



Mechanical Plants „WIROMET” S. A.

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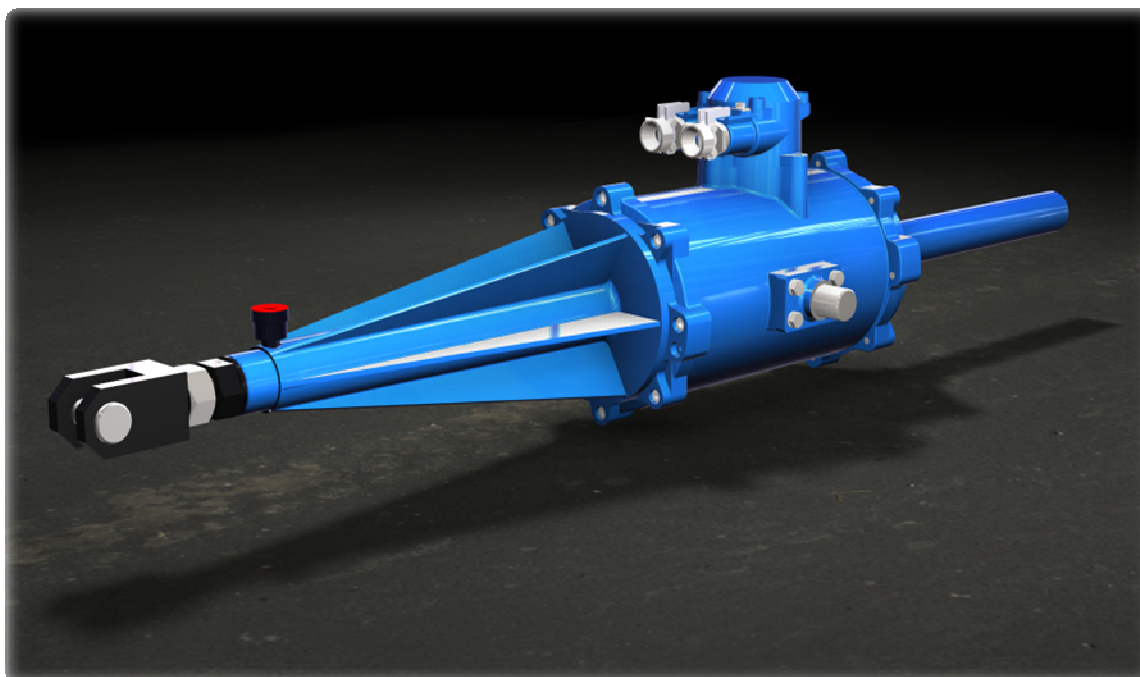
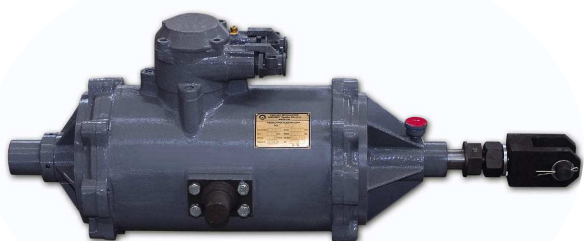
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T
Y
P
E **PEŁ**

Electrical Actuators





APPLICATION:

Applications of our **PEŁ** 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 with heightened risk of explosion. **PEŁ** type actuators provide IP-65 wg PN-EN 60529:2003 level protection.

This actuator is designed to be used in environments at risk of explosion classified under device category **3** group **II** and areas **22** of the EU ATEX directives. The device is marked **II 3DEx tD A22 IP65 T 125°C**.

CLASIFICATION:

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

PEŁ - **F** / **S** / **U**

Symbol definitions:

PEŁ	- electrical actuator
F	- nominal force (on the couple ending) in [kN]
S	- actuator travel [mm]
U	- operating voltage [V]

Example of electrical actuator applied force 3 kN, travel length 450mm and 400V motor operating voltage.

