SPOOL VALVES
Series 400/500

General

These are 2 stage valves actuated electro-pneumatically. A serie 300 directly operated solenoid valve actuates pneumatically the principal power distributor. This integrated system allows configurations of systems requiring very little space. The pilot air is normally taken from the inlet port (autofeed) and the only actuating signal is electric.
The range of the solenoid valves, as far as dimensions and mechanical construction, is similar to series 200. We have therefore solenoid valves G 1/8", G 1/4", G 1/2" and G 1" with identical pneumatic characteristics that are, however, actuated electrically. They have a balanced spool, insentive to presence or absence of pressure. They are constructed in 3 and 5 way with 1 solenoid (monostable) or 2 solenoids (bistable) and also 5 ways 3 positions with closed centres, open centres and pressured centres.

If should be noted that the autofeed of the electric pilot requires always inlet through port 1 and if a 3 ways normally open configuration is desired, it is necessary to switch the operators.
In the tables showing individual valves, the quick reference tables show the output in Nl/min at a inlet pressure of 6 bar and a pressure drop of 1 bar. All information was obtained using standards CETOP RP 50P.

Solenoid valves G 1/8" and G 1/4" can be equipped with microsolenoids as well as standard solenoids and they can be mounted in line or in 90 degrees on distributors. Please note that while the microsolenoid can be mounted in any direction, standard solenoid requires mounting as inticated in the photographs and diagrams.

The order codes pertain only to the solenoid valve with mechanical actuator "M2" or solenoid "S*" already assembled (see Series 300, section 1). (M2 coils are not included and have to be ordered separately).

Coils for M2 and solenoids "S" c UL us homologated are available (see Series 300).

Construction characteristics

Body	Aluminium
Operators	Aluminium Technopolymer for spring botton plate G 1/8", G1/4", G 1/2" and aluminium for G 1"
Spools	Stainless steel / Technopolymer fpt Series T488
Seals	NBR Polyurethane compound for oil free applications G 1/8", G 1/4" and G 1/2"
Spacers	Technopolymer (aluminium for G1")
Spring	Stainless steel or spring steel

Use and maintenance

These valves have an average life of 15 million cycles depending on the application and air quality, filtered and lubricated air using specified lubricants will dramatically reduce the wear of the seals and ensures long and trouble free operation.
Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature and that exhaust ports 3 & 5 are protected against the possible ingress of dirt or debris.
Repair kits including the spool complete with seals are available for overhauling the valves; however, although this is a simple operation it should be carried out by a competent person.

ATTENTION: use hydraulic oil class H for lubrication such as MAGNA GC 32 (Castrol).

(2020/10)

		Symbol	Description		Code	Max. pressure	Flow at 6 bar, Δp=1	Orifice size
G 1/8" 	3/2		Solenoid - Spring		468.32.0.1.M2	2,5-10 bar	540Nl/min	mm 6
			Solenoid - Differential		468.32.0.12.M2			
			Solenoid - Solenoid		468.32.0.0.M2	2-10 bar		
	5/2		Solenoid - Spring		468.52.0.1.M2	2,5-10 bar		
			Solenoid - Differential		468.52.0.12.M2			
			Solenoid - Solenoid		468.52.0.0.M2	2-10 bar		
	5/3		Solenoid - Solenoid - C.C.		468.53.31.0.0.M2	3-10 bar	410Nl/min	mm 6
			Solenoid - Solenoid - O.C.		468.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.		468.53.33.0.0.M2			
	3/2		Solenoid - Spring	STD	468/1.32.0.1.M2	2,5-10 bar	540Nl/min	mm 6
			Solenoid - Differential		468/1.32.0.12.M2			
			Solenoid - Solenoid	STD	468/1.32.0.0.M2	2-10 bar		
	5/2		Solenoid - Spring	STD	468/1.52.0.1.M2	2,5-10 bar		
			Solenoid - Differential		468/1.52.0.12.M2			
			Solenoid - Solenoid	STD	468/1.52.0.0.M2	2-10 bar		
	5/3		Solenoid - Solenoid - C.C.	STD	468/1.53.31.0.0.M2	3-10 bar	410Nl/min	
			Solenoid - Solenoid - O.C.	STD	468/1.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.	STD	468/1.53.33.0.0.M2			

PNEUMAX

SOLENOID VALVES
(series 400, section 2)

		Symbol	Description		Code	Max. pressure	Flow at 6 bar, Δp=1	Orifice size
G 1/4" 	3/2		Solenoid - Spring		464.32.0.1.M2	2,5-10 bar	1360Nl/min	mm 8
			Solenoid - Differential		464.32.0.12.M2			
			Solenoid - Solenoid		464.32.0.0.M2	2-10 bar		
	5/2		Solenoid - Spring		464.52.0.1.M2	2,5-10 bar		
			Solenoid - Differential		464.52.0.12.M2			
			Solenoid - Solenoid		464.52.0.0.M2	2-10 bar		
	5/3		Solenoid - Solenoid - C.C.		464.53.31.0.0.M2	3-10 bar	1280Nl/min	
			Solenoid - Solenoid - O.C.		464.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.		464.53.33.0.0.M2			
	3/2		Solenoid - Spring	STD	464/1.32.0.1.M2	2,5-10 bar	1360Nl/min	
			Solenoid - Differential		464/1.32.0.12.M2			
			Solenoid - Solenoid	STD	464/1.32.0.0.M2	2-10 bar		
	5/2		Solenoid - Spring	STD	464/1.52.0.1.M2	2,5-10 bar		
			Solenoid - Differential		464/1.52.0.12.M2			
			Solenoid - Solenoid	STD	464/1.52.0.0.M2	2-10 bar		
	5/3		Solenoid - Solenoid - C.C.	STD	464/1.53.31.0.0.M2	3-10 bar	1280Nl/min	
			Solenoid - Solenoid - O.C.	STD	464/1.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.	STD	464/1.53.33.0.0.M2			

