

Computer System Plugs, Connectors and Receptacles

More than 30 years ago, Russellstoll offered the first pin and sleeve connectors that met the demanding needs of the Data Processing industry, and we've been leading the way ever since.

The expanding technology of the Computer System Industry is creating more sophisticated applications, which require safe, reliable connections that exceed the tough demands of today's applications. Russellstoll's commitment to excellence offers you that and more... Safety, Durability, Reliability and Performance on our complete line of plugs, receptacles and connectors.

Pin and sleeve power connections are chosen for Computer System interconnections because of the absolute performance required in today's mainframe and peripheral installation. Pin and sleeve connections have been proven to be more reliable in service than any bladed device. Data centers stay in service because Russellstoll keeps them connected.

Quick Selection Chart



SERIES*	FS/FD™ and angle type	Spec Grade	Dura-Gard®	Uni-Gard®
Available Ranges (A)	20, 30 and 60*	20 and 30	20, 30, 50 and 60	30 (IEC)
Safety Grade™ UL Flame-Rated High-Temp Thermoplastic	UL 94-V0 Aluminum	UL94-5VA	UL94-V0	UL94-V0
Easy-to-Wire Rear-Loaded Interiors	—	√	√	√
Single Rated Safety Voltage Polarizations	20A		20A	
			20A	30A
			30A	50A
			60A	(9h-IEC)
Waterproof O-Ring Seal (pins, sleeves and interiors)	—	√	√	√
2nd Internal Ground Lug (cable shielding alt.)	—	√	(optional)	—
External Cable Clamp	√	—	√	√
External Gland Nut Lock	—	—	√	√

* 60 A devices are specially designed versions of Russellstoll Angle Type (7328DP)



TüV For TÜV listed devices, contact your Regional Sales Office

Computer System Plugs, Connectors and Receptacles

Specifications

Performance – Electrical

Dielectric Voltage Withstand	3000 volts
Max. Working Voltage	600 volts RMS (minimum creepage distance and minimum clearance per UL 840)
Circuit Interrupting/ Load Breaking	UL Listed and CSA Certified for circuit interrupting at full rated current
Temperature Rise	Max. 30° C temperature rise at full rated current after 50 cycles of overload at 150% rated current at .75 pF
Shrouded Contacts	Complies with California Code Title 8, Art. 51, S2510.7(b) for devices exceeding 300 VAC
Horsepower	Per NEC® 430–151 ratings

Performance – Mechanical

Impact Resistance	Per UL 1682 Paragraph 34
Cord Accommodation	Round portable service cords per UL standard 62 and CSA C22.2 No. 49.1
Terminal Identification	In accordance with UL 1682
Cable Pull-Out	Force In accordance with UL 1682
Product Identification	Identification label and molded-in name
Lockout/Tagout	Lockout/Tagout hole in 30/50 A Dura-Gard® plug complies with OSHA Reg. 29 CFR 1910.147 (VO 30 A and 50 A plugs only)

Materials



	FS/FD™	SPEC GRADE	DURA-GARD® SAFETY GRADE™
Contact Carrier Interior	Thermoset/Thermoplastic (20 A and 30 A)	Arc-Resistant UL 94-V0 Phenolic Thermoset	Arc-Resistant UL 94-V0 Phenolic Thermoset
Housing, Gland Nuts	Cast Aluminum	Lexan® UL 94-5VA	DuraV™ UL 94-V0
Screw Collar Rings	—	High-Impact Thermoplastic	High-Impact Thermoplastic
O-Rings	—	Buna-N (Nitrile)	Buna-N (Nitrile)
Contacts: Pins and Sleeves	Brass	Brass CDA 360	Brass CDA 360
Hinge Pins (Receptacle)	Stainless Steel	—	Stainless Steel
Terminals	Brass	Stainless Steel	Stainless Steel
All Hardware	Stainless Steel	Stainless Steel	Stainless Steel
Gland Glide Washer (or Internal Cable Grip)	Brass	Nylon	20 A — Nylon 30 and 50 A — Aluminum
Cable Clamp Bushing	Neoprene	Neoprene	Neoprene

Lexan® is a registered trademark of GE

Performance – Environmental

Moisture Resistance	Per UL 1682 Paragraph 49. Watertight flap screw cover on receptacle, O-Rings on all VO/5VA pins and sleeves (excludes 60A)		
Flammability	VO/5A per UL 94 (DuraV™ also 5VA in some applications)		
Operating Temperatures	VO	5VA	Metal
Maximum	95°C (230°F)	130°C (266°F)	130°C (266°F)
Continuous	(230°F)	(266°F)	(266°F)
Minimum	-40°C (-40°F)	-29°C (-20°F)	-40°C (-40°F)
without Impact	-40°F	(-20°F)	(-40°F)
Chemicals	Resists standard industrial hydrocarbons, acids, bases and solvents (DuraV™ and Metal)		

