

# Tube only (TO) grade hoses



*Corroflon*

---

## **Features and benefits**

- Natural or anti-static patented PTFE liner
- The shallow convoluted liner design delivers exceptional flexibility while minimising restriction in flow rate
- Vacuum and kink resistant
- High temperature and pressure capability
- Chemical resistant
- PTFE lined and non-lined end fittings
- Range of braid, cover and external protection options available

## Tube only (TO) grade hoses performance

| Nominal hose bore size |     | Bore inside convolutions |       | Corroflon grade<br>(braid & cover) | Maximum working pressure of hose |     | Burst pressure |       | Minimum bend radius |     |
|------------------------|-----|--------------------------|-------|------------------------------------|----------------------------------|-----|----------------|-------|---------------------|-----|
| in                     | mm  | in                       | mm    |                                    | bar                              | psi | bar            | psi   | in                  | mm  |
| 1/2                    | 15  | 0.440                    | 11.2  | TO                                 | 6                                | 87  | 24             | 350   | 1 1/2               | 38  |
|                        |     |                          |       | SS                                 | 41                               | 595 | 450            | 6,525 | 1 1/2               | 38  |
|                        |     |                          |       | PB                                 | 31                               | 450 | 150            | 2,175 | 1 1/2               | 38  |
|                        |     |                          |       | SS, RC/FP                          | 41                               | 595 | 450            | 6,525 | 2 1/4               | 57  |
|                        |     |                          |       | RC, SI                             | 41                               | 595 | 450            | 6,525 | 2 1/4               | 57  |
|                        |     |                          |       | KYB                                | 15                               | 215 | 61.5           | 890   | 1 1/2               | 38  |
| 1/2                    | 20  | 0.620                    | 15.7  | TO                                 | 5                                | 70  | 20             | 290   | 2                   | 51  |
|                        |     |                          |       | SS                                 | 35                               | 505 | 240            | 3,480 | 2                   | 51  |
|                        |     |                          |       | PB                                 | 26                               | 375 | 105            | 1,520 | 2                   | 51  |
|                        |     |                          |       | SS, RC/FP                          | 35                               | 505 | 240            | 3,480 | 3                   | 76  |
|                        |     |                          |       | RC, SI                             | 35                               | 505 | 240            | 3,480 | 3                   | 76  |
|                        |     |                          |       | KYB                                | 13                               | 190 | 52.5           | 760   | 2                   | 51  |
| 1                      | 25  | 0.847                    | 21.5  | TO                                 | 4.5                              | 65  | 18             | 260   | 2 1/4               | 70  |
|                        |     |                          |       | SS                                 | 31                               | 450 | 200            | 2,900 | 2 1/4               | 70  |
|                        |     |                          |       | PB                                 | 23                               | 334 | 93             | 1,350 | 2 1/4               | 70  |
|                        |     |                          |       | SS, RC/FP                          | 31                               | 450 | 200            | 2,900 | 4 1/4               | 105 |
|                        |     |                          |       | RC, SI                             | 31                               | 450 | 200            | 2,900 | 4 1/4               | 105 |
|                        |     |                          |       | KYB                                | 11                               | 160 | 46.5           | 675   | 2 1/4               | 70  |
| 1 1/2                  | 32  | 1.080                    | 27.5  | TO                                 | 4                                | 58  | 16             | 230   | 3 1/4               | 82  |
|                        |     |                          |       | SS                                 | 27                               | 390 | 180            | 2,610 | 3 1/4               | 82  |
|                        |     |                          |       | PB                                 | 20                               | 290 | 81             | 1,175 | 3 1/4               | 82  |
|                        |     |                          |       | SS, RC/FP                          | 27                               | 390 | 180            | 2,610 | 4 1/4               | 123 |
|                        |     |                          |       | RC, SI                             | 27                               | 390 | 180            | 2,610 | 4 1/4               | 123 |
|                        |     |                          |       | KYB                                | 10                               | 145 | 40.5           | 585   | 3 1/4               | 82  |
| 1 1/2                  | 40  | 1.250                    | 32.0  | TO                                 | 3.5                              | 50  | 14             | 205   | 4                   | 100 |
|                        |     |                          |       | SS                                 | 23                               | 335 | 120            | 1,740 | 4                   | 100 |
|                        |     |                          |       | PB                                 | 17                               | 245 | 69             | 1,000 | 4                   | 100 |
|                        |     |                          |       | SS, RC/FP                          | 23                               | 335 | 120            | 1,740 | 6                   | 150 |
|                        |     |                          |       | RC, SI                             | 23                               | 335 | 120            | 1,740 | 6                   | 150 |
|                        |     |                          |       | KYB                                | 9                                | 130 | 34.5           | 500   | 4                   | 100 |
| 2                      | 50  | 1.690                    | 43.0  | TO                                 | 3                                | 44  | 12             | 175   | 5 1/2               | 140 |
|                        |     |                          |       | SS                                 | 20                               | 290 | 100            | 1,450 | 5 1/2               | 140 |
|                        |     |                          |       | PB                                 | 15                               | 215 | 60             | 870   | 5 1/2               | 140 |
|                        |     |                          |       | SS, RC/FP                          | 20                               | 290 | 100            | 1,450 | 8 1/2               | 210 |
|                        |     |                          |       | RC, SI                             | 20                               | 290 | 100            | 1,450 | 8 1/2               | 210 |
|                        |     |                          |       | KYB                                | 8                                | 115 | 30             | 435   | 5 1/2               | 140 |
| 2 1/2                  | 65  | 2.120                    | 54.0  | TO                                 | 2.5                              | 36  | 10             | 145   | 7                   | 178 |
|                        |     |                          |       | SS                                 | 16                               | 230 | 70             | 1,015 | 7                   | 178 |
|                        |     |                          |       | PB                                 | 12                               | 175 | 48             | 695   | 7                   | 178 |
|                        |     |                          |       | SS, RC/FP                          | 16                               | 230 | 70             | 1,015 | 10 1/2              | 267 |
|                        |     |                          |       | RC, SI                             | 16                               | 230 | 70             | 1,015 | 10 1/2              | 267 |
|                        |     |                          |       | KYB                                | 6                                | 87  | 24             | 350   | 7                   | 178 |
| 3                      | 80  | 2.500                    | 64.0  | TO                                 | 2                                | 29  | 8              | 115   | 9                   | 230 |
|                        |     |                          |       | SS                                 | 14                               | 205 | 60             | 870   | 9                   | 230 |
|                        |     |                          |       | PB                                 | 10                               | 145 | 42             | 610   | 9                   | 230 |
|                        |     |                          |       | SS, RC/FP                          | 14                               | 205 | 60             | 870   | 13 1/2              | 345 |
|                        |     |                          |       | RC, SI                             | 14                               | 205 | 60             | 870   | 13 1/2              | 345 |
|                        |     |                          |       | KYB                                | 5                                | 73  | 21             | 305   | 9                   | 230 |
| 4                      | 100 | 3.860                    | 98.0  | TO                                 | 1.5                              | 22  | 6              | 87    | 11 1/2              | 300 |
|                        |     |                          |       | SS                                 | 10                               | 145 | 40             | 580   | 11 1/2              | 300 |
|                        |     |                          |       | PB                                 | 8                                | 115 | 30             | 435   | 11 1/2              | 300 |
|                        |     |                          |       | SS, RC/FP                          | 10                               | 145 | 40             | 580   | 17 1/2              | 450 |
|                        |     |                          |       | RC, SI                             | 10                               | 145 | 40             | 580   | 17 1/2              | 450 |
|                        |     |                          |       | KYB                                | -                                | -   | -              | -     | -                   | -   |
| 6                      | 150 | 5.250                    | 130.0 | TO                                 | 0.75                             | 11  | 3              | 44    | 23 1/4              | 600 |
|                        |     |                          |       | SS                                 | 5                                | 73  | 20             | 290   | 23 3/4              | 600 |
|                        |     |                          |       | PB                                 | -                                | -   | -              | -     | -                   | -   |
|                        |     |                          |       | SS, RC/FP                          | 5                                | 73  | 20             | 290   | 35 1/2              | 900 |
|                        |     |                          |       | RC, SI                             | 5                                | 73  | 20             | 290   | 35 1/2              | 900 |
|                        |     |                          |       | KYB                                | -                                | -   | -              | -     | -                   | -   |

