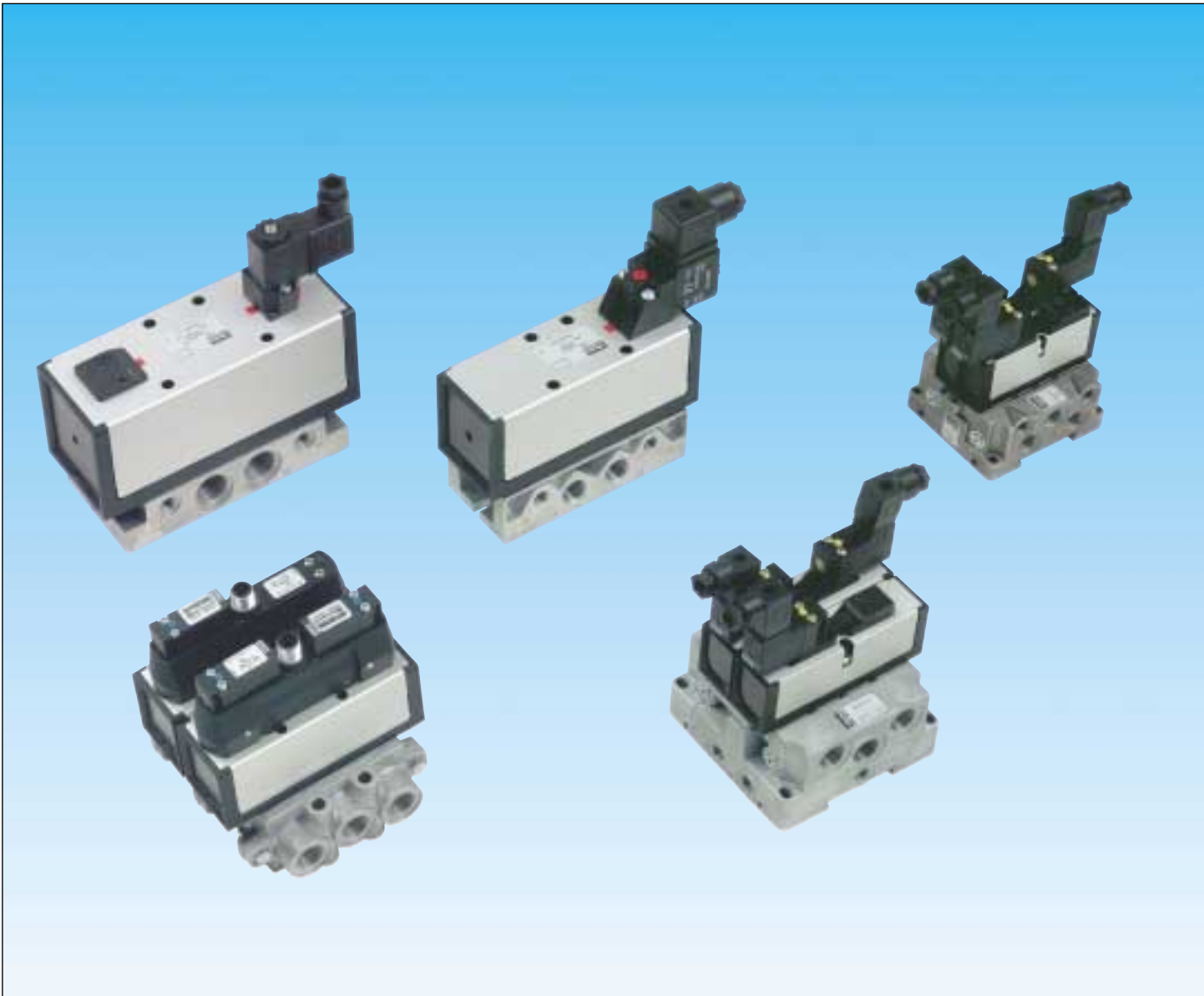




# **ISOMAX Directional control valves**

**According to ISO 5599-1 and  
ISO15407-1 (VDMA 24563)**

*Catalogue PD0C00025UK01-ev*





## **WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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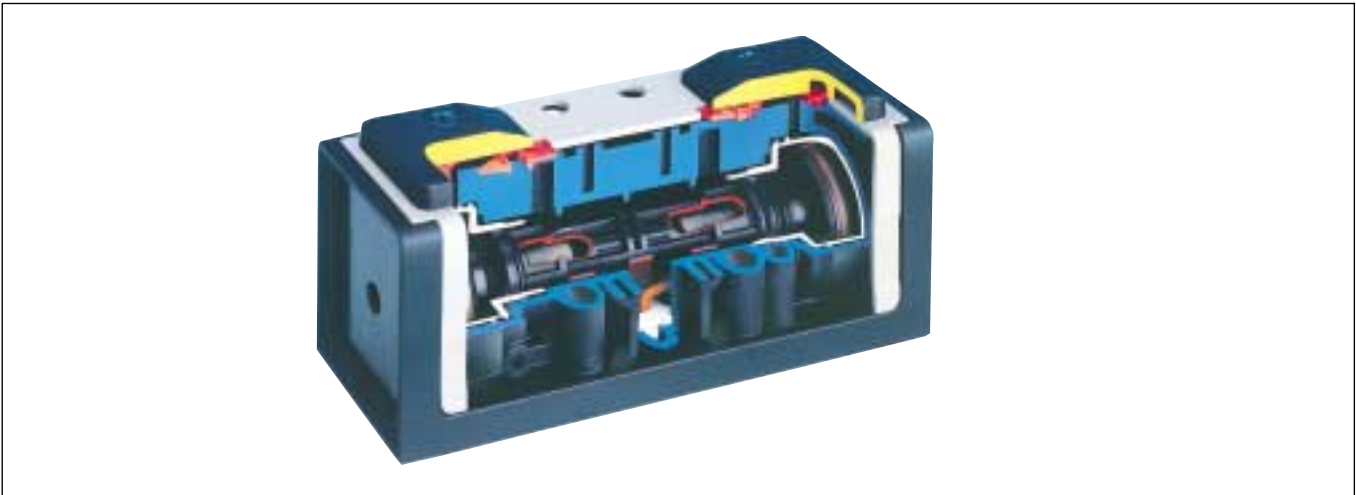
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### Valve range

**DX02** 1/8", ISO 15407-1, size 02

**DX01** 1/4", ISO 15407-1, size 01

**DX1** 1/4", ISO 5599-1, size 1

**DX2** 3/8", ISO 5599-1, size 2

**DX3** 1/2", ISO 5599-1, size 3

The Isomax range of directional control valves, comply with ISO 15407-1 sizes 02 and 01 and ISO5599-1 sizes 1, 2 and 3 and provide flows from 720 NI/min to 6500NI/min.

The range includes both 5/2 and 5/3 valves, for pneumatic and electrical actuation with a wide choice of subbases and manifolds to suit different application needs.



ISO 5599 - 1



ISO 15407 - 1

### Ceramic technology

All ISOMAX products use high-tech ceramic switching technology :

- **Excellent reliability :**

Long life in excess of 100 million operations\*.

Operates with lubricated or non lubricated air.

Low sensitivity to air quality changes ; switching without seal.

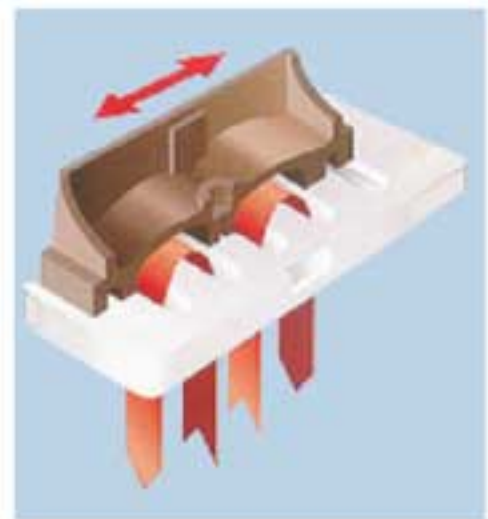
Stiction free.

