

# SHV SERIES

## High Voltage Connectors

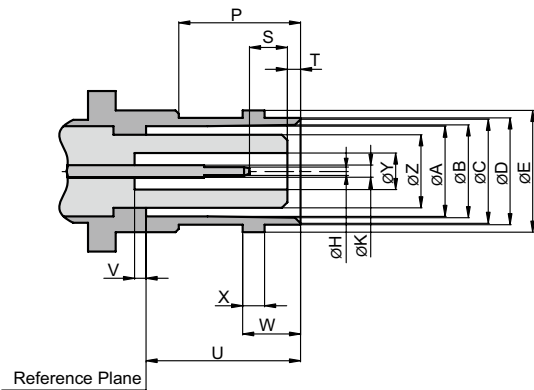
### FEATURES

SHV connectors are suitable for all high voltage applications up to 3.5KV RMS, in particular for use on nuclear instruments.

The SHV outer contact ground connection is maintained through the center contact mating cycle. The center contacts are recessed to prevent shock hazards when the connectors are unmated.

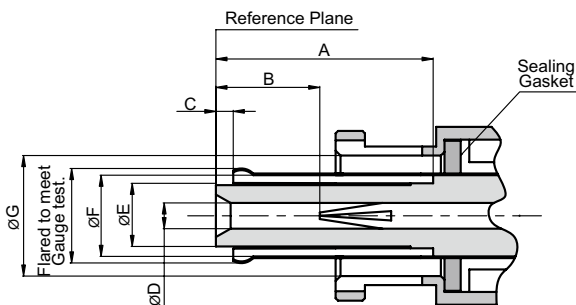
### INTERFACE MATING DIMENSIONS

#### JACK:



Letter	Millimeters (inch)	
	Minimum	Maximum
A	8.10(.319)	8.15(.321)
B	8.33(.328)	8.46(.333)
C	8.81(.347)	9.07(.357)
D	9.60(.378)	9.70(.382)
E	10.97(.432)	11.07(.436)
H	1.32(.052)	1.37(.054)
K	2.06(.081)	2.11(.083)
P	10.85(.427)	–
S	4.78(.188)	5.28(.208)
T	1.55(.061)	1.98(.078)
U	15.90(.626)	16.00(.630)
V	1.63(.064)	2.18(.086)
W	5.18(.204)	5.28(.208)
X	1.90(.075)	2.06(.081)
Y	4.83(.190)	4.98(.196)
Z	–	6.60(.260)

#### PLUG:



Letter	Millimeters (inch)	
	Minimum	Maximum
A	15.95(.628)	16.05(.632)
B	6.05(.238)	6.65(.262)
C	1.17(.046)	1.63(.064)
D	2.08(.082)	–
E	4.57(.180)	4.72(.186)
F	6.71(.264)	–
G	9.78(.385)	9.91(.390)

Note: Jyebao SHV connectors meet the interface requirements of MIL-STD-348A

## TECHNICAL DATA

Electrical Data	
Dielectric Withstanding Voltage (at sea level, in V rms, 50 Hz)	5000
Working Voltage (at sea level, in V rms, 50 Hz)	≤3500
Corona Extinction Voltage (at 21000m, in V rms, 50 Hz)	≥350
Impedance	50Ω
Frequency Range	DC up to 300 MHz
Insulation Resistance	≥5000MΩ
Contact Resistance Inner conductor	≤2mΩ
Contact Resistance Outer conductor	≤1.5mΩ
Current Rating, continuous	≤10A

Mechanical Data	
Coupling Nut Torque	0.6 to 2.5 in.-lbs
Coupling Nut Retention Force	≥101.2 lbs
Contact Captivation	≥6.1 lbs
Durability (matings)	≥500

Environmental Data	
Temperature Range	-65°C...+165°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Moisture Resistance	MIL-STD-202, Method 103, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B

