



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

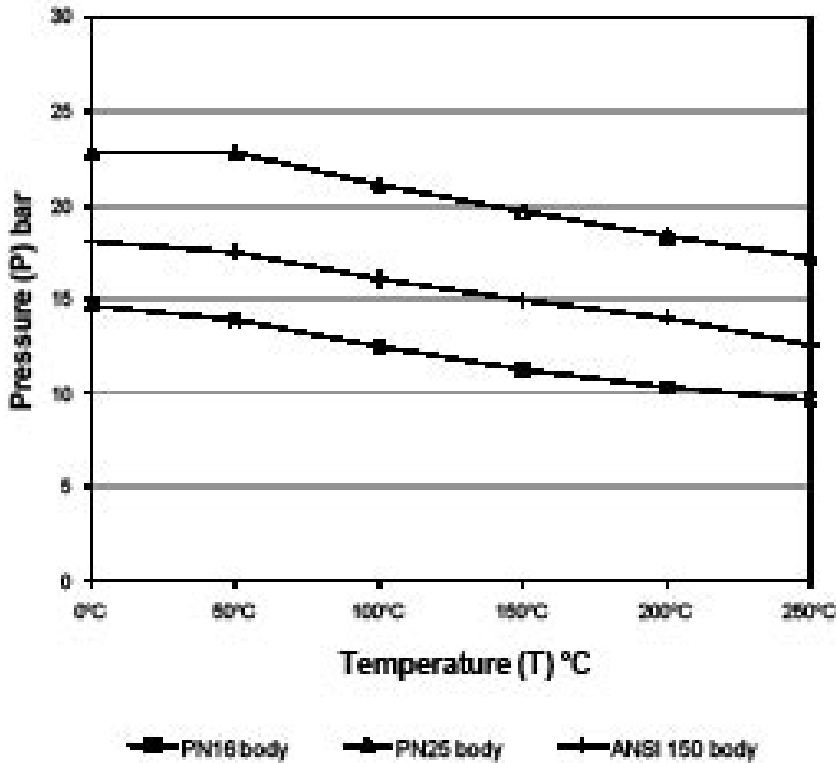
Material:	EN 1.4408
Size range:	DN 500, 600 20", 24"
Outlet Flange	DN 700,800 or customized if required
Pressure ratings:	PN 16 ANSI Class 150
Max differential pressure:	16 bar
Face to face:	See page 5
Valve design:	ANSI B16.34 and EN 12516
Temperature range:	-30 - +250°C
Test pressure:	1,5 x PN at open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

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

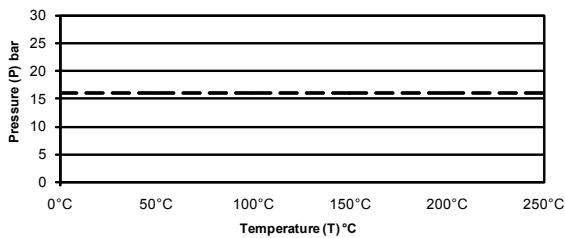
Working pressure, differential pressure and temperature

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.

