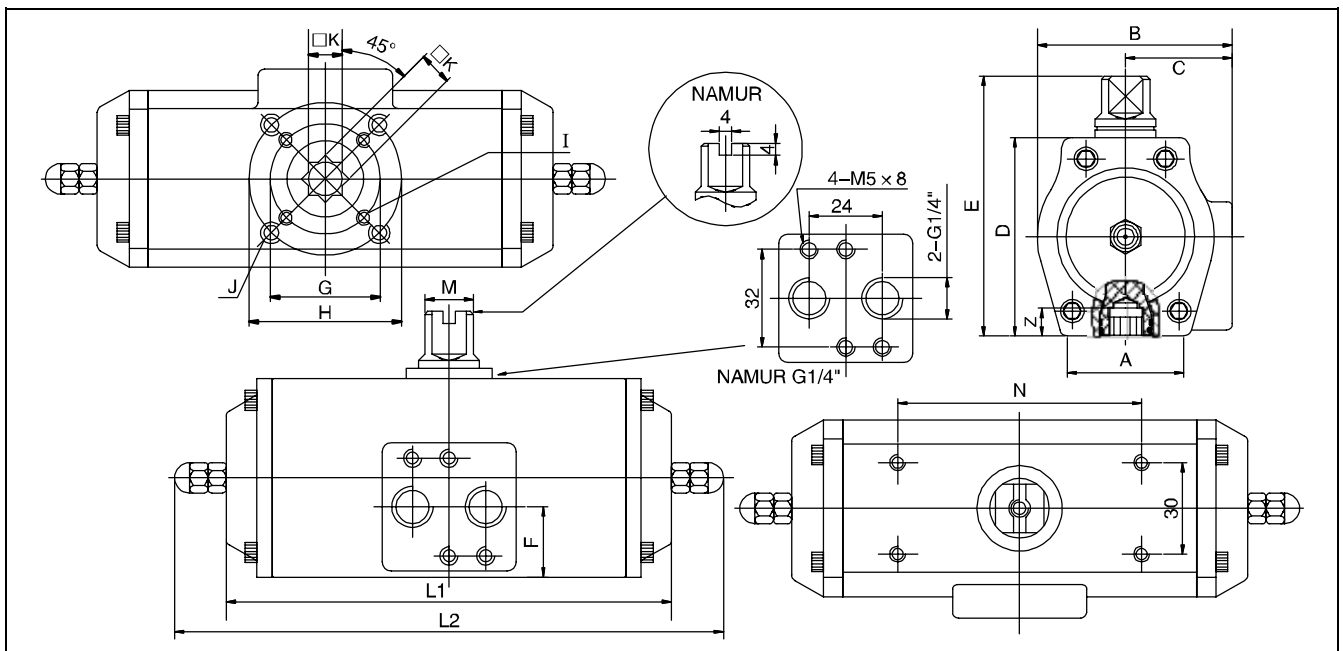




**Pneumatic actuators  
stainless steel version  
twin-piston actuator, type ETD/ETE – 4A**



Type	Dimensions mm															Weight kg		
	A	B	C	D	E	F	G	H	I	J	K	L1	L2	M	N	Z	ETE	ETD
ETD-045/090	42	64	35	65	95	23	∅ 36	∅ 50	M5x8	M6x10	14	148	180	16	80	14	2.65	2.51
ETD-060/090	48.5	74	39	81	111	23		∅ 50		M6x10	14	166	185	16	80	18	4.10	3.85
ETD-085/090	66	101	52	108	138	24	∅ 50	∅ 70	M6x10	M8x13	17	197	212	16	80	21	7.00	6.35
ETD-105/090	80	118	60	133	163	24		∅ 70		M8x13	17	250	269	16	80	26	12.60	11.90
ETD-125/090	100	138	69	155	185	28	∅ 70	∅ 102	M8x13	M10x16	22	286	306	22	130	26	19.20	18.00
ETD-140/090	115	153	77	171	201	34	∅ 102	∅ 125	M10x16	M12x20	27	364	376	22	130	31	27.30	24.80
ETD-160/090	132	175	87	197	227	39	∅ 102	∅ 125	M10x16	M12x20	27	412	432	22	130	31	37.60	35.80

Torques of double-acting actuators type ETD [Nm]				Torques of single-acting actuators type ETE [Nm]									
Actuator type	Control pressure P <sub>st</sub> [bar]			Actuator type	Number of springs	Spring force Md [Nm]		Pneumatic effective torque Md [Nm] at min. control pressure P <sub>st</sub> min [bar]					
	4.0	5.5	6.0			min.	max.	4.0		5.5		6.0	
								min.	max.	min.	max.	min.	max.
ETD-045/090	12	16.5	18	ETE-045/090	-08	4.6	7.4	4.3	7.2	-	-	-	-
					-10	5.8	9.2	2.4	6.0	6.9	10.5	8.4	12.0
					-12	7.0	11.1	-	-	5.0	9.3	6.5	10.8
ETD-060/090	28.5	39	42.5	ETE-060/090	-08	10.9	16.7	10.8	16.9	-	-	-	-
					-10	13.7	20.9	6.4	14.0	17.0	24.6	20.6	28.2
					-12	16.4	25.0	-	-	12.6	21.7	16.2	25.3
ETD-085/090	61	85	92	ETE-085/090	-08	25.3	36.8	22.8	35.0	-	-	-	-
					-10	31.6	46.0	13.2	28.3	36.4	51.5	44.1	59.2
					-12	38.0	55.2	-	-	26.7	44.8	34.4	52.2
ETD-105/090	131	181	197	ETE-105/090	-08	51	79	49	78	-	-	-	-
					-10	63	98	28	65	77	114	94	131
					-12	76	118	-	-	57	101	73	117
ETD-125/090	205	282	308	ETE-125/090	-08	84	125	73	117	-	-	-	-
					-10	105	157	40	95	117	172	143	198
					-12	126	188	-	-	84	150	110	176
ETD-140/090	351	482	526	ETE-140/090	-08	137	206	134	207	-	-	-	-
					-10	172	258	80	170	211	302	255	345
					-12	206	310	-	-	157	266	200	309
ETD-160/090	535	735	802	ETE-160/090	-08	223	333	184	300	-	-	-	-
					-10	279	417	96	241	297	441	364	508
					-12	335	500	-	-	209	382	276	449

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