Flow Divider with MOTOR

Code:

9RG	NN	O	CC	CC

9RG	Flow Divider Typology
NN	Number of flow divider elements
O	Number of motor elements
CC	Motor Displacement Code
CC	Flow Divider Displacement Code

Example: Flow divider with two elements (same displacement) and Motor
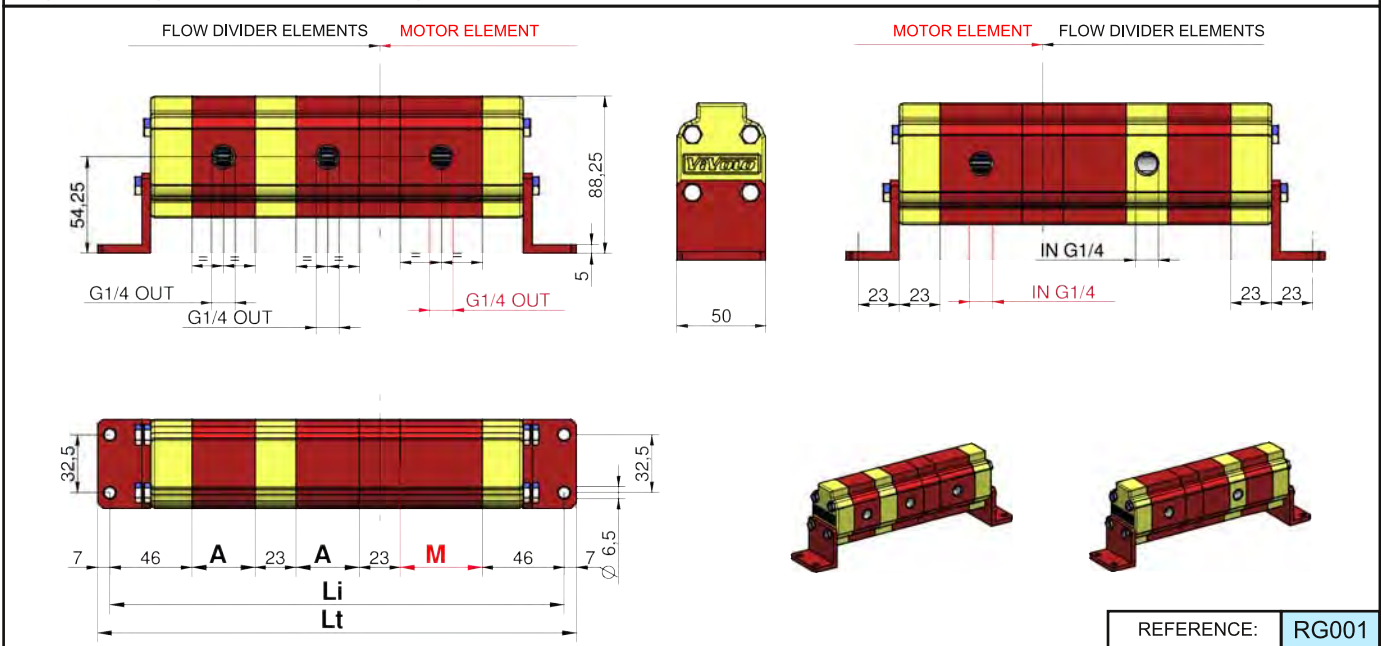RV-0G / 0,76 x 2 + 1 Motor 1.52

9RG	02	1	11	06

Example: Flow Divider 4 elements (different displacement - max 6) and Motor:
RV-0G / 0,57+0,76+1.27+0.45 + 1 Motor 2.30

9RG	04	1	13	05	06	09	04

NOTE: to define codes for flow dividers with more than 6 different
displacement, please contact our sales department.

