

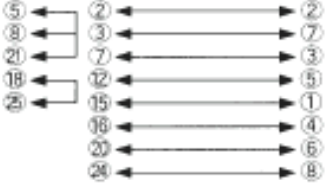



PLC 编程电缆制作大全


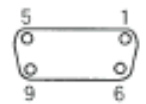
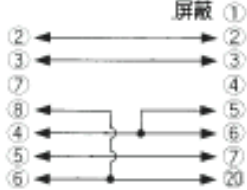
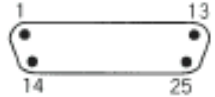
1. 三菱 FX 系列 PLC 编程电缆

用于三菱 FX1S、FX1N、FX2N、FX2NC 及 A 系列 PLC 编程使用。

第一步：制作一根 FX-422CAB0。

电缆名	主要用途和规格		
FX-422CAB0[1.5m]	与FX-232AW/AWC组合，传送程序。		
	FX-232AW/AWC 接口	接线图	FX _{1S} ,FX _{1N} ,FX _{2N} ,FX _{2NC} ,FX _{1V} ,FX _{2V}
	 D-SUB 25针母头		 MINI-DIN 8针母头

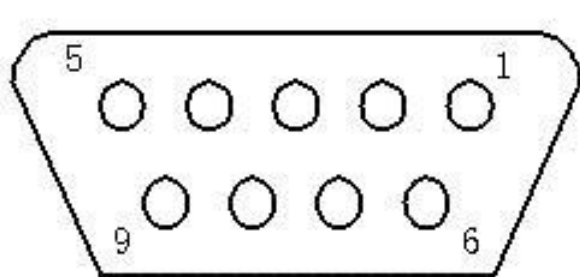
第二步：制作一根 F2-232CAB-1

型号(长度)	主要用途和规格		
F2-232CAB-1[3.0m]	与FX-232AW/AWC组合，传送程序。		
	电脑(9针)	接线图	FX-232AW/AWC型接口
	 D-SUB 9针母头		 D-SUB 25针公头

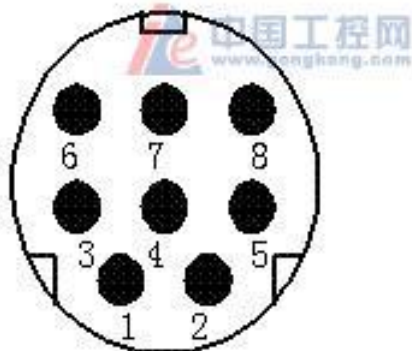
第三步：把上以两根线的 25 针母接头和公插头对接。

好了，一根三菱 PLC 编程电缆 SC-09 就制作完成了。

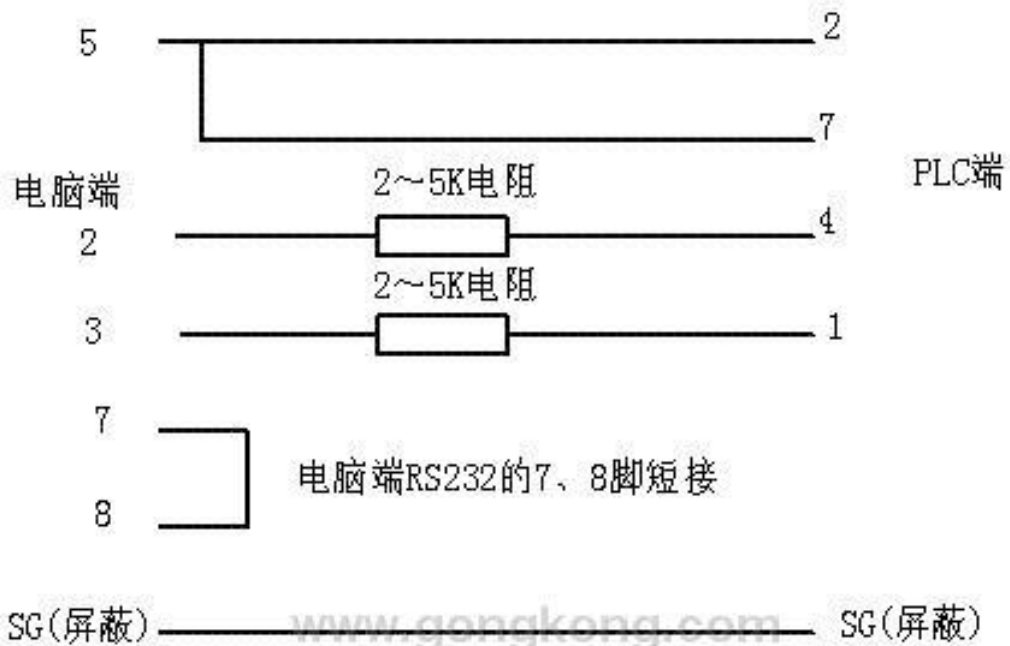
三菱 PLC 编程电缆制作资料



电脑端，RS232母头插头

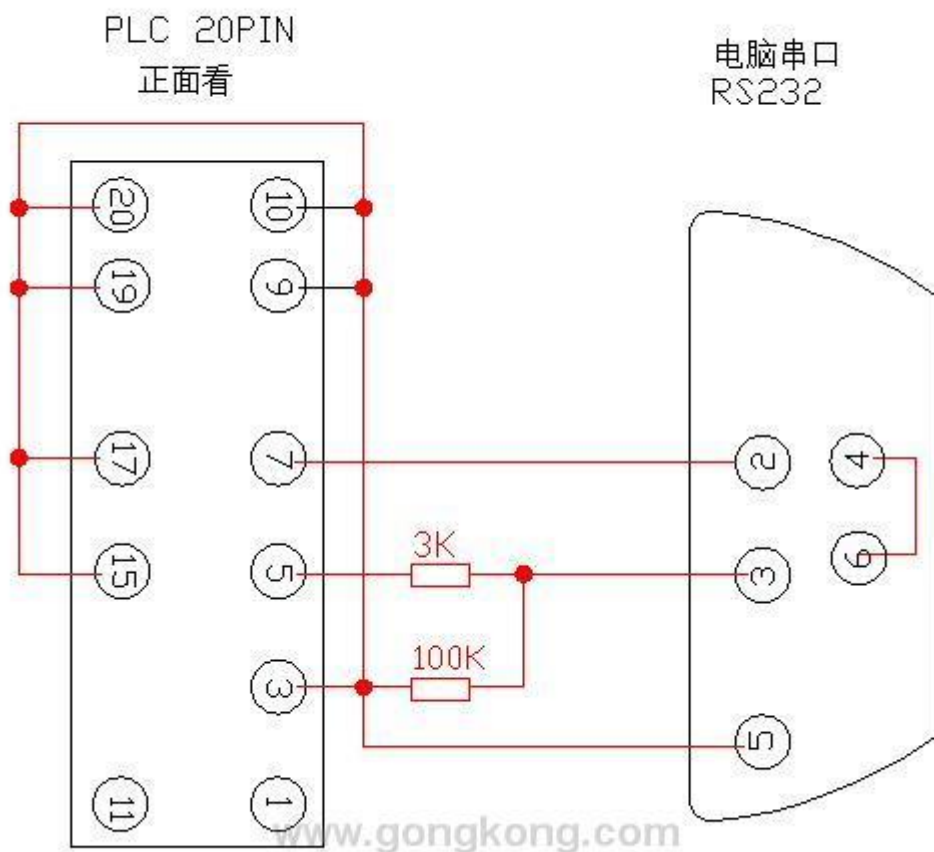


PLC端，422公头插头



2. 欧姆龙编程电缆制作资料

欧姆龙CPM1A系列PLC编程电缆接线图



2



3

电脑与 PLC/CQM1H 系列的编程电缆 XW2Z-200S-CV 的制作
 PLC-PC: 2-2 3-3 4-8 5-7 9-5

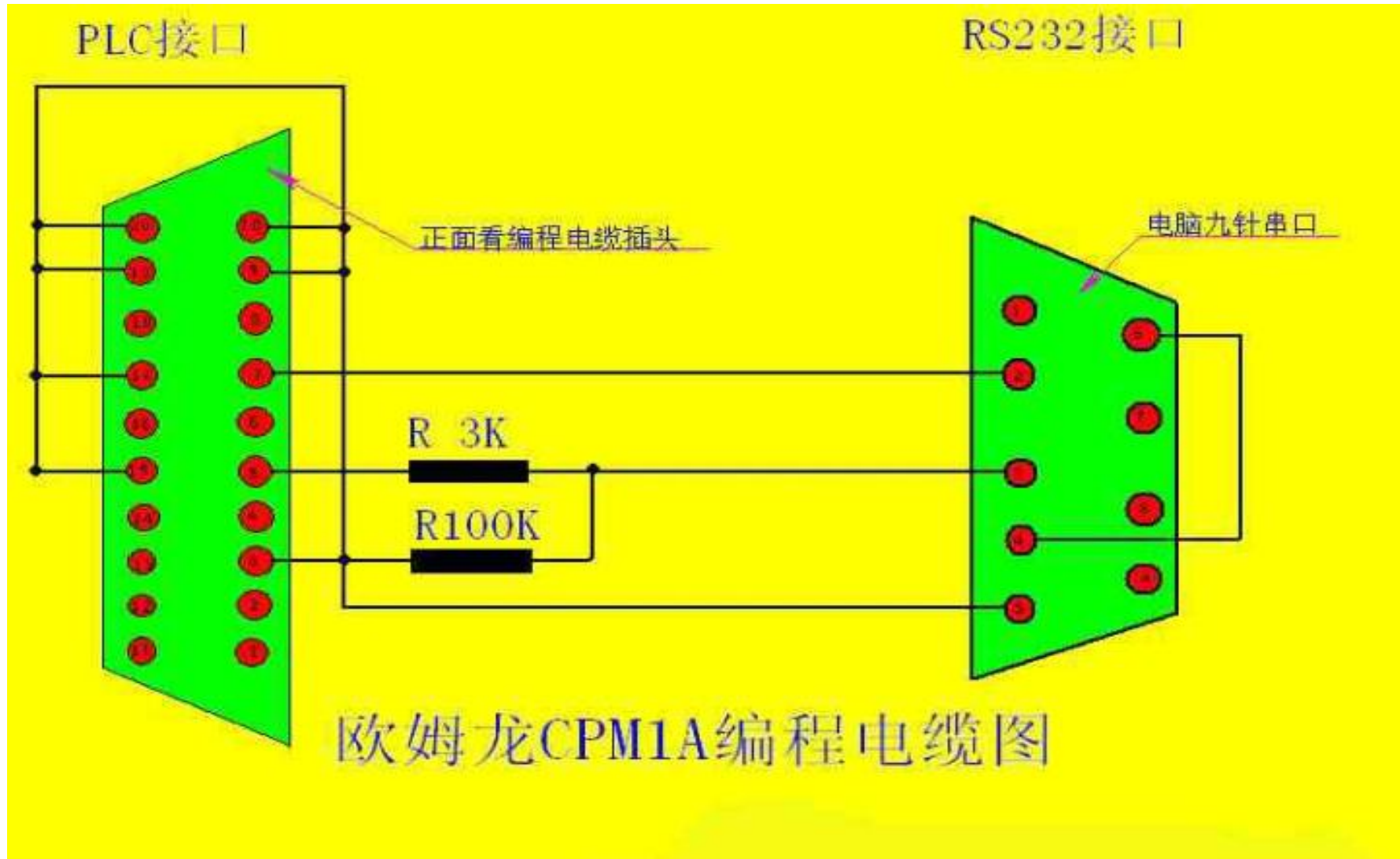
4

4400 与 OMRON CP1H 的通讯电缆制作

plc-----hmi

3 3

2 2



OMRON通讯电缆制作图:

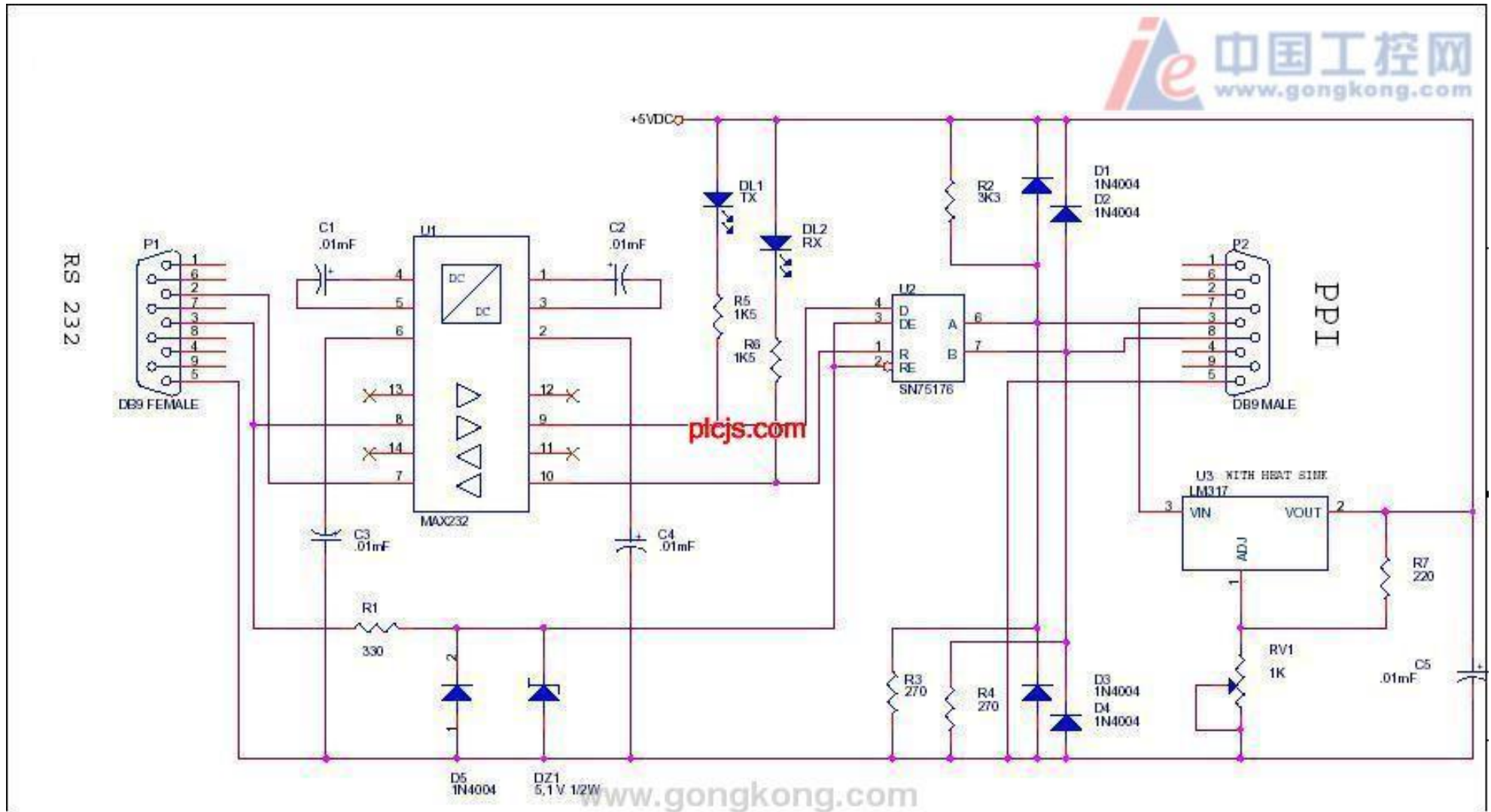


NT1-1通讯时置
DM6645=4000。



RS422, NT1-1通讯时
置DM6555=4000,
通讯板SW1=4, SW2=ON。

3. 西门子 s7-200 和 300 编程电缆制作方法

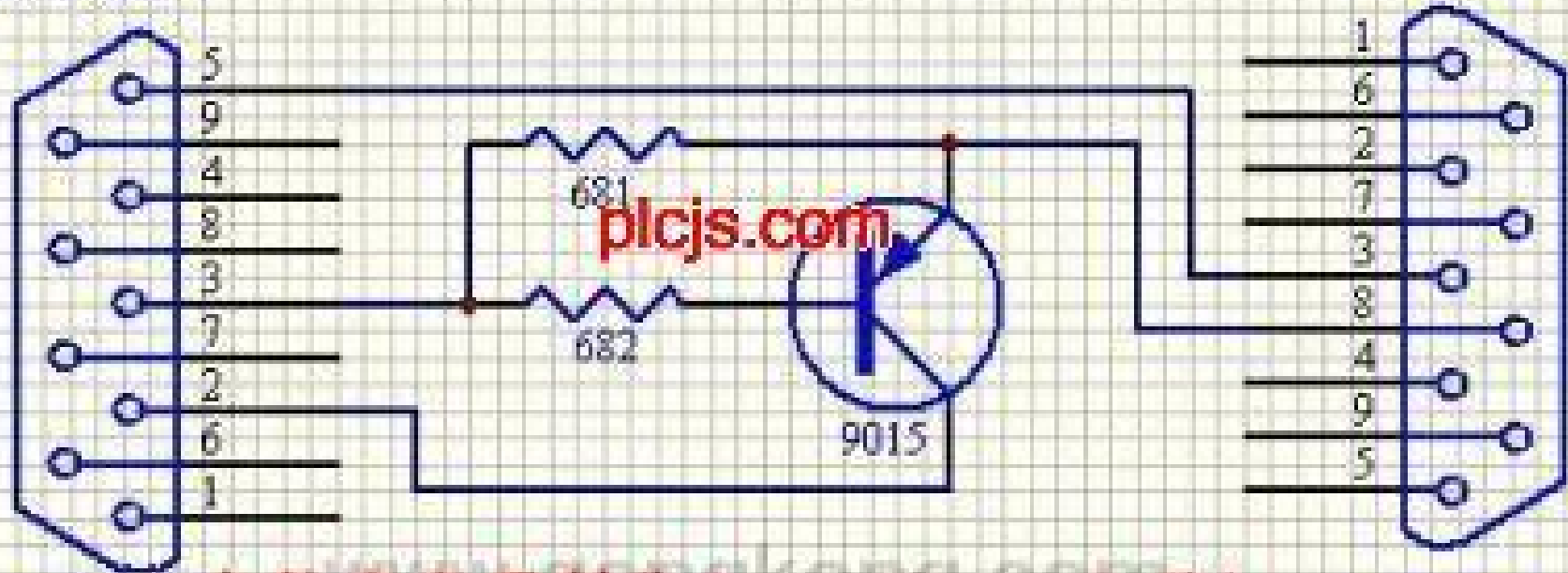


S7-200编程电缆接线图



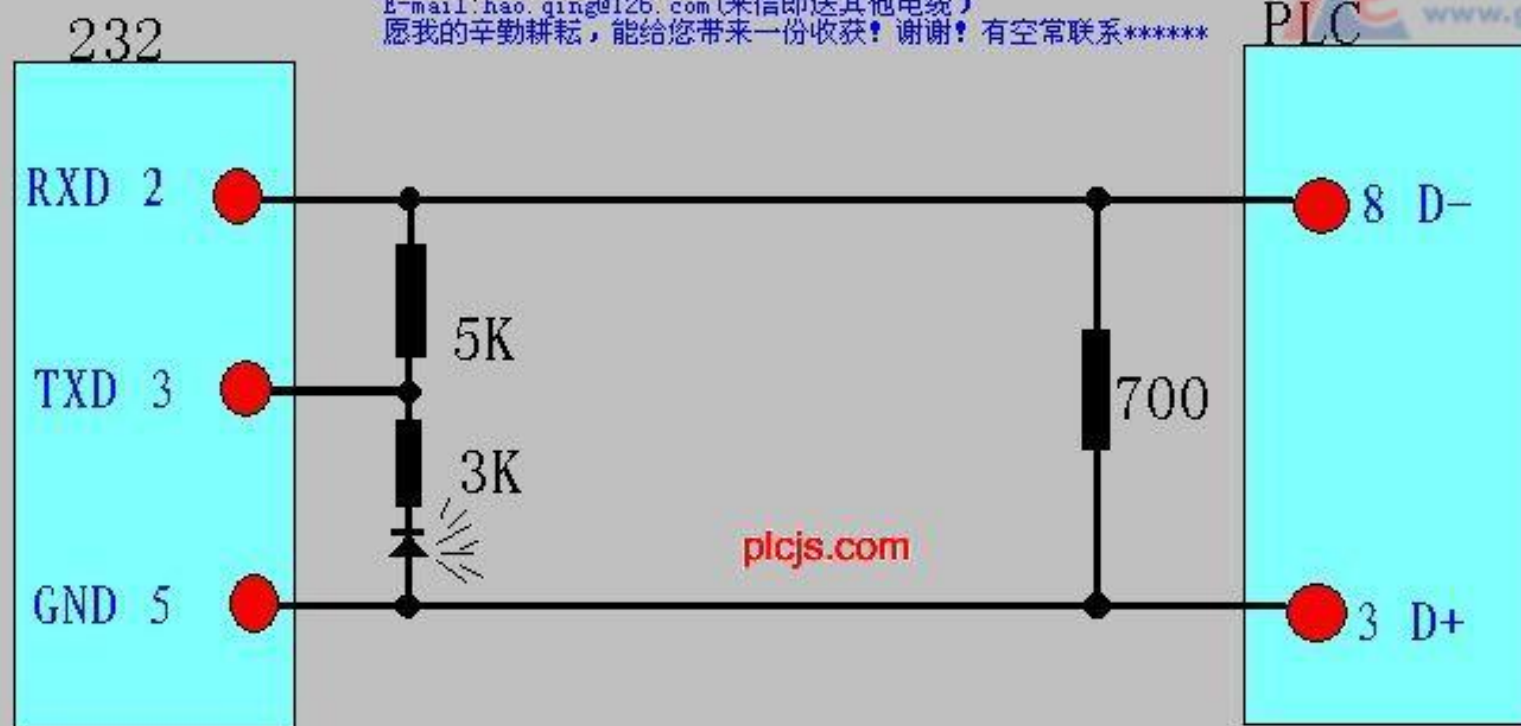
接PC RS232

接PLC



由数学家网制作: <http://www.hzlbl.com>

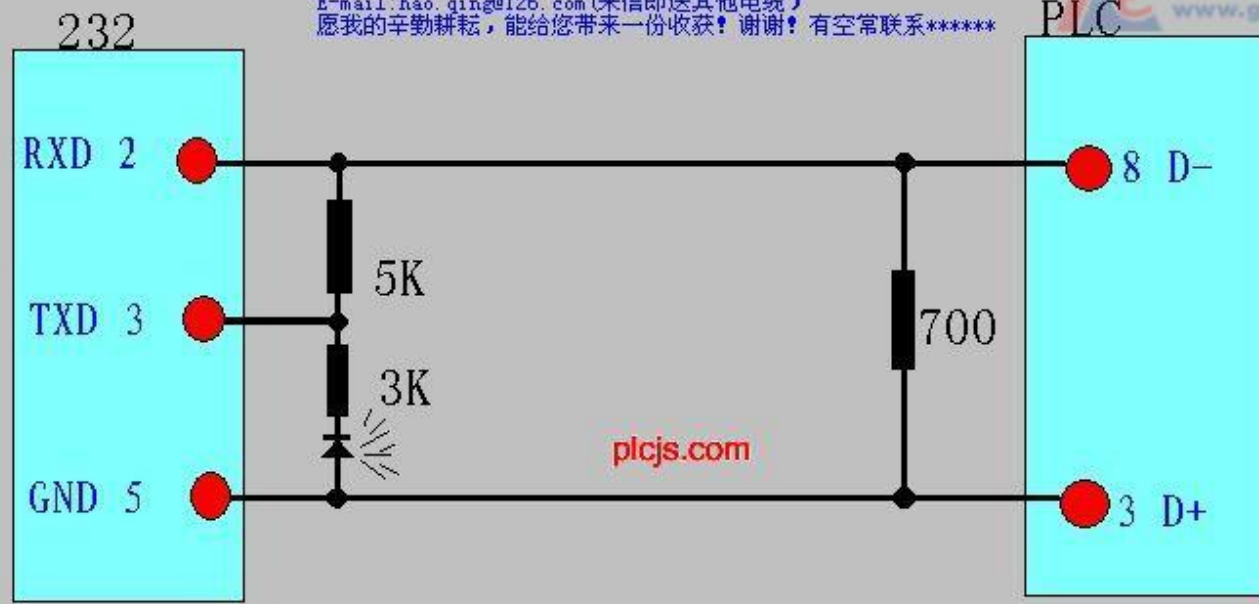
创作：郝金红
电话：13054900817
QQ：596181637
E-mail:hao.qing@126.com (来信即送其他电缆)
愿我的辛勤耕耘，能给您带来一份收获！谢谢！有空常联系*****



西门子S7-200编程电缆

在S7-200 CN CPU224下在以9.6kbps 和19.2kbps 都能通过

创作：郝金红
电话：13054900817
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愿我的辛勤耕耘，能给您带来一份收获！谢谢！有空常联系*****



西门子S7-200编程电缆

在S7-200 CN CPU224下在以9.6kbps 和19.2kbps 都能通过

www.gongkong.com

我的主页网址: <http://plcjiemi.51.com>

1、西门子 s7-200 和 300 编程电缆制作方法

s7-200: PPI 通讯方式 1: 用 siemens 的 PPI 编程电缆 2: 用 rs232/485 转换器, 485 与 plc 的 PPI 口的连接方式是: 3-Data+ 8-Data- s7-300、400: 通过 MPI 通讯, 用 siemens 的适配器 (PC-Adapter), 适配器的一端直接和 plc 的 MPI 口相连, 适配器的另一端采用下面的连接方式. 1-1 2-3 //发送端 3-2 //接收端 4-6 //发送确认 5-5 //共地 6-4 //接收确认 7-8 //发送完成 8-7 //接受完成 9-9 Profibus: 1: 用专用电缆, 一般是 A1-A1 B1-B1 2: 自己制作 3-3 8-8

2、s7200 与 TP170B 通讯电缆的制作

3--3; 8--8.

