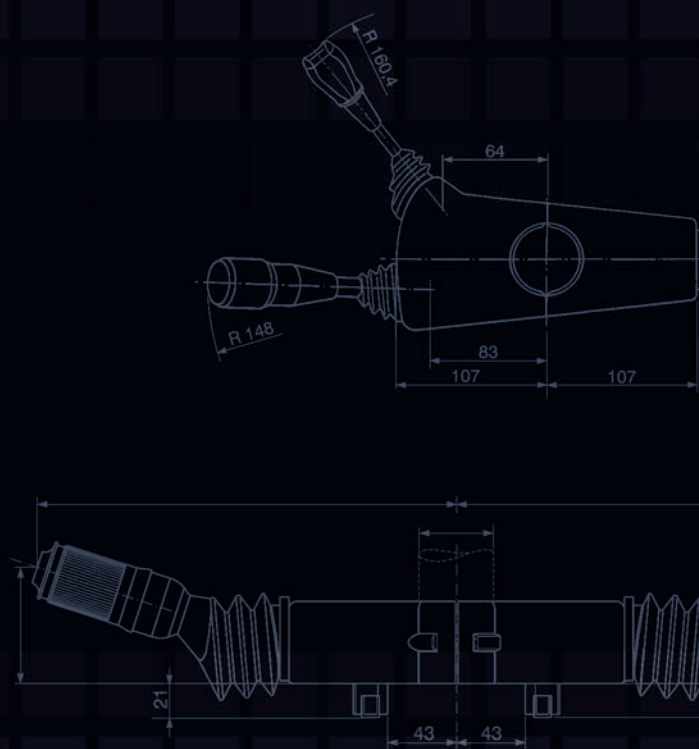




01

DEVIOGUIDA INVERSORI COMANDI TERGICRISTALLO RETARDER CRUISE CONTROL

LIGHT SWITCHES
SHIFTERS
WINDSHIELD WIPER
SWITCHES
RETARDER
CRUISE CONTROL





DEVIAGUIDA INVERSORI COMANDO TERGICRISTALLO

LIGHT SWITCHES SHIFTERS WINDSHIELD WIPER SWITCHES

ITALIANO



SERIE "106 - 109" pag. 217 - 218

Serie di devioGUIDA utilizzate principalmente su autocarri di gamma media.



SERIE "246" pag. 219 - 222

Serie di devioGUIDA utilizzate principalmente su autocarri di gamma medio-pesante.



SERIE "134" pag. 63

DevioGUIDA dotati di contenitore di protezione realizzato in poliammide. Dotati di staffa interna metallica e piolo di bloccaggio per facilitare il fissaggio a diversi diametri del piantone guida. La leva metallica di comando, disponibile con pomello di due diversi styling, può essere realizzata con diverse lunghezze e inclinazioni per adattarsi alle specifiche esigenze del cliente. Alcune versioni sono dotate di interruttore supplementare, posto nella parte inferiore dell'apparecchio, per l'accensione luci esterne.

Funzioni devioGUIDA: indicatore di direzione, lampo luci, abbagliante, anabbagliante e avvisatore acustico + interruttore per accensione luci esterne (solo alcune versioni). Devono essere abbinati ad un interruttore per l'accensione luci esterne.

Durata elettromeccanica: **devioGUIDA n° 50.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "180" pag. 59 - 62

DevioGUIDA o inversori semplici, robusti, dotati di contenitore realizzato in lega di alluminio verniciata nera autoportante per facilitare il fissaggio su piantone guida. Disponibili contenitori di protezione adatti a diversi diametri del piantone. La leva metallica del comando può essere realizzata con diverse lunghezze e inclinazioni per adattarsi alle specifiche esigenze del cliente.

Funzioni devioGUIDA: indicatore di direzione, lampo luci, abbagliante, anabbagliante e avvisatore acustico. Devono essere abbinati ad un interruttore per l'accensione luci esterne.

Funzioni inversore: marcia avanti-indietro-lenta-veloce.

Durata elettromeccanica: **devioGUIDA n° 50.000 cicli, inversore n° 100.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "170" pag. 27 - 29

DevioGUIDA o inversori di dimensioni molto compatte per ridurre al minimo gli ingombri. Progettati per essere applicati direttamente sul cruscotto utilizzando il contenitore che protegge i contatti elettrici da polvere e umidità.

Particolarmente adatti per l'impiego su piccole macchine agricole/movimento terra permettono di concentrare in poco spazio i comandi essenziali del veicolo.

Funzioni devioGUIDA: indicatore di direzione, lampo luci, abbagliante, anabbagliante e avvisatore acustico. Devono essere abbinati ad un interruttore per l'accensione luci esterne.

Funzioni inversore: marcia avanti-indietro-lenta-veloce.

Durata elettromeccanica: **devioGUIDA n° 50.000 cicli, Inversore n° 100.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione o, per la versione O1.199.000, utilizzando un connettore COBO specifico.



SERIE "190" pag. 30 - 47 - 53 - 58 - 71 - 75 - 77 - 79 - 82 - 84 - 85 - 87 - 90

Devioguida, inversori o comandi tergicristallo molto compatti per ridurre al minimo gli ingombri. Progettati per essere applicati direttamente sul cruscotto o, le versioni con staffa, anche su piantone guida.

I devioguida sono dotati di pomello rotativo per l'accensione luci esterne. Completano la serie "comandi tergicristallo" con medesimo styling e caratteristiche di fissaggio. Sono forniti di contenitore che protegge i contatti elettrici da polvere e umidità e facilita il montaggio.

L'utilizzo di questi dispositivi permette di razionalizzare la disposizione dei comandi del veicolo e, abbinando le numerose versioni disponibili, si possono soddisfare tutte le esigenze.

Funzioni devioguida: indicatore di direzione, lampo luci, abbagliante, anabbagliante, avvisatore acustico e accensione luci (pomello rotativo).

Funzioni inversore: marcia avanti-indietro-lenta-veloce.

Funzioni tergicristallo: 1a-2a velocità pompa lava-vetro.

Durata elettromeccanica: **devioguida n° 50.000 cicli, inversori n° 100.000 cicli, tergicristallo n° 50.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "203" pag. 50 - 65 - 73

Inversori con contatti elettrici "frontali in aria" adatti al comando diretto di elettrovalvole fino a 2,5A con diodo di soppressione arco.

Robusti meccanicamente mantengono, comunque, ingombri ridotti e sono prodotti in versione per montaggio sul cruscotto o al piantone sterzo.

Funzioni inversore: marcia avanti-indietro-lenta-veloce ed eventuale blocco meccanico per impedire l'azionamento accidentale del dispositivo.

Testati per numero manovre funzionali: **inversori 750.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "281" pag. 69

Devioguida + inversori dotati di contenitore di protezione realizzato in poliammide. Dotati di staffa interna metallica e piolo di bloccaggio per facilitare il fissaggio a piantoni guida di diverso diametro. Le leve metalliche di comando possono essere realizzate con diverse lunghezze e inclinazioni per adattarsi alle specifiche esigenze del cliente. Alcune versioni sono dotate di interruttore supplementare, posto nella parte inferiore dell'apparecchio, per l'accensione luci esterne.

Funzioni devioguida: indicatore di direzione, lampo luci, abbagliante, anabbagliante e avvisatore acustico+ interruttore per accensione. Devono essere abbinati ad un interruttore per l'accensione luci esterne (solo alcune versioni).

Funzioni inversore: marcia avanti-neutro-indietro-lenta-veloce.

Durata elettromeccanica: **devioguida n° 50.000 cicli, inversore n° 750.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "250" pag. 105

Gruppo integrato devioguida + inversore con contenitore specifico per montaggio su piantone sterzo con diametro 52 mm. L'apparecchio, composto da un devioguida della serie "170" e da un inversore inseriti in un solo contenitore e già cablati, raggruppa ed ottimizza i comandi delle funzioni necessarie a macchine semoventi.

Funzioni devioguida: indicatore di direzione, lampo luci, abbagliante, anabbagliante e avvisatore acustico. Devono essere abbinati ad un interruttore per l'accensione luci esterne.

Funzioni inversore: marcia avanti-indietro.

Durata elettromeccanica: **devioguida n° 50.000 cicli, inversore n° 750.000 cicli.**



SERIE "240" pag. 99 - 118 - 124 - 127 - 135 - 139 - 143 - 150 - 152 - 154 - 161 - 163

Gamma molto varia di dispositivi particolarmente robusti adatti all'utilizzo come: devioguida, inversore, comando tergicristalli e variatore di velocità. Progettati per soddisfare ogni esigenza di fissaggio, direttamente su cruscotto, su piantone guida, montaggio verticale o orizzontale. Disponibili con diverse tecnologie di contatti elettrici:

Contatti frontali in aria: per comando diretto di dispositivi con carichi fino a 8-10A

Microswitch: per utilizzatori con carichi fino a 1A.

Per interfaccia con centraline elettroniche disponibili versioni con contatti dorati per evitare problemi di ossidazione.

Funzioni devioguida: indicatore di direzione, lampo luci, abbagliante, anabbagliante, avvisatore acustico e accensione luci (pomello rotativo).

Funzioni inversore/variante di velocità: marcia avanti-indietro-lenta-veloce- 1a-2a-3a-4a.

Funzioni tergicristallo: 1a-2a velocità pompa lava-vetro.

Durata elettromeccanica: **devioguida n° 100.000 cicli, inversori/variatori di velocità n° 1.000.000 cicli, tergicristallo n° 50.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "226" pag. 111

Variatore di velocità con contatti elettrici a microswitch per comando centraline elettroniche con carichi fino a 20mA.

L'apparecchio può essere usato singolarmente o abbinato ad altri comandi in un unico contenitore.

Funzioni variatore di velocità: 0 -1a-2a-3a-4a.

Durata elettromeccanica: **variante di velocità n° 1.000.000 cicli.**



SERIE "2000" pag. 165 - 172 - 178

Gamma di devioguida e inversori/ variatori di velocità progettata per impieghi particolarmente gravosi per macchine operanti in condizioni ambientali critiche. Le leve di comando resistono a trazioni superiori a 90Kg (160 lbs.). Il contenitore di protezione, realizzato in poliammide ad alta resistenza, per garantire una tenuta IP67 della connessione elettrica, è dotato, nella parte inferiore, di un connettore integrato per connettori "DEUTSCH (serie DT)". I contatti elettrici dell'inversore sono del tipo "in aria a contatto frontale" e permettono di comandare direttamente solenoidi fino a 2,5A con diodo di soppressione arco. Disponibili versioni con la funzione variatore di velocità ottenuta ruotando il pomello posto sulla leva principale del comando.

Funzioni devioguida: indicatore di direzione, lampo luci, abbagliante, anabbagliante, avvisatore acustico e accensione luci (pomello rotativo).

Funzioni inversore/variatore di velocità: marcia avanti-indietro-lenta-veloce.

Funzioni tergicristallo: 1a-2a velocità pompa lava-vetro.

Durata elettromeccanica: **devioguida n° 100.000 cicli, inversori/variatori di velocità n° 1.000.000 cicli, tergicristallo n° 50.000 cicli.**



SERIE "316" pag. 112

Inversori con contatti elettrici a microswitch per fissaggio su piantone guida. Meccanicamente molto robusti. Le leve resistono a trazioni fino a 40Kg.. Particolarmente adatti per pilotare centraline elettroniche. La maggior parte delle versioni deve essere montata all'interno di protezioni che proteggano il dispositivo da acqua e polvere. Alcune versioni sono già dotate di propria protezione contro gli agenti atmosferici.

Funzioni inversore: marcia avanti-neutro-indietro e blocco meccanico contro l'azionamento accidentale.

Durata elettromeccanica: **inversori n° 1.000.000 cicli.**

Cablaggio di collegamento disponibile con diversi tipi di connessione.



SERIE "622" - "866" - "776" - "962" - "987" pag. 106 - 107 - 108 - 109 - 110

Gamma di inversori e/o variatori di velocità con tecnologia "HALL EFFECT" e "REED" progettati per pilotare centraline elettroniche con carichi inferiori a 100mA. La tecnologia utilizzata, senza alcun contatto di tipo meccanico, consente di garantire una vita media del dispositivo superiore ai **3.000.000 di cicli.**

Le funzioni base, marcia avanti/indietro, variatore velocità, freno di parcheggio possono essere personalizzate secondo le specifiche esigenze.

L'apparecchio può essere utilizzato singolarmente oppure integrato con altri comandi in un unico contenitore.

ENGLISH



"106 - 109" SERIES pag. 217 - 218

Switches series used on medium trucks.



"246" SERIES pag. 219 - 222

Switches series used on medium-heavy trucks.



"134" SERIES pag. 63

Switches provided with polyamide protection container, an interior metal bracket and locking peg to make the fixing on central steering columns of different diameters easier. The metallic lever, available with knob of two different types of styling, can be made with different lengths and inclinations to meet customer needs. Some versions are provided with an additional switch, placed in the lower part of the instrument.

Switches functions: direction indicators, flashing, low and high beam and horn plus switch for exterior lights ignition (only some versions). They must be coupled with an exterior breaker for the external lights ignition.

Electromechanical life: **switches n° 50.000 cycles.**

Connection wiring harness available with different types of connectors.



"180" SERIES pag. 59 - 62

Easy switches or shifters, rugged, provided with black aluminium alloy to make the fixing on the central steering column easier. Protection containers are suitable for steering columns of different diameters. The metallic lever can be made with different lengths and inclinations to meet customer needs.

Switches functions: direction indicators, flashing, low and high beam and horn. They must be coupled with an exterior breaker for the exterior lights ignition.

Shifters functions: forward-reverse-slow-fast motion.

Electromechanical life: **switches n° 50.000 cycles, shifters n° 100.000 cycles.**

Connection wiring harness available with different types of connectors.



"170" SERIES pag. 27 - 29

Compact switches or shifters to reduce overall dimensions. Designed for application on the dashboard, using the container as a protection for the electrical contacts from dust and dampness. Particularly suitable for agricultural and earthwork vehicles, they allow to concentrate the most important controls of vehicle in a little space.

Switches functions: direction indicators, flashing, low and high beam and horn. They must be coupled with an exterior breaker for the exterior lights ignition.

Shifters functions: forward-reverse-slow-fast motion.

Electromechanical life: **switches n° 50.000 cycles, shifters n° 100.000 cycles.**

Connection wiring harness available with different types of joint or, for 01.199.000 version, using a specific Cobo connector.



"190" SERIES pag. 30 - 47 - 53 - 58 - 71 - 75 - 77 - 79 - 82 - 84 - 85 - 87 - 90

Compact switches, shifters or windshield wiper controls to reduce overall dimensions. Designed for applications on the dashboard or, for the versions with bracket, also on the steering column.

Switches are provided with a revolving knob for the external lights ignition. They complete the "windscreen wiper control" series with the same styling and locking properties. They are provided with a container used as a protection for the electrical contacts from dust and dampness, which make the assembling easier.

Using these devices, it is possible to rationalize the vehicle controls disposition to meet customer needs.

Switches functions: direction indicators, flashing, low and high beam, horn and lights ignition (revolving knob).

Shifters functions: forward-reverse-slow-fast motion.

Windshield wiper functions: 2 speed washer pump.

Electromechanical life: **switches n° 50.000 cycles, shifters n° 100.000 cycles, windshield wiper n° 50.000 cycles.**

Connection wiring harness available with different types of joint.



"203" SERIES pag. 50 - 65 - 73

Shifters with electrical "butt" contacts suitable for the direct control of electro-valves until 2,5A with arc suppression diode.

Even though rugged, they are compact to reduce overall dimensions and designed for application on the dashboard and on the steering column.

Shifters functions: forward-reverse-slow-fast motion and possible mechanic clamping to prevent the accidental starting of the device.

Electromechanical life: **shifters n° 750.000 cycles.**

Connection wiring harness available with different types of connectors.



"281" SERIES pag. 69

Switches and shifters provided with polyamide protection container and an interior metal bracket and locking peg to make the fixing on central steering columns of different diameters easier. The metallic control lever can be made with different lengths and inclinations to meet customer needs. Some versions are provided with an additional switch, placed in the lower part of the instrument, for the exterior lights ignition.

Switches functions: direction indicators, flashing, low and high beam and horn plus switch for exterior lights ignition. They must be coupled with a switch for the external lights ignition (only some versions).

Shifters functions: forward-neutral-reverse-slow-fast motion.

Electromechanical life: **switches n° 50.000 cycles, shifters n° 750.000 cycles.**

Connection wiring harness available with different types of joint.



"250" SERIES pag. 105

Switches and shifter unit with specific container for the assembling on steering columns with 52 mm diameter.

The instrument, made up of a switch "170" series and a shifter wired and placed in the same container, optimizes the function controls necessary for self-propelled vehicles.

Switches functions: direction indicators, flashing, low and high beam and horn. They must be coupled with a switch for the external lights ignition.

Shifters functions: forward-neutral motion.

Electromechanical life: **switches n° 50.000 cycles, shifters n° 750.000 cycles.**



"240" SERIES pag. 99 - 118 - 124 - 127 - 135 - 139 - 143 - 150 - 152 - 154 - 161 - 163

A broad range of rugged devices suitable for different functions: switches, shifters, windshield wipers and speed control. They are designed to satisfy every locking need, directly on the dashboard, on the steering column, horizontal or vertical fixing. They are available with different kinds of electrical contacts:

- Butt contacts: for direct control of devices with loads until 8-10A;
- Microswitch: for loads until 1A;

Some versions with gold-plated contacts are available to interface electronic pc boards, so to avoid oxidation problems.

Switches functions: direction indicators, flashing, low and high beam, horn and lights ignition (revolving knob).

Shifters functions/Speed control: forward-reverse-slow-fast motion, 1a- 2a- 3a- 4a.

Windshield wiper functions: 2 speed washer pump.

Electromechanical life: **switches n° 1.000.000 cycles, shifters/speed control n° 1.000.000 cycles, windshield wiper n° 50.000 cycles.**

Connection wiring harness available with different types of connectors.



"226" SERIES pag. 111

Speed control with microswitch electrical contacts for electronic pc boards with loads until 20mA.

The instrument can be used individually or coupled with some other controls in the same container.

Speed control functions: 0- 1a- 2a- 3a- 4a.

Electromechanical life: **speed control n° 1.000.000 cycles.**



"2000" SERIES pag. 165 - 172 - 178

Switch and shifter/speed control unit designed for particular use, especially for vehicles that work in bad conditions.

The control levers can resist to traction over 90 kg (160 lbs.). The protection container, made of high-resistance polyamide to guarantee IP67 sealing of the electrical connection, is provided with a connector for "Deutsch connectors" (DT series) in the lower part. The electrical contacts of the shifter are "butt contacts" and allow direct coordination of solenoids until 2.5 amps with arc suppression diode. Versions with speed control obtained rotating the knob placed on the main control lever are available.

Switches functions: direction indicators, flashing, low and high beam, horn and lights ignition (revolving knob).

Shifters functions/Speed control: forward-reverse-slow-fast motion, 1a- 2a- 3a- 4a.

Windshield wiper functions: 2 speed washer pump.

Electromechanical life: **switches n° 100.000 cycles, shifters/speed control n° 1.000.000 cycles, windshield wiper n° 50.000 cycles.**



"316" SERIES pag. 112

Rugged shifters with microswitch electrical contacts for the locking on the steering column. Levers can resist to traction over 40 kg. They are particularly suitable for the electrical pc boards. The majority of versions have to be assembled inside protections against water and dust. Some versions are provided with a protection against natural agents.

Shifters functions: forward-neutral-reverse motion and mechanic clamping to prevent the accidental starting.

Electromechanical life: **shifters n° 1.000.000 cycles.**

Connection wiring harness available with different types of joint.



SERIE "622" - "866" - "776" - "962" - "987" pag. 106 - 107 - 108 - 109 - 110

Shifters/Speed control unit with "HALL EFFECT" and "REED" technology designed to manage electrical pc boards with loads below 100mA. This kind of technology, without mechanical contacts, guarantees a device medium life higher than 3.000.000 cycles.

The main functions forward-reverse motion, speed control and parking brake can be changed according to customer needs.

The instrument can be used individually or coupled with some other controls in the same container.



SERIE "106 - 109" pag. 217 - 218

Serie von Lenkstockschaltern für mittlere LKW.



SERIE "246" pag. 219 - 222

Eine Serie von Lenkstockschaltern für mittlere bzw. schwere LKW



SERIE "134" pag. 63

Diese Lenkstockschalter verfügen über ein Polyamid-Gehäuse und sind mit einem inneren Befestigungsbügel sowie einem Feststellstift versehen, um die Montage an verschiedenen Lenksäulen-Durchmessern zu ermöglichen. Der Metallhebel, dessen Griff in unterschiedlichem Design zur Verfügung steht, kann in verschiedenen Längen und Anbauwinkeln angeboten werden, um allen Anforderungen gerecht zu werden. Einige Versionen sind auf der Unterseite mit einem Schalter zum Ein- bzw. Ausschalten der Aussenbeleuchtung versehen.

