

Datasheet



Highly compact gearbox (worm wheel gearbox) for various industrial applications, in particular for automation and robotics; applicable for motorized or manually adjustable rotary movements.

- Housing made of anodized aluminium, shafts made of steel PR80-Pronox with surface hardening treatment (high wear and corrosion resistance).
- Transmission ratios: **1:1 – 1:2 – 1:3 – 1:4 – 1:5 – 1:7,5 – 1:10 – 1:12,5 – 1:15 – 1:25 – 1:30**
- Solid or hollow shafts in various designs offer a wide range of mounting options.
- Flanges for direct connection to machine, motors, and display with position indicators.
- Available types:
 - **RD26** gearbox
 - **RD26F** for threaded shaft
 - **RD26FL** with coupling flange and extension shaft
 - **RD26S** with magnetic sensor
 - **RD26M** with permanent magnet motor
 - **RD26MS** with permanent magnet motor and magnetic sensor
 - **RD26MR** with gear motor
 - **RD26MRS** with gear motor and magnetic sensor.



For continuous use, contract our technical service: In this type of application, a grease nipple is fitted which must be refilled according to the operating conditions.

Performance table

Transmission ratio		1:1	1:2	1:3	1:4	1:5	1:7,5	1:10	1:12,5	1:15	1:25	1:30
Efficiency	%	72	72	69	63	60	61	55	39 ¹⁾	45 ¹⁾	25 ¹⁾	30 ¹⁾
Input torque	Nm	4,18	2,07	1,46	1,19	1	0,66	0,55	0,61	0,44	0,48	0,34
Output torque	Nm	3	3	3	3	3	3	3	3	3	3	3

