

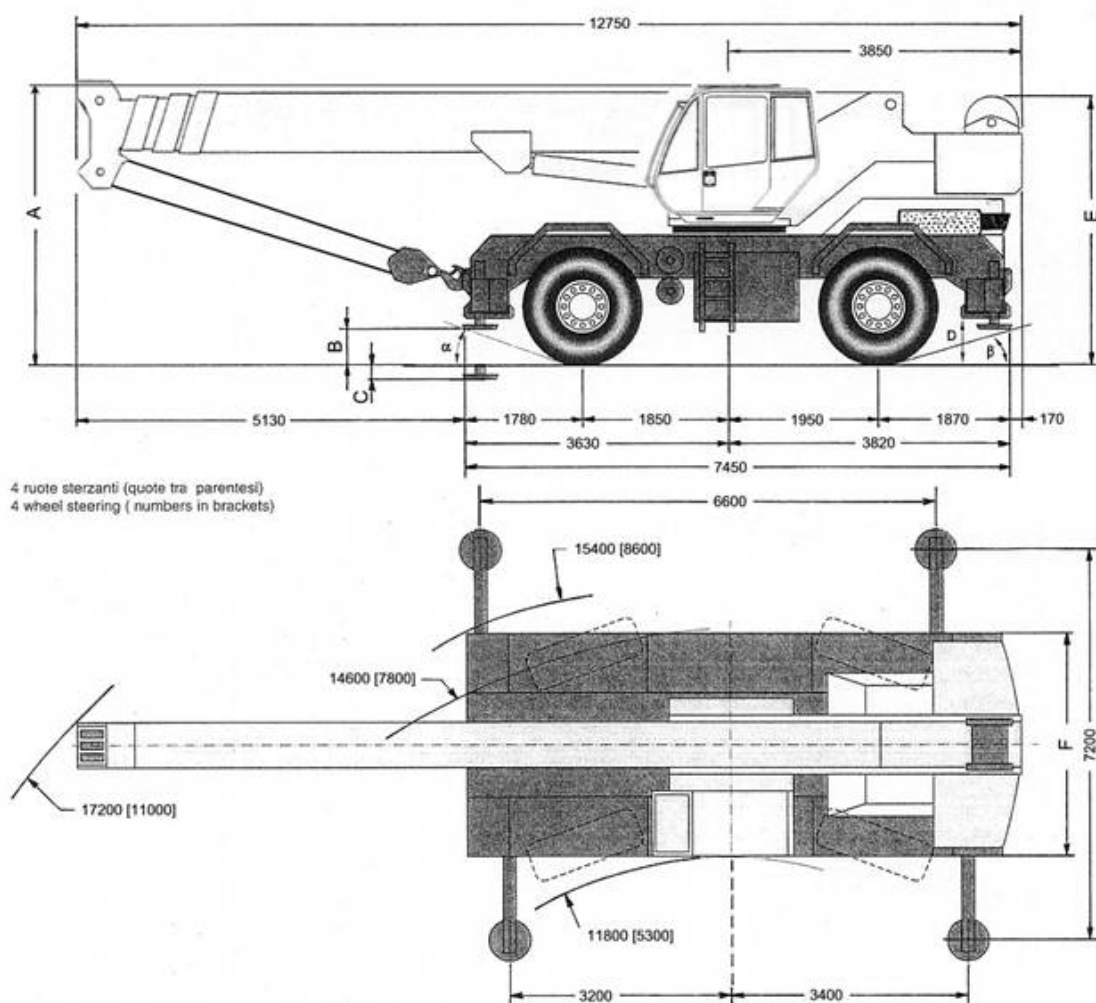


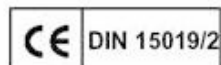
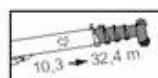
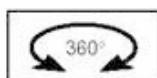
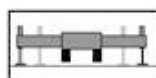
**LUANDA**

Pólo Industrial de Viana  
Estrada do Zango  
Viana  
Tel: (+224) 922 240 240  
E-mail: angola@transgrua.pt

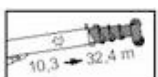
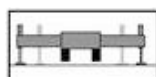
**BENGUELA**

