

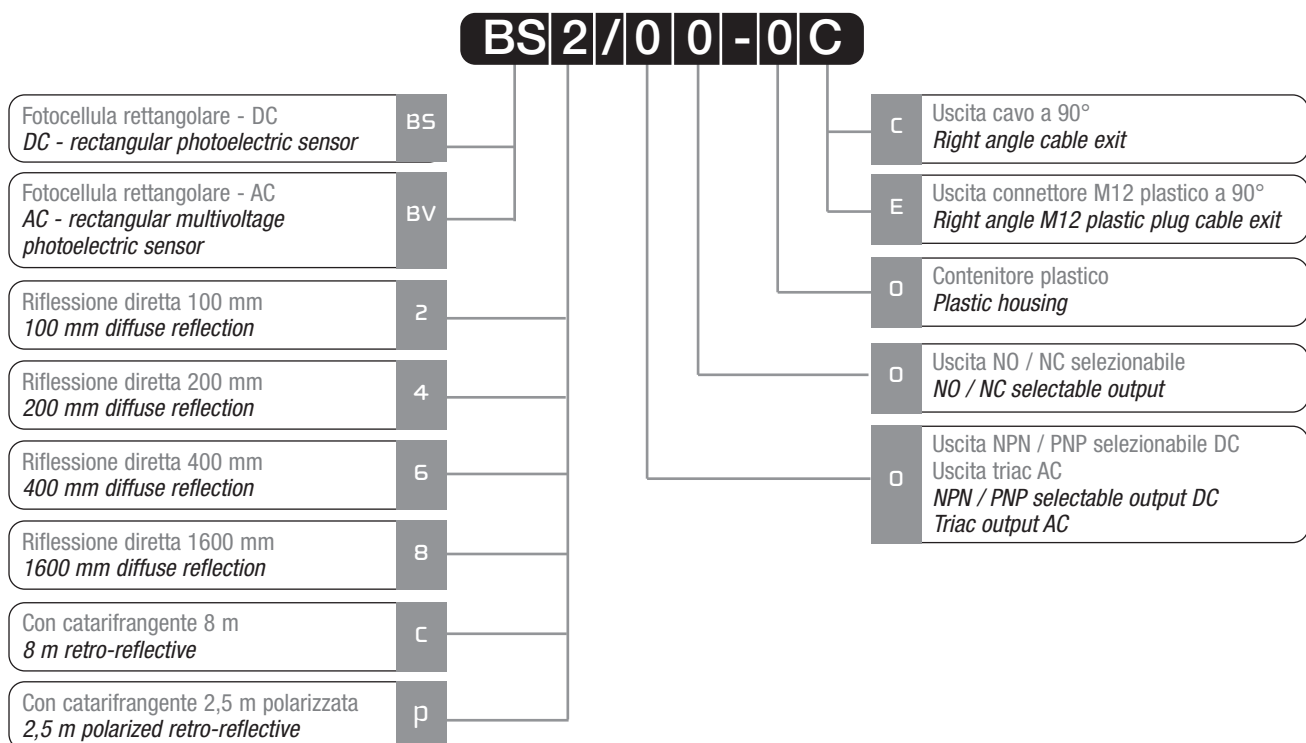
Fotocellule rettangolari con uscita  
DECOUT® - DC o AC serie BS-BV  
Rectangular photoelectric sensors  
DECOUT® - DC or AC BS-BV series



### Caratteristiche principali Main features

- > Vasta gamma di modelli: riflessione diretta, catarifrangente, polarizzata
- > *Wide range of models: diffuse, retro-reflective, polarized*
- > Uscita multifunzionale DECOUT® e possibilità di collegamento logico (modelli DC)
- > *Multifunctional DECOUT® output and logic connection possibilities (DC types)*
- > Multitensione 20-253 Vac e uscita TRIAC commutabile NO/NC (modelli AC)
- > *Multivoltage 20-253 Vac and TRIAC output with NO/NC selectable (AC types)*
- > Regolazione di sensibilità
- > *Sensitivity adjustment*
- > Elevate distanze di rilevazioni
- > *High sensing range*
- > Uscita cavo standard o connettore M12
- > *Standard cable exit or M12 plug exit*
- > LED indicatore di stato
- > *LED status indicator*
- > Grado di protezione IP65
- > *IP65 protection degree*
- > Completamente resinate
- > *Completely filled with of resin*
- > Approvazioni: CE
- > *Approvals: CE*

