

- Symmetrical design for either right or left hand attachments
- Through shaft for connection to indicator devices and manual override
- Suitable for operating butterfly valves, plug cocks and other rotary devices
- Rack-and-pinion actuation

**Torque Units  
Double Acting  
185 - 380 Nm**



### Technical Data

Medium:

Compressed air, filtered and lubricated

Operation:

Double acting, non-cushioned

Operating Pressure:

2 - 7 bar

Operating Temperature:

-20°C\* to +80°C

\*Consult our Technical Service for use below +2°C

Rotation:

90°, 180°, 360° models

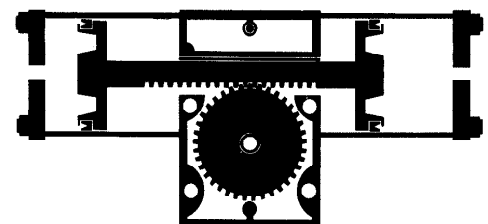
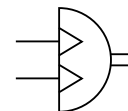
Torque Output:

185 Nm M/507

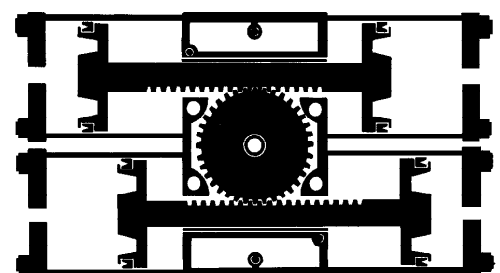
380 Nm M/508

### Torque Output Range

55 - 380 Nm



M/507



M/508

### Materials

Steel barrels and rack-and-pinion, aluminium bodies and pistons, nitrile rubber seals.

### Ordering Information

To order a 380 Nm torque unit with 180° rotation quote:  
M/508/180.



## Theoretical Torque/Air Consumption

Bar		2	3	4	5	6	7
M/507	Nm	55	81	107	133	159	185
	Q	1,73	2,30	2,88	3,46	4,03	4,60
M/508	Nm	120	172	224	276	328	380
	Q	3,46	4,60	5,76	6,92	8,06	9,20

Q - Air consumption (litres) per 90° of rotation

## Weights of Torque Units (kg)

Model	Weight
M/507/90	12,10
M/507/180	13,61
M/507/360	16,00
M/508/90	18,60
M/508/180	22,00
M/508/360	27,00

## Spares

Model	Barrel**	Piston Assembly**	Spares kit
M/507	S/P14780/*	QM/507/04	QM/507/00
M/508	S/P14780/*	QM/507/04	QM/508/00

\*Insert degree of rotation

\*\*M/507 requires 2 barrels and piston assemblies, M/508 requires 4 barrels and piston assemblies.

## 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 MARTONAIR.

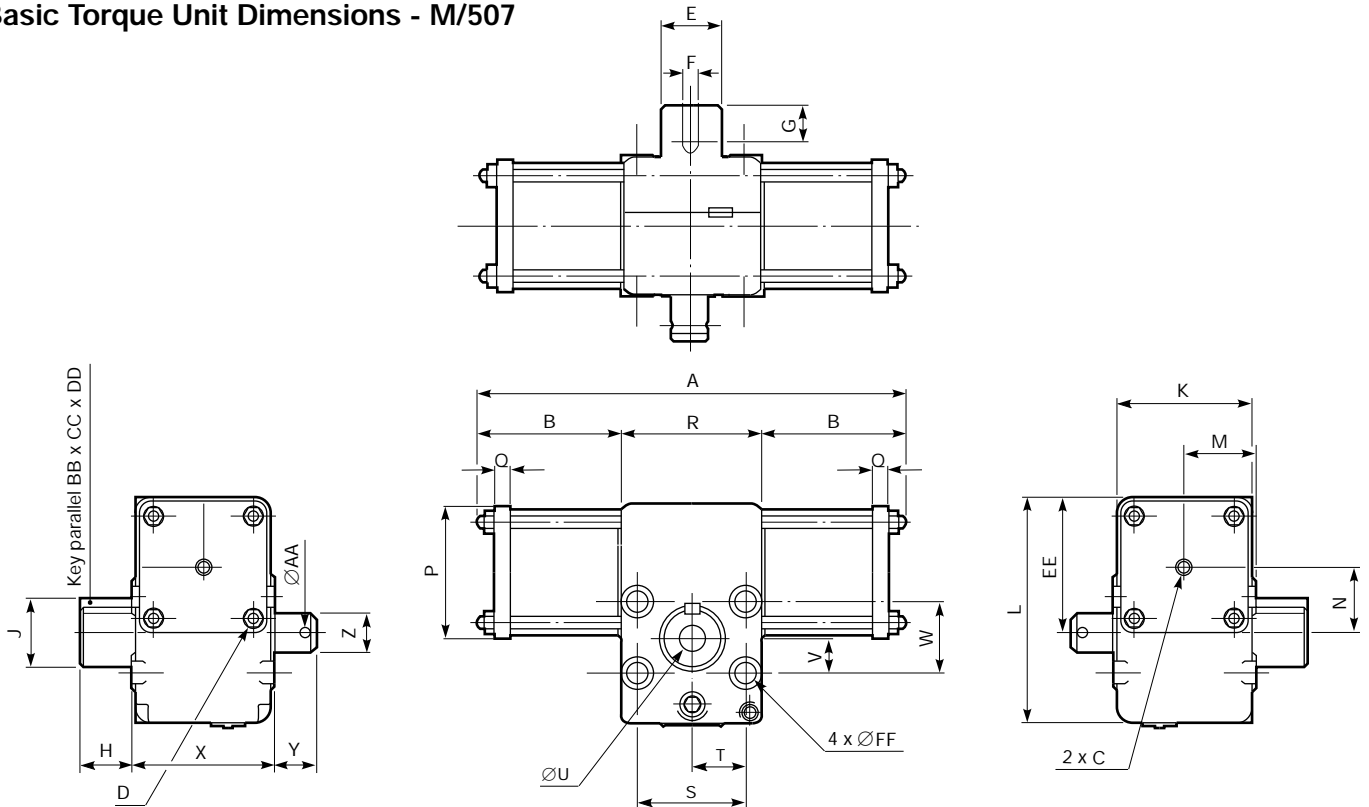
Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in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



