



SINGLE SUBBASES

with side ports / bottom ports



JOUCOMATIC METALLIC JOINABLE SUBBASES

with bottom ports

Series
355
Type

ISO sizes 1-2-3

SPECIFICATIONS

type of subbase	description		port connection				size	catalogue number		
	type of port	12-14	1	2-4	3-5					
single subbases ISO 5599/1 AFNOR NFE 49080	side	tapped	G 1/8	G 1/4	G 1/4	G 1/4	ISO 1	35500076		
			G 1/8	G 1/4	G 1/4	G 3/8		35500061		
			G 1/8	G 3/8	G 3/8	G 3/8		35500382		
			G 1/8	G 3/8	G 3/8	G 3/8	ISO 2	35500560		
			G 1/8	G 1/2	G 1/2	G 1/2		35500562		
	bottom	tapped	G 1/8	G 1/2	G 1/2	G 1/2	ISO 3	35500171		
			G 1/8	G 3/4	G 3/4	G 3/4		35500192		
		with couplers	Ø 4 mm	for OD Ø 8 mm		G 1/4	ISO 1	35500077		
			G 1/8	G 1/4	G 1/4	G 1/4		35500085		
							ISO 1	35500069		
joinable subbases ISO 5599/1 VDMA 24345	bottom	subbase	G 1/8	-	G 1/4	-	ISO 1	35500165		
		set of 2 end plates	-	G 3/8	-	G 3/8		35500166		
		subbase	G 1/8	-	G 3/8	-	ISO 2	35500169		
		set of 2 end plates	-	G 1/2	-	G 1/2		35500170		
		subbase	G 1/8		G 1/2		ISO 3	35500173		
		set of 2 end plates	-	G 1	-	G 1		35500174		
		set of 3 plugs on main pressure (1) and exhausts (3-5) for 2 different pressure supplies (see A)					ISO 1	88135521		
								ISO 2	88135522	
								ISO 3	88135520	

Set of 2 end plates supplied with 3 plugs (for 1-3-5)

(A) Mounting principle of a plug set : this device allows joinable subbases to be supplied with 2 different pressure inlets.



SET OF TRANSFER PLATES AND CONNECTIONS

• Set of transfer plates and connections to put together different sizes of ISO - VDMA joinable subbases :

ISO 1 - ISO 2, set including :

- A transfer module to allow connection of ISO-VDMA joinable subbases through ISO 1 and ISO 2 **bottom** ports, and connection of supply pressure (1) and exhausts (3-5) through the unit.
- One end plate ISO 1 (ports 1 - 3 - 5)
- One end plate ISO 2 (ports 1 - 3 - 5)

ISO 1 - ISO 3 set including the same parts as mentioned above, but adapted to the connection of ISO 1 and ISO 3

description	type	catalogue number	E (mm)	Diagram
Set of transfer plate and connections for ISO/VDMA joinable subbases with bottom ports	ISO 1 - ISO 2	35500199	20	
	ISO 1 - ISO 3	35500194	32	

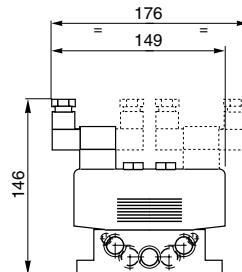
DIMENSIONS (mm), WEIGHT (kg)



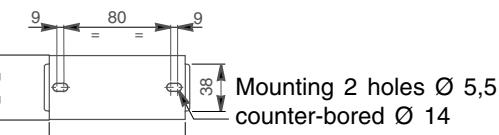
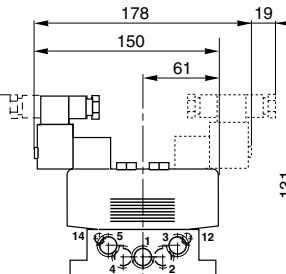
541 VALVES ON SINGLE SUBBASES

Side port - ISO 1

With pilots 189



With pilots 190



With M12 connection

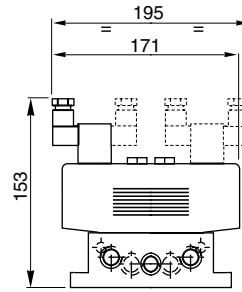
subbase catalogue number	port connection		
	12-14	1-2-4	3-5
35500076	G 1/8	G 1/4	
		G 3/8	
		G 3/8	G 3/8

total weight					
with 1 pilot			with 2 pilots		
189	190	M12	189	190	M12
0,725	0,785	0,665	0,825	0,945	0,695

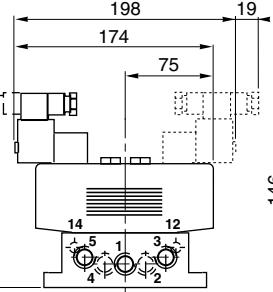
542 VALVES ON SINGLE SUBBASES

Side port - ISO 2

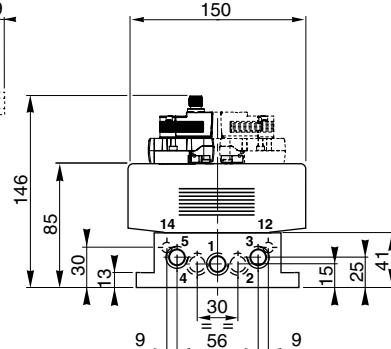
With pilots 189



With pilots 190



With M12 connection

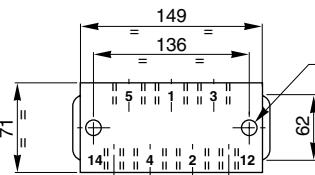


subbase catalogue number	port connection		
	12-14	1-2-4	3-5
35500560	G 1/8	G 3/8	G 3/8
		G 1/2	G 1/2

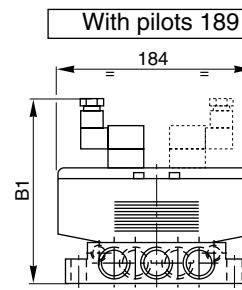
total weight					
with 1 pilot			with 2 pilots		
189	190	M12	189	190	M12
0,950	1,010	0,930	1,080	1,200	0,980

543 VALVES ON SINGLE SUBBASES

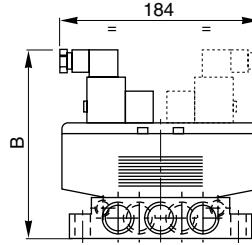
Side port - ISO 3



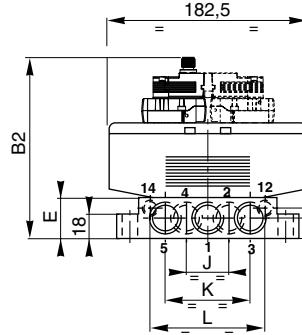
Mounting 2 holes Ø 6,6



With pilots 190



With M12 connection



subbase catalogue number	port connection		
	12-14	1-2-4	3-5
35500171	G 1/8	G 1/2	G 1/2
		G 3/4	G 3/4

G	total weight					
	with 1 pilot			with 2 pilots		
B	B1	B2	E	F	H	J
1/2	1,585	1,645	1,540	1,685	1,800	1,585
3/4	2,652	2,127	2,022	2,167	2,282	2,067

