

MULTIRAPID MANIFOLDS safety-pol

for domestic hot water distribution, with shut-off valve
modular manifold Ø 20, 26 and 32 with Ø 16 and 20 outlets



DESCRIPTION

The **safety-pol** multirapid manifold, fitted with shut-off valve, was designed and built for distribution of water in domestic hot water systems and is inserted in the wide range of **safety** fittings. Each individual module can be assembled quickly and easily with the amount of outlets foreseen by the heat engineering design, making it possible to shut off each individual utility.

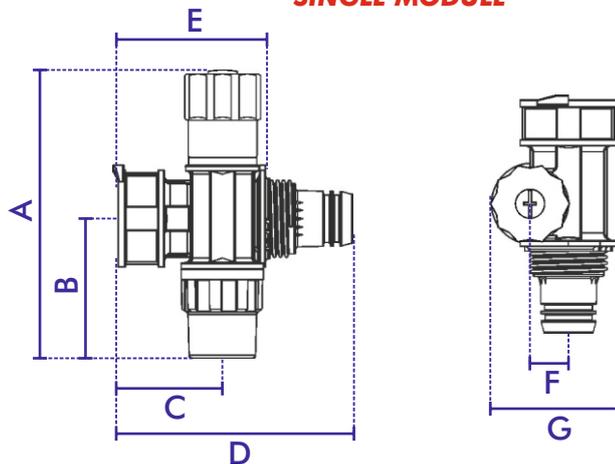
The detailed study of construction details gives the **safety-pol** multirapid manifold a number of technical advantages that differentiate it from normal distribution manifolds: the tapered shape of the elements to assemble guarantees absolute tightness at different temperatures and pressures; the end of stroke lock allows perfect alignment of various outlets and the static nature of the assembled modules; a higher content of fluid and a lower pressure drop enhances its functional performance.

Safety-pol multirapid manifolds must be able to be inspected: to this purpose they can be installed in special boxes by means of specific brackets (as detailed below).

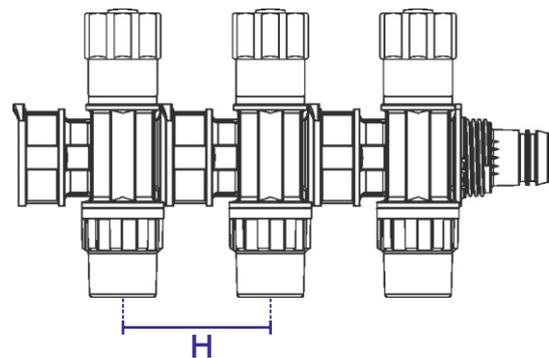
PRODUCT SPECIFICATIONS

MEASUREMENTS (in mm.)

SINGLE MODULE



ASSEMBLED MODULES



Item	Description	Measurements	A	B	C	D	E	F	G	H
21312	Multirapid manifold	sf20-sm16-sf20	90,0	47,0	35,0	78,7	49,5	12,2	42,2	49,5
21316	Multirapid manifold	sf26-sm16-sf26	95,0	52,0	40,5	90,5	59,0	15,0	49,3	59,0
21322	Multirapid manifold	sf32-sm16-sf32	101,0	54,0	43,0	96,5	62,5	17,5	60,0	62,5
21326	Multirapid manifold	sf32-sm20-sf32	101,0	54,0	43,0	96,5	62,5	17,5	60,0	62,5

Legenda: sf = female safety thread; sm = male safety thread

TECHNICAL SPECIFICATIONS

- Material:**
- *fitting body:* PPSU - Polyphenylsulfone
 - *cap:* PA-M - modified polyamide
 - *o-ring:* EPDM (Ethylene Propylene Diene) peroxide shore 70
 - *screw:* brass (with plastic knob)

- Colore:**
- *fitting body:* ivory (with dark grey marking)
 - *cap:* grey
 - *o-ring:* black
 - *screw:* natural brass yellow (with black knob)

Marking (manifold): company logo, trade name, production batch, base material code, progressive number printed.

Operating temperature: da -0°C* a 95°C
(*with the help of glycol as low as -15°C)

Maximum operating pressure at 95°C: 10 bar

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Maximum operating pressure at 95°C: 10 bar

Tensile strength: 70 N/mm²

Flexural modulus: 2400 N/mm²

Impact resistance: 694 J/m

Elongation at fracture: from 60 to 120 %

Weight (in grams)

Description	21312 (sf20-sm16-sf20)	21316 (sf26-sm16-sf26)	21322 (sf32-sm16-sf32)	21326 (sf32-sm20-sf32)
Fitting body	38,3	57,7	88,7	90,2
Cap	6,9	6,9	6,9	8,8
O-ring	0,5	0,7	0,9	1,0
Valve	59,7	59,7	66,9	66,9
Total	105,4	125,0	163,4	166,9