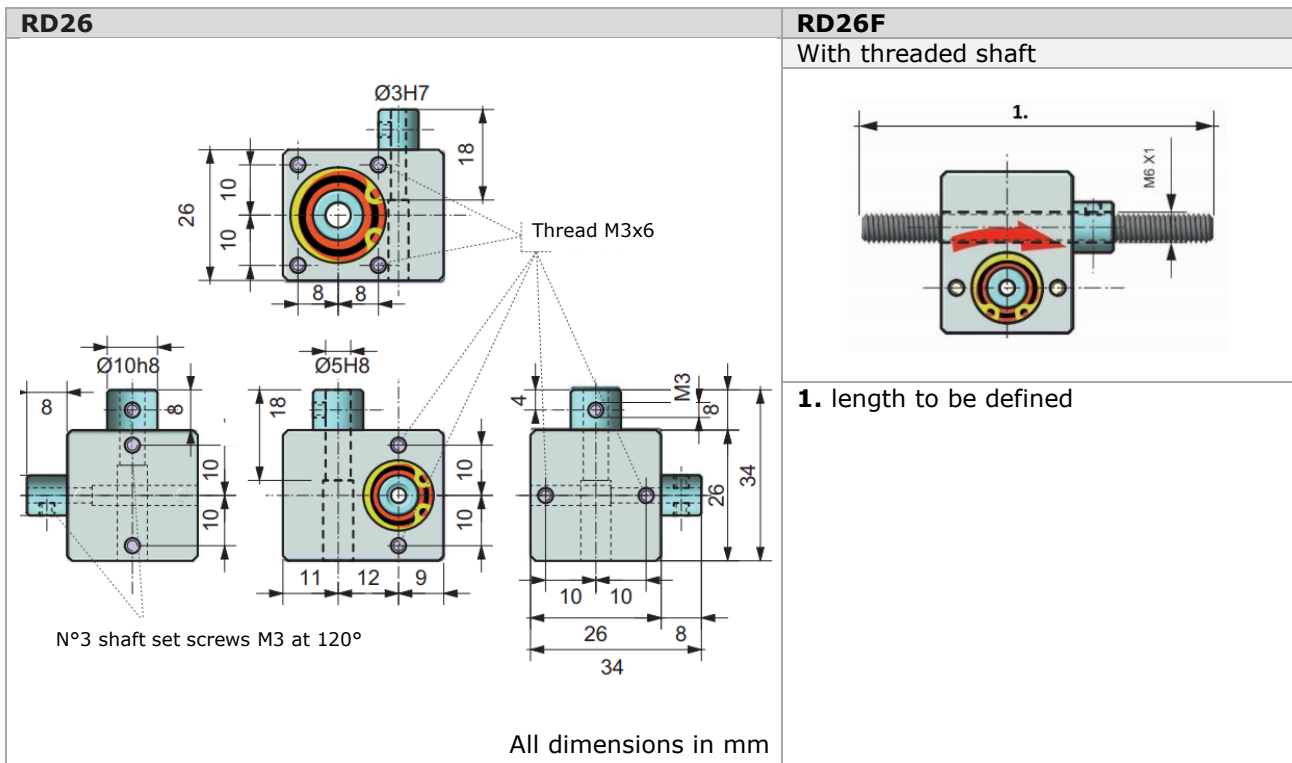
¹⁾ Irreversible

Datasheet

Technical characteristics

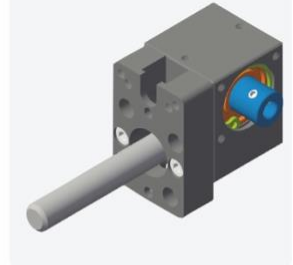
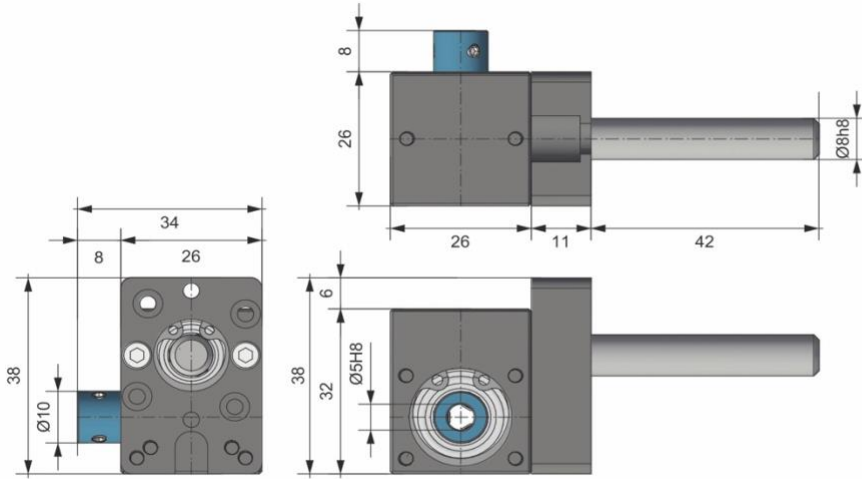
FA * = Input axial load	20 N
FR ** = Output axial load	20 N
FA * = Input radial load	100 N
FR ** = Output radial load	200 N
Backlash	max. 0,75°
Input rotation speed	max. 5.000 rpm
Transmission ratio	1:1 – 1:2 – 1:3 – 1:4 – 1:5 – 1:7,5 – 1:10 – 1:12,5 – 1:15 – 1:25 – 1:30
Input torque	see performance table
Output torque	3 Nm
Operating temperature	-20 ... 90 °C
Lifetime	10.000 h
Dimensions	
Housing	26 x 26 x 32 mm
Hollow shaft	∅ 3H7, ∅ 5H8
Solid shaft	∅ 8h8, ∅ 10h8
Material	
Housing	Aluminium, black anodised
Hollow- / Solid shaft	PR80-Pronox surface hardening
Weight	80 g
Lubrication	Klüber AG 11-462 (grease)

Dimensions

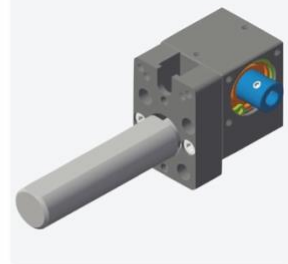
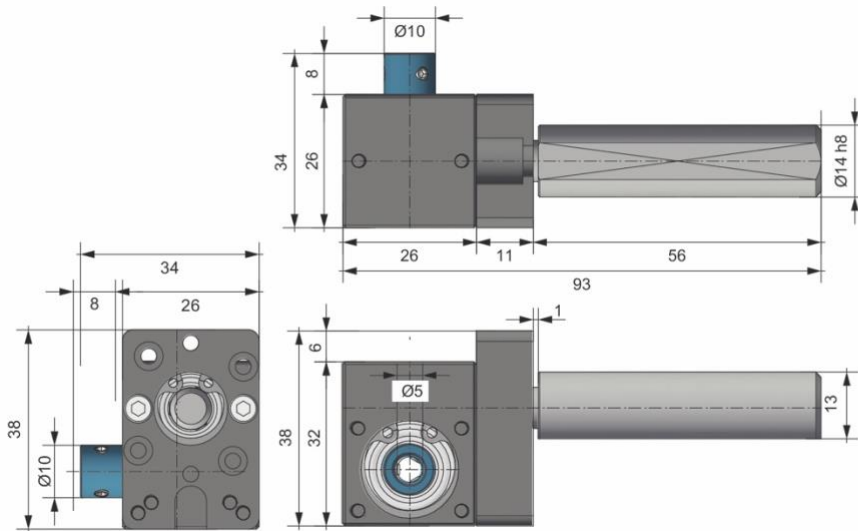


