



MTM Hydro srl

Components and accessories for h.p. cleaners and car wash

Via Moglia, 33 - 12062 Cherasco (CN)
tel. (+39) 0172.49.59.30 - fax (+39) 0172.49.54.37
www.mtmhydro.it - info@mtmhydro.it

MAINTENANCE AND OPERATING MANUAL

BIG Pressure switch



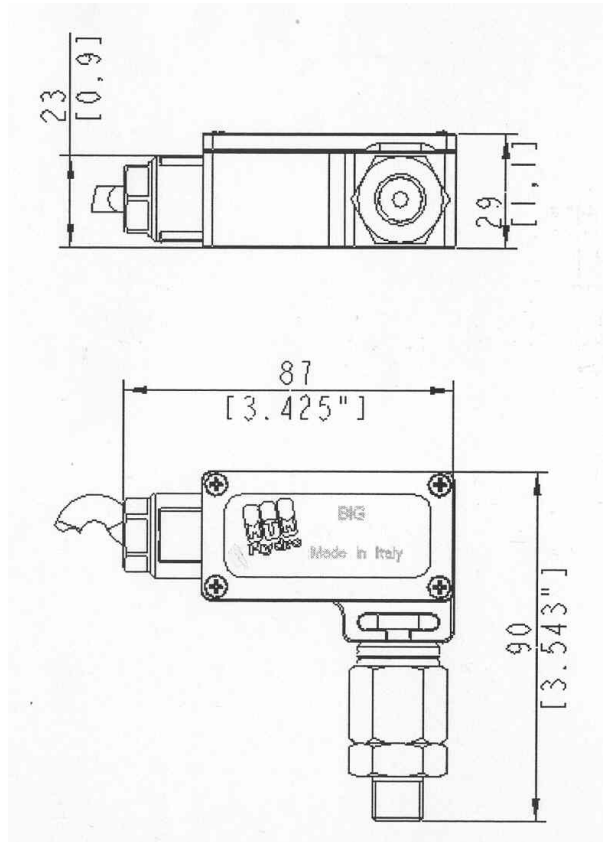
Products

Code	Pressure ON	Type	Inlet
21.0048	8 bar - 115 psi	2 fili/wires	1/4" M
21.0016	8 bar - 115 psi	3 fili/wires	1/4" M
21.0049	8 bar - 115 psi	2 fili/wires	3/8" M
21.0017	8 bar - 115 psi	3 fili/wires	3/8" M
21.0045	15 bar - 210 psi	2 fili/wires	1/4" M
21.0014	15 bar - 210 psi	3 fili/wires	1/4" M
21.0046	15 bar - 210 psi	2 fili/wires	3/8" M
21.0015	15 bar - 210 psi	3 fili/wires	3/8" M
21.0035	25 bar - 360 psi	2 fili/wires	1/4" M
21.0010	25 bar - 360 psi	3 fili/wires	1/4" M
21.0043	25 bar - 360 psi	2 fili/wires	3/8" M
21.0012	25 bar - 360 psi	3 fili/wires	3/8" M
21.0036	40 bar - 580 psi	2 fili/wires	1/4" M
21.0011	40 bar - 580 psi	3 fili/wires	1/4" M
21.0044	40 bar - 580 psi	2 fili/wires	3/8" M
21.0013	40 bar - 580 psi	3 fili/wires	3/8" M

Functioning

The device change the electric contact condition on the working characteristic pressure be attainment.

Size feature



Specifications

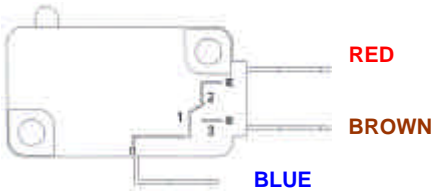
Max pressure	280 bar - 4100 psi
Max temperature	90°C (194°F)
Max voltage	250V
Current int.	15°
Class security level	IP 55

Electrical feature

General		Micro switch	
Max voltage	250V	Resistive load	15A
Cable lenght	1115 mm	Inductive load	10A
Thickness of wire	1,5 mm ²	Mechanical duration	10 ⁷ cicles (a 60 cpm)
Wire max voltage	15A	Electrical duration	10 ⁷ cicles (rated load; 20 cpm)

Electrical connections

Blue and brown	Quiet break contact (N.O.)
Blue and red	Quiet make contact (N.C.)