- **High performances :**

Slide valve concept allows high flow / size ratio and short response time due to short slide stroke and low friction.

- **Stable long lasting performances**

Low friction switching : minimum wear of the valve member/seal assembly.



\* Refer to our warranty conditions.

### Corrosion free and modern design

With the valve body in Polyamide reinforced fibreglass and the casing in anodised aluminium, the complete Isomax range presents a coherent modern design to suit most industrial environments.

### Vacuum operation

All Isomax valves may be used for either vacuum or pressure applications.

### Air supplied from exhaust ports

In order to supply 2 different pressures to the same actuator, it is possible to connect 2 main pressure supplies to the exhaust ports and used the port 1 as exhaust port.

### Central M12 electrical connector versions

All sizes of ISO 5599-1 valves are supplied in a new version with central M12 connector.

### Logic elements integrated on valve piloting

Special interfaces for ISOMAX ISO 5599-1 valves are available for direct mounting of logic elements on valve piloting system. This feature allows the creation of complex pilot functions whilst simplifying and reducing piping costs.

### Auxiliary manual pilot in option

Manual overrides are supplied as standard on solenoids. An auxiliary manual pilot acting directly on the spool is available as standard on all ISO 5599-1 versions.





**General characteristics :**

Standard subbase : ISO 15407-1 and VDMA 24563  
 Permissible fluid : Air or inert gas, filtered 40 µ (classe 5 according to ISO 8573-1), lubricated or non-lubricated  
 Piloting pressure : 2 to 10 bar  
 Operating pressure : -0,9 to 10 bar (for pressure under 2 bar, external pilot supply has to be connected)  
 Supply from exhaust : Possible  
 Flow (Qmax) : DX01 = 1050 NI/mn - DX02 = 720 NI/mn  
 Working temperatures : -10 to + 60°C (dry air)  
 Storage temperatures : -20 to + 70°C  
 Mechanical life : > 100 millions operations (dry air filtered 40 µ, 2 Hz, 6 bar, 20°C)  
 Actuation type : Pneumatically or electrically with 15 mm solenoid valve interface CNOMO E06.36120N

**Material specification :**

Valve member - seat : Self lubricating acetal - ceramic  
 Body : Polyamide reinforced fibreglass  
 Casing - End plates : Anodised aluminium - Painted zinc plated steel  
 Valve plate : Zamak  
 Seals : Nitrile  
 Springs : Stainless steel  
 Screws : Zinc plated steel  
 Function selector : Top cover - Seal : Polyamide reinforced fiberglass - Polyester

**Order key**

<b>Size</b> 02 18 mm (ISO 15407) 01 26 mm (ISO 15407)	<b>Pilot</b> 4 Pneumatic 6 Electro-pneumatic	<b>Manual override</b> 0 Without any 1 Flush non locking 3 Flush locking 2 Flush non locking (extended 15 mm) 5 Flush locking (extended, 15 mm)	<b>Voltage</b> B 12 V AC C 24 V AC D 48 V AC J 110 V AC A 230 V AC L 12 V DC M 24 V DC N 48 V DC	<b>Connector</b> Without any C Standard connector S Connector with LED and protection S3 Connector with LED and protection - 3 m cable S5 Connector with LED and protection - 5 m cable
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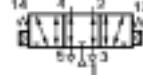


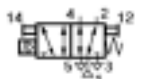







**DX 01 - 6 21 - 95 1 M S**

<b>Function</b>	pneumatic or electro-pneu		electro-pneumatic				pneumatic and electro-pneu solenoid on 14	
	int. supply	ext. supply	int. supply 12 ext. supply 14	ext. supply 14 common	int. supply 12 ext. supply 14	int. supply 12 ext. supply 14	ext. supply 14	solenoid on 12
	captured pilot exhaust	vented pilot exhaust	vented pilot exhaust	captured pilot exhaust	vented pilot exhaust	vented pilot exhaust	vented pilot exhaust	
5/2 bistable	06	08	07	05	31	33		
5/2 bistable, 14 prioritised	56	58	57	59				
5/2 monostable, spring return	21	22		23				
5/2 monostable, differential return	51	53	52	54				
5/3 pressure vented centre	11	12	10	09				
5/3 pressure closed centre	16	18	17	19				

<b>Electrical operator</b>	60 Without any
	95 15 mm solenoid 1,2 W DIN 43650 form C

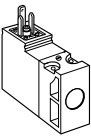
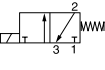



















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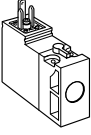
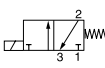




Order codes

Symbol	Function	ISO 15407-1 Size	Order code	Weight kg
	5/2 Bistable	02	<b>DX02-406-60</b>	0,09
		01	<b>DX01-406-60</b>	0,13
	5/2 Monostable differential	02	<b>DX02-451-60</b>	0,09
		01	<b>DX01-451-60</b>	0,13
	5/2 Monostable Spring	02	<b>DX02-421-60</b>	0,09
		01	<b>DX01-421-60</b>	0,13
	5/3 closed centre	02	<b>DX02-416-60</b>	0,09
		01	<b>DX01-416-60</b>	0,13
	5/3 vented centre	02	<b>DX02-411-60</b>	0,09
		01	<b>DX01-411-60</b>	0,13
<b>Electrically actuated valves supplied without solenoid - refer to page 8 to select P2E..... solenoid ;</b>				
	5/2 Bistable	02	<b>DX02-606-60</b>	0,09
		01	<b>DX01-606-60</b>	0,13
	5/2 Monostable differential	02	<b>DX02-651-60</b>	0,09
		01	<b>DX01-651-60</b>	0,13
	5/2 Monostable Spring	02	<b>DX02-621-60</b>	0,09
		01	<b>DX01-621-60</b>	0,13
	5/3 closed centre	02	<b>DX02-616-60</b>	0,09
		01	<b>DX01-616-60</b>	0,13
	5/3 vented centre	02	<b>DX02-611-60</b>	0,09
		01	<b>DX01-611-60</b>	0,13
<b>Electrically actuated valves supplied with solenoid 24 V DC - For other voltage or manual override type refer to ordering key page 6</b>				
	5/2 Bistable	02	<b>DX02-606-951M*</b>	0,17
		01	<b>DX01-606-951M*</b>	0,21
	5/2 Monostable differential	02	<b>DX02-651-951M*</b>	0,13
		01	<b>DX01-651-951M*</b>	0,17
	5/2 Monostable Spring	02	<b>DX02-621-951M*</b>	0,13
		01	<b>DX01-621-951M*</b>	0,17
	5/3 closed centre	02	<b>DX02-616-951M*</b>	0,17
		01	<b>DX01-616-951M*</b>	0,21
	5/3 vented centre	02	<b>DX02-611-951M*</b>	0,17
		01	<b>DX01-611-951M*</b>	0,21

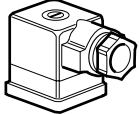
\* With non-locking manual override; to obtain the same valve with locking manual override, replace 951M by 953M in the order code.

