Brad®
from molex

M23 signal and power connectors

BradConnectivity™

Brad® from molex

your partner for innovation and performance

Molex empowers the Industrial Infrastructure with innovative industrial communication, control, connectivity and power solutions for a wide range of applications. Molex manufactures and distributes products and solutions worldwide, with dedicated local support to meet specific customer requirements.

The Brad® Brand of Automation Products – Designed for Performance and Reliability

Molex's reputation for quality and performance starts here. As automation technologies continue to improve the consistency, quality and cost of products manufactured throughout the world, Molex is at the forefront. To stay ahead of the game, market leaders are focused on increasing productivity through reduced downtime, reduced maintenance and higher output. With over 100,000 part numbers, no other company offers more connectivity products than Brad. As a result, Molex's Brad products have become the industry standard in automation solutions.

BradCommunications™

BradConnectivity™

BradControl™

BradPower™

BradCommunications™

Network interface cards, PLC backplanes, switches, gateways, simulation software and diagnostic tools.

BradConnectivity™

Connectors, cordsets and distribution boxes for sensor, actuator and bus network applications.

BradControl™

Network I/O for on-machine and in-cabinet applications.

BradPower™

Modular, flexible wiring systems for machine power distribution and motor control.

Molex operates from 59 locations in 19 countries spanning North America, Europe and Asia/Pacific, so we have the resources to assist you locally with all of your project needs.

M23 connectivity

BradConnectivity™ M23 connectors and receptacles for signal and power applications were designed to meet our customers' stringent requirements for reliability and performance in the harshest of industrial environments.

M23 Signal Connectors include field attachable male and female cable connectors and receptacles from 6-pole to 19-pole in straight and right-angled versions. Cable connectors for a broad range of cable outer diameters and receptacles for front mounting or back mounting guarantee the highest flexibility. Inserts are available with solder contacts or for crimp contacts. The integrated locking clip secures the contacts in the inserts and an easy assembly and disassembly without the need of special assembly tools.

M23 Power Connectors for power applications up to 28 amps. Brad® offers field-attachable cable connectors and receptacles in 5+PE and 4+3+PE versions. Applying the same modular design as the signal connectors, both pole counts can be used in straight and right-angled versions. Easy to assemble and disassemble – no special tools required.

Crimp contacts are available with different crimp ranges. Female contacts with integrated springs assure exceptional electrical performance with ultimate contact reliability in both signal and power product ranges.

Germanischer Lloyd

M23 signal connectors

The modular design of BradConnectivity™ M23 Signal Connectors guarantees maximum flexibility for all kinds of signal applications. A wide range of pin counts are available for solder or crimp contacts.

Available in either bulk-packed connectors, which include all piece parts you need for your connection, or single components like housing, insert and contacts which keep you flexible for different applications.

Significant design features offer a user-friendly assembly of BradConnectivity™ M23 Signal Connectors:

- Cable assembly and shielding in one assembly step
- Clipped-on strain-relief insert prevents cable rotation
- Flexible EMC-O-Ring guarantees reliable EMC-protection
- Radial-encompassing spring contacts assure low plug-in resistance and high mating cycles
- Integrated locking clip secures the contact in the insert and allows easy assembly and disassembly

Mechanical Data

Housing	Copper-Zinc Alloy Die Casting
Housing surface	Nickel-plated brass
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel- and gold-plated (0,25µm Au)
Minimum mating cycles	>1000
Seals/O-Rings	Buna-N standard
Temperature range	-40°C – 125°C (-40°F – 257°F)
Type of contacts	Crimp, solder, dip-solder (PCB)
Protection	IP67 per EN 60625 (connected), NEMA 4x
Cable diameter range	3 – 17 mm (0.12 – 0.55")

Electrical Data

Number of positions	6	7	9 (8+1)	12	16	17	19 (16+3)
Number of contacts	6	7	8 1	12	16	17	16 3
Contact-Ø [mm]	2	2	1 2	1	1	1	1 1.5
Nominal current [A]	20	20	8 20	8	8	8	8 10
Nominal voltage [V~]	300	300	300	300	150	150	150
Test voltage (Breakdown voltage) [V~]	2500	2500	2500	2500	1500	1500	1500
Insulation resistance [MΩ]	$>10^{10}$	$>10^{10}$	$>10^{10}$	$>10^{10}$	$>10^{6}$	$>10^{6}$	$>10^{6}$
Max. contact resistance [mΩ]	3	3	3	3	3	3	3
Degree of pollution*	3	3	3	3	3	3	3

Derating

Straight connectors male + female wires 12x AWG17

* Conductive, as well as dry non-conductive dirt accumulation can occur. It can be temporarily conductive due to condensation. Typical for industrial and factory environments.