G	B	B1	B2	E	F	H	J	K	L
G 1/2	164	159,5	152	32	22	17	32	68	90
G 3/4	182	177,5	170	50	40	20	36	80	92

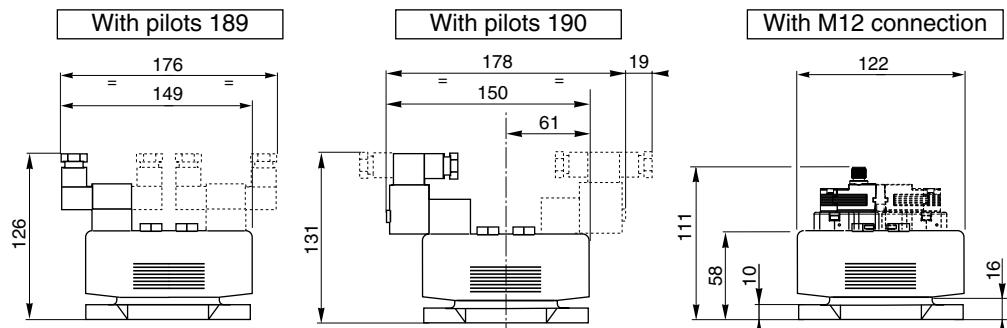
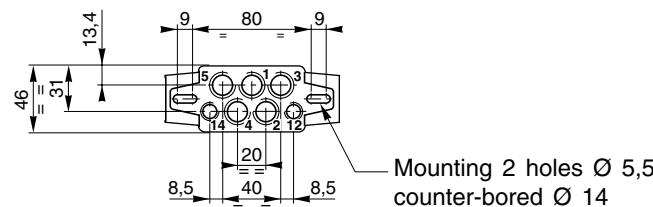
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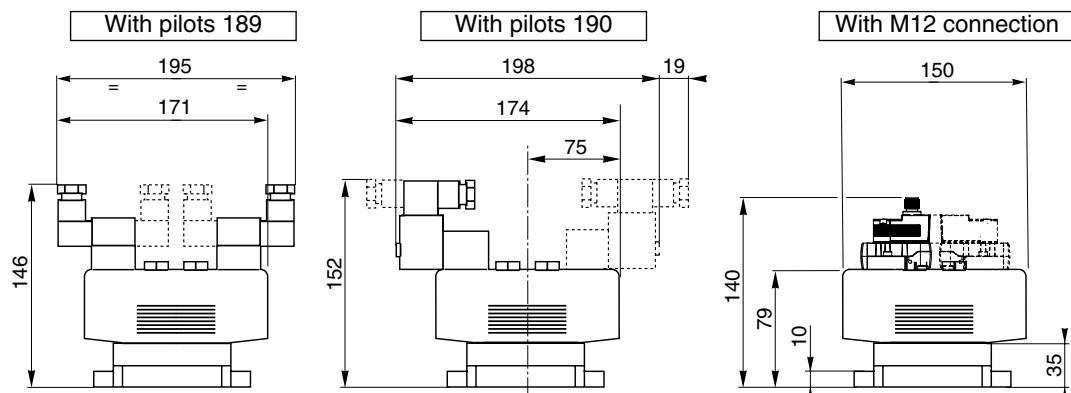
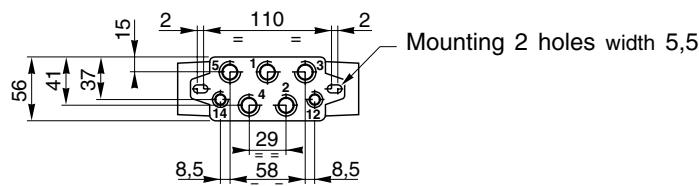
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DIMENSIONS (mm), WEIGHT (kg)

541 VALVES ON SINGLE SUBBASES
Bottom port - ISO 1

subbase catalogue number	port connection		
	12-14	1-2-4	3-5
35500077	G 1/8	G 1/4	G 1/4
35500069	Instant fittings Ø 4 OD	Ø 8 OD	G 1/4

total weight					
with 1 pilot			with 2 pilots		
189	190	M12	189	190	M12
0,720	0,780	0,660	0,820	0,940	0,690

542 VALVES ON SINGLE SUBBASES
Bottom port - ISO 2

subbase catalogue number	port connection		
	12-14	1-2-4	3-5
35500085	G 1/8	G 3/8	G 3/8

total weight					
with 1 pilot			with 2 pilots		
189	190	M12	189	190	M12
0,670	0,730	0,650	0,800	0,920	0,700

SPOOL VALVES ISO 5599/1 SIZES 1-2 - SERIES 541-542
METALLIC JOINABLE SUBBASES - BOTTOM PORTS

JOUCOMATIC™

DIMENSIONS (mm), WEIGHT (kg) 

541 SPOOL VALVES ON METALLIC JOINABLE SUBBASES

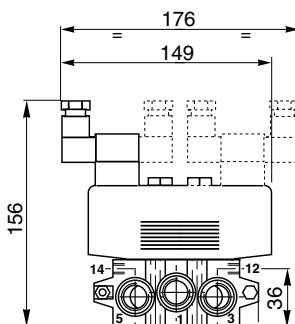
Bottom port - ISO 1

number of subbases	A	B±1	C	weight		
				valves with 2 pilots + subbases + end plates		
				pilot 189	pilot 190	M12
3	173	150	86	2,850	3,200	2,450
4	216	193	129	3,500	4,000	3,000
5	259	236	172	4,100	4,700	3,450
6	302	279	215	4,750	5,500	4,000
7	345	322	258	5,350	6,200	4,450
8	388	365	301	6,000	7,000	5,000

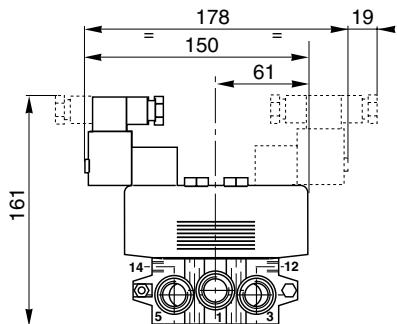
Pilots weight : 1 x 189 = 0,120 kg - 1 x 190 = 0,180 kg

1 x M12 = 0,058 kg - 2 x M12 = 0,110 kg

With pilots 189

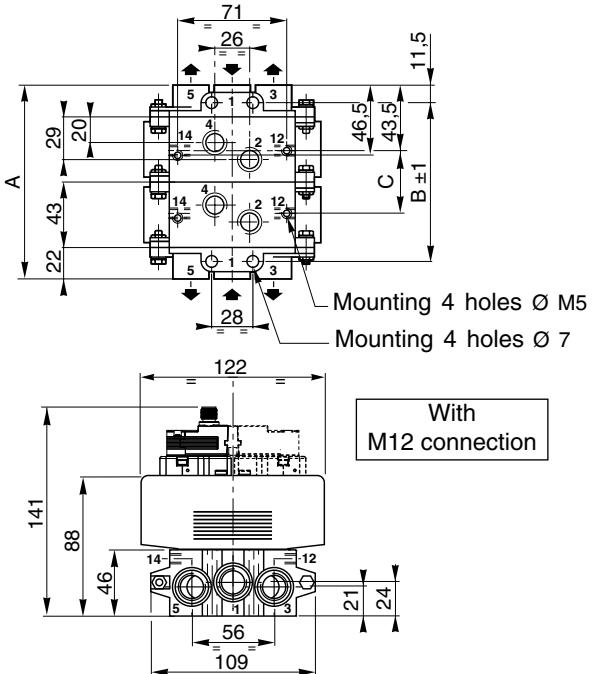


With pilots 190



	code	port connection		
		12-14	2-4	1-3-5
subbase	35500165	G 1/8	G 1/4	-
2 end plates	35500166	-	-	G 3/8

Set of end plates supplied with 3 plugs G 3/8 (for 1-3-5)



542 SPOOL VALVES ON METALLIC JOINABLE SUBBASES

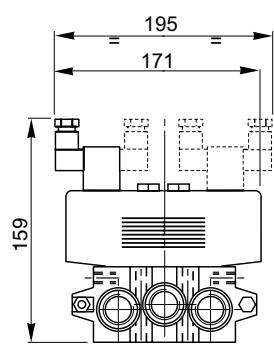
Bottom port - ISO 2

number of subbases	A	B±1	C	weight		
				valves with 2 pilots + subbases + end plates		
				pilot 189	pilot 190	M12
3	220	193	112	3,600	3,900	3,240
4	276	249	168	4,600	5,100	4,220
5	332	305	224	5,700	6,300	5,200
6	388	361	280	6,800	7,500	6,180
7	444	417	336	7,800	8,700	7,160
8	500	473	392	9,000	9,900	8,140

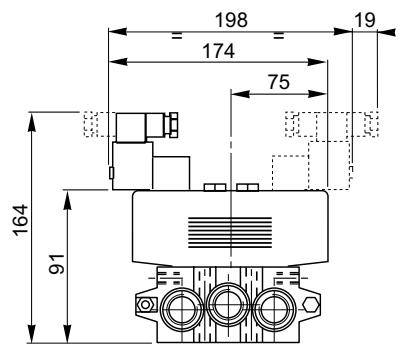
Pilot weight : 1 x 189 = 0,120 kg - 1 x 190 = 0,180 kg