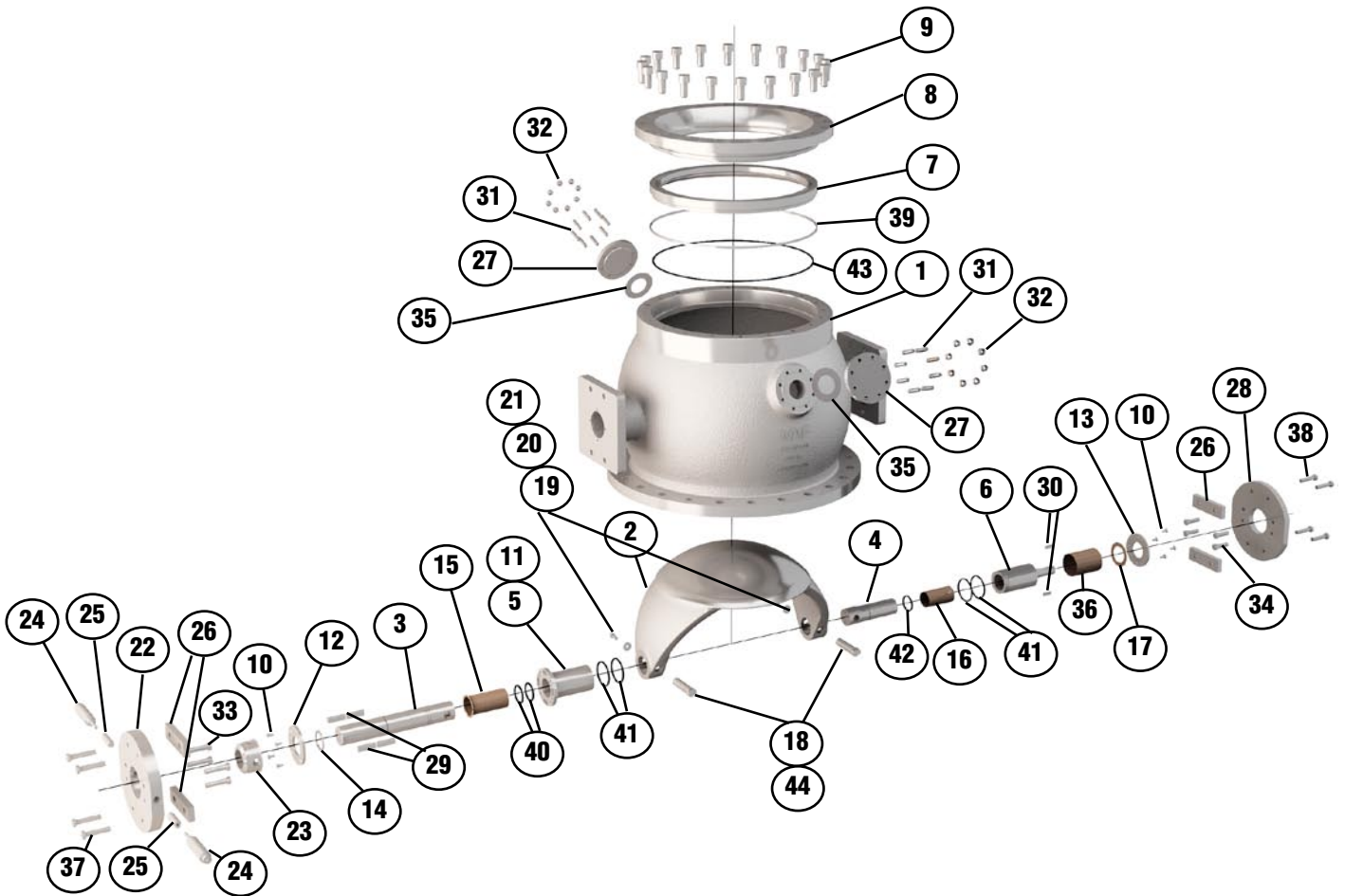
Max working pressure (Diagram 1)



Max dp (Diagram 2)



Material specification (Table 1)

