# ETP-POWER<sup>®</sup> Hydraulic locking bush

# For extremely high radial forces.



ETP-POWER<sup>®</sup> offers the highest performance of all single-screw solutions. It combines all the positive characteristics of hydraulic clamping, such as ease of mounting, compact dimensions and great precision, with ETP-POWER<sup>®</sup>'s typical high radial force transmission.

# Highlights

- For high radial forces
- Extremely fast mounting/dismantling with just one screw
- Small built-in dimensions
- Radial tightening of the screw saves space on the shaft
- Precise positioning, no axial movement when fitting
- High degree of concentricity, even after multiple mountings





# For high radial forces and fast mounting

## Structure/function

ETP-POWER<sup>®</sup> is a hydraulic locking bush, consisting of a double-wall, hardened steel sleeve that is filled with a specially developed pressure medium and a flange section. When the pressure screw is tightened, the sleeve expands evenly towards the shaft and the hub and thereby establishes a fixed, friction-locked connection. After loosening the pressure screw, the sleeve returns to its original state and is easy to dismantle. This whole process can be repeated up to 500 times.



### **ETP-POWER®** technical specifications

							Transmittable			Screw				2xH boreholes			
ETP- POWER®	Dimensions						torque	axial force	radial force	DIN 915, 12.9				for DIN 912, 12.9 screws		Moment of inertia	Weight
	d [mm]	d [mm]	D <sub>1</sub> [mm]	D <sub>2</sub> [mm]	L [mm]	L <sub>1</sub> [mm]	M [Nm]	FA [kN]	F <sub>R</sub> [kN]	Size	R [mm]	N [mm]	M <sub>tight</sub> [Nm]	D₃ [mm]	Size	J [kgm <sup>2</sup> · 10 <sup>-3</sup> ]	[kg]
15	15	20	51	55	21	35	60	7	2	M10	17.1	5	8	36	M5	0.06	0.19
19	19	26	54	58	27	41	100	8	4	M10	18.2	5	8	40	M5	0.08	0.23
20	20	27	55	59	28	42	130	11	4	M10	18.9	5	8	41	M5	0.09	0.24
22	22	29	58	62	29	43	210	15	4.8	M10	20.5	5	8	43.5	M5	0.11	0.27
24	24	32	64	70	33	47	230	15	5.6	M10	22.7	5	8	48	M6	0.17	0.34
25	25	33	67	72	34	48	300	20	6	M10	23.2	5	8	50	M6	0.21	0.38
28	28	37	70	76	35	49	325	20	7.2	M10	24.9	5	8	53.5	M6	0.26	0.43
30	30	39	72	80	36	50	530	26	8	M10	26	5	8	55.5	M6	0.29	0.45
32	32	43	85	92	38	58	550	26	8.8	M16	31	8	25	64.5	M8	0.73	0.82
35	35	46	88	94	40	60	900	40	10	M16	32.4	8	25	67	M8	0.85	0.88
38	38	50	90	96	44	64	1150	47	11.2	M16	34	8	25	70	M8	0.94	0.92
40	40	53	91	96	47	67	1200	47	12	M16	34.2	8	25	72	M8	1.0	1.0

Tolerances

h7 shaft for d = 15 mm k6 - h7 shaft for d = 19, 22, 24, 28, 32, 38, 42, 48, 55 mm h8 shaft for all other diameters h8. H7 hub.

### Types of torque

Transmittable torque M for static load. For alternating or pulsating loads, the transmittable torque is reduced by the following factors: Alternating: 0.5 x M. Pulsating: 0.6 x M.