



## Impact marking spindles

### Technical data sheet

- Suitable for almost every plastic model deformable material
- Marking tools: steel types, engraved stamps or numbering heads
- Impact power is infinitely variable.
- Big usable stroke (depending on the design from 21 up to 150 mm available)

### Application area

BORRIES impact marking spindles are suitable amongst others for marking applications on transfer lines, round cycle facility or testing stations. Because of the big usable stroke workpieces with different heights can be marked without any adjusting.

#### BM 12 PN

Smallest marking unit with an impact power up to 4 kN (pneumatic control).



fig. BM 12 PN

#### BM 22 PN / BM 25 PN

Slim, powerful, exclusive pneumatically working unit with an impact power up to 18 kN (BM 22 PN) or 40 kN (BM 25 PN).



fig. BM 22 PN



fig. BM 25 PN

#### BM 21 PN / BM 21 HY

Marking unit with an impact power up to 25 kN. Depending on the design the control is pneumatic (BM 21 PN) or hydraulic (BM 21 HY).



fig. BM 21 PN



fig. BM 21 HY

#### BM 35 PN / BM 35 HY

Powerful marking unit with an impact power up to 50 kN. Depending on the design the control is pneumatic (BM 35 PN) or hydraulic (BM 35 HY).

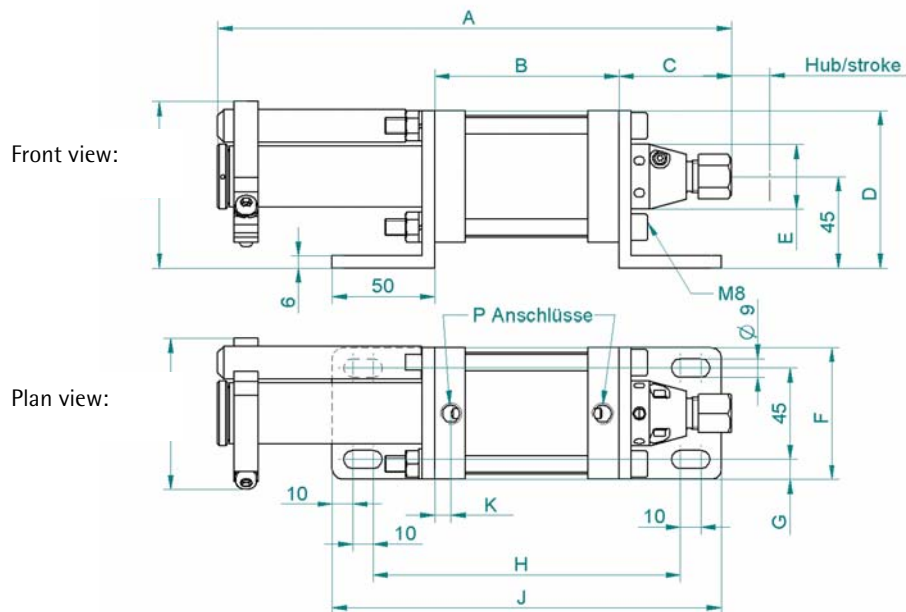


fig. BM 35 PN

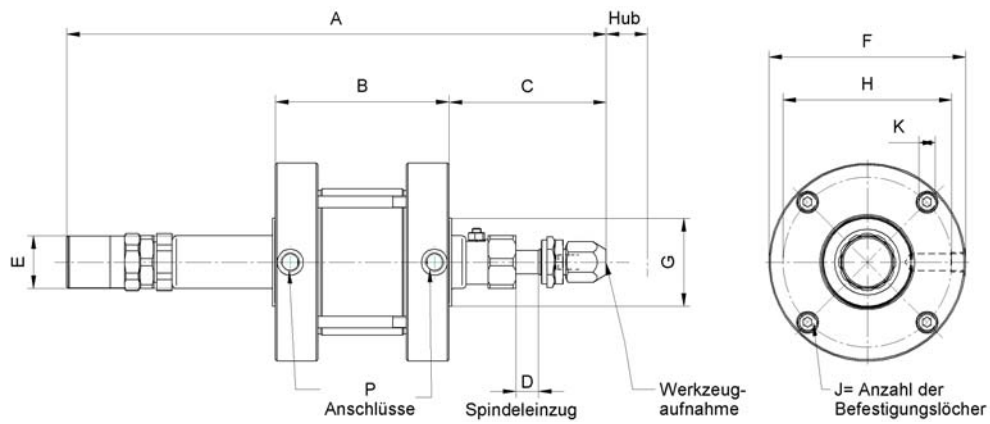
## Technical data

	BM 12 PN	BM 22 PN	BM 21 PN	BM 21 HY	BM 25 PN	BM 35 PN	BM 35 HY
Measurements	see drawing						
Tool holder	∅ 8 mm	∅ 8/10 mm	∅ 10 mm	∅ 10 mm	∅ 10 mm	∅ 16 mm	∅ 16 mm
Usable stroke – standard	22 mm	32 mm	50 mm	50 mm	50 mm	90 mm	75 mm
Usable stroke – option	80 mm	50 mm 80 mm 100 mm 150 mm					