### Descrizione del codice - Code structure



### Modelli disponibili - Available models

Funzione <i>Model</i>	Portata <i>Distance</i>	Uscita <i>Exit</i>	DC - DECOU <sup>®</sup> <i>DECOU<sup>®</sup> - DC</i>	AC - TRIAC <i>AC - TRIAC</i>
Tasteggio diretto <i>Diffuse reflection</i>	100 mm	Cavo / <i>Cable</i>	BS2/00-0C	BV2/00-0C
		M12	BS2/00-0E	BV2/00-0E
	200 mm	Cavo / <i>Cable</i>	BS4/00-0C	BV4/00-0C
		M12	BS4/00-0E	BV4/00-0E
	400 mm	Cavo / <i>Cable</i>	BS6/00-0C	BV6/00-0C
		M12	BS6/00-0E	BV6/00-0E
1600 mm	Cavo / <i>Cable</i>	BS8/00-0C	BV8/00-0C	
	M12	BS8/00-0E	BV8/00-0E	
Catarifrangente <i>Retroreflective</i>	8 m	Cavo / <i>Cable</i>	BSC/00-0C	BVC/00-0C
		M12	BSC/00-0E	BVC/00-0E
Polarizzata <i>Polarized</i>	2,5 m	Cavo / <i>Cable</i>	BSP/00-0C	BVP/00-0C
		M12	BSP/00-0E	BVP/00-0E

### Specifiche (In accordo con IEC EN 60947-5-2) - Specifications (According to IEC EN 60947-5-2)

Modelli / Models	BS2/00-0*	BS4/00-0*	BS6/00-0*	BS8/00-0*	BSC/00-0*	BSP/00-0*	BV2/00-0*	BV4/00-0*	BV6/00-0*	BV8/00-0*	BVC/00-0*	BVP/00-0*
Tipo / Type	Riflessione diretta Diffuse reflection				Catarifrangente Retro-reflective		Riflessione diretta Diffuse reflection				Catarifrangente Retro-reflective	
	Standard				Standard	Polarizzata Polarized	Standard				Standard	Polarizzata Polarized
Distanza di rilevazione nominale (Sn) Nominal sensing distance (Sn)	100 mm <sup>(1)</sup>	200 mm <sup>(1)</sup>	400 mm <sup>(2)</sup>	1600 mm <sup>(2)</sup>	8 m <sup>(3)</sup>	2,5 m <sup>(3)</sup>	100 mm <sup>(1)</sup>	200 mm <sup>(1)</sup>	400 mm <sup>(2)</sup>	1600 mm <sup>(2)</sup>	8 m <sup>(3)</sup>	2,5 m <sup>(3)</sup>
Emissione Emission	Infrarosso / Infrared (880 nm)					Rosso / Red (660 nm)	Infrarosso / Infrared (880 nm)					Rosso / Red (660 nm)
Tolleranza / Tolerance	+15/-5% Sn											
Corsa differenziale Differential travel	5%				10%		5%				10%	
Ripetibilità Repeat accuracy	5%											
Tensione di alimentazione Operating voltage	10 - 30 Vdc						20 - 253 Vac / 50-60 Hz					
Ondulazione residua / Ripple	10 % max.						-					
Corrente assorbita No-load supply current	25 mA						1,5 W					
Corrente di uscita Load current	100 mA						5 mA / 300 m ARMS					
Corrente di picco non ripetitiva	-						6 A (Ton=10ms)					
Corrente di perdita Leakage current	≤ 10 µA						1,5 m ARMS max. (Alimentazione / Supply V=253Vac)					
Caduta di tensione in uscita Voltage drop	1,2 V max.						2,5 V max.					
Tipo uscita / Output type	DECOUT® (NPN, PNP, NO, NC selezionabili / selectable)						TRIAC (NO/NC selezionabili / selectable)					
Frequenza di commutazione Switching frequency	80 Hz						25 Hz					
Ritardo alla disponibilità Time delay before availability	200 ms											
Protezioni elettriche alimentazione Supply electrical protections	Sovratensioni impulsive / Transient											
Protezioni elettriche uscita Output electrical protections	Al cortocircuito (autoripristinante) Short circuit (autoreset)						-					
Limiti di temperatura Temperature range	-25°C....+70°C (Senza condensa / Without freeze)				-25°C....+60°C		-25°C....+70°C (Senza condensa / Without freeze)				-25°C....+60°C	
Deriva termica / Thermal drift	≥ 10% Sr											
Interferenza luce esterna Interference to external light	3000 lux (lampada ad incandescenza), 10000 lux (luce solare) 3000 lux (incandescent lamp), 10000 lux (sunlight)											
Grado di protezione Protection degree	IP65 (EN60529) <sup>(3)</sup>											
Indicatori LED / LED indicators	Rosso (uscita disattivata) / Red (output energized)											
Materiali contenitori Housing material	ABS polietilene (passacavo) / polyethylene (cable exit)											
Materiali ottica / Lenses material	Plexiglass											
Peso (appross.) / Weight (approx.)	130 g (50 g staffa / mounting bracket ST01)											

