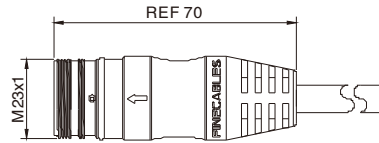


M23 Signal Molded Cable, Straight, Male Housing + Male Thread

- Connector series: M23 Signal
- Contacts: Pin
- Mounting type: Straight
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSSPST***-XXX (solder unshielded)
 M23-MSSSPST***-XXX (solder shielded)
 M23-MSSCPST***-XXX (crimp unshielded)
 M23-MSSSCPST***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU	Insulation resistance:	≥ 100MΩ
Connector insert:	PA	Contact resistance:	≤ 5mΩ
Connector contacts:	Brass with gold plated	Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
Coupling nut/screw:	Brass with nickel plated	IP rating:	IP68 in locked condition
Seal / O-ring:	FKM or NBR	Cable OD range:	2.0~13
Operation cycles:	>800		

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Pin	Part No.	Contacts	Contact OD (mm)	Pin	Part No.	
6A	2		M23-MSSPST06A-XXX (solder unshielded) M23-MSSSPST06A-XXX (solder shielded) M23-MSSCPST06A-XXX (crimp unshielded) M23-MSSSCPST06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSSPST12A-XXX (solder unshielded) M23-MSSSPST12A-XXX (solder shielded) M23-MSSCPST12A-XXX (crimp unshielded) M23-MSSSCPST12A-XXX (crimp shielded)	
7A	2		M23-MSSPST07A-XXX (solder unshielded) M23-MSSSPST07A-XXX (solder shielded) M23-MSSCPST07A-XXX (crimp unshielded) M23-MSSSCPST07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSSPST12B-XXX (solder unshielded) M23-MSSSPST12B-XXX (solder shielded) M23-MSSCPST12B-XXX (crimp unshielded) M23-MSSSCPST12B-XXX (crimp shielded)	
9A (8+1)	8 1	1 2		17A (Standard)	1		M23-MSSPST17A-XXX (solder unshielded) M23-MSSSPST17A-XXX (solder shielded) M23-MSSCPST17A-XXX (crimp unshielded) M23-MSSSCPST17A-XXX (crimp shielded)	
9B (8+1)	8 1	1 2		17B (opposite)	1		M23-MSSPST17B-XXX (solder unshielded) M23-MSSSPST17B-XXX (solder shielded) M23-MSSCPST17B-XXX (crimp unshielded) M23-MSSSCPST17B-XXX (crimp shielded)	
9C (6+3)	6 3	1 2		19A (16+3)	16 3	1 1.5		M23-MSSPST19A-XXX (solder unshielded) M23-MSSSPST19A-XXX (solder shielded) M23-MSSCPST19A-XXX (crimp unshielded) M23-MSSSCPST19A-XXX (crimp shielded)
16A	1		M23-MSSPST16A-XXX (solder unshielded) M23-MSSSPST16A-XXX (solder shielded) M23-MSSCPST16A-XXX (crimp unshielded) M23-MSSSCPST16A-XXX (crimp shielded)					

Note: X refers to cable specification

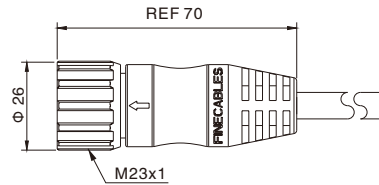
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Straight, Male Housing + Female Thread