**Solenoids 15 mm NC, standard**

	Voltage	Weight kg	Order code Without manual override	Weight kg	Order code Override, blue, non locking flush	Weight kg	Order code Override, yellow locking flush
 	12 V DC	0,038	<b>P2E-KV32B0</b> 	0,038	<b>P2E-KV32B1</b> 	0,038	<b>P2E-KV32B2</b> 
	24 V DC	0,038	<b>P2E-KV32C0</b> 	0,038	<b>P2E-KV32C1</b> 	0,038	<b>P2E-KV32C2</b> 
	48 V DC	0,038	<b>P2E-KV32D0</b> 	0,038	<b>P2E-KV32D1</b> 	0,038	<b>P2E-KV32D2</b> 
	24 V AC 50Hz	0,038	<b>P2E-KV31C0</b> 	0,038	<b>P2E-KV31C1</b> 	0,038	<b>P2E-KV31C2</b> 
	48 V AC 50/60Hz	0,038	<b>P2E-KV34D0</b> 	0,038	<b>P2E-KV34D1</b> 	0,038	<b>P2E-KV34D2</b> 
	115 V AC 50Hz/ 120 V AC 60Hz	0,038	<b>P2E-KV31F0</b>	0,038	<b>P2E-KV31F1</b> 	0,038	<b>P2E-KV31F2</b> 
	230 V AC 50Hz/ 240 V AC 60Hz	0,038	<b>P2E-KV31J0</b>	0,038	<b>P2E-KV31J1</b> 	0,038	<b>P2E-KV31J2</b> 

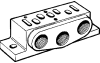


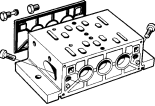


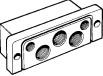



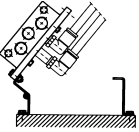

	Voltage	Weight kg	Order code Override extended, blue, non locking	Weight kg	Order code Override extended, yellow, locking
 	24 V DC	0,038	<b>P2E-KV32C3</b> 	0,038	<b>P2E-KV32C4</b> 
	24 V AC 50Hz	0,038	<b>P2E-KV31C3</b> 	0,038	<b>P2E-KV31C4</b> 

**Cable plugs DIN 43650, form C**

	Description	Weight kg	Order code
	With standard screw	Standard IP 65	0,02 <b>P8C-D</b>
		24 V DC VDR + LED IP65	0,02 <b>P8C-D26C</b>
		110 V AC VDR + LED IP65	0,02 <b>P8C-D21E</b>
	With cable	Standard with 2 m cable - IP65	0,13 <b>P8L-C2</b>
		Standard with 5 m cable - IP65	0,30 <b>P8L-C5</b>
		24 V AC/DC, 2 m cable VDR + LED IP65	0,13 <b>P8L-C226C</b>
		24 V AC/DC, 5 m cable VDR + LED IP65	0,30 <b>P8L-C526C</b>
		24 V AC/DC, 10 m cable VDR + LED IP65	0,58 <b>P8L-CA26C</b>
		110 V AC/DC, 2 m cable VDR + LED IP65	0,13 <b>P8L-C221E</b>
		110 V AC/DC, 5 m cable VDR + LED IP65	0,30 <b>P8L-C521E</b>



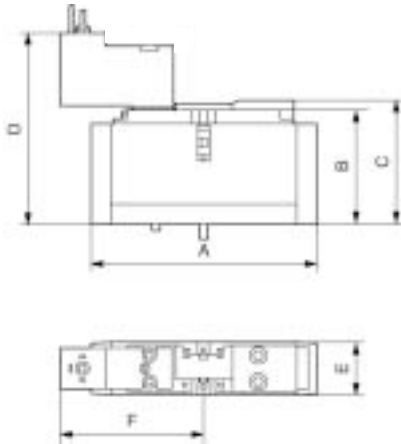
## Bases and manifolds

	Description	Order code	Weight kg	Port size
	<b>Subbase with side ports</b>			
	Size 02	<b>PL02-01-70</b>	0,07	G1/8
	Size 01	<b>P2V-BS512SS</b>	0,12	G1/4
	<b>Subbase with bottom ports</b>			
	Size 01	<b>P2V-BS511SB</b>	0,07	G1/8
	<b>Manifold with 2 valve positions with side ports</b>			
	Size 02	<b>PJLP02-201-70*</b>	0,14	G1/8
	Size 01	<b>PJL01-201-70</b>	0,73	G1/8
	Size 01	<b>PJL01-202-70</b>	0,73	G1/4
	<b>End plate kit for side ported manifold with 2 valve positions</b>			
	Size 02	<b>PEJ02-02-70</b>	0,15	G1/4
	Size 01	<b>PEJ01-03-70</b>	0,52	G3/8
	<b>Intermediate supply block (to fit in place of a valve on manifold)</b>			
	Size 02	<b>D02P-01-70</b>	0,08	G1/8
	Size 01	<b>D01P-02-70</b>	0,10	G1/4
	<b>Set of blanking cap (fit between 2 manifolds PJL)</b>			
	Size 02	<b>D02BD0</b>	0,01	
	Size 01	<b>D01BD0</b>	0,02	
	<b>Bottom ported manifold with 2 valves positions</b>			
	Size 02	<b>P2V-AM511PB</b>	0,20	G1/8
	Size 01	<b>P2V-BM512PB</b>	0,40	G1/4
 	<b>G side end plate bottom ported for above ported manifold</b>			
	Size 02 (G side)	<b>P2V-AM512GB</b>	0,18	G1/4
	Size 01 (G side)	<b>P2V-BM513GB</b>	0,22	G3/8
 	<b>H side end plate bottom ported for above ported manifold</b>			
	Size 02 (H side)	<b>P2V-AM512HB</b>	0,18	G1/4
	Size 01 (H side)	<b>P2V-BM513HB</b>	0,22	G3/8
	<b>Transfer plate for manifold 2 valves positions with bottom ports size 01 to size 02</b>			
	Size 01 → 02	<b>P2V-AM500BE</b>	0,33	
	<b>Set of blanking caps (fit between 2 manifolds P2V-*M)</b>			
	Size 02	<b>P2V-AK0P</b>	0,01	
	Size 01	<b>P2V-BK0P</b>	0,01	
	<b>Angle mounting set for manifold 2 valve positions with bottom ports (P2V-*M)</b>			
	Size 01 or 02	<b>P2V-AK0M</b>	0,14	
	<b>Blanking plate (for one valve position)</b>			
	Size 02	<b>DX02BLK</b>	0,04	
	Size 01	<b>DX01BLK</b>	0,05	

\* Note : manifold PJLP-02-201-70 does not include individual connection ports 12 and 14 ; for pneumatic actuated valves, you need to mount air pilot connectors (reference PVA-P111) in place of the solenoids directly on the valve to give air pilot function.

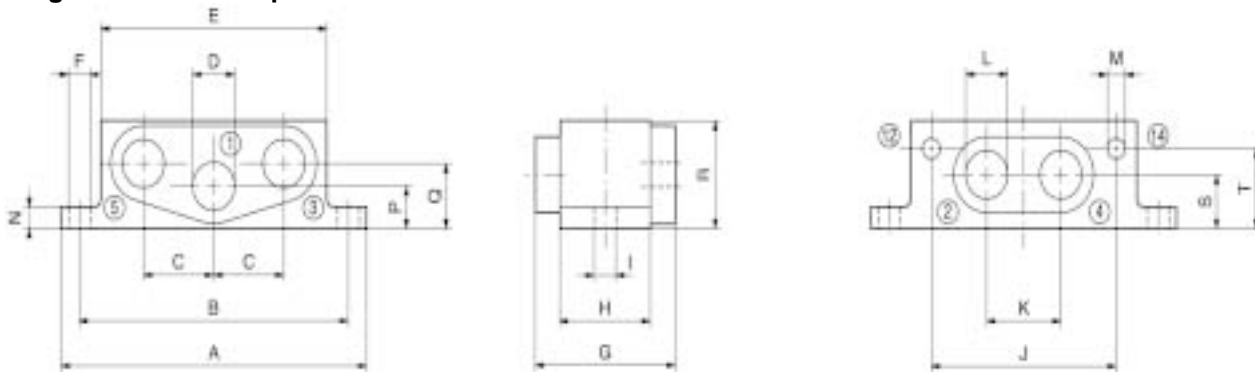
**Dimensions**

**DX01 and DX02 valves**



	A	B	C	D	E	F
<b>DX02</b>	80	41	44,5	67,8	18	51,2
<b>DX01</b>	100	42	45,5	68,8	26	51,2

