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

Isys Micro

Plug-in valve island

PDE2597TCUK July 2013

HANLEY CONTROLS
CLONMEL
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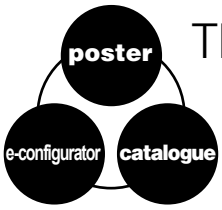
Parker

ENGINEERING YOUR SUCCESS.



The machine designer Isys Micro workshop

Valves are the centre of electro-pneumatic automation. They are now designed into compact islands that are easily configured to each application.

For full efficiency in this enhanced automation practice, machine designers are helped by 3 complementary design tools :

1 - The Isys Micro valve island **e-configurator** and **3D models** are available on website: **http://www.parker.com/pneu/isysmicro**

2 - The Isys Micro functional **poster**

3 - This **catalogue**, including technical data and ordering guide

Important !
Before carrying out any service work, ensure that the valve and manifold have been vented.
Remove the primary supply air hose to ensure total disconnection of the air supply before dismantling valves or blank connection blocks.

NB !
All technical data in this catalogue is typical only.

The air quality is decisive for the valve life: see ISO 8573.

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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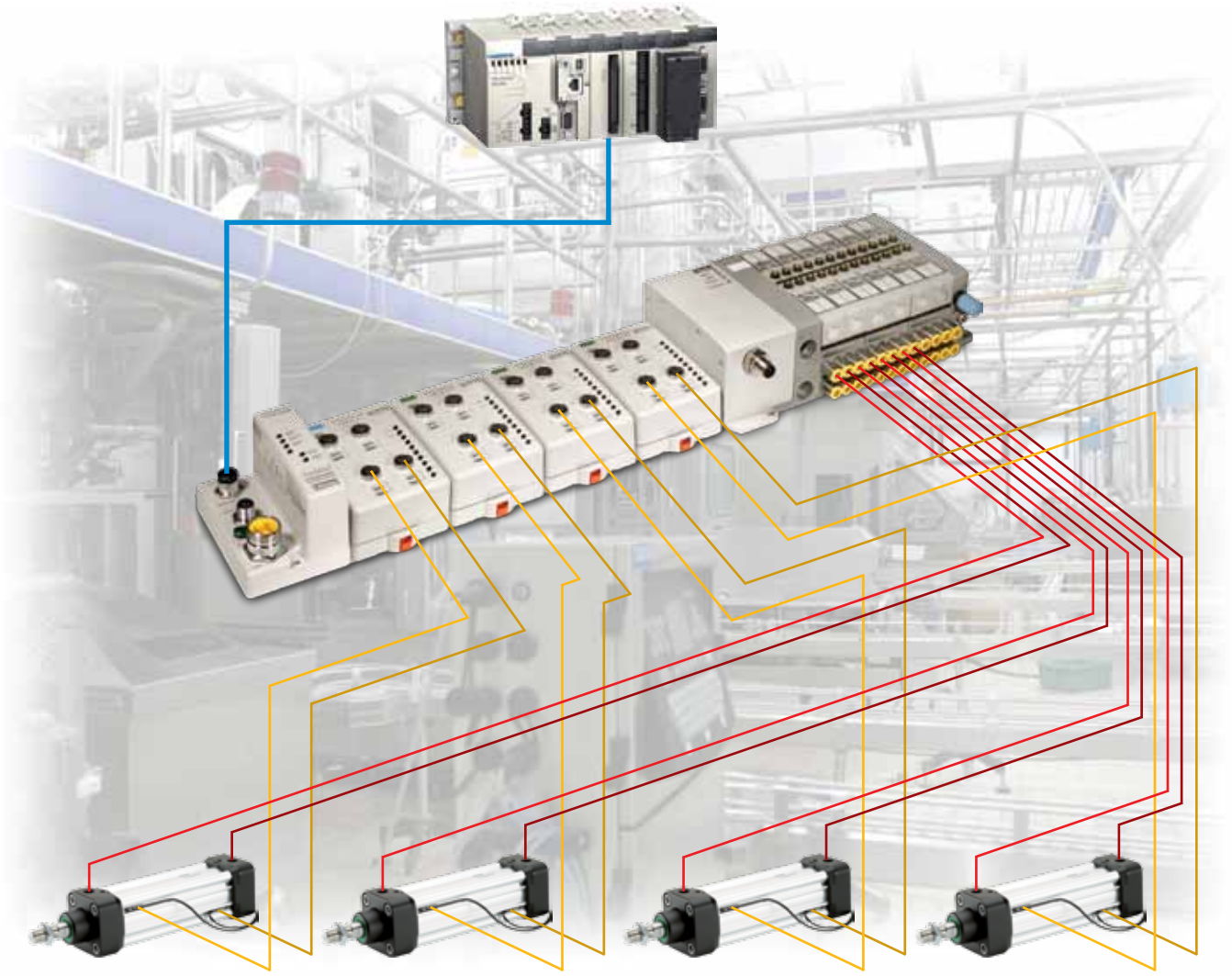
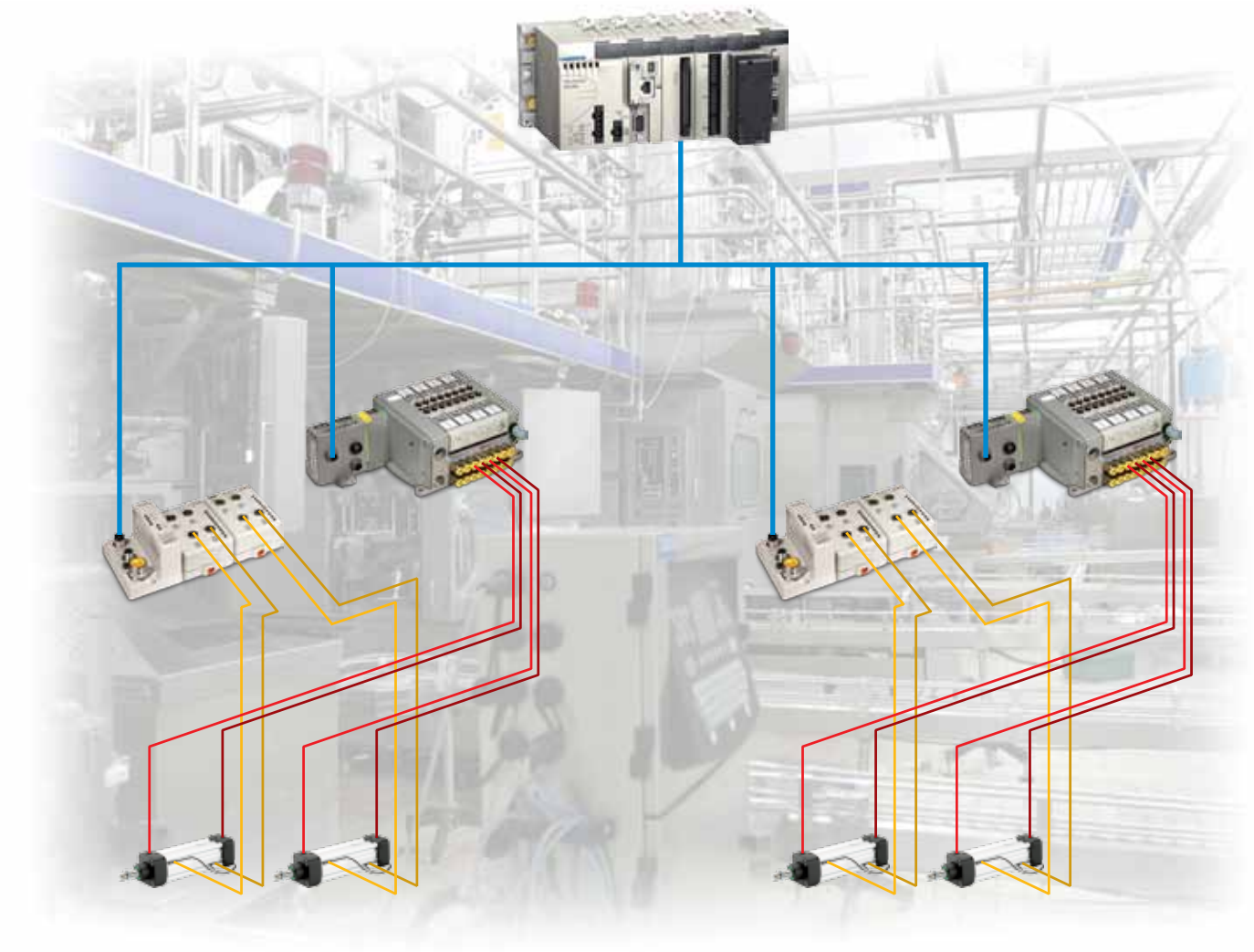
Valve Islands for centralized application



Valve islands for centralized application

Depending upon the machine configuration and design, all of the pneumatic actuators may be controlled form a centralized control panel complete with all the necessary pneumatic valves. The control valves would normally be grouped together into a 'valve island' enabling the solenoids to be electrically interconnected and in turn linked to a PLC via an industrial network. In this configuration all the sensors can be connected to either remote devices positioned around the machine or back to the centralized panel and signals transmitted to the PLC via the valve island and industrial network. Other digital or analogue I/O can be connected if required.

Valve Islands for decentralized application



Valve islands for decentralized application

On larger machines where pneumatic actuators are distributed around the machine, a better solution may be to position smaller 'valve islands' closer to groups of actuators. This enables shorter runs of pneumatic tubing and can result in reduced air consumption and improved cycle times. Other digital or analogue I/O can be connected to the remote devices or directly to the PLC. All devices can be connected to the PLC using traditional wiring, multi-pole connection or an industrial network.

The Isys Micro valve redefines flexibility for pneumatic users. When either configured from basic components or ordered as pre-assembled and tested valve islands, Isys Micro valves are the answer to all your needs.

Solenoid operated Valve fitted with 24 VDC solenoids

Plug-in valves

42 mm only for 4 valve modules

Optimized flow for a 6 mm OD tube

- Up to **8 pneumatic functions** on a **42 mm width** metal sub-base manifold.
- 4 valve modules **back to back** mounted for a compact design.
- Optimized flow with 6 mm OD tube allows 0,5 m/s speed on a 50 mm diameter cylinder with 1/4 fittings.

Qn = 282 Nl/mn **Qmax = 510 Nl/mn**

Side ported manifold design

- Manifold with common ducts for ports 1, 3 and 5, outlet port 2 and 4, and supply port for 12 and 14 are available side ported.

Bottom ported manifold design

- A bottom ported design for an easy integration into an enclosure.

An easy man-machine dialogue

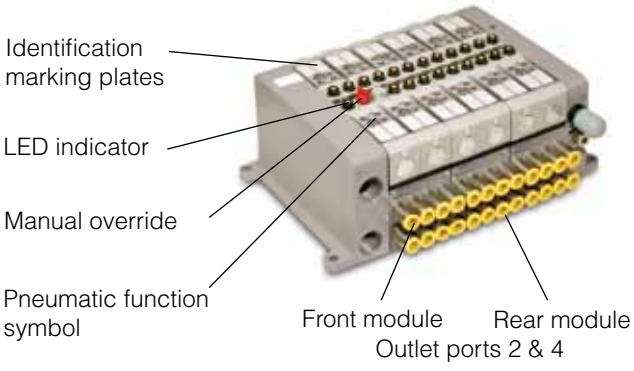
• Multifunction manual override

Standard non-locking manual overrides can be easily changed to locking or blocked with accessories available with valves.

• Customer identification

Have your own identification on the product protected with a transparent flip-up cover.

A quick visual diagnostic face



Isysnet : A centralized Fieldbus and Industrial Ethernet system

Integrated Solution

- A large Fieldbus and Industrial Ethernet communication offering for all Isys Micro range.
- Extremely fast I/O backplane uses change-of-state (COS) connections to maximise performance.
- UL, C-UL and CE certifications (as marked).

Communication Modules

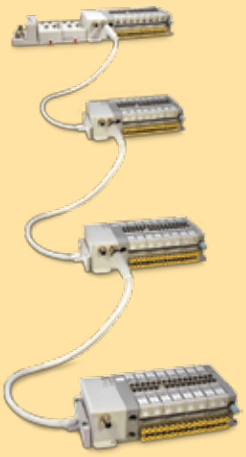
- A Communication Module supports up to 63 I/O modules and up to 256 Inputs and 256 Outputs.

Modularity

- Ease of module replacement with unique latching mechanisms eliminating the need for screws.
- Auto Device Replacement allows OEMs to add I/O modules without making changes to the control software.
- Built-in panel grounding.
- Electronic and mechanical keying prevents users from placing I/O modules in the wrong sequence.

I/O Modules

- Accepts signals from sensors, photo eyes, limit switches and other field input devices.
- Provides signals to remotely operating solenoid valves and other field operating output devices.
- Choice of digital, analogue, high watt I/O Modules.
- Choose from a broad range of colour coded I/O types with connector choices of M8, M12 or M23.
- Built-in miswiring, short circuit, open circuit detection with electronic feedback.



Flexible in use
The Isys Micro range is fully dedicated to centralized applications where a high quantity of valves have to be concentrated in a single location.

Solenoid valve island can also be implemented with digital or analogical electrical I/O.

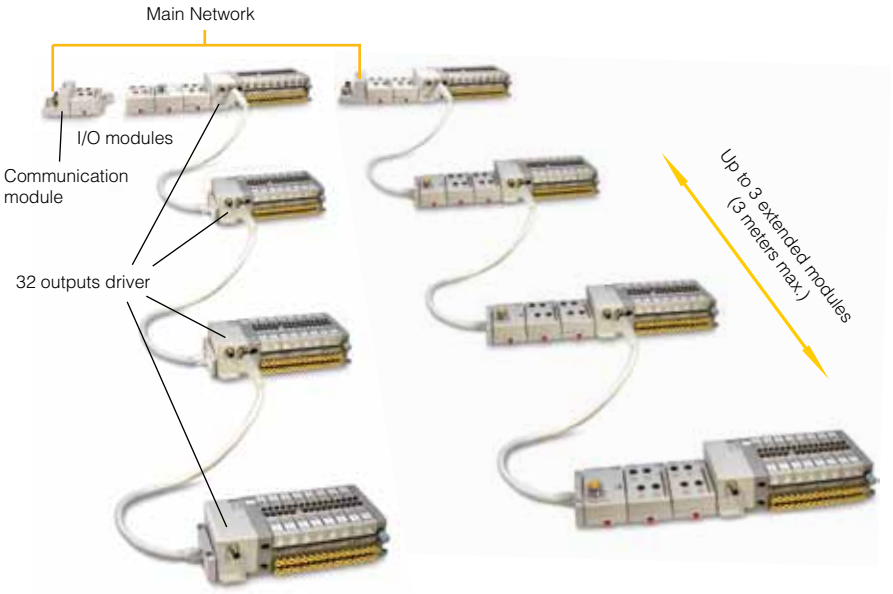
From a centralized application high complexity level to a basic configuration, with industrial communication or traditional multi-connection, an Isys Micro valve island can be designed.

One communication module for 256 Inputs and 256 Outputs

The combination of 32 output drivers and electrical I/O modules linked to the main communication module allows Isys Micro valve islands to drive up to 512 I/O, including up to 128 solenoids splited between 4 interconnected devices.

Both electrical inputs and outputs modules can also be assembled either on the main or extended islands.

Expansion power supply may be used to provide additional Pointbus backplane current.



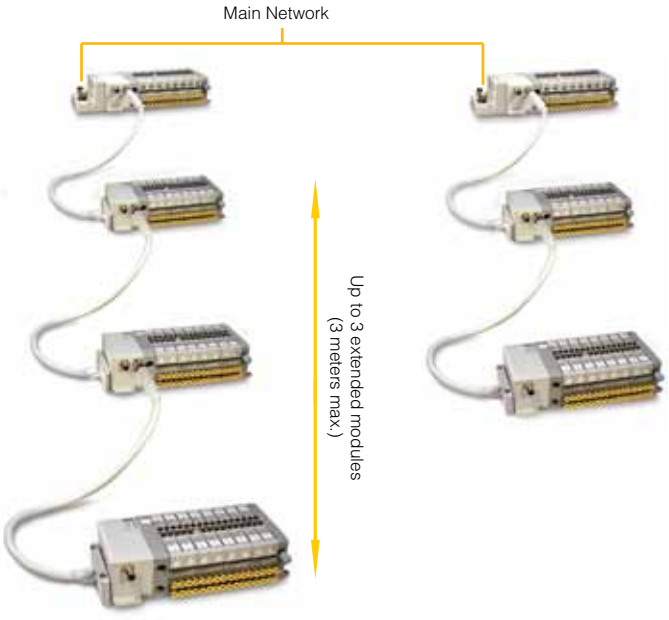
Up to 128 solenoid valves configuration

If a high quantity of valves is required in a centralized application, up to 3 extended islands can be connected to the main device communication module.

