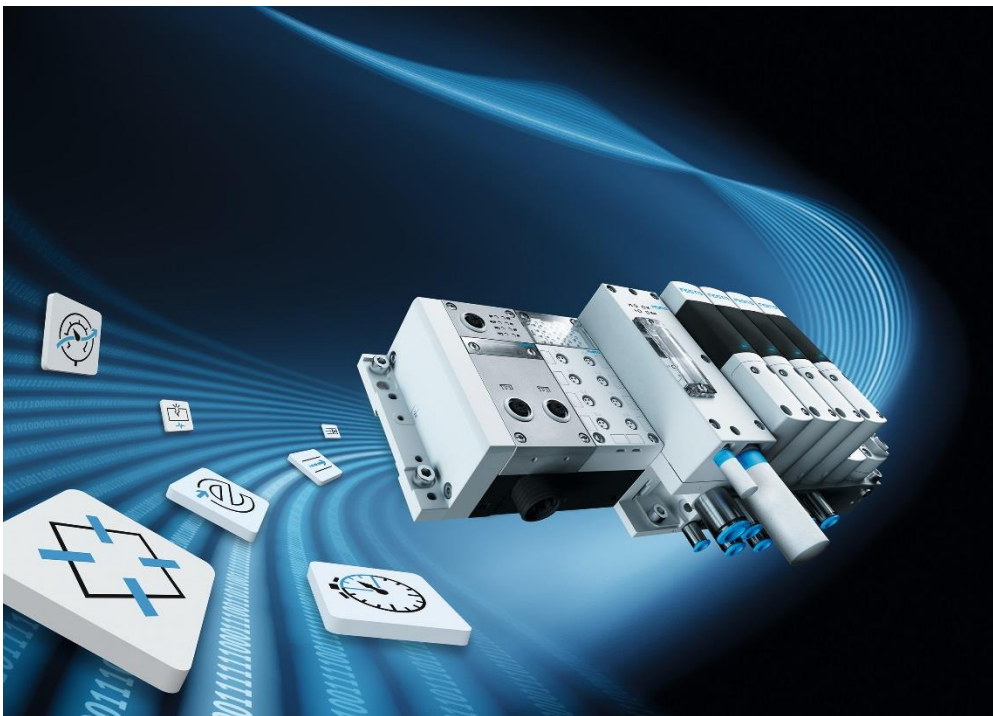


# Festo Motion Terminal (VTEM)

# FESTO



## Supported drives

Date  
12 September 2023

Firmware version  
4.26.6

**Festo SE & Co. KG**

Postfach  
73726 Esslingen  
[www.festo.com](http://www.festo.com)

Ruiter Straße 82  
73734 Esslingen  
Germany

## List of supported drives

This list contains all Festo drives approved for the Festo Motion Terminal (VTEM) and the corresponding value that must be entered in the “drive type” system parameter (ID 20) in order to be able to operate the respective drive with a Motion App.

The table contains markers for which Motion Apps the corresponding drive can be used. <sup>1)</sup>

