

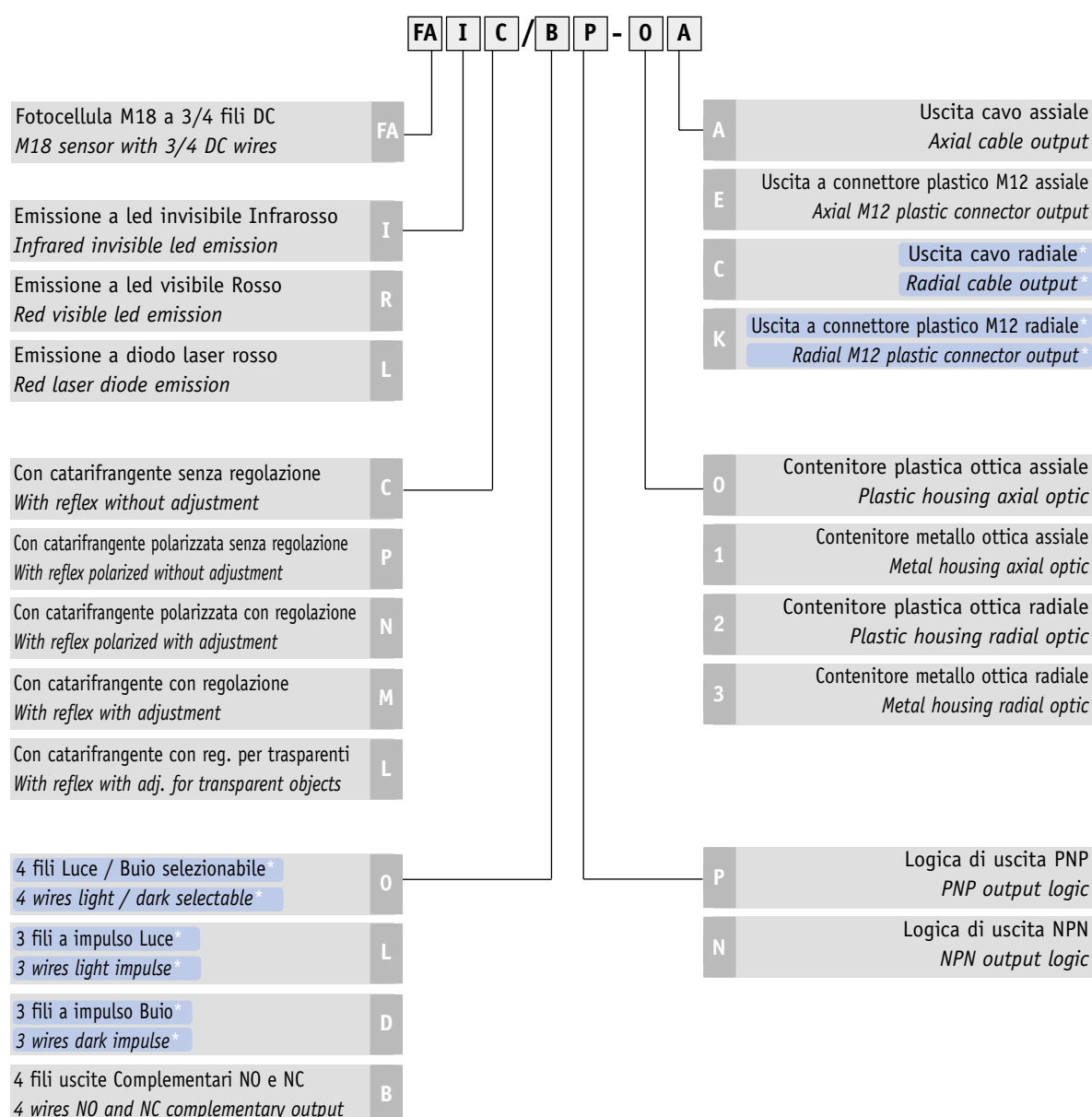
Riflessione a catarifrangente - Retro-reflective

I sensori a emissione infrarossa hanno una portata più elevata ma, non essendo polarizzati, potrebbero non intercettare correttamente gli ostacoli con superficie lucida e speculare. In questi casi si consiglia pertanto di usare la versione a emissione a luce rossa polarizzata. Una specifica versione, a luce rossa, dotata di ottica speciale e di circuito ricevente ad alta stabilità termica, è in grado di intercettare con sicurezza ostacoli trasparenti, quali ad es: bottiglie vuote in vetro o plastica, fogli di plastica trasparente o lastre di vetro.

