



Applications

- All sectors of Water, Building, Energy and Industry.

General features

- AMTROBOX M is specially designed for the S series of 1/4 turn handles (S, SR, SF, SFR, SP and SM handles) and MA 12 and 25 series manual actuators.
- AMTROBOX M integrates a limit switch metallic plate enabling the use of various switches:
 - electric microswitches, (explosion-proof version on request),
 - pneumatic microswitches,
 - inductive proximity detectors.
- It is fitted between the valve mounting plate and the actuator and transmits entirely the operating torque to the valve.
- Its cams device for position detection makes it very reliable.
- AMTROBOX M can be equipped:
 - either with one microswitch or detector on closed position,
 - or with one microswitch or detector on open position,
 - or with one microswitch or detector on closed position and another on open position.

Protection

- Protection level: IP 65 according to EN 60529.
- So, the electric equipment is protected against fine dust and is tight to water-hose nozzle in any direction.

Temperature range

- From -20°C to $+80^{\circ}\text{C}$

Materials

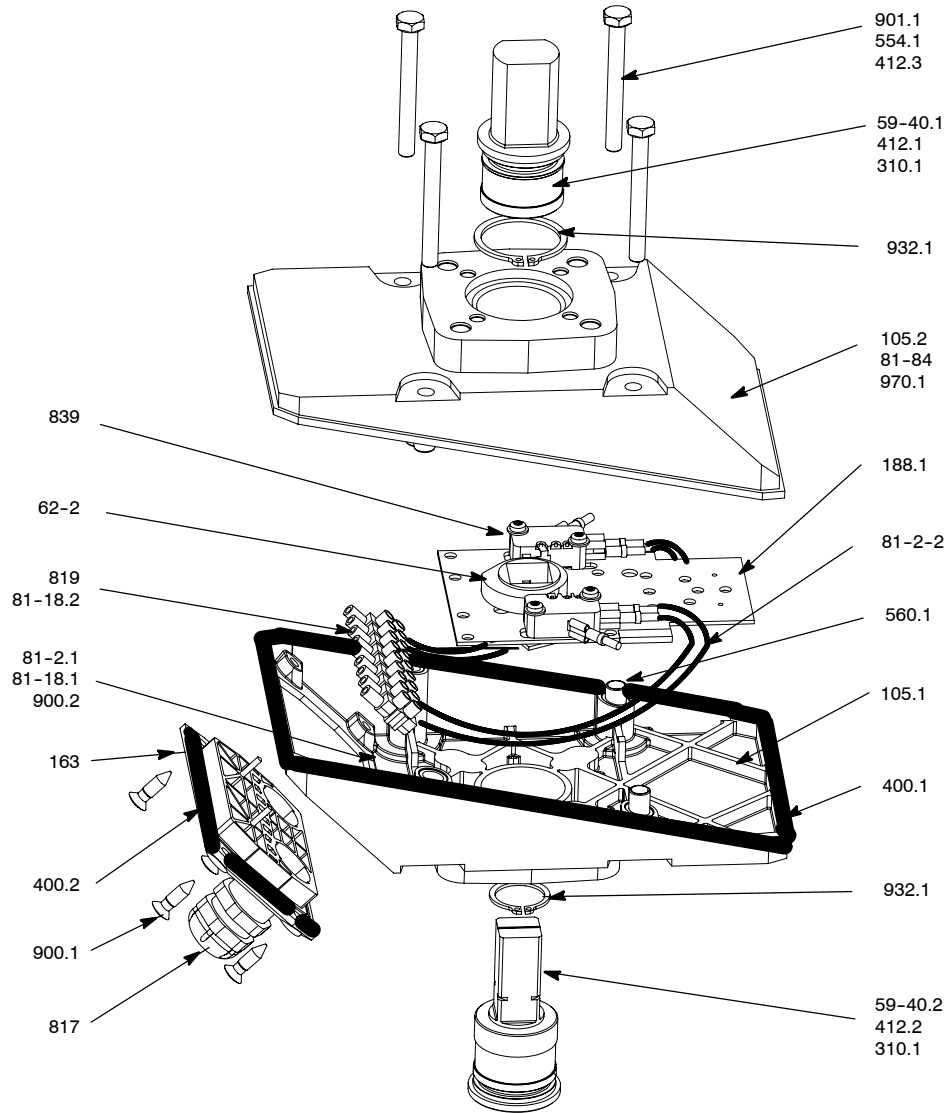
- Housing in light alloy
- Chuck in steel
- Its polyurethane paint coating ensures a good resistance in corrosive environments.
- AMTROBOX M for S series handles: polyurethane paint, thickness $80\ \mu\text{m}$, colour grey, ref. RAL 7016.
- AMTROBOX M for MA séries manual actuators: polyurethane paint, thickness $80\ \mu\text{m}$, colour black, ref. RAL 9011.

