

## LAWSON FUSES

Lawson Fuses offer an extensive range of fuse-holder and fuse-link designs. Lawson fuse-holders and fuse-banks are approved to major standards and designed to meet a wide range of applications: power distribution, motor protection, electronic, railway, shipping and street lighting.

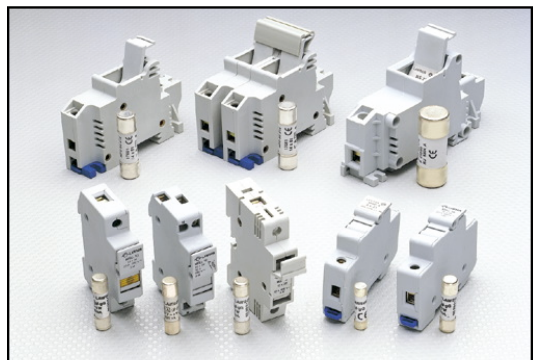
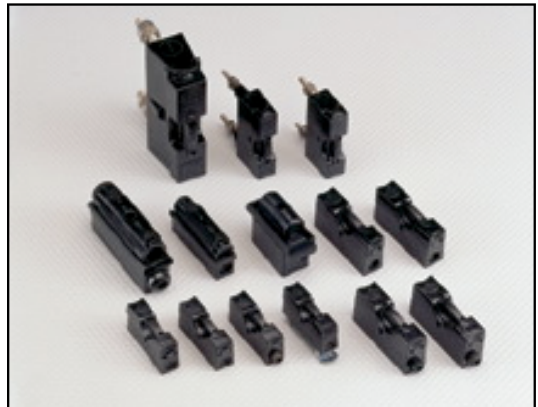
Two distinct designs of British Standard fuse-holders are available. The BOLTIN range accommodates bolted tag fuse-links to BS 88: Part 2, in ratings of 20, 32, 63, 100, and 200 Amps. The CLIPFIT range accommodates compact dimensioned fuse-links to BS88: Part 6 and is available in ratings of 20, 32, and 63 Amps. Both ranges are available in a variety of colours and terminal configurations.



Both the BOLTIN and CLIPFIT fuse-holders are also available as factory built fuse-bank assemblies. The fuse-banks comprise single-phase assemblies of busbar connected fuse-holders mounted on a back rail, for incorporation in distribution fuse panels.

Lawson fuse-holders also include the well established ranges of PULLCAP and SLYDLOK products. The PULLCAP 240/415V a.c. modular fuse-holders incorporate Types MD and L cylindrical fuse-links to BS88:Part 1 and BS1361. The SLYDLOK range offers a wide variety of panel mounted applications. The range includes miniature fuse-holders for 5 x 20mm and 6.3 x 32mm fuse-links, compact fuse-holders rated up to 60 Amps at 240V a.c., and the W/X fuse-holder series, which accommodates either fuse-links or fuse-wire.

Cylindrical fuse-holders are a versatile option, offering fuse protection in four popular sizes up to a maximum fuse-link rating of 125 Amps. These fuse-holders accept cylindrical fuse-links to IEC60269 with principal dimensions of 8 x 31mm, 10 x 38mm, 14 x 51mm and 22 x 58mm.





Introduction

Boltin

Clipfit

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Pullcap

Slydlok Products

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Comparison Charts

### Quality

Lawson Fuses operates a Quality Management System which has been independently assessed and approved by ASTA Certification Services as complying with ISO 9001 and is supported by the issue of Certificate No. 11050. Lawson manufactured fuse-links have been independently certified by ASTA and where appropriate comply with the the rules of the latest ASTA 20 Scheme, which authorises Lawson Fuses to endorse those products "ASTA 20 CERT"

For details of products other than Fuse-Holders, please ask for other publications.



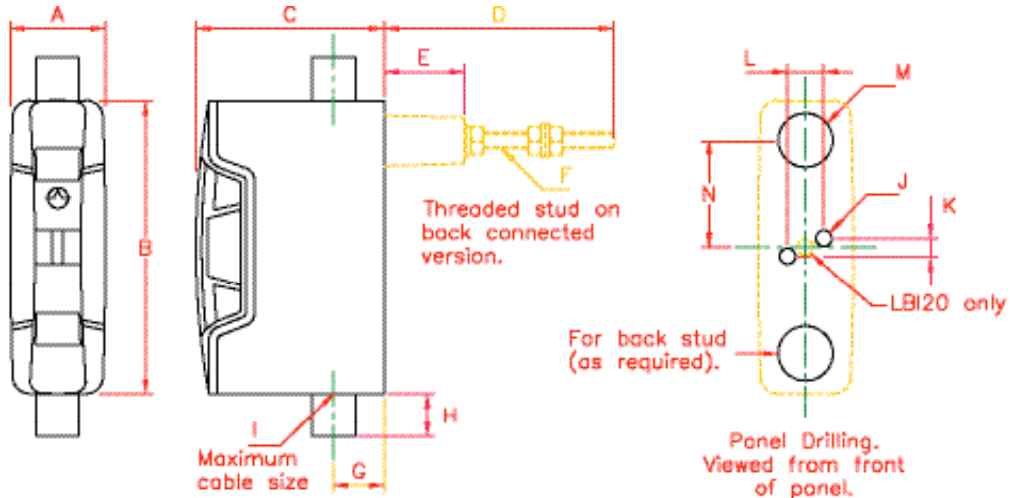
**BOLTIN 660/690V a.c. Fuse-Holders for Fuse-Links to BS88: Part 2 & IEC 60269-2 TYPE LBI**



For white fuse-holders substitute WH for BK in list references. Green fuse-holders are available, details on request.

