# Linear & Rotary
# Axis Drive

DRP | KRPX | KRP | SRP

REDEX
The Machine Drives Company

DRP | KRPX | **KRP** | SRP

### Monobloc housing for Universal mounting

*› Preloaded system for zero backlash with direct integration*

Delivered as a complete machine sub-assembly, DRP is a multifunction patented system offering direct integration into the machine (geometry, lubrication, installation).
It's the favorite choice of key OEMs worldwide

### Rigid machine frame extension

*› Side mounting for use with electrical preload for zero backlash*

Offering accessible side mounting, KRPX generates cost saving in design and enables easy set up during its installation onto the machine frame.
Ideal for both linear and rotary axis drive, KRPX provides high stiffness with electrical preload for zero-backlash

### Flange mounting and integral output pinion

*› Electrical or mechanical preload for zero backlash*

KRP's original design provides the highest output bearing capacity and stiffness.
Its massive integral output pinion is at the core of this unique design.

### The versatile and Multi-use solution

*› Hig-tech planetary reducer + universal output flange*

SRP comes as an integrated concept drive offering designers a ready to use complete machine sub-assembly.
With extremely high tilting moment, SRP allows highly dynamic motion control for heavily loaded applications

## General data

| KRP1 | | | | M | R |
|---|---|---|---|---|---|
| Weight | **m** | kg | 1 Stage | 18 | 22 |
| | | | 2 Stages | 20 | 24 |
| Efficiency | **η** | % | 1 Stage | 96 | 94 |
| | | | 2 Stages | 93 | 91 |
| Backlash | **J** | arcmin | Standard | 3 | 4 |
| | | | Reduced | 1 | 2 |
| Color | | | | RAL2012 | |

## Pinion features

| Tooth type | | | Helical | Straight |
|---|---|---|---|---|
| Module | **Mo** | mm | 3 | 3 |
| Helix angle (left) | **β** | deg | 19°31'42" | 0° |
| Number of teeth | **Z2** | - | 18 | 19 |
| Pressure angle | **α** | deg | 20 | 20 |
| Theoretical pitch diameter | **D02** | mm | 57,3 | 57 |
| Addendum modification factor | **x0** | - | 0,118 | 0,167 |
| Pinion quality grade | **Q** | (ISO 1328) | 6 | 6 |
| Surface hardness | **HRC** | HRC | 61-63 | 61-63 |

## Rack features

| Version | | | Helical | Straight |
|---|---|---|---|---|
| Standard | **F2B** | N | 15939 | 13766 |
| | **F2NOT** | N | 31878 | 23940 |
| | **Material** | | C45E | DIN 1.1191 |
| Reinforced | **F2B** | N | 19562 | N/A |
| | **F2NOT** | N | 42525 | N/A |
| | **Material** | | 16MnCr5 | |
| Available length | **L** | mm | 500, 1000, 2000 | |
| Dimensions | | | see details p113-115 | |

## Drive linear features

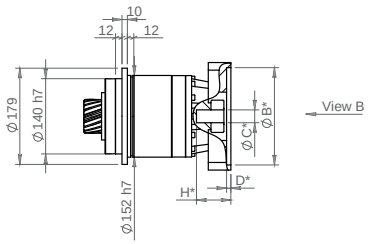
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal feed force | **F2N** | N | 12914 | 13264 | 9424 | 13613 | 10646 | 15009 | 9424 | 13089 | 9424 |
| Peak acceleration feed force | **F2B** | N | 22618 | 23211 | 16510 | 23839 | 18639 | 26283 | 16510 | 22897 | 16510 |
| Max. acceleration feed force | **F2B_max** | N | 45236 | 46422 | 33019 | 47679 | 37277 | 52565 | 33019 | 45794 | 33019 |
| E-stop force | **F2NOT** | N | 29075 | 29075 | 29075 | 29075 | 29075 | 29075 | 29075 | 29075 | 29075 |
| Max. linear speed | **V2B** | m/min | 180 | 129 | 90 | 64 | 51 | 35 | 23 | 18 | 12 |
| Nominal linear speed | **V2N** | m/min | 58 | 41 | 29 | 28 | 22 | 15 | 10 | 8 | 5 |
| Linear stiffness on the rack | **K2T +M** | N/µm | 224 | 208 | 195 | 190 | 190 | 178 | 170 | 173 | 185 |
| | **K2T +R** | N/µm | 191 | 174 | 158 | | 169 | 176 | 169 | 173 | 185 |
| Inertia | **I +M** | kg.mm² | 883 | 746 | 674 | 287 | 269 | 259 | 254 | 246 | 245 |
| | **I +R** | kg.mm² | 2240 | 2304 | 2231 | | 458 | 448 | 443 | 435 | 433 |

