

Solenoid Drivers

Compatibility list of solenoids and solenoid drivers for LB and FB Remote I/O



Purpose of this Document

This document provides cross reference and compatibility information for solenoid drivers of the LB and FB Remote I/O. This includes application-specific data such as maximum cable length and line resistance.

The following average cable characteristics are assumed to determine the maximum cable length:

Cable Attribute	Value per km
Capacitance	110 nF
Inductance	1 mH

According to EN 60079-14, the exact cable characteristics must be used as a basis for project planning. Therefore, a comparison of the actual cable characteristics with the limit values of the control module is required. In the considerations below, it is assumed that there are no concentrated capacitances or inductances in the circuit, instead the corresponding values only refer to line reactances.

Please observe the following rules and restrictions for the combinations of valves and solenoid drivers:

1. Compare cable characteristics for the purpose of explosion hazardous protection.
2. Calculate line resistance (outward/return) as a function of the line cross-section according to the following values:

Cable Crosssection	Resistance per km
0.6 mm ²	59 Ω
1.0 mm ²	35 Ω
1.5 mm ²	24 Ω

3. Where restrictions are stated with regard to ambient temperature T_u , these refer to the maximum ambient temperature of the valve.
4. If solenoid drivers are marked '2 in 1', the two channels of the solenoid driver for this application are connected in parallel to achieve the result. This fact must also be taken into account when configuring and integrating the module. Both channels are then controlled in terms of data via channel 1.

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

ASCO

0.55 W Low Power_12V

LB 2101R, FB 2201R			77 Ohm
LB 2102R, FB 2202R			241 Ohm
LB 2103R, FB 2203R			91 Ohm
LB 2104, FB 2204			172 Ohm
LB 2104R, FB 2204R			172 Ohm
LB 2112R, FB 2212R			160 Ohm
LB 2113R, FB 2213R			21 Ohm
LB 2116, FB 2216			163 Ohm
LB 2117, FB 2217			99 Ohm
LB 6110R, FB 6210R			96 Ohm
LB 6111R, FB 6211R			96 Ohm
LB 6112R, FB 6212R			60 Ohm
LB 6113R, FB 6213R			131 Ohm
LB 6114R, FB 6214R			66 Ohm
LB 6115R, FB 6215R			143 Ohm
LB 6116, FB 6216			163 Ohm
LB 6116, FB 6216_2in1			292 Ohm
LB 6117, FB 6217			99 Ohm
LB 6117, FB 6217_2in1			164 Ohm

0.55 W Low Power_24V

LB 2102R, FB 2202R			177 Ohm
LB 2103R, FB 2203R			27 Ohm
LB 2104, FB 2204			49 Ohm
LB 2104R, FB 2204R			49 Ohm
LB 2112R, FB 2212R			134 Ohm
LB 2113R, FB 2213R			37 Ohm
LB 2116, FB 2216			70 Ohm
LB 6110R, FB 6210R			46 Ohm
LB 6111R, FB 6211R			46 Ohm
LB 6113R, FB 6213R			38 Ohm
LB 6116, FB 6216			70 Ohm
LB 6116, FB 6216_2in1			199 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
ASCO				
IS-M12-I				
	LB 2101R, FB 2201R		> 1 km	288 Ohm
	LB 2102R, FB 2202R		> 1 km	464 Ohm
	LB 2103R, FB 2203R	740 m		314 Ohm
	LB 2104, FB 2204	> 1 km		383 Ohm
	LB 2104R, FB 2204R	> 1 km		383 Ohm
	LB 2112R, FB 2212R	740 m		392 Ohm
	LB 2113R, FB 2213R	680 m		262 Ohm
	LB 2116, FB 2216	1000 m		380 Ohm
	LB 2117, FB 2217	> 1 km		275 Ohm
	LB 6110R, FB 6210R	740 m		322 Ohm
	LB 6111R, FB 6211R	740 m		322 Ohm
	LB 6112R, FB 6212R	> 1 km		239 Ohm
	LB 6113R, FB 6213R	880 m		348 Ohm
	LB 6114R, FB 6214R	880 m		283 Ohm
	LB 6115R, FB 6215R	235 m		318 Ohm
	LB 6116, FB 6216	1000 m		380 Ohm
	LB 6116, FB 6216_2in1		760 m	509 Ohm
	LB 6117, FB 6217	> 1 km		275 Ohm
	LB 6117, FB 6217_2in1	335 m		340 Ohm
Series 195				
	LB 2101R, FB 2201R		> 1 km	33 Ohm
	LB 2103R, FB 2203R	740 m		48 Ohm
	LB 2112R, FB 2212R	740 m		119 Ohm
	LB 2116, FB 2216	1000 m		120 Ohm
	LB 6110R, FB 6210R	740 m		53 Ohm
	LB 6111R, FB 6211R	740 m		53 Ohm
	LB 6113R, FB 6213R	880 m		88 Ohm
	LB 6114R, FB 6214R	880 m		23 Ohm
	LB 6116, FB 6216	1000 m		120 Ohm
Series 302 (LP1 "12V" 0.5W)				
	LB 2102R, FB 2202R		> 1 km	145 Ohm
	LB 2104, FB 2204	> 1 km		74 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

ASCO

Series 302 (LP1 "12V" 0.5W)

LB 2104R, FB 2204R	> 1 km		74 Ohm
LB 2112R, FB 2212R	740 m		65 Ohm
LB 2116, FB 2216	1000 m		67 Ohm
LB 6113R, FB 6213R	880 m		35 Ohm
LB 6115R, FB 6215R	235 m		40 Ohm
LB 6116, FB 6216	1000 m		67 Ohm
LB 6116, FB 6216_2in1		760 m	196 Ohm