Individual Kits

FIELD-ATTACHABLE CABLE CONNECTORS

Female Straight

Female 90°

Male Straight

Part No.
Material No.

	Cable Diameter	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts
6-Pole	3 – 7 mm	KAS6S00-551 1202300001	KAS6S00-401 1202300004	KAS6S00-001 1202300007	– –	– –	– –	KAS6S06-551 1202300106	KAS6S06-401 1202300109	KAS6S06-001 1202300112
	7 – 12 mm	KAS6S00-555 1202300002	KAS6S00-405 1202300005	KAS6S00-005 1202300008	KAS6S01-555 1202300064	KAS6S01-405 1202300066	KAS6S01-005 1202300068	KAS6S06-555 1202300107	KAS6S06-405 1202300110	KAS6S06-005 1202300113
	11 – 17 mm	KAS6S00-559 1202300003	KAS6S00-409 1202300006	KAS6S00-009 1202300009	KAS6S01-559 1202300065	KAS6S01-409 1202300067	KAS6S01-009 1202300069	KAS6S06-559 1202300108	KAS6S06-409 1202300111	KAS6S06-009 1202300114
	Crimp range*		0,75-2,5 mm²			0,75-2,5 mm²			0,75-2,5 mm²	
7-Pole	3 – 7 mm	KAS7S00-551 1202300010	KAS7S00-401 1202300013	KAS7S00-001 1202300016	– –	– –	– –	KAS7S06-551 1202300115	KAS7S06-401 1202300118	KAS7S06-001 1202300121
	7 – 12 mm	KAS7S00-555 1202300011	KAS7S00-405 1202300014	KAS7S00-005 1202300017	KAS7S01-555 1202300070	KAS7S01-405 1202300072	KAS7S01-005 1202300074	KAS7S06-555 1202300116	KAS7S06-405 1202300119	KAS7S06-005 1202300122
	11 – 17 mm	KAS7S00-559 1202300012	KAS7S00-409 1202300015	KAS7S00-009 1202300018	KAS7S01-559 1202300071	KAS7S01-409 1202300073	KAS7S01-009 1202300075	KAS7S06-559 1202300117	KAS7S06-409 1202300120	KAS7S06-009 1202300123
	Crimp range*		0,75-2,5 mm²			0,75-2,5 mm²			0,75-2,5 mm²	
9-Pole	3 – 7 mm	KAS9S00-551 1202300019	KAS9S00-421 1202300022	KAS9S00-001 1202300025	– –	– –	– –	KAS9S06-551 1202300124	KAS9S06-411 1202300127	KAS9S06-001 1202300130
(8 + 1)	7 – 12 mm	KAS9S00-555 1202300020	KAS9S00-425 1202300023	KAS9S00-005 1202300026	KAS9S01-555 1202300076	KAS9S01-425 1202300078	KAS9S01-005 1202300080	KAS9S06-555 1202300125	KAS9S06-415 1202300128	KAS9S06-005 1202300131
	11 – 17 mm	KAS9S00-559 1202300021	KAS9S00-429 1202300024	KAS9S00-009 1202300027	KAS9S01-559 1202300077	KAS9S01-429 1202300079	KAS9S01-009 1202300081	KAS9S06-559 1202300126	KAS9S06-419 1202300129	KAS9S06-009 1202300132
	Crimp range*	0,34-1,0 mm² / 0,75-2,5 mm²			0,34-1,0 mm² / 0,75-2,5 mm²			0,14-1,0 mm² / 0,75-2,5 mm²		
12-Pole	3 – 7 mm	KASCS00-551 1202300028	KASCS00-021 1202300031	KASCS00-001 1202300034	– –	– –	– –	KASCS06-551 1202300133	KASCS06-011 1202300136	KASCS06-001 1202300139