1 x M12 = 0,073 kg - 2 x M12 = 0,140 kg

With pilots 189

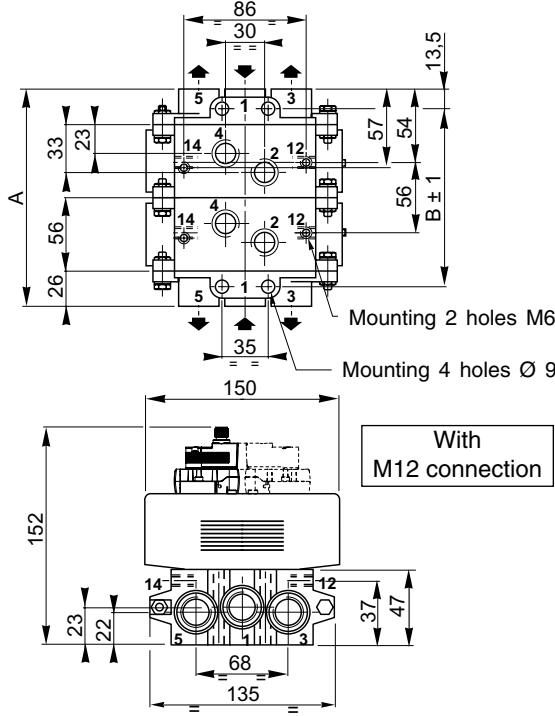


With pilots 190



	catalogue number	port connection		
		12-14	2-4	1-3-5
subbase	35500169	G 1/8	G 3/8	-
2 end plates	35500170	-	-	G 1/2

Set of end plates supplied with 3 plugs G 1/2 (for 1-3-5)



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DIMENSIONS (mm), WEIGHT (kg)

543 SPOOL VALVES ON METALLIC JOINABLE SUBBASES

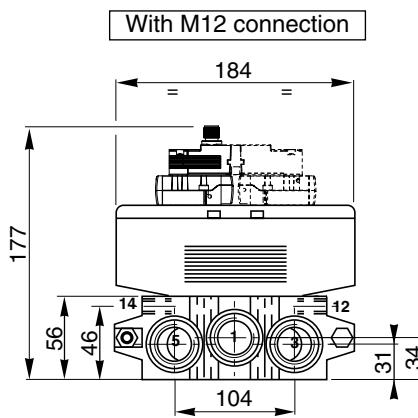
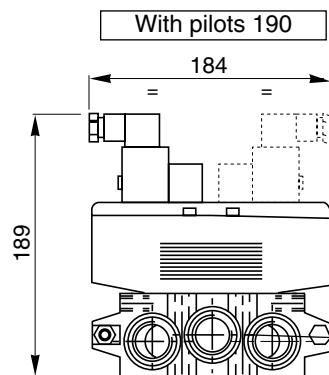
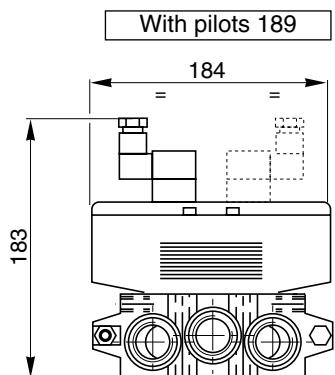
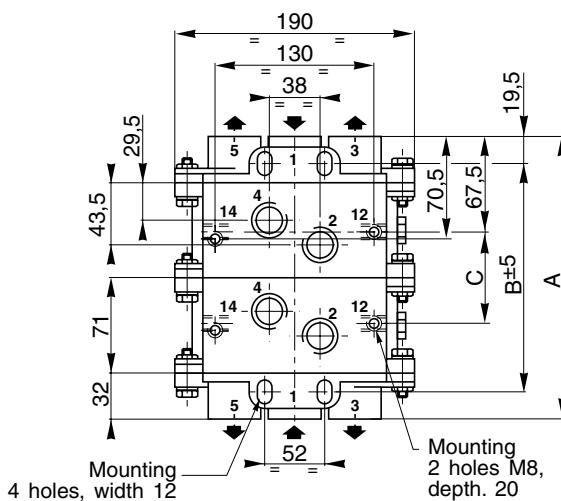
Bottom port - ISO 3

	catalogue number	port connection		
		12-14	2-4	1-3-5
subbase	35500173	G 1/8	G 1/2	-
2 end plates	35500174	-	-	G 1

Set of end plates supplied with 3 plugs G 3/8 (for 1-3-5)

number of subbases	A	B±1	C	weight		
				valves with 2 pilots + subbases + end plates		
				pilot 189	pilot 190	M12
2	206	167	71	4,140	4,260	3,820
3	277	238	142	5,740	5,860	5,200
4	348	309	213	7,340	7,460	6,580
5	419	380	284	8,940	9,060	7,960
6	490	451	355	10,540	10,660	9,120
7	561	522	426	12,140	12,140	10,380

Pilots weight : $1 \times 189 = 0,120 \text{ kg}$ - $1 \times 190 = 0,180 \text{ kg}$
 $1 \times M12 = 0,073 \text{ kg}$ - $2 \times M12 = 0,141 \text{ kg}$



GENERAL

This subbase system comprises joinable subbases and accessories with the following main characteristics :

- The equipment has a **standard** interface complying with the international standard ISO 5599/1, size 1 (Series 541).
- Joinable subbases with **side ports**, with connector G1/4 or instant fittings(couplers).
- Reduction in costs of piping due to built-in pneumatic inter-connections between subbases.
- Built-in pressure indicators show the condition of outputs of the spool valve.
- Adjustable **built-in** flow regulators.

CONSTRUCTION

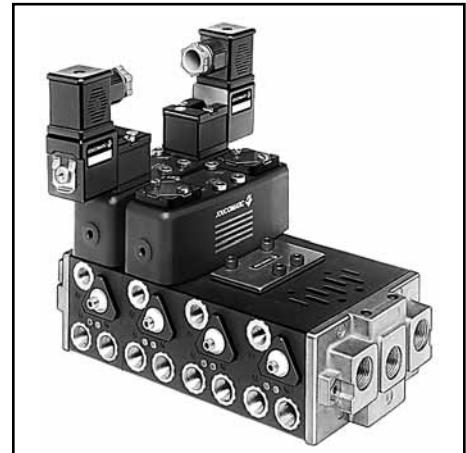
Subbase : glass-filled polyamide (PA+FV).

Internal parts : light alloy and acetal (POM), brass

Sealing : nitrile (NBR).

Pressure indicator : polyether

End plates : light alloy



CONNECTION FACILITIES

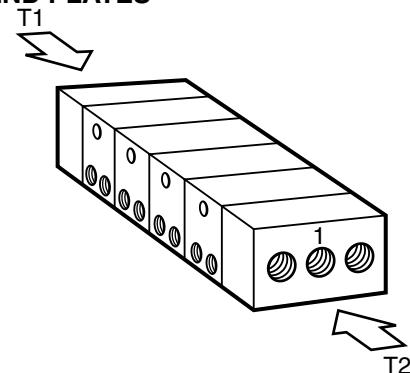
The joinable subbases with side ports offer many advantages :

- Many piping possibilities due to a large number of port connections.
- Easier assembly in panels with a better access to the ports.
- Simple maintenance.
- Cost reduction due to the removal of pivoting mounting chassis and to the reduction of the number of fittings.
- Possible mounting directly on the body of the machine.
- Improved flow rates and response times due to the reduced piping length.

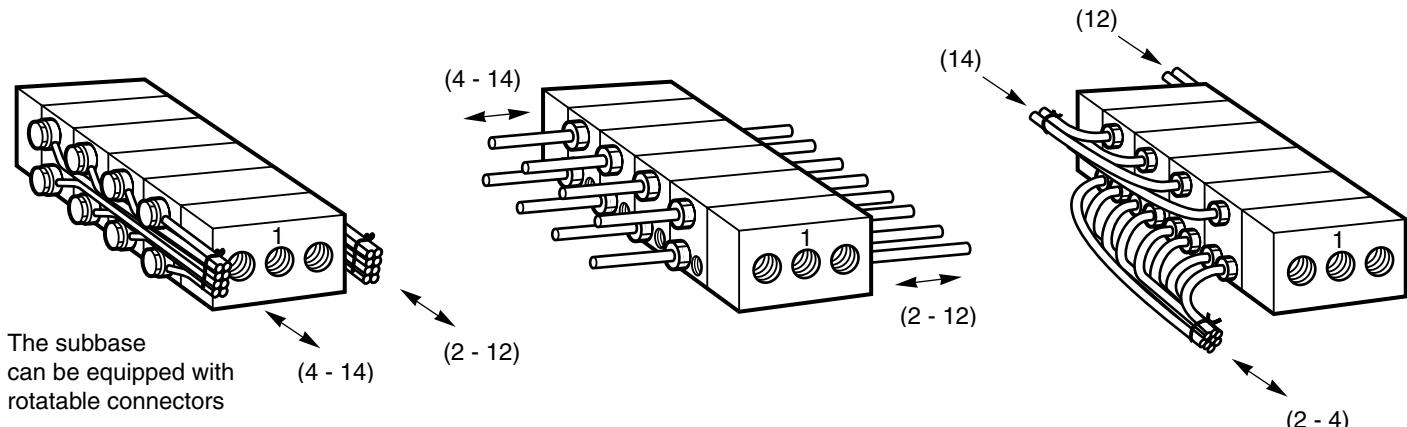
These subbases allow piping to the outlet ports (2-4) and pilot port (14) on the left side ; to the outlet port (2) and pilot port (12) on the right side.