Namur
Interface

M2 | B00 | Use MB-coil (not included)

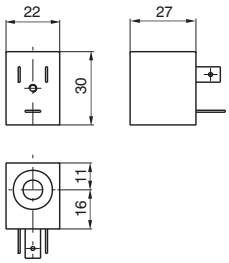
		Operational characteristics				
514.92.00.39.B00 LT	STD 	Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Max working pressure (bar)	Orifice size (mm)	Working ports size	Temperature °C
5/2 Solenoid-Spring (=3/2 NC)		Filtered and lubricated air	1100	10	8	G1/4"	-30 ÷ +50

		Operational characteristics				
514.92.00.35.B00 LT	STD 	Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Max working pressure (bar)	Orifice size (mm)	Working ports size	Temperature °C
5/2 Solenoid-Solenoid (=3/2 NC)		Filtered and lubricated air	1100	10	8	G1/4"	-30 ÷ +50

		Symbol	Description		Code	Max. pressure	Flow at 6 bar, Δp=1	Orifice size
G 1/2"	3/2		Solenoid - Spring		452.32.0.1.M2	2,5-10 bar	3500Nl/min	mm 15
			Solenoid - Differential		452.32.0.12.M2			
			Solenoid - Solenoid		452.32.0.0.M2	2-10 bar		
	5/2		Solenoid - Spring		452.52.0.1.M2	2,5-10 bar		
			Solenoid - Differential		452.52.0.12.M2			
			Solenoid - Solenoid		452.52.0.0.M2	2-10 bar		
	5/3		Solenoid - Solenoid - C.C.		452.53.31.0.0.M2	3-10 bar	3000Nl/min	
			Solenoid - Solenoid - O.C.		452.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.		452.53.33.0.0.M2			
	3/2		Solenoid - Spring	STD	452/1.32.0.1.M2	2,5-10 bar	3500Nl/min	mm 15
			Solenoid - Differential		452/1.32.0.12.M2	2-10 bar		
			Solenoid - Solenoid	STD	452/1.32.0.0.M2	2,5-10 bar		
	5/2		Solenoid - Spring	STD	452/1.52.0.1.M2			
			Solenoid - Differential		452/1.52.0.12.M2	2-10 bar		
			Solenoid - Solenoid	STD	452/1.52.0.0.M2	3-10 bar	3000Nl/min	
	5/3		Solenoid - Solenoid - C.C.	STD	452/1.53.31.0.0.M2			
			Solenoid - Solenoid - O.C.	STD	452/1.53.32.0.0.M2			
			Solenoid - Solenoid - P.C.	STD	452/1.53.33.0.0.M2			

Coil

Coil type U1



Weight 54 gr.

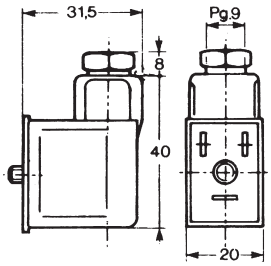
* Use only with M2/9

Ordering code	Available voltages Coils	
MB 4	12 D.C. STD	Direct current
MB 5	24 D.C. STD	
MB 6	48 D.C. STD	
MB 9*	24 D.C. (2 Watt) (Direct current, low consumption)	
MB 17	24/50 STD	Alternating current 50 Hz
MB 21	48/50 STD	
MB 22	110/50 STD	
MB 24	230/50 STD	
MB 37	24/60	Alternating current 60 Hz
MB 39	110/60	
MB 41	230/60	
MB 56	24/50-60	Alternating current 50/60 Hz
MB 57	110/50-60	
MB 58	230/50-60	
MB 66	24/50-60	Alternating current (low consumption) 50/60 Hz
MB 67	110/50-60	
MB 68	230/50-60	

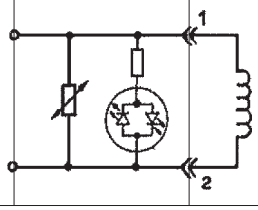
(2020/10)

Connector for coil (DIN 43650)

Ordering code	Supply voltage until	Coil type	Protection class	Remarks
MP1	0-250V~/300V=	U1	IP 65	CONNECTOR
MP1-LED-24V	24V	U1	IP 65	+LED
MP1-LED-24V-5M	24V	U1	IP 65	+LED+CABLE
MP1-LED-230V	230V	U1	IP 65	+LED



Electronic circuit for MP-LED

Input	Connector	Coil
V ac-dc		

Bipolar LED and VDR to protect supply and switch.
(The energy in the coil is limited by the VDR).
Voltage: 24 or 230V.