Approvals



 Conforms to NEMA 4, 4X and 6 (Dura-Gard® and Spec Grade)
 TÜV

Computer System Plugs, Connectors and Receptacles

Connectors



Receptacles



FS/FD™ Aluminum	Dura-Gard® UL94-V0*	FS/FD™ Aluminum•	Dura-Gard® UL94-V0*
3913	9C23U0	3743	9R23U0W □
3913U1	9C23U1	3743U1	9R23U1W □
3913U2	9C23U2	3743U2	9R23U2W □
3933 ■	— 9C33U0 ■ —	3753 ■	9R33U0W □ ■
—	9C53U0	—	9R53U0W •
—	9C63U1	—	9R63U1
—	9C63U2	—	9R63U2
3914	— 9C24U0 —	3744	9R24U0W □
3934 ■	— 9C34U0 ▲ ■ — —	3754 ■	9R34U0W □ ■
—	9C54U0	—	9R54U0W □
—	9C64U1	—	9R64U1
—	9C64U2	—	9R64U2
7428-78^	— — — —	—	SCF7324-78
DS3516FP+	—	DS3516FR+	—

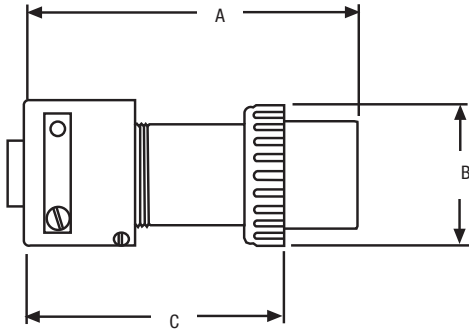
▲ Standard 0.750 Bushing
 ■ Dura-Gard® receptacles and connectors 30/50 A will accept only Dura-Gard® or Spec Grade. FS/FD™ Aluminum 30 A plugs must be used with FS/FD™ metal connectors or receptacles.

* For a more complete listing of UL 94-V0 rated devices, consult Dura-Gard® information on pages E18-E27
 ^ Angle Type Line
 + Max-Gard® Line
 □ Requires 371.1A conduit FD box or 3781A DSFD Box (50 A)
 • 30A FS/FD™ aluminum plugs may not directly exchange with Dura-Gard® plugs

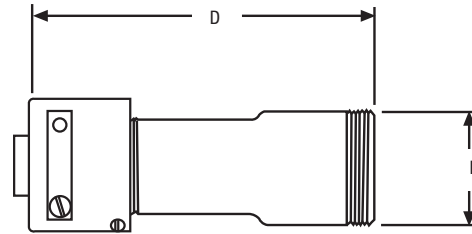
Computer System Plugs, Connectors and Receptacles

Dimensions

Plugs



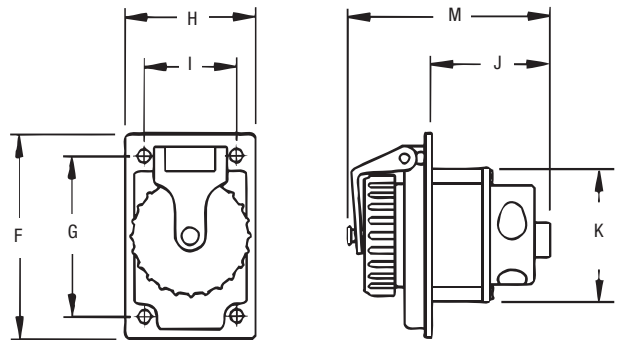
Connectors



	Amperes	A (in.)	B (in.)	C (in.)
FS/FD™	20 A	3-5/8	2	2-1/4
	30 A	3-3/4	2-1/4	2-3/8
Angle Type DP (Thermoplastic)	60 A	8	2-1/2	3-3/4
Spec Grade Dura-Gard®	20 A	3-1/4	2-1/8	2-1/8
	30 A	5	2-3/8	3-5/8
	50 A	5-1/4	2-3/8	3-5/8

	Amperes	D (in.)	E (in.)
FS/FD™	20 A	4	1-7/8
	30 A	4-5/8	2-1/8
Angle Type (Metallic)	60 A	9-1/2	3-1/2
Spec Grade Dura-Gard®	20 A	4-1/8	1-7/8
	30 A	5-5/8	2-1/8
	50 A	5-5/8	2-1/8

Receptacles



(Dura-Gard® shown)

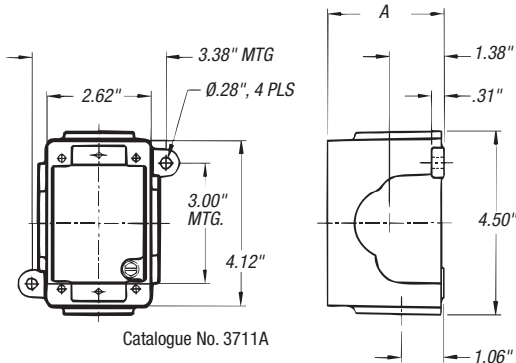
	Amperes	F (in.)	G (in.)	H (in.)	I (in.)	J (in.)	K (in.)	M (in.)
FS/FD™	20 A	4-1/8	3-1/4	2-5/8	1-7/8	1-1/8	2-1/4	2-1/2
	30 A					1-3/8	2-3/4	2-5/8
Angle Type (Metallic)	60 A	3-1/2	2-7/8	3-1/2	2-7/8	-	2-1/2	6
Dura-Gard®	20 A	4-1/8	3-1/4	2-5/8	1-7/8	1-1/2	2	3-1/8
	30 A					2-1/2	2-3/4	4-1/8
	50 A					2-1/2	2-3/4	4-1/8