Funktionen: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe und Schalter ein/aus Aussenbeleuchtung (nur bei einigen Versionen).

Durchgeführter Testlauf: **50.000 Wechselzyklen.**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "180" pag. 59 - 62

Robuste Fahr- bzw. Lenkstockschalter mit selbsttragendem, schwarz lackiertem Gehäuse aus Alu-Legierung, mit Feststellstift zur leichten Montage an Lenksäulen. Gehäuse für unterschiedliche Lenksäulen-Durchmesser und Hebel mit verschiedenen Längen und Montagewinkeln stehen zur Verfügung.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe. Funktion durch separaten Schalter ein/aus für Aussenbeleuchtung.

Funktionen Fahrshalter: vorwärts-rückwärts-langsam-schnell.

Durchgeführter Testlauf Lenkstockschalter: **50.000 Wechselzyklen Fahrshalter: 100.000 Wechselzyklen.**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "170" pag. 27 - 29

Platzsparende Lenkstock- bzw. Fahrshalter in Kompaktbauweise. Das vor Staub und Feuchtigkeit schützende Gehäuse wird direkt am Armaturenbrett angeflanscht. Diese Schalter sind speziell für den Einsatz auf kleineren Landwirtschafts- bzw. Baumaschinen vorgesehen, da alle wichtigen Bedienelemente auf engem Raum konzentriert sind.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe. Funktion durch separaten Schalter ein/aus für Aussenbeleuchtung.

Funktionen Fahrshalter: vorwärts-rückwärts-langsam-schnell.

Durchgeführter Testlauf Lenkstockschalter: **50.000 Wechselzyklen Fahrshalter: 100.000 Wechselzyklen.**

Anschlusskabel mit verschiedenen Steckverbindern oder mit COBO-eigenem Stecker bei Modell 01.199.000.



SERIE "190" 30 - 47 - 53 - 58 - 71 - 75 - 77 - 79 - 82 - 84 - 85 - 87 - 90

Platzsparende Lenkstockschalter, Fahrshalter oder Scheibenwischerschalter in Kompaktbauweise, die direkt am Armaturenbrett angeflanscht werden oder an der Lenksäule angebracht werden (Versionen mit Montagebügel). Der Hebel ist mit einem Drehgriff zum Ein- oder Ausschalten der Aussenbeleuchtung versehen. Scheibenwischerschalter mit gleichem Design und Montage. Gehäuse schützt elektrische Kontakte vor Staub und Feuchtigkeit und erleichtert die Montage.

Diese Schalter erlaubt eine rationelle Anordnung der Bedienelemente des Fahrzeugs und deckt mit den zur Verfügung stehenden Versionen praktisch alle Anwendungsbereiche ab.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe und ein/aus Aussenbeleuchtung (Drehgriff).

Funktionen Fahrshalter: vorwärts-rückwärts-langsam-schnell.

Funktionen Scheibenwischerschalter: Geschw. 1 Geschw. 2 Wascher.

Durchgeführter Testlauf Lenkstockschalter: **50.000 Wechselzyklen Fahrshalter: 100.000 Wechselzyklen Scheibenwischerschalter: 50.000 Wechselzyklen.**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "203" pag. 50 - 65 - 73

Fahrschalter mit Gleitkontakten zur Ansteuerung von Elektroventilen bis 2,5A mit Suppressordiode.

Robuste Mechanik bei kompakten Abmessungen, Montage an Armaturen Brett oder Lenksäule.

Funktionen Fahrschalter: vorwärts-rückwärts-langsam-schnell mit mechanischer Sperre zur Verhinderung versehentlicher Betätigung.

Durchgeführter Testlauf Fahrschalter: **750.000 Wechselzyklen.**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "281" pag. 69

Lenkstockschalter und Fahrschalter mit Polyamid-Gehäuse. Innerer Metallbügel und Feststellstift zur Montage an Lenksäulen mit unterschiedlichen Durchmessern. Hebel in verschiedenen Längen und Anbauwinkeln verfügbar. Einige Versionen sind auf der Unterseite mit einem Schalter zum Ein- bzw. Ausschalten der Aussenbeleuchtung versehen.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe + Lichtschalter (bei einigen Versionen in Verbindung mit separatem Schalter für Aussenbeleuchtung).

Funktionen Fahrschalter: vorwärts-rückwärts-langsam-schnell.

Durchgeführter Testlauf Lenkstockschalter: **50.000 Wechselzyklen** **Fahrschalter: 750.000 Wechselzyklen**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "250" pag. 105

Integrierter Fahr- bzw. Lenkstockschalter mit Gehäuse zur Montage an Lenksäulen mit Durchmesser 52 mm. Bestehend aus einem Lenkstockschalter "Serie 170" und einem Fahrschalter (bereits verkabelt), bietet dieses Gerät optimale Bedienmöglichkeiten bei Selbstfahrern.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe (in Verbindung mit separatem Schalter für Aussenbeleuchtung).

Funktionen Fahrschalter: vorwärts-rückwärts

Durchgeführter Testlauf Lenkstockschalter: **50.000 Wechselzyklen** **Fahrschalter: 750.000 Wechselzyklen.**



SERIE "240" pag. 99 - 118 - 124 - 127 - 135 - 139 - 143 - 150 - 152 - 154 - 161 - 163

Grosse Auswahl an robusten Komponenten, die als Lenkstockschalter, Fahrschalter, Scheibenwischerschalter oder zur Geschwindigkeitsregulierung eingesetzt werden. Vielfältige Montagemöglichkeiten: direkt am Armaturen Brett, an der Lenksäule, vertical oder horizontal.

-Gleitkontakte: zur Bedienung von Komponenten bis 8-10A

-Mikroschalter: bis 1A

Für Schnittstellen mit elektronischen Steuerungen stehen Versionen mit vergoldeten Kontakten zur Verfügung, die eine Oxydation verhindern.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe und Licht ein/aus (Drehgriff).

Funktionen Fahrschalter u. Geschwindigkeitsregulierung: vorwärts-rückwärts-schnell-Hangsam 1-2-3-4

Funktionen Scheibenwischerschalter: Stufen 1 und 2 und Wascher

Durchgeführter Testlauf Lenkstockschalter: **100.000 Wechselzyklen** - **Fahrschalter u. Geschwindigkeitsregulierung: 1.000.000 Wechselzyklen**

Scheibenwischerschalter: 50.000 Wechselzyklen.

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "226" pag. 111

Geschwindigkeitsregulierer mit Mikroschaltern für elektronische Steuerungen bis 20mA. Das Gerät kann sowohl einzeln als auch zusammen mit anderen Bedienelementen in einem einzigen Gehäuse eingesetzt werden.

Funktionen Geschwindigkeitsregulierer: Stufen 0-1-2-3-4

Durchgeführter Testlauf Geschwindigkeitsregulierer: **1.000.000 Wechselzyklen.**



SERIE "2000" pag. 165 - 172 - 178

Fahr- und Lenkstockschalter/Geschwindigkeitsregulierer für den Einbau auf Maschinen, die unter besonders schwierigen Bedingungen zum Einsatz kommen. Die Hebel sind bis zu 90kg belastbar. Das widerstandsfähige Polyamid-Gehäuse erreicht einen Schutzgrad von IP67 und besitzt an der Unterseite einen integrierten Deutsch-Stecker (Serie DT). Gleitkontakte ermöglichen die Ansteuerung von Elektroventilen bis 2,5A mit Suppressordiode..

Versionen mit Geschwindigkeitsregulierungs-Funktion am Drehgriff des Haupthebels stehen zur Verfügung.

Funktionen Lenkstockschalter: Blinker, Lichthupe, Fahr- bzw. Fernlicht, Hupe und ein/aus Aussenbeleuchtung (Drehgriff).

Funktionen Fahrschalter u. Geschwindigkeitsregulierung: vorwärts-rückwärts-langsam-schnell, Stufen 1-2-3-4.

Funktion Scheibenwischerschalter: Stufen 1-2, Wascher

Durchgeführter Testlauf Lenkstockschalter: **100.000 Wechselzyklen** - **Fahrschalter u. Geschwindigkeitsregulierung: 1.000.000 Wechselzyklen**

- **Scheibenwischerschalter: 50.000 Wechselzyklen.**



SERIE "316" pag. 112

Fahrschalter mit Mikroschaltern und robuster Mechanik zur Montage an der Lenksäule und besonders für elektronische Steuerungen geeignet. Die Hebel haben eine Belastbarkeit von 40kg. Dieser Schalter ist für den Einsatz in einer Kabine vorgesehen, in der er vor Wasser und Staub geschützt ist. Versionen mit entsprechendem Schutzgrad für Aussenanwendungen stehen zur Verfügung.

Funktionen Fahrschalter: vorwärts-neutral-rückwärts mit mechanischer Sperre zur Verhinderung versehentlicher Betätigung

Durchgeführter Testlauf Fahrschalter: **1.000.000 Wechselzyklen**

Anschlusskabel mit verschiedenen Steckverbindern.



SERIE "622" - "866" - "776" - "962" - "987" pag. 106 - 107 - 108 - 109 - 110

Produktreihe von Fahrschaltern und/oder Geschwindigkeitsregulierern mit **"Hall-Effekt"** und **"REED"**-Technologie für elektronische Steuerungen bis 100mA.

Die "Hall-Effekt"-Technologie, ohne mechanische Kontakte, erlaubt eine wesentlich höhere Lebensdauer mit mehr als 3.000.000 Wechselzyklen.

Die Grundfunktionen vorwärts-rückwärts, Geschwindigkeitsregulierung und Feststellbremse können je nach Anforderung kundenspezifisch gestaltet werden.

Die Technik kann einzeln verwendet werden oder mit anderen Steuerungen in einem Gehäuse untergebracht werden.

FRANÇAIS



SERIE "106 - 109" pag. 217 - 218

Famille de comandos utilisés principalement sur les camions de moyenne gamme



SERIE "246" pag. 219 - 222

Familles de comandos utilisés principalement sur les camions de gamme lourde moyen



SERIE "134" pag. 63

Comandos équipés d'un carter de protection réalisé en polyamide, d'une fixation interne métallique et d'un cran de blocage pour adapter la fixation selon les différents diamètres de colonne de direction. Le levier métallique de commande, disponible en deux styles de pommeau, peut être réalisé dans différentes longueurs et inclinaisons pour s'adapter à l'exigence spécifique de la clientèle. Il existe certaines versions équipées d'un interrupteur supplémentaire, positionné sur la partie inférieure de l'appareil, pour l'éclairage des feux extérieurs.

Fonctions du comando: indicateur de direction, appel de phares, feu de route, feu de croisement, avertisseur sonore + interrupteur pour l'éclairage des feux extérieurs (uniquement dans certaines versions). Ils doivent être couplés avec un interrupteur pour l'éclairage des feux extérieurs.

Ils sont testés pour un nombre de manœuvres fonctionnelles: **Comodo: 50.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "180" pag. 59 - 62

Comodos ou inverseurs simples, robustes, équipés d'un carter réalisé en alliage d'aluminium vernis noir pour faciliter leur fixation à la colonne de direction.

Sont disponibles des carters de protection pouvant s'adapter aux différents diamètres de colonne de direction.

Le levier métallique de commande peut être réalisé dans différentes longueurs et inclinaisons pour s'adapter à l'exigence spécifique de la clientèle.

Fonctions du comando: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore. Ils doivent être couplés avec un interrupteur pour l'éclairage des feux extérieurs

Fonctions de l'inverseur: marche avant- arrière- lente- rapide.

Ils sont testés pour un nombre de manœuvres fonctionnelles: **Comodo: 50.000 cycles, Inverseur: 100.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "170" pag. 27 - 29

Comodos ou Inverseurs de dimensions très compactes pour réduire au minimum les encombrements. Projetés pour être montés directement sur le tableau de bord en utilisant le carter qui protège les contacts électriques de la poussière et de l'humidité. Particulièrement adaptés pour l'usage sur petites machines agricole ou engins TP, permettent de concentrer, sur peu d'espace les principales commandes du véhicule.

Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore. Ils doivent être couplés avec un interrupteur pour l'éclairage des feux extérieurs.

Fonctions de l'inverseur: marche avant- arrière-lente- rapide.

Ils sont testés pour un nombre de manœuvres fonctionnelles: **Comodo: 50.000 cycles, Inverseur: 100.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion ou, pour la version O1.199.000, en utilisant un connecteur spécifique COBO.



SERIE "190" pag. 30 - 47 - 53 - 58 - 71 - 75 - 77 - 79 - 82 - 84 - 85 - 87 - 90

Comodos, inverseurs ou comodo d'essuie glace de dimensions très compactes pour réduire au minimum les encombrements.

Projetés pour être appliqués directement sur le tableau de bord, ou version avec patte, également sur colonne de direction. Les comodos sont équipés d'un bouton rotatif pour l'éclairage des feux extérieurs. Ils complètent la série « commandes d'essuie glace » avec le même style et caractéristiques de fixation. Il ont un carter qui protège les contacts électriques de la poussière et de l'humidité et facilite l'assemblage.

L'utilisation de ces dispositifs permet de rationaliser la disposition des commandes des véhicules, et en rassemblant les nombreuses versions disponibles, nous pouvons satisfaire l'ensemble des exigences de notre clientèle.

- Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore et éclairage des feux extérieurs (bouton rotatif)

- Fonctions de l'inverseur: marche avant- arrière- lente- rapide.

- Fonctions du comodo essuie glace: 2 vitesses pompe lavage pare-brise

Ils sont testés pour un nombre de manœuvres fonctionnelles: **Comodo: 50.000 cycles, Inverseurs: 100.000 cycles, Essuie glace: 50.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "203" pag. 50 - 65 - 73

Inverseur avec contacts électriques " frontal in air" adaptés à la commande directe d'électrovannes jusqu' à 2,5A avec diode de suppression d'arc. Ils sont robustes et ont des dimensions très compactes pour réduire au minimum les encombrements et il sont aussi projetés pour être montés directement sur le tableau de bord et sur la colonne de direction.

Fonctions de l'inverseur: marche avant- arrière- lente- rapide et éventuellement verrouillage mécanique pour empêcher l'actionnement accidentel du dispositif.

Ils sont testés pour un nombre de manœuvres fonctionnelles: **Inverseurs: 750.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "281" pag. 69

Comodo + inverseurs équipés d'un carter de protection réalisés en polyamide, d'une fixation interne métallique et d'un cran de blocage pour faciliter la fixation selon les différents diamètres de colonne de direction. Les leviers métalliques de commande, peuvent être réalisés de différentes longueurs et inclinaisons pour s'adapter aux exigences de la clientèle. Il y a des versions avec un interrupteur supplémentaire, positionné dans la partie inférieure de l'appareil, pour l'éclairage des feux extérieurs.

Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore + interrupteur pour l'éclairage des feux extérieurs. Ils doivent être couplés avec un interrupteur pour l'éclairage des feux extérieurs (seulement quelques versions).

Fonctions de l'inverseur: marche avant- arrière- lente- rapide.

Il sont testés pour un nombre de manœuvres fonctionnelles: **Comodos: 50.000 cycles, Inverseurs: 750.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "250" pag. 105

Ensemble comodo + inverseurs avec carter spécifique pour montage sur lune colonne de direction de diamètre de 52 mm; L'appareil, composé d'un comodo de la série « 170 » et d'un inverseur intégrés dans un même et unique carter et câblés, regroupe et optimise les commandes des fonctions nécessaires au véhicules automoteurs.

Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore. Ils doivent être assemblés avec un interrupteur pour l'éclairage des feux extérieurs.

Fonctions de l'inverseur: marche avant- arrière.

Il sont testés pour un nombre de manœuvres fonctionnelles: **Comodos: 50.000 cycles, Inverseurs: 750.000 cycles.**



SERIE "240" pag. 99 - 118 - 124 - 127 - 135 - 139 - 143 - 150 - 152 - 154 - 161 - 163

Gamme très variée de dispositifs robustes particulièrement adaptés tels que comodos, inverseurs, comodos d'essuie glace et variateurs de vitesse. Projetés pour être montés directement sur le tableau de bord ou sur la colonne de direction avec montage horizontal et vertical. Ils sont disponibles selon différentes technologies de contacts électriques:

Contacts frontal en l'air: pour le command direct de dispositifs avec charges jusqu'à 8-10A

Microswitch: pour utilisations avec charges jusqu'à 1A

Pour interface avec centrales électroniques il y a des versions avec les contacts dorés pour éviter les problèmes d'oxydation.

Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore et éclairage des feux extérieurs (Bouton rotatif).

Fonctions de l'inverseur/Variateur de vitesse: marche avant- arrière- lente- rapide 1ère, 2ième, 3ème, 4ème vitesse

Fonctions de l'essuie glace: 1ère et 2ème vitesse pompe lavage pare-brise

Il sont testés pour un nombre de manœuvres fonctionnelles: **Comodos 1 00.000 cycles, Inverseurs//Variateur de vitesse: 1.000.000 cycles, Essuie glace: 50.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "226" pag. 111

Variateur de vitesse avec des contacts électriques à microswitch pour commander une centrale électronique avec des charges allant jusqu'à 20mA. L'appareil peut être utilisé seul ou couplé avec d'autres commandes dans un seul et unique carter.

- Fonctions du Variateur de vitesse: 1ère, 2ème, 3ème, 4ème

Il sont testés pour un nombre de manœuvres fonctionnelles: **Variateur de vitesse: 1.000.000 cycles**



SERIE "2000" pag. 165 - 172 - 178

Gamme de comodos et inverseurs/Variateurs de vitesse projetés pour des utilisations particulièrement sévères sur des machines fonctionnant dans des conditions d'environnement très critiques. Les leviers de commande résistent à tractions supérieures à 90 kg (160 livres.). Le carter de protection, réalisé en polyamide à haut résistance, pour garantir un degré d'étanchéité IP67 au niveau de la connexion électrique, est équipé, dans sa partie inférieure, d'un connecteur intégré adapté aux connecteurs « DEUTSCH » (série DT). Les contacts électriques de l'inverseur sont « en l'air avec contact frontal » et permettent de commander directement des solénoïdes jusqu'à 2,5 ampères avec diode de suppression d'arc.

Ils sont disponibles en versions avec fonction variateur de vitesse obtenu en tournant le bouton positionné sur le levier principal de commande.

Fonctions du comodo: indicateur de direction, appel de phare, feu de route, feu de croisement, avertisseur sonore et éclairage des feux extérieurs (Bouton rotatif).

Fonctions de l'inverseur/Variateur de vitesse: marche avant- arrière- lente- rapide

Fonctions de l'essuie glace: 1ère et 2ème vitesse pompe lavage pare-brise

Il sont testés pour un nombre de manœuvres fonctionnelles: **Comodos: 100.000 cycles, Inverseurs//Variateur vitesse: 1.000.000 cycles, Essuie glace: 50.000 cycles.**



SERIE "316" pag. 112

Inverseurs avec contacts électriques à microswitch pour fixation sur des colonnes direction mécaniquement très robustes. Les leviers résistent à des tractions jusqu'à 40kg. Particulièrement adaptés pour commander des centrales électroniques. La plupart des versions doivent être montées dans un système de protection du dispositif contre l'eau et la poussière. Il existe des versions équipées d'un système de protection contre les agents atmosphériques.

Fonctions de l'inverseur: marche avant- point mort- marche arrière et verrouillage mécanique contre une manœuvre accidentelle.

Il sont testés pour n° de manœuvres fonctionnelles: **Inverseurs n° 1.000.000 cycles.**

Faisceau de connexion disponible avec différents types de connexion.



SERIE "622" - "866" - "776" - "962" - "987" pag. 106 - 107 - 108 - 109 - 110

Gamme d'inverseurs et/ou variateurs de vitesse avec technologie "EFFET HALL" et "REED" projetés pour commander des centrales électroniques avec charges inférieures à 100mA. La technologie utilisée, sans aucun contact de type mécanique, garantit une moyenne vie du dispositif supérieure à 3.000.000 de cycles.

Fonctions de base: marche avant- arrière, variateur de vitesse, frein de parking peuvent être personnalisées selon les exigences de la clientèle.

L'appareil peut être utilisé seul ou intégré avec d'autres commandes dans un seul et unique carter.



SERIE "106 - 109" pag. 217 - 218

Série de interruptores de coluna de direção utilizada principalmente em caminhões de médio porte.



SERIE "246" pag. 219 - 222

Série de interruptores de coluna de direção utilizada principalmente em caminhões de porte médio-pesado.



SERIE "134" pag. 63

Interruptores de coluna de direção com caixa de proteção em poliamida. Dotada de flange interna metálica e pino de bloqueio para facilitar a fixação a diversos diâmetros de coluna de direção. A alavanca metálica de comando, disponível com manopla de dois diversos estilos, pode ser produzida com diversos comprimentos e inclinações para adaptar-se às especificações exigidas pelo cliente. Algumas versões são dotadas de interruptor suplementar, colocado na parte inferior do aparelho, para o acendimento das luzes externas.