	7 – 12 mm	KASCS00-555 1202300029	KASCS00-025 1202300032	KASCS00-005 1202300035	KASCS01-555 1202300082	KASCS01-025 1202300084	KASCS01-005 1202300086	KASCS06-555 1202300134	KASCS06-015 1202300137	KASCS06-005 1202300140
	11 – 17 mm	KASCS00-559 1202300030	KASCS00-029 1202300033	KASCS00-009 1202300036	KASCS01-559 1202300083	KASCS01-029 120–2300085	KASCS01-029 1202300087	KASCS06-559 1202300135	KASCS06-019 1202300138	KASCS06-009 1202300141
	Crimp range*		0,34-1,0 mm²			0,34-1,0 mm²			0,14-1,0 mm²	
16-Pole	3 – 7 mm	KASHS00-551 1202300037	KASHS00-021 1202300040	KASHS00-001 1202300043	– –	– –	– –	KASHS06-551 1202300142	KASHS06-011 1202300145	KASHS06-001 1202300148
	7 – 12 mm	KASHS00-555 1202300038	KASHS00-025 1202300041	KASHS00-005 1202300044	KASHS01-555 1202300088	KASHS01-025 1202300090	KASHS01-005 1202300092	KASHS06-555 1202300143	KASHS06-015 1202300146	KASHS06-005 1202300149
	11 – 17 mm	KASHS00-559 1202300039	KASHS00-029 1202300042	KASHS00-009 1202300045	KASHS01-559 1202300089	KASHS01-029 1202300091	KASHS01-009 1202300093	KASHS06-559 1202300144	KASHS06-019 1202300147	KASHS06-009 1202300150
	Crimp range*		0,34-1,0 mm²			0,34-1,0 mm²			0,14-1,0 mm²	
17-Pole	3 – 7 mm	KASJS00-551 1202300046	KASJS00-021 1202300049	KASJS00-001 1202300052	– –	– –	– –	KASJS06-551 1202300151	KASJS06-011 1202300154	KASJS06-001 1202300157
	7 – 12 mm	KASJS00-555 1202300047	KASJS00-025 1202300050	KASJS00-005 1202300053	KASJS01-555 1202300094	KASJS01-025 1202300096	KASJS01-005 1202300098	KASJS06-555 1202300152	KASJS06-015 1202300155	KASJS06-005 1202300158
	11 – 17 mm	KASJS00-559 1202300048	KASJS00-029 1202300051	KASJS00-009 1202300054	KASJS01-559 1202300095	KASJS01-029 1202300097	KASJS01-009 1202300099	KASJS06-559 1202300153	KASJS06-019 1202300156	KASJS06-009 1202300159
	Crimp range*		0,34-1,0 mm²			0,34-1,0 mm²			0,14-1,0 mm²	
19-Pole	3 – 7 mm	KASLS00-551 1202300055	KASLS00-221 1202300058	KASLS00-001 1202300061	– –	– –	– –	KASLS06-551 1202300160	KASLS06-111 1202300163	KASLS06-001 1202300166
(16 + 3)	7 – 12 mm	KASLS00-555 1202300056	KASLS00-225 1202300059	KASLS00-005 1202300062	KASLS01-555 1202300100	KASLS01-225 1202300102	KASLS01-005 1202300104	KASLS06-555 1202300161	KASLS06-115 1202300164	KASLS06-005 1202300167
	11 – 17 mm	KASLS00-559 1202300057	KASLS00-229 1202300060	KASLS00-009 1202300063	KASLS01-559 1202300101	KASLS01-229 1202300103	KASLS01-009 1202300105	KASLS06-559 1202300162	KASLS06-119 1202300165	KASLS06-009 1202300168
	Crimp range*	0,34-1,0 mm² / 0,56-1,0 mm²			0,34-1,0 mm² / 0,56-1,0 mm²			0,14-1,0 mm² / 0,14-1,0 mm²		

