



aerospace  
climate control  
electromechanical  
filtration  
**fluid & gas handling**  
hydraulics  
pneumatics  
process control  
sealing & shielding



## High Flow NAMUR 1/4" & 1/2" valves

for actuator control



ENGINEERING YOUR SUCCESS.

# General Information

## Technical Data

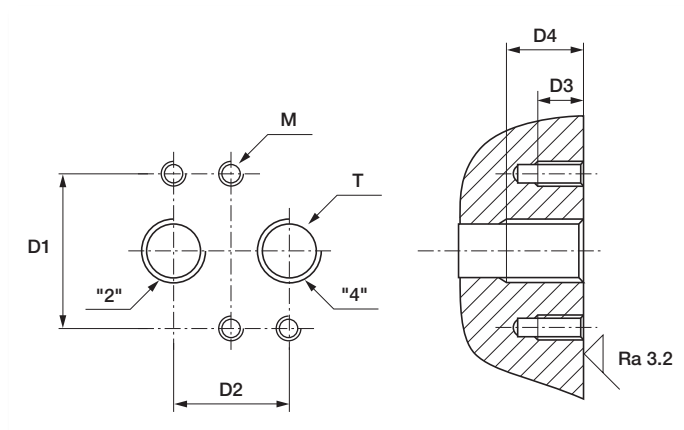
<b>Function</b>	3/2, 5/2 and 5/3 solenoid and air operated valves
<b>Manual override</b>	Standard on all solenoid operated versions
<b>Design</b>	Pilot operated spool valve with combined pneumatic and spring return
<b>Mounting</b>	For direct mounting on NAMUR 1/4" & 1/2" interface
<b>Mounting position</b>	Indifferent
<b>Material specifications</b>	Aluminium body - Internal parts from stainless steel - Sealing material from NBR
<b>Range of admissible pressure drop</b>	$\Delta p$ min. = see table page 4 or 6 $\Delta p$ max. = 10 bar
<b>Media</b>	Dry or lubricated air
<b>Fluid temperature</b>	Minimum 0° C Maximum + 50° C
<b>Ambient temperature</b>	-10° C à +50° C
<b>Electrical part</b>	Miniature coil 496131 (3W) encapsulated in synthetic material Connection with 3-pin DIN 43650 type B plug. Degree of protection IP 65
<b>Solenoid duty</b>	100% ED
<b>Voltage</b>	12 VDC , 24 VDC , 48 VDC , 110 VDC , 24 V / 50-60 AC, 48 V / 50-60 AC, 110 V / 50-60 AC, 115 V / 60 Hz AC, 230 V / 50-60 AC
<b>Voltage tolerance</b>	± 10% of nominal
<b>Class of insulation material</b>	Class F

## Applications

- 3- or 4- way directional valves for the control of single - or double acting pneumatic actuators.
- The interface design corresponds to the NAMUR standard and the VDI/VDE 3845 recommendations of the actuator industry and permits a compact design of the actuator/valve unit.

## NAMUR Interfaces 1/4" & 1/2"

T	D1 mm	D2 mm	D3 mm	D4 min. Mm	M mm
1/4	32	24	8	12	M5
1/2	45	40	10	16	M6



# Coils

Voltage	Without DIN plug		With DIN plug		Zone ATEX 22*	
	Description	Order code	Description	Order code	Description	Order code
12VDC	22 mm standard coil 3W	<b>496131 C1</b>	22 mm standard coil 3W	<b>496482 C1</b>	22 mm Ex II 3D 3W	<b>496637 C1</b>
24VDC	22 mm standard coil 3W	<b>496131 C2</b>	22 mm standard coil 3W	<b>496482 C2</b>	22 mm Ex II 3D 3W	<b>496637 C2</b>
48VDC	22 mm standard coil 3W	<b>496131 C4</b>	22 mm standard coil 3W	<b>496482 C4</b>	22 mm Ex II 3D 3W	<b>496637 C4</b>
110 VDC	22 mm standard coil 3W	<b>496131 C5</b>	22 mm standard coil 3W	<b>496482 C5</b>	22 mm Ex II 3D 3W	<b>496637 C5</b>
24/50-60AC	22 mm standard coil 3W	<b>496131 P0</b>	22 mm standard coil 3W	<b>496482 P0</b>	22 mm Ex II 3D 3W	<b>496637 P0</b>
48/50-60AC	22 mm standard coil 3W	<b>496131 S4</b>	22 mm standard coil 3W	<b>496482 S4</b>	22 mm Ex II 3D 3W	<b>496637 S4</b>
110/50-60AC	22 mm standard coil 3W	<b>496131 P2</b>	22 mm standard coil 3W	<b>496482 P2</b>	22 mm Ex II 3D 3W	<b>496637 P2</b>
115/60AC	22 mm standard coil 3W	<b>496131 K8</b>	22 mm standard coil 3W	<b>496482 K8</b>	22 mm Ex II 3D 3W	<b>496637 K8</b>
230/50-60AC	22 mm standard coil 3W	<b>496131 P9</b>	22 mm standard coil 3W	<b>496482 P9</b>	22 mm Ex II 3D 3W	<b>496637 P9</b>