The end plates allow the piping of the main pressure supply (1) and of exhausts (3 and 5) on side T₁ or T₂ or on both sides T₁ and T₂ (see opposite and overleaf).

CONNECTION THROUGH THE END PLATES

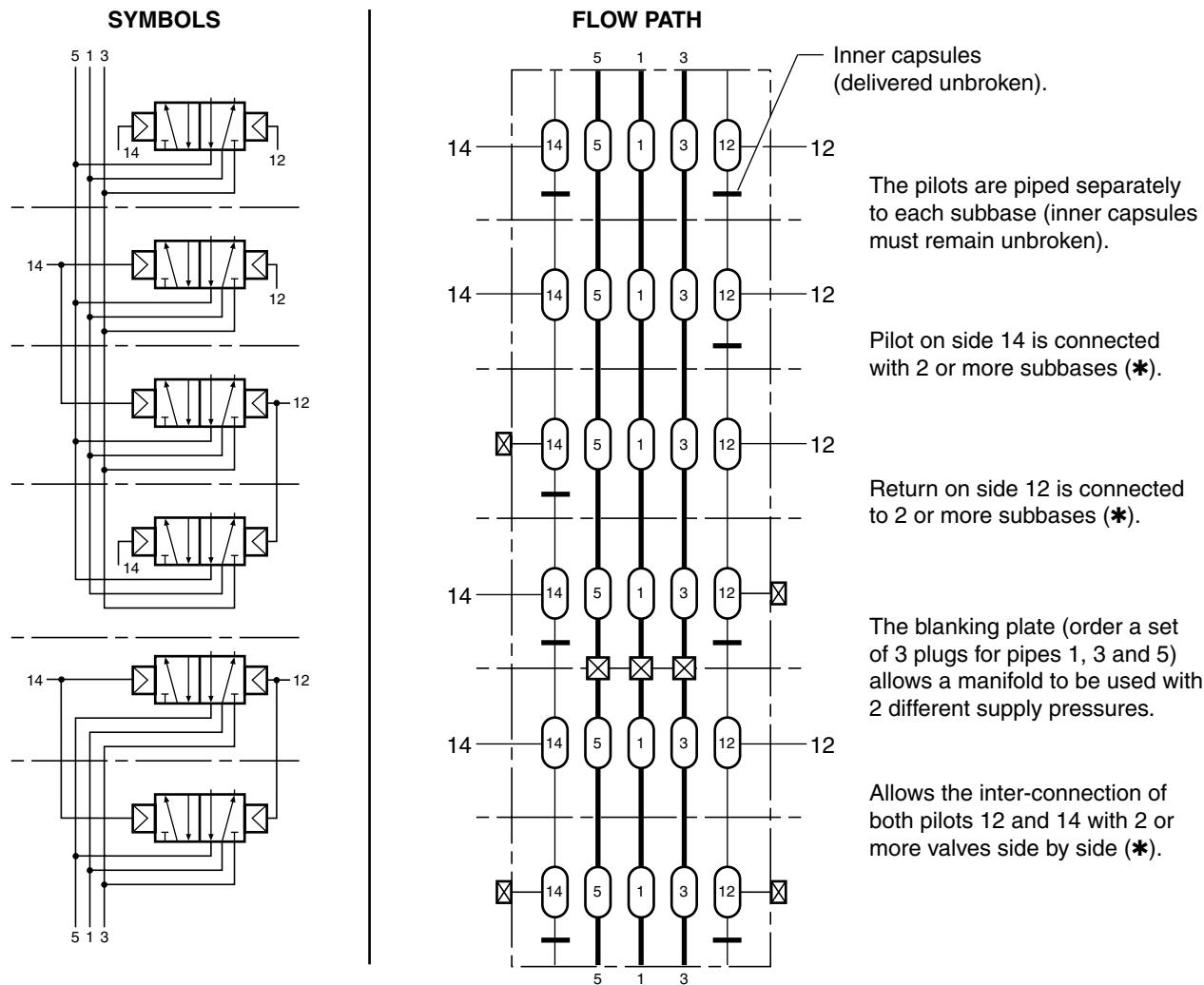


SAMPLE PIPING ARRANGEMENTS



The subbase
can be equipped with
rotatable connectors

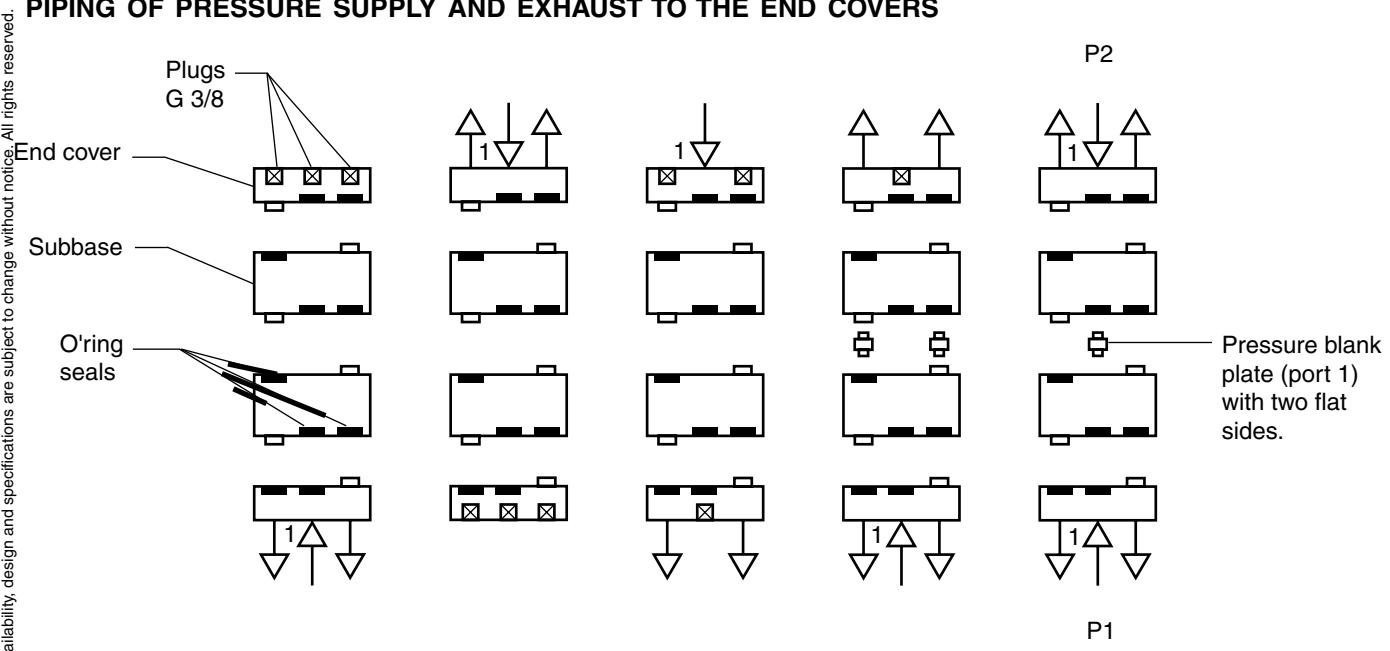
POSSIBLE PNEUMATIC FLOW PATHS



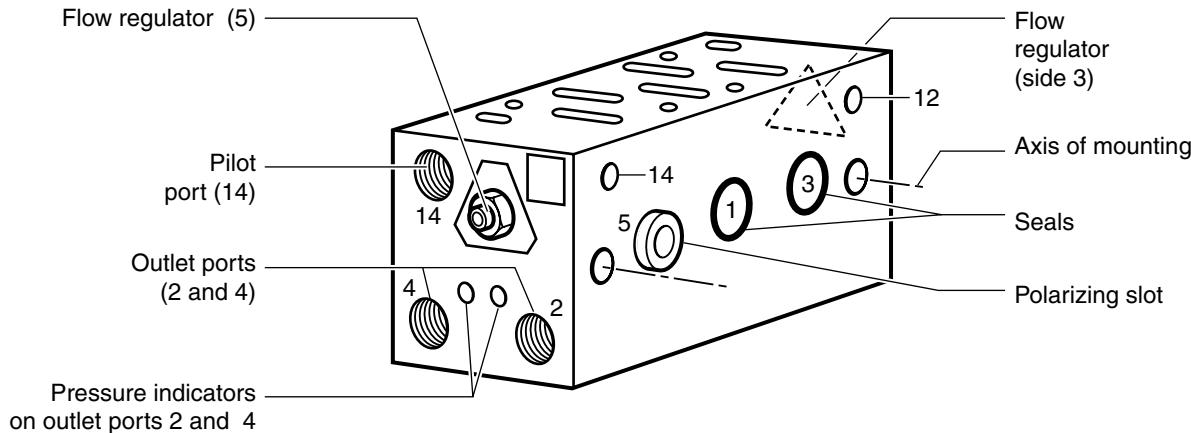
(*) - Ports 12 and 14 are connected by side orifices.

- Punch the inner capsule (with a drift punch) out of the pneumatic inter-connection between subbases to connect pilots with 2 or more subbases : 1) Insert drift punch into the opposite side of raising 2) With G 1/8 plugs, plug the other port(s) of pilot 12 or 14 (subbase is delivered with sealings).

PIPING OF PRESSURE SUPPLY AND EXHAUST TO THE END COVERS

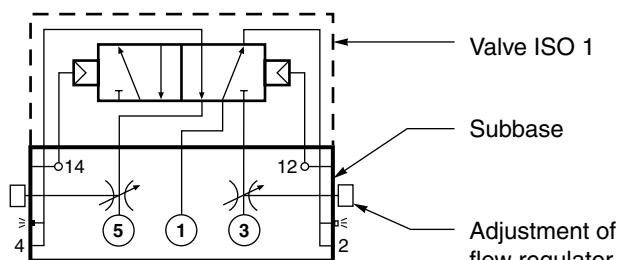


JOINABLE SUBBASE WITH BUILT-IN FLOW REGULATORS AND PRESSURE INDICATORS

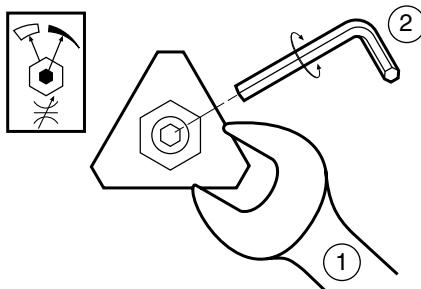


FLOW REGULATORS

PILOT MOUNTING



ADJUSTMENT



- ① Turn nut until the desired flow regulation.