Series 302 (LP1 "24V" 0.25W)

LB 2101R, FB 2201R		> 1 km	87 Ohm
LB 2102R, FB 2202R		> 1 km	292 Ohm
LB 2103R, FB 2203R	740 m		142 Ohm
LB 2104, FB 2204	> 1 km		182 Ohm
LB 2104R, FB 2204R	> 1 km		182 Ohm
LB 2112R, FB 2212R	740 m		238 Ohm
LB 2116, FB 2216	1000 m		194 Ohm
LB 6110R, FB 6210R	740 m		157 Ohm
LB 6111R, FB 6211R	740 m		157 Ohm
LB 6113R, FB 6213R	880 m		162 Ohm
LB 6114R, FB 6214R	880 m		97 Ohm
LB 6115R, FB 6215R	235 m		34 Ohm
LB 6116, FB 6216	1000 m		194 Ohm
LB 6116, FB 6216_2in1		760 m	323 Ohm

Series 302 (LP1 "24V" 0.5W)

LB 2102R, FB 2202R		> 1 km	43 Ohm
LB 6116, FB 6216_2in1		760 m	84 Ohm

Series 622 (Spool Valve Island)

LB 2101R, FB 2201R		> 1 km	87 Ohm
LB 2102R, FB 2202R		> 1 km	292 Ohm
LB 2103R, FB 2203R	740 m		142 Ohm
LB 2104, FB 2204	> 1 km		182 Ohm
LB 2104R, FB 2204R	> 1 km		182 Ohm
LB 2112R, FB 2212R	740 m		238 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

ASCO

Series 622 (Spool Valve Island)

LB 2116, FB 2216	1000 m		194 Ohm
LB 6110R, FB 6210R	740 m		157 Ohm
LB 6111R, FB 6211R	740 m		157 Ohm
LB 6113R, FB 6213R	880 m		162 Ohm
LB 6114R, FB 6214R	880 m		97 Ohm
LB 6115R, FB 6215R	235 m		34 Ohm
LB 6116, FB 6216	1000 m		194 Ohm
LB 6116, FB 6216_2in1		760 m	323 Ohm

Series 630: Piezotronic 12V (12mW Version)

LB 2101R, FB 2201R		> 1 km	885 Ohm
LB 2103R, FB 2203R	740 m		840 Ohm
LB 2104, FB 2204	> 1 km		980 Ohm
LB 2104R, FB 2204R	> 1 km		980 Ohm
LB 2112R, FB 2212R	740 m		871 Ohm
LB 2113R, FB 2213R	680 m		691 Ohm
LB 2116, FB 2216	1000 m		942 Ohm
LB 2117, FB 2217	> 1 km		581 Ohm
LB 6110R, FB 6210R	740 m		830 Ohm
LB 6111R, FB 6211R	740 m		830 Ohm
LB 6112R, FB 6212R	> 1 km		590 Ohm
LB 6113R, FB 6213R	880 m		910 Ohm
LB 6114R, FB 6214R	880 m		845 Ohm
LB 6116, FB 6216	1000 m		942 Ohm
LB 6117, FB 6217	> 1 km		581 Ohm
LB 7104, FB 7204	> 1 km		799 Ohm

Series 630: Piezotronic 12V (32mW Version)

LB 2101R, FB 2201R		> 1 km	155 Ohm
LB 2103R, FB 2203R	740 m		110 Ohm
LB 2104, FB 2204	> 1 km		250 Ohm
LB 2104R, FB 2204R	> 1 km		250 Ohm
LB 2112R, FB 2212R	740 m		141 Ohm
LB 2116, FB 2216	1000 m		212 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

ASCO

Series 630: Piezotronic 12V (32mW Version)

LB 2117, FB 2217	> 1 km		339 Ohm
LB 6110R, FB 6210R	740 m		100 Ohm
LB 6111R, FB 6211R	740 m		100 Ohm
LB 6112R, FB 6212R	> 1 km		285 Ohm
LB 6113R, FB 6213R	880 m		180 Ohm
LB 6114R, FB 6214R	880 m		115 Ohm
LB 6116, FB 6216	1000 m		212 Ohm
LB 6117, FB 6217	> 1 km		339 Ohm
LB 7104, FB 7204	> 1 km		69 Ohm

Series 630: Piezotronic 24V (46mW Version)

LB 2112R, FB 2212R	740 m		41 Ohm
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Series 630: Piezotronic 6V (3mW Version)

LB 2101R, FB 2201R		> 1 km	885 Ohm
LB 2103R, FB 2203R	740 m		840 Ohm
LB 2104, FB 2204	> 1 km		980 Ohm
LB 2104R, FB 2204R	> 1 km		980 Ohm
LB 2112R, FB 2212R	740 m		871 Ohm
LB 2113R, FB 2213R	680 m		691 Ohm
LB 2116, FB 2216	1000 m		942 Ohm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6110R, FB 6210R	740 m		830 Ohm
LB 6111R, FB 6211R	740 m		830 Ohm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		910 Ohm
LB 6114R, FB 6214R	880 m		845 Ohm
LB 6116, FB 6216	1000 m		942 Ohm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		799 Ohm

Series 630: Piezotronic 8V (22mW Version)