Standard variants

- AMTROBOX M for S series handles: R 1020
- AMTROBOX M for MA séries manual actuators: R 1021

This leaflet is also to be used as a start-up guide ref. 42 057 292

Construction



Item	Quantity	Designation	Material
105.1	1	Lower half housing	Light alloy
105.2	1	Upper half housing	Light alloy
163	1	Cap	Acetal
188.1	1	Metallic plate	Steel
310.1	2	Self lubricating strip	PTFE + Stainless steel
400.1	1	Housing flat gasket	Nitrile
400.2	1	Cap flat gasket	Nitrile
412.1	1	O-Ring	Nitrile
412.2	1	O-Ring	Nitrile
412.3	4	O-Ring	Nitrile
554.1	4	Plain washer	Stainless steel
59-40.1	1	Upper chuck	Treated steel
59-40.2	1	Lower chuck	Treated steel
560.1	4	Elastic pin	Steel
62-2	1	Cam	Acetal
81-18.1	1	Snap	-----
81-18.2	6	Cable socket	Brass
81-2.1	0,1m	Ground wire	-----
81-2.2	6	Connecting wire	-----
817	1	Packing-gland	Plastic or stainless steel
81-84	1	Wiring diagram	Polyester + adhesive
819	1	Connecting block	PVC
839	2	Microswitch or inductive proximity detector	-----
900.1	4	Screw	Stainless steel
900.2	1	Screw	Stainless steel
901.1	4	Hexagonal head screw	Steel
932.1	2	Spring retaining ring	Steel
970.1	1	AMRI KSB Identity plate	Adhesive paper

Definition of microswitches and inductive proximity detectors

Various types of electric microswitches or inductive proximity detectors can be fitted in the AMTROBOX M for extreme position indication opening and closing.

Microswitches

Manufacturer	Type	Reference	Size	Codification
CROUZET	electric	83-186-069-FD0 with lever	V4/DIN 41635	R102.-...A111

Inductive proximity detectors

Manufacturer	Type	Reference	Size	Codification
BAUMER	PNP	IFFK 10 24 31 NO lug 3 wires	V3/DIN 41635	R 102.-...H311
IFM EFFECTOR	PNP	IS-3003-BPOG/IS5031 cable 3 wires	V3/DIN 41635	R 102.-...H211
	PNP	IS-3003-APOG/IS5032 NC cable 3 wires	V3/DIN 41635	R 102.-...H212
	Quadronorm	IS-2002-FROG/IS5026 cable 2 wires	V3/DIN 41635	R 102.-...HA31
IFM EFFECTOR	Quadronorm	IN-2004-ABOA/IN0081 NO cable 2 wires	40 x 26 x 12	R 102.-...JA31
PEPPERL & FUCHS	PNP	NBB-V3-E2-V5 NO cosse 3 wires	V3/DIN 41635	R 102.-...H312
	DC	NBN4-12GM40-Z0 cable 2 wires	cilindrical \varnothing 12	R 102.-...MA32
TELEMECANIQUE	PNP	XS512B1DAL2 NO cable 2 wires	cilindrical \varnothing 12	R 102.-...MA31

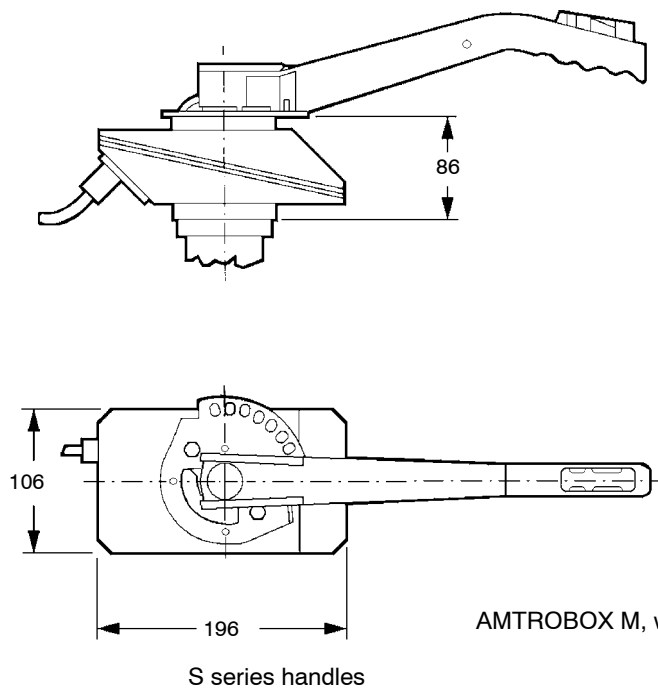
For technical characteristics of these components, please consult us.

Others microswitches and inductive proximity detectors are available, please consult us.