<sup>(1)</sup> Con foglio di carta bianca opaca 100x100 mm / With 100x100 mm white matt paper

<sup>(2)</sup> Con foglio di carta bianca opaca 200x200 mm / With 200x200 mm white matt paper

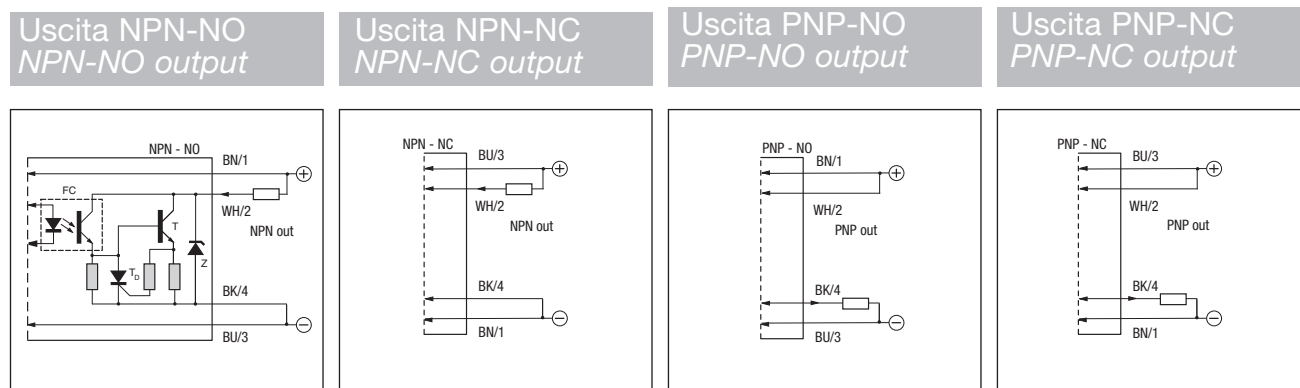
<sup>(3)</sup> Con catarifrangente Ø80 mm (RL110 fornito separatamente) / With standard reflector Ø80 mm (RL110 supplied separately)

<sup>(4)</sup> Protezione garantita solo con il cavo a connettore correttamente montato / Protection guaranteed only with plug cable well mounted

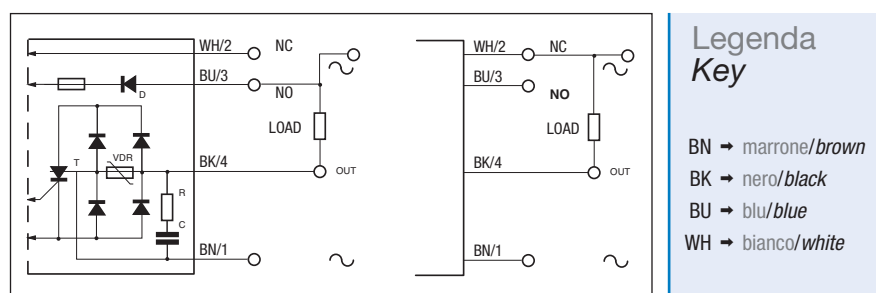
## BS-BV SERIES - RECTANGULAR PHOTOELECTRIC SENSORS

### Schemi elettrici delle connessioni - Electrical diagrams of the connections

> BS\*/00-0\* uscita / output **DECOUT**<sup>®</sup> (1)



> BV\*/00-0\* uscita / output **TRIAC** (2)



(1) In caso di carico misto resistivo e capacitivo, la massima capacità ammissibile  $C = 0,2 \mu F$ , per tensioni e correnti di uscite massime.

