



**ETP-CLASSIC** is available as standard for shafts 15-100 mm, also imperial and a short version, (type S). Also available in stainless steel (type R).  
Runout: 0,03 – 0,06 mm. Number of mountings: 100 (type R: 50). The small number of clamping screws with low tightening torque, makes the mounting/dismantling procedure fast and easy.

#### Construction

ETP-CLASSIC is a hydraulic connection which consists of a double-walled hardened steel sleeve, filled with a specially developed pressure medium, sealing ring, piston, pressure flange and cap head clamping screws.

ETP-CLASSIC type R is made of stainless steel and has hex head stainless steel clamping screws. This in order to facilitate easy cleaning, essential within food processing.

#### Operation

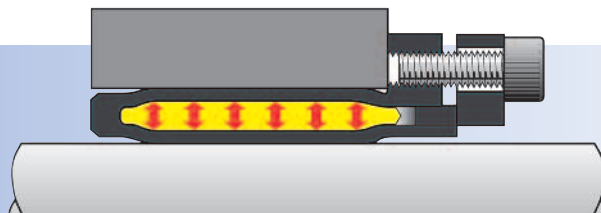
When tightening the screws, the sleeve expands uniformly against hub and shaft and creates a rigid joint. When loosening the screws, the sleeve returns to its original measurements and can easily be dismantled.

ETP-CLASSIC type R has a few more clamping screws, as the tightening torque is lower for stainless steel screws.

#### BENEFITS & FEATURES

- Small built-in dimensions.
- Mounting and dismantling is fast.
- Fine adjustment of the hub can be made during mounting.
- Low tightening torque and a small number of screws makes the mounting easy.
- Good concentricity, also after several mountings.
- Hex head screws available as accessories.

*When the screws have been tightened, ETP-CLASSIC creates an even surface pressure against the hub and shaft along virtually the entire length.*





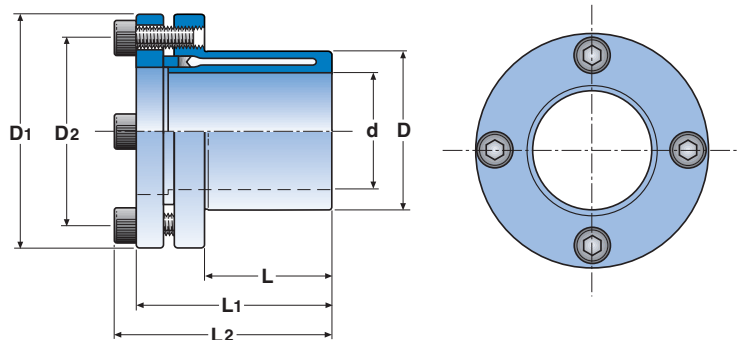
0,03 – 0,06



-30 – +85°



CAD



Notation: ETP-CLASSIC XXX

### Technical Specification ETP-CLASSIC

ETP-CLASSIC	Dimensions							Transmittable torque axial force radial force			Screws DIN 912, 12.9			Polar moment of inertia J kgm <sup>2</sup> · 10 <sup>-3</sup>	Weight kg
	d mm	D mm	D <sub>1</sub> mm	D <sub>2</sub> mm	L mm	L <sub>1</sub> * mm	L <sub>2</sub> * mm	T Nm	F <sub>A</sub> kN	F <sub>R</sub> kN	No.	Dim.	T <sub>t</sub> Nm		
15	15	23	38	28,5	17	30	35	55	7,3	2,5	3	M5	6	0,019	0,10
19	19	28	45	35	21	37	42	100	10,6	5,8	3	M5	8	0,045	0,17
20	20	28	45	35	22	37	42	125	12,5	6,6	3	M5	8	0,043	0,16
22	22	32	49	40	22	37	42	135	12,3	8,2	4	M5	8	0,063	0,20
24	24	34	49	40	25	40	45	200	16,7	9,8	4	M5	8	0,066	0,20
25	25	34	49	40	27	43	48	250	20,0	10,6	4	M5	8	0,067	0,20
28	28	39	55	46	29	45	50	300	21,4	13,1	4	M5	8	0,112	0,27
30	30	41	57	47,5	32	47	52	420	28,0	14,7	4	M5	8	0,133	0,30
32	32	43	60	50,5	34	52	57	420	26,3	16,3	4	M5	8	0,180	0,35
35	35	47	63	53,5	37	55	60	650	37,1	18,8	6	M5	8	0,230	0,41
38	38	50	65	56	41	59	64	750	39,5	21,2	6	M5	8	0,277	0,44
40	40	53	70	60,5	43	63	68	940	47,0	22,8	6	M5	8	0,408	0,57
42	42	55	70	60,5	45	65	70	940	44,8	24,4	6	M5	8	0,414	0,56
45	45	59	77	66,5	49	69	75	1290	57,3	26,9	6	M6	13	0,636	0,73
48	48	62	80	69,5	52	73	79	1570	65,4	29,3	6	M6	13	0,761	0,80
50	50	65	83	72,5	53	76	82	1900	76,0	30,9	6	M6	13	0,943	0,91
55	55	71	88	78	58	82	88	2500	90,9	35,0	8	M6	13	1,301	1,09
60	60	77	95	84,5	64	90	96	3400	113	39,1	8	M6	13	1,959	1,40
65	65	84	102	91	68	96	102	3500	108	43,1	8	M6	13	2,780	1,72
70	70	90	113	99	72	99	107	5200	149	47,2	6	M8	32	4,035	2,09
75	75	95	118	104	85	114	122	6300	168	51,3	6	M8	32	5,500	2,51
80	80	100	123	109	90	120	128	8800	220	55,0	6	M8	32	8,100	2,68
85	85	106	129	115	95	125	133	8800	207	58,0	6	M8	32	9,500	3,09
90	90	112	135	121	100	133	141	11000	244	60,0	8	M8	32	12,200	3,52
95	95	120	143	129	105	139	147	12800	269	61,5	8	M8	32	17,100	4,46
100	100	125	148	134	110	145	153	15500	310	62,0	8	M8	32	19,950	4,87

