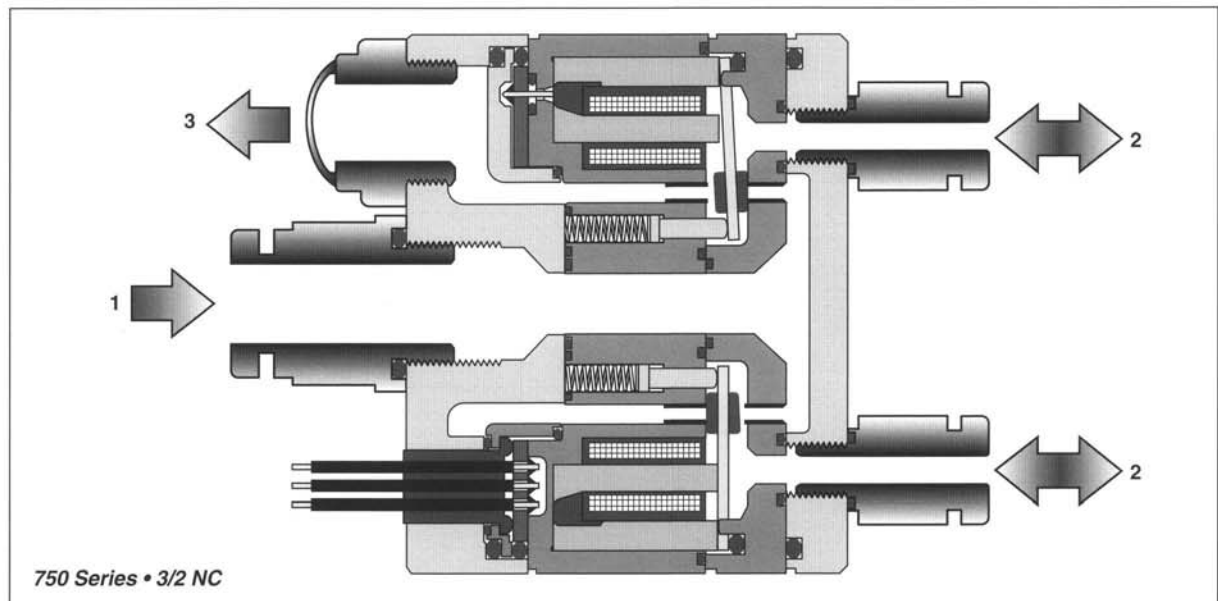


# SOLENOID VALVES 750 SERIES • 2/2 • 3/2

750 Series 2/2 and 2/3 encloses in a single body eight shutters in NC or NO configuration. The series modularity allows to have at disposal a single outlet or 2, 4, 8 independent outlets. All innovations offered by Matrix technology are present. Said characteristics couple manufacturing simplicity and ability of dynamic high-performances. Response times are of millisecond range, while operation life is over 500 million cycles. The Series includes the Vacuum versions designed for uses with vacuum technique. Due to the facility to be speed-up controlled, dynamic characteristics are even more improved: standard solenoid valves equipped with 24 VDC control present response times lower than 5 ms in opening and 2 ms in closing, with a maximum operation frequency 200 Hz. On the contrary, solenoid valves equipped with speed-up control present a response time both in opening and closing lower than 2 ms, with a maximum operation frequency 300 Hz.

Besides high-speed characteristics, solenoid valves 720 Series offer flow rate value to 100ℓ/minute (ANR), with supply pressure from 0 to 8 bar.

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



## Advantages

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

## Applications

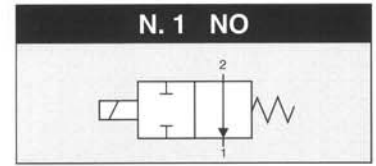
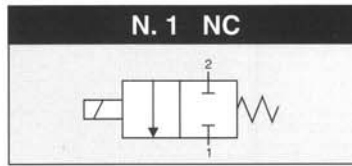
- Process and precision instrumentation.
- Pressure and flow rate control devices.
- Positioning systems.
- Pilot system.
- Selection systems.
- Metering systems.
- Biomedical and measure sector.

## Materials

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



**CONTROL:** DIRECT PFM PNM PWM



### GENERAL CHARACTERISTICS

<b>FLUID</b>	Non-lubricated dry air, neutral gases (-10 + 50°C)		
<b>FILTRATION RATING</b>	Min 40 micron		
<b>TEMPERATURE</b>	- 10 + 50°C (Standard version)		
<b>RESPONSE TIME IN OPENING</b>	12 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
<b>RESPONSE TIME IN CLOSING</b>	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
<b>MAXIMUM FREQUENCY</b>	100 Hz	200 Hz	300 Hz
<b>WEIGHT</b>	380 g		
<b>PRODUCT LIFE EXPECTANCY</b>	≥ 500 M/s cycles		
<b>IP RATING</b>	IP 52 - IP 62 - IP 65		

### IDENTIFICATION CODE

	H	X	7	5	1	1	0	V	C	2	24
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**ORIFICES**

H	Ø eq = 2.5 mm
B	Ø eq = 3.6 mm
M	Ø eq = 4.2 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

1	1 Control
2	2 Controls
4	4 Controls
8	8 Controls
C	4 Controls / Integrated diodes with common 0 V
D	8 Controls / Integrated diodes with common 0 V
F	4 Controls / Integrated diodes with common 12/24 V
G	8 Controls / Integrated diodes with common 12/24 V

