



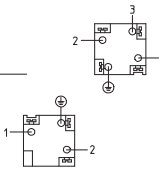

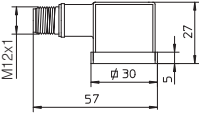
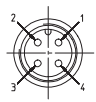

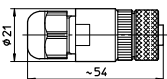


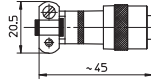


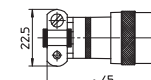


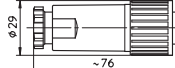


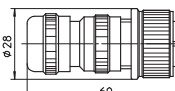


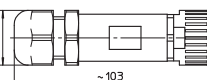


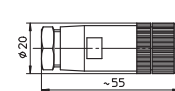


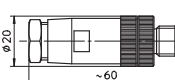


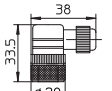


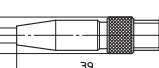


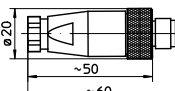


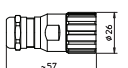




# Electric/electronic connectors

## 1 ELECTRIC CONNECTORS FOR ON/OFF VALVES

CODE AND DIMENSIONS	APPLICATION	ELECTRICAL TERMINAL VIEW (1)	SOCKET INTERFACE	CABLE GLAND Ø CABLE	REFERENCE RULES
<b>SP-345</b> 	Standard connector S (signal) for position trasducer for ZO(R)-T and ZO-L proportional valves of connector Sensor connector for DH*/FI			PG7 ø 4 ÷ 6 mm	Protection degree IP 65 DIN 40050
<b>SP-664</b> 	Connector for pressure switch type MAP			PG11 ø 8 ÷ 10 mm	DIN 43650-A/ISO 4400 Protection degree IP 65 DIN 40050
<b>SP-666 (2)</b>	Standard connector for ON/OFF valves, DC or AC power Standard connector (power) for ZO(R)-A, ZO(R)-T, ZO-L proportional valves				
<b>SP-667-24 (-110, -220)</b>	Option trasparent connector for ON/OFF valves with built-in led				
<b>SP-666/M12</b> 	Optional sensor connector for safety valves			M12x1	DIN 43650-A/ISO 4400 (valve interface) M12x1 (user interface) Protection degree IP 65 DIN 40050
<b>SP-ZH-4P/68</b> 	Sensor connector for ON/OFF safety cartridges type JODL/FI			PG09 ø 6 ÷ 8 mm	M12 IEC 60947-5-2 Protection degree IP 65 DIN 40050
<b>SP-PT-06E-8-3S</b> 	Optional /H connector for intrinsic safety solenoids			ø 3,2 mm	According to MIL-C-26482 Protection degree IP 67 DIN 40050
<b>SP-PT-06E-10-6S</b> 	Standard military connector for joysticks type E-TLP			ø 4,8 mm	According to MIL-C-26482 Protection degree IP 67 DIN 40050

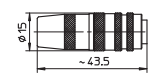


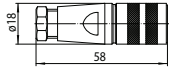


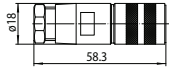


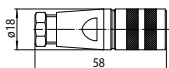


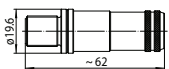





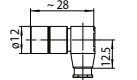


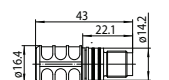


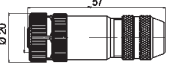


## 2 ELECTRIC CONNECTORS FOR PROPORTIONAL VALVES

<b>SP-ZH-7P</b> 	Standard single - 7 pins, plastic glass fiber reinforced, connectors for proportional valves with integral electronics			PG11 ø 8 ÷ 10 mm	DIN 43563-BF6-3-PG11 Protection degree IP 67 DIN 40050
<b>SP-ZM-7P</b> 	Metal connector for proportional valves with integral electronics.			PG11 ø 8 ÷ 10 mm	According to MIL-C-5015 G Protection degree IP 67 DIN 40050
<b>SP-ZH-12P</b> 	Connector - 12 pins, plastic glass fiber reinforced, connectors for proportional valves with integral electronics			PG16 ø 6 mm x 2 cable	DIN 43563* Protection degree IP 67 DIN 40050
<b>SP-ZH-5P</b> 	Communication connection for proportional valves with digital integral electronic drivers and CANopen interface Sensor connector for ON/OFF safety cartridges type JODL/FI/T			PG9 ø 6 ÷ 8 mm	M12-IEC60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-ZH-5P/BP</b> 	Communication connection for proportional valves with digital integral electronic drivers with PROFIBUS-DP interface			PG9 ø 6 ÷ 8 mm	M12-IEC60947-5-2 Protection degree IP 67 DIN 40050 Reverse Key
<b>SP-ZH-4P-M12</b> 	Female connector - 5 pins for main stage transducer LIQZO-L* proportional throttle cartridges, size 50 and above and for integral pressure transducer proportional valves			-	M12 IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-ZH-4P-M8/5</b> 	Pressure transducer connector for digital integral electronics (TES/LES) with options /SL, SP. Cable lenght 5mt			Moulded on cable	M8-IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-ZH-4P-M8-2/2</b>	Pressure transducer connector for digital integral electronics (TEZ/LEZ) with option /SF. Splitting cable lenght 2,5 mt				
<b>SP-ZH-5PM</b> 	Connection for proportional valves with digital integral controller, with remote analog transducer (position, pressure, force)			PG7 ø 4 ÷ 6 mm	M12-IEC60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-ZM-12P-M23</b> 	Metallic male connector - 12 pins for digital integral controller whit digital position transducer			ø 3 ÷ 7 mm	-