LB 2104, FB 2204	> 1 km		80 Ohm
LB 2104R, FB 2204R	> 1 km		80 Ohm
LB 2116, FB 2216	1000 m		42 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
ASCO				
Series 630: Piezotronic 8V (22mW Version)				
	LB 2117, FB 2217	> 1 km		169 Ohm
	LB 6112R, FB 6212R	> 1 km		115 Ohm
	LB 6116, FB 6216	1000 m		42 Ohm
	LB 6117, FB 6217	> 1 km		169 Ohm
Series IS & NIFW				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2102R, FB 2202R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2104, FB 2204	> 1 km		> 1 kOhm
	LB 2104R, FB 2204R	> 1 km		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 2117, FB 2217	> 1 km		> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6112R, FB 6212R	> 1 km		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6115R, FB 6215R	235 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 6116, FB 6216_2in1		760 m	> 1 kOhm
	LB 6117, FB 6217	> 1 km		> 1 kOhm
	LB 6117, FB 6217_2in1	335 m		> 1 kOhm
Series ISMR (Groups A-D)				
	LB 2101R, FB 2201R		> 1 km	602 Ohm
	LB 2103R, FB 2203R	740 m		640 Ohm
	LB 6110R, FB 6210R	740 m		651 Ohm
	LB 6114R, FB 6214R	880 m		603 Ohm
Series LI WSLI				
	LB 2102R, FB 2202R		> 1 km	149 Ohm
	LB 2104, FB 2204	> 1 km		77 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
ASCO				
Series LI WSLI				
	LB 2104R, FB 2204R	> 1 km		77 Ohm
	LB 2112R, FB 2212R	740 m		71 Ohm
	LB 2116, FB 2216	1000 m		70 Ohm
	LB 6113R, FB 6213R	880 m		38 Ohm
	LB 6115R, FB 6215R	235 m		38 Ohm
	LB 6116, FB 6216	1000 m		70 Ohm
	LB 6116, FB 6216_2in1		760 m	199 Ohm
	LB 6117, FB 6217_2in1	335 m		59 Ohm
Series LISC				
	LB 2102R, FB 2202R		> 1 km	101 Ohm
	LB 2104, FB 2204	> 1 km		36 Ohm
	LB 2104R, FB 2204R	> 1 km		36 Ohm
	LB 2112R, FB 2212R	740 m		18 Ohm
	LB 6115R, FB 6215R	235 m		16 Ohm
	LB 6116, FB 6216	1000 m		25 Ohm
	LB 6116, FB 6216_2in1		760 m	154 Ohm
Series NFIS WSNFIS				
	LB 2101R, FB 2201R		> 1 km	286 Ohm
	LB 2102R, FB 2202R		> 1 km	454 Ohm
	LB 2103R, FB 2203R	740 m		304 Ohm
	LB 2104, FB 2204	> 1 km		382 Ohm
	LB 2104R, FB 2204R	> 1 km		382 Ohm
	LB 2112R, FB 2212R	740 m		376 Ohm
	LB 2113R, FB 2213R	680 m		239 Ohm
	LB 2116, FB 2216	1000 m		375 Ohm
	LB 2117, FB 2217	> 1 km		299 Ohm
	LB 6110R, FB 6210R	740 m		310 Ohm
	LB 6111R, FB 6211R	740 m		310 Ohm
	LB 6112R, FB 6212R	> 1 km		260 Ohm
	LB 6113R, FB 6213R	880 m		343 Ohm
	LB 6114R, FB 6214R	880 m		278 Ohm
	LB 6115R, FB 6215R	235 m		342 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

ASCO

Series NFIS WSNFIS

LB 6116, FB 6216	1000 m		375 Ohm
LB 6116, FB 6216_2in1		760 m	504 Ohm
LB 6117, FB 6217	> 1 km		299 Ohm
LB 6117, FB 6217_2in1	335 m		364 Ohm

Series WPIS WSIS

LB 2101R, FB 2201R		> 1 km	313 Ohm
LB 2102R, FB 2202R		> 1 km	489 Ohm
LB 2103R, FB 2203R	740 m		339 Ohm
LB 2104, FB 2204	> 1 km		408 Ohm
LB 2104R, FB 2204R	> 1 km		408 Ohm
LB 2112R, FB 2212R	740 m		417 Ohm
LB 2113R, FB 2213R	680 m		287 Ohm
LB 2116, FB 2216	1000 m		405 Ohm
LB 2117, FB 2217	> 1 km		300 Ohm
LB 6110R, FB 6210R	740 m		347 Ohm
LB 6111R, FB 6211R	740 m		347 Ohm
LB 6112R, FB 6212R	> 1 km		264 Ohm
LB 6113R, FB 6213R	880 m		373 Ohm
LB 6114R, FB 6214R	880 m		308 Ohm
LB 6115R, FB 6215R	235 m		343 Ohm
LB 6116, FB 6216	1000 m		405 Ohm
LB 6116, FB 6216_2in1		760 m	534 Ohm
LB 6117, FB 6217	> 1 km		300 Ohm
LB 6117, FB 6217_2in1	335 m		365 Ohm

ATOS

OW-18/H

LB 6116, FB 6216_2in1		760 m	26 Ohm
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BC