附:

SIEMENS通讯电缆制作图:

TP-IF2 PC
15针 9孔



RS232-Kabel



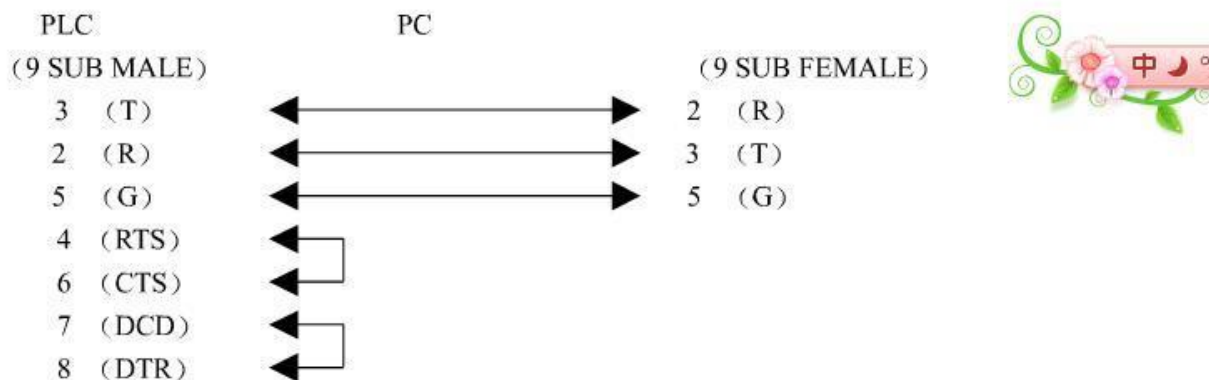
RS232 25pol. -9pol.



PC-PLC使用RS232电缆: 6ES7 901-1BF00-0XA0
和PC Adapter: 6ES7 972-0CA2X-0XA0(需配置)。

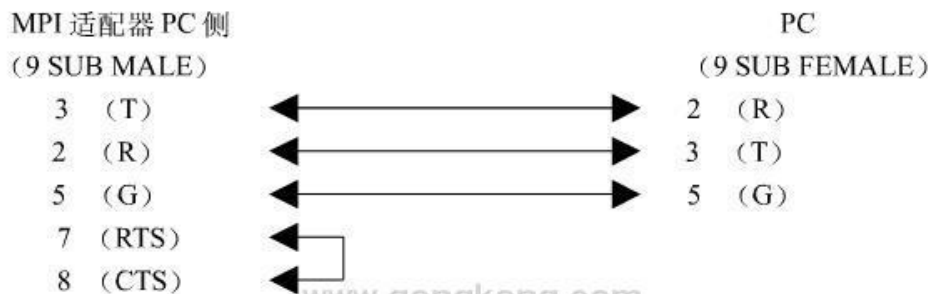
4.施耐德编程电缆制作

5 施耐德公司的 MODIDCON QUANTUM、COMPACT 编程电缆制作:



6 施耐德公司的 MODIDCON QUANTUM 若有以太网模块编程电缆制作: 即 RJ45 网络线。它是一款无需通过串口下载配置即可编程 PLC。

7 SIEMENS S7—300/400 编程电缆 (SIEMENS 公司称为 MPI 适配器, 接 PC 机串口的为 6ES7 972-0CA23-0XA0,) 的延长线 (SIEMENS 公司称为编程电缆或者 MPI 电缆 6ES7) 制作:



目前 SIEMENS 公司生产了接 PC 机 USB 口的为 6ES7 972-0CB20-0XA0 MPI 适配器。

5. GE 公司的编程电缆

1、GE VERMAX 编程电缆制作（电源模件第一个串口）：

PLC PC

（9 SUB MALE） （9 SUB FEMALE）

2 （T） 2 （R）

3 （R） 3 （T）

5 （G） 5 （G）

2、GE 90—30 系列（CPU351/352/363/364） 编程电缆制作（RS232 端口 6 脚 RJ11 型）：

PLC PC

（6 RJ11 MALE） （9 SUB FEMALE）

2 （T） 2 （R）

5 （R） 3 （T）

3 （G） 5 （G）

3、GE 90-30、90-70、VersaMax 编程电缆制作（RS232 端口 6 脚 RJ11 型）：

PLC RS422/RSRS232 PC

（15 SUB MALE） （9 SUB FEMALE）

12 （T-） （R+） （T） 2 （R）

13 （T+） （R-） （R） 3 （T）

10 （R-） （T+） （G） 5 （G）

11 （T+） （T-）

9 （RT）

6 （RTS-）

15 （CTS-）

6 (RTS+)

15 (CTS+)

注意一下，GE 90-70 有两个 15 SUB FEMALE 串口，用第二个串口方能编程，即使用 GE 公司生产的编程电缆。

4、GE 公司生产的编程电缆 (GE 90-30、90-70、VersaMax)，在调试过程中不够长，需要延长，延长线的制作同 1

注意一下，GE 90-70 有两个 15 SUB FEMALE 串口，用第二个串口方能编程，即使用 GE 公司生产的编程电缆。

6.LG PLC 编程电缆制作方法

使用 RS232 串行口和屏蔽电缆制作。

公 2 (白) (-----) 母 3 (白)，

公 3 (黄) (-----) 母 2 (黄)

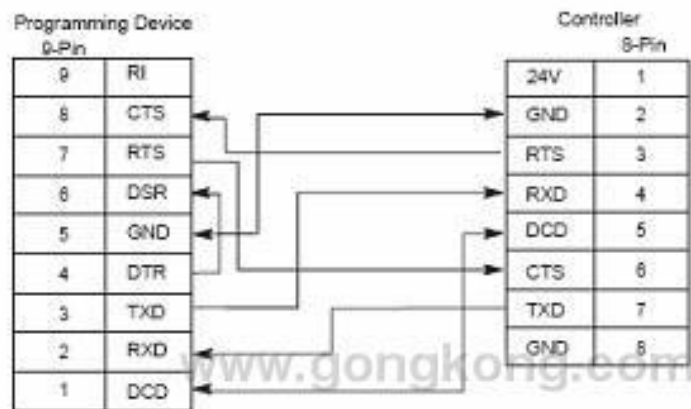
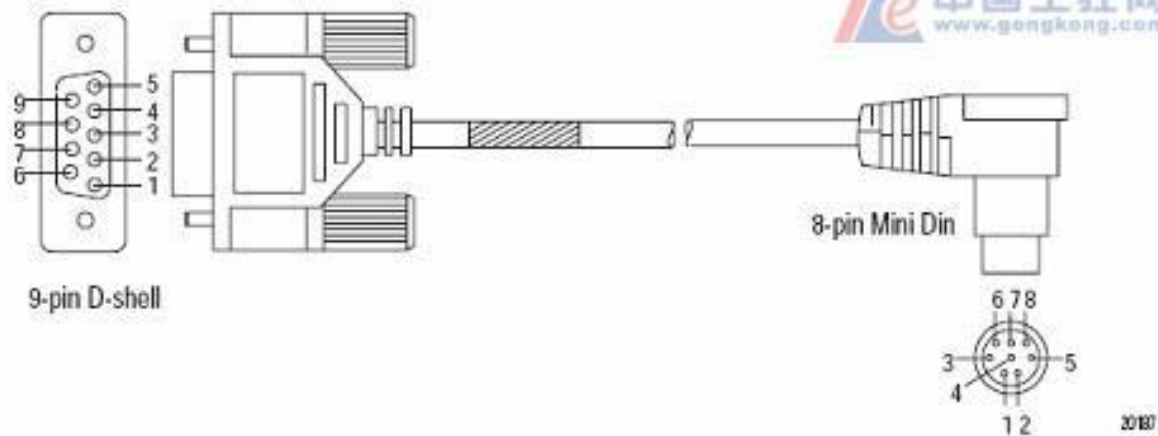
公 5 (红) (-----) 母 5 (红)，

屏蔽层加护套焊接在金属外壳上。

以上颜色为自定。假如线径太细接口卡不牢，可以先用电工胶带固定和加粗厚再安装接口外壳。

7.AB 的 PLC 编程电缆

1761-CBL-PM02 Series B Cable



AB 的 SLC 5/03 编程电缆的制作

R232C 采用 9 针 D 型插头。

2-3

3-2

4-6+1

6+1-4

7-8

8-7

5-5

两头都用凸型插头即可。

plc\mcu\微机，所有 232 接口都用这种连接方式。

A-B 通讯电缆制作图：



8. 富士 spb plc 的编程电缆内部接线图！

一端 8 芯水晶头 一端 rs232 9 孔

RJ45 端 3-----TD+

4-----TD-

5-----RD+

6-----RD-

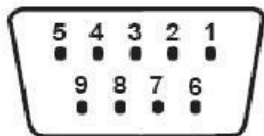
1, 2, 7, 8-----NC

SPB 为 RS422 模式，因此令一端你需要一个 RS232 转 RS422 的转换器~~然后对应著转换器上的引脚分布进行接线。

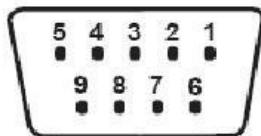
另，低版本的软件会导致通讯失败，请使用高版本的软体。

9. 触摸屏 WeinView/EasyView 编程电缆制作方法

编号: WP



WeinView/EasyView 侧
PLC[RS485]/ PC[RS232]
DB 9 芯针座



PC 机侧 COM1
DB 9 芯针座



10.富士 PLC 编程电缆制作

制作方法如下:

1.直连编程电缆，该制作方法当初是参考三菱 PLC 编程电缆制作方法。当初网上没有关于富士 PLC 编程电缆制作的方法，在触摸屏编程手册上看到富士 PLC 采用 RS422 通讯，并下载了通讯口图如图所示。开始准备用 RS232/422 转换器制作，单本地没有买到。想起三菱 PLC 也是 RS422 通讯，网上很多三菱编程电缆制作图，就下载了一个三菱接线图并制作了一个富士编程电缆。

开始用电阻制作的编程电缆用 V1.0 中文版富士软件联机成功几率很低，10%左右。在车间用笔记本成功几率为 0，就到郑州购买 RS232/422 模块制作另外一根编程电缆，谁知道用转换器制作的编程电缆在办公室成功几率 0，车间就更不用说了。就一直使用电阻连接的编程电缆并把 PLC 拆到办公室输入程序再安装到车间。直到后来才有好心的工控朋友说 V1.0 中文版软件是在 WIN98 系统联机的软件，XP 系统必须用 V2.0 以后的版本。下载安装 V2.0 版本软件，两种方法制作的编程电缆都可以用。

[attach]42[/attach]

4 RTX+ -----5 GND
6 TXD+ -----5 GND
3 RXD— -----2.2K 电阻-----3 RXD
5 TXD— -----2.2K 电阻-----2 TXD

将 PLC 的 4(RXD+). 6(TXD+)脚的导线与电脑 9 芯母头的 5 脚连接(该脚是 RS232 的地),

3脚(RXD-)通过 2.2k 欧的电阻与 9 芯的 3 脚相连,

5脚(TXD-)通过 2.2k 欧电阻与 9 芯的 2 脚相连

2.通过 RS232-RS422 转换头相连

到电脑市场购买一个 RS232-422 转换头 (25 元左右, 比电阻连接的安全), 按转换头的说明书的说明与 8 芯水晶头按 RTX+接 RTX+; RTX-接 RTX-; TXD+接 TXD+; TXD-接 TXD-连接就可。

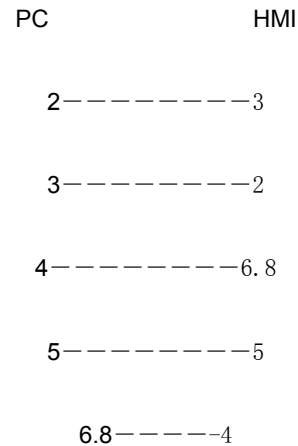
后有朋友联机不成功, 我总结有以下原因导致他们没有成功:

1 如果有 USB/RS232 转换器, 注意转换器必须单独供电, 如果转换器可以用+5V 供电, 可以直接用 PLC 的+5V 电源。如果转换器是+9V 供电的可能需要另外增加一个直流电源了;

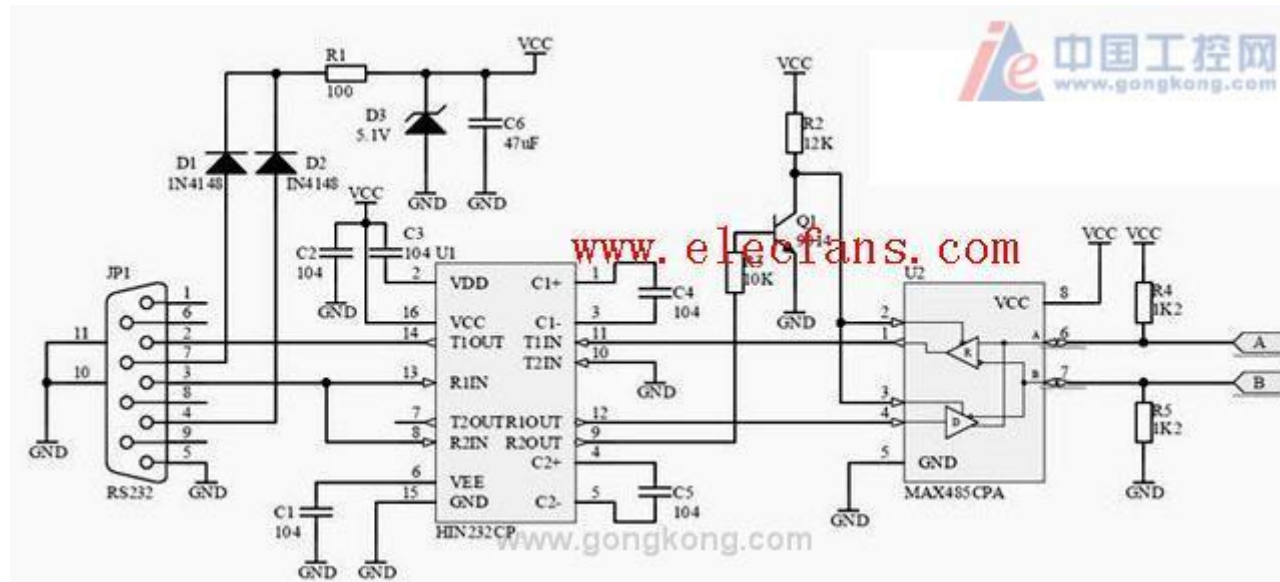
2 软件必须用 2.0 英文版本, 1.0 中文版本可以在下面编程用, 1.0 在 WIN98 系统可用, 在 XP 系统联机成功率不高 (偶然可以成功一次)。

3 判断接线是否正确, 可以把水晶头插到 PLC 编程口 (PLC NB2 有一个口不是编程口, 不要插错) 测量+5V 是否是 1/7 和 2/8 脚。好几个朋友都是把水晶头上下程序弄错。好几个朋友都是把通讯口 1~8 的次序弄颠倒了, 插到 PLC 通讯口后测量 1 脚和 2 脚+5V 极性判断是否接错。

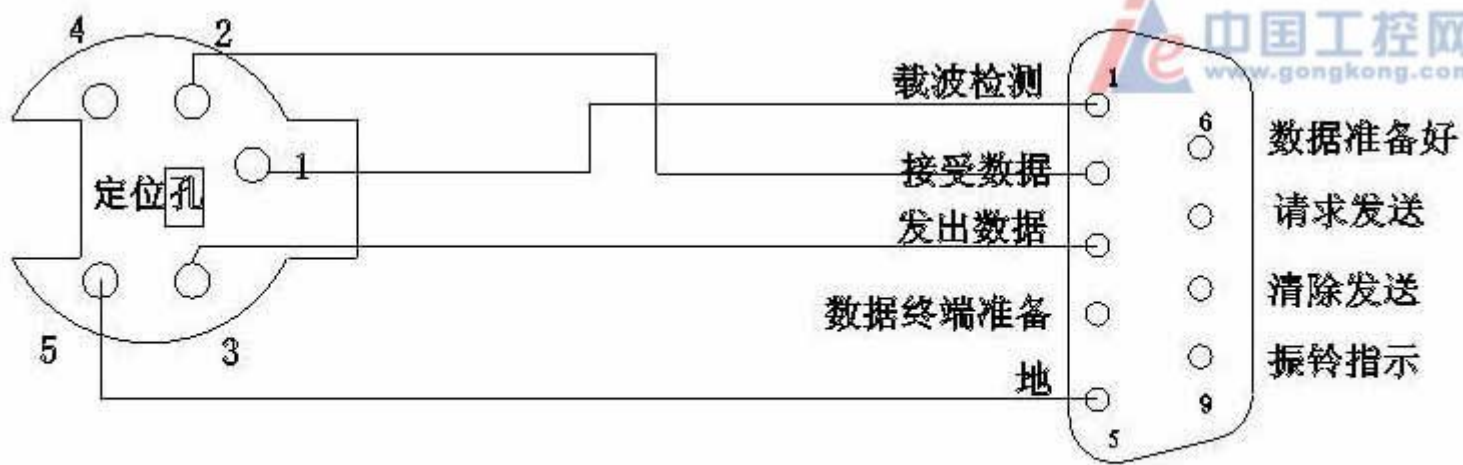
11.F930GOT-BWD-C 的编程电缆



12.RS232 转 RS485 自制线原理图



13. 松下 PLC (FP0) 编程电缆图



PLC侧插座（不是插头）

www.gongkong.com

PC:9针串行口

14. 欧姆龙全套编程电缆:

C200H - LK201
3G2C7 - LK201
3G2A6 - LK201
CV500 - LK201 (Port 1)

