

FLEXMOV® Data cables

FLEXMOV® 数据电缆

FMD611 数据电缆 Data cables



- PVC外护套
- 带屏蔽
- 耐油
- 阻燃
- 低成本
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame resistance
- Low cost

移动参数 Dynamic Information

	最小弯曲半径 Min. bending radius	拖链内移动 Moving in cable carriers	7.5 x d
		非拖链内移动 Flexible moving	6 x d
		固定铺设 Fixed installation	4 x d
	使用温度范围 Temperature	拖链内移动 Moving in cable carriers	+5°C至to +70°C
		非拖链内移动 Flexible moving	-5°C至to +70°C
		固定铺设 Fixed installation	-15°C至to +70°C
	最大速度 v max.	架空 Unsupported	5 m/s
		滑行 Gliding	3 m/s
	最大加速度 a max.	50 m/s ²	
	行程距离 Travel distance	架空应用和行程距离小于100米的滑行应用 Unsupported travels and up to 100 m for gliding applications	

电缆结构 Cable structure

	导体 Conductor	高柔性设计的精细裸铜多股线 Fine bare copper stranded wires with high flexibility design
	绝缘材料 Conductor insulation	高机械性能TPE混合物 Mechanically high-quality TPE compound.
	芯线结构 Conductor construction	每两根芯线以短节距对绞，再将所有对线以短节距围绕高强度中芯线绞合在一起 Cores twisted in pairs with a short pitch length, core pairs then wound with short pitch lengths.
	芯线识别 Color code	颜色代码符合 DIN 47100 标准 Colour code following DIN 47100
	中间层 Intermediate layer	聚合物薄带缠绕在芯线束外 Foil taping over the outer layer.
	总屏蔽 Overall shield	高度抗弯曲的镀锡铜丝编织。覆盖线性约70%，光学约90%。 Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	外护套 Outer jacket	低粘性、耐油的PVC基混合材料，符合拖链要求 颜色：灰色 Color: Grey RAL 7001 Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in cable carriers.

FMD611

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电气参数 Electrical Information

	额定电压 Nominal voltage	U_0/U : 300/300 V (符合following VDE0298-3)
	测试电压 Test voltage	1500 V (符合following EN50395)

特性和认证 Properties and approvals

	耐油性 Oil resistance	耐油 (符合 IEC60811-404 标准, 经SGS检测), 耐生物油 (符合VDMA24568 标准, 经SGS检测) Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	阻燃 Flame resistance	符合According to IEC 60332-1-2、VW-1、FT1
	REACH	符合 Accordding to the regulation (EC) No. 1907/2006 (REACH)
	EAC	经认证Certificate No. KG 417/043.CN.02.00249
	无铅 Lead-free	符合Following 2015/863/EU (RoHS-II 经SGS检测 Tested by SGS)
	无尘室 Cleanroom	符合Following ISO 14644-1
	CE	符合Following 2014/35/EU
	UL	符合Following UL2464, 300V, 80°C

质保使用寿命 Guaranteed service life

往返行程 Double strokes	500万次 5 million times	750万次 7.5 million times	1000万次 10 million times
适用温度范围 Temperature, from/to [°C]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]
+5/+15	10	11	12
+15/+60	7.5	8.5	9.5
+60/+70	10	11	12

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产品编码 Part No.	芯数及截面积 Number of cores and conductor nominal cross-section [mm]	外径 Outer diameter [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
FMD611.02.01.02	(2×0.25)C	5.0	18.0	33.0
FMD611.02.02.02 ^{④)}	(2x(2x0.25))C	6.5	25.0	51.0
FMD611.02.03.02	(3x(2x0.25))C	7.0	36.0	63.0
FMD611.02.04.02	(4x(2x0.25))C	7.5	44.0	76.0
FMD611.02.05.02	(5x(2x0.25))C	8.5	52.0	92.0
FMD611.02.06.02	(6x(2x0.25))C	9.0	62.0	105.0
FMD611.02.08.02	(8x(2x0.25))C	10.5	78.0	137.0
FMD611.02.10.02	(10x(2x0.25))C	12.0	90.0	170.0
FMD611.02.14.02	(14x(2x0.25))C	12.0	119.0	204.0
FMD611.03.03.02	(3x(2x0.34))C	8.0	44.0	86.0
FMD611.03.08.02	(8x(2x0.34))C	12.0	102.0	206.0
FMD611.05.01.02	(2×0.5)C	6.0	25.0	51.0
FMD611.05.02.02 ^{④)}	(2x(2x0.5))C	7.0	46.0	90.0
FMD611.05.03.02	(3x(2x0.5))C	9.0	61.0	109.0
FMD611.05.04.02	(4x(2x0.5))C	9.5	74.0	125.0
FMD611.05.05.02	(5x(2x0.5))C	11.0	91.0	153.0
FMD611.05.06.02	(6x(2x0.5))C	11.5	103.0	189.0
FMD611.05.08.02	(8x(2x0.5))C	13.0	137.0	234.0
FMD611.05.10.02	(10x(2x0.5))C	15.5	181.0	326.0
FMD611.05.14.02	(14x(2x0.5))C	16.0	193.0	341.0

