

750 Series - Multifunction



Compact solenoid multi-valve | 2/2 and 3/2 integrated functions
PNEUMATIC DIVISION

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S.V. 750 MULTI - FUNCTION SERIES • 2/2 - 3/2

750 multi-function Series encloses 8 separately controlled shutters in a single body. Its base version has 8 outputs with the following configurations:

- four 3/2 NC outlets four 3/2 NC outlets.
- two 2/2 NC outlets.
- two 2/2 NO inverted flow outlets.

The extreme modularity of 750 Series allows the arrangement of an almost unlimited number of customized configurations. For this aim, contact your local dealer or MATRIX technical staff.

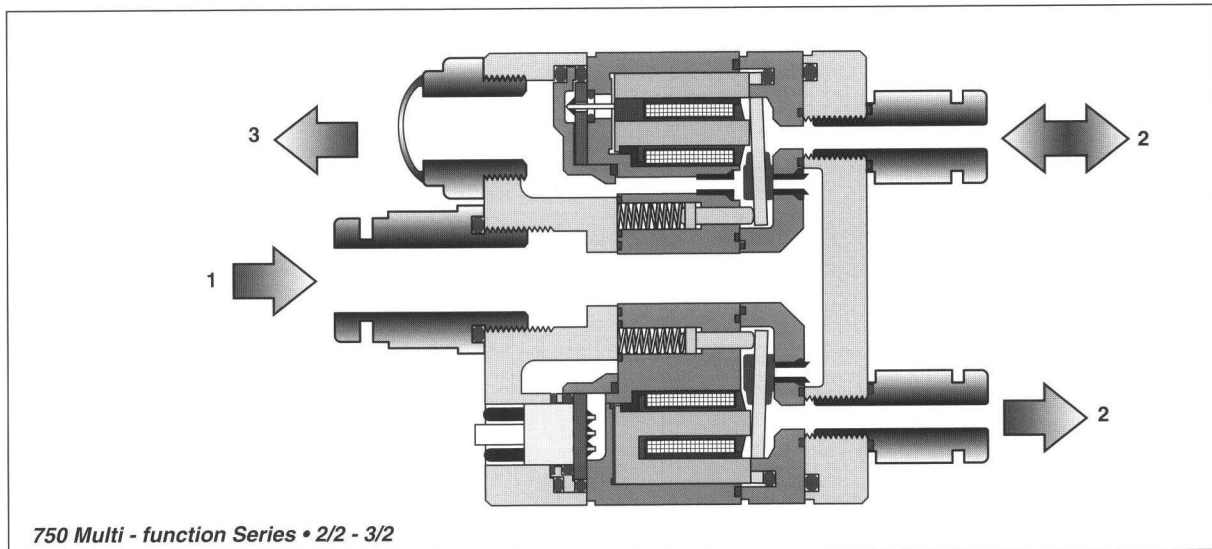
750 multi-function Series is particularly fit for the control of intricate pneumatic system, where different functions are integrated.

In the present model, all the innovations offered by Matrix technology (this combines special dynamic performance to the simplicity and reliability of manufacture) are present. Response times are of millisecond range, while operation life is over 500 million cycles.

With a speed-up kind control, dynamic characteristics are even more improved. Standard 12/24 VDC control solenoid valves have a response time lower than 5 ms in opening and than 2 ms in closing, with a maximum operation frequency 200 Hz. Speed-up control solenoid valves have a response time lower than 2 ms both in opening and in closing, with a maximum operation frequency of 300 Hz.

Besides high-speed characteristics, 750 Series solenoid valves offer flow rate values up to 100 l/minute (ANR) for every single outlet, with feeding (supply) pressure from 0 to 8 bar.

For 750 multi-function series, a lot of accessories is available, such as IP 52 or IP 56 connectors, manifolds with different positions and speed-up driver boards.



Advantages

- Compact dimension.
- Short response times.
- Insensitivity to frequency work and to vibrations.
- Low absorbed power.
- Precision, repetitiveness and flexibility.
- Long operating life.

Applications

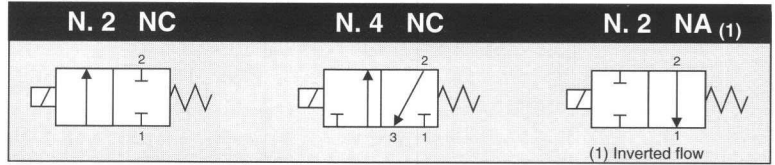
- Process and precision instrumentation.
- Pressure and flow rate control devices.
- Positioning systems.
- Biomedical and measure sector.
- Robotics and industrial automation.

