

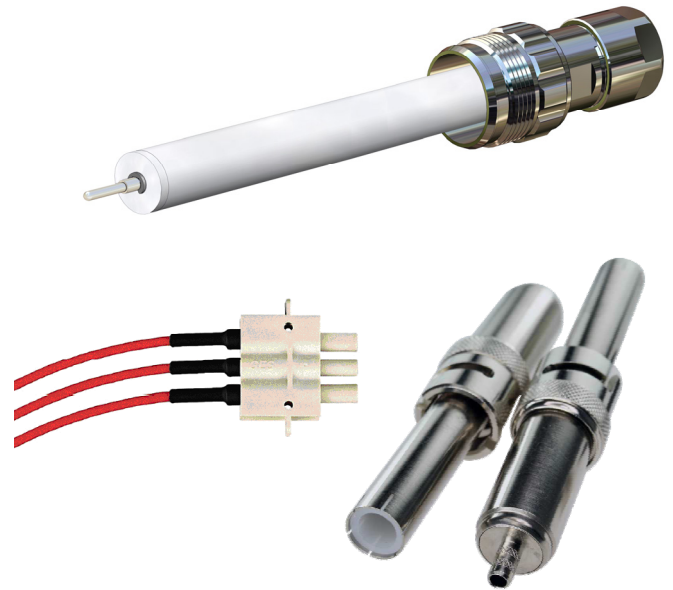
HIGH VOLTAGE CABLE ASSEMBLIES UP TO 100kV

FEATURES

- Different connector families
- Various standard configurations
- Operating voltage up to 100kV_{DC}
- Oil-tight and hermetically sealed receptacles available
- Extended temperature range available
- Made in Germany

APPLICATIONS

- Analytical Instruments
- Medical electronics
- Particle physics
- Instrument high voltage connections
- High voltage power supplies / amplifiers
- Nuclear instrumentation
- Test and measurement equipment
- High voltage laboratory wiring
- General high voltage wiring



DESCRIPTION

Custom configurations of high voltage cable assemblies for connecting HV power supplies to different kind of equipment. Various connector models can be terminated to a great number of cable types. The terminations can be made single-sided or two-sided. Two-sided terminations are possible with identical or different connector models. Mating instrument mount receptacles are available in oil-tight or even hermetically sealed versions.

The cable assemblies are fully tested to provide reliable long-lasting connections.

Typical applications include high voltage power supplies, nuclear instrumentation, industrial and scientific X-Ray, electron microscopes, mass spectrometry, high voltage test equipment, electron beam welding, particle physics and many more.

HC55 / 57 SHV

Safe High Voltage coaxial connectors up to 5kV_{DC}. Cable group mechanically matching RG 58 and RG 316 style. High temperature versions available.

SHV terminated cable assemblies are used in nuclear instrumentation and many other applications. Both the cable connectors and the bulkhead receptacles have recessed contacts and will withstand the rated voltage in unmated condition.



HC51

Coaxial connectors up to 10kV_{DC}. Cable group mechanically matching RG 58 style. High temperature versions available for the cable. Typical applications include industrial, nuclear instrumentation and medical. Both the cable connectors and the bulkhead receptacles have recessed contacts and will withstand the rated voltage in unmated condition. The front mount receptacles are hermetically sealed.



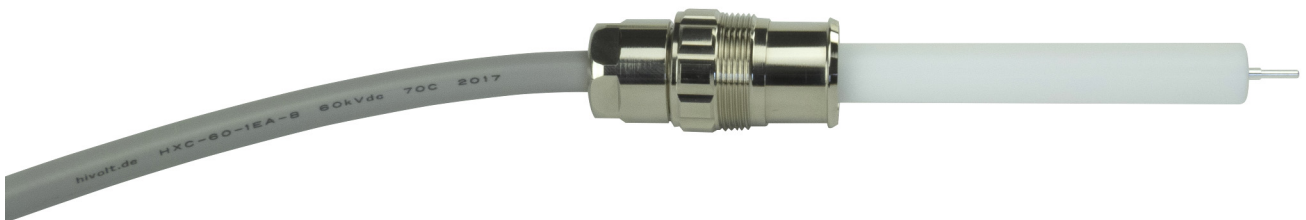
▪ HC52

Coaxial connectors up to 20kV_{DC}. Cable group mechanically matching RG 213 / RG 214 style. Typical applications include industrial, nuclear instrumentation and medical. Both the cable connectors and the bulkhead receptacles have recessed contacts and will withstand the rated voltage in unmated condition. The front mount receptacles are hermetically sealed.



▪ HC7

Industrial high voltage connector series for 10, 20, 30, 50, 60 and 100kV_{DC}. Fits to cables from 6.5 to 14mm outer diameter. Various cable types for different requirements available. Medium to high power industrial and scientific applications.