The sensors with infrared emission have a higher reading distance but, since they are not polarized, could not correctly detect obstacles with shining or mirror surfaces.

In these cases, it is advisable to use the version with polarized red light emission.

There is a specific red light version, equipped with a special optic and receiving circuit with high thermo stability, able to reliably detect transparent objects such as empty glass or plastic bottles, transparent plastic or glass sheets.



Funzioni usate per comporre codici di prodotti speciali di classe C
Functions are used to create Class C special products codes

Specifiche modelli emissione a led - Led emission models specifications

	Emissione Infrarossa <i>Infrared emission</i>		Polarizzato/ <i>Polarized</i> emissione rossa/ <i>red emission</i>		Letture trasparente <i>Transparent objects reading</i> emissione rossa <i>red emission</i>
Modelli/Models	FAIC/**_** (1)	FAIM/**_** (1)	FARP/**_** (1)	FARN/**_** (1)	FARL*/**_** (2)
Distanza di rilevazione nominale <i>Nominal sensing distance</i>	4 m		3 m assiale/ <i>axial</i> 2m radiale/ <i>radial</i>		1 m
Emissione/ <i>Emission</i>	Infrarosso/ <i>Infrared</i> (880 nm)		Rosso/ <i>Red</i> (660 nm)		
Corsa differenziale/ <i>Differential travel</i>	≤ 10%				
Ripetibilità/ <i>Repeat accuracy</i>	5%				
Tensione alimentazione <i>Operating voltage</i>	10-30 Vc.c./ <i>Vd.c.</i>				
Ondulazione residua/ <i>Ripple</i>	≤ 10%				
Corrente assorbita <i>No load supply current</i>	30 mA				
Corrente di uscita/ <i>Load current</i>	100 mA				
Corrente di perdita/ <i>Leakage current</i>	≤10 µA				
Caduta di tensione in uscita <i>Output voltage drop</i>	2 Vmax. I _L =100mA				
Tipo uscita/ <i>Output type</i>	NPN o PNP, uscita/ <i>output</i> Q/Qnot o/ <i>or</i> LON/DON selezionabile/ <i>selectable</i> (modello speciale/ <i>special model</i>)				
Frequenza di commutazione <i>Switching frequency</i>	250 Hz				
Ritardo alla disponibilità <i>Time delay before availability</i>	200 ms				
Protezione elettriche alimentazione <i>Supply electrical protections</i>	Inversione di polarità, sovratensioni impulsive <i>Polarity reversal, transient</i>				
Protezione elettriche uscita <i>Protection electrical output</i>	Cortocircuito (autoripristinante)/ <i>Short circuit (autoreset)</i> Overvoltage				
Regolazione di sensibilità <i>Sensitivity adjustment</i>	No	Sì/Yes Trimmer	No	Sì/Yes Trimmer	Sì/Yes Trimmer
Limiti di temperatura operativa <i>Operative temperature range</i>	-25°... +70° (senza condensa/ <i>without freeze</i>)				
Deriva termica/ <i>Temperature drift</i>	10% Sr				
Temperatura di immagazzinamento <i>Storage temperature</i>	-55°... +80°				
Compatibilità elettromagnetica <i>EMC</i>	Accordo/ <i>According to</i> EN50082-2; 1995; EN60647-5-2; 1999 Accordo/ <i>According to</i> EN50081-1; 1993				
Interferenza alla luce esterna <i>Interference external light</i>	5000 lux (lampada ad incandescenza/ <i>incandescence lamp</i>) 10000 lux (luce solare/ <i>sunligh</i>)				
Grado di protezione <i>Protection degree</i>	IP 67 (EN60529)				
Indicatori LED/ <i>LED indicators</i>	Giallo/ <i>Yellow</i> (Stato luce/ <i>Light state</i>) o (stato dell'uscita nelle versioni speciali Lon/Don/ status of the Lon/Don output in special versions)				
Materiale contenitore <i>Housing material</i>	PBT (Plastico/ <i>Plastic</i>)/Ottone nichelato- <i>Nicked plated brass</i> (Metallico/ <i>Metallic</i>)/ PC (passacavo/ <i>cable exit</i>)				
Materiale ottica/ <i>Optic material</i>	PC		PMMA		PC
Coppia serraggio/ <i>Tightening torque</i>	40 nm				
Peso (appros.)/ <i>Weight (approx)</i>	0.10kg (Plastico/ <i>Plastic</i>); 0.12kg (Metallico/ <i>Metal</i>)				

