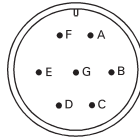


**Connettore MIL da pannello 7 poli MS3102A 16S-1P**  
**MIL panel connector 7 pins MS3102A 16S-1P**

ELETRONICHE - OUTPUT  
NPN - PNP OPEN COLLECTOR - PUSH-PULL  
(S, OC, P, OP, PP2)

Conessioni - Connections **S07 ; L07**

**TYPE "A"**



<b>PIN A</b>	0 Volt	Nero	Black
<b>PIN B</b>	Case		
<b>PIN C</b>	Out 1 (CH A)	Verde	Green
<b>PIN D</b>	Out Z (CH Z)	Blu	Blue
<b>PIN E</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN F</b>	+ Vcc	Rosso	Red
<b>PIN G</b>	N.C.		

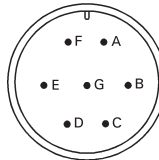
**Connettore MIL da pannello 7 poli MS3102A 16S-1P**  
**MIL panel connector 7 pins MS3102A 16S-1P**

ELETRONICHE  
PUSH-PULL - LINE DRIVER  
VERSIONE:  
MONODIREZIONALE,  
MONODIREZIONALE + ZERO,  
BIDIREZIONALE (LD2, LD)

OUTPUT  
PUSH-PULL - LINE DRIVER  
VERSION:  
UNIDIRECTIONAL,  
UNIDIRECTIONAL+ZERO,  
BIDIRECTIONAL (LD2, LD)

Conessioni - Connections **S07 ; L07**

**TYPE "B" - "H"**



PIN	MONODIR. E BIDIREZIONALE UNIDIR. AND BIDIRECTIONAL			MONODIREZIONALE + ZERO UNIDIR. + ZERO INDEX		
	Out 1 (CH A)	Verde	Green	Out 1 (CH A)	Verde	Green
<b>PIN A</b>	Out 1 (CH A)	Verde	Green	Out 1 (CH A)	Verde	Green
<b>PIN B</b>	Out 2 (CH B)	Giallo	Yellow	Out Z (CH Z)	Blu	Blue
<b>PIN C</b>	Out 1 (CH A)	Marrone	Brown	Out 1 (CH A)	Marrone	Brown
<b>PIN D</b>	+ Vcc	Rosso	Red	+ Vcc	Rosso	Red
<b>PIN E</b>	Out 2 (CH B)	Rosa	Pink	Out Z (CH Z)	Bianco	White
<b>PIN F</b>	0 Volt	Nero	Black	0 Volt	Nero	Black
<b>PIN G</b>	Case	Case	Case	Case	Case	Case

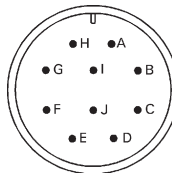
**Connettore MIL da pannello 10 poli MS3102A 18-1P**  
**MIL panel connector 10 pins MS3102A 18-1P**

ELETRONICHE  
LINE DRIVER  
VERSIONE: BIDIREZIONALE + ZERO  
(LD2 - LD)

OUTPUT  
LINE DRIVER  
VERSION: (LD - LD2)  
BIDIRECTIONAL+ZERO

Conessioni - Connections **S10 ; L10**

**TYPE "C"**



<b>PIN A</b>	Out 1 (CH A)	Verde	Green
<b>PIN B</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN C</b>	Out Z (CH Z)	Blu	Blue
<b>PIN D</b>	+ Vcc	Rosso	Red
<b>PIN E</b>	+ Vcc		
<b>PIN F</b>	0 Volt	Nero	Black
<b>PIN G</b>	Out 1 (CH A)	Marrone	Brown
<b>PIN H</b>	Out 2 (CH B)	Rosa	Pink
<b>PIN I</b>	Out Z (CH Z)	Bianco	White
<b>PIN J</b>	Case		