Funções do interruptor da coluna de direção: indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico + interruptor para acendimento das luzes externas (somente algumas versões).

Nas demais deve ser adicionado um interruptor para o acendimento das luzes externas.

São testadas por número de manobras funcionais: **Interruptor de coluna de direção n. 50.000 ciclos**

Chicote de interligação disponível com diversos tipos de conexão.



SERIE "180" pag. 59 - 62

Interruptor de coluna de direção ou inversor simples, robusto, dotado de caixa feita em liga de alumínio envernizada preta autoportante para facilitar a fixação na coluna de direção. Disponível cobertura de proteção adaptada a diversos diâmetros da coluna de direção. A alavanca metálica do comando pode ser produzida com diversos tamanhos e inclinações para adaptar-se às diversas especificações exigidas pelo cliente.

Funções do interruptor da coluna de direção: indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico. Deve ser adicionado um interruptor para o acendimento das luzes externas.

Função inversora: marcha avante atrás lenta - rápida.

São testadas pelo seguinte número de operações: **Interruptor de Coluna de direção n° 50.000, Inversor n° 100.000 ciclos**

Chicote de interligação disponível com diversos tipos de conexão.



SERIE "170" pag. 27 - 29

Interruptor de coluna de direção ou inversor de dimensão muito compacta para reduzir ao mínimo o espaço utilizado. Projetado para ser aplicado diretamente no painel de instrumentos utilizando o gabinete que protege os contatos elétricos do pó e umidade.

Particularmente adaptado para o uso em pequenas máquinas agrícolas/movimento terra permitindo a concentração, em pouco espaço, os comandos essenciais do veículo.

Funções Interruptor de coluna de direção: Indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico. Deve ser acrescentado um interruptor para o acendimento das luzes externas.

Funções do inversor: Marcha avante atrás lenta - rápida.

São testadas para o seguinte n° de manobras funcionais: **Interruptor de coluna de direção n. 50.000 ciclos, Inversor n. 100.000 ciclos**

Chicote de interligação disponível com diversos tipos de conexão ou para versão 01.199.000, utilizando um conector COBO específico.



SERIE "190" pag. 30 - 47 - 53 - 58 - 71 - 75 - 77 - 79 - 82 - 84 - 85 - 87 - 90

Interruptor de coluna de direção, inversores ou interruptores limpa pára-brisa muito compactos para reduzir ao mínimo o espaço utilizado. Projetados para serem montados diretamente sobre painel de instrumentos ou, as versões com flange, também sobre a coluna de direção.

Os interruptores de colunas de direção são dotados de manopla rotativa para o acendimento de luzes externas. Completam a série "comandos limpa pára-brisa" com o mesmo estilo e características de fixação. Podem ser fornecidos com gabinete que protege os contatos elétricos do pó e umidade e facilita a montagem. O uso destes dispositivos permite racionalizar a disposição dos comandos do veículo e, juntando as inúmeras versões disponíveis é possível satisfazer inúmeras exigências.

Funções do Interruptor de coluna de direção: Indicador de direção sinal de luz, luz baixa, luz alta e indicador acústico e acendimento de luzes (manopla rotativa)

Funções do inversor: Marcha avante atrás lenta - rápida.

Funções interruptor limpa pára brisa: 1° -2° velocidades, bomba esguicho d'água.

Testadas por número de manobras funcionais: **Interruptor de coluna de direção n° 50.000, Inversores n° 100.00 ciclos, Interruptor limpa pára brisa n° 50.000 ciclos**

Chicote de interligação disponível com diversos tipos de conexão.



SERIE "203" pag. 50 - 65 - 73

Inversor com contatos elétricos "frontais abertos" adaptados ao comando de eletro-válvula até 2,5 Amp com diodo de supressão de arco elétrico. Robustos mecanicamente mantendo, contudo apresentando dimensões reduzidas e são produzidos com versão para montagem no painel ou na coluna de direção.

Funções do inversor: Marcha avante - atrás - lenta - rápida com eventual bloqueio mecânico para impedir o acionamento acidental do dispositivo. Testados para um número de manobras funcionais: **Inversor 750.000 ciclos.**
Chicote de interligação disponível com diversos tipos de conexão.



SERIE "281" pag. 69

Interruptor de coluna de direção + inversor dotados de gabinete de proteção feito em poliamida. Dotados de flange interna metálica e pino de bloqueio para facilitar a fixação em colunas de direções de diversos diâmetros. As alavancas metálicas de comando podem ser produzidas em diversos comprimentos e inclinações para adaptar-se às especificações do cliente. Algumas versões são dotadas de interruptor complementar, montado na parte inferior do aparelho, para o acendimento das luzes externas.

Funções do Interruptor de coluna de direção: Indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico + interruptor para acendimento de luzes.

Deve ser acrescido um interruptor para acendimento das luzes externas.

Funções do inversor: Marcha a frente - neutro - atrás - lenta - rápida.

São testadas por n° de manobras funcionais: **Interruptor de coluna de direção n. 50.000 ciclos, Inversor n. 750.000 ciclos**
Chicote de interligação disponível com diversos tipos de conexão.



SERIE "250" pag. 105

Grupo integrado Interruptor de coluna de direção + inversor com gabinete específico para montagem numa coluna de direção com diâmetro de 52mm.

O aparelho, composto de um interruptor de coluna de direção da série "170" e de um inversor inserido em um só gabinete inclui o chicote de interligação, reagrupa e otimiza os comandos de funções de máquinas.

Funções do Interruptor de coluna de direção: indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico. Deve ser acrescido um interruptor para acendimento das luzes externas.

Funções do inversor: Marcha avante - atrás.

São testados para n° de manobras funcionais: **Interruptor de coluna de direção n° 50.000 ciclos, Inversor n° 750.000 ciclos**



SERIE "240" pag. 99 - 118 - 124 - 127 - 135 - 139 - 143 - 150 - 152 - 154 - 161 - 163

Grupo integrado Interruptor de coluna de direção + inversor com gabinete específico para montagem numa coluna de direção com diâmetro de 52mm.

O aparelho, composto de um interruptor de coluna de direção da série "170" e de um inversor inserido em um só gabinete inclui o chicote de interligação, reagrupa e otimiza os comandos de funções de máquinas.

Funções do Interruptor de coluna de direção: indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico. Deve ser acrescido um interruptor para acendimento das luzes externas.

Funções do inversor: Marcha avante - atrás.

São testados para n° de manobras funcionais: **Interruptor de coluna de direção n° 50.000 ciclos, Inversor n° 750.000 ciclos**



SERIE "226" pag. 111

Variador de velocidade com contatos elétricos com microswitch para comando de central eletrônica com cargas até 20mA.

O aparelho pode ser usado isoladamente ou combinado com outros comandos em um único módulo.

Funções do variador de velocidade: 0 - 1ª - 2ª - 3ª - 4ª

Testados por número de manobras funcionais: **Variador de velocidade n°. 1.000.000 ciclos**



SERIE "2000" pag. 165 - 172 - 178

Gama de Interruptor de coluna e inversores/variadores de velocidade projetada para uso particularmente pesado para máquinas operando em condições ambientais críticas. A alavanca de comando resiste a trações superiores a 90Kg (160lbs). O gabinete de proteção é feito em poliamida de alta resistência, para garantir uma proteção IP67 da conexão elétrica. Na parte inferior possui um conector integrado "DEUTSCH (série DT)". Os contatos elétricos do inversor são do tipo "aberto com contato frontal" e permitem acionar diretamente solenóides até a 2,5A com diodo de supressão de arco elétrico. Disponíveis versões com a função de variadores de velocidade obtendo-se ao girar a manopla colocada sobre a alavanca principal do comando.

Funções do Interruptor de coluna de direção: Indicador de direção, sinal de luz, luz baixa, luz alta e indicador acústico e acendimento de luzes (manopla rotativa)

Funções inversoras / Variador de velocidade: Marcha a frente - atrás - lenta - rápida 1ª 2ª 3ª 4ª

Funções interruptor limpa pára-brisa: 1º - 2º velocidade, bomba do esguicho d'água.

Testados por número de manobras funcionais: **Interruptor de coluna de direção n° 100.000 ciclos, Inversor/Variador de velocidade n. 1.000.000 ciclos, Interruptor do limpador de pára-brisa n° 50.000 ciclos**



SERIE "316" pag. 112

Inversores com contatos elétricos com microswitch e fixação para coluna de direção. Mecanicamente muito robustos. A alavanca resiste a trações até 40Kg. Particularmente adaptados para comandar centrais eletrônicas. A maior parte das versões devem ser montadas dentro de gabinetes que protejam o dispositivo da água e poeira. Algumas versões são já dotadas de própria proteção contra os agentes atmosféricos.

Funções do inversor: Marcha avante - neutro - atrás e bloqueio mecânico contra o acionamento accidental.

Testados por número de manobras funcionais: **Inversores n° 1.000.000 ciclos,**

Chicote de interligação disponível com diversos tipos de conexão.



SERIE "622" - "866" - "776" - "962" - "987" pag. 106 - 107 - 108 - 109 - 110

Gama de inversor e/ou variador de velocidade com tecnologia "HALL EFFECT" e "REED" projetados para comandar centrais eletrônicas com cargas inferiores a 100mA. A tecnologia utilizada, sem qualquer contato de tipo mecânico, permite garantir uma vida média do dispositivo superior aos 3.000.000 de ciclos.

As funções base: Marcha avante - atrás, variadores de velocidade, freio de estacionamento podem ser personalizados segundo as especificações exigidas.

O aparelho pode ser utilizado isoladamente ou integrado com os outros comandos em um único gabinete.



• Serie 170 fissaggio a cruscotto DEVIOGUIDA COMANDO LUCI

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

• Series 170 dashboard mounting LIGHT CONTROL SWITCH

Interior lever: Metallic

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

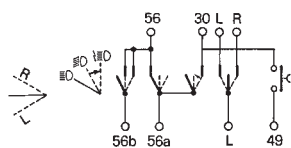
Protection container: Polyamide

Connection cable: Available with different kinds of connection



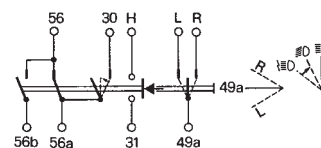
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	5A	3A
	7A	5A

072



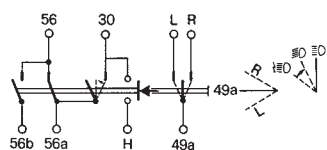
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.523.000		

037



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.199.000		

031



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.260.000		
01.178.000		
01.171.000		
01.208.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.172.000		

• **Serie 170** fissaggio a cruscotto
INVERSO MARCIA AVANTI-INDIETRO

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

Contatti elettrici: frontali in aria

• **Series 170** dashboard mounting
FORWARD-REVERSE MOTION SHIFTER

Interior lever: *Metallic*

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

Protection container: Polyamide

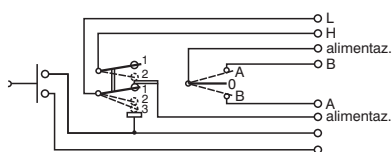
Connection cable: Available with different kinds of connection

Electrical contacts: *Butt contacts*



FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
F	8A	5A
R	8A	5A
	8A	5A
	8A	5A

209



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.261.000		 F R

P/N	DIMENSIONI <i>DIMENSIONS</i>	FUNZIONI <i>FUNCTIONS</i>

• Serie 190 fissaggio a cruscotto DEVIAGUIDA COMANDO LUCI

Accensione luci interne-esterne: Ruotando pomello leva

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

• Series 190 dashboard mounting LIGHT CONTROL SWITCH

Interior-exterior lights ignition: Turning lever knob

Interior lever: Metallic

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

Protection container: Polyamide

Connection cable: Available with different kinds of connection



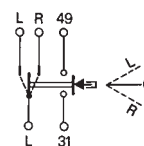
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	5A	3A
	7A	5A
	5A	3A

118



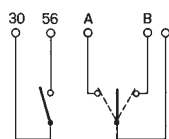
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0761.0000		

024



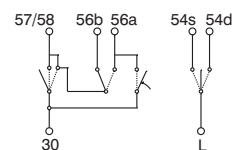
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.307.000		
01.0684.0000		

040



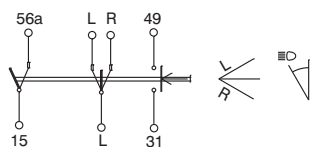
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.277.000		

251



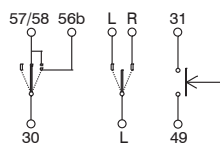
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0856.0000		
NASO 01.1068.0000		

242



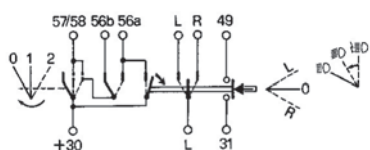
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0832.0000		

312



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.1052.0000	Technical drawing of part 01.1052.0000. Dimensions: 69.6, 130, 65, 44, 200. View A is indicated.	Function icons for part 01.1052.0000: horn, fog lights, and headlights.

013



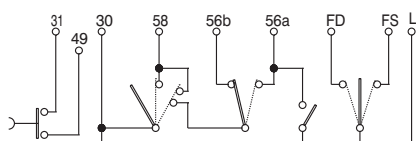
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.1023.0000	Technical drawing of part 01.1023.0000. Dimensions: 72, 125, 60, 140, 33.	Function icons for part 01.1023.0000: horn, fog lights, and headlights.

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.378.000	Technical drawing of part 01.378.000. Dimensions: 70, 125, 33, 70, 350.	Function icons for part 01.378.000: horn, fog lights, and headlights.
01.0893.0000 DIFFERISCE DA 01.378.000 PER PIN-OUT IT DIFFERS FROM 01.378.000 IN THE PIN-OUT	Technical drawing of part 01.0893.0000. Dimensions: 70, 125, 33, 70, 350.	Function icons for part 01.0893.0000: horn, fog lights, and headlights.
01.0657.0500	Technical drawing of part 01.0657.0500. Dimensions: 10.5, 200, 150, 63, 55, 4, 15, 45, 34, 4.1, 15.2.	Function icons for part 01.0657.0500: horn, fog lights, and headlights.
01.1083.0000	Technical drawing of part 01.1083.0000. Dimensions: 198.5, 182, 6.5, 5, 450, 400, 63, 55, 4, 15, 45, 34, 4.1, 15.2.	Function icons for part 01.1083.0000: horn, fog lights, and headlights.
01.0703.0000	Technical drawing of part 01.0703.0000. Dimensions: 125, 72, 79, 350, 70, 3.5, 29, 33, 61.	Function icons for part 01.0703.0000: horn, fog lights, and headlights.

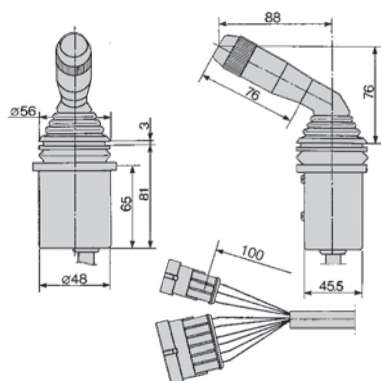
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.447.000		
01.273.000		
01.258.000		
01.319.000		
01.0662.0000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0964.0000		
01.1139.0000		
01.0669.0000		

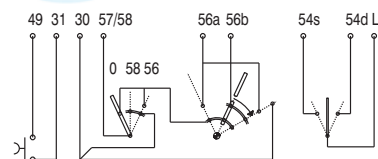
263



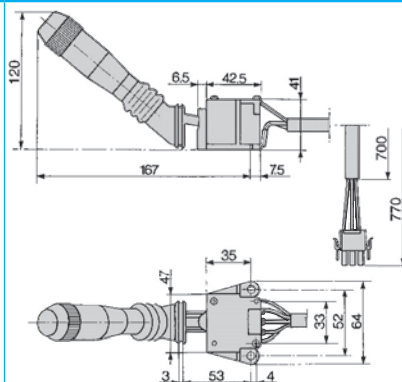
01.0902.0000



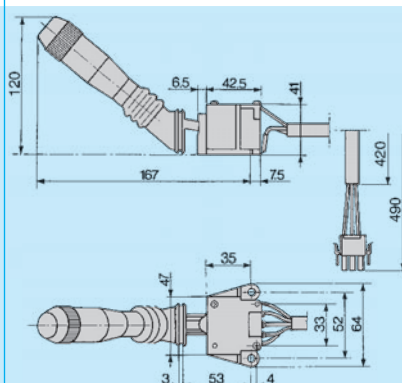
249



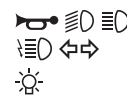
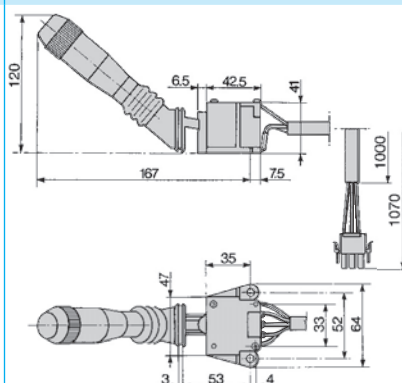
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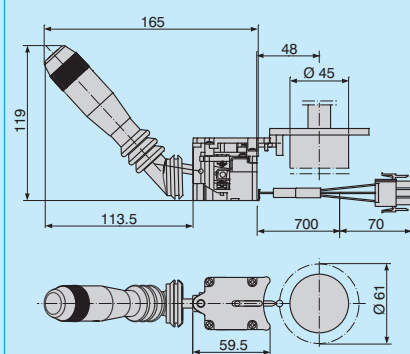
01.581.000



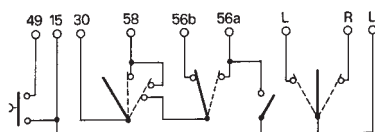
01.221.550



01.0863.0000



032



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.341.000		
01.318.000		
01.0769.0000		
01.0682.0000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.272.000		
01.227.000		
01.571.000 DIFFERISCE DAL 01.227.000 PER LA ROTAZIONE DELLA SIMBOLOGIA DI 180° IT DIFFERS FROM 01.227.000 IN SYMBOL ROTATED 180°		
01.293.000		
01.416.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.292.000		

01.327.000		
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01.0623.0000		
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01.1057.0000		
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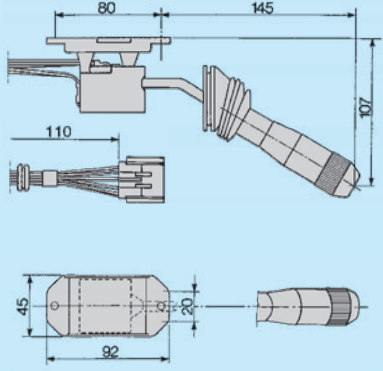
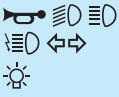
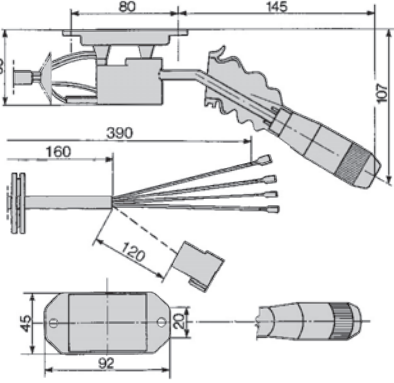
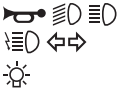
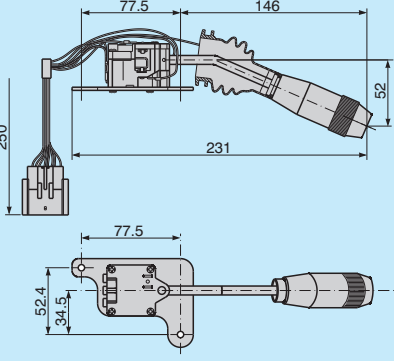
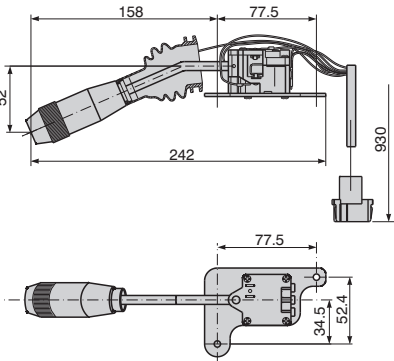
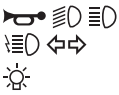
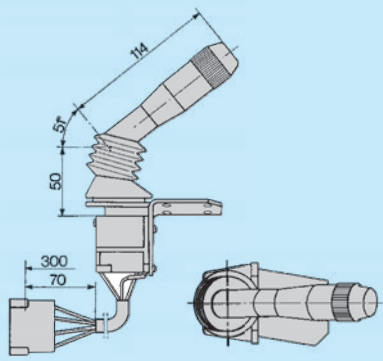
01.0819.0000		
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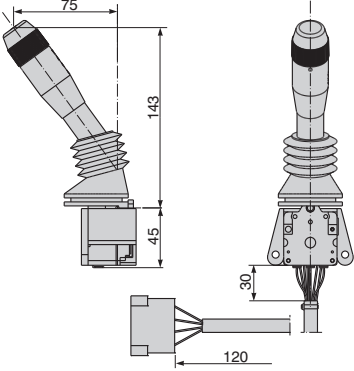
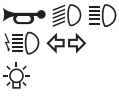
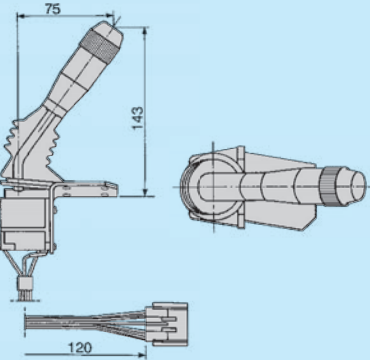
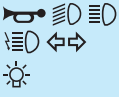
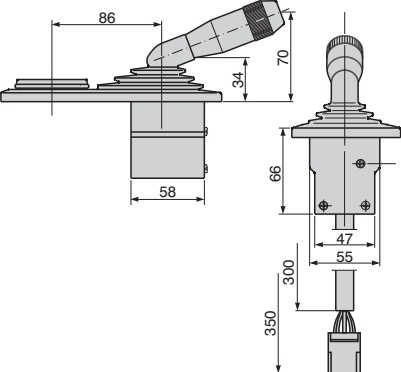
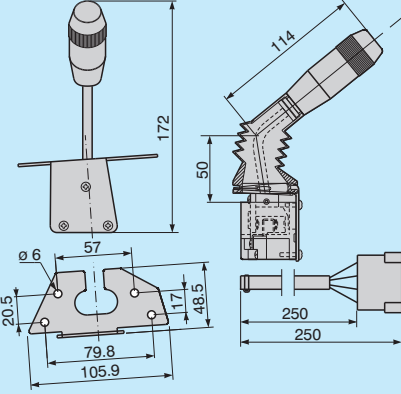
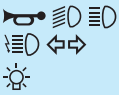
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.403.000		

