





#### **60 YEARS OF ITALIAN TRADITION**

Luxor is an important industrial reality, world wide and European market leader in the production of flexible hoses and components for hydro and thermo-sanitary installations. Luxor has been the expression of the most prestigious made in Italy and the great Italian high technology mechanical workings tradition for fifty years; a quality certified and recognized by the most prestigious International Certification Institutes all over the world.

Our mission is the complete customer satisfaction through a process of continuous technological research in order to make high quality, reliable products, anticipating the market evolutions by innovative partnership with both customers and suppliers. Luxor mission takes

place in its own Research and Development Centre in which new and advanced technologies are constantly analyzed and researched with continuous investments to offer the most innovative and reliable solutions for the international markets at competitive costs, ensuring strict quality controls on each single piece.

Luxor entirely plans and realizes each product, thanks to its decennial know how. The great production strength, a "slender" innovative and advanced industrial organization together with a modern logistic conception, make Luxor able to satisfy every kind of request, even customized, with fast deliveries all over the world.



Luxor is certified ISO 9001:2015 by DEKRA Group certification body

#### **CERTIFICATION**





















UNI EN 215 **EUROPE** 

KIWA-UNI ITALY

DVGW GERMANY

**GERMANY** 

**GERMANY** 

ΤÜV GERMANY

FRANCE

QB FRANCE

SVGW

WRAS SWITZERLAND GREAT BRITAIN























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NSF IAPMO USA U.S. / CANADA

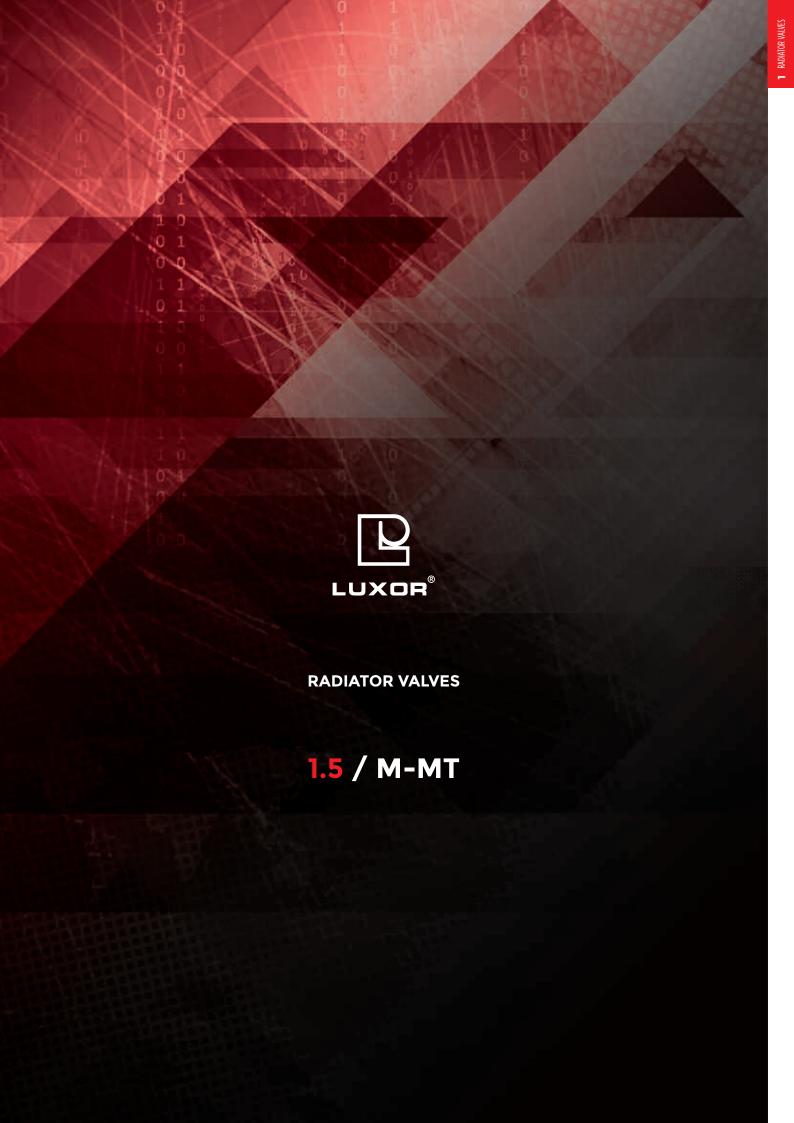
RUSSIA



Please contact our offices for information about technical specifications and certified products or visit the website of the corresponding certification body for the latter.

Please refer to www.nsf.org for a complete list of NSF approved

Please refer to www.iapmort.org for a complete list of UPC/cUPC approved products.





## 4-WAY MANUAL VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM



Single pipe valves feature a fixed stem, whose tightness is ensured by an o-ring and a flat teflon gasket which may be adjusted through a brass stuffing nut.

The valves are nickel plated.

#### **TECHNICAL DATA**









Max pressure

10 bar



Max differential pressure 1 bar



Materials

CW617N UNI EN 12165:2016

Knob

white ABS **RAL 9016** 



Probe

Polyamide

#### **SYSTEM CONNECTIONS**



Copper pipe W 24x19 - TR 91



Plastic pipe W 24x19 - TP 95



Multilayer pipe W 24x19 - TP 97

#### **RADIATOR** CONNECTION



cylindrical thread G 1/2 G 3/4

**CENTRE TO** CENTRE **DISTANCE** 



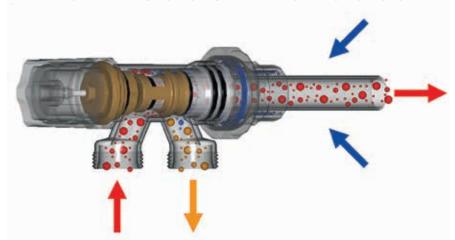
40 mm

#### **PROBE**

4-way M valves are provided with a M 523 polyamide probe which enables them to correctly distribute the flow in heating bodies up to 50 cm in length. Should the direction of flow indicated by the arrow on the body not be observed, or should the heating body be longer than 50 cm, a M 525polyamide extension must be installed and then cut so that the other end is located 10 cm far from the edge of the heating body.



#### 4-WAY MANUAL VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM M 87



Luxor manufactures 4-way manual valves for single and double pipe systems which easily meet any requirement. All 4-way valves are designed so that the heating medium can flow in and out of the heating body through a single connection. These valves must be installed on the bottom connection of the heating body. 4-way valves for single and double pipe systems are designed to:

- Connect the heating body to the single pipe ring tubing, which can be in copper, plastic or PEX-AL-PEX multilayer;
- Allow for room temperature setting by adjusting the inlet flow;
- Intercept the flow so as to allow for maintenance without affecting the functioning of the remaining heating bodies.

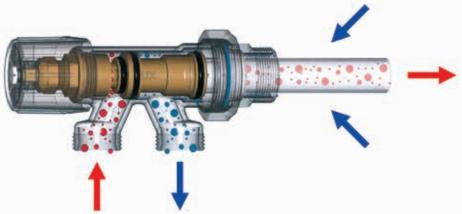
The valve divides the incoming flow into two: one part enters the heating body, while the other flows on to the next heating body through the bypass. The advantage is that the flow coming out of a low temperature heating body mixes with the flow which has passed through the bypass and has a higher temperature; in this way, the flow proceeding towards the next heating body will have a higher thermal input.