(2020/10)

☎ +32 3 355 32 20


PNEUMAX

2

Solenoid - Spring

3/2

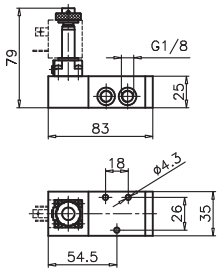
Ordering code

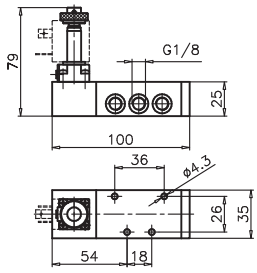
468.T.0.1.M2

T	TYPE
	32=3 ways
	52=5 ways

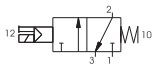
5/2

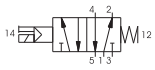
Solenoid - Spring





Weight gr. 240
Minimum working pressure 2,5 bar





Weight gr. 240
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

Solenoid - Differential

3/2

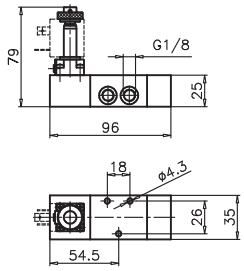
Ordering code

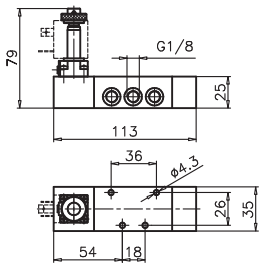
468.T.0.12.M2

T	TYPE
	32=3 ways
	52=5 ways

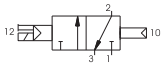
5/2

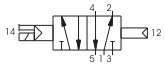
Solenoid - Differential





Weight gr. 280
Minimum working pressure 2,5 bar





Weight gr. 320
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

Solenoid - Solenoid

3/2

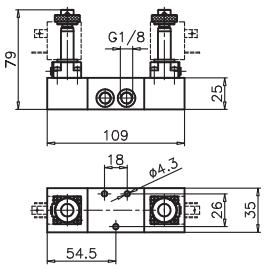
Ordering code

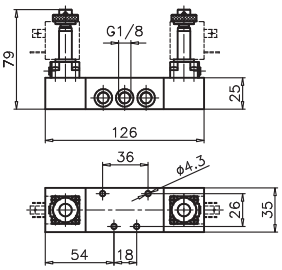
468.T.0.0.M2

T	TYPE
	32=3 ways
	52=5 ways

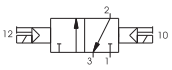
5/2

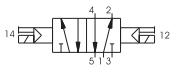
Solenoid - Solenoid





Weight gr. 370
Minimum working pressure 2 bar





Weight gr. 410
Minimum working pressure 2 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

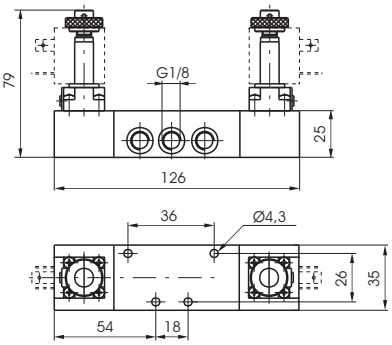
Solenoid - Solenoid

5/3

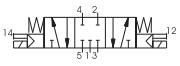
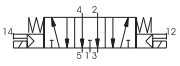
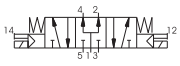
Ordering code

468.53.Ⓕ.0.0.M2

Ⓕ	FUNCTION
	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 420
Minimum working pressure 3 bar

Operational characteristics

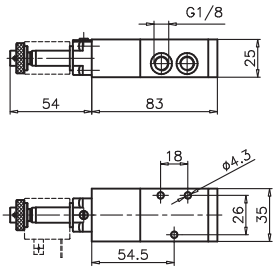
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	410 Nl/min	mm 6	G 1/8"

3/2 Solenoid - Spring

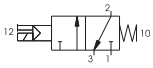
Ordering code

468/1.Ⓣ.0.1.M2

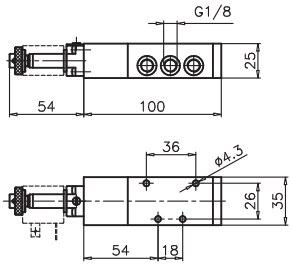
Ⓣ	TYPE
	32=3 ways
	52=5 ways



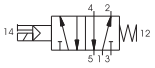
Weight gr. 240
Minimum working pressure 2,5 bar



Solenoid - Spring 5/2



Weight gr. 280
Minimum working pressure 2,5 bar



Operational characteristics

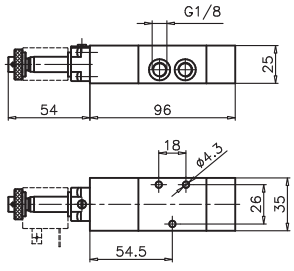
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

3/2 Solenoid - Differential

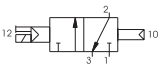
Ordering code

468/1.Ⓣ.0.12.M2

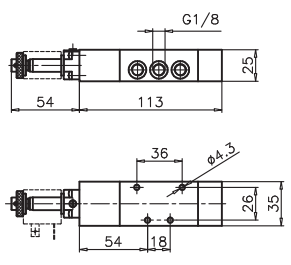
Ⓣ	TYPE
	32=3 ways
	52=5 ways



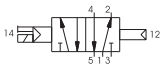
Weight gr. 280
Minimum working pressure 2,5 bar