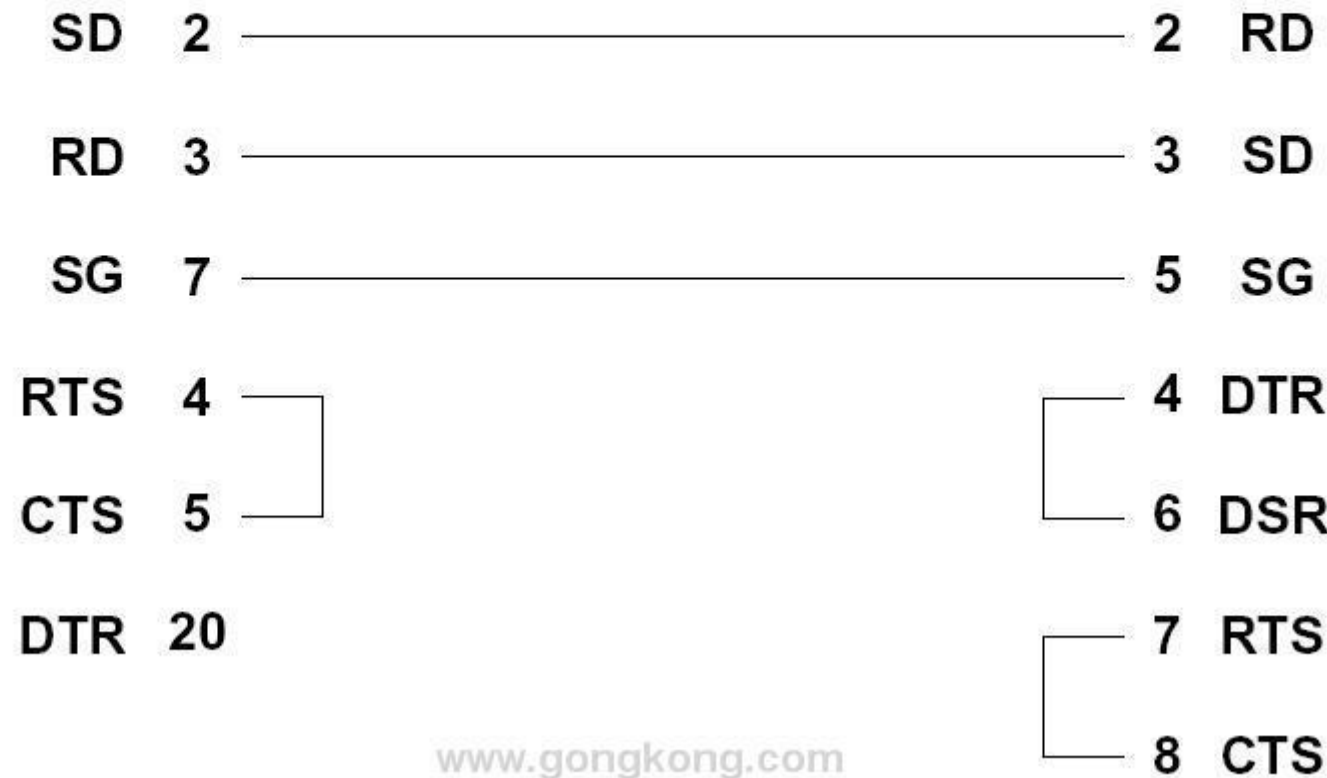


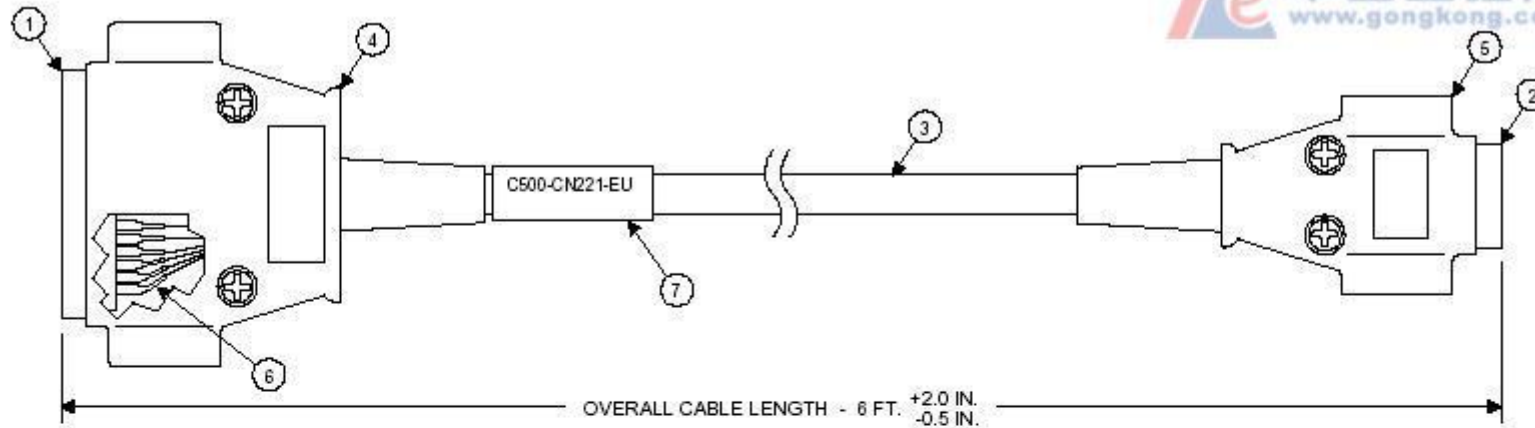
25-pin

Cable Part Number C500 - CN221 - EU



AT Computer (9-pin)





CABLE C500-CN221-EU

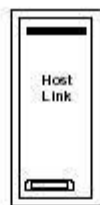
1. DB-25 MALE CONNECTOR WITH SOLDER CUPS
2. DE-9 FEMALE CONNECTOR WITH SOLDER CUPS
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DB-25 BACKSHEL W/ 2.6MM JACK SCREWS, P/N XM2S-2511
5. OMRON DE-9 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-0913
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
TXD	2	2	RXD
RXD	3	3	TXD
	*4 to 5	nc	
	nc	*4 to 6	
	nc	*7 to 8	
COM	7	5	COM
	1 to SHIELD	nc	

* PIN TO PIN JUMPERS

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C500 BASIC/ASCII/LINK TO IBM-AT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	11-2-94	FINISH: -	DRWG NO: PFP0015A
-	-	-	-	-	CHCKD	-	-	UNITS: ENGLISH	FILE NAME: -
-	-	-	-	-	APRVD	-	-	SCALE: NONE	SIZE: A
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-	-	SHEET: 1 OF 1	Omron Electronics, Inc. Omron Manufacturing of America

C200H - LK201
 3G2C7 - LK201
 3G2A6 - LK201
 CV500 - LK201 (Port 1)

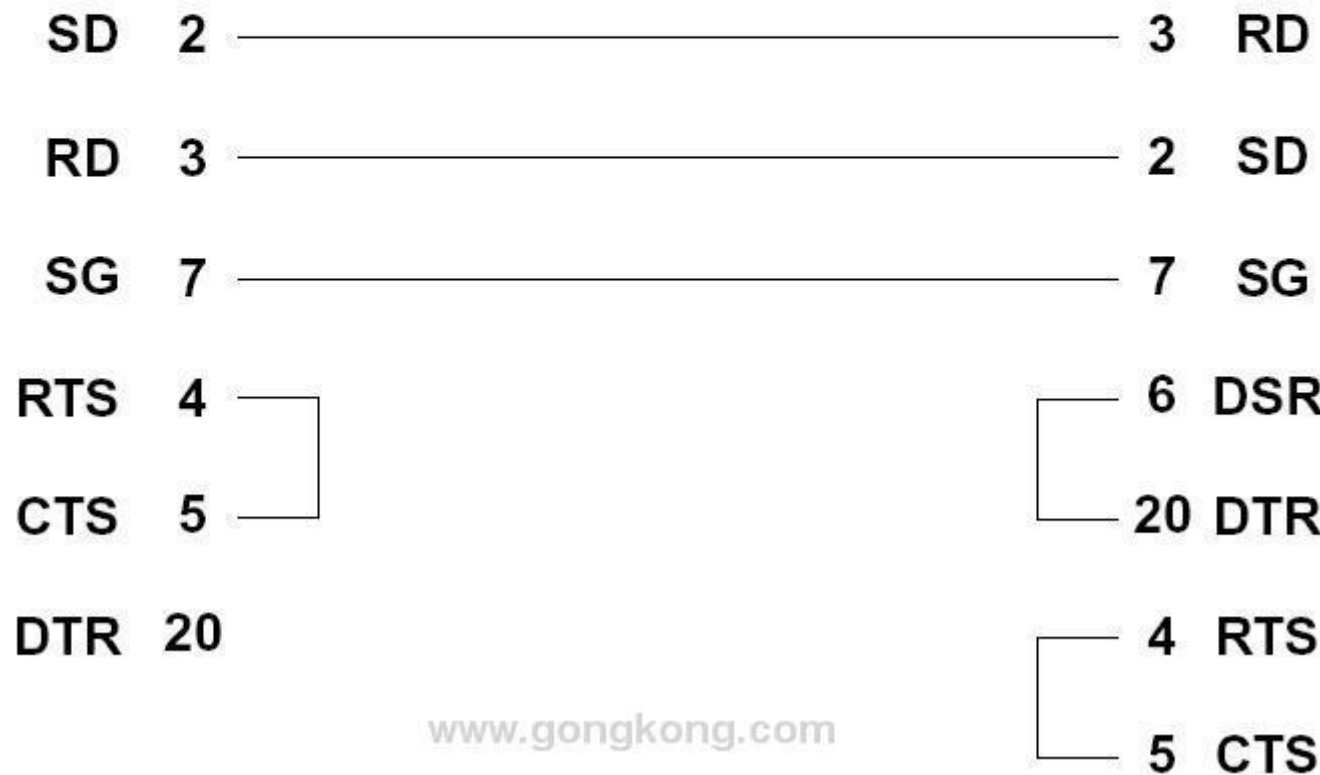


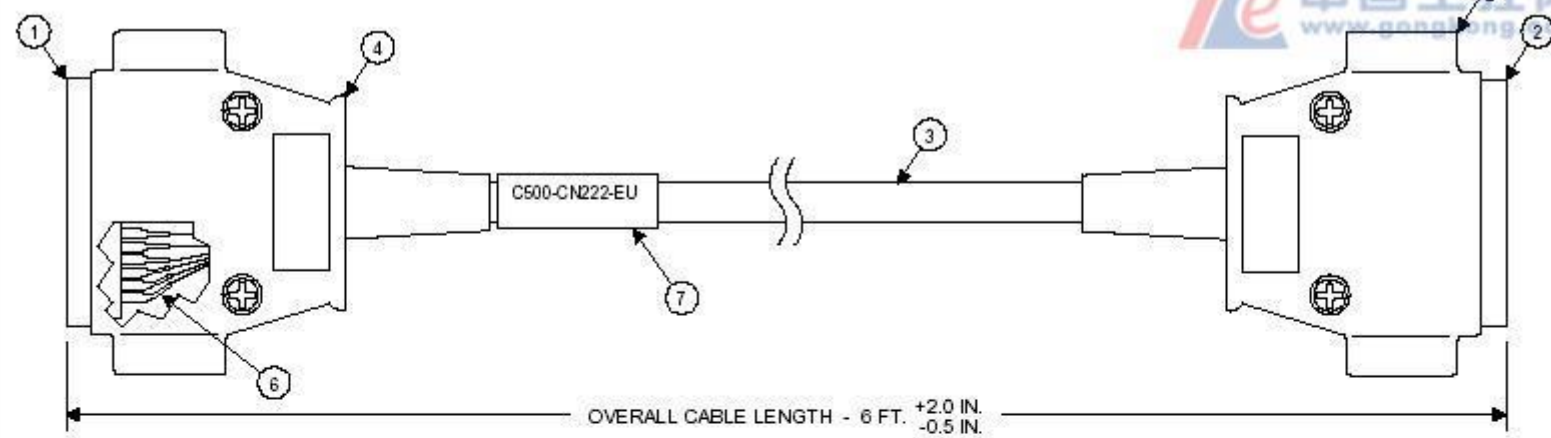
25-pin

Cable Part Number
 C500 - CN222 - EU



XT Computer (25-pin)





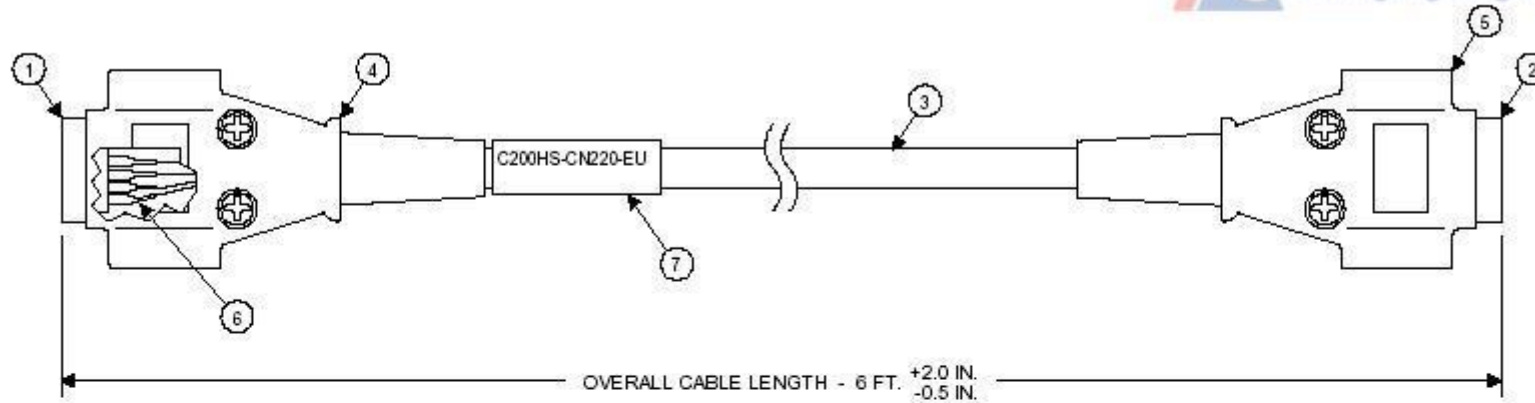
CABLE C500-CN222-EU

1. DB-25 MALE CONNECTOR WITH SOLDER CUPS
2. DB-25 FEMALE CONNECTOR WITH SOLDER CUPS
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DB-25 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-2511
5. OMRON DB-25 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-2513
6. HEAT SHRINK TUBING TO COVER SOLERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	*4 to 5		nc
	nc	*6 to 20	
	nc	*4 to 5	
COM	7	7	COM
	1 to SHIELD		nc

* PIN TO PIN JUMPERS

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C500 BASIC/ASCII/LINK TO IBM-XT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	11-2-94	FINISH: -	DRWG NO: PFP0016A
-	-	-	-	-	CHCKD			UNITS: ENGLISH	FILE NAME: -
-	-	-	-	-	APRVD			SCALE: NONE	SIZE: A
REV	DESCRIPTION	COS NO.	DATE	SGND				SHEET: 1 OF 1	Omron Electronics, Inc. Omron Manufacturing of America



CABLE C200HS-CN220-EU

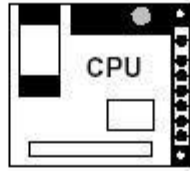
1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DE-9 FEMALE CONNECTOR WITH SOLDER CUPS
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DE-9 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-0913
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
TXD	2	2	RXD
RXD	3	3	TXD
	*4 to 5	nc	
	nc	*4 to 6	
	nc	*7 to 8	
SG	9	5	SG
	1 to SHIELD	nc	

* PIN TO PIN JUMPERS

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	HOST LINK PORT TO IBM-AT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-26-94	FINISH: -	DRWG NO: PFP0010A
-	-	-	-	-	CHCKD			UNITS: ENGLISH	FILE NAME: -
-	-	-	-	-	APRVD			SCALE: NONE	SIZE: A
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-		SHEET: 1 OF 1	OMRON Omron Electronics, Inc. Omron Manufacturing of America

CV500 - LK201 (Port 2)
 CVM1 built-in Hostlink
 C200HS built-in Hostlink
 CQM1 built-in Hostlink
 IDSC built-in Hostlink

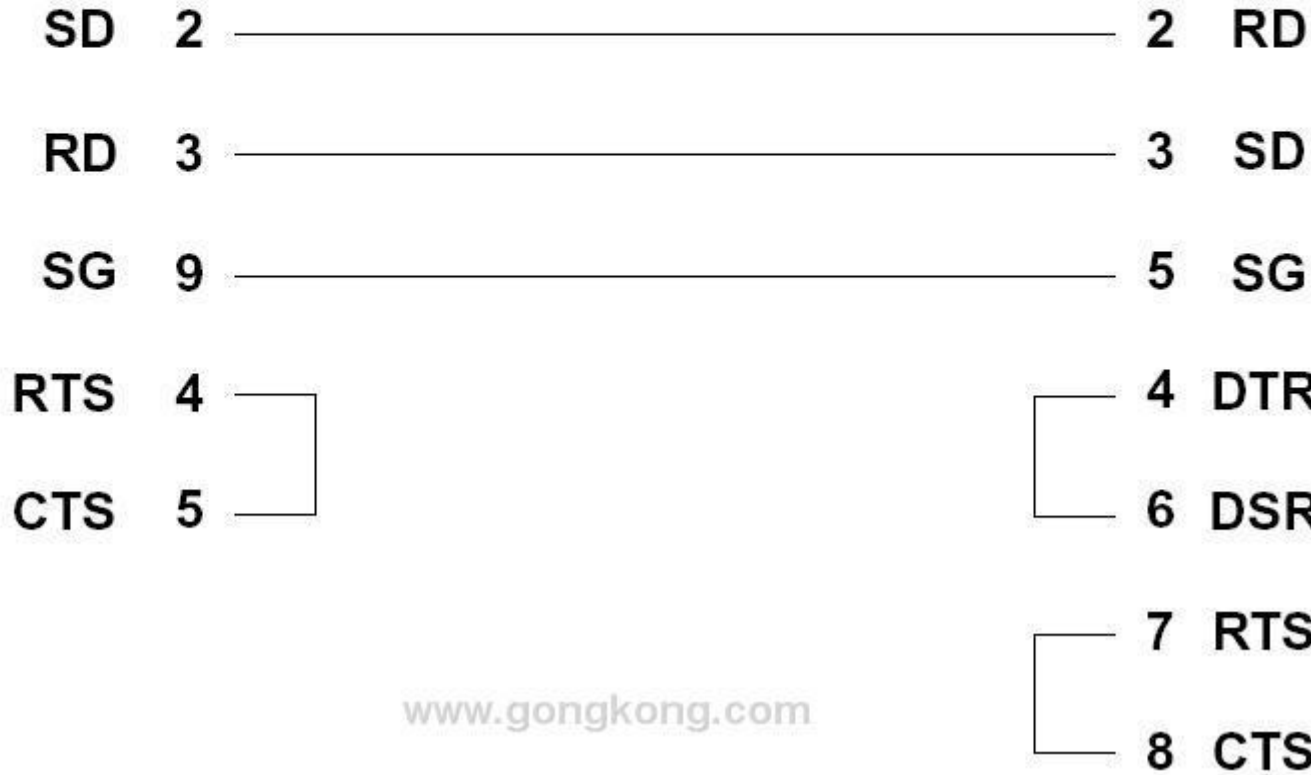


9-pin

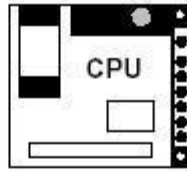
Cable Part Number
C200HS - CN220 - EU



AT Computer (9-pin)



CVM1 built-in Hostlink
 C200HS built-in Hostlink
 CQM1 built-in Hostlink

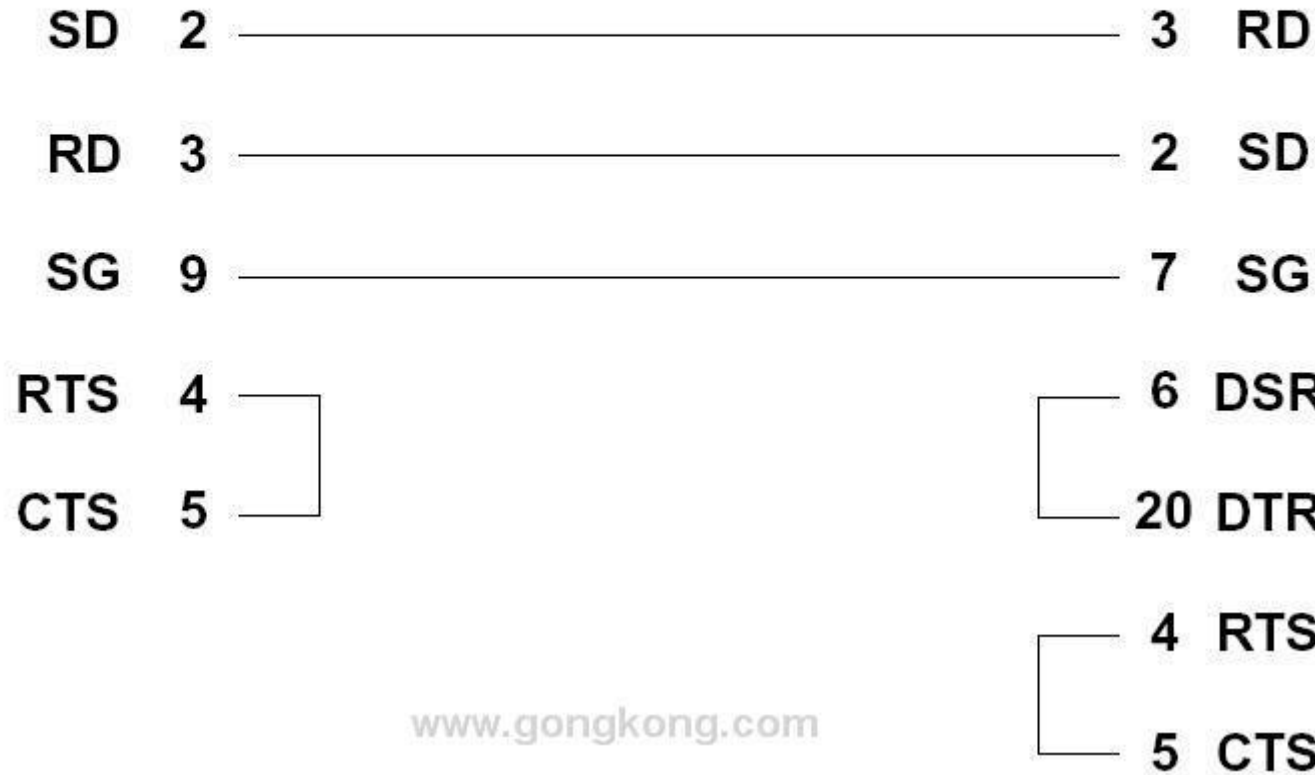


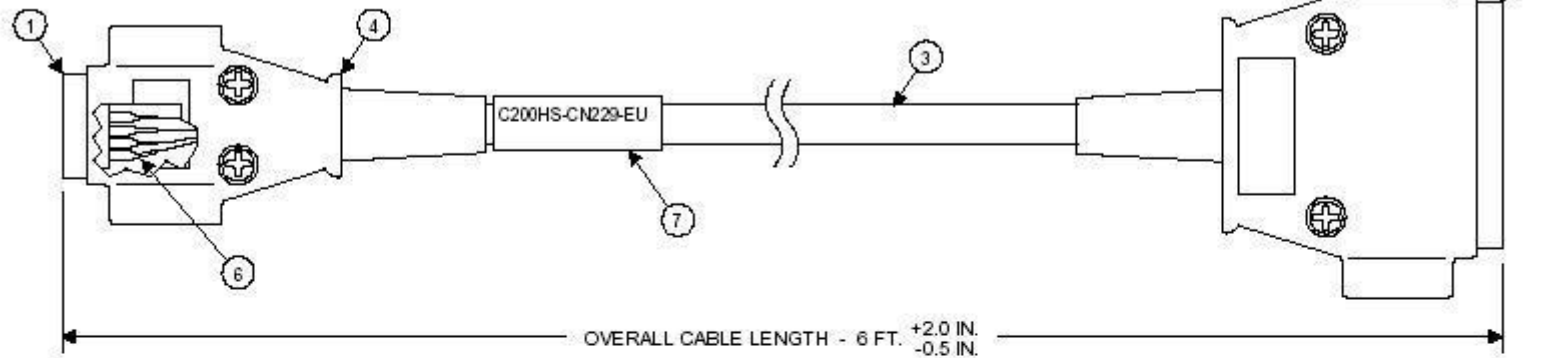
9-pin

Cable Part Number C200HS - CN229 - EU



XT Computer (25-pin)





CABLE C200HS-CN229-EU

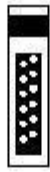
1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DE-25 FEMALE CONNECTOR WITH SOLDER CUPS
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DE-25 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-2513
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	*4 to 5		nc
	nc		*6 to 20
	nc		*4 to 5
SG	9	7	SG
	1 to SHIELD		nc

* PIN TO PIN JUMPERS

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	HOST LINK PORT TO IBM-XT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-26-94	FINISH: -	DRWG NO: PFP0011A
-	-	-	-	-	CHCKD		TOLERANCE: -	UNITS: ENGLISH	FILE NAME: -
-	-	-	-	-	APRVD			SCALE: NONE	SIZE: A
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-		SHEET: 1 OF 1	Omron Electronics, Inc. Omron Manufacturing of America