M 87 valves are equipped with a fixed bypass allowing 50% of the ring flow rate to enter the heating body.

#### 4-WAY MANUAL VALVES FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM M 88

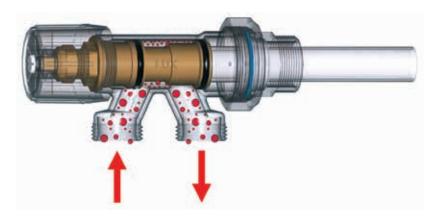
When in fully open position, M 88 valves do not divert the flow, so that 100% of the ring flow enters the heating body (see picture above).

The bypass opens gradually and proportionally to the closure of the obturator (see picture below).



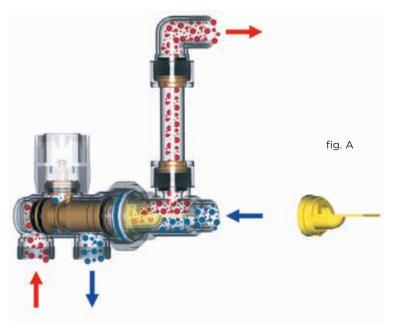
When in fully closed position, the bypass does not allow any liquid to enter the heating body.

The other features are the same as for the manual valve M87 for single pipe distribution system.



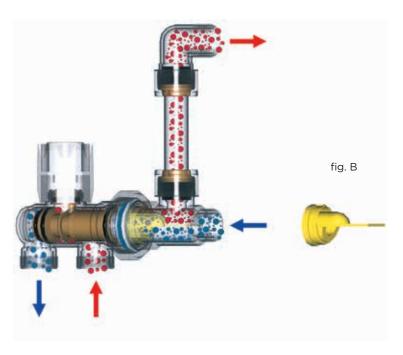


#### 4-WAY VERTICAL MANUAL VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM M 81-83-85



4-way vertical manual valves are available in two versions: single pipe with a 50% bypass or double pipe with 100% of the ring flow rate. The valves must be connected to the system observing the direction indicated by the arrows on the body. In this way, the valves can heat up heating bodies with up to 7-8 elements. Should the flow direction not be respected or should the heating body be composed of more than 8 elements, a M 525 extension must be installed on valves M 81 and M 83.

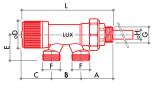
The extension must then be cut so that the other end is located 10 cm far from the edge of the heating body. If the flow direction is not observed with valves M 85 and M 86, it is necessary to correct it by turning the baffle inside the conveyor body. Use the baffle as shown in fig. A to let the flow enter through the connection as displayed by the arrow.



Should the arrow direction not be observed during installation, use the baffle as shown in fig. B.

#### 4-WAY MANUAL VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM: **CONNECTION FOR COPPER AND PLASTIC PIPE W24X19**





#### M 87

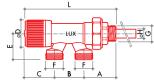
4-way single adjustment horizontal manual single pipe valve. Maximum flow to radiator: 50% ring flow. Connections for copper and plastic pipe.

Fittings	

TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
68072100	DN 15 1/2	45	40	41	37	35	W24x19	G 1/2	12	126	360	5	40
68072700	DN 20 3/4	45	40	41	37	35	W24x19	G 3/4	16	126	358	5	40





#### M 88

4-way single adjustment horizontal manual single pipe valve (for double pipe systems). Maximum flow to radiator: 100% ring flow. Connections for copper and plastic pipe.

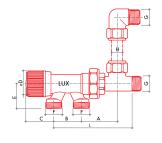




TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
68072101	DN 15 1/2	45	40	41	37	35	W24x19	G 1/2	12	126	366	5	40
68072701	DN 20 3/4	45	40	41	37	35	W24x19	G 3/4	16	126	363	5	40





#### M 86

Single adjustment horizontal straight single pipe valve, with flow conveyor. Maximum flow to radiator: 50% and 100% ring flow. Connections for copper and plastic pipe.

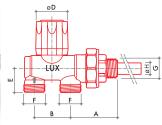
#### Fittings

TR 91

TP 95 TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
68072102	DN 15 1/2 50%	52	40	41	37	35	W24x19	G 1/2	15	110	488	5	40
68072103	DN 15 1/2 100%	52	40	41	37	35	W24x19	G 1/2	15	110	490	5	40





#### M 81

Single adjustment vertical manual single pipe valve. Maximum flow to radiator: 50% ring flow. Connections for copper and plastic pipe.

Fittings

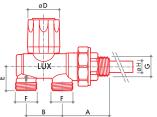


TR	91	TΡ	95	TP	Ĉ

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
68032101	DN 15 1/2	50	40	-	35	27	W24x19	G 1/2	12	-	344	5	40
68032701	DN 20 3/4	50	40	-	35	27	W24x19	G 3/4	16	-	346	5	40







#### M 83

Single adjustment vertical manual single pipe valve. Maximum flow to radiator: 100% ring flow. Connections for copper and plastic pipe.

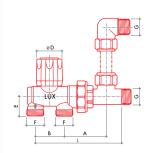


CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
68042100	DN 15 1/2	50	40	-	35	27	W24x19	G 1/2	12	-	346	5	40
68042700	DN 20 3/4	50	40	-	35	27	W24x19	G 3/4	16	-	348	5	40



68042102

68042103



В

40

40

Α

57

57

DN 15 1/2 50%

DN 15 1/2 100%

С

35

35

27

27

#### M 85

Single adjustment vertical straight single pipe valve, with flow conveyor.

Maximum flow to radiator: 50% and

100% ring flow. Connections for copper and plastic pipe.

W24x19 G 1/2

W24x19 G 1/2

	Fittings	
TR 91	TP 95	TP 97

40

40

D	Е	F	G	Н	L	Ô	$\Rightarrow$	

15

15

114

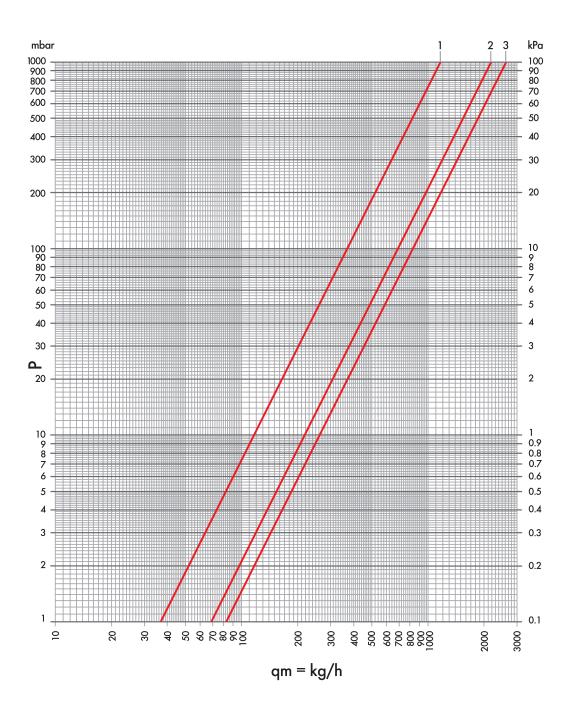
114

552

555

5

Fittings for copper pipe



ITEM	Kv	POS
M 88 1/2 M 88 3/4 M 86 1/2 100%	1.61	1
M 83 1/2 M 83 3/4 M 85 1/2 100%	2.16	2
M 87 1/2 M 87 3/4 M 86 1/2 50% M 81 1/2 M 81 3/4 M 85 1/2 50%	2.60	3



### 4-WAY THERMOSTATIC VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM



With  $\Delta t$ =2K and if coupled with a thermostatic head, thermostatic single pipe valves can supply an heating body with the equivalent of 35% of the system's total flow rate.