All extended islands are connected through a bus extension cable PSSVEXT1 (including 1 m cable and head plate).

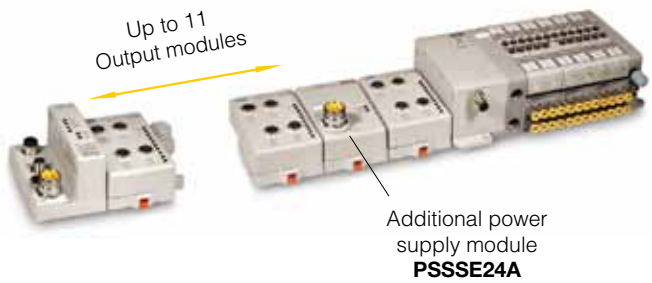
In this configuration, the 32 outputs driver module, on the main island and the extended island, have to be equiped with a "bus extention" M12 connector, excepted for the last extended island.

All 32 outputs driver modules need to be equiped with a M12 solenoids power supply connector.



Up to 256 electrical outputs including 32 solenoid valves

Communication modules include a main 24 VDC power supply for the Bus and up to 10 digital or analogical output modules. Additional power supply is only requested if there are more than 11 output modules.



Up to 32 solenoid valves

Communication modules include a main 24 VDC power supply for the bus and the 32 output driver modules.
All solenoids can be energized at the same time.

Island up to 16 or 32 solenoid valves linked to the Turck BL67 remote I/O device series

This electro-mechanical interface allows, with its modularity up to 16 or 32 solenoid valves, an inter-connection to the TURCK BL67 Series, offering a wide choice of industrial communication with Field bus and Industrial Ethernet protocols and a complete range of electrical I/O modules.

Island for fieldbus communication in decentralized application

In a decentralized application where a serial communication is required and only a few valves are necessary, different fieldbus protocol modules are also available.

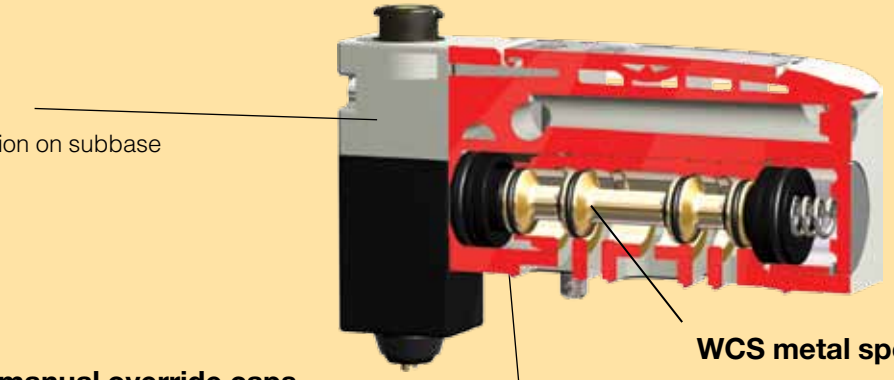
In that case, the valve island has to be equiped with a bus communication head module adaptor.

Depending on the protocol, the head module can pilot up to 16 solenoid valves.

Island with multi-pole connection

In a decentralized application, when a multi-pole connection is required, the valve island head module can be equiped with a standard Sub-D25 connector.

With this Sub-D25 connection, up to 24 solenoid valves can be piloted.

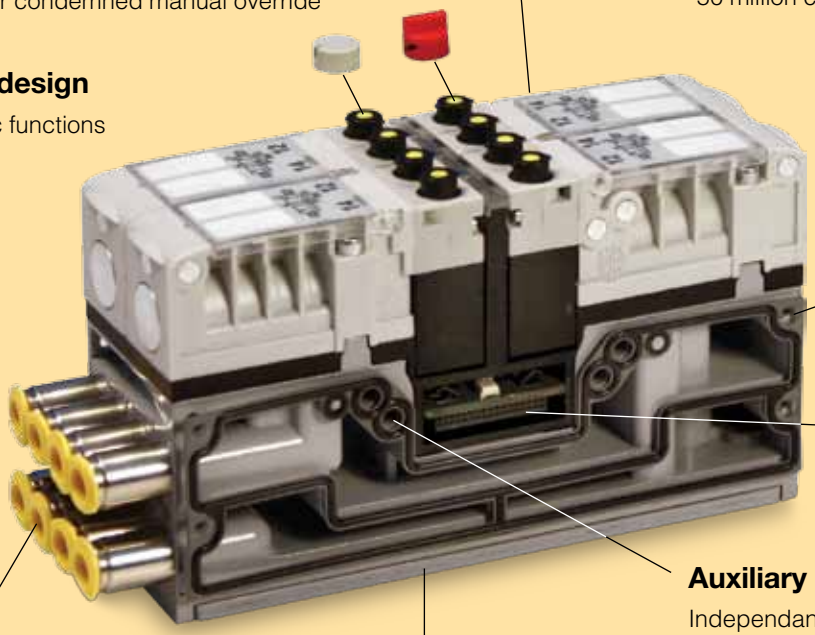


Plug-in valve
Electrical connection on subbase

WCS metal spool
Wear Compensating System for 50 million cylcles

Multifunction manual override caps
Caps for locking or condemned manual override

Back to back design
Up to 8 pneumatic functions in 42mm width



Metal sub-base
Aluminium Die cast for maximum rigidity

Internal connection
Up to 32 solenoids

Auxiliary channels
Independant pilot pressure and exhausts

M7 thread
For 4 or 6 mm tube fitting

4 valves Side or Bottom ported sub-base
Up to 4 pneumatic modules

Material Specification

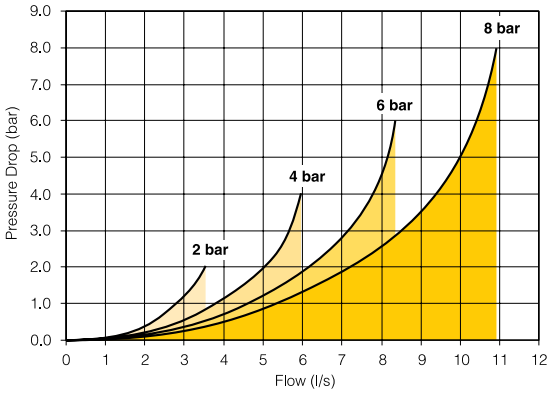
Valve spool :	Brass
Valve spool enclosure :	Brass
Dynamic seals :	Nitrile
Valve body :	Polyamide reinforced fibreglass
Seals :	Nitrile
Springs :	Stainless steel
Top cover :	Polyester
Subbase - End plates :	Painted aluminium

Certification

EMC / CE mark. :	According to EN 61 000-6-2
Dust & water protection :	IP65 according to EN 60529

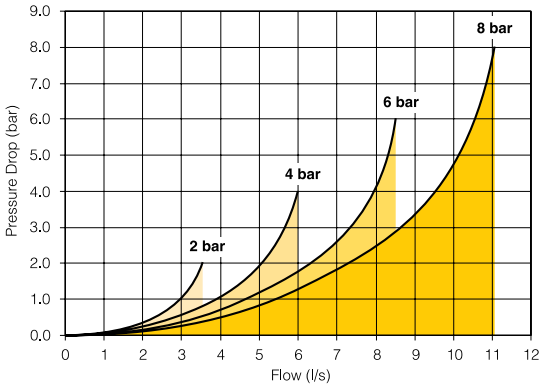
Flow Characteristics

Dual 3/2



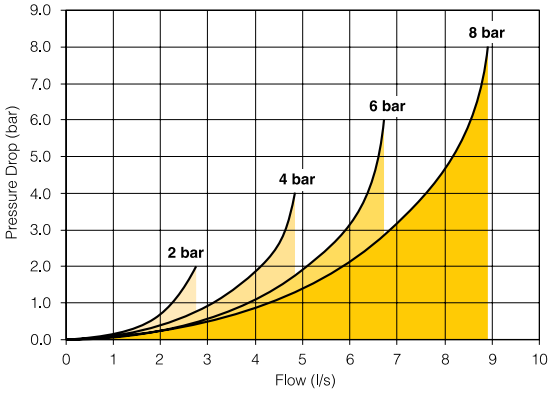
Operating pressure :	2,7 to 8,3 bar
Change-over time (side 14)	Actua. 15 ms Return 20 ms P = 6b
Change-over time (side 12)	15 ms / 25 ms P = 6b
Flow (acc. to ISO 6358) :	c = 1,2 Nl/s x bar b = 0,13 Qn = 4,6 Nl/s Qmax = 8,4 Nl/s

5/2 single and double solenoid



Operating pressure single solenoid:	2,7 to 8,3 bar
Operating pressure double solenoid:	1,7 to 8,3 bar
Change-over time single solenoid:	Actua. 15 ms Return 25 ms P = 6b
Change-over time double solenoid:	13 ms / 13 ms P = 6b
Flow (acc. to ISO 6358) :	c = 1,2 Nl/s x bar b = 0,13 Qn = 4,7 Nl/s Qmax = 8,5 Nl/s

5/3 all ports blocked



Operating pressure :	2,7 to 8,3 bar
Change-over time	Actua. 20 ms Return 20 ms P = 6b
Flow (acc. to ISO 6358) :	c = 1 Nl/s x bar b = 0,14 Qn = 3,8 Nl/s Qmax = 6,7 Nl/s

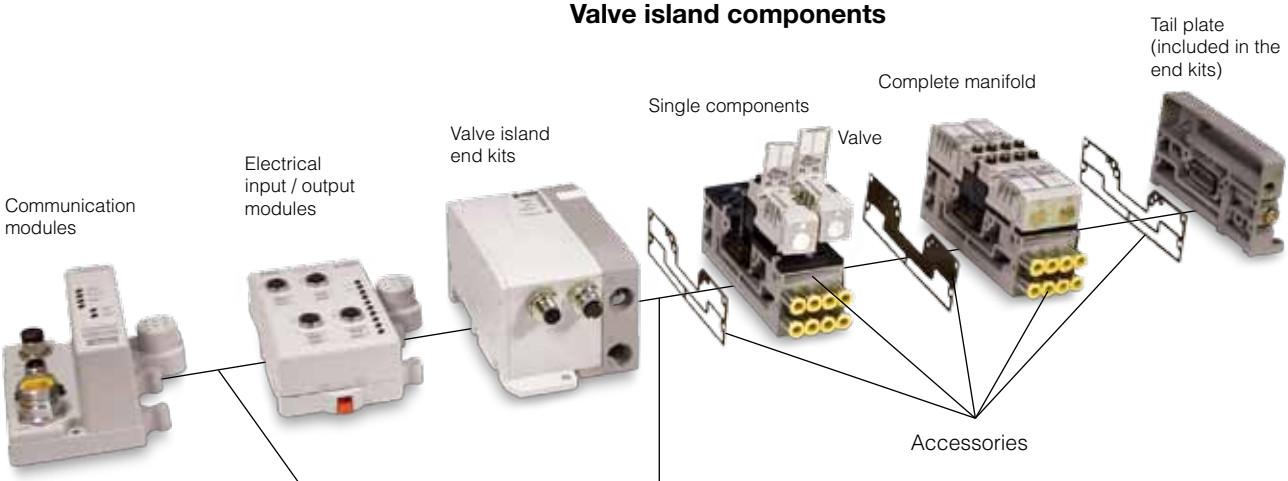
Characteristics

Fluid :	Air or inert gas Filtered 40 µ Class 5 (according to ISO 8573-1) Dry class 4 (according to ISO 8573-1) Non-lubricated or lubricated
Storage temperature :	-40 °C to + 70 °C
Working temperature	-15 °C to + 50°C
Vibration :	according to IEC 68-2-6 2G to 150 Hz
Shock :	according to IEC 68-2-27 15G 11 ms

Operating pressure :	-0.9 to 8,3 bar with external pressure 6 bar
Piloting pressure :	2.7 to 8.3 bar
Exhaust collection :	Independant exhaust collection
Rated coil voltage :	24 VDC -15 % / +10 %
Electrical connection:	Not polarised
Coil insulation :	Class B
Power consumption :	1 W (42 mA) with LED
Duty factor :	100 % at 20°C

Build your device configuration

Valve island components



Isysnet System
Fieldbus and Industrial Ethernet

Up to 128 solenoid valves
on 4 interconnected islands

TURCK Industrial Automation

Electro-mechanical interface to the TURCK - BL67 series

Up to 16 or 32 solenoid valves

Connected to the BL67 series from TURCK, offering :
- a wide choice of Fieldbus and industrial ethernet protocols
- a complete range of digital or analogic I/O modules with a large choice of connectivity

Moduflex Bus

Up to 16 solenoid valves

Multi-pole connection sub-D25

Up to 24 solenoid valves

Valve island components

Manifold components: Pages 14 & 15

Valve

Sub-base

Complete manifold

Fittings and accessories: Pages 16 & 17

Fittings

Multi-pressure manifold seals

Isysnet components

Valve island end kits, Fieldbus & Industrial Ethernet modules, I/O modules and accessories: Pages 18 to 21

32 outputs drivers

Industrial communication modules

Bus extender

I/O modules

Accessories

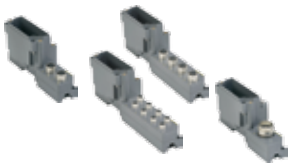
Valve Driver Module to TURCK BL67 adaptor

Valve island end kits, 16 outputs & Blank modules: Pages 22 to 27

16 or 32 Outputs drivers

Industrial communication gateway

Electronic and Power feeding modules


Base modules

Moduflex Bus components

Valve island end kits, Fieldbus modules and accessories: Pages 28 & 29

Fieldbus module

Fieldbus adaptor

Accessories

Multi-pole connection components

Sub-D25 end kits and cables: Pages 30 & 31

Sub-D25 end kits

Cables

Valve ordering chart

HMEVX2049A

Pneumatic function	
E	5/2 Single solenoid - Spring return
2	5/2 Double solenoid
5	5/3 All ports blocked (APB)
N	Double 3/2 NC
P	Double 3/2 NO
Q	Double 3/2 NC + NO

Manual override	
0	None, (no solenoid *)
2	Non locking, Flush, Multi-functional

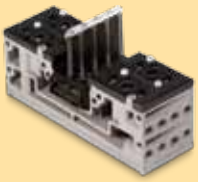
Solenoid pilot	
49	24 VDC standard

B	Blanking plate
C	Pressure module

XX	No solenoid pilot *

* Only available with B & C

Manifold ordering chart (without valve module and fitting)



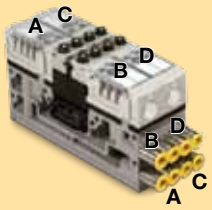
PSM21JAP

Manifold design	Thread type
1 Side ported	M7
2 Bottom ported	M7

Electronic circuit board	
J	Single address *
M	Double adress

Single address sub-bases are only used with 5/2 single solenoid for saving the address

Manifold ordering chart (complete with valve modules and/or fittings)



								A		B		C		D	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P	S	M	3	1	J	A	P	N	6	N	6	2	4	5	6

Manifold design	Thread type
1 Side ported	M7
2 Bottom ported	M7

Electronic circuit board	
J	Single address
M	Double adress

Digits 9, 11, 13 & 15

Pneumatic function	
X	Without valve module - fittings only
E	5/2 Single solenoid - Spring return
2*	5/2 Double solenoid
5*	5/3 All ports blocked (APB)
N*	Double 3/2 NC
P*	Double 3/2 NO
Q*	Double 3/2 NC + NO

C	Pressure module
B	Blanking plate

Digits 10, 12, 14 & 16

Straight fittings	
0	Without fitting
4	4 mm OD
6	6 mm OD
7	1/4" OD

P	Plug (for blanking plate)