**PORT CONNECTION**

0	Integrated cables IP 62 L = 500 mm
E	Presetting for Easy connection IP 52 - IP 65 (only 4 and 8 controls)

**SPECIAL PROTECTIONS**

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

**OUTLETS**

1	Outlet
---	--------

**FUNCTION**

A	NO
C	NC

**TYPE**

2	2/2
---	-----

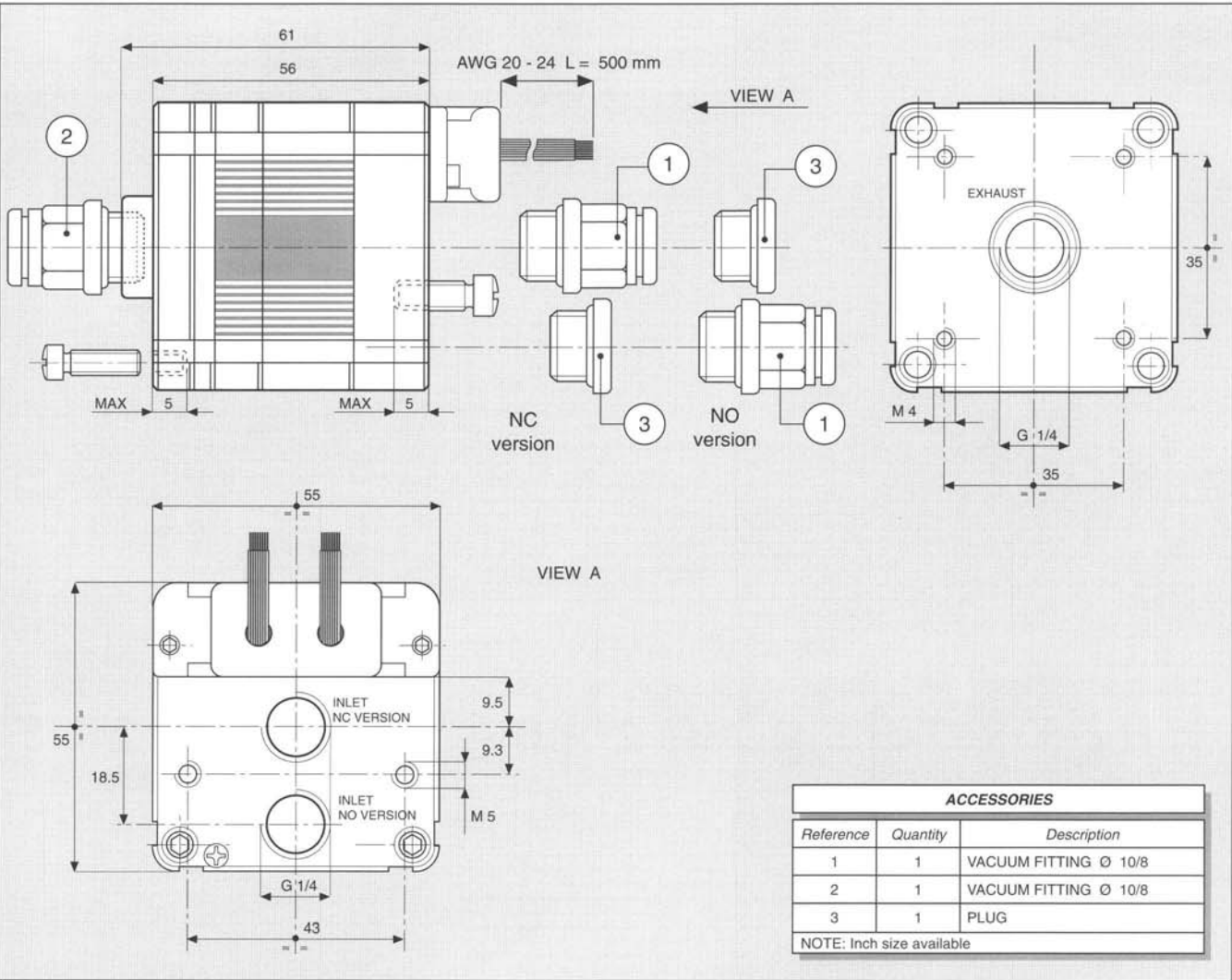
**CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	1.4+11.6W
24	24 VDC ± 10 %	ED 100 %	1.2+10.0W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	1.9+15.2W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

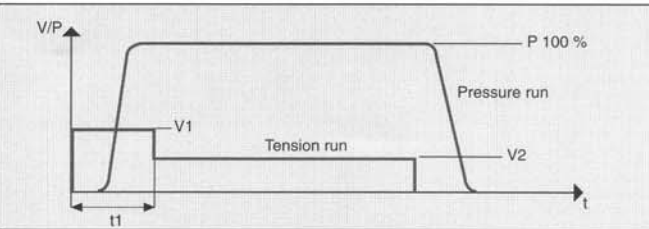
(1) Only with Electronic Driver Boards PRB or UDB

**OPERATING PRESSURE**

	<b>RANGE</b>	<b>MODELS</b>
V	10 <sup>-5</sup> Torr	All



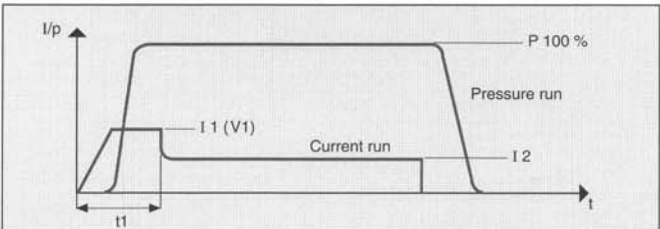
CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



N.B. KK MODELS ARE CONTROLLED IN TENSION

V 1 = 24 VDC      t 1 = 2 ms      V 2 = 5 VDC

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX

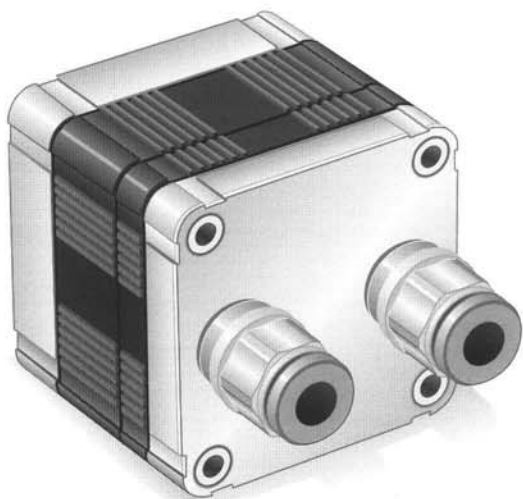


N.B. XX MODELS ARE CONTROLLED IN CURRENT

I 1 = 5.6 A      t 1 = 2 ms      I 2 = 2.4 A

ELECTRICAL PORT CONNECTION

COLOUR	1 CONTROL	2 CONTROLS	4 CONTROLS	8 CONTROLS
BLACK	COMMON	COMMON	COMMON	COMMON
BROWN	—	1	1	1
RED	1	2	2	2
ORANGE	—	—	3	3
YELLOW	—	—	4	4
GREEN	—	—	—	5
BLUE	—	—	—	6
VIOLET	—	—	—	7
GREY	—	—	—	8



**CONTROL:**

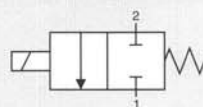
**DIRECT**

**PFM**

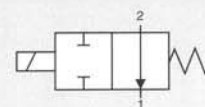
**PNM**

**PWM**

**N. 2 NC**



**N. 2 NO**



## GENERAL CHARACTERISTICS

<b>FLUID</b>	Non-lubricated dry air, neutral gases (-10 + 50°C)		
<b>FILTRATION RATING</b>	Mix 40 micron		
<b>TEMPERATURE</b>	- 10 + 50°C (Standard version)		
<b>RESPONSE TIME IN OPENING</b>	12 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
<b>RESPONSE TIME IN CLOSING</b>	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
<b>MAXIMUM FREQUENCY</b>	100 Hz	200 Hz	300 Hz
<b>WEIGHT</b>	330 g		
<b>PRODUCT LIFE EXPECTANCY</b>	≥ 500 M/s cycles		
<b>IP RATING</b>	IP 52 - IP 62 - IP 65		

## IDENTIFICATION CODE

	H	X	7	5	2	2	0	V	C	2	24
--	---	---	---	---	---	---	---	---	---	---	----

**ORIFICES**

H	Ø eq = 1.8 mm
B	Ø eq = 2.6 mm
M	Ø eq = 3.0 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

2	2 Controls
4	4 Controls
8	8 Controls
C	4 Controls / Integrated diodes with common 0 V
D	8 Controls / Integrated diodes with common 0 V
F	4 Controls / Integrated diodes with common 12 / 24 V
G	8 Controls / Integrated diodes with common 12 / 24 V