Computer System Plugs, Connectors and Receptacles

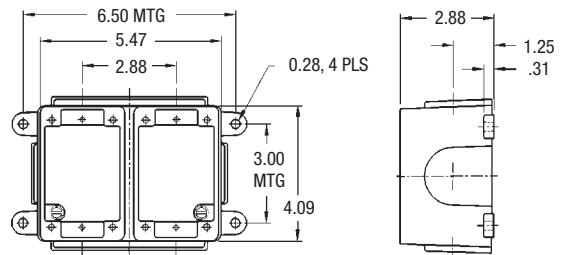
Accessories

All Conduit Boxes/Angle Adapters are Copper-Free, Cast Aluminum, Epoxy Powder Coat Finish

Conduit Boxes (for Surface Mounting)



Catalogue No. 3711A



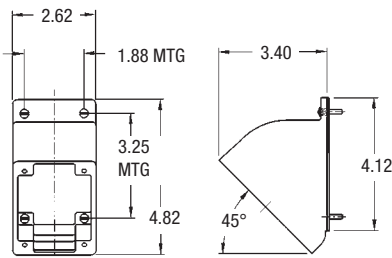
Catalogue No. 3712A



Receptacle Amperes	Cat. No.	
	Single-Gang	Double-Gang
20, 30 and 50 A	3711A	3712A
60 A*	JB6-1	—
50 A	3781A	—

* Various mounting options available. 4 in. deep (not shown)

Angle Adapter



Catalogue Number 3678A

Receptacle Amperes	Cat. No.	
	45°	20°
20, 30 and 50 A	3678A	—
60 A*	JAA6-45	JAA6-AB6

Mounts to conduit boxes to angle receptacle downward for easier access, no moisture retention on surfaces and better plug-cable drop bend relief.

* Various mounting options available.

Conduit Adapter

Kit includes gland nuts for plugs or connectors



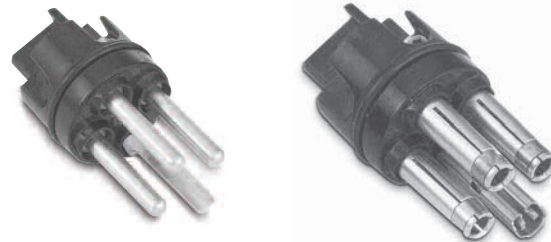
Plug/Connector Amperes	Tapped Hold Size (in.)	Cat. No.		
		FS/FD™	Spec Grade	Dura-Gard®
20 A	1/2	FSA11	—	9X2C50
	3/4	FSA12	—	9X2C75
	1/2	FSA21	—	9X3C50
30 A	3/4	FSA22	—	9X3C75
	1	FSA23	—	—
50 A	3/4	—	—	9X5C75
	1	—	—	9X5C10
	3/4	JPA62	—	—
60 A Angle Type	1	JPA63	—	—
	1-1/4	JPA64	—	—
	1-1/2	JPA65	—	—
	1-1/2	JPA65	—	—

Computer System Plugs, Connectors and Receptacles

Plug/Connector Replacement Items

	Spec Grade		Dura-Gard®		
	Blue	Yellow	Blue	Yellow	Black
Item Colour	Blue	Yellow	Blue	Yellow	Black
Plug/Connector Amperage	20 A	20 A	30 A	30 A	50 A
Gland Nut	C17077C	C17077A	C17076CX	C17076AX	C17076BX
Nylon Locking Screw	N/A	NA	B16983	B16983	B16983
Bushing, Clamp, Nut and Screw Kit (Inc. Nylon Locking Screw — 30/50A)	B17019CPR	B17019APR	B17018CPR	B17018APR	B17018BPR
Bushings	To Spec	To Spec	To Spec	To Spec	To Spec
Glide Washer	863-8	863-8	500RS	500RS	500RS
Gland Nut Assembly	B17019CR	B17019AR	B17018CR	B17018AR	B17018BR

Note: Minimum purchase quantities apply



Replacement Interiors

Amperage		Voltage Polarization	Cat. No.	
			Male Interior Assembly	Female Interior Assembly
—	—	125 VAC	9XM23U1	9XF23U1
2P3W	20	250 VAC	9XM23U2	9XF23U2
—	—	Through 600 VAC/250 VDC	9XM23U0	9XF23U0
2P3W	30	Through 600 VAC/250 VDC	9XM33U0	9XF33U0
2P3W	50	Through 600 VAC/250 VDC	9XM53U0	9XF53U0
3P4W	20	Through 600 VAC/250 VDC	9XM24U0	9XF24U0
3P4W	30	Through 600 VAC/250 VDC	9XM34U0	9XF34U0
3P4W	50	Through 600 VAC/250 VDC	9XM54U0	9XF54U0

Note: For replacement bushings, see Dura-Gard® section
Interiors with ground straps are specials