

# Square tube connectors

## Technopolymer and steel

### CONNECTOR

It consists of two parts made out of polyamide (PA) based technopolymer, black or grey colour, matte finish.

### REINFORCEMENT

Zinc-plated steel or stainless steel (STC-SST).

### COLOR

Black or grey, matte finish.

### STANDARD EXECUTIONS

- **1A-2W**: monodimensional two-way connector.
- **2A-2W**: bidimensional two-way connector.
- **2A-3W**: bidimensional three-way connector.
- **2A-4W**: bidimensional four-way connector.
- **3A-3W**: tridimensional three-way connector.
- **3A-4W**: tridimensional four-way connector.
- **3A-5W**: tridimensional five-way connector.
- **3A-6W**: tridimensional six-way connector.

Index for connectors with reinforcement:

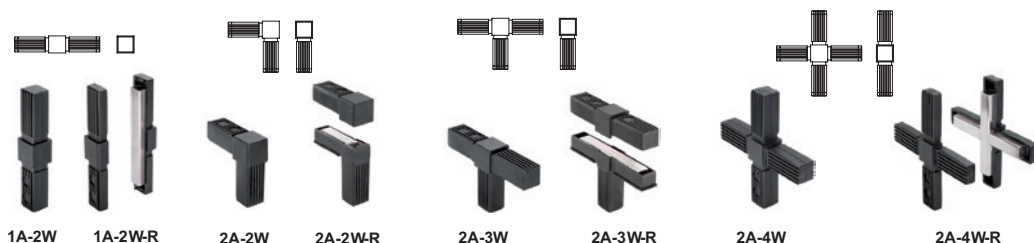
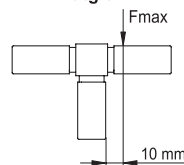
- **R**: zinc-plated steel reinforcement.
- **R-M10**: zinc-plated steel reinforcement with threaded hole.
- **R-SST**: stainless steel reinforcement.

### FEATURES AND APPLICATIONS

Suitable for creating structures composed by square profiles. The assembly can be performed simply by positioning the connector, forcing it, inside the profile, with no need of screws or other fasteners. The maximum limit static load for each arm of the connectors with steel reinforcement (STC-R and STC-R-SST) is shown in Fig. 1. The maximum limit static load is the value above which, under particular conditions of use, the load applied to the element may cause breakage. As a consequence, a suitable factor must be applied to this value, according to the importance and safety level of the specific application.



Fig.1

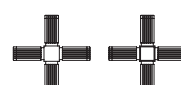
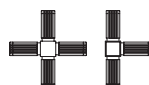


1A-2W 1A-2W-R

2A-2W 2A-2W-R

2A-3W 2A-3W-R

2A-4W 2A-4W-R



3A-3W

3A-3W-R

3A-4W

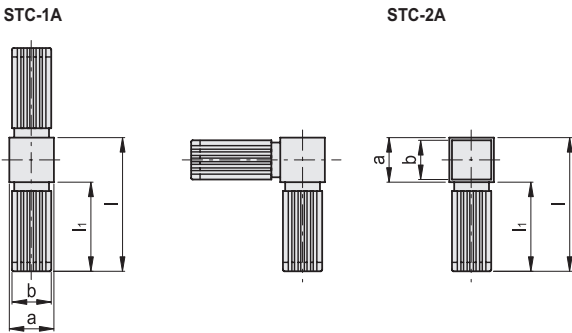
3A-4W-R

3A-5W

3A-5W-R

3A-6W

3A-6W-R



C9

C33

RAL9005

RAL7040

The drawing shows the assembled connector. The two tecnopolymer pieces composing it may have different shapes depending on the dimensions and / or executions.