Estrada do Lubango  
Benguela  
Tel: (+224) 949 439 372





|                                     | BRACCIO PRINCIPALE / MAIN BOOM<br>HAUPTAUSLEGER/FLECHE PRINCIPALE |                        |                         |                             |                             |                             |                               |                                           |
|-------------------------------------|-------------------------------------------------------------------|------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------------------|
|                                     | 10.30                                                             | 14.00                  | 17.70                   | 21.30                       | 25.00                       | 28.70                       | 32.40                         |                                           |
|                                     | DIN                                                               | DIN                    | DIN                     | DIN                         | DIN                         | DIN                         | DIN                           |                                           |
| 3                                   | 60.00                                                             |                        |                         |                             |                             |                             |                               | 3                                         |
| 4                                   | 45.00                                                             | 41.00                  | 33.80                   |                             |                             |                             |                               | 4                                         |
| 5                                   | 36.00                                                             | 36.00                  | 28.50                   | 24.70                       | 19.90                       |                             |                               | 5                                         |
| 6                                   | 31.50                                                             | 29.00                  | 25.50                   | 21.80                       | 18.10                       | 15.50                       |                               | 6                                         |
| 7                                   | 25.00                                                             | 24.00                  | 21.50                   | 19.00                       | 16.40                       | 14.40                       | 11.70                         | 7                                         |
| 8                                   | 19.80                                                             | 19.50                  | 18.60                   | 16.90                       | 14.70                       | 13.10                       | 11.00                         | 8                                         |
| 9                                   |                                                                   | 17.00                  | 16.80                   | 14.70                       | 13.40                       | 12.30                       | 10.60                         | 9                                         |
| 10                                  |                                                                   | 14.00                  | 13.80                   | 13.50                       | 12.10                       | 11.20                       | 9.60                          | 10                                        |
| 12                                  |                                                                   | 10.90                  | 9.70                    | 9.70                        | 9.00                        | 9.50                        | 8.20                          | 12                                        |
| 14                                  |                                                                   |                        | 6.80                    | 7.20                        | 7.20                        | 7.10                        | 7.10                          | 14                                        |
| 16                                  |                                                                   |                        |                         | 5.80                        | 5.80                        | 5.80                        | 5.80                          | 16                                        |
| 18                                  |                                                                   |                        |                         | 4.50                        | 4.50                        | 4.40                        | 4.30                          | 18                                        |
| 20                                  |                                                                   |                        |                         |                             | 3.60                        | 3.40                        | 3.70                          | 20                                        |
| 22                                  |                                                                   |                        |                         |                             | 2.30                        | 2.80                        | 3.10                          | 22                                        |
| 24                                  |                                                                   |                        |                         |                             |                             | 2.60                        | 2.80                          | 24                                        |
| 26                                  |                                                                   |                        |                         |                             |                             | 2.00                        | 2.30                          | 26                                        |
| 28                                  |                                                                   |                        |                         |                             |                             |                             | 1.80                          | 28                                        |
| 30                                  |                                                                   |                        |                         |                             |                             |                             | 1.50                          | 30                                        |
| SEZIONI ESTESE<br>EXTENDED SECTIONS | 1° 0<br>2° 0<br>3° 0                                              | 1° 50%<br>2° 0<br>3° 0 | 1° 100%<br>2° 0<br>3° 0 | 1° 100%<br>2° 25%<br>3° 25% | 1° 100%<br>2° 50%<br>3° 50% | 1° 100%<br>2° 75%<br>3° 75% | 1° 100%<br>2° 100%<br>3° 100% | AUSLEGER SEKTIONEN<br>ELEMENTS TELESCOPES |