The BOLTIN fuse-holders are available in three versions, front connected, back connected, and front/back connected, in ratings of 20, 32, 63, 100, and 200 Amps. The range fully complies with BS88: Part 2 and is ASTA Certified to a test duty of 80kA at 660V and complies with the current edition of the IEE Wiring Regulations.

List Reference	Current Rating (A)	Colour	Lawson Fuse-Link 415V 660V	Solid Link
LBI 20 FC/FC BK LBI 20 FC/BC BK LBI 20 BC/BC BK	20	Black	NIT SSA1	SLA1 20
LBI 32 FC/FC BK LBI 32 FC/BC BK LBI 32 BC/BC BK	32		GTIA/TIA SSA2	SLA2 32
LBI 63 FC/FC BK LBI 63 FC/BC BK LBI 63 BC/BC BK	63		TIS SSA3	SLA3 63
LBI 100 FC/FC BK LBI 100 FC/BC BK LBI 100 BC/BC BK	100		TCP SSA4	SLA4 100
LBI 200 FC/FC BK LBI 200 FC/BC BK LBI 200 BC/BC BK	200		CTF/TF SSB2	SLB2 200
Spare Carriers	Spare Cable Shrouds (Grey)	DIN-Rail Adaptor		
LBI 20 CA BK LBI 32 CA BK LBI 63 CA BK LBI 100 CA BK LBI 200 CA BK	LBI 20 SH LBI 32 SH LBI 63 SH LBI 100 SH LBI 200 SH	LBI 20 DA		
		Busbar Stud Connector		
		LBI 32 LBI 63		



LAWSON REFERENCE	CURRENT RATING AMPS	GENERAL DIMENSIONS (mm)													
		A	B	C	D	E	F	G	H	I <sub>mm</sub>	J	K	L	M	N
LBI20	20	27	80	48	60	28.5	M6	16	14	10	5.5	n/a	n/a	15	29
LBI32	32	33	102	65	78	28.5	M6	16	14	16	5.5	6.3	12.7	19	37
LBI63	63	36	112	72	84	28.5	M8	19	14	25	5.5	6.3	12.7	19	39
LBI100	100	53	144	90	85	32	M10	24	14	70	6.5	22	19	23	48
LBI200	200	60	171	143	95	32	M12	30	21	120	6.5	57	38	28	61

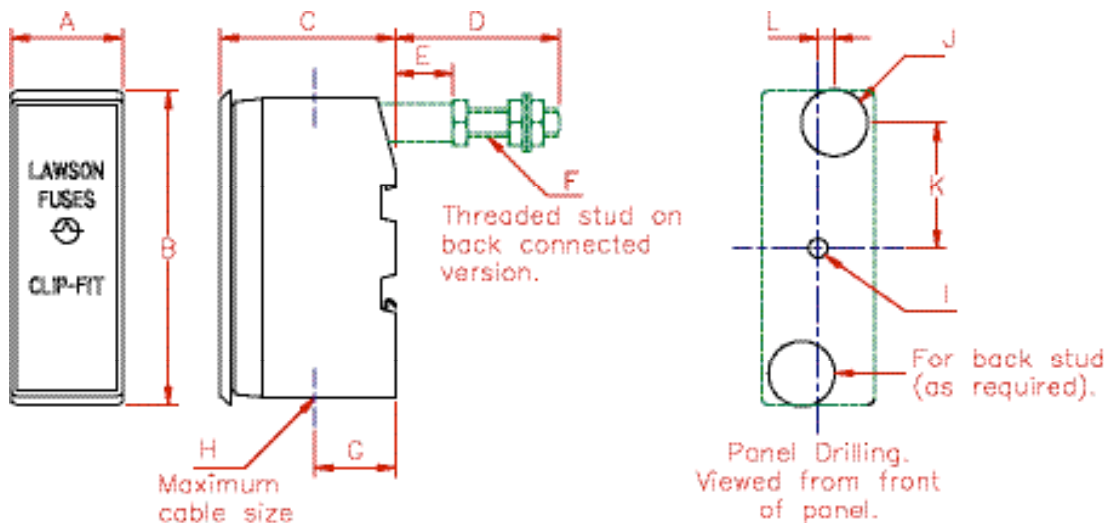
**CLIPFIT 240/415V a.c. Fuse-Holders for Fuse-Links to BS88: Part 6 & IEC 60269-2 TYPE LCF**



CLIPFIT fuse-holders provide a simple safe range designed to accommodate the compact dimension fuse-links to BS88: Part 6 and are ASTA certified to the required test duty. Breaking capacities are 50kA at 240V a.c. and 80kA at 415V a.c. CLIPFIT is available in 20, 32, and 63 Amp ratings, and incorporates an integral DIN rail mounting facility as well as single screw fixing. Front connected, back connected, front/busbar connected and front/back connected configurations are available in black or white as standard colours.