**Single subbases side ported**

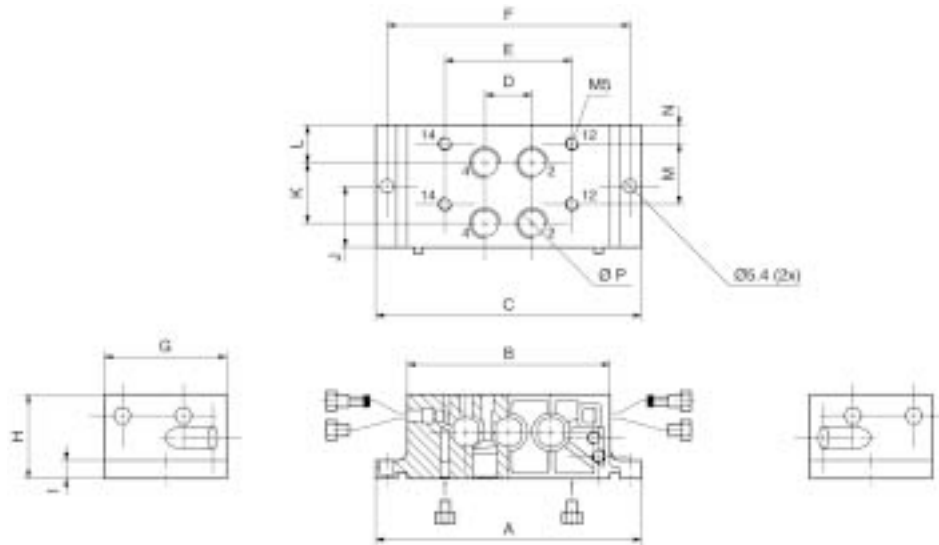


	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T
<b>PL02-01-70</b>	<b>02</b>	80	70	16	G1/8	52	8	27	19	5,5	40	17	G1/8	M5	8	8	8	22	13	6
<b>P2V-BS512SS</b>	<b>01</b>	92	80	21,2	G1/8	68	6,5	42	27	5,5	55	22	G1/8	M5	6	11	17	28	14	21

**Side ported manifolds for 2 valve positions**

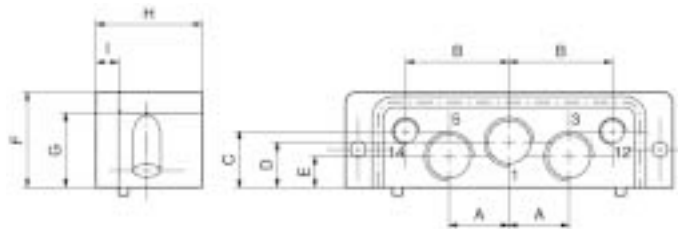
	Size	A	B	C	D	E	F	G	H
<b>PJLP02-201-70</b>	<b>02</b>	38,5	80	12	Ø 4,2	38	14	18	72
<b>PJL01-201-70</b>	<b>01</b>	55	100	24	Ø 5,5	54	17	22	90
<b>PJL01-202-70</b>									

Bottom ported manifolds for 2 valve positions



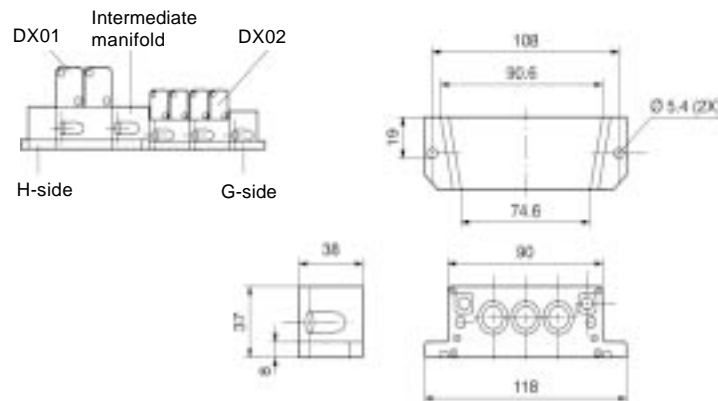
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
P2V-AM511PB	02	102	74	74,6	16	43	92	38	26	7	19	19	11	19	5	G1/8
P2V-BM512PB	01	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8	G1/4

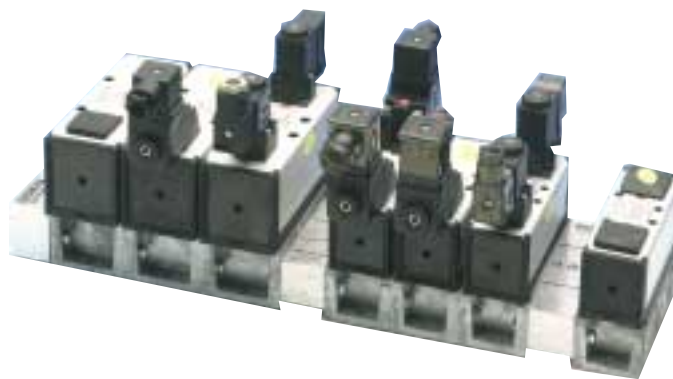
G and H side end plate bottom ported for above bottom ported manifold



	Size	Port size 1,2,3	Port size 12, 14	A	B	C	D	E	F	G	H	I
P2V-AM512GB and P2V-AM512HB	02	G1/4	G1/8	17	29	21	18,5	9,5	35,5	28	33	7
P2V-BM513GB and P2V-BM513HB	01	G3/8	G1/8	21,5	37	20	16	11	34,5	28	38	8

Transfer plate size 01 to size 02 for above bottom ported manifold





## General characteristics :

Standard subbase :	ISO 5599-1 and NFE 49-080
Permissible fluid :	Air or inert gas, filtered 40 µ (classe 5 according to ISO 8573-1), lubricated or non-lubricated
Piloting pressure :	2 to 12 bar (2 to 10 bar with 15 mm solenoid)
Operating pressure :	-0,9 to 12 bar (for pressure under 2 bar, external pilot supply has to be connected)
Supply from exhaust :	Possible
Flow (Qmax) :	DX1 = 1680 NI/mn - DX2 = 4320 NI/mn - DX3 = 6540 NI/mn
Working temperatures :	-10 to + 60°C (dry air)
Storage temperatures :	-20 to + 80°C (-20 to + 70°C with 15 mm solenoids)
Mechanical life :	> 100 millions operations (dry air filtered 40 µ, 2 Hz, 6 bar, 20°C)
Actuation type :	Pneumatically or electrically with CNOMO 06-05-10 solenoids 30 mm or 22 mm or with 15 mm solenoid valve interface CNOMO E06.36120N.

## Material specification :

Valve member - seat :	Self lubricating acetal - ceramic
Body :	Polyamide reinforced fibreglass
Casing - End plates :	Anodised aluminium - Painted zinc plated steel
Valve plate :	Zamak
Seals :	Nitrile
Springs :	Stainless steel
Screws :	Zinc plated steel
Function selector : Top cover - Seal :	Polyamide reinforced fiberglass - Polyester

## Ordering key

Execution	Size	Pilot	Manual override	Voltage	Connector
Standard D Anti-corrosion	1 Size 1 (ISO 5599) 2 Size 2 (ISO 5599) 3 Size 3 (ISO 5599)	4 Pneumatic 6 Electro-pneumatic	0 Without any 1 Flush non locking 3 Flush locking	B 12 V AC C 24 V AC D 48 V AC J 110 V AC A 230 V AC L 12 V DC M 24 V DC N 48 V DC	Without any C Standard connector S Connector with LED and protection S3 Connector with LED and protection - 3 m cable S5 Connector with LED and protection - 5 m cable