▪ HS

Industrial high voltage connector series for 10, 20, 30 and 40kV_{DC}. Fits to cables from 5 to 6.5mm outer diameter. Cable types for different requirements available. Low to medium power industrial, scientific and T&M applications.



▪ VP-CL

1, 2 or 3 pole connector series for internal wiring up to 13kV_{DC}.

▪ Others

We are able to provide high voltage cable assemblies using many other HV connector types like LEMO, Fischer or MIL.

HIGH VOLTAGE MOLDED RUBBER AND RESIN CAST CABLE TERMINATIONS AND RESIN CAST RECEPTACLES 50kV – 300kV

FEATURES

- Up to 300kV_{DC}
- Oil-tight Receptacles
- Extended Temperature Range
- Various Standard Types
- Custom Designs

APPLICATIONS

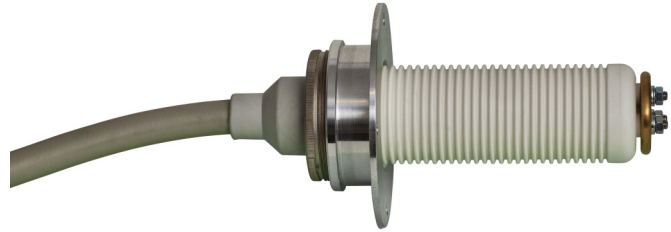
- Industrial X-Ray
- Analytical Instruments
- Particle Physics
- Electron Beam Welding
- Pulsed Power
- Test Stations

DESCRIPTION

A comprehensive range of high voltage cable assemblies and mating chassis mounted receptacles used for connecting HV power supplies to X-Ray tubes and other equipment. Available in the following styles and voltages: 65kV (R3), 75kV Federal Standard (O3, O4), 100kV (R10), 160kV (R24), 210kV (R30), 225kV (R28), 300kV, Pantak connectors, bottle shaped connectors and custom types. The cable terminations are implemented as resin cast or molded rubber connectors and fit most makes of industrial and scientific equipment. Molded rubber connectors are available spring loaded or with spring loaded flanges.

A wide range of termination clamping flanges, insulation paste, receptacle blanking plugs and test probes are available.

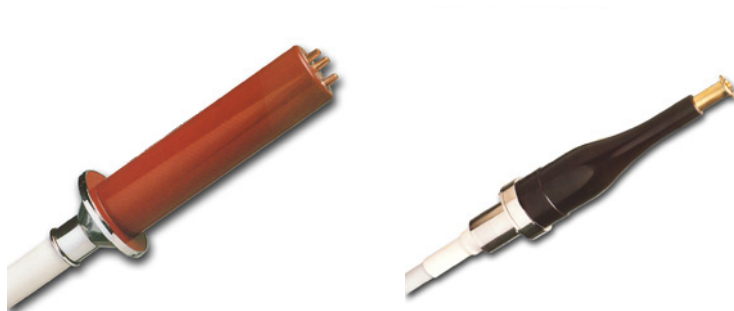
Typical applications include medical and industrial X-Ray, electron microscopes, X-Ray fluorescence, inspection equipment, electron beam welding, high energy, pulsed power and particle physics.



160kV R24 Type Spring Loaded Molded Rubber Connector and Receptacle



75kV O3 Type Resin Cast Connector and Receptacle

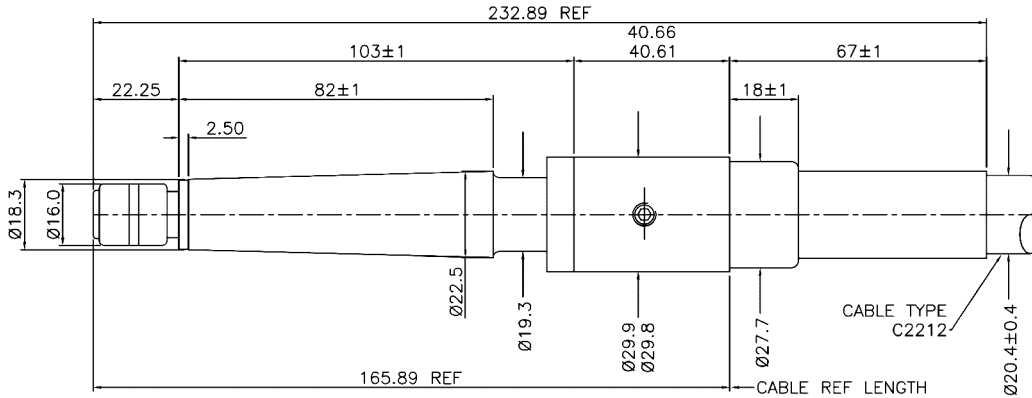


EXAMPLES OF HIGH VOLTAGE CABLE ASSEMBLIES AND RECEPTACLES (FOR REFERENCE ONLY)

