

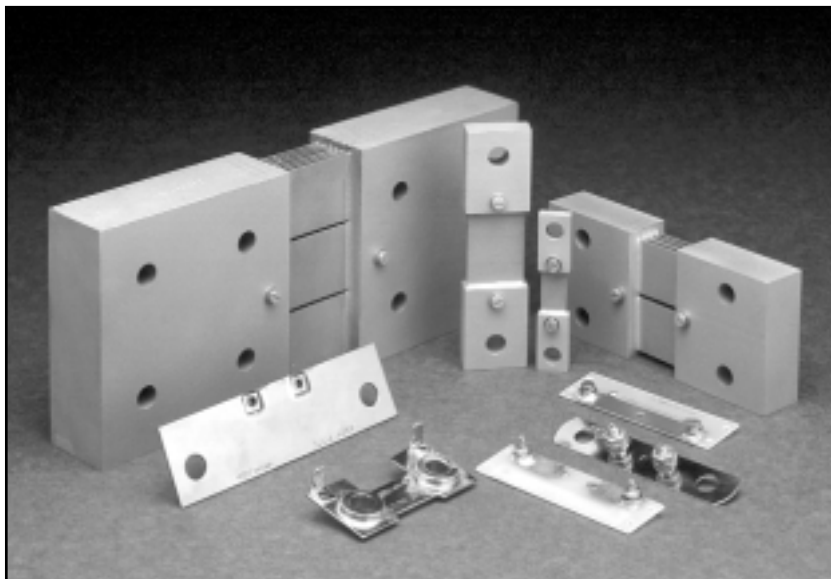
SHUNTS

DESCRIPTION

Highly accurate manganin resistance d.c. shunts. When a current is passed through the shunt, a proportional millivolt output is produced.

APPLICATION

Shunts are used for measuring current in d.c. applications by connecting them to moving coil panel meters, digital meters or other measurement devices. Shunts can also be used in control devices such as power supplies and battery chargers or for overload protection.



RANGE

Current Output

Standard brass ended	5-10000A	50-300mV
Compact brass ended	5-50A	25-100mV
Plate (standard and compact)	50-500A	50-100mV
Wire	300mA-60A	50-100mV

SPECIFICATIONS

Accuracy Class: 1.5, 1.0 or 0.5

Outputs: 25-300mV

Overloads (brass ended):

Continuous - 1.2 x rated current
 5 seconds - 5 x rated current up to 2kA
 5 seconds - 2 x rated current for 2kA - 10kA

Temperature

Co-efficient: 0.002% per °C between 25°C to +80°C

Ambient

Temperature: -20°C to +40°C

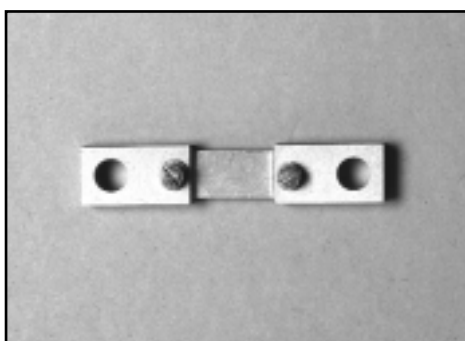
Insulation:

Shunts are supplied un-insulated & protection against contact should be installed where applicable.

Standards:

BS89 / IEC51

COMPACT BRASS ENDED



Order Example:

A compact brass ended shunt with 50A rated current and 60mV output is: **SHB50A60-COMPACT**.

Our Compact Brass Ended Shunts are often requested for special applications due to the small size. Manufactured to BS89/IEC51 class1 they can be current rated from 5-50A, with 25,50,60,75 or 100mV output.

Operating Temperature:

-20°C to +40°C

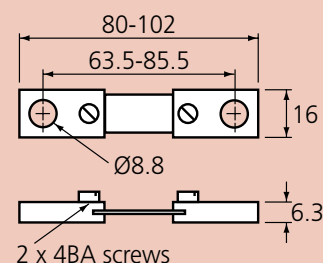
Permissible Overload:

Continuous - 1.2 x rated current
 5 seconds - 5 x rated current

Shunt Leads:

Millivolt leads can be supplied upon request (standard length = 760mm).

Dimensions (mm)

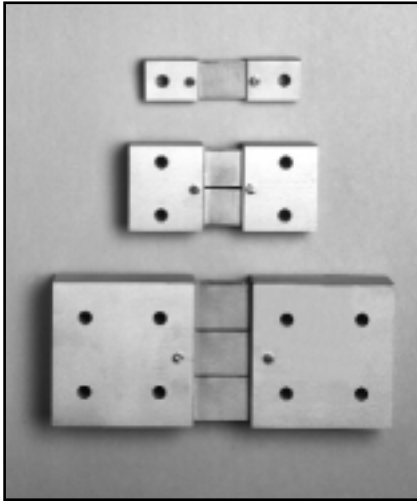


COMPACT BRASS ENDED

SHUNTS

HOBUT

STANDARD BRASS ENDED



Our standard range of BS89/IEC51 class1 or class 0.5 shunts can be current rated from 5 to 10,000A with 50 to 300mV output.