**Connettore da pannello 12 poli tipo "CONTACT"**  
**Panel connector 12 pins type "CONTACT"**

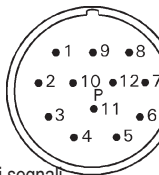
ELETRONICHE NPN - PNP - OPEN COLLECTOR - PUSH-PULL CON O SENZA PROTEZIONE AL CORTO CIRCUITO - PUSH-PULL COMPLEMENTATO - LINE DRIVER (S, OC, P, OP, PP2, LD2, LD)

NPN PNP - OPEN COLLECTOR PUSH-PULL WITH OR WITHOUT SHORT CIRCUIT PROTECTION PUSH-PULL COMPLEMENTARY LINE DRIVER OUTPUT (S, OC, P, OP, PP2, LD2, LD)

Versione antioraria (standard) ed oraria (a richiesta), stessa assegnazione dei segnali CCW (standard) and CW (option) version same signals

Conessioni - Connections **S1 ; R1**

**TYPE "D"**



<b>PIN 1</b>	Out 2 (CH B)	Rosa	Pink
<b>PIN 2</b>	N.C.		
<b>PIN 3</b>	Out Z (CH Z)	Blu	Blue
<b>PIN 4</b>	Out Z (CH Z)	Bianco	White
<b>PIN 5</b>	Out 1 (CH A)	Verde	Green
<b>PIN 6</b>	Out 1 (CH A)	Marrone	Brown
<b>PIN 7</b>	N.C.		
<b>PIN 8</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN 9</b>	Case		
<b>PIN 10</b>	0 Volt	Nero	Black
<b>PIN 11</b>	N.C.		
<b>PIN 12</b>	+ Vcc	Rosso	Red

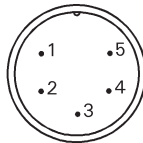
**Connettore da pannello 5 poli tipo "LUMBERG"**  
**Panel connector 5 pins type "LUMBERG"**

ELETRONICHE: (S, OC, P, OP, PP2)  
NPN - PNP - OPEN COLLECTOR  
PUSH-PULL CON O SENZA  
PROTEZIONE AL CORTO CIRCUITO

OUTPUT: (S, OC, P, OP, PP2)  
NPN PNP - OPEN COLLECTOR  
PUSH-PULL WITH OR WITHOUT  
SHORT CIRCUIT PROTECTION

Conessioni - Connections **S05 ; L05**

**TYPE "E"**



<b>PIN 1</b>	0 Volt	Nero	Black
<b>PIN 2</b>	+ Vcc	Rosso	Red
<b>PIN 3</b>	Out 1 (CH A)	Verde	Green
<b>PIN 4</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN 5</b>	Out Z (CH Z)	Blu	Blue

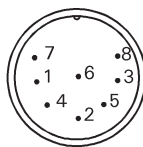
**Connettore da pannello 8 poli tipo "LUMBERG"**  
**Panel connector 8 pins type "LUMBERG"**

ELETRONICHE:  
LINE DRIVER (LD2, LD)  
VERSIONE: BIDIREZIONALE + ZERO

OUTPUT:  
LINE DRIVER VERSION  
BIDIRECTIONAL+ZERO

Conessioni - Connections **S08 ; L08**

**TYPE "F"**



<b>PIN 1</b>	0 Volt	Nero	Black
<b>PIN 2</b>	+ Vcc	Rosso	Red
<b>PIN 3</b>	Out 1 (CH A)	Verde	Green
<b>PIN 4</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN 5</b>	Out 1 (CH A)	Marrone	Brown
<b>PIN 6</b>	Out 2 (CH B)	Rosa	Pink
<b>PIN 7</b>	Out Z (CH Z)	Blu	Blue
<b>PIN 8</b>	Out Z (CH Z)	Bianco	White

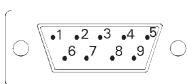
**Connettore da pannello DB 9 poli**  
**Panel connector DB 9 pins**

ELETRONICHE:  
NPN - PNP OPEN COLLECTOR -  
PUSH-PULL CON O  
SENZA PROTEZIONE AL CORTO  
CIRCUITO - LINE DRIVER  
(S, OC, P, OP, PP2, LD2, LD)