(1) Con riflettore RL 110/With RL 110 reflector

(2) Con riflettore RL 113G o RL 116 /With RL 113G or RL 116 reflector

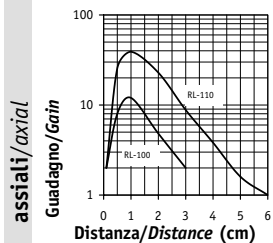


Curve caratteristiche modelli a catarifrangente

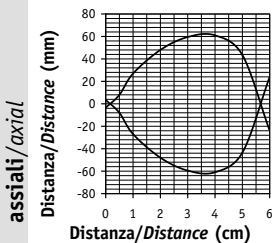
Features diagrams of reflex models

Modelli/Models: FAIC/**_** FAIM/**_**

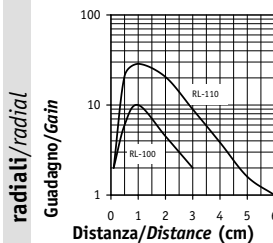
■ Eccesso di Guadagno
■ Excess Gain



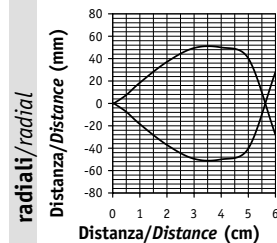
■ Disassamento parallelo
■ Parallel displacement