**PORT CONNECTION**

0	Integrated cables IP 62 L = 500 mm
E	Presetting for Easy connection IP 52 - IP 65 (only 4 and 8 controls)

**SPECIAL PROTECTIONS**

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

**OUTLETS**

2	2 Outlets
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**FUNCTION**

A	NO
C	NC

**TYPE**

2	2/2
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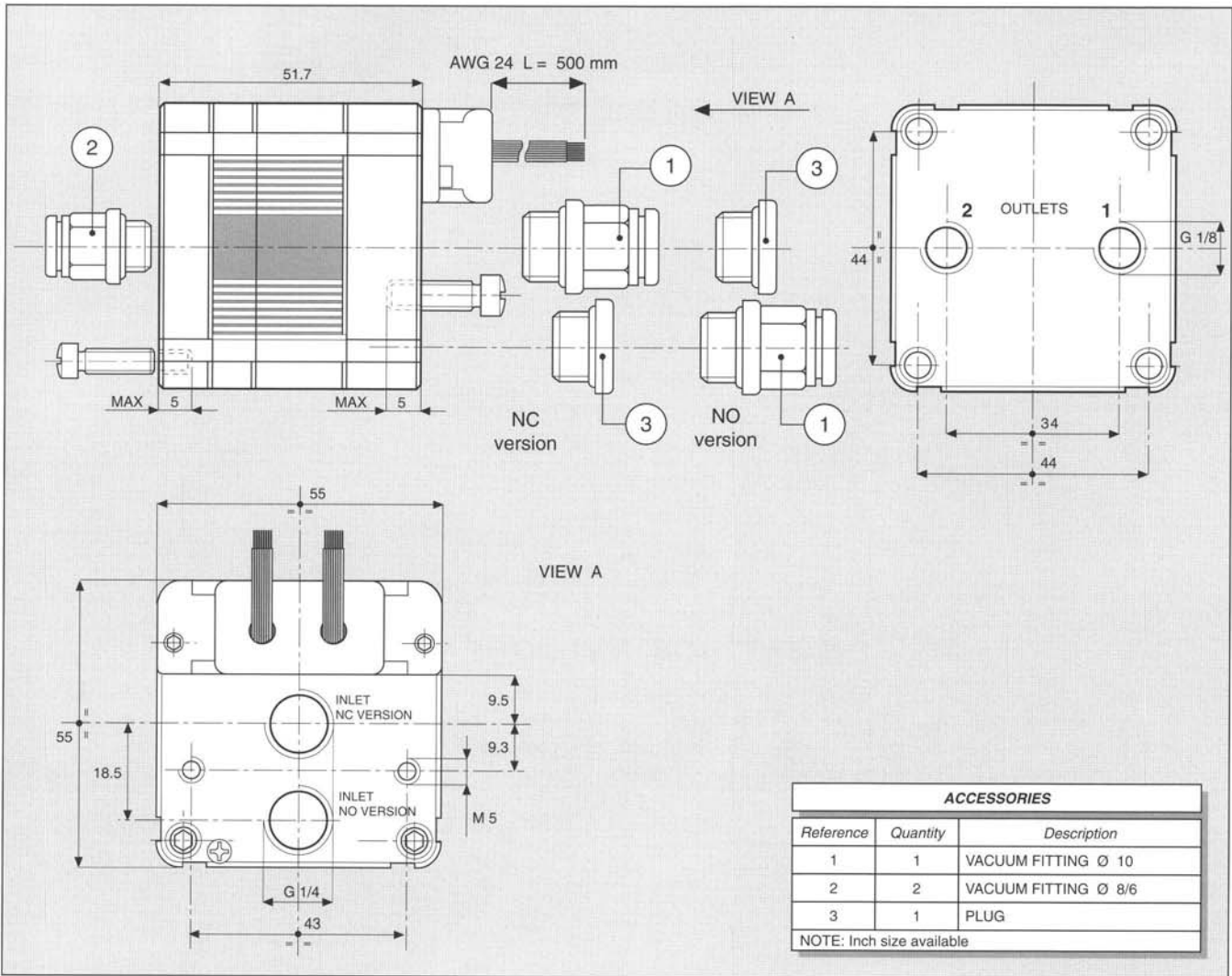
**CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	1.4 + 5.8W
24	24 VDC ± 10 %	ED 100 %	1.2 + 5.0W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	1.9 + 7.6W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

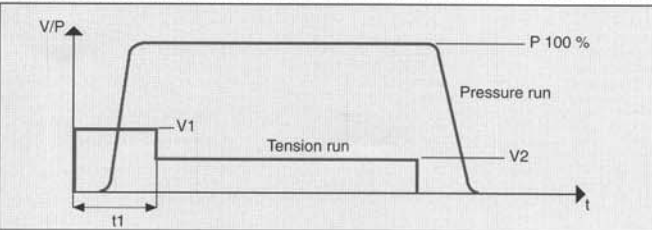
(1) Only with Electronic Driver Boards PRB or UDB

**OPERATING PRESSURE**

	<b>RANGE</b>	<b>MODELS</b>
V	10 <sup>-5</sup> Torr	All



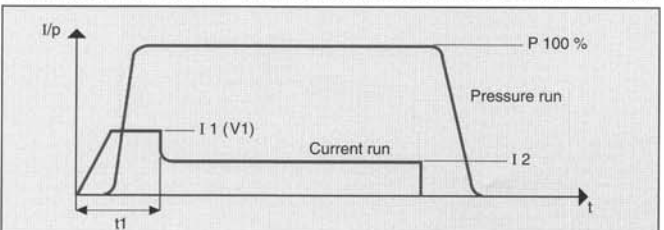
CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



N.B. KK MODELS ARE CONTROLLED IN TENSION

V 1 = 24 VDC      t 1 = 2 ms      V 2 = 5 VDC

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX



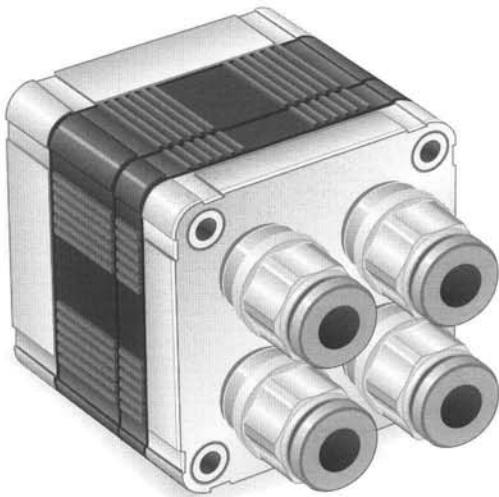
N.B. XX MODELS ARE CONTROLLED IN CURRENT

I 1 = 2.8 A      t 1 = 2 ms      I 2 = 1.2 A

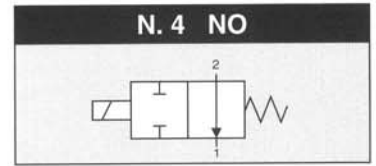
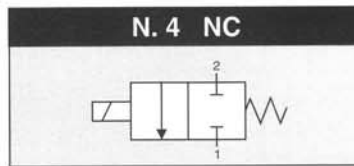
ELECTRICAL PORT CONNECTION

COLOUR	2 CONTROLS (SINGLE CABLES)	2 CONTROLS EASY CONNECTION IP 52	4 CONTROLS (OUTLET)	8 CONTROLS (OUTLET)
BLACK	COMMON	COMMON	COMMON	COMMON
BROWN	1	1	1 (1)	1 (1)
RED	2	—	2 (1)	2 (1)
ORANGE	—	2	3 (2)	3 (1)
YELLOW	—	—	4 (2)	4 (1)
GREEN	—	—	—	5 (2)
BLUE	—	—	—	6 (2)
VIOLET	—	—	—	7 (2)
GREY	—	—	—	8 (2)





**CONTROL:** DIRECT PFM PNM PWM



### GENERAL CHARACTERISTICS

<b>FLUID</b>	Non-lubricated dry air, neutral gases (-10 + 50°C)		
<b>FILTRATION RATING</b>	Min 40 micron		
<b>TEMPERATURE</b>	- 10 + 50°C (Standard version)		
<b>RESPONSE TIME IN OPENING</b>	12 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
<b>RESPONSE TIME IN CLOSING</b>	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
<b>MAXIMUM FREQUENCY</b>	100 Hz	200 Hz	300 Hz
<b>WEIGHT</b>	340 g		
<b>PRODUCT LIFE EXPECTANCY</b>	≥ 500 M/s cycles		
<b>IP RATING</b>	IP 52 - IP 62 - IP 65		