Pressure	5 bar	5 bar	5 bar	20 bar	5 bar	5 bar	25 bar
Air consumption L/ stroke	0.4	0.4	0.7	0.25	0.3	2.7	0.5
Piston area cm <sup>2</sup>	18 cm <sup>2</sup>	18 cm <sup>2</sup>	50 cm <sup>2</sup>	18 cm <sup>2</sup>	19 cm <sup>2</sup>	109 cm <sup>2</sup>	25 cm <sup>2</sup>
Impact power kN	4 kN	18 kN	25 kN	25 kN	35 kN	50 kN	50 kN

Technical details are subject to change.



Type	A	B	C	D	E	F	G	H	J	K	L	M	P
<b>BM 12 PN</b>	218	88	44	77.5	∅ 27	∅ 65	10	148	188	7	-	-	R 1/8 "
<b>BM 22 PN</b>	251	90	55	77.5	∅ 32	∅ 65	10	150	190	8	74.5	82	R 1/8 "
<b>BM 25 PN</b>	298	108	68	82.5	∅ 40	∅ 75	15	168	208	7.5	76.4	-	R 1/4 "



Type	A	B	C	D	E	F	G	H	J	K	P
<b>BM 21 PN</b>	403	119	110	15	Ø 39	Ø 135	Ø 60	Ø 116	4	M 8	R 1/4 "
<b>BM 21 HY</b>	405	115	107	15	Ø 39	Ø 98	Ø 55	Ø 80	4	M 8	R 1/4 "
<b>BM 35 PN</b>	700	194	130	25	Ø 124	Ø 184	Ø 90	Ø 162	4	M 8	R 1/4 "
<b>BM 35 HY</b>	700	209	148	25	Ø 124	Ø 140	Ø 90	Ø 118	4	M 10	R 1/4 "

**Marking power (max. numbers of characters\*) with using of BORRIES steel types and type holders**

	BM 12 PN		BM 22 PN		BM 21 PN		BM 25 PN		BM 35 PN	
	Steel	Alu	Steel	Alu	Steel	Alu	Steel	Alu	Steel	Alu
Character height 1.0 mm	7	14	11	21	33	72	14	24	36	75
Character height 1.5 mm	6	13	10	20	27	63	13	23	30	70
Character height 2.0 mm	5	12	8	18	23	62	11	21	26	65
Character height 2.5 mm	4	10	7	16	16	57	10	19	19	60
Character height 3.0 mm	3	8	6	14	14	52	9	17	17	55
Character height 4.0 mm	2	6	5	11	12	47	8	14	15	50

\*) These details are rough standard values. Exact information can only be made after a sample marking with an original workpiece. Technical details are subject to change.