Solenoid - Differential 5/2



Weight gr. 320
Minimum working pressure 2,5 bar



Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

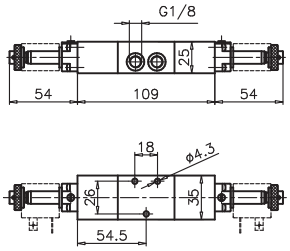
2

3/2 Solenoid - Solenoid

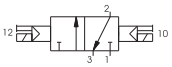
Ordering code

468/1.Ⓣ.0.0.M2

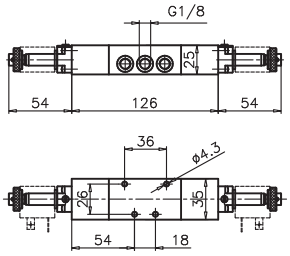
Ⓣ	TYPE
	32=3 ways
	52=5 ways



Weight gr. 370
Minimum working pressure 2 bar



5/2 Solenoid - Solenoid



Weight gr. 410
Minimum working pressure 2 bar

Operational characteristics

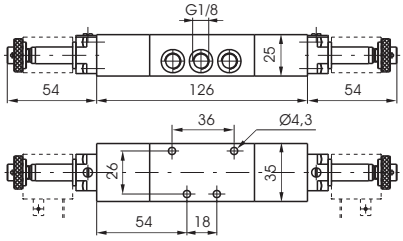
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	540 Nl/min	mm 6	G 1/8"

5/3 Solenoid - Solenoid

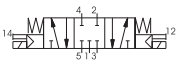
Ordering code

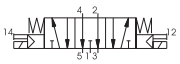
468/1.53.Ⓕ.0.0.M2

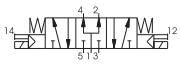
Ⓕ	FUNCTION
	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 420
Minimum working pressure 3 bar







Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	410 Nl/min	mm 6	G 1/8"

2

Solenoid - Spring

3/2

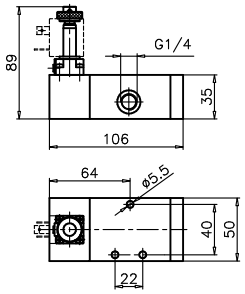
Ordering code

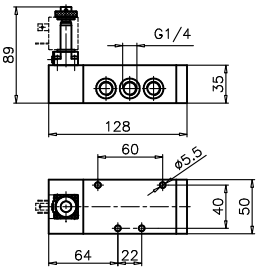
464.T.0.1.M2

T	TYPE
	32=3 ways
	52=5 ways

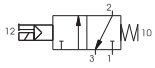
5/2

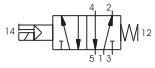
Solenoid - Spring





Weight gr. 530
Minimum working pressure 2,5 bar





Weight gr. 625
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

Solenoid - Differential

3/2

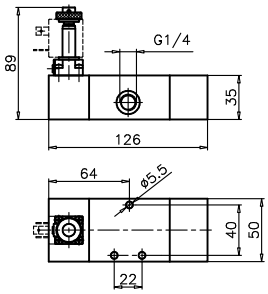
Ordering code

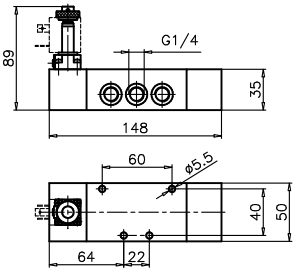
464.T.0.12.M2

T	TYPE
	32=3 ways
	52=5 ways

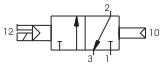
5/2

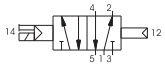
Solenoid - Differential





Weight gr. 650
Minimum working pressure 2,5 bar





Weight gr. 740
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

Solenoid - Solenoid

3/2

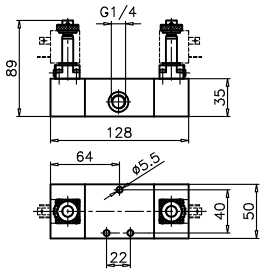
Ordering code

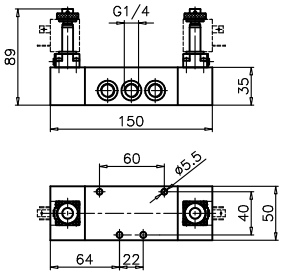
464.T.0.0.M2

T	TYPE
	32=3 ways
	52=5 ways

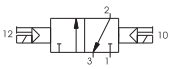
5/2

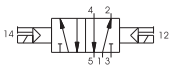
Solenoid - Solenoid





Weight gr. 730
Minimum working pressure 2 bar





Weight gr. 820
Minimum working pressure 2bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

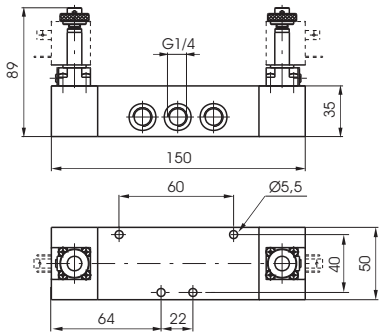
Solenoid - Solenoid

5/3

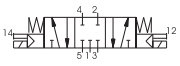
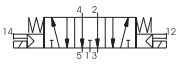
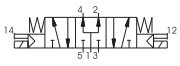
Ordering code

464.53.Ⓕ.0.0.M2

	FUNCTION
Ⓕ	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 820
Minimum working pressure 3 bar

Operational characteristics

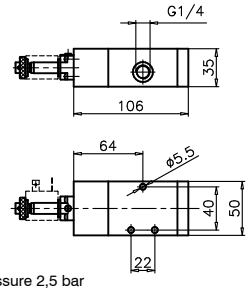
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 ÷ +50	1280 Nl/min	mm 8	G 1/4"