| Drive/volume                                                                                                                 | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| No drive (volume, e.g. air reservoir)                                                                                        | -1                                         |                     |                     |                     | •                   |                     |
| Default value<br>(must be replaced with the value for one of the listed drive types before using a corresponding Motion App) | 0                                          |                     |                     |                     |                     |                     |
| ADN-100-...-A-P-A                                                                                                            | 641                                        |                     |                     |                     | •                   |                     |
| ADN-100-...-A-PPS-A                                                                                                          | 902                                        |                     |                     |                     | •                   |                     |
| ADN-100-...-I-P-A                                                                                                            | 641                                        |                     |                     |                     | •                   |                     |
| ADN-100-...-I-PPS-A                                                                                                          | 902                                        |                     |                     |                     | •                   |                     |
| ADN-125-...-A-P-A                                                                                                            | 642                                        |                     |                     |                     | •                   |                     |
| ADN-125-...-I-P-A                                                                                                            | 642                                        |                     |                     |                     | •                   |                     |
| ADN-16-...-A-P-A                                                                                                             | 633                                        |                     |                     |                     |                     |                     |
| ADN-16-...-I-P-A                                                                                                             | 633                                        |                     |                     |                     |                     |                     |
| ADN-20-...-A-P-A                                                                                                             | 634                                        |                     |                     |                     |                     |                     |
| ADN-20-...-A-PPS-A                                                                                                           | 900                                        |                     |                     |                     |                     |                     |
| ADN-20-...-I-P-A                                                                                                             | 634                                        |                     |                     |                     |                     |                     |
| ADN-20-...-I-PPS-A                                                                                                           | 900                                        |                     |                     |                     |                     |                     |
| ADN-25-...-A-P-A                                                                                                             | 635                                        | •                   | •                   |                     | •                   |                     |
| ADN-25-...-A-PPS-A                                                                                                           | 1458                                       | •                   | •                   |                     | •                   |                     |
| ADN-25-...-I-P-A                                                                                                             | 635                                        | •                   | •                   |                     | •                   |                     |
| ADN-25-...-I-PPS-A                                                                                                           | 1458                                       | •                   | •                   |                     | •                   |                     |
| ADN-32-...-A-P-A                                                                                                             | 636                                        | •                   | •                   |                     | •                   |                     |
| ADN-32-...-A-PPS-A                                                                                                           | 901                                        | •                   | •                   | •                   | •                   |                     |
| ADN-32-...-I-P-A                                                                                                             | 636                                        | •                   | •                   |                     | •                   |                     |
| ADN-32-...-I-PPS-A                                                                                                           | 901                                        | •                   | •                   | •                   | •                   |                     |
| ADN-40-...-A-P-A                                                                                                             | 637                                        | •                   | •                   |                     | •                   |                     |
| ADN-40-...-A-PPS-A                                                                                                           | 1260                                       | •                   | •                   | •                   | •                   |                     |
| ADN-40-...-I-P-A                                                                                                             | 637                                        | •                   | •                   |                     | •                   |                     |
| ADN-40-...-I-PPS-A                                                                                                           | 1260                                       | •                   | •                   | •                   | •                   |                     |
| ADN-50-...-A-P-A                                                                                                             | 638                                        | •                   | •                   |                     | •                   |                     |
| ADN-50-...-A-PPS-A                                                                                                           | 907                                        | •                   | •                   | •                   | •                   |                     |