- Connector series: M23 Signal
- Contacts: Pin
- Mounting type: Straight
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSNPST***-XXX (solder unshielded)
 M23-MSNSPST***-XXX (solder shielded)
 M23-MSNCPST***-XXX (crimp unshielded)
 M23-MSNSCPST***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Pin	Part No.	Contacts	Contact OD (mm)	Pin	Part No.	
6A	2		M23-MSNPST06A-XXX (solder unshielded) M23-MSNSPST06A-XXX (solder shielded) M23-MSNCPST06A-XXX (crimp unshielded) M23-MSNSCPST06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSNPST12A-XXX (solder unshielded) M23-MSNSPST12A-XXX (solder shielded) M23-MSNCPST12A-XXX (crimp unshielded) M23-MSNSCPST12A-XXX (crimp shielded)	
7A	2		M23-MSNPST07A-XXX (solder unshielded) M23-MSNSPST07A-XXX (solder shielded) M23-MSNCPST07A-XXX (crimp unshielded) M23-MSNSCPST07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSNPST12B-XXX (solder unshielded) M23-MSNSPST12B-XXX (solder shielded) M23-MSNCPST12B-XXX (crimp unshielded) M23-MSNSCPST12B-XXX (crimp shielded)	
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSNPST17A-XXX (solder unshielded) M23-MSNSPST17A-XXX (solder shielded) M23-MSNCPST17A-XXX (crimp unshielded) M23-MSNSCPST17A-XXX (crimp shielded)	
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSNPST17B-XXX (solder unshielded) M23-MSNSPST17B-XXX (solder shielded) M23-MSNCPST17B-XXX (crimp unshielded) M23-MSNSCPST17B-XXX (crimp shielded)	
9C (6+3)	6 / 3	1 / 2		19A (16+3)	16 / 3	1 / 1.5		M23-MSNPST19A-XXX (solder unshielded) M23-MSNSPST19A-XXX (solder shielded) M23-MSNCPST19A-XXX (crimp unshielded) M23-MSNSCPST19A-XXX (crimp shielded)
16A	1		M23-MSNPST16A-XXX (solder unshielded) M23-MSNSPST16A-XXX (solder shielded) M23-MSNCPST16A-XXX (crimp unshielded) M23-MSNSCPST16A-XXX (crimp shielded)					

Note: X refers to cable specification

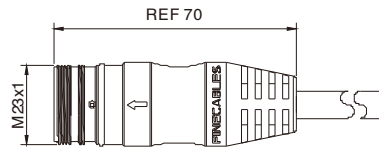
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Straight, Female Housing + Male Thread

- Connector series: M23 Signal
- Contacts: Socket
- Mounting type: Straight
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSSSST***-XXX (solder unshielded)
 M23-MSSSSST***-XXX (solder shielded)
 M23-MSSCSST***-XXX (crimp unshielded)
 M23-MSSSCSST***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Socket	Part No.	Contacts	Contact OD (mm)	Socket	Part No.
6A	2		M23-MSSSST06A-XXX (solder unshielded) M23-MSSSSST06A-XXX (solder shielded) M23-MSSCSST06A-XXX (crimp unshielded) M23-MSSSCSST06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSSSST12A-XXX (solder unshielded) M23-MSSSSST12A-XXX (solder shielded) M23-MSSCSST12A-XXX (crimp unshielded) M23-MSSSCSST12A-XXX (crimp shielded)
7A	2		M23-MSSSST07A-XXX (solder unshielded) M23-MSSSSST07A-XXX (solder shielded) M23-MSSCSST07A-XXX (crimp unshielded) M23-MSSSCSST07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSSSST12B-XXX (solder unshielded) M23-MSSSSST12B-XXX (solder shielded) M23-MSSCSST12B-XXX (crimp unshielded) M23-MSSSCSST12B-XXX (crimp shielded)
9A (8+1)	8 / 1 / 2		M23-MSSSST09A-XXX (solder unshielded) M23-MSSSSST09A-XXX (solder shielded) M23-MSSCSST09A-XXX (crimp unshielded) M23-MSSSCSST09A-XXX (crimp shielded)	17A (Standard)	1		M23-MSSSST17A-XXX (solder unshielded) M23-MSSSSST17A-XXX (solder shielded) M23-MSSCSST17A-XXX (crimp unshielded) M23-MSSSCSST17A-XXX (crimp shielded)
9B (8+1)	8 / 1 / 2		M23-MSSSST09B-XXX (solder unshielded) M23-MSSSSST09B-XXX (solder shielded) M23-MSSCSST09B-XXX (crimp unshielded) M23-MSSSCSST09B-XXX (crimp shielded)	17B (opposite)	1		M23-MSSSST17B-XXX (solder unshielded) M23-MSSSSST17B-XXX (solder shielded) M23-MSSCSST17B-XXX (crimp unshielded) M23-MSSSCSST17B-XXX (crimp shielded)
9C (6+3)	6 / 3 / 1 / 2		M23-MSSSST09C-XXX (solder unshielded) M23-MSSSSST09C-XXX (solder shielded) M23-MSSCSST09C-XXX (crimp unshielded) M23-MSSSCSST09C-XXX (crimp shielded)	19A (16+3)	16 / 3 / 1 / 1.5		M23-MSSSST19A-XXX (solder unshielded) M23-MSSSSST19A-XXX (solder shielded) M23-MSSCSST19A-XXX (crimp unshielded) M23-MSSSCSST19A-XXX (crimp shielded)
16A	1		M23-MSSSST16A-XXX (solder unshielded) M23-MSSSSST16A-XXX (solder shielded) M23-MSSCSST16A-XXX (crimp unshielded) M23-MSSSCSST16A-XXX (crimp shielded)				