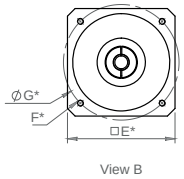
## KRP ratings

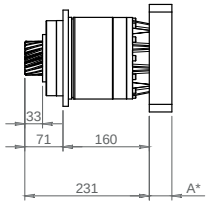
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal ouput torque | **T2N** | Nm | 370 | 380 | 270 | 390 | 305 | 430 | 270 | 375 | 270 |
| Max. ouput torque | **T2B** | Nm | 648 | 665 | 473 | 683 | 534 | 753 | 473 | 656 | 473 |
| No load torque | **T01 +R** | Nm | 5 | 5 | 5 | | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| No load torque | **T01 +M** | Nm | 4,5 | 4,5 | 4,5 | 1 | 1 | 1 | 1 | 1 | 1 |
| E-stop torque | **T2NOT** | Nm | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 |
| Max. input speed | **n1B** | rpm | 5000 | 5000 | 5000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Nominal input speed | **n1N** | rpm | 1600 | 1600 | 1600 | 2600 | 2600 | 2600 | 2600 | 2600 | 2600 |
| Radial stiffness | **K2R** | N/µm | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 |
| Axial stiffness | **K2A** | N/µm | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 |
| Torsional stiffness | **C2t +R** | Nm/ rad | 295646 | 250956 | 213140 | | 237205 | 254393 | 237205 | 247518 | 278457 |
| | | Nm/arcmin | 86 | 73 | 62 | | 69 | 74 | 69 | 72 | 81 |
| | **C2t +M** | Nm/ rad | 412530 | 350650 | 309397 | 292208 | 292208 | 261269 | 240642 | 247518 | 278457 |
| | | Nm/arcmin | 120 | 102 | 90 | 85 | 85 | 76 | 70 | 72 | 81 |

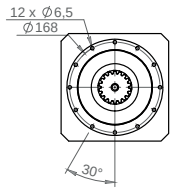
Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## DIMENSIONS - TYPE **M 1 stage**



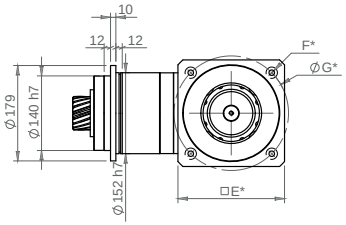



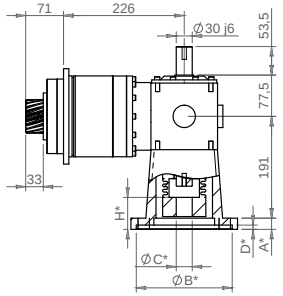

| | IFB 140 14/24 | IFB 140 28/38 | IFB 200 28/38 | IFB 260 28/38 |
|---|---|---|---|---|
| **A** | 37 | 42 | 57 | 64 |
| **E** | 140 | 140 | 200 | 260 |
| **H** | 59 | 65 | 80 | 87 |

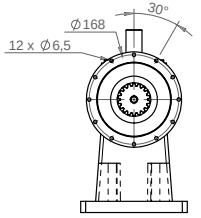
*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread



## DIMENSIONS - TYPE **R 1 stage**




| | MF3 140 | MF3 200 | MF3 260 |
|---|---|---|---|
| **A** | 21 | 21 | 24 |
| **E** | 140 | 200 | 260 |
| **H** | 80 | 80 | 83 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

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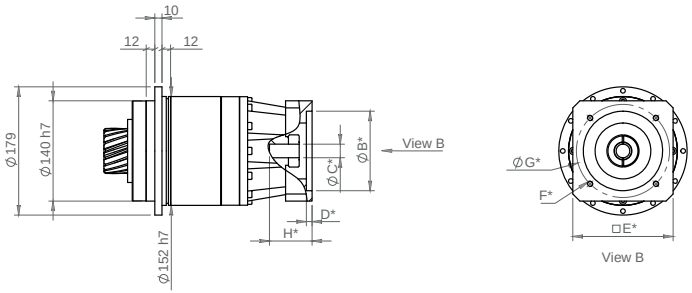
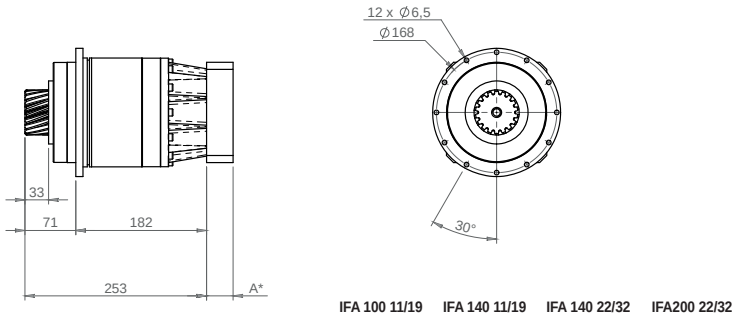
## DIMENSIONS - TYPE **M 2 stages**

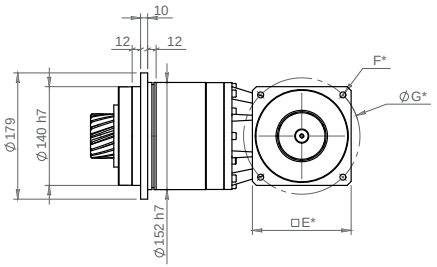


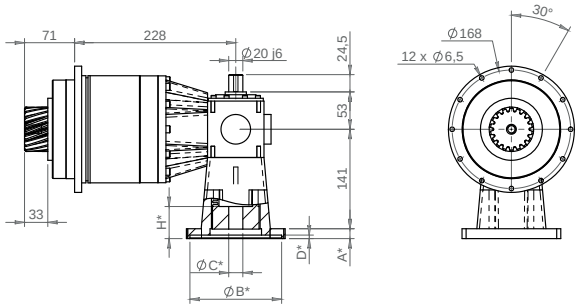




| | IFA 100 11/19 | IFA 140 11/19 | IFA 140 22/32 | IFA200 22/32 |
|---|---|---|---|---|
| **A** | 27 | 27 | 37 | 42 |
| **E** | 100 | 140 | 140 | 200 |
| **H** | 49 | 49 | 59 | 64 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