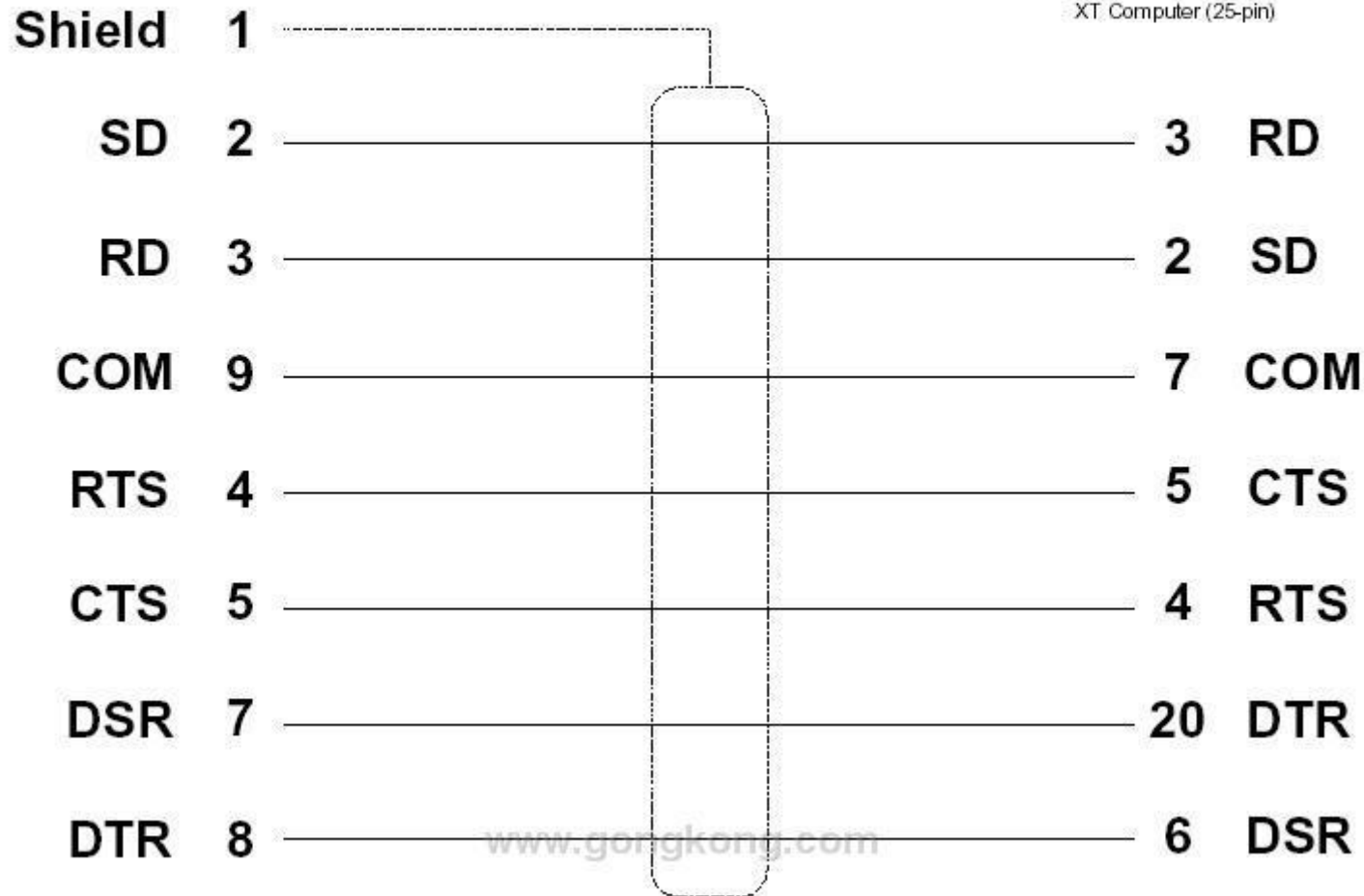
C200H-ASC02
C200H-BASIC/ASCII

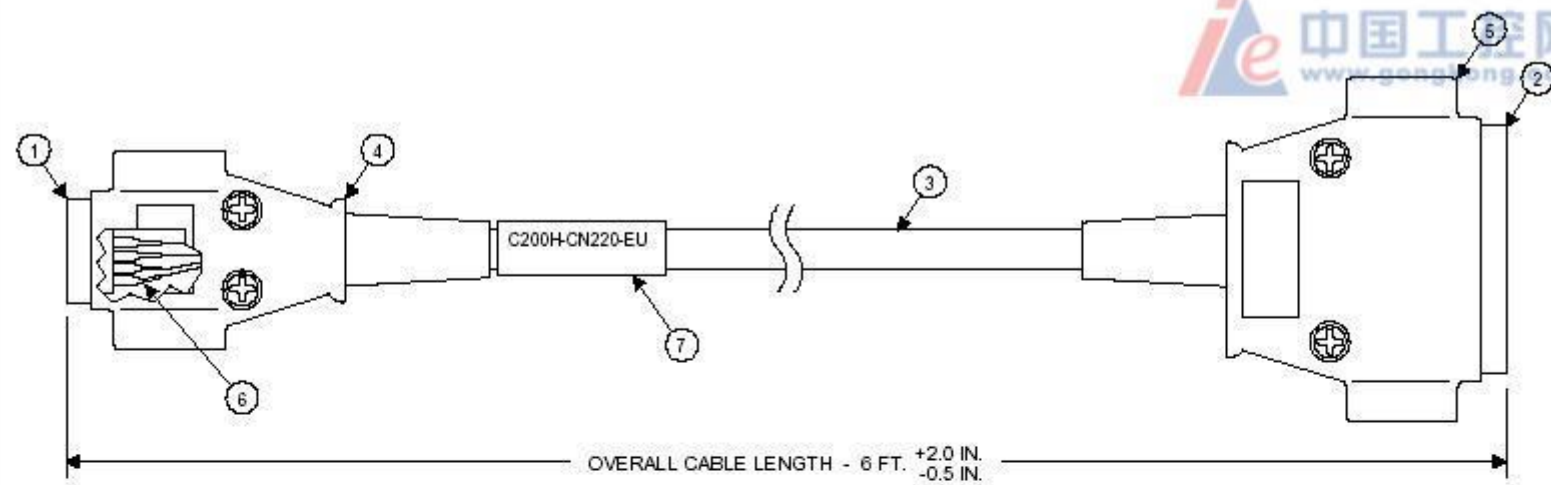


Cable Part Number
C200H - CN220 - EU



XT Computer (25-pin)





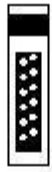
CABLE C200H-CN220-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DB-25 FEMALE CONNECTOR WITH SOLDER CUPS
3. 7 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DB-25 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-2513
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

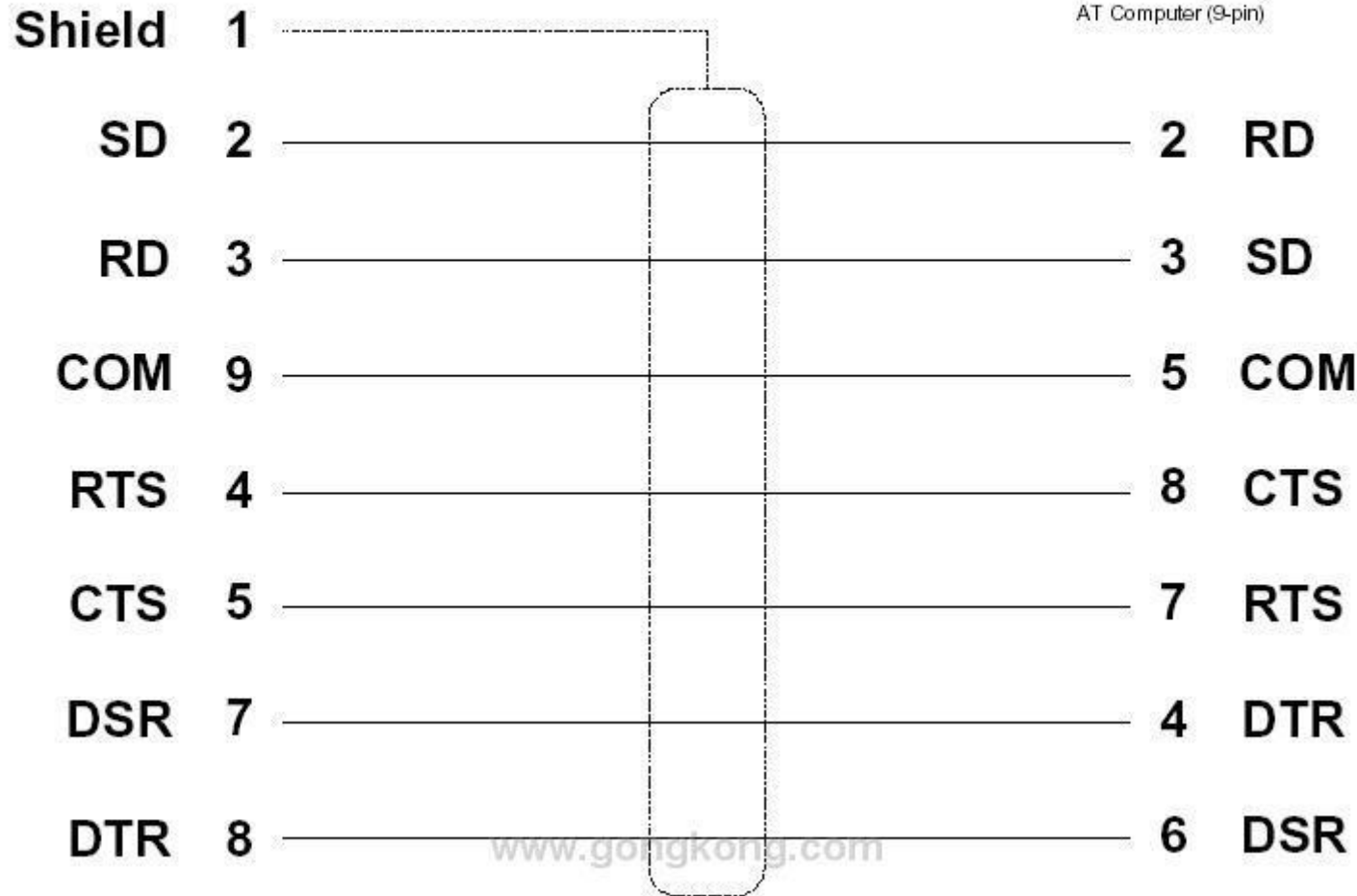
	FROM #1 PIN	TO #2 PIN	
	TXD 2	3	RXD
	RXD 3	2	TXD
	RTS 4	5	CTS
	CTS 5	4	RTS
	6	nc	
	DSR 7	20	DTR
	DTR 8	6	DSR
	COM 9	7	COM
	1 to SHIELD	nc	

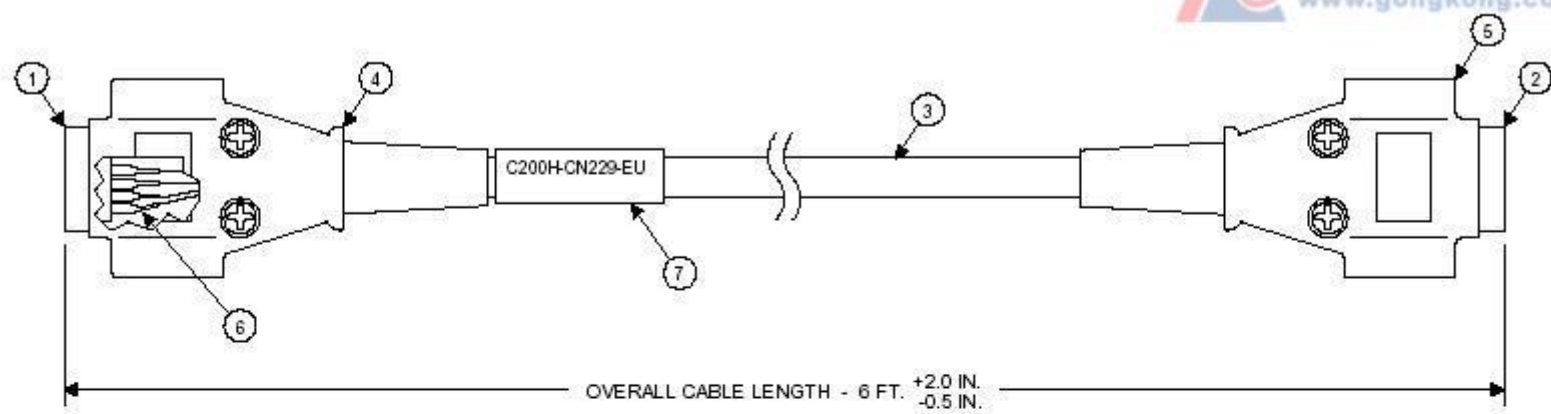
-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C200H BASIC/ASCII MODULE TO IBM-XT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-18-94	FINISH: -	DRWG NO: PFP0006B
-	-	-	-	-	CHCKD			UNITS: ENGLISH	FILE NAME: -
B	ADDED ITEMS #6 AND 7	-	10-18-94	-	APRVD			SCALE: NONE	SIZE: A
A	ORIGINAL	-	7-14-94	-				SHEET: 1 OF 1	omron Omron Electronics, Inc. Omron Manufacturing of America
REV	DESCRIPTION	COS NO.	DATE	SGND					

C200H-ASC02
C200H-BASIC/ASCII



Cable Part Number
C200H - CN229 - EU





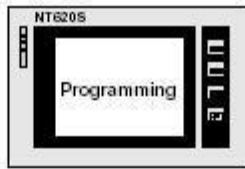
CABLE C200H-CN229-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DE-9 FEMALE CONNECTOR WITH SOLDER CUPS
3. 7 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELDED, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DE-9 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-0913
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
TXD	2	2	RXD
RXD	3	3	TXD
RTS	4	8	CTS
CTS	5	7	RTS
	6	nc	
DSR	7	4	DTR
DTR	8	6	DSR
COM	9	5	COM
	1 to SHIELD	nc	

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C200H BASIC/ASCII MODULE TO IBM-AT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-18-94	FINISH: -	DRWG NO: PFP0005B
-	-	-	-	-	CHCKD		TOLERANCE: -	UNITS: ENGLISH	FILE NAME: -
B	ADDED ITEMS #6 AND 7	-	10-18-94	-	APRVD			SCALE: NONE	SIZE: A
A	ORIGINAL	-	7-14-94	-				SHEET: 1 OF 1	omron Omron Electronics, Inc. Omron Manufacturing of America
REV	DESCRIPTION	COS NO.	DATE	SGND					

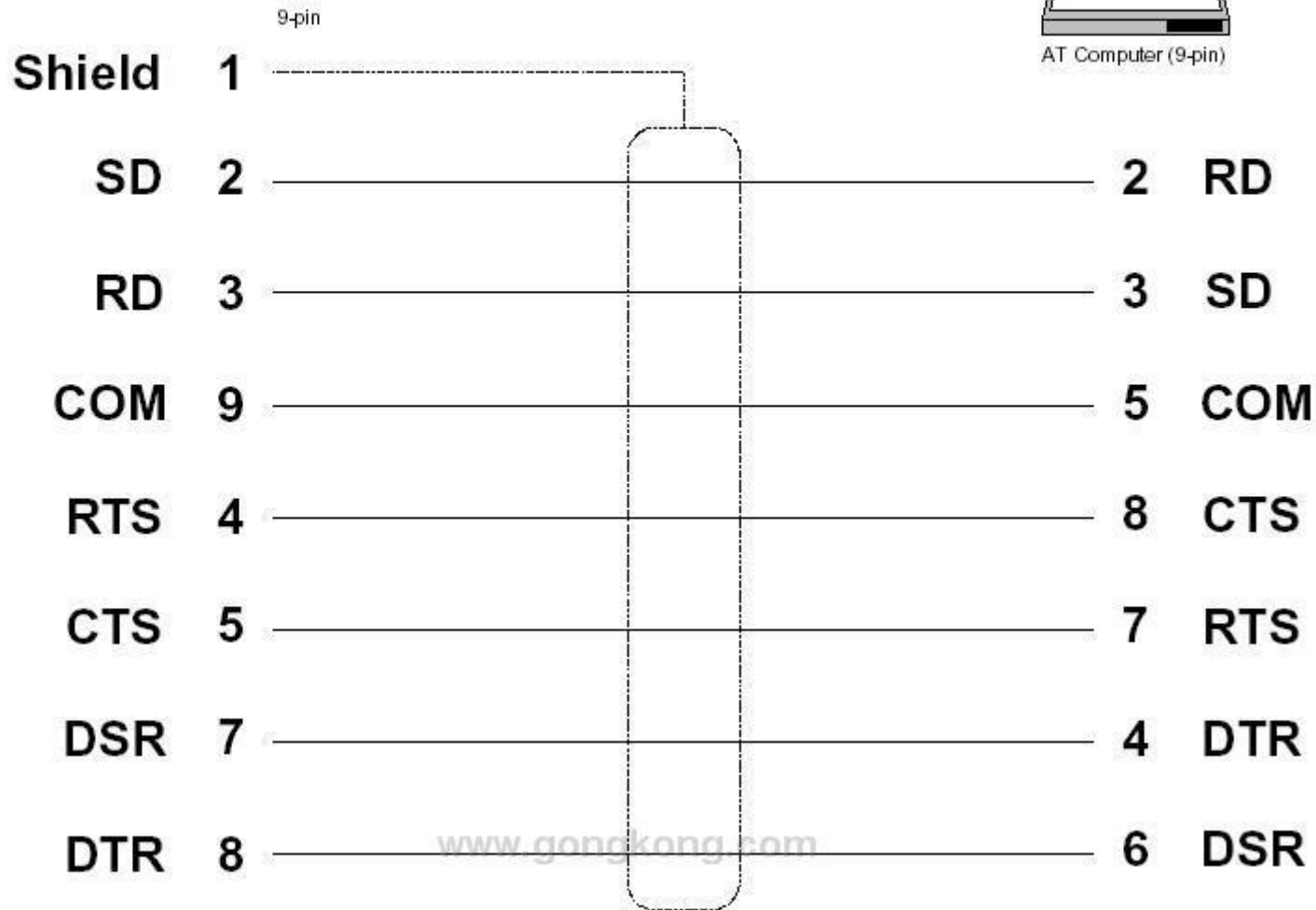
NT11S, NT20S,
NT600S, NT30,
NT30C, NT620S/620C

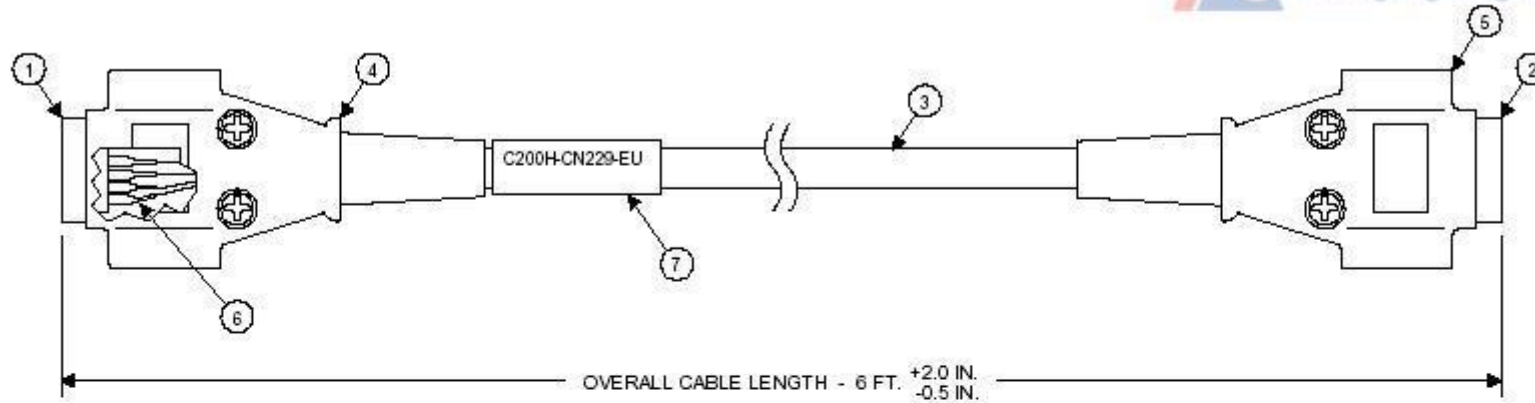


Cable Part Number
C200H - CN229 - EU



AT Computer (9-pin)





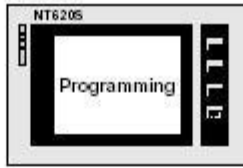
CABLE C200H-CN229-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DE-9 FEMALE CONNECTOR WITH SOLDER CUPS
3. 7 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DE-9 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-0913
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

	FROM #1 PIN	TO #2 PIN	
	TXD 2	2	RXD
	RXD 3	3	TXD
	RTS 4	8	CTS
	CTS 5	7	RTS
	6	nc	
	DSR 7	4	DTR
	DTR 8	6	DSR
	COM 9	5	COM
	1 to SHIELD	nc	

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C200H BASIC/ASCII MODULE TO IBM-AT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-18-94	FINISH: -	DRWG NO: PFP0005B
B	ADDED ITEMS #6 AND 7	-	10-18-94	-	CHCKD		TOLERANCE: -	UNITS: ENGLISH	FILE NAME: -
A	ORIGINAL	-	7-14-94	-	APRVD			SCALE: NONE	SIZE: A
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-		SHEET: 1 OF 1	OMRON Omron Electronics, Inc. Omron Manufacturing of America