3/2 Solenoid - Spring

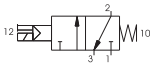
Ordering code

464/1.Ⓣ.0.1.M2

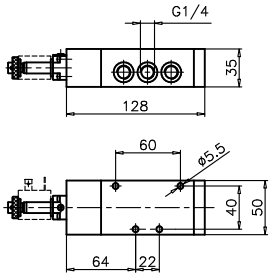
	TYPE
Ⓣ	32=3 ways
	52=5 ways



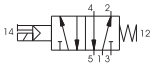
Weight gr. 530
Minimum working pressure 2,5 bar



Solenoid - Spring 5/2



Weight gr. 625
Minimum working pressure 2,5 bar



Operational characteristics

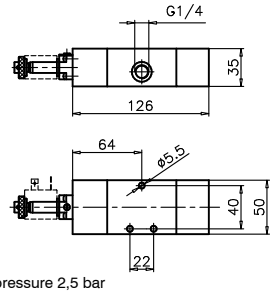
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

3/2 Solenoid - Differential

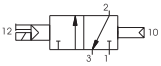
Ordering code

464/1.Ⓣ.0.12.M2

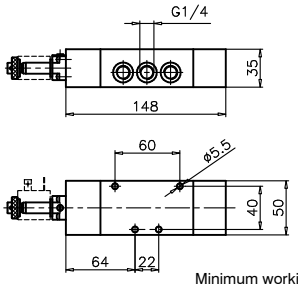
	TYPE
Ⓣ	32=3 ways
	52=5 ways



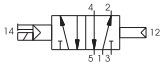
Weight gr. 650
Minimum working pressure 2,5 bar



Solenoid - Differential 5/2



Weight gr. 740
Minimum working pressure 2,5 bar



Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

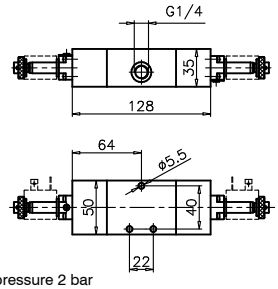
2

3/2 Solenoid - Solenoid

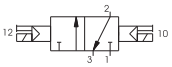
Ordering code

464/1.Ⓣ.0.0.M2

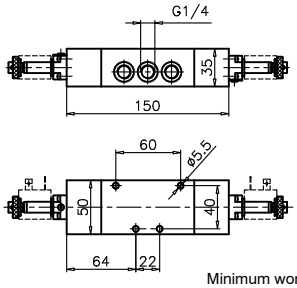
Ⓣ	TYPE
	32=3 ways
	52=5 ways



Weight gr. 730
Minimum working pressure 2 bar



5/2 Solenoid - Solenoid



Weight gr. 820
Minimum working pressure 2 bar

Operational characteristics

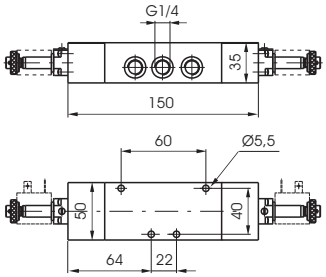
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	1360 Nl/min	mm 8	G 1/4"

5/3 Solenoid - Solenoid

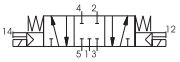
Ordering code

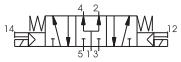
464/1.53.Ⓕ.0.0.M2

Ⓕ	FUNCTION
	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 820
Minimum working pressure 3 bar





Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	1280 Nl/min	mm 8	G 1/4"

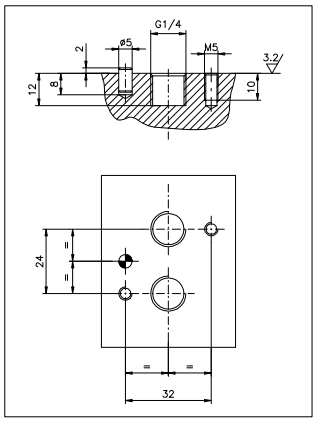
NAMUR valves are 5/2 and 4/2 valves and electrovalves, piloted electrically or pneumatically, utilised primarily to operate rotary actuators and wherever there is a **NAMUR** standard installation plan.
The product is available in 5/2 and 4/2 versions or in a universal version which can be configured by the end user by replacing the fitting plate and adding a stopper.

The product is classified for use in potentially explosive atmospheres (Directive 2014/34/EU).

NAMUR valves have been developed using the latest, technical design solutions which guarantee flexibility and an increased flow rate capacity exceeding that of traditional, spool valves.
In addition, they have been produced with innovative materials which guarantee increased performance.

NOTE :
"Although accurately described, the 4/2 valve actually functions as a 3/2 normally closed valve and should be used as such."

"NAMUR" interface dimensions:
according to standard
(VDI/VDE 3847 July 2003)



Construction characteristic

Body	Aluminium
Operators	Technopolymer
Spools	Steel
Seals	Nitrile rubber
Spacers	Technopolymer
Springs	Stainless Steel
Screw	Zinc coated Steel / Stainless steel

IMPORTANT: Version 515 (available only in 5/2), differs from version 514 because it is supplied without a plate.

