATIVE
- ✓ COMPLETE AND FUNCTIONAL

RATED 16A
Can be used with pumps up to 3HP.

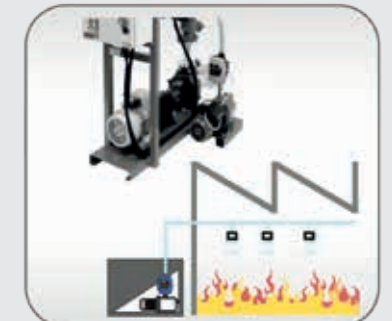
5 LANGUAGES LCD
Easy setting of parameters .
Digital indication of pressure and current.

CURRENT CONTROL Protects the pump against overload.

ERROR LOG
Error logging for an easier and complete troubleshooting.

I/O CONNECTIONS Can be connected to bms and other equipments for remote control. Allows connection in twin booster sets.

Application

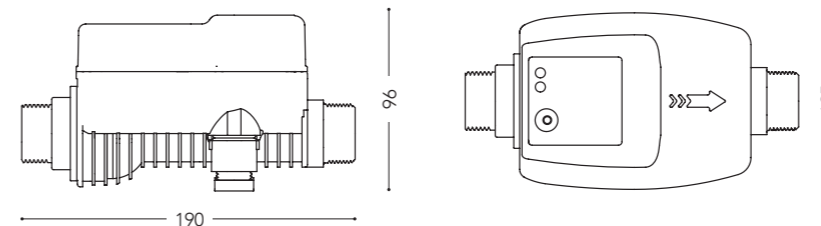


TECHNICAL DATA	BRIO TOP
Power supply	230Vac ±10% 50/60Hz
Max rated current	16A
Starting pressure range	0,5÷8 bar
Max allowable pressure	10 bar
Protection degree	IP 65
Max fluid temperature	30°C
Max ambient temperature	35°C
Hydraulic connections	1" M



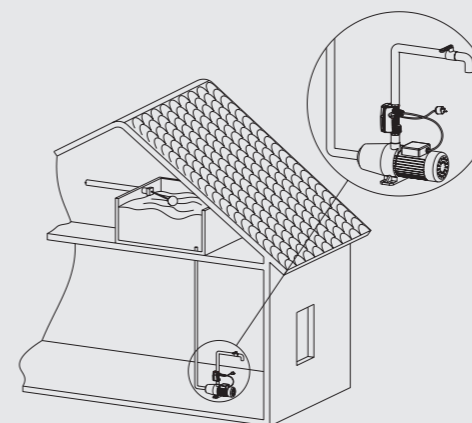
SPY 2000

ELECTRONIC
FLOW SWITCH



- ✓ FILLING UP AND EMPTYING OUT
- ✓ AFFORDABLE
- ✓ SIMPLE

Installation



Features

- It is used in water reserve systems (tanks, cisterns, etc.) and automatizes their filling up and emptying out processes.
- Useful in all applications where it is necessary to protect the installation from temporary and sudden lacks of flow (low levels in the suction, obstructions of the pipeline, etc.).
- It makes the electric pump start when detecting a minimum fluid dropping movement into the pipe; it makes it stop when the flow has been interrupted (taps closing or no water on suction side).
- It protects against the dry running.
- Installation in any position – both vertical and horizontal – according to the flow direction.

Optionals – special arrangements

- Automatic reset after each shutdown of the electric pump; standard interval 60 min./4 attempts (SPY2000-RT).
- Version with drilled check valve for water column drain.
- Special plastic fittings for a quick installation.

TECHNICAL DATA	SPY 2000
Power supply	230Vac ±10% 50/60Hz
Max rated current	12A
Max allowable pressure	10 bar
Min flow rate	2,4 l/min.
Protection degree	IP 65
Max fluid temperature	85°C
Max ambient temperature	55°C
Hydraulic connections	1" M

CRONO SPY

ELECTRONIC
FLOW SWITCH
WITH TIMER

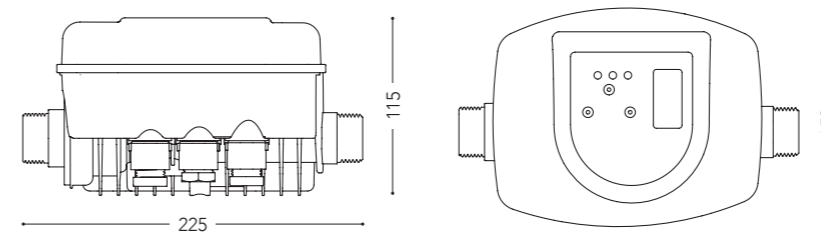


Features

- Useful in applications for automatic filling and drainage of tanks, cisterns etc.
- **Starts up the electric pump** at regular intervals **within specific programmable daily time bands**.
- **Weekly programming** with the possibility of setting up to 2 daily periods ON and 2 OFF.
- Stops the electric pump when the flow ends due to lack of water on the suction or on completion of filling (if applied with mechanical float on system delivery).
- **Protection against dry running**.
- **Auxiliary input** for connection of external electric float.
- Installation in any position – both vertical and horizontal.

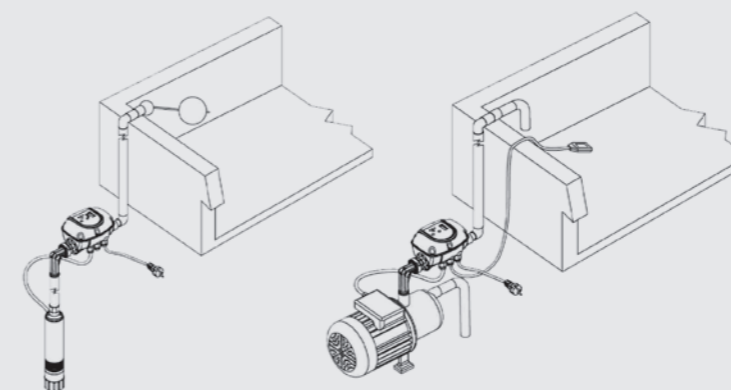
Optionals – special arrangements

- Version with electrical cables for motor and line connection.
- Hydraulic connections with revolving nut 1" F for pipe union.