\* Application explosive dust atmosphere (zone 22).

## How to order

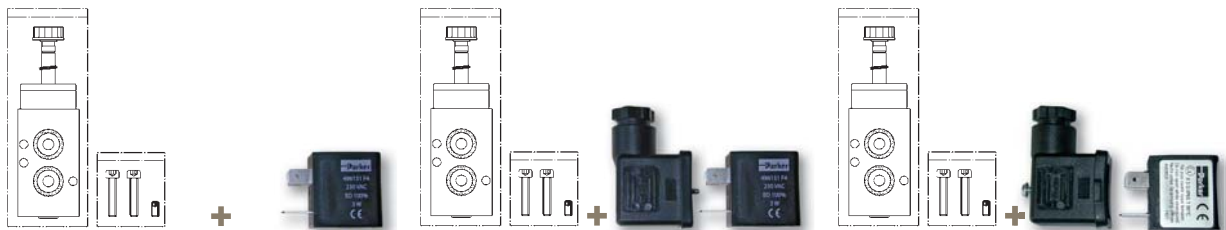
Valve reference No.\* - Coil reference – Voltage code =

\* Includes mounting kit for coil assembly + 2x NAMUR O-rings  
+ 2 mounting screws and positioning dowel

Valves and coils may also be orders separately.

### Order code

(non assembled)



Example: 341 N 03 + 496131C2 =  
**341N03-496131C2**

Example: 341 N 03 + 496482C2 =  
**341N03-496482C2**

Example: 341 N 03 + 496637C2 =  
**341N03-496637C2**

## Spare Parts

### Spare Housing

#### Plastic nut with O-ring

Maximum torque 0.5 Nm

### Order code

**3125**



### Spare part mounting kit

#### For G 1/4" models

Spare part kit includes:  
2 screws DIN912 M5x25 A2, 1 pin DIN 913 M5x10 A2, 2 O-rings NBR 15x2.5

### Order code

**496132**



#### For G 1/2" models

Spare part kit includes:  
2 screws DIN912 M6x35 A2, 1 pin DIN 913 M6x12 A2, 2 O-rings NBR 24x3

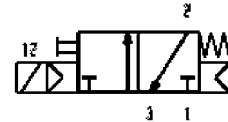
**496133**



# G 1/4" Serie

Port size	Orifice	Qn	Admissible differential pressure (bar)		Max. admissible fluid temperature (°C)	Seat disc	Reference number		(Watt) consumption Power		(g) Weight	Dimensions Reference
			max.	min.			Valve	Coil	DC	AC		
G	mm	L/min	min	DC= AC~	Air & Neutral gases		Valve	Coil	DC	AC		

## 3/2 Pilot operated valve - Internal pressure supply



1/4	7	1250		10	10	50	NBR	<b>331N03</b>	496131	3	3	300	1
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## 5/2 Pilot operated valve - Internal pressure supply



1/4	7	1250		10	10	50	NBR	<b>341N03</b>	496131	3	3	300	2
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## 5/2 Control by 2 solenoids and internal pressure supply



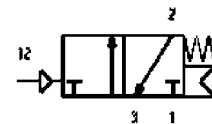
1/4	7	1250	2	10	10	50	NBR	<b>347N03</b>	496131	3	3	430	3
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## 5/3 Control by 2 solenoids and internal pressure supply Closed in centre position



1/4	7	1250	3	10	10	50	NBR	<b>342N03</b>	496131	3	3	430	4
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## 3/2 Externally operated valve - External pressure supply 2.5 to 10 bar



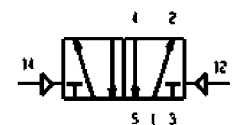
1/4	7	1250	2.5	10	10	50	NBR	<b>531N03</b>	-	-	-	210	5
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## 5/2 Externally operated valve - External pressure supply 2.5 to 10 bar



