

Znfo 正火股份

专注 工控领域36年

2023版

高压触头/断路器附件

辅助开关选型手册



浙江正火电气股份有限公司

ZHEJIANG ZNFO ELECTRIC CO., LTD.

正火简介 Company Profile Of Znfo

正火股份是一家以工业控制电器为主导产品，以电力自动化等为辅，集制造、贸易、科研于一体的产销企业。

正火股份在上海和温州建有两大生产基地，拥有上海正火电气有限公司，浙江正火电气股份有限公司，大连二开开关有限公司等10多家控参股企业，50多家协作企业。

作为一家专业针对工控开关元件创新研发、生产为一体的供应商，产品广泛应用于起重、电力、工控等行业的重点工程，以最高的品质、安全性最强的解决方案和完善的售后服务来赢得广大用户一致好评的口碑。

公司发扬“同心、敬业、创新、争光”的企业精神，以“产业科技化、产品定制化、管理数字化，”为发展理念，以敏锐的目光，昂扬的姿态，面向世界，挑战新时代新未来。

As a production and marketing enterprise integrating manufacturing, trading and scientific research, ZNFO takes industrial control appliances as the leading products and electric automation products as the auxiliary products.

ZNFO has two production bases, respectively in Shanghai and Wenzhou, and owns more than 10 controlling and share holding enterprises and more than 50 cooperative enterprises, including Shanghai CHZHCT Electric Co., Ltd., Zhejiang ZNFO Electric Co., Ltd. and Dalian Toperkai Switch Co., Ltd.

As a supplier specializing in innovative R&D and production of industrial control switch components, with products widely used in key projects in the fields of lifting, electric power, industrial control, etc., ZNFO has won unanimous praise from users by virtue of the highest quality, the most secure solutions and the perfect after-sales services.

In the spirit of “Unity, Dedication, Innovation, Glory” and with the development idea of “Industrial Technicalization, Products Customization, Management Digitization”, ZNFO faces the world and challenges the new era and future with keen eyes and spirited attitude.

发展历史

Development History

创客阶段

2017-2027年

Maker stage
(2017-2027)

2018年浙江正火电气有限公司晋升为浙江正火电气股份有限公司，荣获安全生产标准化企业。
2019年荣获浙江省科技型中小企业、AAA级信用企业、荣获多项产品计算机软件著作权及专利证书。
2020年创新 " 正火超越者 " 系列产品10项、专利2项。
2021-2022年创新 " 正火绿创 " 系列20项，专利2项。
2022年-2027年计划创新100项以上、创客500位员工。

In 2018, Zhejiang CHZHCT Electric Co., Ltd. was promoted as Zhejiang ZNFO Electric Co., Ltd. and was awarded the Safe Production Standardization Enterprise.
In 2019, the Company was awarded Zhejiang Provincial Small and Medium-Sized Sci-tech Enterprise and AAA Credit Enterprise, with many products awarded the copyright of computer software and the patent certificate.
In 2020, the Company made innovations of 10 series products of "ZNFO Transcender" and was awarded 2 patents.
From 2021 to 2022, the Company made innovations of 20 series products of "ZNFO Green Innovation" and was awarded 2 patents.
From 2022 to 2027, the Company aims to make innovations of more than 100 items and increase employees by 500 persons.

提升阶段

2007-2017年

Promotion stage
(2007-2017)

2011年温州正火电气有限公司晋升为 "浙江正火电气有限公司"，投产行程开关、限位开关、起重开关、输送机综合智能保护装置系统等产品。
2012年荣获 "电气行业十大创新企业"。
2013年荣获 "中国电气行业十大评选——十大知名品牌"，聚焦两大平台建设——自主创客平台和赋能创客平台。
2016年推出 " 正火特制 " 高端工控产品，同年并通过 "ISO9001/14001/18001" 质量、环境、职业健康安全管理体系认证。
2017年荣获 " 正火特制 " 7项3C证书、"辅助开关" 2项专利。

In 2011, Wenzhou CHZHCT Electric Co., Ltd. was promoted as Zhejiang CHZHCT Electric Co., Ltd., with travel switches, limit switches, crane switches and comprehensive intelligent protection device systems for conveyors, etc. put into operation.
In 2012, the Company was rated as one of the "Top Ten Innovative Enterprises in Electrical Industry".
In 2013, the Company was listed in "Top Ten Awards of China's Electric Industry - Top Ten Famous Brands", and focused on the construction of the independent maker platform and the empowerment maker platform.
In 2016, the Company launched the high-end industrial control products of "TAND" series, and passed the certification of "ISO9001/14001/18001" Quality, Environment and Occupation Health Safety Management Systems.
In 2017, the Company won seven 3C certificates for "TAND" products and 2 patents for "auxiliary switches".

发展阶段

1997-2007年

Development stage
(1997-2007)

2002年 "乐清新光冲件配套厂" 更名为 "乐清市正大银触头厂"。
2003年通过ISO9001质量体系认证，同年获得市质量技术监督局颁发的质量保证能力认可证书。
2005年投产高低压线圈、凸轮触头总成、辅助开关及全套配件。
2006年 "乐清正大" 申报更名为 "温州正火电气有限公司"，并在上海成立 "上海正火电气有限公司"。
通过ISO9001转版认证、部分产品通过CE、CCC、ROSH认证。

In 2002, "Yueqing Xinguang Supporting Stamping Parts Factory" was renamed as "Yueqing Zhengda Silver Contact Tips Factory".
In 2003, the Company passed the certification of ISO9001 Quality System, and was awarded the quality assurance ability accreditation certificate issued by the Municipal Bureau of Quality and Technical Supervision.
In 2005, the Company put high-voltage and low-voltage coils, cam contact assemblies, auxiliary switches and complete sets of accessories into production.
In 2006, "Yueqing Zhengda" declared that it was renamed as "Wenzhou CHZHCT Electric Co., Ltd." and established "Shanghai CHZHCT Electric Co., Ltd." in Shanghai.
In the same year, the Company passed the certification of the updated ISO9001 system, and some products of the Company passed CE, CCC and ROHS certifications.

