

FORGED GATE VALVE CLASS 800 TRIM16



PED/97/23/CE



Certificate 3.1

**Size :** DN 10 to 50 (NPS 3/8" to 2")  
**Ends :** Female - Female NPT , Socket Welding  
**Min Temperature :** - 29°C  
**Max Temperature :** + 425°C  
**Max Pressure :** 136 Bars (Class 800)  
**Specifications :** Rising stem non rotating (OS&Y)  
Bolted bonnet and gland pack  
Standard port

**Materials :** Forged carbon steel

**FORGED GATE VALVE CLASS 800 TRIM16**

**SPECIFICATIONS :**

- Standard port
- Rising stem non rotating (OS&Y)
- Bolted bonnet and gland pack
- Forged Carbon steel
- TRIM 16
- Class 800

**USE :**

- Petroleum industry, steam, high pressure
- Min and max Temperature Ts : - 29°C to + 425°C
- Max Pressure Ps : 136 bars ( see graph )

**FLOW COEFFICIENT Kvs ( M3 / h ) :**

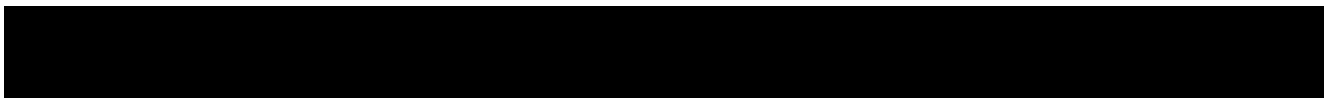
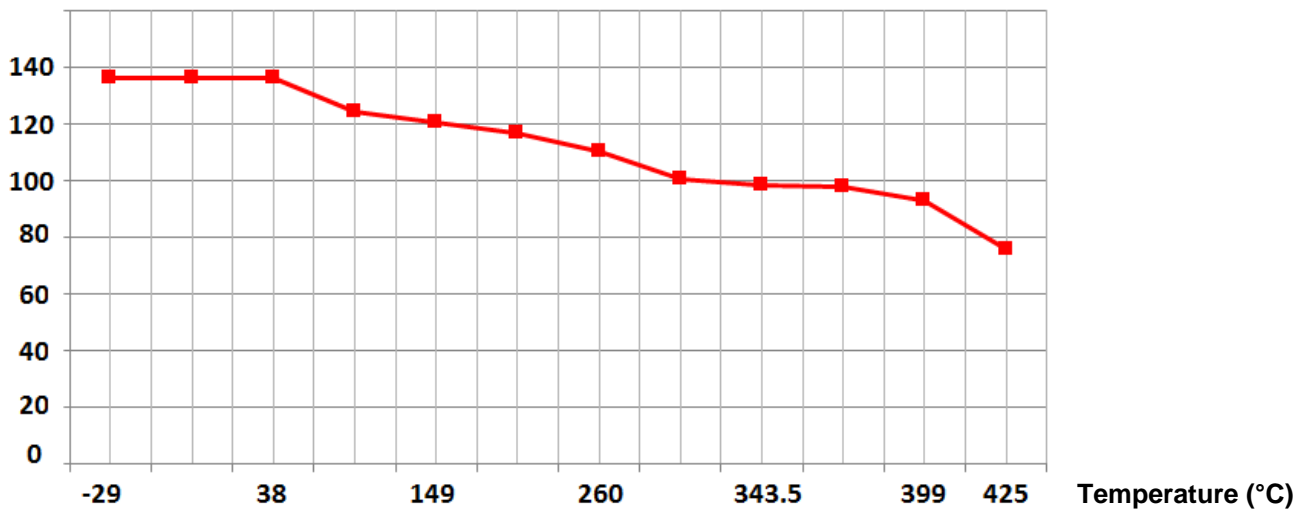
| DN           | 10   | 15   | 20   | 25   | 32    | 40    | 50   |
|--------------|------|------|------|------|-------|-------|------|
| NPS          | 3/8" | 1/2" | 3/4" | 1"   | 1"1/4 | 1"1/2 | 2"   |
| Kvs ( m3/h ) | 3.7  | 4.8  | 10.4 | 23.4 | 47.6  | 69.2  | 90.8 |

