

# PSR SERIES HIGH-SPEED SQUARE BODY FUSES

Semiconductor Fuses • Flush End • 40 A - 2000 A



## Description

Littelfuse PSR Series High-Speed Square Body Fuses are specially designed for protection of power semiconductor devices such as diodes, triacs, IGBTs, SCRs, MOSFETs and other solid state devices that are typically designed into power conversion and power conditioning equipment. Variable frequency drives, inverters, UPS, rectifiers and soft-starters are examples of typical equipment designed with sensitive power semiconductor devices that cannot withstand any line surge or overcurrent conditions and require high-speed protection.

Littelfuse POWR-SPEED® PSR Series products offer optimized circuit protection at the extremely fast speed required to protect modern day power conversion devices. Such products are commonly found in numerous applications including pulp and paper industries, cranes and heavy-lifting equipment, processing industries, wastewater treatment plants and various large factories and MRO facilities.

## Features/Benefits

- Best in Class DC performance
- Extremely current limiting
- Superior cycling capability
- Global certification cURus, CCC, IEC
- Direct bus-bar mount design
- Visual and optional microswitch fuse blown indication
- Low watt-loss design
- Compliance with US and Canadian requirements
- Class aR performance according to IEC60269-4

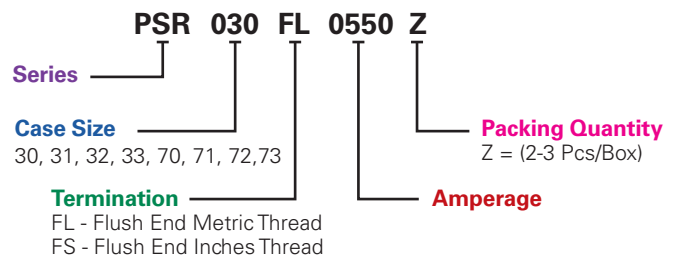
## Applications

- Power Conversion Devices (UPS, Inverter, Rectifiers, Drives)
- DC Systems (DC Common Bus, DC Injection Braking)
- Battery Protection Application (Energy Storage Systems)
- Electric Vehicle Charging Stations
- Heaters and Power Supplies

## Specifications

<b>Voltage Range</b>	AC: 550 V - 1300 V DC: 500 V - 1000 V
<b>Amperage Range</b>	40 A - 2000 A
<b>Interrupting Range</b>	AC: 100 kA - 200 kA DC: 150 kA
<b>Time Constant</b>	10ms
<b>Microswitch</b>	Yes
<b>Mounting</b>	Flush-End Style
<b>Material</b>	Body: Ceramic Contacts: Plated Brass
<b>Approvals</b>	UL 248-13 Recognized (File: E71611) C-UR-US (File: E71611) IEC 60269-4 (Class aR) CCC
<b>Environmental</b>	RoHS Compliant, REACH
<b>Operating Temperature</b>	-55 C° to +125 C°
<b>Storage Temperature</b>	Up to +35 C° with Relative Humidity <65%
<b>Country of Origin</b>	Mexico

## Ordering Part Number



## Catalog Number

SERIES	CASE SIZE	TERMINATION	AMPERAGE	CATALOG NUMBER	ORDERING PART NUMBER
PSR	030	FL	0550	PSR030FL0550	PSR030FL0550Z

## Recommended Accessories

**Microswitch:** MS3H1000C (Case Size 30 to 33)  
MS7H1500C (Case Size 70 to 73)

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## Electrical Characteristics