85% SAE J765

|                                     | BRACCIO PRINCIPALE / MAIN BOOM<br>HAUPTAUSLEGER/FLECHE PRINCIPALE |                        |                         |                             |                             |                             |                               |                                           |
|-------------------------------------|-------------------------------------------------------------------|------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------------------|
|                                     | 10.30                                                             | 14.00                  | 17.70                   | 21.30                       | 25.00                       | 28.70                       | 32.40                         |                                           |
|                                     | 85%                                                               | 85%                    | 85%                     | 85%                         | 85%                         | 85%                         | 85%                           |                                           |
| 3                                   | 60.00                                                             |                        |                         |                             |                             |                             |                               | 3                                         |
| 4                                   | 49.00                                                             | 41.00                  | 34.40                   |                             |                             |                             |                               | 4                                         |
| 5                                   | 38.50                                                             | 36.00                  | 29.70                   | 26.30                       | 21.10                       |                             |                               | 5                                         |
| 6                                   | 33.30                                                             | 29.00                  | 26.20                   | 23.00                       | 19.30                       | 16.30                       |                               | 6                                         |
| 7                                   | 26.50                                                             | 25.00                  | 22.60                   | 20.30                       | 17.50                       | 14.90                       | 12.30                         | 7                                         |
| 8                                   | 21.50                                                             | 21.00                  | 20.00                   | 17.90                       | 16.20                       | 13.80                       | 11.60                         | 8                                         |
| 9                                   |                                                                   | 19.00                  | 18.00                   | 15.50                       | 15.00                       | 12.80                       | 11.20                         | 9                                         |
| 10                                  |                                                                   | 16.00                  | 15.30                   | 14.20                       | 11.70                       | 12.00                       | 10.40                         | 10                                        |
| 12                                  |                                                                   | 10.90                  | 10.90                   | 10.90                       | 10.00                       | 10.30                       | 9.10                          | 12                                        |
| 14                                  |                                                                   |                        | 7.30                    | 8.10                        | 8.10                        | 8.00                        | 8.00                          | 14                                        |
| 16                                  |                                                                   |                        |                         | 6.30                        | 6.30                        | 6.30                        | 6.30                          | 16                                        |
| 18                                  |                                                                   |                        |                         | 4.60                        | 4.60                        | 4.70                        | 4.60                          | 18                                        |
| 20                                  |                                                                   |                        |                         |                             | 3.50                        | 4.20                        | 4.10                          | 20                                        |
| 22                                  |                                                                   |                        |                         |                             | 2.60                        | 3.30                        | 3.60                          | 22                                        |
| 24                                  |                                                                   |                        |                         |                             |                             | 2.80                        | 3.00                          | 24                                        |
| 26                                  |                                                                   |                        |                         |                             |                             | 2.30                        | 2.60                          | 26                                        |
| 28                                  |                                                                   |                        |                         |                             |                             |                             | 2.10                          | 28                                        |
| 30                                  |                                                                   |                        |                         |                             |                             |                             | 1.70                          | 30                                        |
| SEZIONI ESTESE<br>EXTENDED SECTIONS | 1° 0<br>2° 0<br>3° 0                                              | 1° 50%<br>2° 0<br>3° 0 | 1° 100%<br>2° 0<br>3° 0 | 1° 100%<br>2° 25%<br>3° 25% | 1° 100%<br>2° 50%<br>3° 50% | 1° 100%<br>2° 75%<br>3° 75% | 1° 100%<br>2° 100%<br>3° 100% | AUSLEGER SEKTIONEN<br>ELEMENTS TELESCOPES |