STC-1A

| Code   | Description       | Code   | Description        | a  | b         | l  | li | External tube dimensions | Internal tube dimensions | Thickness | Fmax [N] | ⚖️  |
|--------|-------------------|--------|--------------------|----|-----------|----|----|--------------------------|--------------------------|-----------|----------|-----|
| 430001 | STC.20-1A-2W-C9   | 430004 | STC.20-1A-2W-C33   | 20 | 17+/-0.15 | 50 | 45 | 20                       | 17                       | 1.5       | -        | 46  |
| 430051 | STC.25-1A-2W-C9   | 430049 | STC.25-1A-2W-C33   | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5       | -        | 100 |
| 430101 | STC.30-1A-2W-C9   | 430104 | STC.30-1A-2W-C33   | 30 | 26+/-0.17 | 76 | 46 | 30                       | 26                       | 2         | -        | 107 |
| 430002 | STC.20-1A-2W-R-C9 | 430005 | STC.20-1A-2W-R-C33 | 20 | 17+/-0.15 | 50 | 45 | 20                       | 17                       | 1.5       | 2000     | 46  |
| 430052 | STC.25-1A-2W-R-C9 | 430050 | STC.25-1A-2W-R-C33 | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5       | 4000     | 100 |
| 430102 | STC.30-1A-2W-R-C9 | 430105 | STC.30-1A-2W-R-C33 | 30 | 26+/-0.17 | 76 | 46 | 30                       | 26                       | 2         | 4000     | 107 |

STC-2A

| Code   | Description       | Code   | Description        | a  | b         | l  | li | External tube dimensions | Internal tube dimensions | Thickness | Fmax [N] | ⚖️  |
|--------|-------------------|--------|--------------------|----|-----------|----|----|--------------------------|--------------------------|-----------|----------|-----|
| 430011 | STC.20-2A-2W-C9   | 430012 | STC.20-2A-2W-C33   | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | -        | 15  |
| 430061 | STC.25-2A-2W-C9   | 430062 | STC.25-2A-2W-C33   | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5       | -        | 31  |
| 430111 | STC.30-2A-2W-C9   | 430112 | STC.30-2A-2W-C33   | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | -        | 51  |
| 430016 | STC.20-2A-3W-C9   | 430017 | STC.20-2A-3W-C33   | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | -        | 20  |
| 430066 | STC.25-2A-3W-C9   | 430067 | STC.25-2A-3W-C33   | 25 | 22+/-0.15 | 76 | 51 | 25                       | 22                       | 1.5       | -        | 42  |
| 430116 | STC.30-2A-3W-C9   | 430117 | STC.30-2A-3W-C33   | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | -        | 68  |
| 430021 | STC.20-2A-4W-C9   | 430022 | STC.20-2A-4W-C33   | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | -        | 26  |
| 430071 | STC.25-2A-4W-C9   | 430072 | STC.25-2A-4W-C33   | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5       | -        | 57  |
| 430121 | STC.30-2A-4W-C9   | 430122 | STC.30-2A-4W-C33   | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | -        | 80  |
| 430013 | STC.20-2A-2W-R-C9 | 430014 | STC.20-2A-2W-R-C33 | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | 2000     | 89  |
| 430063 | STC.25-2A-2W-R-C9 | 430064 | STC.25-2A-2W-R-C33 | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5       | 4000     | 120 |
| 430113 | STC.30-2A-2W-R-C9 | 430114 | STC.30-2A-2W-R-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 139 |
| 430018 | STC.20-2A-3W-R-C9 | 430019 | STC.20-2A-3W-R-C33 | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | 2000     | 151 |
| 430068 | STC.25-2A-3W-R-C9 | 430069 | STC.25-2A-3W-R-C33 | 25 | 22+/-0.15 | 76 | 51 | 25                       | 22                       | 1.5       | 4000     | 162 |
| 430118 | STC.30-2A-3W-R-C9 | 430119 | STC.30-2A-3W-R-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 180 |
| 430023 | STC.20-2A-4W-R-C9 | 430024 | STC.20-2A-4W-R-C33 | 20 | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5       | 2000     | 205 |
| 430073 | STC.25-2A-4W-R-C9 | 430074 | STC.25-2A-4W-R-C33 | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5       | 4000     | 95  |
| 430123 | STC.30-2A-4W-R-C9 | 430124 | STC.30-2A-4W-R-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 130 |