Note: X refers to cable specification

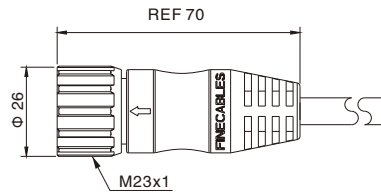
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Straight, Female Housing + Female Thread

- Connector series: M23 Signal
- Contacts: Socket
- Mounting type: Straight
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSNSST***-XXX (solder unshielded)
 M23-MSNSST***-XXX (solder shielded)
 M23-MSNCSST***-XXX (crimp unshielded)
 M23-MSNCSST***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Socket	Part No.	Contacts	Contact OD (mm)	Socket	Part No.	
6A	2		M23-MSNSST06A-XXX (solder unshielded) M23-MSNSST06A-XXX (solder shielded) M23-MSNCSST06A-XXX (crimp unshielded) M23-MSNCSST06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSNSST12A-XXX (solder unshielded) M23-MSNSST12A-XXX (solder shielded) M23-MSNCSST12A-XXX (crimp unshielded) M23-MSNCSST12A-XXX (crimp shielded)	
7A	2		M23-MSNSST07A-XXX (solder unshielded) M23-MSNSST07A-XXX (solder shielded) M23-MSNCSST07A-XXX (crimp unshielded) M23-MSNCSST07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSNSST12B-XXX (solder unshielded) M23-MSNSST12B-XXX (solder shielded) M23-MSNCSST12B-XXX (crimp unshielded) M23-MSNCSST12B-XXX (crimp shielded)	
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSNSST17A-XXX (solder unshielded) M23-MSNSST17A-XXX (solder shielded) M23-MSNCSST17A-XXX (crimp unshielded) M23-MSNCSST17A-XXX (crimp shielded)	
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSNSST17B-XXX (solder unshielded) M23-MSNSST17B-XXX (solder shielded) M23-MSNCSST17B-XXX (crimp unshielded) M23-MSNCSST17B-XXX (crimp shielded)	
9C (6+3)	6 / 3	1 / 2		19A (16+3)	16 / 3	1 / 1.5		M23-MSNSST19A-XXX (solder unshielded) M23-MSNSST19A-XXX (solder shielded) M23-MSNCSST19A-XXX (crimp unshielded) M23-MSNCSST19A-XXX (crimp shielded)
16A	1		M23-MSNSST16A-XXX (solder unshielded) M23-MSNSST16A-XXX (solder shielded) M23-MSNCSST16A-XXX (crimp unshielded) M23-MSNCSST16A-XXX (crimp shielded)					

Note: X refers to cable specification

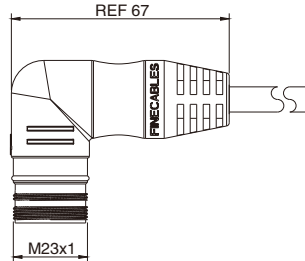
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Right Angle, Male Housing + Male Thread

