Sprung pressure screws

for precise positioning

BOSSARD

Sprung pressure screws – small but highly effective

Precise positioning

Rapid fixing

Secure locking

Wide range of applications

The small but refined object in the foreground

Component suitable for all trades, usable anywhere:

- manufacturing of devices and tools
- electrical and machinery industries
- construction of plant and apparatus
- locking systems, household appliances, medical equipment
- and much more

The appropriate material for every case:

- steel
- stainless steel
- plastic
- springs are always in stainless steel

Pressure screws are used to

- fix components which have to be changed quickly and frequently, e.g. blade holders, bulb holders and various types of locking elements
- to position dimensionally accurate distances e.g. for stops
- allowing play in the manufacture of gauges, devices and tools
- positioning in linear and radial movements e.g. for sliders and tripping latches in the manufacture of tools, machinery and apparatus
- locking movable components, e.g. for top-hung windows, doors
- centering of aligning elements, e.g. for shafts, bushes, bearings
- fine adjustment, e.g. for indexing mechanism
- slipping into the correct position, e.g. for variable travel limiting in packaging machinery

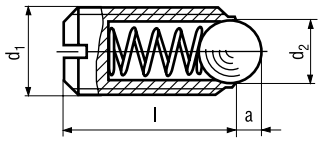
The solution for every design case

- with threads from M3 to M20
- for pressing in Ø 4 to 8 mm
- with ball or bolt
- with slot or with hexagon socket
- special parts prepared to customers' requests
- also with defined spring pressure (to customers' requests)

Sprung pressure screws – Standard program

with ball and slot **EH 2204**

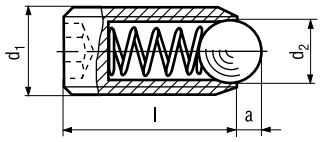
- **BN 13377**
  sleeve - POM blue
  ball - hardened stainless steel
  spring - stainless steel
- **BN 13378**
  sleeve - POM blue
  ball - POM white
  spring - stainless steel



d_1	BN 13377 Code	BN 13378 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M6	2204006	2204406	14	1	3,5	12	17	● ●
M8	2204008	2204408	16	1,5	5	20	35	● ●
M10	2204010	2204410	19	2	6	25	45	● ●

with ball and hexagon socket **EH 2203 (standard spring force)**

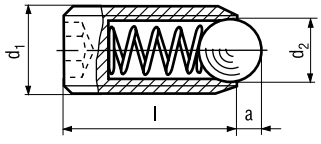
- **BN 20199**
  sleeve - free cutting steelt, black-finished
  ball - ball-bearing steel, hardened
  spring - stainless steel
- **BN 20201**
  sleeve - stainless steel 1.4305
  ball - bearing steel, hardenedt
  spring - stainless steel



d_1	BN 20199 Code	BN 20201 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M4	2203004	2203204	12	0,8	2,5	8,5	14	● ●
M5	2203005	2203205	14	0,9	3	8	14	● ●
M6	2203006	2203206	15	1	3,5	11	18	● ●
M8	2203008	2203208	18	1,5	4,5	18	31	● ●
M10	2203010	2203210	23	2	6	24	45	● ●
M12	2203012	2203212	26	2,5	8	26	49	● ●

with ball and hexagon socket **EH 2203 (increased spring force)**

- **BN 20200**
  sleeve - free cutting steelt, black-finished
  ball - bearing steel, hardened, yellow
  spring - stainless steel
- **BN 20202**
  sleeve - stainless steel 1.4305
  sleeve end yellow
  ball - hardened stainless steel
  spring - stainless steel

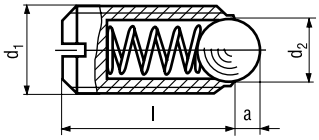


d_1	BN 20200 Code	BN 20202 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M5	2203045	2203245	14	0,9	3	15	22	● ●
M6	2203046	2203246	15	1	3,5	19	28	● ●
M8	2203048	2203248	18	1,5	4,5	36	62	● ●
M10	2203050	2203250	23	2	6	57	104	● ●
M12	2203052	2203252	26	2,5	8	61	110	● ●

with ball and slot **EH 2205 (standard spring force)**

- **BN 13363**
  sleeve – free cutting steel, black-finished
  ball - ball-bearing steel, hardened
  spring - stainless steel
- **BN 13370**
  sleeve - stainless steel 1.4305
  ball - hardened stainless steel
  spring - stainless steel

