



Mechanical Plants „WIROMET” S. A.

43-190 Mikołów, ul. Wyzwolenia 27

Info Line: +48 (32) 32 40 740 • Head Office: +48 (32) 32 40 700

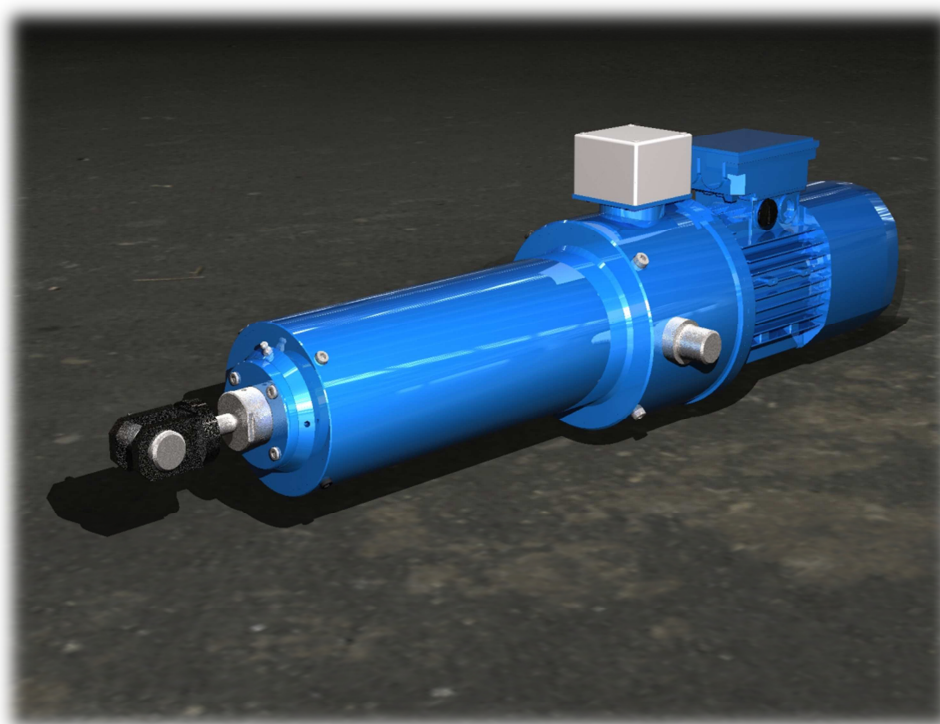
• Fax: +48 (32) 32 40 730

e-mail: wiromet@wiromet.com.pl • www.wiromet.com.pl



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PEM Electrical Actuators





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DESCRIPTION:

Applications of our **PEM** type electrical actuators include operating dam doors, mechanical bridges, mine ventilation shafts, vault locks, brakes ect. These devices are found where reciprocating (to and fro) motion is required in conjunction with rotation about a fulcrum (pivot point) and within set limits of travel. The electrical actuator is certified for operation in environments between **+40°C to -25°C** and in maximum humidity of **95%**.

CLASIFICATION:

The classification for **PEM** type electrical actuators comprises of the following symbols:

PEM - **X** / **F** / **S** / **t** / **U**

Symbol definitions:

- PEM** - electrical actuator
- X** - actuator size (1, 2 and 3)
- F** - nominal force (on the couple ending) in [kN]
- S** - actuator travel [mm]
- t** - actuator travel time w [s]
- U** - operating voltage [V]

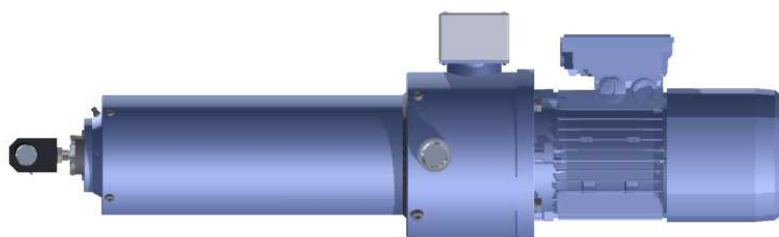
Example of electrical actuator size 2, applied force 6 kN, travel length 450mm, travel time 8 seconds and 400V motor operating voltage.