*In case of combined load, resistive and capacitive, the maximum admissible capacity  $C = 0,2 \mu F$ , for maximum output voltage and current.*

(2) I modelli della serie BV con alimentazione in alternata dispongono della selezione elettronica dello stato di uscita del sensore attraverso le opportune connessioni dei cavi di collegamento. / Through proper wiring for the connection cable BV models in AC permit one to select the output state.

#### Stato uscita / output state **NO**:

**BLU / BLUE** → alimentazione / power supply

**BIANCO / WHITE** → non collegato (isolare su morsetto) / disconnected (isolate on a terminal)

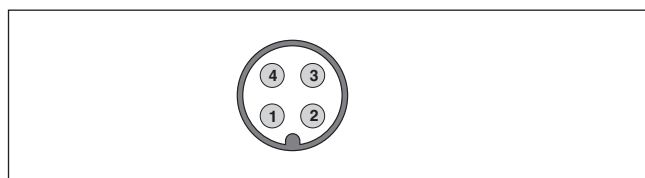
#### Stato uscita / output state **NC**:

**BIANCO / WHITE** → alimentazione / power supply

**BLU / BLUE** → non collegato (isolare su morsetto) / disconnected (isolate on a terminal)

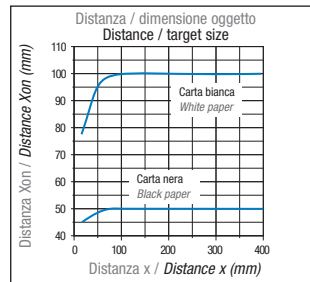
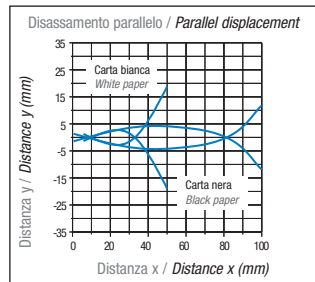
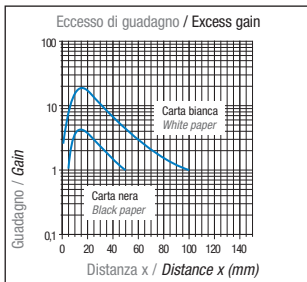
### Connettore - Plug

M12

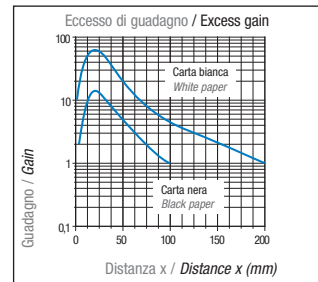


### Curva di risposta - Response diagram

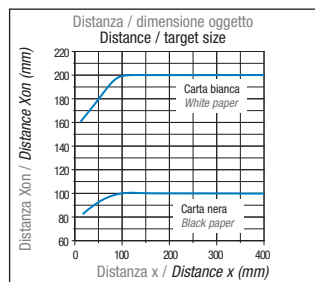
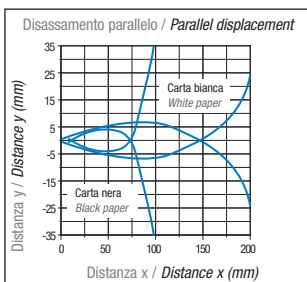
B\*2/00-0\*