T= Transmittable torque when axial force is 0. } When the screw is tightened to T<sub>t</sub>.  
 F<sub>A</sub>=Transmittable axial force when torque is 0. }  
 F<sub>R</sub>=Max transmittable radial force at continuous operation.  
 Max allowed bending torque: 15% of transmittable torque T.

T<sub>t</sub>= Recommended tightening torque for the screws.  
 \*) The dimensions are valid before mounting.

Dimensions subject to alterations without notice.

#### TOLERANCES

Shaft h8 – k6 (size 15 only h7)

When using k6 shaft – transmittable torque will increase by 20%.

Can also be used with h9 shaft – Transmittable torque will be reduced by 25%.

Hub H7.

#### Type of torque

Transmittable torque, T, is for static load.

If the load is alternating or pulsating torque, reduce the transmittable torque, T, with the following factors: (factor x T).

**Alternating:** 0,6 x T for sizes 15 – 30 mm.

0,5 x T for sizes 32 – 100 mm.

**Pulsating:** 0,7 x T for sizes 15 – 30 mm.

0,6 x T for sizes 32 – 100 mm.

#### Tightening torque

By increasing the tightening torque of the screw sizes according to the table, the transmittable torque can be increased by 25%.

Note: Only to be used when operating temperature ≤ mounting temperature.

#### Max. tightening torque (screw quality 12.9)

M5	M6	M8
10 Nm	17 Nm	40 Nm

### Technical Specification ETP-CLASSIC in inch

ETP-CLASSIC®	Dimensions						Transmittable torque or axial force		Screws DIN 912, 12.9		
	d tum	D mm	D <sub>1</sub> mm	L mm	L <sub>1</sub> mm	L <sub>2</sub> mm	T Nm	F <sub>A</sub> kN	No.	Dim.	Tt Nm
3/4"	3/4"	28	45	21	35	40	88	9,3	3	M5	8
7/8"	7/8"	32	49	22	37	42	135	12,1	4	M5	8
15/16"	15/16"	34	49	25	39	44	175	14,7	4	M5	8
1"	1"	35	51	27	41	46	195	16,2	4	M5	8
1 1/8"	1 1/8"	39	55	29	43	48	280	19,5	4	M5	8
1 3/16"	1 3/16"	41	57	32	47	52	340	22,5	4	M5	8
1 1/4"	1 1/4"	43	60	34	50	55	410	26,1	4	M6	13
1 3/8"	1 3/8"	47	63	37	53	58	540	31,1	6	M5	8
1 7/16"	1 7/16"	50	65	37	54	59	580	31,8	6	M5	8
1 1/2"	1 1/2"	52	68	41	57	62	700	36,7	6	M5	8
1 5/8"	1 5/8"	55	70	44	63	68	850	41,2	6	M5	8
1 3/4"	1 3/4"	59	77	49	67	73	1180	53,0	6	M6	13
1 15/16"	1 15/16"	65	83	52	74	80	1450	58,9	6	M6	13
2"	2"	68	88	53	74	80	1620	64,3	6	M6	13
2 7/16"	2 7/16"	81	99	60	85	91	2800	90,5	8	M6	13
2 1/2"	2 1/2"	84	107	62	86	94	3100	97,6	6	M8	32
2 15/16"	2 15/16"	95	118	85	108	116	5300	153,0	6	M8	32
3"	3"	98	121	74	101	109	5300	139,1	6	M8	32
4"	4"	130	155	97	128	136	12500	264,0	8	M8	32

ETP-CLASSIC is also available in a large assortment of inch sizes. The main dimensions are given in the table, for more information please refer to technical data for ETP-CLASSIC.