01.537.000		
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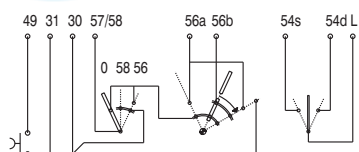
033		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.271.000		

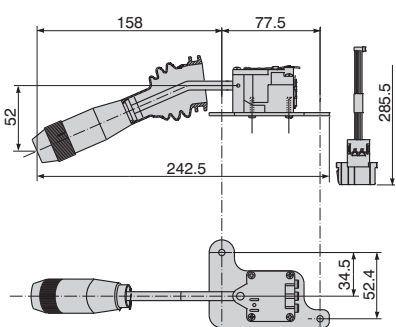
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.303.000		
01.206.000		
01.0640.0000		
01.0950.0000		
01.251.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0892.0000		
01.462.000		
01.0620.0000		
01.0681.0000		

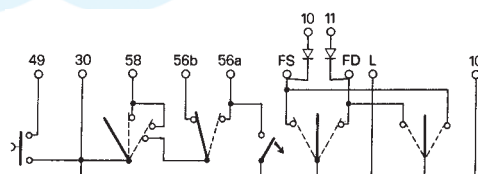
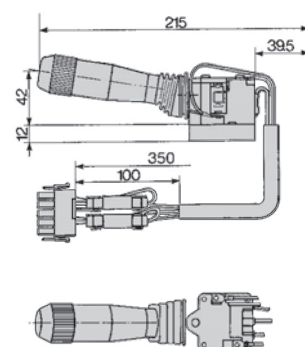
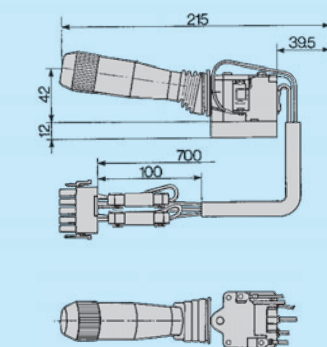
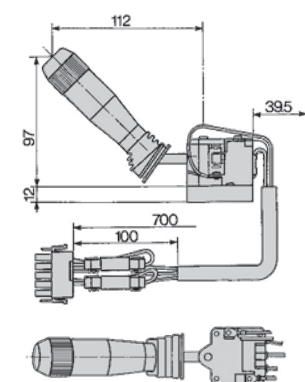
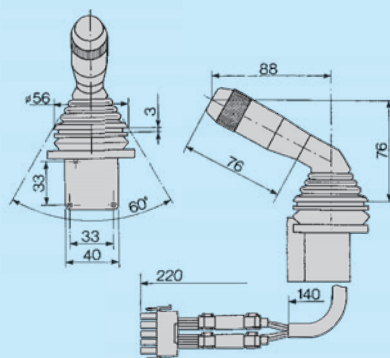
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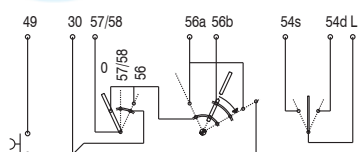
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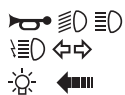
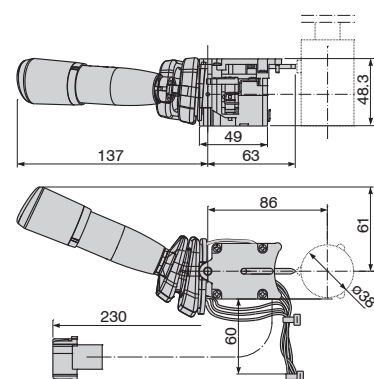
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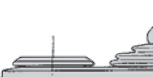
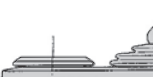
NASO
01.393.000NASO
01.283.000NASO
01.439.000NASO
01.490.000

323



01.0987.0500



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.412.000		

096

01.404.000

Technical drawing of the 01.404.000 tool, showing two views. The top view is a side profile with dimensions 50 and 350. The bottom view is a perspective view with a dimension of 120. To the right of the drawing are five icons: a bell, a fan, a light bulb, a double-headed arrow, and a light bulb.

01.0824.0000

01.0824.0500
SENZA PIASTRA
WITHOUT PLATE

Technical drawing showing two views of the 01.0824.0000 and 01.0824.0500 actuators. Dimensions are provided in millimeters.

For the 01.0824.0000 actuator (top view):

- Mounting bracket width: 50
- Actuator body length: 350

For the 01.0824.0500 actuator (bottom view):

- Mounting bracket width: 66
- Actuator body length: 110
- Side view dimensions: 82.6, 30, 50

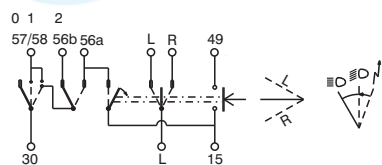
Legend symbols on the right:

- Light (Sun icon)
- Sound (Speaker icon)
- Vibration (Double arrow icon)

01.337.500

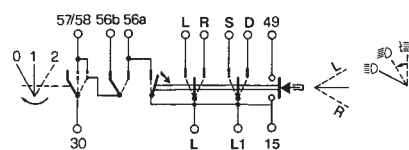
Technical drawing of the 01.337.500 sensor. The main view shows a side profile with dimensions: a total length of 145 and a mounting arm height of 120. A detail view shows the mounting bracket with a width of 170. A bottom view shows the sensor's base and cable. To the right, a set of icons indicates the sensor's functions: a horn icon for siren, a bell icon for alarm, a light icon for status indicator, and a double arrow icon for bidirectional communication.

141



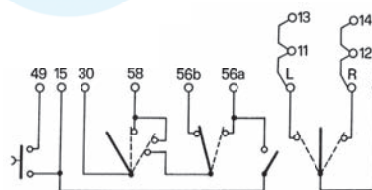
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0598.0000		
01.0597.0000		

127



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.494.000		

061



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.392.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.282.000		

NASO 01.0942.0000		
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NASO 01.0683.0000		
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	078	
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS

01.491.000		
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01.357.000		
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01.1045.0000 DIFFERISCE DAL 01.357.000 PER ORIENTAMENTO SERIGRAFIA IT DIFFERS FROM 01.357.000 IN ICONS ORIENTATION		
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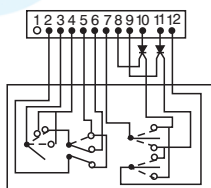
01.1077.0000		
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P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.368.000		
01.0584.0000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0904.0000		

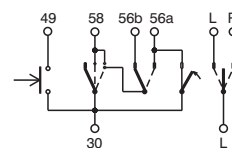
207		
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0686.0000		
01.0685.0000		

181



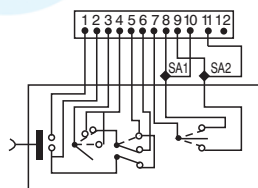
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.549.000		

151



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0605.0000		
NASO 01.0642.0000		
NASO 01.0693.0000		
NASO 01.0875.0000		

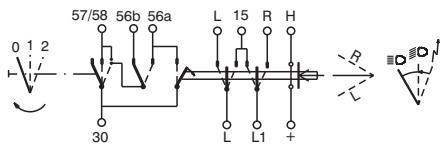
182



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.548.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0876.0000		
NASO 01.1029.0000		

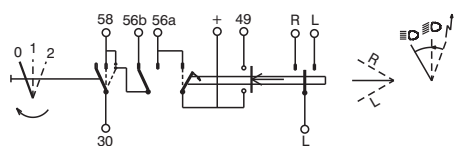
153



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.0599.0000		

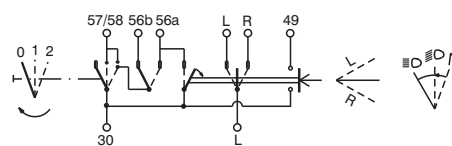
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.0608.0000		
NASO 01.0609.0000		
NASO 01.0624.0000		
NASO 01.0590.0000		
NASO 01.0865.0000		

164



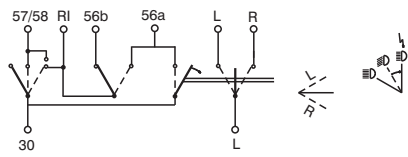
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.558.000		

201



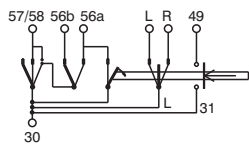
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.467.500		
01.0680.0500		

197



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.524.000		

188



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0753.0000		

• **Serie 190** fissaggio a cruscotto
COMANDI TERGICRISTALLO

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

• **Series 190** dashboard mounting
WINDSHIELD WIPER SWITCHES

Interior lever: *Metallic*

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

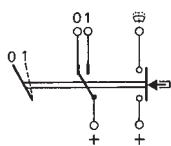
Protection container: Polyamide

Connection cable: Available with different kinds of connection



FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	8A	5A
	9A	6A
	5A	3A
	8A	5A

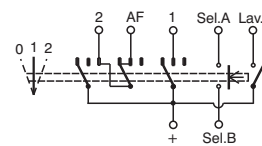
065



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.337.600		

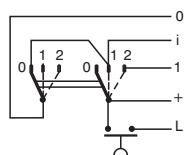
065

202



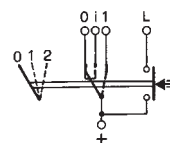
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.564.600		

155



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
16.212.000		
16.0236.0000		
16.0238.0000		

055



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
16.187.000		

P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
NASO 01.0766.0000		
NASO 01.0868.0000		

[illegible]

• Serie 203 fissaggio a cruscotto INVERSOE MARCIA AVANTI-INDIETRO-LENTA-VELOCE

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

Contatti elettrici: Frontali in aria

• Series 203 dashboard mounting FORWARD-REVERSE-SLOW-FAST SHIFTER

Interior lever: Metallic

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

Protection container: Polyamide

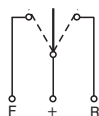
Connection cable: Available with different kinds of connection

Electrical contacts: Butt contacts

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
F	8A	5A
N	8A	5A
R	8A	5A
	8A	5A
	8A	5A
	3A	2A

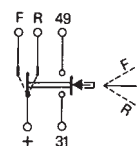


169



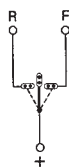
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0657.0600		F R

038



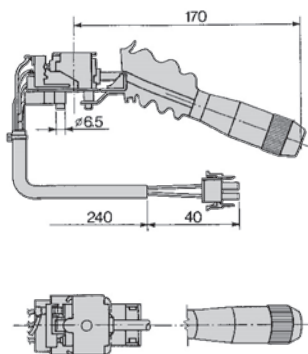
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.547.000		F R

066



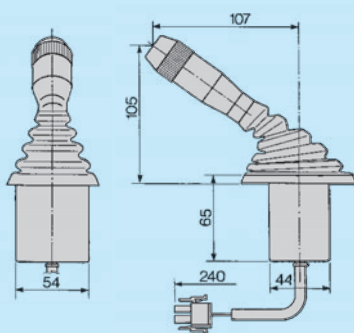
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
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01.349.000



F R

01.366.000



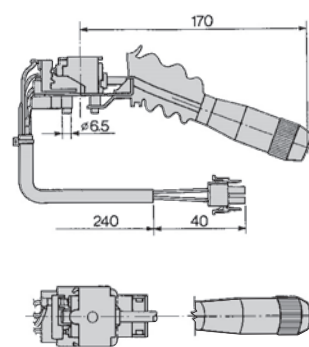
F R

012

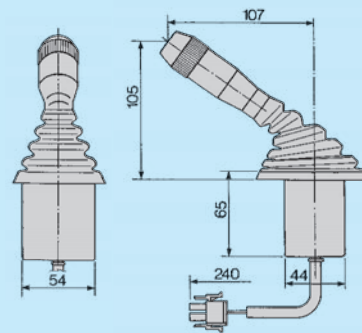


P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
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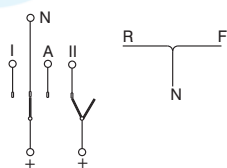
01.343.000

F N R

01.365.000

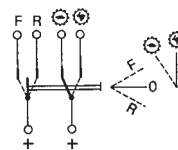
F N R

230



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.0806.0000		F N R 0

003



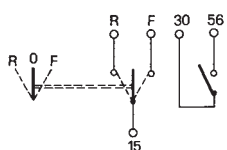
P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.342.000		F R

01.269.000		F R
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01.0829.0000		F R
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01.367.000		F R
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098



P/N	DIMENSIONI DIMENSIONS	FUNZIONI FUNCTIONS
01.418.000		F R I

- Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI+COMANDO TERGICRISTALLO

Comando luci interne-esterne o tergicristallo: Ruotando pomello leva

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Staffa di supporto: Acciaio zincato

Cavo di collegamento: Disponibile con diversi tipi di connessione

• **Series 190** dashboard mounting
LIGHT CONTROL SWITCH+WINDSHIELD WIPER

Interior-exterior lights or windshield wiper control: turning knob lever

Interior lever: *Metallic*

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

Protection container: Polyamide

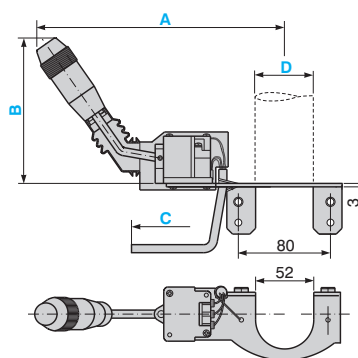
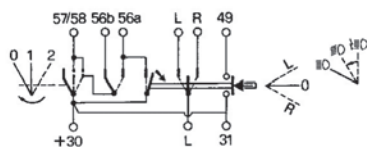
Rest bracket: Zinc-plated steel

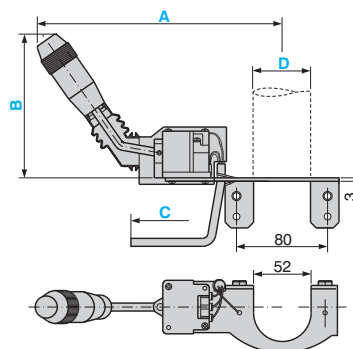
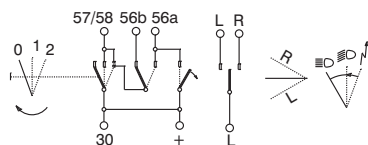
Connection cable: Available with different kinds of connection

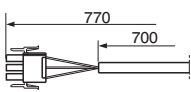
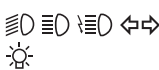


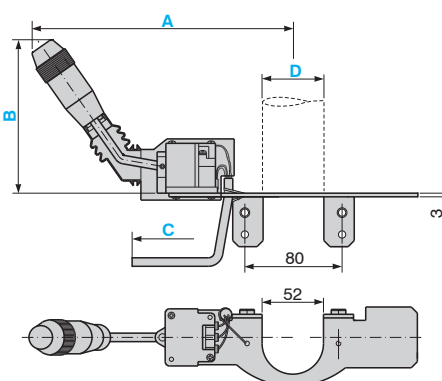
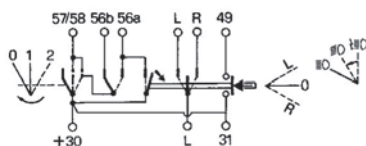
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD		FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V		12V	24V
	5A	3A		18A	3A
	6,5A	4,5A		8A	5A
	7A	5A		9A	6A
	5A	3A		9A	6A
	7A	5A			
	5A	3A			

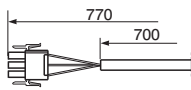
096

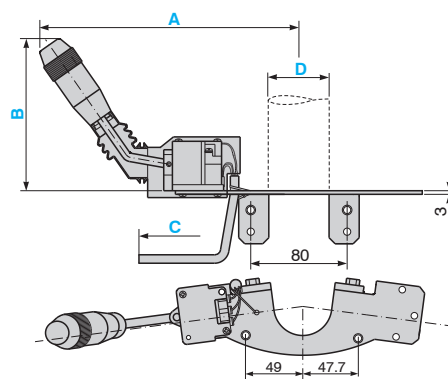
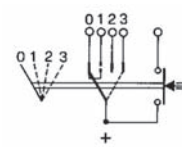
[illegible]

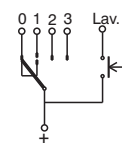
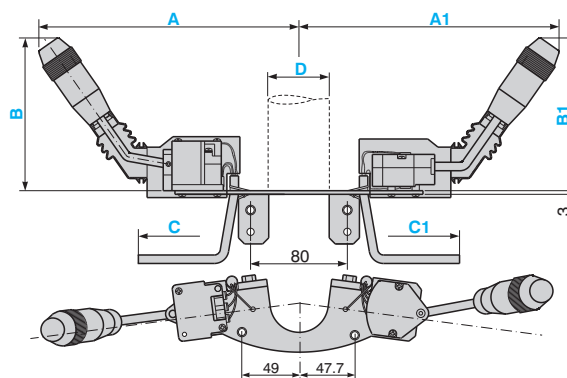
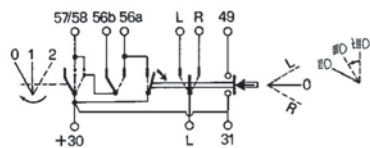


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0857.0000	215	126		01.0857.0500		Ø 50					

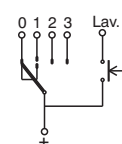
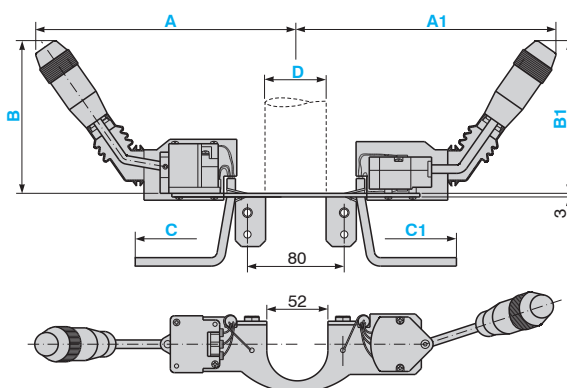
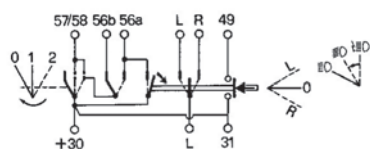


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.308.000	215	128		01.276.500		Ø 50					

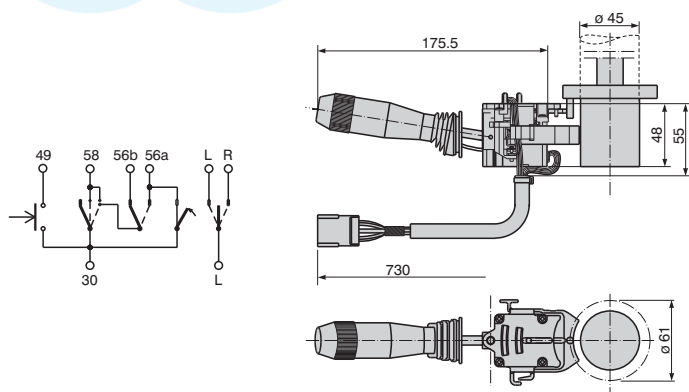
[illegible][illegible]