Certifications available:
SOLENOID VALVES WITH XMB or XMC 3GD COIL

: **CE Ex II 3G Ex h IIB T4 Gc X**
CE Ex II 3D Ex h IIIC T120°C Dc X IP65

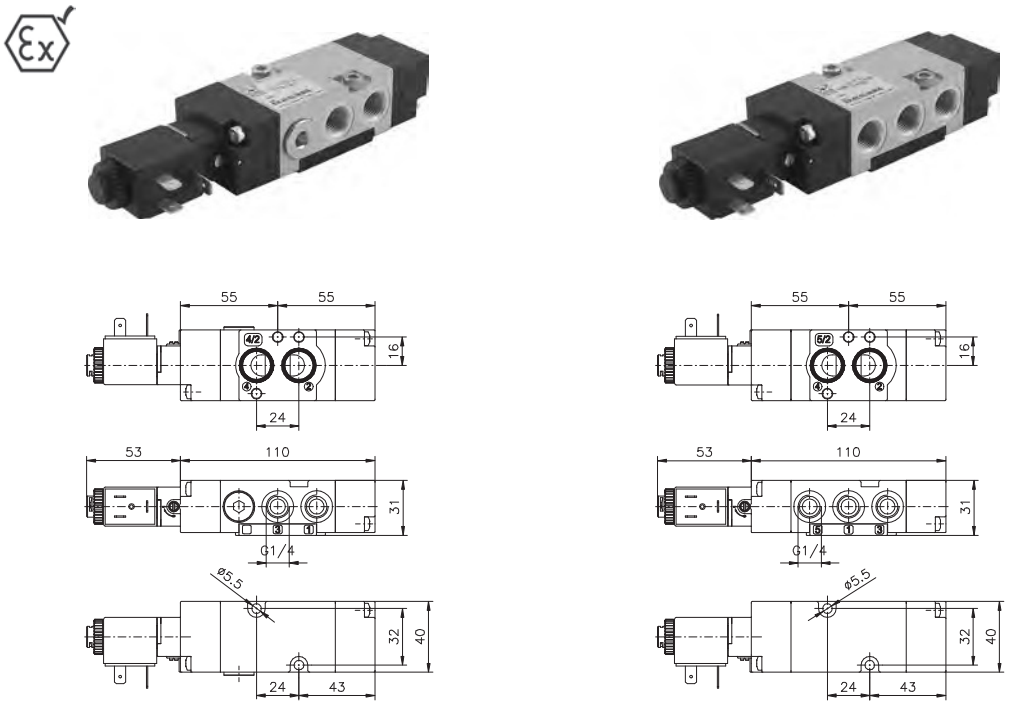
MECHANICAL AND PNEUMATIC VALVES WITHOUT COILS

: **CE Ex II 2G Ex h IIB T5 Gc X**
CE Ex II 2D Ex h IIIC T96°C Dc X IP65

Solenoid - Differential / Solenoid - Spring

4/2
5/2

Ordering code	
Ⓜ514.Ⓕ.00.Ⓥ.ⓉⓄ	
Ⓜ	MODEL
	=STANDARD Valve
	X=ATEX Valve
Ⓕ	FUNCTION
	42=4 ways
	52=5 ways
Ⓥ	VERSION
	36=Solenoid - Differential
	39=Solenoid - Spring
Ⓣ	VOLTAGE
	B04=12 VDC
	B05=24 VDC
	B09=24 VDC (2W)
	B56=24V (50-60 Hz)
	B57=110V (50-60 Hz)
	B58=230 V (50-60 Hz)
	C04=12 VDC
	C05=24 VDC
	C09=24 VDC (2W)
	C56=24V (50-60 Hz)
	C57=110V (50-60 Hz)
	C58=230 V (50-60 Hz)
	F04=12 VDC
	F05=24 VDC
	F56=24V (50-60 Hz)
	F57=110V (50-60 Hz)
	F58=230 V (50-60 Hz)
Ⓞ	TEMPERATURE OPTIONS
	=STANDARD Valve (-10 ÷ +50)
	=ATEX Valve (-20 ÷ +40)
	LT=Low temperature (-30 ÷ +50)



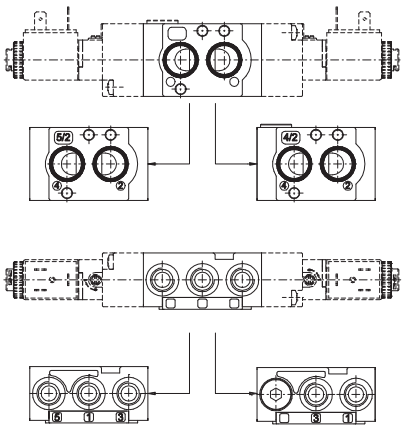
"LT" and "ATEX" Versions are not available with MF coils
Weight g. 330
Minimum pilot pressure 2,5 bar
Maximum fixing torque for fittings 9 N/m

Weight g. 325

Code Example	MODELL	Operational characteristics					
		Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Max working pressure (bar)	Orifice size (mm)	Working ports size	Temperature °C
514.Ⓕ.00.ⓋⓉ	STANDARD Valve	Filtered and lubricated air	1100	10	8	G1/4"	-10 ÷ +50
514.Ⓕ.00.ⓋⓉLT	LT "Low Temperture" Valve						-30 ÷ +50
X514.Ⓕ.00.ⓋⓉ	ATEX Valve						-20 ÷ +40