OUTPUT:  
NPN - PNP - OPEN COLLECTOR  
PUSH-PULL WITH OR WITHOUT  
SHORT CIRCUIT PROTECTION  
LINE DRIVER  
(S, OC, P, OP, PP2, LD2, LD)

Conessioni - Connections **D09**

**TYPE "G"**



<b>PIN 1</b>	0 Volt	Nero	Black
<b>PIN 2</b>	+ Vcc	Rosso	Red
<b>PIN 3</b>	Out 1 (CH A)	Verde	Green
<b>PIN 4</b>	Out 2 (CH B)	Giallo	Yellow
<b>PIN 5</b>	Out 1 (CH A)	Marrone	Brown
<b>PIN 6</b>	Out 2 (CH B)	Rosa	Pink
<b>PIN 7</b>	Out Z (CH Z)	Blu	Blue
<b>PIN 8</b>	Out Z (CH Z)	Bianco	White
<b>PIN 9</b>	N.C.		

I valori sono validi all'interno dell'intervallo di frequenza e di temperatura definito per ogni singolo prodotto  
The values are valid inner the interval of frequency and temperature defined for every single product

Si richiede cavo schermato 80% min.; Screened cable shielded 80% min is requested.

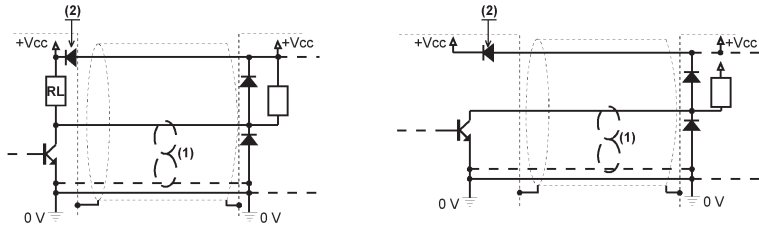
Vcc = tensione di alimentazione; voltage supply  
Vc out = tensione di uscita; output voltage  
Ic out = corrente di uscita; output current  
RL = resistenza di carico interna; load resistance

(1) Protezione contro inversione di polarità non disponibile con tensione di alimentazione uguale a 5 Vcc e 5/30Vcc  
(1) Reverse polarity protection not available with 5 Vdc and 5/30 Vdc voltage supply.

(2) Per versione TI44/TK25 si ha RL= 3,3 K per Vcc=11/30 V  
(2) Version TI44/TK25: RL= 3,3 K for Vcc=11/30 V

V <sub>cc</sub> (V)	RL (k ) (2)
5 (1)	0,68
11÷30	4,7

**S = NPN OC = NPN Open collector**



Lunghezza cavo max 6 mt a 50 kHz - Max. length of cable 6 m at 50 KHz  
Tensione di alimentazione: 5 - 11÷30 Vcc ove possibile - Voltage supply: Vcc 5 - 11÷30 where available

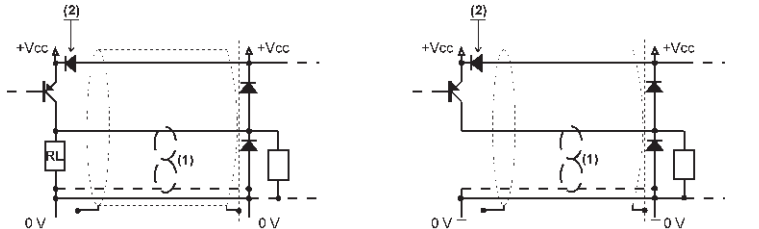
**NPN**

I out	V out	
	Logic "Low"	Logic "High"
≤50mA	≤0,6 V	=Vcc

**OC**

I out	V out	
	Logic "Low"	Logic "High"
≤50mA	≤0,6 V	open collector

**P = PNP OP = PNP Open collector**



Lunghezza cavo max 6 mt a 50 kHz - Max. length of cable 6 m at 50 KHz  
Tensione di alimentazione: 5 - 11÷30 Vcc ove possibile - Voltage supply: Vcc 5 - 11÷30 where available

