

FORGED CARBON STEEL A105N GATE VALVE CLASS 800 TRIM 5 WELDED BONNET



ISO 9001 : 2015



PED 2014/68/EU



Certificate 3.1

Size : DN 15 to 50 (NPS 1/2" to 2")
Ends : Female - Female NPT, Socket Welding
Min Temperature : - 29°C
Max Temperature : + 425°C
Max Pressure : 136 Bars (Class 800)
Specifications : Rising non rotating stem (OS&Y)
Welded bonnet
Standard bore

Materials : Forged carbon steel A105N

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SPECIFICATIONS :

- Standard bore
- Rising non rotating stem (OS&Y)11
- Welded bonnet
- Bolted gland pack
- Forged carbon steel A105N
- Full stellite (Trim 5)
- Class 800

USE :

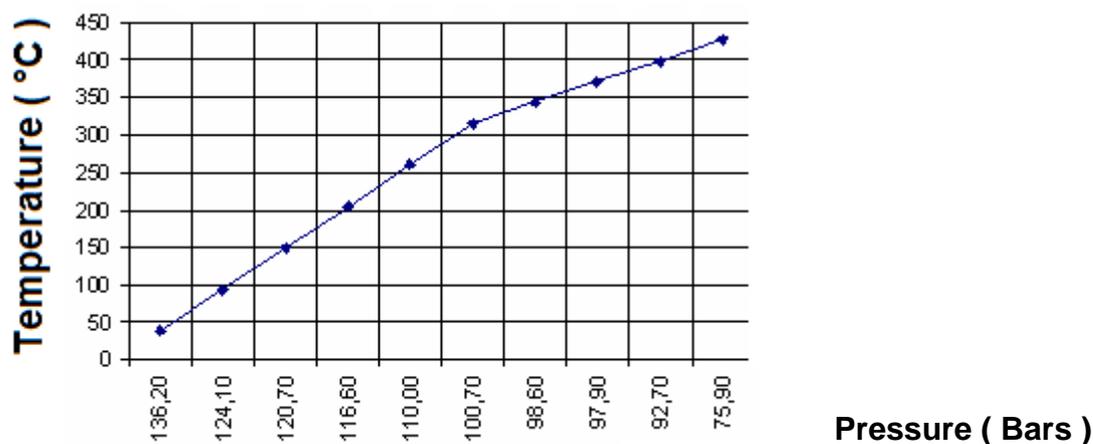
- Petroleum industry, steam, high pressure
- Min and Max Temperature Ts : - 29°C to + 425°C
- Max Pressure Ps : 136 bars (see graph)

FLOW COEFFICIENT Kvs (M3 / h) :

DN	15	20	25	32	40	50
NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Kvs (m3/h)	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

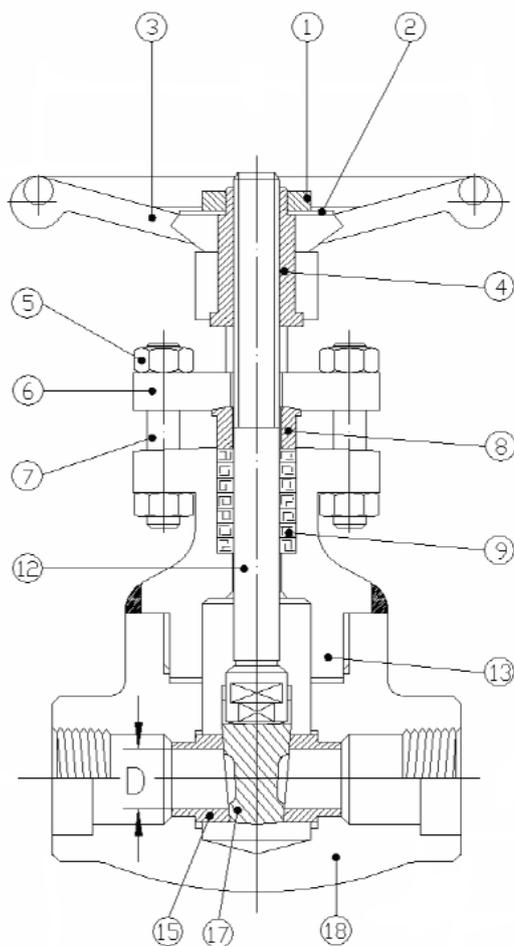
PRESSURE / TEMPERATURE GRAPH :


FORGED CARBON STEEL A105N GATE VALVE CLASS 800 TRIM 5 WELDED BONNET

RANGE :

- Forged A105N carbon steel gate valve TRIM 5 with threaded NPT ends **Ref.116** from DN 15 to 50 (NPS 1/2" to 2")
- Forged A105N carbon steel gate valve TRIM 5 with Socket Welding ends **Ref. 117** from DN 15 to 50 (NPS 1/2" to 2")