| Drive/volume        | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|---------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                     |                                            |                     |                     |                     |                     |                     |
| ADN-50-...-I-P-A    | 638                                        | •                   | •                   |                     | •                   |                     |
| ADN-50-...-I-PPS-A  | 907                                        | •                   | •                   | •                   | •                   |                     |
| ADN-63-...-A-P-A    | 639                                        | •                   | •                   |                     | •                   |                     |
| ADN-63-...-A-PPS-A  | 1327                                       | •                   | •                   |                     | •                   |                     |
| ADN-63-...-I-P-A    | 639                                        | •                   | •                   |                     | •                   |                     |
| ADN-63-...-I-PPS-A  | 1327                                       | •                   | •                   |                     | •                   |                     |
| ADN-80-...-A-P-A    | 640                                        |                     |                     |                     | •                   |                     |
| ADN-80-...-A-PPS-A  | 1101                                       |                     |                     |                     | •                   |                     |
| ADN-80-...-I-P-A    | 640                                        |                     |                     |                     | •                   |                     |
| ADN-80-...-I-PPS-A  | 1101                                       |                     |                     |                     | •                   |                     |
| ADVC-100-...-A-P    | 707                                        |                     |                     |                     |                     |                     |
| ADVC-100-...-A-P-A  | 619                                        |                     |                     |                     |                     |                     |
| ADVC-16-...-A-P     | 699                                        |                     |                     |                     |                     |                     |
| ADVC-16-...-A-P-A   | 611                                        |                     |                     |                     |                     |                     |
| ADVC-20-...-A-P     | 700                                        |                     |                     |                     |                     |                     |
| ADVC-20-...-A-P-A   | 612                                        |                     |                     |                     |                     |                     |
| ADVC-25-...-A-P     | 701                                        | •                   | •                   |                     | •                   |                     |
| ADVC-25-...-A-P-A   | 613                                        | •                   | •                   |                     | •                   |                     |
| ADVC-32-...-A-P     | 702                                        | •                   | •                   |                     | •                   |                     |
| ADVC-32-...-A-P-A   | 614                                        | •                   | •                   |                     | •                   |                     |
| ADVC-40-...-A-P     | 703                                        | •                   | •                   |                     | •                   |                     |
| ADVC-40-...-A-P-A   | 615                                        | •                   | •                   |                     | •                   |                     |
| ADVC-50-...-A-P     | 704                                        | •                   | •                   |                     | •                   |                     |
| ADVC-50-...-A-P-A   | 616                                        | •                   | •                   |                     | •                   |                     |
| ADVC-63-...-A-P     | 705                                        | •                   | •                   |                     | •                   |                     |
| ADVC-63-...-A-P-A   | 617                                        | •                   | •                   |                     | •                   |                     |
| ADVC-80-...-A-P     | 706                                        |                     |                     |                     |                     |                     |
| ADVC-80-...-A-P-A   | 618                                        |                     |                     |                     |                     |                     |
| CRDSNU-16-...-P-A   | 1411                                       |                     |                     |                     |                     |                     |
| CRDSNU-20-...-P-A   | 1412                                       |                     |                     |                     |                     |                     |
| CRDSNU-20-...-PPS-A | 1424                                       |                     |                     |                     |                     |                     |
| CRDSNU-20-...-PPV-A | 1418                                       |                     |                     |                     |                     |                     |
| CRDSNU-25-...-P-A   | 1413                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-25-...-PPS-A | 1425                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-25-...-PPV-A | 1419                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-32-...-P-A   | 1414                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-32-...-PPS-A | 1426                                       | •                   | •                   | •                   | •                   |                     |
| CRDSNU-32-...-PPV-A | 1420                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-40-...-P-A   | 1415                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-40-...-PPS-A | 1427                                       | •                   | •                   | •                   | •                   |                     |
| CRDSNU-40-...-PPV-A | 1421                                       | •                   | •                   |                     | •                   |                     |

| Drive/volume              | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|---------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                           |                                            |                     |                     |                     |                     |                     |
| CRDSNU-50-...-P-A         | 1416                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-50-...-PPS-A       | 1428                                       | •                   | •                   | •                   | •                   |                     |
| CRDSNU-50-...-PPV-A       | 1422                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-63-...-P-A         | 1417                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-63-...-PPS-A       | 1429                                       | •                   | •                   |                     | •                   |                     |
| CRDSNU-63-...-PPV-A       | 1423                                       | •                   | •                   |                     | •                   |                     |
| DFM-100-...-P-A-GF        | 380                                        |                     |                     |                     |                     |                     |
| DFM-100-...-P-A-KF        | 491                                        |                     |                     |                     |                     |                     |
| DFM-16-...-B-P-A-GF       | 1726                                       |                     |                     |                     |                     |                     |
| DFM-16-...-B-P-A-GF-AJ    | 1728                                       |                     |                     |                     |                     |                     |
| DFM-16-...-B-P-A-KF       | 1727                                       |                     |                     |                     |                     |                     |
| DFM-16-...-B-P-A-KF-AJ    | 1729                                       |                     |                     |                     |                     |                     |
| DFM-16-...-B-PPV-A-GF     | 683                                        |                     |                     |                     |                     |                     |
| DFM-16-...-B-PPV-A-KF     | 983                                        |                     |                     |                     |                     |                     |
| DFM-16-...-P-A-GF         | 390                                        |                     |                     |                     |                     |                     |
| DFM-16-...-P-A-KF         | 493                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-P-A-GF       | 769                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-P-A-GF-AJ-EJ | 770                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-P-A-KF       | 772                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-P-A-KF-AJ-EJ | 773                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-PPV-A-GF     | 684                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-PPV-A-KF     | 764                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-YSRW-A-KF    | 771                                        |                     |                     |                     |                     |                     |
| DFM-20-...-B-YSRW-GF      | 768                                        |                     |                     |                     |                     |                     |
| DFM-20-...-P-A-GF         | 391                                        |                     |                     |                     |                     |                     |
| DFM-20-...-P-A-KF         | 494                                        |                     |                     |                     |                     |                     |
| DFM-25-...-B-P-A-GF       | 775                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-P-A-GF-AJ-EJ | 776                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-P-A-KF       | 778                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-P-A-KF-AJ-EJ | 779                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-PPV-A-GF     | 685                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-PPV-A-KF     | 765                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-YSRW-A-KF    | 777                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-B-YSRW-GF      | 774                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-P-A-GF         | 392                                        | •                   | •                   |                     | •                   |                     |
| DFM-25-...-P-A-KF         | 495                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-P-A-GF       | 781                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-P-A-GF-AJ-EJ | 782                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-P-A-KF       | 784                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-P-A-KF-AJ-EJ | 785                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-PPV-A-GF     | 686                                        | •                   | •                   |                     | •                   |                     |