### IDENTIFICATION CODE

	H	X	7	5	4	4	E	V	C	2	24
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**ORIFICES**

H	Ø eq = 1.3 mm
B	Ø eq = 1.8 mm
M	Ø eq = 2.1 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

4	4 Control
8	8 Control
C	4 Controls / Integrated diodes with common 0 V
D	8 Controls / Integrated diodes with common 0 V
F	4 Controls / Integrated diodes with common 12/24 V
G	8 Controls / Integrated diodes with common 12/24 V

**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**

4	4 Outlets
---	-----------

**FUNCTION**

A	NO
C	NC

**TYPE**

2	2/2
---	-----

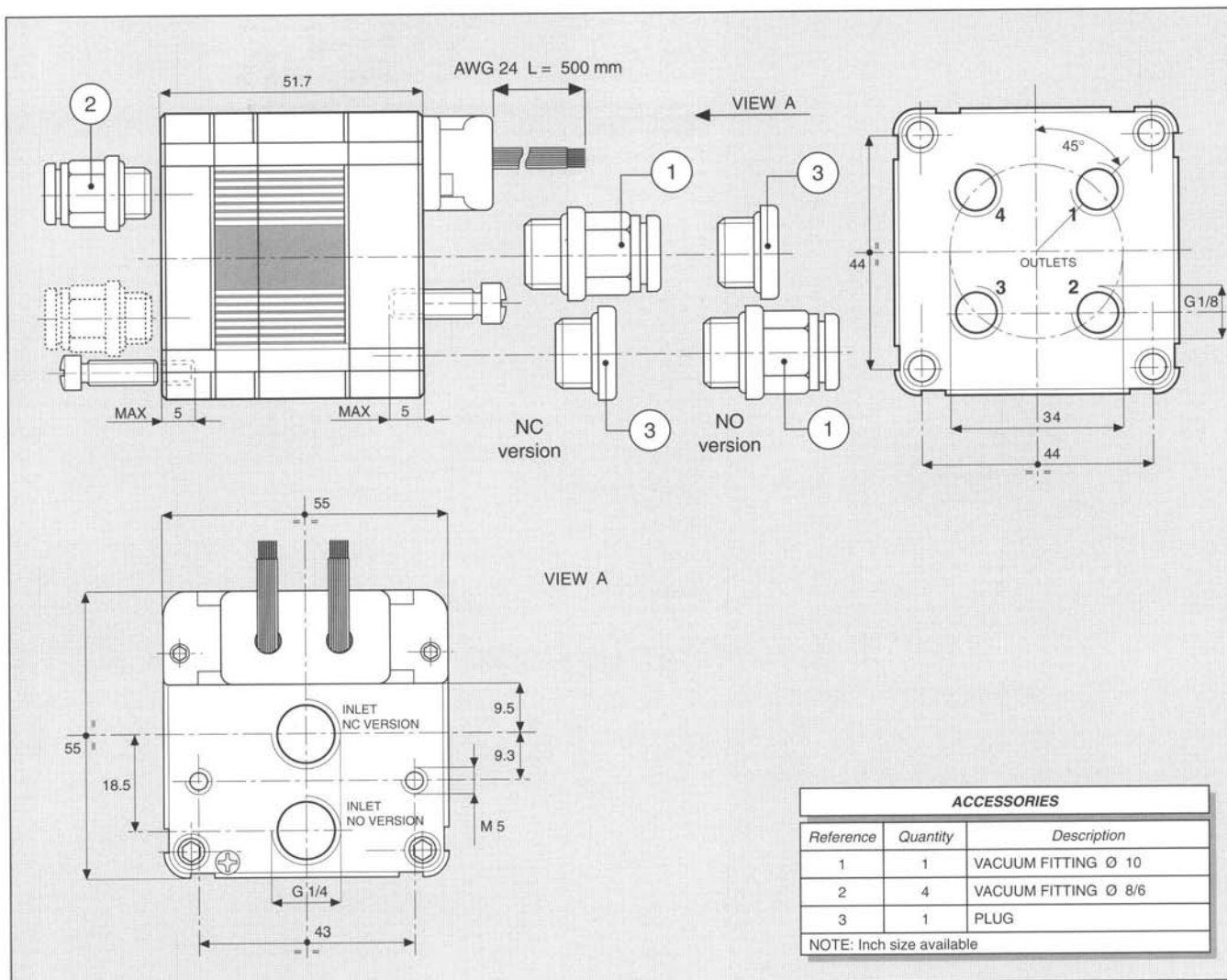
**CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	1.4+2.9W
24	24 VDC ± 10 %	ED 100 %	1.2+2.5W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	1.9+3.8W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

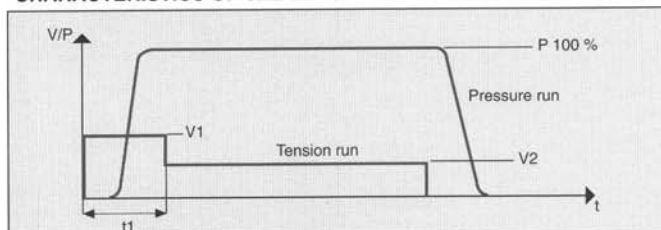
(1) Only with Electronic Driver Boards PRB or UDB

**OPERATING PRESSURE**

	<b>RANGE</b>	<b>MODELS</b>
V	10 <sup>-5</sup> Torr	All



CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



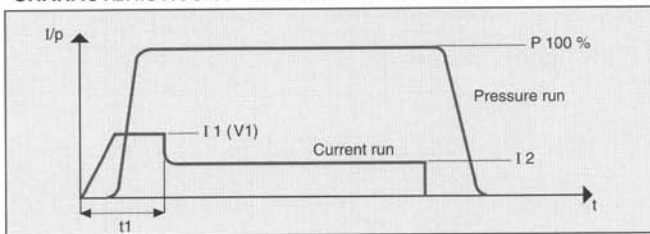
N.B. KK MODELS ARE CONTROLLED IN TENSION

V1 = 24 VDC

t1 = 2 ms

V2 = 5 VDC

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX



N.B. XX MODELS ARE CONTROLLED IN CURRENT

I1 = 1.4 A

t1 = 2 ms

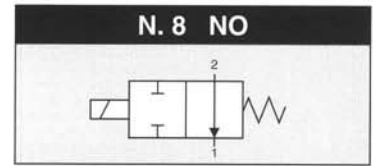
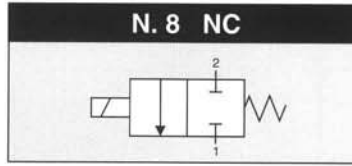
I2 = 0.6 A

ELECTRICAL PORT CONNECTION

COLOUR	4 CONTROLS	8 CONTROLS (OUTLET)
BLACK	COMMON	COMMON
BROWN	1	1 (1)
RED	2	2 (1)
ORANGE	3	3 (2)
YELLOW	4	4 (2)
GREEN	—	5 (3)
BLUE	—	6 (3)
VIOLET	—	7 (4)
GREY	—	8 (4)



CONTROL: DIRECT PFM PNM 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 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
RESPONSE TIME IN CLOSING	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
MAXIMUM FREQUENCY	100 Hz	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	V	C	2	24
--	---	---	---	---	---	---	---	---	---	---	----

**ORIFICES**

H	Ø eq = 0.9 mm
B	Ø eq = 1.3 mm
M	Ø eq = 1.5 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

8	8 Control
D	8 Controls / Integrated diodes with common 0 V
G	8 Controls / Integrated diodes with common 12 / 24 V

