



## 7. Hoses

High Pressure Hoses

## Section 7. Hoses

### Section 7a. High Pressure Hoses

RBV Energy supply High Pressure Hoses designed and supplied in accordance with the following specifications

|                      |                                                                              |
|----------------------|------------------------------------------------------------------------------|
| <b>API 6A</b>        | Specification for Wellhead and Christmas Tree Equipment                      |
| <b>API 16C</b>       | Specification for Choke & Kill Systems                                       |
| <b>API 7K</b>        | Specification for Drilling Equipment                                         |
| <b>NACE MR-01-75</b> | Sulphide Stress Cracking Resistant Metallic Materials for Oilfield Equipment |

High Pressure Hoses are available for use in the following pressure ratings and services:-

| PRESSURE RATINGS      |           |           |           |           |            |            |            |            |
|-----------------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|
| MAX. WORKING PRESSURE | 1,500 PSI | 2,000 PSI | 3,000 PSI | 4,000 PSI | 5,000 PSI  | 7,500 PSI  | 10,000 PSI | 15,000 PSI |
| TEST PRESSURE         | 3,000PSI  | 4,000 PSI | 6,000 PSI | 8,000 PSI | 10,000 PSI | 15,000 PSI | 15,000 PSI | 22,500 PSI |

| TYPICAL SERVICES                       | INFORMATION REQUIRED FOR ORDERING                       |
|----------------------------------------|---------------------------------------------------------|
| BOP HYDRAULIC HOSES (TOPSIDE & SUBSEA) | INTERNAL DIAMETER                                       |
| CEMENT HOSES                           | LENGTH                                                  |
| CHOKE & KILL HOSES (TOPSIDE & SUBSEA)  | SERVICE MEDIA                                           |
| HP MUD VIBRATOR HOSES                  | WORKING PRESSURE                                        |
| HP PRODUCTION JUMPER HOSES             | MOVEMENT REQUIRED                                       |
| MUD BOOSTER LINE HOSES                 | TEMPERATURE LIMITS (LOWER & UPPER)                      |
| PRODUCTION TEST HOSES                  | END CONNECTIONS-e.g. HAMMER LUG UNION, HUB, API 16A HUB |
| ROTARY DRILLING HOSES                  | OR API 6A FLANGE                                        |
| SUBSEA HOSES                           | END CONNECTION MATERIALS                                |
| WELL TEST HOSES                        | QUANTITY                                                |
|                                        | <b>SPECIAL ITEMS</b>                                    |
|                                        | SAFETY CLAMPS & CHAINS                                  |
|                                        | HOSE LIFTERS                                            |

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**GENERAL NOTE:** Please contact RBV Energy for any special material, pressure or dimensional requirements, including hose design analysis service.

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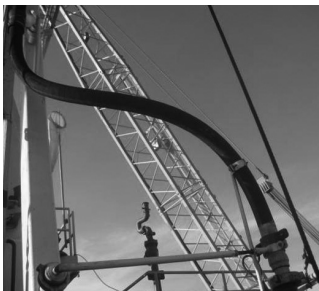
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**Table 7a.1 High Pressure Hoses**

