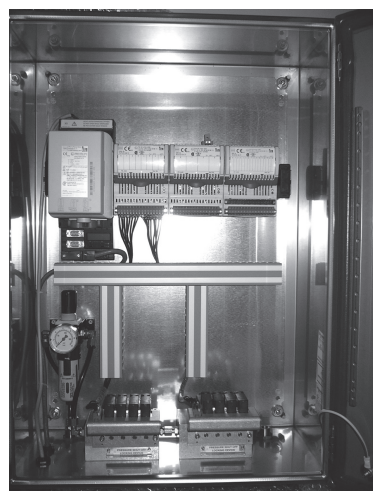
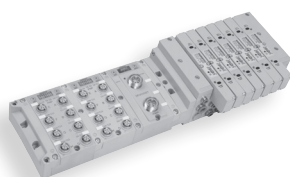


*G3 Electronic Interface Inputs, **ATEX** Group II, Zone 2 and 22, Category 3 GD*



Section 1 Features

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

Section 2 How to Order

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

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93



ATEX
Series 2005 Valve

numatics™



Technical Data • Operating Data

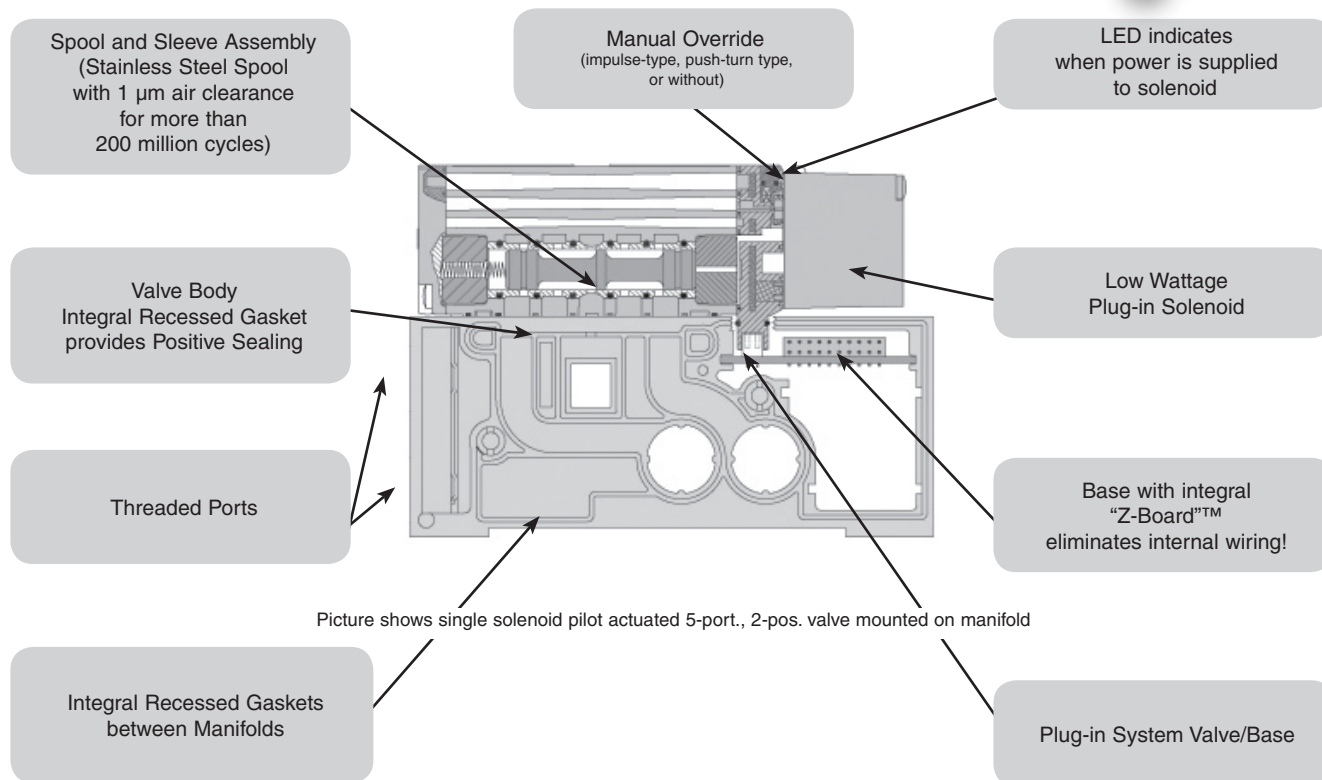
Manifolds of 2005 series valves are equipped with integral electrical plug-in allowing an easy exchange of single components without dismounting the manifold.
“Z-Board”™ eliminates internal wiring.

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.



