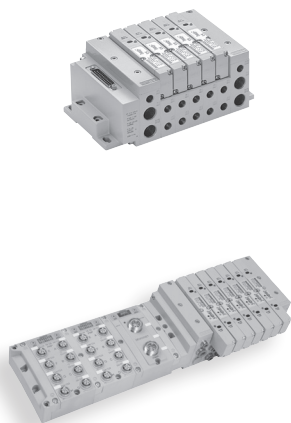
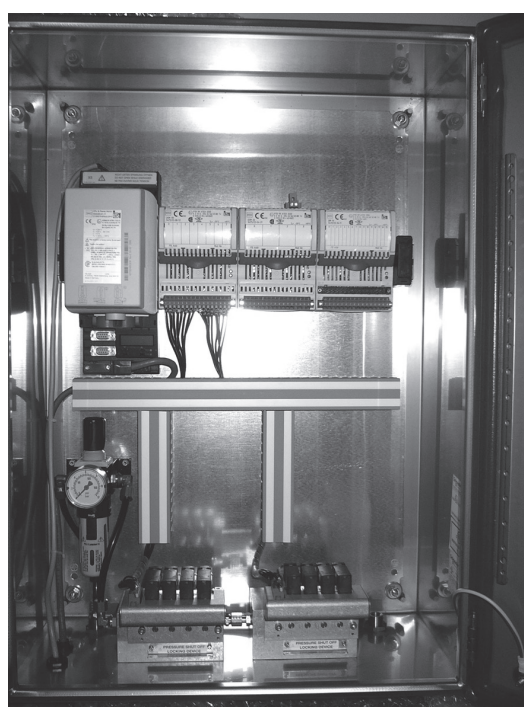


## *G3 Electronic Interface Inputs, ATEX Group II, Zone 2 and 22, Category 3 GD*



<b>Section 1</b> .....	<b>Features</b>
Spool and Sleeve Assembly .....	30-2
Completely Assembled Manifolds with Multipole Connection .....	30-7
G3 Platform Distribution Options .....	30-10
ATEX certification (2005/501) .....	30-11
DeviceNet™ .....	30-12
EtherNet/IP™ .....	30-14
Modbus TCP .....	30-16
Profibus-DP® .....	30-18
PROFINET® .....	30-20
POWERLINK .....	30-22
CANopen® .....	30-24
DeviceLogix .....	30-26
EtherNet/IP™ DLR .....	30-28
EtherCAT® .....	30-30
Inputs Modules - Digital Inputs - 5-Pin M12 Modules .....	30-32
Inputs Modules - Analog Inputs (16 Bit Resolution) .....	30-32
Inputs Modules - Digital Inputs - Terminal Strip Modules .....	30-32
Input Module M12 - RTD temperature sensor input module .....	30-33
Inputs Modules - Accessories .....	30-33
G3 Backplane Extension Modules .....	30-35
G3 Backplane Extension Cables and Connectors .....	30-37
Dimensions - G3 Fieldbus Communication Assembly .....	30-38
<b>Section 2</b> .....	<b>How to Order</b>
How to Order - Assembly Kit (2005) .....	30-40
How to Order - 2005 Series Valves .....	30-41
How to Order - G3 Electronics (2005) .....	30-42
Example Order for a Valve Island with G3 Electronics .....	30-43