* Double address electronic circuit board (type M) required

Solenoid operated valve fitted with 24 VDC solenoid

	Symbol	Description	Weight (g)	Order code
		Double 3/2 NC + NC	60	**HMNVX2049A**
		Double 3/2 NO + NO	60	**HMPVX2049A**
		Double 3/2 NC + NO	60	**HMQVX2049A**
		5/2 single solenoid - Spring return	49	**HMEVX2049A**
		5/2 double solenoid	60	**HM2VX2049A**
		5/3 all ports blocked (APB)	65	**HM5VX2049A**
		Blanking module kit (including two M7 plugs for manifold)	30	**HMBVX00XXA**
		Additional pressure module	30	**HMCVX00XXA**

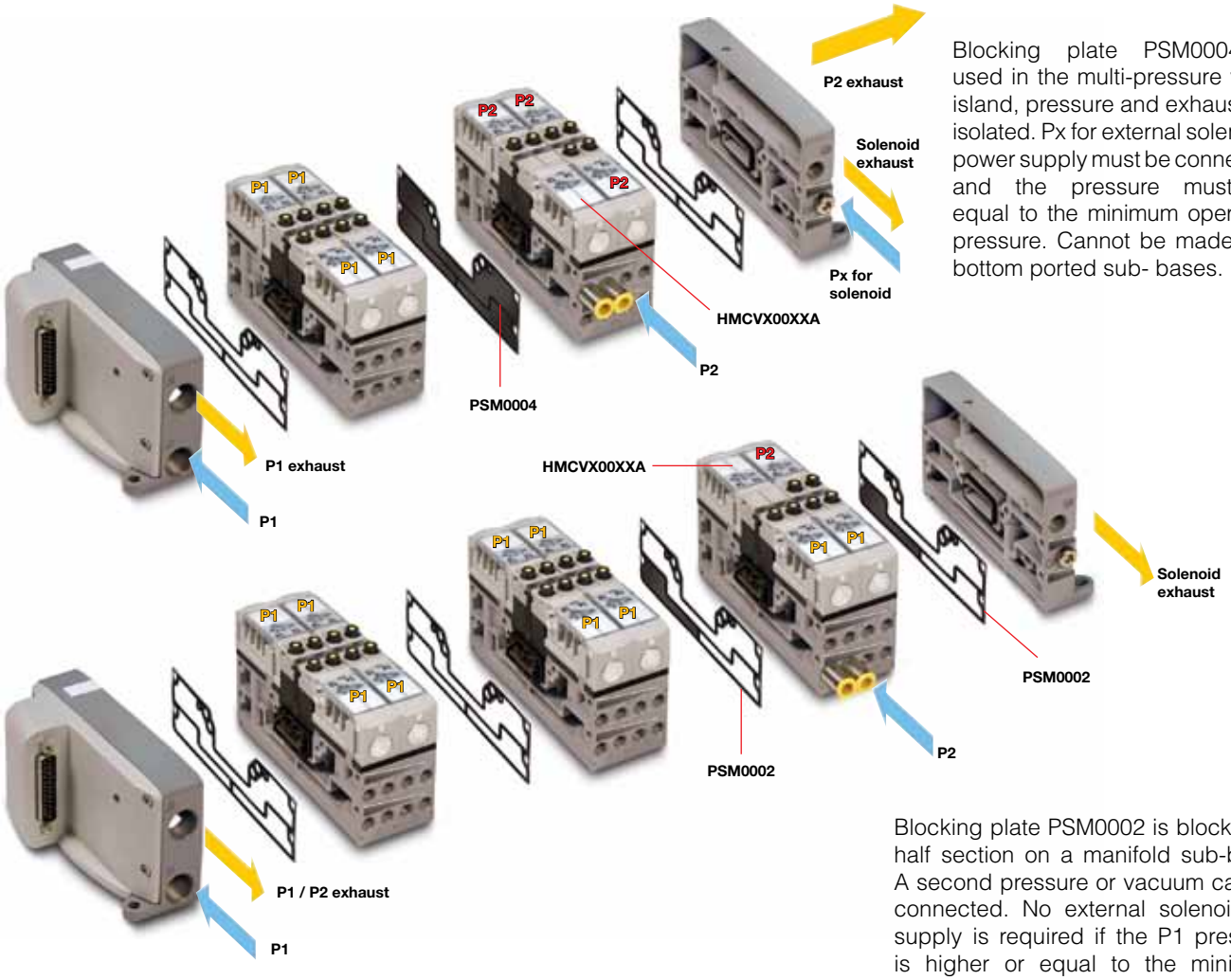
Metal manifold for 4 valves (M7 threaded)

	Description	Weight (g)	Order code
Side ported	4 position manifold single electrical address	332	**PSM21JAP**
	4 position manifold double electrical address	332	**PSM21MAP**
Bottom ported	4 position manifold single electrical address	310	**PSM22JAP**
	4 position manifold double electrical address	310	**PSM22MAP**

Complete manifold without fitting (M7 threaded)

	Symbol	Description	Weight (g)	Order code
Side ported		4 x Double 3/2 NC + NC	572	**PSM31MAPN0N0N0N0**
		4 x 5/2 single solenoid - Spring return	528	**PSM31JAPE0E0E0E0**
		4 x 5/2 double solenoid	572	**PSM31MAP20202020**
		4 x 5/3 all ports blocked (APB)	592	**PSM31MAP50505050**
Bottom ported		4 x Double 3/2 NC + NC	550	**PSM32MAPN0N0N0N0**
		4 x 5/2 single solenoid - Spring return	506	**PSM32JAPE0E0E0E0**
		4 x 5/2 double solenoid	550	**PSM32MAP20202020**
		4 x 5/3 all ports blocked (APB)	570	**PSM32MAP50505050**

Multi-pressure Manifold with blocking plates



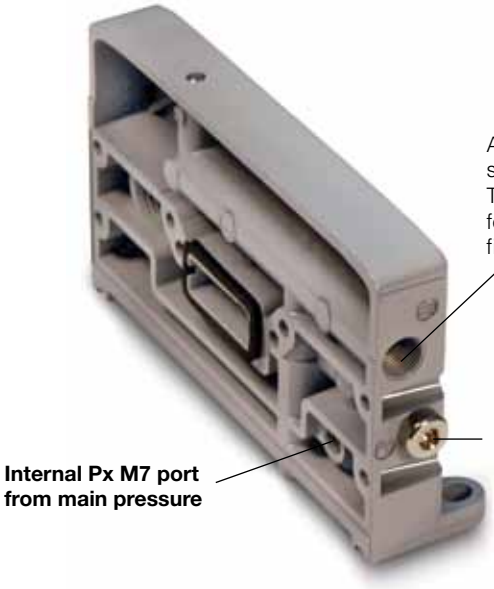
Blocking plate PSM0004 is used in the multi-pressure valve island, pressure and exhaust are isolated. Px for external solenoids power supply must be connected and the pressure must be equal to the minimum operating pressure. Cannot be made with bottom ported sub- bases.

Blocking plate PSM0002 is blocking a half section on a manifold sub-base. A second pressure or vacuum can be connected. No external solenoid air supply is required if the P1 pressure is higher or equal to the minimum operating pressure.

Auxiliary pressure for solenoid pilots and Exhaust channel

All end plates are delivered with an internal solenoid power supply version and can be easily changed to external solenoid power supply by simply moving a plug, if the main pressure is below the minimum operating pressure.

Auxiliary pressure supply port for solenoid pilot :
This is a M7 port. The internal pilot supply end plate version includes an M7 plug. To change from internal supply to external supply mode, remove the plug and screw it into the internal Px port.



All solenoid pilots use a separate exhaust channel. The channel is G1/8" piped for muffler or pneumatic fitting.

Pneumatic accessories

	Description	Size	Tube OD	Material	Order code
	Straight pneumatic connector for sub-base and **Px**	M7	4 mm	Metal	**F28PMB4M7MD**
		M7	6 mm	Metal	**F28PMB6M7MD**
	Straight pneumatic connector for **Ex**	1/8"	6 mm	Metal	**F4PMB6-1/8**
	Straight pneumatic connector for Pressure and Exhaust ports	3/8"	8 mm	Metal	**F4PB8-3/8**
		3/8"	10 mm	Metal	**F4PB10-3/8**
		3/8"	12 mm	Metal	**F4PB12-3/8**
	Muffler for **Ex**	1/8"		Metal	**ESB12MC**
		1/8"		Plastic	**P6M-PAB1**
	Muffler for exhaust port	3/8"		Sintered metal	**9090050900**

Multi-pressure inter-manifold seal plate

	Description	Pressure port	Exhaust port	Weight (g)	Order code
	Inter-manifold seal plate	Passing / Passing	Passing	16	**PSM0001**
		Passing / Block	Passing	20	**PSM0002**
		Passing / Block	Block	30	**PSM0003**
		Block / Block	Block	40	**PSM0004**

Spare parts

	Description	Weight (g)	Order code
	24 VDC Pilot solenoid with screws	11	**PSM0010**
	Set of 10 multifunction manual override caps	15	**PSM0011**
	Set of 5 valve manifold gaskets and 10 screws	25	**PSM0012**
	Set of 10 M7 plugs for auxiliary pressure selection	30	**PSM0013**
	Set of 10 labels (in the P/N, **x** has to be replaced with the valve function letter, see page 14)	5	**PSM002x**
	Set of 10 manifold to manifold M3 screws	20	**PSM0014**

Isysnet 32 output driver end modules ordering chart

P	S	M	L	6	1	A	P

ISYSNET 32 Output driver end modules		
	24 VDC power supply connector	Extender bus connector
L6	NO	NO
M5	NO	YES
M6	YES	NO
M7	YES	YES

	Ported design	Thread type
1	Side ported	3/8" BSPP
2	Bottom ported	3/8" BSPP
5	Side ported	3/8" NPT
6	Bottom ported	3/8" NPT

32 outputs driver selection guide :

L6 type

- Isysnet 32 outputs driver with internal solenoids power supply from the communication head module
- Extended valve island not possible

Up to 32 solenoid valves per island

M6 type

- Isysnet 32 outputs driver with external solenoids power supply by M12 male connector
- Extended valve island not possible

Up to 32 solenoid valves per island

M7 type

- Isysnet 32 outputs driver with external solenoids power supply by separated M12 male connector
- Extended Bus link connection for additional valve islands by separate M12 female connector

Up to 32 solenoid valves per island

M5 type

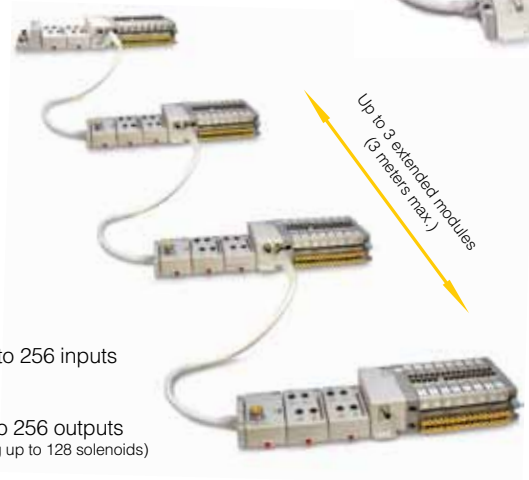
- Isysnet 32 outputs driver with internal solenoids power supply from the communication head module
- Extended Bus link connection for additional valve islands by separate M12 female connector

Up to 32 solenoid valves per island

Isysnet bus extender

Isysnet bus extender communication 1 meter cable for instant valve island plug-in by M12 male connector and direct head connection plate on Isysnet device

Every extended island has to be separately power supplied



Up to 256 inputs

Up to 256 outputs
(including up to 128 solenoids)

Technical data

Isysnet 32 Outputs driver modules

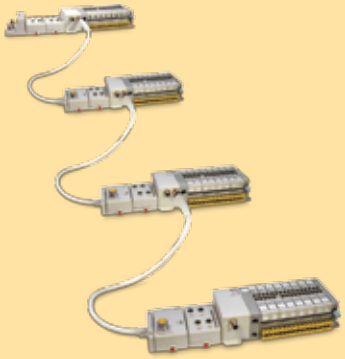
Number of Outputs :	32
Operating Voltage Range :	20,4 to 26.4 VDC
Output current rating Nom. :	50 mA per chanel (100 mA Max)
	3.2A per module
Pointbus current :	200 mA
Working temperature :	-15°C to 50°C
Dust and water protection :	IP65

Isysnet 32 outputs driver modules

	Sub-base design	Thread type	24 VDC power supply	Extender bus	Weight (g)	Order code
	Side ported	3/8" BSPP	NO	NO	400	**PSML61AP**
	Bottom ported	3/8" BSPP	NO	NO	400	**PSML62AP**
	Side ported	3/8" BSPP	YES	NO	400	**PSMM61AP**
	Bottom ported	3/8" BSPP	YES	NO	400	**PSMM62AP**
	Side ported	3/8" BSPP	NO	YES	400	**PSMM51AP**
	Bottom ported	3/8" BSPP	NO	YES	400	**PSMM52AP**
	Side ported	3/8" BSPP	YES	YES	400	**PSMM71AP**
	Bottom ported	3/8" BSPP	YES	YES	400	**PSMM72AP**

Isysnet bus extender

	Description	Weight (g)	Order code
	Head plate 1 meter cable / M12 male connector for extended island inter-connection	380	**PSSVEXT1**



Communication modules :
- Fieldbus
- Industrial Ethernet

Digital and Analogical I/O modules
Extended power supply module
IP67 modules

Isysnet Communication and I/O modules

Isysnet Communication modules

Isysnet communication modules are available in :

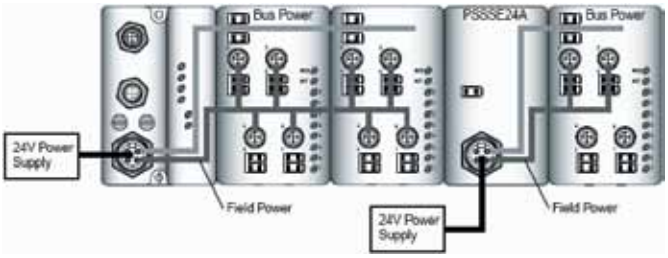
- DeviceNet
- Profibus DP
- Ethernet I/P
- ControlNet

Digital or Analogical electrical I/O modules

Some modules have diagnostic features, electronic fusing, or individually isolated inputs/ outputs. The Isysnet family provides a wide range of input and output modules to span many applications, from highspeed discrete to process control. Isysnet supports producer/consumer technology, which allows input information and output status to be shared among multiple Logix controllers.

