

# Special Use Clamps

## Pull-Down Clamp, Concentric Specifications

### Single Acting Pull-Down Clamp, Concentric

- Five (5) side machining can be carried out safely without clamp interference.
- Workpiece can be loaded and unloaded by handling equipment.
- Optional oil supply through G 1/4 port or manifold connection.
- Disk spring for staged pull-down effect.
- Serrated grippers.

Body, sleeves and draw bar are made of nitride-hardened alloy steel for longer trouble-free life.

Clamping sleeves are segmented and serrated to form and grip the clamping hole.

These Pull-Down Clamps also serve as a support surface and "Z" locator for the workpiece.



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### Specifications

Model No.	Allow Horiz. Force (kN)	Radial Force Sleeve Segs. (kN)	Sleeve Expansion (mm)	Vol. (cm <sup>3</sup> )	Side Load (unclamp) (N)	Piston Dia. (mm)	Vertical Clamp Force (kN)	Work Piece Hole Dia. (mm)	Work Piece Hole Depth Min. (mm)	Lateral Comp. Per Clamp (mm)	Clamp Rim Height Min. (mm)	Wgt (g)
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.												
41-5711-09	1.2	12	1.4	0.5	50	28	4	8.8-9.7	10	+/- 0.25	6	2600
41-5711-10								9.8-10.7				
41-5711-11								10.8-11.9				
41-5711-12	3	30	1.7	1.6	150	32	10	12-12.9	15	+/- 0.25	8	2600
41-5711-13								13-13.9				
41-5711-14								14-14.9				
41-5711-15								15-15.9				
41-5711-16								16-16.9				
41-5711-17	7.7	77	1.7	3.8	200	40	26	17-17.9	17	+/- 0.25	9	2800
41-5711-18								18-18.9				
41-5711-19								19-19.9				
41-5711-20								20-20.9				
41-5711-21	7.7	77	1.7	3.8	300	40	26	21-21.9	17	+/- 0.25	9	2900
41-5711-22								22-22.9				
41-5711-23								23-23.9				
41-5711-24								24-24.9				
41-5711-25								25-25.9				

Maximum operating pressure 350 bar (35 MPa)

Minimum operating pressure 30 bar (3 MPa)



# Special Use Clamps

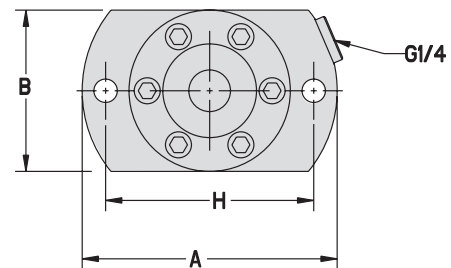
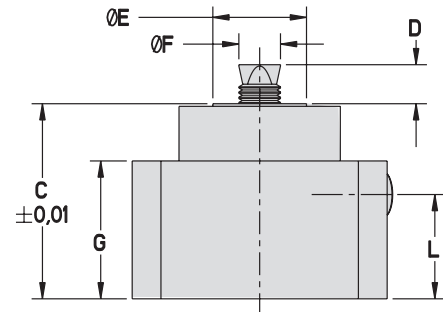
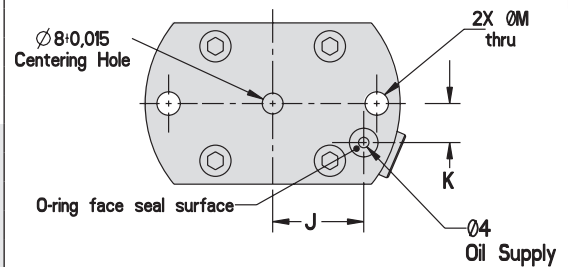
## Pull-Down Clamp, Concentric Dimensions

### Single Acting Pull-Down Clamp, Concentric

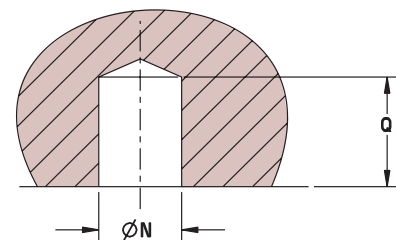
Dimensions							
Model No.	A	B	C	D	E	F	G
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.							
41-5711-09						8.5	
41-5711-10	98	62	75	9.5	36	9.5	53
41-5711-11						10.5	
41-5711-12	98	62	75	14	36	11.5	53
41-5711-13						12.5	
41-5711-14						13.5	
41-5711-15						14.5	
41-5711-16						15.5	
41-5711-17	115	62	75	16	36	16.5	53
41-5711-18						17.5	
41-5711-19						18.5	
41-5711-20						19.5	
41-5711-21						20.5	
41-5711-22	115	62	75	16	62	21.5	53
41-5711-23						22.5	
41-5711-24						23.5	
41-5711-25						24.5	
Model No.	H	J	K	L	M	N	Q
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.							
41-5711-09						8.8-9.7	
41-5711-10	80	31	13	40	9	9.8-10.7	10
41-5711-11						10.8-11.9	
41-5711-12	80	31	13	40	9	12-12.9	15
41-5711-13						13-13.9	
41-5711-14						14-14.9	
41-5711-15						15-15.9	
41-5711-16						16-16.9	
41-5711-17	90	35	15	40	13	17-17.9	17
41-5711-18						18-18.9	
41-5711-19						19-19.9	
41-5711-20						20-20.9	
41-5711-21						21-21.9	
41-5711-22	90	35	15	40	13	22-22.9	17
41-5711-23						23-23.9	
41-5711-24						24-24.9	
41-5711-25						25-25.9	

**NOTE:** For single acting clamping elements there is a risk of drawing in coolant during return stroke. In this case the clamping element has to be protected against the direct effect of coolant. The built in sinter metal breather should be covered.

For proper sealing, the mating surface must be flat within 0.08 mm with a maximum surface roughness of 1.6  $\mu\text{m}$   $R_a$ .



CLAMPING HOLE IN WORKPIECE



For manifold mounting, remove the M5 screw and sealing washer and insert the o-ring (included).

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