■ Eccesso di Guadagno
■ Excess Gain

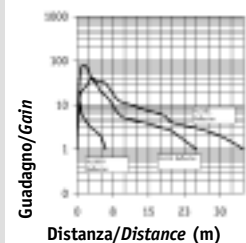


■ Disassamento parallelo
■ Parallel displacement

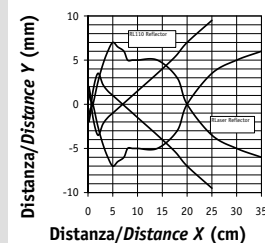


Modelli/Models: FALN/**_**

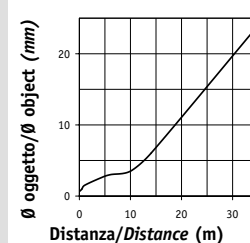
■ Eccesso di Guadagno
■ Excess Gain



■ Disassamento parallelo
■ Parallel displacement

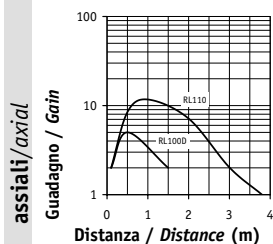


■ Minimo oggetto rilevabile
■ Minimum detectable object

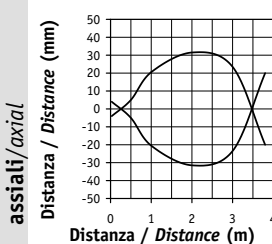


Modelli/Models: FARP/**_** FARN/**_**

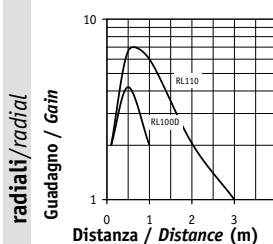
■ Eccesso di Guadagno
■ Excess Gain



■ Disassamento parallelo
■ Parallel displacement



■ Eccesso di Guadagno
■ Excess Gain

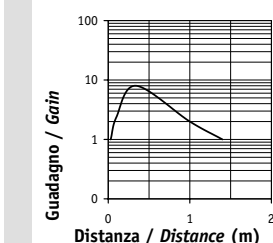


■ Disassamento parallelo
■ Parallel displacement

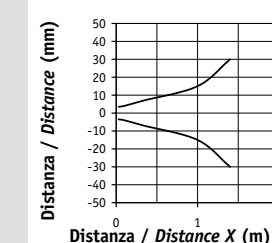


Modelli/Models: FARL/**_**

■ Eccesso di Guadagno
■ Excess Gain

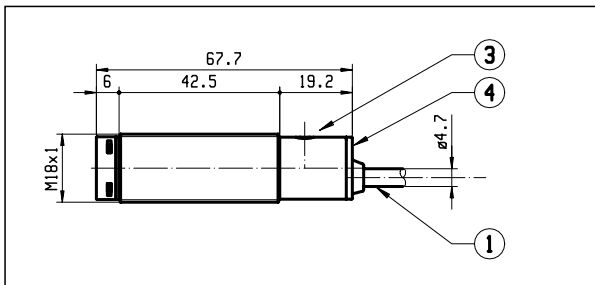


■ Disassamento parallelo
■ Parallel displacement

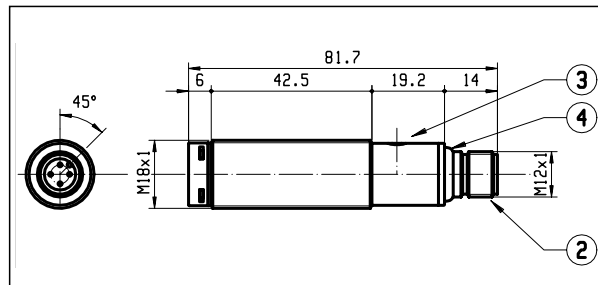


DIMENSIONI MODELLI A LED - LED MODELS DIMENSIONS

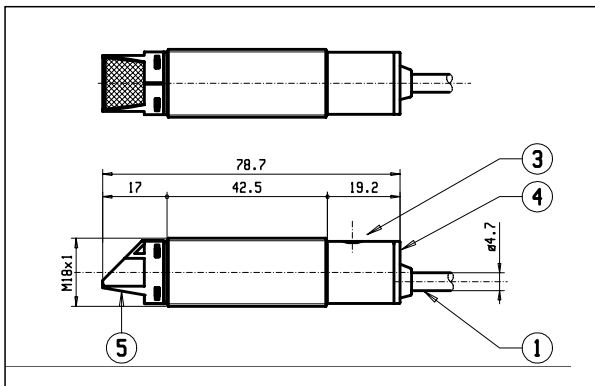
Versione a ottica assiale e cavo assiale
Axial optic axial cable version



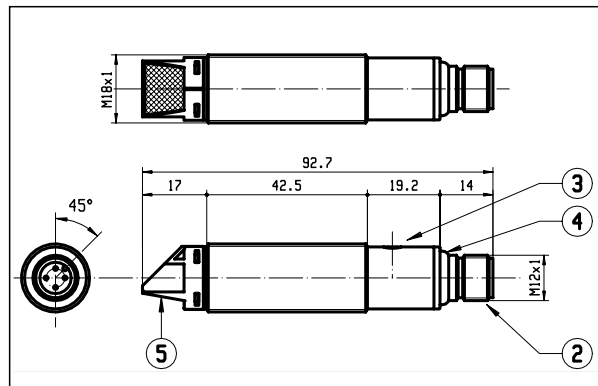
Versione a cavo assiale e connettore assiale
Axial optic axial connector version



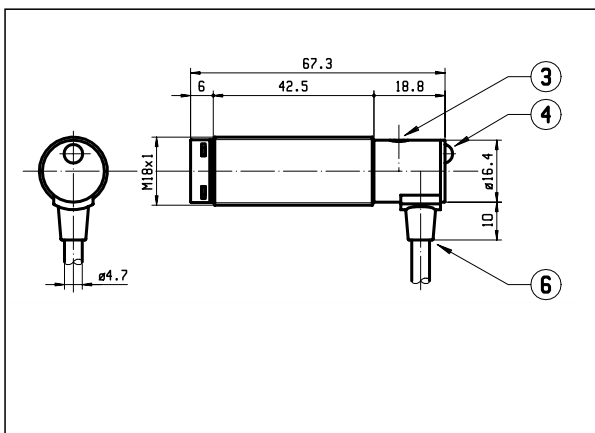
Versione a ottica radiale e cavo assiale
Radial optic axial cable version