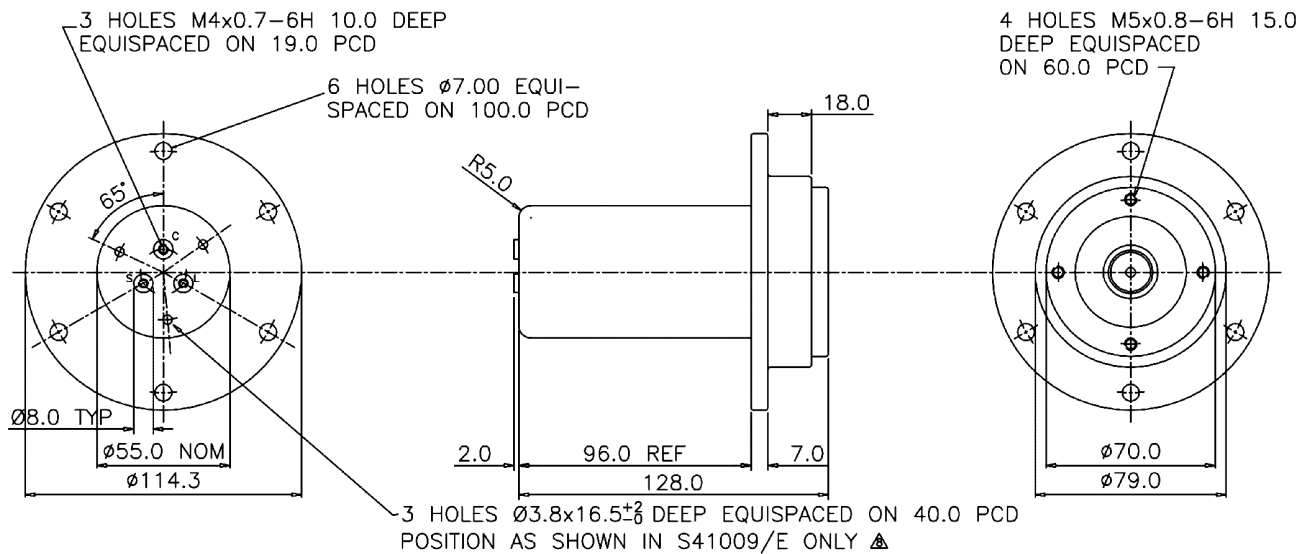
High Voltage Cable Assemblies are manufactured in various different combinations of cable and connector types. Some possible configurations and some variants of receptacles are shown for reference. All drawings are for identification purposes only. All drawings not to scale.

Final configurations are defined according to the requirements of the customer's application.