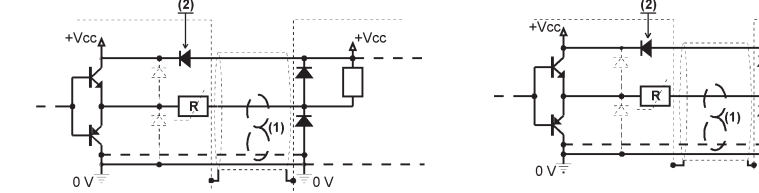
**P**

I out	V out	
	Logic "Low"	Logic "High"
≤50mA	0 V	Vcc -2V

**OP**

I out	V out	
	Logic "Low"	Logic "High"
≤50mA	open collector	Vcc -2V

**PP2 = Push-pull con protezione attiva al corto circuito  
PP2 = Push-pull with short circuit active protection**



Lunghezza cavo max 6 mt a 50 kHz - Max. length of cable 6 m at 50 KHz  
Tensione di alimentazione: 5 - 11÷30 Vcc ove possibile - Voltage supply: Vcc 5 - 11÷30 where available

**PP**

I out	V out	
	Logic "Low"	Logic "High"
≤50mA	≤1 V	=Vcc -2V

**PP2**

I out	V out	
	Logic "Low"	Logic "High"
≤35mA	≤ 1,5V	=Vcc -2V

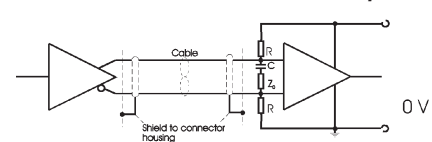
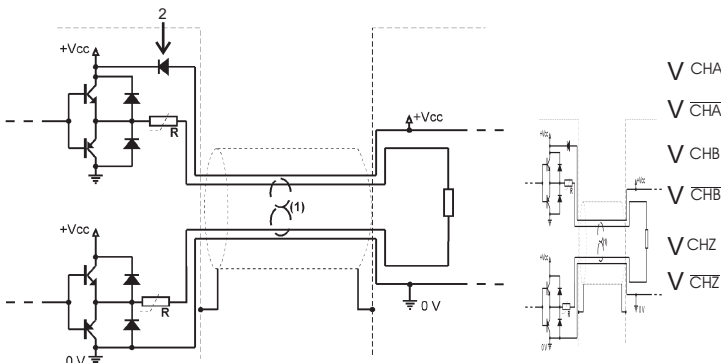
**LD2**

I out	V out	
	Logic "Low"	Logic "High"
≤20mA	≤ 0,5V	=Vcc -2V

**NOTA:**Le elettroniche LD2-1130 e PP2-1130 sono compatibili con lo standard HTTL  
**NOTE:** The output LD2-1130 and PP2-1130 are standard HTTL compatible

**LD2 = Line Driver con protezione attiva al corto circuito  
LD2 = Line Driver with short circuit active protection**

**LD = Line Driver senza protezione al corto circuito  
LD = Line Driver without short circuit protection**



Valori suggeriti per tensione di alimentazione 5 Vcc: C= 10nF - Zo = 150Ohm - R = 4,7 kW  
Line driver usato:  
- Alimentazione 5 Vcc o 24-5 Vcc: 26LS31 - I out = 20 mA max  
- Alimentazione 11 - 30 Vcc  
Line receiver raccomandato, rispettivamente: 26LS32  
Lunghezza cavo max 100 m a 100 kHz

Suggested value for 5 Vdc voltage supply: C = 10 nF - Zo = 150 Ohm - R = 4K7 Ohm  
Used line driver:  
Power supply 5 Vdc or 24-5 Vdc: 26LS31 I OUT = 20 mA max  
Power supply 11 - 30 Vdc  
Recommended line receiver respectively: 26LS32  
Maximum cable length: 100m at 100 KHz

La TEKEL Instruments S.r.l. al fine di migliorare i propri prodotti si riserva di modificarne le caratteristiche senza preavviso.  
To improve one's products The TEKEL Instruments S.r.l. reserves a right to modify the characteristics of them without notice.