- ② For accurate adjustment, turn central screw.

SPECIFICATIONS

description	parts list	port connection			catalogue number
		1-3-5	2-4	12-14	
joinable subbase with built-in flow regulators and pressure indicators (see above)	1 subbase 5 seals for piping 1-3-5-12-14 1 plug G 1/4 +1plug G 1/8 2 assembly posts	-	G 1/4	G 1/8	35500153
	1 subbase 5 seals for piping 1-3-5-12-14 2 cylindrical plugs (1 Ø 8 + 1 Ø 4 mm) 2 assembly posts	-	instant fittings for flexible tubes		35500155
joinable subbase without flow regulators nor pressure indicator	1 subbase 5 seals for piping 1-3-5-12-14 1 plug G 1/4 +1 plug G 1/8 2 assembly posts	-	G 1/4	G 1/8	35500156
	1 subbase 5 seals for piping 1-3-5-12-14 2 cylindrical plugs (1 Ø 8 + 1 Ø 4 mm) 2 assembly posts	-	instant fittings for flexible tubes		35500158
set of 2 end plates	2 end plates 4 seals 2 assembly screws 2 assembly nuts 3 plugs G 3/8	G 3/8	-	-	35500159
set of 3 plugs	3 plugs on main pressure (1) and exhausts (3,5) - seals included				88135514

NOTE - number maximum of subbases = 10

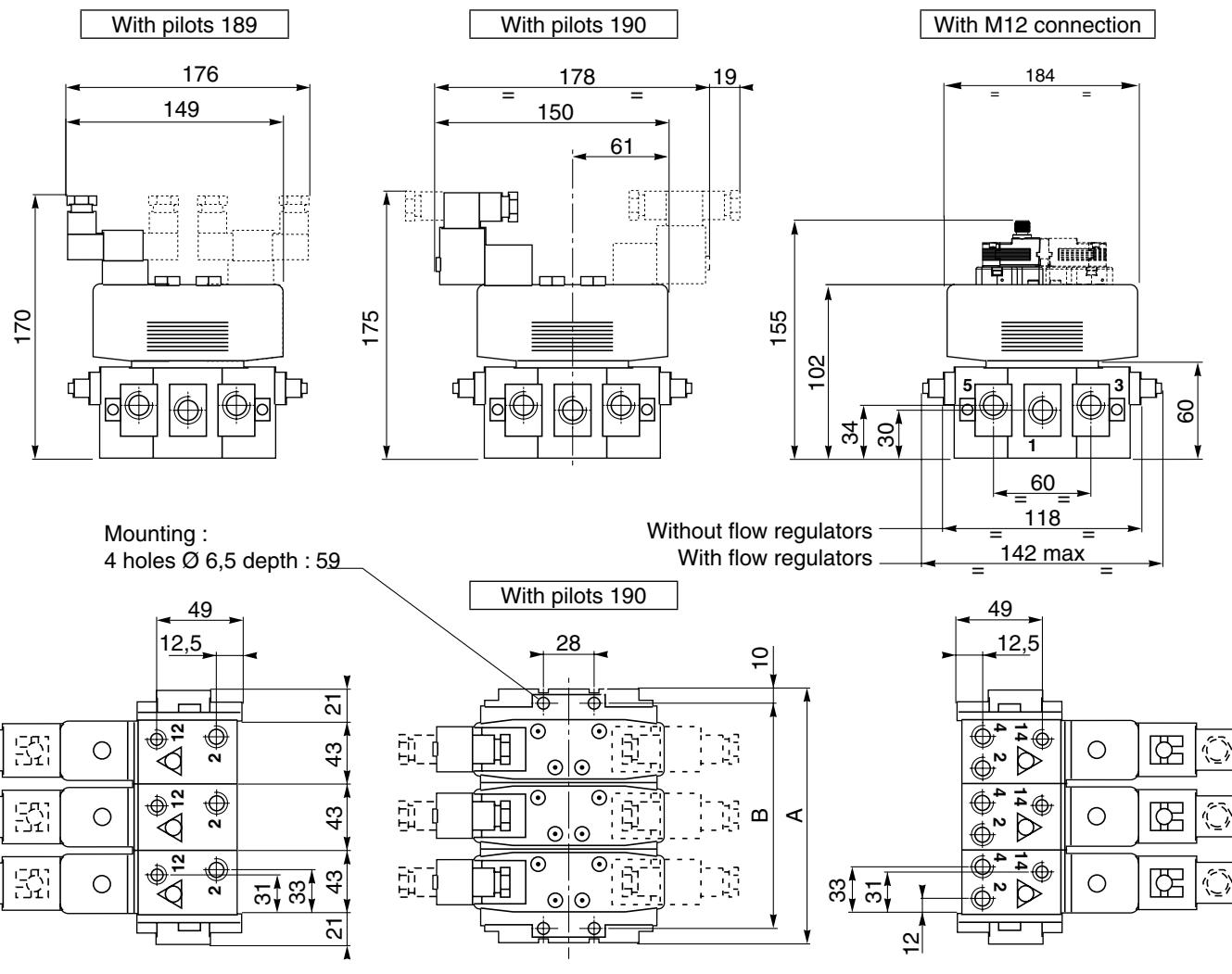
ACCESSORIES (see page 22)

DIMENSIONS (mm), WEIGHT (kg) 