PEŁ-3/450/400



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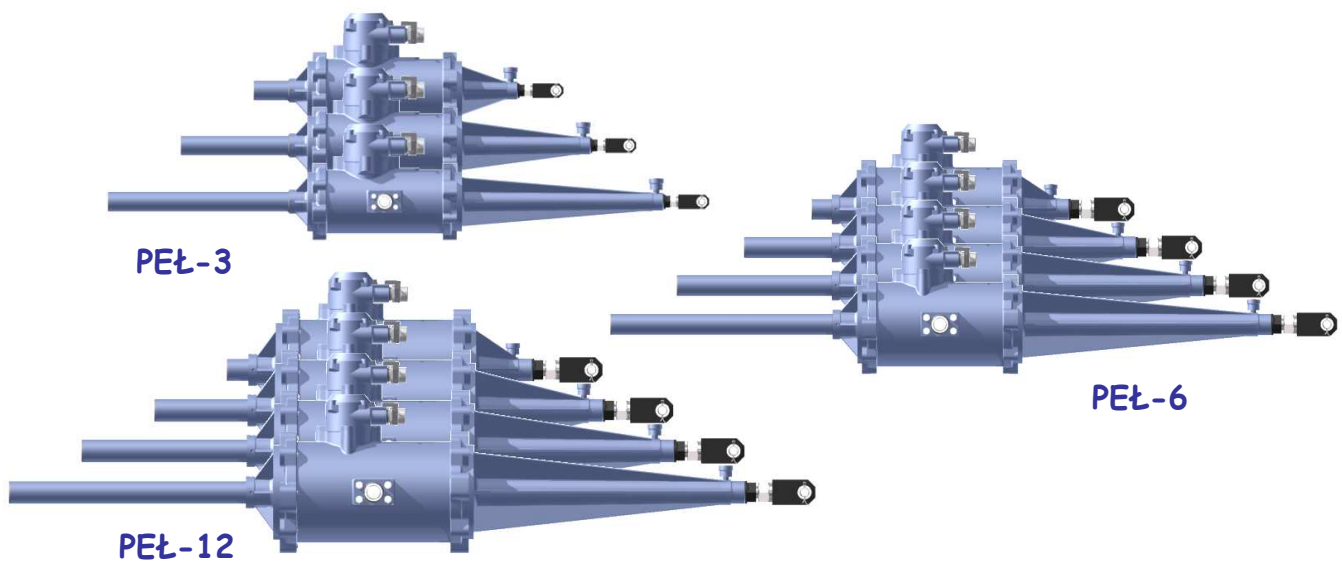
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TECHNICAL SPECIFICATIONS:

Table 1

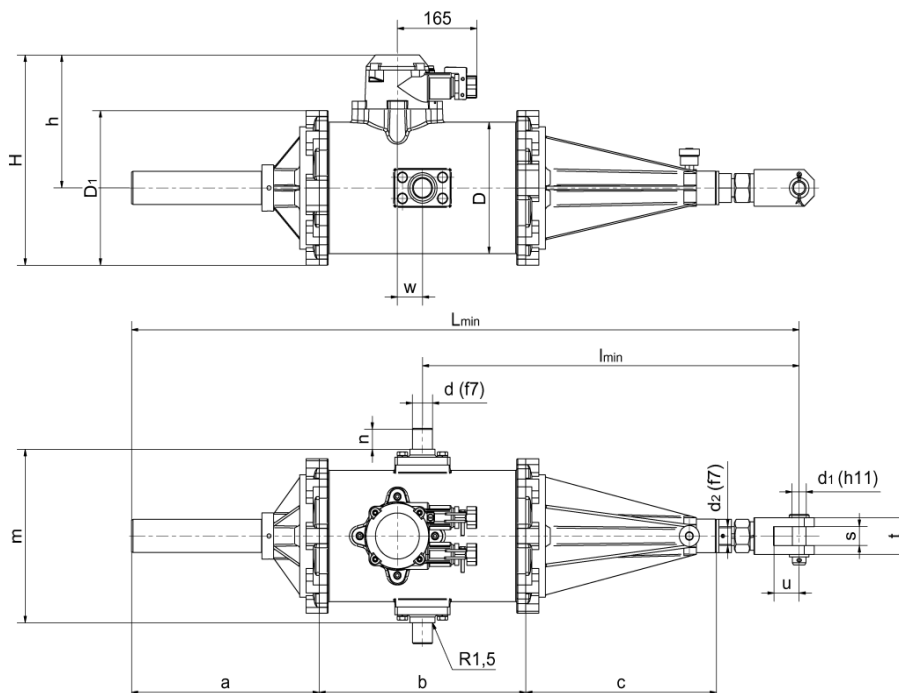
Actuator type	Nominal force	travel	Rate of travel	Time for complete stroke	Permitted deployment rate	Power	Operating voltage	Amps	Mass
	kN	mm	mm/s	s	hrs. ⁻¹	kW	V	A	kg
PEŁ-3	3	250	118	2,12	120	2,2	230/400 500	8,3/4,8 3,9	58,0
		450		3,81					63,0
		650		5,50					68,0
PEŁ-6	6	250	126,7	1,97	120	3,0	230/400 500	11,9/6,9 5,5	120,0
		450		3,55					130,0
		650		5,13					140,0
		850		6,71					150,0
PEŁ-12	12	250	128	1,95	120	7,5	230/400 500	26,7/15,4 11,6	168,0
		450		3,51					180,0
		650		5,08					192,0
		850		6,64					205,0



