

**MAXIMUM PERMISSIBLE ROTATION SPEEDS (RPM)**

**FOR CHUCKS 3105, 32\*\*, 35\*\*, 36\*\*, 37\*\*, 38\*\***

Chuck size [mm]	Max. rpm			
	Type 3105 <sup>1)</sup> , 32**, 36**	Type 35**, 37**	Type 3564, 3565	Type 3864, 3865
80	5.000	7.000	-	-
100	4.500	6.300	6.300	-
125	4.000	5.500	5.500	3.800
160	3.600	4.600	4.600	3.200
200	3.000	4.000	4.000	2.800
250	2.500	3.500	3.500	2.400
315	2.000	2.800	2.800	2.400
400	1.600	2.000	2.000	1.400
500	1.000	1.300	1.300	900
630	800	1.000	1.000	700
800	600	800	800	400
1000	400	600	500	300

<sup>1)</sup> The specified permissible speeds are only applicable for work-pieces not exceeding a specific unbalance of 25 gmm/kg

**FOR CHUCKS 43\*\***

Chuck size [mm]	Max. rpm	
	Steel body	Cast iron body
85	4.000	-
100	3.800	-
125	3.500	-
160	3.200	-
200	2.500	1.800
250	2.000	1.500
315	1.500	1.200
350	1.500	1.200
400	1.100	800
500	700	500
630	550	400
800	450	300
915	200	150
1000	200	150
1250	150	100

\* The specified permissible speeds are only applicable for work-pieces not exceeding a specific unbalance of 25 gmm/kg

**FOR CHUCKS 3404**

Chuck size [mm]	Max. rpm
125	6.000
160	5.400
200	4.600
250	4.200
315	3.300

**FOR CHUCKS 4505, 4605, 4705, 4805**

Chuck size [mm]	Max. rpm			
	Type 4505*	Type 4605*	Type 4705*	Type 4805*
200	2.500	2.000	3.000	2.500
250	2.000	1.800	2.500	2.000
315	1.500	1.500	2.000	1.700
400	1.000	1.000	1.500	1.300
500	700	600	1.000	800
630	540	480	750	660

\* The specified permissible speeds are only applicable for work-pieces not exceeding a specific unbalance of 25 gmm/kg

**BALANCE VALUE**

**FOR CHUCKS 35\*\*, 37\*\***

Chuck size [mm]	gcm
80	11
100	16
125	23
160	32
200	45
250	63
315	90
400	140
500	300
630	640

**FOR CHUCKS 3404**

Chuck size [mm]	gcm
125	16
160	32
200	63
250	125
315	250

**FOR CHUCKS 3105, 32\*\*, 35\*\*, 36\*\*, 37\*\*, 38\*\***

Chuck size [mm]	Torque on wrench [Nm]	Total gripping force [daN]
80	35	1.000
100	50	1.700
125	75	2.400
160	120	3.100 (2.400*)
200	160	3.700 (2.900*)
250	180	4.600 (3.600*)
315	200	5.500 (4.400*)
400	280	6.500 (4.900*)
500	360	7.200
630	460	8.000
800	500	9.000
915	500	9.000
1000	500	9.000
1000	200	-
1250	150	-

\* for 3105

**TOTAL GRIPPING FORCE**

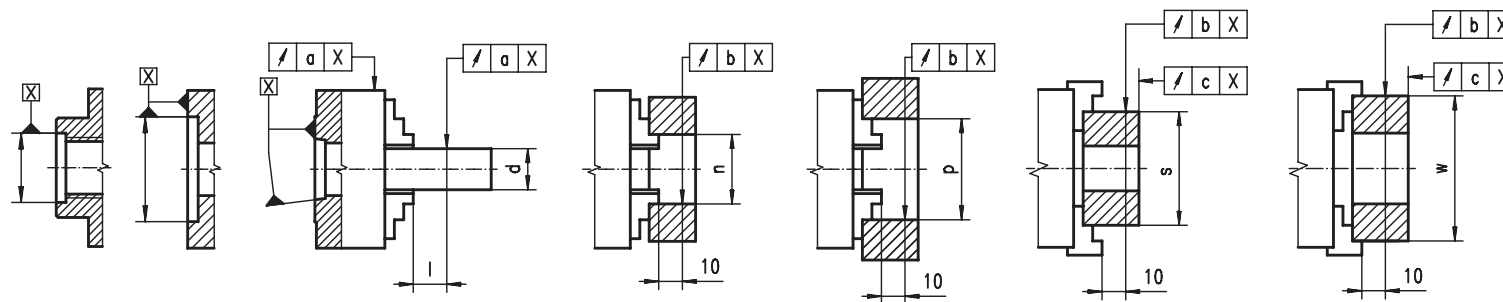
- The total gripping force is the sum of all jaw forces acting radially on the stationary workpiece. The specified gripping forces are approximate values.
- They apply to chucks in perfect condition which have been lubricated with greases recommended in the chuck operations manual.

