

## M12-A Circular Connector

30/60/125/250V 1.5/2/4A

## Technical characteristics

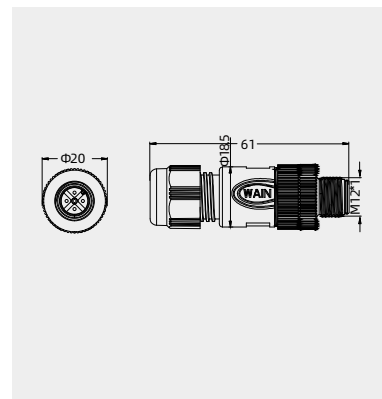
|                          | 3-pole                              | 4-pole                              | 5-pole                              | 8-pole                            | 12-pole                            |
|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|------------------------------------|
| Rated current (40°C)     | 4A                                  | 4A                                  | 4A                                  | 2A                                | 1.5A                               |
| Rated voltage            | 250V                                | 250V                                | 125V                                | 60V                               | 30V                                |
| Rated impulse voltage    | 2500V                               | 2500V                               | 1500V                               | 800V                              | 800V                               |
| Pollution degree         | 3                                   | 3                                   | 3                                   | 3                                 | 3                                  |
| Overvoltage categorie    | II                                  | II                                  | II                                  | II                                | II                                 |
| Contact resistance       | ≤ 10 mΩ                             | ≤ 10 mΩ                             | ≤ 10 mΩ                             | ≤ 10 mΩ                           | ≤ 10 mΩ                            |
| Connector locking system | screw M12x1                         | screw M12x1                         | screw M12x1                         | screw M12x1                       | screw M12x1                        |
| Termination              | screw/solder                        | screw/solder                        | screw/solder                        | screw/solder                      | solder                             |
| Wire gauge               | max.0.75mm <sup>2</sup> (max.AWG18) | max.0.75mm <sup>2</sup> (max.AWG18) | max.0.75mm <sup>2</sup> (max.AWG18) | max.0.5mm <sup>2</sup> max.AWG20) | max.0.25mm <sup>2</sup> max.AWG24) |
| Cable outlet             | 4-6,6-8 mm                          | 4-6,6-8 mm                          | 4-6,6-8 mm                          | 6-8 mm                            | 6-8 mm                             |
| Degree of protection     | IP67                                | IP67                                | IP67                                | IP67                              | IP67                               |
| Mechanical operation     | > 100                               | > 100                               | > 100                               | > 100                             | > 100                              |
| Limiting temperature     | -40°C ...+85°C                      | -40°C ...+85°C                      | -40°C ...+85°C                      | -40°C ...+85°C                    | -40°C ...+85°C                     |
| Material group           | III                                 | III                                 | III                                 | III                               | III                                |
| Material of contact      | copper alloy                        | copper alloy                        | copper alloy                        | copper alloy                      | copper alloy                       |
| Contact plating          | Au                                  | Au                                  | Au                                  | Au                                | Au                                 |
| Insulating material      | PA                                  | PA                                  | PA                                  | PA                                | PA                                 |
| Material of housing      | PA/PBT                              | PA/PBT                              | PA/PBT                              | PA/PBT                            | PA/PBT                             |

## Straight cable connectors

Male cable connector,  
metal locking system,  
screw clamp connection  
**Recommended use**



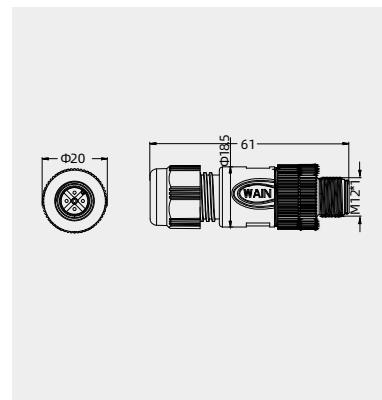
| Contacts | Cable outlet | Designation   | Order No.        |
|----------|--------------|---------------|------------------|
| 3        | 4-6 mm       | M12-M03A-T-D6 | 163 003 411 3001 |
|          | 6-8 mm       | M12-M03A-T-D8 | 163 003 411 3002 |
| 4        | 4-6 mm       | M12-M04A-T-D6 | 163 004 411 3001 |
|          | 6-8 mm       | M12-M04A-T-D8 | 163 004 411 3002 |
| 5        | 4-6 mm       | M12-M05A-T-D6 | 163 005 411 3001 |
|          | 6-8 mm       | M12-M05A-T-D8 | 163 005 411 3002 |
| 8        | 6-8 mm       | M12-M08A-T-D8 | 163 008 411 3002 |



Male cable connector,  
metal locking system,solder  
**Recommended use**



| Contacts | Cable outlet | Designation     | Order No.        |
|----------|--------------|-----------------|------------------|
| 3        | 4-6 mm       | M12-MST03A-T-D6 | 163 003 413 3504 |
|          | 6-8 mm       | M12-MST03A-T-D8 | 163 003 413 3505 |
| 4        | 4-6 mm       | M12-MST04A-T-D6 | 163 004 413 3501 |
|          | 6-8 mm       | M12-MST04A-T-D8 | 163 004 413 3510 |
| 5        | 4-6 mm       | M12-MST05A-T-D6 | 163 005 413 3508 |
|          | 6-8 mm       | M12-MST05A-T-D8 | 163 005 413 3509 |
| 8        | 4-6 mm       | M12-MST08A-T-D6 | 163 008 413 3500 |
|          | 6-8 mm       | M12-MST08A-T-D8 | 163 008 413 3501 |
| 12       | 6-8 mm       | M12-MST12A-T-D8 | 163 012 413 3002 |



## Hexagonal driver



| Description                         | Designation | Order No.        |
|-------------------------------------|-------------|------------------|
| for 8 pin screw<br>clamp connection | SW-1.27*47  | 198 001 003 0016 |