BC-x.8.12.25

LB 2117, FB 2217	> 1 km		28 Ohm
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Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
BC				
BC-x.8.12.25				
	LB 6117, FB 6217	> 1 km		28 Ohm
	LB 6117, FB 6217_2in1	335 m		93 Ohm
BC-x.8.12.30				
	LB 6117, FB 6217_2in1	335 m		67 Ohm
BC-x.8.12.35				
	LB 6117, FB 6217_2in1	335 m		48 Ohm
BC-x.8.12.40				
	LB 6117, FB 6217_2in1	335 m		34 Ohm
BC-x.8.12.45				
	LB 6117, FB 6217_2in1	335 m		23 Ohm
BC-x.8.12.50				
	LB 6117, FB 6217_2in1	335 m		14 Ohm
Buerkert				
Spule 6519 NAMUR I.S				
	LB 2101R, FB 2201R		> 1 km	84 Ohm
	LB 2103R, FB 2203R	740 m		108 Ohm
	LB 2104, FB 2204	> 1 km		179 Ohm
	LB 2104R, FB 2204R	> 1 km		179 Ohm
	LB 2112R, FB 2212R	740 m		183 Ohm
	LB 2113R, FB 2213R	680 m		52 Ohm
	LB 2116, FB 2216	1000 m		175 Ohm
	LB 2117, FB 2217	> 1 km		78 Ohm
	LB 6110R, FB 6210R	740 m		115 Ohm
	LB 6111R, FB 6211R	740 m		115 Ohm
	LB 6112R, FB 6212R	> 1 km		41 Ohm
	LB 6113R, FB 6213R	880 m		143 Ohm
	LB 6114R, FB 6214R	880 m		78 Ohm
	LB 6116, FB 6216	1000 m		175 Ohm
	LB 6117, FB 6217	> 1 km		78 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Buerkert

Spule AC 10 EEXi für Ventile:0590EEXi, 6014EEXi, 6518E

LB 2101R, FB 2201R		> 1 km	58 Ohm
LB 2103R, FB 2203R	740 m		80 Ohm
LB 2112R, FB 2212R	740 m		154 Ohm
LB 2116, FB 2216	1000 m		149 Ohm
LB 6110R, FB 6210R	740 m		87 Ohm
LB 6111R, FB 6211R	740 m		87 Ohm
LB 6113R, FB 6213R	880 m		117 Ohm
LB 6114R, FB 6214R	880 m		52 Ohm
LB 6116, FB 6216	1000 m		149 Ohm

Spule AC21 EEXi für Ventile:0450EEXi, 5470EEXi, 6106E

LB 2101R, FB 2201R		> 1 km	84 Ohm
LB 2103R, FB 2203R	740 m		108 Ohm
LB 2113R, FB 2213R	680 m		52 Ohm
LB 2116, FB 2216	1000 m		175 Ohm
LB 6110R, FB 6210R	740 m		115 Ohm
LB 6114R, FB 6214R	880 m		78 Ohm
LB 6116, FB 6216	1000 m		175 Ohm