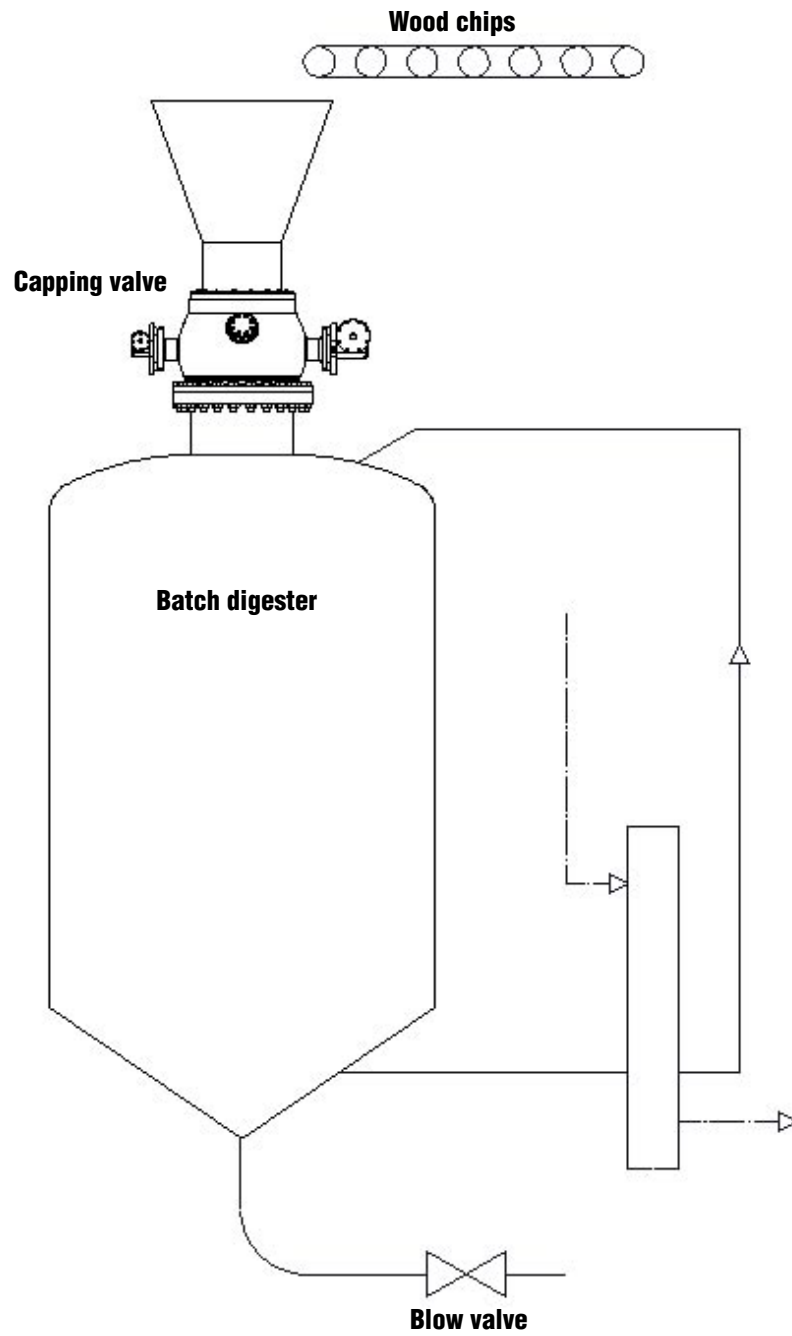


Item	Qty	Part	Material
1	1	Body	1.4408
2	1	Ball sector	1.4408/Alloy 21
3	1	Stem, operating	1.4460
4	1	Stem, tightening	1.4460
5	1	Eccentric hub	1.4460/chromed
6	1	Eccentric hub	1.4460
7	1	Seat ring	1.4408/Alloy 21
8	1	Clamp ring	1.4408
9	24	Screw	A4-80
10	8	Screw	A4-70
11	4	Screw	A4-80
12	1	Cover	1.4436
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

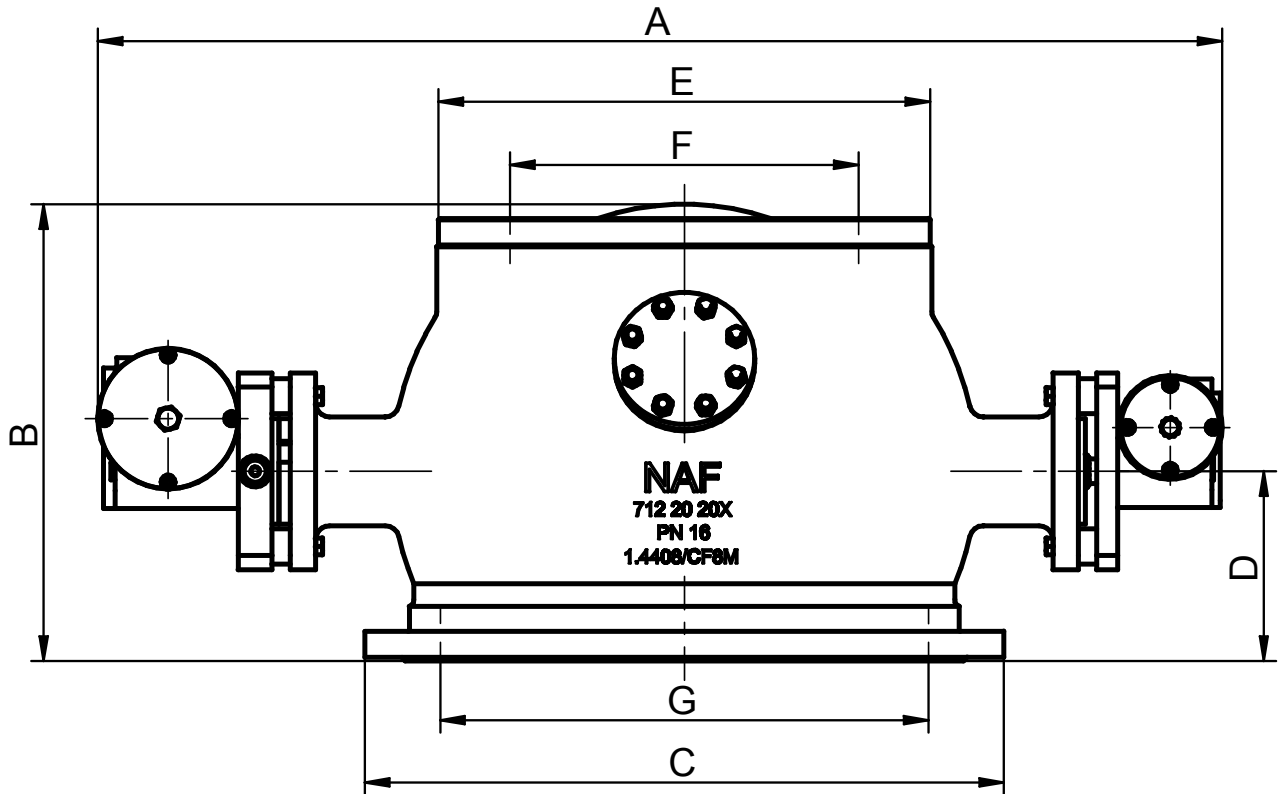
Item	Qty	Part	Material
23	1	Hub	1.4460/chromed
24	2	Cylinder	
25	2	Piston	1.4460
26	4	Distance block	1.4436
27	2	Lid	1.4436
28	1	Actuator plate	1.4436
29	4	Key	A4
30	2	Key	A4
31	16	Screw	A4-80
32	16	Nut	A4-80
33	4	Screw	A4-80
34	4	Screw	A4-80
35	2	Gasket	Graphite
36	1	Eccentric hub bearing	Metaloplast
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