DX   1 - 6 21 - 76 1 M S

Function	pneumatic or electro-pneu					pneumatic and electro-pneu	
	electro-pneumatic		pneumatic		electro-pneu		
	int. supply	ext. supply	int. supply 12 ext. supply 14	ext. supply 12 int. supply 14	int. supply 12 ext. supply 14	ext. supply 12 int. supply 14	
	captured pilot exhaust	vented pilot exhaust	vented pilot exhaust	vented pilot exhaust	vented pilot exhaust	vented pilot exhaust	
5/2 bistable	06	08	07	31	33		
5/2 bistable, 14 prioritised	56	58					
5/2 monostable, spring return	21	22					
5/2 monostable, differential return	51	53	52				
5/3 pressure vented centre	11	12	10				
5/3 pressure closed centre	16	18	17				
5/3 pressurised centre	13	24	15				

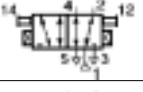
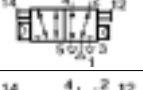
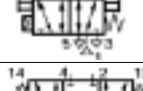
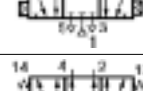
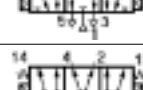
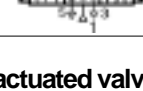
Electrical operator, auxiliary manual pilot		
	electrical operator	aux. manual. pilot
60	Without any	No
61	EV 310	
66	EV 30 - 6,5 W	
67	EV 30 - 3 W	
6A	15 mm solenoid, individual plate, pin up	
6B	15 mm solenoid, individual plate, pin up (high flow)	
70	Without any	Yes
71	EV 310	
76	EV 30 - 6,5 W	
77	EV 30 - 3 W	
7A	15 mm solenoid, individual plate, pin up	
7B	15 mm solenoid, individual plate, pin up (high flow)	

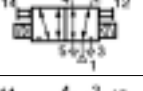
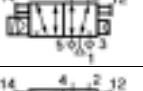
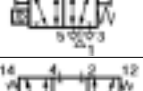
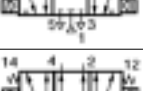
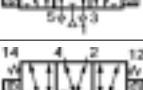
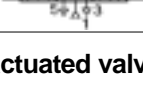
= product available on special request

Order codes

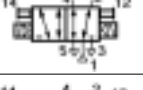
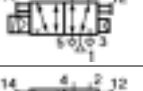
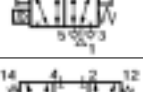
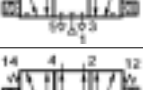
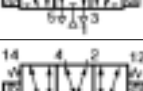

Pneumatically actuated valves

Symbol	Function	ISO 5599-1 size	Order code	Weight kg
	5/2 Bistable	1	<b>DX1-406-70</b>	0,35
		2	<b>DX2-406-70</b>	0,60
		3	<b>DX3-406-70</b>	1,10
	5/2 Monostable differential	1	<b>DX1-451-70</b>	0,35
		2	<b>DX2-451-70</b>	0,60
		3	<b>DX3-451-70</b>	1,10
	5/2 Monostable spring	1	<b>DX1-421-70</b>	0,35
		2	<b>DX2-421-70</b>	0,60
		3	<b>DX3-421-70</b>	1,10
	5/3 closed centre	1	<b>DX1-416-70</b>	0,35
		2	<b>DX2-416-70</b>	0,60
		3	<b>DX3-416-70</b>	1,10
	5/3 vented centre	1	<b>DX1-411-70</b>	0,35
		2	<b>DX2-411-70</b>	0,60
		3	<b>DX3-411-70</b>	1,10
	5/3 pressurised centre	1	<b>DX1-413-70</b>	0,35
		2	<b>DX2-413-70</b>	0,60

Electrically actuated valves for CNOMO 06-05-10 solenoid supplied without solenoid - Refer to page 15 to select solenoid

	Bistable	1	<b>DX1-606-70</b>	0,35
		2	<b>DX2-606-70</b>	0,60
		3	<b>DX3-606-70</b>	1,10
	5/2 Monostable differential	1	<b>DX1-651-70</b>	0,35
		2	<b>DX2-651-70</b>	0,60
		3	<b>DX3-651-70</b>	1,10
	5/2 Monostable spring	1	<b>DX1-621-70</b>	0,35
		2	<b>DX2-621-70</b>	0,60
		3	<b>DX3-621-70</b>	1,10
	5/3 closed centre	1	<b>DX1-616-70</b>	0,65
		2	<b>DX2-616-70</b>	0,60
		3	<b>DX3-616-70</b>	1,10
	5/3 vented centre	1	<b>DX1-611-70</b>	0,35
		2	<b>DX2-611-70</b>	0,60
		3	<b>DX3-611-70</b>	1,10
	5/3 pressurised centre	1	<b>DX1-613-70</b>	0,35
		2	<b>DX2-613-70</b>	0,60

Electrically actuated valves for 15 mm solenoid supplied without solenoid - Refer to page 15 to select solenoid

	Bistable	1	<b>DX1-606-7B</b>	0,37
		2	<b>DX2-606-7B</b>	0,60
		3	<b>DX3-606-7B</b>	1,10
	5/2 Monostable differential	1	<b>DX1-651-7B</b>	0,36
		2	<b>DX2-651-7B</b>	0,60
		3	<b>DX3-651-7B</b>	1,10
	5/2 Monostable spring	1	<b>DX1-621-7B</b>	0,36
		2	<b>DX2-621-7B</b>	0,60
		3	<b>DX3-621-7B</b>	1,10
	5/3 closed centre	1	<b>DX1-616-7B</b>	0,37
		2	<b>DX2-616-7B</b>	0,60
		3	<b>DX3-616-7B</b>	1,10
	5/3 vented centre	1	<b>DX1-611-7B</b>	0,37
		2	<b>DX2-611-7B</b>	0,60
		3	<b>DX3-611-7B</b>	1,10
	5/3 pressurised centre	1	<b>DX1-613-7B</b>	0,37
		2	<b>DX2-613-7B</b>	0,60

## Order codes

Electrically actuated valves with CNOMO 06-05-10 30 mm solenoid 24 V DC (supplied without cable plug) ;









Symbol	Function	ISO 5599-1 size	Order code	Weight kg
	Bistable	1	<b>DX1-606-761M</b>	0,65
		2	<b>DX2-606-761M</b>	0,90
		3	<b>DX3-606-761M</b>	1,40
	5/2 Monostable differential	1	<b>DX1-651-761M</b>	0,50
		2	<b>DX2-651-761M</b>	0,75
		3	<b>DX3-651-761M</b>	1,25
	5/2 Monostable spring	1	<b>DX1-621-761M</b>	0,50
		2	<b>DX2-621-761M</b>	0,75
		3	<b>DX3-621-761M</b>	1,25
	5/3 closed centre	1	<b>DX1-616-761M</b>	0,35
		2	<b>DX2-616-761M</b>	0,90
		3	<b>DX3-616-761M</b>	1,40
	5/3 vented centre	1	<b>DX1-611-761M</b>	0,65
		2	<b>DX2-611-761M</b>	0,90
		3	<b>DX3-611-761M</b>	1,40
	5/3 pressurised centre	1	<b>DX1-613-761M</b>	0,65
		2	<b>DX2-613-761M</b>	0,90

Electrically actuated valves with 15 mm solenoid 24 V DC (supplied without cable plug) ;


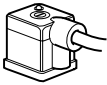
Symbol	Function	ISO 5599-1 size	Order code	Weight kg
	Bistable	1	<b>DX1-606-7B1M</b>	0,45
		2	<b>DX2-606-7B1M</b>	0,70
		3	<b>DX3-606-7B1M</b>	1,20
	5/2 Monostable differential	1	<b>DX1-651-7B1M</b>	0,41
		2	<b>DX2-651-7B1M</b>	0,65
		3	<b>DX3-651-7B1M</b>	1,15
	Monostable spring	1	<b>DX1-621-7B1M</b>	0,41
		2	<b>DX2-621-7B1M</b>	0,65
		3	<b>DX3-621-7B1M</b>	1,15
	5/3 closed centre	1	<b>DX1-616-7B1M</b>	0,45
		2	<b>DX2-616-7B1M</b>	0,70
		3	<b>DX3-616-7B1M</b>	1,20
	5/3 vented centre	1	<b>DX1-611-7B1M</b>	0,45
		2	<b>DX2-611-7B1M</b>	0,70
		3	<b>DX3-611-7B1M</b>	1,20
	5/3 pressurised centre	1	<b>DX1-613-7B1M</b>	0,45
		2	<b>DX2-613-7B1M</b>	0,70

Note : all valves proposed in this page are supplied with non-locking manual override on the solenoids ; to obtain the same valves with locking manual override change the last digits of the order coder from 1M to 3M.