Isysnet Extension Power Unit

The auxiliary power supports up to 10 I/O modules and 32 output driver with a maximum of 10 A field power.
The 24 VDC extension power unit (PSSSE24A) extends the backplane bus power to support up to 10 more I/O modules.
Connect additional extension power units to expand the I/O assembly up to 63 I/O modules



Technical data

Isysnet Communication modules & Extension power unit

Bus power supply :	24 VDC at 400 mA
Power supply input voltage :	24 VDC
Operative voltage range :	10 to 28.8 VDC
Input overvoltage protection :	Reverse polarity protected

Isysnet Analogue Input modules

Number of Outputs :	2
Input signal Range :	4 to 20 mA / 0 to 10 VDC
Pointbus current :	75 mA

Isysnet Analogue Output modules

Number of Outputs :	2
Input signal Range :	4 to 20 mA / 0 to 10 VDC
Pointbus current :	75 mA

Isysnet Digital Input modules

Number of Outputs :	8 – PNP or NPN
Operating Voltage Range :	10 to 28.8 VDC
Input current on-state :	2 to 5 mA
Input current off-state :	1,5 mA
Pointbus current :	75 mA

Isysnet Digital Ouput modules

Number of Outputs :	8
Operating Voltage Range :	10 to 28.8 VDC
Output current rating Max. :	1 A per channel 3 A per module
Pointbus current :	75 mA

Isysnet Relay Output modules

Number of Outputs :	4 – NO contacts
Operating Voltage Range :	5 to 28.8 VDC
Output current rating Max. :	2 A per channel 8 A per module
Pointbus current :	90 mA

Isysnet communication modules

Description	Fieldbus connection	Power supply connector	Weight (g)	Order code
DeviceNet	M18	7/8" - 4 pins	400	**PSSCDM18PA**
	M12 - A coding	7/8" - 4 pins	400	**PSSCDM12A**
Profibus DP	M12 - B coding	7/8" - 5 pins	380	**PSSCPBA**
Ethernet I/P	M12 - D coding	7/8" - 4 pins	380	**PSSCENA**
ControlNet	M12 - D coding	7/8" - 4 pins	380	**PSSCCNA**

Isysnet electrical I/O modules

Description	Polarity	Connector type	Weight (g)	Order code
8 Digital Inputs	PNP	8 x M8	400	**PSSN8M8A**
		4 x M12	380	**PSSN8M12A**
	NPN	8 x M8	400	**PSSP8M8A**
		4 x M12	380	**PSSP8M12A**
8 Digital Ouputs	PNP	8 x M8	400	**PSST8M8A**
		4 x M12	380	**PSST8M12A**
		1 x M23	400	**PSST8M23A**
4 Digital Ouputs	Relay	4 x M12	410	**PSSTR4M12A**
2 Analogue Inputs	0 - 10 V	2 x M12	400	**PSSNAVM12A**
	4 - 20 mA	2 x M12	400	**PSSNACM12A**
2 Analogue Outputs	0 - 10 V	2x M12	400	**PSSTAVM12A**
	4 - 20 mA	2 x M12	400	**PSSTACM12A**

Isysnet auxiliary electrical modules

Description	Connector type	Weight (g)	Order code
24 VDC expansion power unit	7/8" - 4 pins	420	**PSSSE24A**

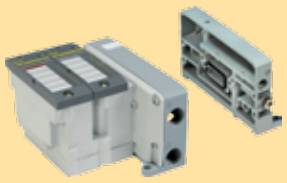
Isysnet bus extender

Description	Length	Weight (g)	Order code
Bus extender cable for Isysnet module interconnection	1 meter	380	**PSSEXT1**
	3 meters	760	**PSSEXT3**
Isysnet termination module		200	**PSSTERM**

Isysnet accessories

Description	Bus protocol	Connector type	Weight (g)	Order code
Power supply connector	DeviceNet, ControlNet & Ethernet	7/8" - 4 pins	40	**P8CS7804AA**
	Profibus DP	7/8" - 5 pins	40	**P8CS7805AA**
Line termination	DeviceNet	M12 - A coding	25	**P8BPA00MA**
	Profibus DP	M12 - B coding	25	**P8BPA00MB**
Bus IN female connector	DeviceNet	M12 - A coding	25	**P8CS1205AA**
	Profibus DP	M12 - B coding	25	**P8CS1205AB**
Bus OUT male connector	DeviceNet	M12 - A coding	25	**P8CS1205BA**
	Profibus DP	M12 - B coding	25	**P8CS1205BB**
Cable quick connect connector		M8	25	**P8CS0803J**
		M12 - A coding	25	**P8CS1204J**
"Y" shape, thread to thread		M12 - 2 x M12	25	**P8CSY1212A**

Isys Micro end plates with Turck BL67 Adaptor



P	S	M	T	2	1	A	P

TURCK BL67 Series adaptor	
T0	Valve Driver Module without output module
T1	Valve Driver Module for 16 Outputs
T2	Valve Driver Module for 32 Outputs

For T0 version, 16 output module and blank module can be ordered separately from the next page or directly from TURCK under the same part number.

	Ported design	Thread type
1	Side ported	3/8" BSPP
2	Bottom ported	3/8" BSPP
5	Side ported	3/8" NPT
6	Bottom ported	3/8" NPT

Valve driver Module for 16 or 32 Outputs

Modularity up to 16 or 32 Outputs :
Thanks to its modularity, the Isys Micro Valve Driver Module to Turck BL67 Remote I/O System adaptor can be configure up to either a 16 or 32 solenoid valves configuration :

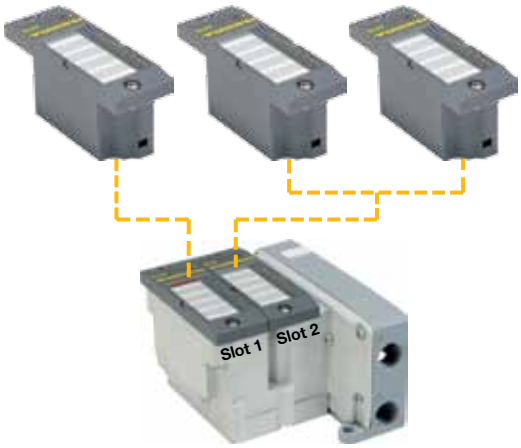
For a light configuration up to 16 solenoid valves (2 double address or 4 single address manifolds), the Valve Driver Module can be optimized being populated with:

- 1 Standard Turck 16 DO module BL67-16DO-0.1A-P in slot 1
- 1 blank module BL67-E in slot 2

For a full configuration up to 32 solenoid valves (4 double address or 8 single address manifolds), the Valve Driver Module must be fully populated with 1 Standard Turck 16 DO module BL67-16DO-0.1A-P in each slot.

BL67-16DO-0.1A-P
16 DO module for Solenoids
0 to 15 16 to 31

BL67-E
blank module
for configuration
up to 16 solenoid valves



16 Outputs module BL67-16DO-0.1A-P technical specifications

Number of channels	16
Nominal voltage V_O	24 VDC
Rated current from field supply	≤ 100 mA
Rated current from module bus	≤ 30 mA
Power loss, typical	≤ 1.5 W
Output type	PNP
Output voltage	24 VDC
Output current per channel	140 mA rated current (with VN 01-05 or higher)
Output delay	3 ms
Load type	resistive, inductive
Short-circuit protection	yes
Simultaneity factor	1
Electrical isolation	electronics for the field level

Dimensions (W x L x H)	32 x 91 x 59 mm
Approvals	CE, cULus
Operating temperature	Refer to solenoid valve
Storage temperature	-40°C to +70°C
Vibration	According to IEC68-2-6 : 2g to 150 Hz
Shock test	According to IEC68-2-27 : 15g to 11 ms
Electro-magnetic compatibility	acc. to EN61131-2
Protection class	IP 65
Tightening torque fixing screws	0.9 ... 1.2 Nm

Full description of TURCK BL67 Series on http://www.turck.com

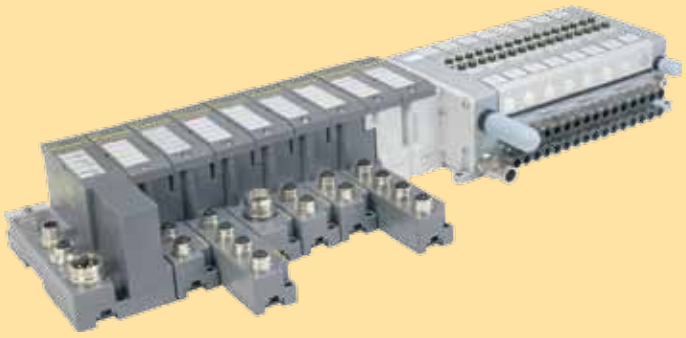
Valve Driver Module - TURCK BL67 adaptor

	Description	Solenoid Valves	Sub-base design	Thread type	Weight (g)	Order code
	Valve Driver Module	0 Without 16 O module	Side ported	3/8" BSPP	200	**PSMT01AP**
			Bottom ported	3/8" BSPP	200	**PSMT02AP**
		16 Outputs or blank module to be ordered separately (see below)				
		16 Including : - 1 x 16 O module - 1 blank module	Side ported	3/8" BSPP	270	**PSMT11AP**
			Bottom ported	3/8" BSPP	270	**PSMT12AP**
		32 Including : - 2 x 16 O modules	Side ported	3/8" BSPP	310	**PSMT21AP**
			Bottom ported	3/8" BSPP	310	**PSMT22AP**

Standard TURCK BL67 module

	Description	Weight (g)	Order code
	16 Outputs module for 16 or 32 solenoid valves configuration	55	**BL67-16DO-0.1A-P**
	Blank module for 16 solenoid valves configuration	15	**BL67-E**

TURCK BL67 Remote I/O System

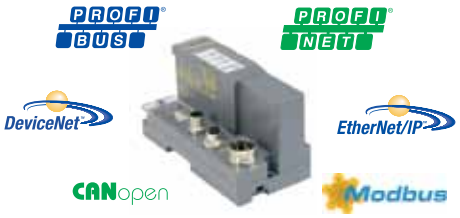


Using the Turck BL67 Valve Driver Adaptor, it's very easy to connect an Isys Micro Plug-in Valve Island to the industrial network, getting all the power and the flexibility offered by the TURCK BL67 Remote I/O System.

TURCK BL67 communication gateway

Industrial Communication :

- Linked to a TURCK BL67 communication module (programmable or not programmable), the device can be connected to a wide choice of Fieldbus or Industrial Ethernet protocols.

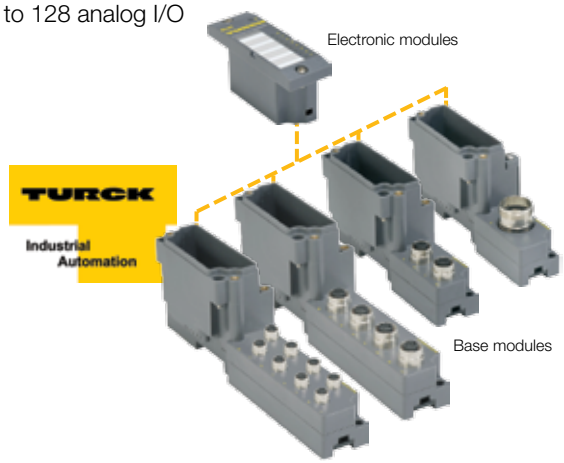


TURCK BL67 I/O and Base modules

The separation between electronic and base module for connectivity allows to complete the device with a choice through a full digital or analogue **I/O modules** range populating the **base module** existing with a multiple choice of electrical connection (M8, M12, M23)

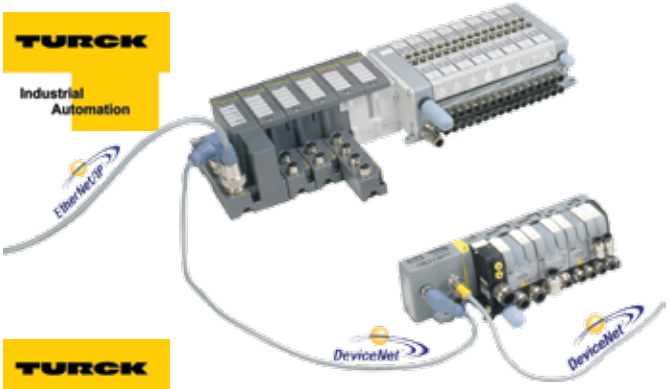
The complete resulting configuration can handle :

- Up to 32 electrical modules (up to 2 in the Valve Driver Module)
- Up to 512 digital I/O (up to 32 outputs in the Valve Driver Module)
- Up to 128 analog I/O



BL67 EtherNet/IP™ gateway to DeviceNet ™

Using the TURCK BL67 EtherNet/IP™ gateway with DeviceNet™ master BL67-GW-EN-IP-DN, you can easily connect and configure a DeviceNet™ subnetwork thanks to the "SET-Button".



Other Turck BL67 Electronic modules

Other electronic modules, as CANopen gateway alowing a sub-network connectivity with other CANopen slaves, RFID System or counting modules complet the full TURCK BL67 Remote I/O System.

Full description of TURCK BL67 Series on http://www.turck.com

TURCK BL67 Communication Gateway

Protocol	Network connection	Power Sup. Connection	Weight (g)	Order code
CANopen (Bus IN & OUT)	M12 - A coding	7/8" - 5 Pin's	375	**BL67-GW-CO**
DeviceNet™	7/8" - 5 Pin's	7/8" - 5 Pin's	360	**BL67-GW-DN**
Profibus-DP (DPV0/DPV1)	M12 - B coding	7/8" - 5 Pin's	370	**BL67-GW-DPV1**
Multiprotocol Ethernet: Modbus TCP, EtherNet/IP™ and PROFINET	M12 - D coding	7/8" - 5 Pin's	375	**BL67-GW-EN**
Modbus TCP scan DeviceNet™	M12 - D coding	7/8" - 5 Pin's	375	**BL67-GW-EN-DN**
Ethernet/IP™ scan DeviceNet™	M12 - D coding	7/8" - 5 Pin's	375	**BL67-GW-EN-IP-DN**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

TURCK BL67 Programmable CODESYS Communication Gateway

Protocol	Network connection	Power Sup. Connection	Weight (g)	Order code
Slave Profibus-DP	M12 - B coding	7/8" - 5 Pin's	380	**BL67-PG-DP**
Slave EtherNet/IP™	M12 - D coding	7/8" - 5 Pin's	375	**BL67-PG-EN-IP**
Slave Modbus TCP	M12 - D coding	7/8" - 5 Pin's	375	**BL67-PG-EN**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

TURCK BL67 Electronic Modules

Decription	Characteristic	Polarity	Weight (g)	Order code
4 Digital Inputs		PNP	55	**BL67-4DI-P**
		NPN	55	**BL67-4DI-N**
	Channel diagnostics	PNP	55	**BL67-4DI-PD**
8 Digital Inputs		PNP	55	**BL67-8DI-P**
		NPN	55	**BL67-8DI-N**
	Channel diagnostics	PNP	55	**BL67-8DI-PD**
16 Digital Inputs		PNP	55	**BL67-16DI-P**
4 Digital Ouputs	0.5 A	PNP	55	**BL67-4DO-0.5A-P**
	2.0 A	PNP	55	**BL67-4DO-2A-P**
		NPN	55	**BL67-4DO-2A-N**
	4.0 A	PNP	55	**BL67-4DO-4A-P**
8 Digital Ouputs	0.5 A	PNP	55	**BL67-8DO-0.5A-P**
		NPN	55	**BL67-8DO-0.5A-N**
16 Digital Ouputs	0.1 A	PNP	55	**BL67-16DO-0.1A-P**
4 Digital Inputs & Ouputs	0.5 A - Channel Diagnostic	PNP	55	**BL67-4DI4DO-PD**
8 Configurable Digital Channels	0.5 A	PNP	55	**BL67-8XSG-P**
	0.5 A - Channel Diagnostics	PNP	55	**BL67-8XSG-PD**
8 Isolated Relay Ouputs	Normally open		55	**BL67-8DO-R-NO**
2 analogue Inputs	16 bit resolution	Current	55	**BL67-2AI-I**
		Voltage	55	**BL67-2AI-V**
	For Pt and Ni sensors		55	**BL67-2AI-PT**
	For thermoelements		55	**BL67-2AI-TC**
4 analogue Inputs	16 bit resolution	Current / Voltage	55	**BL67-4AI-V/I**
	For thermoelements		55	**BL67-4AI-TC**
2 analogue Outputs	16 bit resolution	Current	55	**BL67-2AO-I**
		Voltage	55	**BL67-2AO-V**
4 analogue Outputs	16 bit resolution	Voltage	55	**BL67-4AO-V**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number
The complete TURCK BL67 Remote I/O System range on http://www.turck/com and http:// www.parker,com/pneu/fieldbus

TURCK BL67 Base modules for Digital and Analog I/O Modules

Description	Connector Type	Con. Number	Weight (g)	Order code
Base Modules	M8, 3-pole, female	4	160	**BL67-B-4M8**
		8	215	**BL67-B-8M8**
	M8, 4-pole, female	8	215	**BL67-B-8M8-4**
	M12, 5-pole, female, A-coded	2	185	**BL67-B-2M12**
	M12, 5-pole, female, A-coded, paired	2	185	**BL67-B-2M12-P**
	M12, 5-pole, female, A-coded	4	245	**BL67-B-4M12**
	M12, 5-pole, female, A-coded, paired	4	245	**BL67-B-4M12-P**
	M23, 12-pole, female	1	190	**BL67-B-1M23**
	M23, 19-pole, female	1	190	**BL67-B-1M23-19**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