## DIMENSIONS - TYPE **R 2 stages**




| | MF1 100 | MF1 140 | MF1 200 |
|---|---|---|---|
| **A** | 14 | 14 | 18 |
| **E** | 100 | 140 | 200 |
| **H** | 62 | 62 | 66 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
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## General data

| KRP2 | | | | M | R |
|---|---|---|---|---|---|
| Weight | **m** | kg | 1 Stage | 46 | 53 |
| | | | 2 Stages | 49 | 56 |
| Efficiency | **η** | % | 1 Stage | 96 | 94 |
| | | | 2 Stages | 93 | 91 |
| Backlash | **J** | arcmin | Standard | 3 | 4 |
| | | | Reduced | 1 | 2 |
| Color | | | | RAL2012 | |

## Pinion features

| Tooth type | | | Helical | Straight |
|---|---|---|---|---|
| Module | **Mo** | mm | 4 | 4 |
| Helix angle (left) | **β** | deg | 19°31'42" | 0° |
| Number of teeth | **Z2** | - | 18 | 19 |
| Pressure angle | **α** | deg | 20° | 20° |
| Theoretical pitch diameter | **D02** | mm | 76,39 | 76 |
| Addendum modification factor | **x0** | - | 0,638 | 0,688 |
| Pinion quality grade | **Q** | (ISO 1328) | 6 | 6 |
| Surface hardness | **HRC** | HRC | 61-63 | 61-63 |

## Rack features

| Version | | | Helical | Straight |
|---|---|---|---|---|
| Standard | **F2B** | N | 28552 | 24705 |
| | **F2NOT** | N | 57103 | 42966 |
| | **Material** | | C45E | DIN 1.1191 |
| Reinforced | **F2B** | N | 35138 | N/A |
| | **F2NOT** | N | 76388 | N/A |
| | **Material** | | 16MnCr5 | |
| Available length | **L** | mm | 500, 1000, 2000 | |
| Dimensions | | | see details p113-115 | |

## Drive linear features

| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal feed force | **F2N** | N | 26181 | 26181 | 20945 | 27491 | 20945 | 31418 | 20945 | 30109 | 20945 |
| Peak acceleration feed force | **F2B** | N | 45818 | 45818 | 36654 | 48121 | 36654 | 54981 | 36654 | 52703 | 36654 |
| Max. acceleration feed force | **F2B_max** | N | 91635 | 91635 | 73308 | 96243 | 73308 | 109962 | 73308 | 105406 | 73308 |
| E-stop force | **F2NOT** | N | 71999 | 71999 | 71999 | 71999 | 71999 | 71999 | 71999 | 71999 | 71999 |
| Max. linear speed | **V2B** | m/min | 192 | 137 | 96 | 85 | 69 | 46 | 31 | 24 | 16 |
| Nominal linear speed | **V2N** | m/min | 53 | 38 | 26 | 30 | 24 | 16 | 11 | 8 | 6 |
| Linear stiffness on the rack | **K2T +M** | N/µm | 313 | 317 | 288 | 276 | 276 | 291 | 278 | 288 | 275 |
| | **K2T +R** | N/µm | 309 | 294 | 2965 | | 251 | 273 | 273 | 285 | 275 |
| Inertia | **I +M** | kg.mm² | 2559 | 1741 | 1308 | 816 | 722 | 663 | 634 | 596 | 588 |
| | **I +R** | kg.mm² | 11101 | 10310 | 7427 | | 1321 | 1263 | 1234 | 1196 | 1188 |

## KRP ratings

| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal ouput torque | **T2N** | Nm | 1000 | 1000 | 800 | 1050 | 800 | 1200 | 800 | 1150 | 800 |
| Max. ouput torque | **T2B** | Nm | 1750 | 1750 | 1400 | 1838 | 1400 | 2100 | 1400 | 2013 | 1400 |
| No load torque | **T01 +R** | Nm | 8,8 | 8,8 | 8,8 | 2,3 | 2,3 | 2,3 | 2,3 | 2,3 | 2,3 |
| No load torque | **T01 +M** | Nm | 8 | 8 | 8 | 2 | 2 | 2 | 2 | 2 | 2 |
| E-stop torque | **T2NOT** | Nm | 2750 | 2750 | 2750 | 2750 | 2750 | 2750 | 2750 | 2750 | 2750 |
| Max. input speed | **n1B** | rpm | 4000 | 4000 | 4000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Nominal input speed | **n1N** | rpm | 1100 | 1100 | 1100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 |
| Radial stiffness | **K2R** | N/µm | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 |
| Axial stiffness | **K2A** | N/µm | 2162 | 2162 | 2162 | 2162 | 2162 | 2162 | 2162 | 2162 | 2162 |
| Torsional stiffness | **C2t +R** | Nm/ rad | 1038200 | 928192 | 749429 | | 677236 | 794120 | 794120 | 866312 | 804433 |
| | | Nm/arcmin | 302 | 270 | 218 | | 197 | 231 | 231 | 252 | 234 |
| | **C2t +M** | Nm/ rad | 1220400 | 1100079 | 886939 | 814746 | 814746 | 904127 | 825059 | 883501 | 807870 |
| | | Nm/arcmin | 355 | 320 | 258 | 237 | 237 | 263 | 240 | 257 | 235 |

