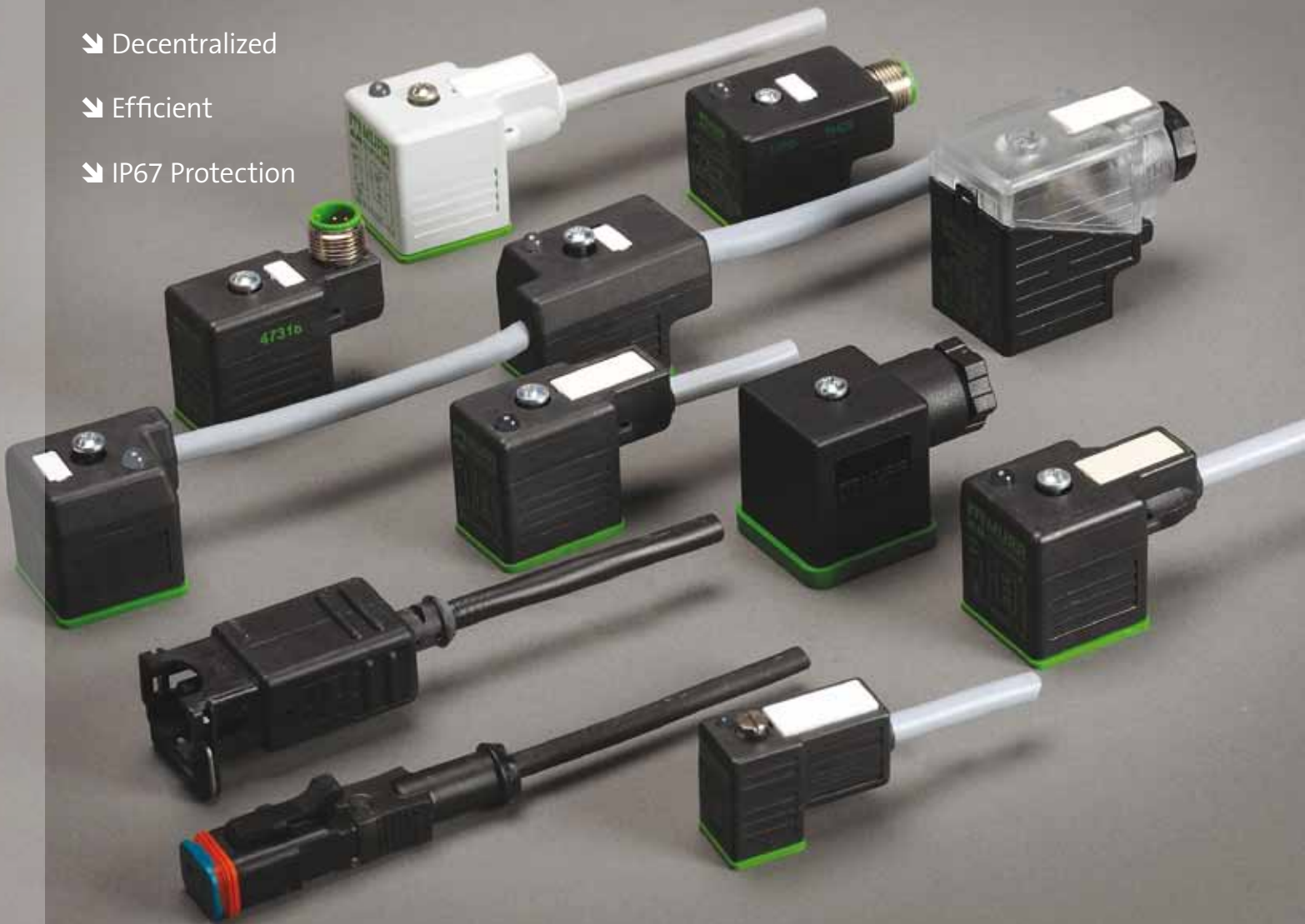


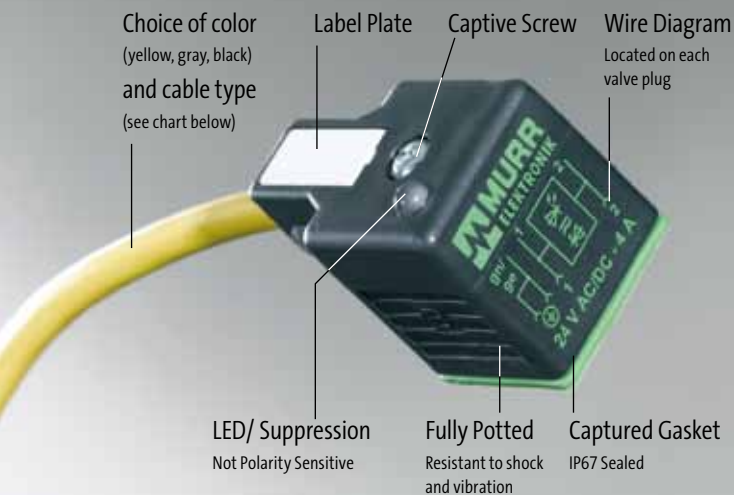
VALVE PLUGS

More Variety, Less Effort

- Decentralized
- Efficient
- IP67 Protection



What makes a Murrelektronik Valve Plug a Murrelektronik Valve Plug...



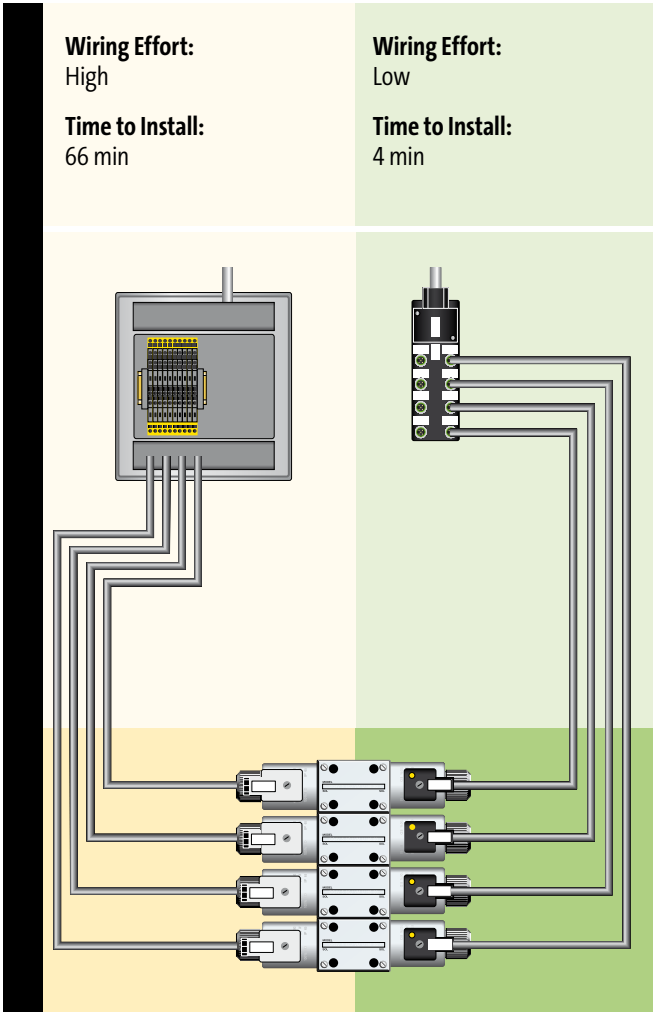
CABLE TYPES

Properties	PVC (Type 1)	PUR/PVC (Type 2)	PUR (Type 3)	PUR (Type 5)
Flame Retardant	✓	✓	✓	✓
Chemical Resistant	✓	✓	✓	✓
Oil Resistant		✓	✓	✓
Weld Slag Resistant				✓
C-Track Flex Rating		2 million	5 million	10 million
Torsion Rating			± 180°	± 360°
UV Resistant			✓	✓
Halogen Free			✓	✓
Temperatures	-5 to 80°C 23 to 176°F		-25 to 80°C -13 to 176°F	-25 to 90°C -13 to 194°F
Application Examples	Packaging Food & Bev. Assembly & Production Lines	Packaging Handling Assembly & Production Lines	Machine Tools Swivel Tables Metal Cutting	Machine Tools Industrial Robots Metal Cutting

CABLE CODES

	PVC (Type 1)	PUR/PVC (Type 2)	PUR (Type 3)	PUR (Type 5)
Yellow – Single Valve	016	026	036	056
Yellow – Double Valve	017	027	037	057
Gray – Single Valve	216	226	236	256
Gray – Double Valve	217	227	237	257
Black – Single Valve	616	626	636	656
Black – Double Valve	617	627	637	657

