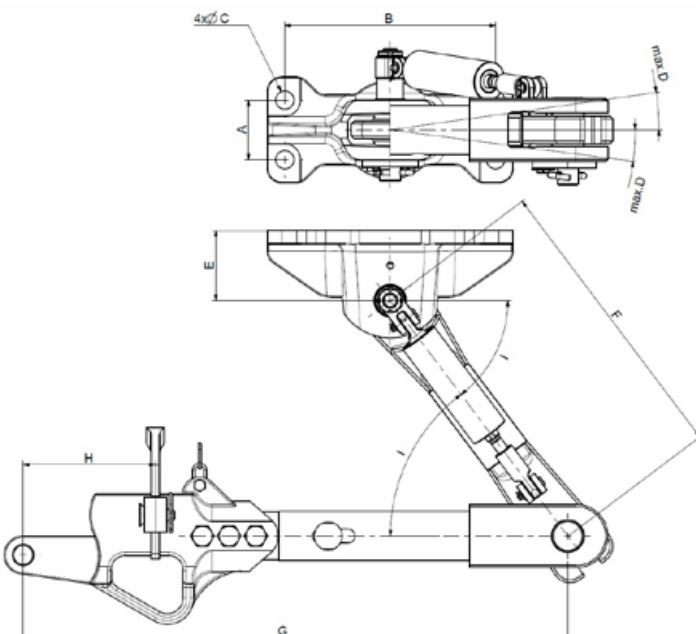
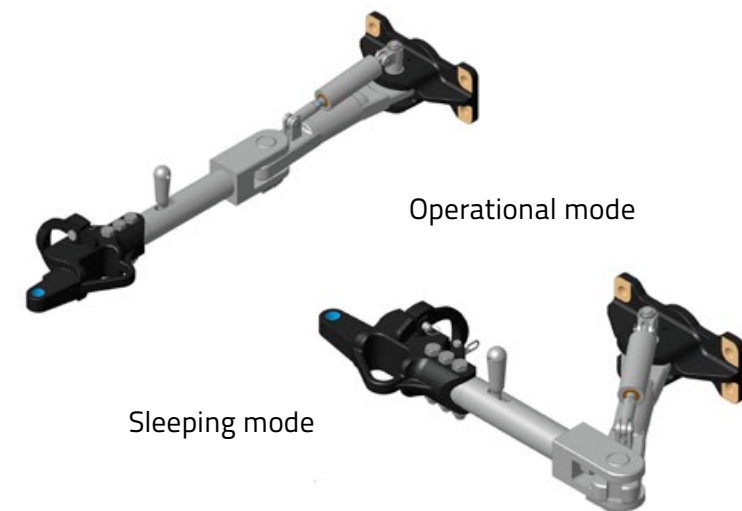


ALBERT COUPLERS

Albert couplers can be used as operational or emergency couplers for trams and light rail vehicles. Operational couplers can be used for daily vehicle service on tram and/or LRV lines, where there is a need for a safe, cost effective and simple connection. Emergency couplers are used for towing a faulty vehicle. They are often used as couplers in working service trams.

STANDARD SOLUTIONS

- The foldable Albert coupler type AX-SP without shock absorber

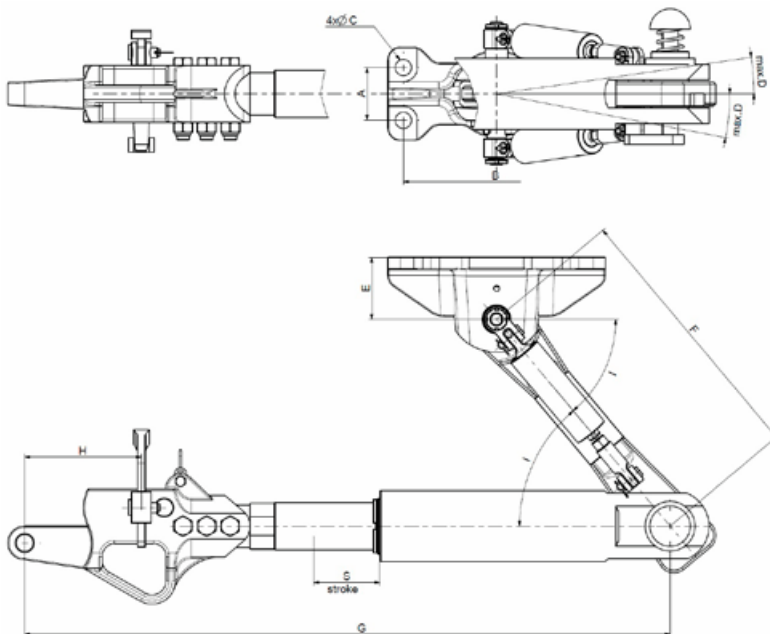


Technical specification of the Albert type AX-SP coupler:

- very low mass from 63 [kg],
- easy and reliable blocking mechanism,
- the foldable Albert coupler without shock absorber,
- compressive strength in static test 200 or 400 [kN],
- tensile strength in static test 200 or 400 [kN].

A	85 [mm]
B	300 [mm]
C	26 [mm]
D	max.7°
E	100 [mm]
F	from 420 to 1000 [mm]
G	from 775 to 1200 [mm]
H	188 [mm]
I	max.53°

- The foldable Albert coupler type AX-SP-3 with one-sided operation shock absorber

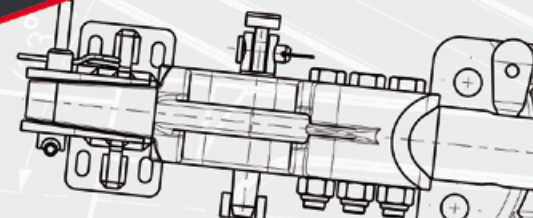


Technical specification of the Albert type AX-SP-3 coupler:

- very low mass from 89 [kg],
- easy and reliable blocking mechanism,
- the foldable Albert coupler with one - sided operation shock absorber (absorbed energy during compression according to individual customer need),
- the type of shock absorber which can be used: liquid elastomer shock absorber KAMAXIL® or solid elastomer shock absorber EUROPAD®,
- compressive strength in static test 200 or 400 [kN],
- tensile strength in static test 200 or 400 [kN].

A	85 [mm]
B	300 [mm]
C	26 [mm]
D	max.7°
E	100 [mm]
F	from 420 to 1000 [mm]
G	from 890 to 1200 [mm]
H	188 [mm]
I	max.50°
S (stroke)	from 50 to 100 [mm]

There is also a possibility to equip the Albert coupler with a crash shock absorber element in the irreversible range.

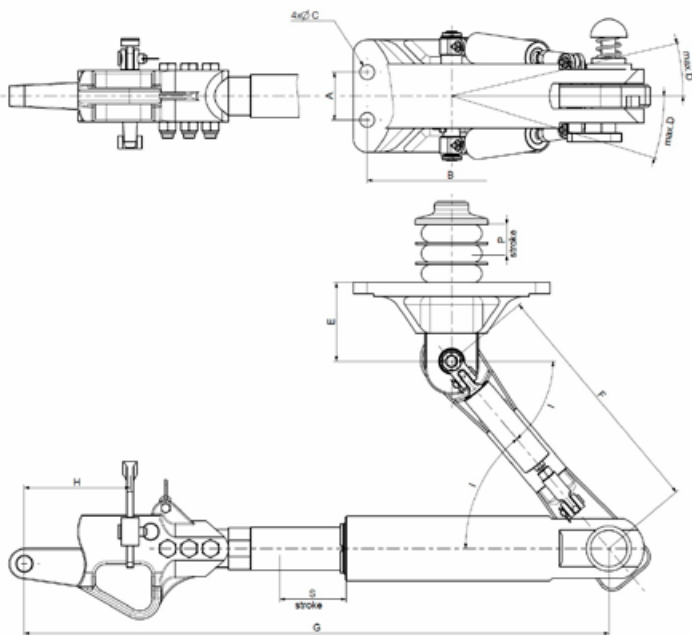


- The foldable Albert coupler type AX-SP-4 with two-sided operation shock absorber