| Drive/volume              | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|---------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DFM-32-...-B-PPV-A-KF     | 766                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-YSRW-A-KF    | 783                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-B-YSRW-GF      | 780                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-P-A-GF         | 393                                        | •                   | •                   |                     | •                   |                     |
| DFM-32-...-P-A-KF         | 496                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-P-A-GF       | 787                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-P-A-GF-AJ-EJ | 788                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-P-A-KF       | 790                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-P-A-KF-AJ-EJ | 791                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-PPV-A-GF     | 687                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-PPV-A-KF     | 767                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-YSRW-A-KF    | 789                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-B-YSRW-GF      | 786                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-P-A-GF         | 394                                        | •                   | •                   |                     | •                   |                     |
| DFM-40-...-P-A-KF         | 497                                        | •                   | •                   |                     | •                   |                     |
| DFM-50-...-B-P-A-GF       | 1153                                       | •                   | •                   |                     | •                   |                     |
| DFM-50-...-B-P-A-KF       | 1151                                       | •                   | •                   |                     | •                   |                     |
| DFM-50-...-B-PPV-A-GF     | 1157                                       | •                   | •                   |                     | •                   |                     |
| DFM-50-...-B-PPV-A-KF     | 1155                                       | •                   | •                   |                     | •                   |                     |
| DFM-50-...-B-YSRW-A-KF    | 1159                                       | •                   | •                   |                     | •                   |                     |
| DFM-50-...-P-A-GF         | 395                                        | •                   | •                   |                     | •                   |                     |
| DFM-50-...-P-A-KF         | 498                                        | •                   | •                   |                     | •                   |                     |
| DFM-63-...-B-P-A-GF       | 1154                                       | •                   | •                   |                     | •                   |                     |
| DFM-63-...-B-P-A-KF       | 1152                                       | •                   | •                   |                     | •                   |                     |
| DFM-63-...-B-PPV-A-GF     | 1158                                       | •                   | •                   |                     | •                   |                     |
| DFM-63-...-B-PPV-A-KF     | 1156                                       | •                   | •                   |                     | •                   |                     |
| DFM-63-...-B-YSRW-A-KF    | 1160                                       | •                   | •                   |                     | •                   |                     |
| DFM-63-...-P-A-GF         | 489                                        | •                   | •                   |                     | •                   |                     |
| DFM-63-...-P-A-KF         | 499                                        | •                   | •                   |                     | •                   |                     |
| DFM-80-...-P-A-GF         | 379                                        |                     |                     |                     |                     |                     |
| DFM-80-...-P-A-KF         | 490                                        |                     |                     |                     |                     |                     |
| DGC-18-...-G-PPV-A        | 818                                        |                     |                     |                     |                     |                     |
| DGC-18-...-GF-PPV-A       | 817                                        |                     |                     |                     |                     |                     |
| DGC-18-...-GF-YSRW-A      | 819                                        |                     |                     |                     |                     |                     |
| DGC-18-...-GF-YSRW-A      | 820                                        |                     |                     |                     |                     |                     |
| DGC-18-...-HD-YSR         | 1579                                       |                     |                     |                     |                     |                     |
| DGC-18-...-HD-YSRW        | 1580                                       |                     |                     |                     |                     |                     |
| DGC-18-...-KF-PPV-A       | 754                                        |                     |                     |                     |                     |                     |
| DGC-18-...-KF-YSRW-A      | 821                                        |                     |                     |                     |                     |                     |
| DGC-18-...-KF-YSRW-A      | 822                                        |                     |                     |                     |                     |                     |
| DGC-25-...-G-PPV-A        | 812                                        | •                   | •                   |                     | •                   |                     |