Operating Temperature:
-20°C to +40°C

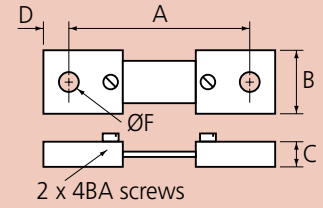
Permissible Overload:
Continuous - 1.2 x rated current
5 seconds - 5 x rated current up to 2kA
10 seconds - 2 x rated current for 2kA-10kA

Shunt Leads:
Millivolt leads can be supplied upon request (standard length = 760mm)

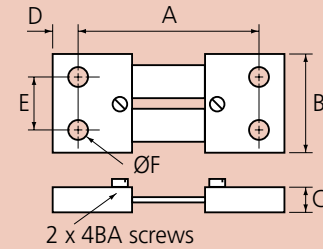
Order Example:

A brass ended shunt with 1000A rated current and 100mV output, class1 is:
SHB1000A100-CLASS1

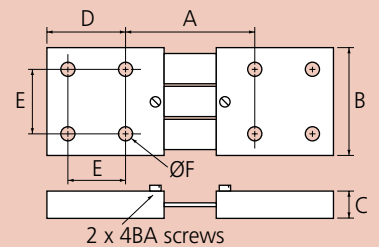
Dimensions (mm)



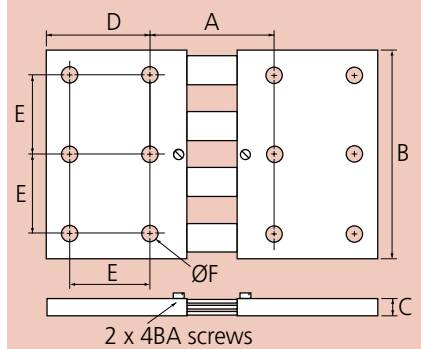
TYPE 1



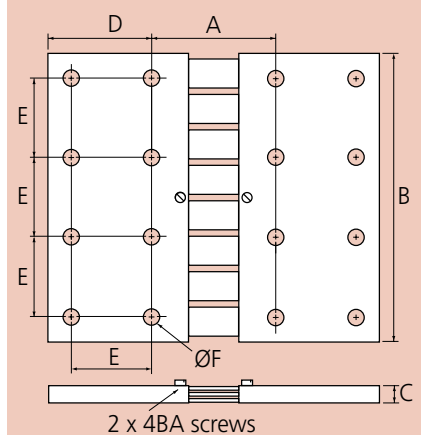
TYPE 2



TYPE 3



TYPE 4



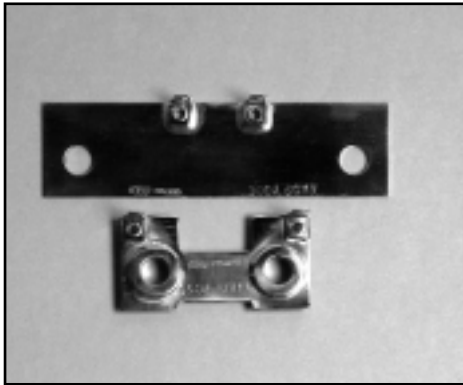
TYPE 5

Dimensions (mm)

Current(A)	Type	Dimensions (mm)								B	C	D	E	F
		50mV	60mV	75mV	100mV	150mV	200mV	250mV	300mV					
5-35	1	95	95	95	114	114	172	172	267	22	10	11	-	7
40-200	1	95	95	95	114	114	172	172	267	32	12	13	-	10
250-400	1	95	95	95	114	121	172	172	267	32	20	25	-	10
450-1600	2	95	95	95	114	121	172	172	267	67	25	25	41	10
1800-3250	3	95	95	95	114	121	172	-	-	111	38	81	57	10
3500-5000	3	83	83	95	114	121	-	-	-	140	38	114	90	12
5500-7000	4	83	83	96	-	-	-	-	-	230	38	114	90	12
7500-10000	5	83	83	96	-	-	-	-	-	320	38	114	90	12

SHUNTS

PLATE (STANDARD & COMPACT)



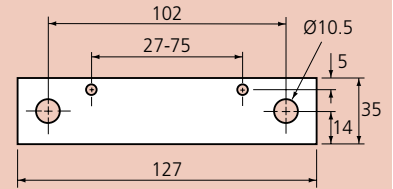
An economical range of shunts, manufactured to class 1.5.

Operating Temperature :
-20°C to +40°C.

Shunt Leads:

Millivolt leads can be supplied upon request (standard length = 760mm).

Dimensions (mm)



STANDARD

STANDARD

50A to 500A rated current with 50, 60, 75 or 100mV output available. 6.3mm Faston Tags (T) or Tapped 4BA Bushes (B) can be supplied.