|  | 18.00 R 25                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | STATICHE / STATIONARY / STATIQUE / STATISCH                                       |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  | IN TRASLAZIONE 3 KM/H / PICK AND CARRY UP TO 3 KM/H<br>EN TRANSLATION JUSQU'À 3 KM/H / VERFAHRBAR |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------|
|                                                                                   | SETTORE FRONTALE / OVER FRONT / SUR L'AVANT / NACH VORNE ± 3°                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | SU 360° / OVER 360° / SUR 360° / BEI 360°                                         |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  | SETTORE FRONTALE / OVER FRONT / SUR L'AVANT / NACH VORNE ± 3°                                     |  |  |  |  |  |  |  |                                                                                     |
|                                                                                   | 10,3 m                                                                            | 14 m                                                                              | 17,7 m                                                                            | 21,3 m                                                                            | 25 m                                                                              | 10,3 m                                                                            | 14 m                                                                              | 17,7 m                                                                            | 10,3 m                                                                            | 14 m                                                                               | 17,7 m                                                                              | 21,3 m                                                                              | 25 m                                                                                |                                                                                     |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
|                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                               | DIN                                                                                | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 |                                                                                     |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 3                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 3,5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 3,5                                                                                 |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 4                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 4,5                                                                               | 13,60                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 13,60                                                                             |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 4,5                                                                                 |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 5                                                                                 | 12,20                                                                             | 11,90                                                                             |                                                                                   |                                                                                   |                                                                                   | 7,60                                                                              | 7,00                                                                              |                                                                                   | 12,20                                                                             | 11,90                                                                              |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 6                                                                                 | 10,00                                                                             | 9,70                                                                              |                                                                                   |                                                                                   |                                                                                   | 5,50                                                                              | 5,00                                                                              | 4,60                                                                              | 10,00                                                                             | 9,70                                                                               |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 7                                                                                 | 8,30                                                                              | 8,00                                                                              | 7,70                                                                              |                                                                                   |                                                                                   | 4,10                                                                              | 3,60                                                                              | 3,30                                                                              | 8,30                                                                              | 8,00                                                                               | 7,70                                                                                |                                                                                     |                                                                                     | 7                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 8                                                                                 | 6,80                                                                              | 6,60                                                                              | 6,40                                                                              |                                                                                   |                                                                                   | 3,20                                                                              | 2,60                                                                              | 2,30                                                                              | 6,80                                                                              | 6,60                                                                               | 6,40                                                                                |                                                                                     |                                                                                     | 8                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 9                                                                                 |                                                                                   | 5,60                                                                              | 5,40                                                                              |                                                                                   |                                                                                   |                                                                                   | 1,90                                                                              | 1,60                                                                              |                                                                                   | 5,60                                                                               | 5,40                                                                                |                                                                                     |                                                                                     | 9                                                                                   |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 10                                                                                |                                                                                   | 4,70                                                                              | 4,50                                                                              | 4,90                                                                              | 4,90                                                                              |                                                                                   | 1,20                                                                              | 1,00                                                                              |                                                                                   | 4,70                                                                               | 4,50                                                                                | 4,90                                                                                | 4,90                                                                                | 10                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 12                                                                                |                                                                                   | 3,30                                                                              | 3,10                                                                              | 3,60                                                                              | 3,60                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3,30                                                                               | 3,10                                                                                | 3,60                                                                                | 3,60                                                                                | 12                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 14                                                                                |                                                                                   |                                                                                   | 1,80                                                                              | 2,20                                                                              | 2,20                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1,80                                                                                | 2,20                                                                                | 2,20                                                                                | 14                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 1,40                                                                              | 1,40                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1,40                                                                                | 1,40                                                                                | 16                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 18                                                                                |                                                                                   |                                                                                   |                                                                                   | 0,80                                                                              | 0,80                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0,80                                                                                | 0,80                                                                                | 18                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |
| 20                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 20                                                                                  |  |  |                                                                                                   |  |  |  |  |  |  |  |                                                                                     |



