



Flat slide gate valve

General Information

The Brabender flat slide gate valves with double acting pneumatic cylinders are mainly used as automatic refill valves for loss-in-weight feeders where they release the ingredient for feeder refilling and shut off the ingredient flow again at the end of the refill phase. Their rapid opening and closing features make them particularly suitable for this task.

Depending on the required flow volume and the pipe diameters used, Brabender flat slide gate valves are available with diameters from 65 to 400 mm (2.6 to 15.7 in). Upon request, further diameters can be supplied. All slide valves are fully assembled including a 5/2 way solenoid valve. Ingredient contact surfaces are made of stainless steel.

The standard versions of the slide valves are supplied with holes drilled as per DIN EN 1092 for mounting between flanges provided by the customer. For flexible connection to downstream and/or upstream equipment with flexible sleeves a version is available with a flanged inlet or outlet.

For applications where bulk ingredient flow is to be shut off manually, a hand wheel version is optionally available.

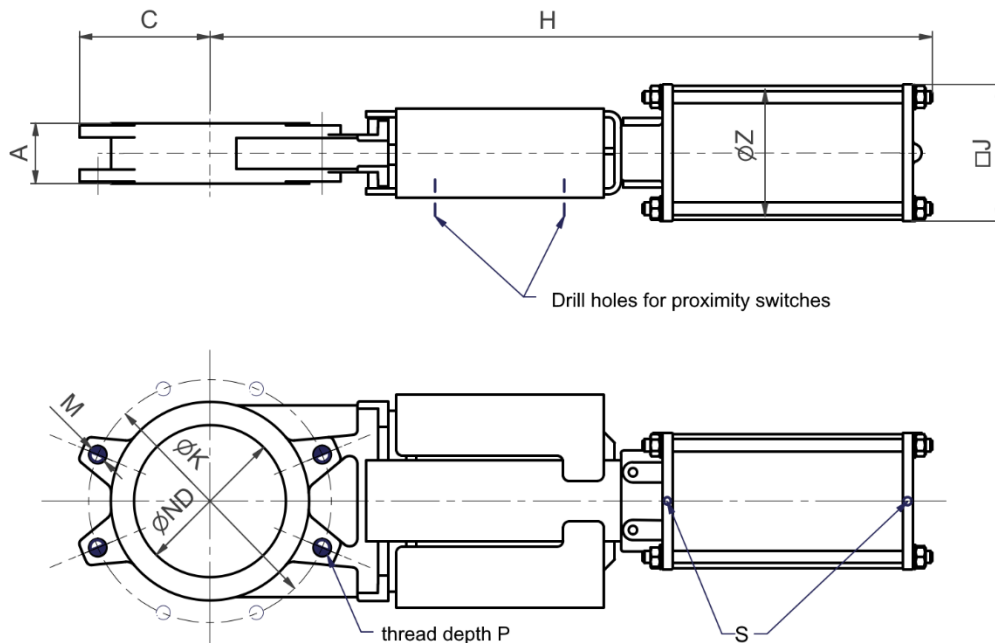
The flat slide gate valves conform to CE directives.



Control modules

The flat slide gate valve is controlled by the control system of the feeding unit used.



Technical Drawings and Dimensions





Flat slide gate valve



ND	A	C	Z	S	J	H	K	M	P	Threads	Holes O	Weight
mm	mm	mm	mm		mm	mm	mm		mm			Kg
65 (2.56)	40 (1.57)	70 (2.76)	80 (3.15)	1/4 "	96 (3.78)	452 (17.80)	145 (5.71)	M16	8 (0.31)	4	0	10.0 kg (22.0 lb)
80 (3.15)	50 (1.97)	92 (3.62)	80 (3.15)	1/4 "	96 (3.78)	494 (19.45)	160 (6.30)	M16	9 (0.35)	4	0	11.0 kg (24.3 lb)
100 (3.94)	50 (1.97)	105 (4.13)	100 (3.94)	1/4 "	115 (4.53)	557 (21.93)	180 (7.09)	M16	9 (0.35)	4	4	13.0 kg (28.7 lb)
150 (5.91)	60 (2.36)	130 (5.12)	125 (4.92)	1/4 "	138 (5.43)	711 (28.00)	240 (9.45)	M20	10 (0.39)	4	4	23.0 kg (50.7 lb)
200 (7.87)	60 (2.36)	160 (6.30)	160 (6.30)	1/2 "	175 (6.89)	871 (34.29)	295 (11.61)	M20	10 (0.39)	4	4	40.0 kg (88.2 lb)
250 (9.84)	70 (2.76)	198 (7.80)	200 (7.87)	1/2 "	218 (8.58)	1027 (40.43)	350 (13.78)	M20	12 (0.47)	6	6	57.0 kg (125.7 lb)
300 (11.81)	70 (2.76)	234 (9.21)	200 (7.87)	1/2 "	218 (8.58)	1177 (46.34)	400 (15.75)	M20	12 (0.47)	6	6	68.0 kg (149.9 lb)
350 (13.78)	96 (3.78)	256 (10.08)	250 (9.84)	1/2 "	270 (10.63)	1380 (54.33)	460 (18.11)	M20	21 (0.83)	8	4	129.0 kg (284.4 lb)
400 (15.75)	100 (3.94)	292 (11.50)	250 (9.84)	1/2 "	270 (10.63)	1536 (60.47)	515 (20.28)	M24	21 (0.83)	10	6	152.0 kg (335.1 lb)

Max. theoretical flow rate*

Diameter mm (in)	Flow rate approx. dm ³ /s (ft ³ /s)
65 (2.56)	1.5 (0.05)
80 (3.15)	3.0 (0.11)
100 (3.94)	5.0 (0.18)
150 (5.91)	15.0 (0.53)
200 (7.87)	30.0 (1.06)
250 (9.84)	50.0 (1.77)
300 (11.81)	80.0 (2.83)
350 (13.78)	120.0 (4.24)
400 (15.75)	160.0 (5.65)

* All data are theoretical values referring to free flowing bulk ingredients. Depending on the flow characteristics and granulometry of the respective ingredient, the actual maximum flow rate may be up to 80% less!

Technical Specification

Ambient temperature:	0°C to +45°C (32°F to 113°F)
Ingredient temperature:	Up to +120°C (248°F) *
Humidity of the air:	up to 85% without condensation
Medium:	Air or inert gas
Pressurized air:	Industrial air, unooled
Operating pressure:	6-8 bar
Steel components:	1.4404
Sealing slide plate:	silicon soft-sealing
Power supply:	Optional AC 230 V - 50Hz or 24V VDC
* other values upon request	

Options and Accessoires

- [2 limit switches](#)
- Explosion proof design as per directive 2014/34/EU (ATEX) or NFPA
- [Solenoid valve and limit switches wired to a junction box](#)
- Alternative sealing materials
- [Flanged inlet and/or outlet, 50mm \(2.0 in\)](#)
- Flexible connection compensators and sleeves
- Slide valve version with hand wheel for the manual operation
- [Wear hopper for use with coarse-grained and fibrous bulk materials](#)