VSF SERIES

Worm
Geared Motors

NMRV®

NMRV™ POWER

MOTOVARIO®
HEART OF MOTION
a TECO Group company

Features

VSF SERIES

NMRV and NMRVpower worm gear reducers currently re-present the most advanced solution to market requirements in terms of **efficiency** and **flexibility**. The new NMRVpower series, also available as compact integral helical/worm option, has been designed to guarantee a **high modularity**. Low number of basic models can be applied to a **wide range of power ratings** guaranteeing high performance.

NMRV®

Sizes:
025-030-040-050-130-150

NMRV
Fitted for motor coupling

NMRV-P
Fitted for motor coupling

NMRV POWER™

Sizes:
063-075-090-110

- Cases up to 110 in die-cast aluminium alloy and over 130 in G200 grey cast iron
- Aluminium units are supplied complete with synthetic oil and allow for universal mounting positions, with no need to modify lubricant quantity
- Worm wheel: bronze Cu Sn12 Ni2 (UNI7013-10)
- Ground worm profile ZI (UNI4760)
- Excellent mechanical strength and particularly lightweight
- Loading capacity in accordance with: ISO.14521, DIN.3996, BS 721, AGMA 6034, ISO 6336, DIN 3990, DIN 743, ISO 281
- Size 030 and over are painted with RAL 5010 blue epoxy-polyester powder according to DIN 1843
- Available with pre-stage unit: PC for NMRV Series, HW for NMRV-P Series
- Worm gear reducers are available with different combinations: NMRV/NMRV, NMRV/NMRV-P, NMRV-P/NMRV-P and NMRV-P/NMRV
- ATEX versions available: 3GD/2GD

OtherVersions

NRV With Input Shaft

NRV-P With Input Shaft

NMRV/NMRV-P Combined Worm Geared Motor

Range

VSF SERIES

Worm Geared Motor

	Output torque M_2 [Nm]		Ratio	
	Min	Max	Min	Max
NMRV 030	13	19	5	80
NMRV 040	29	48		100
NMRV 050	55	88		
NMRV-P 063	118	160	7,5	
NMRV-P 075	180	247		
NMRV-P 090	270	432		
NMRV-P 110	483	725		
NMRV 130	740	1.050		
NMRV 150	1.000	1.550		

- Power up to 15 kW
- Ratios between 5 and 100
- Max Torque 1.550 Nm
- Admissible radial loads max 18.000 N

Combined Worm Geared Motor

	Output torque M_2 [Nm]		Ratio	
	Min	Max	Min	Max
NMRV 030/040	43	73	100	5.000
NMRV 030/050	79	145		
NMRV 030 / NMRV-P 063	150	271		
NMRV 040/050	120	145		
NMRV 040 / NMRV-P 063	231	271		
NMRV 040 / NMRV-P 075	352	444		
NMRV 040 / NMRV-P 090	361	700		
NMRV 050 / NMRV-P 090	560	700		
NMRV 050 / NMRV-P 110	648	1.265		
NMRV-P 063/110	1.100	1.265		
NMRV-P 063 / NMRV 130	1.123	1.760		
NMRV-P 063 / NMRV 150	1.971	2.670		

- Power up to 1,85 kW
- Ratios between 100 and 5.000
- Max Torque 2.670 Nm

Accessories

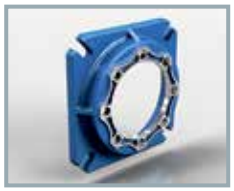
VSF SERIES

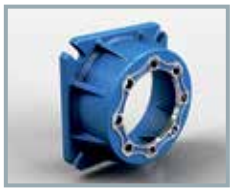
ProtectionCover

OutputFlanges

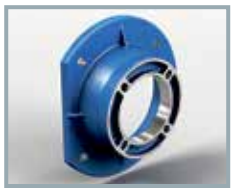
	FA	FB	FC	FD	FE
NMRV 030	•	/	/	/	/
NMRV 040	•	•	•	•	/
NMRV 050	•	•	•	•	/
NMRV-P 063	•	•	•	•	•
NMRV-P 075	•	•	/	/	/
NMRV-P 090	•	•	•	•	/
NMRV-P 110	•	•	/	/	/
NMRV 130	•	/	/	/	/
NMRV 150	•	/	/	/	/

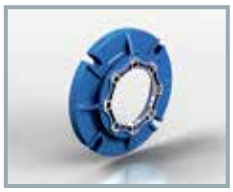
• Available
/ Not Available


FA


FB

FC


FD

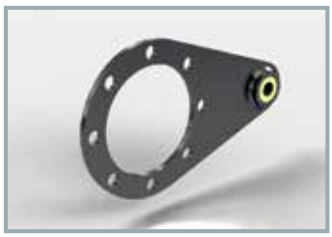

FE

SolidOutputShaft

Single output shaft

Double output shaft

TorqueArm



TorqueLimiter

Available versions NMRL 050
and NMRL-P 063-075-090

OtherAccessories

- Viton oil seals
- Low/high temperature and food grade oil
- Filling/Drain/Breather/Level plug
- Reinforced Output

MOTOVARIO®
HEART OF MOTION
a TECO Group company

VSF SERIES

NMRV Worm geared motor with **HA31** pre-stage

- HA31 is the new single stage helical gear reducer available as pre-stage for the worm gear boxes NMRV040 and NMRV050; it can be supplied as a separate unit to be mounted on any type of fitted geared motor
- Die-cast aluminium alloy casing; gears hardened and tempered with shaved profile steel 20MnCr5 (UNI7846)
- Available as unpainted or painted with RAL 5010 blue epoxy-polyester powder
- Power up to 1,1 kW and motor sizes up to 080
- Combined total ratios between 22,08 and 315
- Max Torque of group HA31+worm gear reducer 206 Nm

NMRV-P Worm geared motor with **HW** pre-stage

- The pre-stage units called HW are two: HW030 which can be mounted on gearboxes NMRVpower063-075 and HW040 which can be fitted with gearboxes NMRVpower 090-110
- The pre-stage construction is modular and therefore it can be supplied for various motor (PAM) with B5 and B14 flange
- Casing in aluminium alloy. Steel gears 20MnCr5(UNI7846), hardened, tempered and carefully scraped
- Power up to 1,85 kW and motor sizes up to 090
- Combined total ratios between 22,08 and 1.083,33
- Max Torque of group HW+worm gear reducer 1.189 Nm

WORLDWIDE

DP-VSF EN/2016/REV.0

Subsidiaries

Germany

France

Spain

United Kingdom

Denmark

USA

China

India

MAC™
MOTOVARIO ASSEMBLY CENTRE

Italy
Australia
Benelux
Bulgaria
China
Finland
France
India
Ireland
Israel
Lithuania
Malaysia
Netherlands
Poland
Portugal
South Korea
Spain
Sweden
Turkey
United Kingdom
Ukraine
USA