**OUTLETS**

8	8 Outlets
---	-----------

**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

**FUNCTION**

A	NO
C	NC

**TYPE**

2	2/2
---	-----

**CONTROL TENSION**

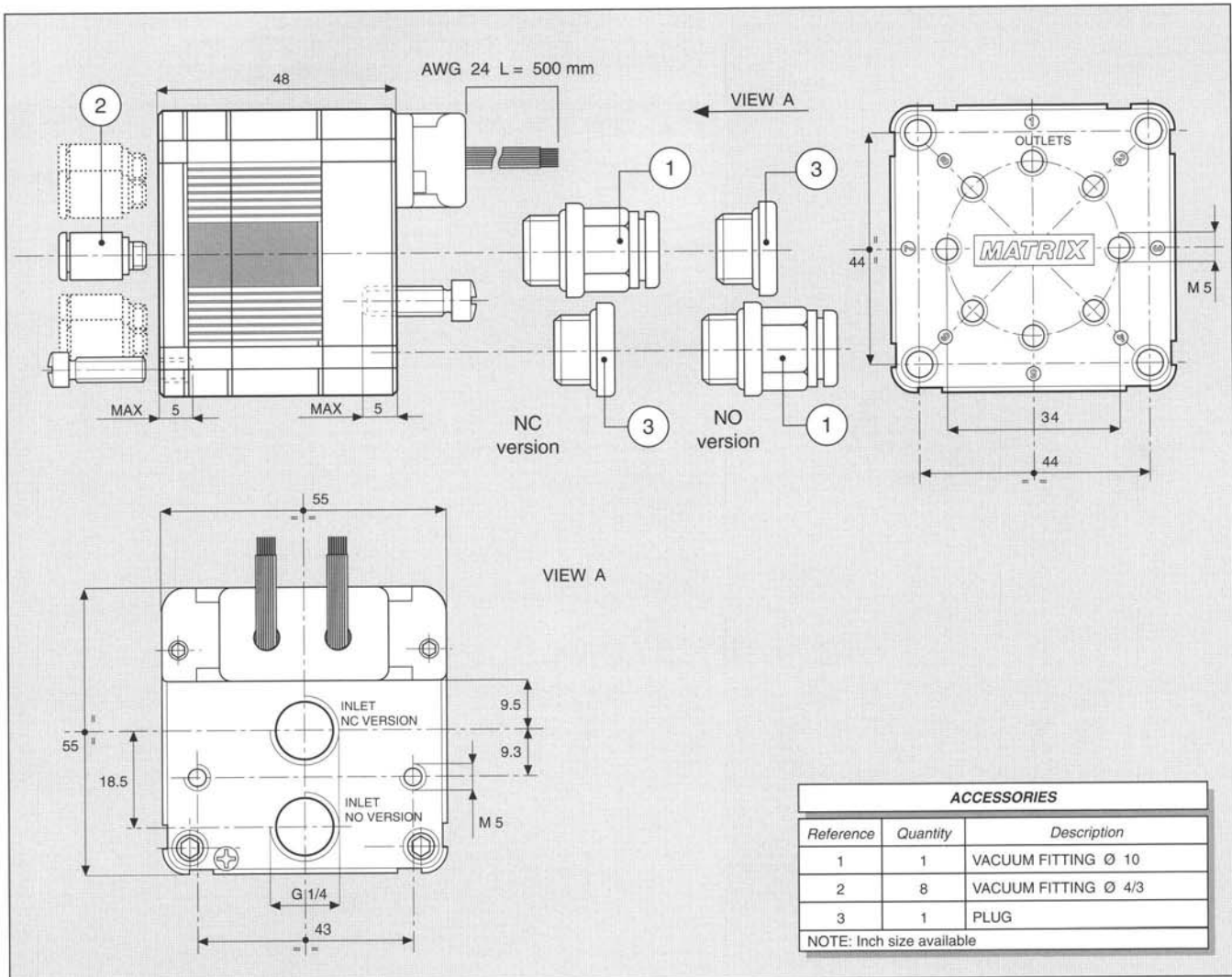
12	12 VDC ± 10 %	ED 100 %	1.4 W
24	24 VDC ± 10 %	ED 100 %	1.2 W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	1.9 W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

(1) Only with Electronic Driver Boards PRB or UDB

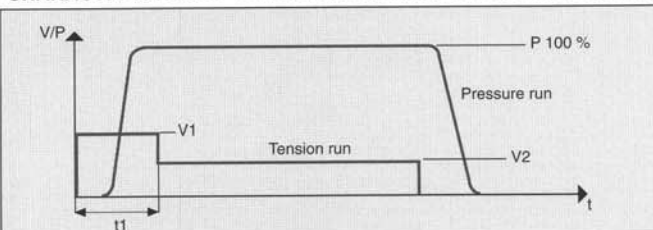
**OPERATING PRESSURE**

	RANGE	MODELS
V	10 <sup>-5</sup> Torr	All





CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



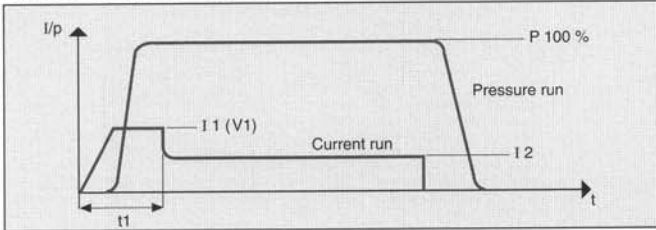
N.B. KK MODELS ARE CONTROLLED IN TENSION

V 1 = 24 VDC

t 1 = 2 ms

V 2 = 5 VDC

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX



N.B. XX MODELS ARE CONTROLLED IN CURRENT

I 1 = 0.7 A

t 1 = 2 ms

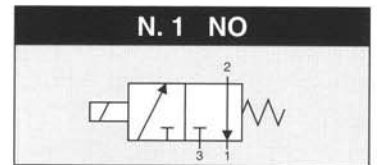
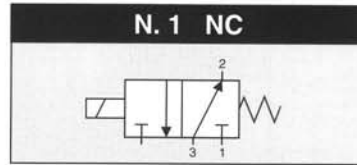
I 2 = 0.3 A

ELECTRICAL PORT CONNECTION

COLOUR	8 CONTROLS
BLACK	COMMON
BROWN	1
RED	2
ORANGE	3
YELLOW	4
GREEN	5
BLUE	6
VIOLET	7
GREY	8



CONTROL: **DIRECT**



### 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 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
RESPONSE TIME IN CLOSING	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
MAXIMUM FREQUENCY	100 Hz	200 Hz	300 Hz
WEIGHT	380 g		
PRODUCT LIFE EXPECTANCY	≥ 500 M/s cycles		
IP RATING	IIP 62		

### IDENTIFICATION CODE

	H	X	7	5	1	1	0	V	C	3	24
--	---	---	---	---	---	---	---	---	---	---	----

**ORIFICES**

H	Ø eq = 2.5 mm
B	Ø eq = 3.6 mm
M	Ø eq = 4.2 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

1	1 Control
---	-----------

**OUTLETS**

1	1 Outlet
---	----------

**PORT CONNECTION**

0	Integrated cables IP 62 L = 500 mm
---	------------------------------------

**SPECIAL PROTECTIONS**

M	Stainless steel (INOX) flanges
N	EPOX BLACK varnished flanges

**FUNCTION**

A	NO
C	NC

**TYPE**

3	3/2
---	-----

**CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	11.6 W
24	24 VDC ± 10 %	ED 100 %	10.0 W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	15.2 W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