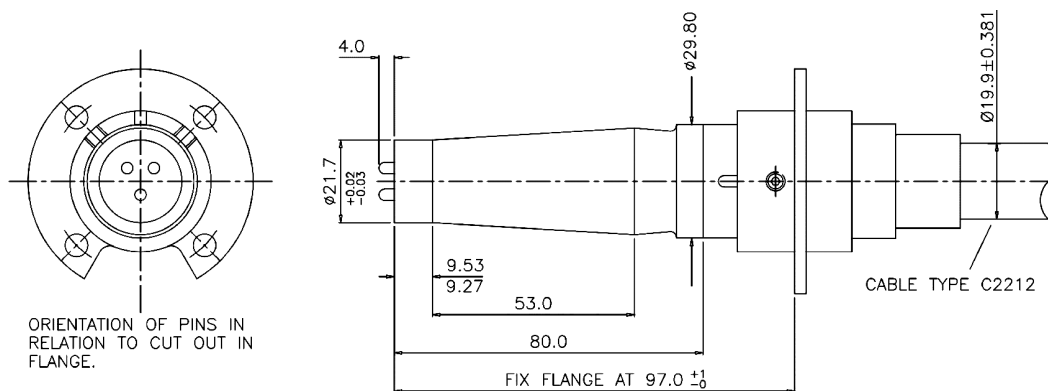
100kV R10 STRAIGHT MOLDED RUBBER CONNECTOR – CABLE TYPE 2212



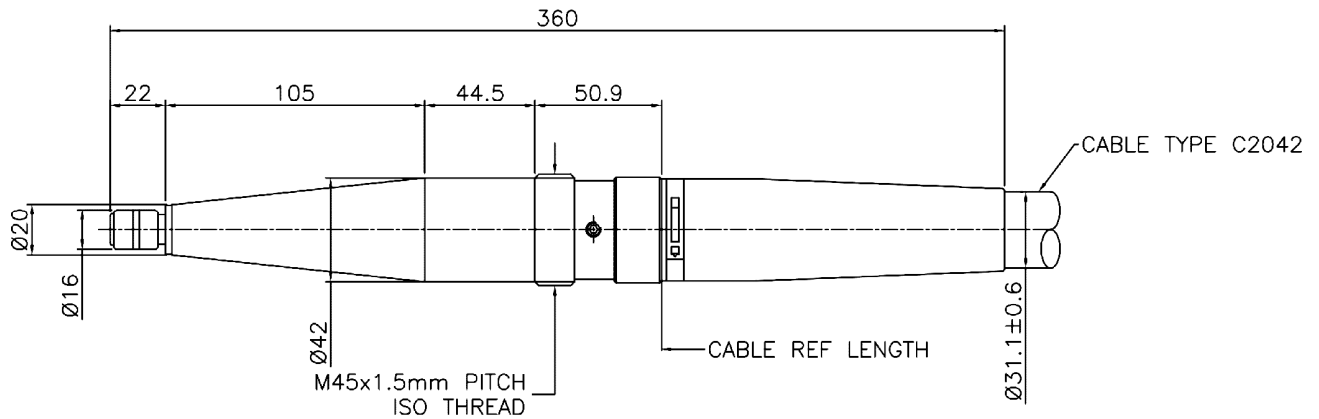
100kV R10 RECEPTACLE



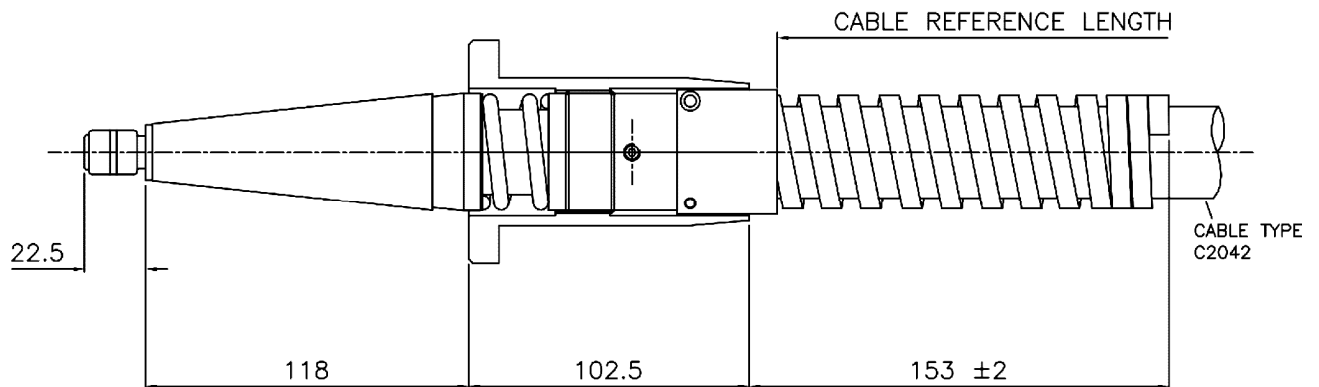
100kV R27 STRAIGHT MOLDED RUBBER CONNECTOR – CABLE TYPE 2212