SPOOL VALVES ON POLYAMIDE JOINABLE SUBBASES

Side port - ISO 1

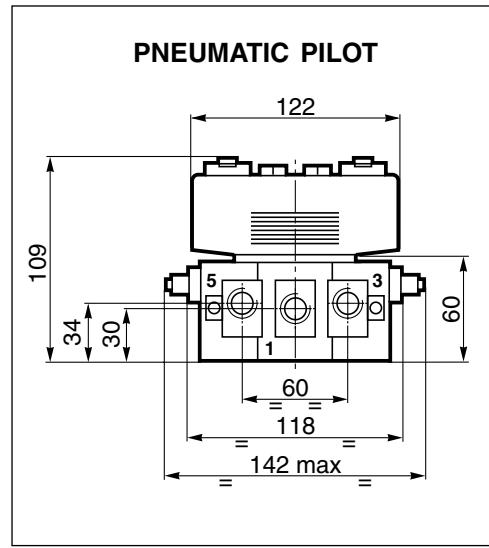
ELECTRIC PILOT



number of subbases	A	B	weight		
			valves with 2 pilots + subbases + end plates		
			pilot 189	pilot 190	M12
2	128	108	2,200	2,400	1,900
3	171	151	3,100	3,400	2,650
4	214	194	4,000	4,400	3,400
5	257	237	4,900	5,400	4,150
6	300	280	5,800	6,400	4,900
7	343	323	6,700	7,400	5,650
8	386	366	7,600	8,400	6,400
9	429	409	8,500	9,400	7,150
10	472	452	9,400	10,400	7,900

Pilot weight : 1 x 189 = 0,120 kg - 1 x 190 = 0,180 kg
1 x M12 = 0,058 kg - 2 x M12 = 0,110 kg

n° of ports	port connection	
	tapped	with instant fittings for flexible tubes
1-3-5	G 3/8	tapped G 3/8
2-4	G 1/4	OD. Ø 8 mm
12-14	G 1/8	OD. Ø 4 mm



GENERAL

This subbase system comprises joinable subbases and accessories with 3 principal characteristics.

- The equipment has a **standard** interface complying with the international standard ISO 5599/1 - Size 1, so that spool valves series 541 can be fitted.
- Subbases for **side ports**.
- The subbases are fitted with selector plates which mean that various piping arrangements and inter-connections can be selected.

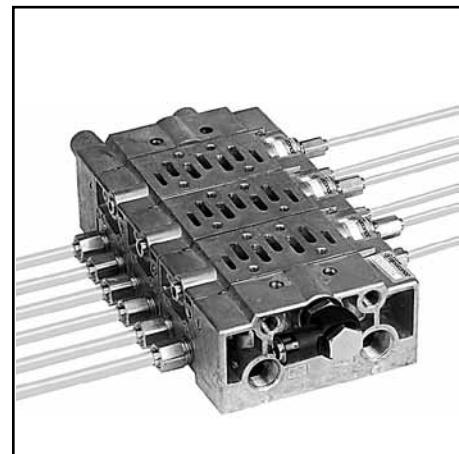
CONNECTION POSSIBILITIES

These joinable subbases with side ports offer many advantages:

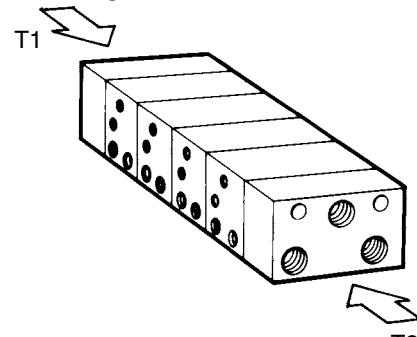
- Various piping possibilities due to a large number of port connections.
- Simple assembly in panels due to an improved accessibility to the ports.
- Simple maintenance.
- A reduction in costs due to the removal of pivoting mounting chassis and a reduction in the number of fittings.
- Possibility of mounting directly onto the body of the machine.
- A reduction in lengths of tube giving improved flow rates and improved response times.

These bases allow piping to outlet ports (2, 4) and pilot ports (12, 14) on both side faces, as shown below.

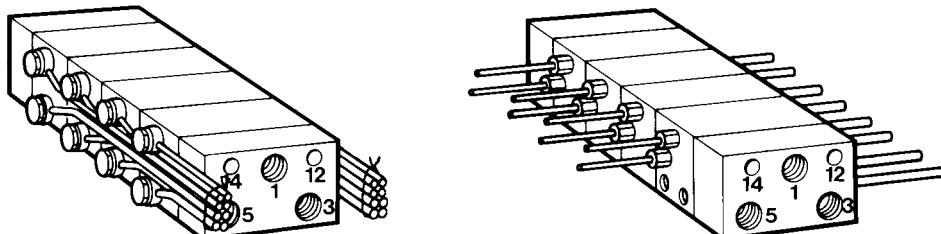
The end plates allow the piping of the supply (1) and exhausts (3,5), in addition, the pilots (12,14) can be piped into the end plates.