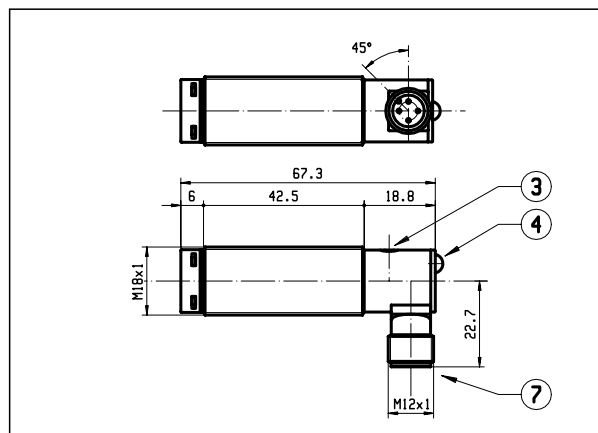
Versione a ottica radiale e connettore assiale
Radial optic axial connector version



Versione speciale a cavo radiale
Special radial cable version



Versione speciale a connettore radiale
Special radial connector version

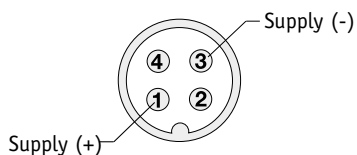


- ① Uscita cavo assiale/*Axial cable exit*
- ② Connettore plastico assiale M12/*Axial M12 plastic connector*
- ③ Trimmer per la regolazione di sensibilità/*Trimmer for sensitivity adjustment*
- ④ Indicatori led/*Led indicator*
- ⑤ Asse ottica radiale/*Radial optic axis*
- ⑥ Uscita cavo radiale/*Radial cable exit*
- ⑦ Connettore radiale M12/M12 *radial connector*

SCHEMI ELETTRICI DELLE CONNESSIONI - ELECTRICAL DIAGRAMS OF THE CONNECTIONS

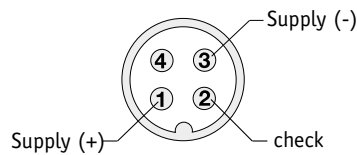
Uscita connettore - Connector output

M12



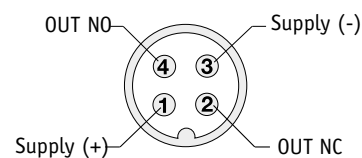
Proiettori senza check
Emitters without check

M12



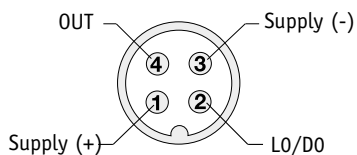
Proiettori con check
Emitters with check

M12



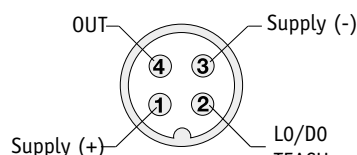
Modelli/Models FA/B*****
Tasteggio diretto/Diffuse reflection
Polarizzata/Polarized
Ricevitore/Receiver

M12



Modelli/Models FA/O*****
Tasteggio diretto/Diffuse reflection
Polarizzata/Polarized
Ricevitore/Receiver

M12



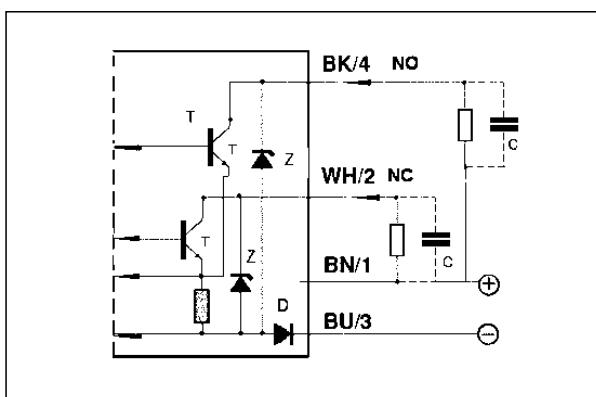
Modelli/Models FAL*/O***
Tasteggio diretto/Diffuse reflection
Polarizzata/Polarized