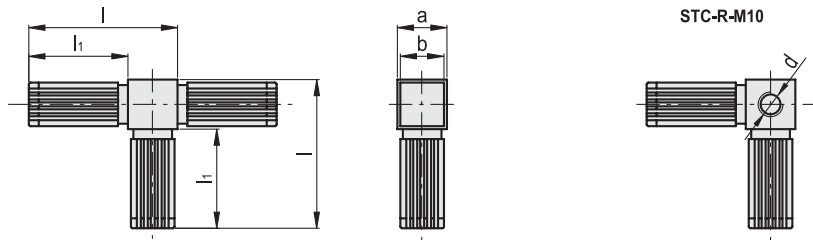
STC-2A-SST

STAINLESS STEEL

| Code   | Description           | Code   | Description            | a  | b         | l  | li | External tube dimensions | Internal tube dimensions | Thickness | Fmax [N] | ⚖️  |
|--------|-----------------------|--------|------------------------|----|-----------|----|----|--------------------------|--------------------------|-----------|----------|-----|
| 430151 | STC.25-2A-2W-R-SST-C9 | 430152 | STC.25-2A-2W-R-SST-C33 | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5       | 4000     | 95  |
| 430171 | STC.30-2A-2W-R-SST-C9 | 430172 | STC.30-2A-2W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 115 |
| 430153 | STC.25-2A-3W-R-SST-C9 | 430154 | STC.25-2A-3W-R-SST-C33 | 25 | 22+/-0.15 | 76 | 51 | 25                       | 22                       | 1.5       | 4000     | 130 |
| 430173 | STC.30-2A-3W-R-SST-C9 | 430174 | STC.30-2A-3W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 156 |
| 430155 | STC.25-2A-4W-R-SST-C9 | 430156 | STC.25-2A-4W-R-SST-C33 | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5       | 4000     | 174 |
| 430175 | STC.30-2A-4W-R-SST-C9 | 430176 | STC.30-2A-4W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2         | 4000     | 196 |



Levelling elements 11



The drawing shows the assembled connector. The two tecnopolymer pieces composing it may have different shapes depending on the dimensions and / or executions.