Basic Torque Unit Dimensions - M/507



Model	M/507/90	M/507/180	M/507/360
Rotation	90° <sup>+2°</sup> <sub>-0°</sub>	180° <sup>+2°</sup> <sub>-0°</sub>	360° <sup>+2°</sup> <sub>-0°</sub>
A	364	503	783
B	121	191	330
C	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>
D	M10x1,5	M10x1,5	M10x1,5
E	50 <sup>+0,000</sup> <sub>-0,030</sub>	50 <sup>+0,000</sup> <sub>-0,030</sub>	50 <sup>+0,000</sup> <sub>-0,030</sub>
F	14 <sup>+0,020</sup> <sub>-0,000</sub>	14 <sup>+0,020</sup> <sub>-0,000</sub>	14 <sup>+0,020</sup> <sub>-0,000</sub>
G	40	40	40
H	60	60	60
J	53,5	53,5	53,5
K	114	114	114
L	189	189	189
M	59	59	59
N	57	57	57
P	111	111	111
Q	11	11	11
R	122	122	122
S	96,8	96,8	96,8
T	48,4	48,4	48,4
U	20,2	20,2	20,2
V	31,8	31,8	31,8
W	63,5	63,5	63,5
X	117	117	117
Y	38	38	38
Z	31,8	31,8	31,8
AA	10,3	10,3	10,3
BB	14 <sup>+0,000</sup> <sub>-0,043</sub>	14 <sup>+0,000</sup> <sub>-0,043</sub>	14 <sup>+0,000</sup> <sub>-0,043</sub>
CC	9 <sup>+0,000</sup> <sub>-0,090</sub>	9 <sup>+0,000</sup> <sub>-0,090</sub>	9 <sup>+0,000</sup> <sub>-0,090</sub>
DD	40	40	40
EE	115,9	115,9	115,9
FF	13,5	13,5	13,5

Start position when keyway as shown in drawing, ±1°. Tommy bar hole has no particular relationship to keyway.