- ✓ RESERVOIR
- ✓ WEEKLY TIMER
- ✓ EASY AND INTUITIVE

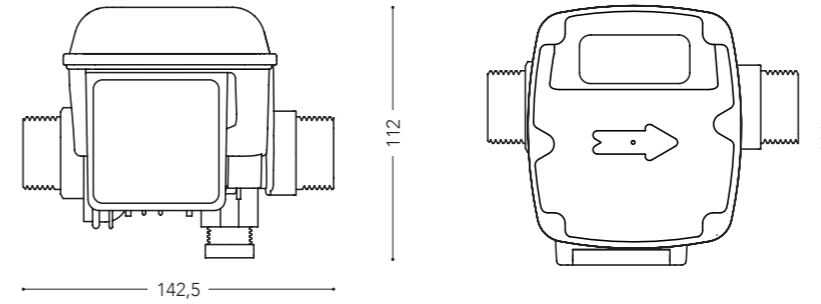
Installazione / Installation



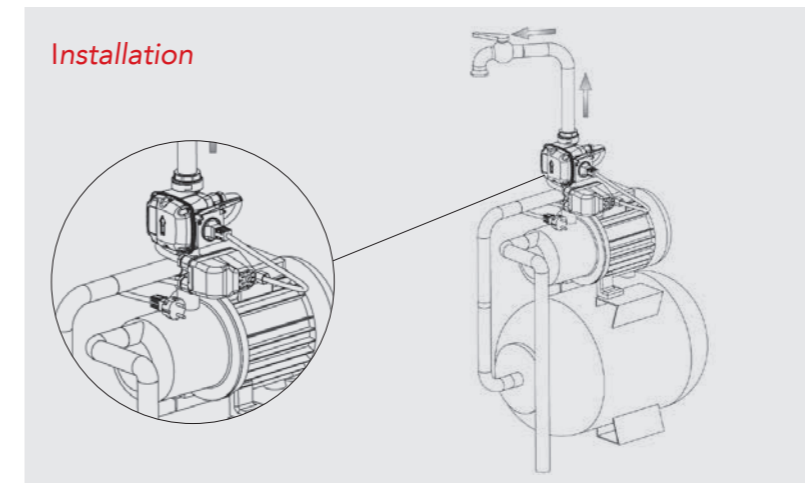
TECHNICAL DATA	CRONO SPY
Power supply	230Vac ±10% 50/60Hz
Max rated current	12A
Min flow rate	2,5 l/min.
Max allowable pressure	10 bar
Protection degree	IP 65
Max fluid temperature	30°C
Max ambient temperature	35°C
Hydraulic connections	1" M

SPIN

ELECTRONIC FLOW SWITCH



- ✓ PUMP PROTECTION
- ✓ COMPACT AND VERSATILE
- ✓ EASY INSTALLATION



CURVA

Features

- Dry running protection device for use in booster sets in series with the traditional pressure switch.
- Pump shutdown delay settable internally from 10 to 180 seconds to enable filling of expansion tanks of various capacities
- Available with SCHUKO socket or pre-fitted electric cables, that is a valid alternative to the external float switch (simplified electrical connection, suitable also for the do it yourself)
- Pump shutdown only if the absorbed current is higher than 1.0 Amp. (in case the pressure switch does not reach the stop value for no water on suction side). The version without such feature is available upon request.

Optionals – special arrangements

- Version with drilled check valve for water column drain.
- Version with electrical cables for motor and line connection.
- Hydraulic connections with revolving nut 1" F for pipe union.
- 1" plastic elbow for a quick installation of the device on the electric pump.

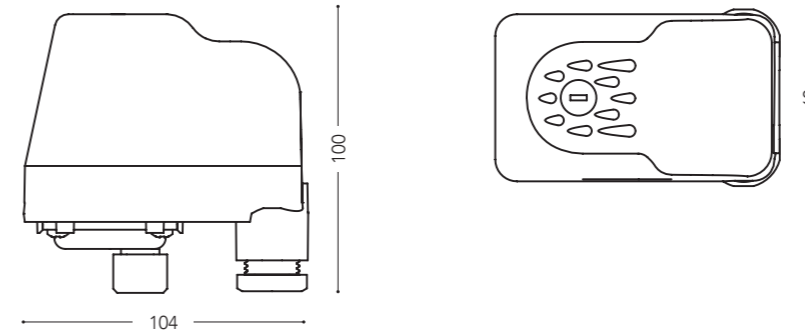
TECHNICAL DATA	SPIN
Power supply	115-230Vac ±10% 50/60Hz
Max rated current	12A
Max allowable pressure	10 bar
Min flow rate	2,4 l/min.
Protection degree	IP 44 IP 65 > versione senza presa/version without socket
Max fluid temperature	50°C
Max ambient temperature	55°C
Hydraulic connections	1" M

WARNING: the pump stops only if the absorbed current exceeds 1.0 Amp. The version without such feature, to be used as flow switch without pressure switch, is available upon request.

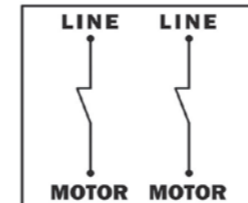


PRESSURE SWITCHES

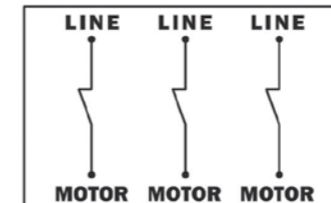




- ✓ BOOSTER SETS
- ✓ TRADITIONAL
- ✓ SAFE AND AFFORDABLE



PM/5 - PM/6 - PM/12



PT/5 - PT/6 - PT/12



4V - MAN

Features

- Pressure switches for **booster sets**.
- The switch ensures automatically the starting and stopping of the electric pump according to the set pressure values.
- Electric contacts: normally closed and made of brass alloy with Ag-Ni surfacing.
- NBR rubber coated fabric membrane.
- ¼" F hydraulic connection made of galvanized steel.
- Tear resistant cable clamps.
- Terminal block with full insulated live parts.

