

ETP-OCTOPUS®

Hydraulic clamping element

ETP-Octopus® – quick and totally reliable.



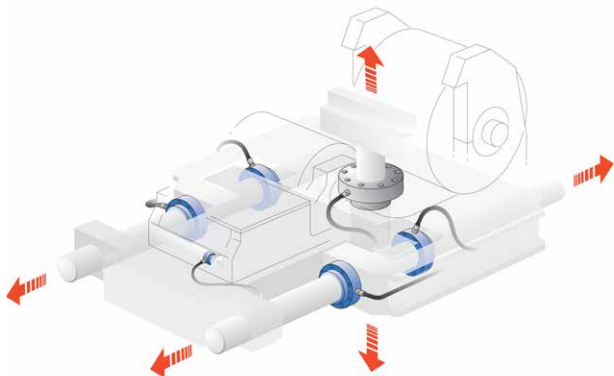
The ETP-OCTOPUS® is used wherever settings of machine parts must be changed frequently, rapidly and with the highest precision. Using hydraulic pressure, one or more ETP-OCTOPUS® clamps can be clamped or released simultaneously. The ETP-OCTOPUS® is used for instance in machine tools or in machines used for forming.

The ETP-OCTOPUS® is easy to install since no hubs are necessary. The ETP-OCTOPUS® only tightens inwards e.g. against a piston. It allows rapid, frequent and precise positioning

We would be more than happy to offer you the optimum solution for your specific application.

HIGHLIGHTS

- Simple installation
- Rapid and precise positioning
- Up to 500,000 assemblies possible
- High torsional stiffness
- Axial forces and torque can be transmitted

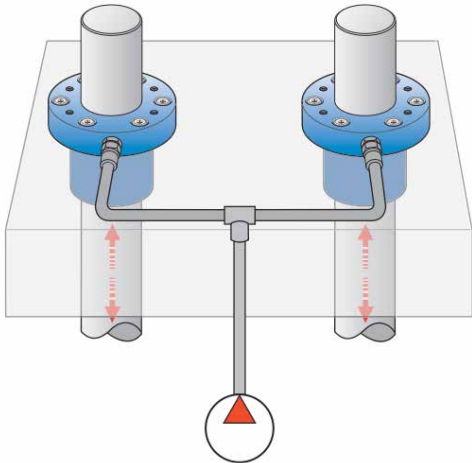


Hydraulic clamping element/ETP-OCTOPUS®

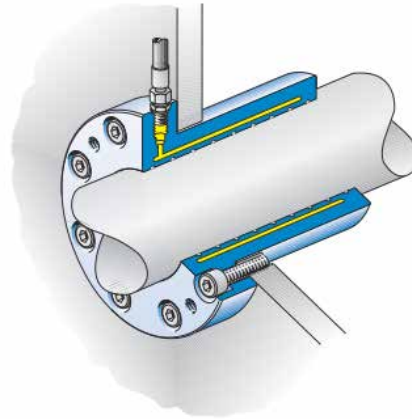
Structure/function

The ETP-OCTOPUS® establishes a hydraulic connection consisting of a double-wall, hardened steel sleeve with a flange. The flange contains the holes for mounting the hub and wiper, the connection thread for the hydraulics and an air relief screw. The inner diameter has spiral grooves to maintain uniform friction and guarantee the clamping force.

Fastening is carried out with screws. Due to the hydraulic pressure build-up, the inner sleeve presses evenly against the shaft – but not against the hub – thus bringing about a firm connection. No expansion against the hub occurs. After depressurisation the sleeve returns to its original state and the shaft can be repositioned and clamped.



Pressure build-up is ensured with an external pressure source. Several connections can be clamped or released simultaneously.



No hub is required to install the ETP-OCTOPUS® since the outer sleeve has a sufficient wall thickness to accommodate the hydraulic pressure.

Construction size	Dimensions					Transmittable torque Axial force				Flange connection for screws: DIN 912, 12.9				Thread M6 (4 units) for wiping a*	Weight kg
	d mm	D mm	D ₁ mm	L mm	L ₁ mm	M ₁ Nm	M ₂ Nm	F _{A1} kN	F _{A2} kN	n	D ₂ mm	Größe	M _{ANZ} Nm		
30	30	42	66	55	75	140	230	9	15	6	52	M6	17	30	0,7
35	35	48	72	55	75	180	300	10	17	6	58	M6	17	30	0,8
40	40	55	79	55	75	270	420*	13	21	6	65	M6	17	30	1,0
45	45	62	86	55	75	370	460*	16	25	6	72	M6	17	30	1,2
50	50	70	101	80	100	710	1000	28	42	8	84	M8	40	45	2,0
60	60	83	114	100	120	1200	1500*	42	62	8	97	M8	40	45	3,0
70	70	97	128	120	140	1700*	1700*	64	92	8	111	M8	40	45	4,6
80	80	110	148	130	150	3300	4000*	84	110	10	128	M10	79	54	6,2
90	90	125	163	130	150	4100	4400*	91	130	10	143	M10	79	54	8,0
100	100	138	176	130	150	4800*	4800*	105	140	10	156	M10	79	54	9,5

M1 /M2 = transmittable torque at axial force equal to 0. } At pressure p1 (350 bar) or p2 (450 bar),
 FA1/FA2 = transmittable axial force at torque equal 0. } $\mu = 0,1$.

* For these torque values, the screw connection determines the upper limit for the torque.

Manz = required tightening torque for the screw.

We would be happy to help and advise you with your individual dimensioning requirements.