|  | 23.5 R 25<br>26.5 R 25                                                              |                                                                                     | STATICHE / STATIONARY / STATIQUE / STATISCH                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | IN TRASLAZIONE 3 KM/H / PICK AND CARRY UP TO 3 KM/H<br>EN TRANSLATION JUSQU'A 3 KM/H / VERFAHRBAR |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                     | SETTORE FRONTALE / OVER FRONT / SUR L'AVANT / NACH VORNE ± 3°                       |                                                                                     |                                                                                     |                                                                                     |                                                                                     | SU 360° / OVER 360° / SUR 360° / BEI 360°                                           |                                                                                     |                                                                                     | SETTORE FRONTALE / OVER FRONT / SUR L'AVANT / NACH VORNE ± 3°                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|                                                                                     | 10,3 m                                                                              | 14 m                                                                                | 17,7 m                                                                              | 21,3 m                                                                              | 25 m                                                                                | 10,3 m                                                                              | 14 m                                                                                | 17,7 m                                                                              | 10,3 m                                                                                            | 14 m                                                                                 | 17,7 m                                                                                | 21,3 m                                                                                | 25 m                                                                                  |                                                                                       |                                                                                       |
|                                                                                     |  |  |  |  |  |  |  |  |                |  |  |  |  |  |                                                                                       |
| DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                 | DIN                                                                                               | DIN                                                                                  | DIN                                                                                   | DIN                                                                                   | DIN                                                                                   |                                                                                       |                                                                                       |
| 3                                                                                   | 22,10                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       |                                                                                       |                                                                                       | 3                                                                                     |                                                                                       |
| 3,5                                                                                 | 19,40                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 15,35                                                                               |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       |                                                                                       |                                                                                       | 3,5                                                                                   |                                                                                       |
| 4                                                                                   | 17,15                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 13,30                                                                               |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       |                                                                                       |                                                                                       | 4                                                                                     |                                                                                       |
| 4,5                                                                                 | 15,25                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 11,60                                                                               | 11,30                                                                               |                                                                                     | 13,65                                                                                             |                                                                                      |                                                                                       |                                                                                       |                                                                                       | 4,5                                                                                   |                                                                                       |
| 5                                                                                   | 13,70                                                                               | 12,40                                                                               |                                                                                     |                                                                                     |                                                                                     | 10,20                                                                               | 9,60                                                                                |                                                                                     | 12,25                                                                                             | 12,00                                                                                |                                                                                       |                                                                                       |                                                                                       | 5                                                                                     |                                                                                       |
| 6                                                                                   | 11,70                                                                               | 10,95                                                                               |                                                                                     |                                                                                     |                                                                                     | 7,70                                                                                | 6,95                                                                                | 6,20                                                                                | 10,15                                                                                             | 9,90                                                                                 |                                                                                       |                                                                                       |                                                                                       | 6                                                                                     |                                                                                       |
| 7                                                                                   | 10,15                                                                               | 9,05                                                                                | 8,90                                                                                |                                                                                     |                                                                                     | 5,70                                                                                | 5,05                                                                                | 4,60                                                                                | 8,50                                                                                              | 8,25                                                                                 | 8,05                                                                                  |                                                                                       |                                                                                       | 7                                                                                     |                                                                                       |
| 8                                                                                   | 8,45                                                                                | 8,35                                                                                | 8,05                                                                                |                                                                                     |                                                                                     | 4,35                                                                                | 3,75                                                                                | 3,40                                                                                | 7,20                                                                                              | 6,95                                                                                 | 6,75                                                                                  |                                                                                       |                                                                                       | 8                                                                                     |                                                                                       |
| 9                                                                                   |                                                                                     | 6,70                                                                                | 6,40                                                                                | 6,95                                                                                |                                                                                     |                                                                                     | 2,85                                                                                | 2,50                                                                                |                                                                                                   | 5,90                                                                                 | 5,70                                                                                  | 6,05                                                                                  |                                                                                       | 9                                                                                     |                                                                                       |
| 10                                                                                  |                                                                                     | 5,50                                                                                | 5,15                                                                                | 5,70                                                                                | 5,70                                                                                |                                                                                     | 2,10                                                                                | 1,85                                                                                |                                                                                                   | 5,00                                                                                 | 4,85                                                                                  | 5,15                                                                                  | 5,45                                                                                  | 10                                                                                    |                                                                                       |
| 12                                                                                  |                                                                                     | 3,55                                                                                | 3,35                                                                                | 3,80                                                                                | 3,80                                                                                |                                                                                     | 1,05                                                                                |                                                                                     |                                                                                                   | 3,55                                                                                 | 3,35                                                                                  | 3,80                                                                                  | 3,80                                                                                  | 12                                                                                    |                                                                                       |
| 14                                                                                  |                                                                                     |                                                                                     | 2,10                                                                                | 2,45                                                                                | 2,45                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                                   |                                                                                      | 2,10                                                                                  | 2,45                                                                                  | 2,45                                                                                  | 14                                                                                    |                                                                                       |
| 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 1,60                                                                                | 1,60                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       | 1,60                                                                                  | 1,60                                                                                  | 16                                                                                    |                                                                                       |
| 18                                                                                  |                                                                                     |                                                                                     |                                                                                     | 1,00                                                                                | 1,05                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       | 1,00                                                                                  | 1,05                                                                                  | 18                                                                                    |                                                                                       |
| 20                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                   |                                                                                      |                                                                                       |                                                                                       |                                                                                       | 20                                                                                    |                                                                                       |