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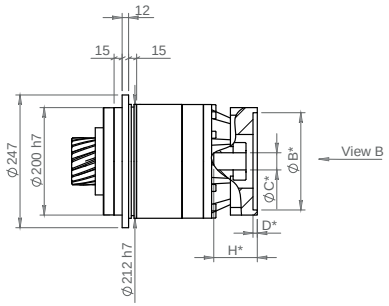
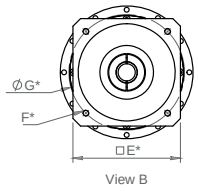
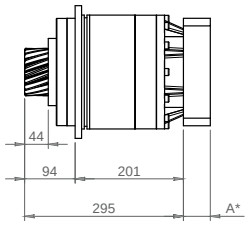
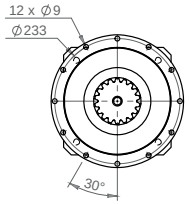
## DIMENSIONS - TYPE **M 1 stage**



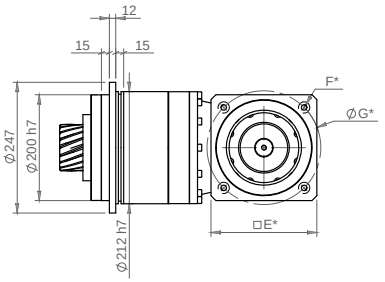



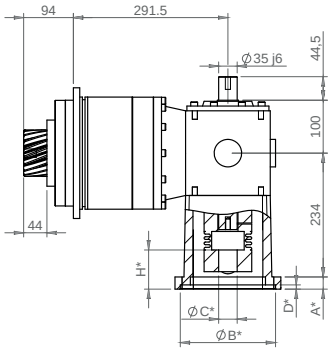

| | IFC 140 22/32 | IFC 200 22/48 | IFC 260 35/48 |
|---|---|---|---|
| **A** | 42 | 50 | 51 |
| **E** | 140 | 200 | 260 |
| **H** | 73 | 81 | 82 |

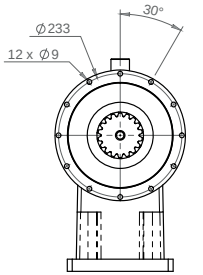
*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread



## DIMENSIONS - TYPE **R 1 stage**




| | MF4 200 | MF4 260 |
|---|---|---|
| **A** | 23 | 23 |
| **E** | 200 | 260 |
| **H** | 110 | 110 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

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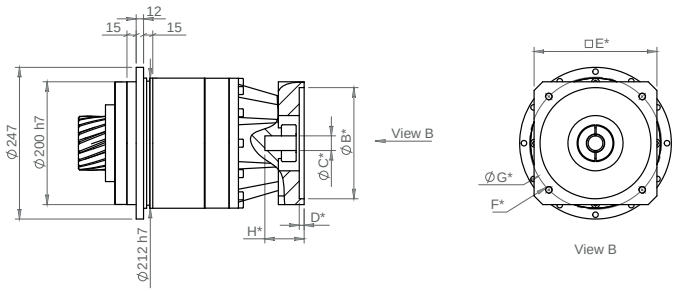
## DIMENSIONS - TYPE **M 2 stages**

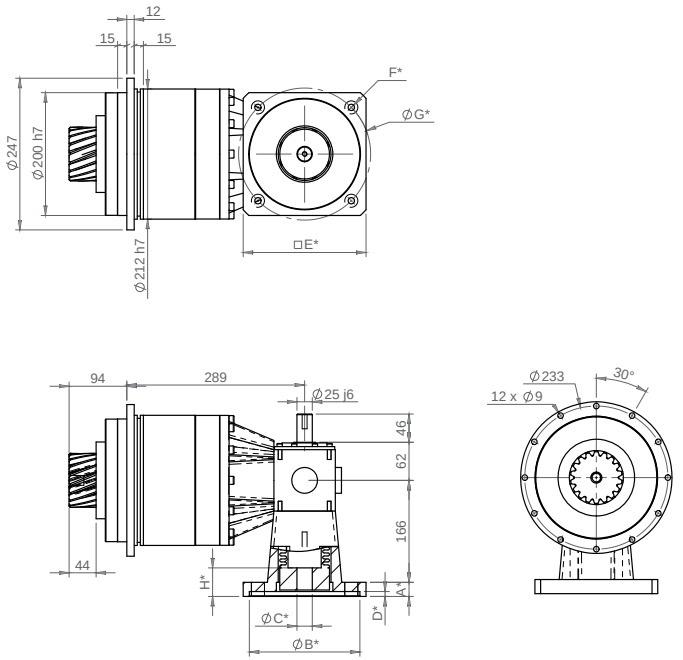



| | IFB 140 14/24 | IFB 140 28/38 | IFB 200 28/38 | IFB 260 28/38 |
|---|---|---|---|---|
| **A** | 37 | 42 | 57 | 64 |
| **E** | 140 | 140 | 200 | 260 |
| **H** | 59 | 65 | 80 | 87 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread



## DIMENSIONS - TYPE **R 2 stages**




| | MF2 140 | MF2 200 |
|---|---|---|
| **A** | 23 | 23 |
| **E** | 140 | 200 |
| **H** | 80 | 80 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## General data

| KRP3 | | | | M | R |
|---|---|---|---|---|---|
| Weight | **m** | kg | 1 Stage | | |
| | | | 2 Stages | 103 | 116 |
| Efficiency | **η** | % | 1 Stage | | |
| | | | 2 Stages | 93 | 91 |
| Backlash | **J** | arcmin | Standard | 3 | 4 |
| | | | Reduced | 1 | 2 |
| Color | | | | RAL2012 | |

## Pinion features

| Tooth type | | | Helical | Straight |
|---|---|---|---|---|
| Module | **Mo** | mm | 5 | 5 |
| Helix angle (left) | **β** | deg | 19°31'42" | 0° |
| Number of teeth | **Z2** | - | 18 | 19 |
| Pressure angle | **α** | deg | 20° | 20° |
| Theoretical pitch diameter | **D02** | mm | 95,49 | 95 |
| Addendum modification factor | **x0** | - | 0,251 | 0,300 |
| Pinion quality grade | **Q** | (ISO 1328) | 6 | 6 |
| Surface hardness | **HRC** | HRC | 61-63 | 61-63 |

## Rack features

| Version | | | Helical | Straight |
|---|---|---|---|---|
| Standard | **F2B** | N | 44837 | 38761 |
| | **F2NOT** | N | 89674 | 67410 |
| | **Material** | | C45E | DIN 1.1191 |
| Reinforced | **F2B** | N | 55062 | N/A |
| | **F2NOT** | N | 119700 | N/A |
| | **Material** | | 16MnCr5 | |
| Available length | **L** | mm | 500, 1000, 2000 | |
| Dimensions | | | see details p113-115 | |

## Drive linear features

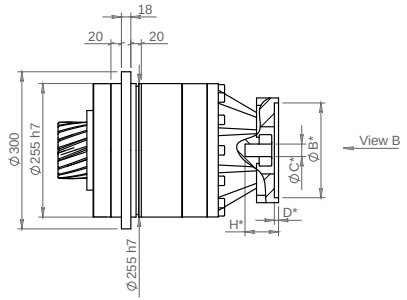
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal feed force | **F2N** | N | | | | 38748 | 31417 | 46078 | 29532 | 32255 | 32255 |
| Peak acceleration feed force | **F2B** | N | | | | 67819 | 54980 | 80637 | 51691 | 56446 | 56446 |
| Max. acceleration feed force | **F2B_max** | N | | | | 135637 | 109959 | 161273 | 103383 | 112891 | 112891 |
| E-stop force | **F2NOT** | N | | | | 103676 | 103676 | 103676 | 103676 | 103676 | 103676 |
| Max. linear speed | **V2B** | m/min | | | | 88 | 71 | 48 | 33 | 25 | 16 |
| Nominal linear speed | **V2N** | m/min | | | | 28 | 23 | 15 | 10 | 8 | 5 |
| Linear stiffness on the rack | **K2T +M** | N/µm | | | | 426 | 426 | 409 | 399 | 387 | 421 |
| | **K2T +R** | N/µm | | | | - | 363 | 386 | 374 | 385 | 382 |
| Inertia | **I +M** | kg.mm² | | | | 1242 | 994 | 8465 | 773 | 666 | 647 |
| | **I +R** | kg.mm² | | | | - | 2552 | 2403 | 2330 | 2224 | 2204 |

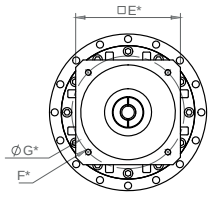
## KRP ratings

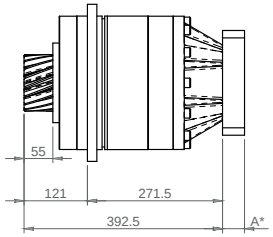
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal ouput torque | **T2N** | Nm | | | | 1850 | 1500 | 2200 | 1410 | 1540 | 1540 |
| Max. ouput torque | **T2B** | Nm | | | | 3238 | 2625 | 3850 | 2468 | 2695 | 2695 |
| No load torque | **T01 +R** | Nm | | | | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 |
| No load torque | **T01 +M** | Nm | | | | 2,5 | 2,5 | 2,5 | 2,5 | 2,5 | 2,5 |
| E-stop torque | **T2NOT** | Nm | | | | 4950 | 4950 | 4950 | 4950 | 4950 | 4950 |
| Max. input speed | **n1B** | rpm | | | | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |
| Nominal input speed | **n1N** | rpm | | | | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Radial stiffness | **K2R** | N/µm | | | | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |
| Axial stiffness | **K2A** | N/µm | | | | 4355 | 4355 | 4355 | 4355 | 4355 | 4355 |
| Torsional stiffness | **C2t +R** | Nm/ rad | | | | | 1354472 | 1505733 | 1423227 | 1498858 | 1478231 |
| | | Nm/arcmin | | | | | 394 | 438 | 414 | 436 | 430 |
| | **C2t +M** | Nm/ rad | | | | 1787628 | 1787628 | 1663869 | 1588239 | 1512609 | 1753251 |
| | | Nm/arcmin | | | | 520 | 520 | 484 | 462 | 440 | 510 |

