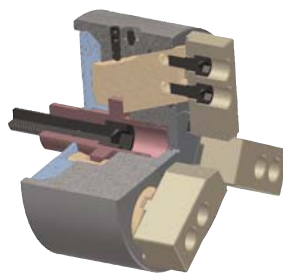


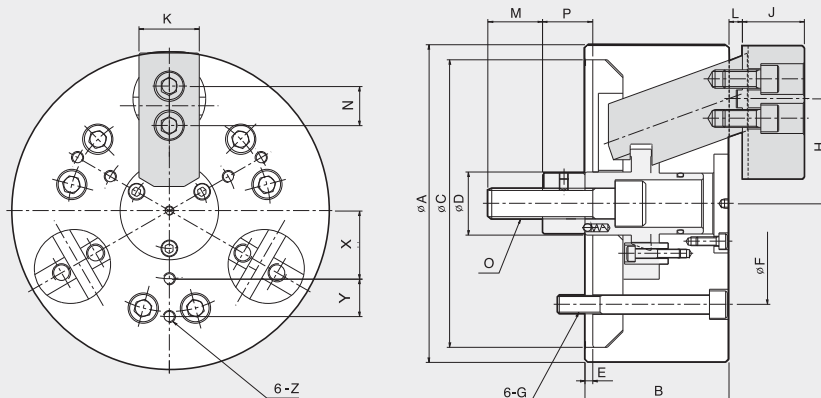
# DDL

## Outside Draw-Down Chuck

- Workpiece pulled down to location for superior accuracy
- Very accurate for parallel and perpendicular surfaces
- Interchangeable top jaws facilitate work on multiple workpieces
- Sealed to prevent chips and coolant from entering the chuck body



**SPECIAL CHUCK**



### Dimensions

	ΦA	B	ΦC(h7)	ΦD	E	ΦF	G	Hmax.	Hmin.	J	K	Lmax.	Lmin.	M	N	O	Pmax.	Pmin.	X	Y	Z
DDL-04	98	60	60	25	5	80	3-M8	38.25	33.25	19.5	25	10.5	3.5	20	-	M10	14	7	25	-	3-M6
DDL-05	130	70	80	28	5	100	3-M8	44	41.5	24.5	30	10.5	3.5	25	-	M12	24	17	30	-	M6
DDL-06	165	85	140	34	5	104.8	M10	58	54.4	31	35	14	4	36	-	M16	33	23	35	20	M6
DDL-08	210	95	190	40	5	133.4	M12	71	67.4	41	40	14	4	36	26	M20	38	28	45	25	M8
DDL-10	254	110	230	50	5	171.4	M16	85	79.6	49	50	19	4	46	32	M24	47	32	55	30	M8
DDL-12	304	125	230	54	5	171.4	M16	102	96.6	51	60	19	4	50	36	M27	47	32	70	35	M10
DDL-15	381	140	300	60	8	230	M20	133.6	126.4	60	70	26	6	47	40	M30	71	51	95	45	M12
DDL-20	500	150	420	95	9	360	-	180.5	171.4	71	80	32	7	49	44	-	72	47	150	50	M16

### Specifications

Type	Max. Clamping Force	Max. Drawbar Pull	Jaw Stroke Dia.	Plunger Stroke Dia.	Clamping Range		Max. Speed	Weight	GD <sup>2</sup>
	[kg]	[kgf]	[mm]	[mm]	Standard	Top Jaw	[r.p.m.]	[kg]	[kgf·m <sup>2</sup> ]
DDL-04	1350	800	5	7	10-55	10-50	5500	4.5	0.05
DDL-05	2000	1000	5.0	7	15-65	15-60	3500	7.3	0.07
DDL-06	2500	1500	7.2	10	35-85	35-80	3500	14	0.18
DDL-08	4500	2500	7.2	10	40-200	40-150	3000	27	0.66
DDL-10	6000	3500	10.8	15	50-250	50-200	2500	46	1.50
DDL-12	7500	4500	10.8	15	50-300	50-250	2000	68	3.20
DDL-15	9000	5500	14.5	20	60-380	60-320	1500	110	9.00
DDL-20	23800	9100	18	28	80-450	80-400	1700	230	12