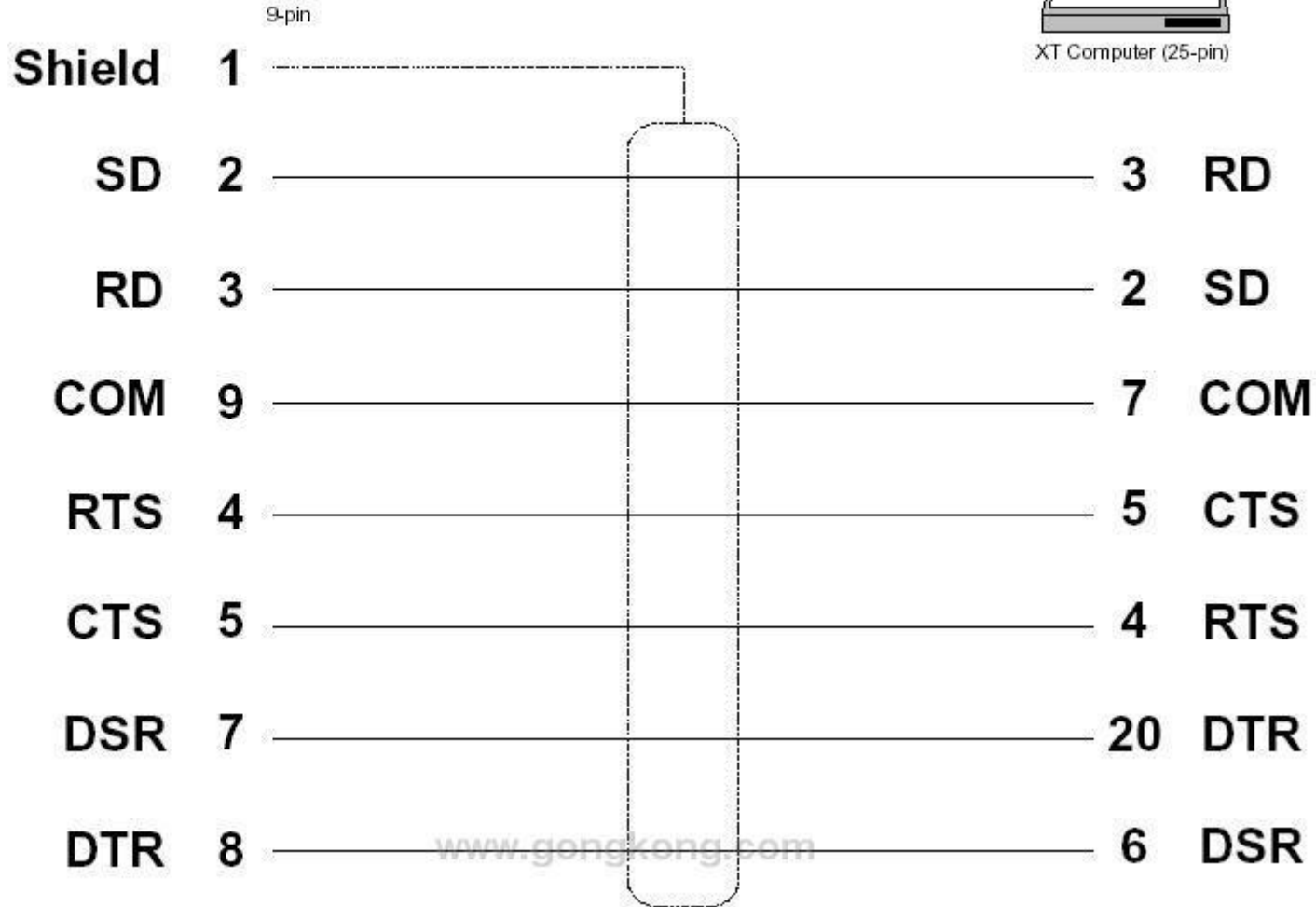
NT11S, NT20S,
NT600S, NT30,
NT30C, NT620S/620C

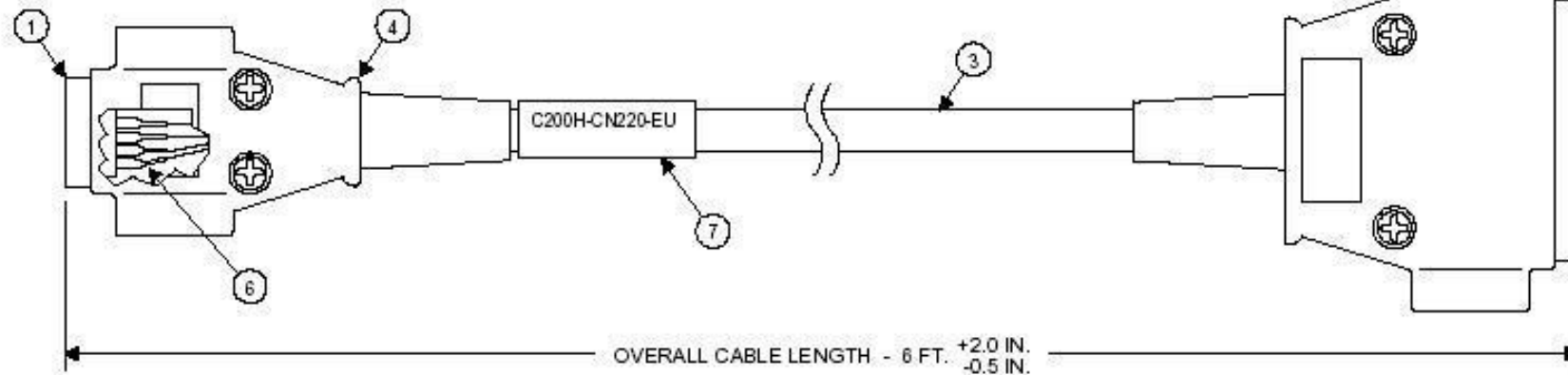


Cable Part Number C200H - CN220 - EU



XT Computer (25-pin)





CABLE C200H-CN220-EU

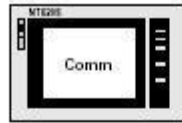
1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DB-25 FEMALE CONNECTOR WITH SOLDER CUPS
3. 7 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, P/N XM2S-0911
5. OMRON DB-25 BACKSHELL W/ #4-40 JACK SCREWS, P/N XM2S-2513
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA. POSITION APPROXIMATELY AS SHOWN.

FROM #1 PIN	TO #2 PIN	
TXD 2	3	RXD
RXD 3	2	TXD
RTS 4	5	CTS
CTS 5	4	RTS
6	nc	
DSR 7	20	DTR
DTR 8	6	DSR
COM 9	7	COM
1 to SHIELD	nc	

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	C200H BASIC/ASCII MODULE TO IBM-XT COMPUTER CABLE	
-	-	-	-	-	DRWN	OBA	10-18-94	FINISH: -	DRWG NO: PFP0006B
-	-	-	-	-	CHCKD			TOLERANCE: -	FILE NAME: -
B	ADDED ITEMS #6 AND 7	-	10-18-94	-	APRVD			UNITS: ENGLISH	SIZE: A
A	ORIGINAL	-	7-14-94	-				SCALE: NONE	
REV	DESCRIPTION	COS NO.	DATE	SGND				SHEET: 1 OF 1	OMRON Omron Electronics, Inc. Omron Manufacturing of America

15. 欧姆龙全套编程电缆 2:

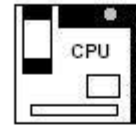
NT11S, NT20S,
NT600S, NT30,
NT30C, NT620/620S



9-pin male

Cable Part Number
C200H - CN510 - EU

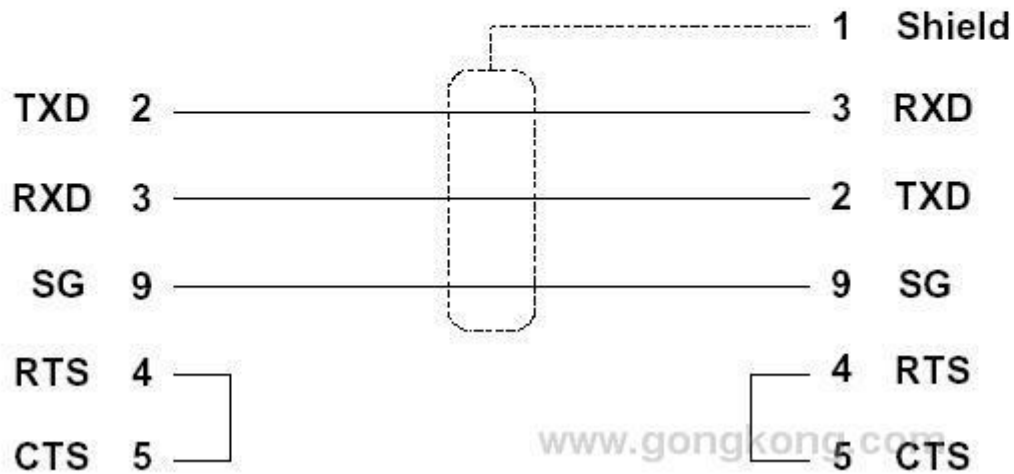
CV500 - LK201 (Port 2)
CVM1 built-in port
C200HS built-in port
CQM1 built-in port
IDSC built-in port

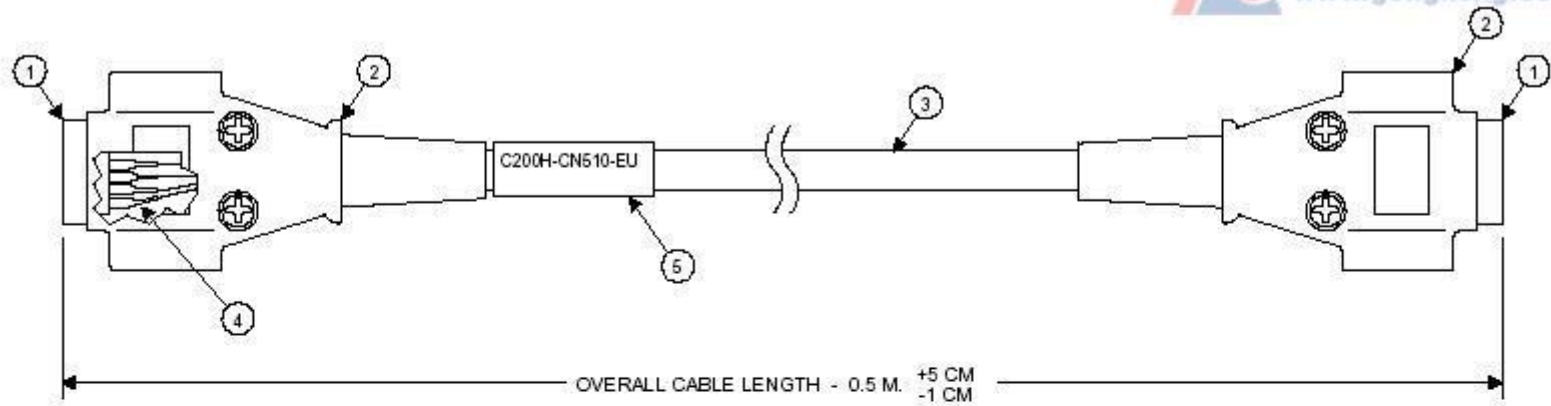


9-pin male



CV500-LK201 (Port 2)
CVM1 built-in port
C200HS built-in port
CQM1 built-in port
IDSC built-in port





CABLE C200H-CN510-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS, QTY 2
2. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, QTY 2
OMRON CAT. NO. XM2S-0911, PIM NO. 4584252-0
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE*
4. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
5. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA TYPE. POSITION APPROXIMATELY AS SHOWN.

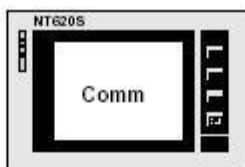
* RECOMMENDED: CAROL #C0743, 6 CONDUCTOR CABLE

	FROM PIN	TO PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	nc	4 to 5*	
	4 to 5*	nc	
+5	6	nc	
COM	9	9	COM
	nc	1 to SHIELD	

* JUMPER PINS 4 TO 5 IN EACH CONNECTOR

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	S-SERIES PT to C-CV SERIES CPU PORT	
-	-	-	-	-	DRWN	11-28-95	FINISH: -	DRWG NO:	PFP0017-A
-	-	-	-	-	OBA		TOLERANCE: -	FILE NAME: -	SIZE: A
-	-	-	-	-	CHCKD		UNITS: ENGLISH	Omron Electronics, Inc. Omron Manufacturing of America	
-	-	-	-	-	APRVD		SCALE: NONE	omron	
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-	SHEET: 1 OF 1		

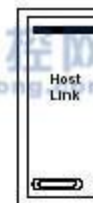
NT11S, NT20S, NT30,
NT30C, NT600S,
NT620C/620S



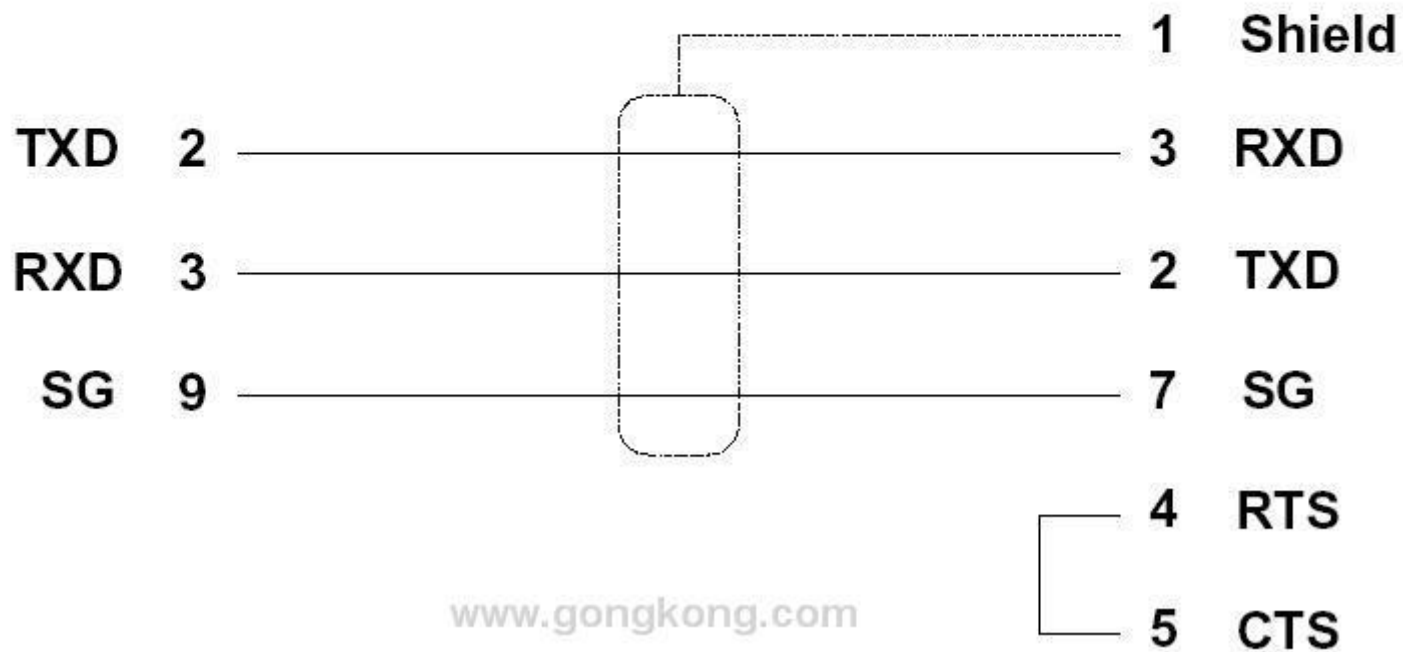
9-pin male

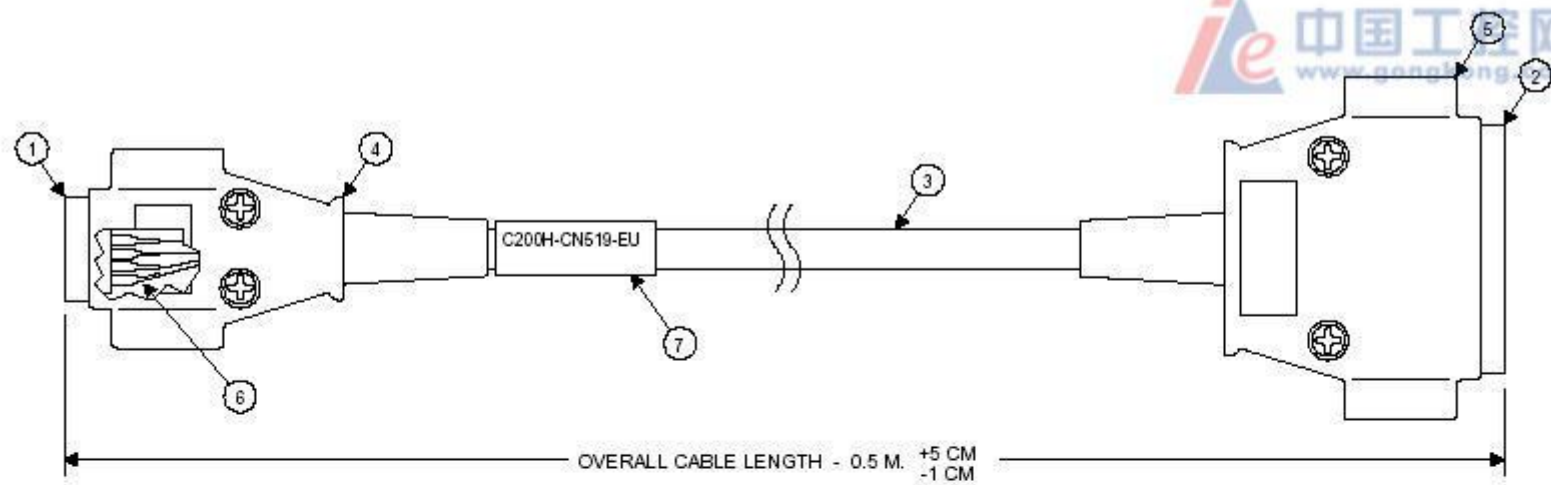
Cable Part Number
C200H-519-EU (50 cm)
C200H-329-EU (3M)
C200H-529-EU (5M)

C500 - LK203
C200H - LK201
3G2A6 - LK201
3G2C7 - LK201
CV500 - LK201 (Port 1)



25-pin





CABLE C200H-CN519-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS
2. DB-25 MALE CONNECTOR WITH SOLDER CUPS
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE
4. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, CAT. XM2S-0911, PIM 4584252-0
5. OMRON DB-25 BACKSHELL W/ 2.6MM JACK SCREWS, CAT. XM2S-2511, PIM 4584254-0
6. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
7. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA TYPE. POSITION APPROXIMATELY AS SHOWN.

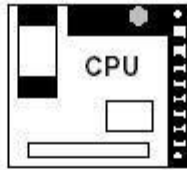
* RECOMMENDED: CAROL #C0743, 6 CONDUCTOR CABLE

	FROM #1 PIN	TO #2 PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	nc	4 to 5*	
	--	--	
+5	6	nc	
COM	9	7	COM
	nc	1 to SHIELD	

* JUMPER PINS 4 TO 5

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	S-SERIES PT to C-CV SERIES HOST LINK MODULE	
-	-	-	-	-	DRWN	OBA 11-28-95	FINISH: -	DRWG NO:	PFP0020-A
-	-	-	-	-	CHCKD		TOLERANCE: -	FILE NAME: -	SIZE: A
-	-	-	-	-	APRVD		UNITS: ENGLISH	Omron Electronics, Inc. Omron Manufacturing of America	
REV	DESCRIPTION	COS NO.	DATE	SGND			SCALE: NONE		
							SHEET: 1 OF 1		

CPM1 / CQM1 / C200H /
IDSC



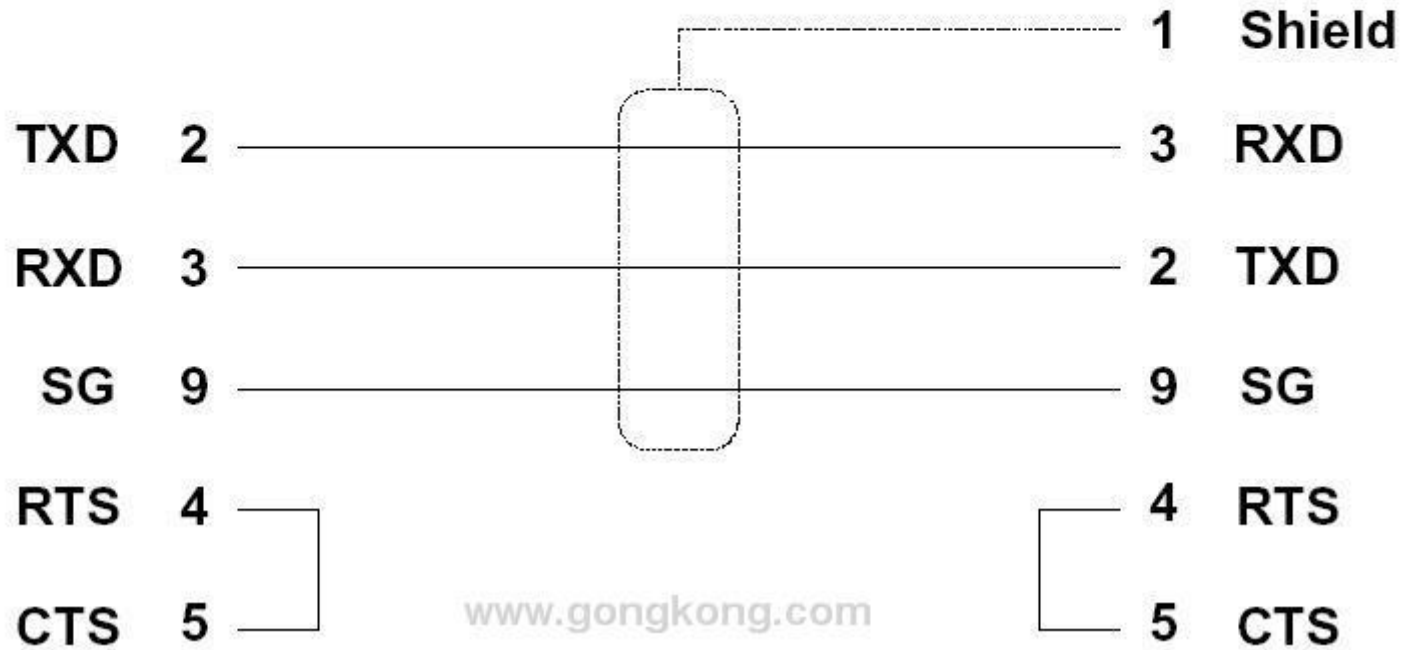
9-pin male

Cable Part Number
C200H - CN320 - EU
C200H - CN520 - EU
(one-to-one link)

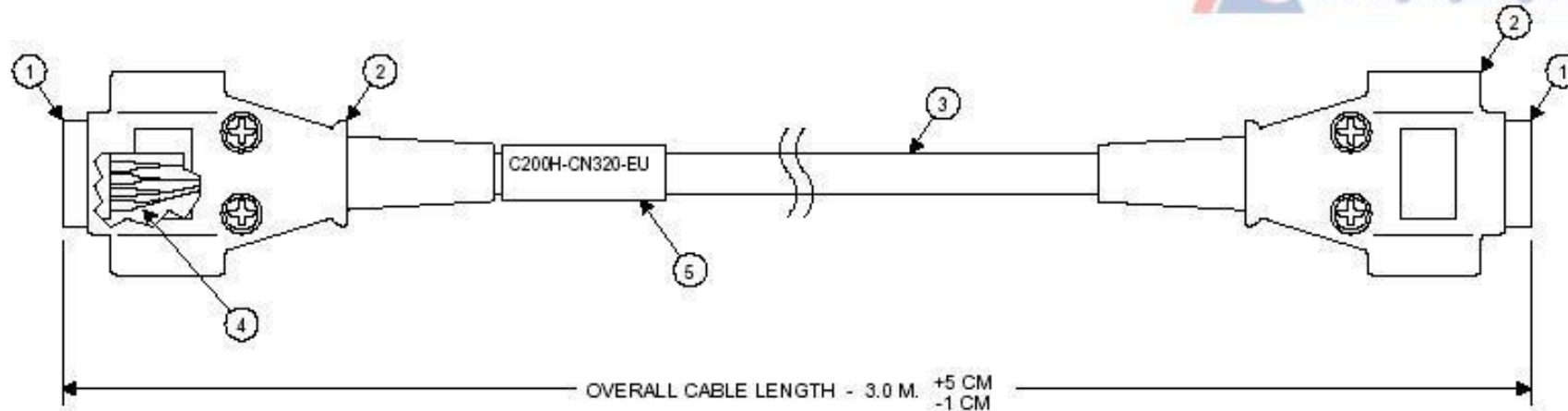
CPM1 / CQM1 / C200H /
IDSC



9-pin male



www.gongkong.com



CABLE C200H-CN320-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS, QTY 2
2. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, QTY 2
OMRON CAT. NO. XM2S-0911, PIM NO. 4584252-0
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE*
4. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
5. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA TYPE. POSITION APPROXIMATELY AS SHOWN.

