# Comparison of technical data — 155mm GH N-45 versus G-5

| | | | | Unit | GH N-45 A1 | GH N-45 APU | G-5 |
|---|---|---|---|---|---|---|---|
| Dimensions | Length | travelling position | barrel forward | mm | 13'970 | 13'970 | |
| | | | barrel aft | mm | 9'720 | 9'725 | 9'500 |
| | Width | | | mm | 2'500 | 2'750 | 2'500 |
| | Hight | Overall | | mm | 2'260 | 2'260 | 2'300 |
| | | Ground clearance | | mm | 310 | 315 | 300 |
| Weight | Total weight | | | kg | 10'070 | 12'400 | 13'750 |
| | Lunette load | on towing eye | barrel forward | kg | 1'750 | 1'750 | |
| | | | barrel aft | kg | 2'460 | 2'550 | 3'000 |
| | Axle load | walking beam front | barrel forward | kg | 4'390 | 4'500 | |
| | (towed) | | barrel aft | kg | 3'000 | 4'100 | |
| | | walking beam rear | barrel forward | kg | 4'980 | 6'125 | |
| | | | barrel aft | kg | 4'610 | 5'750 | |
| | Axle load | walking beam front | barrel forward | kg | - | 4'300 | |
| | (self propelled) | | barrel aft | kg | - | 3'600 | |
| | | walking beam rear | barrel forward | kg | - | 5'300 | |
| | | | barrel aft | kg | - | 4'625 | |
| Barrel | Calibre | | | mm | 155 | 155 | |
| | length | calibre | | Calibre | 45 | 45 | 45 |
| | length | | | mm | 7'045 | 7'045 | 6'975 |
| | length | incl. muzzle brake and breech | | mm | 7'720 | 7'720 | |
| | volume | chamber | | ccm | 22'940 | 22'940 | 23'548 |
| | Rifling | number of grooves | | qty | 48 | 48 | 48 |
| | | twist | | | uniform right-hand | uniform right-hand | uniform right-hand |
| | | | | | 1 in 20 cals | 1 in 20 cals | 1 in 20 cals |
| | Life expectancy in rounds **E**quivalent **F**ull **C**harge | | | rds EFC | 2'500 | 2'500 | |
| Breech | mechanism | | | type | semi-automatic interrupted-screw type | semi-automatic interrupted-screw type | semi-automatic interrupted-screw type |
| Recoil Mechanism | | | | type | hydro-pneumatic variable | hydro-pneumatic variable | hydro-pneumatic variable |
| | Nitrogen pressure | | | bar | 158 | 158 | |
| | recoil path | -89 to +550 mils | | mm (max.) | 1'524 | 1'524 | |
| | | +830 to +1280 mils | | mm (max.) | 1'041 | 1'041 | |
| Equilibrator System | | | | type | hydro-pneumatic hydraulically adjusted | hydro-pneumatic hydraulically adjusted | pneumatic spring-adjusted (like GC-45 !) |

