



AGRO Rolling Stock Glands

Now ASTM 1354 NFPA 130 Approved





Initial situation



After 30 minutes



After 10 minutes



After 35 minutes



After 20 minutes



After 44 minutes

AGRO Progress® - the ideal solution for rolling stock

AGRO Progress® metal cable glands can be used with confidence for any rolling stock application, in any arrangement, as has been recently certified.

The outstanding Progress® compression technology ensures tight seals and offers cables exceptional damage-preventing strain relief, even in dynamic applications. A comprehensive range of standard and EMC cable glands and accessories offers a solution for almost any application. Where the need arises, AGRO also delivers certified solutions according to customer requirements.

Exceeding the demands of EN 45545-3

EN 45545-3 defines the requirements for fire resistance of fire barriers. The aim of EN 45545-3 is to limit fire spread by specifying the performance of materials and components. If cables are routed through fire barriers, the requirements apply also to the cable glands used.

In order to establish whether or not the required fire resistance is achieved, components are tested in a testing furnace with respect to requirements for fire barrier, thermal insulation and radiation emission.

AGRO Progress® metal cable glands easily exceed the requirements of EN 45545-3 and satisfy the very high demands of fire resistance class E30. This means that the seal inserts remain impervious and prevent the spread of fire through the gland for at least 30 minutes. They do not crack or fissure. From a fire protection perspective, they can be used without hesitation in all railway vehicles.



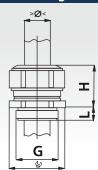




AGRO Progress® MS Certified Rolling Stock Cable Glands

Temperature rang

Short Entry Thread



Material: O-ring: Strain relief: Nickel-plated brass According to EN 50262

-50°C / +105°C

version A

Protection class: IP 68 **Protection addition** IP 69K Material sealing insert: Color sealing insert: Threads: Further norms:

Special AGRO TPE Light grey RAL 7035 M12 to M63

EN 50262 / IEC 62444



| G | > Ø < | > Ø < | ∯ mm | H | L | Two-piece sealing insert | Art. No. | |
|---------|----------------|----------------|---------|----|----|--------------------------|----------|----|
| M16x1.5 | 6.0 | 10.5 | 18 | 22 | 5 | | F1000.17 | 50 |
| M20x1.5 | 8.0 | 15.0 | 24 | 23 | 6 | | F1000.20 | 50 |
| M25x1.5 | 12.5 | 20.5 | 30 | 28 | 7 | | F1000.25 | 25 |
| M32x1.5 | 17.0 | 25.5 | 36 | 28 | 8 | | F1000.32 | 25 |
| M40x1.5 | 24.0 | 33.0 | 46 | 31 | 8 | | F1000.40 | 10 |
| M50x1.5 | 33.0 | 42.0 | 55 | 34 | 9 | | F1000.50 | 10 |
| M63x1.5 | 40.0 | 52.0 | 70 | 37 | 10 | | F1000.63 | 5 |



| AGRO Progress® MS Certified Rolling Stock Cable Glands Short Entry Thread | | | | | | | | | | | |
|---|---------|----------------|----------------|----------|----|----|------------------|--------------------------|--------------|----|--|
| | G | > Ø < | > Ø < | ∑) mm | H | L | i info | One-piece sealing insert | Art. No. | | |
| (38) | M12x1.5 | 3.5 | 5.0 | 15 | 17 | 10 | - | | F1160.12.050 | 50 | |
| | M12x1.5 | 5.0 | 6.5 | 15 | 17 | 10 | - | | F1160.12.065 | 50 | |
| | M12x1.5 | 6.5 | 7.5 | 15 | 17 | 10 | - | | F1160.12.075 | 50 | |
| | M16x1.5 | 8.0 | 10.5 | 18 | 22 | 10 | - | | F1160.17.105 | 50 | |
| 188 | M20x1.5 | 11.0 | 14.5 | 24 | 23 | 10 | - | | F1160.20.145 | 50 | |
| | M25x1.5 | 16.0 | 19.0 | 30 | 28 | 11 | - | | F1160.25.190 | 25 | |
| | M32x1.5 | 21.0 | 25.5 | 36 | 28 | 13 | - | | F1160.32.255 | 25 | |
| | M40x1.5 | 28.5 | 33.0 | 46 | 34 | 13 | - | | F1160.40.330 | 10 | |
| | M50x1.5 | 37.0 | 42.0 | 55 | 34 | 14 | - | | F1160.50.420 | 10 | |
| | M63x1.5 | 46.0 | 52.0 | 70 | 37 | 14 | - | | F1160.63.520 | 5 | |