TO = Tube only, SS = Stainless steel braid, PB = Polypropylene braid, SS,RC/FP = Fireproof rubber cover, RC = EPDM rubber cover, SI = Silicone rubber cover, KYB = Kynar braid

## Technical specifications

|                                  | Tube only (TO) grade hoses   |
|----------------------------------|--|
| Nominal bore size                | 15 - 150 mm  |
| Nominal bore size                | 0.5 - 6 in   |
| Actual bore size                 | 11.2 - 130 mm  |
| Actual bore size                 | 0.44 - 5.25 in   |
| Outside diameter                 | 16.1 - 146 mm  |
| Outside diameter                 | 0.63 - 5.75 in   |
| Max. operating pressure          | 6 bar  |
| Max. operating pressure          | 87 psi   |
| Burst pressure                   | 3 - 24 bar   |
| Burst pressure                   | 44 - 350 psi   |
| Certification                    | (EU) 10/2011, 3.1 Traceability, ATEX, EN16643:2016, FDA (materials), ISO 14001:2015, ISO 9001:2015, OHSAS 18001:2015   |
| Bend radius                      | 38 - 600 mm  |
| Bend radius                      | 1.5 - 23.75 in   |
| Braid                            | None   |
| Cover                            | None   |
| Hose external protection options | Protection coil, Safeguard, Scuff rings  |
| End fitting                      | 90° elbow fittings, BSP and NPT threaded fittings, CAM and groove fittings, DIN 11851 fittings, JIC fittings, PTFE dip pipe fittings, Sanitary triclamp fittings, SMS and RJT fittings, Swivel flange fittings |
| Labelling options                | Colour coding, Standard  |
| Vacuum resistance                | Vacuum resistant to -0.9 bar up to 150 °C (302 °F)   |

## Materials of construction

|               | Tube only (TO) grade hoses    |
|---------------|-------------------------------|
| Helical wire  | Stainless steel               |
| Liner tube    | Antistatic PTFE, Natural PTFE |
| Fitting liner | PTFE                          |

Disclaimer: The information contained in this document is believed to be correct but Aflex Hose Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the user's responsibility to ensure product suitability for use within their application. Bioflex, Corroflon, Corroline, Hyperline FX, Pharmaline are registered trademarks of Aflex Hose Limited. A member of Watson-Marlow Fluid Technology Solutions, A Spirax-Sarco Engineering plc company.

[wmfts.com/global](http://wmfts.com/global)



22 November 2023