

# OROFLEX<sup>TM</sup> 20

Premium Quality Extruded Rubber Lay Flat Hose



Specially Designed as a Drag Hose and Main Feeding Line

Ease of Transportation and Handling

High Abrasion Resistance Suitable for Slurry, Mining, Fracking and Dewatering Purposes

OROFLEX Series  
The Market Leader in Rubber Lay Flat Hose

## Color:

-  The standard colors are yellow for diameters up to 5" and black for larger sizes. 6" & 8" are typically available also in green. Other colors are available upon request.
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## Applications:

Designed for heavy duty and agricultural discharge applications including dewatering, water transfer, slurry and manure spreading, irrigation, water and hydrocarbons bypass operations, compressed air applications up to 3" ID, high pressure liquid pumping, bulk powder discharge (excluding cement) and flotation booms.

## Construction:

Made from circularly woven 100% high tenacity synthetic yarn, completely protected and locked-in by a tough, highly resistant synthetic nitrile rubber & PVC blend, extruded through the weave and forming a single homogenous construction without the use of glues or adhesives.

## Lining Properties:

- Ultimate Tensile Strength of the lining: Minimum guaranteed value of 1,500 psi (10,500 kPa).
- Ultimate Elongation: 400% minimum.
- Accelerated Aging Test:  
The tensile strength and ultimate elongation of the vulcanized rubber compound have been tested with oxygen at a pressure of 300 psi +/- 10 psi (2100 kPa +/- 70 kPa), and a temperature of 70 degrees Celsius +/- 1 degree (158°F +/- 18°F) for a period of 96 hours, after which the properties of the rubber are at least 60% of the original values.

## Abrasion Resistance:

The OROFLEX 20 hose will extend the lifetime of your application when under extreme conditions, where abrasion is the main concern. Abrasion resistance > 2000 cycles.

## Service Temperature Range:

From -22°F (-30°C) to +176°F (+80°C). Special versions for higher and lower temperatures available upon request.

## Ozone Resistance:

No visible signs of cracking appear on the lining or cover when tested in accordance with ASTM D518 Procedure B, 100pphm/104°F (40°C).

## Chemical Resistance:

Exposure to seawater and contamination by most chemical substances, hydrocarbons, oils, and greases has no effect on the short or long term performance of the hose. A chemical resistance chart is available and TIPSa will supply specific chemical resistance data when requested by the purchaser for unique applications.

## Lengths:

Standard 50ft (15m), 66ft (20m), 100ft (30m), 200ft (60m), 330ft (100m). Special lengths up to 660ft (200m).

## Couplings:

As requested by purchaser, for liquid transfer (Camlock, Bauer, Perrot, Victaulic, Storz, etc.) as well as for compressed air (Ground Joint, Universal Air Hose Couplings, etc.).