** Crimp range only applies to "Crimp Contacts" versions.*

Individual Kits

FRONT PANEL-MOUNT RECEPTACLES

Female Flange-Mount 4x Ø 3,2 mm

Male Flange-Mount 4x Ø 3,2 mm

Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable

Part No. / Material No.	Female Flange-Mount 4x Ø 3,2 mm			Male Flange-Mount 4x Ø 3,2 mm			Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable		
	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts
6-Pole	KRS6G20-553 1202310001	KRS6G20-403 1202310002	KRS6G20-003 1202310003	KRS6G26-5531 1202310022	KRS6G26-4031 1202310023	KRS6G26-0031 1202310024	KRS6G27-5512 1202310043	KRS6G27-4012 1202310044	KRS6G27-0012 1202310045
Crimp range*		0,75-2,5 mm²			0,75-2,5 mm²			0,75-2,5 mm²	
7-Pole	KRS7G20-553 1202310004	KRS7G20-403 1202310005	KRS7G20-003 1202310006	KRS7G26-5531 1202310025	KRS7G26-4031 1202310026	KRS7G26-0031 1202310027	KRS7G27-5512 1202310046	KRS7G27-4012 1202310047	KRS7G27-0012 1202310048
Crimp range*		0,75-2,5 mm²			0,75-2,5 mm²			0,75-2,5 mm²	
9-Pole (8 + 1)	KRS9G20-553 1202310007	KRS9G20-423 1202310008	KRS9G20-003 1202310009	KRS9G26-5531 1202310028	KRS9G26-4131 1202310029	KRS9G26-0031 1202310030	KRS9G27-5512 1202310049	KRS9G27-4112 1202310050	KRS9G27-0012 1202310051
Crimp range*		0,34-1,0 mm² / 0,75-2,5 mm²			0,14-1,0 mm² / 0,75-2,5 mm²			0,14-1,0 mm² / 0,75-2,5 mm²	
12-Pole	KRSCG20-553 1202310010	KRSCG20-023 1202310011	KRSCG20-003 1202310012	KRSCG26-5531 1202310031	KRSCG26-0131 1202310032	KRSCG26-0031 1202310033	KRSCG27-5512 1202310052	KRSCG27-0112 1202310053	KRSCG27-0012 1202310054
Crimp range*		0,34-1,0 mm²			0,14-1,0 mm²			0,14-1,0 mm²	
16-Pole	KRSHG20-553 1202310013	KRSHG20-023 1202310014	KRSHG20-003 1202310015	KRSHG26-5531 1202310034	KRSHG26-0131 1202310035	KRSHG26-0031 1202310036	KRSHG27-5512 1202310055	KRSHG27-0112 1202310056	KRSHG27-0012 1202310057
Crimp range*		0,34-1,0 mm²			0,14-1,0 mm²			0,14-1,0 mm²	
17-Pole	KRSJG20-553 1202310016	KRSJG20-023 1202310017	KRSJG20-003 1202310018	KRSJG26-5531 1202310037	KRSJG26-0131 1202310038	KRSJG26-0031 1202310039	KRSJG27-5512 1202310058	KRSJG27-0112 1202310059	KRSJG27-0012 1202310060
Crimp range*		0,34-1,0 mm²			0,14-1,0 mm²			0,14-1,0 mm²	
19-Pole (16 + 3)	KRSLG20-553 1202310019	KRSLG20-223 1202310020	KRSLG20-003 1202310021	KRSLG26-5531 1202310040	KRSLG26-1131 1202310041	KRSLG26-0031 1202310042	KRSLG27-5512 1202310061	KRSLG27-1112 1202310062	KRSLG27-0012 1202310063
Crimp range*		0,34-1,0 mm² / 0,56-1,0 mm²			0,14-1,0 mm² / 0,14-1,0 mm²			0,14-1,0 mm² / 0,14-1,0 mm²	

BACK PANEL-MOUNT RECEPTACLES

Male Flange-Mount 4xM3

Male Single Hole-Mount M25x1,5

Part No. / Material No.	Male Flange-Mount 4xM3				Male Single Hole-Mount M25x1,5			
	Solder Contacts	PCB Contacts	Crimp Contacts	Without Contacts	Solder Contacts	PCB Contacts	Crimp Contacts	Without Contacts
6-Pole	KRS6G46-5541 1202310064	KRS6G46-7741 1202310065	KRS6G46-4041 1202310066	KRS6G46-0041 1202310067	KRS6P46-550 1202310092	KRS6P46-770 1202310093	KRS6P46-400 1202310094	KRS6P46-000 1202310095
Crimp range*			0,75-2,5 mm²				0,75-2,5 mm²	
7-Pole	KRS7G46-5541 1202310068	KRS7G46-7741 1202310069	KRS7G46-4041 1202310070	KRS7G46-0041 1202310071	KRS7P46-550 1202310096	KRS7P46-770 1202310097	KRS7P46-400 1202310098	KRS7P46-000 1202310099
Crimp range*			0,75-2,5 mm²				0,75-2,5 mm²	
9-Pole (8 + 1)	KRS9G46-5541 1202310072	KRS9G46-7741 1202310073	KRS9G46-4141 1202310074	KRS9G46-0041 1202310075	KRS9P46-550 1202310100	KRS9P46-770 1202310101	KRS9P46-410 1202310102	KRS9P46-000 1202310103
Crimp range*		0,14-1,0 mm² / 0,75-2,5 mm²				0,14-1,0 mm² / 0,75-2,5 mm²		
12-Pole	KRSCG46-5541 1202310076	KRSCG46-7741 1202310077	KRSCG46-0141 1202310078	KRSCG46-0041 1202310079	KRSCP46-550 1202310104	KRSCP46-770 1202310105	KRSCP46-010 1202310106	KRSCP46-000 1202310107
Crimp range*			0,14-1,0 mm²				0,14-1,0 mm²	
16-Pole	KRSHG46-5541 1202310080	KRSHG46-7741 1202310081	KRSHG46-0141 1202310082	KRSHG46-0041 1202310083	KRSHP46-550 1202310108	KRSHP46-770 1202310109	KRSHP46-010 1202310110	KRSHP46-000 1202310111
Crimp range*			0,14-1,0 mm²				0,14-1,0 mm²	
17-Pole	KRSJG46-5541 1202310084	KRSJG46-7741 1202310085	KRSJG46-0141 1202310086	KRSJG46-0041 1202310087	KRSJP46-550 1202310112	KRSJP46-770 1202310113	KRSJP46-010 1202310114	KRSJP46-000 1202310115
Crimp range*			0,14-1,0 mm²				0,14-1,0 mm²	
19-Pole (16 + 3)	KRSLG46-5541 1202310088	KRSLG46-7741 1202310089	KRSLG46-1141 1202310090	KRSLG46-0041 1202310091	KRSLP46-550 1202310116	KRSLP46-770 1202310117	KRSLP46-110 1202310118	KRSLP46-000 1202310119
Crimp range*		0,14-1,0 mm² / 0,14-1,0 mm²				0,14-1,0 mm² / 0,14-1,0 mm²		