创业阶段

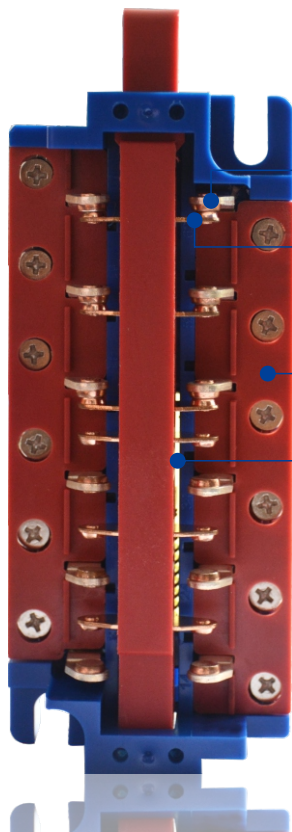
1987-1997年

Entrepreneurial stage
(1987-1997)

1987年创立 "柳市低压电气配件厂"，本着 "精益求精" 的精神，依靠质量和信誉求得生存。
1990年更名为 "乐清市新光冲件配套厂"。
1995年投资10万元引进冲压件、挤压机等设备，发展奠定了 "正火" 基业。

Founded in 1987, in the spirit of "Keeping Improving", "Liushi Low-voltage Electrical Accessories Factory" sought survival with quality and reputation.
In 1990, the Company was renamed as "Yueqing Xinguang Supporting Stamping Parts Factory".
In 1995, the Company invested 100,000 yuan to introduce stamping parts, extruders and other kinds of equipment, which laid the foundation of "ZNFO".

ZHNK6-1真空辅助开关



静触头：88%银氧化隔触点；H62黄铜镀银触桥

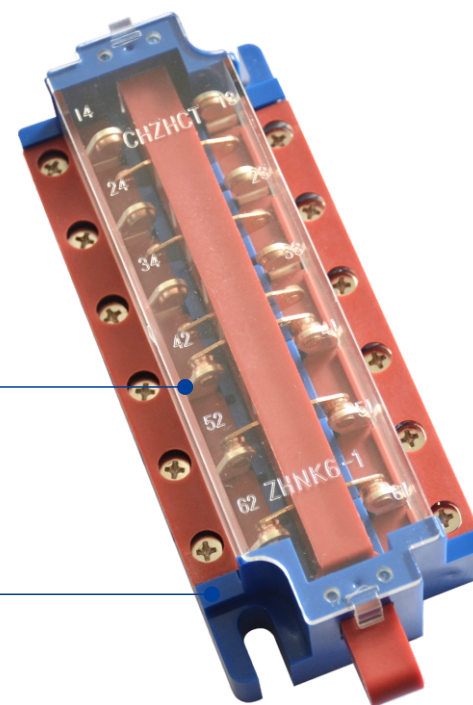
动触头：88%银氧化隔触点；磷青铜触桥，可靠度高于一般铝合金制品

防尘隔栏板设计，外观精美上档次

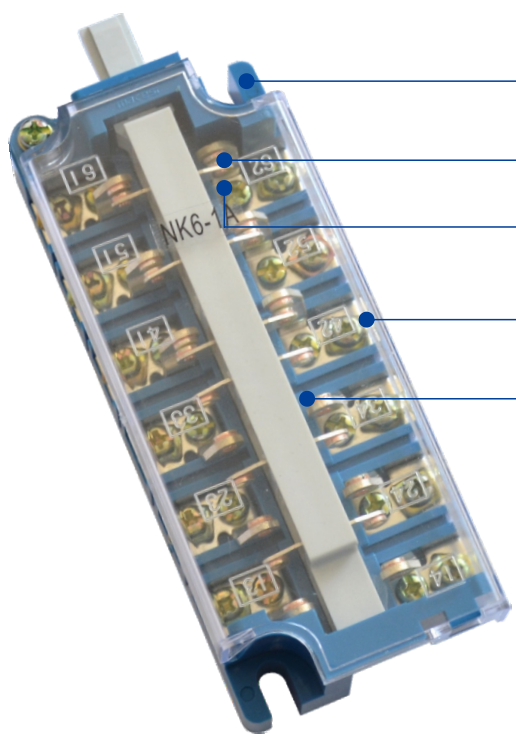
不锈钢弹簧

防尘盖：PC聚碳材料，抗摔防爆裂
可防尘，触点更持久耐用

外壳：PC聚碳材料，防阻燃，耐高温



市场传统NK6-1真空辅助开关



外壳：采用聚苯材料易燃

静触头：普通触点，铁制品触桥

动触头：普通触点，铁制品触桥

防尘盖：采用聚苯材料易爆裂，易进灰尘，缩短使用寿命

铁弹簧

交流接触器辅助开关



CJ40-250/400A辅助



CJ0辅助



CZ0-40-150A



CA7辅助开关



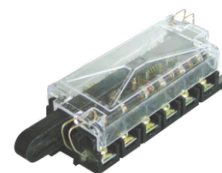
CA9辅助开关



CJ20-250/400A辅助



CJ12(CZ0)辅助



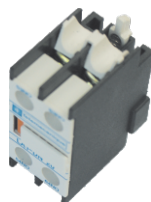
CJ12辅助小



CJ10-CJT1辅助



CA11辅助开关



F4(LA1)-11/20/02



F4(LA1)-22/40/31/13



3TF辅助

万能式断路器、真空辅助开关



DZ1辅助



DW10电动辅助



DW10(DW15)辅助



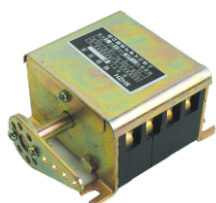
DW16辅助



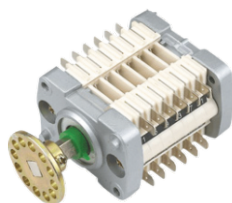
DW17辅助



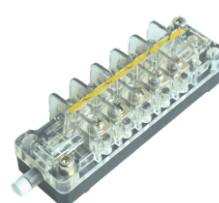
DW45辅助(两个连体)