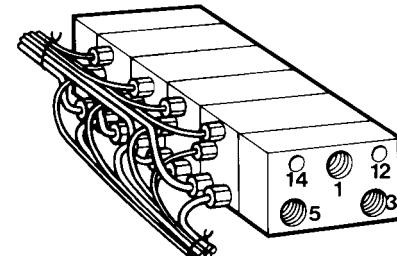
CONNECTION THROUGH THE END PLATES



SAMPLE PIPING ARRANGEMENTS

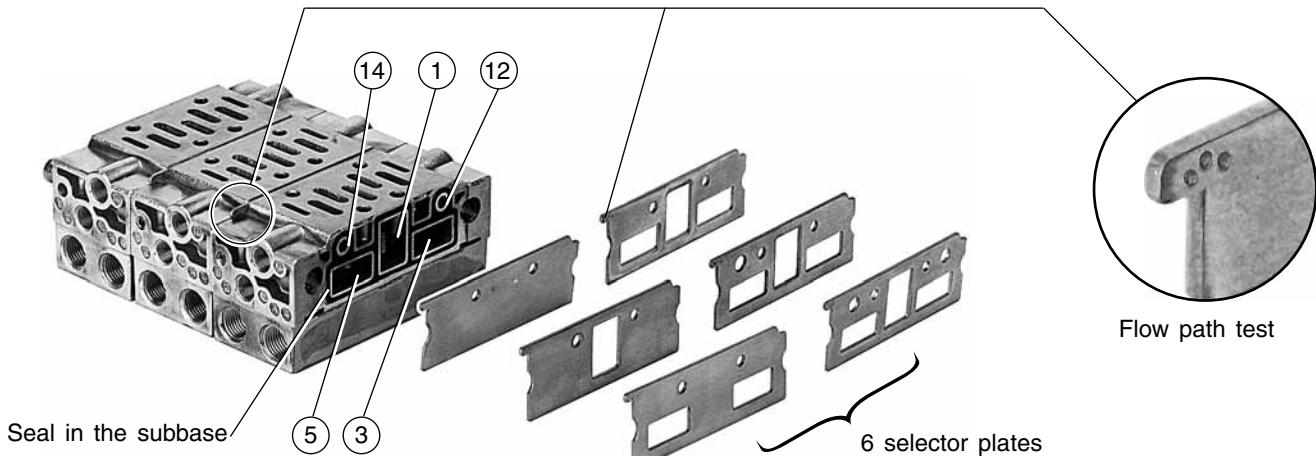


This arrangements allows the use of rotatable fitting

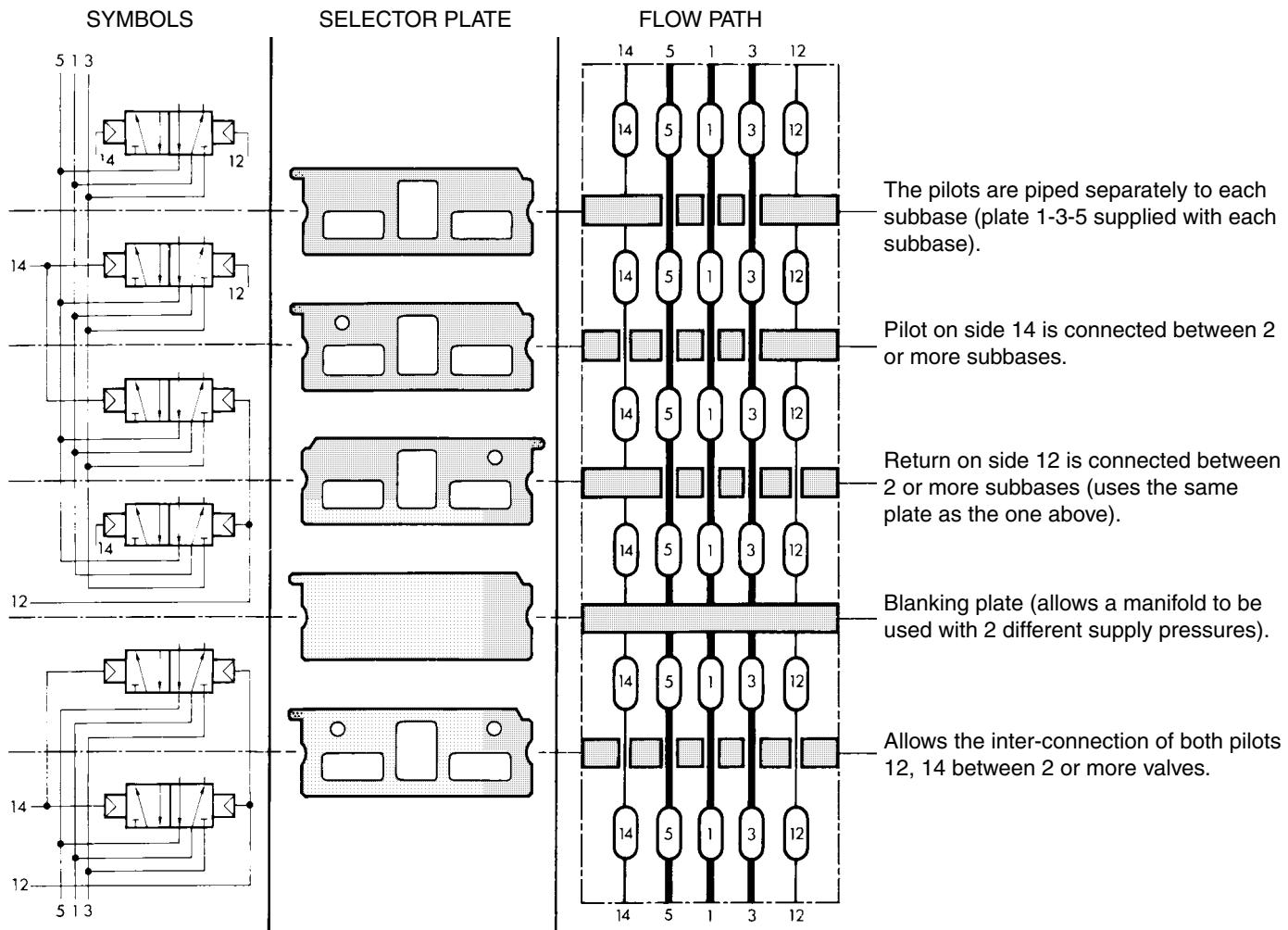


POSSIBLE FLOW PATHS

The subbases include 5 flow paths (1-3-5-12-14), all of which can be connected through the end plates of each manifold assembly.

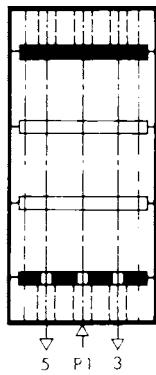


POSSIBLE FLOW PATHS



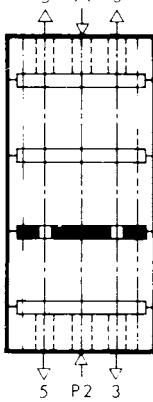
PIPING OF SUPPLY AND EXHAUSTS TO THE END COVERS

STANDARD ASSEMBLY
Supply and exhausts to 1 side plate.



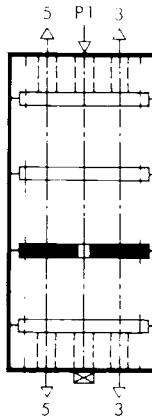
Selector plates supplied as standard allows the assembly as shown above.

Assembly with 2 different pressures and with the exhaust piped to both end plates.



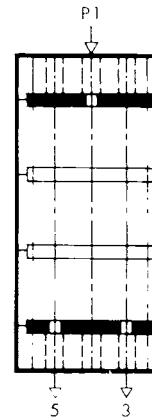
For this assembly a selector plate with connections between 3, 5 is necessary.

Assembly with 1 supply on 1 plate but with exhausts from the 2nd end plate.



For this assembly a selector plate allows flow through port 1 if required. The supply port in the second plate must be plugged.

Assembly with the supply port in 1 end plate and the exhaust from the other end plate.



For this assembly you require 2 selector plates, 1 allowing flow through port 1 and 1 allowing flow through ports 3, 5. With ISO 1 bases this arrangement allows the assembly without plugging any ports.

CHOICE OF EQUIPMENT

description	parts list	ports					code	
		1-3-5		2-4		12-14	ISO 1	ISO 2
		ISO 1	ISO 2	ISO 1	ISO 2	ISO 1-2		
metallic joinable subbase with side ports	1 subbase + 2 seals 1 selector plate (connects ports 1 - 3 - 5) 2 G 1/4 plugs 1 G 1/8 plug 2 assembly diabolos	-	-	G 1/4	G 1/2	G 1/8	35500088	35500102
set of 2 end plates	2 end plates + 2 seals 1 blank selector plate (no flow) 1 selector plate (connects ports 1 - 3 - 5) 2 assembly diabolos	G 3/8	G 3/4	-	-	G 1/8	35500087	35500101
blank selector plate (no flow)							88135501	88135506
selector plate (connects port 1)							88135512	88135513
selector plate (connects ports 3 and 5)							88135510	88135511
selector plate (connects ports 1 - 3 - 5)							88135502	88135507
selector plate (connects ports 1 - 3 - 5 and 1 pilot 12 or 14)							88135503	88135508
selector plate (connects ports 1 - 3 - 5 and 2 pilots 12 and 14)							88135504	88135509

SET OF TRANSFER PLATES AND CONNECTIONS

- Allow connection of ISO 1 and ISO 2 metallic joinable subbases, with side port .

Set including : - A transfer module to allow connection of subbases ISO 1 and ISO 2

- One end plate ISO 2 (ports 1 - 3 - 5 : G 3/4)
- One end plate ISO 1 (ports 1 - 3 - 5 : G 3/8)

SPECIFICATIONS

designation	type	catalogue number	E (mm)	Diagram
set of transfer plate and connections for joinable metallic subbases with side port	ISO 1 - ISO 2	35500390	30	

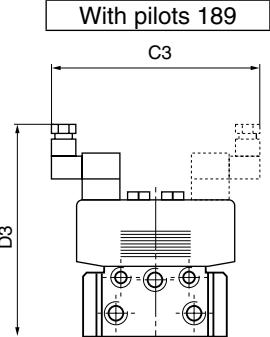
ACCESSORIES (see page 22)

DIMENSIONS (mm), WEIGHT (kg) 

SPOOL VALVES ON METALLIC JOINABLE SUBBASES

Side ports - ISO 1-2

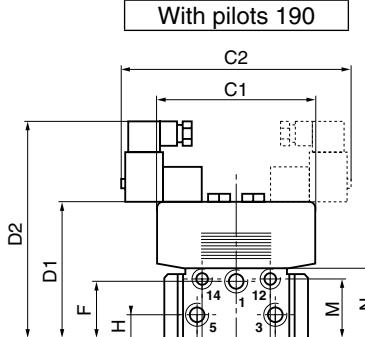
number of subbases	ISO 1		ISO 2	
	A (mm)	B (mm)	A (mm)	B (mm)
2	146	106	192	168
3	189	149	248	224
4	232	192	304	280
5	275	235	360	336
6	318	278	416	392
7	361	321	472	448
8	404	364	528	504