(1) Only with Electronic Driver Boards PRB or UDB

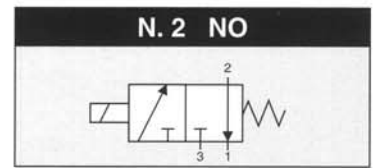
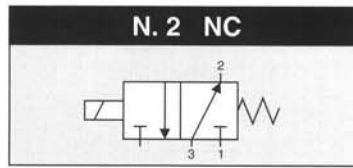
**OPERATING PRESSURE**

	RANGE	MODELS
V	10 <sup>-5</sup> Torr	All





CONTROL: **DIRECT**



### GENERAL CHARACTERISTICS

<b>FLUID</b>	Non-lubricated dry air, neutral gases (-10 + 50°C)		
<b>FILTRATION RATING</b>	Min 40 micron		
<b>TEMPERATURE</b>	- 10 + 50°C (Standard version)		
<b>RESPONSE TIME IN OPENING</b>	12 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
<b>RESPONSE TIME IN CLOSING</b>	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
<b>MAXIMUM FREQUENCY</b>	100 Hz	200 Hz	300 Hz
<b>WEIGHT</b>	330 g		
<b>PRODUCT LIFE EXPECTANCY</b>	≥ 500 M/s cycles		
<b>IP RATING</b>	IP 52 - IP 62		

### IDENTIFICATION CODE

	H	X	7	5	2	2	0	V	C	3	24
--	---	---	---	---	---	---	---	---	---	---	----

**ORIFICES**

<b>H</b>	Ø eq = 1.8 mm
<b>B</b>	Ø eq = 2.6 mm
<b>M</b>	Ø eq = 3.0 mm (control tension JJ XX KK)

**VERSION**

	Standard
<b>H</b>	HNBR Shutters

**No. ELECTRICAL CONTROLS**

<b>2</b>	2 Control
----------	-----------

**OUTLETS**

<b>2</b>	2 Outlets
----------	-----------

**PORT CONNECTION**

<b>0</b>	Integrated cables IP 62 L = 500 mm
<b>E</b>	Presetting for Easy connection IP 52

**FUNCTION**

<b>A</b>	NO
<b>C</b>	NC

**TYPE**

<b>3</b>	3/2
----------	-----

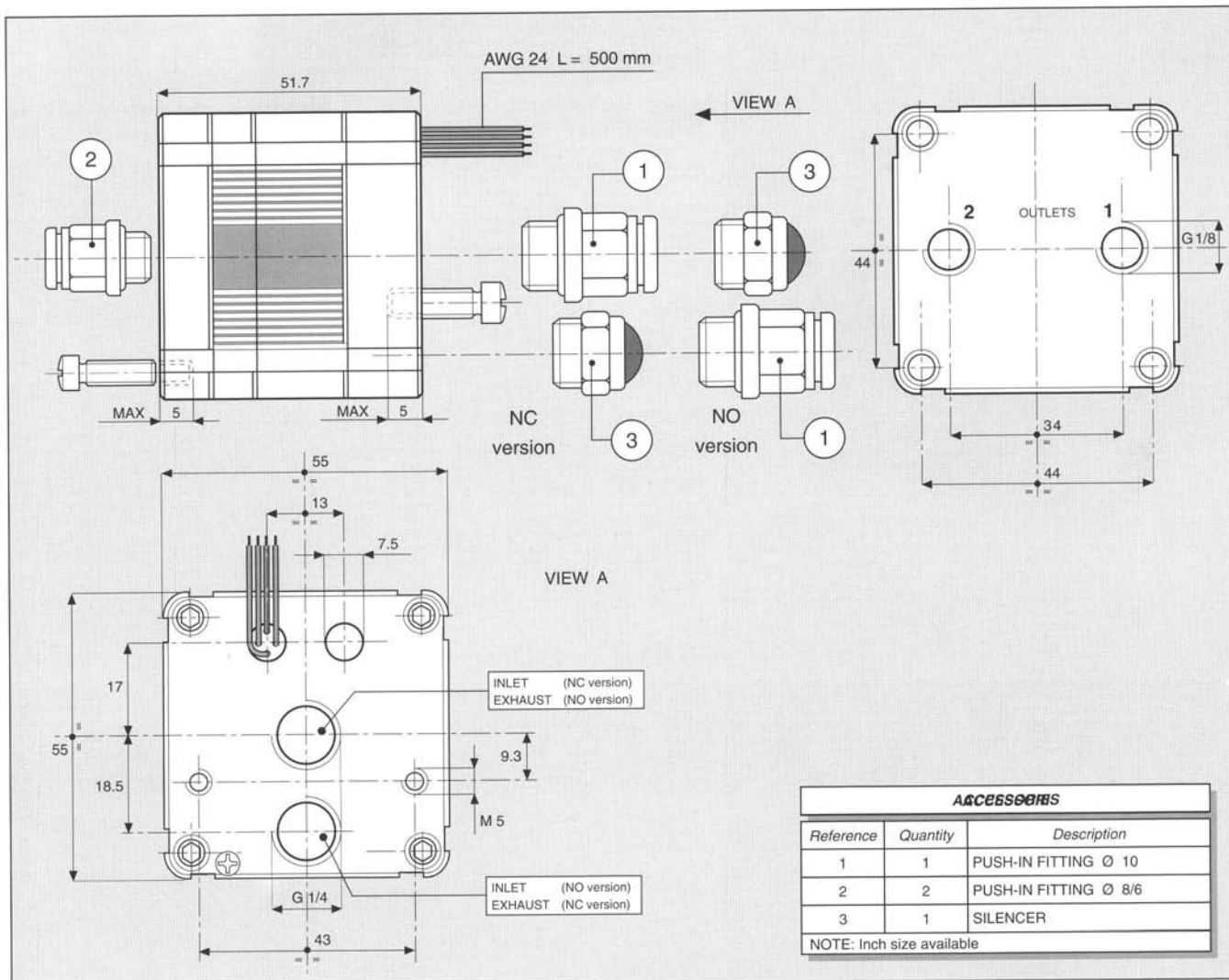
**CONTROL TENSION**

<b>12</b>	12 VDC ± 10 %	ED 100 %	5.8 W
<b>24</b>	24 VDC ± 10 %	ED 100 %	5.0 W
<b>JJ</b>	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	7.6 W
<b>XX</b>	Speed-up in current	ED 100 % <sup>(1)</sup>	—
<b>KK</b>	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

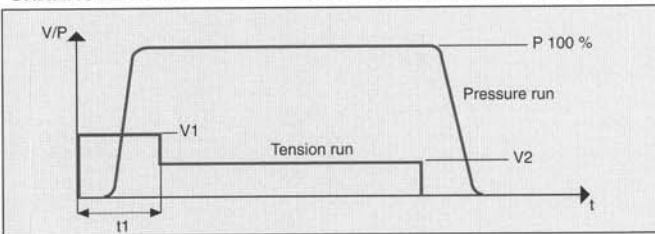
(1) Only with Electronic Driver Boards PRB or UDB