Materials

- Body in PPS.
- Flanges in Al.
- Seals in NBR (shutters in HNBR if required).



CONTROL: DIRECT PFM PWM



GENERAL CHARACTERISTICS

FLUID	Non-lubricated dry air, neutral gases (-10 + 50°C)	
FILTRATION RATING	Min 40 micron	
TEMPERATURE	- 10 + 50°C (Standard version)	
RESPONSE TIME IN OPENING	12 / JJ < 5 ms	KK < 2 ms
RESPONSE TIME IN CLOSING	12 / JJ < 2 ms	KK < 2 ms
MAXIMUM FREQUENCY	200 Hz	300 Hz
WEIGHT	350 g	
PRODUCT LIFE EXPECTANCY	≥ 500 M/s cycles	
IP RATING	IP 52 - IP 62 - IP 65	

IDENTIFICATION CODE

	H	X	7	5	8	8	E	2	R	R	K	K
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• FLOW RATE (at 6 bar)

H	50 NI/min
B	80 NI/min
M	100 NI/min (ontrol tension JJ XX KK)

• VERSION

	Standard
H	HNBR Shutters

• No. ELECTRICAL CONTROLS

8	8 Controls
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• PORT CONNECTION

0	Integrated cables IP 62 L = 500 mm
E	Presetting for Easy connection IP 52 - IP 65

• SPECIAL PROTECTIONS

	Only with EASY IP 65 port connection
M	Stainless steel (INOX) flanges
N	EPOX BLACK varnished flanges

• OUTLETS

8	8 Outlets
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• FUNCTIONS

R	N.6 NC N.2 NO
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• TYPE

R	N.4 3/2 - N.2 2/2 N.2 2/2 Inverted flow
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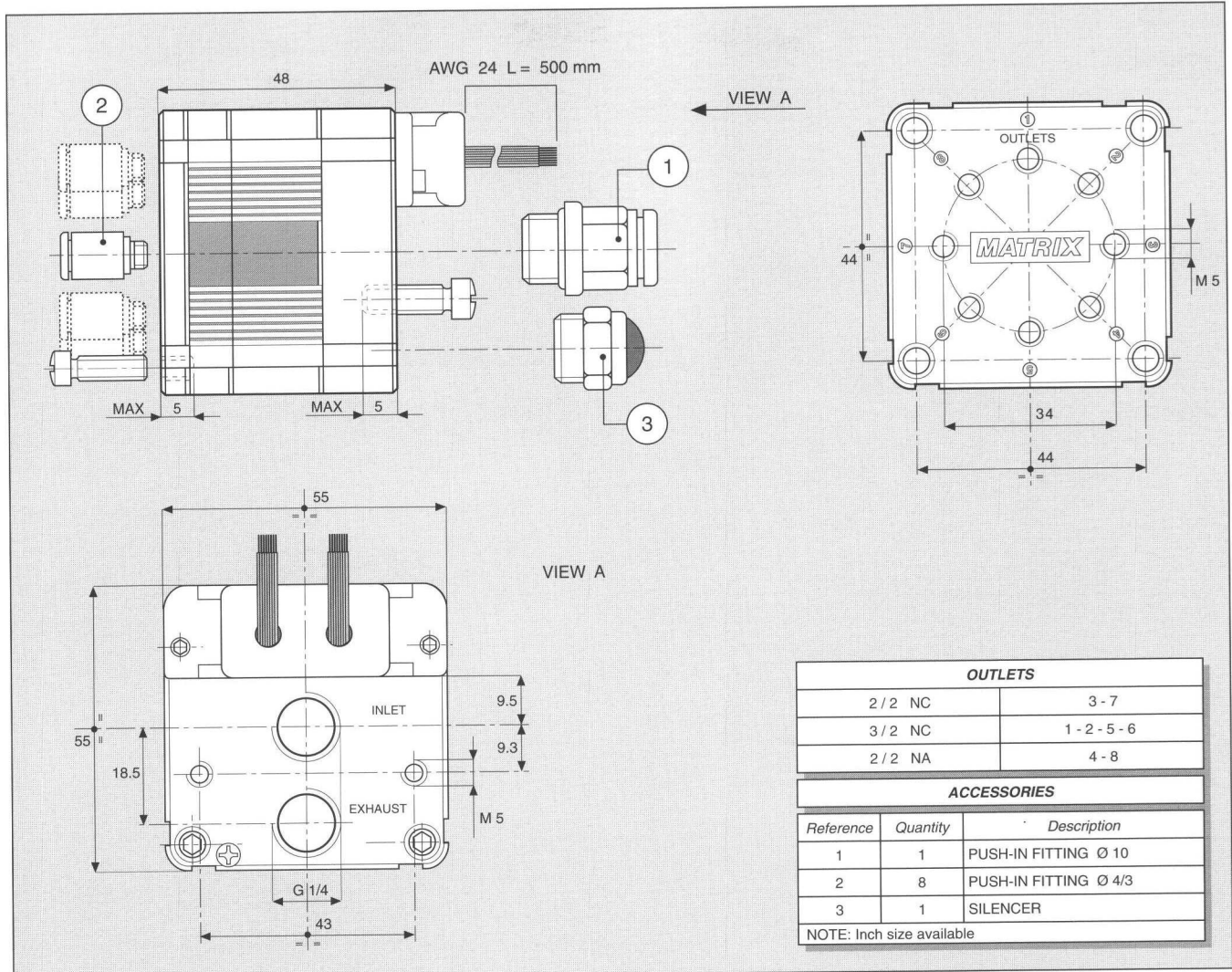
• CONTROL TENSION