For white fuse-holders substitute WH for BK in list references.

List Reference	Voltage Rating (V)	Current Rating (A)	Colour	Lawson Fuse-Link (BS Ref)	Solid Link
LCF 20 FC/FC BK LCF 20 FC/BBC BK LCF 20 FC/BC BK LCF 20 BC/BC BK	240	20	Black	SS (E1)	SLE1 20
LCF 32 FC/FC BK LCF 32 FC/BBC BK LCF 32 FC/BC BK LCF 32 BC/BC BK	415	32		NS (F1)	SLF1 32
LCF 63 FC/FC BK LCF 63 FC/BBC BK LCF 63 FC/BC BK LCF 63 BC/BC BK	415	63		MES (F2)	SLF2 63
Spare Carriers				Busbar Stud Connector	
LCF 20 CA BK LCF 32 CA BK LCF 63 CA BK				LBC 20 LBC 32 LBC 63	



LAWSON REFERENCE	CURRENT RATING (AMPS)	GENERAL DIMENSIONS (mm)											
		A	B	C	D	E	F	G	H	I	J	K	L
LCF20	20	25	69	50	43	16	M6	23	16	5.5	15	24	5.0
LCF32	32	26	80	50	43	17	M6	23	16	5.5	15	30	5.0
LCF63	63	32	90	52	46	17	M8	23	25	5.5	19	38	4.7



## FUSE-BANKS

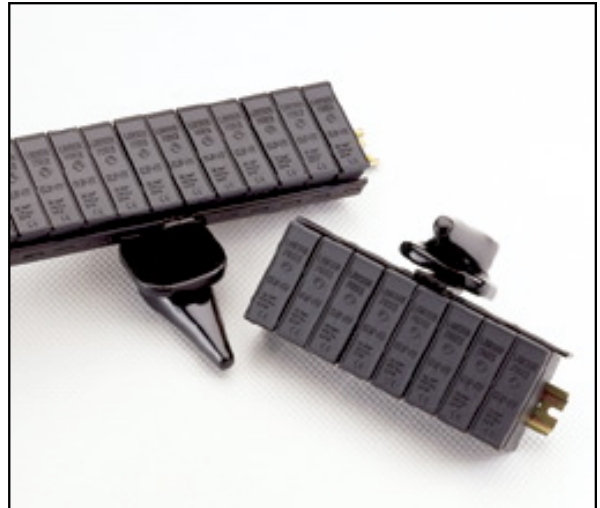
Diversity Factor	BOLTIN				CLIPFIT		
	20A, 32A, 63A, 100A				20A, 32A, 63A		
4 Way	0.9	0.9	0.9	0.9	0.9	0.9	0.9
6 Way	0.8	0.8	0.8	0.8	0.8	0.8	0.8
8 Way	0.8	0.8	0.8	0.66	0.8	0.8	0.8
12 Way	0.66	0.66	0.66	-	0.66	0.66	0.66

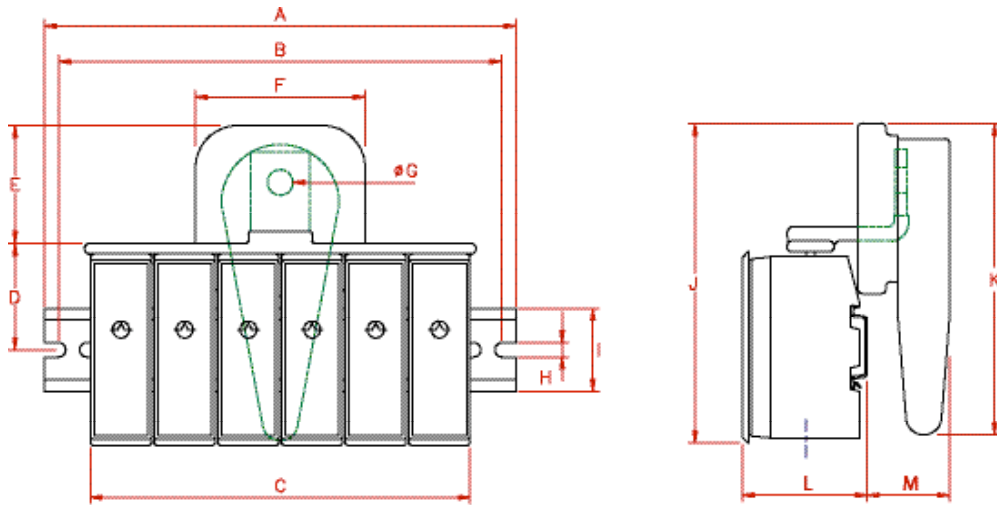
BOLTIN and CLIPFIT Terminal Bolt Size - Incoming Circuit		
20/32 Amp -	4 / 6 / 8 / 12 Ways	10.5mm
63 Amp -	4 / 6 / 8 / 12 Ways	12.5mm
100 Amp -	4 / 6 / 8 Ways	12.5mm