- Connector series: M23 Signal
- Contacts: Pin
- Mounting type: Right Angle
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSSPRA***-XXX (solder unshielded)
 M23-MSSSPRA***-XXX (solder shielded)
 M23-MSSCPRA***-XXX (crimp unshielded)
 M23-MSSSCPRA***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Pin	Part No.	Contacts	Contact OD (mm)	Pin	Part No.	
6A	2		M23-MSSPRA06A-XXX (solder unshielded) M23-MSSSPRA06A-XXX (solder shielded) M23-MSSCPRA06A-XXX (crimp unshielded) M23-MSSSCPRA06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSSPRA12A-XXX (solder unshielded) M23-MSSSPRA12A-XXX (solder shielded) M23-MSSCPRA12A-XXX (crimp unshielded) M23-MSSSCPRA12A-XXX (crimp shielded)	
7A	2		M23-MSSPRA07A-XXX (solder unshielded) M23-MSSSPRA07A-XXX (solder shielded) M23-MSSCPRA07A-XXX (crimp unshielded) M23-MSSSCPRA07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSSPRA12B-XXX (solder unshielded) M23-MSSSPRA12B-XXX (solder shielded) M23-MSSCPRA12B-XXX (crimp unshielded) M23-MSSSCPRA12B-XXX (crimp shielded)	
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSSPRA17A-XXX (solder unshielded) M23-MSSSPRA17A-XXX (solder shielded) M23-MSSCPRA17A-XXX (crimp unshielded) M23-MSSSCPRA17A-XXX (crimp shielded)	
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSSPRA17B-XXX (solder unshielded) M23-MSSSPRA17B-XXX (solder shielded) M23-MSSCPRA17B-XXX (crimp unshielded) M23-MSSSCPRA17B-XXX (crimp shielded)	
9C (6+3)	6 / 3	1 / 2		19A (16+3)	16 / 3	1 / 1.5		M23-MSSPRA19A-XXX (solder unshielded) M23-MSSSPRA19A-XXX (solder shielded) M23-MSSCPRA19A-XXX (crimp unshielded) M23-MSSSCPRA19A-XXX (crimp shielded)
16A	1		M23-MSSPRA16A-XXX (solder unshielded) M23-MSSSPRA16A-XXX (solder shielded) M23-MSSCPRA16A-XXX (crimp unshielded) M23-MSSSCPRA16A-XXX (crimp shielded)					

Note: X refers to cable specification

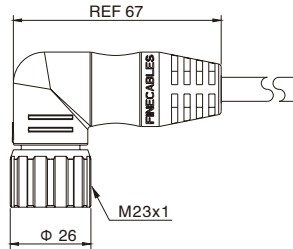
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Right Angle, Male Housing + Female Thread

- Connector series: M23 Signal
- Contacts: Pin
- Mounting type: Right Angle
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSNPRA***-XXX (solder unshielded)
 M23-MSNSPRA***-XXX (solder shielded)
 M23-MSNCPRA***-XXX (crimp unshielded)
 M23-MSNSCPRA***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information

Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Pin	Part No.	Contacts	Contact OD (mm)	Pin	Part No.	
6A	2		M23-MSNPRA06A-XXX (solder unshielded) M23-MSNSPRA06A-XXX (solder shielded) M23-MSNCPRA06A-XXX (crimp unshielded) M23-MSNSCPRA06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSNPRA12A-XXX (solder unshielded) M23-MSNSPRA12A-XXX (solder shielded) M23-MSNCPRA12A-XXX (crimp unshielded) M23-MSNSCPRA12A-XXX (crimp shielded)	
7A	2		M23-MSNPRA07A-XXX (solder unshielded) M23-MSNSPRA07A-XXX (solder shielded) M23-MSNCPRA07A-XXX (crimp unshielded) M23-MSNSCPRA07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSNPRA12B-XXX (solder unshielded) M23-MSNSPRA12B-XXX (solder shielded) M23-MSNCPRA12B-XXX (crimp unshielded) M23-MSNSCPRA12B-XXX (crimp shielded)	
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSNPRA17A-XXX (solder unshielded) M23-MSNSPRA17A-XXX (solder shielded) M23-MSNCPRA17A-XXX (crimp unshielded) M23-MSNSCPRA17A-XXX (crimp shielded)	
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSNPRA17B-XXX (solder unshielded) M23-MSNSPRA17B-XXX (solder shielded) M23-MSNCPRA17B-XXX (crimp unshielded) M23-MSNSCPRA17B-XXX (crimp shielded)	
9C (6+3)	6 / 3	1 / 2		19A (16+3)	16 / 3	1 / 1.5		M23-MSNPRA19A-XXX (solder unshielded) M23-MSNSPRA19A-XXX (solder shielded) M23-MSNCPRA19A-XXX (crimp unshielded) M23-MSNSCPRA19A-XXX (crimp shielded)
16A	1		M23-MSNPRA16A-XXX (solder unshielded) M23-MSNSPRA16A-XXX (solder shielded) M23-MSNCPRA16A-XXX (crimp unshielded) M23-MSNSCPRA16A-XXX (crimp shielded)					