| Drive/volume             | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|--------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DGC-25-...-GF-PPV-A      | 811                                        | •                   | •                   |                     | •                   |                     |
| DGC-25-...-GF-YSR-A      | 813                                        | •                   | •                   |                     | •                   |                     |
| DGC-25-...-GF-YSRW-A     | 814                                        | •                   | •                   |                     | •                   |                     |
| DGC-25-...-HD-YSR        | 1581                                       |                     |                     |                     |                     |                     |
| DGC-25-...-HD-YSRW       | 1582                                       |                     |                     |                     |                     |                     |
| DGC-25-...-KF-PPV-A      | 645                                        | •                   | •                   |                     | •                   |                     |
| DGC-25-...-KF-YSR-A      | 815                                        | •                   | •                   |                     | •                   |                     |
| DGC-25-...-KF-YSRW-A     | 816                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-G-PPV-A       | 752                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-GF-PPV-A      | 751                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-GF-YSR-A      | 801                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-GF-YSRW-A     | 802                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-KF-PPV-A      | 750                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-KF-YSR-A      | 803                                        | •                   | •                   |                     | •                   |                     |
| DGC-32-...-KF-YSRW-A     | 804                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-G-PPV-A       | 806                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-GF-PPV-A      | 805                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-GF-YSR-A      | 807                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-GF-YSRW-A     | 808                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-HD-YSR        | 1583                                       |                     |                     |                     |                     |                     |
| DGC-40-...-HD-YSRW       | 1584                                       |                     |                     |                     |                     |                     |
| DGC-40-...-KF-PPV-A      | 753                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-KF-YSR-A      | 809                                        | •                   | •                   |                     | •                   |                     |
| DGC-40-...-KF-YSRW-A     | 810                                        | •                   | •                   |                     | •                   |                     |
| DGC-50-...-G-PPV-A       | 1015                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-GF-PPV-A      | 1012                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-GF-YSR-A      | 1013                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-GF-YSRW-A     | 1014                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-KF-PPV-A      | 1016                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-KF-YSR-A      | 1017                                       | •                   | •                   |                     | •                   |                     |
| DGC-50-...-KF-YSRW-A     | 1018                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-G-PPV-A       | 1022                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-GF-PPV-A      | 1019                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-GF-YSR-A      | 1020                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-GF-YSRW-A     | 1021                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-KF-PPV-A      | 1023                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-KF-YSR-A      | 1024                                       | •                   | •                   |                     | •                   |                     |
| DGC-63-...-KF-YSRW-A     | 1025                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-18-...-PPV-A-GK    | 1585                                       |                     |                     |                     |                     |                     |
| DGC-K-18-...-PPV-A-GK-D2 | 1721                                       |                     |                     |                     |                     |                     |
| DGC-K-25-...-PPV-A-GK    | 1452                                       | •                   | •                   |                     | •                   |                     |