Spule G1 642735 EEXi;6104 EEXi, 6510 EEXi, 6511 EEXi,

LB 2101R, FB 2201R		> 1 km	73 Ohm
LB 2103R, FB 2203R	740 m		97 Ohm
LB 2104, FB 2204	> 1 km		168 Ohm
LB 2104R, FB 2204R	> 1 km		168 Ohm
LB 2112R, FB 2212R	740 m		172 Ohm
LB 2113R, FB 2213R	680 m		41 Ohm
LB 2116, FB 2216	1000 m		164 Ohm
LB 2117, FB 2217	> 1 km		67 Ohm
LB 6110R, FB 6210R	740 m		104 Ohm
LB 6111R, FB 6211R	740 m		104 Ohm
LB 6112R, FB 6212R	> 1 km		30 Ohm
LB 6113R, FB 6213R	880 m		132 Ohm
LB 6114R, FB 6214R	880 m		67 Ohm
LB 6116, FB 6216	1000 m		164 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Buerkert				
Spule G1 642735 EExi;6104 EExi, 6510 EExi, 6511 EExi,				
	LB 6117, FB 6217	> 1 km		67 Ohm
FAS				
Microsol_12V_T4_85				
	LB 2102R, FB 2202R		> 1 km	51 Ohm
	LB 6116, FB 6216_2in1		760 m	108 Ohm
	LB 6117, FB 6217_2in1	335 m		12 Ohm
Microsol_12V_T5_50				
	LB 2102R, FB 2202R		> 1 km	51 Ohm
	LB 6116, FB 6216_2in1		760 m	108 Ohm
	LB 6117, FB 6217_2in1	335 m		12 Ohm
Festo				
CPV10-EX-VI				
	LB 2103R, FB 2203R	740 m		78 Ohm
	LB 2112R, FB 2212R	740 m		194 Ohm
	LB 2113R, FB 2213R	680 m		105 Ohm
	LB 2116, FB 2216	1000 m		116 Ohm
	LB 6110R, FB 6210R	740 m		101 Ohm
	LB 6111R, FB 6211R	740 m		101 Ohm
	LB 6113R, FB 6213R	880 m		84 Ohm
	LB 6114R, FB 6214R	880 m		19 Ohm
	LB 6116, FB 6216	1000 m		116 Ohm
MFVH* (Spule: GBXE 022*)				
	LB 2102R, FB 2202R		> 1 km	148 Ohm
	LB 2104, FB 2204	> 1 km		92 Ohm
	LB 2104R, FB 2204R	> 1 km		92 Ohm
	LB 2112R, FB 2212R	740 m		59 Ohm
	LB 2117, FB 2217	> 1 km		53 Ohm
	LB 6112R, FB 6212R	> 1 km		10 Ohm
	LB 6115R, FB 6215R	235 m		99 Ohm
	LB 6116, FB 6216_2in1		760 m	206 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Festo				
MFVH* (Spule: GBXE 022*)				
	LB 6117, FB 6217	> 1 km		53 Ohm
	LB 6117, FB 6217_2in1	335 m		118 Ohm
VACC-S13-11-K4-1-EX4A				
	LB 2101R, FB 2201R		> 1 km	149 Ohm
	LB 2103R, FB 2203R	740 m		237 Ohm
	LB 2104, FB 2204	> 1 km		244 Ohm
	LB 2104R, FB 2204R	> 1 km		244 Ohm
	LB 2112R, FB 2212R	740 m		355 Ohm
	LB 2113R, FB 2213R	680 m		268 Ohm
	LB 2116, FB 2216	1000 m		272 Ohm
	LB 6110R, FB 6210R	740 m		260 Ohm
	LB 6111R, FB 6211R	740 m		260 Ohm
	LB 6113R, FB 6213R	880 m		240 Ohm
	LB 6114R, FB 6214R	880 m		175 Ohm
	LB 6116, FB 6216	1000 m		272 Ohm
	LB 7104, FB 7204	> 1 km		163 Ohm
Herion				
2010...2014				
	LB 6115R, FB 6215R	235 m		57 Ohm
	LB 6117, FB 6217_2in1	335 m		74 Ohm
2050				
	LB 2101R, FB 2201R		> 1 km	109 Ohm
	LB 2102R, FB 2202R		> 1 km	275 Ohm
	LB 2103R, FB 2203R	740 m		125 Ohm
	LB 2104, FB 2204	> 1 km		204 Ohm
	LB 2104R, FB 2204R	> 1 km		204 Ohm
	LB 2112R, FB 2212R	740 m		195 Ohm
	LB 2113R, FB 2213R	680 m		58 Ohm
	LB 2116, FB 2216	1000 m		197 Ohm
	LB 2117, FB 2217	> 1 km		127 Ohm
	LB 6110R, FB 6210R	740 m		130 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Herion				
2050				
	LB 6111R, FB 6211R	740 m		130 Ohm
	LB 6112R, FB 6212R	> 1 km		88 Ohm
	LB 6113R, FB 6213R	880 m		165 Ohm
	LB 6114R, FB 6214R	880 m		100 Ohm
	LB 6115R, FB 6215R	235 m		170 Ohm
	LB 6116, FB 6216	1000 m		197 Ohm
	LB 6116, FB 6216_2in1		760 m	326 Ohm
	LB 6117, FB 6217	> 1 km		127 Ohm
	LB 6117, FB 6217_2in1	335 m		192 Ohm
2051				
	LB 2101R, FB 2201R		> 1 km	132 Ohm
	LB 2102R, FB 2202R		> 1 km	320 Ohm
	LB 2103R, FB 2203R	740 m		170 Ohm
	LB 2104, FB 2204	> 1 km		227 Ohm
	LB 2104R, FB 2204R	> 1 km		227 Ohm
	LB 2112R, FB 2212R	740 m		255 Ohm
	LB 2113R, FB 2213R	680 m		134 Ohm
	LB 2116, FB 2216	1000 m		230 Ohm
	LB 2117, FB 2217	> 1 km		86 Ohm
	LB 6110R, FB 6210R	740 m		181 Ohm
	LB 6111R, FB 6211R	740 m		181 Ohm
	LB 6112R, FB 6212R	> 1 km		53 Ohm
	LB 6113R, FB 6213R	880 m		198 Ohm
	LB 6114R, FB 6214R	880 m		133 Ohm
	LB 6115R, FB 6215R	235 m		127 Ohm
	LB 6116, FB 6216	1000 m		230 Ohm
	LB 6116, FB 6216_2in1		760 m	359 Ohm
	LB 6117, FB 6217	> 1 km		86 Ohm
	LB 6117, FB 6217_2in1	335 m		152 Ohm
2052				
	LB 2101R, FB 2201R		> 1 km	97 Ohm
	LB 2102R, FB 2202R		> 1 km	319 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Herion				
2052				
	LB 2103R, FB 2203R	740 m		169 Ohm
	LB 2104, FB 2204	> 1 km		192 Ohm
	LB 2104R, FB 2204R	> 1 km		192 Ohm
	LB 2112R, FB 2212R	740 m		277 Ohm
	LB 2113R, FB 2213R	680 m		179 Ohm
	LB 2116, FB 2216	1000 m		213 Ohm
	LB 6110R, FB 6210R	740 m		189 Ohm
	LB 6111R, FB 6211R	740 m		189 Ohm
	LB 6113R, FB 6213R	880 m		181 Ohm
	LB 6114R, FB 6214R	880 m		116 Ohm
	LB 6116, FB 6216	1000 m		213 Ohm
	LB 6116, FB 6216_2in1		760 m	342 Ohm
	LB 6117, FB 6217_2in1	335 m		22 Ohm
	LB 7104, FB 7204	> 1 km		99 Ohm
2053				
	LB 2102R, FB 2202R		> 1 km	175 Ohm
	LB 2103R, FB 2203R	740 m		25 Ohm
	LB 2104, FB 2204	> 1 km		11 Ohm
	LB 2104R, FB 2204R	> 1 km		11 Ohm
	LB 2112R, FB 2212R	740 m		156 Ohm
	LB 2113R, FB 2213R	680 m		83 Ohm
	LB 2116, FB 2216	1000 m		50 Ohm
	LB 6110R, FB 6210R	740 m		53 Ohm
	LB 6111R, FB 6211R	740 m		53 Ohm
	LB 6113R, FB 6213R	880 m		18 Ohm
	LB 6116, FB 6216	1000 m		50 Ohm
	LB 6116, FB 6216_2in1		760 m	179 Ohm
2080/2082				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 2117, FB 2217	> 1 km		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Herion