Optionals – special arrangements

- Several available hydraulic connections.
- Stainless steel connection flange ¼" fix and revolving nut female according to the Italian Ministerial Decree 174/04 (drinking water use)
- **Customized settings.**
- Transparent cover and graduated scale showing the cut-in pressure value.
- Cover with **on/off button**.
- Reinforced electric contacts up to 25A current.
- Protection degree IP 54.
- Version with electric cables for line and motor connection.

TECHNICAL DATA	PM/5	PM/6	PM/12	PT/5	PT/6	PT/12
Pressure range	1÷5 bar	1,5÷5,5 bar	3÷12 bar	1÷5 bar	1,5÷5,5 bar	3÷12 bar
Factory setting	1,4-2,8 bar	1,8-3 bar	5-7 bar	1,4-2,8 bar	1,8-3 bar	5-7 bar
Min differential	0,6 bar	0,8 bar	1,5 bar	0,6 bar	0,8 bar	1,5 bar
Max differential	2,3 bar	2,2 bar	5 bar	2,3 bar	2,2 bar	5 bar
Rated current	16(10)A					
Rated voltage:	250 V			500 V		
Protection degree	IP 44					
Max fluid temperature	55°C					
Max ambient temperature	55°C					



ON/OFF



SG

PM5-3W PM5-2W

PRESSURE SWITCHES
FOR WATER PUMPS
WITH INTEGRATED
PRESSURE GAUGE
AND 3 WAY FITTING



PM5-3W

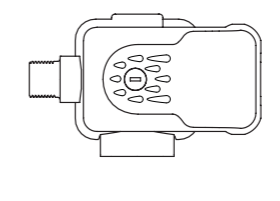
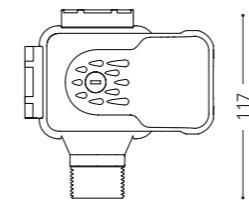
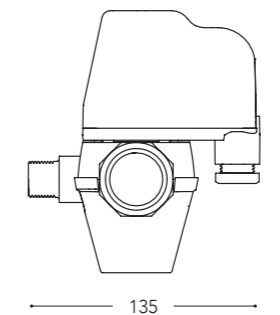
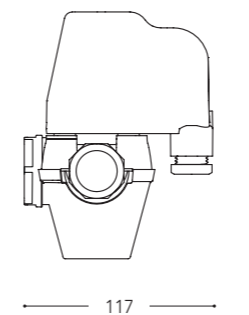
PM5-2W

Features

- Easy and fast connection to the pump and to the pressure tank.
- Integrated pressure gauge.
- Robust plastic fitting with reinforced steel ring replacing common brass fitting.

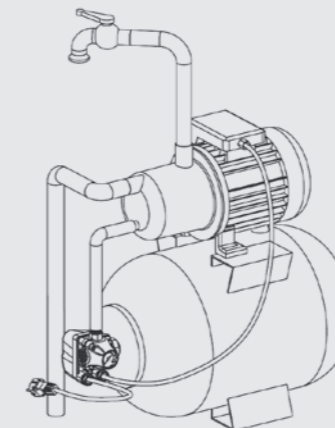
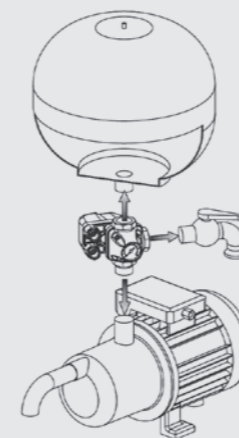
Optionals – special arrangements

- Customized settings.
- Cover with on/off button.
- Reinforced electric contacts up to 25A current.
- Version with electric cables for line and motor connection.

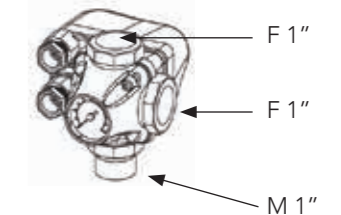


- ✓ INNOVATIVE
- ✓ HANDY
- ✓ ROBUST AND COMPACT

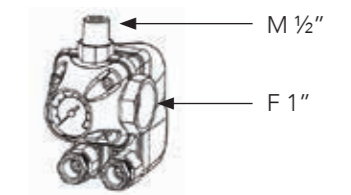
Installation



PM5-3W



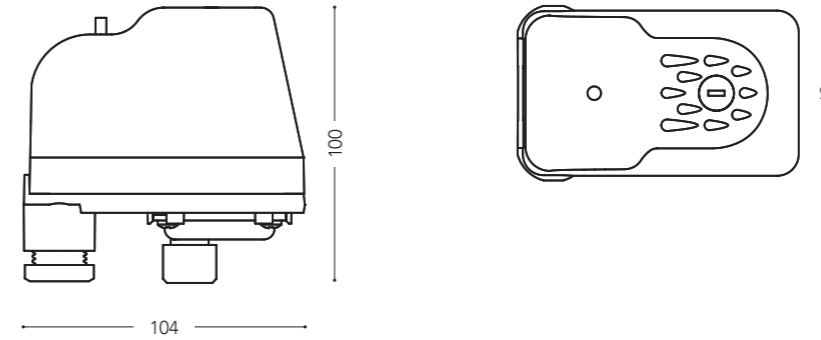
PM5-2W



TECHNICAL DATA	PM5-3W	PM5-2W
Load	250V~16(10)A	
Max pressure	5 bar	
Connections	1" M x 1" F x 1" F	1" F x 1/2" M
Pressure gauge	Ø 40 mm 0-6 bar / 0-86 PSI	
Max fluid temperature	55°C	