With pilots 189

C3

D3



With pilots 190

C2

D2

D1

F

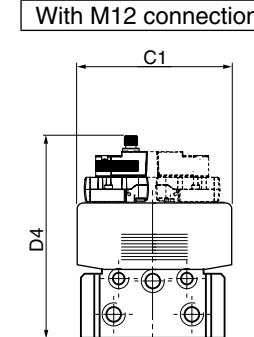
J

K

L

M

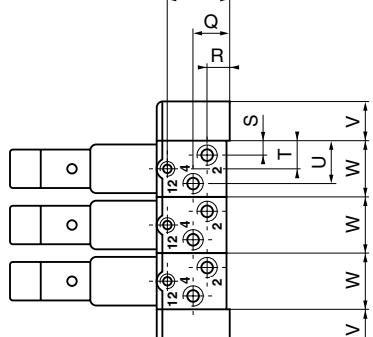
N



With M12 connection

C1

D4



ISO 1

P

Q

R

S

U

V

W

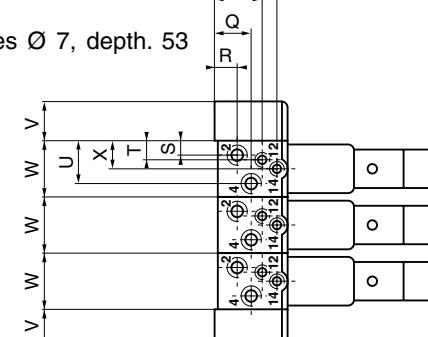
W

W

V

A

B



4 holes Ø 7, depth. 53

P

Y

Q

R

U

S

V

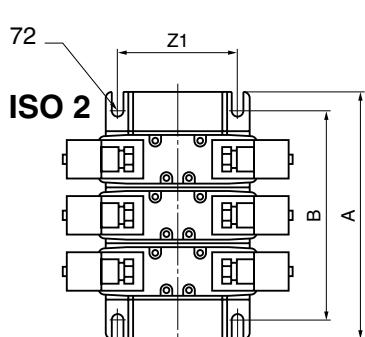
W

W

W

V

A



4 holes Ø 8,5, depth. 72

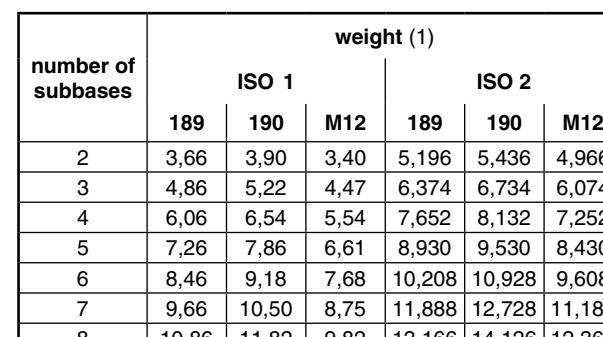
Z1

ISO 2

A

B

Z1



weight (1)

number of subbases	ISO 1			ISO 2		
	189	190	M12	189	190	M12
2	3,66	3,90	3,40	5,196	5,436	4,966
3	4,86	5,22	4,47	6,374	6,734	6,074
4	6,06	6,54	5,54	7,652	8,132	7,252
5	7,26	7,86	6,61	8,930	9,530	8,430
6	8,46	9,18	7,68	10,208	10,928	9,608
7	9,66	10,50	8,75	11,888	12,728	11,188
8	10,86	11,82	9,82	13,166	14,126	12,366

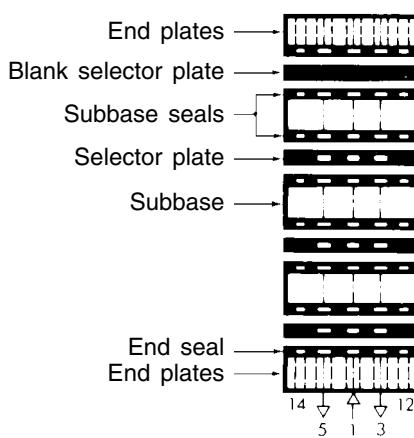
(1) Spool valves with 2 pilots 189 + subbases + end plates
Pilot weight : 1 x 189 = 0,120 kg - 1 x 190 = 0,180 kg

M12 ISO1 1 x M12 = 0,058 kg - 2 x M12 = 0,110 kg

M12 ISO2 1 x M12 = 0,073 kg - 2 x M12 = 0,140 kg

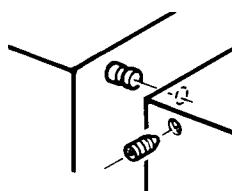
	C1	C2	C3	D1	D2	D3	D4	F	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z1
ISO 1	122	178	176	95	168	163	148	42	16	53	59	106	44	53	44	13	13	11	17,5	32	30	43	26	30	28
ISO 2	150	198	171	126	197	191	185	62	30	62	62	126	72	80	68	36	17	15	18	41	40	58	38	64	104

ASSEMBLY OF SUBBASES

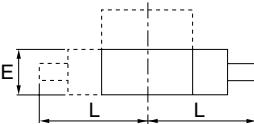


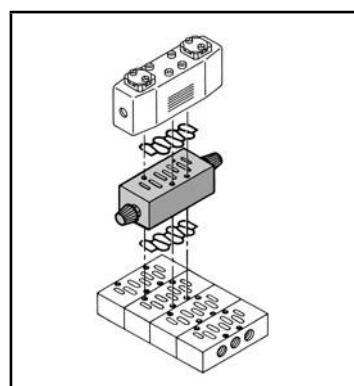
CONNECTION

End plates and subbases are connected together using a system of diabolos and grub screws.

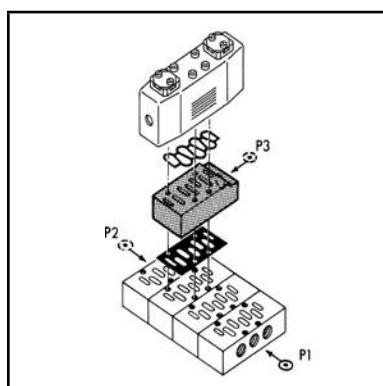


SPECIFICATIONS

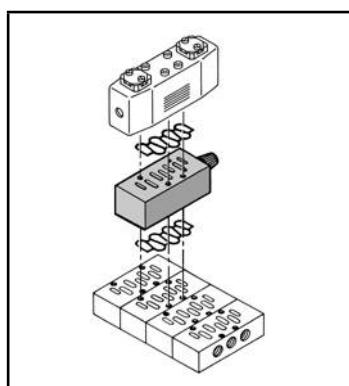
designation	symbol	catalogue number			
		ISO 1	ISO 2	ISO 3	
Blanking plate to cover interface This plate allows later assembly with a spool valve.		88135517	88135518	88135519	
Flow regulator sandwich This unit, fitted between the subbase and the valve, incorporates 2 flow regulators in the exhaust ports 3 and 5. Flow regulators can be used to control the speed of a double acting cylinder. Weights : ISO 1 : 0,230 kg - ISO 2 : 0,440 kg - ISO 3 : 1 kg		34600476	34600477	-	
Separate pressure supply module This unit, fitted between the subbase and the valve, allows an individual valve to be supplied with a different pressure from that in the main manifold. The pressure feed within the side bases is not blocked by adding this plate. Pressure supply port P : G 1/4		35500118	-	-	
Sandwich pressure regulator module This module, which is placed between a subbase and a spool valve, is designed to regulate the pressure and the port according to: - Adjustable pressure: 0.5 to 10 bar - G1/8 (A) port on top for pressure gauge connection - Locking adjustment knob of "Pull-Turn-Push" type  ISO 1 : E=45 mm L=146 mm ISO 2 : E=60 mm L=180 mm ISO 3 : E=67 mm L=208 mm	on port 1 (supply pressure) regulator flow at 6 bar : ISO 1 : 550 l/min weight: 0,387 kg ISO 2 : 1000 l/min weight: 1,680 kg ISO 3 : 2000 l/min weight: 2,210 kg		34600474	-	-
	on port 2 regulator flow at 6 bar : ISO 1 : 850 l/min weight: 0,387 kg ISO 2 : 1400 l/min weight: 1,680 kg ISO 3 : 2700 l/min weight: 2,210 kg		34600458	-	-
	on port 4 regulator flow at 6 bar : ISO 1 : 850 l/min weight: 0,387 kg ISO 2 : 1400 l/min weight: 1,680 kg ISO 3 : 2700 l/min weight: 2,210 kg		34600459	-	-
	on ports 2 et 4 regulator flow at 6 bar : ISO 1 : 850 l/min weight: 0,577 kg ISO 2 : 1400 l/min weight: 2,400 kg ISO 3 : 2700 l/min weight: 3,200 kg		34600460	-	-
Gauge Ø40 (0 - 12 bar)				34300014	
G1/8 bracket connection for pressure gauge mounting				88100617	



Sandwich flow regulator module



Separate pressure supply module



Sandwich pressure regulator module