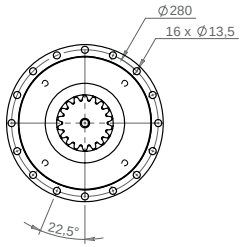
Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## DIMENSIONS - TYPE M



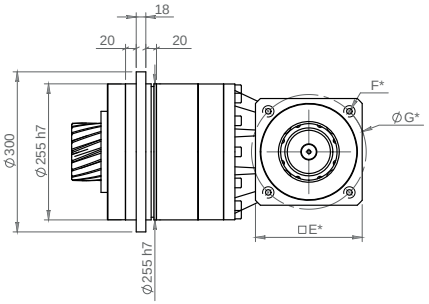



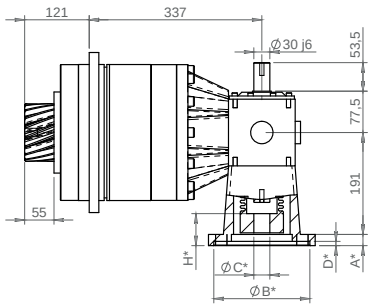

| | IFB 140 14/24 | IFB 140 28/38 | IFB 200 28/38 | IFB 260 28/38 |
|---|---|---|---|---|
| **A** | 37 | 42 | 57 | 64 |
| **E** | 140 | 140 | 200 | 260 |
| **H** | 59 | 65 | 80 | 87 |

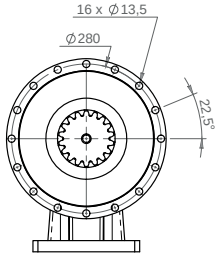
*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread



## DIMENSIONS - TYPE R




| | MF3 140 | MF3 200 | MF3 260 |
|---|---|---|---|
| **A** | 21 | 21 | 24 |
| **E** | 140 | 200 | 260 |
| **H** | 80 | 80 | 83 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## General data

| KRP4 | | | | M | R |
|---|---|---|---|---|---|
| Weight | **m** | kg | 1 Stage | | |
| | | | 2 Stages | 169 | 200 |
| Efficiency | **η** | % | 1 Stage | | |
| | | | 2 Stages | 93 | 91 |
| Backlash | **J** | arcmin | Standard | 3 | 4 |
| | | | Reduced | 1 | 2 |
| Color | | | | RAL2012 | |

## Pinion features

| Tooth type | | | Helical | Straight |
|---|---|---|---|---|
| Module | **Mo** | mm | 6 | 6 |
| Helix angle (left) | **β** | deg | 19°31'42" | 0° |
| Number of teeth | **Z2** | - | 18 | 19 |
| Pressure angle | **α** | deg | 20° | 20° |
| Theoretical pitch diameter | **D02** | mm | 114,59 | 114 |
| Addendum modification factor | **x0** | - | 0,201 | 0,250 |
| Pinion quality grade | **Q** | (ISO 1328) | 6 | 6 |
| Surface hardness | **HRC** | HRC | 61-63 | 61-63 |

## Rack features

| Version | | | Helical | Straight |
|---|---|---|---|---|
| Standard | **F2B** | N | 64103 | 55424 |
| | **F2NOT** | N | 128205 | 96390 |
| | **Material** | | C45E | DIN 1.1191 |
| Reinforced | **F2B** | N | 78753 | N/A |
| | **F2NOT** | N | 171203 | N/A |
| | **Material** | | 16MnCr5 | |
| Available length | **L** | mm | 500, 1000, 2000 | |
| Dimensions | | | see details p113-115 | |

## Drive linear features

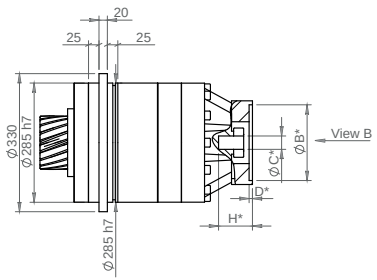
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal feed force | **F2N** | N | | | | 61087 | 61087 | 62833 | 44681 | 49568 | 49568 |
| Peak acceleration feed force | **F2B** | N | | | | 106903 | 106903 | 109957 | 78192 | 86744 | 86744 |
| Max. acceleration feed force | **F2B_max** | N | | | | 213806 | 213806 | 219914 | 156384 | 173488 | 173488 |
| E-stop force | **F2NOT** | N | | | | 132647 | 132647 | 132647 | 132647 | 132647 | 132647 |
| Max. linear speed | **V2B** | m/min | | | | 85 | 69 | 46 | 31 | 24 | 16 |
| Nominal linear speed | **V2N** | m/min | | | | 28 | 22 | 15 | 10 | 8 | 5 |
| Linear stiffness on the rack | **K2T** | **+M** N/µm | | | | 461 | 461 | 461 | 440 | 493 | 440 |
| | **K2T** | **+R** N/µm | | | | | 440 | 440 | 420 | 437 | 431 |
| Inertia | **I** | **+M** kg.mm² | | | | 3439 | 2246 | 1886 | 1702 | 1146 | 1095 |
| | **I** | **+R** kg.mm² | | | | | 10788 | 7978 | 7793 | 7265 | 7214 |

