

# PNÖMATİK AKTÜATÖR

- Teknik Özellikleri
- Kullanım
- Kurulum
- Çalışma Ortamı
- Teknik Detay



### PNÖMATİK AKTÜATÖR

#### TKC70DA / TKC70SA



#### KURULUM

Alt parçanın montajı uluslararası ISO5211 standartlarına uygundur. Alt ve delikler arasında iki kare flanş bağlantısı vardır.

Çift etkili aktüatörlerde vananın açık-kapalı veya oransal kontrolü için mutlaka hava basıncının yönlendirilmesi gerekir.

Tek etkili aktüatörlerde önyüklemeli yaylar, korozyona karşı kaplanmış olup kartuş tipi tasarımları ile standart tek etkili aktüatöre uygun kapaklara kolaylıkla ilave edilebilirler.

#### ÇALIŞMA ORTAMI

Hava veya aşındırıcı olmayan gazlar

#### PNÖMATİK AKTÜATÖR

Pnömatik Aktüatör, basınçlı hava tesisatından sağlanan enerjinin mekanik harekete dönüştürülmesiyle, vana kontrolünde otomasyon özelliğini gerçekleştiren kontrol elemanıdır.

Çift Etkili ve Tek Etkili (yay dönüşlü) olarak iki tipi vardır.

#### TEKNİK ÖZELLİKLER

##### Gövde

Alüminyum Ekstrüzyon

##### Vana Bağlantı

TS EN ISO 5211

##### Şaft

Kadmiyum Kaplamalı Çelik

##### Pistonlar

Alüminyum Döküm

##### Sızdırmazlık

Nitril Kauçuk

##### Valf Bağlantı

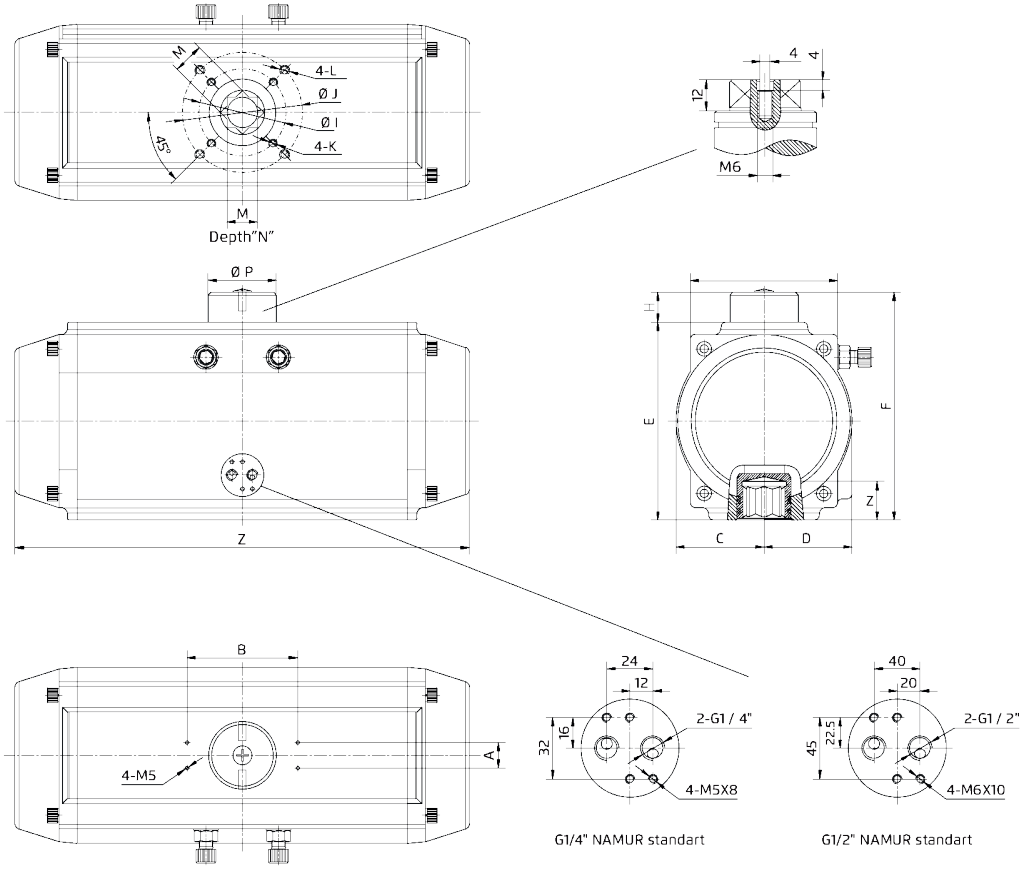
Namur

#### KULLANIM

- Kelebek Vanalar (DN40-DN400)
- Küresel Vanalar (DN15-DN150)