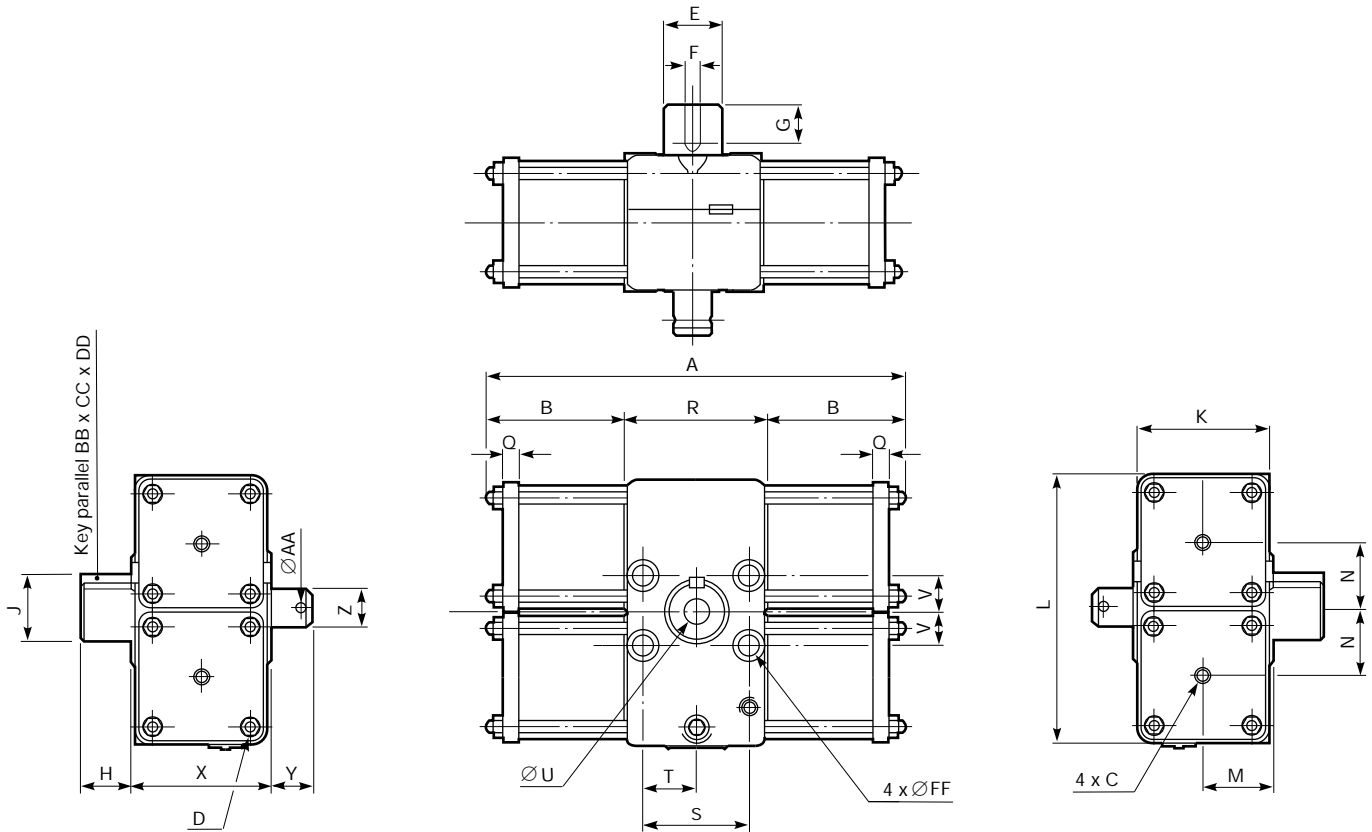
Diameter 'U' hole through shaft, not to be used for location purposes.

The small diameter shaft end provides a facility for turning the unit manually and for the connection of an indicator device, etc. It must not be used to transmit torque.

The units should be adequately supported to eliminate any side load on the bearings.



Basic Torque Unit Dimensions - M/508



Model	M/508/90	M/508/180	M/508/360
Rotation	90° <sup>+2°</sup> <sub>-0°</sub>	180° <sup>+2°</sup> <sub>-0°</sub>	360° <sup>+2°</sup> <sub>-0°</sub>
A	364	503	783
B	121	191	330
C	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>
D	M10x1,5	M10x1,5	M10x1,5
E	50 <sup>+0,000</sup> <sub>-0,030</sub>	50 <sup>+0,000</sup> <sub>-0,030</sub>	50 <sup>+0,000</sup> <sub>-0,030</sub>
F	14 <sup>+0,020</sup> <sub>-0,000</sub>	14 <sup>+0,020</sup> <sub>-0,000</sub>	14 <sup>+0,020</sup> <sub>-0,000</sub>
G	40	40	40
H	60	60	60
J	53,5	53,5	53,5
K	114	114	114
L	232,2	232,2	232,2
M	59	59	59
N	57	57	57
P	111	111	111
Q	11	11	11
R	122	122	122
S	96,8	96,8	96,8
T	48,4	48,4	48,4
U	20,2	20,2	20,2
V	31,8	31,8	31,8
X	117	117	117
Y	38	38	38
Z	31,8	31,8	31,8
AA	10,3	10,3	10,3
BB	14 <sup>+0,000</sup> <sub>-0,043</sub>	14 <sup>+0,000</sup> <sub>-0,043</sub>	14 <sup>+0,000</sup> <sub>-0,043</sub>
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DD	40	40	40
FF	13,5	13,5	13,5

Start position when keyway as shown in drawing, ±1°. Tommy bar hole has no particular relationship to keyway.

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