LP/3

LOW PRESSURE SWITCH



- ✓ PUMP PROTECTION
- ✓ ORIGINAL
- ✓ ALTERNATIVE

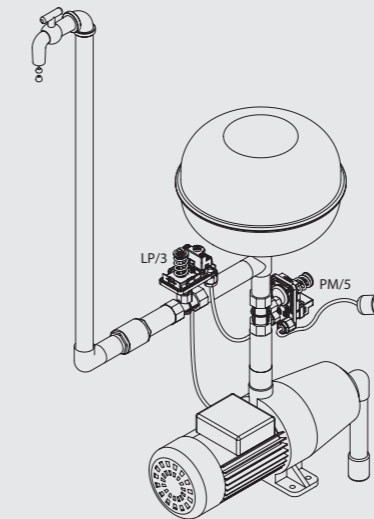
Features

- Pressure switch for the protection of water systems (booster sets and fire-fighting systems) and pneumatic systems (control circuits under pressure).
- The device interrupts the electric connection between the line and the load when the pressure decreases below the established value (stop pressure).
- In the booster sets systems it is **matched in series with a PM/5 pressure switch** in order to **protect the electric pump from dry running**.
- The reset is automatic when the pressure becomes again higher than the start value or when pressing the reset button.
- Double electric contact: normally open, made of brass alloy with Ag-Ni surfacing.
- NBR rubber coated fabric membrane.
- Tear resistant cable clamps.

Optionals – special arrangements

- Several available hydraulic connections.
- Customized settings.
- Graduated scale showing stop pressure value.
- Protection degree IP 54.
- Version with electrical cables for motor and line connection.

Installation



The pre-set cut-out pressure value must be higher than the equivalent pressure generated by the water column on LP/3 exit side (water column 1 mt is equivalent to 0,1 bar).



RESET



SG

TECHNICAL DATA	LP/3	LP/3-18
Cut-out pressure range	0,05÷0,4 bar	0,5÷2,0 bar
Factory setting	0,1–0,45 bar	0,5–0,95 bar
Rated current	16(10)A	
Rated voltage	250 V	
Max fluid temperature	55°C	
Max ambient temperature	55°C	
Standard connection	¼" F	
Protection degree	IP 44	

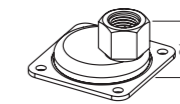
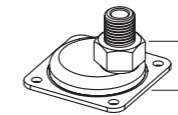


MALE

1/4" G

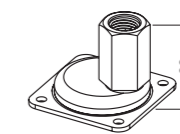
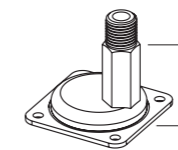
FEMALE

M
male



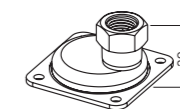
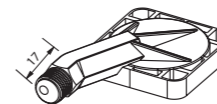
F
Inox/Stainless steel FX
female

ML
long male

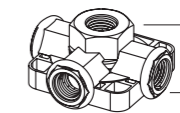


FL
long female

L
side male



FG
Inox/Stainless steel FGX
female revolving nut



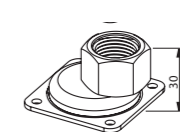
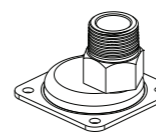
4V
female 4 ways 1/4"

MALE

1/2" G

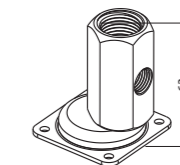
FEMALE

M
male



F
female

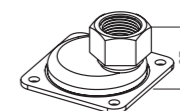
2V
female



2V
female 1 way 1/2" + 1 way 1/4"

3/8" G

FEMMINA / FEMALE



FG
femmina girevole
female revolving nut



4V
femmina 3 vie 1/4" + 1 via 3/8"
female 3 way 1/4" + 1 way 3/8"

PMR/5-R2 LPR/5

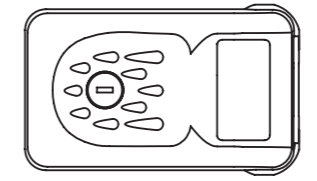
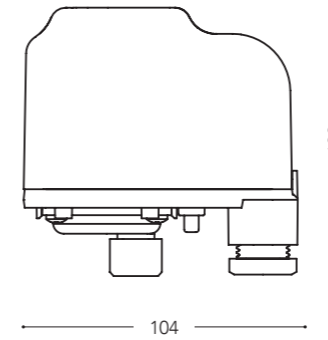
MINIMUM
AND MAXIMUM
PRESSURE
SWITCHES WITH
MANUAL RESET FOR
HEATING SYSTEMS



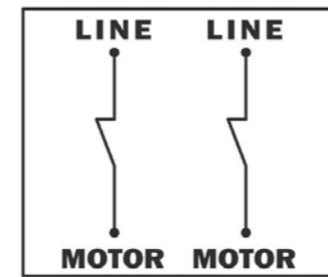
PMR/5-R2



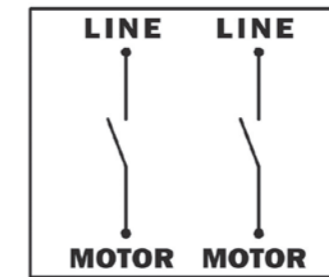
LPR/5



- ✓ CENTRAL HEATING
- ✓ FAIL-SAFE
- ✓ APPROVED



PMR/5-R2



LPR/5

Features

- Safety pressure switches for heating systems applications PED certified.
- The devices automatically stop the heat generator when a pre-set water pressure limit is reached.
- Reset is exclusively manual by pressing the manual reset key after the pressure has returned by at least 0.4 bar within the shutoff value.
- External graduated scale.
- Double normally closed electric contact (PMR/5-R2) or normally open contact (LPR/5) in brass alloy with Ag-Ni coating.
- NBR rubber coated fabric membrane.
- Tear resistant cable clamps.

Optionals – special arrangements

- Release for maximum pressure up to 10 bar (PMR/10 not PED compliant).