C9 C33  
RAL9005 RAL7040

STC-3A

| Code   | Description           | Code   | Description                   | d  | a         | b         | l  | l1 | External tube dimensions | Internal tube dimensions | Thick-ness | Fmax [N] | ⚖   |
|--------|-----------------------|--------|-------------------------------|----|-----------|-----------|----|----|--------------------------|--------------------------|------------|----------|-----|
| 430026 | STC.20-3A-3W-C9       | 430027 | STC.20-3A-3W-C33              | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | -        | 19  |
| 430076 | STC.25-3A-3W-C9       | 430077 | STC.25-3A-3W-C33              | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | -        | 46  |
| 430126 | STC.30-3A-3W-C9       | 430127 | STC.30-3A-3W-C33              | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | -        | 68  |
| 430031 | STC.20-3A-4W-C9       | 430032 | STC.20-3A-4W-C33              | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | -        | 25  |
| 430081 | STC.25-3A-4W-C9       | 430082 | STC.25-3A-4W-C33              | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | -        | 56  |
| 430131 | STC.30-3A-4W-C9       | 430132 | STC.30-3A-4W-C33              | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | -        | 86  |
| 430036 | STC.20-3A-5W-C9       | 430037 | STC.20-3A-5W-C33              | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | -        | 30  |
| 430086 | STC.25-3A-5W-C9       | 430087 | STC.25-3A-5W-C33              | -  | 25        | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5        | -        | 69  |
| 430136 | STC.30-3A-5W-C9       | 430137 | STC.30-3A-5W-C33              | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | -        | 96  |
| 430041 | STC.20-3A-6W-C9       | 430042 | STC.20-3A-6W-C33              | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | -        | 41  |
| 430091 | STC.25-3A-6W-C9       | 430092 | STC.25-3A-6W-C33              | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | -        | 87  |
| 430141 | STC.30-3A-6W-C9       | 430142 | STC.30-3A-6W-C33              | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | -        | 113 |
| 430028 | STC.20-3A-3W-R-C9     | 430029 | STC.20-3A-3W-R-C33            | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | 2000     | 160 |
| 430078 | STC.25-3A-3W-R-C9     | 430079 | STC.25-3A-3W-R-C33            | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 174 |
| 430128 | STC.30-3A-3W-R-C9     | 430129 | STC.30-3A-3W-R-C33            | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 180 |
| 430033 | STC.20-3A-4W-R-C9     | 430034 | STC.20-3A-4W-R-C33            | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | 2000     | 212 |
| 430083 | STC.25-3A-4W-R-C9     | 430084 | STC.25-3A-4W-R-C33            | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 259 |
| 430133 | STC.30-3A-4W-R-C9     | 430134 | STC.30-3A-4W-R-C33            | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 115 |
| 430038 | STC.20-3A-5W-R-C9     | 430039 | STC.20-3A-5W-R-C33            | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | 2000     | 156 |
| 430088 | STC.25-3A-5W-R-C9     | 430089 | STC.25-3A-5W-R-C33            | -  | 25        | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5        | 4000     | 196 |
| 430138 | STC.30-3A-5W-R-C9     | 430139 | STC.30-3A-5W-R-C33            | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 158 |
| 430043 | STC.20-3A-6W-R-C9     | 430044 | STC.20-3A-6W-R-C33            | -  | 20        | 17+/-0.15 | 56 | 36 | 20                       | 17                       | 1.5        | 2000     | 204 |
| 430093 | STC.25-3A-6W-R-C9     | 430094 | STC.25-3A-6W-R-C33            | -  | 25        | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 240 |
| 430143 | STC.30-3A-6W-R-C9     | 430144 | STC.30-3A-6W-R-C33            | -  | 30        | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 285 |
| 430096 | STC.25-3A-3W-R-M10-C9 | 430097 | STC.25-3A-3W-R-M10-C33 M10x25 | 25 | 22+/-0.15 | 77        | 52 | 25 | 25                       | 22                       | 1.5        | 4000     | 136 |
| 430146 | STC.30-3A-3W-R-M10-C9 | 430147 | STC.30-3A-3W-R-M10-C33 M10x30 | 30 | 26+/-0.17 | 77        | 47 | 30 | 30                       | 26                       | 2          | 4000     | 158 |
| 430098 | STC.25-3A-4W-R-M10-C9 | 430099 | STC.25-3A-4W-R-M10-C33 M10x25 | 25 | 22+/-0.15 | 77        | 52 | 25 | 25                       | 22                       | 1.5        | 4000     | 174 |
| 430148 | STC.30-3A-4W-R-M10-C9 | 430149 | STC.30-3A-4W-R-M10-C33 M10x30 | 30 | 26+/-0.17 | 77        | 47 | 30 | 30                       | 26                       | 2          | 4000     | 204 |

STC-3A-SST

STAINLESS STEEL

| Code   | Description           | Code   | Description            | a  | b         | l  | l1 | External tube dimensions | Internal tube dimensions | Thick-ness | Fmax [N] | ⚖   |
|--------|-----------------------|--------|------------------------|----|-----------|----|----|--------------------------|--------------------------|------------|----------|-----|
| 430157 | STC.25-3A-3W-R-SST-C9 | 430158 | STC.25-3A-3W-R-SST-C33 | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 136 |
| 430177 | STC.30-3A-3W-R-SST-C9 | 430178 | STC.30-3A-3W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 158 |
| 430159 | STC.25-3A-4W-R-SST-C9 | 430160 | STC.25-3A-4W-R-SST-C33 | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 174 |
| 430179 | STC.30-3A-4W-R-SST-C9 | 430180 | STC.30-3A-4W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 204 |
| 430161 | STC.25-3A-5W-R-SST-C9 | 430162 | STC.25-3A-5W-R-SST-C33 | 25 | 22+/-0.15 | 79 | 54 | 25                       | 22                       | 1.5        | 4000     | 212 |
| 430181 | STC.30-3A-5W-R-SST-C9 | 430182 | STC.30-3A-5W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 240 |
| 430163 | STC.25-3A-6W-R-SST-C9 | 430164 | STC.25-3A-6W-R-SST-C33 | 25 | 22+/-0.15 | 77 | 52 | 25                       | 22                       | 1.5        | 4000     | 259 |
| 430183 | STC.30-3A-6W-R-SST-C9 | 430184 | STC.30-3A-6W-R-SST-C33 | 30 | 26+/-0.17 | 77 | 47 | 30                       | 26                       | 2          | 4000     | 285 |