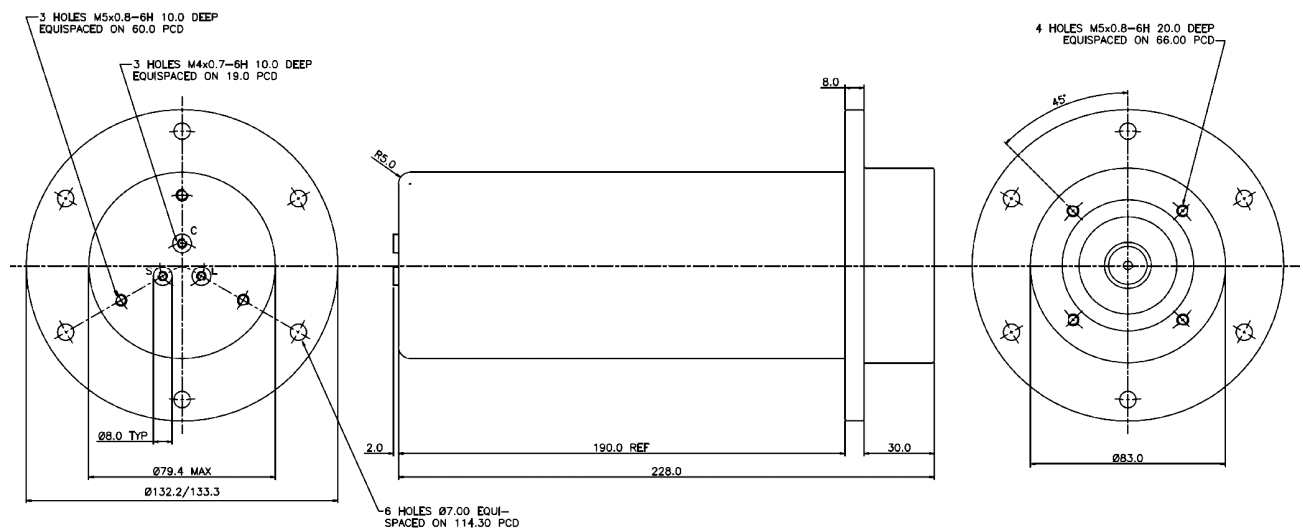
▪ **160kV R24 STRAIGHT MOLDED RUBBER CONNECTOR – CABLE TYPE 2042**



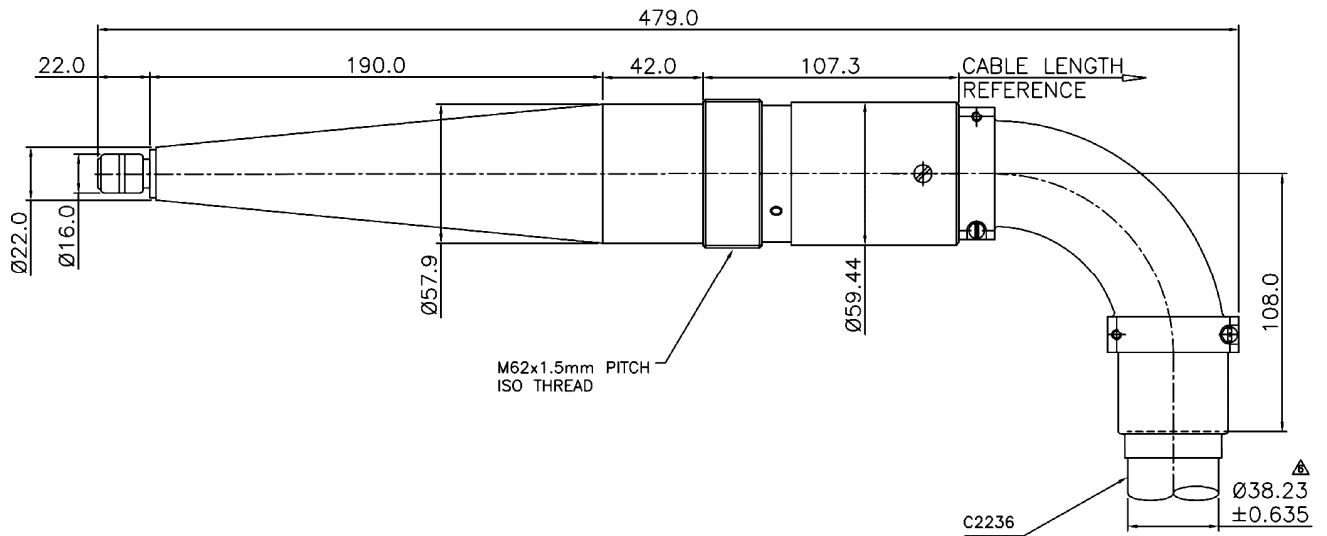
▪ **160kV R24 SPRING LOADED STRAIGHT MOLDED RUBBER CONNECTOR – CABLE TYPE 2042**