The thermostatic screw allows to replace one of the o-rings on the control stem without draining the system. The valves are nickel plated.

#### **TECHNICAL DATA**



15

20



Max temperature 120 °C



Max pressure 10 bar



Max differential pressure 1 bar





CW617N UNI EN 12165:2016

Knob

white ABS **RAL 9016** 



**AISI 316** 



Probe

Polyamide

#### SYSTEM CONNECTIONS



Copper pipe W 24x19 - TR 91



Plastic pipe W 24x19 - TP 95



Multilayer pipe W 24x19 - TP 97

#### **RADIATOR** CONNECTION



cylindrical thread G 1/2 G 3/4

**CENTRE TO CENTRE DISTANCE** 



40 mm

#### **PROBE**

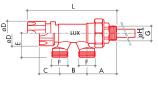
4-way M valves are provided with a M 523 polyamide probe which enables them to correctly distribute the flow in heating bodies up to 50 cm in length. Should the direction of flow indicated by the arrow on the body not be observed,

or should the heating body be longer than 50 cm, a M 525 polyamide extension must be installed and then cut so that the other end is located 10 cm far from the edge of the heating body.



#### 4-WAY THERMOSTATIC VALVES FOR SINGLE PIPE DISTRIBUTION SYSTEM: **CONNECTION FOR COPPER AND PLASTIC PIPE W24X19**





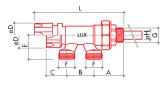
#### MT 282

4-ways thermostatically or electronically controlled valve with protection cap. Maximum flow to radiator: 35% ring flow ( $\Delta t=2K$ ). Connections for copper and plastic pipe.

	Fittings	
TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
68010021	DN 15 1/2	46	40	30	37	35	W24x19	G 1/2	12	115	353	5	40
68010027	DN 20 3/4	46	40	30	37	35	W24x19	G 3/4	16	115	351	5	40





#### MT 2582

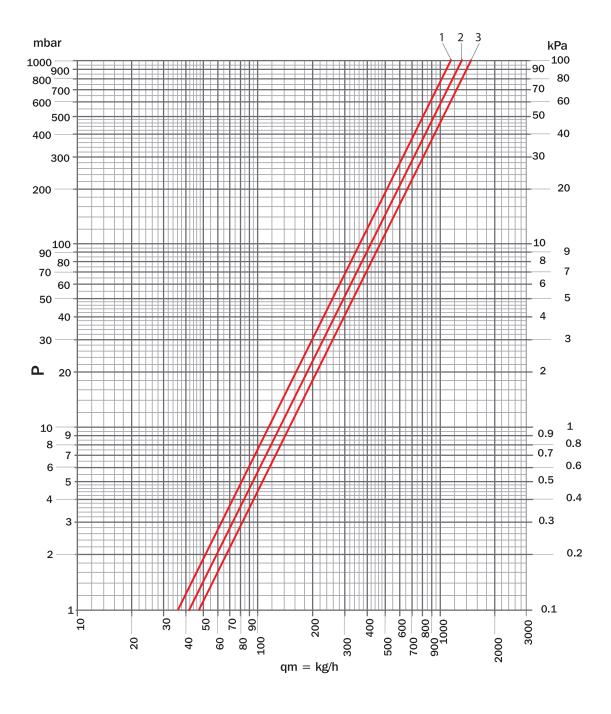
4-ways thermostatically or electronically controlled valve with manual adjustment knob article VT 2600. Maximum flow to radiator: 35% ring flow ( $\Delta t$ =2K). Connections for copper and plastic pipe.

# Fittings

TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
68010121	DN 15 1/2	46	40	47	35	35	W24x19	G 1/2	12	133	360	5	40
68010127	DN 20 3/4	46	40	47	35	35	W24x19	G 3/4	16	133	360	5	40





ITEM	SIZE	RA %	TURNS N°	Kv	POS
	DN 15 1/2	0	closed	1,15	1
MT 282	DN 20 3/4	0	ciosed	1,15	1
141 202	DN 15 1/2	100	all open	1,30	2
	DN 20 3/4	100	ан орен	1,45	3
	DN 15 1/2	0	closed	1,15	1
MT 2582	DN 20 3/4	O	ciosed	1,15	1
1711 2382	DN 15 1/2 DN 20 3/4	allanan	1,30	2	
		all open	1,45	3	

# **M**VALVES FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM



Manual M valves feature a fixed stem, whose tightness is ensured by an o-ring and a flat PTFE gasket which may be adjusted through a brass stuffing nut. When in closed position, the tightness is granted by an o-ring and a conical metal collar. The screw of thermostatic M valves allows to

preset the flow thanks to a shaped acetal ring. The thermostatic screw enables to replace one of the o-rings on the control stem without draining the system. The valves are nickel plated.

**SYSTEM CONNECTIONS** 

#### **TECHNICAL DATA**



DN 15



Max temperature

120 °C



Max pressure



Max differential pressure (thermostatic valves)





Max differential pressure 1 bar

0,6 bar



Iron pipe G 1/2



**Copper pipe** W 24x19 - TR 91 G 3/4 EK - TR 91/A



Materials

CW617N UNI EN 12165:2016



Knob

white ABS RAL 9016



Stem

AISI 316



Testing

100%



**Plastic pipe** W 24x19 - TP 95 G 3/4 EK - TP 98



**Multilayer pipe** W 24x19 - TP 97 G 3/4 EK - TP 99

### RADIATOR CONNECTION



conical knurled thread G 1/2

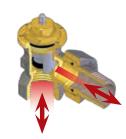
#### FLOW ADJUSTMENT AND REVERSE FLOW

To adjust the maximum flow rate, proceed as follows:

• align the reference mark on the stainless steel stem with one of the positions marked on the valve.

Luxor thermostatic valves are now EN 215 approved in reverse flow mode as well. This characteristic allows for installation on the inlet as well as on the outlet of the radiator up to a 0,6 bar differential pressure.









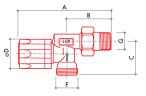
All valves and lockshields are 100% checked with an electronically controlled pneumatic test.

The characteristics of the fluid in the system must be compliant with the UNI 8065: 2019 directive.



#### VALVES FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM: **CONNECTION FOR COPPER AND PLASTIC PIPE W24X19**





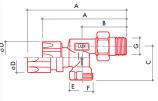
#### M 300

Single adjustment reverse angle radiator valve. Connection for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
13062100	DN 15 1/2	108	52	39	35	-	W24x19	R 1/2	-	-	215	10	80





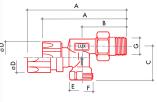
Reverse angle radiator valve, thermostatically or electronically controlled with protection cap. Connection for copper and plastic pipe.



TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
13102100	DN 15 1/2	95	52	39	37	-	W24x19	R 1/2	-	-	207	10	80





#### M 330

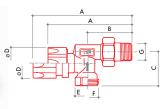
Reverse angle radiator valve, thermostatically or electronically controlled with manual adjustment knob. Connection for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13122100	DN 15 1/2	116	52	39	35	-	W24x19	R 1/2	-	-	215	10	80

#### **VALVES FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM: CONNECTION FOR COPPER AND PLASTIC PIPE G3/4 EUROKONUS**





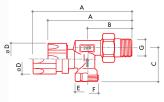
#### M 320/A

Reverse angle radiator valve, thermostatically or electronically controlled with protection cap. Eurokonus connections.



CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
13102721	DN 15 1/2	95	52	39	37	-	G 3/4 EK	R 1/2	-	-	210	10	80





#### M 330/A

Reverse angle radiator valve, thermostatically or electronically controlled with manual adjustment knob. Eurokonus connections.



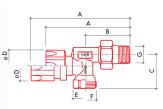


TR 91/A TP 98 TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13122721	DN 15 1/2	116	52	39	35	-	G 3/4 EK	R 1/2	-	-	217	10	80

#### **VALVES FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM: CONNECTION FOR IRON PIPE**





#### M 322

Reverse angle radiator valve, thermostatically or electronically controlled with protection cap. Connections for iron pipe.

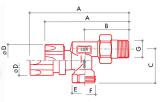






CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	ĝ	$\Rightarrow$	
13202100	DN 15 1/2	95	52	40	37	G 1/2	-	R 1/2	-	-	221	10	80





Reverse angle radiator valve, thermostatically or electronically controlled with manual adjustment knob. Connections for iron pipe.



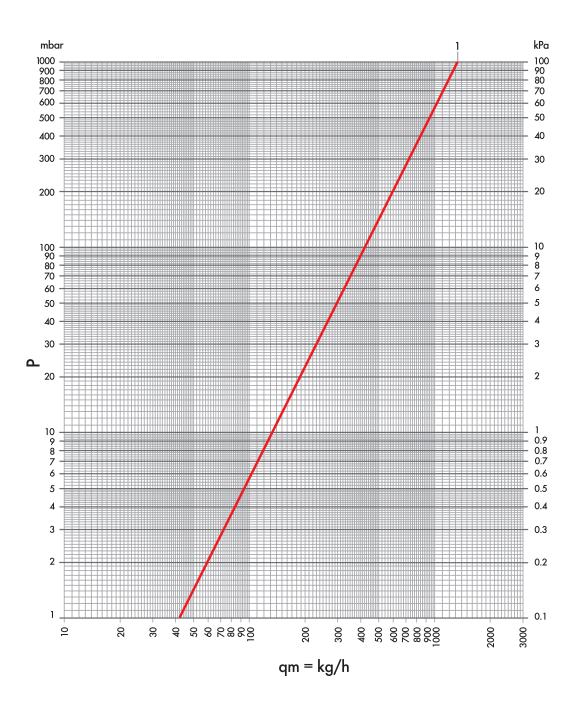
TR 92



TP 90

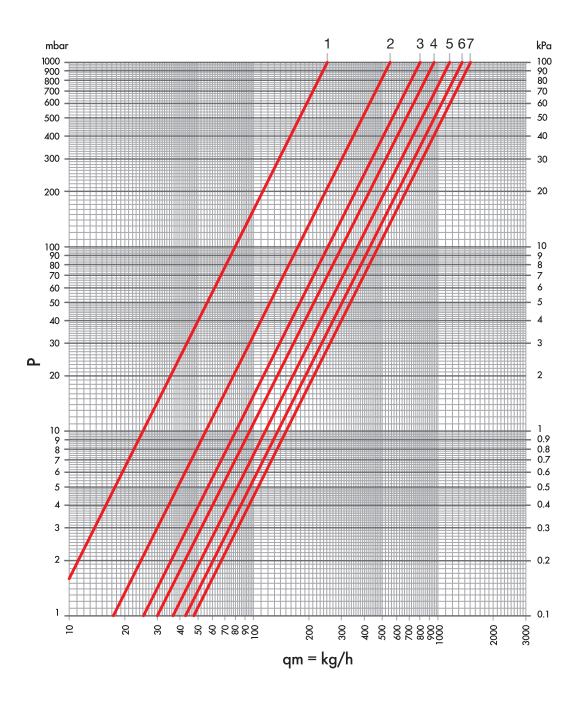
CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13222100	DN 15 1/2	116	52	40	35	G 1/2	-	R 1/2	-	-	228	10	80





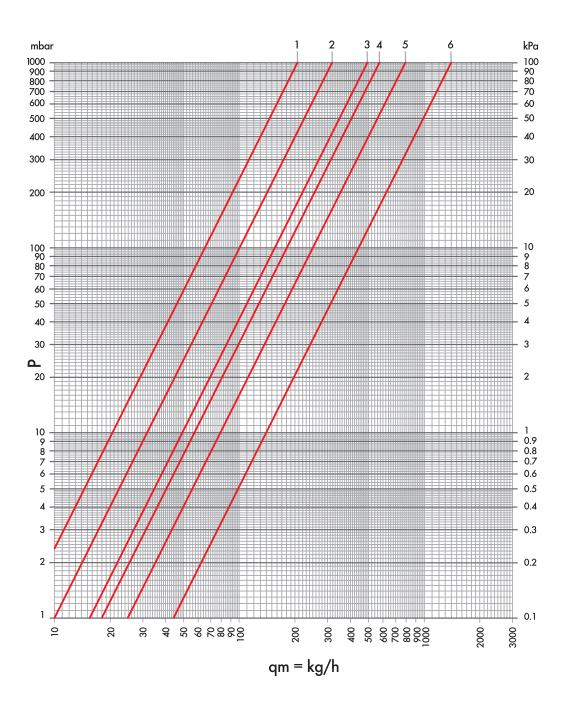
ITEM	Kv	POS
M 300	1.31	1





ITEM	TURNS N°	Kv	POS
	1	0,25	1
	1+1/2	0,55	2
	2	0,80	3
MD 331/A MS 331/A	2+1/2	0,95	4
	3	1,15	5
	3+1/2	1,35	6
	all open	1,50	7





ITEM	Kv	Kv ∆t 1 °C	Kv ∆t 2 °C	POS
	0.21	0.15	0.19	1
M 320 M 320/A	0.32	0.20	0.25	2
M 330 M 330/A	0.49	0.24	0.36	3
M 322 M 332	0.57	0.24	0.37	4
MD 321/A MS 331/A	0.79	0.24	0.40	5
	1.39	0.32	0.55	6



## 4-WAY DISTRIBUTORS FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM



The tightness of distributors towards the outside is ensured by an o-ring and a flat gasket inside the plug. When in closed position, the tightness is granted by an o-ring. The distributors are nickel plated. All distributors allow for flow adjustment by limiting the lift of the obturator.

