



**Primary characteristics**

NAF-ProCap, Capping valve for automated filling of wood chips to the batch digester in Pulp industries. The design provides a reliable and tight shutoff valve with long life time, supplied as standard in stainless steel for pressure ratings PN 16-25 and ANSI Class 150 and in sizes DN 500 and 600, 20" and 24".

The valve has:

- a unique design using the eccentric hubs to load the seat and provide a tight shutoff
- an inlet neck that is drilled and tapped to accept direct mounting of the chip chute
- a lower flange in std dimension or customized to meet existing digester flange
- a stainless steel ball segment with welded overlay of Alloy 21 in the seat area
- Alloy 21 seat
- has sealed stems with O-rings in PFM that prevent build up and results in an increased life time
- NAF-Turnex high performance pneumatic actuators used for operation and eccentric hub
- locking device, cylinders in stainless steel with spring to lock the valve for safe operation

**CE-marked** according to Pressure Equipment Directive (PED 97/23/EG) module H, category III.  
 For module H1, category IV contact NAF

**Application**

NAF-ProCap is a batch digester capping valve for chips filling in a safe and time saving way.

**Technical specification**

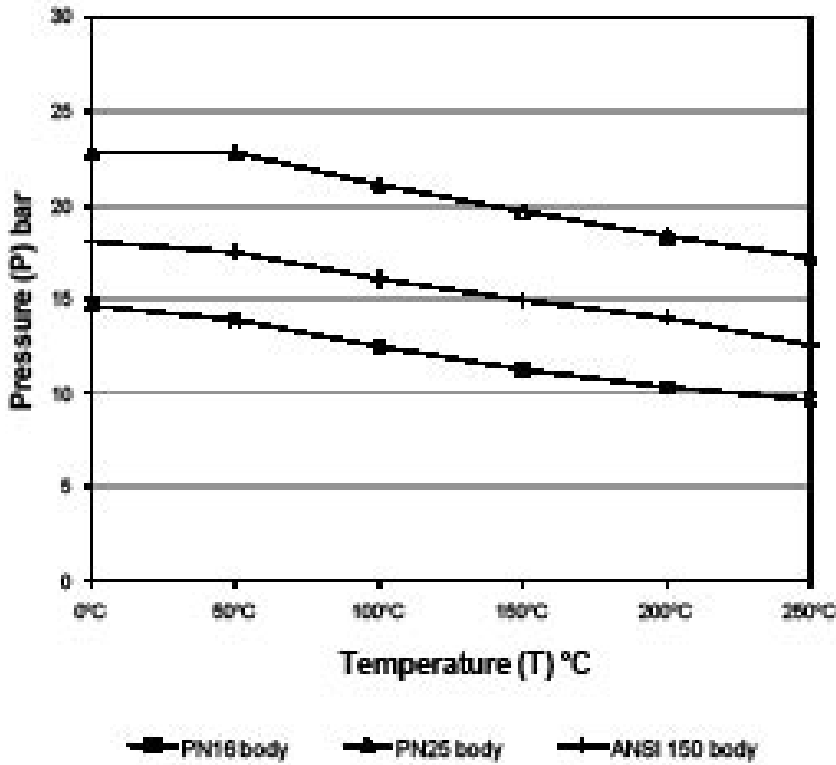
<b>Material:</b>	EN 1.4408
<b>Size range:</b>	DN 500, 600 20", 24"
<b>Outlet Flange</b>	DN 700,800 or customized if required
<b>Pressure ratings:</b>	PN 16 ANSI Class 150
<b>Max differential pressure:</b>	16 bar
<b>Face to face:</b>	See page 5
<b>Valve design:</b>	ANSI B16.34 and EN 12516
<b>Temperature range:</b>	-30 - +250°C
<b>Test pressure:</b>	1,5 x PN at open valve According to API 598
<b>Sealing class:</b>	Leakage test with gas according to API 598.

Other technical data will be specified by NAF for each individual application.

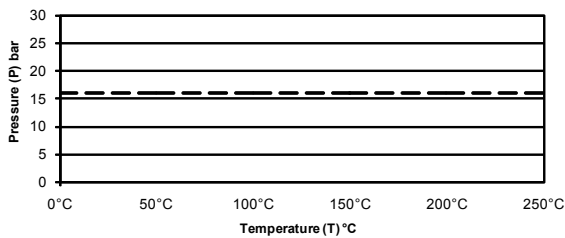
### Working pressure, differential pressure and temperature

The maximum working pressure and temperature in the body depends on pressure class according to respectively flange standards. For EN1092-1:2001, see diagram 1.