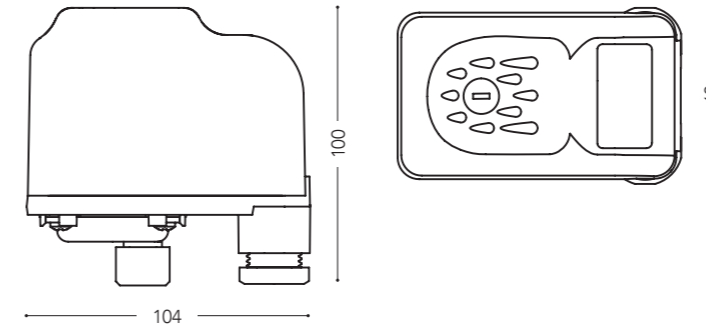
TECHNICAL DATA	PMR/5-R2	PMR/10	LPR/5
Electric contact	N.C.	N.C.	N.O.
Pressure range	1÷5 bar	1÷9 bar	0,5÷1,7 bar
Factory setting	3 bar	5 bar	0,9 bar
Rated current	16(10)A		
Rated voltage	250 V		
Max fluid temperature	110°C	80°C	110°C
Hydraulic connections	¼" F		
Protection degree	IP 44		
Max ambient temperature	50°C		



RESET



SG



- ✓ OEM APPLICATIONS
- ✓ FIRE-FIGHTING
- ✓ MULTIPURPOSE

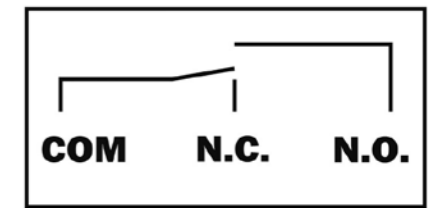
PS/3 - PS/5 - PS/12



PE



SG



Features

- Series of pressure switches for control applications and supervision in different technological systems (fire fighting units, building machineries, systems for water treatment, etc).
- The pressure switch works mechanically per action of the pressure in the system and it doesn't need any additional electrical power supply.
- SPDT contact (single pole double throw COM.-N.O.-N.C.).
- NBR rubber coated fabric membrane.
- Tear resistant cable clamps.

Optionals – special arrangements

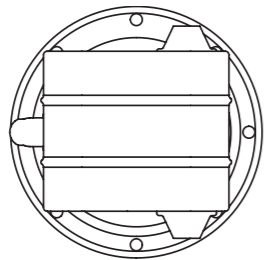
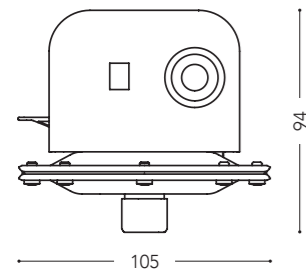
- **Temporary disable button** for testing system according to EN 12845 (10.7.5.3).
- Customized settings.
- Graduated scale for an easy adjusting.
- Protection degree IP55.

TECHNICAL DATA	PS/3	PS/3D	PS/5	PS/5D	PS/12	PS/12D	PS/16D
Max working pressure	5 bar	5 bar	12 bar	12 bar	12 bar	12 bar	16 bar
Setting range	0,9÷2,0 bar	0,9÷5,0 bar	1,7÷5,0 bar	1,7÷7,5 bar	2,5÷10,0 bar	2,5÷12,0 bar	2,5÷12,0 bar
Factory setting	1.0-1.3	1.0-2.0	2.4-2.8	2.4-3.5	5.0-5.8	5.0-7.0	5.0÷8.0
Min differential	0,2 bar	0,4 bar	0,5 bar	0,5 bar	0,8 bar	0,8 bar	0,8 bar
Max differential	0,2 bar	2,5 bar	0,7 bar	3,3 bar	1,4 bar	3,8 bar	3,8 bar
Max load	5 A 250 V~						
Max fluid temperature	55°C						
Max ambient temperature	55°C						
Protection degree	IP 44						
Connections	¼" F						

VC

VACUUM SWITCH

- ✓ VACUUM CONTROL
- ✓ ROBUST
- ✓ OEM APPLICATION



TECHNICAL DATA	VC
Connection	¼" F NPT
Rated voltage	250V
Rated current	16(10)A
Setting values	1,5 - 2,0 - 2,5 - 4,0 - 4,5 inHg
Max ambient temperature	55°C

Features

- Vacuum switch, useful for protecting the pump against dry running during draining of basins, tanks or cisterns.
- The switch, which is fitted on the suction pipe, controls the vacuum generated by the pump.
- The system is activated manually using the start lever which, when lowered, starts the pump running; this action leads to the creation of the vacuum which automatically determines the closure of the contacts.
When the liquid supply is about to run out, the vacuum in the suction line disappears and so the switch deactivates the pump.
- Variable distance between the switch and the end of the suction pipe (from 0 to 4 m / 0 to 157 ½ inches).
- Normally open brass alloy contacts with Ag-Ni insert.
- Oil and hydrocarbons resistant NBR rubber membrane.

Optionals – special arrangements

- Several pre-adjusting settings.
- Tear-resistant wire clamps.

Certifications



UR - File E176663 Approvals B



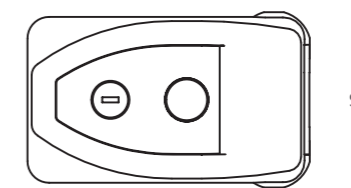
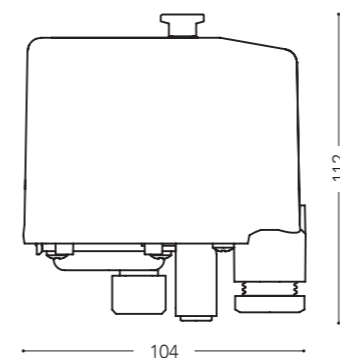


PMA/12 PTA/12

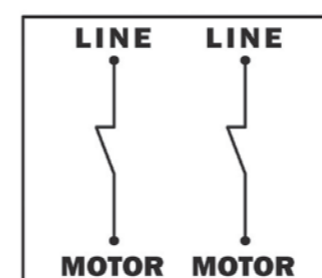
PRESSURE
SWITCHES FOR AIR
COMPRESSORS



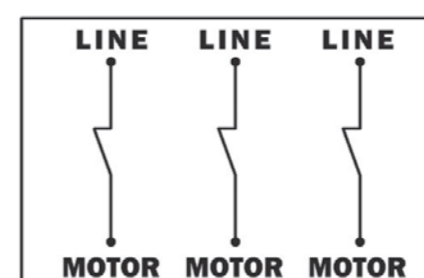
PMA/12 - PTA/12



- ✓ COMPRESSED AIR
- ✓ UNLOADER VALVE
- ✓ COMPACT



PMA/12



PTA/12

Features

- Pressure switches for use with *air compressors*.
- The switch ensures automatically starting and stopping of the compressor according to the preset pressure values.
- Electrical contacts: normally closed, made of brass alloy with Ag-Ni surfacing.
- Oil-resistant NBR rubber coated fabric.
- Tear resistant cable clamps.
- Cover with on/off button.
- Air-relief valve for 6 mm diameter pipe with delayed closing system for model PMA single phase, and with instant-closing action for model PTA three phase.