#### **TECHNICAL DATA**







Max temperature

120 °C



Max pressure

10 bar



Max differential pressure 1 bar



Materials

CW617N UNI EN 12165:2016

white ABS **RAL 9016** 

#### **SYSTEM CONNECTIONS**



Copper pipe W 24x19 - TR 91



Plastic pipe W 24x19 - TP 95



Multilayer pipe W 24x19 - TP 97

#### RADIATOR CONNECTION



conical knurled thread G 1/2

**CENTRE TO CENTRE DISTANCE** 



40 mm

#### **INSTALLATION WITH REVERSE VALVE BODY**

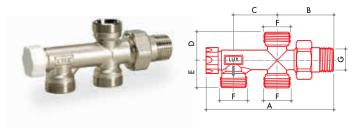
M distributors must be installed observing scrupulously the flow direction indicated by the arrow on the body.

4-way distributors can have the connection to the system from floor or wall.





#### 4-WAY DISTRIBUTORS FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM: **CONNECTION FOR COPPER AND PLASTIC PIPE W24X19**

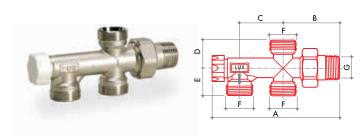


#### M 341

4-way distributor with floor connections. Maximum flow to radiator: 50% ring flow. Connections for copper and plastic pipe.

Fittings								
TR 91	TP 95	TP 9						

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
13142100	DN 15 1/2	118	52	40	25	25	W24x19	R 1/2	-	-	243	10	80

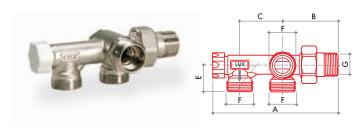


#### M 351

4-way distributor with floor connections. Maximum flow to radiator: 100% ring flow. Connections for copper and plastic pipe.

	Fittings	
C.		
TR 91	TP 95	TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	6	$\Rightarrow$	
13152100	DN 15 1/2	118	52	40	25	25	W24x19	R 1/2	-	-	244	10	80

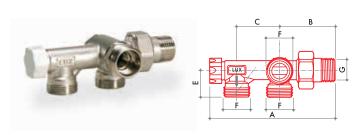


#### M 361

4-way distributor with wall connections. Maximum flow to radiator: 50% ring flow. Connections for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
13242100	DN 15 1/2	118	52	40	-	25	W24x19	R 1/2	-	-	308	6	48



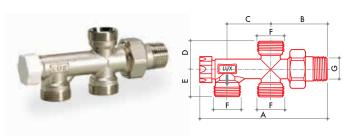
#### M 371

4-way distributor with wall connections. Maximum flow to radiator: 100% ring flow. Connections for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13252100	DN 15 1/2	118	52	40	-	25	W24x19	R 1/2	-	-	309	6	48

#### 4-WAY DISTRIBUTORS FOR SINGLE/DOUBLE PIPE DISTRIBUTION SYSTEM: **CONNECTION FOR COPPER AND PLASTIC PIPE G3/4 EUROKONUS**



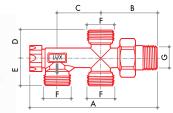
#### M 341/A

4-way distributor with floor connections. Maximum flow to radiator: 50% ring flow. Eurokonus connection.

	Fittings	;
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	ĝ	$\Rightarrow$	
13142721	DN 15 1/2	118	52	40	25	25	G 3/4 EK	R 1/2	-	-	245	10	80





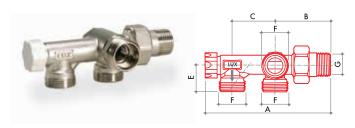
#### M 351/A

4-way distributor with floor connections. Maximum flow to radiator: 100% ring flow. Eurokonus connection.



TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
13152721	DN 15 1/2	118	52	40	25	25	G 3/4 EK	R 1/2	-	-	256	10	80



#### M 361/A

4-way distributor with wall connections. Maximum flow to radiator: 50% ring flow. Eurokonus connection.

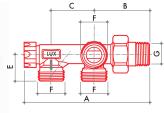






CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
13242721	DN 15 1/2	118	52	40	-	25	G 3/4 EK	R 1/2	-	-	310	6	48





#### M 371/A

4-way distributor with wall connections. Maximum flow to radiator: 100% ring flow. Eurokonus connection.



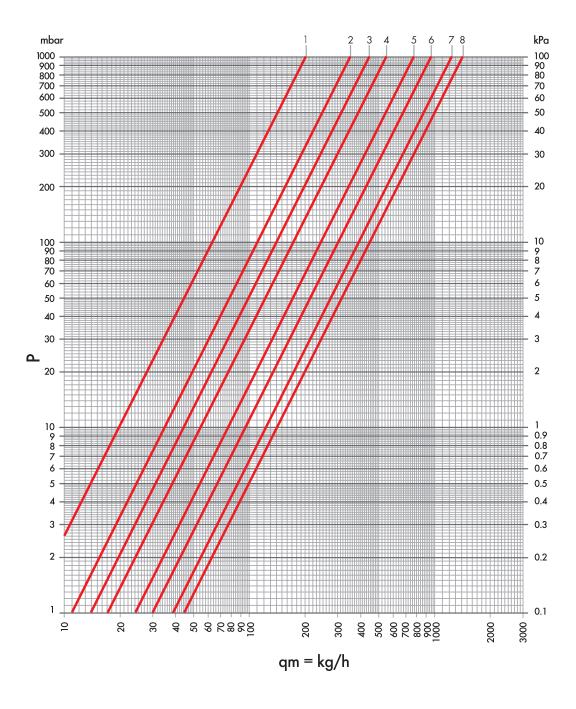


TR 91/A TP 98 TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13252721	DN 15 1/2	118	52	40	-	25	G 3/4 EK	R 1/2	-	-	320	6	48

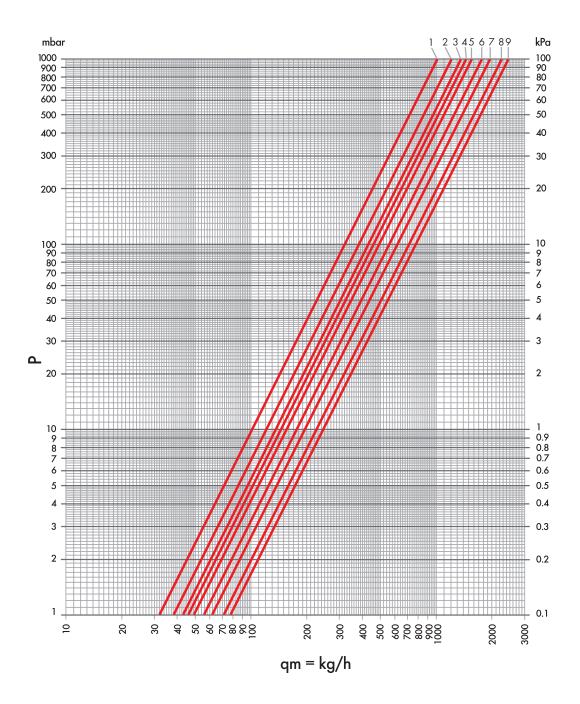


#### **DISTRIBUTORS FLOW RATE CHART**



ITEM	TURNS N°	Kv	POS
	1	0.20	1
	1+1/2	0.35	2
	2	0.43	3
M 351 M 351/A	2+1/2	0.55	4
M 371 M 371/A	3	0.78	5
	3+1/2	0.95	6
	4	1.22	7
	all open	1.41	8

#### DISTRIBUTORS FLOW RATE CHART



ITEM	TURNS N°	Kv	POS
	closed	1.00	1
	1	1.20	2
	1+1/2	1.35	3
M 341	2	1.43	4
M 341/A M 361	2+1/2	1.55	5
M 361/A	3	1.78	6
	3+1/2	1.95	7
	4	2.22	8
	all open	2.41	9



### M COAXIAL VALVES



The coaxial valves have a headwork hat allows pre-regulation thanks to a shaped acetal ring. The thermostatic head allows the replacement of one of the sealing o-rings on the control rod without having to empty the system. The valves are produced with a nickel-plated finish.