ACTUATOR DIMENSIONS:

Table 2.1

Actuator type	Travel [mm]	Dimensions [mm]															
		a	b	c	D	D ₁	d	d ₁	d ₂	H	h	m	n	s	t	u	w
PEŁ-3	250	185	350	190	173,5	210	30	20	25	318	213	220	30	22	40	35	50
	450	385	350	390	173,5	210	30	20	25	318	213	220	30	22	40	35	50
	650	585	350	590	173,5	210	30	20	25	318	213	220	30	22	40	35	50
PEŁ-6	250	174	412	180	250	290	40	28	36	400	253	330	40	36	70	50	50
	450	374	412	380	250	290	40	28	36	400	253	330	40	36	70	50	50
	650	574	412	580	250	290	40	28	36	400	253	330	40	36	70	50	50
	850	774	412	780	250	290	40	28	36	400	253	330	40	36	70	50	50
PEŁ-12	250	180	470	200	280	338	40	28	36	442	273	370	40	36	70	50	70
	450	380	470	400	280	338	40	28	36	442	273	370	40	36	70	50	70
	650	580	470	600	280	338	40	28	36	442	273	370	40	36	70	50	70
	850	780	470	800	280	338	40	28	36	442	273	370	40	36	70	50	70



ACTUATOR DIMENSIONS:

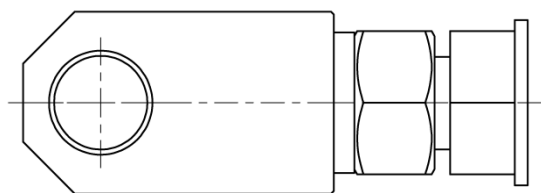
Table 2.2

Actuator type	Travel [mm]	Wymiary [mm]							
		Dimension 1 without shield		Dimension 2 with shield		Dimension 1 without shield		Dimension 2 with shield	
		L _{min}	I _{min}	L _{min}	I _{min}	L _{min}	I _{min}	L _{min}	I _{min}
PEŁ-3	250	830	470	830	470	830	470	830	470
	450	1230	670	1255	695	1230	670	1255	695
	650	1630	870	1680	920	1630	870	1680	920
PEŁ-6	250	931	551	931	551	881	501	881	501
	450	1331	751	1331	751	1281	701	1281	701
	650	1731	951	1756	976	1681	901	1706	926
	850	2131	1151	2181	1201	2081	1101	2131	1151
PEŁ-12	250	1015	600	1015	600	965	550	965	550
	450	1415	800	1415	800	1365	750	1365	750
	650	1815	1000	1840	1025	1765	950	1790	975
	850	2215	1200	2265	1250	2165	1150	2215	1200

COUPLING OPTIONS:

There are 2 coupling options for PEŁ type actuators.

Coupling A



Coupling B