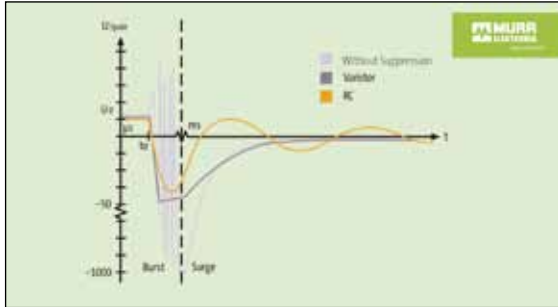
CONNECTION EFFICIENCY



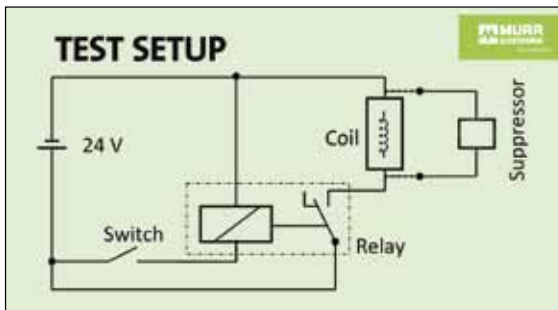
- IP54 Protection
- Untested Connections
- Troubleshooting requires Multimeter
- Many Components to Order & Track
- Increased Labor
- IP67 Protection
- Factory Tested Connections
- LED Indicators for Diagnostics
- Reduced size for Compact Installations
- Reduced Number of Components
- Label Plates
- Quick/Easy Installation

| WHY SUPPRESSION?

When an inductive load (coil), at 24 V, is switched off, voltage spikes of more than 1000V will be created. Not only the coil but also other modules within the same circuit could be destroyed as a result of those voltage spikes.



At the beginning of the diagram you can see the curve for such an overvoltage at 24 V without a suppressor module. There are also two curves with a suppressor module; one with a varistor type suppressor & one with an RC type suppressor.



Next you will see a block diagram of the test set-up.

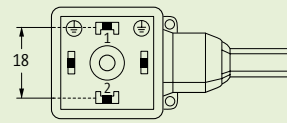


In the test setup you can see the break spark from a motor relay without (left side) & with (right side) a suppressor module in real time & in slow motion. You can still see the break spark but with less energy than without a suppressor module.

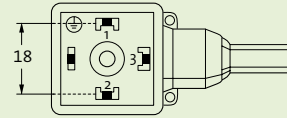


To learn more, scan the QR code to visit our YouTube® channel and view our “**Extreme Testing**” video and see a suppression module in action.

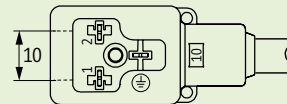
| CONTACT LAYOUTS



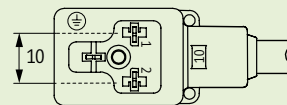
Form A
(18 mm)



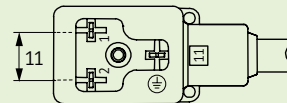
Form A
Pressure Switch



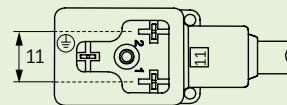
Form B
(10 mm)



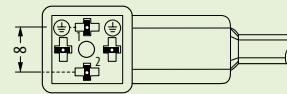
Form B
180°



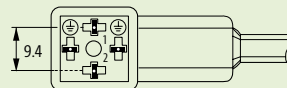
Form BI
(11 mm)



Form BI
180°



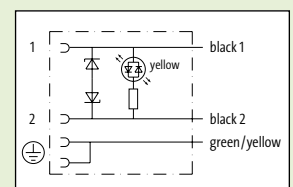
Form C
(8 mm)



Form CI
(9.4 mm)

| POLARITY

Wiring to our over-molded valve DIN connectors is not polarity sensitive. We use a circuit that allows for connection and protection independent of the polarity connections.