# PNÖMATİK AKTÜATÖR / Pneumatic Actuator

## Teknik Detay / Technical Detail



MODEL	A	B	C	D	E	F	G	H	I	I-1	J	J-1	K	L	M	N	P	Z	AIR
AT-40	30	50	22	34	60	88	45	28	36	F03	50	F05	M5X8	M6X10	9	12	40	113	1/8"
AT-52	30	80	30	42,5	72,4	100,4	50,5	28	36	F03	50	F05	M5X8	M6X10	11	14	40	150	1/4"
AT-63	30	80	36	47	88,5	106,5	69,5	28	50	F05	70	F07	M6X10	M8X13	14	18	40	171	1/4"
AT-75	30	80	42,5	53	100	128	78	28	50	F05	70	F07	M6X10	M8X13	14	18	40	186	1/4"
AT-83	30	80	46,5	57	109,5	137,5	86	28	50	F05	70	F07	M6X10	M8X13	17	21	40	206	1/4"
AT-92	30	80	50	58	117	145	90	28	50	F05	70	F10	M6X10	M10X16	17	21	40	265	1/4"
AT-105	30	80	57,5	64	135	163	104,5	28	70	F07	102	F10	M8X13	M10X16	22	26	40	272	1/4"
AT-125	30	80	67,5	74,5	157	185	120,5	28	70	F07	102	F10	M8X13	M10X16	22	26	55	304	1/4"
AT-140	30	80	75,5	75,5	174	202	125	28	102	F10	125	F12	M10X16	M12X20	27	32	55	395	1/4"
AT-160	30	130	87	87	198	246	143	28	102	F10	125	F12	M10X16	M12X20	27	32	55	462	1/4"
AT-190	30	130	103	103	232	260	172	38	102	F10	140	F14	M10X16	M16X25	36	40	80	520	1/4"

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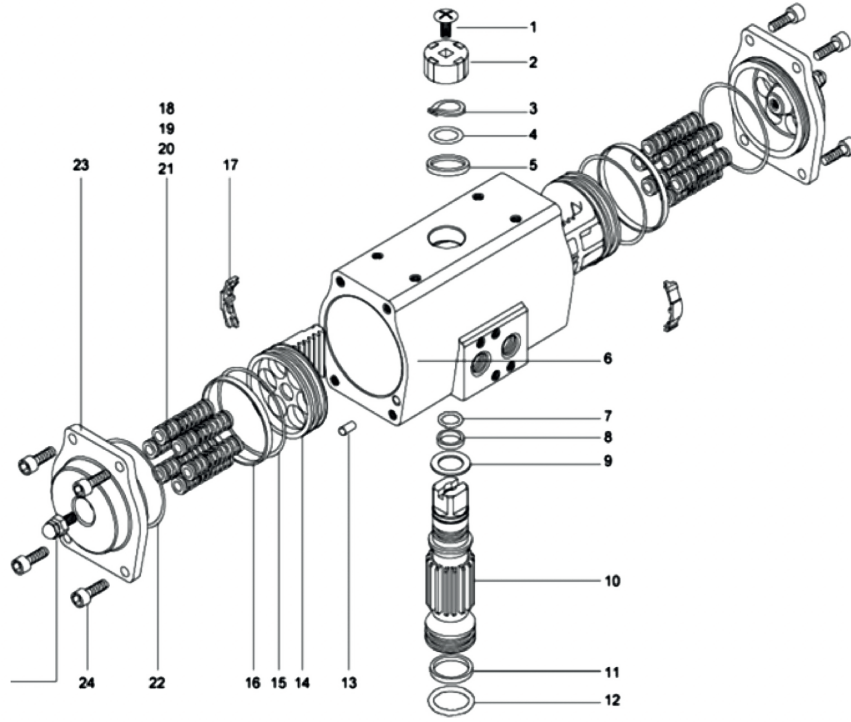
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## Çift Etkili Pnömatik Aktüatör Tork Değerleri / Double Acting Output Torque (Nm)