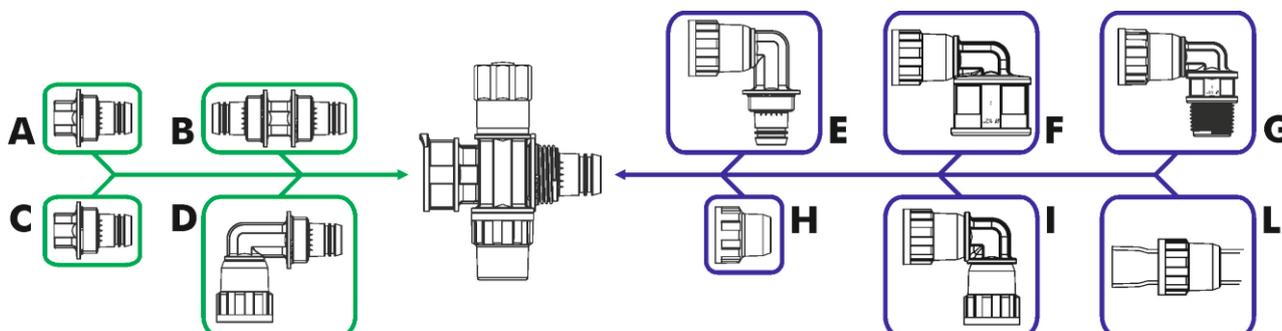
STANDARDS (CONFORMITY)

Safety-pol multirapid manifolds are designed and manufactured by Aquatechnik in accordance with the quality management system ISO 9001:2000 (certificate No. IIP 640 - IQNET IT-16323).

Like all fittings of the **safety** range, multirapid manifolds are manufactured in compliance with the strictest European standards, as demonstrated by countless acknowledgments issued by leading national and international certification organisations including: DVGW (no. 14-0413-WNV / Germany), SKZ (no. 372410/1.1/92490, year 2010/Germany), HY (Germany); NSF (standard 61 and 14/USA); KIWA (no. K40532/01 / Holland); IIP (no. 380/2012 / Italy); RINA (no. MAC351115CS/001 / Italy); AENOR (no. 001/004899 / Spain); ITB (no. AT-15-7359/2007 / Poland); PCT (no. POCC IT.TH02.B00373 / Russia); BIGGFORSK (no. 1192 / Norway); CSTB (no. 2470-157-1883 and 2293-157-1308 / France); WRAS (no. 1403333 / England); Lloyd's Register (no. 13/00077 / England); VUPS (no. 227-STO-10-0095 / Czech Republic); WaterMark (no. 23187 / Australia).

ACCESSORIES AND CUSTOMISING OF SPECIAL SAFETY FITTING MODULES

The full range of accessories for **safety-pol** multirapid manifolds makes it possible to customise them according to the specific needs of each system.



A - male cap,

B - sleeve,

C - 1/2" male thread reducer cap,

D/E - male/female elbow,

F - female/female threaded elbow,

G - male/female threaded elbow,

H - female cap,

I - 90° female/female elbow,

L - multi-color/multi-eco/polipert/PE-X* tube.

*Note: the use of PE-X and PE-RT tubes with **safety** fittings is permitted only with a thickness equal to that of the multi-color tubes. For more information consult the **aquatechnik** technical service.

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BOXES AND MOUNTING BRACKETS

The following are the codes of the boxes and brackets for installation of the manifolds.

Item	Description	Nominal sizes	Box item	Bracket item
21312	Multirapid manifold	sf20-sm16-sf20	71458-71460	73580
21316	Multirapid manifold	sf26-sm16-sf26	71458-71460 71462-71464-71466 73542-73544-73546	73582 73583
21322	Multirapid manifold	sf32-sm16-sf32	71462-71464-71466 73542-73544-73546	73584
21326	Multirapid manifold	sf32-sm20-sf32	71462-71464-71466 73542-73544-73546	73584

Note: the manifolds art. 21316 (Ø26-16) can be housed in two different boxes, with short brackets (art. 74582 length 250 mm, for boxes art. 71458, 71460, 71462, 71464 and 71466) or with long brackets (art. 73583 length 440 mm, for boxes art. 73542, 73544 and 73546).

PRESSURE DROPS

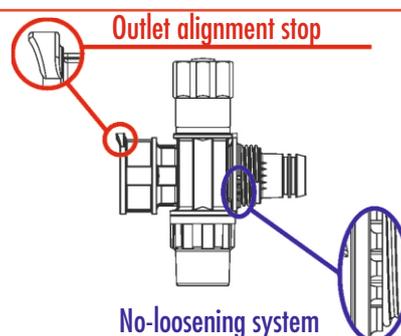
Among the many performance benefits that the **safety** fittings as well as **safety-pol** multirapid manifolds have given the thermal-sanitary installations, the greater fluid flow rate and the reduced pressure drops are among the most obvious and without comparison respect to other types of fittings. These values emerge significantly and, experimental tests performed by accredited National Laboratories to other figures of the range, further confirm that established by the manufacturer. The pressure drop values of the **safety-pol** multirapid manifolds will be published as soon as the experimental lab testing is completed.