Maximum Cable Sizes - Outgoing Circuits	
BOLTIN	CLIPFIT
20 Amp - 10mm <sup>2</sup>	20 Amp - 16mm <sup>2</sup>
32 Amp - 16mm <sup>2</sup>	32 Amp - 16mm <sup>2</sup>
63 Amp - 25mm <sup>2</sup>	63 Amp - 25mm <sup>2</sup>
100 Amp - 70mm <sup>2</sup>	



### CLIPFIT Dimensional Drawings



LIST REFERENCE	CURRENT RATING (AMPS)	NUMBER OF WAYS	GENERAL DIMENSIONS (mm)												
			A	B	C	D	E	F	G	H	I	J	K	L	M
FZ04FB20	20	4	160	140	112	45	50	75	10.5	9	30	130	135	58	45
FZ06FB20		6	220	200	170										
FZ08FB20		8	275	255	228										
FZ12FB20		12	390	370	344										
FZ04FB32	32	4	160	140	113	50	50	75	10.5	9	30	140	135	58	45
FZ06FB32		6	220	200	171										
FZ08FB32		8	275	255	229										
FZ12FB32		12	390	370	345										
FZ04FB63	63	4	190	170	140	60	75	110	12.5	9	30	180	215	60	70
FZ06FB63		6	260	240	212										
FZ08FB63		8	330	310	284										
FZ12FB63		12	475	455	428										

## PULLCAP MODULAR FUSE-HOLDERS

## TYPE LPC

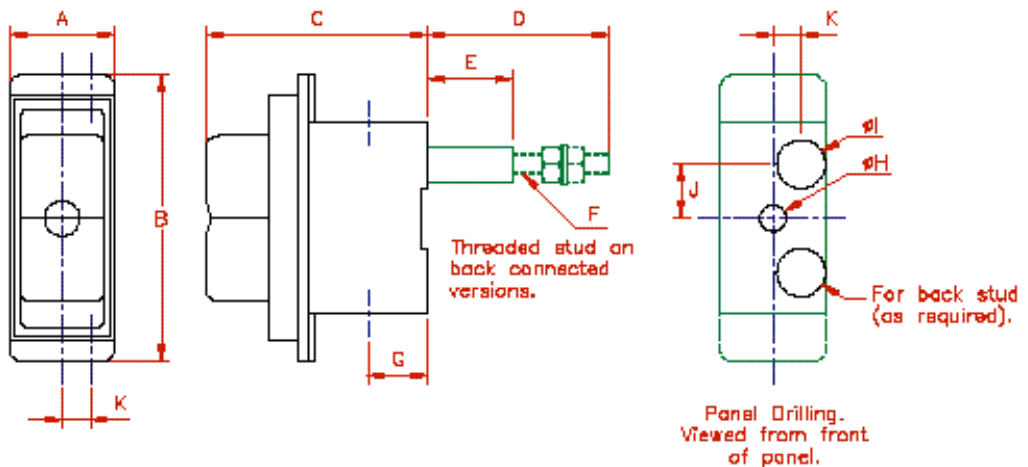


The PULLCAP 240/415 V a.c. modular fuse-holders incorporate fuse-links to BS88: Part 1 and BS1361.

Component	Current Rating (A)	Colour	List Reference	Lawson Fuse-Link	Solid Link	
Carrier	5	White	LPC 5 CA WH	LA	SLPC5	
	5	Black	LPC 5 CA BK	LA	SLPC5	
	20	Blue	LPC 20 CA BL	LC	SLPC 20	
	20	Green	LPC 20 CA GN	LC	SLPC 20	
	32	Red	LPC 32 CA RD	LD	SLPC 32	
	32	Black	LPC 32 CA BK	MD	SLPC 32	
Cover Plate	5	White	LPC 5 CP WH	LA		
	5	Black	LPC 5 CP BK	LA		
	20	Blue	LPC 20 CP BL	LC		
	20	Green	LPC 20 CP GN	LC		
	32	Red	LPC 32 CP RD	LD		
	32	Black	LPC 32 CP BK	MD		
Base	32	Black	LPC 00 CP BK	-		
	63		LPC 63 CA BK	ME		
			LPC 32 FC/FC	DIN rail adaptor LPC 32 DA		
			LPC 32 FC/BBC			
			LPC 32 FC/BC			
			LPC 32 BC/BC			
	LPC 32 FC/FCL					
	LPC 32 FCL/FCL					
	63	Black	LPC 63 FC/FC			
			LPC 63 FC/BBC			
			LPC 63 FC/BC			
			LPC 63 BC/BC			

Note: Individual components are available as fully assembled LPCU units rated at 5, 20, 32 & 63 Amps.