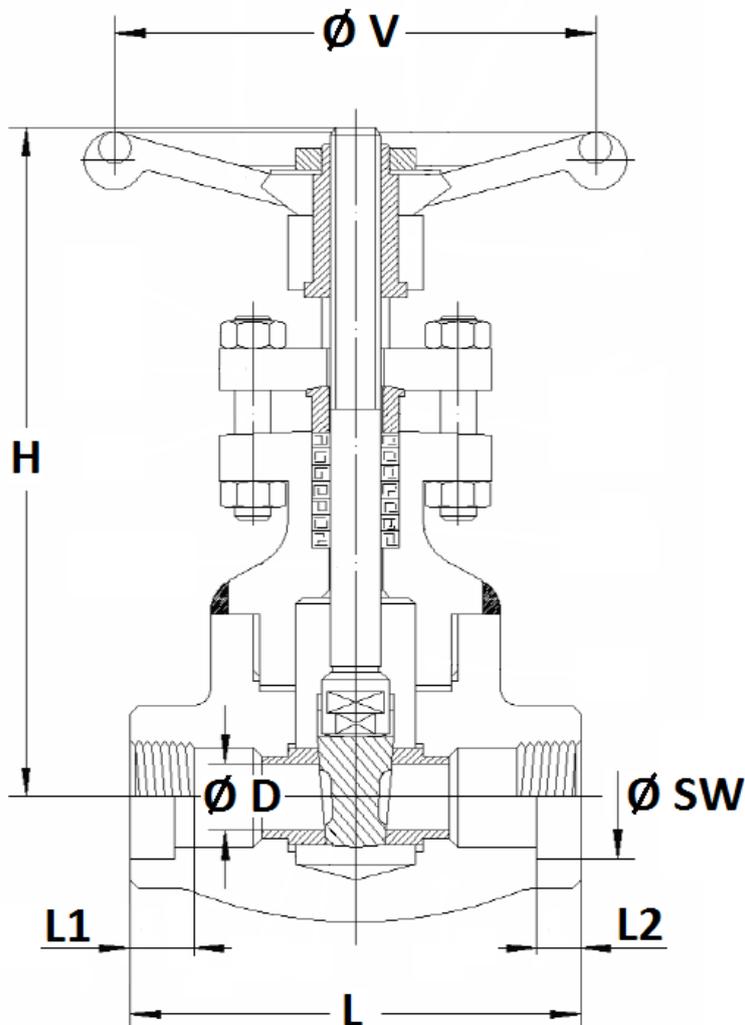
MATERIALS :



Item	Designation	Materials
1	Handwheel nut	Carbon steel
2	ID plate	Aluminium
3	Handwheel	Carbon steel
4	Yoke nut	ASTM A473 type 416
5	Gland nut	ASTM A194 2H
6	Glande flange	ASTM A105
7	Gland stud	UNS S41000
8	Gland	UNS S41000
9	Packing	Graphite
12	Stem	ASTM A276 type 410
13	Bonnet	ASTM A105N
15	Seat	ASTM A276 type 410 stellite
17	Wedge	ASTM A182 F6a stellite
18	Body	ASTM A105N

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SIZE (in mm) :



Ref.	DN (mm)	15	20	25	40	50
	NPS (")	1/2"	3/4"	1"	1 1/2"	2"
116-117	Ø D	9.6	14	18	30	36.5
	L	80	90	110	127	127
	H (opened)	148	163	178	243	262
	Ø V	80	80	110	130	130
116	L1	15	18	19	21	21
117	L2 (SW)	12.7	14.5	16	19	22
	Ø SW	21.8	27.2	33.9	48.8	61.2
116-117	Weight (Kg)	1.4	1.7	2.9	5.8	7.5

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STANDARDS :

- Fabrication according to **ISO 9001 : 2015**
- DIRECTIVE 2014/68/EU : **CE N° 0036**
Risk category III module H
- Certificate 3.1 on request
- Designing according to **ISO 15761** and **API 602 8th**
- 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.

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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.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **During welding operation, for S.W. types half open the valve and do not exceed 350-400°C**
- The theoretical lengths given by ISO/R7 for the tapping are typically longer than required, the length of the thread should be limited, and **check that the end of the tube does not press right up to the head of the thread.**
- **Never use a vice to tighten the fixings of the valve.**
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- **It may be necessary to screw the packing gland during using according to the type of use.**
- **Do not use a tool to shut the valve**
- **Fluids in the valve must not contain solid objects (it could damaged the seat).**
- **It's recommended to operate the valve (open and close) 1 to 2 times per year**