12	12 VDC ± 10 %	ED 100 %	1.4 W
JJ	24 VDC ± 10 %	ED 100 % ⁽¹⁾	1.9 W
KK	Speed-up in tension	ED 100 % ⁽¹⁾	—

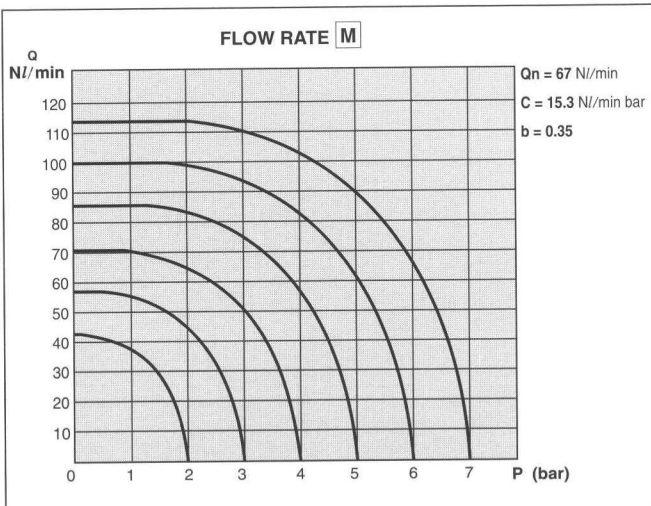
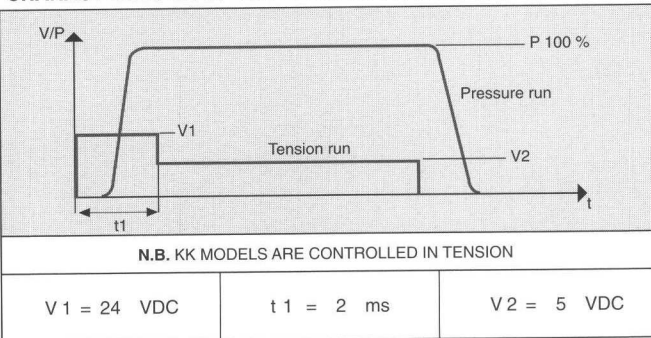
(1) Only with Electronic Driver Boards PRB or UDB

• OPERATING PRESSURE

	RANGE	MODELS
1	0 - 4 bar	All
2	4 - 8 bar	All
3	0 - 8 bar KK
8	2 - 6 bar	All



CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



ELECTRICAL PORT CONNECTION

	COLOUR	OUTLET
BLACK 1 - 2	BROWN	1 3/2 NC
	RED	2 3/2 NC
	ORANGE	3 2/2 NC
	YELLOW	4 2/2 NA (1)
BLACK 3 - 4	GREEN	5 3/2 NC
	BLUE	6 3/2 NC
	VIOLET	7 2/2 NC
	GREY	8 2/2 NA (1)
BLACK	COMMON	COMMON

(1) Inverted flow