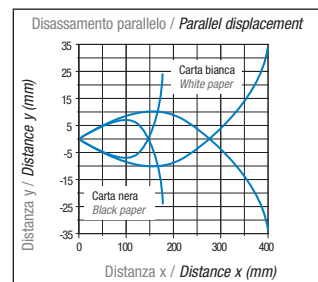
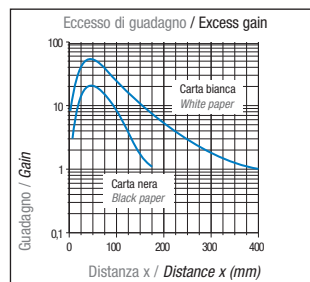
B\*4/00-0\*



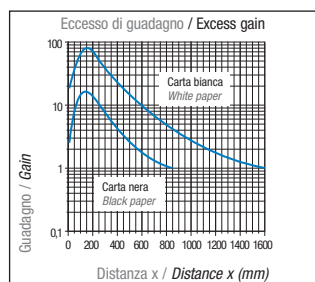
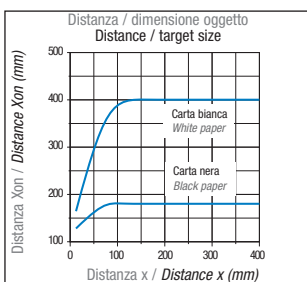
B\*4/00-0\*



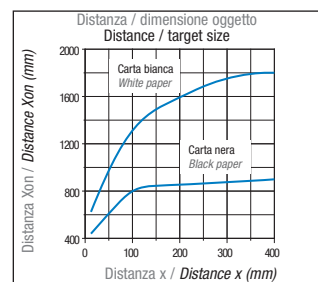
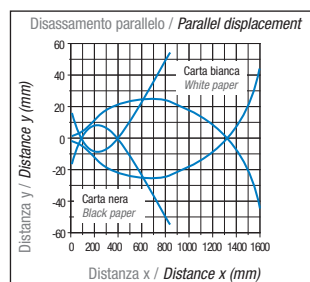
B\*6/00-0\*



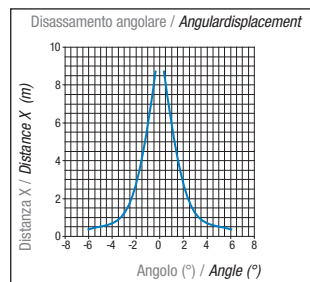
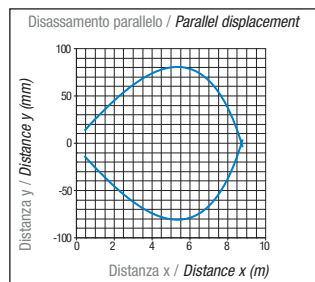
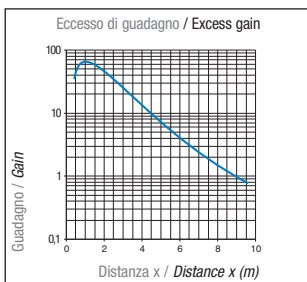
B\*6/00-0\*



