

# FLOW REGULATORS FOR SEMI-RIGID PIPE

## PLASTIC FLOW REGULATORS FOR SEMI-RIGID PIPE VMRP18 SERIES



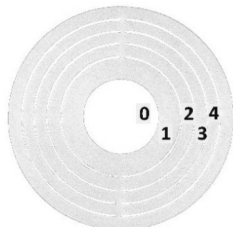
### DESCRIPTION

Air flow regulator for semi-rigid pipes, consisting of a flat plastic disc to be inserted inside the corresponding GREY collar (Ø75 or Ø90) or AIRPIU' series joint. The disc consists of No. 4 cutter-removable rings, as well as a ring

outside. It is possible to calibrate the pressure drop value as desired by removal of 1 or more of the 4 rings, using the table below to estimate the number of rings to be removed.

### TECHNICAL SPECIFICATIONS

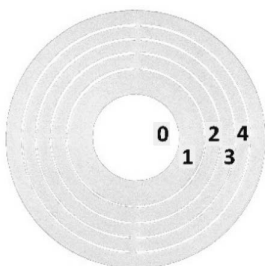
**Code** (flow regulator for Ø75 semi-rigid pipe)  
**VMRP1875**



#### Identification number of the outermost of the removed rings

	0	1	2	3	4
Zeta coefficient [ $\zeta$ ] <sup>*</sup>	24,18	14,56	8,74	4,68	1,93
Flow rate (m <sup>3</sup> /h)	Pressure drop $\Delta p$ in the passage through the regulator (Pa)				
<b>10</b>	6	4	2	1	1
<b>20</b>	23	14	8	4	2
<b>30</b>	52	31	18	10	4
<b>40</b>	97	58	34	19	8

**Code** (flow regulator for Ø90 semi-rigid pipe)  
**VMRP1890**



#### Identification number of the outermost of the removed rings

	0	1	2	3	4
Zeta coefficient [ $\zeta$ ] <sup>*</sup>	26,36	16,07	9,45	5,33	2,34
Flow rate (m <sup>3</sup> /h)	Pressure drop $\Delta p$ in the passage through the regulator (Pa)				
<b>20</b>	25	15	9	5	2
<b>30</b>	56	34	20	11	5
<b>40</b>	100	61	36	20	9
<b>50</b>	156	95	56	32	14
<b>60</b>	225	137	81	45	20

\* Zeta coefficient [  $\zeta$  ] : coefficient of localized pressure drop; it is given by the formula:

$$\Delta p = \zeta \times \rho \times v^2 / 2 \text{ where:}$$

$\Delta p$ : localized pressure drop (Pa)

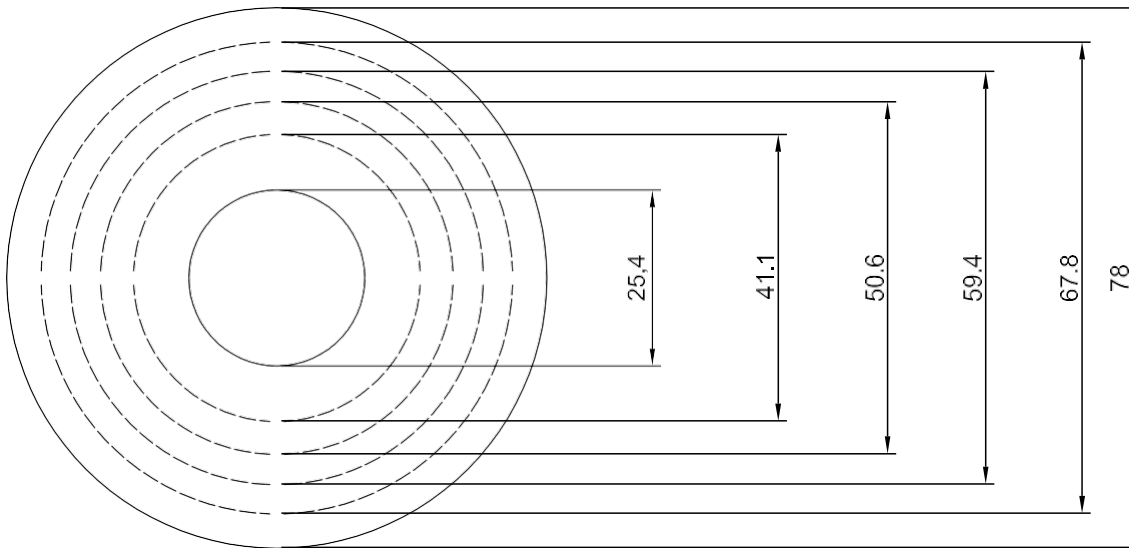
$\rho$ : density of air (e.g. 1.2 kg/m<sup>3</sup>)

$v$ : air velocity through the orifice, given by the controller once N rings are removed.



## DIMENSIONS

Dimensioned drawing of the controller cod. **VMRP1875** - measurements in mm



Dimensioned drawing of the controller cod. **VMRP1890** - measurements in mm