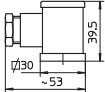
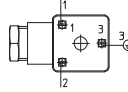

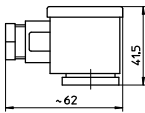
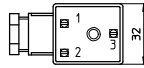

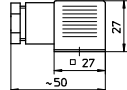


(1) Connection of electrical terminals must be realized according to instructions of the specific technical table of the valve.

(2) These connectors are black. White versions are also available (**SP-666/A, SP-669/A**)

**3 CONNECTORS FOR CK\* SERVOCYLINDER**

CODE AND DIMENSIONS	APPLICATION	ELECTRICAL TERMINAL VIEW (1)	SOCKET INTERFACE	CABLE GLAND Ø CABLE	REFERENCE RULES
<b>SP-PT-06W-8-4S</b> 	Standard military connector for CKP and CKV servocylinders with position transducer			ø 4,2 ÷ 5,8 mm	According to MIL-C-26482 Protection degree IP 67 DIN 40050
<b>SP-ST-CO-9131-D06-PG9</b> 	Female connector - 6 pins for CKM servocylinders with CANopen interface Connector for transducer output			PG09 ø 6 ÷ 8 mm	DIN 45322 Protection degree IP 67 DIN 40050
<b>SP-ST-CO-9131-D07-PG9</b> 	Female connector - 7 pins for CKM servocylinders with digital SSI position transducer Connector for transducer output			PG09 ø 6 ÷ 8 mm	DIN 45329 Protection degree IP 67 DIN 40050
<b>SP-ST-CO-9131-D</b> 	Female connector - 6 pins for KKN and CKM servocylinders with analog position transducer Connector for transducer output			ø 4 ÷ 6 mm	DIN 45322 Protection degree IP 67 DIN 40050
<b>SP-560884</b> 	Male connector - 5 pins for CKM servocylinders with digital position transducer with PROFIBUS DP interface Connector for bus output			ø 6,5 ÷ 8,5 mm	M12 IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-560885</b> 	Female connector - 5 pins for CKM servocylinders with digital position transducer with PROFIBUS DP interface Connector for bus input			ø 6,5 ÷ 8,5 mm	M12 IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-560886</b> 	Female connector - 4 pins for CKM servocylinders with digital position transducer with PROFIBUS DP interface Connector for power supply			ø 5 mm	M8 IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-560888</b> 	Female connector - 5 pins for CKM servocylinders with digital position transducer with PROFIBUS DP interface Connector for bus terminator			-	M12 IEC 60947-5-2 Protection degree IP 67 DIN 40050
<b>SP-CON031</b> 	Female connector - 5 pins for CKF servocylinders and electronic conditioning card of KKN servocylinders			ø 6 ÷ 8 mm	Protection degree IP 67 DIN 40050

**4 ELECTRONIC ACTIVE CONNECTORS FOR ON/OFF VALVES**

CODE AND DIMENSIONS	APPLICATION	ELECTRICAL TERMINAL VIEW (1)	SOCKET INTERFACE	CABLE GLAND Ø CABLE	REFERENCE RULES
<b>SP-669 (2)</b> 	Option connector for ON/OFF valves with built-in rectifier bridge for supplying DC coils by AC current			PG11 ø 8 ÷ 10 mm	DIN 43650-A/ISO 4400 Protection degree IP 65 DIN 40050
<b>E-SD/AC</b> 	Electronic connector which eliminate electric disturbances when AC solenoid valves are deenergized Power supply: 110/50, 115/60, 220/50, 230/60 VAc			PG11 ø 8 ÷ 10 mm	DIN 43650 Protection degree IP 65 DIN 40050
<b>E-SD/DC</b> 	Electronic connector which eliminate electric disturbances when DC solenoid valves are deenergized Power supply: 12, 24, 48 Vdc			PG11 ø 8 ÷ 10 mm	DIN 43650 Protection degree IP 65 DIN 40050

(1) Connection of electrical terminals must be realized according to instructions of the specific technical tables of the valve.