Solenoids

		Voltage	Weight kg	Order code Without manual override	Order code Manual override non locking	Order code Manual override locking
<b>EV30-4.5 W DC, 5 VA AC solenoids with CNOMO 06-05-10 interface and for cable plug DIN 43650 form A (supplied without cable plug)</b>						
		24 V DC	0,17	<b>EV30M0100</b>	<b>EV30M1100</b>	<b>EV30M3100</b>
		24 V AC	0,17	<b>EV30C0100</b>	<b>EV30C1100</b>	<b>EV30C3100</b>
		110 V AC	0,17	<b>EV30J0100</b>	<b>EV30J1100</b>	<b>EV30J3100</b>
		230 V DC	0,17	<b>EV30A0100</b>	<b>EV30A1100</b>	<b>EV30A3100</b>
<b>EV30-2.5 W DC, 3 VA AC solenoids with CNOMO 06-05-10 interface and for cable plug DIN 43650 form A (supplied without cable plug)</b>						
		24 V DC	0,17	<b>EV30M0200</b>	<b>EV30M1200</b>	<b>EV30M3200</b>
		24 V AC	0,17	<b>EV30C0200</b>	<b>EV30C1200</b>	<b>EV30C3200</b>
		110 V AC	0,17	<b>EV30J0200</b>	<b>EV30J1200</b>	<b>EV30J3200</b>
		230 V AC	0,17	<b>EV30A0200</b>	<b>EV30A1200</b>	<b>EV30A3200</b>
<b>EV310-2.5 W DC, 4.5 VA AC solenoids with CNOMO 06-05-10 interface and for cable plug DIN 43650 form B (supplied without cable plug)</b>						
		24 V DC	0,17	<b>EV0M310</b>	<b>1EV1M310</b>	<b>EV3M310</b>
		24 V AC	0,17	<b>EV0C310</b>	<b>1EV1C310</b>	<b>EV3C310</b>
		110 V AC	0,17	<b>EV0J310</b>	<b>1EV1J310</b>	<b>EV3J310</b>
		230 V AC	0,17	<b>EV0A310</b>	<b>1EV1A310</b>	<b>EV3A310</b>
<b>15 mm High-flow solenoids 1.8 W DC, 2.4 VA AC for cable plug DIN 43650 form C (supplied without cable plug)</b>						
		24 V DC	0,17	<b>P2E-HV32C0</b>	<b>P2E-HV32C1</b>	<b>P2E-HV32C2</b>
		24 V AC	0,17	<b>P2E-HV31C0</b>	<b>P2E-HV31C1</b>	<b>P2E-HV31C2</b>
		48 V DC	0,17	<b>P2E-HV32D0</b>	<b>P2E-HV32D1</b>	<b>P2E-HV32D2</b>
		115/120 V AC	0,17	<b>P2E-HV31F0</b>	<b>P2E-HV31F1</b>	<b>P2E-HV31F2</b>

Cable plugs

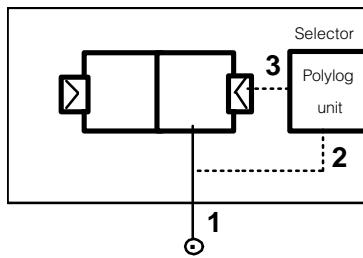
	Description	Order code DIN 43650 form A (for EV30)	Order code DIN 43650 form B (for EV310)	Order code DIN 43650 form C (for 15 mm solenoid)
	- Standard (without flying lead)	<b>3EV290V10</b>	<b>3EV10V10</b>	<b>P8C-D</b>
	- With LED and protection 24 V AC/DC	<b>3EV290V20-24</b>	<b>3EV10V20-24</b>	<b>P8C-D26C</b>
	- With LED and protection 110 V AC	<b>3EV290V20-110</b>	<b>3EV10V20-110</b>	<b>P8C-D21E</b>
	- With LED and protection 230 V AC	<b>3EV290V20-230</b>	<b>3EV10V20-230</b>	-
	- With 5 m flying lead cable LED and protection 24 V AC/DC	<b>3EV290V20-24L5</b>	<b>3EV10V20-24L5</b>	<b>P8L-C526C</b>
	- With 5 m cable - LED and protection 110 V AC	<b>3EV290V20-110L5</b>	<b>3EV10V20-110L5</b>	<b>P8L-C521E</b>
	- With 5 m cable - LED and protection 230 V AC	<b>3EV290V20-230L5</b>	<b>3EV10V20-230L5</b>	-

## LOGISO interfaces

Logiso interfaces allow direct mounting of logic elements on Isomax valves sizes 1 to 3 ; it allows to create simple solution on creating complex valve pilot function :  
 low pressure or high pressure signal, delayed pilot signal, or control of alternating movement, etc....



Symbol	Function	Order code	Weight kg
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Port 1 (input signal 1 for logic element) is connected to pilot port 12 or 14 valves subbase.

Port 2 (input signal 2 for logic element) is connected to the internal air supply of the valve.

**38DX70** 0,05

Selector  
Polylog  
unit

Port 1 (input signal 1 for logic element) is connected to pilot port 12 or 14 valves subbase.

Port 2 (input signal 2)for logic element is connected to the external Ø 4 mm push-in fitting.

**34DX70** 0,25

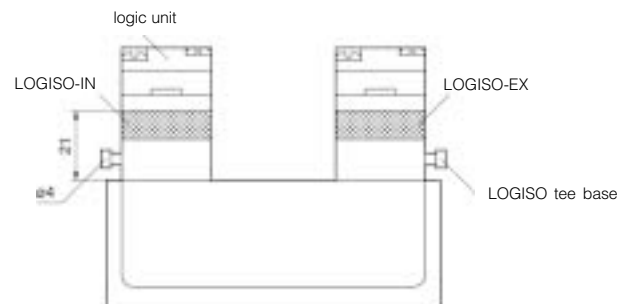
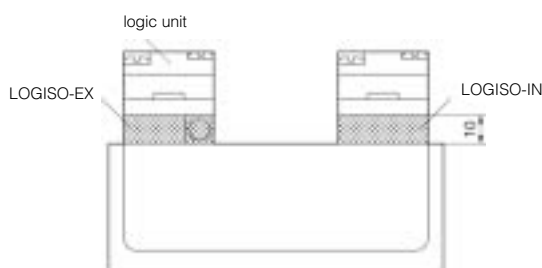
Ø 4 mm connector on LOGISO EX

Ø 4 mm connector on LOGISO Tee

Polylog  
unit

Use to tee off output (port 3) of the logic unit. Has to be mounted in association with Logiso IN or Logiso Ex interfaces for use with logic elements.