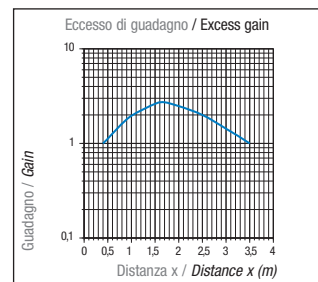
B\*8/00-0\*



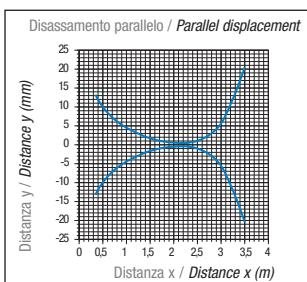
B\*C/00-0\*



B\*P/00-0\*

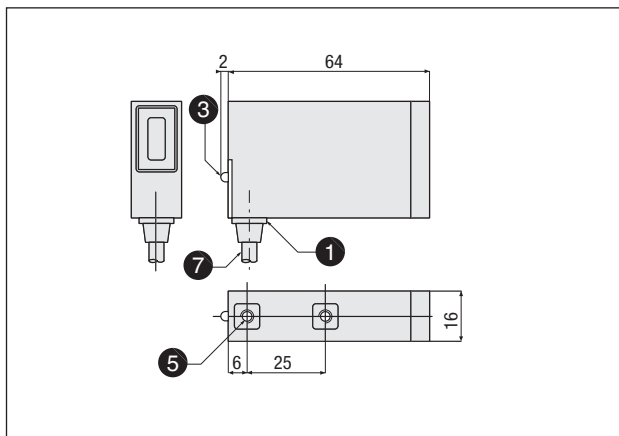


B\*P/00-0\*

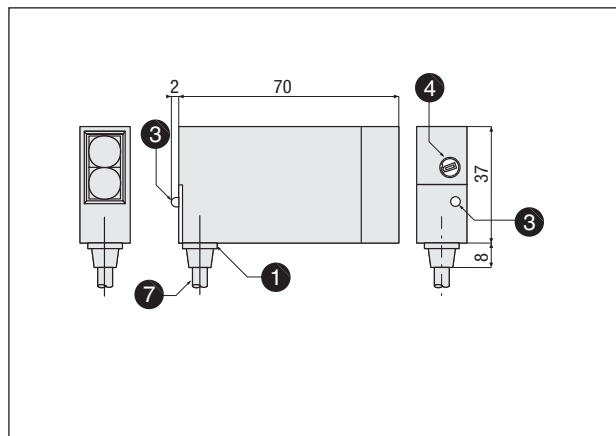


### Dimensioni - Dimensions

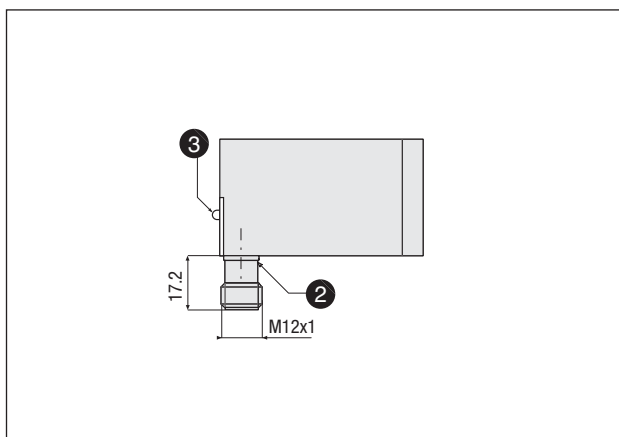
B\*2/00-0C - B\*4/00-0C - B\*6/00-0C - B\*8/00-0C



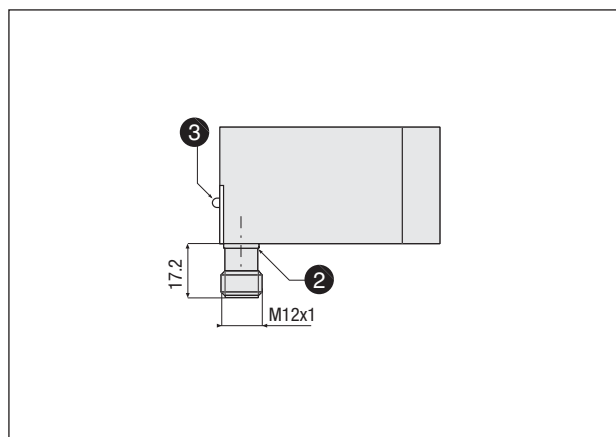
B\*C/00-0C - B\*P/00-0C



B\*2/00-0E - B\*4/00-0E - B\*6/00-0E - B\*8/00-0E



B\*C/00-0E - B\*P/00-0E



### Legenda / Key

- ① Uscita cavo standard a 90°  
Standard right angle cable exit
- ② Uscita connettore M12 plastico  
M12 plastic plug cable exit
- ③ LED rosso (stato uscita)  
Red LED (output state)
- ④ Trimmer di regolazione della sensibilità (1 giro)  
Sensitivity adjustment trimmer (1 turn)
- ⑤ Fori per viti di fissaggio M4  
Holes for M4 mounting screws
- ⑥ Staffa di montaggio ST01 (in dotazione)  
ST01 mounting bracket (supplied)
- ⑦ Cavo 4x0,34 mm<sup>2</sup>, Ø4,7 mm, PVC, 2 m  
Cable 4x0,34 mm<sup>2</sup>, Ø4,7 mm, PVC, 2 m

Connettori serie - CD Accessori serie ST  
Plugs CD series - Accessories ST series