**ATEX**  
Series 2005 Valve

**NUMATICS™**



**Technical Data • Operating Data**

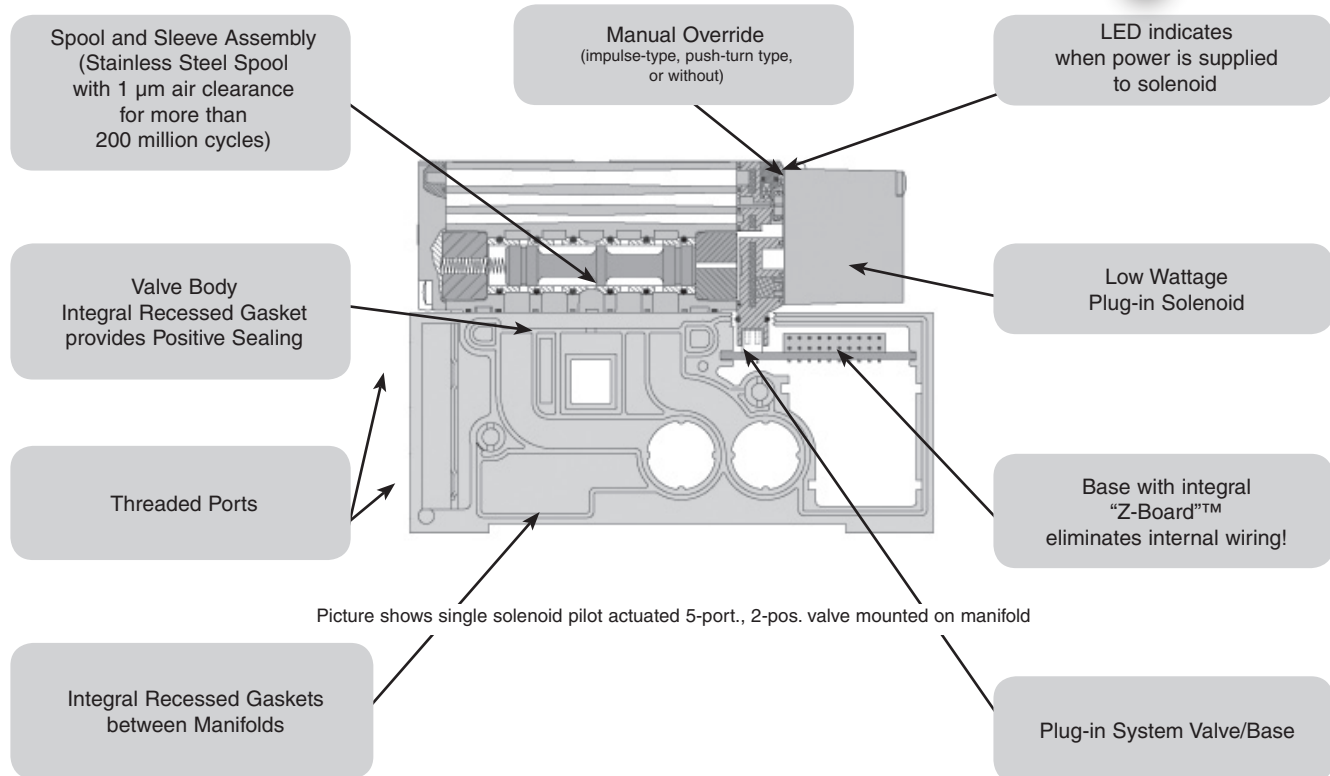
Manifolds of 2005 series valves are equipped with integral electrical plug-in allowing an easy exchange of single components without dismounting the manifold. "Z-Board"™ eliminates internal wiring.

Manifolds are available with threaded ports.

Exhaust ports 12 and 14 are integrated in the base with common exhaust at port 12.

End plates are available with integral mufflers.

Easy conversion from internal to external pilot air supply.



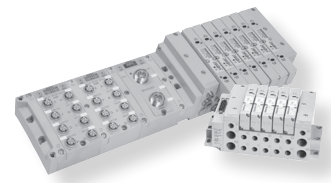
**Technical Data**

5-port., 2- and 3-pos. valves	2005
Flow capacity [at 6bar, Δp 1 bar]	600 l/min ANR
Operating pressure range:	Vacuum to 10 bar
Pilot pressure range:	1,8 to 8,2 bar
Ambient temperature range:	-20°C to +46 °C

Material	
Body:	Aluminium alloy
Other parts:	Stainless steel, steel or plastic
Static seals:	NBR
Finish:	Anodised or varnished

**Operating Data**

5-port., 2- and 3-pos. valves	2005
100% ED:	24 V DC ± 10%
Power (W):	1,0
Response time [ms]	energise    de-energise
5-port., 2-pos., single actuated, spring return:	14      16
5-port., 2-pos., double actuated, detented:	13
5-port., 3-pos., double actuated, spring centered	14      16



**Multipole Connectors • General Information**

**FEATURES**

- Solenoid air operated valve manifolds for connection to a control system (PLC) with a multiwire cable for simple wiring.
- Electrical connection with a 25 or 37 pin Sub-D connector or a 12, 19 or 26 pin round connector.
- Internal wiring by “Z-Board” plug-in system.
- Plug-together flexibility due to different assembly and wiring options.
- Designed to meet IP65 / NEMA 4 with round connector or terminal strip.



**COMBINATIONS**

- The maximum number of valves depends on the type of electrical connection chosen:
  - 25 pin Sub-D connector: max. 22 solenoids
  - 37 pin Sub-D connector: max. 32 solenoids
  - Terminal strip: max. 32 solenoids
  - 12 pin round connector: max. 8 solenoids
  - 19 pin round connector: max. 15 solenoids
  - 26 pin round connector: max. 22 solenoids
- Optional mixing of:
  - All functions of dual 3-ported, 2-position, 5-ported, 2-position single or double actuated and 5-ported, 3-position valves.
  - Pressure separation plate and intermediate pressure supply module.
- The valve manifolds are intended for frame or DIN-EN 50022 rail mounting.