** Crimp range only applies to "Crimp Contacts" versions.*

Bulk-Packed Components

FIELD-ATTACHABLE CABLE CONNECTOR HOUSINGS

Female Straight

Female 90°

Male Straight

Part No.
Material No.

	Cable Diameter	Housing	Housing	Housing
Housing Only	3 – 7mm	KAS0S00-001 1202320001	– –	KAS0S06-001 1202320006
	7 – 12mm	KAS0S00-005 1202320002	KAS0S01-005 1202320004	KAS0S06-005 1202320007
	11 – 17mm	KAS0S00-009 1202320003	KAS0S01-009 1202320005	KAS0S06-009 1202320008

FRONT PANEL-MOUNT RECEPTACLES HOUSINGS

Female Flange-Mount 4x Ø 3,2 mm

Male Flange-Mount 4x Ø 3,2 mm

Male 90° Flange-Mount 4x Ø 2,7 mm rotatable

Part No.
Material No.

	Housing	Housing	Housing
Housing Only	KRS0G20-003 1202320009	KRS0G26-0031 1202320010	KRS0G27-0012 1202320011

BACK PANEL-MOUNT RECEPTACLES HOUSINGS

Male Flange-Mount 4xM3

Male Single Hole-Mount M25x1,5

Part No.
Material No.

	Housing	Housing
Housing Only	KRS0G46-0041 1202320012	KRS0P46-000 1202320013

INSERTS

	Female Inserts			Male Inserts		
	Solder Contacts	PCB Contacts	Without Contacts	Solder Contacts	PCB Contacts	Without Contacts
6-Pole	KIS60-55 1202320014	KIS60-77 1202320015	KIS60-00 1202320016	KIS66-55 1202320035	KIS66-77 1202320036	KIS66-00 1202320037
7-Pole	KIS70-55 1202320017	KIS70-77 1202320018	KIS70-00 1202320019	KIS76-55 1202320038	KIS76-77 1202320039	KIS76-00 1202320040
9-Pole (8 + 1)	KIS90-55 1202320020	KIS90-77 1202320021	KIS90-00 1202320022	KIS96-55 1202320041	KIS96-77 1202320042	KIS96-00 1202320043
12-Pole	KISC0-55 1202320023	KISC0-77 1202320024	KISC0-00 1202320025	KISC6-55 1202320044	KISC6-77 1202320045	KISC6-00 1202320046
16-Pole	KISH0-55 1202320026	KISH0-77 1202320027	KISH0-00 1202320028	KISH6-55 1202320047	KISH6-77 1202320048	KISH6-00 1202320049
17-Pole	KISJ0-55 1202320029	KISJ0-77 1202320030	KISJ0-00 1202320031	KISJ6-55 1202320050	KISJ6-77 1202320051	KISJ6-00 1202320052
19-Pole (16 + 3)	KISL0-55 1202320032	KISL0-77 1202320033	KISL0-00 1202320034	KISL6-55 1202320053	KISL6-77 1202320054	KISL6-00 1202320055

Part No.
Material No.