* RECOMMENDED: CAROL #C0743, 6 CONDUCTOR CABLE

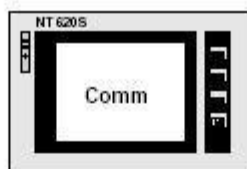
FROM PIN	TO PIN
TXD 2	3 RXD
RXD 3	2 TXD
nc	4 to 5*
4 to 5*	nc
+5 6	nc
COM 9	9 COM
nc	1 to SHIELD

* JUMPER PINS 4 TO 5 IN EACH CONNECTOR

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	S-SERIES PT to C-CV SERIES CPU PORT	
-	-	-	-	-	DRWN	11-28-95	FINISH: -	DRWG NO:	PFP0018-A
-	-	-	-	-	CHCKD		TOLERANCE: -	FILE NAME: -	SIZE: A
-	-	-	-	-	APRVD		UNITS: ENGLISH	Omron Electronics, Inc. Omron Manufacturing of America	
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-	SCALE: NONE		

16. 欧姆龙全套编程电缆 3:

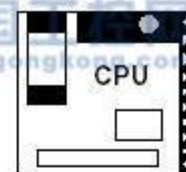
NT11S, NT20S, NT30,
NT30C, NT600S,
NT620C/620S



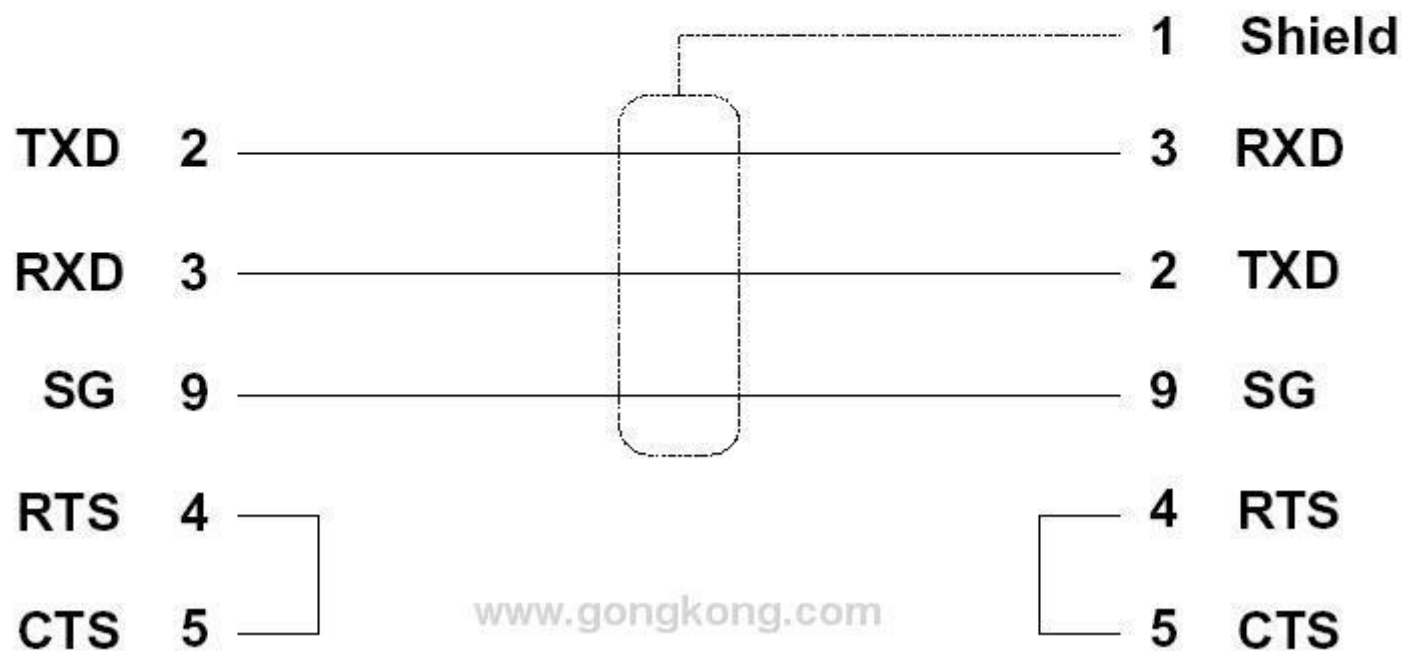
9-pin male

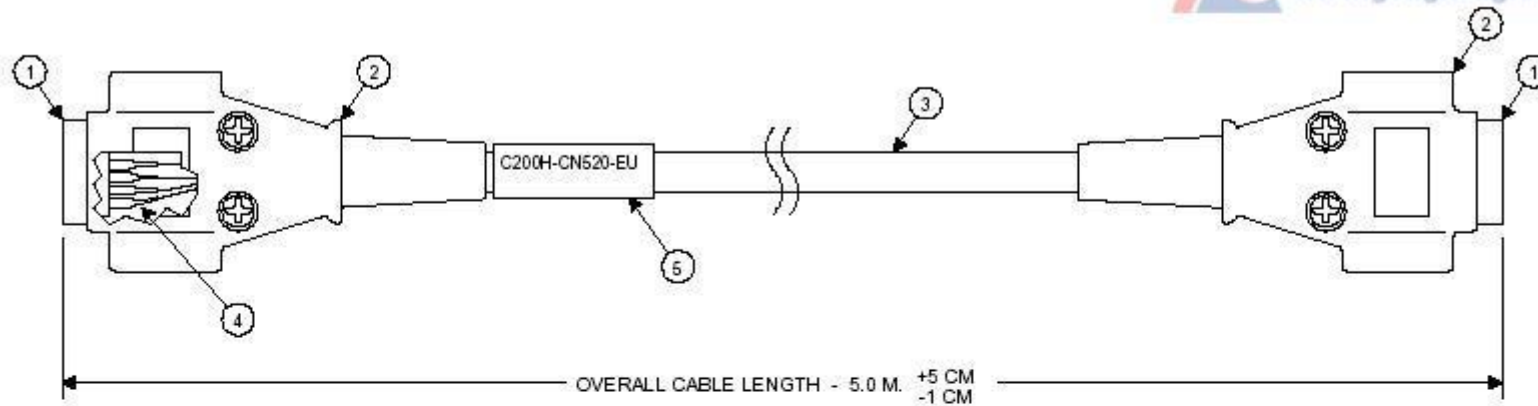
Cable Part Number
C200H - CN320 - EU
C200H - CN520 - EU

CV500 - LK201 (Port 2)
CVM1 built-in port
C200HS built-in port
CQM1 built-in port
CPM1- CIF01
IDSC built-in port



9-pin male





CABLE C200H-CN520-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS, QTY 2
2. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, QTY 2
OMRON CAT. NO. XM2S-0911, PIM NO. 4584252-0
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE*
4. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
5. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA TYPE. POSITION APPROXIMATELY AS SHOWN.

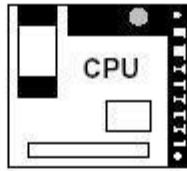
* RECOMMENDED: CAROL #C0743, 6 CONDUCTOR CABLE

	FROM PIN	TO PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	nc	4 to 5*	
	4 to 5*	nc	
+5	6	nc	
COM	9	9	COM
	nc	1 to SHIELD	

* JUMPER PINS 4 TO 5 IN EACH CONNECTOR

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	S-SERIES PT to C-CV SERIES CPU PORT	
-	-	-	-	-	DRWN	11-28-95	FINISH: -	DRWG NO:	PFP0019-A
-	-	-	-	-	CHCKD		TOLERANCE: -	FILE NAME: -	SIZE: A
-	-	-	-	-	APRVD		UNITS: ENGLISH	Omron Electronics, Inc. Omron Manufacturing of America	
REV	DESCRIPTION	COS NO.	DATE	SGND	-	-	SCALE: NONE		

CV500 - LK201 (Port 2)
 CVM1 built-in port
 C200HS built-in port
 CQM1 built-in port
 CPM1- CIF01
 IDSC built-in port



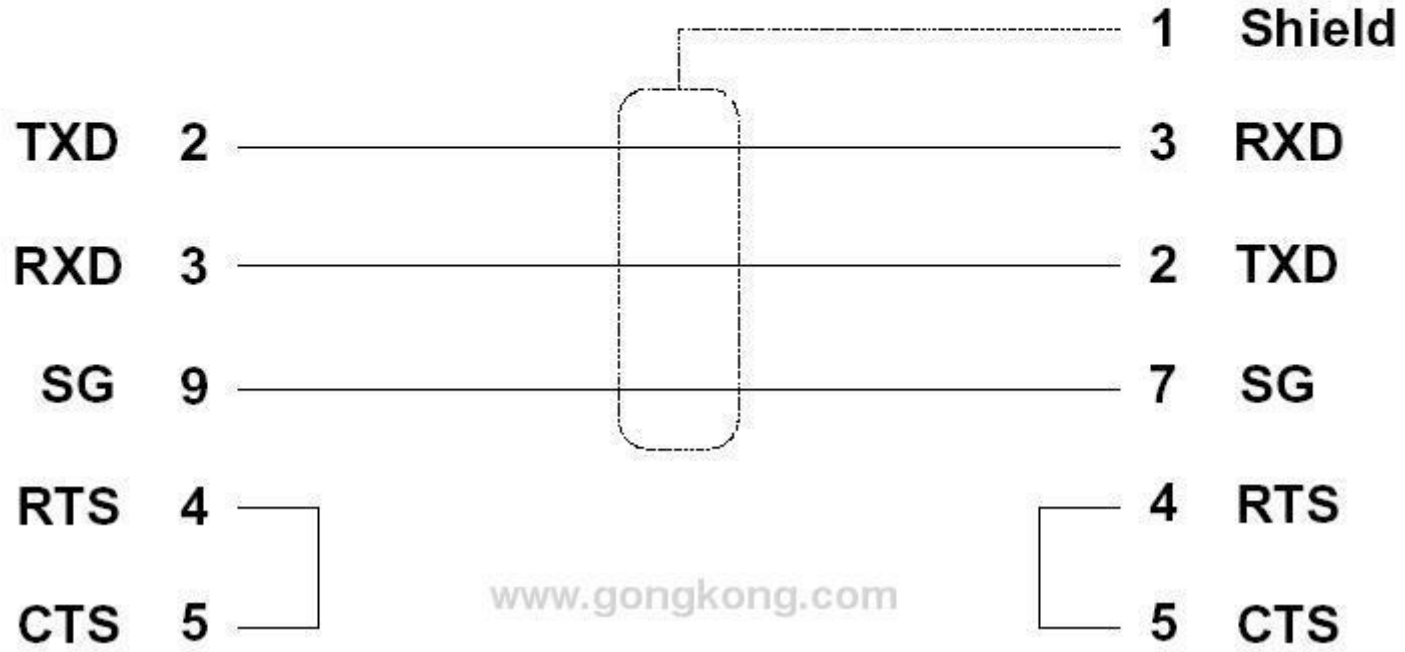
9-pin male

Cable Part Number
 C200H - CN320 - EU
 C200H - CN520 - EU

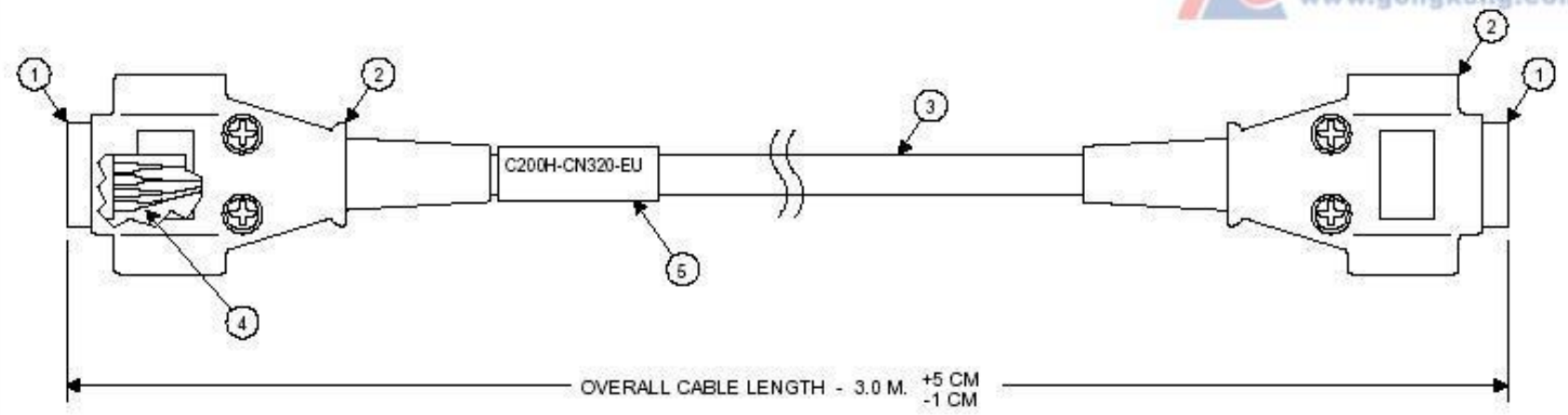
PT (NT600M - LK201)



9-pin male



www.gongkong.com



CABLE C200H-CN320-EU

1. DE-9 MALE CONNECTOR WITH SOLDER CUPS, QTY 2
2. OMRON DE-9 BACKSHELL W/ 2.6MM JACK SCREWS, QTY 2
OMRON CAT. NO. XM2S-0911, PIM NO. 4584252-0
3. 3 CONDUCTOR, 24 AWG STRANDED, FOIL SHIELD, PVC JACKETED CABLE*
4. HEAT SHRINK TUBING TO COVER SOLDERED CONNECTION, BOTH ENDS
5. HEAT SHRINK TUBING, WHITE WITH PRINTED PART NUMBER AS SHOWN IN BLACK, 8 PT. HELVETICA TYPE. POSITION APPROXIMATELY AS SHOWN.

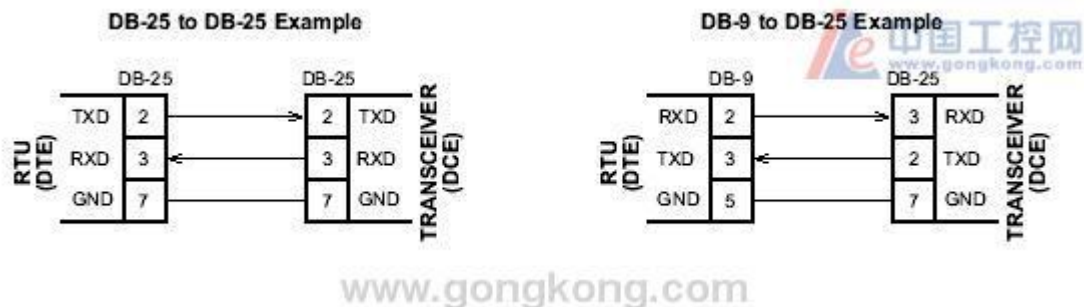
* RECOMMENDED: CAROL #C0743, 6 CONDUCTOR CABLE

	FROM PIN	TO PIN	
TXD	2	3	RXD
RXD	3	2	TXD
	nc	4 to 5*	
	4 to 5*	nc	
+5	6	nc	
COM	9	9	COM
	nc	1 to SHIELD	

* JUMPER PINS 4 TO 5 IN EACH CONNECTOR

-	-	-	-	-	APPROVAL	DATE	MATERIAL: -	S-SERIES PT to C-CV SERIES CPU PORT	
-	-	-	-	-	DRWN	11-28-95	FINISH: -	DRWG NO:	PFP0018-A
-	-	-	-	-	CHCKD		TOLERANCE: -	FILE NAME: -	SIZE: A
-	-	-	-	-	APRVD		UNITS: ENGLISH	Omron Electronics, Inc.	
REV	DESCRIPTION	COS NO.	DATE	SGND			SCALE: NONE	Omron Manufacturing of America	
							SHEET: 1 OF 1	OMRON	

17.MDS x710A/C 数传电台通讯线



MDS x710A/C 数传电台编程线

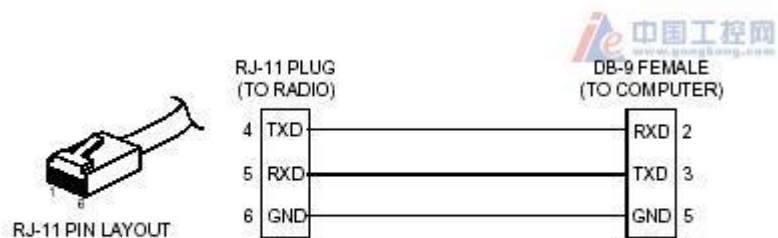
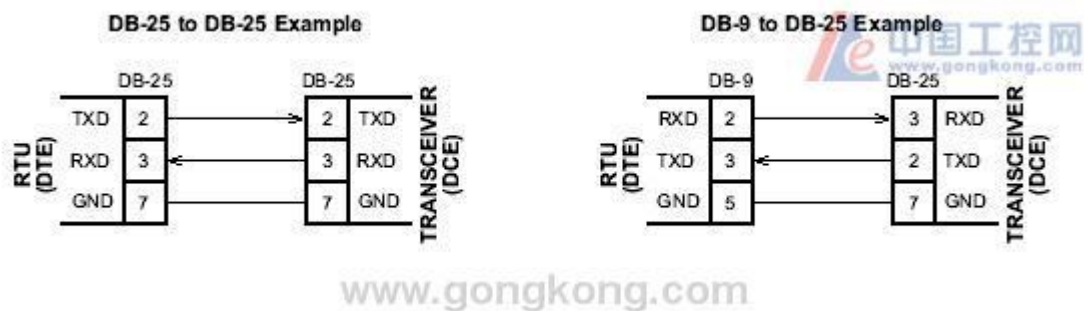