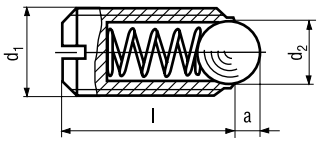
d_1	BN 13363 Code	BN 13370 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M3	2005003	2005403	7	0,4	1,5	3	4,5	● ●
M4	2005004	2005404	9	0,8	2,5	8,5	14	● ●
M5	2005005	2005405	12	0,9	3	8	14	● ●
M6	2005006	2005406	14	1	3,5	11	18	● ●
M8	2005008	2005408	16	1,5	4,5	18	31	● ●
M10	2005010	2005410	19	2	6	24	45	● ●
M12	2005012	2005412	22	2,5	8	26	49	● ●
M16	2005016	2005416	24	3,5	10	41	86	● ●
M20	2005020	2005420	30	4,5	12	56	111	● ●



with ball and slot **EH 2205 (increased spring force)**

- **BN 13364**
  sleeve – free cutting steel, black-finished
  ball - yellow, ball-bearing steel, hardened
  spring - stainless steel
- **BN 13371**
  sleeve - stainless steel 1.4305
  sleeve ends yellow
  ball - hardened stainless steel
  spring - stainless steel

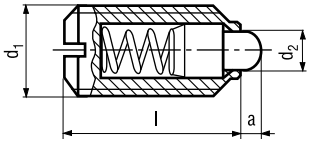
d_1	BN 13364 Code	BN 13371 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M5	2205205	2205605	12	0,9	3	15	22	● ●
M6	2205206	2205606	14	1	3,5	19	28	● ●
M8	2205208	2205608	16	1,5	4,5	36	62	● ●
M10	2205210	2205610	19	2	6	57	104	● ●
M12	2205212	2205612	22	2,5	8	61	110	● ●
M16	2205216	2205616	24	3,5	10	68	142	● ●
M20	2205220	2205620	30	4,5	12	84	166	● ●



with ball and slot **EH 2205 (standard spring force)**

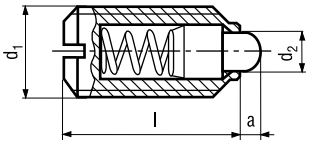
- **BN 13365**
  sleeve – free cutting steel, black-finished
  bolt – free cutting steel hardened, black-finished
  spring - stainless steel
- **BN 13372**
  sleeve - stainless steel 1.4305
  bolt - stainless steel 1.4305
  spring - stainless steel

d_1	BN 13365 Code	BN 13372 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M4	2205104	2205504	9	1,5	1,8	4,5	12,5	● ●
M5	2205105	2205505	12	2	2,4	5	13	● ●
M6	2205106	2205506	14	2	2,7	6	17	● ●
M8	2205108	2205508	16	2	3,8	16	33	● ●
M10	2205110	2205510	19	2,5	4,5	19	42	● ●
M12	2205112	2205512	22	3,5	6,2	22	57	● ●
M16	2205116	2205516	24	4,5	8,5	38	78	● ●



with ball and slot **EH 2205 (increased spring force)**

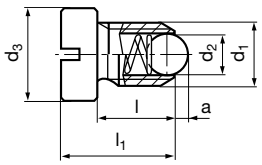
- **BN 13366**
  isleeve – free cutting steel, black-finished
  bolt – free cutting steel hardened, blue-galvanized
  spring - stainless steel
- **BN 13373**
  sleeve - stainless steel 1.4305, sleeve ends yellow
  bolt - stainless steel 1.4305
  spring - stainless steel



d_1	BN 13366 Code	BN 13373 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
M6	2205306	2205706	14	2	2,7	11	25	● ●
M8	2205308	2205708	16	2	3,8	23	59	● ●
M10	2205310	2205710	19	2,5	4,5	20	54	● ●
M12	2205312	2205712	22	3,5	6,2	38	96	● ●
M16	2205316	2205716	24	4,5	8,5	50	100	● ●

with ball and cylindrical head with slot **EH 2205 (standard spring force)**

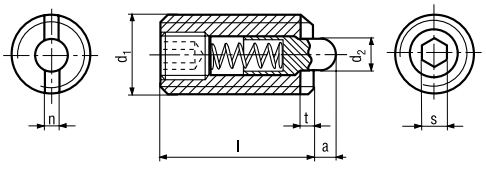
- **BN 20203**
  sleeve – free cutting steel, black-finished
  ball - ball-bearing steel, hardened
  spring - stainless steel
- **BN 20204**
  sleeve - stainless steel 1.4305
  ball - hardened stainless steel
  spring - stainless steel



d_1	BN 20203 Code	BN 20204 Code	l	l_1	a	d_2	d_3	initial force F_1 ~N	ending force F_2 ~N	
M4	2205930	2205940	6,5	9,5	0,8	2,5	6	8	14	● ●
M5	2205931	2205941	8,5	12,5	0,9	3	8	8	14	● ●
M6	2205932	2205942	9	14	1	3,5	10	11	18	● ●
M8	2205933	2205943	11	16,5	1,5	4,5	13	18	31	● ●
M10	2205934	2205944	14	20	2	6	16	24	45	● ●

with bolt and grub screw with hexagon socket bonded **EH 2206 (standard spring force)**