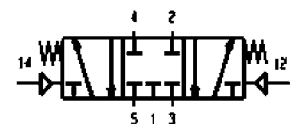
1/4	7	1250	2.5	10	10	50	NBR	<b>541N03</b>	-	-	-	210	6
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## 5/2 Externally operated valve - 2 x External pressure supply 2 to 10 bar

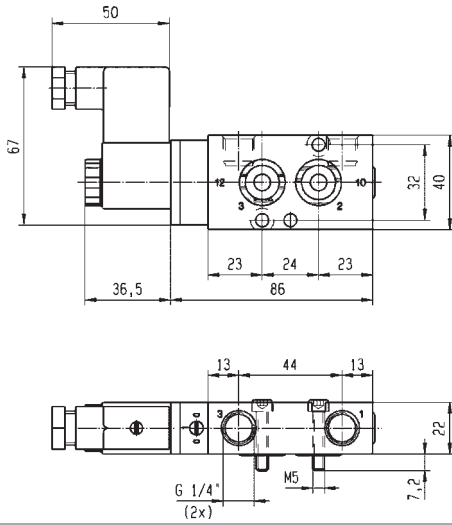


1/4	7	1250	1.5	10	10	50	NBR	<b>547N03</b>	-	-	-	240	7
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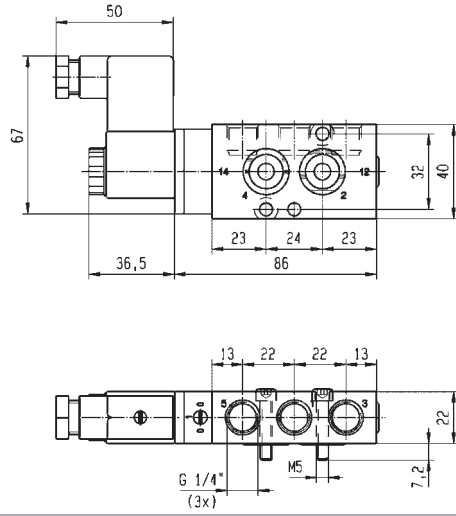
## 5/3 Externally operated valve - 2 x External pressure supply 3 to 10 bar Closed in centre position



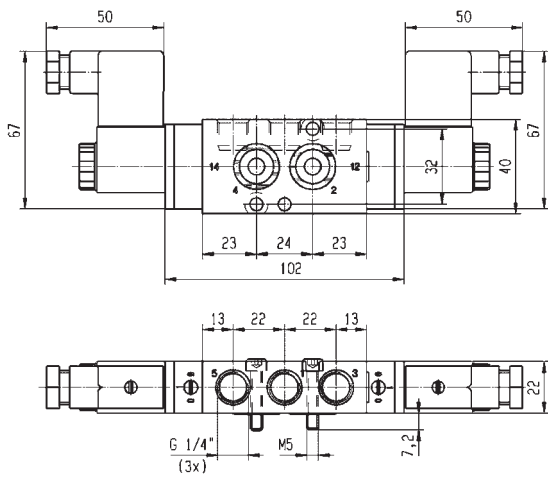
1/4	7	1250	1.5	10	10	50	NBR	<b>542N03</b>	-	-	-	210	8
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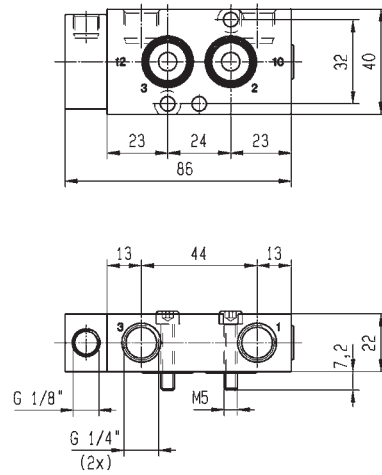
Dimensions Reference 1



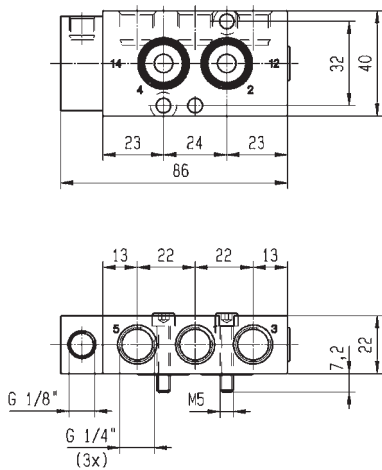
Dimensions Reference 2



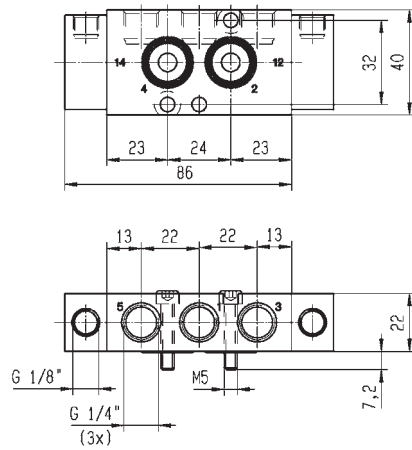
Dimensions Reference 3 & 4



Dimensions Reference 5



Dimensions Reference 6



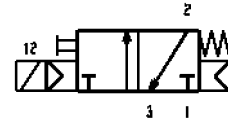
Dimensions Reference 7 & 8



# G 1/2" Serie

Port size	Orifice	Q <sub>N</sub>	Admissible differential pressure (bar)		Max. admissible fluid temperature (°C)	Seat disc	Reference number		(Watt) consumption Power		(g) Weight	Dimensions Reference
			max.	min.			Valve	Coil	DC	AC		
G	mm	L/min	min	DC= AC~	Air & Neutral gases							

## 3/2 Pilot operated valve - Internal pressure supply



1/2	12	3000	2.5	10	10	50	NBR	<b>331N04</b>	496131	3	3	720	9
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## 5/2 Pilot operated valve - Internal pressure supply



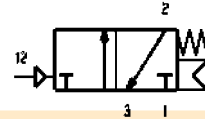
1/2	12	3000	2.5	10	10	50	NBR	<b>341N04</b>	496131	3	3	700	10
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## 5/2 Control by 2 solenoids and internal pressure supply



1/4	7	1250	2	10	10	50	NBR	<b>347N04</b>	496131	3	3	430	11
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## 3/2 Externally operated valve - External pressure supply 2.5 to 10 bar



1/2	12	3000	2.5	10	10	50	NBR	<b>531N04</b>	-	-	-	620	12
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## 5/2 Externally operated valve - External pressure supply 2.5 to 10 bar



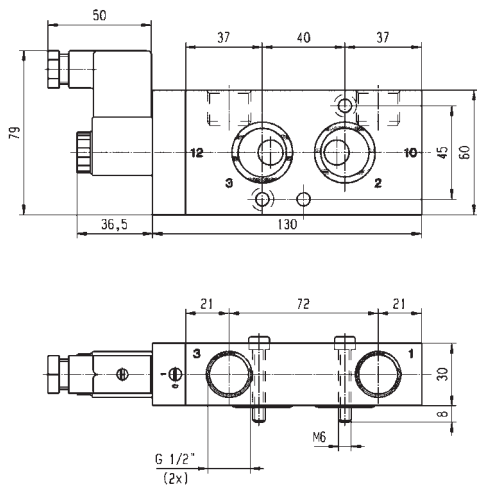
1/2	12	3000	2.5	10	10	50	NBR	<b>541N04</b>	-	-	-	600	13
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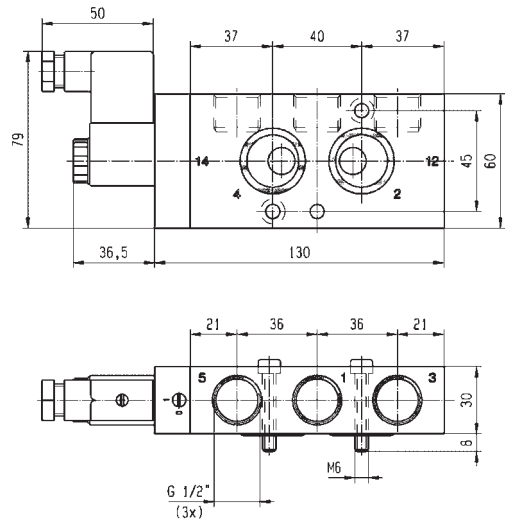
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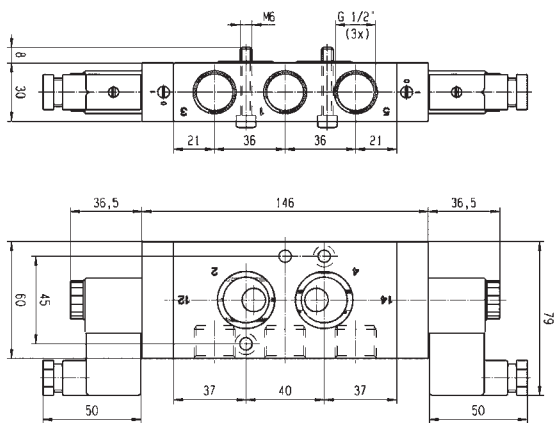
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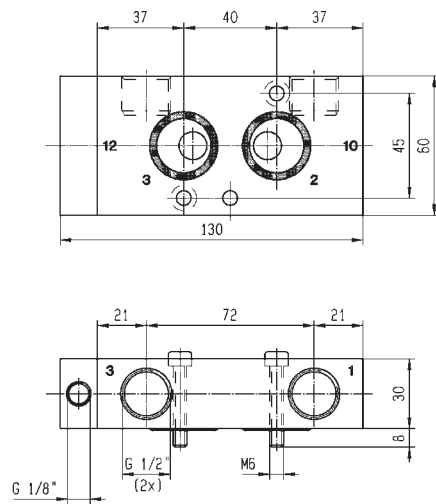
Dimensions Reference 9



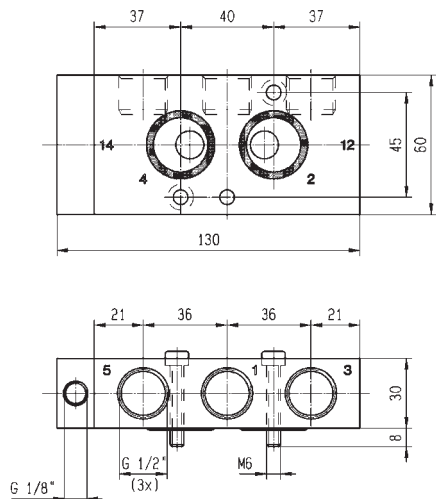
Dimensions Reference 10



Dimensions Reference 11



Dimensions Reference 12



Dimensions Reference 13

# Worldwide division headquarters

## **Parker Lucifer SA**

Fluid Control Division Europe  
Ch. Fbg-de-Cruseilles, 16  
**CH** - 1227 Carouge / Geneva  
Switzerland  
Tel. : +41 22 30 77 111  
Fax : +41 22 30 77 110  
[www.parker.com/fcde](http://www.parker.com/fcde)  
[infolucifer@parker.com](mailto:infolucifer@parker.com)

## **Parker Hannifin S.p.A.**

Fluid Control Division Europe  
Via E. Fermi, 5  
**IT** - 20060 Gessate (Milan)  
Italy  
Tel. : + 39 02 95 125 1  
Fax : + 39 02 95 382 051  
[www.parker.com/fcde](http://www.parker.com/fcde)  
[cicgessate@parker.com](mailto:cicgessate@parker.com)

## **Parker Hannifin Corporation**

Fluid Control Division  
95 Edgewood Ave.  
**US** - New Britain, CT 06051-4100  
USA  
Tel. : +1 (860) 827 2300  
Fax : +1 (860) 827 2384  
[www.parker.com/fcd](http://www.parker.com/fcd)  
[skinnervalue@parker.com](mailto:skinnervalue@parker.com)

## **Parker Hannifin Corporation**

Fluid Control Division  
147 West Hoy Road  
**US** - Madison, MS 39110-9357  
USA  
Tel. : +1 (601) 856 4123  
Fax : +1 (601) 853 7250  
[www.parker.com/fcd](http://www.parker.com/fcd)  
[skinnervalue@parker.com](mailto:skinnervalue@parker.com)

## **Parker Korea Ltd.**

Fluid Control Division  
777 Jungri, Dongtanmyeon,  
**KR** - Hwasungsi, Kyunggido,  
445-813 - South Korea  
Tel. : (82) 31 379 2200  
Fax : (82) 31 377 9710  
[www.parker.com/fcd](http://www.parker.com/fcd)



## **Parker Lucifer SA**

Climate & Industrial Controls Group  
Fluid Control Division Europe  
Ch. Fbg de Cruseilles, 16  
1227 Carouge / Geneva  
Switzerland  
Tel. : +41 22 30 77 111  
Fax : +41 22 30 77 110  
[www.parker.com/fcde](http://www.parker.com/fcde)  
[infolucifer@parker.com](mailto:infolucifer@parker.com)