CONTACTS

Crimp Range	Female Contact Ø 1,0 mm	Male Contact Ø 1,0 mm
0,08-0,56 mm²	KCS00-01 1202320056	– –
0,14-1,0 mm²	– –	KCS06-01 1202320062
0,34-1,0 mm²	KCS00-02 1202320057	– –
1,0-1,5 mm²	KCS00-03 1202320058	KCS06-03 1202320063
	Female Contact Ø 1,5 mm	**Male Contact Ø 1,5 mm**
0,14-0,56 mm²	KCS00-10 1202320059	– –
0,14-1,0 mm²	– –	KCS06-10 1202320064
0,56-1,0 mm²	KCS00-20 1202320060	– –
	Female Contact Ø 2,0 mm	**Male Contact Ø 2,0 mm**
0,75-2,5 mm²	KCS00-40 1202320061	KCS06-40 1202320065

Assembly Instructions

CABLE CONNECTOR STRAIGHT

CABLE CONNECTOR 90°

PANEL CONNECTOR FEMALE

PANEL CONNECTOR MALE

PANEL CONNECTOR 90°

Crimp Tool Setting

Part No. Material No.	Crimp Contact	Cross section (mm²)	AWG	Crimp Tool Setting	Locator Setting
KCS06-01 1202320062	Male Contact Ø 1 mm	0.14 0.25 0.34 0.56 0.75 1.00	AWG26 AWG24 AWG22 AWG20 AWG18 AWG17	0.86 0.90 0.95 0.98 1.03 1.08	1
KCS00-01 1202320056	Female Contact Ø 1 mm (0,08-0,56 mm²)	0.08 0.14 0.25 0.34 0.56	AWG28 AWG26 AWG24 AWG22 AWG20	0.75 0.78 0.82 0.86 0.90	2
KCS00-02 1202320057	Female Contact Ø 1 mm (0,34-1,0 mm²)	0.34 0.56 0.75 1.00	AWG22 AWG20 AWG18 AWG17	0.77 0.82 0.88 0.95	2
KCS06-10 1202320064	Male Contact Ø 1,5 mm	0.14 0.25 0.34 0.56 0.75 1.00	AWG26 AWG24 AWG22 AWG20 AWG18 AWG17	0.65 0.68 0.72 0.81 0.95 1.07	3
KCS00-10 1202320059	Female Contact Ø 1,5 mm (0,14-0,75 mm²)	0.14 0.25 0.34 0.56 0.75	AWG26 AWG24 AWG22 AWG20 AWG18	0.70 0.73 0.77 0.85 1.05	2
KCS00-20 1202320060	Female Contact Ø 1,5 mm (0,34-1,0 m²)	0.34 0.56 0.75 1.00	AWG22 AWG20 AWG18 AWG17	0.88 0.95 1.05 1.13	2
KCS06-40 1202320065	Male Contact Ø 2,0 mm	0.75 1.00 1.50 2.50	AWG18 AWG17 AWG16 AWG14	1.20 1.35 1.45 1.60	4
KCS00-40 1202320061	Female Contact Ø 2,0 mm	0.75 1.00 1.50 2.50	AWG18 AWG17 AWG16 AWG14	1.20 1.35 1.45 1.60	5

M23 power connectors

With M23 Power Connectors, BradConnectivity™ offers a versatile solution for power applications up to 28 amps. The modular design offers a maximum on flexibility; male and female contact inserts work with all different housing styles.

Like the BradConnectivity M23 Signal Connector range, Power Connectors are available as kits as well as bulk parts. Essential design features guarantee the simplest assembly and a secure power connection:

- Modularity: Same insert for all housings
- The integrated locking clip allows quick assembly
- Complete assembly and disassembly without special tools
- Lowest contact resistance as a result of a gold-plated contact area
- Integrated strain-relief fitting

Mechanical Data

Housing	Copper-Zinc Alloy Die Casting
Housing surface	Nickel-plated brass
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel- and gold-plated (0,25µm Au)
Minimum mating cycles	>1000
Seals/O-Rings	Buna-N standard
Temperature range	-40°C – 125°C (-40°F – 257°F)
Type of contacts	Crimp
Protection	IP67 per EN 60625 (connected), NEMA 4x
Cable diameter range	7 – 17 mm (0.28 – 0.55")

Electrical Data

Number of positions	5+PE	4+3+PE	
Number of contacts	6	4	4
Contact-Ø [mm]	2	1	2
Nominal current 1) [A]	28	8	28
Nominal voltage [V~] Degree of Protection 2*	800	300	800
Nominal voltage [V~] Degree of Protection 3**	600	300	600
Test voltage (Breakdown voltage) 4) [V~]	4000	2500	4000
Insulation resistance [MΩ]	$>10^{13}$	$>10^{13}$	
Max. contact resistance) [mΩ]	3	3	

Derating

Straight connectors male + female M23, 5+PE, wires 5 x AWG12

* No permanent conductive dirt accumulation will occur. Temporary conductive dirt accumulation, such as condensation, is possible. Typical for households, offices, laboratories and test labs.

** Conductive, as well as dry non-conductive dirt accumulation can occur. It can be temporarily conductive due to condensation. Typical for industrial and factory environments.