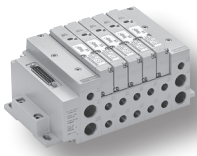
} (\*)



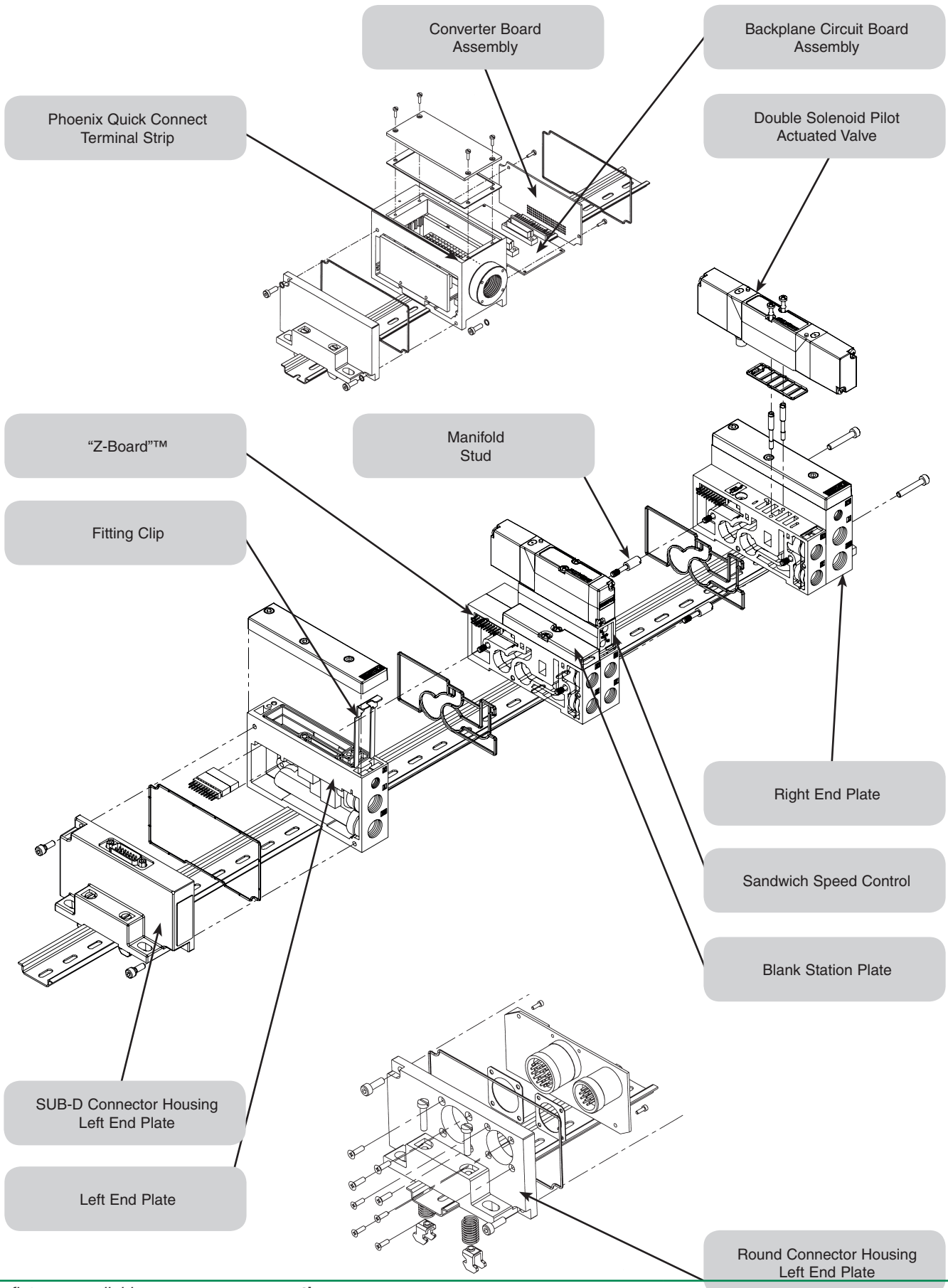
(\*) See page X021-30-10: Max. number of coil under voltage according to input module number or electrical connection type.