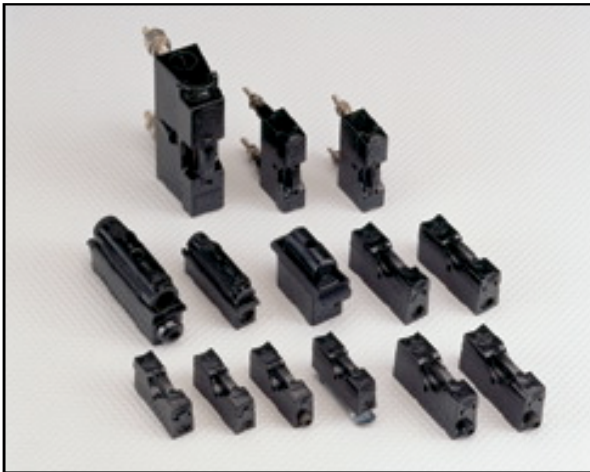
### Dimensional Drawings Type LPCU



LAWSON REFERENCE	CURRENT RATING (AMPS)	GENERAL DIMENSIONS (mm)										
		A	B	C	D	E	F	G	H	I	J	K
LPCU5	5	23.8	65	44	41	19	28A	13.5	8	11	13	8.35
LPCU20	20	23.8	65	48	41	19	28A	13.5	8	11	13	8.35
LPCU32	32	23.8	65	50	41	19	28A	13.5	8	11	13	8.35
LPCU63	63	35	98.5	72	83.5	22	36W	15	7	20	21.5	8.35

**SLYDLOK FUSE-HOLDERS**

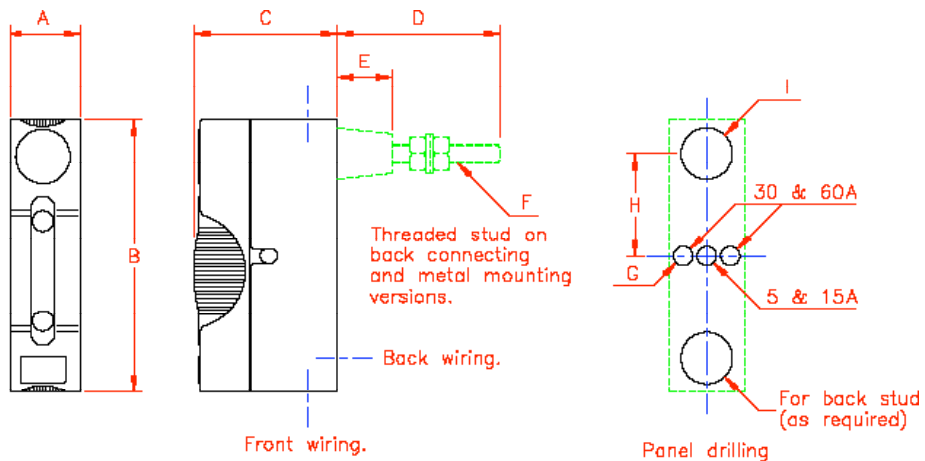
**TYPE SLY**



List Reference	Current Rating (A)	Colour	Lawson Fuse-Link	Wiring Connections	DIN Rail Adaptor
W 5341 FW W 5342 BC W 5344 MM W 5345 BW	5	Black	W534	FW BC MM BW BCT BCB	SLYM 3
W 15331 FW W 15332 BC W 15334 MM W 15335 BW	15		W1533		-
W 30341 FW W 30342 BC W 30344 MM W 30345 BW	30		W3034		-
W 60411 FW W 60412 BC W 60414 MM W 60415 BW	60		W6041		-

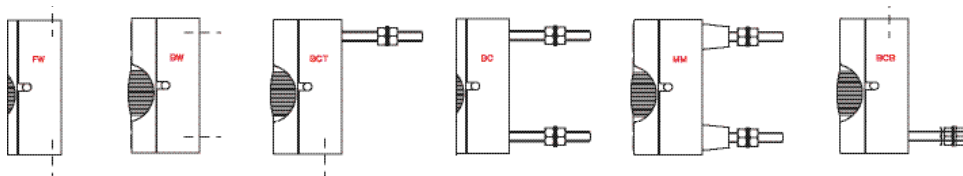
**Notes:**  
Fuse-holders incorporating fuse-wire, substitute prefix 'W' with 'X'.  
Details of H range are available on request.