MODEL	Unit Bar								
	3 bar	3.5 bar	4 bar	4.5 bar	5 bar	5.5 bar	6 bar	6.5 bar	7 bar
BT-40	5.7	6.7	7.6	8.6	9.5	10.5	11.4	13.3	15.2
BT-52	12.0	14.0	16.0	18.0	20.0	22.0	24.0	28.0	32.0
BT-63	21.0	24.5	28.0	31.5	35.0	38.5	42.0	49.0	56.0
BT-75	30.0	35.0	40.0	45.0	50.0	55.0	60.0	70.0	80.0
BT-83	45.7	53.3	61.0	68.6	76.2	83.8	91.4	106.7	121.9
BT-92	67.4	78.7	89.9	101.2	112.4	123.6	134.9	157.4	179.8
BT-105	97.6	113.9	130.2	146.4	162.7	179.0	195.2	227.8	260.3
BT-125	152.2	177.6	203.0	228.3	253.7	279.1	304.4	355.2	405.9
BT-140	260.3	303.7	347.0	390.4	433.8	477.2	520.6	607.3	694.1
BT-160	396.6	462.7	528.8	594.9	661.0	727.1	793.2	925.4	1057.6
BT-190	639.3	745.9	852.4	959.0	1065.5	1172.1	1278.6	1491.7	1704.8
BT-210	781.0	911.2	1041.4	1171.5	1301.7	1431.9	1562.0	1822.4	2082.7

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## Tek Etkili Pnömatik Aktüatör Tork Değerleri / Single Acting Output Torque (Nm)