#### TOLERANCES

ETP-CLASSIC	Shaft tolerance
3/4"	0 to -0,0015"
7/8" – 1 1/2"	0 to -0,0020"
1 5/8" – 2 15/16"	0 to -0,0030"
3"	0 to -0,0040"
4"	0 to -0,0030"

ETP-CLASSIC	Hub tolerance
3/4" - 1 15/16"	0 to +0,0010"
2" – 2 7/16"	0 to +0,0012"
2 1/2" – 4"	0 to +0,0014"

Notation ETP-CLASSIC S-XX

### Technical Specification ETP-CLASSIC type S

ETP-CLASSIC®	Dimensions						Transmittable torque or axial force		Screws DIN 912, 12.9			Weight kg
	d mm	D mm	D <sub>1</sub> mm	L mm	L <sub>1</sub> mm	L <sub>2</sub> mm	T Nm	F <sub>A</sub> kN	No.	Dim.	Tt Nm	
S-19	19	28	45	13	26	31	53	5	3	M5	8	0,15
S-20	20	28	45	15	28	33	75	6	3	M5	8	0,14
S-25	25	34	49	15	29	34	120	10	4	M5	8	0,17
S-30	30	41	57	20	34	39	210	14	4	M5	8	0,24
S-35	35	47	63	22	38	43	330	19	6	M5	8	0,32
S-40	40	53	70	25	42	47	500	26	6	M5	8	0,46
S-45	45	59	77	28	45	51	700	31	6	M6	13	0,57
S-50	50	65	83	26	45	51	1000	40	6	M6	13	0,72

ETP-CLASSIC is also available in a shorter version, type S, which is especially suitable for small hubs. The main dimensions are given in the table, for more information please refer to technical data for ETP-CLASSIC.

#### TOLERANCES

Shaft: h9 (for size 19: k6-h8).

Hub: H7.



Notation: ETP-CLASSIC R-XX

### Technical Specification ETP-CLASSIC R

ETP-CLASSIC®	Dimensions							Transmittable torque axial force radial force			Screws**) DIN 933, A4			Polar moment of inertia J kgm <sup>2</sup> · 10 <sup>-3</sup>	Weight kg
	d mm	D mm	D <sub>1</sub> mm	D <sub>2</sub> mm	L mm	L <sub>1</sub> * mm	L <sub>2</sub> * mm	T Nm	F <sub>A</sub> kN	F <sub>R</sub> kN	Ant.	Dim.	Tt Nm		
R-15	15	23	38	28,5	17	30	34	45	6,0	2,5	4	M5	4,5	0,019	0,10
R-20	20	28	45	35	22	37	41	100	10,0	6,6	5	M5	4,5	0,044	0,16
R-25	25	34	49	40	27	43	47	210	16,8	10,6	7	M5	4,5	0,070	0,21
R-30	30	41	57	47,5	32	47	51	350	23,3	14,7	7	M5	4,5	0,137	0,30
R-35	35	47	63	53,5	37	55	59	500	28,5	18,8	9	M5	4,5	0,234	0,41
R-40	40	53	70	60,5	43	63	67	750	37,5	22,8	9	M5	4,5	0,414	0,58
R-45	45	59	77	66,5	49	69	73	1100	48,8	26,9	9	M6	7,8	0,647	0,74
R-50	50	65	83	72,5	53	76	80	1550	62,0	30,9	9	M6	7,8	0,957	0,92

T = Transmittable torque when axial force is 0. } When the screw is tightened to Tt.  
 F<sub>A</sub> = Transmittable axial force when torque is 0. }  
 F<sub>R</sub> = Max transmittable radial force at continuous operation.  
 Max allowed bending torque: 15% of transmittable torque T.

Tt = Recommended tightening torque for the screws.  
 \*) The dimensions are valid before mounting.

Dimensions subject to alterations without notice.

#### TOLERANCES

Shaft h8 (size R-15 only h7)

Hub H7.

#### Material

Euronorm 1.4542, stainless steel, X5CrNiCuNb16-4.

\*\*) Screws: coated for a low and even friction in the threads.

#### Mounting advice

Make sure the screw thread is well lubricated before each mounting.

We recommend the use of Molykote P-1900.