**Dimensional Drawings Type W and X**



LAWSON REFERENCE		CURRENT RATING (AMPS)	GENERAL DIMENSIONS (mm)								
TYPE X	TYPE W		A	B	C	D	E	F	G	H	I
X5--	W5--	5	14.2	50.8	25.4	38.1	12.7	3BA	4.5	19	11
X15--	W15--	15	17.5	63.5	33.5	38.1	12.7	2BA	4.5	23.9	12
X30--	W30--	30	25.4	82.6	46.2	50.8	19.1	0BA	4.5	28.6	17
X60--	W60--	60	31.8	108	51.6	76.2	25.4	5/16W	5.5	38.1	20

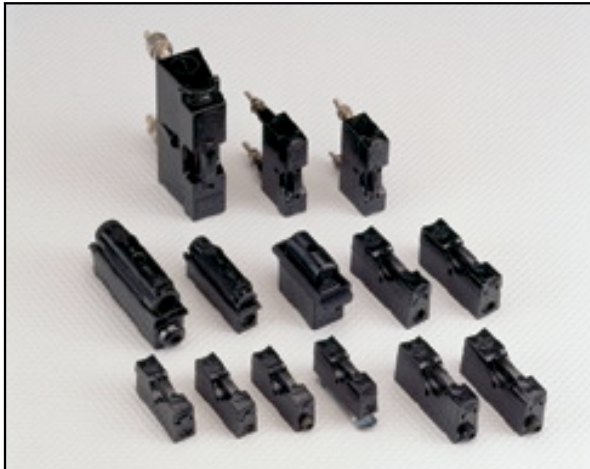
**Wiring Connections**





## SLYDLOK FUSE-HOLDERS

## TYPE SLY



List Reference	Current Rating (A)	Colour	Lawson Fuse-Link	Wiring Connections	DIN Rail Adaptor
K 511 FW K 522 BC K 533 MM	5	Black	KCC KDC	FW BC MM	-
K 1011 FW	10				-
KP 1011 FW	10				-
			PCC PDC		-

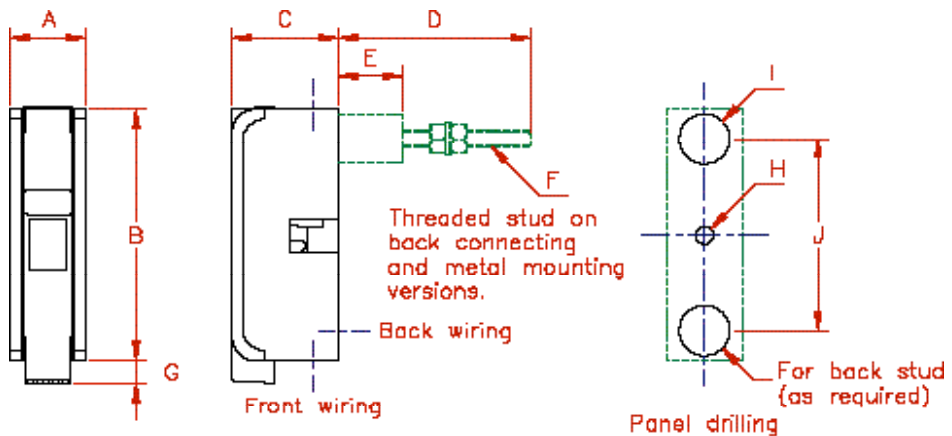
**Notes:**

Minature Fuse-Links are available to match this range of Fuse-Holders see publication:-

**LFL/PUB/0502 Low Voltage Fuse-Links Page 21.**

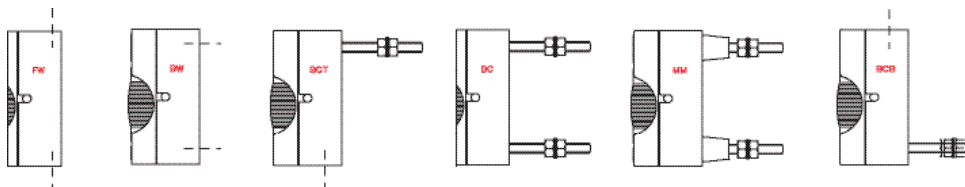
Dimensionally KCC/KDC are 6.3 x 32mm, whereas PCC/PDC are 5 x 20mm.

### Dimensional Drawings Type K and KP

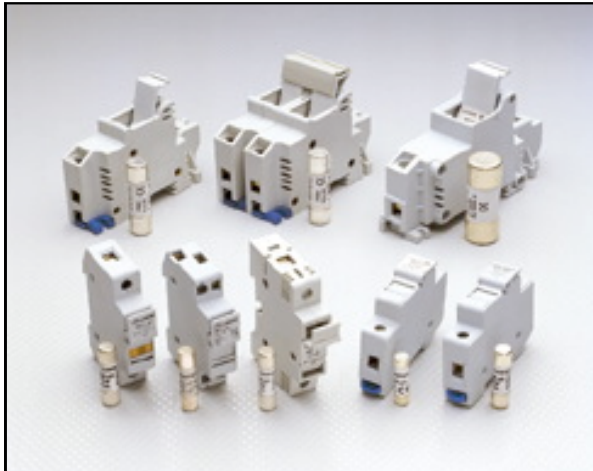


LAWSON REFERENCE	CURRENT RATING (AMPS)	GENERAL DIMENSIONS (mm)									
		A	B	G	D	E	F	G	H	I	J
K5	5										
K10	10	15.7	50.8	22.4	38.1	12.7	4.8	4.8	3.5	10	38.1
KP10	10										