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.276.000	215	128		01.276.500		Ø 50		210	128		01.276.600

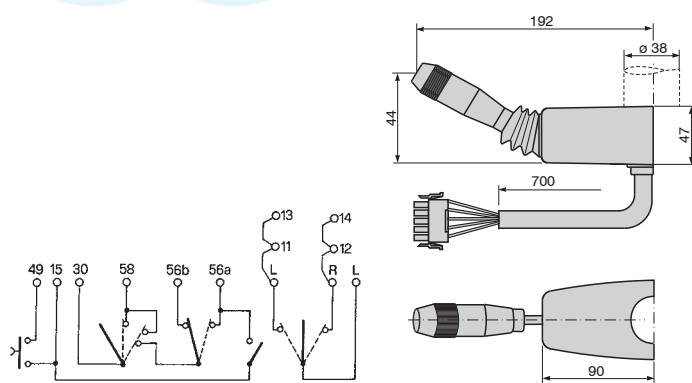


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0654.0000	215	128		01.276.500		Ø 50		210	128		01.276.600



P/N	FUNZIONI - FUNCTIONS
01.0960.0000	

P/N	FUNZIONI - FUNCTIONS



P/N	FUNZIONI - FUNCTIONS
01.1115.0000	

P/N	FUNZIONI - FUNCTIONS

Serie 190 fissaggio a piantone sterzo

Leva interna: Metallica

Cuffia: Gomma neoprene nera

Cavo di collegamento: Con connettore portamaschi 6 vie AMP serie Universal Mate-n-lok

Staffa di supporto: Acciaio zincato

DEVI GUIDA COMANDO LUCI

Rivestimento leva: Poliammide + simboli funzioni

Contenitore di protezione: Poliammide

INVERSO: MARCIA AVANTI-NEUTRO-INDIETRO

Rivestimento leva: ABS + simboli funzioni

Contatti elettrici: Microswitch IP66

Series 190 steering column mounting

Interior lever: *Metallic*

Cap: Black neoprene rubber

Connection cable: With female connector 6 ways
AMP Mate-n-lock Universal series

Rest Bracket: Zinc-plated steel

LIGHT CONTROL SWITCH

Lever covering: Polyamide + Function symbols

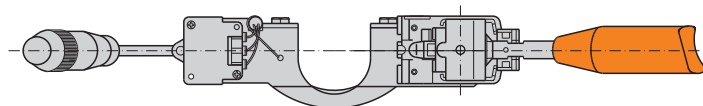
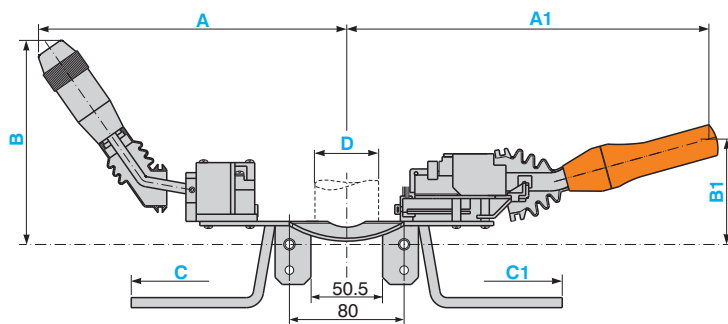
Protection container: Polyamide

FORWARD-NEUTRAL-REVERSE SHIFTER

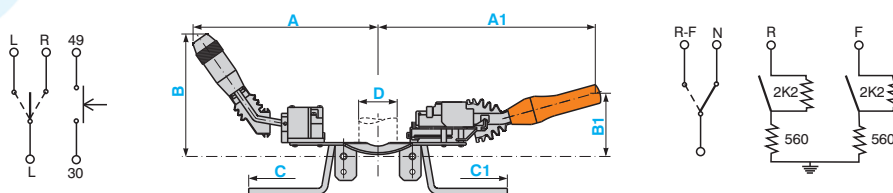
Lever covering: *ABS + Function symbols*

Electrical contacts: Microswitch IP66

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD		FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V		12V	24V
	5A	3A	F	2A	1A
	7A	5A	N	5A	3A
			R	5A	3A



199

[illegible]

- **Serie 180** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI

Leva: Metallica verniciata nera

Pomello leva: Poliammide

Cuffia: Gomma neoprene nera

Contenitore di protezione: Lega di alluminio verniciata nera

Cavo di collegamento: Disponibile con diversi tipi di connessione

Montaggio: Applicabile a piantoni di diverso diametro



- **Series 180** steering column mounting
LIGHT CONTROL SWITCH

Lever: *Metallic with black varnishing*

Knob lever: Polyamide

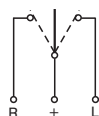
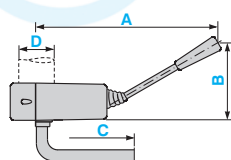
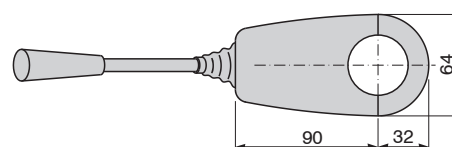
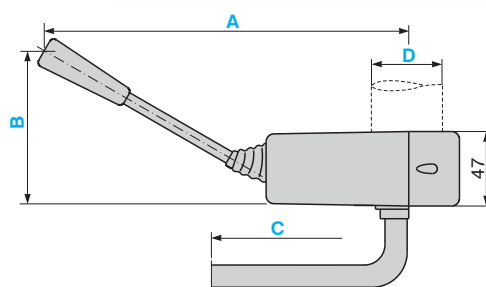
Cap: Black neoprene rubber

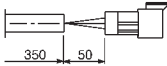
Protection container: Black aluminium alloy

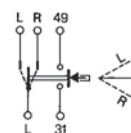
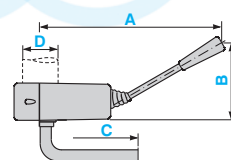
Connection cable: Available with different kinds of connections

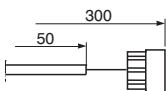
Setting: Designed for steering columns of different diameters

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	5A	3A
	7A	5A
	5A	3A

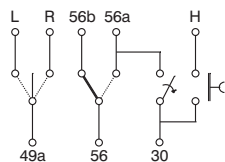
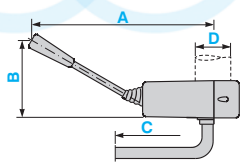


P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0641.0000	210	85				Ø 38



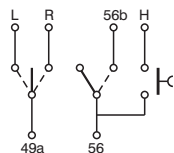
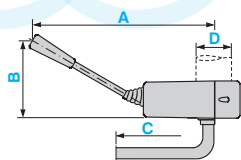
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0787.0000	210	80				Ø 45

262



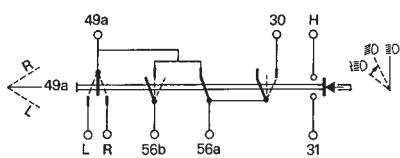
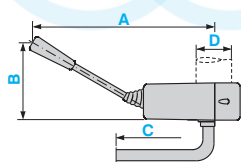
P/N	A	B	C	FUNZIONI FUNCTIONS	D
01.0896.0000	230	75			Ø 38

161



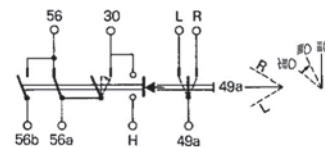
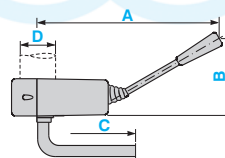
P/N	A	B	C	FUNZIONI FUNCTIONS	D
01.0643.0000	230	98			Ø 38

039

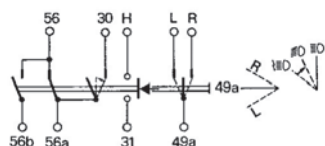
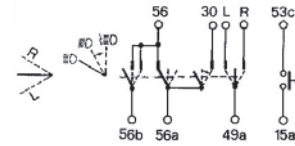


P/N	A	B	C	FUNZIONI FUNCTIONS	D
01.267.000	230	58			Ø 45

031



P/N	A	B	C	FUNZIONI FUNCTIONS	D
01.183.000	243	55			Ø 45
01.295.000	207	51			Ø 45
01.380.000	243	88			Ø 45
01.187.000	243	87			Ø 45
01.214.000	195	67			Ø 45
01.522.000	195	85			Ø 45
01.268.000	195	67			Ø 38
01.0594.0000	195	67			Ø 38
01.0613.0000	195	65			Ø 45
01.0788.0000	195	67			Ø 38

[illegible][illegible]

• Serie 180 *fissaggio a piantone sterzo* INVERSOE MARCIA AVANTI-INDIETRO-LENTA-VELOCE

Leva: Metallica verniciata nera

Pomello leva: Poliammide

Cuffia: Gomma neoprene nera

Contenitore di protezione: Lega di alluminio verniciata nera

Cavo di collegamento: Disponibile con diversi tipi di connessione

Montaggio: Applicabile a piantoni di diverso diametro

• Series 180 *steering column mounting* FORWARD-REVERSE-SLOW-FAST SHIFTER

Lever: Metallic with black varnishing

Lever knob: Polyamide

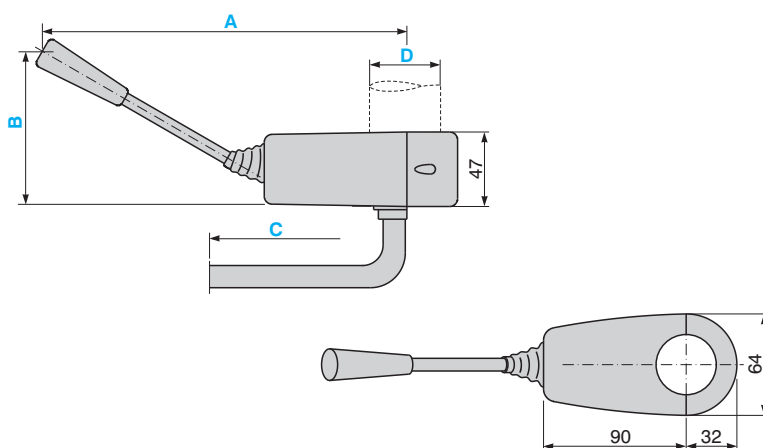
Cap: Black neoprene rubber

Protection container: Black aluminium alloy

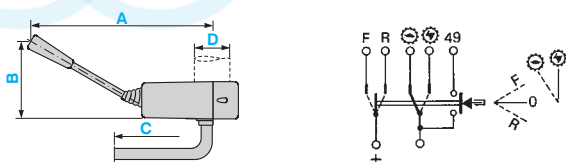
Connection cable: Available with different kinds of connection

Setting: Designed for steering columns of different diameters

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
F	8A	5A
R	8A	5A
	8A	5A
	8A	5A

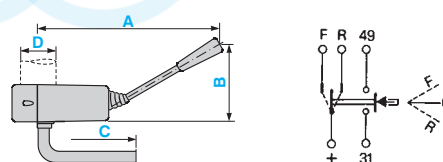


030



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.191.000	243	88			FR	Ø 38
01.1048.0000 DIFFERISCE DA 01.191.000 PER POSIZIONE COLLEGAMENTI CONNETTORE. IT DIFFERS FROM 01.191.000 IN THE CONNECTORS POSITION	243	88			FR	Ø 38
01.182.000	243	88			FR	Ø 45

038



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.194.000	210	80			FR	Ø 45
01.207.000	210	85			FR	Ø 38

- **Serie 134** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI

Leva: Metallica verniciata nera

Pomello leva: Poliammide

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide nero

Cavo di collegamento: Disponibile con diversi tipi di connessione

Montaggio: Applicabile a piantoni di diverso diametro

Accensione luci: Disponibili versioni con leva

supplementare accensione luci

• **Series 134** steering column mounting
LIGHT CONTROL SWITCH

Lever: *Metallic with black varnishing*

Lever knob: Polyamide

Cap: Black neoprene rubber

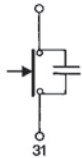
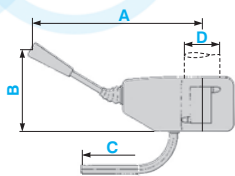
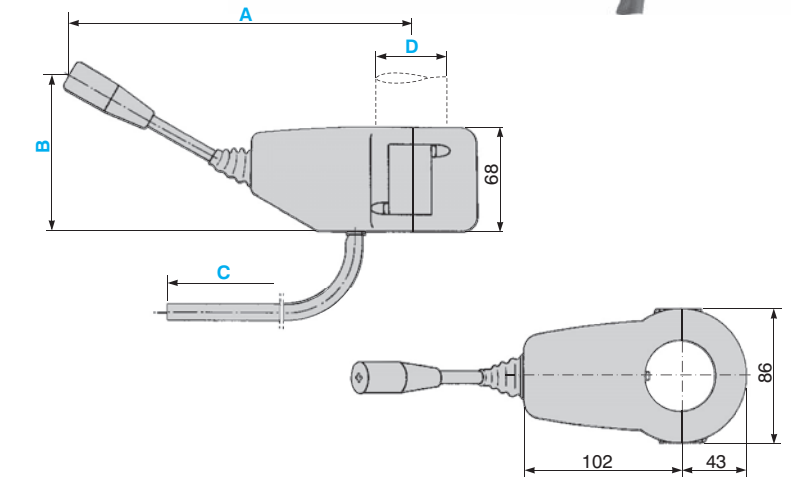
Protection container: Black polyamide

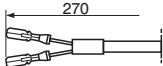
Connection cable: Available with different kinds of connections

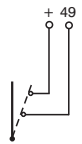
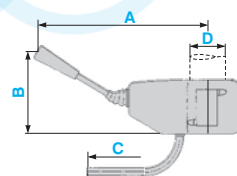
Setting: Designed for steering columns of different diameters

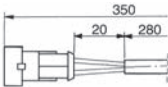
Lights ignition: Versions with additional lights ignition lever available

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A
	3A	2A



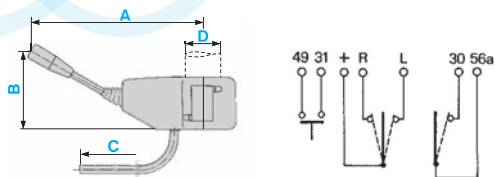
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.565.000	210	90				Ø 45



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.577.000	210	85				Ø 45

035

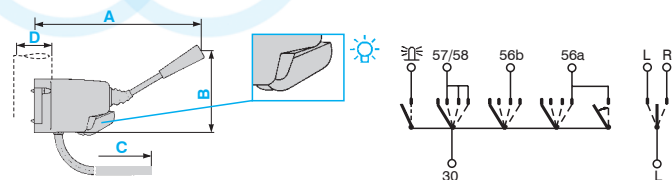
TYPE B



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.263.000	210	90				Ø 50

184

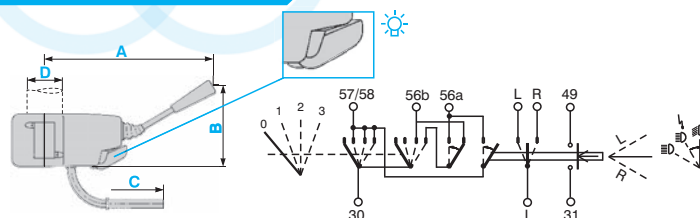
TYPE A



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.1056.0000	210	85				Ø 45

198

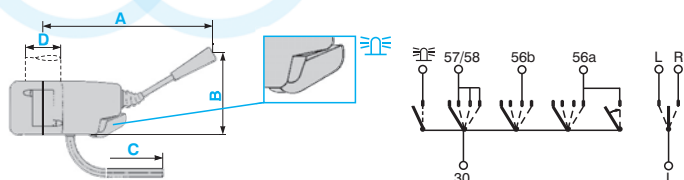
TYPE A



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.154.000	205	46				Ø 38

184

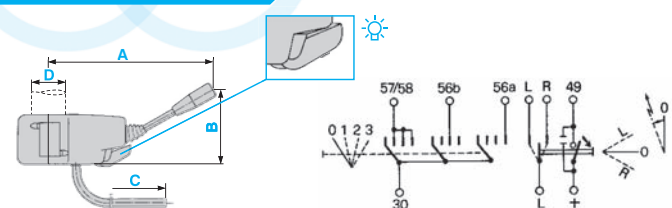
TYPE A



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.528.000	210	85				Ø 45
01.150.000	210	85				Ø 45
01.0588.0000	210	85				Ø 45

027

TYPE B

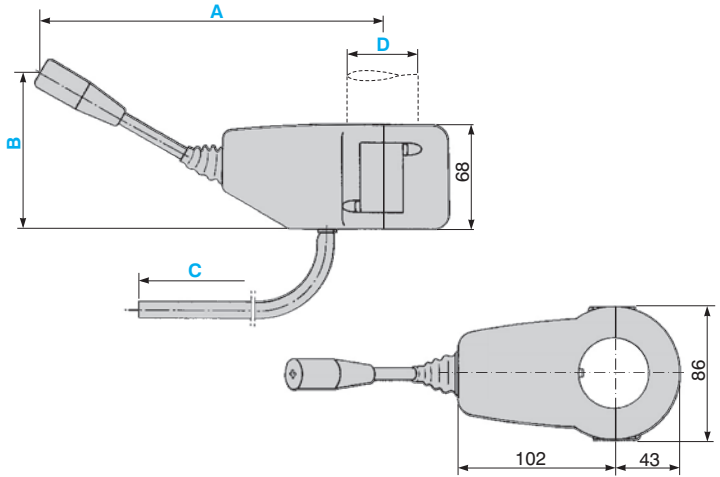


P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.205.000	210	96				Ø 45

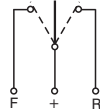
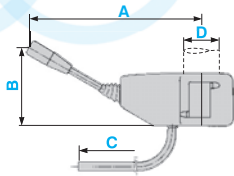
- Serie 203** fissaggio a piantone sterzo
INVERSORE MARCIA AVANTI-INDIETRO-LENTA-VELOCE
Leva: Metallica verniciata nera
Pomello leva: Poliammide
Cuffia: Gomma neoprene nera
Contenitore di protezione: Poliammide nero
Cavo di collegamento: Disponibile con diversi tipi di connessione
Montaggio: Applicabile a piantoni con diversi tipi di diametro

- Series 203** steering column mounting
FORWARD-REVERSE-SLOW-FAST SHIFTER
Lever: Metallic with black varnishing
Lever knob: Polyamide
Cap: Black neoprene rubber
Protection container: Black polyamide
Connection cable: Available with different kinds of connection
Setting: Designed for steering columns of different diameters

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
F	8A	5A
R	8A	5A
	8A	5A
	8A	5A
	10A	6A

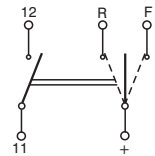
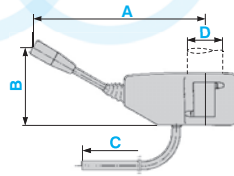


169



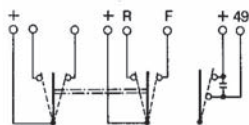
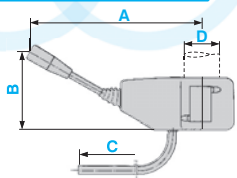
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.580.000	210	90			F R	Ø 45
01.568.000	210	90			F R	Ø 45

183



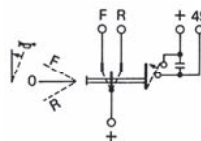
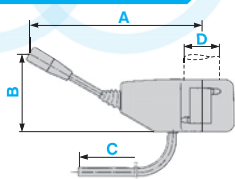
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.569.000	210	90			F R	Ø 45

021



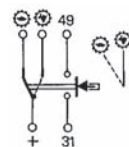
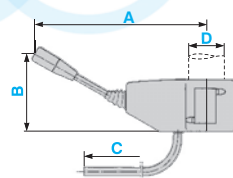
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.299.000	220	102			FR	Ø 38
01.223.000	220	102			FR	Ø 45

011



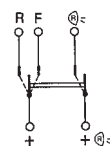
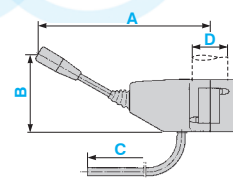
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.204.000	220	102			FR	Ø 45
01.278.000	220	102			FR	Ø 45
01.226.000	220	102			FR	Ø 45
01.232.000	220	102			FR	Ø 45
01.236.000	220	102			FR	Ø 45

004



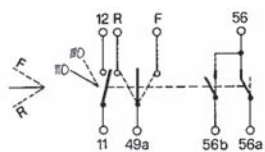
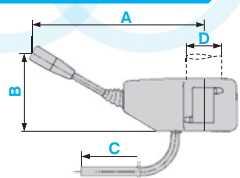
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.203.000	210	90			FR	Ø 45

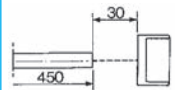
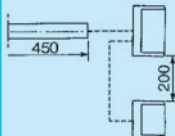
149



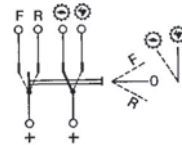
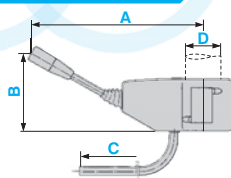
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.527.000	210	90			FR	Ø 45
01.563.000	210	90			FR	Ø 45

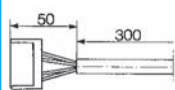
034



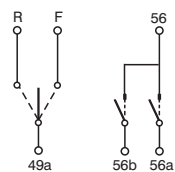
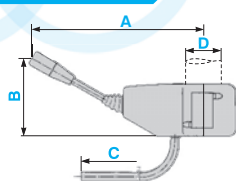
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.297.000	210	90			 F R	Ø 45
01.0612.0000	210	90			 F R	Ø 45

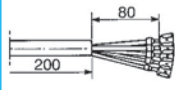
003



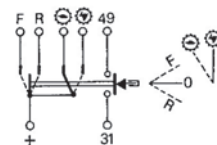
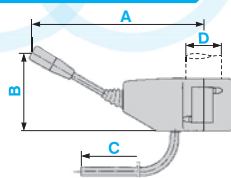
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.243.000	239	90			 F R	Ø 38

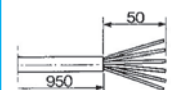
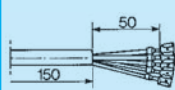
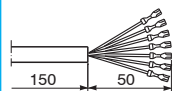
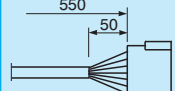
160



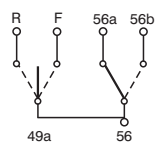
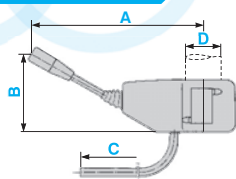
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.566.000	210	90			 F R	Ø 45

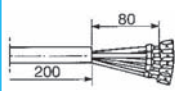
010



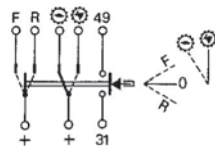
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.230.000	210	90			 F R	Ø 45
01.220.000	210	90			 F R	Ø 38
01.202.000	210	90			 F R	Ø 45
01.1044.0000	210	90			 F R	Ø 45

159



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.567.000	210	90			 F R	Ø 45

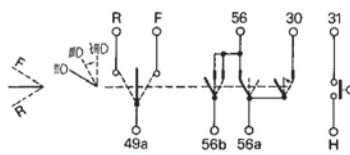
A diagram of a cable with four dimensions labeled: A (total length), B (height of the handle), C (length of the cable), and D (width of the handle).