### Physical Properties:

| Part Number | Nominal Inner Diameter |      | Wall Thickness |      | Working Pressure - Liquid |     | Working Pressure - Air |     | Burst Pressure |       | Tensile Strength |         | Nominal Weight |       | Bend Radius at WP |       |
|-------------|------------------------|------|----------------|------|---------------------------|-----|------------------------|-----|----------------|-------|------------------|---------|----------------|-------|-------------------|-------|
|             | mm                     | inch | mm             | inch | bar                       | psi | bar                    | psi | bar            | psi   | kg               | lb      | kg/m           | lb/ft | m                 | ft    |
| F550680A    | 20                     | ¾    | 2.0            | 0.08 | 33                        | 480 | 25                     | 360 | 100            | 1,450 | 1,500            | 3,300   | 0.20           | 0.13  | 0.65              | 2.13  |
| F552110A    | 26                     | 1    | 2.0            | 0.08 | 38                        | 550 | 29                     | 415 | 115            | 1,660 | 1,875            | 4,150   | 0.25           | 0.17  | 0.90              | 2.95  |
| F552302A    | 38                     | 1 ½  | 2.8            | 0.11 | 21                        | 305 | 16                     | 225 | 63             | 910   | 3,000            | 6,600   | 0.45           | 0.30  | 1.10              | 3.61  |
| F552663A    | 45                     | 1 ¾  | 3.0            | 0.12 | 21                        | 305 | 16                     | 225 | 63             | 910   | 3,500            | 7,700   | 0.55           | 0.37  | 1.28              | 4.20  |
| F552120A    | 52                     | 2    | 3.0            | 0.12 | 21                        | 305 | 16                     | 225 | 63             | 910   | 3,750            | 8,250   | 0.64           | 0.43  | 1.30              | 4.27  |
| F559287A    | 65                     | 2 ½  | 3.0            | 0.12 | 21                        | 300 | 13                     | 185 | 52             | 750   | 6,000            | 13,200  | 0.70           | 0.47  | 1.35              | 4.43  |
| F550760A    | 76                     | 3    | 3.0            | 0.12 | 18                        | 260 | 11                     | 160 | 45             | 650   | 8,500            | 18,750  | 0.90           | 0.61  | 1.45              | 4.76  |
| F552278A    | 102                    | 4    | 3.1            | 0.12 | 21                        | 300 | -                      | -   | 52             | 750   | 13,000           | 28,650  | 1.25           | 0.84  | 1.80              | 5.91  |
| F550208A    | 105                    | 4    | 3.1            | 0.12 | 21                        | 300 | -                      | -   | 52             | 750   | 13,000           | 28,650  | 1.25           | 0.84  | 1.80              | 5.91  |
| F550209A    | 115                    | 4 ½  | 3.1            | 0.12 | 17                        | 245 | -                      | -   | 42             | 605   | 13,000           | 28,650  | 1.49           | 1.00  | 1.80              | 5.91  |
| F551021A    | 127                    | 5    | 3.2            | 0.13 | 17                        | 245 | -                      | -   | 42             | 605   | 15,500           | 34,150  | 1.70           | 1.14  | 1.90              | 6.23  |
| F550206A    | 129                    | 5    | 3.2            | 0.13 | 17                        | 245 | -                      | -   | 42             | 605   | 15,500           | 34,150  | 1.70           | 1.14  | 1.90              | 6.23  |
| F559247A    | 152                    | 6    | 4.0            | 0.16 | 20                        | 290 | -                      | -   | 50             | 725   | 23,400           | 51,600  | 2.50           | 1.68  | 2.00              | 6.56  |
| F552365A    | 154                    | 6    | 4.0            | 0.16 | 20                        | 290 | -                      | -   | 50             | 725   | 23,400           | 51,600  | 2.50           | 1.68  | 2.00              | 6.56  |
| F559250A    | 178                    | 7    | 4.0            | 0.16 | 16                        | 230 | -                      | -   | 40             | 580   | 30,000           | 66,150  | 2.80           | 1.88  | 2.20              | 7.22  |
| F552360A    | 203                    | 8    | 4.1            | 0.16 | 14                        | 200 | -                      | -   | 35             | 500   | 35,000           | 77,150  | 3.30           | 2.22  | 2.50              | 8.20  |
| F551833A    | 254                    | 10   | 3.9            | 0.15 | 14                        | 200 | -                      | -   | 35             | 500   | 50,000           | 110,250 | 3.95           | 2.70  | 3.00              | 9.84  |
| F551950A    | 256                    | 10   | 3.9            | 0.15 | 14                        | 200 | -                      | -   | 33             | 480   | 50,000           | 110,250 | 3.95           | 2.70  | 3.00              | 9.84  |
| F552352A    | 305                    | 12   | 4.1            | 0.16 | 11                        | 155 | -                      | -   | 26             | 375   | 46,000           | 101,400 | 5.10           | 3.43  | 3.30              | 10.83 |

The actual diameter of these hoses may differ slightly from the nominal diameter specified in this chart to make sure that they can be properly assembled with the couplings. For diameter tolerance questions please contact your distributor or directly to TIPSA.

All the hoses up to 3" (76mm) are marked with dual Working Pressure rating for both liquid transfer and compressed air. In the case of compressed air, a 1:4 safety factor has been considered over the Burst Pressure.

**tipsa:** reserves the right to modify any specification without prior notice to meet or exceed changing standards. Customers are advised that special diameters or construction characteristics can be produced upon special request. Contact your local dealer or TIPSA at: [tipsaex@tipsa.com](mailto:tipsaex@tipsa.com)