**OPERATING PRESSURE**

	RANGE	MODELS
<b>V</b>	10 <sup>-5</sup> Torr	All



CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK



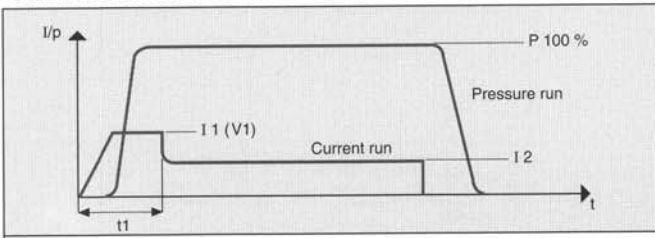
N.B. KK MODELS ARE CONTROLLED IN TENSION

V1 = 24 VDC

t1 = 2 ms

V2 = 5 VDC

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX



N.B. XX MODELS ARE CONTROLLED IN CURRENT

I1 = 2.8 A

t1 = 2 ms

I2 = 1.2 A

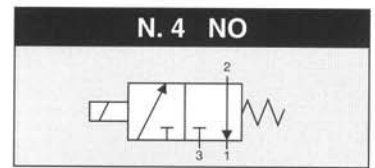
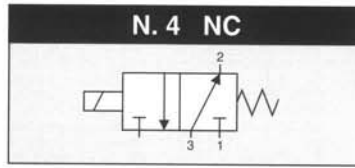
ELECTRICAL PORT CONNECTION

COLOUR	2 CONTROL (SINGLE CABLES)	2 CONTROL EASY CONNECTION IP 52
BLACK	COMMON	COMMON
BROWN	1	1
RED	2	—
ORANGE	—	2





CONTROL: **DIRECT**



### 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 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
RESPONSE TIME IN CLOSING	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
MAXIMUM FREQUENCY	100 Hz	200 Hz	300 Hz
WEIGHT	340 g		
PRODUCT LIFE EXPECTANCY	≥ 500 M/s cycles		
IP RATING	IP 52 - IP 62 - IP 65		

### IDENTIFICATION CODE

	H	X	7	5	4	4	E	V	C	3	24
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**• ORIFICES**

H	Ø eq = 1.3 mm
B	Ø eq = 1.8 mm
M	Ø eq = 2.1 mm (control tension JJ XX KK)

**• VERSION**

	Standard
H	HNBR Shutters

**• No. ELECTRICAL CONTROLS**

4	4 Controls
C	4 Controls / Integrated diodes with common 0 V
F	4 Controls / Integrated diodes with common 12/24 V

**• 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**

4	4 Outlets
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**• FUNCTION**

A	NO
C	NC

**• TYPE**

3	3/2
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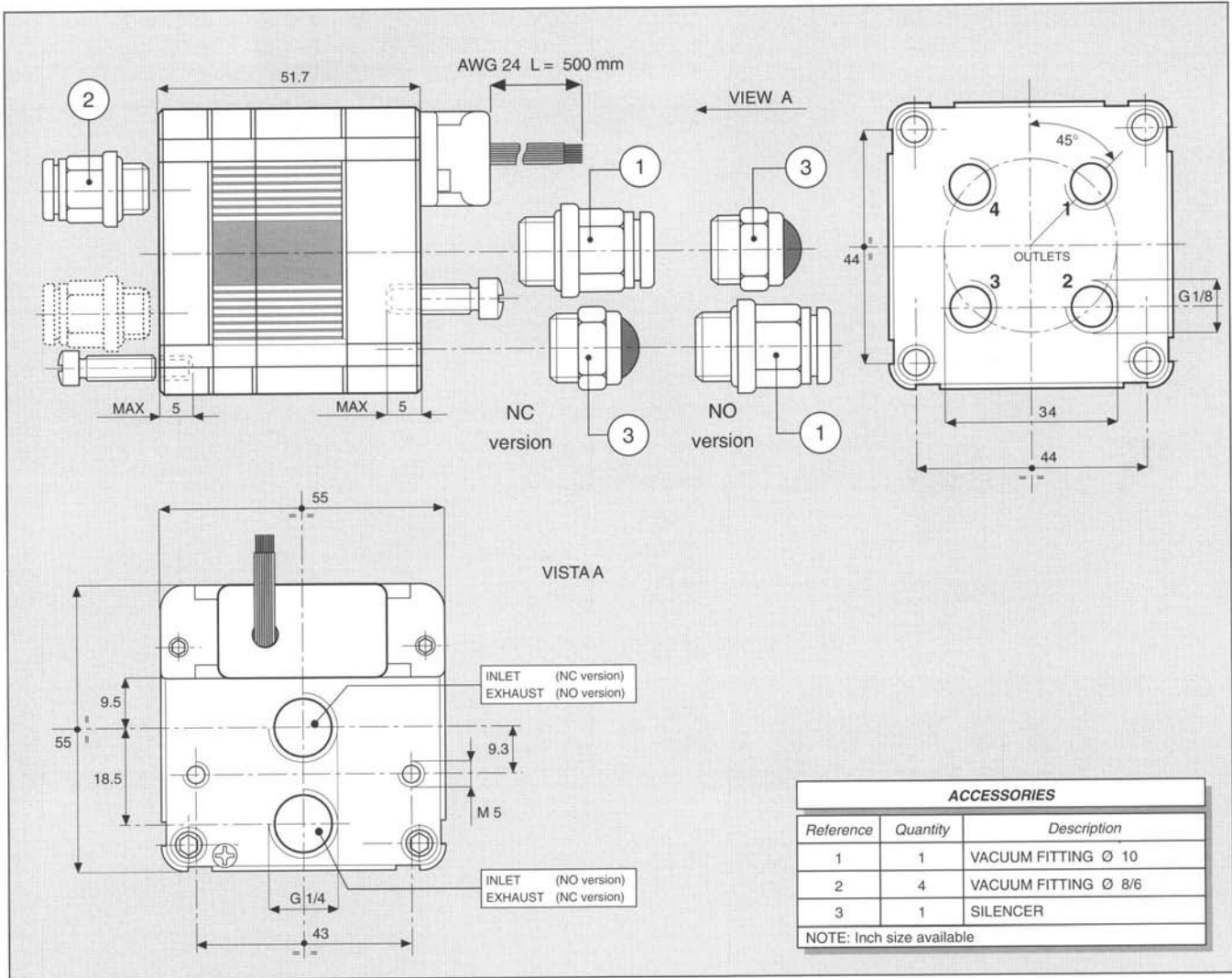
**• CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	2.9 W
24	24 VDC ± 10 %	ED 100 %	2.5 W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	3.8 W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

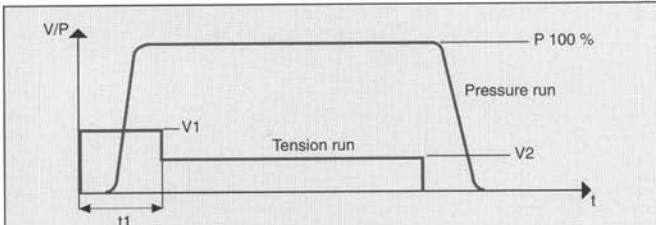
(1) Only with Electronic Driver Boards PRB or UDB

**• OPERATING PRESSURE**

	RANGE	MODELS
V	10 <sup>-5</sup> Torr	All



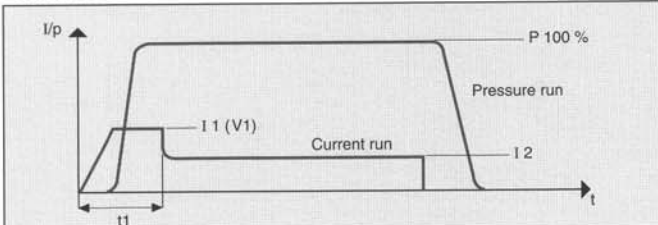
**CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK**