CASE SIZE*	CATALOG NUMBER		AMPERAGE RATING (A)	VOLTAGE RATING (V)			INTERRUPTING RATING		MELTING (PRE-ARC) I <sup>2</sup> T (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> T (A <sup>2</sup> s) AT RATED VOLTAGE		WATT LOSS AT 100% RATED CURRENT (W)	AGENCY CERTIFICATION	
	FLUSH END METRIC THREAD	FLUSH END INCHES THREAD		AC		DC	AC	DC		AC	DC		cURus	CCC
				IEC	UL									
30	PSR030FL0040	PSR030FS0040	40	690	700	600	200kA	150kA	76	280	260	12	•	•
	PSR030FL0050	PSR030FS0050	50	690	700	600	200kA	150kA	110	598	384	15	•	•
	PSR030FL0063	PSR030FS0063	63	690	700	600	200kA	150kA	176	1023	640	20	•	•
	PSR030FL0080	PSR030FS0080	80	690	700	600	200kA	150kA	304	1728	1252	24	•	•
	PSR030FL0100	PSR030FS0100	100	690	700	600	200kA	150kA	437	2835	1575	27	•	•
	PSR030FL0125	PSR030FS0125	125	690	700	600	200kA	150kA	707	4684	2783	36	•	•
	PSR030FL0160	PSR030FS0160	160	690	700	600	200kA	150kA	1359	9114	5507	39	•	•
	PSR030FL0200	PSR030FS0200	200	690	700	600	200kA	150kA	3012	15169	14700	39	•	•
	PSR030FL0250	PSR030FS0250	250	690	700	600	200kA	150kA	4668	29952	20833	50	•	•
	PSR030FL0315	PSR030FS0315	315	690	700	600	200kA	150kA	7131	61830	31600	61	•	•
	PSR030FL0350	PSR030FS0350	350	690	700	600	200kA	150kA	12007	85320	49273	62	•	•
	PSR030FL0400	PSR030FS0400	400	690	700	600	200kA	150kA	16209	114750	63367	75	•	•
	PSR030FL0450	PSR030FS0450	450	690	700	600	200kA	150kA	23133	160110	93533	75	•	•
PSR030FL0500	PSR030FS0500	500	690	700	600	200kA	150kA	31429	225180	137333	80	•	•	
PSR030FL0550	PSR030FS0550	550	690	700	600	200kA	150kA	44323	268920	145400	78	•	•	
31	PSR031FL0200	PSR031FS0200	200	690	700	600	200kA	150kA	1965	17334	16188	49	•	•
	PSR031FL0250	PSR031FS0250	250	690	700	600	200kA	150kA	3789	35343	21080	52	•	•
	PSR031FL0315	PSR031FS0315	315	690	700	600	200kA	150kA	6862	59130	30694	61	•	•
	PSR031FL0350	PSR031FS0350	350	690	700	600	200kA	150kA	9523	76140	40996	63	•	•
	PSR031FL0400	PSR031FS0400	400	690	700	600	200kA	150kA	14770	124335	64359	63	•	•
	PSR031FL0450	PSR031FS0450	450	690	700	600	200kA	150kA	22457	178200	97444	68	•	•
	PSR031FL0500	PSR031FS0500	500	690	700	600	200kA	150kA	29751	251505	125935	74	•	•
	PSR031FL0550	PSR031FS0550	550	690	700	600	200kA	150kA	42056	289170	171845	79	•	•
	PSR031FL0630	PSR031FS0630	630	690	700	600	200kA	150kA	73513	507465	276315	86	•	•
	PSR031FL0700	PSR031FS0700	700	690	700	600	200kA	150kA	98187	601425	337260	89	•	•
PSR031FL0800	PSR031FS0800	800	690	700	600	200kA	150kA	137208	848880	502800	107	•	•	
32	PSR032FL0400	PSR032FS0400	400	690	700	600	200kA	150kA	11104	79650	44533	82	•	•
	PSR032FL0450	PSR032FS0450	450	690	700	600	200kA	150kA	15535	116100	65463	88	•	•
	PSR032FL0500	PSR032FS0500	500	690	700	600	200kA	150kA	21573	161460	88277	94	•	•
	PSR032FL0550	PSR032FS0550	550	690	700	600	200kA	150kA	26327	177660	107960	104	•	•
	PSR032FL0630	PSR032FS0630	630	690	700	600	200kA	150kA	34790	234900	156963	110	•	•
	PSR032FL0700	PSR032FS0700	700	690	700	600	200kA	150kA	51191	291870	209287	117	•	•
	PSR032FL0800	PSR032FS0800	800	690	700	600	200kA	150kA	60125	472770	249000	145	•	•
	PSR032FL0900	PSR032FS0900	900	690	700	600	200kA	150kA	107785	764100	404000	145	•	•
	PSR032FL1000	PSR032FS1000	1000	690	700	600	200kA	150kA	190102	933120	672333	146	•	•
	PSR032FL1100	PSR032FS1100	1100	690	700	600	200kA	150kA	225379	1247400	744000	149	•	•
33	PSR033FL0450	PSR033FS0450	450	690	700	600	200kA	150kA	13600	106380	58947	99	•	•
	PSR033FL0500	PSR033FS0500	500	690	700	600	200kA	150kA	16434	140400	77846	107	•	•
	PSR033FL0550	PSR033FS0550	550	690	700	600	200kA	150kA	23314	187650	100461	108	•	•
	PSR033FL0630	PSR033FS0630	630	690	700	600	200kA	150kA	38727	285930	142437	113	•	•
	PSR033FL0700	PSR033FS0700	700	690	700	600	200kA	150kA	56763	392580	209863	113	•	•
	PSR033FL0800	PSR033FS0800	800	690	700	600	200kA	150kA	84691	575505	348500	120	•	•
	PSR033FL0900	PSR033FS0900	900	690	700	600	200kA	150kA	122619	740340	451177	122	•	•
	PSR033FL1000	PSR033FS1000	1000	690	700	600	200kA	150kA	222350	1170450	787750	124	•	•
	PSR033FL1100	PSR033FS1100	1100	690	700	600	200kA	150kA	310824	1568700	821400	127	•	•
	PSR033FL1250	PSR033FS1250	1250	690	700	600	200kA	150kA	476902	2403000	1674333	131	•	•
	PSR033FL1400	PSR033FS1400	1400	690	700	500	200kA	150kA	583552	2920050	1979750	144	•	•
	PSR033FL1500	PSR033FS1500	1500	600	650	500	200kA	150kA	674538	2433200	1996733	163	•	•
	PSR033FL1600	PSR033FS1600	1600	600	650	500	200kA	150kA	779948	2942800	2301633	182	•	•
PSR033FL1800	PSR033FS1800	1800	600	650	500	200kA	150kA	952196	3785040	2724180	224	•	•	
PSR033FL2000	PSR033FS2000	2000	550	600	500	200kA	150kA	1234315	4131600	3755180	222	•	•	