Optionals – special arrangements

- Several available hydraulic connections.
- Customized settings.
- Reinforce electric contacts up to 25A current.

TECHNICAL DATA	PMA/12	PTA/12
Pressure range:	3÷12 bar	
Factory setting:	6 - 8 bar	
Min differential:	1,5 bar	
Max differential:	5 bar	
Rated current:	16(10)A	
Rated voltage:	250 V	500 V
Max fluid temperature	55°C	
Max ambient temperature	55°C	
Protection degree	IP 44	
Connection	¼" F	



ON/OFF



UNLOADER VALVE

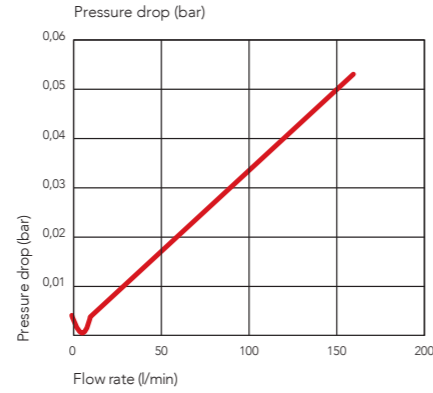


DIAGRAMS

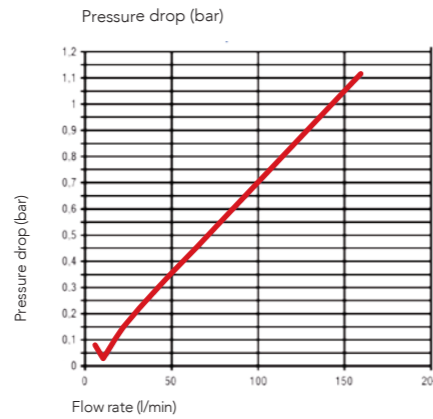




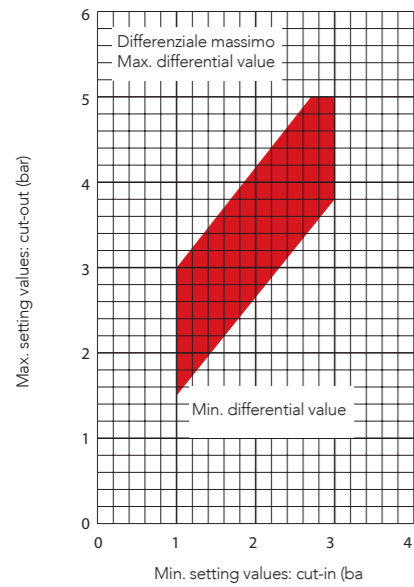
SIRIO
SIRIO ENTRY
SIRIO ENTRY XP



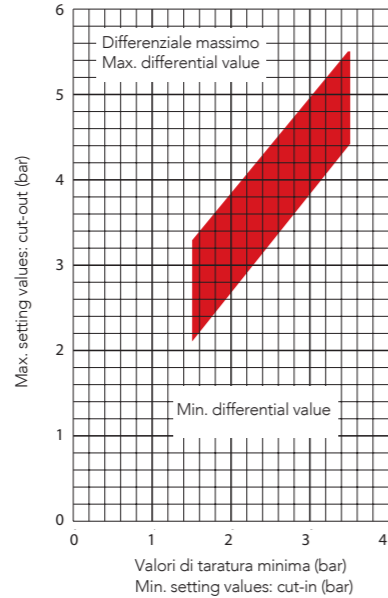
BRIO TANK
BRIO
BRIOM
BRIO TOP
FLUOMAC



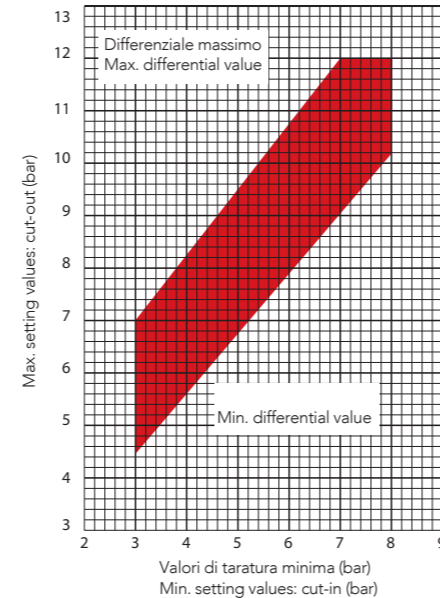
PM/5 – PT/5
PM5-3W



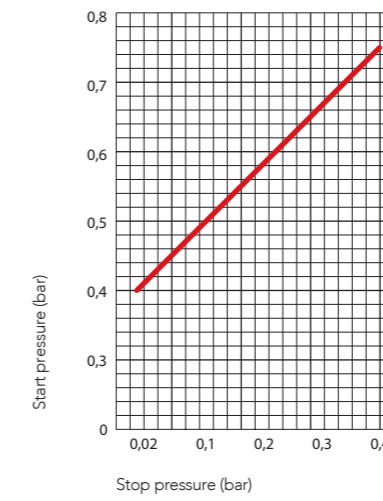
PM/6 – PT/6



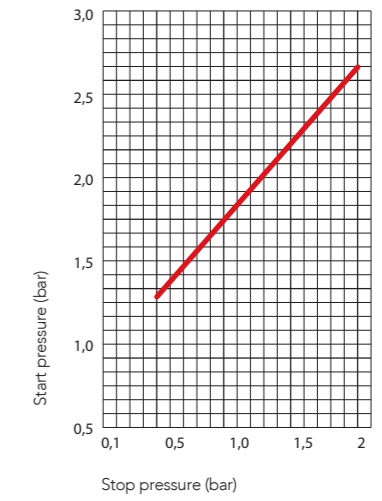
PM/12 – PT/12
PMA/12 – PTA/12



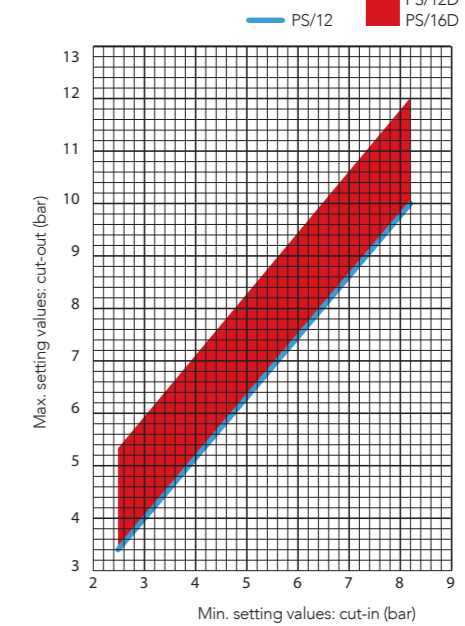
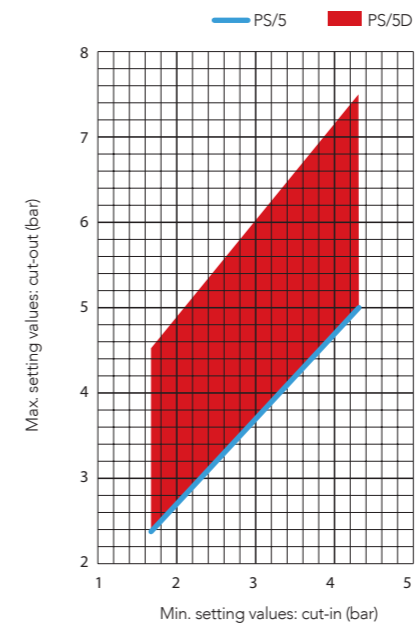
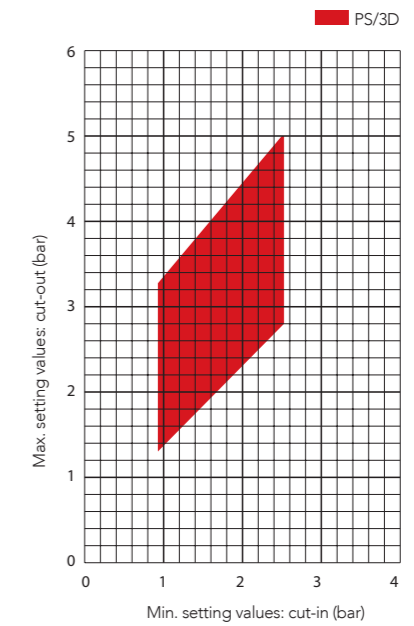
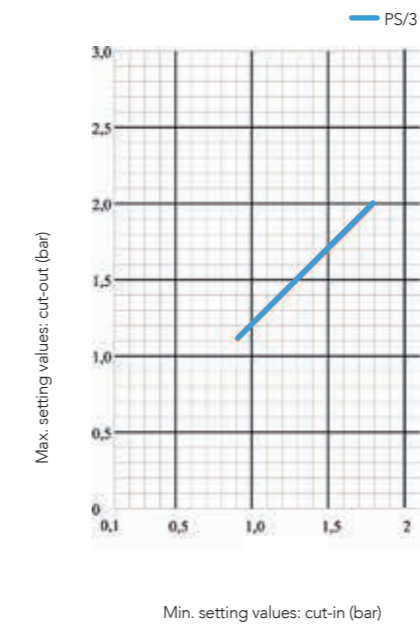
LP/3



LP/3-18



PS





ACCESSORIES





EMC FILTERS



CODE	TYPE	VOLTAGE	CURRENT
