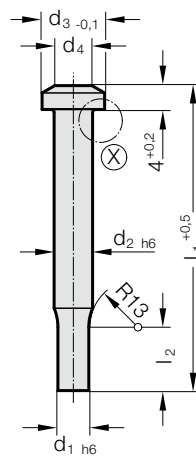


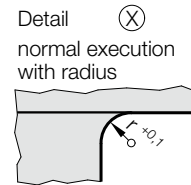
PUNCH DIN 9844, SHAPE B



221.



$$d_4 = d_1^{+0,5}$$



221. Punch DIN 9844, Shape B

Gradation										
d ₁	d ₁	d ₂	d ₃	l ₂	r	l ₁	71	90	112	
0.1	0.05	2	3.6	7	0.2		●	●	●	
1.95	0.05	2.5	4	7	0.2		●	●	●	
2.5	0.1	3.2	5	7	0.3		●	●	●	
3.2	0.1	4	7	7	0.3		●	●	●	
4	0.1	5	8.5	7	0.5		●	●	●	
5	0.1	6.3	10	7	0.5		●	●	●	
6.3	0.1	8	12	16	0.7		●	●	●	
8	0.1	10	14.5	16	0.7		●	●	●	
10	0.1	12.5	18	16	1		●	●	●	
12.5	0.1	16	22	16	1		●	●	●	

Material:

HSS

Order No 221.3.

Hardness:

Shaft 64 ± 2 HRC

Head 52 ± 3 HRC

HST

Order No 221.4.

Hardness:

Surface ≥ 950 HV 0,3

Head 52 ± 3 HRC

Description of FIBRO materials for tool and die components see at the beginning of Chapter E.

Execution:

Punch head hot upset-forged. Shaft and shoulder precision plunge-ground.

Stock lengths: 71, 90, 112 mm.

other lengths and diameters on request!

Ordering Code (example):

Punch DIN 9844, Shape B	=	221.
Material MAT	HSS	= 3.
Cutting diameter d ₁	5 mm	= 0500.
Length l ₁	71 mm	= 071
Order No		= 221.3.0500. 071