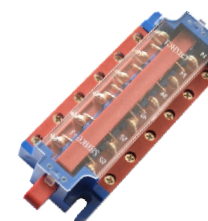
真空辅助F1系列



真空辅助F10系列



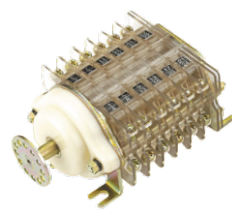
真空辅助NK系列



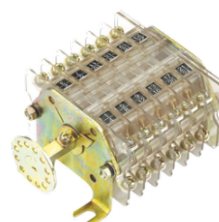
真空接触器辅助ZHNK6-1



真空辅助F4系列



真空辅助F6系列



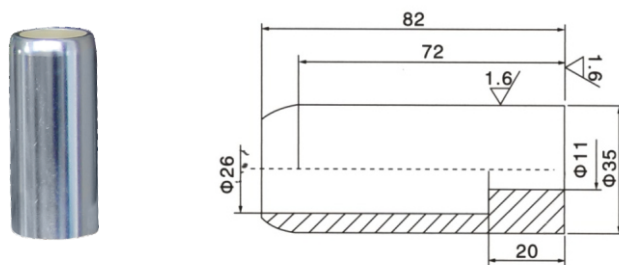
真空辅助F9-11系列



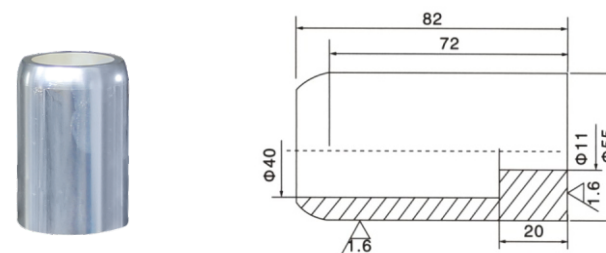
真空辅助ZKF6系列

静触头系列

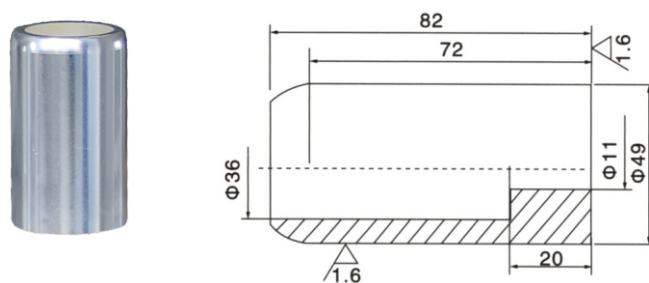
630A 静触头 材料：紫铜 / 铜铝焊接
产品编号：ZH001



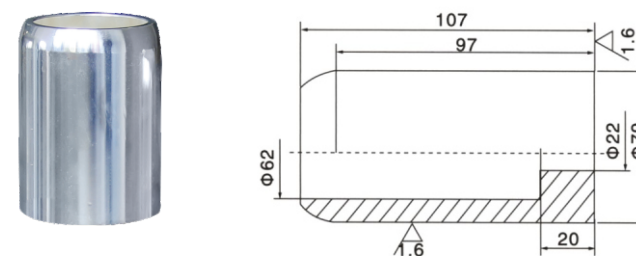
1600A 静触头 材料：紫铜
产品编号：ZH003



1250A 静触头 材料：紫铜 / 铜铝焊接
产品编号：ZH002

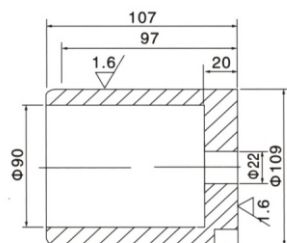


2000A 静触头 材料：紫铜
产品编号：ZH004



静触头系列

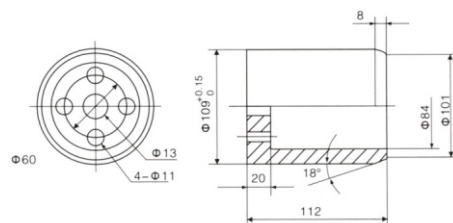
3150A 静触头 材料：紫铜
产品编号：ZH005



SN10-630A 静\动 材料：铜钨
产品编号：ZH007



4000A 静触头 材料：紫铜
产品编号：ZH006

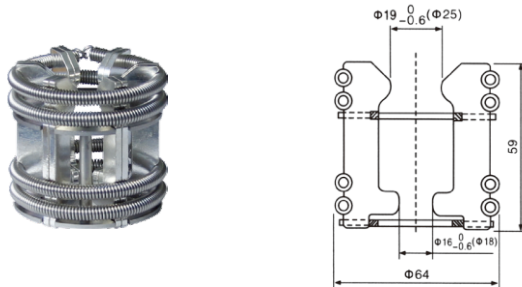


SN10-1000A 静\动 材料：铜钨
产品编号：ZH008

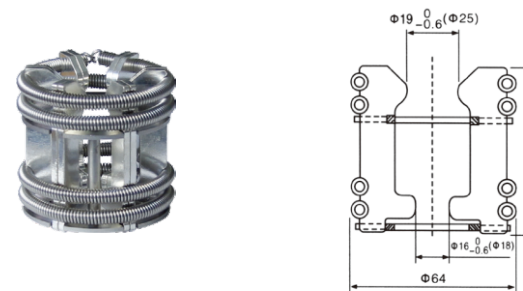


梅花触头系列

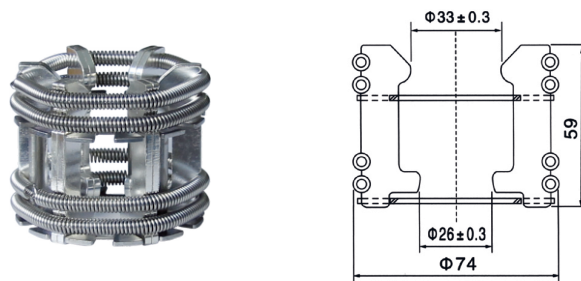
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产品编号: ZH009