Figure 15. RJ-11 to DB-9 Adapter Cable

18.MDS 3624A-OEM 数传电台通讯线

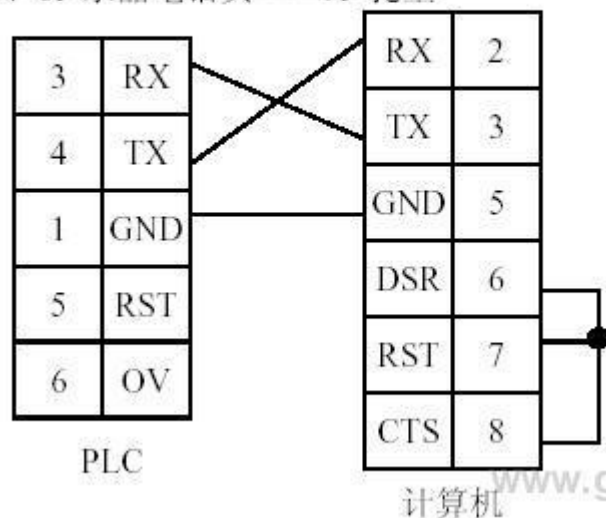


19. 光洋 PLC 电缆图

一、编程电缆 PLC—计算机 RS-232C



1、6P 水晶电话头—9P 孔型



适用型号：SE-22、SH 系列、SM 系列、SZ 系列 CPU

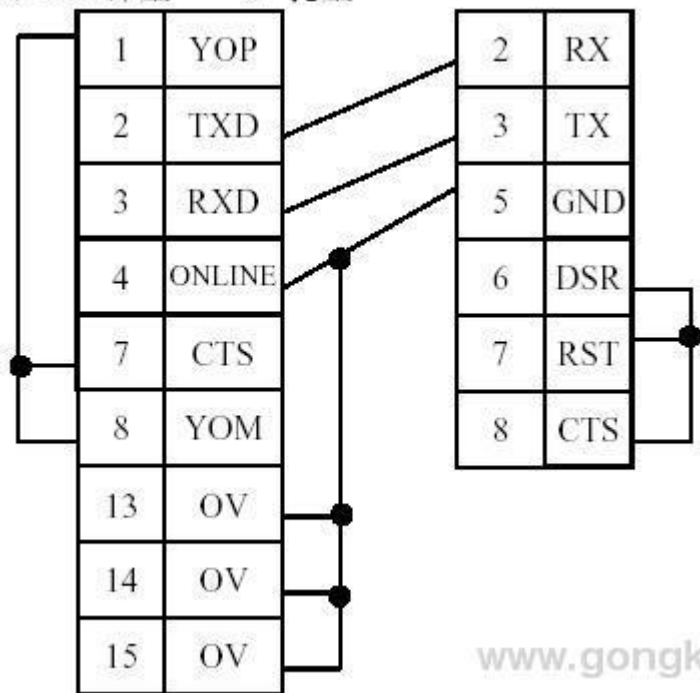
DL 系列： DL-05/DL-06

SU-5M/6M

水晶插头定义号：

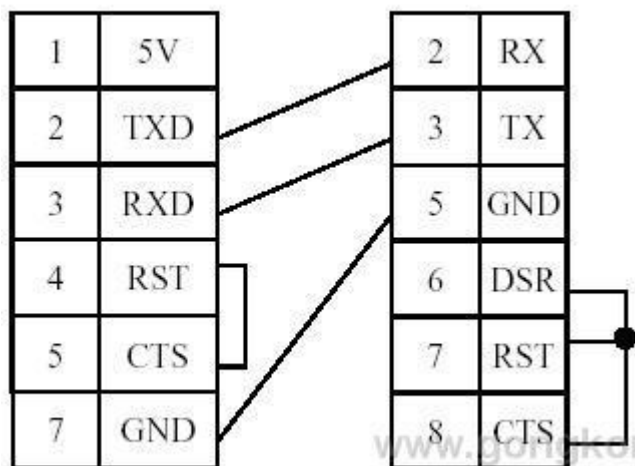
www.gongkong.com

2、15P 针型——9P 孔型




适用型号: SU-5/SU-5E/SU-6B/SU-6M
/SU-5M

www.gongkong.com

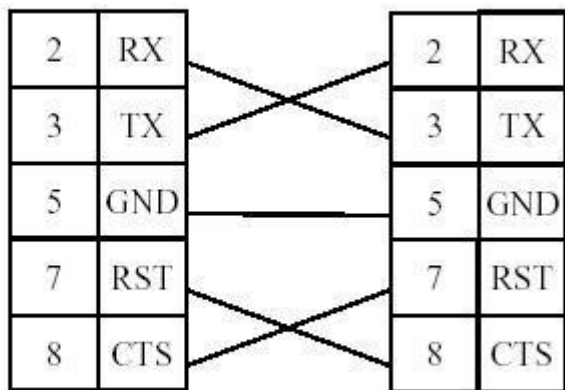


适用型号: DL-06/SZ-4M

3、15P 针型——9P 孔型

4、9P 针型——9P 孔型

中国工控网
www.gongkong.com



适用 SN 系列

9P 针

9P 孔

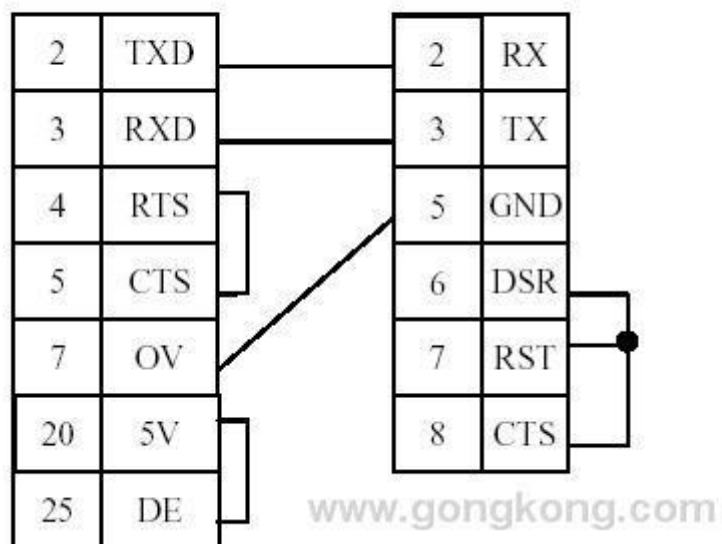
www.gongkong.com

5、 25P 针型

9P 孔型

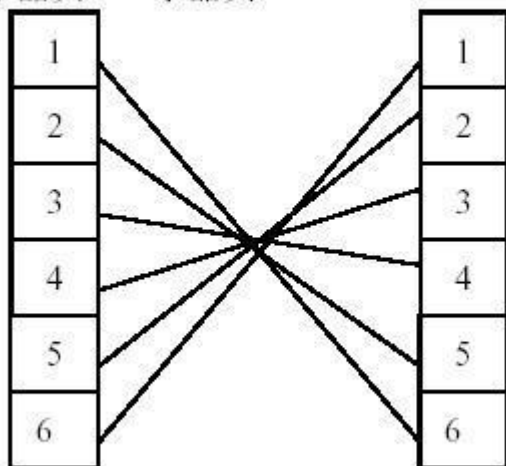


适用 SU 系列 CPU
U-01DM



二、编程器电缆 PLC—编程器（手持式）

1、水晶头—水晶头

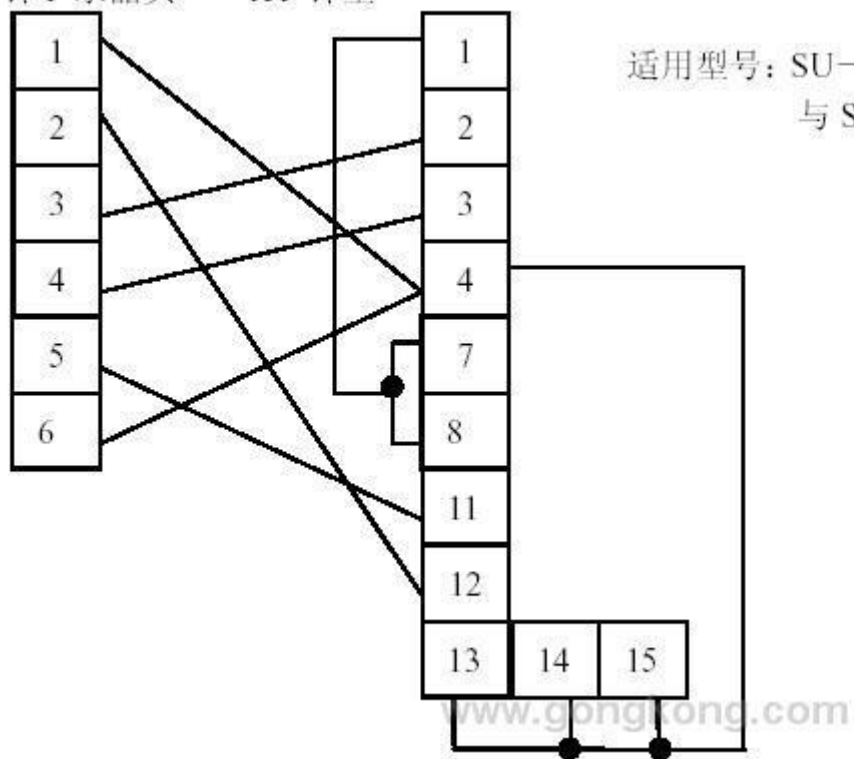


6P 水晶头

6P 水晶头

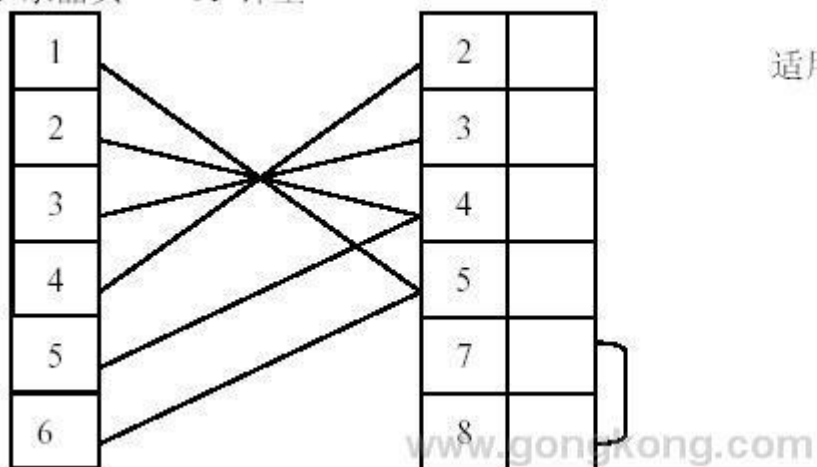
适用型号：SM、SH、SZ、DL-05/DL-06/SU-5M
/SU-6M 与 S-10HP、S-20P

2、6针P水晶头——15P针型



适用型号: SU-5(E)/SU-6B/SU-6M/SU-5M
与 S-20P/S-10HP

3、6P 水晶头——9P 针型



适用型号： 中国工控网
SN 与 S-100HP(暂时)

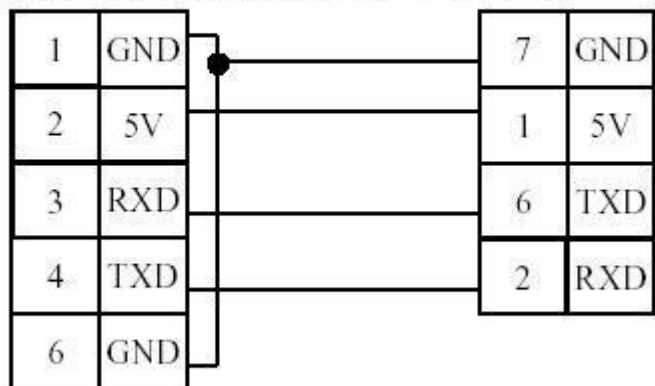
光洋 PLC 电缆图

三、PLC——显示器

中国工控网
www.gongkong.com

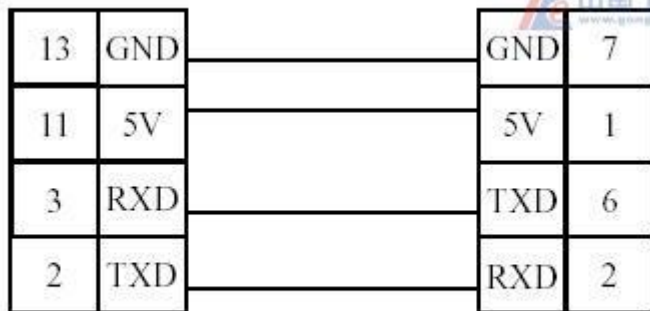
a、PLC——CL-02DS

1、SU/SZ/SH/SM/DL-05/DL-06——CL-02DS



www.gongkong.com
6P 水晶头 9P 针

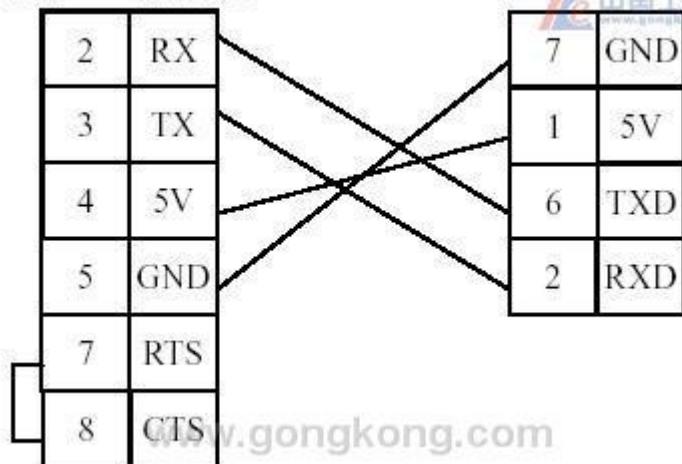
2、SU-5/SU-5E/SU-6B/SU-6M/SU-5M—CL-02DS



15P 针

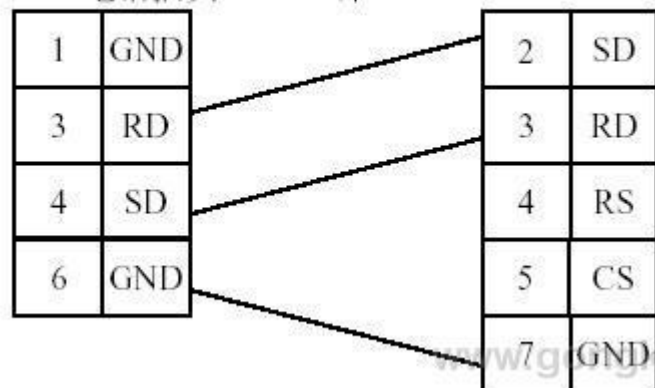
9P 针

3、SN—CL-02DS



b、PLC——GC (RS-232C)

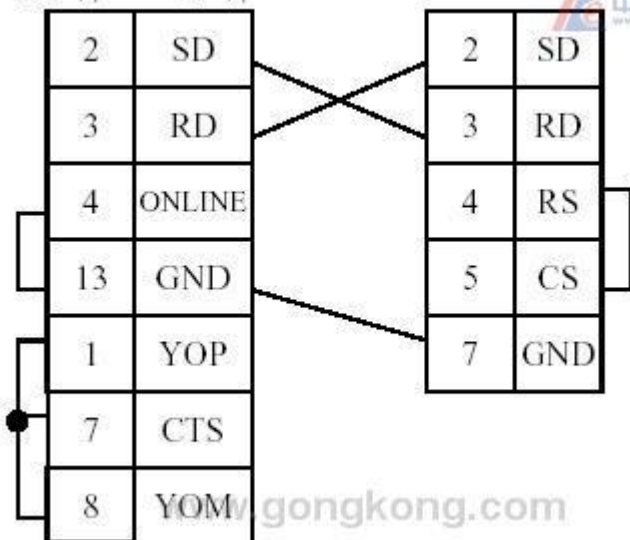
1、6P 电话插头——9P 针



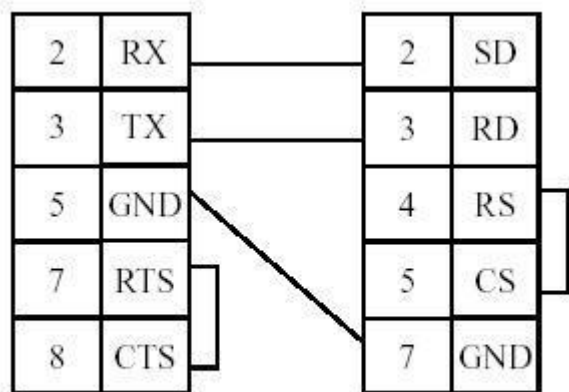
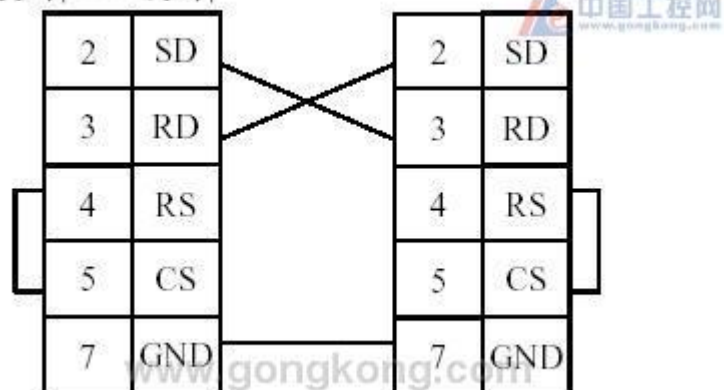
适用范围：SH/SM/SZ/DL-05/DL-06
/SU-5M/SU-6M



2、15P 针——9P 针



3、25P 针——9P 针



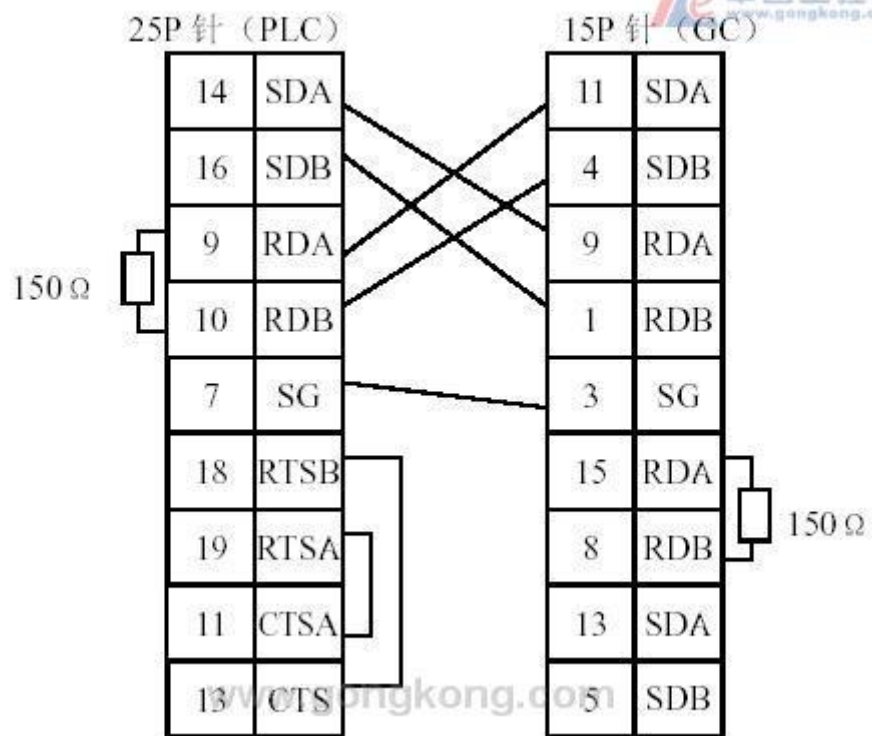
SN

GC www.gongkong.com

注：因为二头都是 9P 针型，所以一定要注明哪头是 SN，哪头是 GC。

4、9P 针——9P 针

C、PLC—GC (RS-485)



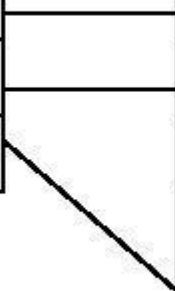
D、PLC——GP (RS-232)

6P 水晶头

3	RX
4	TX
1	GND

25P 针

2	SD
3	RD
4	RS
5	CS
7	GND

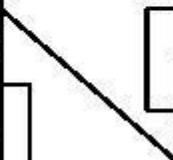


9P 针

2	RX
3	TX
5	GND
7	RTS
8	CTS



2	SD
3	RD
4	RS
5	CS
7	GND



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25P 针

E、PLC——GP (RS-422)

GP

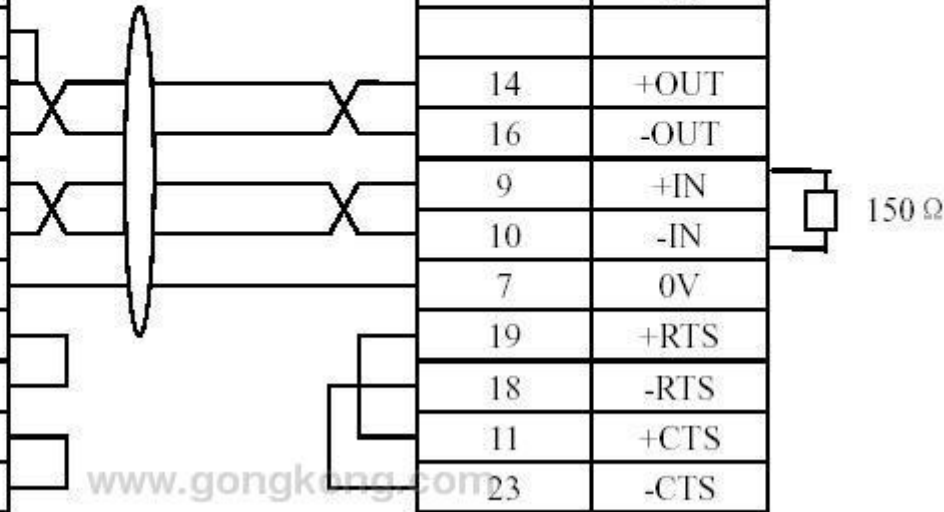
D-sub25 针 (针型)

引脚号	信号名
1	FG
9	TRMX
10	RD A
16	RD B
11	SD A
15	SD B
7	SG
18	CS B
19	ER B
21	CS A
22	ER A

SU-5/6 通用通讯口

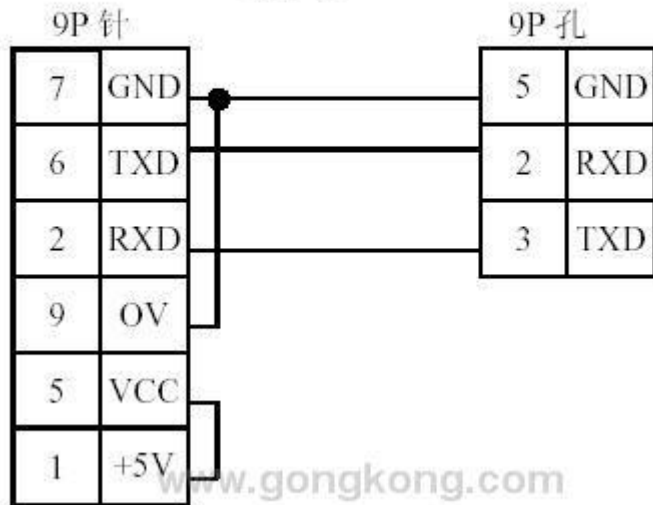
D-sub25 针 (针型)

引脚号	信号名
	FG
14	+OUT
16	-OUT
9	+IN
10	-IN
7	0V
19	+RTS
18	-RTS
11	+CTS
23	-CTS

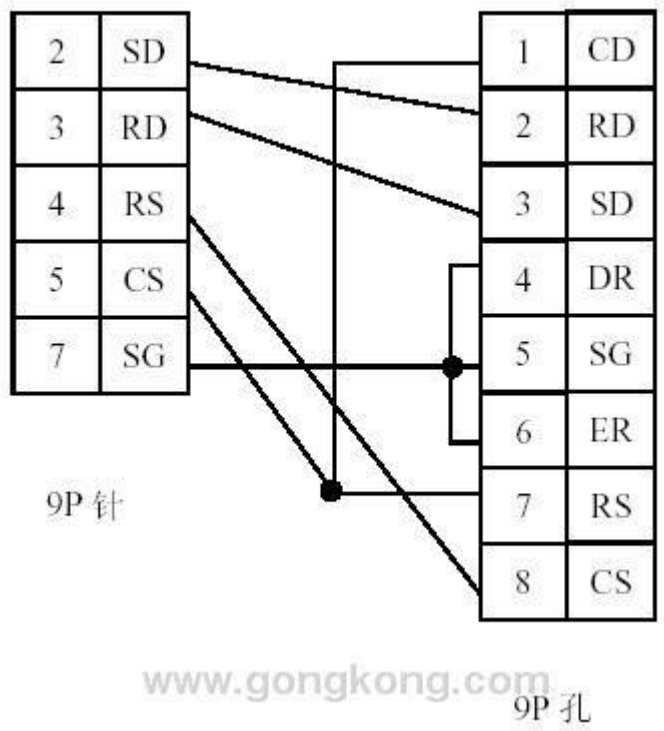


四、计算机——显示器（下载电缆）工控网

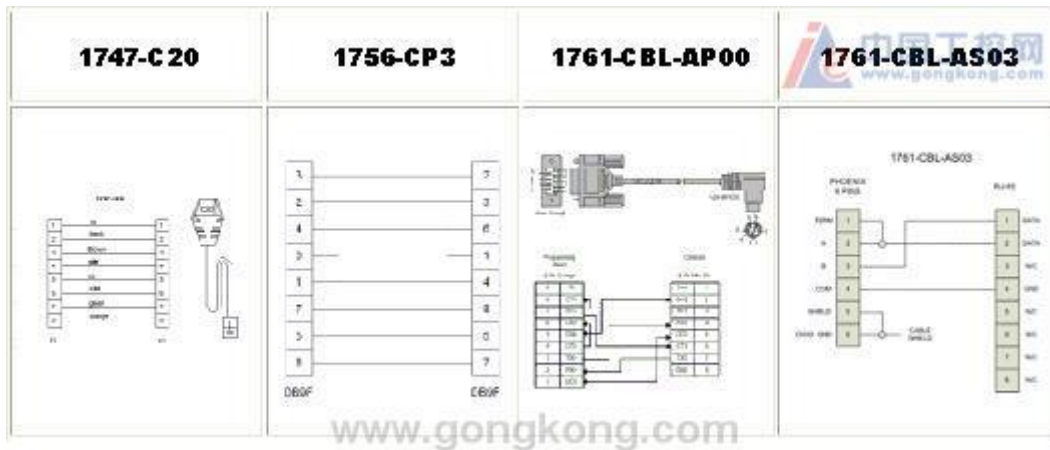
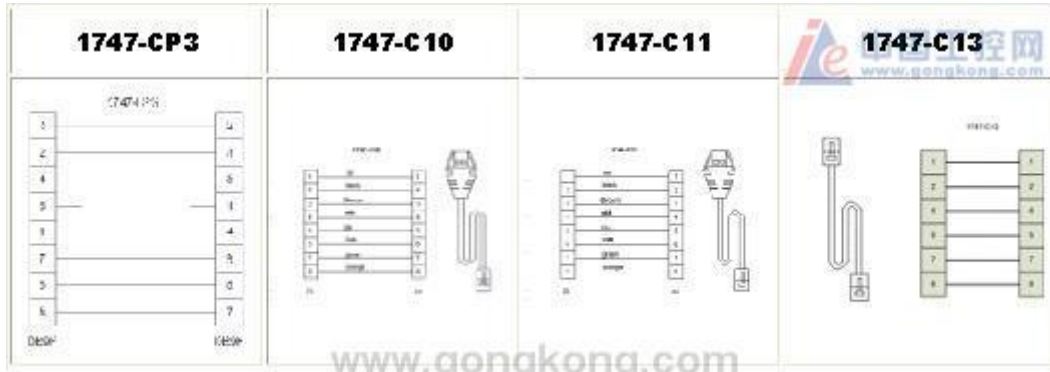
a、CL-02DS——计算机