2080/2082

LB 6108A, FB 6208B			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

2081/2082

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6108A, FB 6208B			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

2084

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6108A, FB 6208B			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Herion				
2084				
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 6117, FB 6217	> 1 km		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
Hoerbiger				
P8 381-RF-C				
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6108C, FB 6208C			> 1 kOhm
PN61				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2102R, FB 2202R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2104, FB 2204	> 1 km		> 1 kOhm
	LB 2104R, FB 2204R	> 1 km		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 2117, FB 2217	> 1 km		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6108C, FB 6208C			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6112R, FB 6212R	> 1 km		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6115R, FB 6215R	235 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 6116, FB 6216_2in1		760 m	> 1 kOhm
	LB 6117, FB 6217	> 1 km		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Hoerbiger				
PN61				
	LB 6117, FB 6217_2in1	335 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
PN65				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2102R, FB 2202R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2104, FB 2204	> 1 km		> 1 kOhm
	LB 2104R, FB 2204R	> 1 km		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 2117, FB 2217	> 1 km		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6108C, FB 6208C			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6112R, FB 6212R	> 1 km		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6115R, FB 6215R	235 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 6116, FB 6216_2in1		760 m	> 1 kOhm
	LB 6117, FB 6217	> 1 km		> 1 kOhm
	LB 6117, FB 6217_2in1	335 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm

Honeywell-Lucifer

Spule mit 295 Ohm

LB 2101R, FB 2201R		> 1 km	30 Ohm
LB 2103R, FB 2203R	740 m		54 Ohm
LB 2112R, FB 2212R	740 m		130 Ohm
LB 2116, FB 2216	1000 m		121 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Honeywell-Lucifer

Spule mit 295 Ohm

LB 6110R, FB 6210R	740 m		61 Ohm
LB 6111R, FB 6211R	740 m		61 Ohm
LB 6113R, FB 6213R	880 m		89 Ohm
LB 6114R, FB 6214R	880 m		24 Ohm
LB 6116, FB 6216	1000 m		121 Ohm

KVAutomation

KVEX131

LB 2101R, FB 2201R		> 1 km	28 Ohm
LB 2102R, FB 2202R		> 1 km	190 Ohm
LB 2103R, FB 2203R	740 m		40 Ohm
LB 2104, FB 2204	> 1 km		123 Ohm
LB 2104R, FB 2204R	> 1 km		123 Ohm
LB 2112R, FB 2212R	740 m		108 Ohm
LB 2117, FB 2217	> 1 km		55 Ohm
LB 6110R, FB 6210R	740 m		44 Ohm
LB 6111R, FB 6211R	740 m		44 Ohm
LB 6112R, FB 6212R	> 1 km		15 Ohm
LB 6113R, FB 6213R	880 m		81 Ohm
LB 6114R, FB 6214R	880 m		16 Ohm
LB 6115R, FB 6215R	235 m		99 Ohm
LB 6116, FB 6216	1000 m		113 Ohm
LB 6116, FB 6216_2in1		760 m	242 Ohm
LB 6117, FB 6217	> 1 km		55 Ohm
LB 6117, FB 6217_2in1	335 m		120 Ohm