**FOR CHUCKS 3404**

Chuck size [mm]	Torque on wrench [Nm]	Total gripping force [daN]
125	40	3.000
160	100	6.000
200	160	8.500
250	200	11.000
315	250	13.000

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**CENTERING ACCURACY**



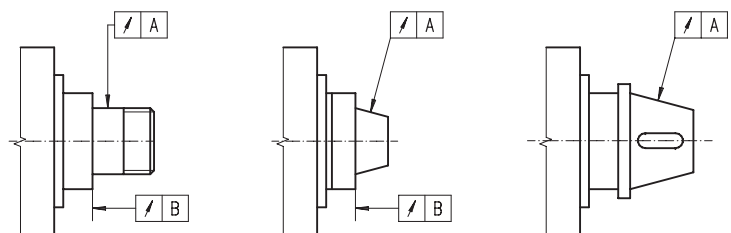
For chucks  
32\*\*, 35\*\*, 36\*\*, 37\*\*, 38\*\*

Chuck size [mm]	d	i	n	p	s	w		Centering accuracy [mm]													
						Hard solid jaws	Hard 2-piece jaws	Type 35** PREMIUM			Type 35**, 37**, 38**			Type 32**, 36**			Type 3284, 3285				
								a	b	c	a	b	c	a	b	c	a	b	c		
80	10	-	14	40	40	60	35	63	-	0,010	0,013	0,008	0,020	0,025	0,015	0,020	0,025	0,015	0,050	0,075	0,040
100	10	14	18	40	40	75	50	80	-	0,010	0,013	0,008	0,020	0,025	0,015	0,020	0,025	0,015	0,050	0,075	0,040
125	18	25	30	60	50	100	62	100	120	0,015	0,018	0,010	0,030	0,035	0,020	0,030	0,035	0,020	0,050	0,075	0,040
160	18	30	40	60	50	135	88	100	150	0,015	0,018	0,010	0,030	0,035	0,020	0,030	0,035	0,020	0,050	0,075	0,040
200	30	40	53	80	80	162	96	160	185	0,020	0,023	0,013	0,040	0,045	0,025	0,040	0,045	0,025	0,050	0,075	0,040
250	30	53	75	80	80	200	150	160	225	0,020	0,023	0,013	0,040	0,045	0,025	0,040	0,045	0,025	0,080	0,075	0,070
315	53	75	100	120	125	252	210	250	300	0,025	0,028	0,015	0,050	0,055	0,030	0,050	0,055	0,030	0,080	0,075	0,070
400	53	100	125	120	125	282	250	250	350	0,030	0,033	0,015	0,060	0,065	0,030	0,060	0,065	0,030	-	-	-
500	75	100	125	160	200	282	300	400	400	0,050	0,055	0,030	0,100	0,075	0,050	0,100	0,100	0,050	-	-	-
630	75	125	160	160	200	325	400	400	400	0,070	0,075	0,050	0,100	0,100	0,050	0,100	0,100	0,050	-	-	-
800	160	200	250	160	325	500	400	500	500	0,100	0,100	0,050	0,150	0,150	0,060	0,150	0,150	0,060	-	-	-
915	250	315	400	160	500	630	500	-	630	-	-	-	-	-	-	0,150	0,150	0,060	-	-	-
1000	250	315	400	160	500	630	500	-	630	0,120	0,120	0,060	0,150	0,150	0,080	0,150	0,150	0,060	-	-	-

**SPINDLE NOSE CENTERING ACCURACY**

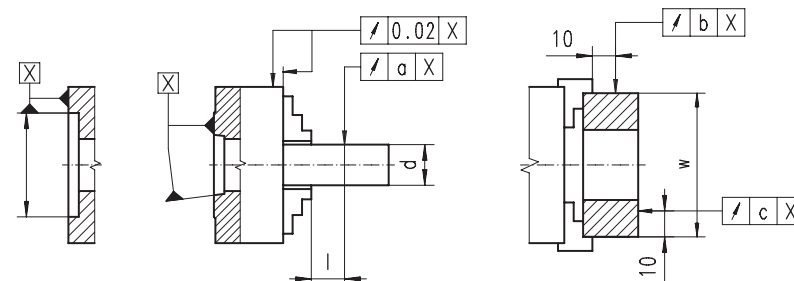
To obtain the specified centering accuracy of a chuck mounted on a machine tool it is necessary:

- 1) to ensure the machine spindle nose run-out does not exceed the values specified,
- 2) to meet the basic requirements for correct mounting of the chuck on the spindle nose, according to the operations manual.



A B		Type 35**		Type 32**, 36**, 37**	
Ø 80 - 400	0,003 mm	Ø 80 - 160	0,003 mm	Ø 200 - 800	0,005 mm
Ø 500 - 630	0,005 mm				

**UNBALANCE CHUCK 3404**



Chuck size [mm]	d		i	w		Centering accuracy [mm]			
	Hard solid jaws	Hard 2-piece jaws		Type 3404					
				a	b	c			
125	14	20	29	60	95	125	0,015	0,010	0,015
160	14	20	39	60	95	160	0,015	0,010	0,015
200	14	22	50	80	125	200	0,015	0,010	0,015
250	15	32	64	80	180	245	0,015	0,010	0,015
315	20	64	89	120	189	290	0,020	0,010	0,020