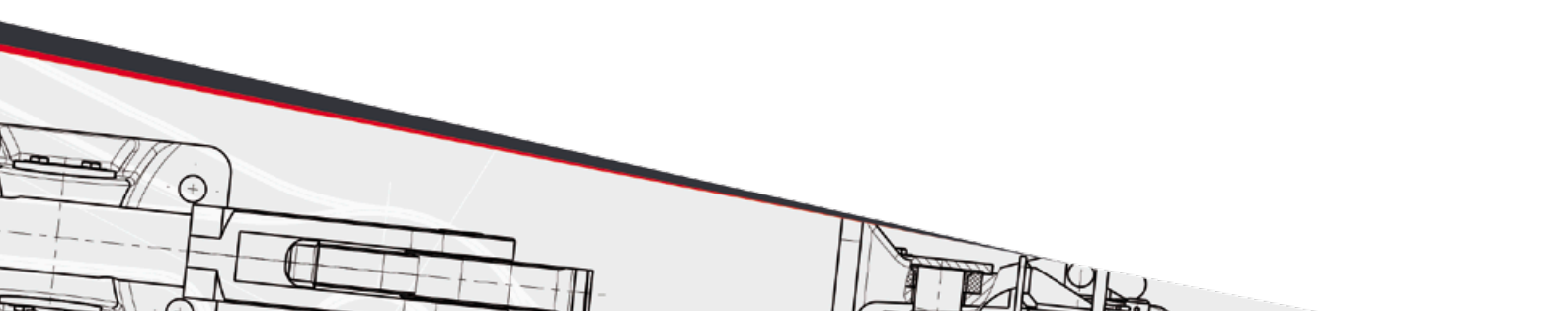
Technical specification of the Albert type AX-SP-4 coupler:

- very low mass from 89 [kg],
- easy and reliable blocking mechanism,
- the foldable Albert coupler with two - sided operation shock absorber (absorbed energy during compression and tensile according to individual customer need),
- the type of shock absorber which can be used: liquid elastomer shock absorber KAMAXIL® or solid elastomer shock absorber EUROPAD®,
- compressive strength in static test 200 or 400 [kN],
- tensile strength in static test 200 or 400 [kN].



A	85 [mm]
B	300 [mm]
C	26 [mm]
D	max.7°
E	from 100 to 140 [mm]
F	from 420 to 1000 [mm]
G	from 890 to 1200 [mm]
H	188 [mm]
I	max.50°
S (stroke)	from 50 to 100 [mm]
P (stroke)	from 20 to 50 [mm]

There is also a possibility to equip the Albert coupler with a crash shock absorber element in the irreversible range.

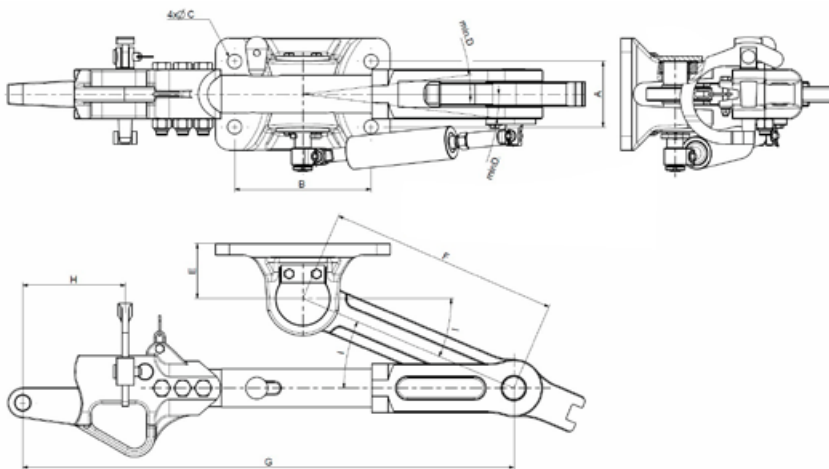


- The foldable Albert coupler type AX-SPS with two-sided operation shock absorber



Technical specification of the Albert type AX-SPS coupler:

- very low mass from 63 [kg],
- easy and reliable blocking mechanism,
- used to dampen vibrations caused by the push-pull movement of the vehicle,
- the type of shock absorber which can be used: solid elastomer shock absorber EUROPAD®,
- compressive strength in static test 200 or 400 [kN],
- tensile strength in static test 200 or 400 [kN].



A	120 [mm]
B	250 [mm]
C	26 [mm]
D	max.7°
E	from 100 to 140 [mm]
F	from 420 to 1000 [mm]
G	from 890 to 1200 [mm]
H	188 [mm]
I	max.23°
S (stroke)	+/-4 [mm]

There is also a possibility to equip the Albert coupler with a crash shock absorber element in the irreversible range.