| ID  |      | Working Pressure |       | OD   |       | Weight | Test Pressure |       | Minimum bending radius |
|-----|------|------------------|-------|------|-------|--------|---------------|-------|------------------------|
| in  | mm   | psi              | bar   | in   | mm    | kg/m   | psi           | bar   | metre                  |
| 2.0 | 51   | 1,500            | 104   | 3.50 | 89    | 9.0    | 3,000         | 208   | 0.6                    |
| 2.0 | 51   | 2,000            | 138   | 3.50 | 89    | 9.0    | 4,000         | 276   | 0.6                    |
| 2.0 | 51   | 4,000            | 276   | 3.87 | 96    | 11.0   | 8,000         | 552   | 0.6                    |
| 2.0 | 51   | 5,000            | 345   | 3.87 | 96    | 11.0   | 10,000        | 690   | 0.6                    |
| 2.0 | 51   | 7,500            | 518   | 4.75 | 120   | 22.5   | 15,000        | 1,035 | 0.6                    |
| 2.0 | 51   | 10,000           | 690   | 4.75 | 120   | 22.5   | 15,000        | 1,035 | 0.6                    |
| 2.0 | 51   | 15,000           | 1,035 | 4.92 | 125   | 27.0   | 22,500        | 1,552 | 0.6                    |
| 2.5 | 63.5 | 1,500            | 104   | 4.00 | 101.6 | 10.6   | 3,000         | 208   | 0.8                    |
| 2.5 | 63.5 | 2,000            | 138   | 4.00 | 101.6 | 10.6   | 4,000         | 276   | 0.8                    |
| 2.5 | 63.5 | 4,000            | 276   | 4.33 | 110   | 13.5   | 8,000         | 552   | 0.8                    |
| 2.5 | 63.5 | 5,000            | 345   | 4.37 | 113   | 15.4   | 10,000        | 690   | 0.8                    |
| 2.5 | 63.5 | 7,500            | 518   | 5.00 | 126   | 24.5   | 15,000        | 1,035 | 0.8                    |
| 2.5 | 63.5 | 10,000           | 690   | 5.00 | 126   | 24.5   | 15,000        | 1,035 | 0.8                    |
| 2.5 | 63.5 | 15,000           | 1,035 | 5.40 | 135   | 30.7   | 22,500        | 1,552 | 0.8                    |
| 3.0 | 76   | 1,500            | 104   | 4.75 | 121   | 14.2   | 3,000         | 208   | 0.9                    |
| 3.0 | 76   | 2,000            | 138   | 4.75 | 121   | 14.2   | 4,000         | 276   | 0.9                    |
| 3.0 | 76   | 4,000            | 276   | 5.12 | 131   | 19.6   | 8,000         | 552   | 0.9                    |
| 3.0 | 76   | 5,000            | 345   | 5.75 | 145   | 28.0   | 10,000        | 690   | 0.9                    |
| 3.0 | 76   | 7,500            | 518   | 6.00 | 152   | 35.0   | 15,000        | 1,035 | 0.9                    |
| 3.0 | 76   | 10,000           | 690   | 6.00 | 152   | 35.0   | 15,000        | 1,035 | 0.9                    |
| 3.0 | 76   | 15,000           | 1,035 | 6.10 | 155   | 37.4   | 22,500        | 1,552 | 1.5                    |

GENERAL NOTE: Safety Factor = Working Pressure x 2.5  
For Choke and Kill Hoses = Test Pressure x 1.5



**Table 7a.1 High Pressure Hoses**

| ID  |     | Working Pressure |     | OD    |     | Weight | Test Pressure |       | Minimum bending radius |
|-----|-----|------------------|-----|-------|-----|--------|---------------|-------|------------------------|
| in  | mm  | psi              | bar | in    | mm  | kg/m   | psi           | bar   | metre                  |
| 3.5 | 89  | 1,500            | 104 | 5.44  | 138 | 17.8   | 3,000         | 208   | 1.1                    |
| 3.5 | 89  | 2,000            | 138 | 5.44  | 138 | 17.8   | 4,000         | 276   | 1.1                    |
| 3.5 | 89  | 4,000            | 276 | 5.75  | 145 | 22.0   | 8,000         | 552   | 1.1                    |
| 3.5 | 89  | 5,000            | 345 | 6.44  | 163 | 37.0   | 10,000        | 690   | 1.5                    |
| 3.5 | 89  | 7,500            | 518 | 6.44  | 163 | 40.4   | 15,000        | 1,035 | 1.5                    |
| 4.0 | 102 | 2,000            | 138 | 5.35  | 136 | 15.2   | 4,000         | 276   | 1.2                    |
| 4.0 | 102 | 4,000            | 276 | 6.19  | 157 | 26.4   | 8,000         | 552   | 1.2                    |
| 4.0 | 102 | 5,000            | 345 | 6.75  | 175 | 42.7   | 10,000        | 690   | 1.2                    |
| 4.0 | 102 | 7,500            | 518 | 6.89  | 175 | 44.5   | 15,000        | 1,035 | 1.2                    |
| 4.0 | 102 | 10,000           | 690 | 6.89  | 175 | 44.5   | 15,000        | 1,035 | 1.8                    |
| 6.0 | 152 | 2,000            | 138 | 7.87  | 200 | 26.3   | 4,000         | 276   | 1.8                    |
| 6.0 | 152 | 3,000            | 208 | 7.95  | 202 | 31.8   | 6,000         | 416   | 1.8                    |
| 6.0 | 152 | 4,000            | 276 | 8.86  | 225 | 55.3   | 8,000         | 552   | 1.8                    |
| 6.0 | 152 | 5,000            | 345 | 8.86  | 225 | 57.6   | 10,000        | 690   | 1.8                    |
| 8.0 | 203 | 2,000            | 138 | 10.00 | 254 | 39.3   | 4,000         | 276   | 2.4                    |
| 8.0 | 203 | 3,000            | 208 | 10.00 | 254 | 41.8   | 6,000         | 416   | 2.4                    |
| 8.0 | 203 | 4,000            | 276 | 10.00 | 277 | 73.8   | 8,000         | 552   | 2.4                    |

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**GENERAL NOTE:** Safety Factor = Working Pressure x 2.5  
For Choke and Kill Hoses = Test Pressure x 1.5

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### HOSE CONSTRUCTION

#### CORE

Synthetic rubber

#### REINFORCEMENT

Textile braid and steel wire spirals

#### COVER

Red flame retardent SBR rubber over a layer of glass fibre

**Table 7a.2 Blowout Preventor Control Hose. Fire Rated - Lloyds Approved.**

| Inside Diameter |       | Outside Diameter | Working Pressure |       | Minimum bending radius | Weight |
|-----------------|-------|------------------|------------------|-------|------------------------|--------|
| mm              | inch  | mm               | bar              | psi   | mm                     | kg/m   |
| 6.35            | 0.250 | 29.7             | 207              | 3,000 | 150                    | 1.20   |
| 9.52            | 0.375 | 33.0             | 207              | 3,000 | 165                    | 1.35   |
| 12.70           | 0.500 | 37.0             | 207              | 3,000 | 180                    | 1.60   |
| 15.87           | 0.625 | 39.0             | 207              | 3,000 | 205                    | 1.75   |
| 19.05           | 0.750 | 41.0             | 207              | 3,000 | 240                    | 2.00   |
| 25.40           | 1.000 | 48.5             | 207              | 3,000 | 300                    | 2.60   |
| 31.75           | 1.250 | 60.0             | 207              | 3,000 | 460                    | 3.90   |
| 38.10           | 1.500 | 66.4             | 207              | 3,000 | 560                    | 4.50   |
| 50.80           | 2.000 | 90.0             | 207              | 3,000 | 800                    | 9.90   |

## Section 7a. High Pressure Hoses

### HOSE CONSTRUCTION

#### CORE

Synthetic rubber

#### REINFORCEMENT

Textile braid and steel wire spirals

#### COVER

Red flame retardent SBR rubber over a layer of glass fibre

**Table 7a.3 Blowout Preventor Control Hose. Fire Rated - Lloyds Approved.**

| Inside Diameter |       | Outside Diameter | Working Pressure |       | Minimum bending radius | Weight |
|-----------------|-------|------------------|------------------|-------|------------------------|--------|
| mm              | inch  | mm               | bar              | psi   | mm                     | kg/m   |
| 6.35            | 0.250 | 34.2             | 345              | 5,000 | 150                    | 1.20   |
| 9.52            | 0.375 | 33.5             | 345              | 5,000 | 185                    | 1.55   |
| 12.70           | 0.500 | 36.6             | 345              | 5,000 | 230                    | 2.10   |
| 15.87           | 0.625 | 40.0             | 345              | 5,000 | 255                    | 2.25   |
| 19.05           | 0.750 | 44.4             | 345              | 5,000 | 300                    | 2.50   |
| 25.40           | 1.000 | 54.2             | 345              | 5,000 | 340                    | 3.20   |
| 31.75           | 1.250 | 65.0             | 345              | 5,000 | 520                    | 5.15   |
| 38.10           | 1.500 | 73.0             | 345              | 5,000 | 640                    | 7.40   |
| 50.80           | 2.000 | 89.5             | 345              | 5,000 | 800                    | 9.90   |

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