Note: X refers to cable specification

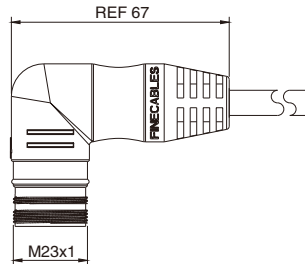
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Right Angle, Female Housing + Male Thread

- Connector series: M23 Signal
- Contacts: Socket
- Mounting type: Right Angle
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSSSRA***-XXX (solder unshielded)
 M23-MSSSSRA***-XXX (solder shielded)
 M23-MSSCSRA***-XXX (crimp unshielded)
 M23-MSSSCSRA***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU	Insulation resistance:	≥ 100MΩ
Connector insert:	PA	Contact resistance:	≤ 5mΩ
Connector contacts:	Brass with gold plated	Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
Coupling nut/screw:	Brass with nickel plated	IP rating:	IP68 in locked condition
Seal / O-ring:	FKM or NBR	Cable OD range:	2.0~13
Operation cycles:	>800		

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Socket	Part No.	Contacts	Contact OD (mm)	Socket	Part No.
6A	2		M23-MSSSRA06A-XXX (solder unshielded) M23-MSSSSRA06A-XXX (solder shielded) M23-MSSCSRA06A-XXX (crimp unshielded) M23-MSSSCSRA06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSSSRA12A-XXX (solder unshielded) M23-MSSSSRA12A-XXX (solder shielded) M23-MSSCSRA12A-XXX (crimp unshielded) M23-MSSSCSRA12A-XXX (crimp shielded)
7A	2		M23-MSSSRA07A-XXX (solder unshielded) M23-MSSSSRA07A-XXX (solder shielded) M23-MSSCSRA07A-XXX (crimp unshielded) M23-MSSSCSRA07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSSSRA12B-XXX (solder unshielded) M23-MSSSSRA12B-XXX (solder shielded) M23-MSSCSRA12B-XXX (crimp unshielded) M23-MSSSCSRA12B-XXX (crimp shielded)
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSSSRA17A-XXX (solder unshielded) M23-MSSSSRA17A-XXX (solder shielded) M23-MSSCSRA17A-XXX (crimp unshielded) M23-MSSSCSRA17A-XXX (crimp shielded)
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSSSRA17B-XXX (solder unshielded) M23-MSSSSRA17B-XXX (solder shielded) M23-MSSCSRA17B-XXX (crimp unshielded) M23-MSSSCSRA17B-XXX (crimp shielded)
9C (6+3)	6 / 3	1 / 2		19A (16+3)	1 / 1.5		M23-MSSSRA19A-XXX (solder unshielded) M23-MSSSSRA19A-XXX (solder shielded) M23-MSSCSRA19A-XXX (crimp unshielded) M23-MSSSCSRA19A-XXX (crimp shielded)
16A	1		M23-MSSSRA16A-XXX (solder unshielded) M23-MSSSSRA16A-XXX (solder shielded) M23-MSSCSRA16A-XXX (crimp unshielded) M23-MSSSCSRA16A-XXX (crimp shielded)				

Note: X refers to cable specification

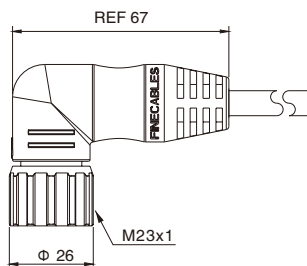
Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.