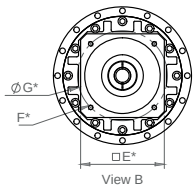
## KRP ratings

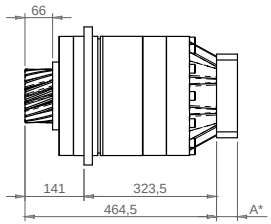
| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal ouput torque | **T2N** | Nm | | | | 3500 | 3500 | 3600 | 2560 | 2840 | 2840 |
| Max. ouput torque | **T2B** | Nm | | | | 6125 | 6125 | 6300 | 4480 | 4970 | 4970 |
| No load torque | **T01 +R** | Nm | | | | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 |
| No load torque | **T01 +M** | Nm | | | | 3 | 3 | 3 | 3 | 3 | 3 |
| E-stop torque | **T2NOT** | Nm | | | | 7600 | 7600 | 7600 | 7600 | 7600 | 7600 |
| Max. input speed | **n1B** | rpm | | | | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| Nominal input speed | **n1N** | rpm | | | | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 |
| Radial stiffness | **K2R** | N/µm | | | | 1250 | 1250 | 1250 | 1250 | 1250 | 1250 |
| Axial stiffness | **K2A** | N/µm | | | | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |
| Torsional stiffness | **C2t +R** | Nm/ rad | | | | | 2475178 | 2471740 | 2289539 | 2444238 | 2382359 |
| | | Nm/arcmin | | | | | 720 | 719 | 666 | 711 | 693 |
| | **C2t +M** | Nm/ rad | | | | 2681442 | 2681442 | 2681442 | 2468302 | 3025217 | 2471740 |
| | | Nm/arcmin | | | | 780 | 780 | 780 | 718 | 880 | 719 |

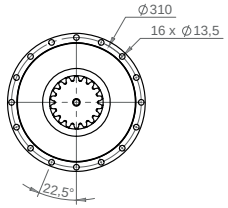
Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## DIMENSIONS - TYPE **M**



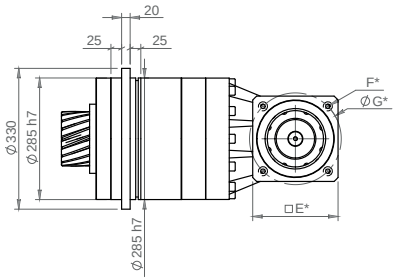



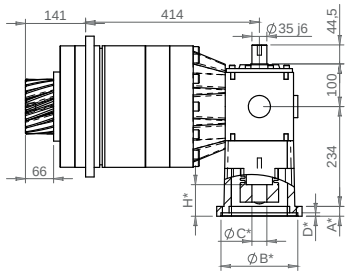



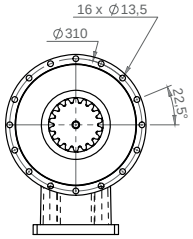

| | IFC 140 22/32 | IFC 200 22/48 | IFC 260 35/48 |
|---|---|---|---|
| **A** | 42 | 50 | 51 |
| **E** | 140 | 200 | 260 |
| **H** | 73 | 81 | 82 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

## DIMENSIONS - TYPE **R**




| | MF4 200 | MF4 260 |
|---|---|---|
| **A** | 23 | 23 |
| **E** | 200 | 260 |
| **H** | 110 | 110 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

## General data

| KRP5 | | | | M | R |
|---|---|---|---|---|---|
| Weight | **m** | kg | 1 Stage | | |
| | | | 2 Stages | 334 | 430 |
| Efficiency | **η** | % | 1 Stage | | |
| | | | 2 Stages | 93 | 91 |
| Backlash | **J** | arcmin | Standard | 3 | 4 |
| | | | Reduced | 1 | 2 |
| Color | | | | RAL2012 | |

## Pinion features

| Tooth type | | | Helical | Straight |
|---|---|---|---|---|
| Module | **Mo** | mm | 8 | 8 |
| Helix angle (left) | **β** | deg | 19°31'42" | 0 |
| Number of teeth | **Z2** | - | 15 | 16 |
| Pressure angle | **α** | deg | 20° | 20° |
| Theoretical pitch diameter | **D02** | mm | 127,32 | 128 |
| Addendum modification factor | **x0** | - | 0,355 | 0,313 |
| Pinion quality grade | **Q** | (ISO 1328) | 6 | 6 |
| Surface hardness | **HRC** | HRC | 61-63 | 61-63 |

## Rack features

| Version | | | Helical | Straight |
|---|---|---|---|---|
| Standard | **F2B** | N | 114380 | 91220 |
| | **F2NOT** | N | 174205 | 148960 |
| | **Material** | | C45E | DIN 1.1191 |
| Reinforced | **F2B** | N | N/A | N/A |
| | **F2NOT** | N | N/A | N/A |
| | **Material** | | 16MnCr5 | |
| Available length | **L** | mm | 500, 1000, 2000 | |
| Dimensions | | | see details p113-115 | |