Norgren

2003

LB 2103R, FB 2203R	740 m		590 Ohm
LB 2112R, FB 2212R	740 m		686 Ohm
LB 6113R, FB 6213R	880 m		210 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Norgren				
24010				
	LB 2103R, FB 2203R	740 m		115 Ohm
	LB 2112R, FB 2212R	740 m		178 Ohm
	LB 6113R, FB 6213R	880 m		160 Ohm
Spule 06129(2086)				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2104, FB 2204	> 1 km		> 1 kOhm
	LB 2104R, FB 2204R	> 1 km		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6108C, FB 6208C			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6112R, FB 6212R	> 1 km		815 Ohm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
Parker				
482660				
	LB 2102R, FB 2202R		> 1 km	212 Ohm
	LB 2103R, FB 2203R	740 m		62 Ohm
	LB 2112R, FB 2212R	740 m		122 Ohm
	LB 6113R, FB 6213R	880 m		110 Ohm
	LB 6116, FB 6216_2in1		760 m	271 Ohm
483330,01				
	LB 2103R, FB 2203R	740 m		62 Ohm
	LB 2112R, FB 2212R	740 m		122 Ohm
	LB 6113R, FB 6213R	880 m		110 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Parker				
483580.01/03_483960.01/03				
	LB 2101R, FB 2201R		> 1 km	385 Ohm
	LB 2103R, FB 2203R	740 m		440 Ohm
	LB 2112R, FB 2212R	740 m		536 Ohm
	LB 6110R, FB 6210R	740 m		455 Ohm
	LB 6111R, FB 6211R	740 m		455 Ohm
	LB 6113R, FB 6213R	880 m		460 Ohm
	LB 6114R, FB 6214R	880 m		395 Ohm
	LB 6116, FB 6216	1000 m		492 Ohm
488650.01/03_488660.01/03_488670.01/03				
	LB 2101R, FB 2201R		> 1 km	385 Ohm
	LB 2103R, FB 2203R	740 m		440 Ohm
	LB 2112R, FB 2212R	740 m		536 Ohm
	LB 2116, FB 2216	1000 m		492 Ohm
	LB 6110R, FB 6210R	740 m		455 Ohm
	LB 6111R, FB 6211R	740 m		455 Ohm
	LB 6113R, FB 6213R	880 m		460 Ohm
	LB 6114R, FB 6214R	880 m		395 Ohm
	LB 6116, FB 6216	1000 m		492 Ohm
490860				
	LB 2103R, FB 2203R	740 m		62 Ohm
	LB 2112R, FB 2212R	740 m		122 Ohm
	LB 6113R, FB 6213R	880 m		110 Ohm
490880_493997				
	LB 2101R, FB 2201R		> 1 km	385 Ohm
	LB 2103R, FB 2203R	740 m		440 Ohm
	LB 2113R, FB 2213R	680 m		426 Ohm
	LB 6110R, FB 6210R	740 m		455 Ohm
	LB 6114R, FB 6214R	880 m		395 Ohm
490885_490890_490895				
	LB 2101R, FB 2201R		> 1 km	385 Ohm
	LB 2103R, FB 2203R	740 m		440 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Parker				
490885_490890_490895				
	LB 2113R, FB 2213R	680 m		426 Ohm
	LB 6110R, FB 6210R	740 m		455 Ohm
	LB 6114R, FB 6214R	880 m		395 Ohm
492965.01/02				
	LB 2101R, FB 2201R		> 1 km	285 Ohm
	LB 2103R, FB 2203R	740 m		340 Ohm
	LB 2112R, FB 2212R	740 m		436 Ohm
	LB 2116, FB 2216	1000 m		392 Ohm
	LB 6110R, FB 6210R	740 m		355 Ohm
	LB 6111R, FB 6211R	740 m		355 Ohm
	LB 6113R, FB 6213R	880 m		360 Ohm
	LB 6114R, FB 6214R	880 m		295 Ohm
	LB 6116, FB 6216	1000 m		392 Ohm
495910				
	LB 2101R, FB 2201R		> 1 km	629 Ohm
	LB 2103R, FB 2203R	740 m		696 Ohm
	LB 2112R, FB 2212R	740 m		799 Ohm
	LB 2116, FB 2216	1000 m		742 Ohm
	LB 6110R, FB 6210R	740 m		713 Ohm
	LB 6111R, FB 6211R	740 m		713 Ohm
	LB 6113R, FB 6213R	880 m		710 Ohm
	LB 6114R, FB 6214R	880 m		645 Ohm
	LB 6116, FB 6216	1000 m		742 Ohm
	LB 7104, FB 7204	> 1 km		627 Ohm
495910N7				
	LB 2101R, FB 2201R		> 1 km	76 Ohm
	LB 2103R, FB 2203R	740 m		118 Ohm
	LB 2112R, FB 2212R	740 m		206 Ohm
	LB 2116, FB 2216	1000 m		177 Ohm
	LB 6110R, FB 6210R	740 m		130 Ohm
	LB 6111R, FB 6211R	740 m		130 Ohm
	LB 6113R, FB 6213R	880 m		145 Ohm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Parker				
495910N7				
	LB 6114R, FB 6214R	880 m		80 Ohm
	LB 6116, FB 6216	1000 m		177 Ohm
RGS				
Spule EP100/ia				
	LB 2102R, FB 2202R		> 1 km	170 Ohm
	LB 2103R, FB 2203R	740 m		20 Ohm
	LB 2104, FB 2204	> 1 km		98 Ohm
	LB 2104R, FB 2204R	> 1 km		98 Ohm
	LB 2112R, FB 2212R	740 m		92 Ohm
	LB 2116, FB 2216	1000 m		91 Ohm
	LB 2117, FB 2217	> 1 km		15 Ohm
	LB 6110R, FB 6210R	740 m		26 Ohm
	LB 6111R, FB 6211R	740 m		26 Ohm
	LB 6113R, FB 6213R	880 m		59 Ohm
	LB 6115R, FB 6215R	235 m		58 Ohm
	LB 6116, FB 6216	1000 m		91 Ohm
	LB 6116, FB 6216_2in1		760 m	220 Ohm
	LB 6117, FB 6217	> 1 km		15 Ohm
	LB 6117, FB 6217_2in1	335 m		80 Ohm
Samson				
3701-11				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Samson				
3701-11				
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3701-12				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3701-13				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3701-42				
	LB 6108A, FB 6208B			120 Ohm
3766-1.2				
	LB 6108A, FB 6208B			> 1 kOhm
3767-1.2				
	LB 6108A, FB 6208B			> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Samson				
3768-122	LB 6108A, FB 6208B			> 1 kOhm
3768-123	LB 6108A, FB 6208B			> 1 kOhm
3775-13	LB 2101R, FB 2201R			592 Ohm
	LB 2103R, FB 2203R			> 1 kOhm
	LB 2112R, FB 2212R			> 1 kOhm
	LB 2116, FB 2216			915 Ohm
	LB 6110R, FB 6210R			> 1 kOhm
	LB 6111R, FB 6211R			> 1 kOhm
	LB 6113R, FB 6213R			883 Ohm
	LB 6114R, FB 6214R			818 Ohm
	LB 6116, FB 6216			915 Ohm
	LB 7104, FB 7204			906 Ohm
3962-13	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3962-17	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Samson				
3962-17				
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3963-12				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2104, FB 2204	> 1 km		> 1 kOhm
	LB 2104R, FB 2204R	> 1 km		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6112R, FB 6212R	> 1 km		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
3963-13				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3963-17				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	
Samson				
3963-17				
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3967-1				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm
3967-2				
	LB 2101R, FB 2201R		> 1 km	> 1 kOhm
	LB 2103R, FB 2203R	740 m		> 1 kOhm
	LB 2112R, FB 2212R	740 m		> 1 kOhm
	LB 2113R, FB 2213R	680 m		> 1 kOhm
	LB 2116, FB 2216	1000 m		> 1 kOhm
	LB 6108A, FB 6208B			> 1 kOhm
	LB 6108C, FB 6208C			> 1 kOhm
	LB 6110R, FB 6210R	740 m		> 1 kOhm
	LB 6111R, FB 6211R	740 m		> 1 kOhm
	LB 6113R, FB 6213R	880 m		> 1 kOhm
	LB 6114R, FB 6214R	880 m		> 1 kOhm
	LB 6116, FB 6216	1000 m		> 1 kOhm
	LB 7104, FB 7204	> 1 km		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Samson