## VSWR

Frequency Range: DC~300MHz

VSWR: DC~100MHz ≤ 1.1

DC 100~300MHz ≤ 1.20

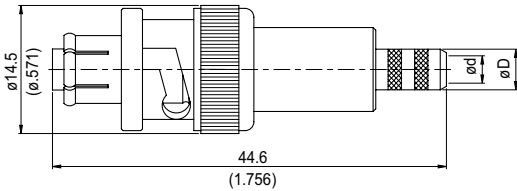


Figure 1

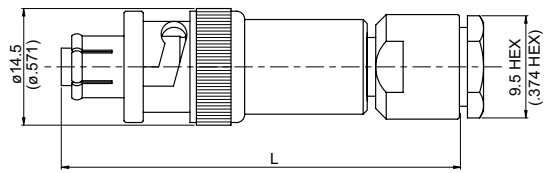


Figure 2

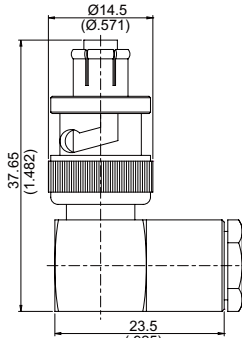


Figure 3

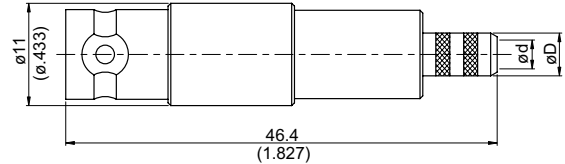


Figure 4

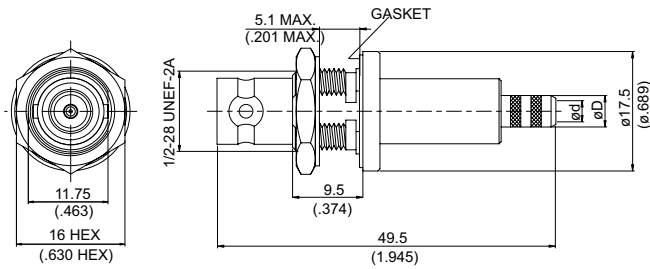


Figure 5

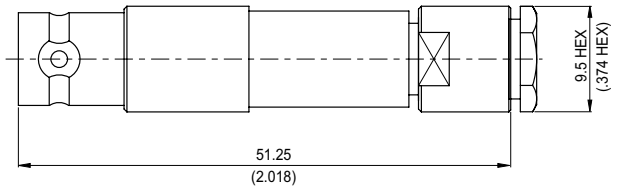


Figure 6

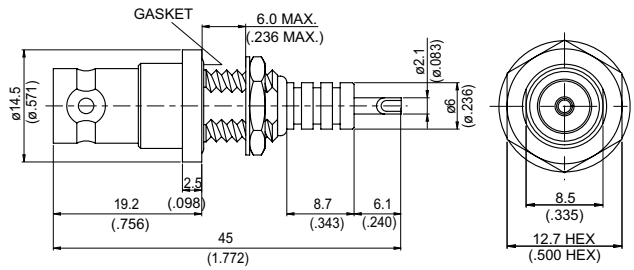


Figure 7

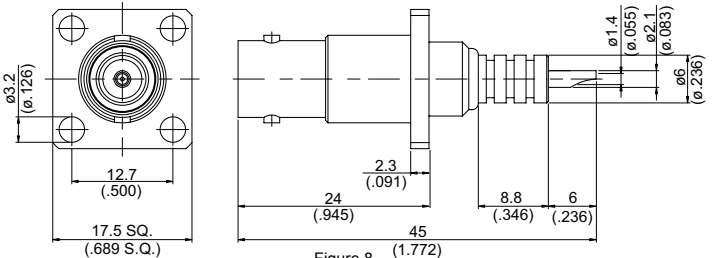
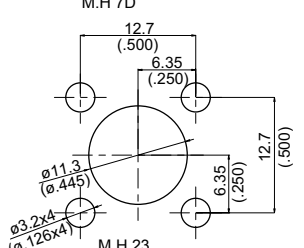
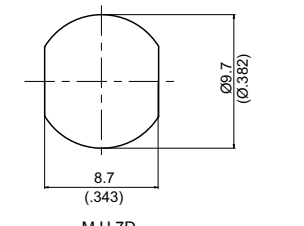
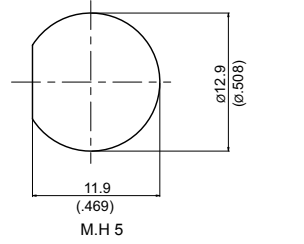


Figure 8

PART NUMBER	Fig.	Measurements	M.H	Weight	Material	Suitable Cable	Remarks
<b>SHV PLUG CRIMP</b>							
SHV3100-0058	1	ød=3.1(.122) øD=4.4(.173)		14.52g	C11	RG58, JBY195	
SHV3100-0059	1	ød=3.9(.154) øD=5.6(.220)		15.23g	C11	RG59	
SHV3100-0142	1	ød=3.1(.122) øD=4.4(.173)		14.22g	C11	RG55, RG142, RG142-E, RG400	
SHV3100-0223	1	ød=3.1(.122) øD=4.4(.173)		14.22g	C11	RG223	
<b>SHV PLUG CLAMP</b>							
SHV3200B-0058	2	L=44.8(1.764)		22.98g	C11	RG55, RG58, RG142, RG142-E, RG223, RG400, JBY195	
SHV3200B-0059	2	L=44.6(1.756)		22.93g	C11	RG59	
<b>SHV PLUG CLAMP RIGHT ANGLE</b>							
SHV3200-9058	3				C11	RG55, RG58, RG142, RG142-E, RG223, RG400, JBY195	
SHV3200-9059	3			31.05g	C11	RG59	
<b>SHV JACK CRIMP</b>							
SHV8100-0058	4	ød=3.1(.122) øD=4.4(.173)		25.74g	A2	RG58, JBY195	
SHV8100-0059	4	ød=3.9(.154) øD=5.6(.220)			A2	RG59	
SHV8100-0142	4	ød=3.1(.122) øD=4.4(.173)			A2	RG55, RG142, RG142-E, RG400	
SHV8100-0223	4	ød=3.1(.122) øD=4.4(.173)			A2	RG223	
<b>SHV JACK CRIMP FOR BULKHEAD</b>							
SHV8105-0058	5	ød=3.1(.122) øD=4.4(.173)	5	25.63g	A2	RG58, JBY195	With Gasket
SHV8105-0059	5	ød=3.9(.154) øD=5.6(.220)	5	25.94g	A2	RG59	With Gasket
SHV8105-0142	5	ød=3.1(.122) øD=4.4(.173)	5	24.95g	A2	RG55, RG142, RG142-E, RG400	With Gasket
SHV8105-0223	5	ød=3.1(.122) øD=4.4(.173)	5		A2	RG223	With Gasket
<b>SHV JACK CLAMP</b>							
SHV8200-0058	6			22.37g	A2	RG55, RG58, RG142, RG142-E, RG400, JBY195, RG223	
SHV8200-0059	6				A2	RG59	
<b>SHV JACK FOR BULKHEAD</b>							
SHV8500-0000	7		7D	11.55g	A2		With Gasket
<b>SHV JACK FOR PANEL RECEPTACLE</b>							
SHV864A-0000	8		23	14.78g	A2		No Gasket



AHS