

Short Stroke Units
Double Acting
Ø25 mm bore

- Stroke adjustable over full length
- Non-contact signal detection via inductive proximity sensors (PNP type) with connector plugs
- May be mounted to provide either vertical or horizontal movement



Technical Data

Medium:

Compressed air, filtered and lubricated

Operating Pressure:

4 - 8 bar

Operating Temperature:

+5°C to +70°C

Operation:

Double acting with buffer cushioning. Hydraulic damping available on M/60170 as optional extra

Air Connection:

G $\frac{1}{8}$

Maximum Load Capacity (including assembled modules):

M/60160 – 3,5 kg

M/60170 – 12 kg

Standard Stroke Lengths:

M/60160 – 75 mm

M/60170 – 100 mm

Module Diameters

M/60160 – Ø 25 mm

M/60170 – 2 x Ø 25 mm

Materials

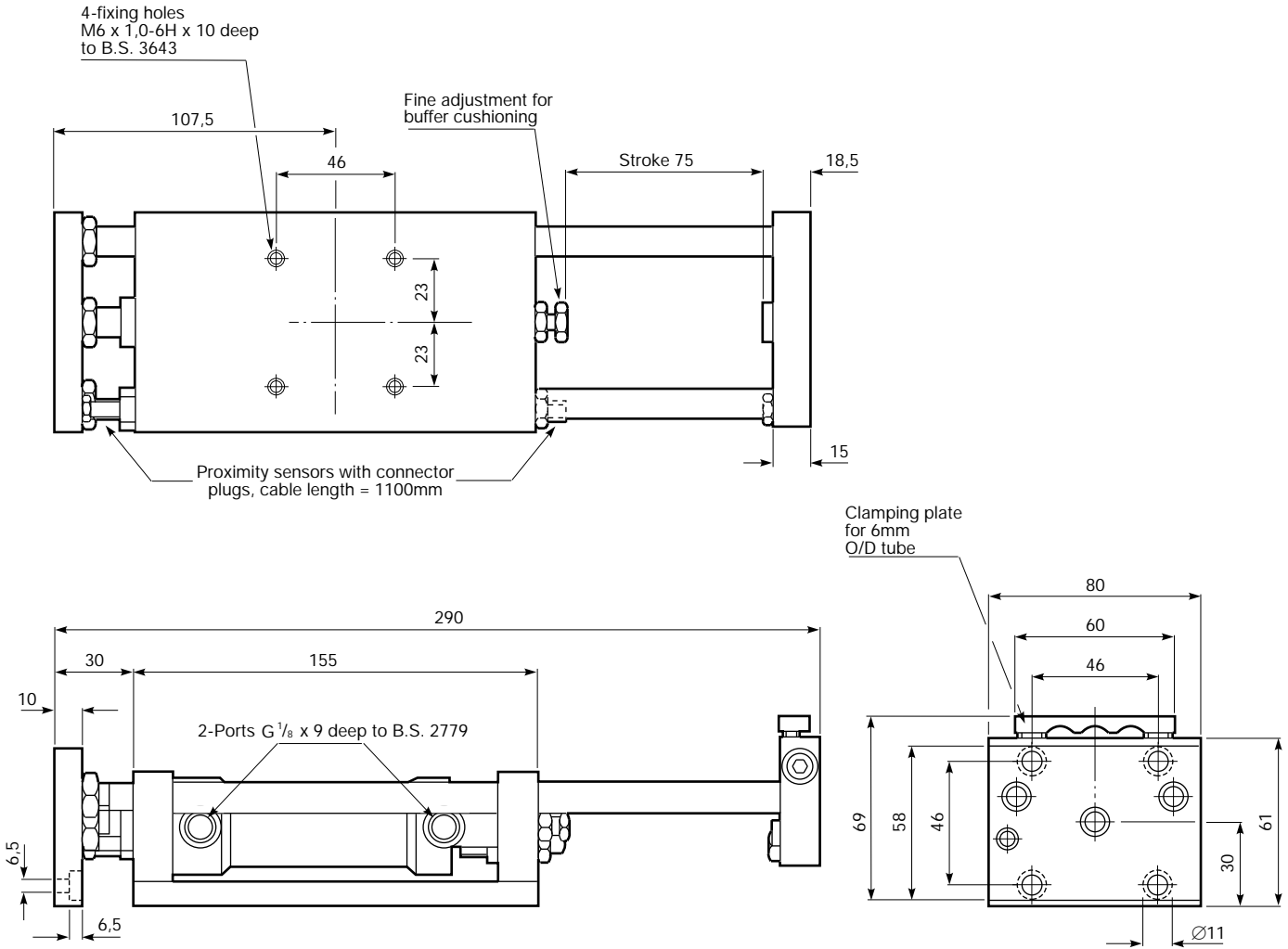
Aluminium base and end covers, stainless steel guide rails.
Aluminium cylinder barrel, stainless steel piston rod, cast aluminium cylinder end covers, brass piston, nitrile rubber seals.

Ordering Information

To order a 25 mm bore Short Stroke Unit with a 75 mm stroke quote:
M/60160.



Basic Dimensions – Short Stroke Unit size ‘A’ – M/60160



Model	M/60160
Weight (kg)	1,64
Spares kit *	QM/60160/00
Refurbishment kit **	QM/60160/88

* Comprises all soft seals.