Datasheet

RD26FL-OP2



RD26FL-OP3



All dimensions in mm

Datasheet

Accessories

Flange FL-U	Mounting options
<p style="text-align: center;">All dimensions in mm</p>	

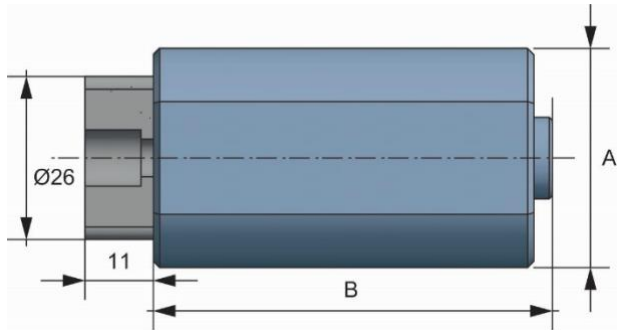
Incremental encoder	
	<p style="text-align: center;">All dimensions in mm</p>
Dimensions	12 x 26 x 26 mm
Power supply	10 ... 30 VDC ±10%, 60 mA _{MAX}
Resolution	256 pulses/revolution
Output signals	Channels A – B Push-Pull output
Output current	20 mA _{MAX} per channel
IP-rating	IP66
Material	
Housing	Aluminium, black anodised
Operating temperature	-10 ... 70 °C
Relative humidity	10 ... 90%
Output	Cable shielded, Cable length 0,5 – 1 – 2 – 5 – 10 m *
Electromagnetic compatibility EMC	2004/108/CE

i The incremental encoder for RD26 converts the rotary motion of the gearbox output shaft into two channel quadrature pulses with a resolution of 256 pulses per revolution.

Datasheet



Motors



All dimensions in mm



Motors M with coupling ¹⁾				Gear motors MR with coupling ²⁾			
A	B	rpm*	Torque (Nm)	A	B	rpm*	Torque (Nm)
35	56	2.200	0,06	30	79	450	0,4
36	65	1.1000	0,05				

¹⁾ suitable for alternate movements

²⁾ suitable for continuous movements

Datasheet

Types

RD26 gearbox	RD26F for threaded shaft	RD26S with magnetic sensor
		
RD26FL-OP2 with coupling flange and extension shaft for position indicator OP2		RD26FL-OP3 with coupling flange and extension shaft for position indicator OP3
		
RD26M ¹⁾ with permanent magnet motor	RD26MR ¹⁾ with gear motor	
		
RD26MS ¹⁾ with permanent magnet motor and magnetic sensor	RD26MRS ¹⁾ with gear motor and magnetic sensor	
		

¹⁾ with flange FL-U

Datasheet

Ordering example

Type	RD26	-	1:10	-	ING
RD26	= gearbox				
RD26F + mm	= for threaded shaft length (mm)				
RD26FL-OP2	= with coupling flange and extension shaft ¹⁾				
RD26FL-OP3	= with coupling flange and extension shaft ²⁾				
RD26S	= with magnetic sensor				
RD26M	= with permanent magnet motor				
RD26MS	= with permanent magnet motor and magnetic sensor				
RD26MR	= with gear motor				
RD26MRS	= with gear motor and magnetic sensor				
Transmission ratios					
1:1 - 1:2 - 1:3 - 1:4 - 1:5 - 1:7,5 - 1:10 - 1:12,5 - 1:15 - 1:25 - 1:30					
Operating mode					
ING	= continuous use (optional), with grease nipple				



For the magnetic sensor, specify the cable length, see table: **Technical characteristics** *
 For the motors and gear motors, specify the rotation speed (rpm), see table: **Motors** *
Please order accessories separately.
 Other versions that cannot be generated from the order code may be available as special versions on request available as special versions on request.

System components			
¹⁾ Position indicator OP2 	²⁾ Position indicator OP3 		

Manufacturer: **FIAMA**
since 1913

The manufacturer reserves the right to make changes to the products that it deems necessary for their improvement without prior notice.