**PRESSURE / TEMPERATURE RELATION :**

| Pressure (bar)   | 136.2 | 136.2 | 136.2 | 124,1 | 120,7 | 116,6 | 110 | 100,7 | 98,6  | 97,9 | 92,7 | 75,9 |
|------------------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|------|------|
| Temperature (°C) | -29   | 0     | 38    | 93,5  | 149   | 204,5 | 260 | 315,5 | 343,5 | 371  | 399  | 425  |

**PRESSURE / TEMPERATURE GRAPH :**

Pressure (Bars)

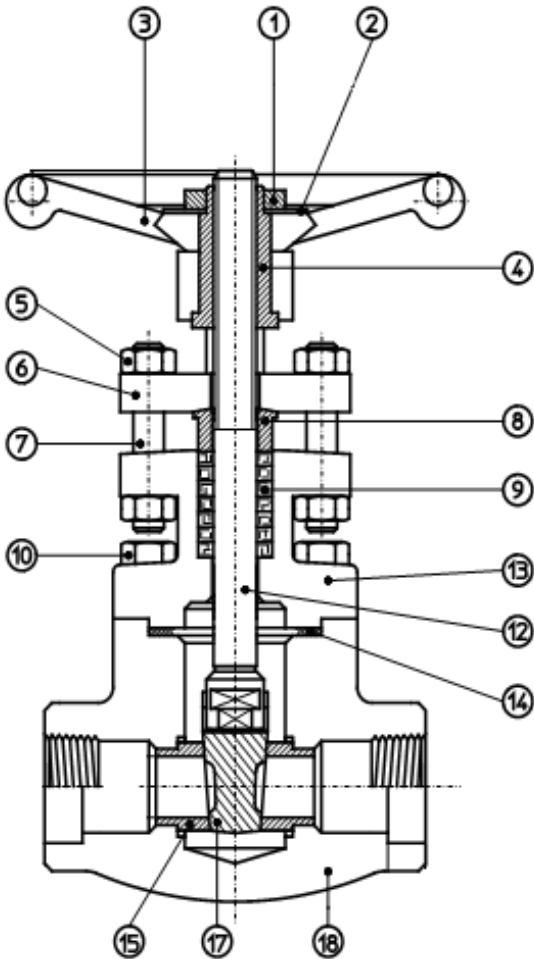


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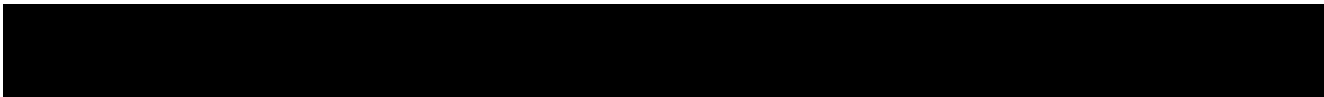
**RANGE :**

- Forged A105N carbon steel gate valve TRIM 16 with Socket Welding ends **Ref. 111** DN 10 to DN 50 (NPS 3/8" to DN 2")
- Forged A105N carbon steel gate valve TRIM 16 with NPT threaded ends **Ref.115** DN 10 to DN 50 (NPS 3/8" to DN 2")