④) 标有④的电缆为四星绞合式设计 Cables marked with ④ are four-star twisted design.

注Note: 外径是指参考值 The outer diameters are reference values.

G: 带黄-绿接地线 With green-yellow earth core

x: 不带接地线 Without earth core

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- 低成本
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame resistance
- Low cost

移动参数 Dynamic Information

	最小弯曲半径 Min. bending radius	拖链内移动 Moving in cable carriers	10 x d
		非拖链内移动 Flexible moving	8 x d
		固定铺设 Fixed installation	5 x d
	使用温度范围 Temperature	拖链内移动 Moving in cable carriers	5°C至to +70°C
		非拖链内移动 Flexible moving	-5°C至to +70°C
		固定铺设 Fixed installation	-15°C至to +70°C
	最大速度 v max.	架空 Unsupported	3 m/s
		滑行 Gliding	2 m/s
	最大加速度 a max.	20 m/s ²	
	行程距离 Travel distance	架空应用和行程距离小于50米的滑行应用 Unsupported travels and up to 50 m for gliding applications	

电缆结构 Cable structure

	导体 Conductor	高柔性设计的精细裸铜多股线 Fine bare copper stranded wires with high flexibility design
	绝缘材料 Conductor insulation	高机械性能TPE混合物 Mechanically high-quality TPE mixture.
	芯线结构 Conductor construction	单独芯线以短节距分层绞合在一起 The individual cores are wound in layers with a short pitch length.
	芯线识别 Color code	颜色代码符合 DIN 47100 标准 Colour code following DIN 47100
	中间层 Intermediate layer	聚合物薄带缠绕在芯线束外 Foil taping over the outer layer.
	总屏蔽 Overall shield	高度抗弯曲的镀锡铜丝编织。覆盖线性约70%，光学约90%。 Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	外护套 Outer jacket	低粘性、耐油的 PVC 基混合材料，符合拖链要求 Low adhesion mixture on the basis of PVC, adapted to suit the requirements in cable carriers. 颜色：灰色 Color: Grey RAL 7001

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电气参数 Electrical Information

	额定电压 Nominal voltage	U ₀ /U: 300/300 V (符合following VDE0298-3)
	测试电压 Test voltage	1500 V (符合following EN50395)

特性和认证 Properties and approvals

	耐油性 Oil resistance	耐油 (符合 IEC60811-404 标准, 经SGS检测), 耐生物油 (符合VDMA24568 标准, 经SGS检测) Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	阻燃 Flame resistance	符合According to IEC 60332-1-2、VW-1、FT1
	REACH	符合 Accordng to the regulation (EC) No. 1907/2006 (REACH)
	EAC	经认证Certificate No. KG 417/043.CN.02.00249
	无铅 Lead-free	符合Following 2015/863/EU (RoHS-II 经SGS检测 Tested by SGS)
	无尘室 Cleanroom	符合Following ISO 14644-1
	CE	符合Following 2014/35/EU
	UL	符合Following UL2464, 300V, 80°C

质保使用寿命 Guaranteed service life

往返行程 Double strokes	500万次 5 million times		750万次 7.5 million times		1000万次 10 million times	
	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
适用温度范围 Temperature, from/to [°C]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]
+5/+15	12.5	15	13.5	16	14.5	17
+15/+60	10	12.5	11	13.5	12	14.5
+60/+70	12.5	15	13.5	16	14.5	17