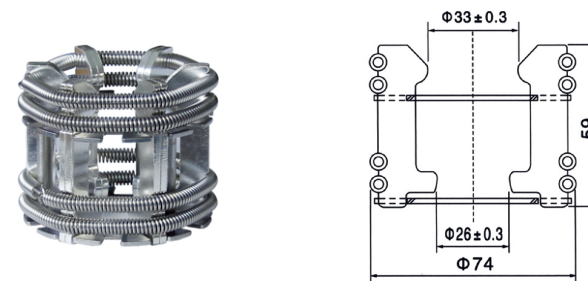
GC5-630A 捆绑式触头 触片数量: 12 片
产品编号: ZH011



GC5-630A/1000A 捆绑式触头 触片数量: 12 片
产品编号: ZH010



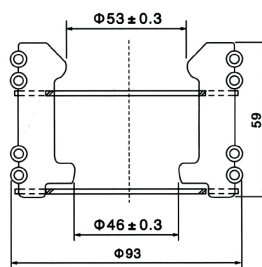
GC5-630A/1000A 捆绑式触头 触片数量: 12 片
产品编号: ZH012



梅花触头系列

GC5-1600A 捆绑式触头
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触片数量: 36 片



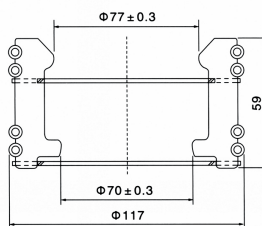
GC5-3150A 捆绑式触头
产品编号: ZH015

触片数量: 64 片



GC5-2000A 捆绑式触头
产品编号: ZH014

触片数量: 48 片



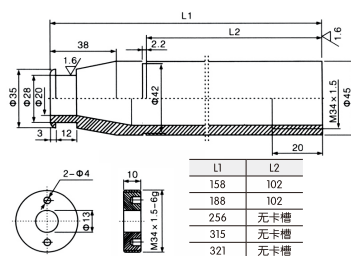
GC5-4000A 捆绑式触头
产品编号: ZH016

触片数量: 84 片

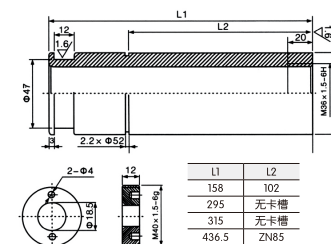


触臂系列

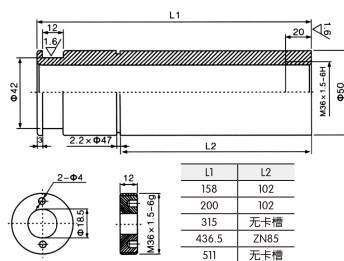
VS1-12/630A 触臂 材料: 铜 / 铝 / 铜铝焊接
产品编号: ZH017



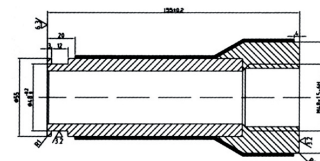
VS1-12/1600A 触臂 材料: 铜 / 铝 / 铜铝焊接
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VS1-12/1250A 触臂 材料：铜 / 铝 / 铜铝焊接
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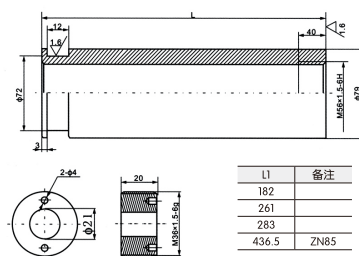


VS1-12/1600A 触臂 材料：紫铜
产品编号：ZH020



触臂系列

VS1-12/2000A 触臂 材料: 紫铜
产品编号: ZH021



VS1-12/4000A 触臂 材料：紫铜
产品编号：ZH023

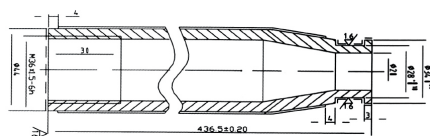


VS1-12/2500A-3150A 触臂 材料：紫铜
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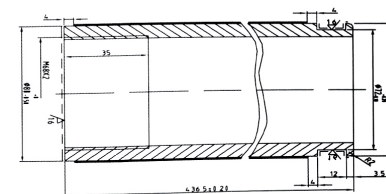


触臂系列

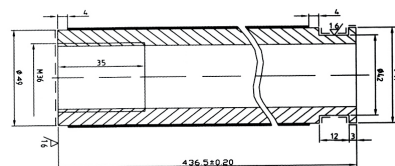
ZN85-40.5/630A 触臂 材料：紫铜 / 铝 / 铜铝焊接
产品编号：ZH024



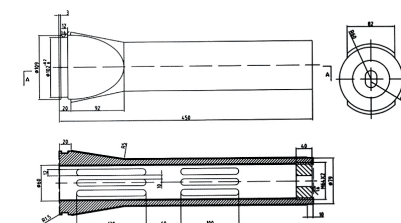
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产品编号: ZH026



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产品编号：ZH025

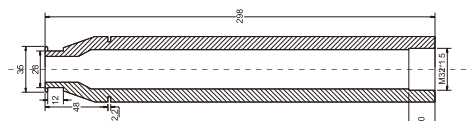


ZN85-40.5/2500A 触臂 材料：紫铜
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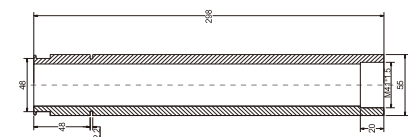