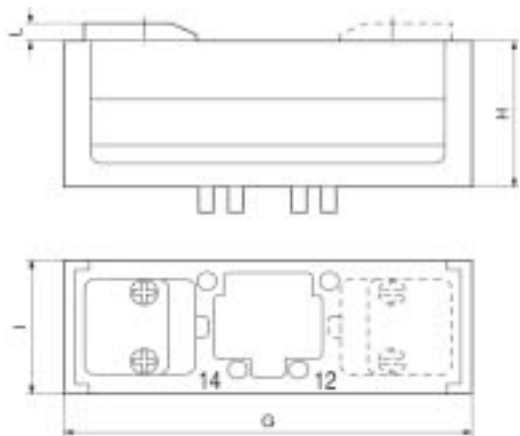
**33DX70** 0,05



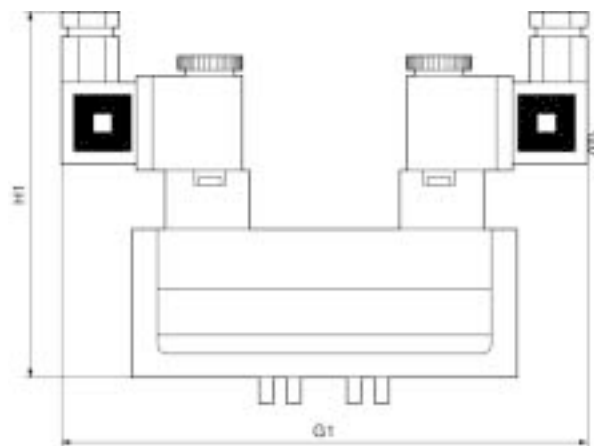


## Dimensions

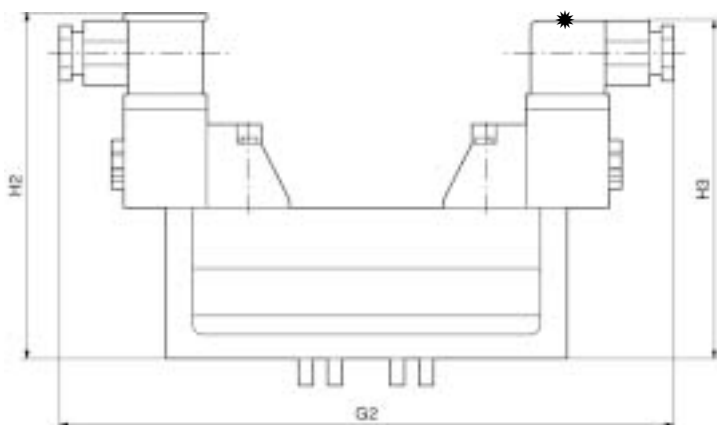
### Pneumatically actuated



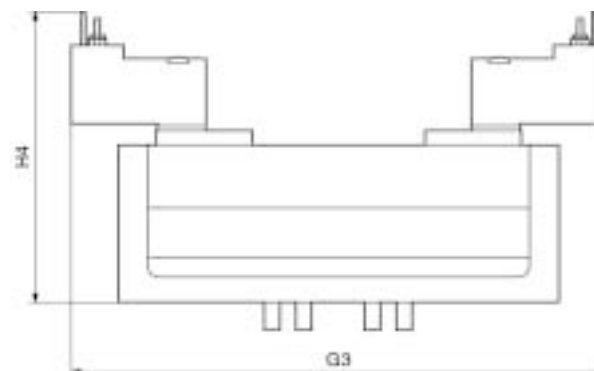
### With EV30 solenoids



### With EV310 solenoids



### With 15 mm solenoids



	G	G1	G2	G3	H	H1	H2	H3	H4	I	L
<b>DX1</b>	120	164	202,5	160	47	115	112,5	119	79	42	5
<b>DX2</b>	140	179,5	218	175,5	58,5	126,5	126,5	130	90,5	54	5
<b>DX3</b>	170	198	235,5	194	71	139	139	142,5	103	68	5



## General characteristics :

Standard subbase :	ISO 5599-1 and NFE 49-080
Permissible fluid :	Air or inert gas, filtered 40 µ (classe 5 according to ISO 8573-1), lubricated or non-lubricated
Piloting pressure :	2 to 10 bar
Operating pressure :	-0,9 to 10 bar (for pressure under 2 bar, external pilot supply has to be connected)
Supply from exhaust :	Possible
Flow (Qmax) :	DX1 = 1680 NI/mn - DX2 = 4320 NI/mn - DX3 = 6540 NI/mn
Working temperatures :	-10 to + 60°C (dry air)
Storage temperatures :	-20 to + 70°C
Mechanical life :	> 100 millions operations (dry air filtered 40 µ, 2 Hz, 6 bar, 20°C)
Actuation type :	Electrically
Voltage :	24 V DC
Electrical connections :	Central M12 connector (according to norm E03.62.520N) with 4 pins Pin 1 : free Pin 2 : +24 V DC side 12 Pin 3 : 0 V common Pin 4 : + 24 V DC side 14
Dust and water protection :	IP 65 (according to EN 60529)
Pilot power consumption :	1,8 W per pilot
Solenoid actuation indication :	By green LED
Manual override :	Locking or non locking on the solenoids (version without manual override on request)

## Material specification :

Valve member - seat :	Self lubricating acetal - ceramic
Body :	Polyamide reinforced fibreglass
Casing - End plates :	Anodised aluminium - Painted zinc plated steel
Valve plate :	Zamak
Seals :	Nitrile
Springs :	Stainless steel
Screws :	Zinc plated steel
Function selector : Top cover - Seal :	Polyamide reinforced fibreglass - Polyester

## Ordering key

Execution	Size	Pilot	Manual override	Voltage	Connector
Standard	1 Size 1 (ISO 5599) 2 Size 2 (ISO 5599) 3 Size 3 (ISO 5599)	6 Electro-pneumatic	0 Without any 1 Flush non locking 3 Flush locking 2 Flush non locking (extended 15 mm) 5 Flush locking (extended, 15 mm)	M 24 V DC	A M12 connector (5° oriented, 12 side) B M12 connector (22,5° oriented, 14 side)

DX
1
6
21
96
1
M
B

Function	electro-pneumatic			
	int. supply	ext. supply by 12 and 14	ext. supply by 14	int. supply 12 ext. supply 14
5/2 bistable	06	08	61	07
5/2 bistable, 14 prioritised	56	58	62	
5/2 monostable, spring return	21	22		
5/2 monostable, differential return	51	53	63	52
5/3 pressure vented centre	11	12	64	10
5/3 pressure closed centre	16	18	65	17
5/3 pressurised centre	13	14	66	15


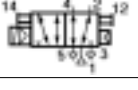
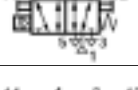
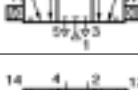
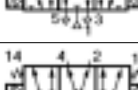
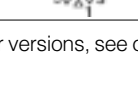
  

Electrical operator, auxiliary manual pilot on spool	
electrical operator	aux. manual. pilot
96 15 mm solenoid 1,8 W (high flow)	No