PEM-2/6/450/8/400

TECHNICAL SPECIFICATIONS FOR PEM ACTUATORS:

Table 1

Motor type with the brake	Coupling type	Motor Power N [kW]	Drive speed [obr/min]	Travel time [s] For travel distance S [mm]				Nominal force F _{nom} [kN]	L [mm]
				250	450	650	850		
Size 1									
SKg 80 - 2AHPS	01/494.525.3/19/15	0,75	2770	1,07	1,92	2,72	3,55	2,0 ÷ 2,5	306
SKg 80 - 8AHPS	01/494.525.3/19/15	0,18	680	4,34	7,81	11,28	14,75	2,0 ÷ 2,5	306
SKg 80 - 2BHPS	01/494.525.3/19/15	1,1	2770	1,08	1,94	2,81	3,67	3,0 ÷ 4,0	306
SKg 80 - 4AHPS	01/494.525.3/19/15	0,55	1390	2,17	3,90	5,64	7,37	3,0 ÷ 4,0	306
SKg 80 - 6AHPS	01/494.525.3/19/15	0,37	905	3,22	5,79	8,37	10,94	3,0 ÷ 4,0	306
SKg 80 - 8BHPS	01/494.525.3/19/15	0,25	685	4,41	7,93	11,46	14,98	3,0 ÷ 3,5	306
SKg 80 - 4BHPS	01/494.625.3/19/15	0,75	1385	2,14	3,85	5,56	7,27	4,0 ÷ 5,0	306
SKg 80 - 6BHPS	01/494.625.3/19/15	0,55	900	3,33	5,99	8,66	11,32	4,0 ÷ 6,0	306
Size 2									
SKg 90S - 2HPS	01/494.625.3/24/15	1,5	2840	1,05	1,89	2,73	3,57	4,0 ÷ 5,0	359
SKg 90S - 8HPS	01/494.525.3/24/15	0,37	680	4,41	7,94	11,46	14,99	4,0 ÷ 5,0	359
SKg 90L - 2HPS	0/494.625.3/24/15	2,2	2845	1,05	1,89	2,73	3,57	5,0 ÷ 7,0	359
SKg 90S - 4HPS	0/494.525.3/24/15	1,1	1415	2,12	3,81	5,51	7,21	5,0 ÷ 7,0	359
SKg 90S - 6HPS	0/494.525.3/24/15	0,75	920	3,26	5,86	8,47	11,08	5,0 ÷ 8,0	359
SKg 90L - 8HPS	0/494.525.3/24/15	0,55	680	4,41	7,94	11,46	14,99	5,0 ÷ 8,0	359
SKg 90L - 4HPS	0/494.625.3/24/15	1,5	1420	2,11	3,79	5,48	7,17	7,0 ÷ 10,0	359
SKg 90L - 6HPS	0/494.625.3/24/15	1,1	925	3,24	5,83	8,42	11,02	8,0 ÷ 12,0	359
Size 3									
SKg 100L - 2HPS	1/494.525.3/28/15	3,0	2895	1,03	1,85	2,68	3,50	7,0 ÷ 10,0	398
SKg 100L - 8AHPS	1/494.525.3/28/15	0,75	710	4,22	7,59	10,97	14,35	7,0 ÷ 10,0	398
SKg 112M - 2HPS	1/494.525.3/28/15	4,0	2915	1,02	1,83	2,65	3,47	9,0 ÷ 13,0	424
SKg 100L - 6HPS	1/494.525.3/28/15	1,5	945	3,17	5,71	8,24	10,78	11,0 ÷ 16,0	398
SKg 100L - 8BHPS	1/494.525.3/28/15	1,1	710	4,22	7,59	10,97	14,35	11,0 ÷ 15,0	398
SKg 100L - 4AHPS	1/494.525.3/28/15	2,2	1420	2,11	3,80	5,49	7,17	11,0 ÷ 15,0	398
SKg 100L - 6HPS	1/494.525.3/28/15	1,5	945	3,17	5,71	8,24	10,77	11,0 ÷ 16,0	398
SKg 112M - 8HPS	1/494.525.3/28/15	1,5	710	4,22	7,59	10,97	14,35	15,0 ÷ 21,0	424
SKg 100L - 4BHPS	1/494.625.3/28/15	3,0	1415	2,12	3,81	5,51	7,21	15,0 ÷ 21,0	398
SKg 112M - 8HPS	1/494.525.3/28/15	1,5	710	4,22	7,59	10,97	14,35	15,0 ÷ 21,0	424
SKg 112M - 4HPS	1/494.625.3/28/15	4,0	1445	2,07	3,73	5,39	7,05	19,0 ÷ 28,0	424