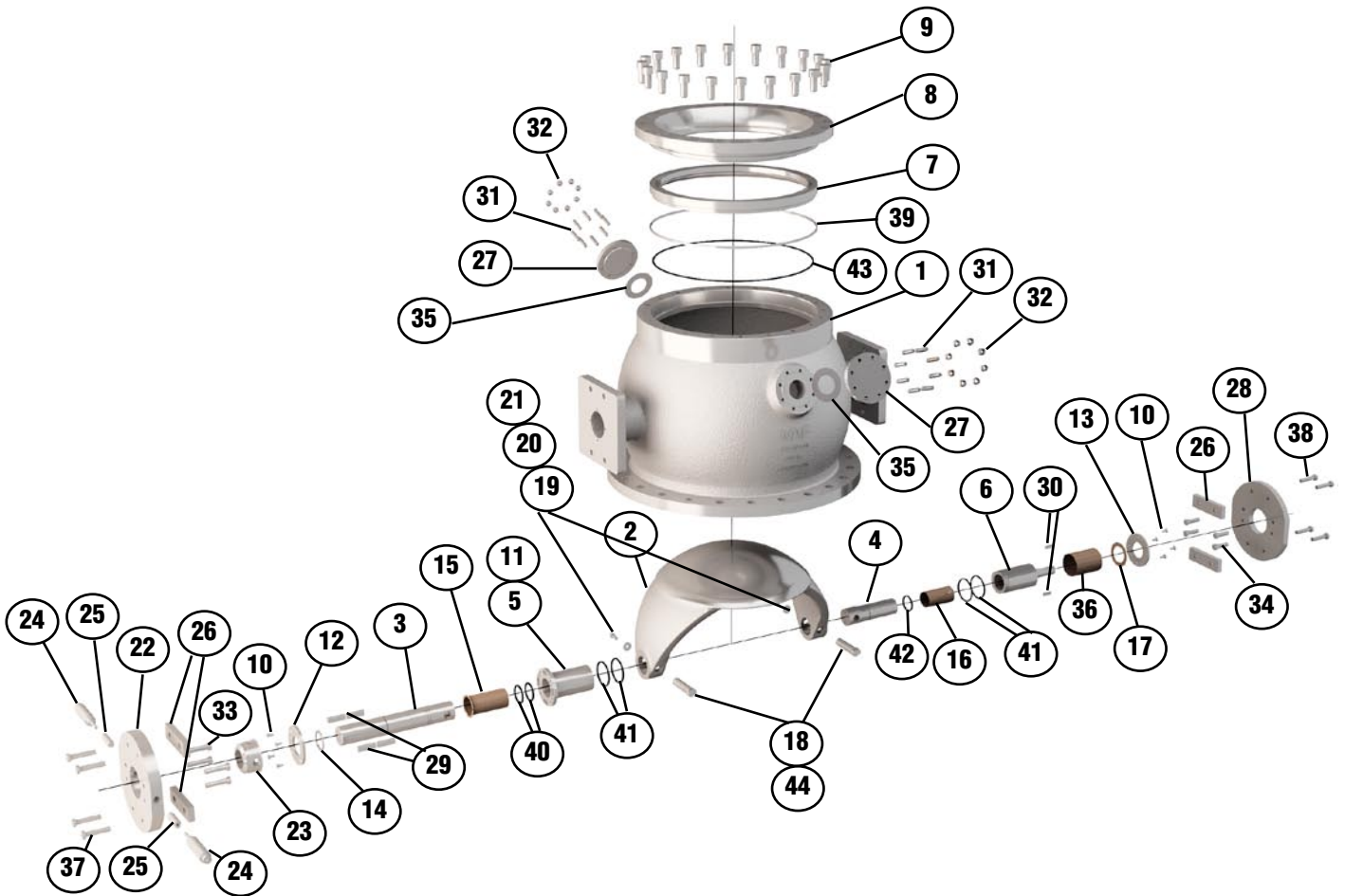
#### Max working pressure (Diagram 1)



#### Max dp (Diagram 2)



**Material specification (Table 1)**

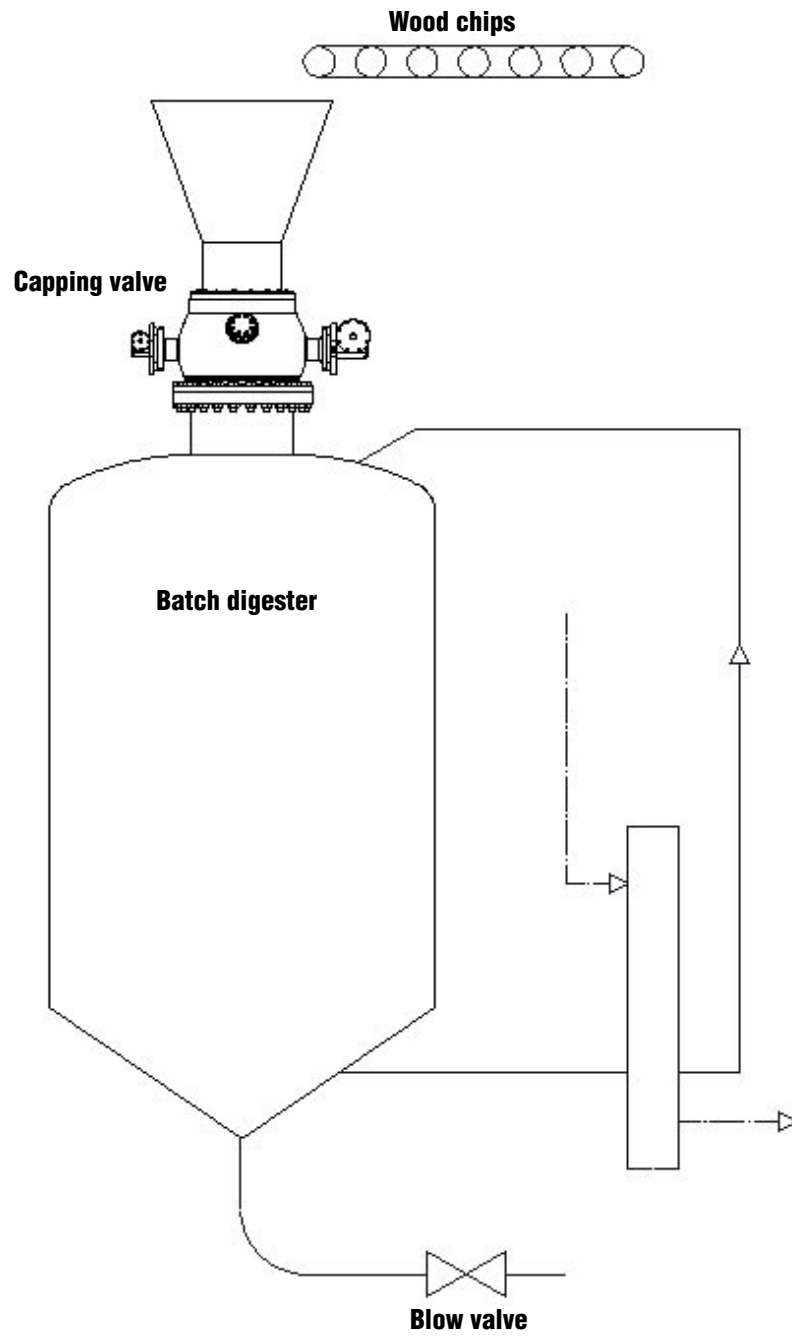


Item	Qty	Part	Material
1	1	Body	1.4408
2	1	Ball sector	1.4408/Alloy 21
3	1	Stem, operating	1.4460
4	1	Stem, tightening	1.4460
5	1	Eccentric hub	1.4460/chromed
6	1	Eccentric hub	1.4460
7	1	Seat ring	1.4408/Alloy 21
8	1	Clamp ring	1.4408
9	24	Screw	A4-80
10	8	Screw	A4-70
11	4	Screw	A4-80
12	1	Cover	1.4436
13	1	Cover	1.4436
14	2	Lock segment	1.4460/chromed
15	1	Stem bearing	Metaloplast
16	1	Stem bearing	Metaloplast
17	1	Washer	Metaloplast
18	2	Pin	1.4460
19	2	Pin washer	1.4460
20	2	Cyl. pin	1.4460
21	2	Screw	A4-80
22	1	Jammer plate	1.4436