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A diagram of a cable with four dimensions labeled: A (total length), B (length of the braided section), C (length of the inner insulation), and D (length of the outer jacket).



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• Serie 281 fissaggio a piantone sterzo DEVIAGUIDA COMANDO LUCI + INVERSOE MARCIA AVANTI-INDIETRO-LENTA-VELOCE

Leva: Metallica verniciata nera

Pomello leva: Poliammide

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide nero

Cavo di collegamento: Disponibile con diversi tipi di connessione

Montaggio: Applicabile a piantoni di diverso diametro



• Series 281 steering column mounting LIGHT CONTROL SWITCH + FORWARD-REVERSE-SLOW-FAST SHIFTER

Lever: Metallic with black varnishing

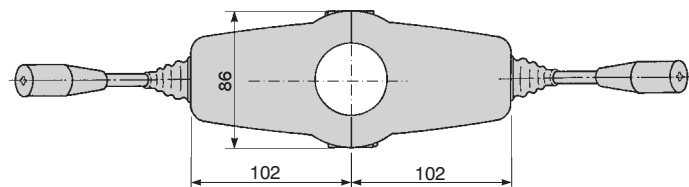
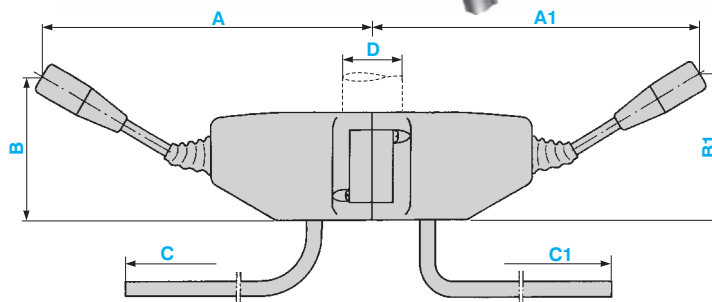
Lever knob: Polyamide

Cap: Black neoprene rubber

Protection container: Black polyamide

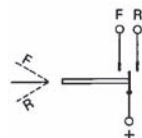
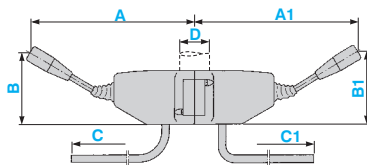
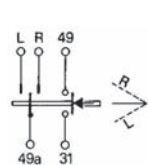
Connection cable: Available with different kinds of connection

Setting: Designed for steering columns of different diameters



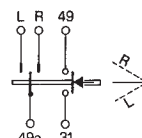
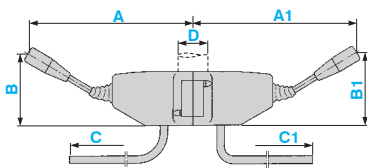
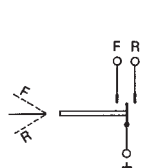
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD		FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V		12V	24V
	5A	3A	F	8A	5A
	6,5A	4,5A	R	8A	5A
	7A	5A		8A	5A
	7A	7A		8A	5A

029



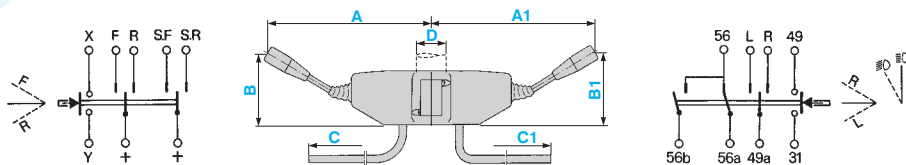
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.281.000	205	116		01.281.500		Ø 38	F R	205	116		01.281.600

109



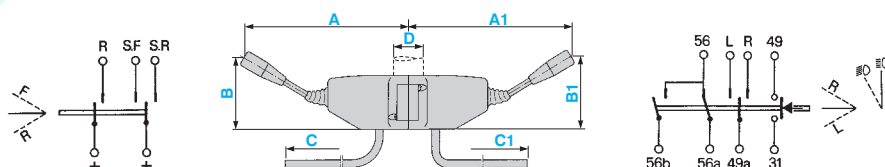
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.387.000	205	116		01.387.500	F R	Ø 38		205	116		01.387.600

036



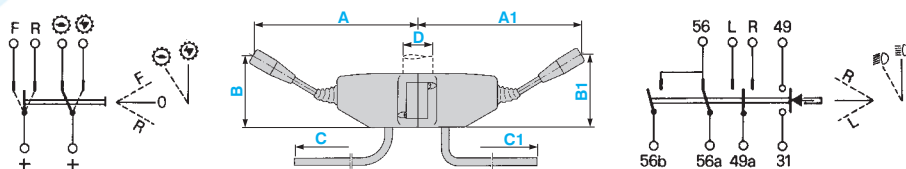
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.280.000	220	103		01.280.500	F R	Ø 38		210	89		01.280.600

111



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.411.000	225	103		01.411.600	F R	Ø 38		210	89		01.411.500

028

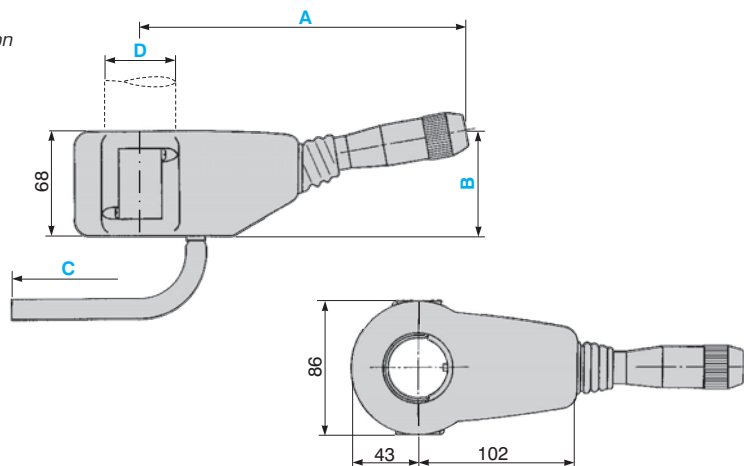


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.233.000	210	90		01.233.500	F R	Ø 38		210	90		01.233.600
01.242.000	239	90		01.242.500	F R	Ø 40		210	90		01.242.600

- **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI
Accensione luci interne-esterne: Ruotando pomello leva
Leva interna: Metallica
Rivestimento leva: Poliammide + simboli funzioni
Cuffia: Gomma neoprene nera
Contenitore di protezione: Poliammide
Cavo di collegamento: Disponibile con diversi tipi di connessione

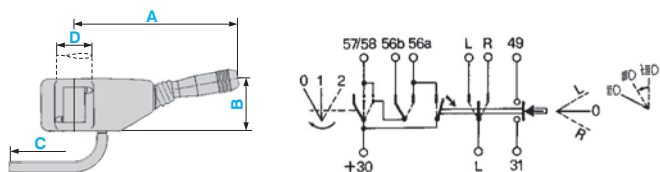


- **Series 190** steering column mounting
LIGHT CONTROL SWITCH
Interior-exterior lights ignition: Turning lever knob
Interior lever: Metallic
Lever covering: Polyamide + Function symbols
Cable: Black neoprene rubber
Protection container: Polyamide
Connection cable: Available with different kinds of connection



FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A

013



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.401.000	210	42				Ø 45
01.234.000	210	42				Ø 38
01.302.000	210	42				Ø 45
01.429.000	210	42				Ø 45

P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0923.0000	210	42				Ø 38
01.405.000	210	42				Ø 38
01.0926.0000 DIFFERISCE DAL 01.405.000 PER ORIENTAMENTO SERIGRAFIA IT DIFFERS FROM 01.405.000 IN ICONS ORIENTATION	210	42				Ø 38
01.1118.0000	210	42				Ø 38
01.0967.0000	210	42				Ø 38
01.1058.0000	210	70				Ø 38

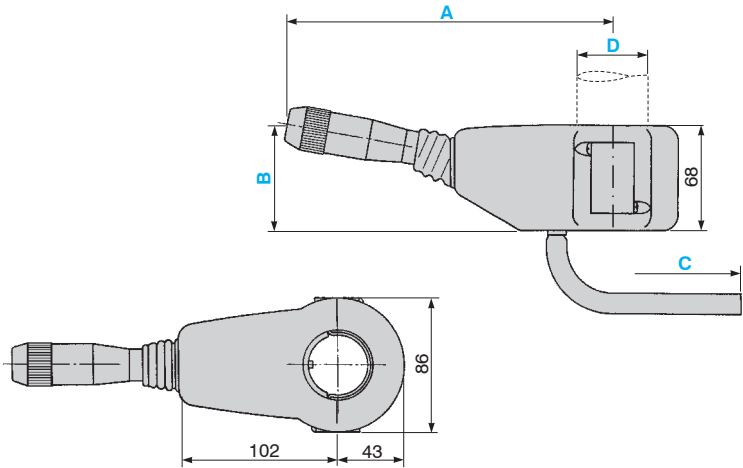
• **Serie 203** fissaggio a piantone sterzo
INVERSOE MARCIA AVANTI-INDIETRO-LENTA-VELOCE

Leva interna: Metallica
Rivestimento leva: Poliammide + simboli funzioni
Cuffia: Gomma neoprene nera
Contenitore di protezione: Poliammide
Cavo di collegamento: Disponibile con diversi tipi di connessione
Contatti elettrici: Frontali in aria
Funzione disponibile su alcuni modelli: Accensione luce di retromarcia con back up alarm

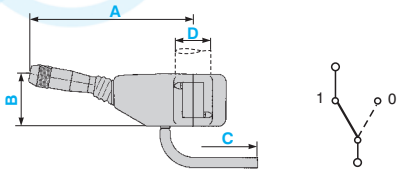
• **Series 203** steering column mounting
FORWARD-REVERSE-SLOW-FAST SHIFTER

Interior lever: Metallic
Lever knob: Polyamide + Function symbols
Cap: Black neoprene rubber
Protection container: Polyamide
Connection cable: Available with different kinds of connection
Electrical contacts: Butt contacts
Function available only for some models: Reversing light with back up alarm ignition

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
F	8A	5A
R	8A	5A
	8A	5A
	8A	5A
	10A	6A

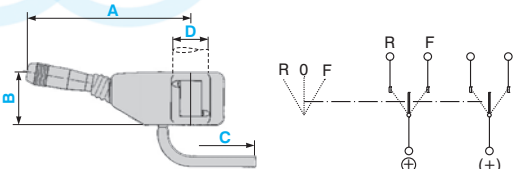


186

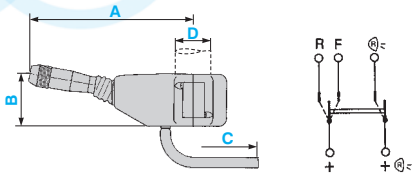


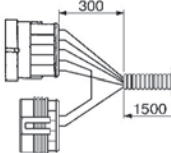
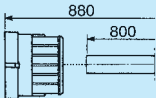
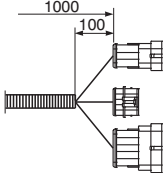
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0663.0000	210	70				Ø 45

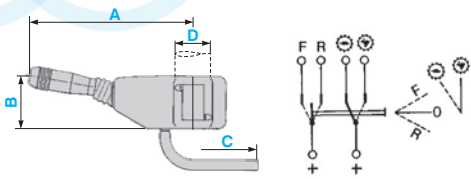
241

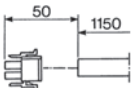


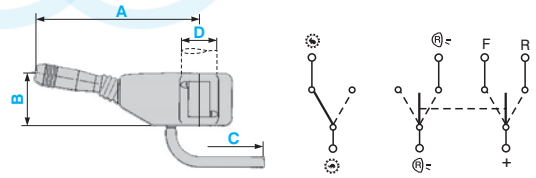
P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0828.0000	210	70			F R	Ø 45
01.0867.0000	210	70			F R	Ø 45



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.0650.0000	210	70			F R (R) $\approx$	$\varnothing$ 45
01.0606.0000	210	70			F R (R) $\approx$	$\varnothing$ 45
01.0935.0000	210	70			F R (R) $\approx$	$\varnothing$ 45



P/N	A	B	C		FUNZIONI FUNCTIONS	D
01.361.000	210	70			F R 	Ø 45

[illegible]

• **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI
+ COMMUTATORE AVVIAMENTO A CHIAVE

Leva interna: Metallica

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione



Interior-exterior lights ignition: Turning lever knob

Interior lever: *Metallic*

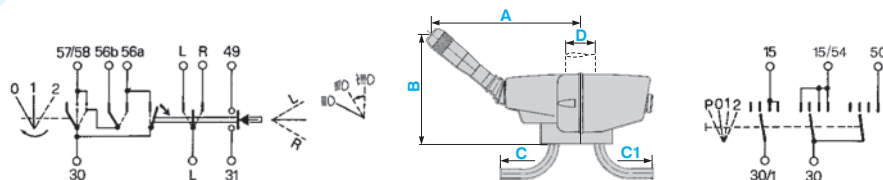
Lever covering: Polyamide + Function symbols

Cable: Black neoprene rubber

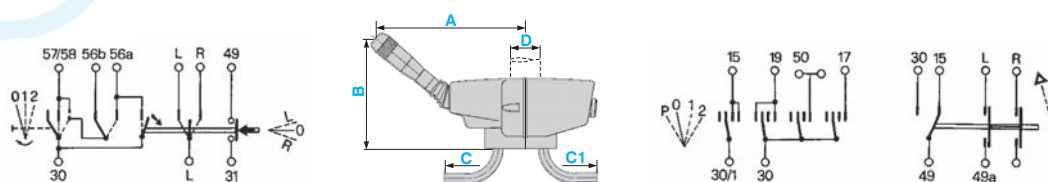
Protection container: Polyamide

Connection cable: Available with different kinds of connection

[illegible]75



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.376.000	215	218		01.376.500		Ø 38	 14.110.000				01.376.600



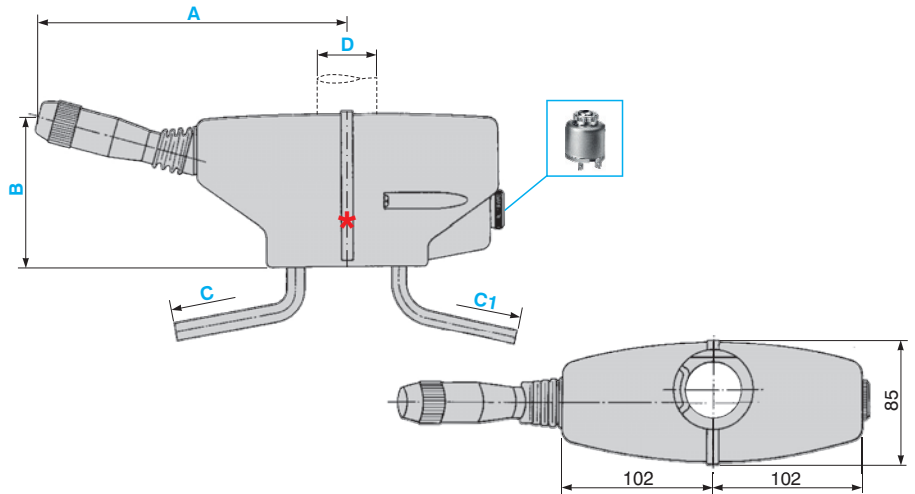
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.225.000	215	218		01.225.500		Ø 38	 14.115.000				01.209.600

- Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI
+ COMMUTATORE AVVIAMENTO A CHIAVE
 Accensione luci interne-esterne: Ruotando pomello leva
 Leva interna: Metallica
 Rivestimento leva: Poliammide + simboli funzioni
 Cuffia: Gomma neoprene nera
 Contenitore di protezione: Poliammide
 Cavo di collegamento: Disponibile con diversi tipi di connessione

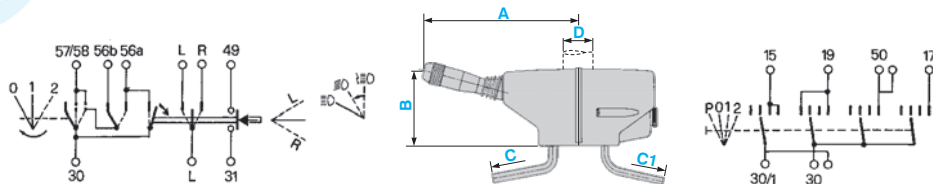
- Series 190** steering column mounting
LIGHT CONTROL SWITCH + DIMMER SWITCH
 Interior-exterior lights ignition: Turning lever knob
 Interior lever: Metallic
 Lever covering: Polyamide + Function symbols
 Cap: Black neoprene rubber
 Protection container: Polyamide
 Connection cable: Available with different kinds of connection



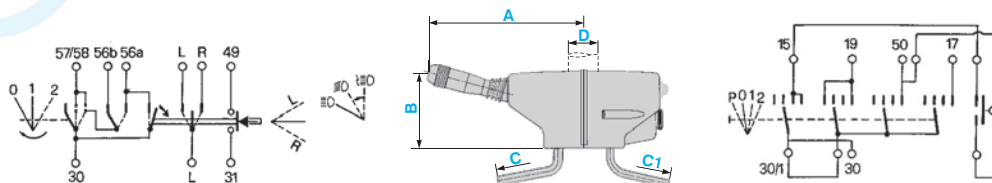
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A



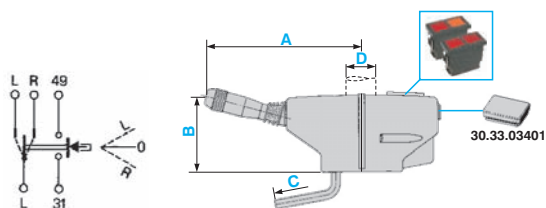
017



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.211.000	210	102		01.211.500		Ø 38	 14.176.000				01.211.600
01.216.000 FORO PER MONTAGGIO APPLICATION HOLE	210	102		01.215.500		Ø 38	 14.176.000				01.216.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.237.000	210	102		01.211.500		Ø 38	 14.176.000 17.130.000				01.237.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.217.000	210	102		01.217.500		Ø 38	 09.302.000 09.354.000				