Electronic and Base Module Combinations

	BL67-B-4M8	BL67-B-8M8	BL67-B-2M12	BL67-B-2M12-P	BL67-B-4M12	BL67-B-4M12-P	BL67-B-1M23	BL67-B-1M23-19	BL67-B-8M8-4
Digital Input Modules									
BL67-4DI-P	✓		✓	✓	✓		✓		
BL67-4DI-N	✓		✓	✓	✓		✓		
BL67-4DI-PD	✓		✓	✓	✓				
BL67-8DI-P		✓			✓	✓	✓		
BL67-8DI-N		✓			✓	✓	✓		
BL67-8DI-PD		✓			✓	✓			
BL67-16DI-P								✓	✓
Digital Output Modules									
BL67-4DO-0.5A-P	✓		✓	✓	✓		✓		
BL67-4DO-2A-P	✓		✓	✓	✓		✓		
BL67-4DO-2A-N	✓		✓	✓	✓		✓		
BL67-4DO-4A-P	✓		✓	✓	✓		✓		
BL67-8DO-0.5A-P		✓			✓	✓	✓		
BL67-8DO-0.5A-N		✓			✓	✓	✓		
BL67-16DO-0.1A-P								✓	✓
BL67-4DI4DO-PD		✓			✓	✓			
Configurable Digital Input/Output Modules									
BL67-8XSG-P		✓			✓	✓			
BL67-8XSG-PD		✓			✓	✓			
Relay Output Module									
BL67-8DO-R-NO						✓			
Analogue Input Module									
BL67-2AI-I			✓						
BL67-2AI-V			✓						
BL67-2AI-PT			✓						
BL67-2AI-TC			✓						
BL67-4AI-V/I					✓				
BL67-4AI-TC					✓				
Analogue Output Module									
BL67-2AO-I			✓						
BL67-2AO-V			✓						
BL67-4AO-V					✓				

The complete TURCK BL67 Remote I/O System range on http://www.turck/com

TURCK BL67 Power Feeding and Base Modules

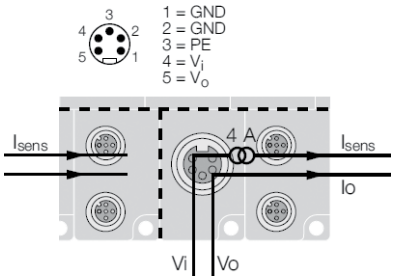
Description	Connector Type		Weight (g)	Order code
Power Feeding Module for 24 VDC additional sourcing			55	**BL67-PF-24VDC**
Base Modules	1 x 7/8", 5-pole, male	VI / VO Sourcing	55	**BL67-B-1RSM**
		VO Sourcing	55	**BL67-B-1RSM-VO**
	1 x 7/8", 4-pole, male		55	**BL67-B-1RSM-4**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

Power Feeding Base Modules Connection

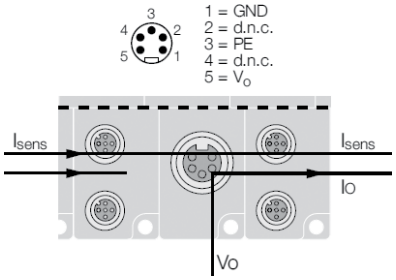
Standard version

BL67-B-1RSM

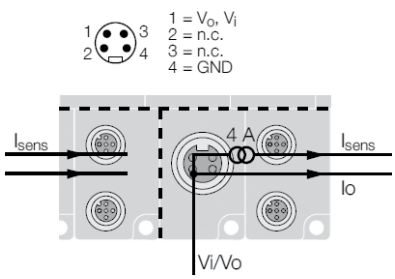


Other possible versions

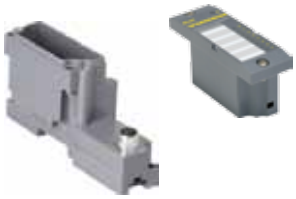
BL67-B-1RSM-VO



BL67-B-1RSM-4



TURCK BL67 CANopen Gateway and Base Module



Description	Connector Type	Weight (g)	Order code
CANopen Gateway Module for CANopen Valve Island Interface		55	**BL67-1CVI**
Base Modules	1 x M12, 5-pole, female, A-coded	170	**BL67-B-1M12**

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

BL67-1CVI electronic module with BL67-B-1M12

- Offering a CANopen Sub-Network connectivity up to 8 CANopen slaves

The complete TURCK BL67 Remote I/O System range on http://www.turck/com

16 Outputs Moduflex Bus ends module adaptator

P	S	M	M	C	1	A	P

Moduflex 16 Outputs adaptator	
M4	Adaptor without bus module
MC	Adaptor with CANopen module
MD	Adaptor with DeviceNet module
MP	Adaptor with Profibus DP module

	Ported design	Thread type
1	Side ported	3/8" BSPP
2	Bottom ported	3/8" BSPP
5	Side ported	3/8" NPT
6	Bottom ported	3/8" NPT

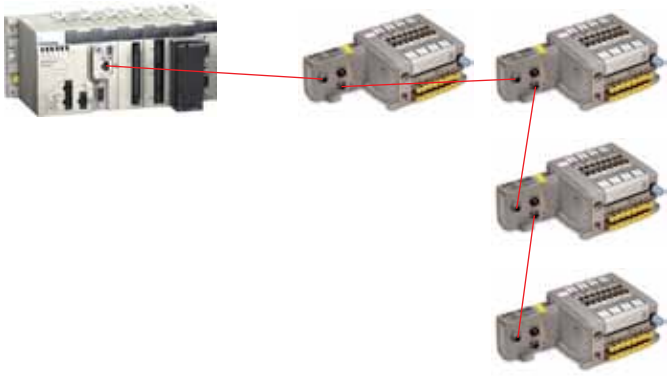
For AS-i communication, use M4 and see Moduflex Valve catalogue for AS-i module part number.

Moduflex Bus 16 Outputs

16 solenoids fieldbus modules available in DeviceNet, CANopen, and Profibus DP protocols.

Closer to the cylinder

Decentralized application when solenoid valves have to be closer to the pneumatic actuators.



Technical data

Moduflex Bus communication modules

Bus power supply :	20 to 30 VDC
Power supply output voltage :	24 VDC
Module consumption :	
• DeviceNet :	1,5 W
• CANopen :	1,5 W
• Profibus DP :	1,5 W
Water and dust Protection :	IP65
Output protection :	overload protected

Moduflex Bus modules

	Description	Bus protocol	Sub-base design	Thread type	Weight (g)	Order code
	Moduflex Bus module	CANopen	Side ported	3/8" BSPP	250	**PSMMC1AP**
			Bottom ported	3/8" BSPP	250	**PSMMC2AP**
		DeviceNet	Side ported	3/8" BSPP	250	**PSMMD1AP**
			Bottom ported	3/8" BSPP	250	**PSMMD2AP**
		Profibus DP	Side ported	3/8" BSPP	250	**PSMMP1AP**
			Bottom ported	3/8" BSPP	250	**PSMMP2AP**
Also available, AS-i interface protocol, standard version or extended version (A - B coded). See Moduflex Valve catalogue.						
	End modules adaptator without Moduflex Bus module	All	Side ported	3/8" BSPP	200	**PSMM41AP**
			Bottom ported	3/8" BSPP	200	**PSMM42AP**

For configuration files, go to : http://www.parker.com/pneu/moduflex.

Decentralized Device bus accessories

	Description	Bus protocol	Connector type	Weight (g)	Order code
	Power supply female straight connector	All	M12 - A coding	25	**P8CS1205AA**
	Line termination	DeviceNet CANopen	M12 - A coding	25	**P8BPA00MA**
		Profibus DP	M12 - B coding	25	**P8BPA00MB**
P8CS0803J	Bus IN female connector	DeviceNet CANopen	M12 - A coding	25	**P8CS1205AA**
		Profibus DP	M12 - B coding	25	**P8CS1205AB**
	Bus OUT male connector	DeviceNet CANopen	M12 - A coding	25	**P8CS1205BA**
		Profibus DP	M12 - B coding	25	**P8CS1205BB**
	Cable quick connect connector		M8	25	**P8CS0803J**
			M12 - A coding	25	**P8CS1204J**
P8CSY1212A	"Y" shape, thread to thread		M12 - 2 x M12 - A coding	25	**P8CSY1212A**

Multi-connection head module

P S M L 2 1 A P

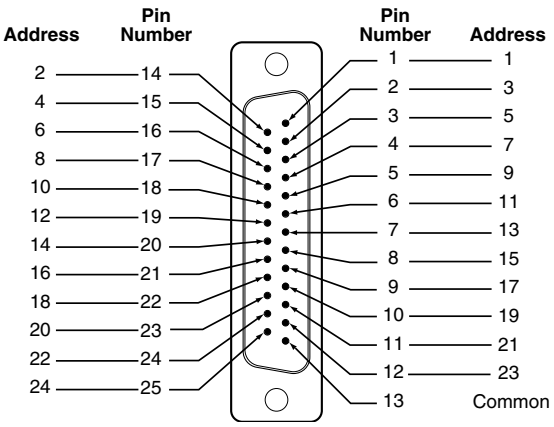
Multi-wire connection	
L2	Sub-D25 connector

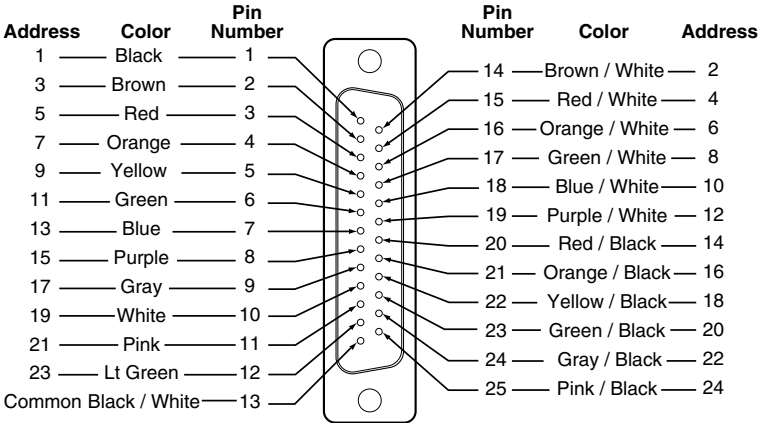
	Ported design	Thread type
1	Side ported	3/8" BSPP
2	Bottom ported	3/8" BSPP
5	Side ported	3/8" NPT
6	Bottom ported	3/8" NPT

Sub-D25 connection

Up to 24 solenoids on standard Sub-D25 connector.

Technical data





Rated voltage :	24 VDC
Maximum addresses :	24
Maximum energised simultaneously :	24
Electrical connection :	Sub-D25 pin DIN 41652, MIL-C-24308, NFC93425 type HE5
Polarity :	PNP and NPN compatible (solenoids not polarized)
Dust and water protection :	IP65 rated with properly assembled IP65 rated cable

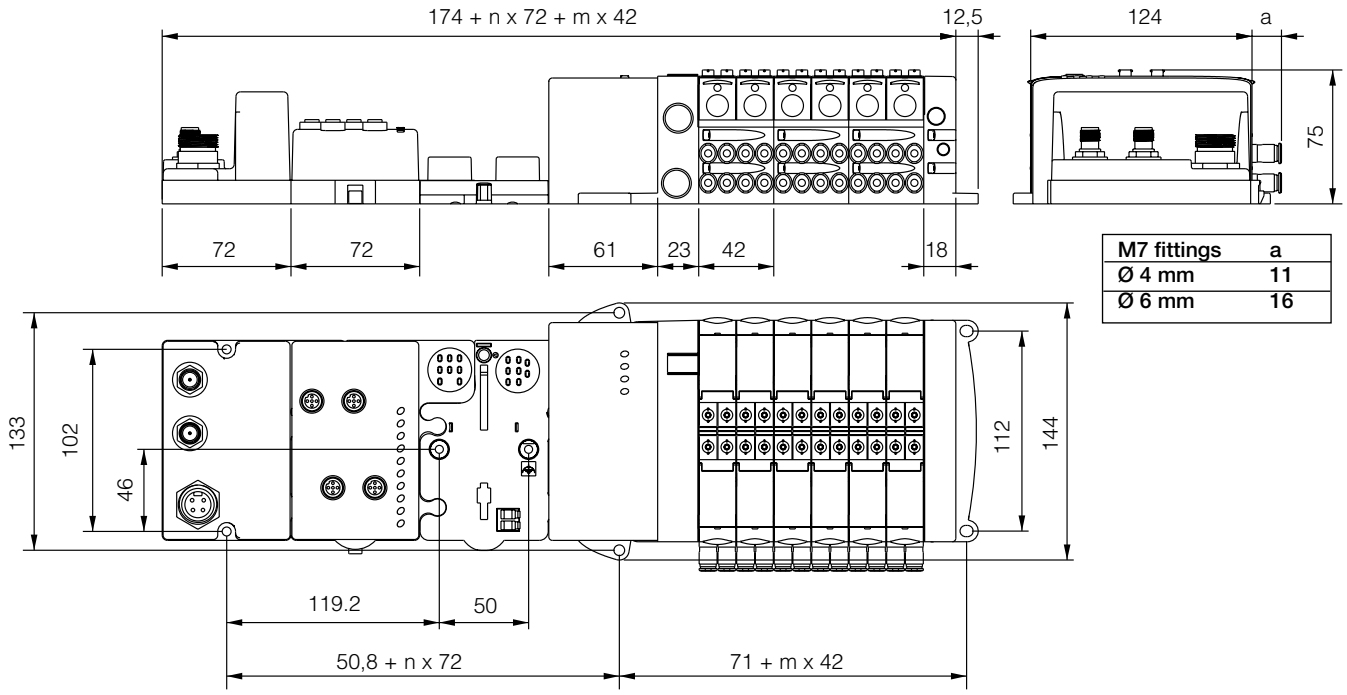
Electrical multi-pole end modules

	Description	Sub-base design	Thread type	Weight (g)	Order code
	Sub-D25 ends module	Side ported	3/8" BSPP	250	**PSML21AP**
		Bottom ported	3/8" BSPP	250	**PSML22AP**

Electrical accessories

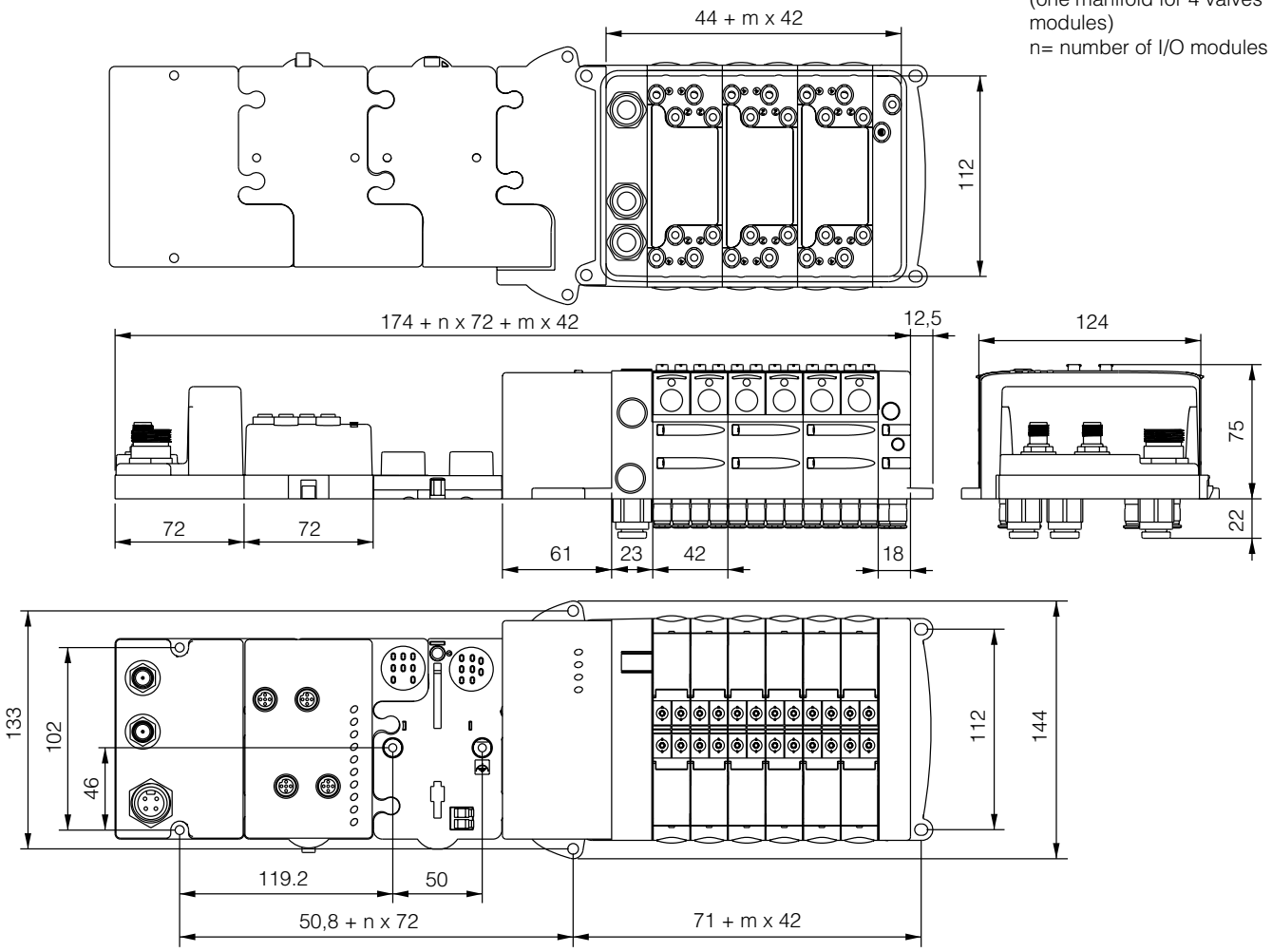
	Description	Cable length	Weight (g)	Order code
P8LMH25M3A	Sub-D25 connector IP40 with flying leads multi-cable	3 m	380	**P8LMH25M3A**
		9 m	780	**P8LMH25M9A**
	Sub-D25 connector IP65 with flying leads multi-cable	9 m	790	**P8LMH25B9A**