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|---|---|---|---|---|---|---|---|
| | Nitrogen pressure | Low pressure cylinder, at 20ºC | | bar | 68 | 68 | 83 |
| | | High pressure cylinder, at 20ºC | | bar | 108 | 108 | 83 |
| | Hydraulic fluid pressure | | elev. = 0 mils | bar | 158 | 158 | |
| Firing condition | overall length | zero elevation | | mm | 11' 400 | 11' 400 | 11' 200 |
| | overall width | | | mm | 9' 930 | 9' 930 | |
| | elevation | maximum range | | degrees | -5 to +72º | -4 to +72º | -3 to +75º |
| | | rate per turn of handwheel | | degrees | 0.3º | 0.3º | |
| | traverse | maximum range | elev. < +15º | degrees | 70º | 70º | 82º |
| | traverse | maximum range | elev. 16 to +25º | degrees | 70º | 70º | 65º |
| | | | elev. > 25º | degrees | 60º | 60º | 65º |
| | | rate per turn of handwheel | | degrees | 0.6º | 0.6º | |
| Fire Power | rate of fire | maximum | | rds/min | 4 to 5 | 4 to 5 | 3 |
| | | sustained | | rds/min | 2 unlimited charge 3 to 7 | 2 unlimited charge 3 to 7 | 3 for 15 min. |
| | | | | rds/min | 1 unlimited charge 8 to 10 | 1 unlimited charge 8 to 10 | 2 for 60 min. |
| | burst fire sequence | | | rds in 16 sec. | 3 | 3 | |
| | maximum range | at sea level | standard | m | 30' 000 | 30' 000 | 30' 000 |
| | | | base bleed | m | 39' 600 | 39' 600 | 39' 000 |
| | direct fire | maximum range | (0 m to ...) | m | 3' 000 | 3' 000 | 3' 000 |
| | terrain slope | maximum cant | | degrees | 10º | 10º | |
| | covered area | maximum | | km² | 906 | 906 | < 1' 000 |
| Firing Accuracy | Probable Error | | Range/Deflection | PE | R<0.30% / D<0.1% | R<0.30% / D<0.1% | R<0.48% / D=0.1% |
| Ammunition | compatibility | | | | all NATO 155mm | all NATO 155mm | all NATO 155mm |
| Wheels | Tires | walking beam | type 1 | size | 9.00-R20 | 11.00-R20 | 14.00-R20 |
| | | | type 2 | size | 11.00-R20 | 12.00-R20 | |
| | | | | size | | 14.00-R20 | |
| | | trail lifting wheels | | size | 8.25-R15 | 8.25-R15 | 7.50-R16 |
| | Track width | walking beam | | mm | 2' 220 | 2' 470 | 2' 100 |
| | | trail lifting wheels | | mm | 865 | 865 | |

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| | | | | Unit | GH N-45 A1 | GH N-45 APU | G-5 |
|---|---|---|---|---|---|---|---|
| Brakes | driving brake | towing | drum brakes | system | pneumatic actuating 4 wheel | hydro-pneumatic actuating 4 wheel | hydro-pneumatic actuating 4 wheel |
| | | self-propelled | drum brakes | system | - | hydraulic actuating 4 wheel | |
| | parking brake | | | | brake lever actuating 2 wheel | spring-loaded brake cylinder actuating 2 wheel | Yes |
| Mobility | max. speed | paved road | towed | km/h (approx.) | 105 | 105 | 90 |
| | | | self propelled | km/h | - | 25 | 16 |
| | | crosscountry | towed | km/h (approx.) | 50 | 50 | 50 |
| | | | self propelled | km/h | - | 25 | 10 |
| | | sand and mud | towed | km/h (approx.) | 15 | 15 | |
| | | | self propelled | km/h (approx.) | - | 5 | 4 |
| | climbing capacity | | self propelled | max. gradient | - | 40% | 40% |
| | fording | depth | | mm | 600 | 600 | 600 |
| | turning circle | | | mm | 10' 700 | 11' 900 | 20' 000 |
| | fuel-tank range | | | km (approx.) | - | 250 | 100 |
| | steering system (to make gun follow in prime mover track) | | | | standard | standard | not available |
| Engine | Propulsion unit | | | type | - | PORSCHE four cylinder | diesel engine |
| | cooling system | | | type | - | air cooled | air cooled |
| | fuel | | | type | - | petrol | diesel |
| | power | | | HP | - | 120 | 80 |
| | | | | KW | - | 88 | 59 |
| | fuel tank | capacity | | litre | - | 60 | 102 |
| Deployment | crew | standard | | men | 6 | 6 | 5 |
| | to deploy | | | sec | 150 | 70 | 120 |
| | bring out of action | | | sec | 180 | 100 | 300 |
| | operate | main float | raise / lower | | hydraulically | hydraulically | hydraulically |
| | | auxiliary float | raise / lower | | hydraulically | hydraulically | N/A |
| | | trail lifting wheels | steer/raise/lower | | manual/hydraulic | hydraulically | hydraulically |
| | | trails | spread / close | | manually | manually | hydraulically |
| | configuration | main float | cylinder | | hydraulic | hydraulic | hydraulic |
| | | auxiliary float | cylinder | | hydraulic | hydraulic | N/A |
| | | traverse gear | | | with clutch | with clutch | with clutch |