- **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI

+ **COMMUTATORE AVVIAMENTO A CHIAVE**

Accensione luci interne-esterne: Ruotando pomello leva

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione



• **Series 190** *steering column mounting*
LIGHT CONTROL SWITCH + DIMMER SWITCH

Interior-exterior lights ignition: Turning lever knob

Interior lever: *Metallic*

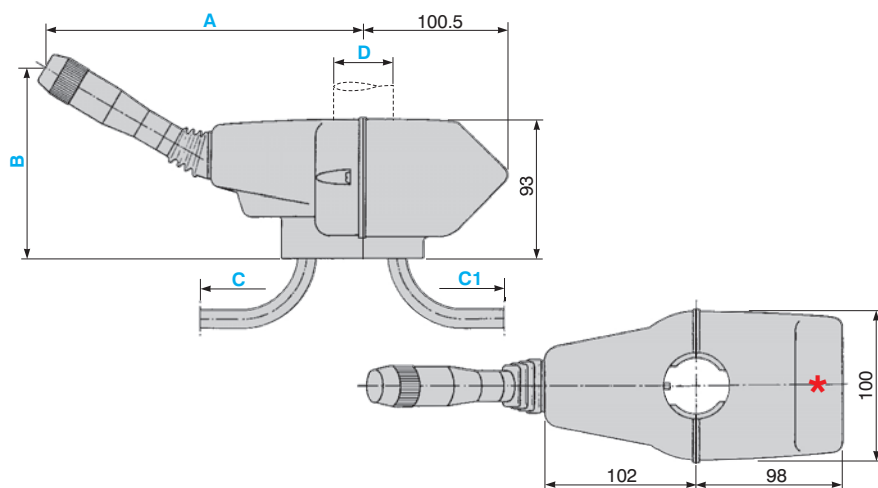
Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

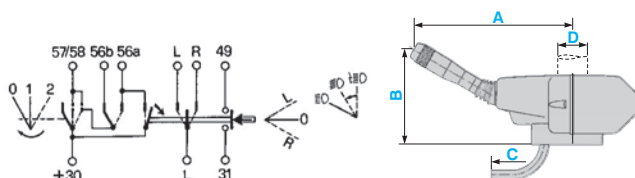
Protection container: Polyamide

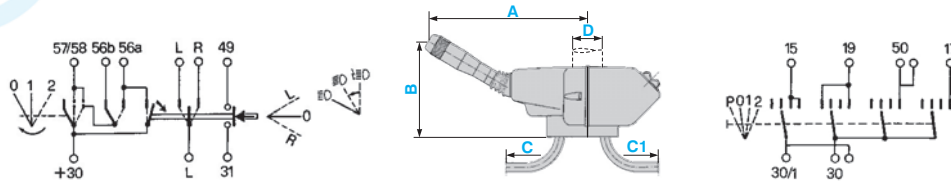
Connection cable: Available with different kinds of connection

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A
	5A	3A
	8A	5A

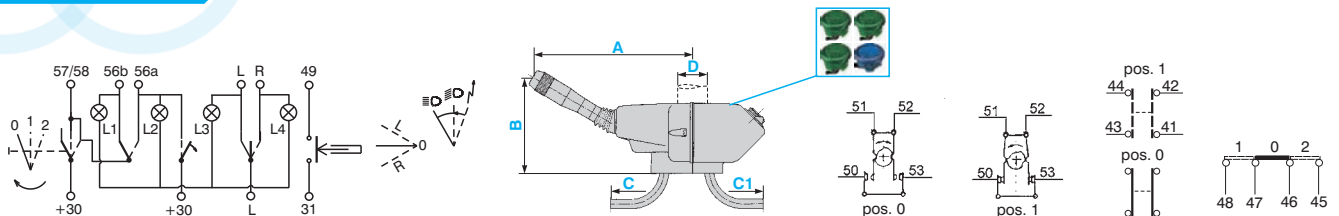


013

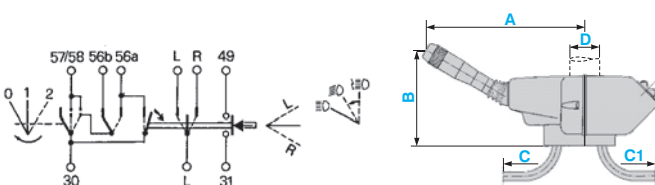
[illegible]



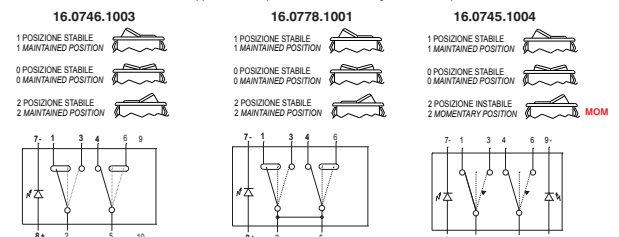
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.222.000 	215	118		01.212.500							01.135.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0833.0000 	215	128		01.0833.0500							01.0833.0600



Schema elettrico rappresentato in posizione 1 - Circuit diagram shown in position 1

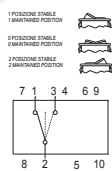


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.1028.0000 	215	110		01.320.500							

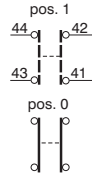
14.0197.0000

POS.	TERMINAL
0	30 INT
1	○ ○

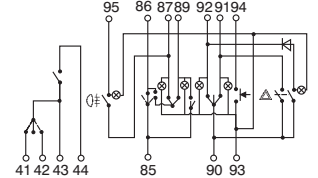
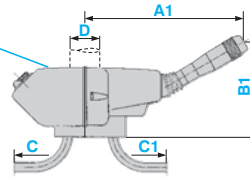
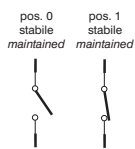
16.0735.0000



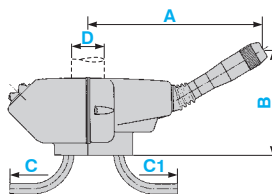
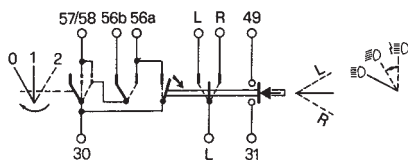
13.209.000



13.221.000

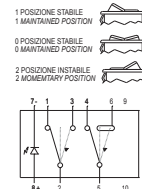


P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0874.0000				01.0874.0600	14.0197.0000 16.0735.0000 13.209.000 13.221.000 09.180.142 09.180.143 09.180.145 09.180.152 09.180.153 09.180.154	Ø 38	 	215	128		01.0874.0500

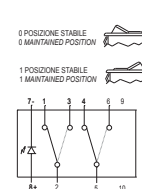


Schema elettrico rappresentato in posizione 1 - Circuit diagram shown in position 1

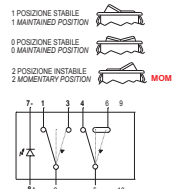
16.0774.1005



16.0701.1024



16.0774.1006



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.1114.0000			50 ~2000	01.1114.0500	16.0774.1005 16.0701.1024 16.0774.1006	Ø 38	 	215	110	50 ~2000	01.1114.0500

• **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI + COMANDO Tergicristallo
+ COMUTATORE AVVIAMENTO A CHIAVE

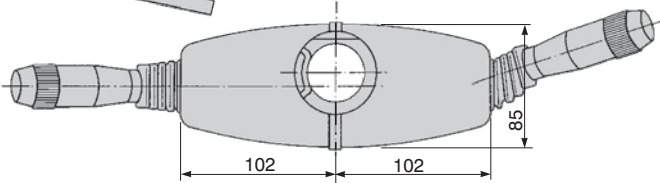
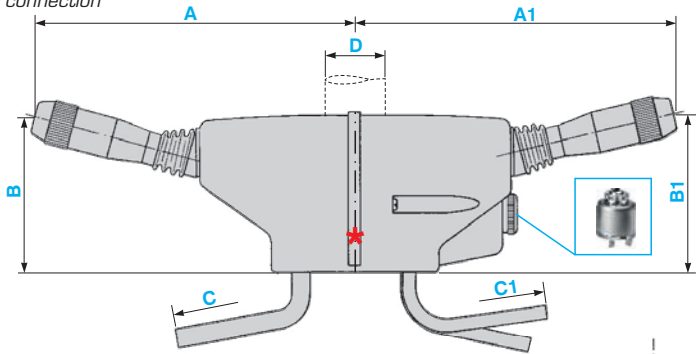
Accensione luci interne-esterne: Ruotando pomello leva
Leva interna: Metallica
Rivestimento leva: Poliammide + simboli funzioni
Cuffia: Gomma neoprene nera
Contenitore di protezione: Poliammide
Cavo di collegamento: Disponibile con diversi tipi di connessione



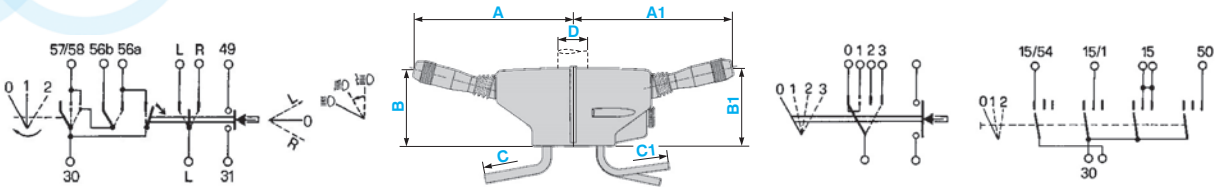
• **Series 190** steering column mounting
LIGHT CONTROL SWITCH + WINDSHIELD WIPER
+ KEY IGNITION SWITCH

Interior-external lights ignition: Turning lever knob
Interior lever: Metallic
Lever covering: Polyamide + Function symbols
Cap: Black neoprene rubber
Protection container: Polyamide
Connection cable: Available with different kinds of connection

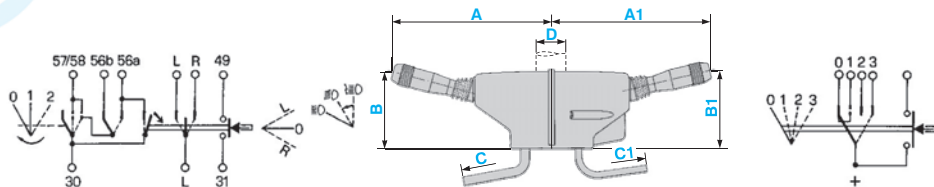
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A
	5A	3A
	8A	5A
	9A	6A
	9A	6A



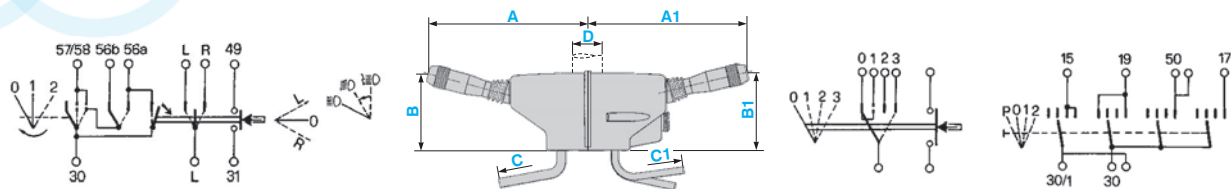
112



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.389.000	210	102		01.389.500	 	Ø 38	 	210	102		01.389.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.235.000	253	156		01.235.500		Ø 45		260	156		01.235.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.539.000	210	102		01.539.500		Ø 38	 	210	102		01.539.600
01.215.000 FORO PER MONTAGGIO APPLICATION HOLE	210	102		01.215.500		Ø 38	 	210	102		01.215.600
01.540.000 FORO PER MONTAGGIO APPLICATION HOLE	210	102	CONNETTORE - CONNECTOR AMP 174930-1 	01.540.500		Ø 38	 	210	102	CONNETTORE - CONNECTOR AMP 174930-7 	01.540.600
01.210.000	210	102		01.210.500		Ø 38	 	210	102		01.210.600
01.0827.0000	210	102	CONNETTORE - CONNECTOR AMP 174930-4 	01.0827.0500		Ø 38	 	210	102	CONNETTORE - CONNECTOR AMP 174930-7 	01.0827.0600

- **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI + INVERSO

Accensione luci interne-esterne: Ruotando pomello leva

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione



• **Series 190** *steering column mounting*
LIGHT CONTROL SWITCH + FORWARD-REVERSE SHIFTER

Interior-exterior lights ignition: Turning lever knob

Interior lever: *Metallic*

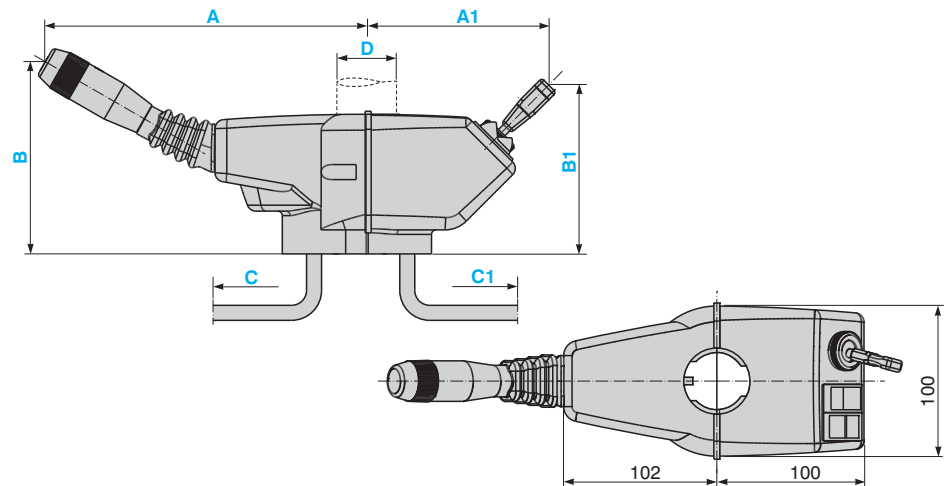
Lever covering: Polyamide + Function symbols

Cap: *Black neoprene rubber*

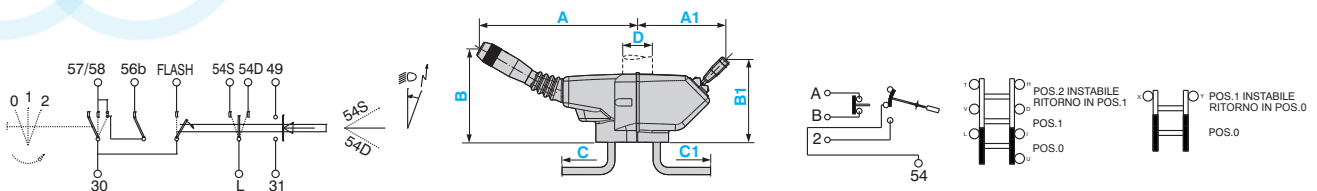
Protection container: Polyamide

Connection cable: Available with different kinds of connection

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD		FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V		12V	24V
	5A	3A	F	8,5A	5A
	6,5A	4,5A	R	8,5A	5A
	7A	5A		8,5A	5A
	7A	5A			
	7A	5A			
	5A	3A			



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[illegible]

• Serie 190 fissaggio a piantone sterzo DEVIAGUIDA COMANDO LUCI + MANIPOLATORE COMANDO BRACCIO ESCAVATORE

Accensione luci interne-esterne: Ruotando pomello leva

Leva interna: Metallica

Rivestimento leva: Poliammide + simboli funzioni

Cuffia: Gomma neoprene nera

Contenitore di protezione: Poliammide

Cavo di collegamento: Disponibile con diversi tipi di connessione

• Series 190 steering column mounting LIGHT CONTROL SWITCH + KEY SENDER CONTROL FOR EXCAVATOR

Interior-exterior lights ignition: Turning lever knob

Interior lever: Metallic

Lever covering: Polyamide + Function symbols

Cap: Black neoprene rubber

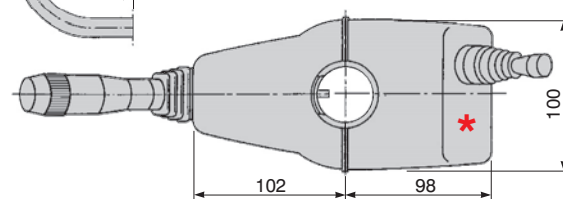
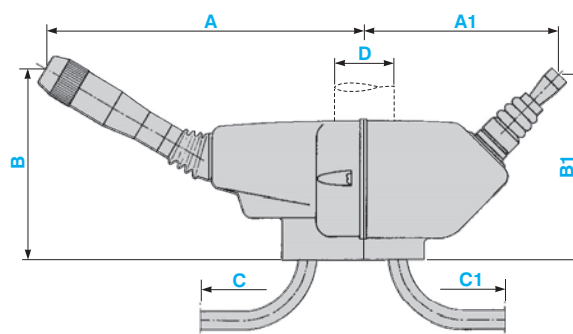
Protection container: Polyamide

Connection cable: Available with different kinds of connection

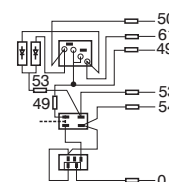
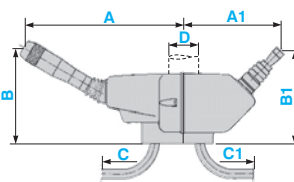
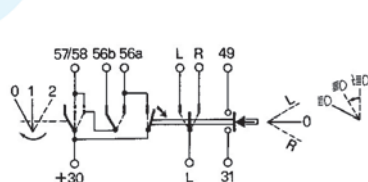


FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A
	5A	3A

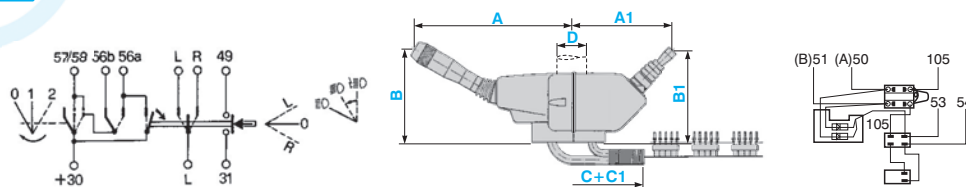
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	10A	10A



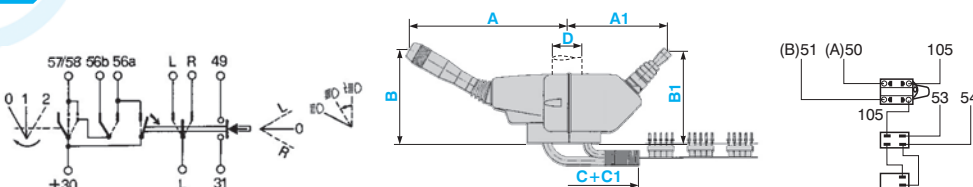
208



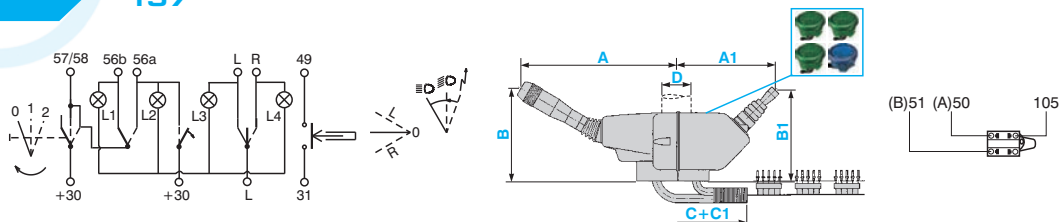
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.247.000 	215	110		01.247.500	 	Ø 38	 30.34.04527 16.172.000 13.308.000	133	109		01.228.600
01.396.000 	215	110		01.396.500	 	Ø 38	 30.34.04527 16.172.000 13.308.000	133	109		01.396.600
01.238.000 	215	110		01.238.500	 	Ø 38	 30.34.04527 16.172.000 13.308.000	133	109		01.177.600



P/N	A	B	C+C1	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C+C1	RICAMBIO SPARE PART
01.420.000 	215	110				Ø 38	 30.34.04527 16.172.000 13.308.000	133	109		



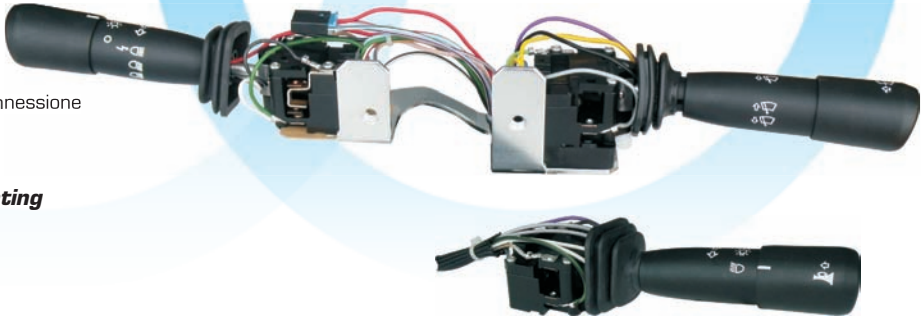
P/N	A	B	C+C1	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C+C1	RICAMBIO SPARE PART
01.541.000 	215	110				Ø 38	 30.34.04527 16.172.000 13.308.000	133	109		