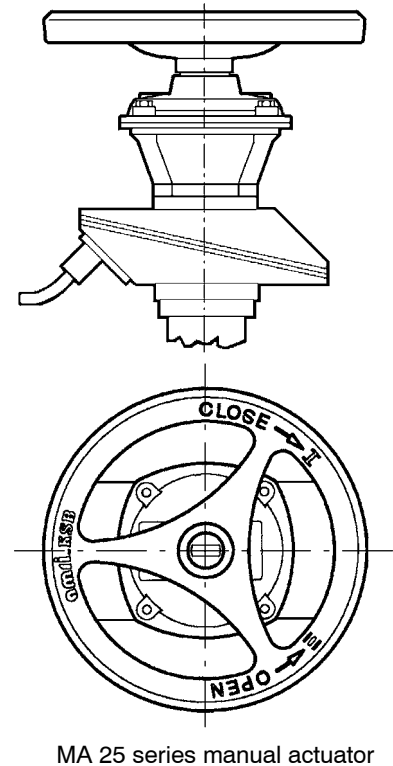
The electric connection is obtained via plastic or metallic packing-gland M20, or connectors.

Dimensions (mm) and Weight (kg)

AMTROBOX M R1020



AMTROBOX M R1021



Product features - to our customers' benefit

Adaptability

Flat ended shaft output for handle or MA fitting

Robustness

Housing in light alloy coated paint

Instrumentation

Proximity detectors or mechanical switches fitted on a metallic plate: various references available

Tightness

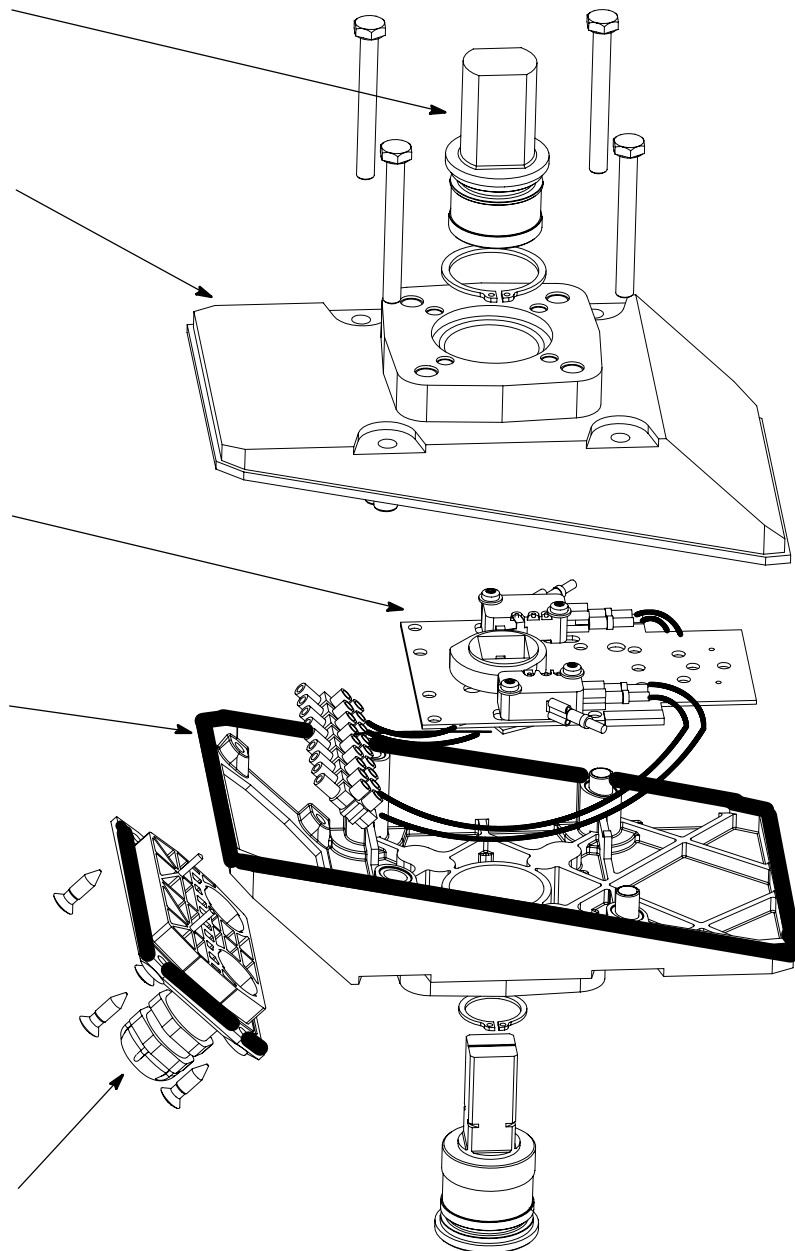
IP 65

Safety

- No external rotating parts
- Cleanliness
- No retention area

Electrical connection

by packing-gland or connector



This leaflet is not contractual and may be amended without notice.

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