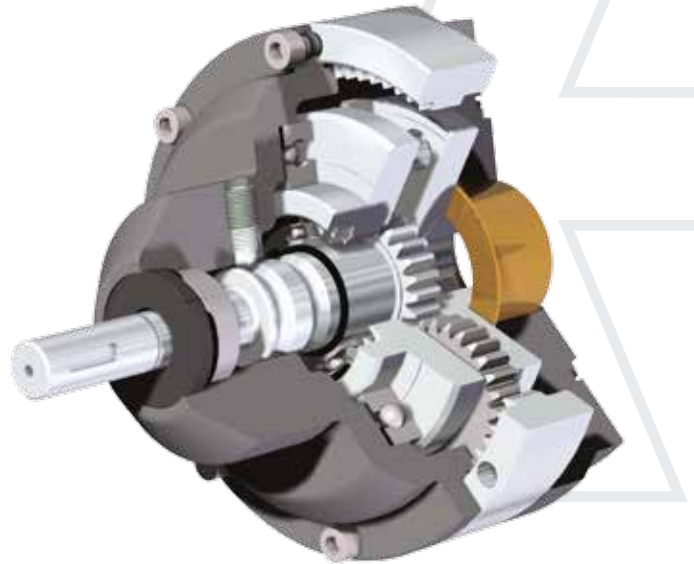


rotork®

Gears



Manual Gearbox Applications - Dual Speed Input Reducer

Rotork Gears has developed a new Dual Speed Input Reducer for reducing the operating time on manual gearbox applications.

The DSIR can be used with any manual gearbox or valve with an input flange of F14 or FA14. It is used to reduce the number of input turns required and therefore the operating time for manually operated valves.

Application

The DSIR has two ratios: 1:1 and 4.25:1. Switching between the two ratios is done by simply pushing or pulling on the input shaft. Pull the input shaft for ratio 1:1, push the input shaft for ratio 4.25:1.

The high 4.25:1 ratio gearing is used for the portion of the valve stroke where the torque requirement is high to initially open a valve or the last cycles to close it.

During travel the valve torque usually drops considerably and the lower 1:1 ratio can be employed to reduce the number of input turns required. Typically this can provide a 70% reduction in the number of turns required and the operating time.

DSIR Gearbox

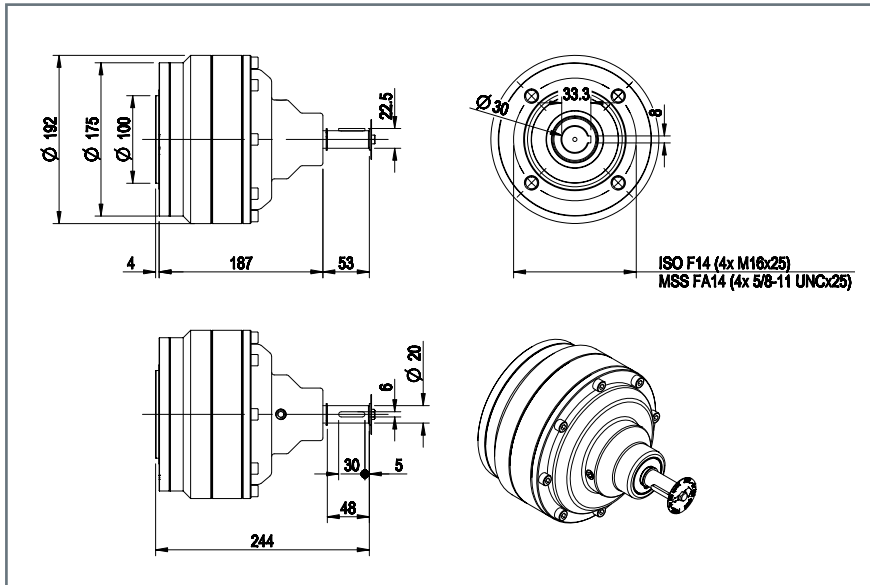
Dual Speed Input Reducer

Environmental Specification

- IP67 Enclosure
- Temperature -40 to 120 °C

Options

- IP68 Enclosure
- Padlocking device
- Flexible extensions
- Output machining to mount direct to valve



Product Data

Input Nm	180
Input lbf.in	1593
Ratio	1:1 & 4.25:1
MA for Higher ratio	4 ±4%
Output Nm	720
Output lbf.in	6373
Max bore mm	30
Max stem height mm	60
Weight kg	25



DSIR Manual Gearbox Material Specification

Components	Material	Notes
Body	Cast Iron	EN-GJL-250
Coverplate	Cast Iron	EN-GJL-250
Input Shaft	Alloy Steel	39NiCrMo3
Radial Ball Bearings	Carbon Steel	
O-ring Seal	NBR	
Planets	Alloy Steel	39NiCrMo3
Planetary External Gear Ring	Carbon Steel	ST52.0S
Planet Carrier	Ductile Iron	EN-GJS-700-2

Rotork Gears UK
9 Brown Lane West
Holbeck, Leeds LS12 6BH
England
tel +44 (0)113 256 7922
email sales@rotorkgears.com

Rotork Gears BV
Nijverheidstraat 25
7581 PV Losser
P.O. Box 98, 7580 AB Losser
The Netherlands
tel +31 (0)53 - 5388677
fax +31 (0)53 - 5383939
email info@rotorkgears.nl

Rotork Gears India
165/166, Bommasandra
Jigani Link Road
Kiadb Industrial Area, Anekal
Thaluk
Jigani Hobli, Bangalore 562106
India
tel +91 80 3098 1600
fax +91 80 3098 1610
email sales@rotork.co.in

Rotork Gears Americas
1811 Brittmoore
Houston, Texas 77043, USA
tel +1 713 9837381
fax +1 713 8568022
email gears@rotorkgears.com

Rotork Gears Shanghai
No. 260 Lian Cao Road
Xin Mei Urban Industrial Park
Min Hang District
Shang Hai 201108
China
tel 0086 21 33236200
fax 0086 21 64348388
email info@rotorkgears.com.cn

Rotork Valvekits
Brookside Way
Nunn Park
Huthwaite
Nottinghamshire NG17 2NL
England
tel +44 (0)1623 440211
fax +44 (0)1623 440214
email sales@rotorkvalvekits.com

Rotork Valvekits Americas
Rotork Tulsa, Inc.
4433 West 49th Street, Suite D
Tulsa, OK 74107, USA
tel +1 (918) 259-8100
fax +1 (918) 259-9167
email usasales@rotorkvalvekits.com

Rotork Gears S.R.L.
Viale Europa 17
20090 Cusago (MI)
Italy
tel +39 0290 16711
fax +39 0290 390368
email rg srl.sales@rotork.com

Roto Hammer Industries
Rotork Tulsa, Inc.
4433 West 49th Street, Suite D
Tulsa, OK 74107, USA
tel +1 (918) 446-3500
fax +1 (918) 446-6218
email sales@rotohammer.com

A full listing of the Rotork sales and service network is available on our website.

www.rotork.com