N.B. KK MODELS ARE CONTROLLED IN TENSION

V1 = 24 VDC      t1 = 2 ms      V2 = 5 VDC

**CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX**



N.B. XX MODELS ARE CONTROLLED IN CURRENT

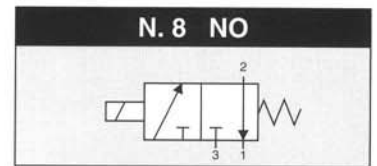
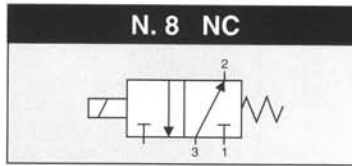
I1 = 1.4 A      t1 = 2 ms      I2 = 0.6 A

**ELECTRICAL PORT CONNECTION**

COLOUR	4 CONTROL
BLACK	COMMON
BROWN	1
RED	2
ORANGE	3
YELLOW	4



CONTROL: DIRECT



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 / 24 < 7 ms	JJ < 5 ms	XX / KK < 2 ms
RESPONSE TIME IN CLOSING	12 / 24 < 3 ms	JJ < 2 ms	XX / KK < 2 ms
MAXIMUM FREQUENCY	100 Hz	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	V	C	3	24
--	---	---	---	---	---	---	---	---	---	---	----

**ORIFICES**

H	Ø eq = 0.9 mm
B	Ø eq = 1.3 mm
M	Ø eq = 1.5 mm (control tension JJ XX KK)

**VERSION**

	Standard
H	HNBR Shutters

**No. ELECTRICAL CONTROLS**

8	8 Controls
D	8 Controls / Integrated diodes with common 0 V
G	8 Controls / Integrated diodes with common 12 / 24 V

**OUTLETS**

8	8 Outlets
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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

**FUNCTION**

A	NO
C	NC

**TYPE**

3	3/2
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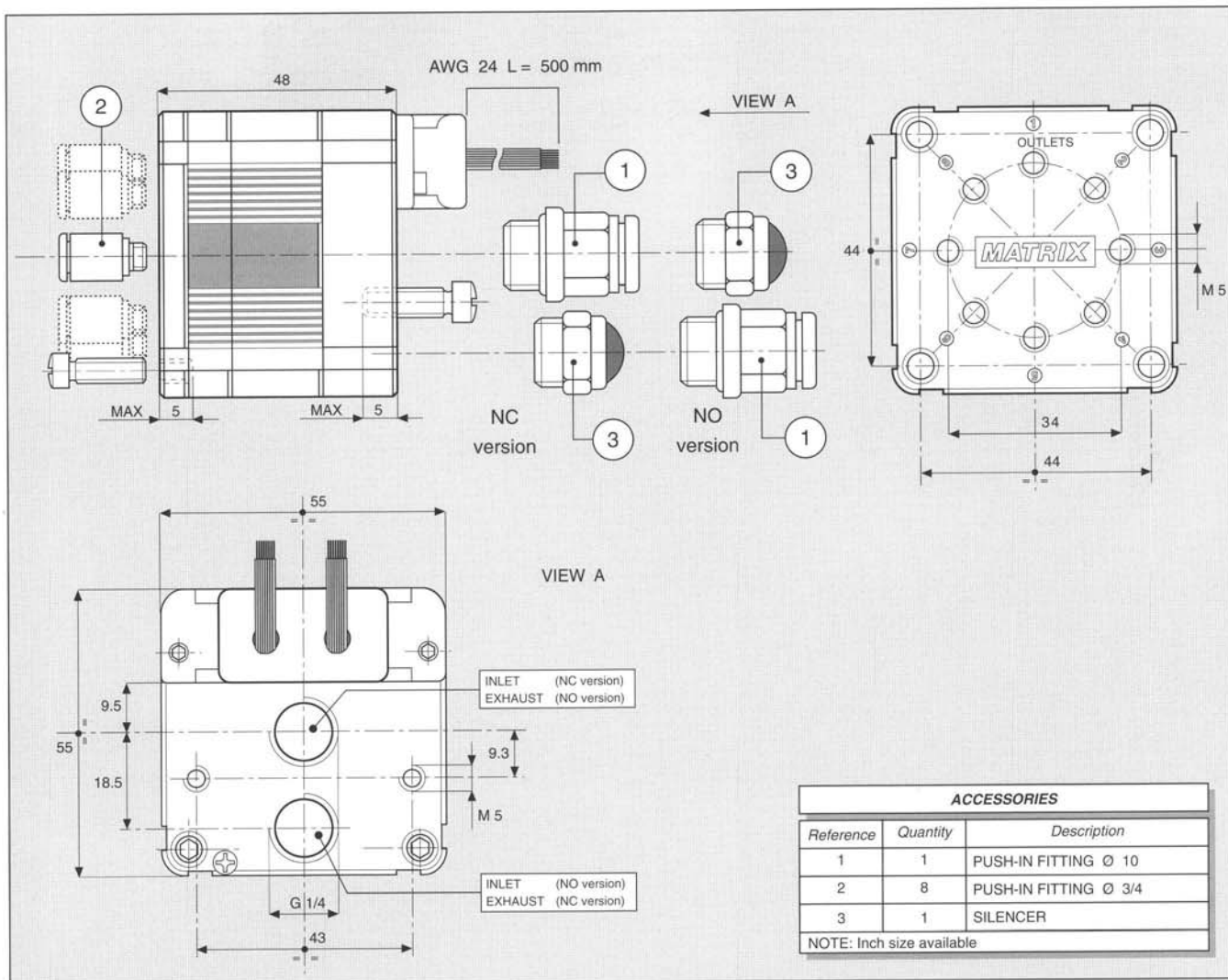
**CONTROL TENSION**

12	12 VDC ± 10 %	ED 100 %	1.4 W
24	24 VDC ± 10 %	ED 100 %	1.2 W
JJ	24 VDC ± 10 %	ED 100 % <sup>(1)</sup>	1.9 W
XX	Speed-up in current	ED 100 % <sup>(1)</sup>	—
KK	Speed-up in tension	ED 100 % <sup>(1)</sup>	—

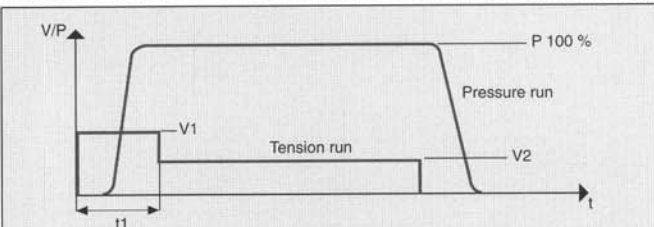
(1) Only with Electronic Driver Boards PRB or UDB

**OPERATING PRESSURE**

	RANGE	MODELS
V	10 <sup>-5</sup> Torr	All



**CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK**



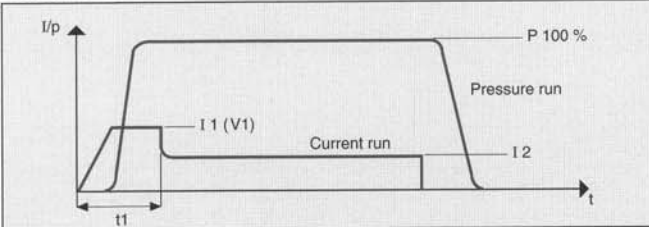
N.B. KK MODELS ARE CONTROLLED IN TENSION

V1 = 24 VDC

t1 = 2 ms

V2 = 5 VDC

**CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS XX**



N.B. XX MODELS ARE CONTROLLED IN CURRENT

I1 = 0.7 A

t1 = 2 ms

I2 = 0.3 A

**ELECTRICAL PORT CONNECTION**

COLOUR	8 CONTROLS
BLACK	COMMON
BROWN	1
RED	2
ORANGE	3
YELLOW	4
GREEN	5
BLUE	6
VIOLET	7
GREY	8