触臂系列

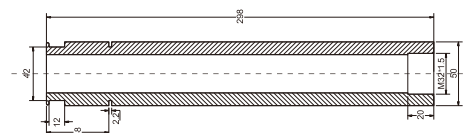
VS1-24/630A(24kV) 触臂 材料: 紫铜
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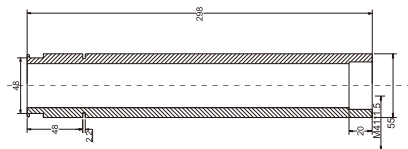


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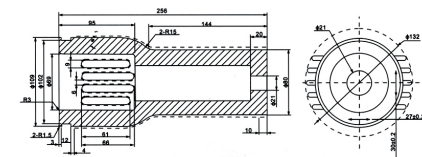


触臂系列

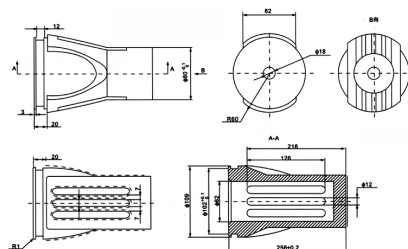
VS1-24/2000A (24kV) 触臂 材料: 紫铜
产品编号: ZH031



VS1-24/4000A (24kV) 触臂 材料: 紫铜
产品编号: ZH033



VS1-24/3150A (24kV) 触臂 材料: 紫铜
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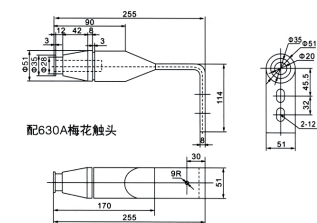


触臂系列

630A 硅胶触臂 材料：紫铜、铝 / 铜铝焊接
产品编号：ZH034



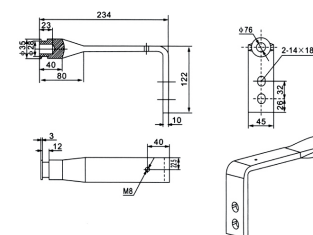
630A 计量触臂 材料：紫铜
产品编号：ZH036



1250A 硅胶触臂 材料：紫铜、铝 / 铜铝焊接
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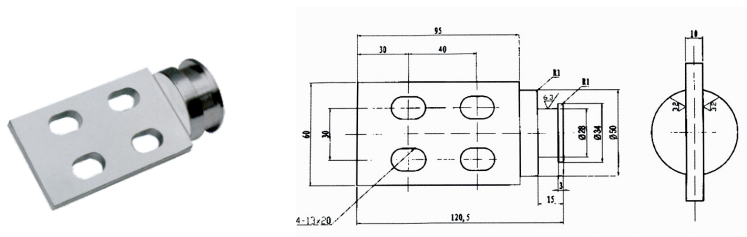


1250A 计量触臂 材料：紫铜
产品编号：ZH037

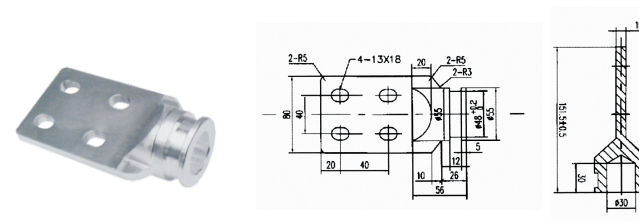


触臂系列

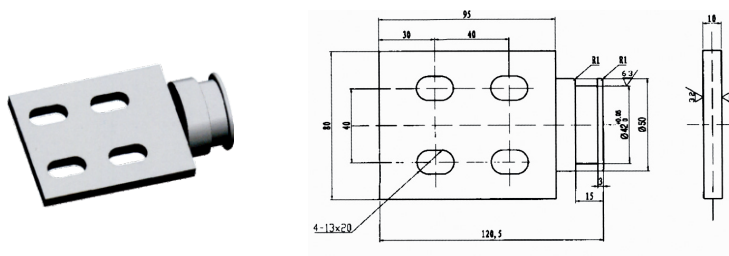
ZN85-40.5/630A 隔离触臂 材料：紫铜
产品编号：ZH038



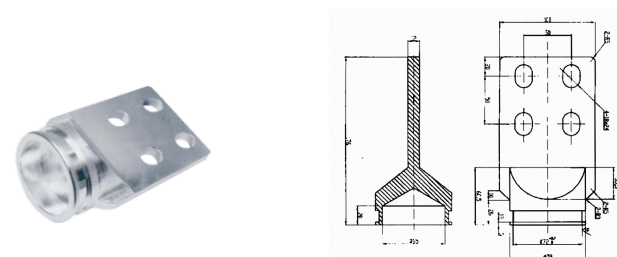
ZN85-40.5/1600A 隔离触臂 材料: 紫铜 代号: TY2010-203
产品编号: ZH040