The seal of the lockshield is ensured by an o-ring on the shutter and, if necessary, by a second o-ring between the body and the cap.

The seal in closing with the shutter is ensured by an o-ring and a metal conical seal. The lockshield are made with a nickel-plated finish. All lockshield can adjust the flow rate by limiting the shutter lift.

**SYSTEM CONNECTIONS** 

#### **TECHNICAL DATA**



DN 15



Max temperature
120 °C

Max pr

Max pressure

10 bar



Max differential pressure (thermostatic valves)

0,6 bar



Max differential pressure 1 bar



**Copper pipe** G 3/4 EK - TR 91/A



**Plastic pipe** G 3/4 EK - TP 98



Materials

CW617N UNI EN 12165:2016



Knob

white ABS RAL 9016



Stelli

AISI 316



**Multilayer pipe** G 3/4 EK - TP 99

### RADIATOR CONNECTION



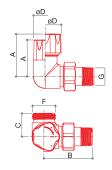
conical knurled thread G 1/2

#### **HOW TO SELECT THE CORRECT COAXIAL VALVES**



#### COAXIAL VALVES: CONNECTION FOR COPPER AND PLASTIC PIPE G3/4 EUROKONUS





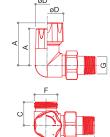
#### **MD 321/A**

Coaxial right radiator valve, thermostatically or electronically controlled with protection cap. Eurokonus connections.

	Fittings									
TR 91/A	TP 98	TP 99								

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g g	$\Rightarrow$	
13272722	DN 15 1/2	49	56	27	37	-	G 3/4 EK	R 1/2	-	-	287	10	80





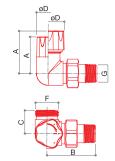
#### MS 331/A

Coaxial left regulating lockshield. Eurokonus connections.

	Fittings	;
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13252722	DN 15 1/2	42	56	27	30	-	G 3/4 EK	R 1/2	-	-	258	10	80





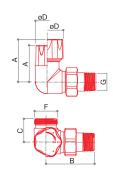
### MS 321/A

Coaxial left radiator valve, thermostatically or electronically controlled with protection cap. Eurokonus connections.

	Fittings	
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g	$\Rightarrow$	
13292722	DN 15 1/2	49	56	27	37	-	G 3/4 EK	R 1/2	-	-	287	10	80





#### **MD 331/A**

Coaxial right regulating lockshield. Eurokonus connections.

	Fittings	;
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	9	$\Rightarrow$	
13232722	DN 15 1/2	42	56	27	30	-	G 3/4 EK	R 1/2	-	-	258	10	80



# M SINGLE/DOUBLE PIPE SYSTEM DISTRIBUTORS FOR HEATING BODY WITH BUILT-IN VALVE



The tightness of distributors is ensured by an o-ring and a flat gasket inside the plug. When in closed position, the tightness is granted by an o-ring and a conical metal collar.

The distributors are nickel plated. All distributors allow for flow adjustment by limiting the lift of the obturator.

#### **TECHNICAL DATA**



UN 15



Max temperature

120 °C



Max pressure

10 bar



Max differential pressure 1 bar



Materials

CW617N UNI EN 12165:2016



Knob

white ABS RAL 9016

#### SYSTEM CONNECTIONS



**Copper pipe** W 24x19 - TR 91 G 3/4 EK - TR 91/A



**Plastic pipe** W 24x19 - TP 95 G 3/4 EK - TP 98



**Multilayer pipe** W 24x19 - TP 97 G 3/4 EK - TP 99

#### **CENTRE DISTANCE**



50 mm

#### **RADIATOR CONNECTION**

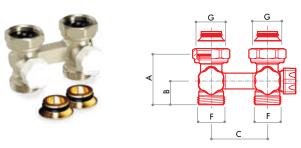
M distributors are designed to be installed on heating bodies with G 3/4 eurokonus connections.

In case of G 1/2 F connections, it is possible to install a M 532 adaptor.





#### SINGLE/DOUBLE PIPE SYSTEM DISTRIBUTORS FOR HEATING BODY WITH BUILT-IN VALVE: CONNECTION FOR COPPER AND PLASTIC PIPE W24X19



#### M 171

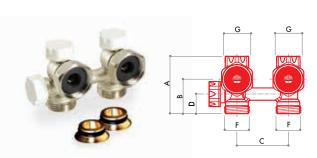
Single / double pipe distributor

- radiator connections 3/4 female swivel nut
- floor connections 24x19 for copper and plastic pipe.

Fittings	

TR 91 TP 95 TP 97

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g g	$\Rightarrow$	
13462100	-	45	21	50	-	-	W24x19	G 3/4	-	-	315	6	48



#### M 173

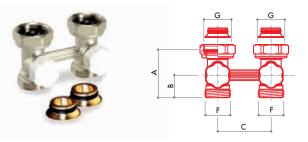
Single / double pipe distributor

- radiator connections 3/4 female swivel nut
- wall connection 24x19 for copper and plastic pipe.

	Fittings	'
1		Ì
01	TD OF	TD

TR 91 TP 95 TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13462101	-	57	34	50	19	-	W24x19	G 3/4	-	-	310	6	48



### M 175

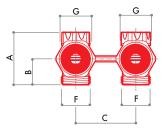
Double pipe distributor

- radiator connections 3/4 female swivel nut
- floor connections 24x19 for copper and plastic pipe.

TR 91 TP 95 TP 97

CODE	SIZE	Α	В	С	D	E	F	G	Н	L	g g	$\Rightarrow$	
13472100	-	45	21	50	-	-	W24x19	G 3/4	-	-	245	6	48





#### M 177

Double pipe distributor

- radiator connections 3/4 female s wivel nut
- · wall connections 24x19 for copper and plastic pipe.

Fittings

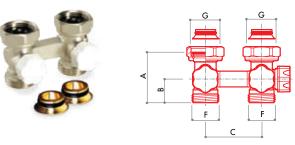


TR 91 TP 95 TP 97

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13472101	-	44	22	50	-	-	W24x19	G 3/4	-	-	255	6	48



#### SINGLE/DOUBLE PIPE SYSTEM DISTRIBUTORS FOR HEATING BODY WITH BUILT-IN VALVE: CONNECTION FOR COPPER AND PLASTIC PIPE G3/4 EUROKONUS



#### M 172

Single / double pipe distributor

- radiator connections 3/4 female swivel nut
- floor connections eurokonus type for copper and plastic pipe.