| Drive/volume               | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|----------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DGC-K-25-...-PPV-A-GK-D2   | 1720                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-32-...-PPV-A-GK      | 1453                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-32-...-PPV-A-GK-D2   | 1716                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-40-...-PPV-A-GK      | 1454                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-40-...-PPV-A-GK-D2   | 1717                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-50-...-PPV-A-GK      | 1455                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-50-...-PPV-A-GK-D2   | 1718                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-63-...-PPV-A-GK      | 1456                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-63-...-PPV-A-GK-D2   | 1719                                       | •                   | •                   |                     | •                   |                     |
| DGC-K-80-...-PPV-A-GK      | 1457                                       |                     |                     |                     |                     |                     |
| DGC-K-80-...-PPV-A-GK-D2   | 1722                                       |                     |                     |                     |                     |                     |
| DGRF-C-GF-20-...-P         | 1383                                       |                     |                     |                     |                     |                     |
| DGRF-C-GF-20-...-P-A3      | 1390                                       |                     |                     |                     |                     |                     |
| DGRF-C-GF-25-...-P         | 1384                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-25-...-P-A3      | 1393                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-32-...-PA-R      | 1385                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-32-...-PA-R-A3   | 1394                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-32-...-PPSA-R    | 1829                                       | •                   | •                   | •                   | •                   |                     |
| DGRF-C-GF-32-...-PPVA-R    | 1386                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-32-...-PPVA-R-A3 | 1395                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-40-...-PPSA-R    | 1830                                       | •                   | •                   | •                   | •                   |                     |
| DGRF-C-GF-40-...-PPVA-R    | 1387                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-40-...-PPVA-R-A3 | 1396                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-50-...-PPSA-R    | 1832                                       | •                   | •                   | •                   | •                   |                     |
| DGRF-C-GF-50-...-PPVA-R    | 1388                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-50-...-PPVA-R-A3 | 1397                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-63-...-PPSA-R    | 1835                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-63-...-PPVA-R    | 1389                                       | •                   | •                   |                     | •                   |                     |
| DGRF-C-GF-63-...-PPVA-R-A3 | 1398                                       | •                   | •                   |                     | •                   |                     |
| DGSL-16-...-C-Y3A          | 1056                                       |                     |                     |                     |                     |                     |
| DGSL-16-...-P1A            | 1048                                       |                     |                     |                     |                     |                     |
| DGSL-16-...-PA             | 1047                                       |                     |                     |                     |                     |                     |
| DGSL-16-...-Y11A           | 1191                                       |                     |                     |                     |                     |                     |
| DGSL-16-...-Y3A            | 1056                                       |                     |                     |                     |                     |                     |
| DGSL-20-...-C-Y3A          | 1057                                       | •                   | •                   |                     | •                   |                     |
| DGSL-20-...-P1A            | 1050                                       | •                   | •                   |                     | •                   |                     |
| DGSL-20-...-PA             | 1049                                       | •                   | •                   |                     | •                   |                     |
| DGSL-20-...-Y11A           | 1192                                       | •                   | •                   |                     | •                   |                     |
| DGSL-20-...-Y3A            | 1057                                       | •                   | •                   |                     | •                   |                     |
| DGSL-25-...-C-Y3A          | 1058                                       | •                   | •                   |                     | •                   |                     |
| DGSL-25-...-P1A            | 1052                                       | •                   | •                   |                     | •                   |                     |