ZN85-40.5/1250A 隔离触臂 材料：紫铜
产品编号：ZH039

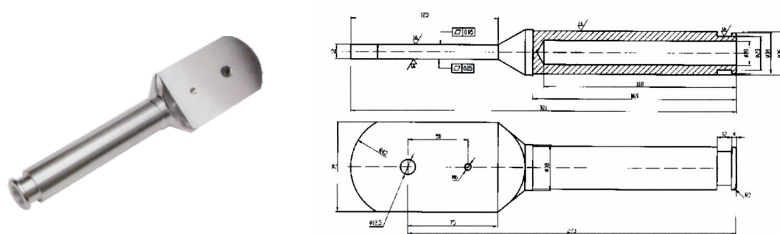


ZN85-40.5/2000A 隔离触臂 材料：紫铜
产品编号：ZH041

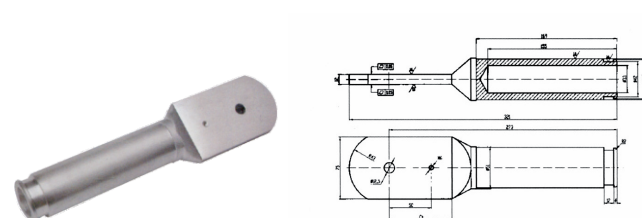


触臂系列

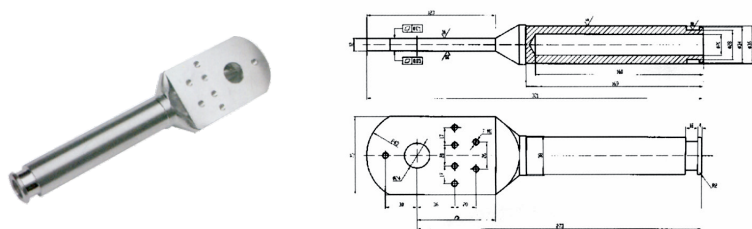
ZN94B/630A 上触臂 材料：紫铜
产品编号：ZH042



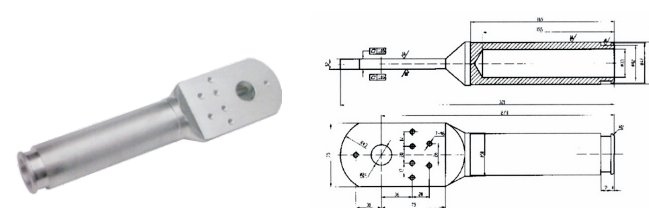
ZN94B/1250A 上触臂 材料：紫铜
产品编号：ZH044



ZN94B/630A 下触臂 材料：紫铜
产品编号：ZH043



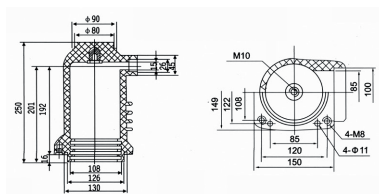
ZN94B/1250A 下触臂 材料：紫铜
产品编号：ZH045



触头盒系列

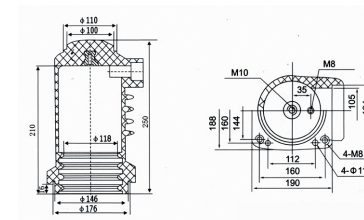
CH3-10Q/150 中置柜触头盒 630-1250A

产品编号: ZH046



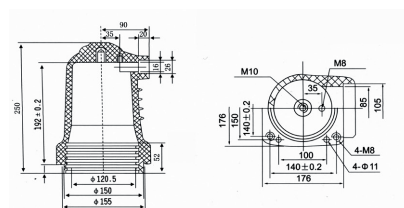
CH3-10Q/190 中置柜触头盒 1600A

产品编号: ZH048



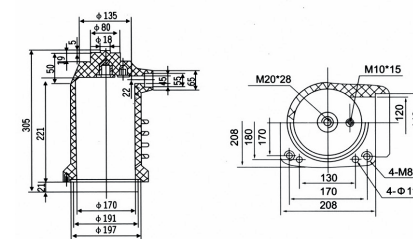
CH3-10Q/180 中置柜触头盒 1250A

产品编号: ZH047



CH3-10Q/208 中置柜触头盒 1600-2000A

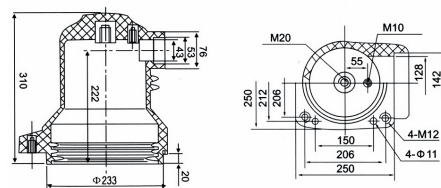
产品编号: ZH049



触头盒系列

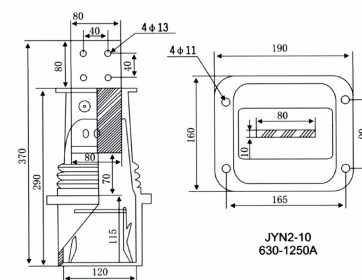
CH3-10Q/250 中置柜触头盒 2500-3150A

产品编号: ZH050



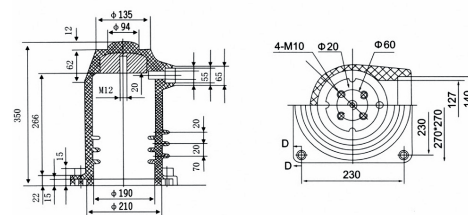
JYN2 触头盒

产品编号: ZH052



CH3-10Q/230 中置柜触头盒 4000A

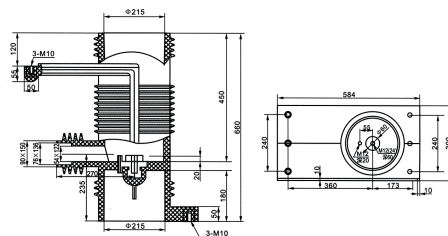
产品编号: ZH051



触头盒系列

CH3-35Q/660 3AV3 触头盒

产品编号: ZH053



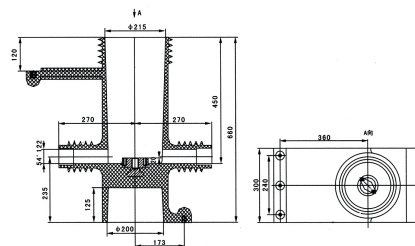
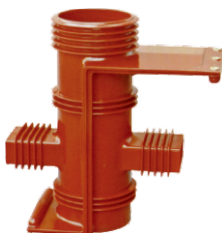
WB-40.5/80 3AV3 弯板

产品编号: ZH055



CH3-35Q/660/3T(三通 A 型) 3AV3 触头盒

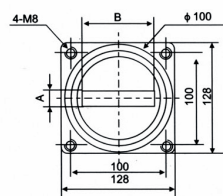
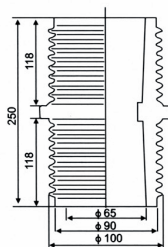
产品编号: ZH054