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FMD612 数据电缆 Data cables

产品编码 Part No.	芯数及截面积 Number of cores and conductor nominal cross-section [mm]	外径 Outer diameter [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
FMD612.01.03	(3×0.14)C	5.0	12.0	28.0
FMD612.01.04	(4×0.14)C	5.0	17.0	32.0
FMD612.01.05	(5×0.14)C	5.5	19.0	37.0
FMD612.01.07	(7×0.14)C	6.0	25.0	47.0
FMD612.01.14	(14×0.14)C	7.0	41.0	75.0
FMD612.01.18	(18×0.14)C	7.5	51.0	90.0
FMD612.01.24	(24×0.14)C	8.5	64.0	125.0
FMD612.02.03	(3×0.25)C	5.0	19.0	35.0
FMD612.02.04	(4×0.25)C	5.5	23.0	45.0
FMD612.02.05	(5×0.25)C	6.0	28.0	49.0
FMD612.02.07	(7×0.25)C	6.5	35.0	61.0
FMD612.02.08	(8×0.25)C	7.0	39.0	68.0
FMD612.02.14	(14×0.25)C	7.5	60.0	92.0
FMD612.02.18	(18×0.25)C	8.5	71.0	122.0
FMD612.02.24	(24×0.25)C	10.0	95.0	161.0
FMD612.03.02	(2×0.34)C	5.5	21.0	37.0
FMD612.03.03	(3×0.34)C	5.5	29.0	42.0
FMD612.03.04	(4×0.34)C	6.0	33.0	51.0
FMD612.03.05	(5×0.34)C	6.5	38.0	56.0
FMD612.03.07	(7×0.34)C	7.5	50.0	77.0
FMD612.03.10	(10×0.34)C	8.0	58.0	97.0
FMD612.03.14	(14×0.34)C	8.0	74.0	112.0
FMD612.03.18	(18×0.34)C	9.0	91.0	139.0
FMD612.03.24	(24×0.34)C	10.0	119.0	177.0

注Note: 外径是指参考值 The outer diameters are reference values.

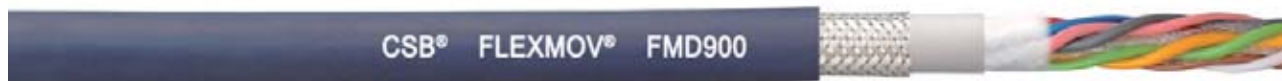
G: 带黄-绿接地线 With green-yellow earth core

x: 不带接地线 Without earth core

FLEXMOV® Data cables

FLEXMOV® 数据电缆

FMD900 数据电缆 Data cables



- TPE 外护套
- 带屏蔽
- 耐油
- 抗UV
- 抗水解和微生物
- 不含PVC和卤素
- TPE outer jacket
- Shielded
- Oil-resistant
- UV-resistance
- Resistant to hydrolysis and microbes
- PVC and halogen-free

移动参数 Dynamic Information

	最小弯曲半径 Min. bending radius	拖链内移动 Moving in cable carriers	6.8 x d
		非拖链内移动 Flexible moving	5 x d
		固定铺设 Fixed installation	4 x d
	使用温度范围 Temperature	拖链内移动 Moving in cable carriers	-35°C至to +100°C
		非拖链内移动 Flexible moving	-50°C至to +100°C
		固定铺设 Fixed installation	-55°C至to +100°C
	最大速度 v max.	架空 Unsupported	10 m/s
		滑行 Gliding	6 m/s
	最大加速度 a max.	100 m/s ²	
	行程距离 Travel distance	架空应用和行程距离小于400米的滑行应用 Unsupported travels and up to 400 m and more for gliding applications	

电缆结构 Cable structure

	导体 Conductor	高抗弯强度的精细裸铜多股线 (符合EN 60228 标准) Conductor consisting of bare copper wires (according to EN 60228).
	绝缘材料 Conductor insulation	高机械性能的TPE混合物 Mechanically high-quality TPE mixture.
	芯线结构 Conductor construction	每两根芯线以短节距对绞, 再将所有对线以短节距围绕高强度中芯线绞合在一起 Cores twisted in pairs with a short pitch length, core pairs then wound with short pitch lengths.
	芯线识别 Color code	截面积Cross -sectional < 1.0mm ² : 颜色代码符合 Color code in accordance with DIN 47100 截面积Cross -sectional ≥ 1.0 mm ² : 黑色芯线带白色数字 Black cores with white numbers.
	内护套 Inner jacket	TPE混合物适用于拖链 TPE mixture adapted to suit the requirements in cable carriers.
	总屏蔽 Overall shield	高度抗弯曲的镀锡铜丝编织。覆盖线性约70%, 光学约90%。 Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70 %, optical approx. 90 %
	外护套 Outer jacket	低粘性的TPE基混合物, 高度耐磨、柔性, 符合拖链要求。 Low-adhesion mixture on the basis of TPE, especially abrasion-resistant and highly flexible, adapted to suit the requirements in cable carriers. 颜色: 钢青色Color: Steel blue RAL 5011