**MATERIALS:**

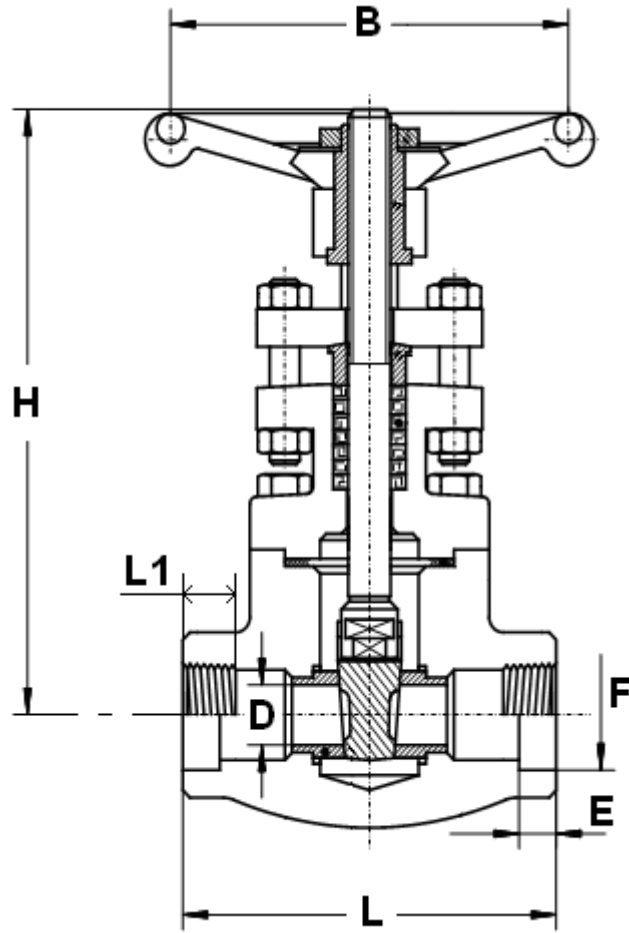


| Item | Designation  | Materials 111/115                |
|------|--------------|----------------------------------|
| 1    | Wheel nut    | Carbon steel                     |
| 2    | Name plate   | Aluminium                        |
| 3    | Handwheel    | Carbon steel                     |
| 4    | Yoke nut     | ASTM A582 type 416               |
| 5    | Gland nut    | ASTM A193 B7M                    |
| 6    | Gland flange | ASTM A105                        |
| 7    | Gland stud   | ASTM A193 B7M                    |
| 8    | Gland        | ASTM A276 type 410               |
| 9    | Packing      | Graphite                         |
| 10   | Bolts        | ASTM A193 B7M                    |
| 12   | Stem         | AISI 316                         |
| 13   | Bonnet       | ASTM A105N                       |
| 14   | Gasket       | AISI 316 + graphite spiral wound |
| 15   | Seat         | AISI 316 + Stellite GR.6         |
| 17   | Wedge        | AISI 316 + Stellite GR.6         |
| 18   | Body         | ASTM A105N                       |



**FORGED GATE VALVE CLASS 800 TRIM16**

SIZE ( in mm ) :



| Ref.    | DN (mm)       | 10   | 15   | 20   | 25   | 40     | 50   |
|---------|---------------|------|------|------|------|--------|------|
|         | NPS (")       | 3/8" | 1/2" | 3/4" | 1"   | 1"1/2" | 2"   |
| 111     | Ø D           | 9.6  | 9.6  | 14   | 18   | 30     | 36.5 |
|         | L             | 80   | 80   | 90   | 110  | 127    | 127  |
| 115     | H (opened)    | 148  | 148  | 163  | 178  | 243    | 262  |
|         | Ø B           | 90   | 90   | 90   | 110  | 130    | 130  |
| 115     | L1            | 13   | 15   | 18   | 19   | 21     | 21   |
| 111     | E ( SW )      | 11.1 | 12.7 | 14.5 | 16   | 19     | 22   |
|         | Ø F ( SW )    | 17.6 | 21.8 | 27.2 | 33.9 | 48.8   | 61.2 |
| 111/115 | Weight ( Kg ) | 1.8  | 1.8  | 3.6  | 5.2  | 9.4    | 15.5 |



**FORGED GATE VALVE CLASS 800 TRIM16****STANDARDS :**

- Fabrication according to **ISO 9001 : 2008**
- **DIRECTIVE 97/23/CE : CE N° 0036**  
Risk category III module H
- Certificate 3.1 on request
- Designing according to **ISO 15761** and **API 602 8<sup>th</sup>**
- Materials according to **NACE MR 01-75**
- Approval certificate **API 6D**
- Pressure tests according to **API 598, table 6**
- Valves approved by the main oil industries ( certificates on request )
- **ATEX Group II Category 2 GD T3 Zone 1 & 21 Zone 2 & 22** ( optional marking ) according to directive 2014/34/EU
- Threaded female NPT ends according to **ANSI B1.20.1**
- Socket Welding ends according to **ISO 15761**

**ADVICE :** Our opinion and our advice are not guaranteed and lauridsen industri shall not be liable for the consequences of damages. The customer must check the right choice of the products with the real service conditions.



**REF. 111-115**

## **FORGED GATE VALVE CLASS 800 TRIM16**

### **INSTALLATION INSTRUCTIONS**

#### **GENERAL GUIDELINES :**

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
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