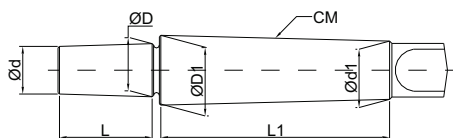


PARA MANDRIL



Tipo Europeu (DIN 238)

REF.	CM x ESPIGA	capacidade do mandril		P. Médio (kg)
		polegadas	milímetros	
HE-551	1xB10	5/32" e 1/4"	4 e 6	0,05
HE-552	1xB12	1/4" e 5/16"	6 e 8	0,05
HE-553	1xB16	3/8" e 1/2"	10 e 13	0,10
HE-554	1xB18	5/8"	16	0,10
HE-554-A	2xB10	5/32" e 1/4"	4 e 6	0,10
HE-555	2xB12	1/4" e 5/16"	6 e 8	0,15
HE-556	2xB16	3/8" e 1/2"	10 e 13	0,15
HE-557	2xB18	5/8"	15	0,20
HE-558	2xB22	3/4"	20	0,25
HE-559	2xB24	1"	26	0,25
HE-560	3xB12	1/4" e 5/16"	6 e 8	0,25
HE-561	3xB16	3/8" e 1/2"	10 e 13	0,30
HE-562	3xB18	5/8"	16	0,30
HE-563	3xB22	3/4"	20	0,40
HE-564	3xB24	1"	26	0,50
HE-564-A	4xB12	1/4" e 5/16"	6 e 8	0,60
HE-564-B	4xB16	3/8" e 1/2"	10 e 13	0,65
HE-565	4xB18	5/8"	16	0,65
HE-566	4xB22	3/4"	20	0,65
HE-567	4xB24	1"	26	0,75
HE-567-A	5xB16	3/8" e 1/2"	10 e 13	1,50
HE-568	5xB18	5/8"	16	1,50
HE-569	5xB22	3/4"	20	1,70
HE-570	5xB24	1"	26	4,20
HE-571	6xB18	5/8"	16	4,30
HE-572	6xB22	3/4"	20	4,30
HE-573	6xB24	1"	26	4,30

Espiga

Europeu	diâmetro menor d	diâmetro maior D	comprimento L
B-10	9,62	10,3	13
B-12	11,39	12,24	17
B-16	14,78	15,98	24
B-18	16,43	18,03	32
B-22	22,01	22,04	40,5
B-24	21,54	24,08	50,5

Cone-Morse

CM	diâmetro menor d1	diâmetro maior D1	comprimento L1
1	9,7	12,2	52
2	14,8	18,0	64
3	20,1	24,1	79
4	26,4	31,6	100
5	38,1	44,7	127
6	54,5	63,8	178

Espiga

Jacobs	diâmetro menor d	diâmetro maior D	comprimento L
J0	5,94	6,43	10
J1	8,69	9,92	16
J2	13,12	14,59	18
J3	19,36	20,85	28
J4	26,7	28,8	40
J5	33,81	36,14	45
J6	16,18	17,42	24
J33	14,58	16,1	24

- Utilizada para fixação de mandris universais à árvore de máquinas-ferramenta.
- Possuem duas superfícies cônicas opostas, uma em cone-morse (1 a 6) e outra para acoplamento dos diversos mandris "Jacobs", "Röhmm".
- Temperadas e retificadas.

Jacobs (ASA)

REF.	CM x ESPIGA	capacidade do mandril		P. Médio (kg)	
		número	milímetros		
HJ-500	0xJ0	0	5/32	4,0	0,30
HJ-501	1xJ0	0	5/32	4,0	0,05
HJ-502	1xJ1	1-A	1/4	6,0	0,05
HJ-503	1xJ2	7 e 8 1/2-N	1/4	6,0	0,07
		30	5/16	8,0	
		2-A; 11-N; 32	3/8	10,0	
HJ-503-A	1xJ3	14-N	1/2	13,0	0,14
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-504	1xJ6	34	1/2	13,0	0,10
HJ-505	1xJ33	33	1/2	13,0	0,10
HJ-506	2xJ0	0	5/32	4,0	0,15
HJ-507	2xJ1	1-A	1/4	6,0	0,15
HJ-508	2xJ2	7 e 8 1/2-N	1/4	6,0	0,15
		30	5/16	8,0	
		2-A; 11-N; 32	3/8	10,0	
HJ-509	2xJ3	14-N	1/2	13,0	0,20
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-510	2xJ6	34	1/2	13,0	0,20
HJ-511	2xJ33	33	1/2	13,0	0,20
HJ-511-A	2xJ4	16-N	3/4	20,0	0,30
HJ-511-B	3xJ1	1-A	1/4	6,0	0,30
HJ-512	3xJ2	7 e 8 1/2-N	1/4	6,0	0,30
		30	5/16	8,0	
		2-A; 11-N; 32	3/8	10,0	
HJ-513	3xJ3	14-N	1/2	13,0	0,35
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-514	3xJ4	16-N	3/4	20,0	0,50
HJ-515	3xJ5	20-N	1	26,0	0,60
HJ-516	3xJ6	34	1/2	13,0	0,40
HJ-517	3xJ33	33	1/2	13,0	0,35
HJ-517-A	4xJ2	7 e 8 1/2-N	1/4	6,0	0,60
		30	5/16	8,0	
		2-A; 11-N; 32	3/8	10,0	
HJ-518	4xJ3	14-N	1/2	13,0	0,65
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-519	4xJ4	18-N	1/2	20,0	0,80
HJ-520	4xJ5	20-N	1/2	26,0	0,90
HJ-521	4xJ6	34	5/8	13,0	0,75
HJ-521-A	4xJ33	33	1/2	13,0	0,75
HJ-521-B	5xJ2	7 e 8 1/2-N	1/4	6,0	1,50
		30	5/16	8,0	
		2-A; 11-N; 32	3/8	10,0	
HJ-522	5xJ3	14-N	1/2	13,0	1,60
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-523	5xJ4	18-N	3/4	20,0	1,70
HJ-524	5xJ5	20-N	1	26,0	1,80
HJ-524-A	5xJ6	34	1/2	13,0	1,60
HJ-525	6xJ3	14-N	1/2	13,0	4,25
		3-A e 16-N	5/8	16,0	
		36	3/4	20,0	
HJ-526	6xJ4	18-N	3/4	20,0	4,40
HJ-527	6xJ5	20-N	1	26,0	4,60