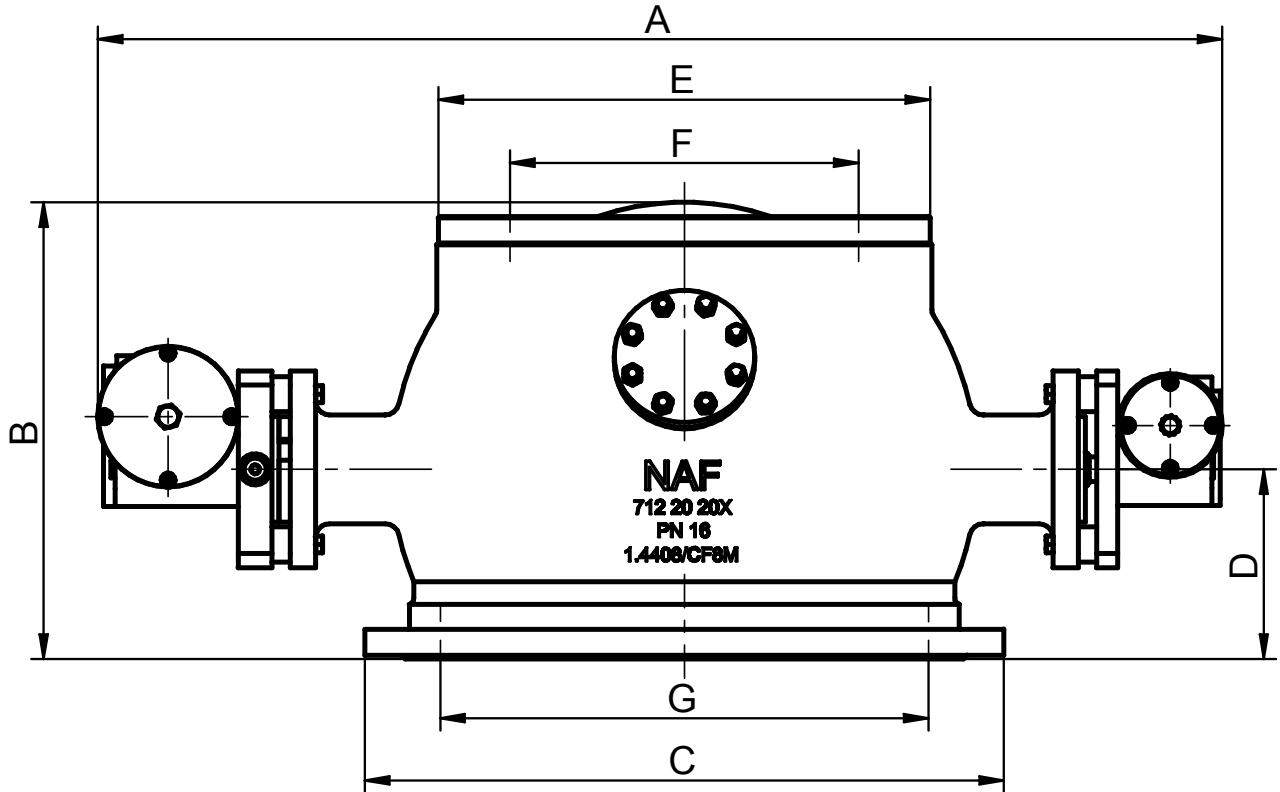
Item	Qty	Part	Material
23	1	Hub	1.4460/chromed
24	2	Cylinder	
25	2	Piston	1.4460
26	4	Distance block	1.4436
27	2	Lid	1.4436
28	1	Actuator plate	1.4436
29	4	Key	A4
30	2	Key	A4
31	16	Screw	A4-80
32	16	Nut	A4-80
33	4	Screw	A4-80
34	4	Screw	A4-80
35	2	Gasket	Graphite
36	1	Eccentric hub bearing	Metaloplast
37	4	Screw	A4-80
38	4	Screw	A4-80
39	1	Seal ring	PTFE
40	2	O-ring	PFM
41	4	O-ring	PFM
42	1	O-ring	PFM
43	1	O-ring	PFM
44	2	Thread insert	A4-70

**Application**

NAF-ProCap capping valve for automated filling of wood chips to the batch digester in pulp industries. A unique design using the eccentric hubs to load the seat and provide a tight shutoff.