Centralized bus - Side ported



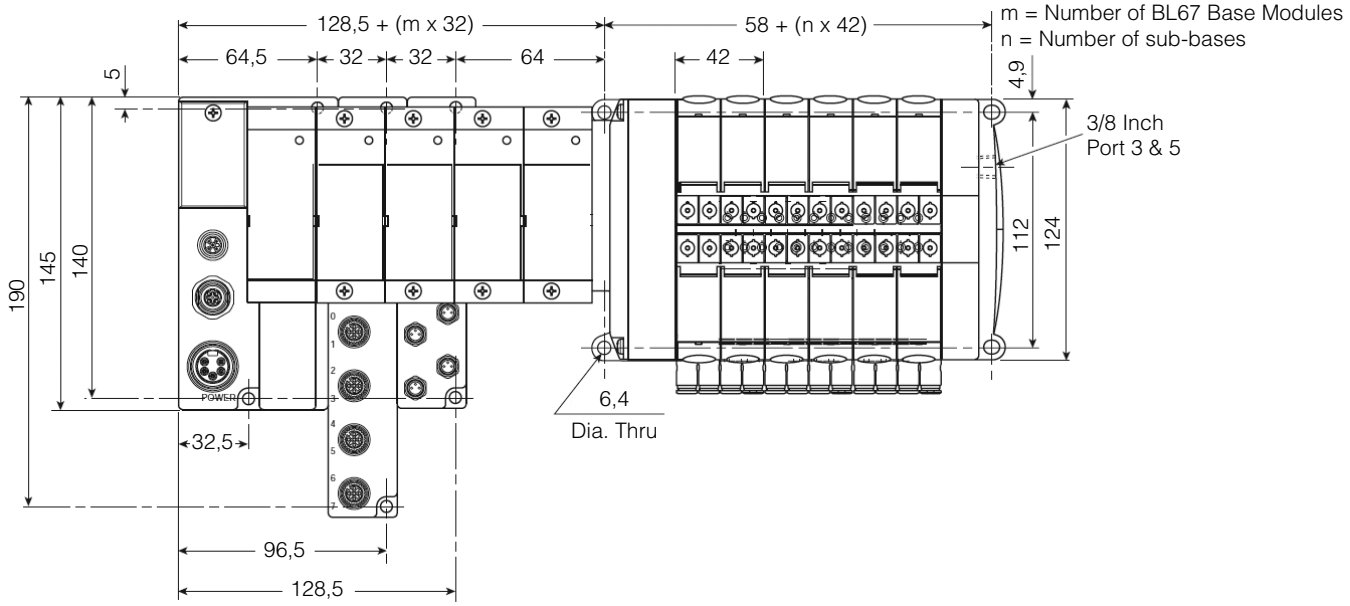
M7 fittings	a
Ø 4 mm	11
Ø 6 mm	16

Centralized bus - Bottom ported

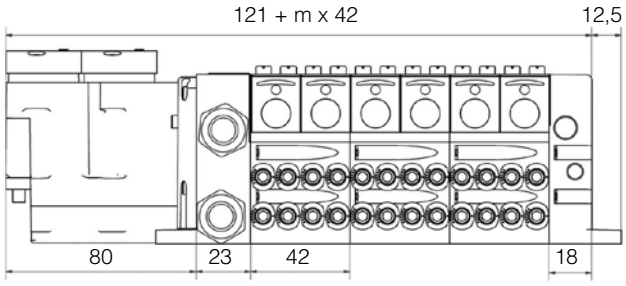


Note:
m = number of manifolds (one manifold for 4 valves modules)
n= number of I/O modules

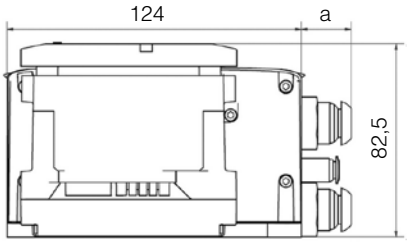
Isys Micro with TURCK BL67 Remote I/O System



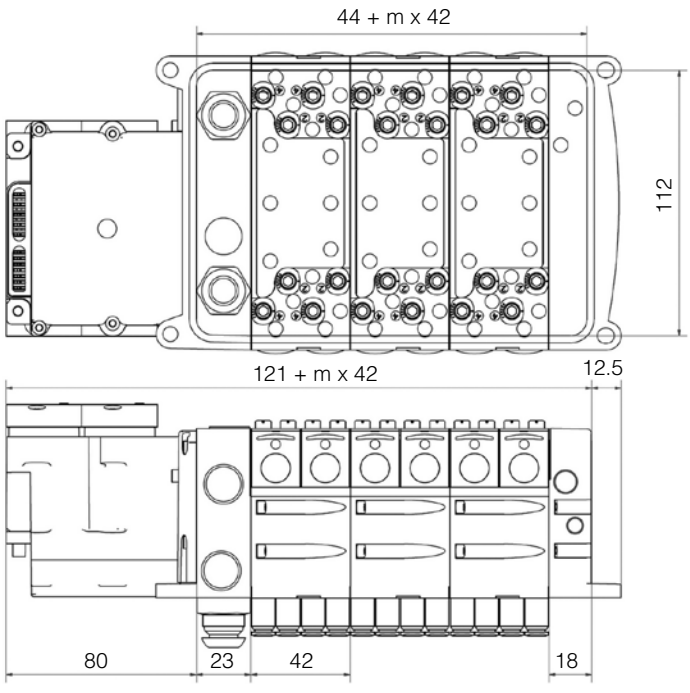
Isys Micro with TURCK BL67 adaptor - Side ported



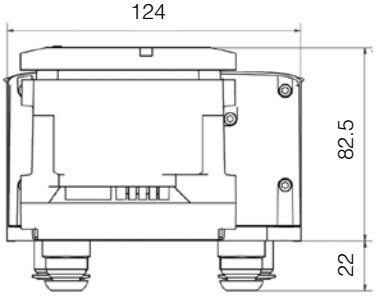
M7 fittings	a
Ø 4 mm	11
Ø 6 mm	16



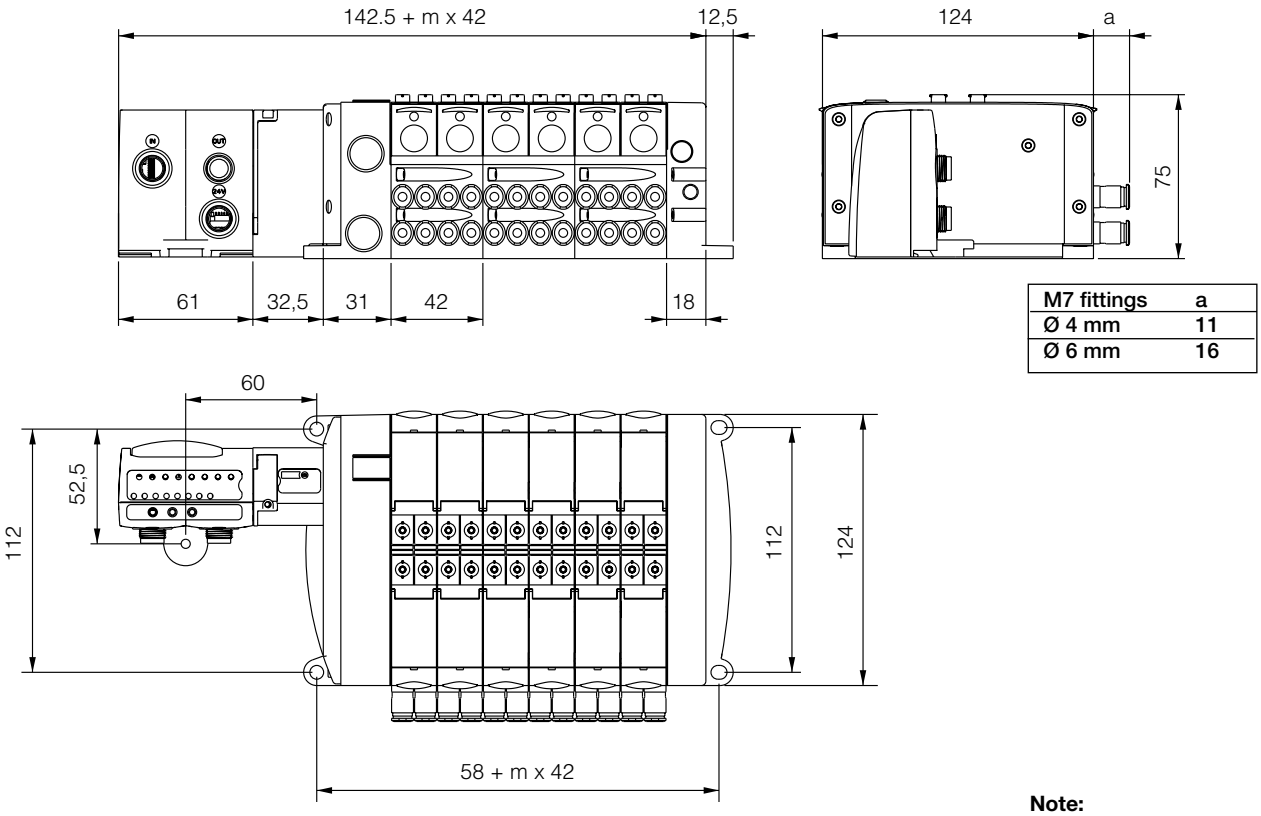
Isys Micro with TURCK BL67 adaptor - Bottom ported



Note:
m = number of manifolds (one manifold for 4 valves modules)



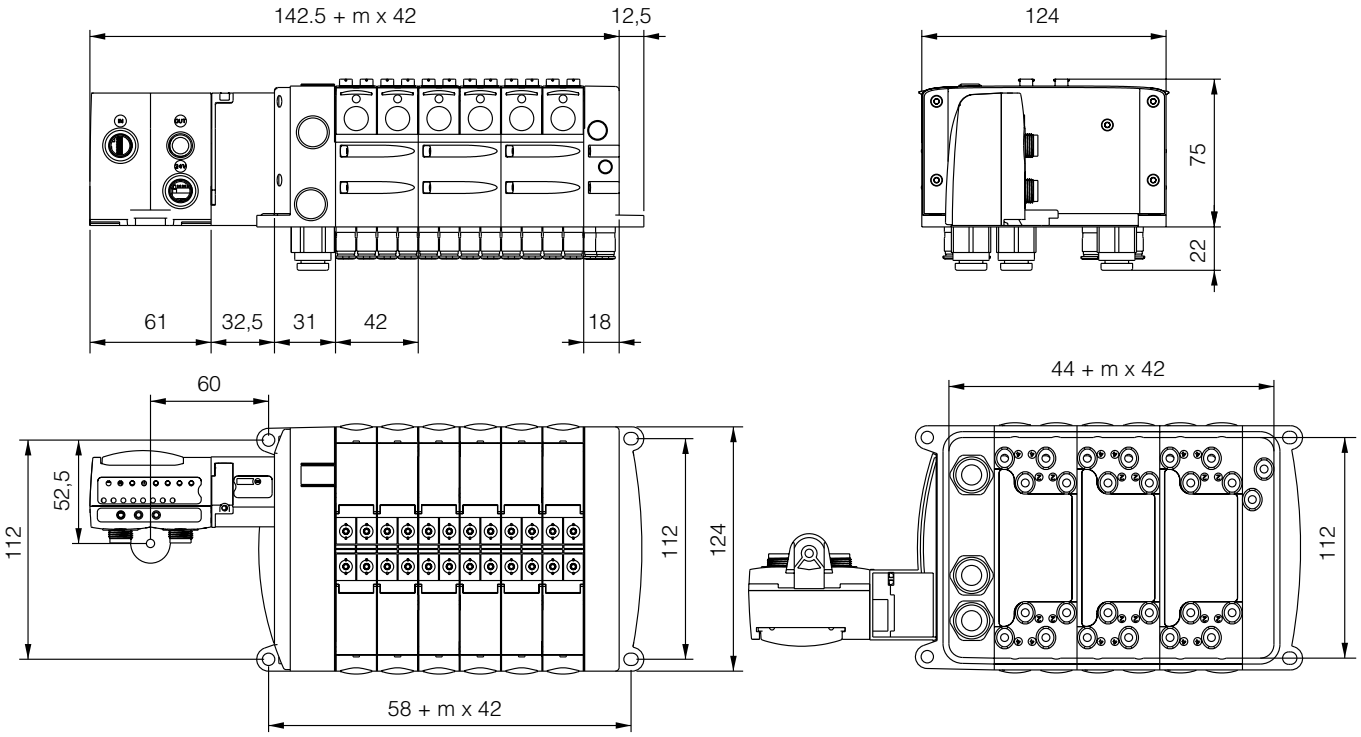
Fieldbus - Side ported



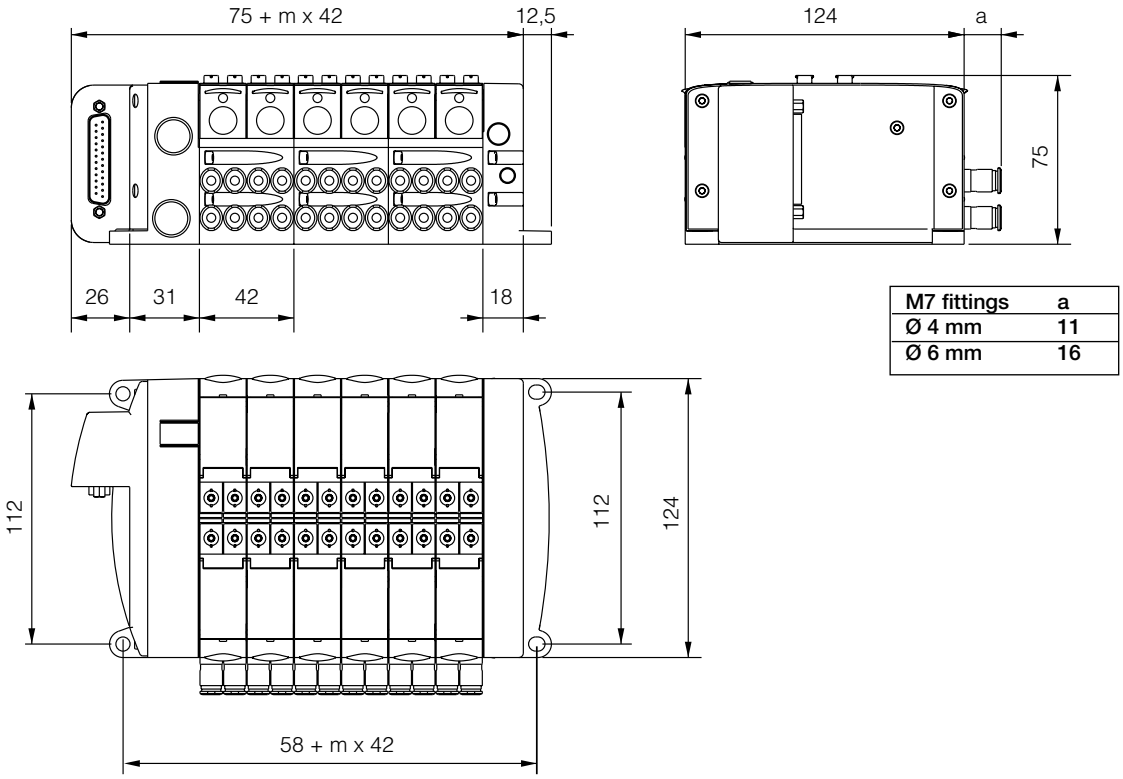
M7 fittings	a
Ø 4 mm	11
Ø 6 mm	16

Note:
m = number of manifolds (one manifold for 4 valves modules)

Fieldbus - Bottom ported



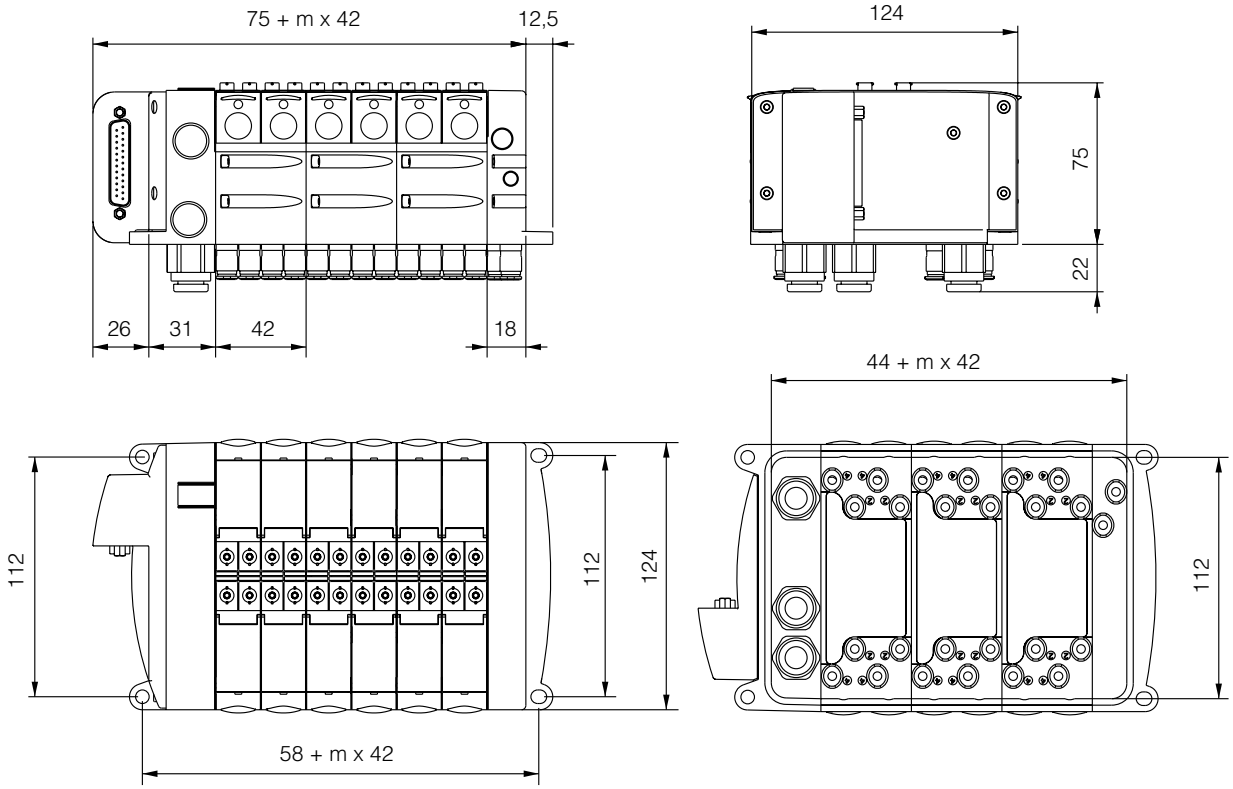
SubD25 - Side ported

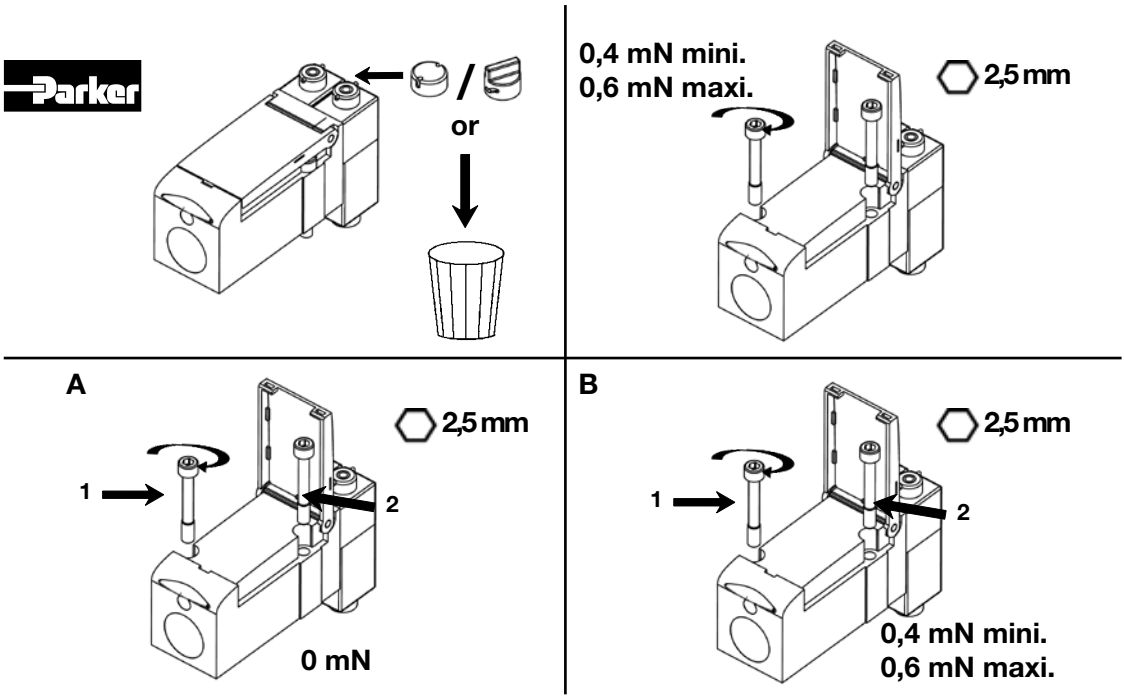


M7 fittings	a
Ø 4 mm	11
Ø 6 mm	16

Note:
m = number of manifolds (one manifold for 4 valves modules)

SubD25 - Bottom ported





Isys Micro
Installation & Service Instructions
Sheet B

ISSUED: 06 2008
Supersedes: None

WARNING: *Failure to follow all precautions, warnings, instructions, and information contained herein, and from the Parker website, may cause death, personal injury, and/or property damage. More detailed information, in several languages, may be obtained from the Parker website: www.parker.com or call 1-800-C PARKER in the USA or 00 800 27 27 53 74 in Europe.*

GENERAL SAFETY GUIDELINES

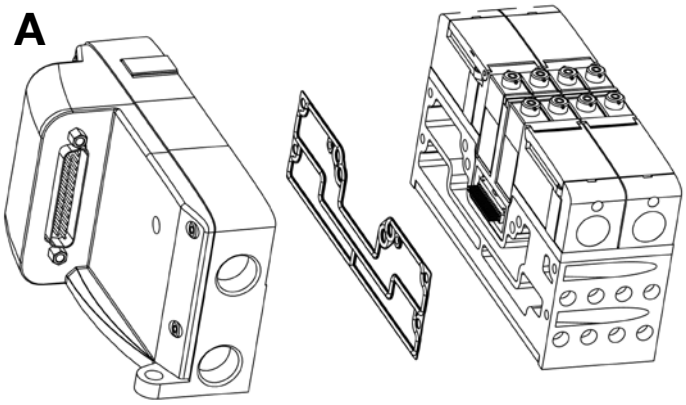
- *Always disconnect the electric and air supply to the valve before adjusting.*
- *Always lockout power to machinery that the valve is attached to before adjusting.*
- *Keep hands and clothing away from any pinch points & paths of moving cylinders.*
- *Never disassemble valves without proper instruction and manuals. This may be obtained from a distributor or the website described above.*

GENERAL INSTALLATION GUIDELINES

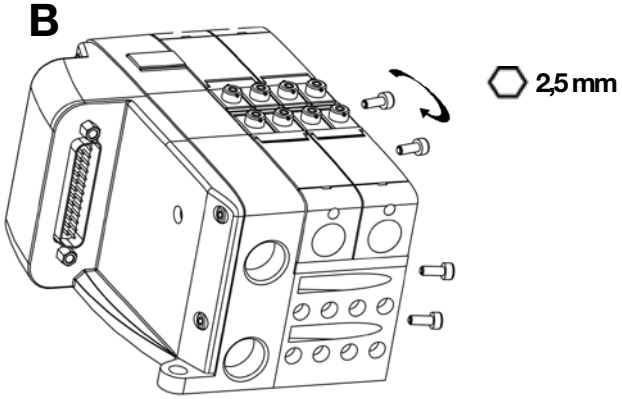
- *Push plug-in pneumatic connectors securely into the modules and assemble the valve islands as shown on reverse side.*
- Secure the valve or valve island using the din-rail fasteners or the mounting holes.
- *Attach Parker tubing to the pneumatic connectors. Completely push clean, square-cut precision tubing into the pneumatic connectors.*
- *Attach electrical connections with power off.*
- *Test the system operation for function and leakage. Do not put into operation until the function is as intended and there is no leakage.*

PSM . . AP

A

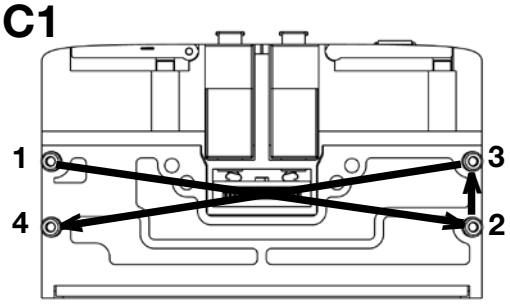


B



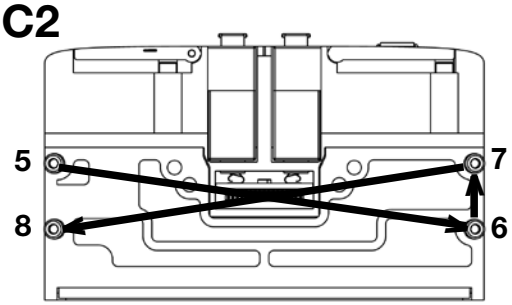
C

C1



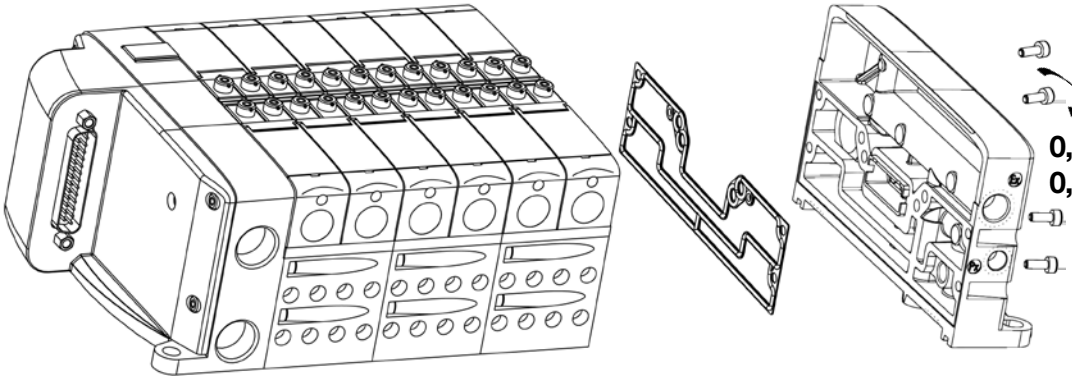
1, 2, 3, → 4 0 mN

C2



5, 6, 7, → 8 0,5 mN mini.
0,8 mN maxi.

D

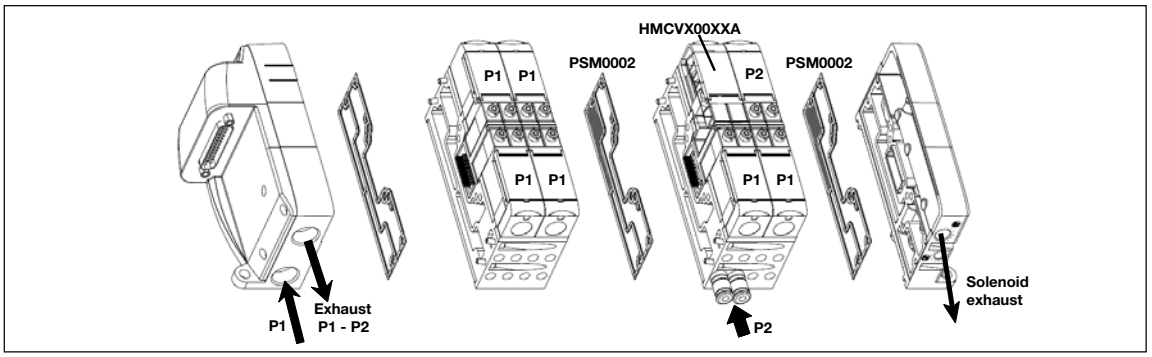


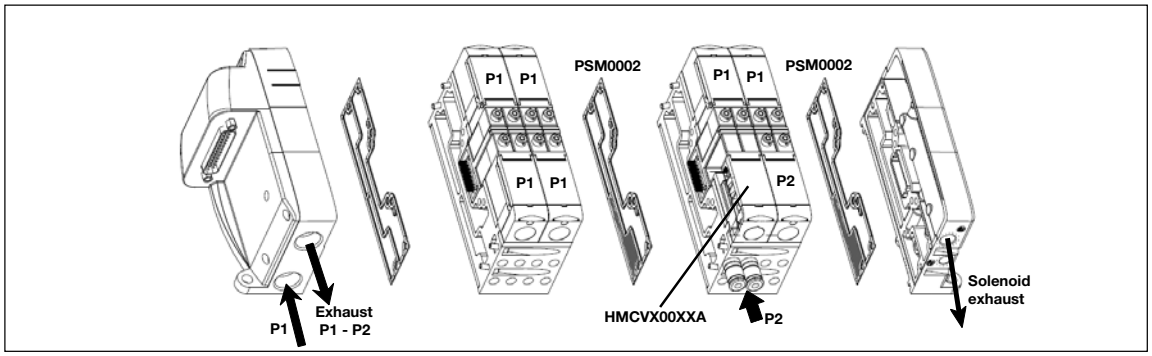
0,5 mN mini.
0,8 mN maxi.