** Comprises all soft seals, wearing components, sensors, dampers, all plugs, sockets and cables.

Possible Assembly Modules

Gripper M/60310.

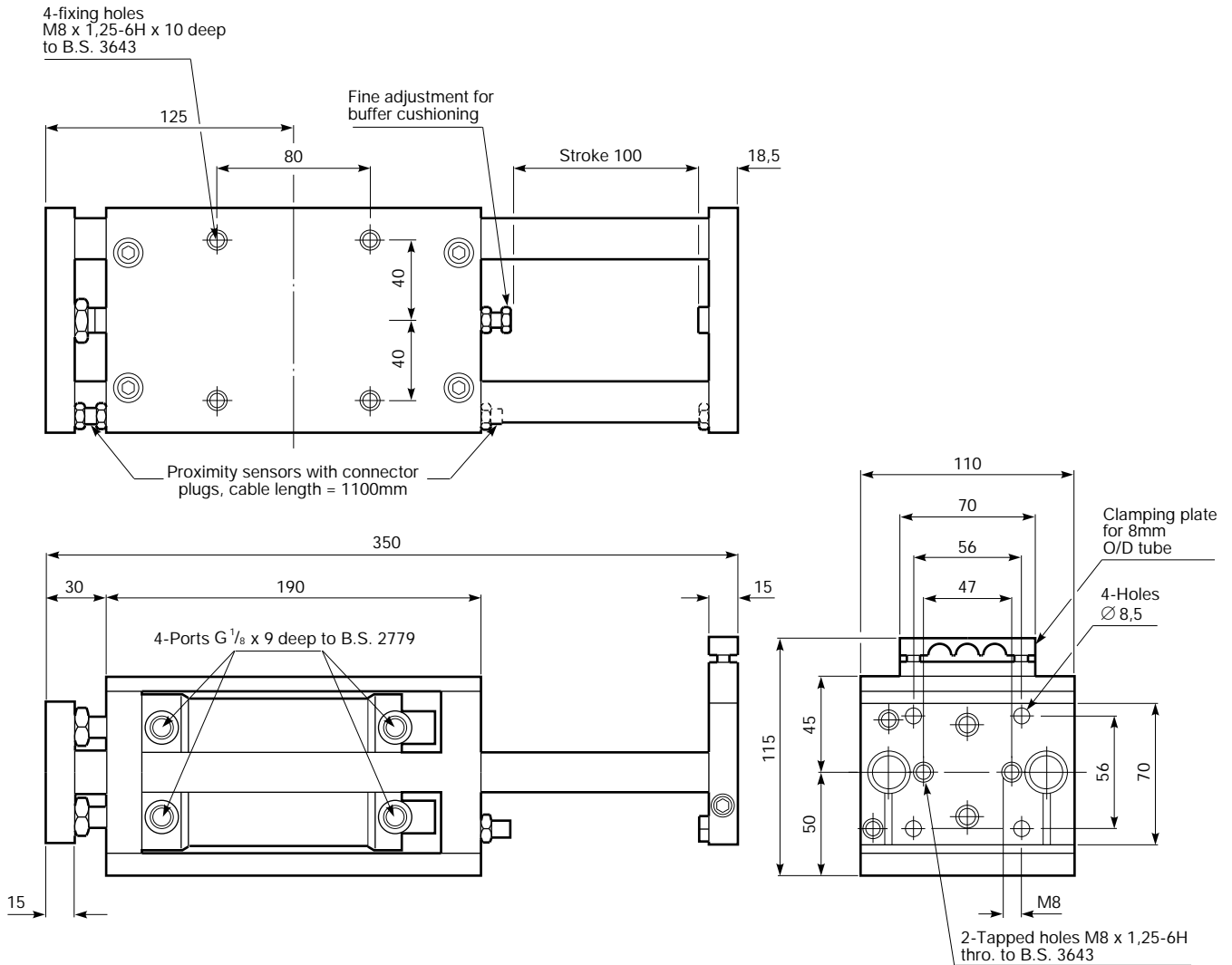
Rotary module M/60130 + gripper M/60310.

Sensor Details

Model number: QM/60011
 Type: PNP
 Gap required (response distance): 1,5 mm
 Voltage: 12-24 V. D.C.
 Maximum load current: 200 mA
 No load current: 12 mA max.
 Screw thread connection: M8 x 1 mm
 Metal housing



Basic Dimensions – Short Stroke Unit size ‘B’ – M/60170



Model	M/60170
Weight (kg)	4,8
Spares kit *	QM/60170/00
Refurbishment kit **	QM/60170/88

* Comprises all soft seals.

** Comprises all soft seals, wearing components, sensors, dampers, all plugs, sockets and cables.

Possible Assembly Modules

Gripper M/60320.

Rotary module M/60220 + gripper M/60320.

Sensor Details

Model number:	QM/60011
Type:	PNP
Gap required (response distance):	1,5 mm
Voltage:	12-24 V. D.C.
Maximum load current:	200 mA
No load current:	12 mA max.
Screw thread connection:	M8 x 1 mm
Metal housing	



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under '**Technical Data**'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.