CONNESSIONI - WIRING DIAGRAMS

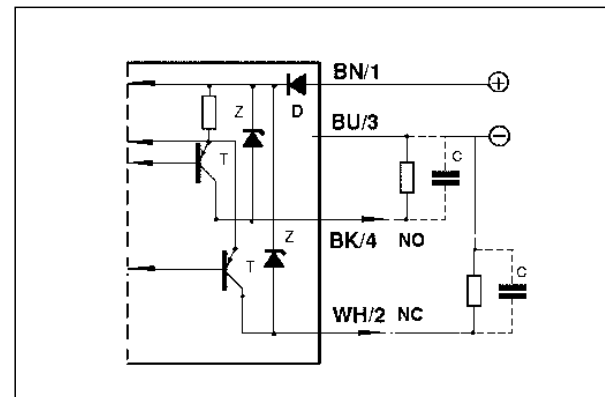
Complementary Q/Qnot output

Complementary Q/Qnot output

NPN uscita/output



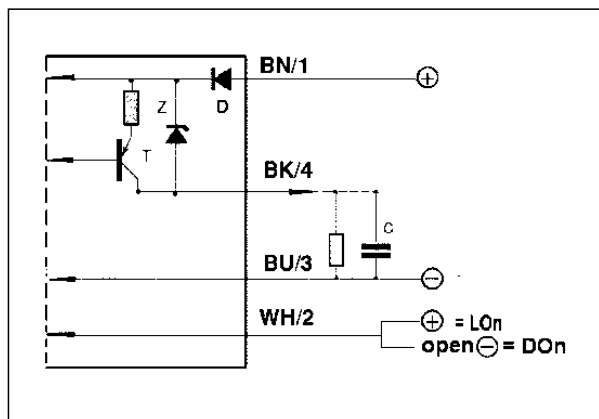
PNP uscita/output



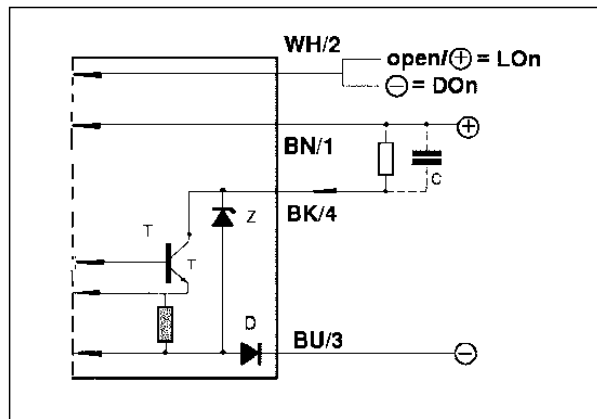
Uscita Lon/Don selezionabile per modelli a led e ricevitore laser

Lon/Don selectable output for LED models and laser receiver

PNP uscita/output



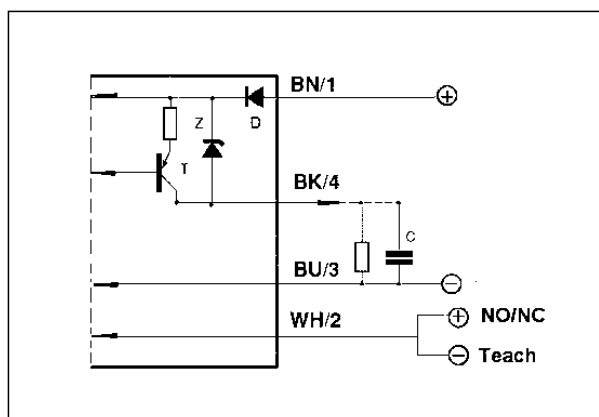
NPN uscita/output



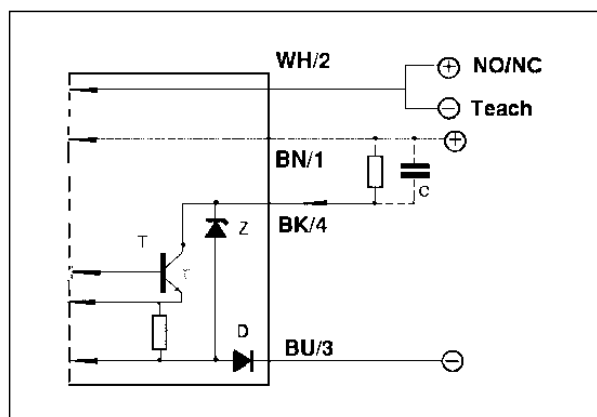
Uscita Lon/Don selezionabile per modelli a diodo laser

Lon/Don selectable output for Laser diode models

PNP uscita/output



NPN uscita/output



Proiettori con check/Emitter with check