P/N	A	B	C+C1	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C+C1	RICAMBIO SPARE PART
01.0630.0000 	215	110				Ø 38	 30.34.04527 09.180.118 09.180.119 09.180.121 09.180.120	133	109		

• **Serie 190** fissaggio a piantone sterzo
DEVIAGUIDA COMANDO LUCI + COMANDO TERGICRISTALLO

- Accensione luci interne-esterne: Ruotando pomello leva
- Leva interna: Metallica
- Rivestimento leva: Poliammide + simboli funzioni
- Cuffia: Gomma neoprene nera
- Contenitore di protezione: Poliammide
- Cavo di collegamento: Disponibile con diversi tipi di connessione
- Contatti elettrici: Frontali in aria



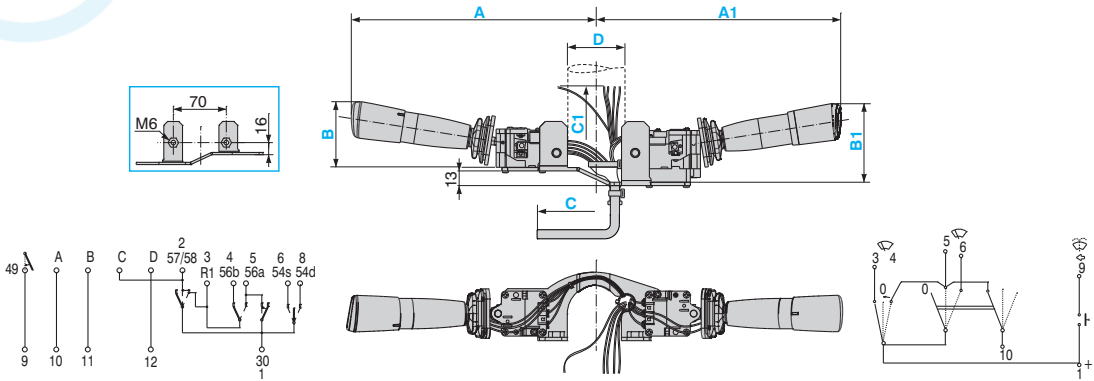
• **Series 190** steering column mounting
**LIGHT CONTROL SWITCH
 + WINDSHIELD WIPER CONTROL**

- Interior-exterior lights ignition: Turning lever knob
- Interior lever: Metallic
- Lever covering: Polyamide + Function symbols
- Cap: Black neoprene rubber
- Protection container: Polyamide
- Connection cable: Available with different kinds of connection
- Electrical contacts: Butt contacts

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	6,5A	4,5A
	7A	5A
	7A	5A
	7A	5A

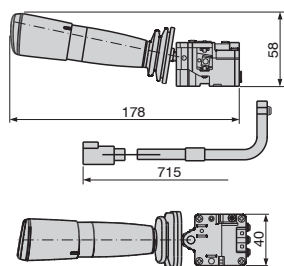
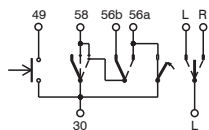
FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V
	5A	3A
	1,8A	1A
	8A	5A
	9A	6A
	9A	6A
	5A	3A
	8A	5A
	8A	5A

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P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0891.0000	217.5	58		01.0891.0500		Ø 48		217.5	70		01.0891.0600

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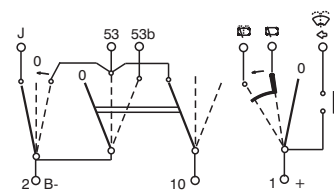
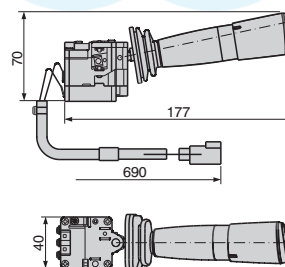
P/N

FUNZIONI - FUNCTIONS

01.0752.0500



166



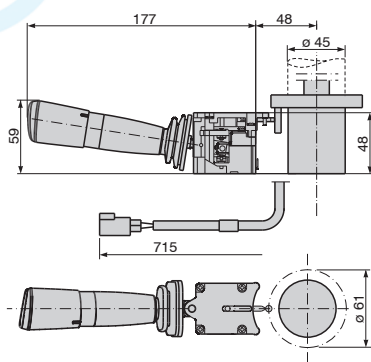
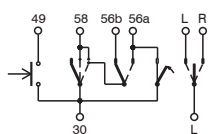
P/N

FUNZIONI - FUNCTIONS

01.0752.0600



151



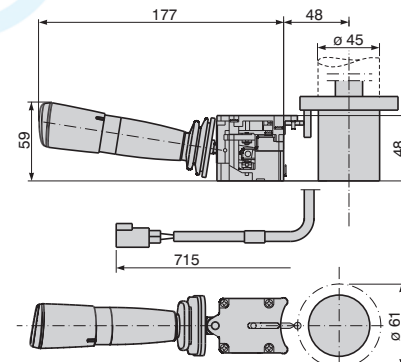
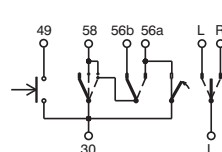
P/N

FUNZIONI - FUNCTIONS

01.0751.0000



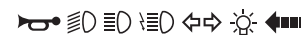
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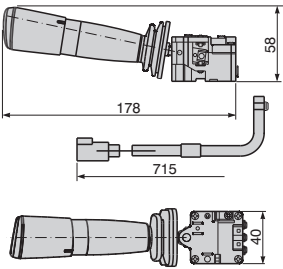
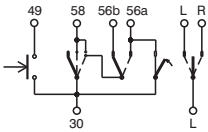


P/N

FUNZIONI - FUNCTIONS

01.0931.0000





P/N	FUNZIONI - <i>FUNCTIONS</i>
01.0930.0500	

P/N	FUNZIONI - <i>FUNCTIONS</i>

P/N	FUNZIONI - <i>FUNCTIONS</i>

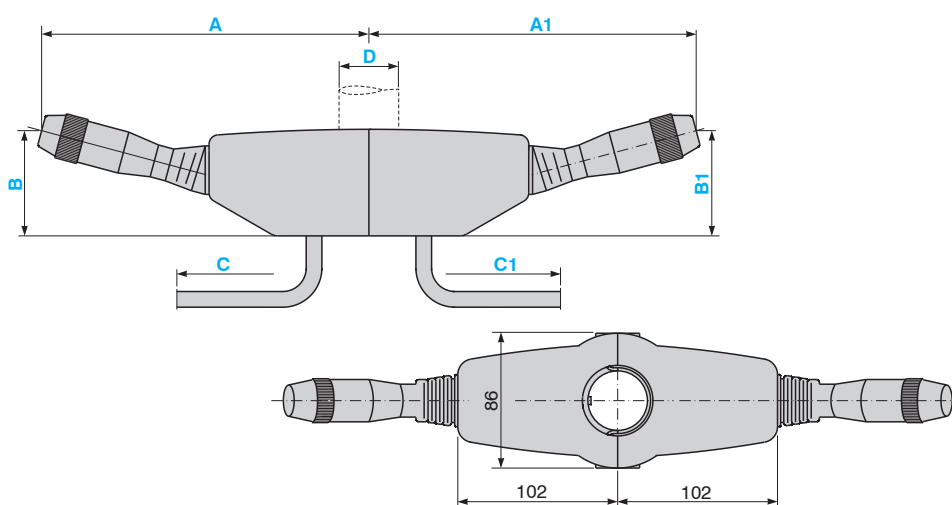
P/N	FUNZIONI - <i>FUNCTIONS</i>

Contatti elettrici: Frontali in aria

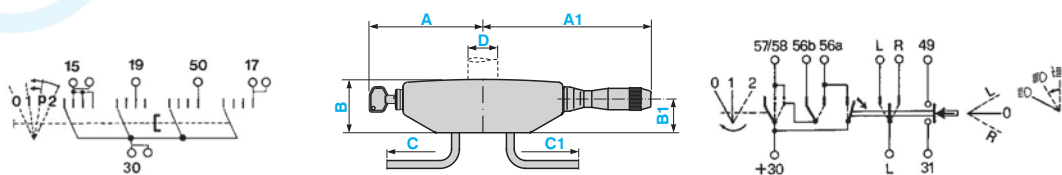


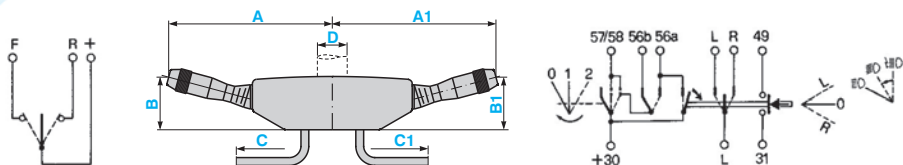
Electrical contacts: *Butt contacts*

FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD		FUNZIONI FUNCTIONS	CARICO MAX PEAK LOAD	
	12V	24V		12V	24V
	5A	3A	F	8A	5A
	6,5A	4,5A	R	8A	5A
	7A	5A		8A	5A
	7A	5A		8A	5A
	7A	5A		3A	2A
	5A	3A			
	1,8A	1A			
	8A	5A			
	9A	6A			
	9A	6A			
	5A	3A			

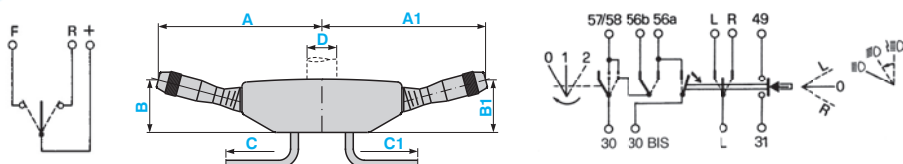


243

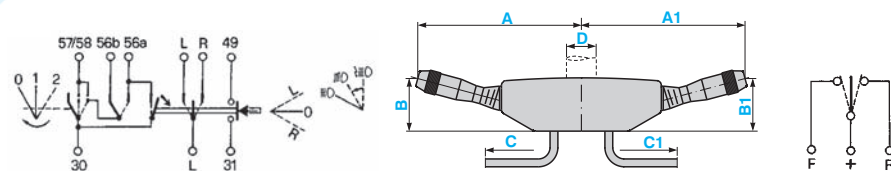
[illegible]



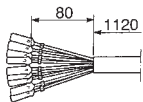
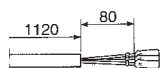
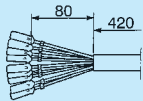
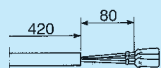
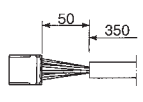
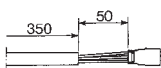
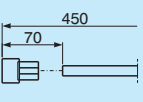
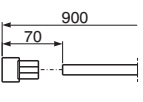
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.438.000	210	70		01.438.500	F R	Ø 45		210	70		01.438.600



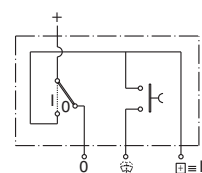
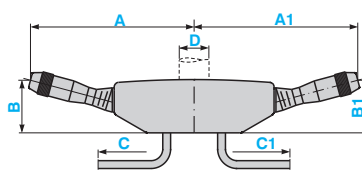
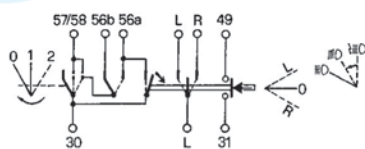
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.422.000	210	70		01.422.500	F R	Ø 45		210	70		01.422.600

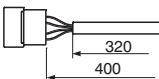
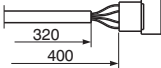


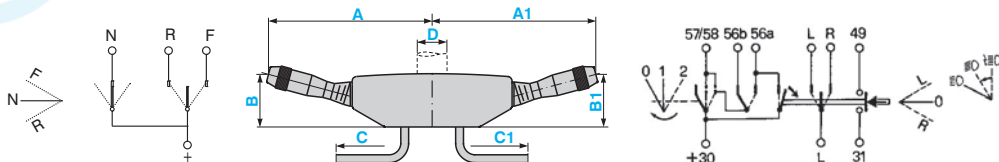
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.265.000	210	67		01.265.500		Ø 38	F R	210	67		01.265.600
01.298.000	210	67		01.298.500		Ø 40	F R	210	67		01.265.600

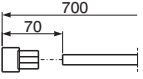
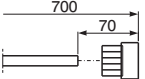
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0771.0000	210	67		01.0771.0500		Ø 45	F R	210	67		01.265.600
01.0889.0000	210	67		01.0889.0500		Ø 40	F R	210	67		01.0889.0600
01.397.000	210	67		01.397.500		Ø 38	F R	210	67		01.397.600
01.507.000	210	70		01.507.600		Ø 38	F R	210	70		01.507.500
01.0639.0000	210	70		01.0639.0600		Ø 45	F R	210	70		01.0639.0500

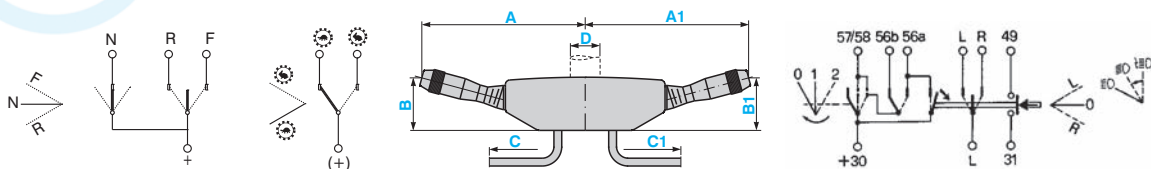
268

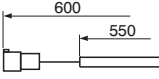
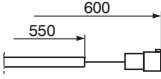


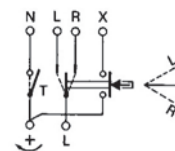
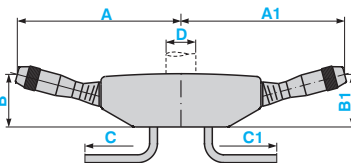
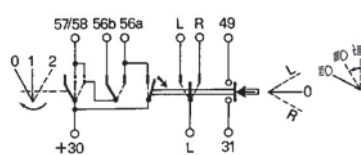
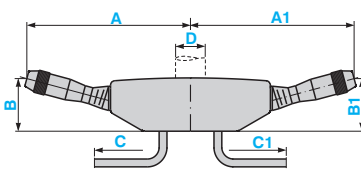
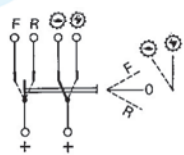
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0914.0000	210	70		01.0914.0500		Ø 38		210	70		01.0914.0600

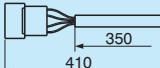
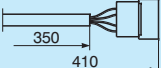
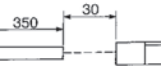
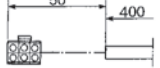
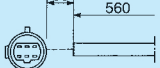
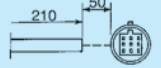
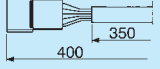
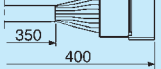
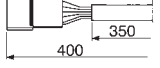


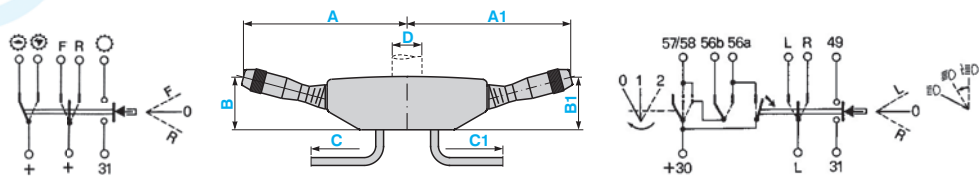
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0864.0000	210	70		01.0864.0500	F N R	Ø 38		210	70		01.0864.0600



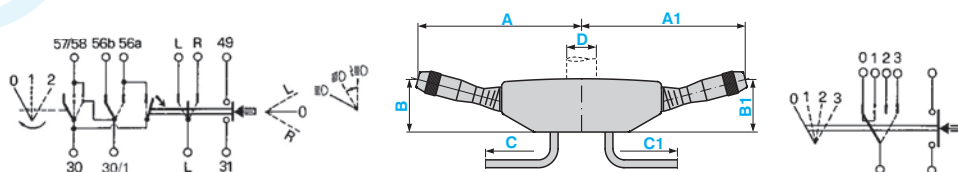
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0812.0000	210	70		01.0812.0500	F N R 	Ø 38		210	70		01.0812.0600

01694

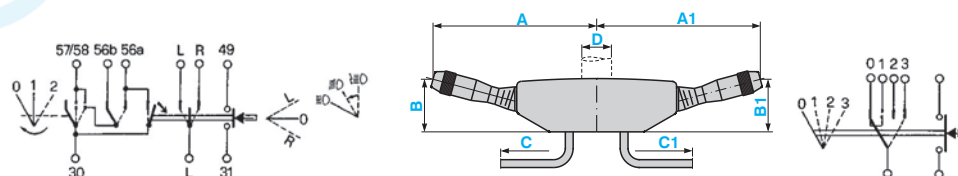
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0913.0000	210	70		01.0913.0500	FR 	Ø 45		210	70		01.0913.0600
01.428.000	210	70		01.428.500	FR 	Ø 45		210	70		01.428.600
01.506.000	210	70		01.506.500	FR 	Ø 45		210	70		01.506.600
01.406.000	210	70		01.406.500	FR 	Ø 38		210	70		01.406.600
01.421.000	210	70		01.421.500	FR 	Ø 45		210	70		01.421.600
01.413.000	214	110		01.413.500	FR 	Ø 45		210	70		01.388.600
01.1079.0000	210	70		01.1079.0500	FR 	Ø 38		210	70		01.1079.0600
01.1081.0000	210	70		01.1081.0500	FR 	Ø 45		210	70		01.1081.0600



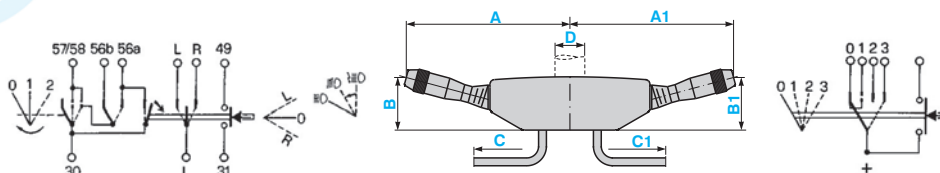
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.388.000	210	70		01.388.500	FR 	Ø 45		210	70		01.388.600



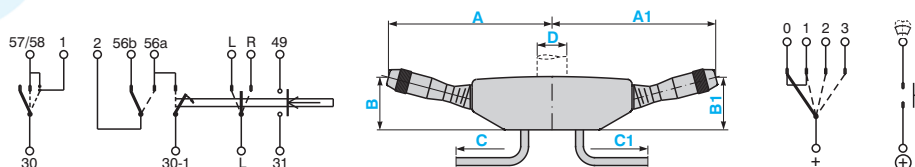
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.489.000	210	67		01.489.500		Ø 38		210	74		01.489.600



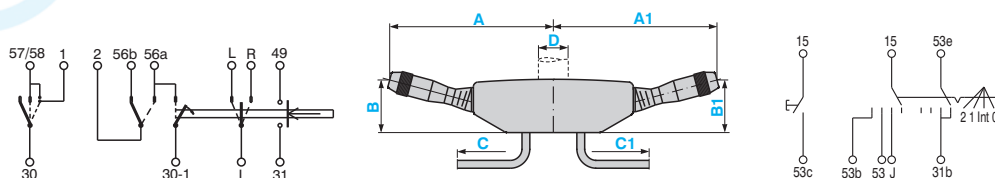
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.264.000	210	67		01.264.500		Ø 38		210	74		01.264.600
01.0786.0000	210	67		01.0786.0500		Ø 45		210	74		01.0786.0600



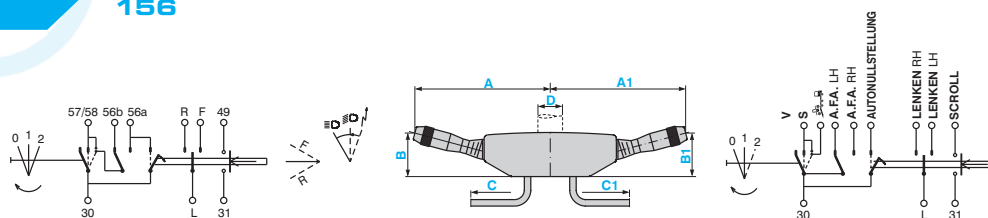
P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.0985.0000	210	67		01.0985.0500		Ø 38		210	74		01.0985.0600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.572.000	210	70		01.572.500		Ø 38		210	70		01.572.600



P/N	A	B	C	RICAMBIO SPARE PART	FUNZIONI FUNCTIONS	D	FUNZIONI FUNCTIONS	A1	B1	C1	RICAMBIO SPARE PART
01.1032.0000	210	70		01.572.500		Ø 38		210	70		01.1032.0600

[illegible]