Order example:

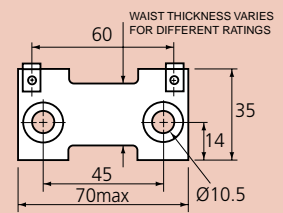
A standard plate shunt 125A 75mV output with bush connections is: **SHP125A75-BUSH.**

COMPACT

75A to 500A rated current with 50, 60, 75 or 100mV output available. 6.3mm Faston Tags as standard.

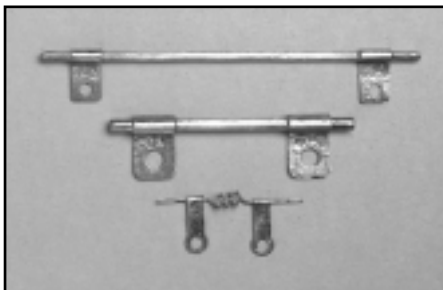
Order example:

A compact plate shunt 300A 60mV output is: **SHP300A60-COMPACT.**



COMPACT

WIRE



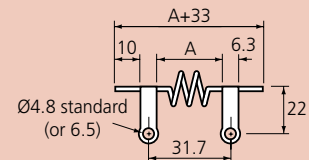
A range of shunts designed mainly for low current applications, manufactured to class 1.5

Operating Temperature :
-20°C to +40°C.

Shunt Leads:

Millivolt leads can be supplied upon request (standard length = 760mm).

Dimensions (mm)

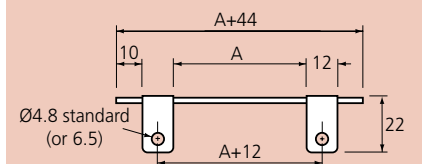


TYPE 1

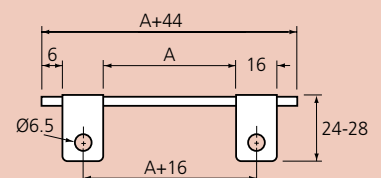
Order example: A wire shunt 6A rated current and 60mV output is: **SHW6A60**

300mA to 60A rated current with 50, 60, 75 or 100mV output available.

Current(A)	Type	Dimension A (mm)			
		50 _{mV}	60 _{mV}	75 _{mV}	100 _{mV}
300mA-3A	1	25	25	25	25
4	2	51	62	78	104
5	2	62	75	98	81
6	2	52	62	81	72
7.5	2	41	50	62	82
8	2	52	63	79	105
10	2	81	97	80	107
12	2	68	81	67	70
15	2	55	66	83	110
20	3	58	51	62	82
25	3	51	40	49	66
30	3	56	51	64	85
35	3	49	61	80	100
40	3	41	53	66	88
50	3	35	43	53	71
60	3	29	35	44	59

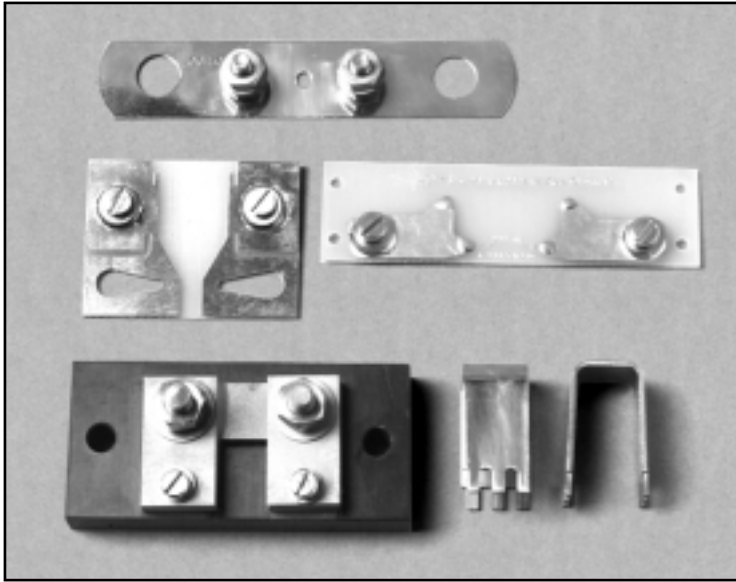


TYPE 2



TYPE 3

SPECIAL SHUNTS



The products detailed in this publication are our standard range, but for quantity orders, HOBUT engineers will be pleased to work with customers to design individual shunts to their specifications.

BASE MOUNTED SHUNTS

Base mounted insulated shunts can be manufactured to order.

PCB MOUNTING SHUNTS

PCB mounting shunts are designed and manufactured to order, for UPS systems applications.

DIN SHUNTS TO DIN 43703

HOBUT can supply D.C. shunts to standard DIN dimensions according to DIN 43703. A separate dimensional sheet is available on request.

Our policy is one of continuous development and therefore specifications may change without notice.

HOBUT

HOWARD BUTLER LTD

CROWN WORKS, LINCOLN ROAD
WALSALL WS1 2EB ENGLAND

Tel: 01922 640003 Fax: 01922 723626
International Tel: +44 1922 640003 E-mail: sales@hobut.co.uk
Web: www.hobut.co.uk