套管系列

TG4-10Q/128 套管

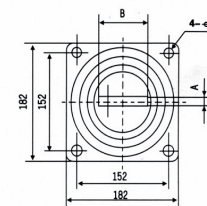
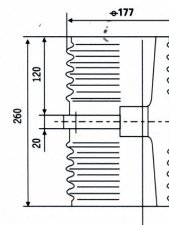
产品编号: ZH056



A	6	7	8	12
B	42	52	62	62

TG4-10Q/182 套管

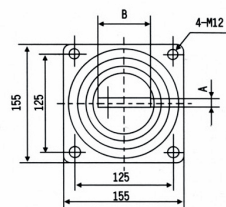
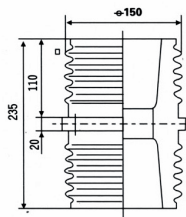
产品编号: ZH058



A	8	10	12	2-12
B	62	82	102	102

TG4-10Q/210 套管

产品编号: ZH057



A	8	10	12	34
B	62	82	82	82

套管系列

TG3-10Q/110 × 180 套管

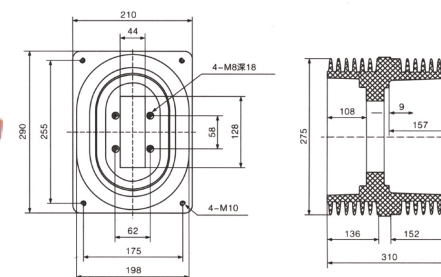
产品编号: ZH059



A	53	63	83	83	83	103
B	8	9	11	13	33	13

TG3-24Q/175 × 225 × 218 套管

产品编号: ZH061



TG3-10Q/140 × 200 套管

产品编号: ZH060

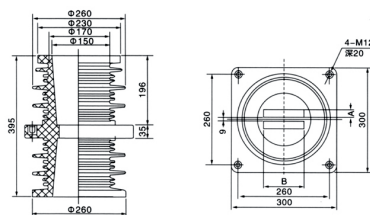


A	83	83	103	103	123
B	13	33	13	33	13

套管系列

TG4-40.5/260 × 260 35kV 套管

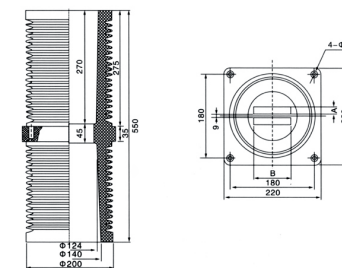
产品编号: ZH062



A	23	23	23	23	50	50
B	73	93	113	133	113	133

TG4-40.5/180×180 35kV 套管

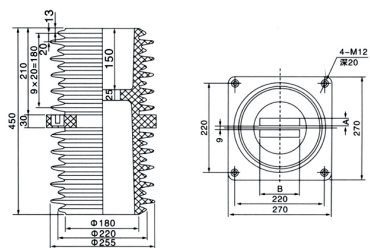
产品编号: ZH064



A	23	23	23	23	50	50
B	73	93	113	133	113	133

TG4-40.5/220×220 35kV 套管

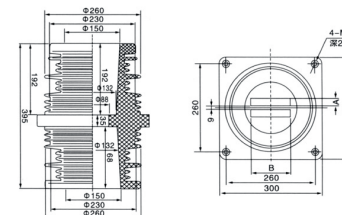
产品编号: ZH063



A	23	23	23	23	50	50
B	73	93	113	133	113	133

TG4-40.5/260×260 (带屏蔽) 3 5kV 套管

产品编号: ZH065

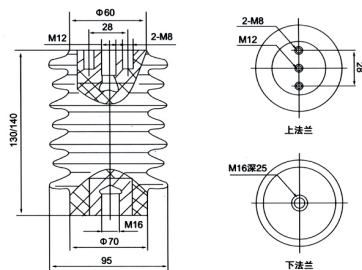


A	23	23	23	23	50	50
B	73	93	113	133	113	133

传感器系列

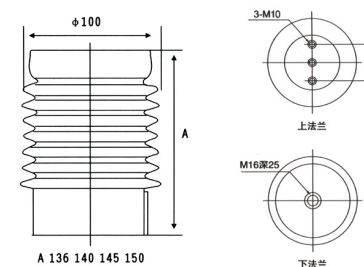
CG5-10Q/95 × 130 (135.140.145) 户内高压带电显示装置传感器

产品编号: ZH066



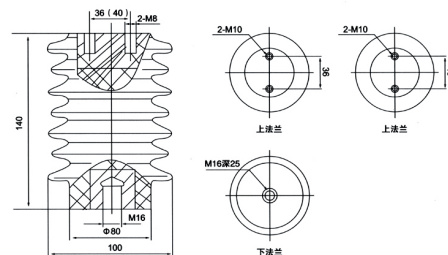
CG5-10Q/100 × 140 户内高压带电显示装置传感器 (隔离开关专用)

产品编号: ZH068



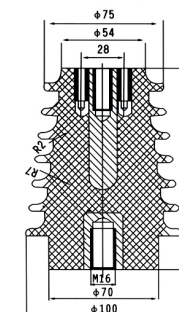
CG5-10Q/100 × 140 户内高压带电显示装置传感器 (接地开关专用)

产品编号: ZH067



12kVCG5 户内高压带电显示装置传感器 (宝塔形)