	Fittings	
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	ĝ	$\Rightarrow$	
13462700	-	45	21	50	-	-	G 3/4 EK	G 3/4	-	-	325	6	48



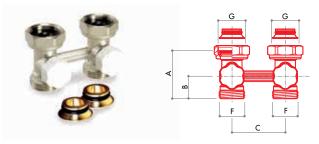
#### M 174

Single / double pipe distributor

- radiator connections 3/4 female s wivel nut
- wall connections eurokonus type for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	E	F	G	Н	L	ĝ	$\Rightarrow$	
13462701	-	57	34	50	19	-	G 3/4 EK		-	-	320	6	48



#### M 176

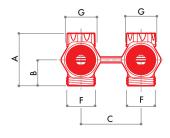
Double pipe distributor

- radiator connections 3/4 female swivel nut
- floor connections eurokonus type for copper and plastic pipe.

	Fittings	
TR 91/A	TP 98	TP 99

CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	ĝ	$\Rightarrow$	
13472700	-	45	21	50	-	-	G 3/4 EK	G 3/4	-	-	255	6	48





#### M 178

Double pipe distributor

- radiator connections 3/4 female swivel nut
- wall connections eurokonus type for copper and plastic pipe.



CODE	SIZE	Α	В	С	D	Е	F	G	Н	L	g	$\Rightarrow$	
13472701	-	44	22	50	-	-	G 3/4 EK	G 3/4	-	-	260	6	48



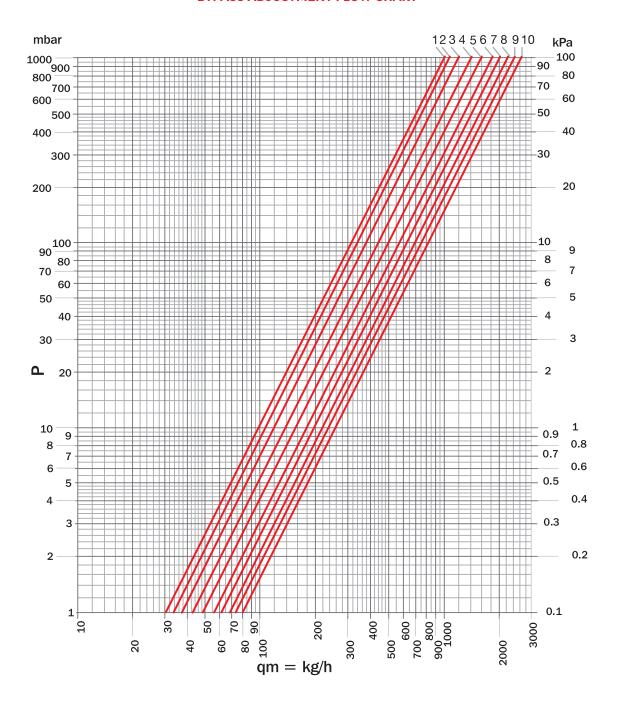






#### DISTRIBUTORS FLOW RATE CHART

#### **BYPASS ADJUSTMENT FLOW CHART**

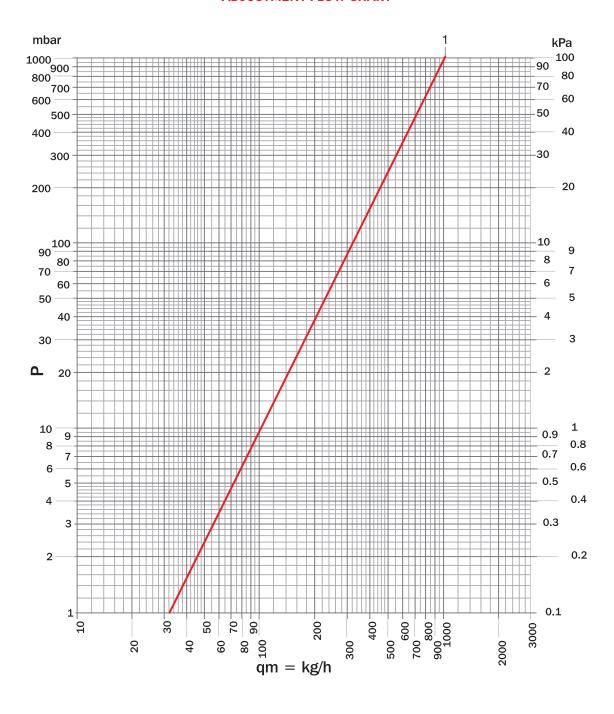


ITEM	TURNS N°	Kv bypass	Kvs	POS
	0	0	1,00	1
	1/4	0,13	1,13	2
	1/2	0,22	1,22	3
	3/4	0,43	1,43	4
M 171 M 172	1	0,65	1,65	5
M 173 M 174	1+1/4	0,80	1,80	6
	1+1/2	0,97	1,97	7
	2	1,20	2,20	8
	2+1/2	1,38	2,38	9
	3	1,60	2,60	10