Individual Kits

FIELD-ATTACHABLE CABLE CONNECTORS

Female Straight

Female 90°

Male Straight

Part No.
Material No.

	Cable Diameter	Female Straight: Crimp Contacts	Female Straight: Without Contacts	Female 90°: Crimp Contacts	Female 90°: Without Contacts	Male Straight: Crimp Contacts	Male Straight: Without Contacts
6-Pole (5 + PE)	7 – 12 mm	KAP6S00-105 1202330001	KAP6S00-005 1202330003	KAP6S01-105 1202330009	KAP6S01-005 1202330011	KAP6S06-105 1202330017	KAP6S06-005 1202330019
	11 – 17 mm	KAP6S00-109 1202330002	KAP6S00-009 1202330004	KAP6S01-109 1202330010	KAP6S01-009 1202330012	KAP6S06-109 1202330018	KAP6S06-009 1202330020
	Crimp range*	0,75-2,5 mm²		0,75-2,5 mm²		0,75-2,5 mm²	
8-Pole	7 – 12 mm	KAP8S00-115 1202330005	KAP8S00-005 1202330007	KAP8S01-115 1202330013	KAP8S01-005 1202330015	KAP8S06-115 1202330021	KAP8S06-005 1202330023
	11 – 17 mm	KAP8S00-119 1202330006	KAP8S00-009 1202330008	KAP8S01-119 1202330014	KAP8S01-009 1202330016	KAP8S06-119 1202330022	KAP8S06-009 1202330024
	Crimp range*	0,25-1,0 mm² / 0,75-2,5 mm²		0,25-1,0 mm² / 0,75-2,5 mm²		0,25-1,0 mm² / 0,75-2,5 mm²	

FRONT PANEL-MOUNT RECEPTACLES

Female Flange-Mount 4x Ø 3,2 mm

Male Flange-Mount 4x Ø 3,2 mm

Part No.
Material No.

	Female Flange-Mount: Crimp Contacts	Female Flange-Mount: Without Contacts	Male Flange-Mount: Crimp Contacts	Male Flange-Mount: Without Contacts
6-Pole (5 + PE)	KRP6G00-103 1202340001	KRP6G00-003 1202340002	KRP6G06-103 1202340005	KRP6G06-003 1202340006
Crimp range*	0,75-2,5 mm²		0,75-2,5 mm²	
8-Pole (4 + 3 + PE)	KRP8G00-113 1202340003	KRP8G00-003 1202340004	KRP8G06-113 1202340007	KRP8G06-003 1202340008
Crimp range*	0,25-1,0 mm² / 0,75-2,5 mm²		0,25-1,0 mm² / 0,75-2,5 mm²	

Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm

Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm

	Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm: Crimp Contacts	Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm: Without Contacts	Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm: Crimp Contacts	Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm: Without Contacts
6-Pole (5 + PE)	KRP6G07-1012 1202340009	KRP6G07-0012 1202340010	KRP6G07-1052 1202340013	KRP6G07-0052 1202340014
Crimp range*	0,75-2,5 mm²		0,75-2,5 mm²	
8-Pole (4 + 3 + PE)	KRP8G07-1112 1202340011	KRP8G07-0012 1202340012	KRP8G07-1152 1202340015	KRP8G07-0052 1202340016
Crimp range*	0,25-1,0 mm² / 0,75-2,5 mm²		0,25-1,0 mm² / 0,75-2,5 mm²	

BACK PANEL-MOUNT RECEPTACLES

Male Flange-Mount 4x Ø 3,2 mm

Male Single Hole-Mount M25x1,5

Part No.
Material No.

	Male Flange-Mount: Crimp Contacts	Male Flange-Mount: Without Contacts	Male Single Hole-Mount: Crimp Contacts	Male Single Hole-Mount: Without Contacts
6-Pole (5 + PE)	KRP6G46-1031 1202340017	KRP6G46-0031 1202340018	KRP6P46-100 1202340021	KRP6P46-000 1202340022
Crimp range*	0,75-2,5 mm²		0,75-2,5 mm²	
8-Pole (4 + 3 + PE)	KRP8G46-1131 1202340019	KRP8G46-0031 1202340020	KRP8P46-110 1202340023	KRP8P46-000 1202340024
Crimp range*	0,25-1,0 mm² / 0,75-2,5 mm²		0,25-1,0 mm² / 0,75-2,5 mm²	