**Dimensions and mass**



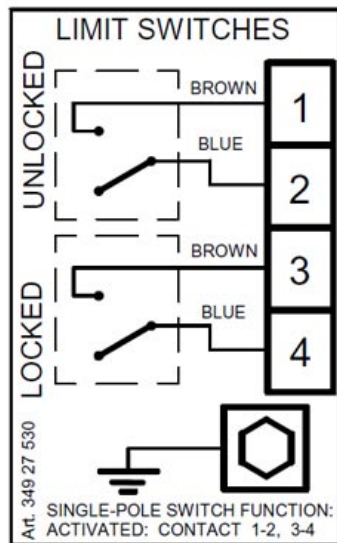
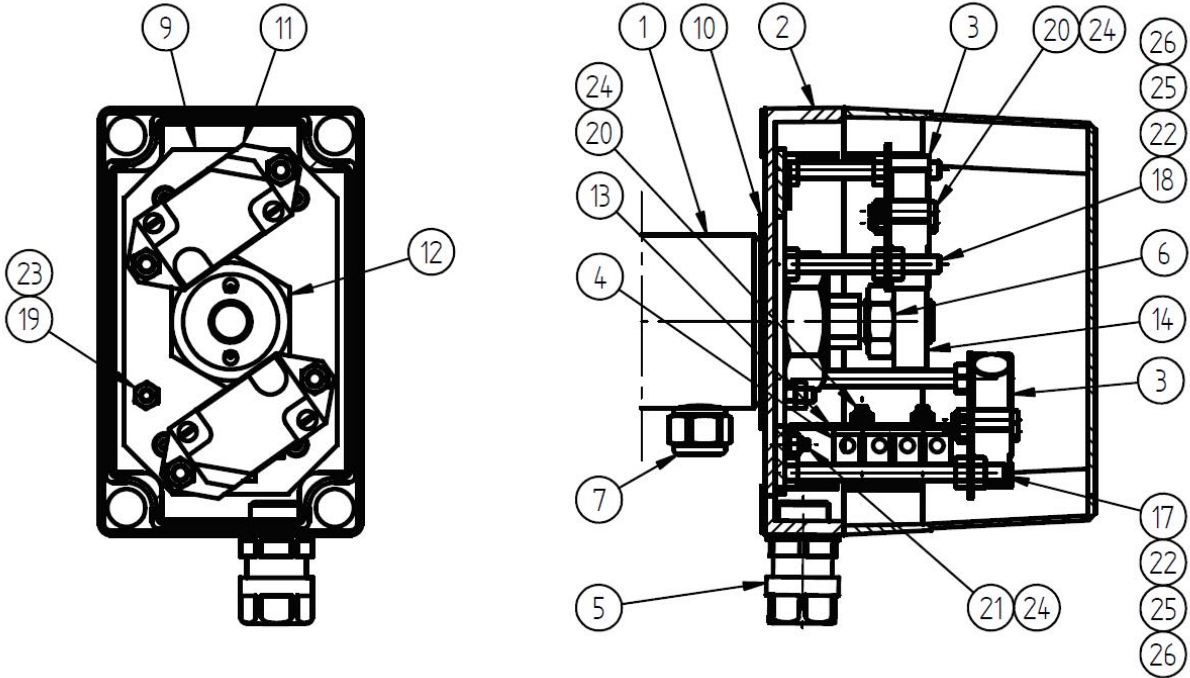
**Pneumatic actuators for DN500/700 are NAF 791290-3250 and 791290-2235  
Pneumatic actuators for DN600/800 are NAF 791290-4280 and 791290-2240**

**(Table 2)**

DN	Size	A	B	C	D	E	F	G	Mass kg
500/700	20/28	1605	650	910	270	705	496	695	850
600/800	24/32	1860	794	1085	337	823	590	796	1440

Dimensions in mm

**Limit switch box for Locking device**



**Materials (Table 3)**

<b>Item</b>	<b>Qty</b>	<b>Part</b>	<b>Material</b>
1	1	Cylinder	Stainless
2	1	Box	ABS-plastic
3	2	Limit switch	Plastic (PBA)
4	1	Terminal block	Plastic (Gemin)
5	1	Cable gland	Polyamide
6	1	Nut	A4
7	1	Silencer	Brass
9	1	Plate	1.4301
10	1	Washer	1.4301
11	1	Mounting plate	1.4301
12	4	Mounting nut	1.4305
13	1	Holder plate	1.4301
14	1	Rod bulb	1.4301
17	2	Screw	A4
18	2	Screw	A4
19	1	Screw	A4
20	6	Screw	A4
21	2	Screw	A4
22	8	Nut	A4
23	2	Nut	A4
24	8	Locking nut	A4
25	4	Locking nut	A4
26	4	Washer	A2

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**Product code NAF-ProCap valves****Example:**

	<b>86</b>	<b>8</b>	<b>5</b>	<b>9</b>	<b>0</b>	-	<b>600/800</b>
<b>Code</b>	1	2	3	4	5		6

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- 1. Valve type**  
**86** Batch digester capping valve
- 2. Material (body)**  
**8** ASTM A351 CF8M
- 3. Pressure rating**  
**3** PN16  
**4** ANSI 150
- 4. Stem seal**  
**9** PFM
- 5. Seals**

<b>Seat rings</b>	<b>Seat seal</b>
<b>0</b> Alloy 21	PFM
- 6. Size inlet / outlet**

<b>DIN-version</b>	<b>ANSI-version</b>
<b>DN</b>	<b>Size</b>
<b>500</b> 500/700	<b>20/28</b> 20"/28"
<b>600</b> 600/800	<b>24/32</b> 24"/32"

Actuators to be ordered separately.