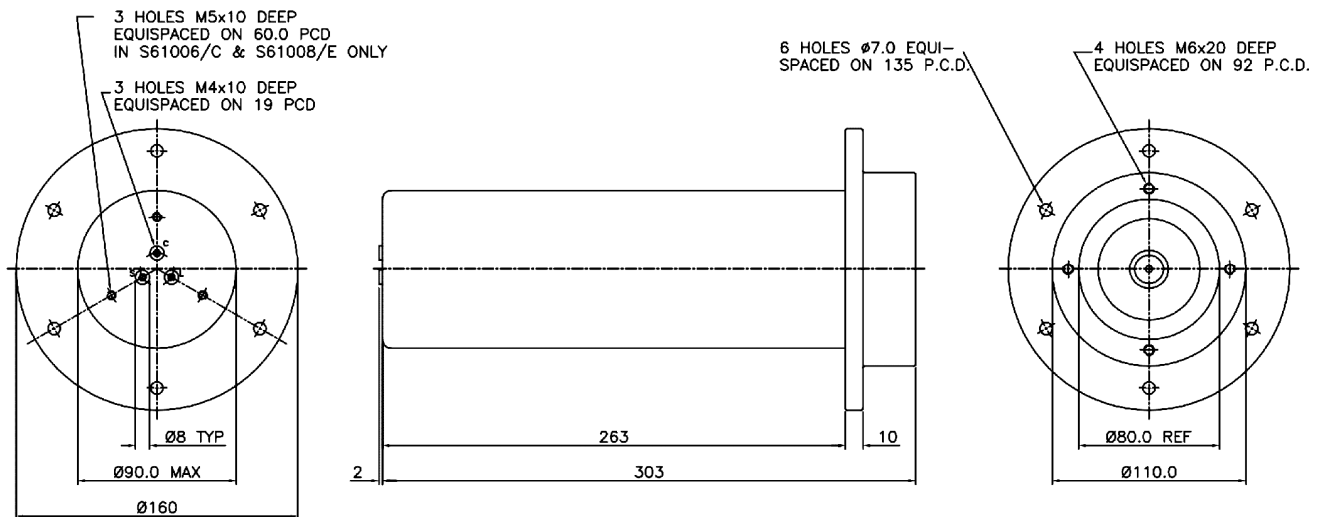
▪ **160kV R24 RECEPTACLE**



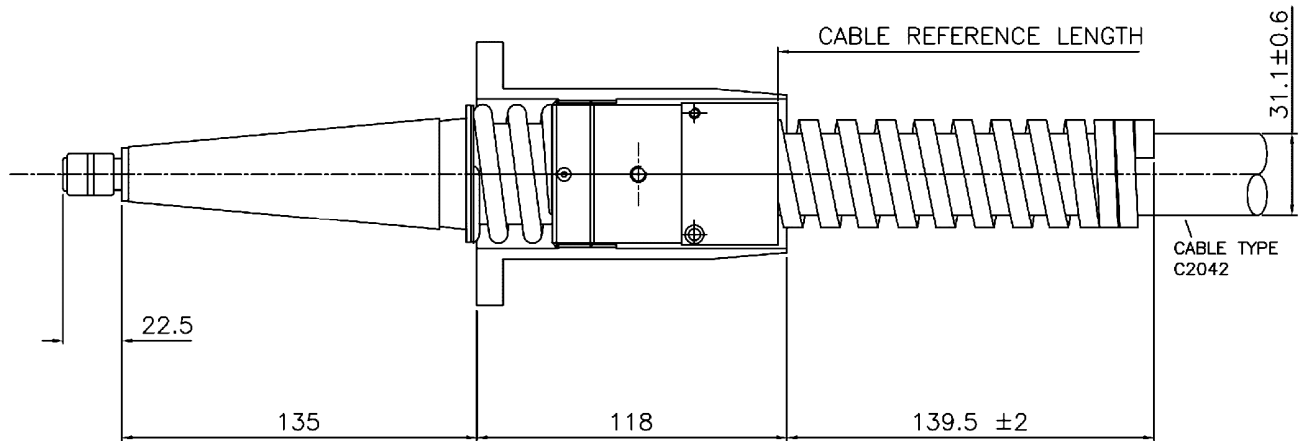
▪ 210kV R30 RIGHT ANGLE MOLDED RUBBER CONNECTOR – CABLE TYPE 2236