MODEL Nm	2.5 bar		3 bar		3.5 bar		4 bar		4.5 bar		5 bar		5.5 bar		6 bar		7 bar		8 bar		
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
SA52	5 6 7 8 9 10 11 12	4.6 3.9	2.3 1.1	6.3 5.6 4.8	4 2.8 1.6	7.9 7.2 6.4 5.7	5.6 4.4 3.2 2	9.6 8.9 8.1 7.4 6.7	7.3 6.1 4.9 3.7 2.5	11.3 10.6 9.8 9.1 8.4 7.6	9 7.8 6.6 5.4 4.2 3	12.9 12.2 11.4 10.7 10 9.2 8.5	10.6 9.4 8.2 7 5.8 4.6 3.4	13.9 13.1 12.4 11.7 10.9 10.2 9.4	11.1 9.9 8.7 7.5 6.3 5.1 3.9	14.8 14.1 13.4 12.6 11.9 11.1	11.6 10.4 9.2 8 6.8 5.6	17.4 16.7 15.9 15.2 14.4	13.7 12.5 11.3 10.1 8.9	20 19.2 18.5 17.7	15.8 14.6 13.4 12.2
SA63	5 6 7 8 9 10 11 12	8.1 6.8	4 1.9	11.1 9.8 8.5	7 4.9 2.8	14 12.7 11.4 10.1	9.9 7.8 5.7 3.5	16.9 15.6 14.3 13 11.7	12.8 10.7 8.6 7.3 6.4 4.4	19.9 18.6 17.3 16 14.7 13.4	15.8 13.7 11.6 10.2 9.4 8.1 6	22.8 21.5 20.2 18.9 17.6 16.3 15	18.7 16.6 14.5 12.3 10.3 8.1 6	24.4 23.1 21.8 20.5 19.2 17.9 16.6	19.5 17.4 15.2 13.2 11 8.9 6.8	26.1 24.8 23.5 22.2 20.9 19.6	20.4 18.2 16.2 14 11.9 9.8	30.6 29.3 28 26.7 25.4	24 22 19.8 17.7	35.3 34 32.7 31.4	28 25.8 23.7 21.6
SA75	5 6 7 8 9 10 11 12	16.1 13.5	8 3.8	22.1 19.5 17	14 9.8 5.6	27.8 25.2 22.7 20.1	19.7 15.5 11.3 7.1	33.6 31 28.5 25.9 23.3	25.5 21.3 17.1 12.9 8.7	39.4 36.8 34.3 31.7 29.1 26.5	31.3 27.1 22.9 18.7 14.5 10.3	45.2 42.6 40.1 37.5 34.9 32.3 29.8	37.1 32.9 28.7 24.5 20.3 16.1 11.9	48.5 46 43.4 40.8 38.2 35.7 33.1	38.8 34.6 30.4 26.2 22 17.8 13.6	51.7 49.1 46.5 43.9 41.4 38.8	40.3 36.1 31.9 27.7 23.5 19.3	60.8 58.2 55.6 53.1 50.5	47.8 43.6 39.4 35.2 31	69.8 67.2 64.7 62.1	55.2 51 46.8 42.6
SA83	5 6 7 8 9 10 11 12	25.5 21.4	12.7 6.1	34.8 30.7 26.7	22 15.4 8.7	43.8 39.7 35.7 31.6	31 24.4 17.7 11.1	53 48.9 44.9 40.8 36.8	40.2 33.6 26.9 20.3 13.7	62.1 58 54 49.9 45.9 41.8	49.3 42.7 36 29.6 22.8 16.3	71.2 67.1 63.1 59 55 50.9 46.9	58.4 51.8 45.1 38.5 31.9 25.4 18.7	76.7 72.7 68.6 64.6 60.5 56.5 52.4	61.4 54.7 48.1 41.5 35 28.3 21.7	81.7 77.6 73.6 69.5 65.5 61.4	63.7 57.1 50.5 44 37.3 30.7	95.6 91.6 87.5 83.5 79.4	75.1 68.5 62 55.3 48.7	110 106 102 97.4	86.5 80 73.3 66.7
SA92	5 6 7 8 9 10 11 12	37 31.1	18.4 8.7	50.3 44.4 38.5	31.7 22 12.4	63.6 57.7 51.8 46	45 35.3 25.7 16.1	76.6 70.7 64.8 59 53	58 48.3 38.7 29.1 19.5	90.6 84.7 78.8 73 67 61.1	72 62.3 52.7 43.1 33.5 24	103.6 97.7 91.8 86 80 74.1 68.3	85 75.3 65.7 56.1 46.5 37 27	111 105 99 93 87.1 81.3 75.4	88.3 78.7 69.1 59.5 50 44	118 112 106 102 98.4	91.7 82.5 72.1 63 53 44	139 133 127 121 115	109 99.5 90 80 71	160 154 148 142	127 117 107 98
SA105	5 6 7 8 9 10 11 12	59.4 49.8	29.3 13.8	81.4 71.8 62.3	51.3 35.8 20	102.4 92.8 83.3 73.8	72.3 56.8 41 26	124 115 105 95.8 86.3	94.3 78.8 73 68 63 58 53	145 136 126 117 107 98	115 100 84 69 53 44	167 158 148 139 129 120 110	137 122 106 91 75 60 44	179 169 160 150 141 131 122	143 127 112 96 81 65 50	191 182 172 163 153 144	149 134 118 103 87 72	225 215 206 196 187	177 161 146 130 115	258 249 239 203	204 189 173 158
SA125	5 6 7 8 9 10 11 12	76.7 64.4	38 18	104.7 92.4 80.2	66 46 26	132.7 120.4 108.2 96	94 74 54 34	160 147 135 123 111	121 101 81 61 41	188 175 163 151 139 126	149 129 109 89 69 49	216 203 191 179 167 154 142	177 157 137 117 97 77	230 218 206 194 181 169 157	184 164 144 124 104 84 64	246 234 222 209 197 185	192 172 152 132 112 92	289 277 264 252 240	227 207 187 167 147	333 320 308 296	263 243 223 203
SA140	5 6 7 8 9 10 11 12	120.7 101	60 29	164.7 145 126	104 73 41	207.7 188 169 150	147 116 84 53	252 232 213 194 175	191 160 128 97 65	295 275 256 237 218 198	234 203 171 140 108 77	277 338 318 299 280 261 241 222	246 214 183 151 120 100	362 343 324 305 285 266 247	290 258 227 195 164 132 101	386 367 348 328 309 290	301 270 245 215 175 144	454 435 415 396 377	357 325 294 262 231	522 502 483 464	412 381 349 318
SA160	5 6 7 8 9 10 11 12	158 133	78 37	215 190 164	135 94 53	272 247 221 197	192 151 110 69	328 303 277 253 227	248 207 166 125 84	385 360 334 310 284 259	305 264 223 182 141 100	452 427 401 377 351 326 301	372 331 290 249 208 167 127	473 447 423 397 372 347 322	377 336 295 254 213 173 131	504 480 454 429 404 379	393 352 311 270 230 188	593 567 542 517 492	465 424 383 343 301	681 656 631 606	538 497 457 415
SA190	5 6 7 8 9 10 11 12	333 293	224 162	440 400 360	331 269 207	546 506 466 426	437 375 313 251	653 613 573 533 493	544 482 420 358 296	759 719 679 639 599 559	650 588 526 464 402 341	866 826 786 746 706 666 626	757 695 633 571 509 448 386	933 893 853 813 773 733 693	802 740 678 616 555 493 431	999 959 919 879 839 799	740 678 616 555 493 431	1172 1132 1092 1052 1012	997 935 874 812 750	1346 1306 1266 1226	1149 1088 1026 964
SA210	5 6 7 8 9 10 11 12	376 321	271 195	506 451 396	401 325 249	636 581 526 471	531 455 379 303	767 712 657 602 547	662 586 510 434 358	897 842 787 732 677 622	792 716 640 564 488 412	1027 972 917 862 807 752 697	922 846 770 694 618 542 466	1102 1047 992 937 882 827 772	976 900 824 748 672 596 520	1177 1122 1067 1012	900 824 748 672 596 520	1383 1328 1273 1218 1163	1215 1139 1063 987 911	1588 1533 1478 1423	1399 1323 1247 1171

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