Table: 1

Displacem.	CC	Max Pressure bar	One element flow rate l/min		
Cm^3/rev	Code		MIN	RECOMMENDED	MAX
0,17	01	210	0,2	0,4	1,2
0,25	02	210	0,3	0,7	1,8
0,45	04	210	0,6	1,2	3
0.57	05	210	0,8	1,5	3,8
0,76	06	210	1	2	4,8
0,98	07	210	1,2	2,3	5,6
1,27	09	210	1,5	3	7,2
1,52	11	210	1,9	3,5	8
2,30	13	210	2,6	5	10,3

FLOW DIVIDER ELEMENTS   MOTOR ELEMENT

G1/4 OUT
G1/4 OUT
G1/4 OUT

MOTOR ELEMENT   FLOW DIVIDER ELEMENTS

IN G1/4
IN G1/4
IN G1/4

REFERENCE:	RG001

Cm^3/rev	A-M
0,17	29,3
0,25	29,9
0,45	31,5
0,76	34
0,98	35,5
1,27	38
1,52	40
2,30	46

Table: 3   in this table the number of inlets in function of the number of elements are indicated.

Number of elements	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
"IN" Number of inlets	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8

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Flow Divider with MOTOR

INTERNAL DRAIN

IN   IN

OUT   OUT   OUT
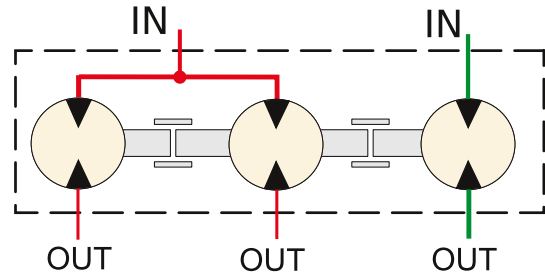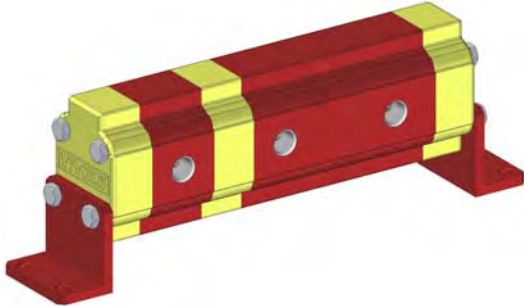
In **table 1** the functining range of single flow divider elements is indicated.
The higher is the feeding capacity (q), the higher is the precision of the flow division, but in opposition there are losses of loading and higher noise. Therefore we suggest to feed the elements with capacities equal or a few superior to the ones indicated in the column **"RECOMMENDED"**.
Remember to verify the capacities even in phase of flow reunion.
The pressure indicated are to be considered as maximum of functioning, the flow divider is able to bear peaks of pressure 20 % superior.

How to calculate the "Li" and "Lt" measures of flow dividers:

From **table 2** it is possible to obtain the "Li" measure for flow dividers up to 16 elements with equal displacements; for flow dividers with different elements or with more than 16 elements the "Li" and "Lt" measure have to be calculated by the following formula:

$$Li = [(n-1) \times 23] + 92 + (A1 + A2 + A3 + \ldots)$$

$$92 = 46 + 46$$

$$n = \text{Number of elements of flow divider}$$

$$A1 \ldots An = \text{heights of elements of flow divider}$$

$$Lt = Li + 14$$

$$14 = 7 + 7$$

EXAMPLE: To obtain the measures **Li** and **Lt** of a flow divider with three elements (n=3), **RV-0G / 0,98 x 2+ 1 MOTOR 2,30**

Distance between fixing hole centres $Li = [(3-1) \times 23] + 92 + 35,5 + 35,5 + 46 = 255$ mm

Total Lenght $Lt = 245,5 + 14 = 269$

In **table 3** the number of inlets in fuction of the number of elements are indicated.
For flow dividers with many inlets, as they are all communicating it is even possible to use only one of them, by plugging the other ones. We suggest to make full us at least of **1** inlet every **15** l/min capacity.

To obtain errors of division **inferior to 3%** there must be no difference of pressure between the elements superior to **30 bar**. To obtain high precisions the respect of the following parametres is also important:

-      Enviroment temperature: -10°c ÷ +60°c   Oil temperature: +30°c ÷ +60°c
-      Hydraulic oil based on hlp, hv (din 51524) minerals   Oil Viscosity 20 ÷ 40 cSt
-      Oil filtering 10 ÷ 25 μ