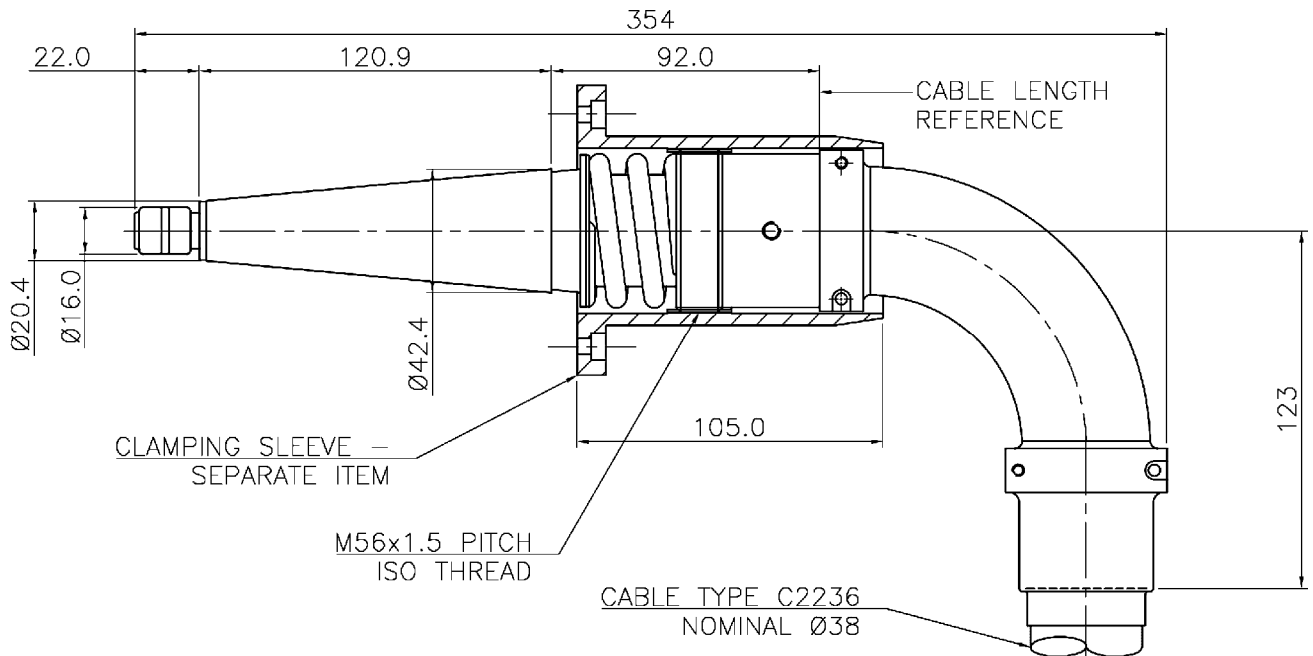
▪ 210kV R30 RECEPTACLE



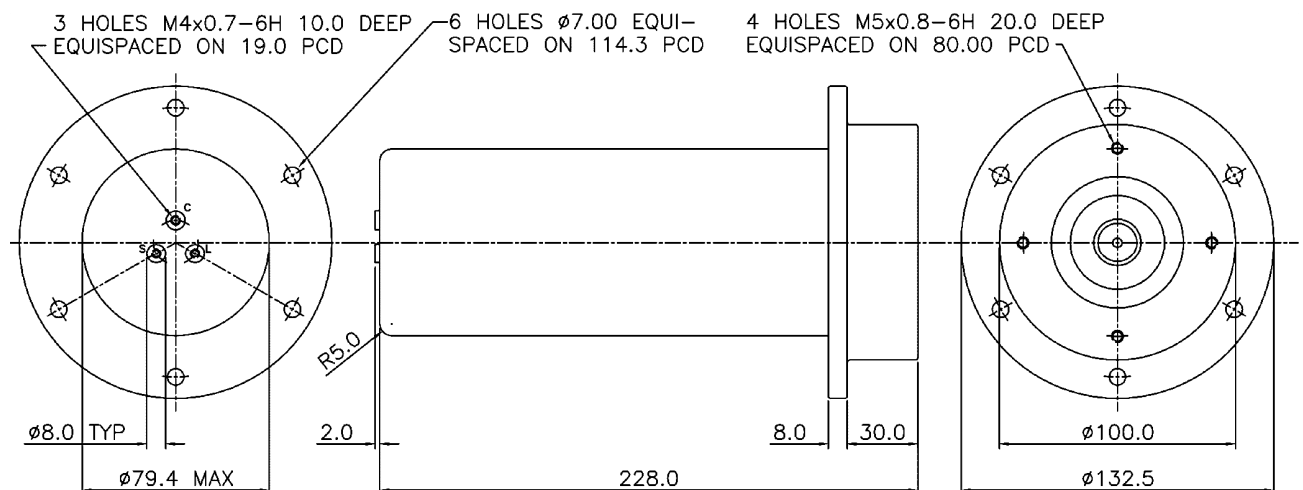
▪ **225kV R28 SPRING LOADED STRAIGHT MOLDED RUBBER CONNECTOR – CABLE TYPE 2042**