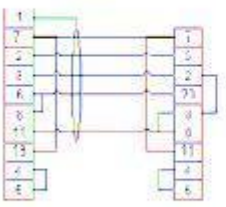
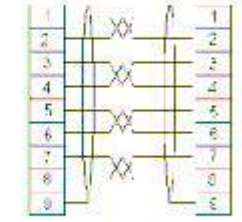


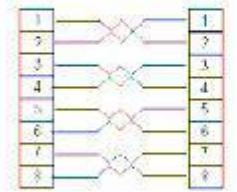
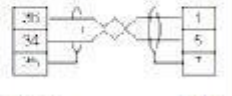
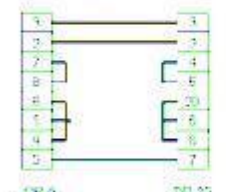
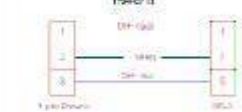
b、GC——计算机


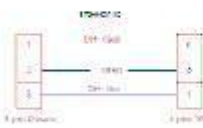
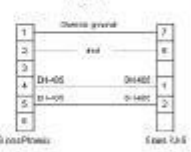
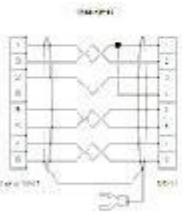
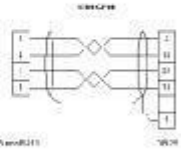


AB 各种电缆接线图:


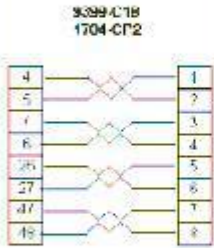
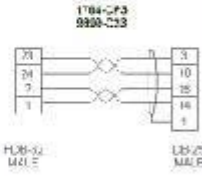
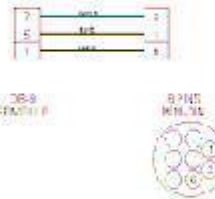
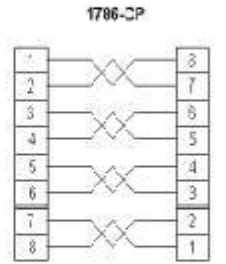


<p>1761-CBL-HM02</p>	<p>1761-CBLPM02 ou PM05/PM10</p>	<p>1770-CG</p>	<p>1770-C0 www.gongkong.com</p>																																																				
 <p>1761-CBL-HM02</p> <table border="1"> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td></tr> <tr><td>3</td><td>6</td></tr> <tr><td>4</td><td>7</td></tr> <tr><td>5</td><td>5</td></tr> <tr><td>6</td><td>3</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>8</td></tr> </table>	1	1	2	2	3	6	4	7	5	5	6	3	7	4	8	8	 <p>1761-CBLPM02</p> <table border="1"> <tr><th>Pin</th><th>Color</th><th>Pin</th><th>Color</th></tr> <tr><td>1</td><td>Red</td><td>1</td><td>Red</td></tr> <tr><td>2</td><td>Green</td><td>2</td><td>Green</td></tr> <tr><td>3</td><td>Blue</td><td>3</td><td>Blue</td></tr> <tr><td>4</td><td>Black</td><td>4</td><td>Black</td></tr> <tr><td>5</td><td>White</td><td>5</td><td>White</td></tr> <tr><td>6</td><td>Brown</td><td>6</td><td>Brown</td></tr> <tr><td>7</td><td>Grey</td><td>7</td><td>Grey</td></tr> <tr><td>8</td><td>Purple</td><td>8</td><td>Purple</td></tr> </table>	Pin	Color	Pin	Color	1	Red	1	Red	2	Green	2	Green	3	Blue	3	Blue	4	Black	4	Black	5	White	5	White	6	Brown	6	Brown	7	Grey	7	Grey	8	Purple	8	Purple	<p>1770-CG</p>  <p>DB-15 MALE</p> <p>DB-25 MALE</p>	<p>1770-C0</p>  <p>DB-15 MALE</p> <p>DB-15 MALE</p>
1	1																																																						
2	2																																																						
3	6																																																						
4	7																																																						
5	5																																																						
6	3																																																						
7	4																																																						
8	8																																																						
Pin	Color	Pin	Color																																																				
1	Red	1	Red																																																				
2	Green	2	Green																																																				
3	Blue	3	Blue																																																				
4	Black	4	Black																																																				
5	White	5	White																																																				
6	Brown	6	Brown																																																				
7	Grey	7	Grey																																																				
8	Purple	8	Purple																																																				

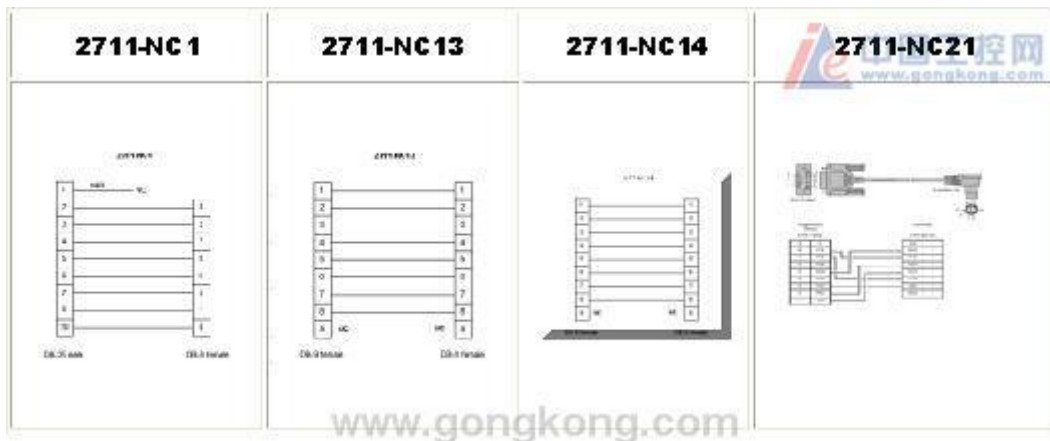
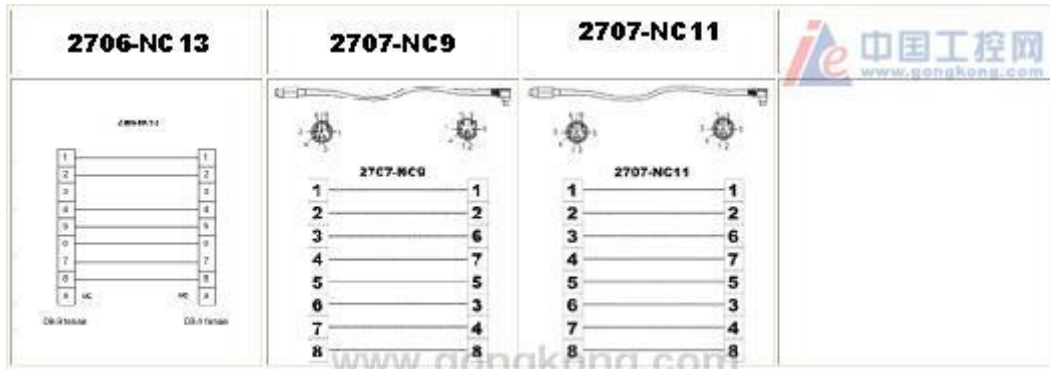
<p>1772-TC /9399-C17</p>	<p>1784-CP / 9399-C19</p>	<p>1784-CP 10 / 9399-C28</p>	<p>1784-CP 12 www.gongkong.com</p>
<p>9399-C17 1772-TC</p>  <p>DB-15 MALE</p> <p>DB-15 MALE</p>	<p>9399-C19 1784-CP</p>  <p>HDB-52 MALE</p> <p>DB-9 MALE</p>	<p>1784-CP 10 9399-C28</p>  <p>DB-9 FEMALE</p> <p>DB-25 MALE</p>	<p>1784-CP 12</p>  <p>DB-15 MALE</p> <p>DB-15 MALE</p>

1784-CP 13	1784-CP 14	1784-CP 15	
			

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1784-CP 2 / 9399-C 18	1784-CP 3 / 9399-C23	1784-CP 7 / 9399-C26	
 <p>HDB 82 MALE</p> <p>DB-15 MALE</p>	 <p>HDB-15 MALE</p> <p>DB-15 MALE</p>	 <p>DB-9 FEMALE</p> <p>B-PIN MINI-D</p>	 <p>RJ-4E</p> <p>RJ-45</p>

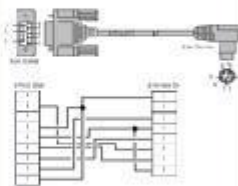
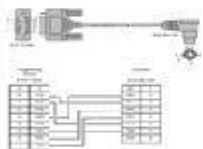
www.gongkong.com



2711-NC 22

2727-TRC 1

9399-C 13



9399-C13

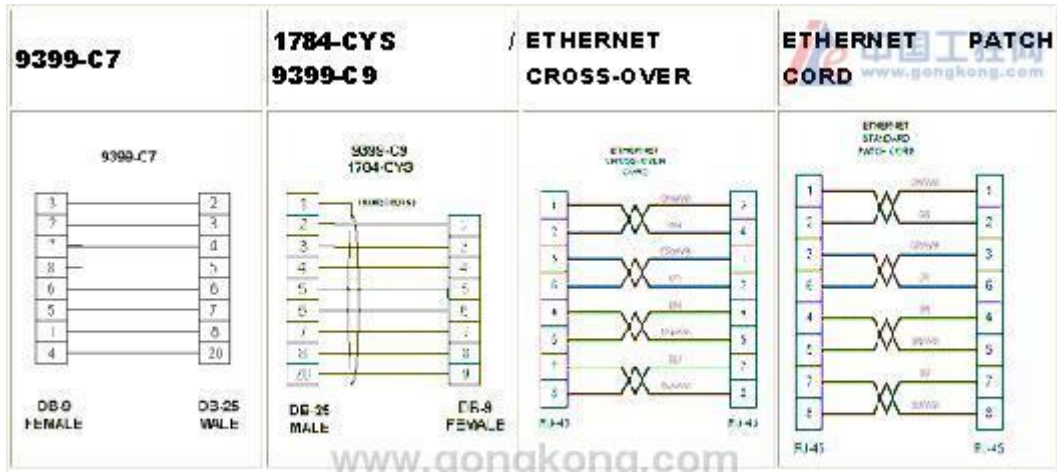
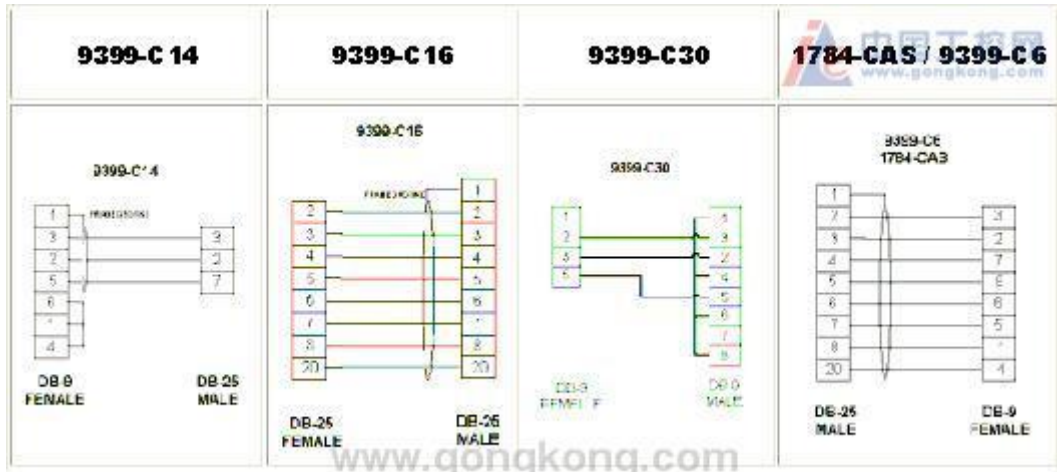


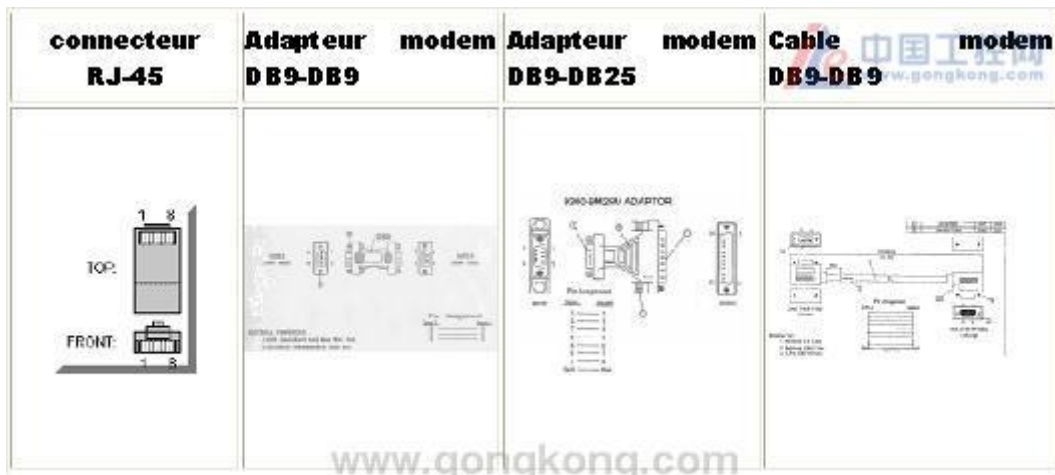
**DB-25
MALE** **DB-9
FEMALE**

9399-C13E



**DB-9
MALE** **DB-25
FEMALE**





MDS2710A 电台和欧姆龙 CQM1H-CPU51 的 PLC 的连接方法:

1、设备准备：PC 一台、欧姆龙 CQM1H-CPU51 两部、MDS2710A2 台、9 芯至 9 芯数据线两条，9 芯至 25 芯数据线两条。

2、连接方法:

有线连接：PC 和主 PLC 通过 9 芯到 9 芯直连线进行联接，具体接线为 TX—TX，RX—RX，GND（5）——GND（9），并将接 PC 的 9 芯线的 7、8 短接，接主 PLC 的 4、5 短接。两台 PLC 通过 9 芯交叉电缆进行连接。具体连接为：RX—TX，TX—RX，GND（9）——GND（9），并将 4、5 针短接。

加电台的连接方法：PC 和主 PLC 通过 9 芯到 9 芯直连线进行联接，具体接线为 TX—TX，RX—RX，GND（5）——GND（9），并将接 PC 的 9 芯线的 7、8 短接，接主 PLC 的 4、5 短接。主 PLC 和主电台进行交叉线（9—25 芯数据线）连接，具体为：RX—TX，TX—RX，GND（9）——GND（7），并将接主 PLC 端的 9 芯线的 4、5 短接。电台和从 PLC 的连接线和主 PLC 和电台的连接线相同。

3、调试方法:

（1）有线连接通信：PC 和 PLC 通过有线方式进行通信，设置主、从 PLC 的参数，进行数据通信。在确定保通信正常的情况下，将 PLC 之间的连接电缆去掉，接换上两个电台。

（2）设备两个电台的参数，电台的数据格式要和 PLC 的数据格式一致，如果 PLC 选用 9600/7E2，电台也应设置为 9600/7E2。然后连接电台到 PLC，主、从 PLC 通过电台建立了通信。

（3）电台与 PLC 匹配的参数:

Baud Rate 为 9600

Data Format 为 7E2 或 8N1

DataKey Mode is on

Cont. Mode is off

Buffer Mode is off

经测试，MDS 2710A 电台和欧姆龙 CQM1H-CPU51 的 PLC 连接通信正常，可以正常进行数据的上载、下载及远程通信。

4、应注意的问题：

- 1)、电台和 PLC 的数据模式设置要一致，如 PLC 设置为 96007E2，电台必须设为 9600 7E2
- 2)、连接好电台、天线，确保电台设置正常
- 3)、确保电台的接收信号强度(RSSI)在-60 到 -100dBm 之间(用设置软件可测出)

台达触摸屏与电脑连接的 USB 口线



电脑与触摸屏下载线：232

B-2 下载传输 Cable 线制作

Cable 连接 HMI DOP 的接头采用 9-pin D-SUB male 接头



RS-232

DOP接线端

9 Pin D-SUB male (RS-232)

PC接线端

9 Pin D-SUB female (RS-232)

PC接线端

示意图

RXD (2)	—————	(3) TXD
TXD (3)	—————	(2) RXD
GND (5)	—————	(5) GND
RTS (7)	—————	(8) CTS
CTS (8)	—————	(7) RTS



D-SUB 9pin to DOP series(male)

D-SUB 9pin to PC(female)



控制器接线说明

RS-232

DOP接线端

9 Pin D-SUB male (RS-232)

Controller接线端

8 Pin Mini DIN male (RS-232)

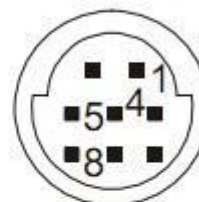
RXD (2) ————— (5) TXD

TXD (3) ————— (4) RXD

GND (5) ————— (8) GND

Controller接线端

示意图



上视图

RS-485

DOP接线端

9 Pin D-SUB male (RS-485)

Controller接线端

RS-485接线端子

RXD+ (2) ———— D+

TXD+ (3) ————

RXD- (1) ————

TXD- (4) ———— D-

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控制器接线说明



RS-485

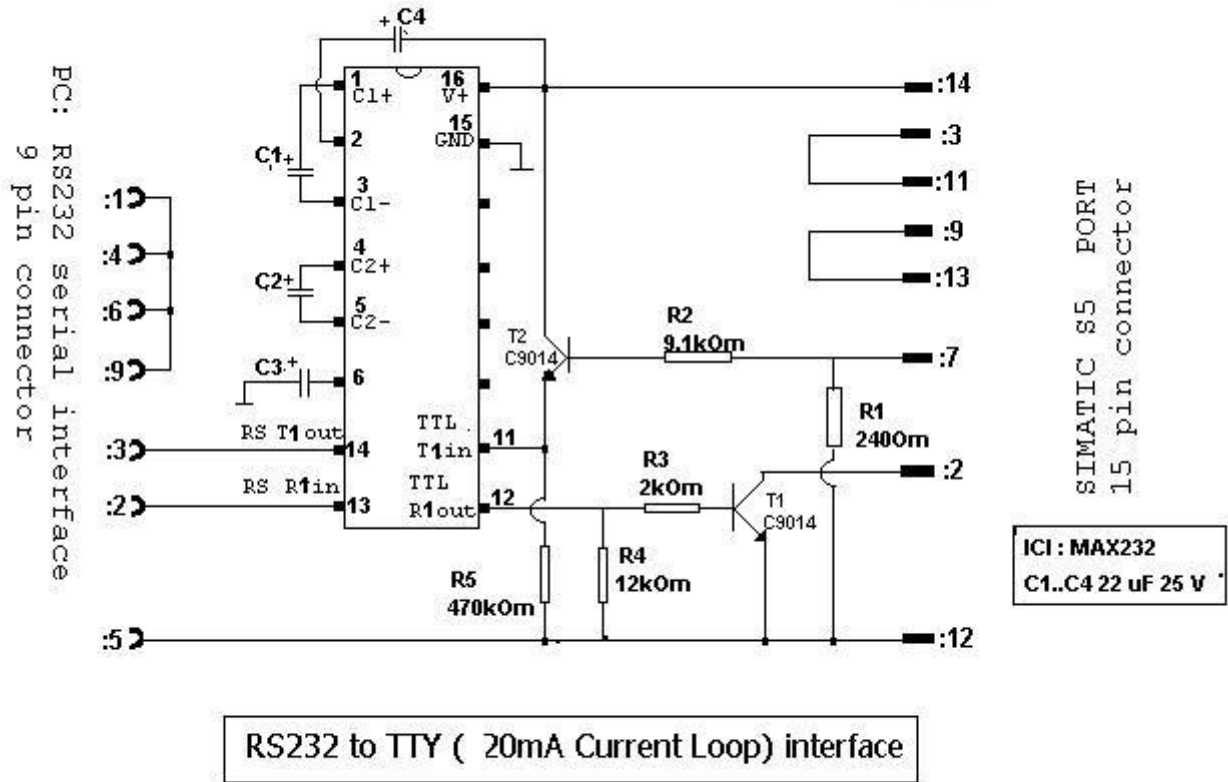
DOP接线端

Controller接线端

9 Pin D-SUB male (RS-485)



西门子 S5



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串行通讯电缆的制作 RS-232 通讯电缆的制作

无论是 9 孔插头，还是 25 孔插头，其串行通讯电缆连接时都要遵循下列对接关系：

SG←→SG TXD←→RXD RXD←→TXD RTS←→CTS
CTS←→RTS DTR←→DSR DSR←→DTR

根据上述对接关系，就可以非常方便地连接串行通讯电缆。这里顺便介绍一下上述各引脚所代表的含义：

- SG 英文全称为 Signal Ground/Common Return，表示信号地；
- TXD 指 Transmitted Data，表示数据发送；
- RXD 指 Received Data，表示接收数据；
- RTS 指 Request To Send，表示发送请求；
- CTS 指 Clear To Send，表示清除请求；
- DTR 指 Data Terminal Ready，表示数据终端准备就绪；
- DSR 指 Data Signal Rate Selector，表示数据置位准备就绪。

在制作 9 芯串口连线时，需要 2 个 9 孔插头和 1.5 米长的至少 7 芯的扁平电缆，引脚连线如下所示。

- 9 孔插头—9 孔插头引脚连线为：2-3、3-2、4-6、5-5、6-4、7-8、8-7。
- 9 孔插头—25 孔插头引脚连线为：2-2、3-3、4-6、5-7、6-20、7-5、8-4。
- 25 孔插头—25 孔插头引脚连线为：2-3、3-2、4-5、5-4、6-20、7-7、20-6。