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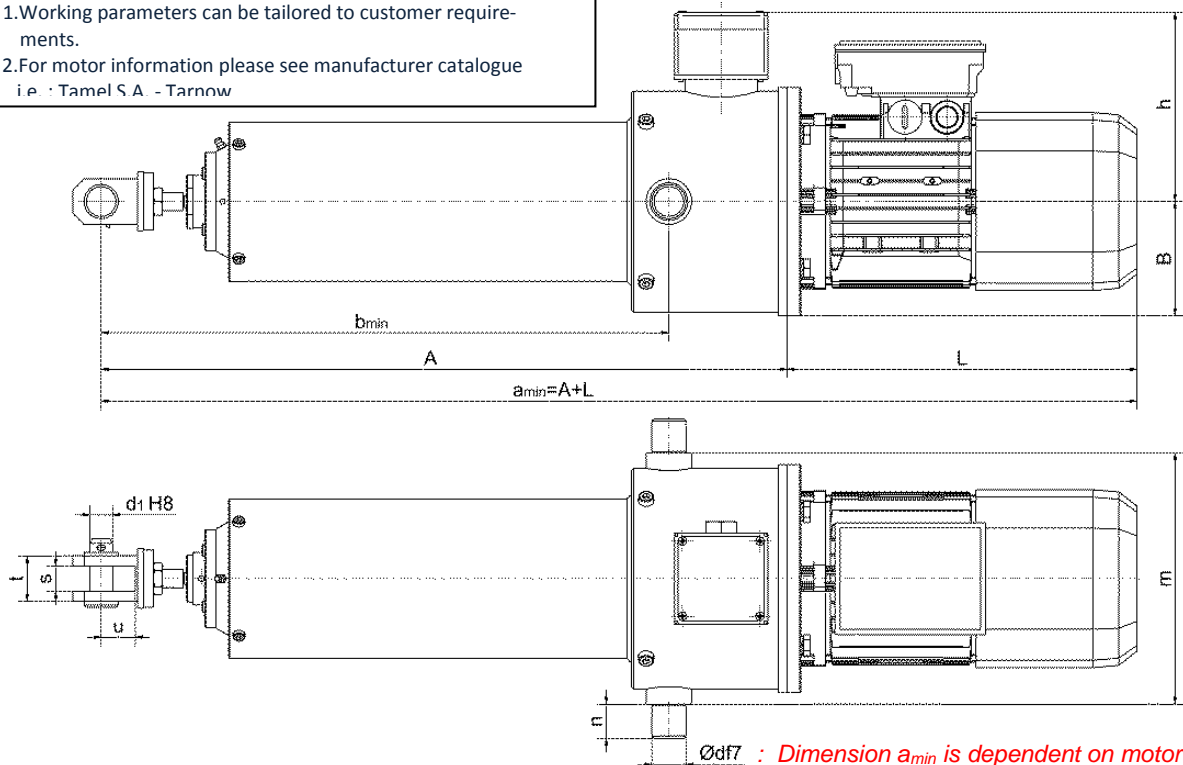


ACTUATOR DIMENSIONS:

Table 2.1

Actuator type	Travel	Dimensions										
		B	h	m	n	d	d ₁	d ₂	b	s	t	u
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Size 1	250	100	168	220	30	30	20	20	19	22	40	30
	450	100	168	220	30	30	20	20	19	22	40	30
	650	100	168	220	30	30	20	20	19	22	40	30
	850	100	168	220	30	30	20	20	19	22	40	30
Size 2	250	100	168	220	30	30	24	25	23	28	60	40
	450	100	168	220	30	30	24	25	23	28	60	40
	650	100	168	220	30	30	24	25	23	28	60	40
	850	100	168	220	30	30	24	25	23	28	60	40
Size 3	250	125	168	220	30	30	30	30	28	36	70	50
	450	125	168	220	30	30	30	30	28	36	70	50
	650	125	168	220	30	30	30	30	28	36	70	50
	850	125	168	220	30	30	30	30	28	36	70	50

Comments: 1. Working parameters can be tailored to customer requirements.
 2. For motor information please see manufacturer catalogue i.e.: Tamel S.A. - Tarnow



Ødf7 : Dimension a_{min} is dependent on motor type + variant type (i.e. with or without colapsable piston shroud) (a_{min} = A + L)



ACTUATOR DIMENSIONS:

Table 2.2

Actuator Type	Travel	Dimensions							
		Variant. A Without shield		Variant. A shielded		Variant. B Without shield		Variant. B shielded	
		b _{min}	A	b _{min}	A	b _{min}	A	b _{min}	A
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Size 1	250	507	611	517	621	494	598	504	608
	450	707	811	737	841	694	798	724	828
	650	907	1011	962	1066	894	998	949	1053
	850	1107	1211	1187	1291	1094	1198	1174	1278
Size 2	250	507	635	517	645	504	632	514	642
	450	707	835	737	865	704	832	734	862
	650	907	1035	962	1090	904	932	959	1087
	850	1107	1235	1187	1315	1104	1132	1184	1312
Size 3	250	517	665	527	675	520	668	530	678
	450	717	865	747	895	720	868	750	898
	650	917	1065	972	1120	920	1068	975	1123
	850	1117	1265	1197	1345	1120	1268	1200	1348

COUPLING OPTIONS:

