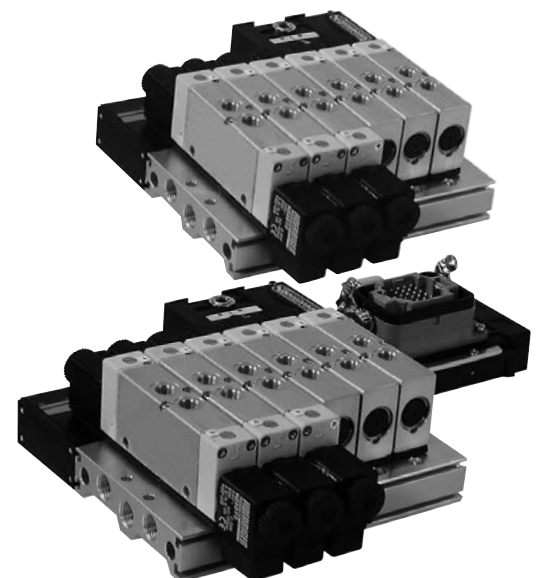


Valve Islands

Series IM20-G1/8
Series IM20-G1/4

Contents

Version	Actuating electrical over	Page		
		Characteristics	Dimension Table	Order Instructions
Valve Islands with Multipole Connector	Sub-D plug industrial connector	88	89, 90	91
Accessories		–	–	92



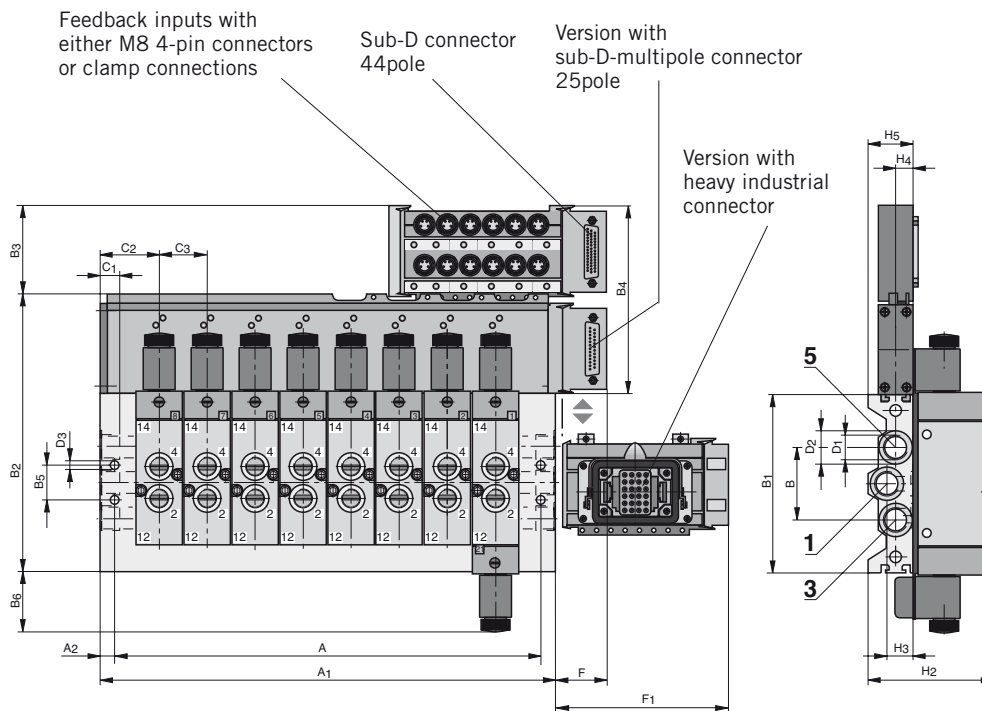
Valve Islands with Multipole Connector

Characteristics	Symbol	Unit	Description
General Features			
Type			IM20-1/8 IM20-1/4
Mounting			4 Screws – see drawing 4 Screws – see drawing
Port size			
– air supply and exhaust			G1/4 both sides G3/8 both sides
– valve outlets			G1/8 G1/4
Size for valve positions			22 33
Installation			
Ambient and medium temperature range	T_{min} T_{max}	°C °C	–10 +50 Note: Please consult us for operating temperatures below 0° C
Medium			
Filtered compressed air			
Lubrication			
With or without oil mist lubrication (We recommend the use of mineral oil type VG 32 to ISO 3448)			
Material			
– Base plate			Al
– Valve housing			Al
– Seals			NBR
Durability of valves			
10 x 10 ⁶ operations			
No. of valves positions			4 – 6 – 8 – 10 – 12 –14–16 ⁽¹⁾
No. of switching outputs			max. 24
No. of sensor inputs			max. 32
Pneumatic characteristics			
Nominal pressure	p_n	bar	6
Operating pressure range	p_{min}	bar	2.5
	p_{max}	bar	10
Nominal flow	Q_n	l/min	500 1300 ⁽²⁾
Actuation			
Electrical			
By control system			
Voltage type			
Direct current			
Nominal voltage	U_n	V	24 ±10%
Power consumption		W	2.5
Mass/ground			
Minuspol			
Electrical protection			
IP65 (applies only to the electrically part)			
– Input clamps		IP	IP20
– Input plug		IP	IP65
Connection			
– Multipole Connector			25-pin sub-D connector or 24-pin industrial connector
– Sensor inputs			Ladder clamps or M8 x 14-pin connectors
Status indication			
LED			
Protective circuit			
Integrated			

⁽¹⁾ other numbers of valves can be fitted via the use of blanking plates.

⁽²⁾ Version “middle position vented“ 1000 l/min

Multipole Island with sub-D-multipole connector 25pole (or heavy industrial connector) and 16 M8 4-pin feedback inputs with 44pin sub-D connector



Valve Islands with Multipole Connection Series IM20

G1/8

Multipole islands can be equipped with following valves.

- 5/2 Way Valves with spring return
- 5/2 Way Impulse Valves
- 5/3 Way Valves with spring return to middle position
- middle position closed
- middle position exhausted
- middle position pressurized

Versions:

- Connection with sub-D connector
- Connection with heavy industrial connector
- With or without sensor inputs
- With multi-connection for sensor inputs (via 44pole sub-D connector)

Accessories See page 92

- Cable with sub-D plug
- Heavy industrial connector
- Straight plug M8 4pole

Dimension Table (mm)

Valve Islands	Dimension												
	A	A ₁	A ₂	B	B ₁	B ₂	B ₃	B ₄	B ₅	B ₆	B ₇	C ₁	
IM20-1/8	17	30	6	43	99	166	62.5	132	20.5	42.5	60	11	
	+ x C ₃		+ x C ₃										

Valve Islands	Dimension										
	C ₂	C ₃	D ₁	ØD ₂	ØD ₃	F	F ₁	H ₂	H ₃	H ₄	H ₅
IM20-1/8	26	23	G1/4	19x0.2	5.5	40	126	68	12	9	25

x C₃= Dimension C₃ multiplied with number of valves

Connection with sub-D connector



Connection with heavy industrial connector



For order instructions see page 91, 135

Dimensions in mm

Valve Islands with Multipole Connection Series IM20

G1/4

Multipole islands can be equipped with following valves:

- 5/2 Way Valves with spring return
- 5/2 Way Impulse Valves
- 5/3 Way Valves with spring return to middle position
 - middle position closed
 - middle position exhausted
 - middle position pressurized

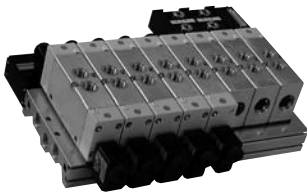
Versions:

- Connection with sub-D connector
- Connection with heavy duty industrial connector
- With or without sensor inputs
- With multi-connection for sensor inputs (via 44-pin sub-D connector)

Accessories See page 92

- Cable with sub-D plug
- Heavy duty industrial connector
- Straight M8 4-pin connector

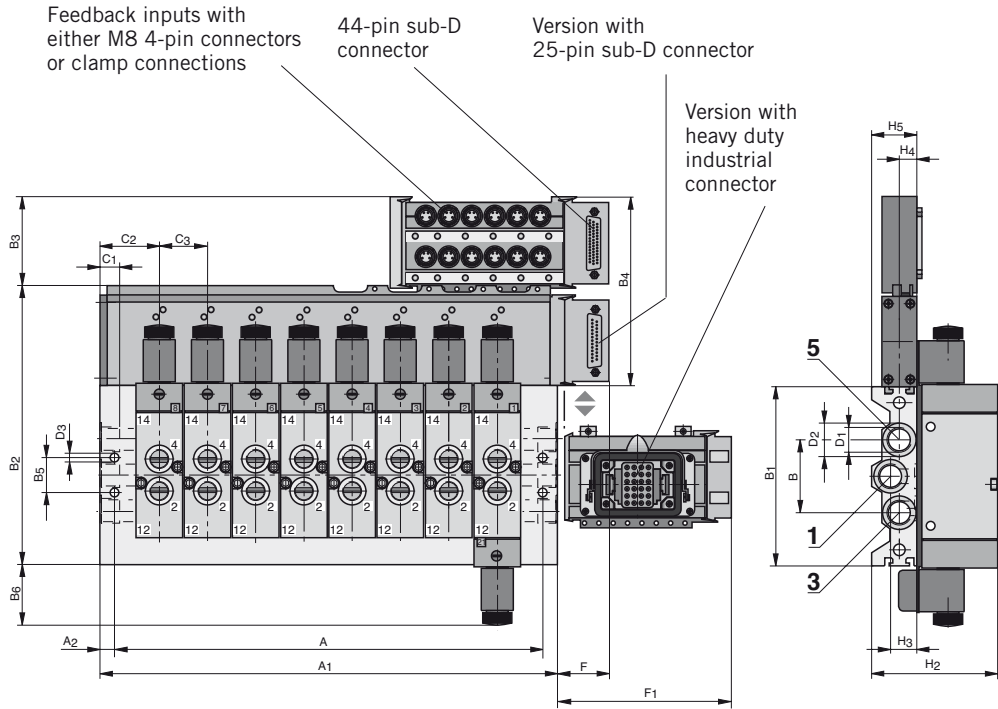
Connection with sub-D connector



Connection with heavy duty industrial connector



Multipole Island with 25-pin sub-D connector (or heavy duty industrial connector) and 16 M8 4-pin feedback inputs with 44-pin sub-D connector



Dimension Table (mm)

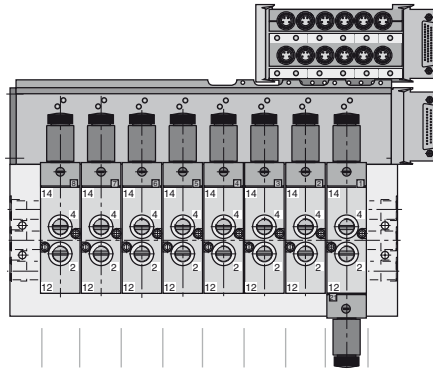
Valve Islands	Dimension											
	A	A ₁	A ₂	B	B ₁	B ₂	B ₃	B ₄	B ₅	B ₆	B ₇	C ₁
IM20-1/4	17	30	6	50	123	190	62.5	132	24	42.5	73.5	12
	+ x C ₃		+ x C ₃									

Valve Islands	Dimension										
	C ₂	C ₃	D ₁	ØD ₂	ØD ₃	F	F ₁	H ₂	H ₃	H ₄	H ₅
IM20-1/4	31	33	G3/8	23x0.5	6.2	40	126	86	18.5	12	31

x C₃= Dimension C₃ multiplied by number of valves

For order instructions see page 91, 135

Dimensions in mm



Order Instructions – Valve Islands

Example:

Valve Islands with Multipole Connector, M8 assembled with:
 1 item 5/2 Way Valves S9 581-1/8
 7 item 5/2 Way Valves S9 581RF-1/8

	Ident-No.						Electrical connection	Valves	Valve position												Input module	Number of inputs	Flow divider	Position of channel divider	
	1	2	3	4	5	6			7	8	9	10	11	12											
Example	P	A	1	0	3	8	1	D	S	0	8	M	M	M	M	M	M	M	J						

For order, please use the neutral order form on page 135

Valve Islands – Sizes

PA Type: IM20-1/8
 10381 Connections:
 G1/8: valve outlets
 G1/4: base plate

PA12867 Type: IM20-1/4
 Connections:
 G1/4: valve outlets
 G3/8: base plate

Electrical Connection

Multipol-Version

DS with sub-D-Connection
 HI with industrial connector

Valves

04	to 4 valves
06	5 and 6 valves
08	7 and 8 valves
10	9 and 10 valves
12	11 and 12 valves
14	13 and 14 valves
16	15 and 16 valves

even number of valve positions only

Important: Please specify the code for the desired valve types

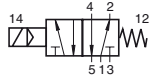
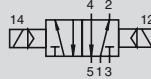
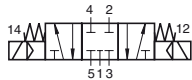

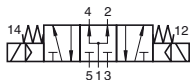
Input Modules

K Pins IP20
 S M8 IP65 connector
 04-08-12 Number of inputs
 16-20-24
 28-32

Dual Pressure Operating

J with channel divider in port 1
 01 – 11 Position of channel divider to valve position

Ordering Code for Valves and Cover Plates


Code	Symbol	Description
A	–	Cover plate on valve
M		5/2 Way Solenoid Valve, permanent signal with spring return Type: S9 581RF-..
J		5/2 Way Solenoid Valve, Impulse version Type: S9 581RF-..
G		5/2 Way Solenoid Valve, spring return to middle position, middle position closed Type: S9 581RFG-..
B		5/2 Way Solenoid Valve, spring return to middle position, middle position pressurized Type: S9 581RFB-..
E		5/2 Way Solenoid Valve, spring return to middle position, middle position exhausted Type: S9 581RFE-..

Accessories for Valve Islands IM20


with Multipole Connector

- Cable with sub-D plug
- Heavy duty industrial connector
- Straight plug M8 4pole

Cable with sub-D plug

Number of poles	Cable length	Order Instructions		Figure
		Type	Order No.	
25	1.0 m	GSK-25-1	KL9012	
25	3.0 m	GSK-25-3	KL9013	
25	5.0 m	GSK-25-5	KL9014	
44	5.0 m	GSK-44-5	KL9005	

Heavy duty industrial connector with cable

Number of poles	Cable length	Order Instructions		Figure
		Type	Order No.	
24	5.0 m	K-IST-24	KL9003	

Straight plug M8 for inputs

Number of poles	Use	Order Instructions		Figure
		Type	Order No.	
4	for own packing	K-M8-4	KL9011	