| Drive/volume     | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                  |                                            |                     |                     |                     |                     |                     |
| DGSL-25-...-PA   | 1051                                       | •                   | •                   |                     | •                   |                     |
| DGSL-25-...-Y11A | 1193                                       | •                   | •                   |                     | •                   |                     |
| DGSL-25-...-Y3A  | 1058                                       | •                   | •                   |                     | •                   |                     |
| DGST-16-10-E1A   | 2127                                       |                     |                     |                     |                     |                     |
| DGST-16-20-E1A   | 2191                                       |                     |                     |                     |                     |                     |
| DGST-16-30-E1A   | 2192                                       |                     |                     |                     |                     |                     |
| DGST-16-40-E1A   | 2193                                       |                     |                     |                     |                     |                     |
| DGST-16-50-E1A   | 2194                                       |                     |                     |                     |                     |                     |
| DGST-16-80-E1A   | 2195                                       |                     |                     |                     |                     |                     |
| DGST-16-100-E1A  | 2196                                       |                     |                     |                     |                     |                     |
| DGST-16-125-E1A  | 2197                                       |                     |                     |                     |                     |                     |
| DGST-16-150-E1A  | 2198                                       |                     |                     |                     |                     |                     |
| DGST-16-10-PA    | 2126                                       |                     |                     |                     |                     |                     |
| DGST-16-20-PA    | 2199                                       |                     |                     |                     |                     |                     |
| DGST-16-30-PA    | 2200                                       |                     |                     |                     |                     |                     |
| DGST-16-40-PA    | 2201                                       |                     |                     |                     |                     |                     |
| DGST-16-50-PA    | 2202                                       |                     |                     |                     |                     |                     |
| DGST-16-80-PA    | 2203                                       |                     |                     |                     |                     |                     |
| DGST-16-100-PA   | 2204                                       |                     |                     |                     |                     |                     |
| DGST-16-125-PA   | 2205                                       |                     |                     |                     |                     |                     |
| DGST-16-150-PA   | 2206                                       |                     |                     |                     |                     |                     |
| DGST-20-10-E1A   | 2080                                       |                     |                     |                     |                     |                     |
| DGST-20-20-E1A   | 2182                                       |                     |                     |                     |                     |                     |
| DGST-20-30-E1A   | 2183                                       |                     |                     |                     |                     |                     |
| DGST-20-40-E1A   | 2184                                       |                     |                     |                     |                     |                     |
| DGST-20-50-E1A   | 2185                                       |                     |                     |                     |                     |                     |
| DGST-20-80-E1A   | 2186                                       |                     |                     |                     |                     |                     |
| DGST-20-100-E1A  | 2187                                       |                     |                     |                     |                     |                     |
| DGST-20-125-E1A  | 2188                                       |                     |                     |                     |                     |                     |
| DGST-20-150-E1A  | 2189                                       |                     |                     |                     |                     |                     |
| DGST-20-200-E1A  | 2190                                       |                     |                     |                     |                     |                     |
| DGST-20-10-PA    | 2079                                       |                     |                     |                     |                     |                     |
| DGST-20-20-PA    | 2173                                       |                     |                     |                     |                     |                     |
| DGST-20-30-PA    | 2174                                       |                     |                     |                     |                     |                     |
| DGST-20-40-PA    | 2175                                       |                     |                     |                     |                     |                     |
| DGST-20-50-PA    | 2176                                       |                     |                     |                     |                     |                     |
| DGST-20-80-PA    | 2177                                       |                     |                     |                     |                     |                     |
| DGST-20-100-PA   | 2178                                       |                     |                     |                     |                     |                     |
| DGST-20-125-PA   | 2179                                       |                     |                     |                     |                     |                     |
| DGST-20-150-PA   | 2180                                       |                     |                     |                     |                     |                     |
| DGST-20-200-PA   | 2181                                       |                     |                     |                     |                     |                     |