## Drive linear features

| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal feed force | **F2N** | N | | | | | 73830 | 105247 | 86396 | 86396 | 86396 |
| Peak acceleration feed force | **F2B** | N | | | | | 118128 | 157870 | 138234 | 138234 | 138234 |
| Max. acceleration feed force | **F2B_max** | N | | | | | 236255 | 315740 | 276469 | 276469 | 276469 |
| E-stop force | **F2NOT** | N | | | | | 180647 | 180647 | 180647 | 180647 | 180647 |
| Max. linear speed | **V2B** | m/min | | | | | 76 | 52 | 35 | 26 | 18 |
| Nominal linear speed | **V2N** | m/min | | | | | 19 | 13 | 9 | 7 | 4 |
| Linear stiffness on the rack | **K2T +M** | N/µm | | | | | 623 | 623 | 545 | 598 | 500 |
| | **K2T +R** | N/µm | | | | | 623 | 622 | 545 | 595 | 483 |
| Inertia | **I +M** | kg.mm² | | | | | 2916 | 2204 | 1851 | 1228 | 1133 |
| | **I +R** | kg.mm² | | | | | 17640 | 16928 | 16575 | 15964 | 15870 |

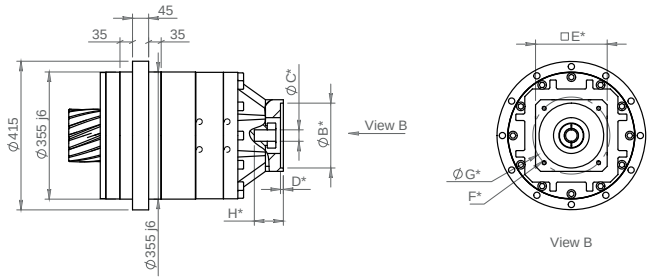
## KRP ratings

| Ratio | | | 5 | 7 | 10 | 17 | 21 | 31 | 46 | 61 | 91 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal ouput torque | **T2N** | Nm | | | | | 4700 | 6700 | 5500 | 5500 | 5500 |
| Max. ouput torque | **T2B** | Nm | | | | | 7520 | 10050 | 8800 | 8800 | 8800 |
| No load torque | **T01 +R** | Nm | | | | | 5,2 | 5,2 | 5,2 | 5,2 | 5,2 |
| No load torque | **T01 +M** | Nm | | | | | 4 | 4 | 4 | 4 | 4 |
| E-stop torque | **T2NOT** | Nm | | | | | 11500 | 11500 | 11500 | 11500 | 11500 |
| Max. input speed | **n1B** | rpm | | | | | 4000 | 4000 | 4000 | 4000 | 4000 |
| Nominal input speed | **n1N** | rpm | | | | | 1000 | 1000 | 1000 | 1000 | 1000 |
| Radial stiffness | **K2R** | N/µm | | | | | 1550 | 1550 | 1550 | 1550 | 1550 |
| Axial stiffness | **K2A** | N/µm | | | | | 5484 | 5484 | 5484 | 5484 | 5484 |
| Torsional stiffness | **C2t +R** | Nm/ rad | | | | | 4812845 | 4802532 | 3781521 | 4427818 | 3107723 |
| | | Nm/arcmin | | | | | 1400 | 1397 | 1100 | 1288 | 904 |
| | **C2t +M** | Nm/ rad | | | | | 4812845 | 4812845 | 3781521 | 4469071 | 3279610 |
| | | Nm/arcmin | | | | | 1400 | 1400 | 1100 | 1300 | 954 |

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier

REDEX
The Machine Drives Company

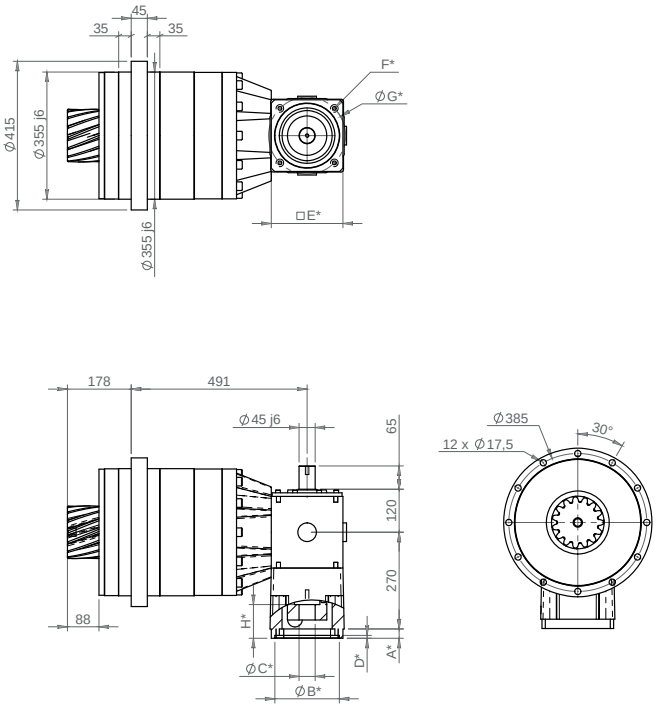
## DIMENSIONS - TYPE **M**




| | IFC 140 22/32 | IFC 200 22/48 | IFC 260 35/48 |
|---|---|---|---|
| **A** | 42 | 50 | 51 |
| **E** | 140 | 200 | 260 |
| **H** | 73 | 81 | 82 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

## DIMENSIONS - TYPE **R**




| | MF5 200 | MF5 260 |
|---|---|---|
| **A** | 26 | 26 |
| **E** | 200 | 260 |
| **H** | 110 | 110 |

*B C D F G According to motor dimensions
Tapping depth =1.5x0 thread

Dimensions and main data for information only - Please consult us and / or refer to Products Datasheets
For accurate selection, contact your local supplier