W930019630111 http://www.parker.com/Pneumatic 300196301W05 02

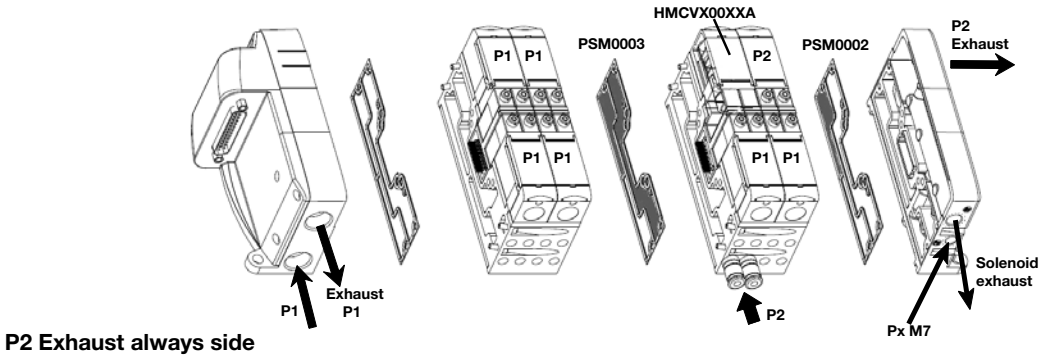
Inter-manifold seal plate

PSM0002



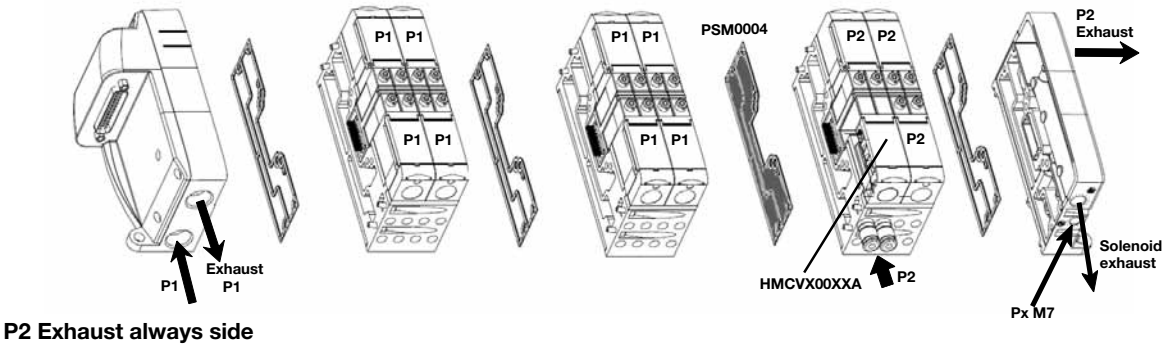


PSM0003



P2 Exhaust always side

PSM0004

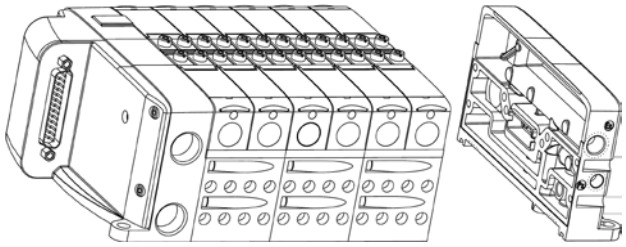


P2 Exhaust always side

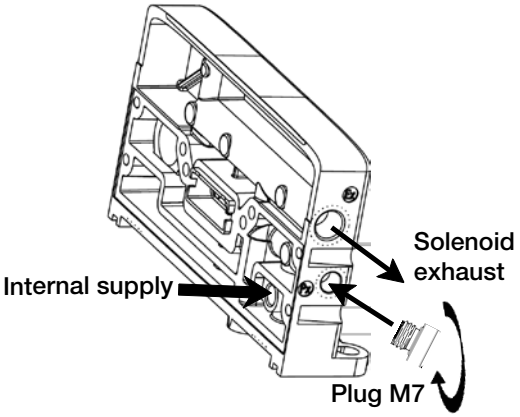
Operating pressure -0.9 to 8.3 bar, with external pilot pressure 6 bar. Solenoid pressure supply 2.7 to 8.3 bar

PSM...AP

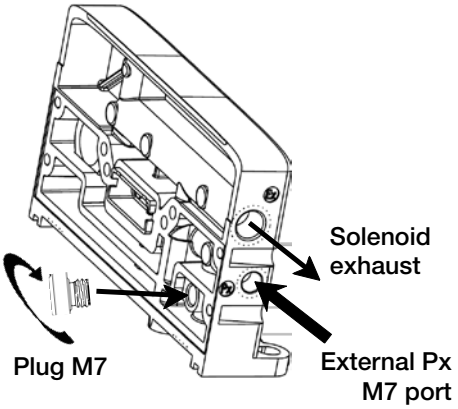
Side ported



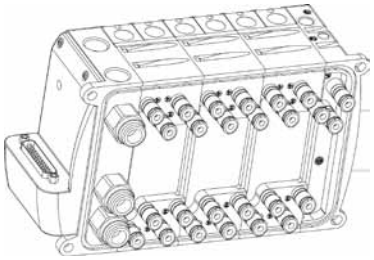
Internal solenoids pilot supply



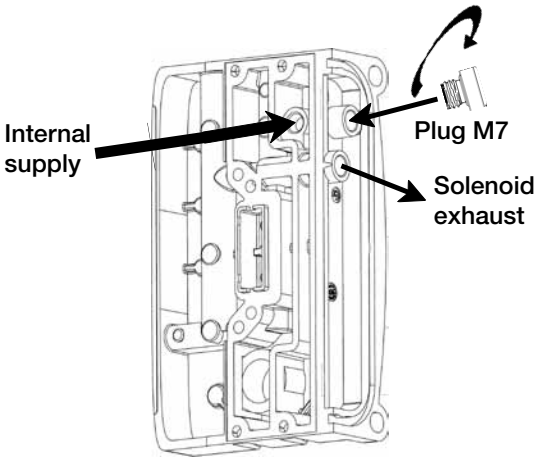
External solenoids pilot supply



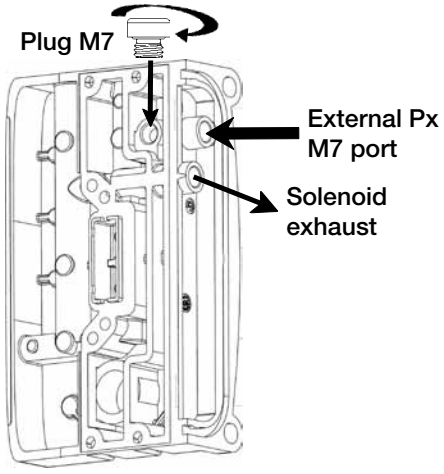
Bottom ported



Internal solenoids pilot supply



External solenoids pilot supply



Operating pressure -0.9 to 8.3 bar, with external pilot pressure 6 bar. Solenoid pressure supply 2.7 to 8.3 bar

ISYS-Micro
Installation & Service Instructions
Sheet B

Supersedes: None

⚠AVERTISS Danger : *Le non-respect des précautions, mises en garde, instructions et informations décrites dans le présent document ou sur le site Parker peut provoquer des dommages matériels et des blessures graves même mortelles. Des précisions complémentaires en plusieurs langues peuvent être obtenues en visitant le site web Parker: www.parker.com ou appeler le 00 800 27 27 53 74 en Europe.*

CONSIGNES GENERALES DE SECURITE

- *Débrancher toujours les alimentations électrique et pneumatique du distributeur avant réglage.*
- *Couper toujours l'énergie de l'équipement avant réglage.*
- *Garder les mains et les vêtements hors de portée des points de pincement des pièces en mouvement.*
- *Ne jamais démonter les distributeurs sans les instructions ou manuels appropriés. Ces derniers peuvent être obtenus chez nos distributeurs ou sur le site web.*

CONSIGNES GENERALES D'INSTALLATION

- S'assurer du bon positionnement des connecteurs pneumatiques dans leur logement.
- Fixer l'îlot sur un bâti à l'aide des logements.
- Utiliser des tubes Parker. Ils doivent être propres, coupés droits, sans résidu, et enfoncés complètement.
- Connecter électriquement les distributeurs ou îlots hors tension.
- *Tester les fonctions et fuites du système. Ne jamais mettre en service sans s'assurer préalablement du bon fonctionnement et de l'absence de fuites.*

⚠ ACHTUNG *: Nichtbeachten der hier und auf der Parker Website aufgezeigten Vorsichtsmassregeln, Hinweise, Anleitungen und Informationen kann zu Tod, Personenschäden und/oder Zerstörung der Einrichtungen führen. Genauere Informationen -in verschiedenen Sprachen- können von der Parker Website : www.parker.com abgerufen werden. T : 00 800 27 27 53 74.*

Allgemeine Sicherheitsrichtlinien

- *Vor jeglicher Einstellarbeit an den Ventilen bzw. der Ventilinseln sind die Druckluftleitungen zu trennen.*
- *Vor jeglicher Einstellarbeit an den Ventilen bzw. der Ventilinseln ist der entsprechende Anlagenteil energie- und spannungslos zu machen.*
- *Halten Sie Abstand mit Händen und Kleidung von Klemmstellen (z.B. von Zylindern).*
- *Bauen Sie niemals Komponenten auseinander ohne entsprechend geeignete Anleitungen. Sie können diese erhalten von unseren Fachhändlern , eigenen Niederlassungen oder von der Webseite abrufen.*

Allgemeine Installationsrichtlinien

- *Drücken Sie die Einsteck-Schnellverbinder fest und sicher in die Basismodule wie gezeigt.*
- *Sichern Sie die Ventilinsel durch Befestigungsschrauben an auf einer Montagefläche.*
- *Benutzen Sie nur Parker Kunststoffrohr in Verbindung mit den Schnellsteckverbindern.*
  Das Rohr muss sauber, rechteckig abgeschnitten, ohne lose Partikel und komplett in die Verbinder gesteckt sein.
- *Stellen Sie die elektrische Verbindung in spannungslosem Zustand her.*
- *Testen Sie das System auf Funktion und Leckagen. Nehmen Sie das System erst in Betrieb wenn die Funktionen wie geplant ablaufen und keine Leckagen vorhanden sind.*

⚠WARNING: *Failure to follow all precautions, warnings, instructions, and information contained herein, and from the Parker website, may cause death, personal injury, and/or property damage. More detailed information, in several languages, may be obtained from the Parker website: www.parker.com or call 1-800-C PARKER in the USA or 00 800 27 27 53 74 in Europe.*

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- *Attach Parker tubing to the pneumatic connectors. Completely push clean, square-cut precision tubing into the pneumatic connectors.*
- *Attach electrical connections with power off.*
- *Test the system operation for function and leakage. Do not put into operation until the function is as intended and there is no leakage.*

⚠ ADVERTÊNCIA: O não cumprimento de todas as advertências, instruções e informações contidas nesta, pode causar morte, danos pessoais e/ou danos materiais. Maiores detalhes, em outras línguas, podem ser obtidos do website Parker : www.parker.com
T : 00 800 27 27 53 74 (Europe).

INSTRUÇÕES GERAIS PARA SEGURANÇA

- Sempre desconecte a eletricidade e suprimento de ar da válvula antes da regulagem ou instalação das unidades.
- *Sempre desconecte a válvula de qualquer máquina/equipamento antes da regulagem ou instalação.*
- Mantenha as mãos e vestuário longe de pontos onde há riscos de agarramentos ou movimentos de cilindros para evitar acidentes.
- Nunca desmonte as válvulas sem manuais e instruções apropriados. Estes podem ser obtidos da fábrica ou do website descrito anteriormente.

INSTRUÇÕES GERAIS PARA INSTALAÇÃO

- **Pressione os conectores especiais dentro das unidades de válvulas como mostrado**
- **Instale o conjunto do manifold na superfície utilizando parafusos nos furos de montagem.**
- **Conecte somente tubos Parker. Estes devem estar limpos, com corte das extremidade no esquadro, sem partículas soltas, e pressionadas completamente dentro das conexões.**
- **Faça as conexões elétricas com a linha desernegizada.**
- *Teste o sistema para checar o funcionamento e vazamentos. Não coloque o sistema em operação antes de checar se o funcionamento está adequado e não há vazamentos.*

⚠WAARSCHUWING: *Verzuimen tot het volgen van alle voorzorgsmaatregelen, en informaties zoals hier samengevat en op de Parker website, kan persoonlijk letsel, eigendomsschade, of zelfs de dood tot gevolg hebben. Meer detail informatie, zie www.parker.com T : 00 800 27 27 53 74 (Europe).*

Algemene veiligheidsrichtlijnen

- *Altijd de lucht- en stroomtoevoer naar het ventiel afsluiten voor men gaat afstellen.*
- *Altijd de energie naar de machine waar het ventiel op gemonteerd zit afsluiten voor men gaat afstellen.*
- *Handen en kleding weghouden van de klempunten en bewegende cilinders.*
- *Nooit ventielen demonteren zonder de juiste instructie en handleidingen.*

Algemene installatie voorschrift

- *Bevestig speciale koppelingen precies zoals hierboven wordt getoond.*
- *Bevestig de ventielunit op ondergrond door schroeven te plaatsen.*
- *Alleen Parker leidingen in de koppelingen bevestigen. Deze moeten schoon en recht afgesneden zijn, zodat ze goed in de koppeling passen.*
- *Elektrische aansluitingen plaatsen, alleen als de voeding uit staat.*
- *Systeem testen op werking en lekkage, en niet in gebruik nemen voordat aan beide eisen voldaan is.*

⚠PRECAUCION: *La Negligencia a los avisos de precaución, instrucciones e información contenida aquí y en el sitio Web de Parker pueden causar la muerte, daños personales y/o daño a la propiedad. Mas información detallada en diferentes idiomas pueden ser obtenidos del sitio Web de Parker: www.parker.com o llamando al teléfono 1-800-C PARKER en los Estados Unidos de América o 00 800 27 27 53 74 en Europa.*

NORMAS GENERALES DE SEGURIDAD.

- *Siempre desconecte el suministro de energía eléctrica y aire comprimido a la válvula antes de ajustar o instalar unidades.*
- *Siempre baje el interruptor de energía eléctrica de la maquinaria en la que la válvula esta instalada antes de ajustarla.*
- *Mantenga las manos y ropa fuera de cualquier punto apriete o partes móviles de los cilindros.*
- Nunca desensamble válvulas sin los manuales o instrucciones adecuados. Estos pueden ser obtenidos de un distribuidor o del sitio Web descrito arriba.

NORMAS GENERALES DE INTALACION

- *Presione los conectores especiales asegúrelos contra las bases como se muestra.*
- Asegure el ensamble de manifold a la superficie usando conectores rápidos.
- Conecte solamente tubing Parker a las conexiones. Estos deberán de estar limpios, cortados en escuadra, sin partículas sueltas, y presionados completamente dentro de las conexiones.
- *Realice las conexiones eléctricas con el interruptor de energía en apagado (OFF).*
- *Pruebe la operación del sistema verificando funcionamiento y fugas. No lo ponga en operación hasta que cumpla con la operación requerida y que no haya fugas.*

⚠VARNING: *Instruktioner, varningar och information i denna handling, och på Parkers websida, skall åtlydas noggrant. Följden av att bortse från dessa kan medföra dödsfall, personskador och/eller skador på egendom. Detaljerad information, på flera språk kan hämtas från Parkers websida www.parker.com eller ring 00 800 27 27 53 74 (Europe).*

GENERELLA SÄKERHETSANVISNINGAR

- *Stäng alltid av både el och luftförsörjningen innan justeringar på ventilen genomförs.*
- *Bryt alltid huvudströmmen till maskinen som ventilen betjänar.*
- *Se till att hålla undan händer och kläder från klämrisker.*
- *Plocka aldrig isär en ventil utan att ha först hämtat underlag för detta från websidan eller leverantörn..*

GENERELLA INSTALLATIONSANVISNINGAR

- *Tryck de speciella anslutningarna ordentligt fast i underdelen, se bilden.*
- Sätt fast ventilbas ordentligt på ett stabilt underlag.
- Montera enbart Parker slang i instickskopplingarna. Dessa måste skäras av rakt och vara utan s.k.skägg eller lösa partiklar samt tryckas helt in i kopplingen.
- *Koppla in elen med huvudbrytaren i frånläge.*
- *Test systemet sedan för funktion and läckage. Starta ej maskin förrän fullgod funktion och täthet uppnåtts.*

⚠ATTENZIONE! *Il mancato rispetto delle precauzioni, avvertenze, istruzioni, ed informazioni contenute di seguito e nel sito web Parker, può provocare danni a cose o persone, anche con conseguenze letali. Per informazioni più dettagliate nelle varie lingue, consultare sito web Parker: www.parker.com o, negli Stati Uniti, chiamare il 00 800 27 27 53 74 (Europe).*

ISTRUZIONI DI SICUREZZA

- *Scollegare sempre la valvola dall'alimentazione elettrica e pneumatica prima di regolare le periferiche.*
- *Interrompere sempre l'alimentazione elettrica ai macchinari cui la valvola è collegata prima di procedere alla regolazione.*
- *Tenere le mani e gli abiti lontano dai cilindri in movimento in modo che non rimangano impigliati o intrappolate.*
- *Non smontare mai le valvole senza aver prima seguito scrupolosamente i manuali di istruzioni che si possono richiedere al distributore, o scaricare dal sito web sopra citato.*

ISTRUZIONI GENERALI D'INSTALLAZIONE

- *Inserire e fissare i raccordi speciali nelle basi come indicato nel disegno.*
- Fissare il manifold ad un piano mediante i dispositivi di fissaggio indicati.
- Collegare ai raccordi esclusivamente tubi Parker. I tubi devono essere puliti con le estremità tagliate a squadra, senza parti libere e inseriti nel raccordo fino in fondo.
- *Attaccare le connessioni elettriche ad apparecchio spento.*
- *Collaudare il sistema per controllarne il funzionamento ed individuare eventuali perdite. Non utilizzare finché il funzionamento non risulta corretto e senza perdite.*

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