#### **DISTRIBUTORS FLOW RATE CHART**

#### **ADJUSTMENT FLOW CHART**



ITEM	RA %	TURNS N°	Kvs	POS
M 175 M 176 M 177 M 178	100%	all open	1	1



#### **GENERAL CONDITIONS OF SALE**

- 1 PREMISES 1.1 The present conditions of sale apply to all supplies of Luxor Spa Products (hereafter "Luxor"). Any general conditions, and in particular the conditions of purchase of the Buyer (hereafter "Customer"), unless expressly accepted in writing by Luxor, shall not bind the latter nor exempt the Customer from the application of the present General Conditions (hereafter GSC)
- **2. ORDERS 2.1** The Purchase Orders (referred to as 'Orders') are an irrevocable purchase proposal. By placing an Order, customers fully accept the present General Conditions of Sale.
- **2.2** Orders are considered accepted only after Luxor confirms them in writing. The Order confirmation and/or Invoice issued by Luxor will be considered as confirmation.
- **2.3** Any changes to the Order requested by the Customer after the sending of the Order Confirmation will only be valid and enforceable after written acceptance by Luxor. Cancellation or modification of Orders without the prior written consent of Luxor, will give Luxor the right to act to obtain reimbursement of the costs incurred, without prejudice to the right to compensation for greater damages.
- **3 PRICES 3.1** Luxor products will be invoiced based on the current price list at the time the order is accepted. Prices do not include VAT or any other taxes.
- **3.2** Prices listed in sales catalogues/lists are merely indicative and may be subject to change due to production cost increases. In such cases, Luxor will inform the purchaser of the price increase and provide the reasons.
- **4 DELIVERY TERMS 4.1** The supplies in each individual Order will be delivered within the stated terms in the Order Confirmation.
- **4.2** Luxor will not be held responsible for delays in delivery that are not caused by Luxor, such as delays by third parties, including suppliers and sub-suppliers, shippers, and causes of force majeure that result in total or partial inactivity of the plants. In the cases mentioned above, the Customer cannot refuse delivery of the goods, even if it is only partial, nor can they use a delay in delivery as a reason to terminate the contract or claim damages.
- **5 SHIPMENTS 5.1** The products will be delivered to the 'Assigned Port' (Incoterms 2020 EXW), with transport costs and risks borne by the buyer, unless otherwise agreed.
- **5.2** Even in the case of agreed delivery in "Free Port" (Incoterms 2020 DDP) with costs borne by Luxor, the goods will still travel at the buyer's risk. Regardless of the delivery terms agreed upon by the parties, the risks will pass to the buyer at the latest with delivery to the first carrier.
- **5.3** The transfer of ownership of the goods is suspended until the full price has been paid, but this does not affect the transfer of risk to the purchaser.
- **5.4** If special packaging is required, an additional charge as indicated in the price list or order confirmation will be added to the invoice.
- **6 PAYMENTS 6.1** Payments are due as per the terms and manner specified in the order confirmation and/or invoice.
- **6.2** Unless otherwise expressly agreed, payments must be made to the bank details mentioned in the sales invoice. For payments made from abroad via bank transfer, the OUR option must be selected to ensure that Luxor receives the net amount on the invoice after deducting bank charges and expenses. Luxor does not authorize any third parties, including agents and representatives, to collect money on its behalf.
- **6.3** The Customer is not permitted to suspend or delay payments, even in the event of claims or complaints of defects, and must adhere to the agreed terms.
- **6.4** In case of payment interruption or suspension, the Customer will be considered in default. Luxor reserves the right to charge expenses and interest as per Art. 5 and 6 of D.Lgs n. 192/2012, without prejudice to the right to terminate the contract. Delayed payment may also result in Luxor excluding the guarantee for the entire period of delay.
- **6.5** If the Customer fails to adhere to the agreed payment terms, or interrupts or suspends payment, Luxor reserves the right to suspend any ongoing supplies and/or make the execution of the current order conditional on the payment of the outstanding debt. Luxor may also withdraw from any further contracts with the Customer and cancel any previously granted favourable conditions, such as discounts or free gifts.
- **6.6** The Customer is not permitted to offset any claims they may have against Luxor with debts they owe to Luxor, unless formally authorised by Luxor
- **7 EXPRESS TERMINATION CLAUSE 7.1** Luxor may terminate the contract immediately if the Customer is undergoing bankruptcy or liquidation proceedings, as well as in the event that the Customer is subject to execution proceedings and/or protests and the economic conditions suggest the purchaser is insolvent.
- **8 WARRANTY 8.1** Luxor guarantees the conformity of the products supplied, free from defects that could make them unsuitable for their intended use. The guarantee may be invoked if the defect is due to

- manufacturing errors or defects in raw materials that are the responsibility of Luxor.
- **8.2** Unless otherwise expressly agreed, the guarantee lasts for one (1) year from the date of delivery. The Customer must make a written complaint within eight (8) days from delivery in the case of apparent defects, or, in the case of hidden defects, from the time of discovery and in any event not later than twelve (12) months from delivery.
- **8.3** In the event of non-conforming products, Luxor may, at its discretion, provide the Buyer with replacement products of the same type and quantity free of charge ex works, after verifying the returned products. Any return must always be previously agreed and authorised by Luxor The goods in question must be returned 'carriage paid' along with a note explaining the reason for the return within 30 days of Luxor's approval. Failure to do so will result in the authorization becoming invalid.
- **8.4** If Luxor does not recognize the defective products upon verification, it will invoice those sent as replacements. If Luxor does not recognize the defective products upon verification, they will invoice the replacements. If Luxor is unable to replace defective products, they may issue a credit note to the customer for the value of the defective products. This does not imply any responsibility on Luxor for direct, indirect, or consequential damages resulting from or connected to the defects or faults of the products.
- **8.5** It is important to note that this guarantee does not cover instances where the product has been installed, used or maintained in a manner that is contrary to the instructions and warnings provided in the installation, use, and maintenance manuals that were included with the product. Additionally, any installation or repair work should only be carried out by qualified personnel.
- **8.6** The guarantee will not apply if the Purchaser breaches their contractual obligations.
- **8.7** This warranty is the only warranty and replaces any other written, oral or implied warranties. By accepting these General Terms and Conditions, the Purchaser expressly waives any right of recourse arising from the sale and/or installation of the Products to a non-professional consumer.
- **9. RESERVATION OF PROPERTY 9.1** The sale of Luxor S.p. A's Products is carried out under reservation of ownership. Therefore the products will remain the property of Luxor S.p.A. until the full payment of the price by the buyer.
- **10 TRANSFER OF THE CONTRACT 10.1** It is forbidden to transfer the Contract and/or any interest, right and obligation connected to it to third parties without specific written approval by Luxor.
- 11 PRIVACY 11.1 The Customer confirms that they have read the information regarding the processing of their personal data, as required by Articles 13 and 14 of Regulation (EU) 2016/679 (GDPR) as amended. The information can be found at https://luxor.it/privacy-policy. By accepting these GTC, the Customer consents to the processing of their personal data.
- **11.2** Luxor will process the personal data provided by the Customer, including through external parties, to fulfil legal obligations and carry out administrative and commercial tasks related to the contractual relationship.
- 12 APPLICABLE LAW AND COURT OF JURISDICTION 12.1 Contract is governed by Italian law. Anything not expressly governed by these GVCs shall be governed by the rules on sale provided for in articles 1470 et seq. of the Italian Civil Code.
- **12.2** The Parties expressly exclude the application of the Vienna Convention on Contracts for the International Sale of Goods. Any disputes related to the Contract, including those regarding its validity, interpretation, execution, and termination, must be referred exclusively to the Court of Brescia.
- **12.3** Luxor reserves the right to take legal action at the competent court of the Customer's location to recover any outstanding debts. The local law will apply in this case.
- 13 FINAL CLAUSES 13.1 The possible nullity and/or ineffectiveness of one or more provisions of these GTC shall not affect the validity of the Contract as a whole.
- **13.2** Any amendment to the Contract shall be valid only if made in writing and signed by authorised representatives of both Parties.

The customer acknowledges that they are not a 'consumer' and therefore the provisions of law relating to relations between entrepreneurs and consumers do not apply. The customer declares that they have paid particular attention to the following clauses: Introduction (1.1), Orders (2.1-2.3), Prices (3.2), Delivery Terms (4.1-4.2), Shipping (5.1-5.3), and 6 (2.1-6.1), Shipping (5.1-5.3), and 6 (2.1-6.1), Shipping (5.1-5.3), and 6 (2.1-6.1), Payments (6.2-6.3-6.4-6.5-6.6); 7 Express Termination Clause (7.1); 8. Warranty (8.1-8.2-8.3-8.4-8.5-8.6-8.7); 9. Retention of Title (9.1); 10. Applicable Law and Jurisdiction (12.1-12.2-12.3); 13 Final Clauses (13.1-13.2), and they are to be specifically approved.

These general terms and conditions are published on LUXOR's website (https://luxor.it/) where they may be consulted, thereby taking full and proper cognisance thereof, pursuant to and for the purposes of Articles 1341 and 1342 of the Civil Code.