- **BN 13367**
  sleeve – free cutting steel, black-finished
  bolt – free cutting steel hardened, black-finished
  spring - stainless steel

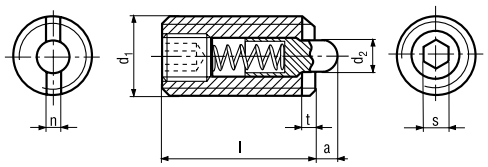


d_1	BN 13367 Code	l	a	d_2	n	t	s	initial force F_1 ~N	ending force F_2 ~N	
M3	2206003	12	1	1	0,4	0,5	0,7	2	4	●
M4	2206004	15	1,5	1,5	0,6	0,6	1,3	4,5	16	●
M5	2206005	18	2,3	2,4	1,2	0,8	1,5	6	19	●
M6	2206006	20	2,5	2,7	1,3	0,9	2	6	19	●
M8	2206008	22	3	3,5	1,5	1,4	2,5	10	39	●
M10	2206010	22	3	4	1,5	1,4	3	10	39	●
M12	2206012	28	4	6	2,7	2	4	12	53	●
M16	2206016	32	5	7,5	3,2	2,5	5	45	100	●
M20	2206020	40	7	10	3,7	3	6	52	125	●

with bolt and grub screw with hexagon socket bonded **EH 2206 (increased spring force)**

● **BN 13368**
sleeve – free cutting steel, black-finished
bolt – free cutting steel hardened, black-finished
spring - stainless steel
grub screw - plain

d_1	BN 13368 Code	l	a	d_2	n	t	s	initial force F_1 ~N	ending force F_2 ~N	
M5	2206105	18	2,3	2,4	1,2	0,8	1,5	11	40	●
M6	2206106	20	2,5	2,7	1,3	0,9	2	15	43	●
M8	2206108	22	3	3,5	1,5	1,4	2,5	20	75	●
M10	2206110	22	3	4	1,5	1,4	3	20	75	●
M12	2206112	28	4	6	2,7	2	4	45	120	●
M16	2206116	32	5	7,5	3,2	2,5	5	64	160	●
M20	2206120	40	7	10	3,7	3	6	75	195	●



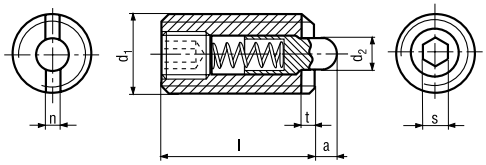
with bolt and grub screw with hexagon socket bonded **EH 2206 (standard spring force)**

● **BN 13369**
sleeve – free cutting steel, black-finished
bolt - POM white
spring - stainless steel

● **BN 13374**
sleeve - stainless steel 1.4305
bolt - stainless steel 1.4305
spring - stainless steel

○ **BN 13375**
sleeve - stainless steel 1.4305
bolt - POM white
spring - stainless steel

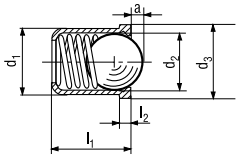
d_1	BN 13369 Code	BN 13374 Code	BN 13375 Code	l	a	d_2	n	t	s	initial force F_1 ~N	ending force F_2 ~N	
M4	2206204	2206404	2206604	15	1,5	1,5	0,6	0,6	1,3	4,5	16	● ● ○
M5	2206205	2206405	2206605	18	2,3	2,4	1,2	0,8	1,5	6	19	● ● ○
M6	2206206	2206406	2206606	20	2,5	2,7	1,3	0,9	2	6	19	● ● ○
M8	2206208	2206408	2206608	22	3	3,5	1,5	1,4	2,5	10	39	● ● ○
M10	2206210	2206410	2206610	22	3	4	1,5	1,4	3	10	39	● ● ○
M12	2206212	2206412	2206612	28	4	6	2,7	2	4	12	53	● ● ○
M16	2206216	2206416	2206616	32	5	7,5	3,2	2,5	5	45	100	● ● ○



Smooth design with collar **EH 2208**

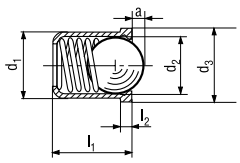
● **BN 13376**
sleeve - stainless steel 1.4303
ball - hardened stainless steel
spring - stainless steel
mounting hole tolerance H7 to H8

d_1	BN 13376 Code	d_2	d_3	l_1	l_2	a	initial force F_1 ~N	ending force F_2 ~N	
Ø 4	2208004	3	4,6	5	1	1	2,5	6	●
Ø 5	2208005	4	5,6	6	1	1,4	3	6,5	●
Ø 6	2208006	5	6,5	7	1	1,8	5,5	11,5	●
Ø 8	2208008	6,5	8,5	9	1	2,4	7	12,5	●