= product available on special request

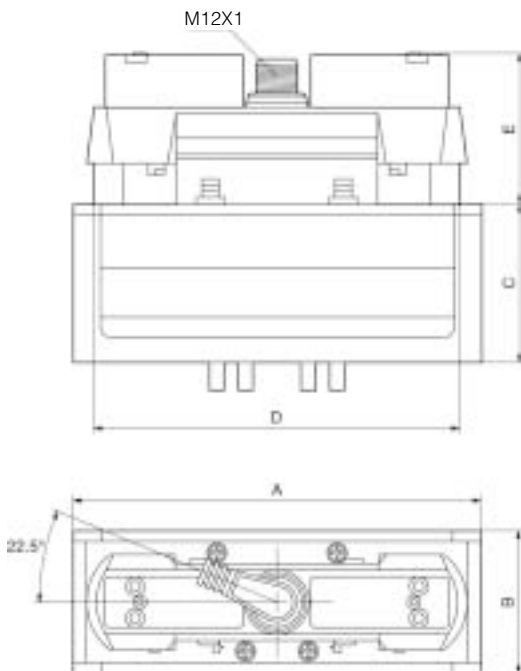
**Order codes**

**Manual override non-locking ; internal pilot supply**

Symbol	Function	ISO 5599-1 Size	Order code	Weight	Order code	Weight
			with M12 5° oriented side 12	kg	with M12 22,5° oriented side 14	kg
	Bistable	1	<b>DX1-606-961MA</b>	0,50	<b>DX1-606-961MB</b>	0,50
		2	<b>DX2-606-961MA</b>	0,74	<b>DX2-606-961MB</b>	0,74
		3	<b>DX3-606-961MA</b>	1,30	<b>DX3-606-961MB</b>	1,30
	5/2 Monostable differential	1	<b>DX1-651-961MA</b>	0,47	<b>DX1-651-961MB</b>	0,47
		2	<b>DX2-651-961MA</b>	0,70	<b>DX2-651-961MB</b>	0,70
		3	<b>DX3-651-961MA</b>	1,25	<b>DX3-651-961MB</b>	1,25
	5/2 Monostable spring	1	<b>DX1-621-961MA</b>	0,47	<b>DX1-621-961MB</b>	0,47
		2	<b>DX2-621-961MA</b>	0,70	<b>DX2-621-961MB</b>	0,70
		3	<b>DX3-621-961MA</b>	1,25	<b>DX3-621-961MB</b>	1,25
	5/3 closed centre	1	<b>DX1-616-961MA</b>	0,50	<b>DX1-616-961MB</b>	0,50
		2	<b>DX2-616-961MA</b>	0,74	<b>DX2-616-961MB</b>	0,74
		3	<b>DX3-616-961MA</b>	1,30	<b>DX3-616-961MB</b>	1,30
	5/3 vented centre	1	<b>DX1-611-961MA</b>	0,50	<b>DX1-611-961MB</b>	0,50
		2	<b>DX2-611-961MA</b>	0,74	<b>DX2-611-961MB</b>	0,74
		3	<b>DX3-611-961MA</b>	1,30	<b>DX3-611-961MB</b>	1,30
	5/3 pressurised centre	1	<b>DX1-613-961MA</b>	0,50	<b>DX1-613-961MB</b>	0,50
		2	<b>DX2-613-961MA</b>	0,74	<b>DX2-613-961MB</b>	0,74

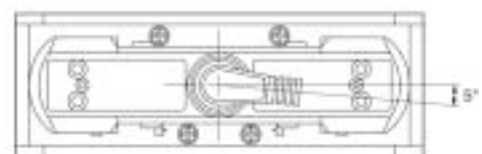
Note : for all other versions, see ordering key page 18

**Dimensions**



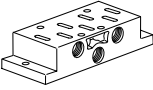





	A	B	C	D	E*
<b>DX1</b>	120	42	47	108	44
<b>DX2</b>	140	54	58,5	114	44
<b>DX3</b>	170	68	71	132	44

\* For version with external pilot supply common by 14, add 6 mm.

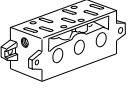

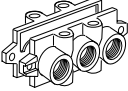
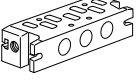

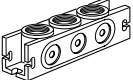



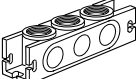

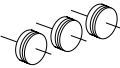
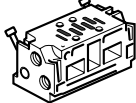

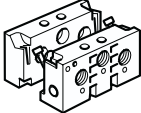
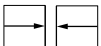


## Manifolds and subbases

### Single subbases

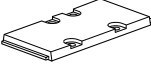
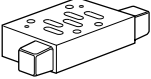
		Description	Order code	Weight kg	Port size
		<b>Subbase with side ports according to VDMA</b>			
		Size 1	<b>P2N-VS512SD</b>	0,16	G1/4
		Size 2	<b>P2N-WS513S</b>	0,28	G3/8
		Size 3	<b>P2N-YS514SD</b>	0,35	G1/2
		<b>Subbase with side ports</b>			
		Size 1	<b>PL1-1/4-70</b>	0,16	G1/4
		Size 2	<b>PL2-3/8-70</b>	0,28	G3/8
		Size 3	<b>P2N-JS516SD</b>	0,57	G3/4
		<b>Subbase with bottom ports</b>			
		Size 1	<b>PD1-1/4-70</b>	0,37	G1/4
		Size 2	<b>PD2-3/8-70</b>	0,59	G3/8
		Size 3	<b>PD3-1/2-70</b>	0,90	G1/2

### Manifolds

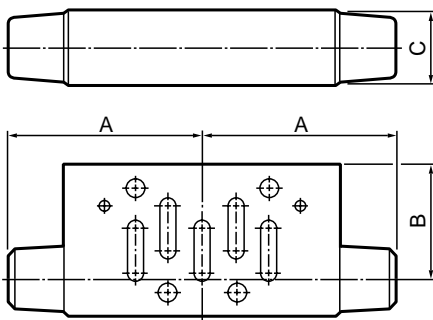
		Description	Order code	Weight kg	Port size
		<b>Manifold with bottom ports according to VDMA</b>			
		Size 1	<b>P2N-VM512MB</b>	0,24	G1/4
		Size 2	<b>P2N-WM513MB</b>	0,36	G3/8
		Size 3	<b>P2N-YM514MB</b>	0,70	G1/2
	<b>End plate kit for above bottom ported manifold according to VDMA</b>				
	Size 1	<b>P2N-VM513E</b>	0,21	G3/8	
	Size 2	<b>P2N-WM514ES</b>	0,36	G1/2	
	Size 3	<b>P2N-YM518ES</b>	0,68	G1	
		<b>Manifold with bottom ports low profile</b>			
		Size 1	<b>P2N-AM512MB</b>	0,20	G1/4
		<b>Top or bottom ported connecting block for above manifold "low profile"</b>			
		Size 1	<b>P2N-AM513GT</b>	0,15	G3/8
		<b>End piece for above manifold "low profile"</b>			
		Size 1	<b>P2N-AM500J</b>	0,06	
		<b>Top or bottom ported intermediate supply for above manifold "low profile"</b>			
		Size 1	<b>P2N-AM513BT</b>	0,14	G3/8
	<b>Isolating seal for above manifold "low profile"</b>				
	Size 1	<b>P2N-AK0P</b>	0,07		
		<b>Manifold with side port</b>			
		Size 1	<b>P2N-EM512MD</b>	0,24	G1/4
		Size 2	<b>P2N-FM513MD</b>	0,36	G3/8
		<b>Side ported connecting kit for above manifold with side ports</b>			
		Size 1	<b>P2N-EM513ES</b>	0,21	G3/8
		Size 2	<b>P2N-FM514ES</b>	0,29	G1/2

**Manifolds and subbases accessories**

**Order codes**

	Description	Order code	Weight kg
	<b>Blanking plate</b>		
	Size 1	<b>P2N-AA5B</b>	0,10
	Size 2	<b>P2N-BA5B</b>	0,15
	Size 3	<b>P2N-CA5B</b>	0,20
	<b>Sandwich flow control interface function plate</b> (for exhaust flow control - adjustment by hex. Key)		
	Size 1	<b>P2N-GA5F</b>	0,22
	Size 2	<b>P2N-HA5F</b>	0,35
	Size 3	<b>P2N-JA5F</b>	0,86

**Dimensions**



	ISO size	A	B	C	D
<b>P2N-GA5F</b>	1	51	30	20	89
<b>P2N-HA5F</b>	2	67	25	26	108
<b>P2N-JA5F</b>	3	89	33,5	33	122





## **Pneumatic Division Sales Offices**

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**Austria - Wr.Neustadt**

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Fax: +43 2622 66212

**Belgium - Nivelles**

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**Czech & Slovak  
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Fax: +420 283 085 360

**Denmark - Ishøj**

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Fax: +45 43 733107

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**Romania - Bucharest**

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Fax: +40 21 252 3381

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**Slovenia - Novo mesto**

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**Spain - Madrid**

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**Sweden - Spånga**

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Fax: +46 (0) 8 5979 5110

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**UK - Cannock**

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Fax: +44 1543 456001

**Ukraine - Kiev**

Tel: + 380 44 220 7432  
Fax: + 380 44 220 6534



**Parker Hannifin plc**  
Pneumatic Division,  
Walkmill Lane, Bridgtown,  
Cannock, Staffs. WS11 3LR  
United Kingdom