



01 / PRODUCT OVERVIEW

HAL-20

120 mm HAL-20 thermobaric mortar bomb



FIG 01 PRODUCT CONFIGURATION

6400 m (0+6) at +55 deg C (120 mm mortar M75, barrel length 1500 mm)

MAXIMUM RANGE

320 m/s (0+6) at +55 deg C, barrel length 1500 mm

MUZZLE VELOCITY

-30 deg C to +55 deg C

OPERATING TEMPERATURE RANGE

50 m

MUZZLE SAFETY AT LOWEST INITIAL VELOCITY

01.1 / OVERVIEW

120 mm mortar-launched thermobaric bomb with 4000 g HAL-20 fill, reaching 6400 m at 320 m/s with six increment charges.

TYPE
Mortar shell with fuze ut m88 p2

CALIBRE
120 mm

STANDARD
Both

PROCUREMENT AND COMPLIANCE

Supply is exclusively for government and institutional end-users. Availability is subject to destination screening, a state-issued export licence and a verified End-User Certificate.



02 / TECHNICAL SPECIFICATION

TECHNICAL DATA

HAL-20 / AMMUNITION

IDENTITY AND CONSTRUCTION

Length with fuze	675 mm
Mass with fuze	13000 g
Fuze	UT M88 P2, impact
Ignition cartridge	M74

BALLISTIC PERFORMANCE

Explosive insensitivity (open flame / high temperature)	MIL-STD-2105B, reaction type IV (deflagration reaction)
Muzzle safety at lowest initial velocity	50 m
Maximum range	6400 m (0+6) at +55 deg C (120 mm mortar M75, barrel length 1500 mm)
Muzzle velocity	320 m/s (0+6) at +55 deg C, barrel length 1500 mm
Overpressure at 5 m	0.67 bar
Operating temperature range	-30 deg C to +55 deg C
Storage temperature range	-30 deg C to +70 deg C

DIMENSIONS, MASS AND SUPPLY

Mass of explosive charge	4000 g
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ADDITIONAL TECHNICAL DATA

Explosive charge	Thermobaric explosive (HAL-20)
Explosive insensitivity (12.7 mm AP ammunition impact)	MIL-STD-2105B, reaction type V (burning reaction)
Increment charges	Ignition cartridge and six increment charges (0+6)
Lethal (kill) radius of fragments	30 m
Service life	15 years



CONFIGURATION VIEWS

HAL-20 / SUPPLEMENTARY CATALOGUE VIEWS

FIG 02 / with transport tube