CNW811/10	DV/DT 3-phase output filter	3x500V	10A max
B84142-A20-R	Single phase line filter (single stage)	250V	20A max
B84142-B16-R	Single phase line filter (double stage)	250V	16A max

FLOAT SWITCHES



TECNO

USE	CABLE	FUNCTION	LENGHT
Float switch for clear water, dirty water and other no aggressive liquids	PVC 3x1	For filling-up emptying out according to the connection	0,5÷20 m
	A07RN-F 3 X 1	For filling-up emptying out according to the connection.	
	H07RN-F 3G1	For emptying out function only (upon request: filling up).	

Counterweight	upon request
Microswitch Electrical ratings	20(8)A 250V~
Certifications	ENEC/CE 10(8)A 250V~
Working temperature	0 ÷ 60°C
Protection degree	IP 68



TITANIO

USE	CABLE	LENGHT
Liquids control in drainage systems, pumping systems and dirty (black) waters. Protection against moisture infiltration	PVC 3X1 H07RN-F 3X1	3-5-10-20 m

Electrical characteristics	10(4)A 250V~
Pressure resistance	10 bar
Working temperature	0 ÷ +50°C
Protection degree	IP 68

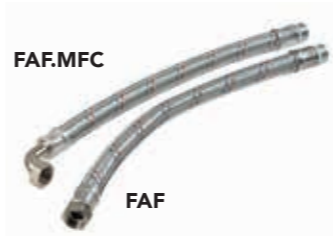
SUCTION KIT



ASPIKIT

USE	CONNECTION	LENGHT
Suction kit for water complete of couplings and foot valve	1"x1" M/F Ø 22 mm	4 - 7 m