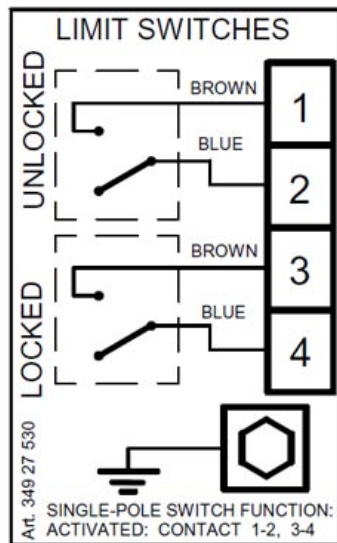
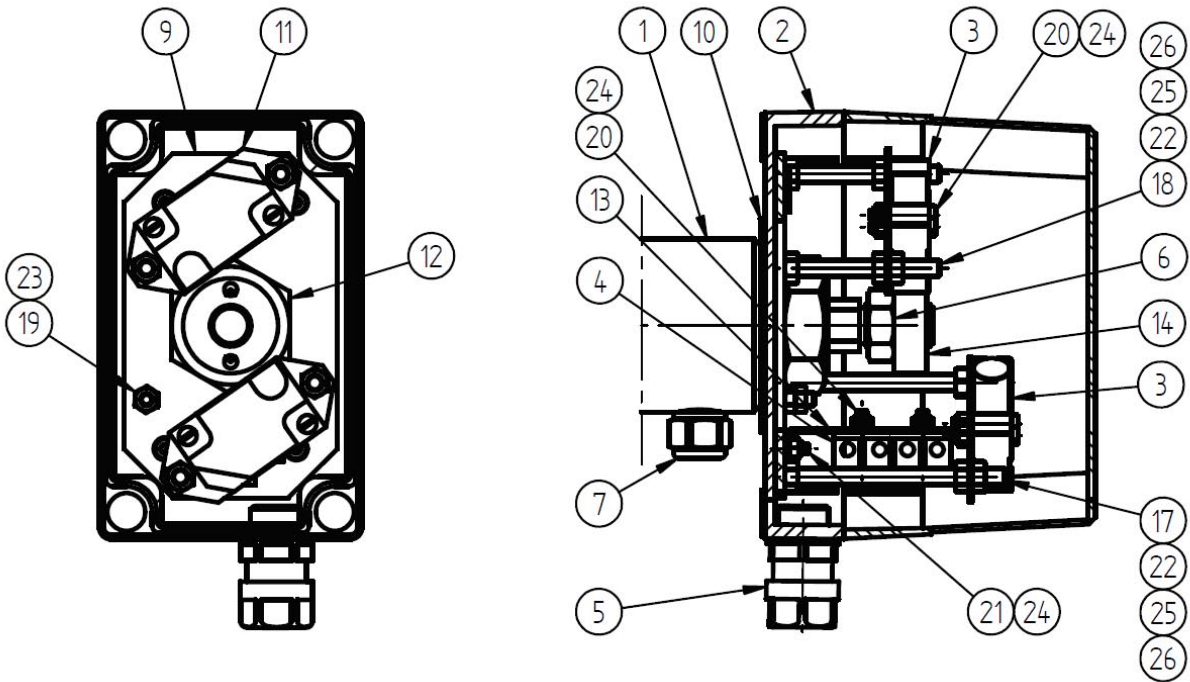
**Pneumatic actuators for DN500/700 are NAF 791290-3250 and 791290-2235
Pneumatic actuators for DN600/800 are NAF 791290-4280 and 791290-2240**

(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)

Item	Qty	Part	Material
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

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

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

- 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**

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

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

Actuators to be ordered separately.