Safety precautions

- This component must be build into complete and ended machines.
- To install after a pump and at any rate before a possible hot water heater.
- Use with clean soft water or with the addition of detergent; to use different or corrosive fluid advise with our technical office.
- The max calibrate pressure value is signal to a different seal color shown in the following table.

<i>OR seal color</i>	<i>Max calibrate pressure</i>	<i>Min. calibrate pressure</i>
Yellow	10MPa (100bar-1500psi)	2,5 MPa (25bar-380psi)
Red	20MPa (200bar-3000psi)	3,0 MPa (30bar- 450psi)
Blue	27,5MPa (275bar-4000psi)	5,5 MPa (55bar- 8300psi)
Black	31MPa (310bar-4500psi)	6,0 MPa (60bar- 900psi)

Maintenance

In case of change spare part kit, grease all seal's component with water resistant grease, compatible with seals and with a low coefficient of friction.

For a spare part's correct assembly use the exploded drawing.

The maintenance must be done only from qualify staff and with original spare parts.

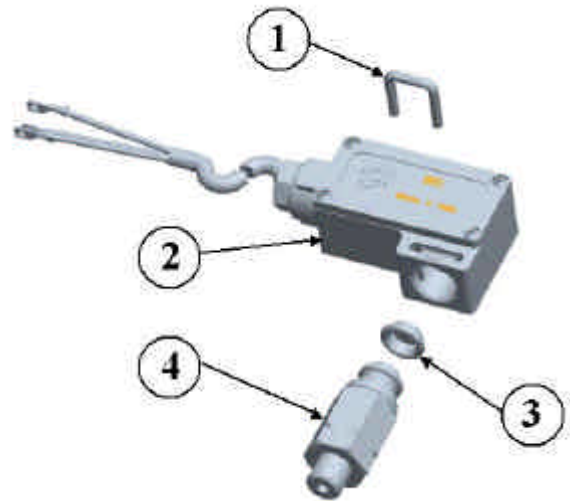
MTM Hydro is not responsible for any malfunctioning due to an incorrect maintenance done from un-qualify staff.

To assure the mechanical component correct functioning use only original MTM Hydro spare parts kit (see exploded drawing with relative spare parts kit code).

Exploded drawing

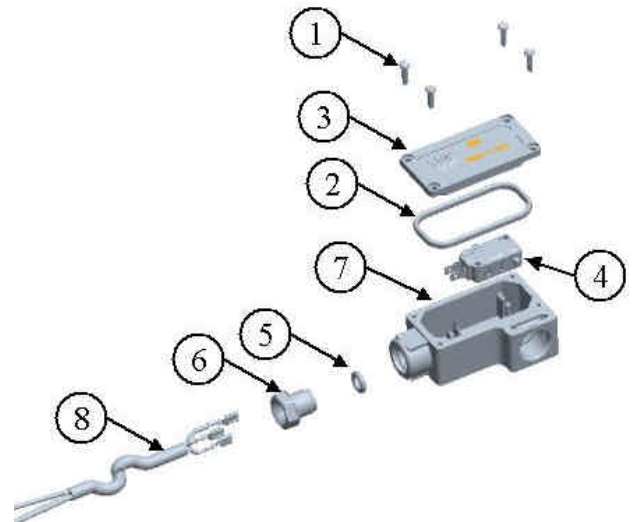
A - Assembly hydraulic and electric part

code	q.ty	position	description
38.0123	1	A1	Block-pin
41.0114	1	A2	Electrical part (exploded B)
39.0097	1	A3	Membrane seal
41.0021	1	A4	Hydraulic part (exploded C)