Universal kit

Ordering code	
Ⓜ514.92.00.Ⓥ.ⓉⓄ	
Ⓜ	MODEL
	=STANDARD Valve
	X=ATEX Valve
Ⓥ	VERSION
	16=Pneumatic - Differential
	18=Pneumatic - Pneumatic
	19=Pneumatic - Spring
	35=Solenoid - Solenoid
	36=Solenoid - Differential
	39=Solenoid - Spring
Ⓣ	VOLTAGE
	B04=12 VDC
	B05=24 VDC
	B09=24 VDC (2W)
	B56=24V (50-60 Hz)
	B57=110V (50-60 Hz)
	B58=230 V (50-60 Hz)
	C04=12 VDC
	C05=24 VDC
	C09=24 VDC (2W)
	C56=24V (50-60 Hz)
	C57=110V (50-60 Hz)
	C58=230 V (50-60 Hz)
	F04=12 VDC
	F05=24 VDC
	F56=24V (50-60 Hz)
	F57=110V (50-60 Hz)
Ⓞ	TEMPERATURE OPTIONS
	=STANDARD Valve (-10 ÷ +50)
	=ATEX Valve (-20 ÷ +40)
	LT=Low temperature (-30 ÷ +50)



"LT" and "ATEX" Versions are not available with MF coils
Weight g. 405
Minimum pilot pressure 2,5 bar
Maximum fixing torque for fittings 9 N/m

To change a 5/2 valve into a 4/2:
Simply replace the bottom plate with the one included in the universal kit (cod. 514.92....) and by plugging port 5

Code Example	MODELL	Operational characteristics					
		Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Max working pressure (bar)	Orifice size (mm)	Working ports size	Temperature °C
514.92.00.ⓋⓉ	STANDARD Valve	Filtered and lubricated air	1100	10	8	G1/4"	-10 ÷ +50
514.92.00.ⓋⓉLT	LT "Low Temperture" Valve						-30 ÷ +50
X514.92.00.ⓋⓉ	ATEX Valve						-20 ÷ +40

2

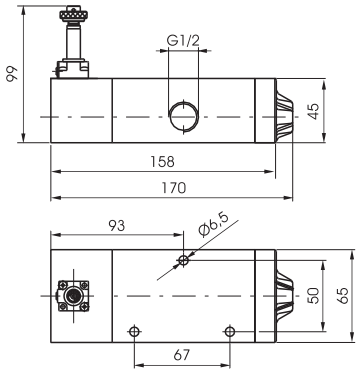
Solenoid - Spring

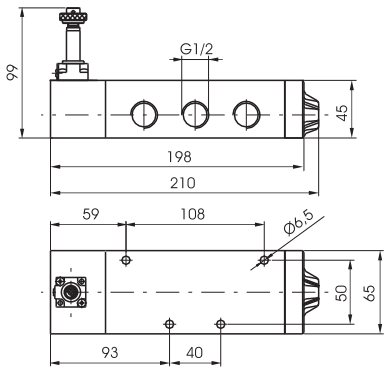
3/2
5/2

Ordering code

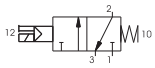
452.Ⓣ.0.1.M2

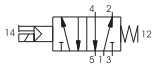
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1152
Minimum working pressure 2,5 bar





Weight gr. 1422
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

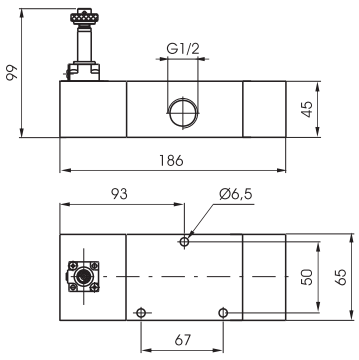
Solenoid - Differential

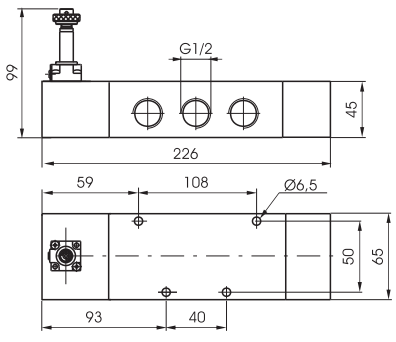
3/2
5/2

Ordering code

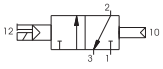
452.Ⓣ.0.12.M2

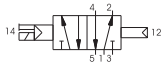
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1422
Minimum working pressure 2,5 bar





Weight gr. 1692
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

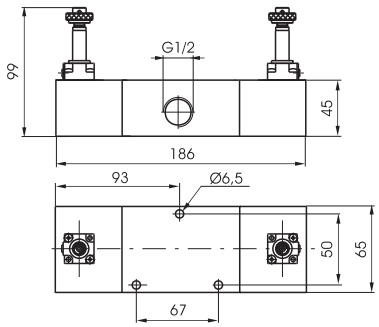
Solenoid - Solenoid

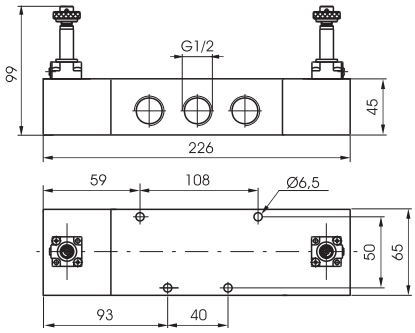
3/2
5/2

Ordering code

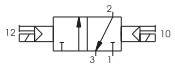
452.Ⓣ.0.0.M2

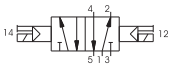
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1474
Minimum working pressure 2 bar