3967-3

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm
LB 2112R, FB 2212R	740 m		> 1 kOhm
LB 2113R, FB 2213R	680 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 6108A, FB 6208B			264 Ohm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

Seitz

PV 12F73 Ci oh

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm
LB 2113R, FB 2213R	680 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6108A, FB 6208B			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

PV 12F73 Xi oh

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Seitz

PV 12F73 Xi oh

LB 2112R, FB 2212R	740 m		> 1 kOhm
LB 2113R, FB 2213R	680 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6108A, FB 6208B			> 1 kOhm
LB 6108C, FB 6208C			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

PV 12F73 Xi oh 2

LB 2101R, FB 2201R		> 1 km	> 1 kOhm
LB 2103R, FB 2203R	740 m		> 1 kOhm
LB 2112R, FB 2212R	740 m		> 1 kOhm
LB 2113R, FB 2213R	680 m		> 1 kOhm
LB 2116, FB 2216	1000 m		> 1 kOhm
LB 2117, FB 2217	> 1 km		> 1 kOhm
LB 6108A, FB 6208B			> 1 kOhm
LB 6110R, FB 6210R	740 m		> 1 kOhm
LB 6111R, FB 6211R	740 m		> 1 kOhm
LB 6112R, FB 6212R	> 1 km		> 1 kOhm
LB 6113R, FB 6213R	880 m		> 1 kOhm
LB 6114R, FB 6214R	880 m		> 1 kOhm
LB 6116, FB 6216	1000 m		> 1 kOhm
LB 6117, FB 6217	> 1 km		> 1 kOhm
LB 7104, FB 7204	> 1 km		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

SMC

52-SY5000

LB 2104, FB 2204		> 1 km	75 Ohm
LB 2104R, FB 2204R		> 1 km	75 Ohm
LB 2112R, FB 2212R		740 m	53 Ohm
LB 2117, FB 2217		> 1 km	19 Ohm
LB 6113R, FB 6213R		880 m	31 Ohm
LB 6116, FB 6216		1000 m	63 Ohm
LB 6117, FB 6217		> 1 km	19 Ohm

52-SY7000

LB 2104, FB 2204		> 1 km	75 Ohm
LB 2104R, FB 2204R		> 1 km	75 Ohm
LB 2112R, FB 2212R		740 m	53 Ohm
LB 2117, FB 2217		> 1 km	19 Ohm
LB 6113R, FB 6213R		880 m	31 Ohm
LB 6116, FB 6216		1000 m	63 Ohm
LB 6117, FB 6217		> 1 km	19 Ohm

52-SY9000

LB 2104, FB 2204		> 1 km	75 Ohm
LB 2104R, FB 2204R		> 1 km	75 Ohm
LB 2112R, FB 2212R		740 m	53 Ohm
LB 2117, FB 2217		> 1 km	19 Ohm
LB 6113R, FB 6213R		880 m	31 Ohm
LB 6116, FB 6216		1000 m	63 Ohm
LB 6117, FB 6217		> 1 km	19 Ohm

Telektron

Spule L (12 ... 24 V)

LB 2101R, FB 2201R		> 1 km	735 Ohm
LB 2103R, FB 2203R	740 m		940 Ohm
LB 2104, FB 2204	> 1 km		830 Ohm
LB 2104R, FB 2204R	> 1 km		830 Ohm
LB 2112R, FB 2212R	740 m		> 1 kOhm
LB 2113R, FB 2213R	680 m		> 1 kOhm

Manufacturer / Valve	Suitable Driver	Max Cable Length		Lead resistance
		Exia IIC	Exia IIB	

Telektron

Spule L (12 ... 24 V)

LB 2116, FB 2216	1000 m		917 Ohm
LB 6110R, FB 6210R	740 m		992 Ohm
LB 6111R, FB 6211R	740 m		992 Ohm
LB 6112R, FB 6212R	> 1 km		240 Ohm
LB 6113R, FB 6213R	880 m		885 Ohm
LB 6114R, FB 6214R	880 m		820 Ohm
LB 6116, FB 6216	1000 m		917 Ohm
LB 7104, FB 7204	> 1 km		836 Ohm

Wandfluh

ISI 4401-03_100R

LB 6117, FB 6217_2in1	335 m		17 Ohm
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ISI 4401-03_152R

LB 2102R, FB 2202R		> 1 km	13 Ohm
LB 6115R, FB 6215R	235 m		23 Ohm
LB 6116, FB 6216_2in1		760 m	78 Ohm
LB 6117, FB 6217_2in1	335 m		40 Ohm

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