** Crimp range only applies to "Crimp Contacts" versions.*

Bulk-Packed Components

FIELD-ATTACHABLE CABLE CONNECTOR HOUSINGS

Female Straight

Female 90°

Male Straight

Part No. / Material No.	Cable Diameter	Female Straight	Female 90°	Male Straight
		Housing	Housing	Housing
Housing only	7 – 12 mm	KAP0S00-005 1202350001	KAP0S01-005 1202350003	KAP0S06-005 1202350005
	11 – 17 mm	KAP0S00-009 1202350002	KAP0S01-009 1202350004	KAP0S06-009 1202350006

FRONT PANEL-MOUNT RECEPTACLE HOUSINGS

Female Flange-Mount 4x Ø 3,2 mm

Male Flange-Mount 4x Ø 3,2 mm

Part No. / Material No.	Female Flange-Mount 4x Ø 3,2 mm	Male Flange-Mount 4x Ø 3,2 mm
	Housing	Housing
Housing only	KRP0G00-003 1202350007	KRP0G06-003 1202350008

Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm

Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm

	Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm	Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm
	Housing	Housing
Housing only	KRP0G07-0012 1202350009	KRP0G07-0052 1202350010

BACK PANEL-MOUNT RECEPTACLE HOUSINGS

Male Flange-Mount 4x Ø 3,2 mm

Male Single Hole-Mount M25x1,5

Part No. / Material No.	Male Flange-Mount 4x Ø 3,2 mm	Male Single Hole-Mount M25x1,5
	Housing	Housing
Housing only	KRP0G46-0031 1202350011	KRP0P46-000 1202350012

INSERTS

	Female Inserts	Male Inserts
	Without Contacts	Without Contacts
6-Pole (5 + PE)	KIP60-00 1202350013	KIP66-00 1202350015
8-Pole (4 + 3 + PE)	KIP80-00 1202350014	KIP86-00 1202350016

CONTACTS

Crimp Range	Female Contact Ø 1,0 mm	Male Contact Ø 1,0 mm
0,25-1,0 mm²	KCP00-01 1202350017	KCP06-01 1202350020
	Female Contact Ø 2,0 mm	**Male Contact Ø 2,0 mm**
0,75-2,5 mm²	KCP00-10 1202350018	KCP06-10 1202350021
2,5-4,0 mm²	KCP00-20 1202350019	KCP06-20 1202350022

Assembly Instructions

CABLE CONNECTOR STRAIGHT

CABLE CONNECTOR 90°

PANEL CONNECTOR FEMALE

PANEL CONNECTOR MALE

PANEL CONNECTOR 90°

Crimp Tool Setting

Part No. Material No.	Crimp Contact	Cross section (mm^2)	AWG	Crimp Tool Setting	Locator Setting
KCP06-01 1202350020	Male Contact Ø 1 mm	0.14 0.25 0.35 0.50 0.75 1.00	AWG26 AWG24 AWG22 AWG20 AWG18 AWG17	0.75 0.80 0.85 1.03 1.08 1.13	1
KCP00-01 1202350017	Female Contact 1 mm	0.14 0.25 0.35 0.50 0.75 1.00	AWG26 AWG24 AWG22 AWG20 AWG18 AWG17	0.75 0.80 0.85 0.89 0.95 1.02	2
KCP06-10 1202350021	Male Contact Ø 2 mm	0.75 1.00 1.50 2.50	AWG18 AWG17 AWG16 AWG14	1.20 1.40 1.55 1.70	7
KCP06-20 1202350022	Male Contact Ø 2 mm	2.50 4.00	AWG14 AWG12	1.47 1.60	7
KCP00-10 1202350018	Female Contact Ø 2 mm	0.75 1.00 1.50 2.50	AWG18 AWG17 AWG16 AWG14	1.20 1.40 1.55 1.70	8
KCP00-20 1202350019	Female Contact Ø 2 mm	2.50 4.00	AWG14 AWG12	1.47 1.60	8

Tools and Accessories

M23 SIGNAL

Part No.
Material No.

Crimp Tool

For manual crimping of machined crimp contacts for signal connectors

KS-TOOL-01
1201550012

Locator For Crimp Tool

Locator for Male Contacts

KS-LOC-01
1201550013

Locator for Female Contacts

KS-LOC-02
1201550014

Assembly Tool

For female receptacles

KS-TOOL-02
1201550015

Adapter Flange

For straight connectors

KA-FLANGE
1201550016

M23 POWER

Part No.
Material No.

Crimp Tool

For manual crimping of machined crimp contacts for power connectors

KP-TOOL-01
1201550017

Locator For Crimp Tool

Locator for Male Contacts

KP-LOC-01
1201550018

Locator for Female Contacts

KP-LOC-02
1201550019

Adapter Flange

For straight connectors

KA-FLANGE
1201550016

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