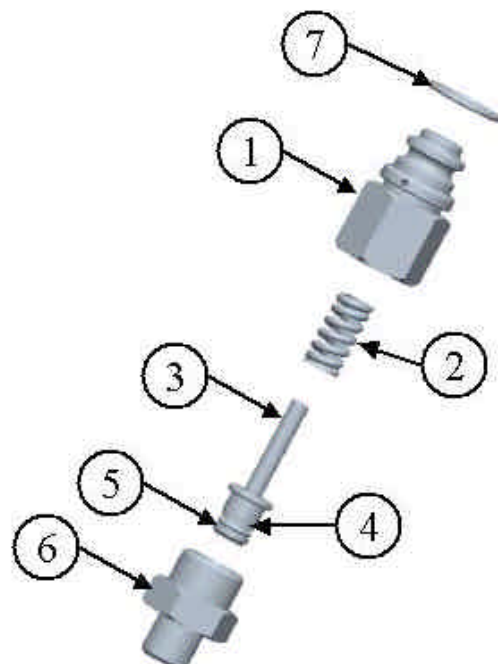
B – Electrical part

code	q.ty	position	description
36.0191	4	B1	Inox screw
39.0134	1	B2	o-ring 46,8x2,62 mm
37.0048	1	B3	cope
41.0095	1	B4	Micro switch
39.0155	1	B5	o-ring 6x3 mm
37.0047	1	B6	Pressure switch cable
37.0046	1	B7	box 8-15-25-40 bar
39.0084	1	B8a	Cable lenght 1115 mm 2 fili
39.0085	1	B8b	Cable lenght 1115 mm 3 fili



C – Hydraulical part

code	q.ty	position	description
35.0074	1	C1	Hood body
38.0084	1	C2a	spring 8bar
36.0148	1	C2b	spring 15bar
38.0082	1	C2c	spring 25bar
38.0083	1	C2d	spring 40bar
36.0010	1	C3	Piston
39.0059	1	C4	BK
39.0141	1	C5	o-ring
35.0072	1	C6a	1/4" body
35.0073	1	C6b	3/8" body
39.0014	1	C7a	o-ring 12,42x1,78 mm yellow
39.0013	1	C7b	o-ring 12,42x1,78 mm blue
39.0015	1	C7c	o-ring 12,42x1,78 mm red
39.0012	1	C7d	o-ring 12,42x1,78 mm black



Spare part kit

codice	descrizione	componenti
41.0021	BIG 8bar 1/4" hydraulical part kit	C3-C4-C5-C2a-C7a-C6a-C1
41.0016	BIG 15bar 1/4" hydraulical part kit	C3-C4-C5-C2b-C7b-C6a-C1
41.0014	BIG 25bar 1/4" hydraulical part kit	C3-C4-C5-C2c-C7c-C6a-C1
41.0015	BIG 40bar 1/4" hydraulical part kit	C3-C4-C5-C2d-C7d-C6a-C1
41.0022	BIG 8bar 3/8" hydraulical part kit	C3-C4-C5-C2a-C7a-C6b-C1
41.0019	BIG 15bar 3/8" hydraulical part kit	C3-C4-C5-C2b-C7b-C6b-C1
41.0017	BIG 25bar 3/8" hydraulical part kit	C3-C4-C5-C2c-C7c-C6b-C1
41.0018	BIG 40bar 3/8" hydraulical part kit	C3-C4-C5-C2d-C7d-C6b-C1
41.0114	BIG electrical part kit – 2 wire	B1-B2-B3-B4-B5-B6-B7-B8a
41.0020	BIG electrical part kit – 3 wire	B1-B2-B3-B4-B5-B6-B7-B8b
41.0095	microswitch	B4

Warning

- Read carefully the manual before done any operation with the product;
- For a correct use follow carefully how indicate in the manual before proceeding to the installation, set up or the product's disassembly;
- Relate this manual's information on the use and maintenance manual of the machine where the pressure switch is installed;
- The installation and the maintenance must be done only from qualify staff;
- Every wrong product's use could be lay it on the line safety of operator: the constructor can't be considerate responsabile for damages for wrong uses;
- The product don't have to be tampered, in this case the constructor decline every responsibility for the working and the safety;
- Before to attend on the product be required:
 - Disconnect the machine to the network;
 - Dump the circuit for any possible residual pressure in the plumbing.

MTM Hydro reserve the right to improve own products and own manuals whichever technical modify, without notice.

The relate component is in accordance with the legislation in force relate on the DECLARATION OF CONFORMITY.

MTM Hydro is not responsible in case don't respect the prohibition of the component's set up before that the build in machine be declared conform at the reference instruction and rule.