FLEXIBLE HOSES



FAF.MFC

FAF

CONNECTION THREAD	NOMINAL Ø	INLET/OUTLET Ø	WORKING PRESSURE	AVAILABLE LENGHT
½"	15	14x20	10	30 min/100 max
¾"	18	19x26	10	30 min/100 max
1"	25	25x33	10	30 min/100 max
1" ¼"	32	32x42	6	30 min/100 max
1" ½"	40	40x53	6	40 min/100 max
2"	50	50x65	6	40 min/100 max

Working temperature -5°C + 110°C

BRASS FITTINGS



RCC

RCLL

RC3



ROMF1-3
ROMF114-3

ROMFC114-3-03

TYPE	THREAD	LENGHT
RCM/F (2 ways)	1"M x 1"F	72 mm
RC3 (3 ways)	1"M x 1"F x 1"F	72 mm
RCC (5 ways)	1"M x 1"F x 1"F x ¼"M x ¼"F	72 mm
RCL (5 ways)	1"M x 1"F x 1"F x ¼"M x ¼"F	82 mm
RCLL (5 ways)	1"M x 1"F x 1"F x ¼"M x ¼"F	91 mm
ROMF1-3	3 pieces straight fitting MF 1" with o-ring	
ROMF114-3	3 pieces straight fitting MF 1"1/4 with o-ring	
ROMFC114-3-03	3 pieces elbow MF 1"1/4 with o-ring	

SECURITY VALVES



VS

TYPE	FILETTATURA THREAD
NT1: 0,5÷5 bar – NT2: 6÷12 bar – NT3: 13÷18 bar	½" – ¼" – ¾" – ½" – ¾" – 1"

Working temperature NBR - 10°C + 90°C / VITON -10°C + 250°C

upon request PED 97/23/CE

use: compressed air

BRASS CHECK VALVES AND FOOT VALVES



TYPE	THREAD	MAX. WORKING PRESSURE
Standard check valve F/F (VARY)	1/4" - 3/8" - 1/2" 3/4" 1"	12 bar
	1 1/4" - 1 1/2" - 2"	10 bar
	2 1/2" - 3" - 4"	8 bar
Standard check valve FF for high pressure (VARE)	3/8" - 1/2" - 3/4" - 1"	25 bar
	1 1/4" - 1 1/2" - 2"	18 bar
	2 1/2" - 3" - 4"	12 bar
Foot valve with incorporated stainless steel filter (VAFY)	3/8" - 1/2" - 3/4" - 1"	10 bar
	1 1/4" - 1 1/2" - 2"	8 bar
	2 1/2" - 3" - 4"	6 bar
Foot valve with stainless steel filter (VAFE)	3/8" - 1/2" - 3/4" - 1"	25 bar
	1 1/4" - 1 1/2" - 2"	18 bar
	2 1/2" - 3" - 4"	12 bar

PRESSURE GAUGES



TYPE	CASSA CASING	DIAMETRO DIAMETER	ATTACCO CONNEXION	SCALA DI PRESSIONE PRESSURE RANGE
A 22 / B 22	ABS	50 mm	1/4" bottom (A 22) back (B 22)	0÷2,5 - 0÷40 bar
A 32 / B 32	ABS	63 mm	1/4" bottom (A 32) back (B 32)	
E 35 / F 35	st. steel gliceryne	63 mm	1/4" bottom (E 35) back (F 35)	
E 55 / F 55	st. steel gliceryne	100 mm	1/2" bottom (E 55) back (F 55)	

CONTAINERS FOR FILTERING CARTRIDGES

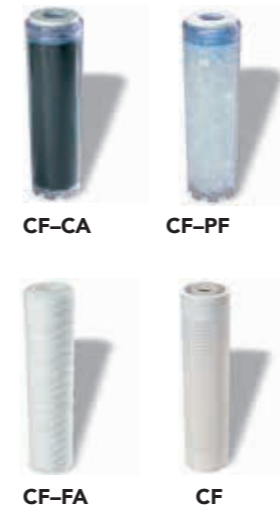


TYPE	PER CARTUCCE ALTEZZA HEIGHT PER CARTRIDGE	FILETTATURA IN/OUT THREAD IN/OUT	PRESSIONE MASSIMA MAX PRESSURE
Transparent housing in 3 pcs, head in loaded polypropylene with brass inserts	5" - 9 3/4" - 20"	1/2" - 3/4" - 1" 1 1/4" - 1 1/2"	8 bar

working temperature

0÷30°C

CARTRIDGES



TYPE	HEIGHT PER CARTRIDGE	FILTERING
Wound polypropylene filtering cartridge (CF-FA)	5" - 9 3/4"	25 micron (upon request: 1-5-10-50 µ)
Washable net polyester cartridge		60 micron (upon request: 150 µ)
Transparent housing with polyphosphate crystals	5" - 9 3/4"	

MEMBRANES FOR PRESSURE TANKS



TYPE OF RUBBER	MAX WORKING TEMPERATURE	AVAILABLE CAPACITIES	HARDNESS
EPDM	85°C	From 5 lt to 1500 lt	50 ± 5 Shore A (DIN4807)
BUTILE		From 5 lt to 50 lt	

PRESSURE TANKS



Micron mini tank studied for the absorption of the sudden overpressure due by water hammering in the pressurized water systems.

CAPACITÀ CAPACITY	PRECARICA PRÉCHARGE	PRESSIONE MAX MAX PRESSURE	TEMPERATURA DI ESERCIZIO WORKING TEMPERATURE	CONNESSIONE INOX STAINLESS STEEL CONNECTION
160 ml	3,5 bar	15 bar	-10 + 99°C	1/2" M
2 lt	3,5 bar	10 bar	-10 + 99°C	1/2" M

AIR FEEDER



The air feeders grant the maintaining of the air bearing inside the tank. - Flexible hoses for connection available by request.

TYPE	TANK CAPACITY	MAX PRESSURE	MALE CONNECTIONS	SIZE HEIGHT/ DIAMETER
AA-04	min/max: 100/500 lt	max 10 bar	1/2" Gc	220/106 mm
AA-16	min/max: 750/2000 lt		3/4" Gc	275/162 mm

SISTEMA[®]