Weight gr. 1744
Minimum working pressure 2 bar

Operational characteristics					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

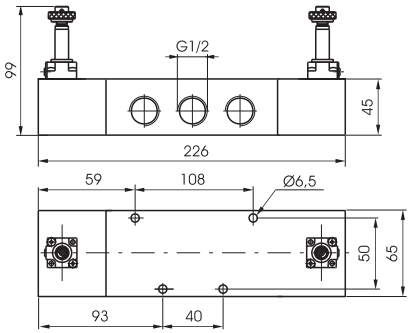
Solenoid - Solenoid

5/3

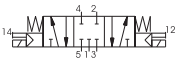
Ordering code

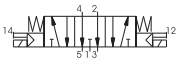
452.53.Ⓕ.0.0.M2

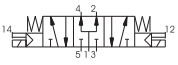
Ⓕ	FUNCTION
	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 1744
Minimum working pressure 3 bar







Operational characteristics					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

2

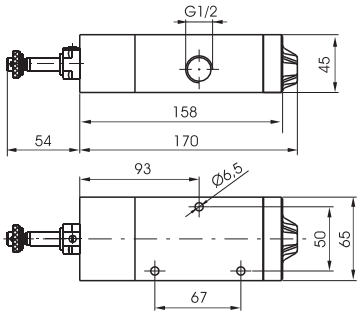
Solenoid - Spring

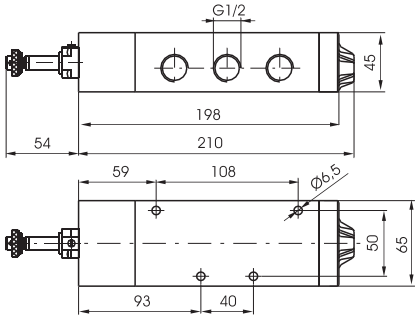
3/2
5/2

Ordering code

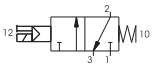
452/1.Ⓣ.0.1.M2

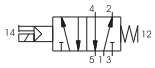
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1330
Minimum working pressure 2,5 bar





Weight gr. 1600
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

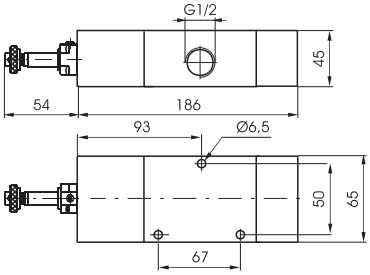
Solenoid - Differential

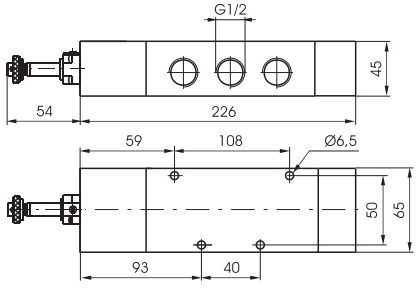
3/2
5/2

Ordering code

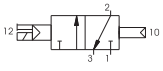
452/1.Ⓣ.0.12.M2

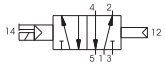
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1600
Minimum working pressure 2,5 bar





Weight gr. 1870
Minimum working pressure 2,5 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

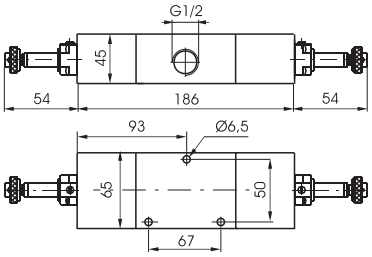
Solenoid - Solenoid

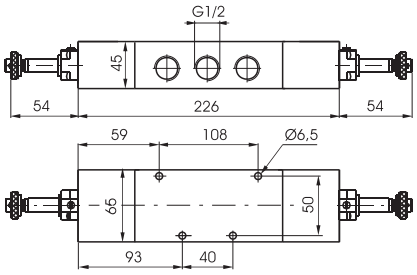
3/2
5/2

Ordering code

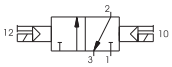
452/1.Ⓣ.0.0.M2

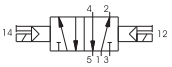
Ⓣ	TYPE
	32=3 ways
	52=5 ways





Weight gr. 1830
Minimum working pressure 2 bar





Weight gr. 2100
Minimum working pressure 2 bar

Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"

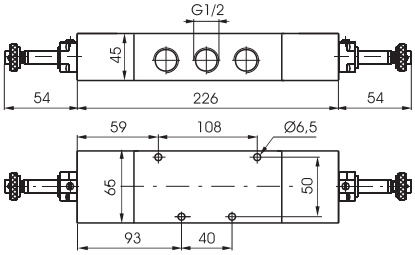
Solenoid - Solenoid

5/3

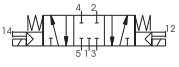
Ordering code

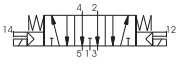
452/1.53.Ⓕ.0.0.M2

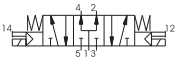
Ⓕ	FUNCTION
	31=Closed centres
	32=Open centres
	33=Pressured centres



Weight gr. 2100
Minimum working pressure 3 bar







Operational characteristics

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 ÷ +50	3500 Nl/min	mm 15	G 1/2"