电气参数 Electrical Information

	额定电压 Nominal voltage	U ₀ /U: 300/300 V (符合following VDE0298-3)
	测试电压 Test voltage	1500 V (符合following EN50395)

特性和认证 Properties and approvals

	抗紫外线 UV-resistance	高 High
	耐水解 Hydrolysis-resistance	高 High
	耐低温 Cold-resistant	-55°C
	耐油性 Oil resistance	耐油 (符合 IEC60811-404 标准, 经SGS检测), 耐生物油 (符合VDMA24568 标准, 经SGS检测) Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	无卤素 Halogen-free	符合Following IEC60754
	REACH	符合 Accordding to the regulation (EC) No. 1907/2006 (REACH)
	EAC	经认证Certificate No. KG 417/043.CN.02.00249
	无铅 Lead-free	符合Following 2015/863/EU (RoHS-II 经SGS检测 Tested by SGS)
	无尘室 Cleanroom	符合Following ISO 14644-1
	CE	符合Following 2014/35/EU
	UL	符合Following UL21481, 300V, 80°C

质保使用寿命 Guaranteed service life

往返行程 Double strokes	500万次 5 million times	750万次 7.5 million times	1000万次 10 million times
适用温度范围 Temperature, from/to [°C]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]
-35/-25	7.5	8.5	9.5
-25/+90	6.8	7.5	8.5
+90/+100	7.5	8.5	9.5

FLEXMOV® Data cables

FLEXMOV® 数据电缆

FMD900

FMD900 数据电缆 Data cables

产品编码 Part No.	芯数及截面积 Number of cores and conductor nominal cross-section [mm]	外径 Outer diameter [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
FMD900.01.04.02	(4×(2×0.14))C	7.5	30.0	63.0
FMD900.01.18.02	(18×(2×0.14))C	12.5	101.0	202.0
FMD900.02.01.02	(2×0.25)C	6.0	17.0	39.0
FMD900.02.02.02 ^④	(2×(2×0.25))C	6.5	26.0	47.0
FMD900.02.03.02	(3×(2×0.25))C	8.0	35.0	78.0
FMD900.02.04.02	(4×(2×0.25))C	8.5	42.0	90.0
FMD900.02.05.02	(5×(2×0.25))C	9.0	49.0	100.0
FMD900.02.06.02	(6×(2×0.25))C	10.0	69.0	125.0
FMD900.02.09.02	(9×(2×0.25))C	12.5	102.0	208.0
FMD900.02.10.02	(10×(2×0.25))C	13.5	103.0	207.0
FMD900.02.14.02	(14×(2×0.25))C	14.0	124.0	228.0
FMD900.03.08.02	(8×(2×0.34))C	13.0	106.0	209.0
FMD900.05.04.02	(4×(2×0.5))C	9.5	77.0	140.0
FMD900.05.06.02	(6×(2×0.5))C	12.0	103.0	198.0
FMD900.05.08.02	(8×(2×0.5))C	14.5	135.0	251.0
FMD900.07.03.02	(3×(2×0.75))C	10.5	83.0	155.0
FMD900.10.04.02	(4×(2×1))C	12.5	125.0	232.0
FMD900.15.06.02	(6×(2×1.5))C	16.5	247.0	420.0

④) 标有④的电缆为四星绞合式设计 Cables marked with ④ are four-star twisted design.

注Note: 外径是指参考值 The outer diameters are reference values.

G: 带黄-绿接地线 With green-yellow earth core

x: 不带接地线 Without earth core

FMD900

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FMD910 数据电缆 Data cables



- PUR 外护套
- 带屏蔽
- 耐油和冷却剂
- 抗UV
- 耐划痕
- 抗水解和微生物
- 不含PVC和卤素
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- UV-resistance
- Notch-resistant
- Resistant to hydrolysis and microbes
- PVC and halogen-free

移动参数 Dynamic Information

	最小弯曲半径 Min. bending radius	拖链内移动 Moving in cable carriers	10 x d
		非拖链内移动 Flexible moving	8 x d
		固定铺设 Fixed installation	5 x d
	使用温度范围 Temperature	拖链内移动 Moving in cable carriers	-25°C至to +80°C
		非拖链内移动 Flexible moving	-40°C至to +80°C
		固定铺设 Fixed installation	-50°C至to +80°C
	最大速度 v max.	架空 Unsupported	3 m/s
		滑行 Gliding	2 m/s
	最大加速度 a max.	20 m/s ²	
	行程距离 Travel distance	架空应用和行程距离小于50米的滑行应用 Unsupported travels and up to 50 m for gliding applications	