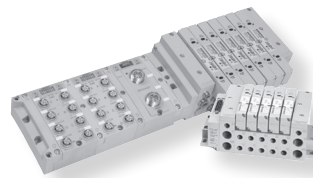
Technical Data

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



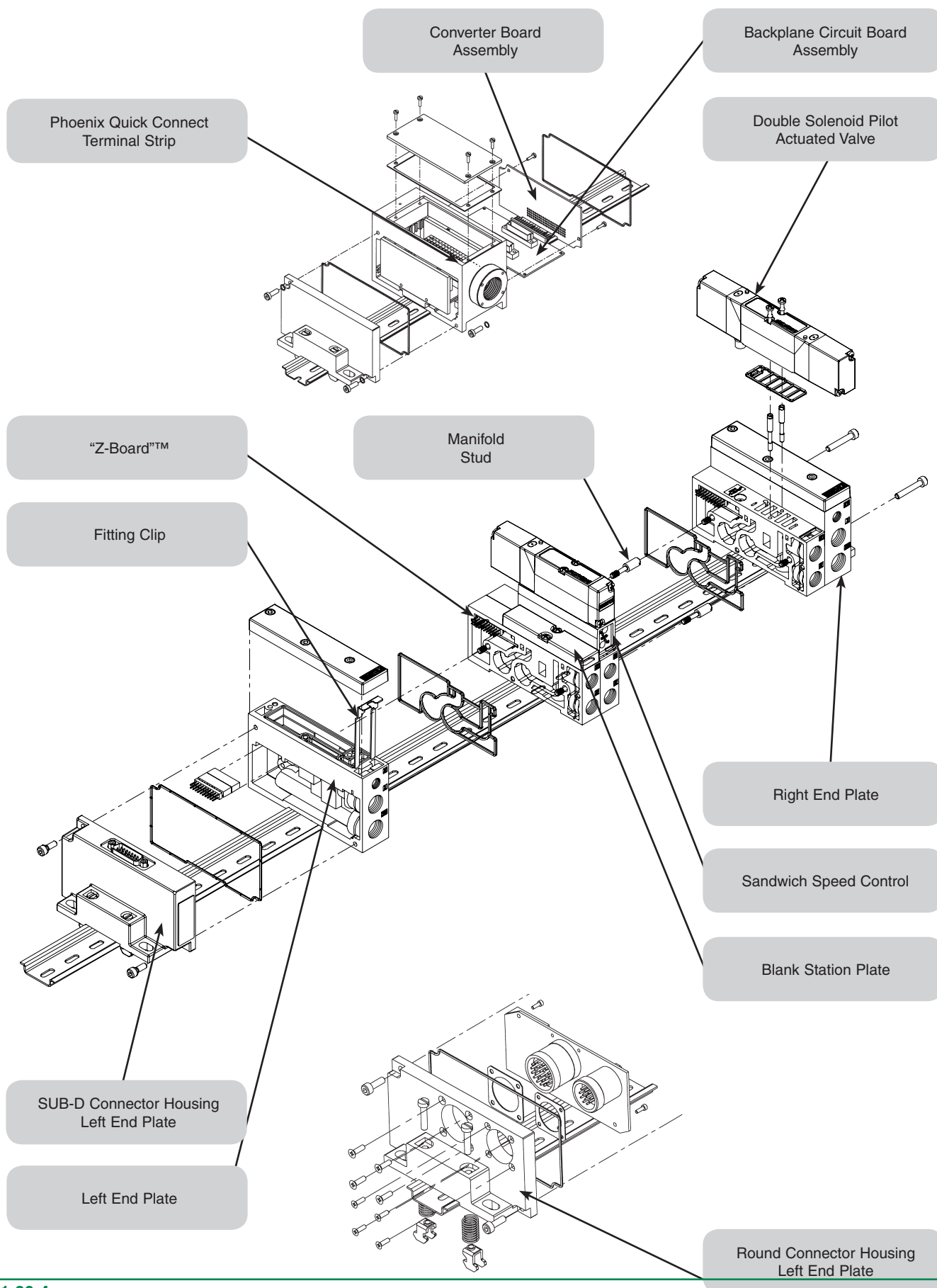
ATEX

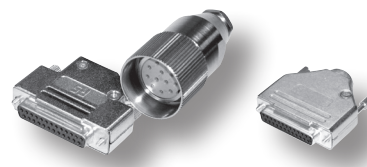
Series 2005 Multipol Connectors ATEX

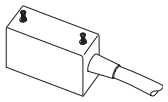
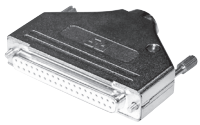
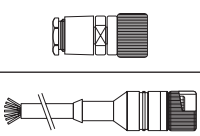
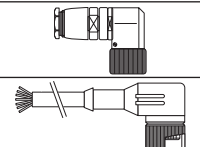
numatics™



Multipole Connectors • 3-D Drawing

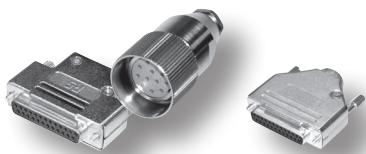



Multipol Connectors • Accessories

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

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.



numatics™



ATEX

Series 2005 Multipol Connectors ATEX

Multipol 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					

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93