FIELD OF USE

- Civil/housing sector:** sanitation networks and services, radiator heating, air conditioning and cooling, garden irrigation.
- Industrial sector:** sanitation networks and services, radiator heating, unit heaters, radiant panels, compressed air networks, tool machine hydraulic circuit supplied.
- Tertiary sector:** laboratories, medical-dental offices, mechanical workshops, greenhouses.

LAYING/INSTALLATION

The assembly of the individual bodies of the multirapid manifolds, aimed at obtaining the number of outlets required, is carried out by screwing together the individual elements until achieving the appropriate no-loosening system and the specific stop which guarantees perfect alignment of the outlets.



sistema **safety**

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For connection to the mains supply, we recommend you to use **multi-calor, multi-eco, polipert, polipex*** tubes or other types of pipes with equivalent flow rates. Connections to the manifold heads as well as to each outlet can be carried out after socketing with **safety fittings**. **Do not connect commonly used standard threads (gas, DIN, etc.) to the safety threads.**

Connection to gas threads (or standard) may be made by using connection fittings of the **safety** range (male and female threaded couplings, male and female threaded female couplings, male and female threaded elbows, male and female threaded female elbows, reducer caps).

Safety-pol multirapid manifolds are accommodated in special boxes (with right/left vertical/horizontal inlets/outlets) which can be recessed in the wall as required by heat engineering design.

Having mounting and connected the manifolds, and before commissioning depending on the system made, multirapid manifolds should be protected from accidental contacts with paints, thinners, solvents, white spirit, benzene or other chemical compounds.

NOTES

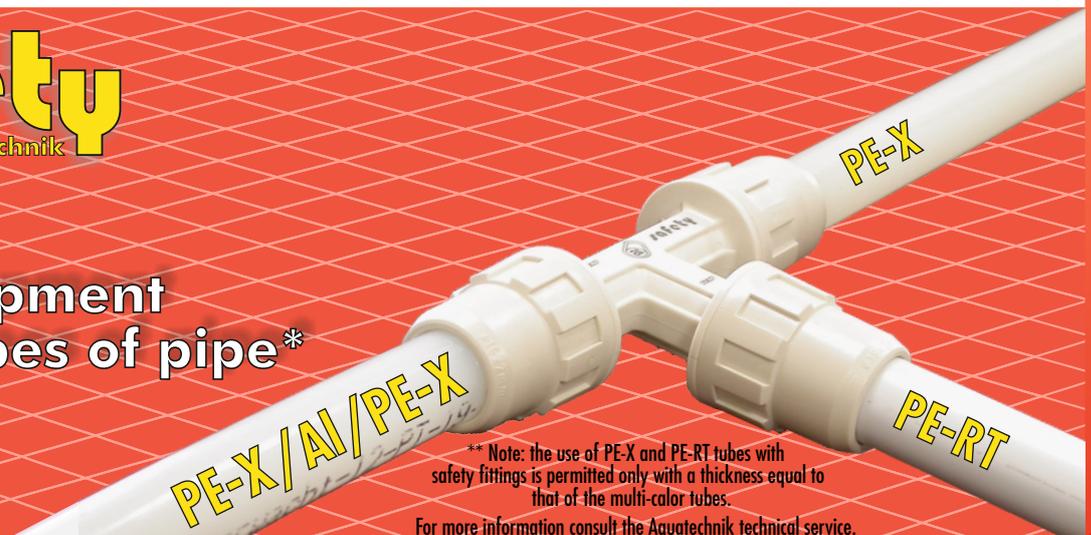
- **Safety-pol** multirapid manifold, like all plastic products, are susceptible to chemical attack; it is advisable to even avoid short-term contacts.
- The male/female threaded parts (**safety** threads) of the manifolds **are not directly compatible with traditional gas threads**; we recommend that you use appropriate adapters manufactured by the company.
- After installation, it is necessary to perform a hydraulic test of the system in compliance with legislation in force.

VOCE DI CAPITOLATO

Distribution to the various adduction circuits starts from the multirapid distribution manifolds (in PPSU plastic with locking device with notched end of stroke) housed in special recessable boxes supplied by multilayer pipes compliant to Standards 10954-2 with code no. 282.

System
safety
patented by aquatechnik

A fitting
and equipment
for all types of pipe*



** Note: the use of PE-X and PE-RT tubes with safety fittings is permitted only with a thickness equal to that of the multi-calor tubes.

For more information consult the Aquatechnik technical service.



aquatechnik®

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