M23 Signal Molded Cable, Right Angle, Female Housing + Female Thread

- Connector series: M23 Signal
- Contacts: Socket
- Mounting type: Right Angle
- Shielding: Shielded or unshielded
- Connection Type: Solder/Crimp
- Part No.: M23-MSNSRA***-XXX (solder unshielded)
 M23-MSNSSRA***-XXX (solder shielded)
 M23-MSNCSRA***-XXX (crimp unshielded)
 M23-MSNSCSRA***-XXX (crimp shielded)

*** refers to pins number XXX refers to cable specification



General information



Connector overmold:	TPU
Connector insert:	PA
Connector contacts:	Brass with gold plated
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM or NBR
Operation cycles:	>800

Insulation resistance:	≥ 100MΩ
Contact resistance:	≤ 5mΩ
Ambient temperature:	-40°C ~ +80°C (fixed installation) -20°C ~ +80°C (flexible installation)
IP rating:	IP68 in locked condition
Cable OD range:	2.0~13

Electrical data & Mechanical data

Number of positions	6,7	9(8+1)/(6+3)		12	16	17	19(16+3)	
Contacts	6,7	8 / 6	1 / 3	12	16	17	16	3
Contact OD(mm)	2.0(14AWG)	1.0(18AWG)	2.0(14AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.0(18AWG)	1.5(16AWG)
Rated current @ 20°C(A)	20	8	20	8	8	8	8	10
Rated Voltage(V)	300	300	300	300	160	160	160	160
Impulse voltage(V)	2500	2500	2500	1500	1500	1500	1500	1500
Overvoltage category	II							
Pollution Degree	III							

Contacts	Contact OD (mm)	Socket	Part No.	Contacts	Contact OD (mm)	Socket	Part No.	
6A	2		M23-MSNSRA06A-XXX (solder unshielded) M23-MSNSSRA06A-XXX (solder shielded) M23-MSNCSRA06A-XXX (crimp unshielded) M23-MSNSCSRA06A-XXX (crimp shielded)	12A (Standard)	1		M23-MSNSRA12A-XXX (solder unshielded) M23-MSNSSRA12A-XXX (solder shielded) M23-MSNCSRA12A-XXX (crimp unshielded) M23-MSNSCSRA12A-XXX (crimp shielded)	
7A	2		M23-MSNSRA07A-XXX (solder unshielded) M23-MSNSSRA07A-XXX (solder shielded) M23-MSNCSRA07A-XXX (crimp unshielded) M23-MSNSCSRA07A-XXX (crimp shielded)	12B (opposite)	1		M23-MSNSRA12B-XXX (solder unshielded) M23-MSNSSRA12B-XXX (solder shielded) M23-MSNCSRA12B-XXX (crimp unshielded) M23-MSNSCSRA12B-XXX (crimp shielded)	
9A (8+1)	8 / 1	1 / 2		17A (Standard)	1		M23-MSNSRA17A-XXX (solder unshielded) M23-MSNSSRA17A-XXX (solder shielded) M23-MSNCSRA17A-XXX (crimp unshielded) M23-MSNSCSRA17A-XXX (crimp shielded)	
9B (8+1)	8 / 1	1 / 2		17B (opposite)	1		M23-MSNSRA17B-XXX (solder unshielded) M23-MSNSSRA17B-XXX (solder shielded) M23-MSNCSRA17B-XXX (crimp unshielded) M23-MSNSCSRA17B-XXX (crimp shielded)	
9C (6+3)	6 / 3	1 / 2		19A (16+3)	16 / 3	1 / 1.5		M23-MSNSRA19A-XXX (solder unshielded) M23-MSNSSRA19A-XXX (solder shielded) M23-MSNCSRA19A-XXX (crimp unshielded) M23-MSNSCSRA19A-XXX (crimp shielded)
16A	1		M23-MSNSRA16A-XXX (solder unshielded) M23-MSNSSRA16A-XXX (solder shielded) M23-MSNCSRA16A-XXX (crimp unshielded) M23-MSNSCSRA16A-XXX (crimp shielded)					

Note: X refers to cable specification

Remarks

- Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm².
- Please refer to Page 365 for products' part number encoding rule.