### Wiring Connections



**MODULAR FUSE-HOLDERS FOR FUSE-LINKS IN ACCORDANCE WITH IEC 60269 -2 TYPE MS**

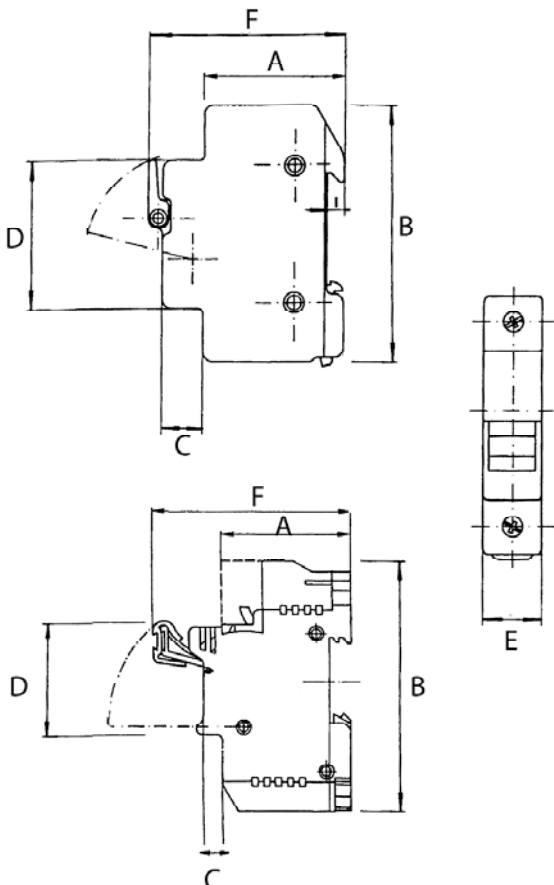


The MS range of modular fuse-holders offer fuse protection in four popular frame sizes in voltage ratings up to 660 Va.c. Modular fuse-holders accept cylindrical fuse-links up to a maximum rating of 125 Amps, with principle dimensions of 8.5 x 31.5, 10.3 x 38, 14 x 51 and 22 x 58mm. Conversion kits are available to assemble 2,3 or 4-pole units.

List Reference	Current Rating (A)	Dimensions (mm)	Lawson Fuse-Link	Solid Link	Colour
MSC 81 MSC 81 N	20	8.5x31.5	LPVG 8	SLLPV 820	Grey
MSC 101 MSC 101 / MSC 101 N	32	10.3x38	LPVG 10 LPVM 10	SLLPV 10 32	
MS 101 MS 101 N	50	14x51	LPVG 14 LPVM 14	SLLPV 14 50	
MS 221 MS 221 N	125	22x58	LPVG 22 LPVM 22	SLLPV 22 125	