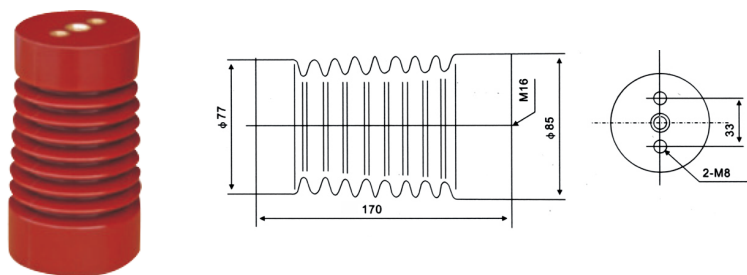
产品编号: ZH069



传感器系列

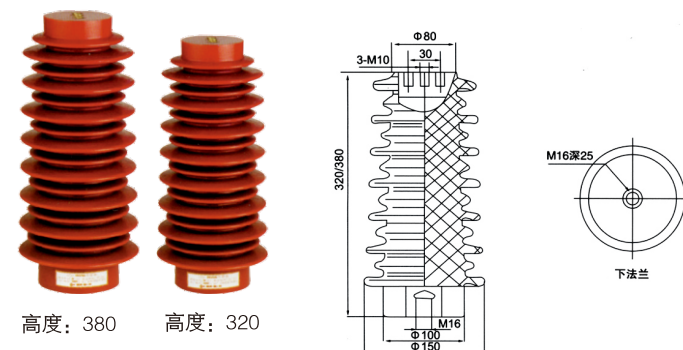
12kVCG5 户内高压带电显示装置传感器 (高原形)

产品编号: ZH070



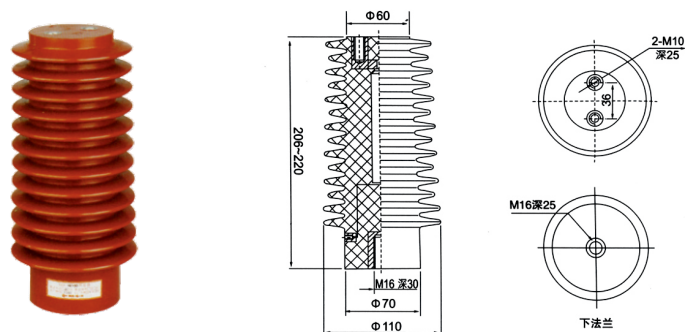
35kVCG5 户内高压带电显示装置传感器 (宝塔形)

产品编号: ZH072



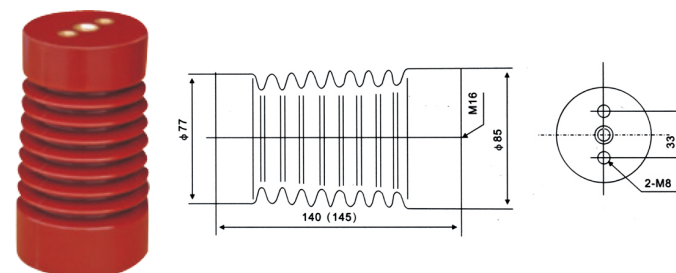
24kVCG5 户内高压带电显示装置传感器 (宝塔形)

产品编号: ZH071



ZJ-10Q $\phi 85 \times 140(145)$ 支柱绝缘子

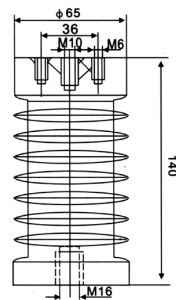
产品编号: ZH073



传感器系列

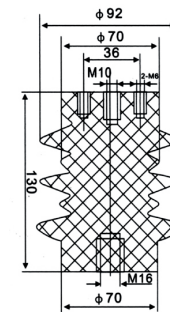
ZJ-10Q $\phi 65 \times 140$ (130) 支柱绝缘子 (FN7)

产品编号: ZH074



ZJ-10Q $\phi 75 \times 130$ (130) 支柱绝缘子 (FN5)

产品编号: ZH076



6kV 支柱绝缘子及低压绝缘子

产品编号: ZH075



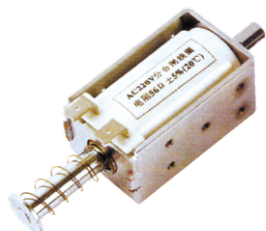
72 × 95

75 × 87

操作机构线圈

VS1机构分合闸过流脱扣器

产品编号: ZH077



ZN12分合闸过流脱扣器

产品编号: ZH079



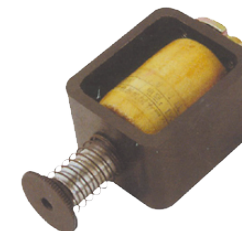
3AV3机构分合闸过流脱扣器

产品编号: ZH081



CT19分合闸磁合线圈总成

产品编号: ZH083



CT21分合闸磁合线圈总成

产品编号: ZH078



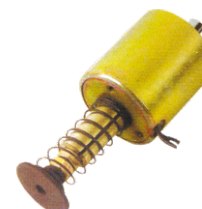
CT23分合闸磁合线圈总成

产品编号: ZH080



CT23分合闸磁合线圈总成

产品编号: ZH082

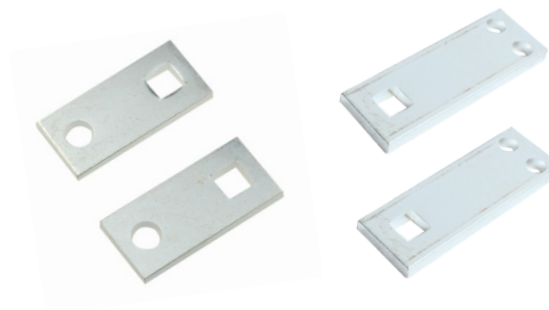


断路器附件

DZ20-100附件 材料：紫铜
产品编号：ZH084



DZ20-400附件 材料：紫铜
产品编号：ZH086



DZ20-225附件 材料：紫铜
产品编号：ZH085



DZ20-600附件 材料：紫铜
产品编号：ZH087



断路器附件

CM1-100A附件 材料：紫铜
产品编号：ZH088



CM1-400A附件 材料：紫铜
产品编号：ZH090



CM1-225A附件 材料：紫铜
产品编号：ZH089



CM1-630A附件 材料：紫铜
产品编号：ZH091



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