smooth design with collar **EH 2208**

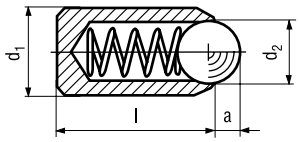
- **BN 13379**
  sleeve - POM blue
  ball - hardened stainless steel
  spring - stainless steel
- **BN 13380**
  sleeve - POM blue
  ball - POM white
  spring - stainless steel
  mounting hole tolerance H7 to H8



d_1	BN 13379 Code	BN 13380 Code	d_2	d_3	l_1	l_2	a	initial force F_1 ~N	ending force F_2 ~N	
Ø 4	2208404	2208604	3	4,6	5	1	0,8	2,5	6,5	●●
Ø 5	2208405	2208605	4	5,6	6	1	1	4,5	9	●●
Ø 6	2208406	2208606	5	6,5	7	1	1,6	6,5	13	●●
Ø 8	2208408	2208608	6,5	8,5	9	1	1,9	8	18	●●

smooth design without collar **EH 2208**

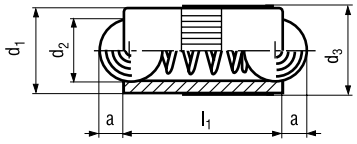
- **BN 20205**
  sleeve - stainless steel 1.4305
  ball - hardened stainless steel
  spring - stainless steel
  tolerance of diameter d1 +/- 0.04



d_1	BN 20205 Code	l	a	d_2	initial force F_1 ~N	ending force F_2 ~N	
Ø 3	2208310	7	0,65	2	4,5	7,5	●
Ø 3,5	2208312	9	0,8	2,5	6	14,5	●
Ø 4	2208315	11	0,9	3	8	14	●
Ø 4,5	2208317	12	0,95	3,2	9,5	16,5	●
Ø 5	2208320	13	1	3,5	11	18	●
Ø 5,5	2208322	14	1,2	4	15,5	25	●
Ø 6	2208325	15	1,5	4,5	18	31	●

double-sided **EH 2209**

- **BN 20206**
  copper sleeve (centre rimmed)
  ball - hardened stainless steel
  spring - stainless steel



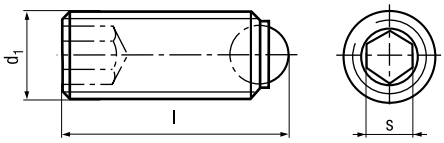
d_1	BN 20206 Code	l_1	a	d_2	d_3 min.	initial force F_1 ~N	ending force F_2 ~N	
Ø 2,5	2209025	5,3	0,65	2	2,52	1,3	2,5	●
Ø 3	2209030	7,3	0,8	2,5	3,02	2	4,5	●
Ø 4	2209040	9	0,9	3	4,03	2,5	7,5	●
Ø 5	2209050	10,8	1,2	4	5,03	3,5	8	●
Ø 7	2209070	14	2	6	7,03	4	12	●
Ø 8	2209080	18	2,1	6,5	8,03	6	15	●

Ball plungers / screwdriver

Without head, full ball EH 2272

● **BN 20214**
screw - steel hardened and tempered
1200 ± 100 N/mm²
ball - ball-bearing steel, hardened

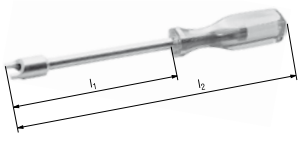
d_1	BN 20214 Code	l	static load max. kN	
M4	2272042	6	3,5	●
	2272043	8	3,5	●
	2272044	10	3,5	●
	2272045	12	3,5	●
	2272046	16	3,5	●
M5	2272052	8	4,5	●
	2272053	10	4,5	●
	2272054	12	4,5	●
	2272055	16	4,5	●
	2272056	20	4,5	●
	2272058	25	4,5	●
M6	2272062	10,8	9	●
	2272063	12,8	9	●
	2272064	16,8	9	●
	2272065	20,8	9	●
	2272066	25,8	9	●
M8	2272081	11,2	15	●
	2272082	13,2	15	●
	2272083	17,2	15	●
	2272084	21,2	15	●
	2272085	26,2	15	●
	2272086	31,2	15	●
M10	2272101	13,7	20	●
	2272102	17,7	20	●
	2272103	21,7	20	●
	2272104	26,7	20	●
	2272105	31,7	20	●
	2272106	36,7	20	●
	2272108	41,7	20	●



Screwdriver to EH 2206

● **BN 16007**

Size	order number	l_1	l_2	
M3	2206.803	60	135	●
M4	2206.804	75	155	●
M5	2206.805	85	175	●
M6	2206.806	85	175	●
M8	2206.808	95	195	●
M10	2206.810	105	205	●
M12	2206.812	105	230	●
M16	2206.816	115	265	●
M20	2206.820	115	265	●



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