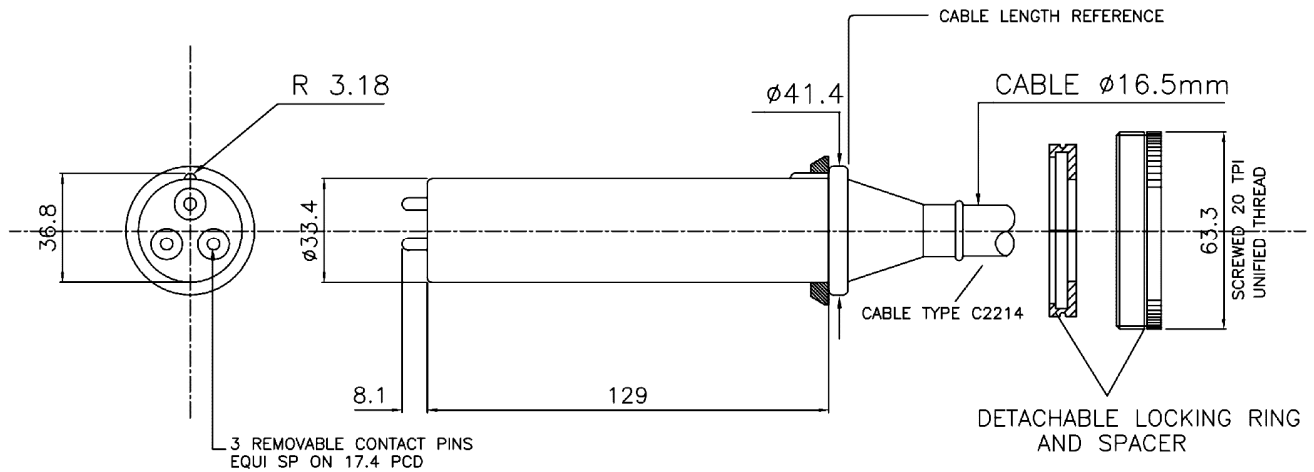
▪ **225kV R28 SPRING LOADED RIGHT ANGLE MOLDED RUBBER CONNECTOR – CABLE TYPE 2236**



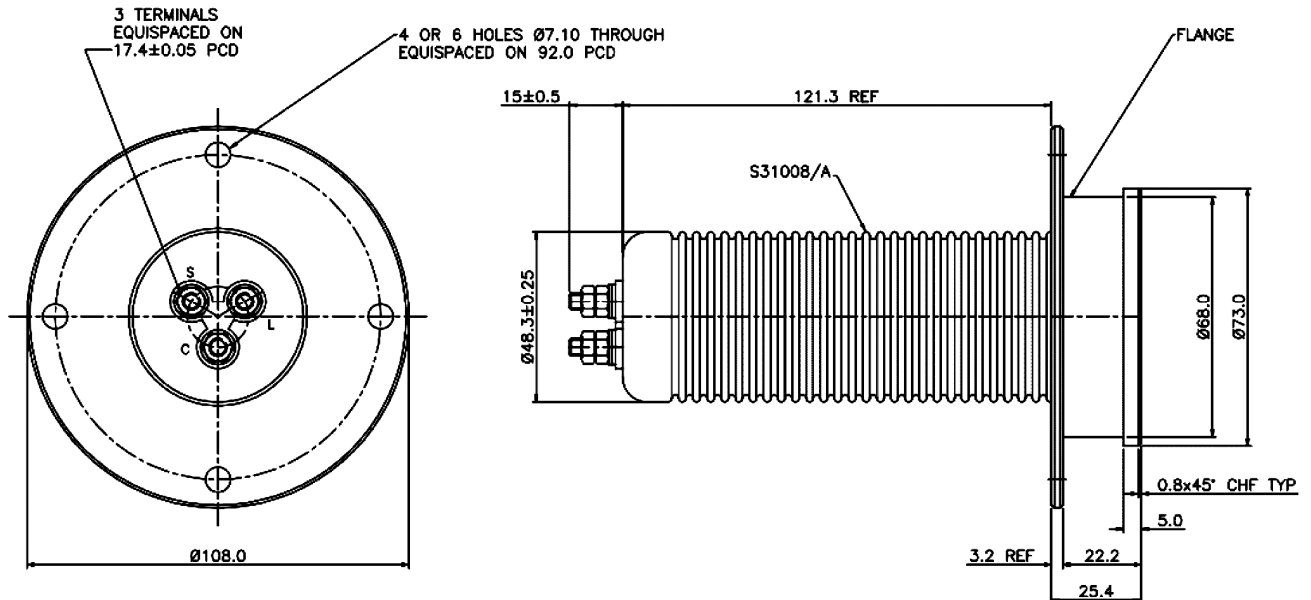
▪ **225kV R28 RECEPTACLE**



▪ 75kV 03 STRAIGHT RESIN CAST CONNECTOR – CABLE TYPE 2214



▪ 75kV RECEPTACLE WITH FLANGE



Note: drawings not to scale

Disclaimer

The information given in this data sheet is technical data, not assured product characteristics. It has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. All drawings and pictures are not to scale. All values and dimensions without given tolerances are nominal. The content is subject to change without notice. The user has to ensure by adequate tests that the product is suitable for his application regarding safety and technical aspects. hivolt.de GmbH & Co. KG does not assume any liability arising out of the application or use of any product described. The technical data is based on manufacturer's information.

Safety Advice

Design, installation and inspection of machinery and devices carrying high voltage require accordingly trained and qualified personnel. Appropriate safety rules and directives must be complied with. Improper handling of high voltage can mean severe injuries or death and may cause serious collateral damage!