SINGLE

Cable Colors:



Circuit		Form				
		A 18 mm	B 10 mm	BI 11 mm	C 8mm	CI 9.4 mm
Standard						
24 V	LED	18001	10001	11001	80001	94001
	LED + Supp	18021	10021	11021	80021	94021
	LED + Supp, PE@180		10081	11081		
	Pressure Switch with LED	18121 18141				
110 V	LED	18011			80011	
	LED + Supp	18041	10041	11041	80041	94041
	LED + Supp, PE@180			11141		
230 V	LED + Supp	18061		11051		
	Without Comp.	18081	10061	11061	80061	94061
	Pressure Switch Without Comp.	18111			80141	94141
Special Applications						
24 V	LED + Supp – Tall				80031	94031
	Energy Saving	18211 18221				
	Rectified with LED	18031				
110 V	LED + Supp – Tall					94051
	Rectified with LED	18311				
230 V	LED + Supp, PE@180			11091		
	Without Comp. – Tall					94071
	Without Comp. PE@180			11071		
	Rectified with LED	18321				

 Unavailable – not an industry standard configuration.

M8/12 CABLE

Cable Colors:



Circuit		Form				
		A 18 mm	B 10 mm	BI 11 mm	C 8 mm	CI 9.4 mm
M12						
24 V	LED + Supp	40881	41001	40961	41081	41041
	LED + Supp - Tall				41091	41051
	LED + Supp, PE@180		41002	40962		
	LED + Supp, 90° M12	40901	41021	40981	41101	41061
	Pressure Switch with LED	40921 40931				
	Pressure Switch with LED, 90° M12	40941 40951				
	Without Comp.	40885		40965	41085	
110 V	LED + Supp	40891		40971		41042
	LED + Supp, 90° M12	40911				
	Without Comp. 90° M12	40905				
M8						
24 V	LED + Supp - 3-pole	88701	88741	88781	88421	88415
	LED + Supp - 4-pole	88711	88751	88791	88431	88461
	LED + Supp - 3-pole 90° M8	88721	88761	88801	88441	88481
	LED + Supp - 4-pole 90° M8	88731	88771	88811	88451	88491

DOUBLE

M8/12

Cable Colors:



M8



M12

Circuit		Form				
		A 18 mm	B 10 mm	BI 11 mm	C 8 mm	CI 9.4 mm
24 V	LED + Supp Span = 100 mm	58001	58201	58101	58401	58431
	LED + Supp Span = 150 mm	58021	58221	58121	58411	58441
	LED + Supp Span = 200 mm	58041	58241	58141	58421	58451
	LED + Supp Span = 300 mm	58081				
110 V	LED + Supp Span = 100 mm	58005				58345
	LED + Supp Span = 150 mm	58025				
	LED + Supp Span = 200 mm	58045				
230 V	LED + Supp Span = 100 mm	58002				
	LED + Supp Span = 150 mm	58022				
	LED + Supp Span = 200 mm	58042				
M12 Straight + Cable						
24 V	LED + Supp. Span = 100 mm	41571		41811		42945
	LED + Supp. Span = 150 mm	41591				42955
	LED + Supp. Span = 200 mm	41611				
M12 90° + Cable						
24 V	LED + Supp. Span = 100 mm	41511				
	LED + Supp. Span = 150 mm	41531				
	LED + Supp. Span = 200 mm	41551				

Circuit		Form				
		A 18 mm	B 10 mm	BI 11 mm	C 8 mm	CI 9.4 mm
M12 Top Mount						
24 V	LED + Supp	41301	41901	42021	42811	42851
	LED	41281	41881	42001		
	Pressure Switch with LED	41321 41323				
110 V	LED + Supp	41302				
	Without Comp.	41261	41861	41981		
M12 Rear Mount						
24 V	LED + Supp	41421	41961	42081	42831	42871
	LED + Supp, PE@180		41971	42091		
	LED	41401	41941	42061		
	LED, PE@180		41951	42071		
	Pressure Switch with LED	41441				
110 V	LED + Supp	41431				
	Without Comp.	41381	41921	42041		
	Without Comp. PE@180		41931	42051		
3-pole M8 Top Mount						
24 V	LED + Supp	88905	88925	88945	88965	88985
	LED	88903	88923	88943		
60 V	Without Comp.	88901	88921	88941		
3-pole M8 Rear Mount						
24 V	LED + Supp	88915	88935	88955	88975	88995
	LED	88913	88933	88953		
60 V	Without Comp.	88911	88931	88951		

DOUBLE M8/12

Cable Colors:



Circuit		Form				
		A 18 mm	B 10 mm	BI 11 mm	C 8 mm	CI 9.4 mm
M12 Top Mount						
24 V	LED + Supp. Span = 100 mm	41501	41621	41741	42881	42941
	LED + Supp. Span = 150 mm	41521	41641	41761	42891	42951
	LED + Supp. Span = 200 mm	41541	41661	41781	42901	42961
M12 Rear Mount						
24 V	LED + Supp. Span = 100 mm	41561	41681	41801	42911	42971
	LED + Supp. Span = 150 mm	41581	41701	41821	42921	42981
	LED + Supp. Span = 200 mm	41601	41721	41841	42931	42991
M12 Y Cable						
24 V	LED + Supp.	42401	42411	42421	42431	42441
3-pole M8 Top Mount						
24 V	LED + Supp. Span = 100 mm				89181	89241
	LED + Supp. Span = 150 mm				89191	89251
	LED + Supp. Span = 200 mm				89201	89261
3-pole M8 Rear Mount						
24 V	LED + Supp. Span = 100 mm				89211	89271
	LED + Supp. Span = 150 mm				89221	89281
	LED + Supp. Span = 200 mm				89231	89291

FIELD WIREABLE



SVS



SVS Eco



SVS Eco LED

Circuit			Form				
			A 18 mm	B 10 mm	BI 11 mm	C 8 mm	CI 9.4 mm
SVS							
24 V	LED + Supp. (Z-Diode)	M16 PG9	29001 29021	29561 29581	29801 29821		
		M16 PG9	29041 29061	29601 29621	29841 29861		
	LED + Amplifier	M16 PG9	29481 29501				
	Pressure Switch LED Gn/Ye	M16 PG9	29441 29461				
110 V	LED + Supp. (VDR)	M16 PG9	29081 29101	29641 29661	29881 29901		
	LED + Supp. (RC)	M16 PG9	29121 29141				
230 V	LED + Supp. (VDR)	M16 PG9	29161 29181	29681 29701	29921 29941		
	LED + Supp. (RC)	M16 PG9	29121 29141	29721 29741	29961 29981		
	Without Comp.	M16 PG9	29241 29261	29761 29781	30001 30021		
	LED + Rectifier	M16 PG9	29521 29541				
	Pressure Switch LED Rd/Gn	M16 PG9	29281 29301				
	Pressure Switch LED Yellow	M16 PG9	29361 29381				
	Pressure Switch Without Comp.	M16 PG9	29401 29421				
SVS Eco							
24 V	LED + Supp. (VDR)		29005	29595	29805	30105	30205
110 V	LED + Supp. (VDR)		29085	29645	29885	30115	30215
230 V	LED + Supp. (VDR)		29165	29685	29925	30125	
	Without Comp.		29245	29765	30005	30055	30155
	Pressure Switch Without Comp.		29405				

XTREME – Valve Plugs for Mobile Applications

Cable Color:



Circuit		Form													
		DIN A Xtreme	Junior Timer	Junior Timer 90°	Deutsch® MDC06-2S	Deutsch® MDC04-2P	Deutsch® MDC06-3S	Deutsch® MDC06-4S	Deutsch® MDC06-6S	SuperSeal® MSC1.5-2S	SuperSeal® MSC1.5-3S	SuperSeal® MSC1.5-4S	SuperSeal® MSC1.5-2P	SuperSeal® MSC1.5-3P	SuperSeal® MSC1.5-4P
12 V ... 24 V	LED		70021	70321	72021										
	LED + Supp.	18021	70061	70361											
	M12 LED		43011	43041											
	M12 LED + Supp.	40881	43021	43051											
	M12 90° LED		43161	43191											
	M12 90° LED + Supp.		43051	43201											
230V	Without Comp.	18081	70001	70301	72011	72301	72081	72161	72221	73001	73081	73161	73301	73381	73461
	M12 Without Comp.	40885	43001	43031	43081										
	M12 90° Without Comp.		43151	43181	43231										
Double DIN															
12V ... 24V	LED + Supp. Span = 150 mm	58021													
	LED + Supp. Span = 150 mm	41591													
	M12 + Cable														
	LED + Supp. M12 Y Cable	42401													

| BUILD YOUR ARTICLE NUMBER

7

0

X

X

1

8

0

0

1

2

1

6

0

3

0

0

Substitute XX with 00 – Standard with 72 – Xtreme

Form Number from one of the tables on this spread

Cable Type from the chart on the front

Cable Length in cm (See our Main Catalog for Standard lengths)

If applicable. If there is no cable, fill in these boxes with zeros (000000).



➔ www.murrelektronik.com

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