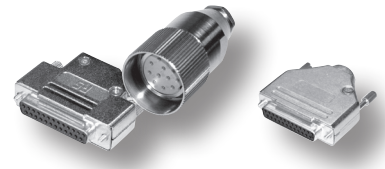
**Technical Data**

Electrical Data	
Node power:	Voltage: 24 V DC ±10%
Operating Data	
Temperature range:	-20°C to +46°C
Humidity:	95 % relative humidity, non-condensing
Protection:	IP65 / NEMA 4



Multipole Connectors • 3-D Drawing





**Multipole Connectors • Accessories**

Accessory	Description		Order Code
	25 pin female SUB-D connector, according to DIN 47100, straight cable outlet (IP 40) (série 2000)	w/ cable 2 m	<b>88100453</b>
		w/ cable 5 m	<b>88100456</b>
		w/ cable 10 m	<b>88100461</b>
	25 pin female SUB-D connector, elbow cable outlet (Series 2000)	w/ cable 2 m	<b>88100901</b>
		w/ cable 5 m	<b>88157644</b>
	37 pin female SUB-D connector, according to DIN 47100, straight cable outlet (IP 40) (série 2000)	w/ cable 2 m	<b>88100473</b>
		w/ cable 5 m	<b>88100476</b>
		w/ cable 10 m	<b>88100481</b>
	16 pin female M27 connector (IP 65)	w/o cable	<b>230-742-K</b>
		w/ cable 2 m	<b>230-742E-02m</b>
		w/ cable 5 m	<b>230-742E-05m</b>
		w/ cable 10 m	<b>230-742E-10m</b>
	19 pin female M23 connector, straight	w/o cable	<b>88164102</b>
		w/ cable 5 m	<b>88164106</b>
	19 pin female M23 connector, 90° elbow	w/o cable	<b>88164105</b>
		w/ cable 5 m	<b>88164107</b>
	12 pin female M23 connector (IP 65)	w/o cable	<b>230-879-K</b>
		w/ cable 2 m	<b>230-960-02m</b>
		w/ cable 5 m	<b>230-960-05m</b>
		w/ cable 10 m	<b>230-960-10m</b>

**Please note:**

The cable used on the prewired connectors comply with the requirements of standard EN 60079-14 for explosive atmospheres. This type of cable **MUST** be used in explosive atmospheres of ATEX zone 2-22.



**Multipole Connectors • Accessories**

Pin no.	37 PIN SUB-D according to DIN 47100 Order Codes: 88100473 88100476 88100481	SUB-D 25 Order Codes: 88100901 88157644	25 PIN SUB-D according to DIN 47100 Order Codes: 88100453 88100456, 88100461 230-945-xxm	12 PIN ROUND M23 Order Codes: 230-960-xxm	19 PIN ROUND M23 Order Codes: 88164106 88164107	26 PIN ROUND M27 Order Codes: 230-742E-xxm
1	white	white-green	white	white	purple	white
2	brown	white-yellow	brown	brown	red	brown
3	green	white-grey	green	green	grey	green
4	yellow	green	yellow	yellow	red-blue	yellow
5	grey	yellow	grey	grey	green	grey
6	pink	yellow-black	pink	pink	blue	pink
7	blue	grey	blue	blue	grey-pink	blue
8	red	yellow-red	red	red	white-green	red
9	black	pink	black	black	white-yellow	black
10	purple	yellow-blue	purple	purple	white-grey	purple
11	grey-pink	orange	grey-pink	grey-pink	black	pink-brown
12	red-blue	khaki	red-blue	green-yellow	yellow-green	white-pink
13	white-green	blue	white-green		yellow-brown	white-green
14	brown-green	white-brown	brown-green		brown-green	brown-green
15	white-yellow	white-black	white-yellow		white	white-yellow
16	yellow-brown	purple	yellow-brown		yellow	yellow-brown
17	white-grey	white-pink	white-grey		pink	white-grey
18	grey-brown	white-red	grey-brown		grey-brown	grey-brown
19	white-pink	white-purple	white-pink		brown	red-blue
20	pink-brown	white-blue	pink-brown			grey-pink
21	white-blue	blue	white-blue			white-blue
22	brown-blue	white	brown-blue			brown-blue
23	white-red	red	white-red			white-red
24	brown-red	brown	brown-red			brown-red
25	white-black	black	white-black			white-black
26	brown-black					yellow-green
27	grey-green					
28	yellow-grey					
29	pink-green					
30	yellow-pink					
31	green-blue					
32	yellow-blue					
33	green-red					
34	yellow-red					
35	green-black					
36	yellow-black					
37	grey-blue					
	<p>Pin 37 PE Pins 35-36 COMMON Pins 1-32 Valve solenoids</p>	<p>Pin 25 PE Pins 23-24 COMMON Pins 1-22 Valve solenoids</p>	<p>Pin 12 PE Pin 11 COMMON Pins 1-10 Valve solenoids</p>	<p>View from solder side</p> <p>Pin 12 PE Pin 6 COMMON</p>	<p>Pin 26 PE Pins 24-25 COMMON Pins 1-22 Valve solenoids</p>	