电缆结构 Cable structure

	导体 Conductor	高柔性设计的精细裸铜多股线 Fine bare copper stranded wires with high flexibility design
	绝缘材料 Conductor insulation	高机械性能的TPE混合物 Mechanically high-quality TPE mixture.
	芯线结构 Conductor construction	单独芯线以短节距分层绞合在一起 The individual cores are wound in layers with a short pitch length.
	芯线识别 Color code	颜色代码符合 Color code in accordance with DIN 47100
	中间层 Intermediate layer	聚合物薄带缠绕在芯线束外 Foil taping over the outer layer.
	总屏蔽 Overall shield	高度抗弯曲的镀锡铜丝编织。覆盖线性约70%，光学约90%。 Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70 %, optical approx. 90 %
	外护套 Outer jacket	低粘性的 PUR 基混合材料，符合拖链要求（符合 EN 50363-10-2 标准） Low-adhesion mixture on the basis of PUR, adapted to suit the requirements in cable carriers (following DIN EN 50363-10-2). 颜色：灰色 Color: Grey RAL 7001

FLEXMOV® Data cables

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电气参数 Electrical Information

	额定电压 Nominal voltage	U ₀ /U: 300/300 V (符合following VDE0298-3)
	测试电压 Test voltage	1500 V (符合following EN50395)

特性和认证 Properties and approvals

	抗紫外线 UV-resistance	中 Medium
	耐水解 Hydrolysis-resistance	高 High
	耐低温 Cold-resistant	-50°C
	耐油性 Oil resistance	耐油 (符合 IEC60811-404 标准, 经SGS检测), 耐生物油 (符合VDMA24568 标准, 经SGS检测) Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	阻燃 Flame resistance	符合According to IEC 60332-1-2、VW-1、FT1
	无卤素 Halogen-free	符合Following IEC60754
	REACH	符合 Accordding to the regulation (EC) No. 1907/2006 (REACH)
	EAC	经认证Certificate No. KG 417/043.CN.02.00249
	无铅 Lead-free	符合Following 2015/863/EU (RoHS-II 经SGS检测 Tested by SGS)
	无尘室 Cleanroom	符合Following ISO 14644-1
	CE	符合Following 2014/35/EU
	UL	符合Following UL20233, 300V, 80°C

质保使用寿命 Guaranteed service life

往返行程 Double strokes	500万次 5 million times		750万次 7.5 million times		1000万次 10 million times	
适用温度范围 Temperature, from/to [°C]	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]	最小弯曲半径 R min. [系数factor x d]
-25/-15	12.5	15	13.5	16	14.5	17
-15/+70	10	12.5	11	13.5	12	14.5
+70/+80	12.5	15	13.5	16	14.5	17

FMD910

FLEXMOV®

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FMD910 数据电缆 Data cables

产品编码 Part No.	芯数及截面积 Number of cores and conductor nominal cross-section [mm]	外径 Outer diameter [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
FMD910.01.04	(4×0.14)C	5.5	15	39
FMD910.01.07	(7×0.14)C	6.5	24	54
FMD910.01.08	(8×0.14)C	7	26	64
FMD910.01.14	(14×0.14)C	7.5	41	79
FMD910.01.18	(18×0.14)C	8	51	97
FMD910.01.25	(25×0.14)C	8.5	66	101
FMD910.02.03	(3×0.25)C	5.5	18	41
FMD910.02.04	(4×0.25)C	6	22	45
FMD910.02.05	(5×0.25)C	6	25	50
FMD910.02.07	(7×0.25)C	7	33	65
FMD910.02.08	(8×0.25)C	7	39	72
FMD910.02.14	(14×0.25)C	8	60	103
FMD910.02.18	(18×0.25)C	9	71	122
FMD910.02.25	(25×0.25)C	10.5	97	152
FMD910.03.03	(3×0.34)C	5	25	47
FMD910.03.04	(4×0.34)C	5.5	30	54
FMD910.03.05	(5×0.34)C	6	34	60
FMD910.03.07	(7×0.34)C	6.5	45	84
FMD910.03.14	(14×0.34)C	8	74	126
FMD910.03.18	(18×0.34)C	8.5	91	156

注Note: 外径是指参考值 The outer diameters are reference values.

G: 带黄-绿接地线 With green-yellow earth core

x: 不带接地线 Without earth core