I = Indicator, N= Integral Neutral link

**Modular Fuse-Holder Dimensional Drawings**



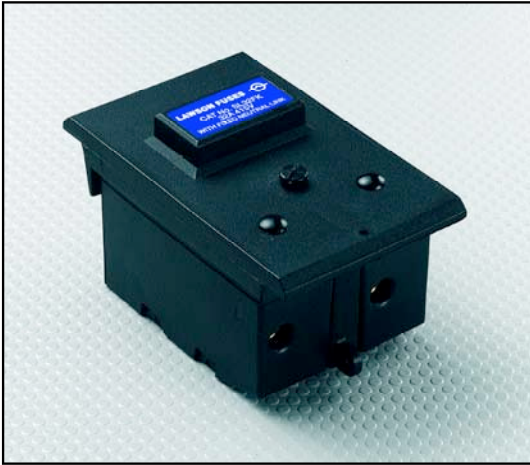
MSC 8 & 10  
Dimensions mm

MSC	A	B	C	D	E	F
8 10	42	77	12	45	17.5	59

MS 10, 14 & 22  
Dimensions mm

MS	A	B	C	D	E	F
10	43	77	14	45	17.5	64
14	52	110	11	45	25	81
22	52	140	14	45	35	89

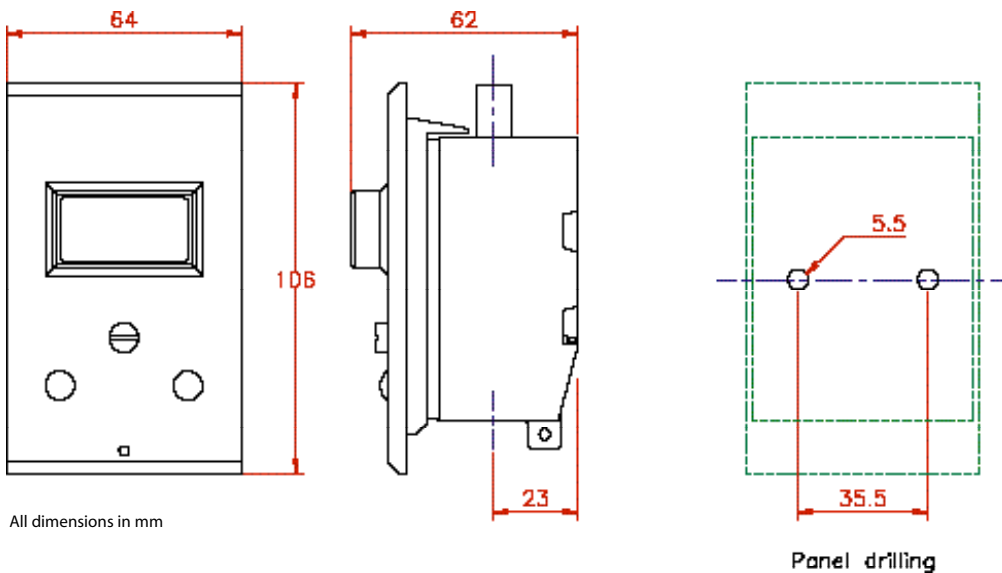
**DOUBLE POLE CUT-OUT** **TYPE SLFK**



This compact Cut-Out has been designed to comply with the latest requirements of the Wiring Regulations and the Electricity at Work Act. It has been rated at 32A, 415V a.c., incorporates fully shrouded top terminals and utilises fuse-links reference F1 to BS88:Part 6

List Reference	Description	Max Cable	Max Fuse Rating (Amps)	Height (mm)	Width (mm)	Depth (mm)
SL 32 FK	Cut-Out unit complete with fixed neutral link	16mm <sup>2</sup>	32	106	64	60

**Dimensional Drawings**



## COMPARISON CHARTS

### COMPARISON CHART FOR CLIPFIT FUSE-HOLDERS

LAWSON REFERENCE	BUSSMANN HAWKER	GEC ALSTHOM	BILL
LCF32FC/FCBK	32NNSF	SC32H-D	V32FF
LCF32FC/BBCBK	-	SC32BH	-
LCF32FC/BCBK	32NNSFBS	-	V32FB
LCF32BC/BCBK	32NNBSBS	SC32P	-
LCF32FC/FCWH	32NNSF/W	SC32H-D WHITE	V32FFW
LCF32FC/BBCWH	-	-	-
LCF32FC/BCWH	32NNSFBS/W	-	V32FBW
LCF32BC/BCWH	32NNBSBS/W	SC32PWHITE	-
LCF63FC/FCBK	63ENSF	SC63H-D	V63FF
LCF63FC/BBCBK	-	SC63BH	-
LCF63FC/BCBK	63ENSFBS	-	V63FB
LCF63BC/BCBK	63ENBSBS	SC63P	-
LCF63FC/FCWH	63ENSF/W	SC63H-D WHITE	V63FFW
LCF63FC/BBCWH	-	-	-
LCF63FC/BCWH	63ENSFBS/W	-	V63FBW
LCF63BC/BCWH	63ENBSBS/W	-	-

### COMPARISON CHART FOR BOLTIN FUSE-HOLDERS

LAWSON REFERENCE	BUSSMANN HAWKER	GEC ALSTHOM	BILL	MEM	DORMAN SMITH
LBI20FC/FCBK	32NF CM32FC	RS20H		20MFB	32NNF
LBI20FC/BCBK	32NFBS	RS20PH		20MFD	32NNFB
LBI20BC/BCBK	32NBS	RS20P		20MFC	32NNBS
LBI32FC/FCBK	32AF CM32F	RS32H		32MFB	2AF
LBI32FC/BCBK	32AFBS	RS32PH		32MFD	32AFBS
LBI32BC/BCBK	32ABS	RS32P		32MFC	32ABS
LBI63FC/FCBK	63BF CM63F	RS63H		63MFB	63BF
LBI63FC/BCBK	63BFBS	RS63PH		63MFD	63BFBS
LBI63BC/BCBK	63BBS	RS63P		63MFC	63BBS
LBI100FC/FCBK	100CF CM100F	RS100H	V100FF	100MF	100CF
LBI100FC/BCBK	100CFBS	RS100PH	V100FB	100CFB	100CFBS
LBI100BC/BCBK	100CBS	RS100P	V100BB	100MFC	100CBS
LBI200FC/FCBK	200DF	RS200H	V200FF	200MFB	200DF
LBI200FC/BCBK	200DFBS	RS200PH	V200BF	200MFD	200DFBS
LBI200BC/BCBK	200DBS	RS200P	V200BB	200MFC	200DBS