| Drive/volume        | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|---------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DGST-25-10-E1A      | 2077                                       |                     |                     |                     |                     |                     |
| DGST-25-20-E1A      | 2141                                       |                     |                     |                     |                     |                     |
| DGST-25-30-E1A      | 2142                                       |                     |                     |                     |                     |                     |
| DGST-25-40-E1A      | 2143                                       |                     |                     |                     |                     |                     |
| DGST-25-50-E1A      | 2144                                       |                     |                     |                     |                     |                     |
| DGST-25-80-E1A      | 2145                                       |                     |                     |                     |                     |                     |
| DGST-25-100-E1A     | 2146                                       |                     |                     |                     |                     |                     |
| DGST-25-125-E1A     | 2147                                       |                     |                     |                     |                     |                     |
| DGST-25-150-E1A     | 2148                                       |                     |                     |                     |                     |                     |
| DGST-25-200-E1A     | 2149                                       |                     |                     |                     |                     |                     |
| DGST-25-10-PA       | 2076                                       |                     |                     |                     |                     |                     |
| DGST-25-20-PA       | 2150                                       |                     |                     |                     |                     |                     |
| DGST-25-30-PA       | 2151                                       |                     |                     |                     |                     |                     |
| DGST-25-40-PA       | 2152                                       |                     |                     |                     |                     |                     |
| DGST-25-50-PA       | 2153                                       |                     |                     |                     |                     |                     |
| DGST-25-80-PA       | 2154                                       |                     |                     |                     |                     |                     |
| DGST-25-100-PA      | 2155                                       |                     |                     |                     |                     |                     |
| DGST-25-125-PA      | 2156                                       |                     |                     |                     |                     |                     |
| DGST-25-150-PA      | 2157                                       |                     |                     |                     |                     |                     |
| DGST-25-200-PA      | 2158                                       |                     |                     |                     |                     |                     |
| DLGF-G-20-...-PPSA  | 1867                                       |                     |                     |                     |                     |                     |
| DLGF-G-25-...-PPSA  | 1819                                       |                     |                     |                     |                     |                     |
| DLGF-G-32-...-PPSA  | 1868                                       |                     |                     |                     |                     |                     |
| DLGF-G-40-...-PPSA  | 1869                                       |                     |                     |                     |                     |                     |
| DLGF-KF-20-...-PPSA | 2118                                       |                     |                     |                     |                     |                     |
| DLGF-KF-25-...-PPSA | 2119                                       |                     |                     |                     |                     |                     |
| DLGF-KF-32-...-PPSA | 2120                                       |                     |                     |                     |                     |                     |
| DLGF-KF-40-...-PPSA | 2121                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-H-PA    | 2035                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-P-PA    | 2005                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-PA      | 1993                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-S-PA    | 1999                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-T-PA    | 2029                                       |                     |                     |                     |                     |                     |
| DPDM-16-...-T1-PA   | 2041                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-H-PA    | 2034                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-P-PA    | 2004                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-PA      | 1992                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-S-PA    | 1998                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-T-PA    | 2028                                       |                     |                     |                     |                     |                     |
| DPDM-20-...-T1-PA   | 2040                                       |                     |                     |                     |                     |                     |
| DPDM-25-...-H-PA    | 2033                                       |                     |                     |                     |                     |                     |

| Drive/volume        | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|---------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DPDM-25-...-P-PA    | 2003                                       |                     |                     |                     |                     |                     |
| DPDM-25-...-PA      | 1991                                       |                     |                     |                     |                     |                     |
| DPDM-25-...-S-PA    | 1997                                       |                     |                     |                     |                     |                     |
| DPDM-25-...-T-PA    | 2027                                       |                     |                     |                     |                     |                     |
| DPDM-25-...-T1-PA   | 2039                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-H-PA    | 2032                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-P-PA    | 2002                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-PA      | 1990                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-S-PA    | 1996                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-T-PA    | 2026                                       |                     |                     |                     |                     |                     |
| DPDM-32-...-T1-PA   | 2038                                       |                     |                     |                     |                     |                     |
| DPDM-Q-16-...-P-PA  | 2023                                       |                     |                     |                     |                     |                     |
| DPDM-Q-16-...-PA    | 2011                                       |                     |                     |                     |                     |                     |
| DPDM-Q-16-...-S-PA  | 2017                                       |                     |                     |                     |                     |                     |
| DPDM-Q-20-...-P-PA  | 2022                                       |                     |                     |                     |                     |                     |
| DPDM-Q-20-...-PA    | 2010                                       |                     |                     |                     |                     |                     |
| DPDM-Q-20-...-S-PA  | 2016                                       |                     |                     |                     |                     |                     |
| DPDM-Q-25-...-P-PA  | 2021                                       |                     |                     |                     |                     |                     |
| DPDM-Q-25-...-PA    | 2009                                       |                     |                     |                     |                     |                     |
| DPDM-Q-25-...-S-PA  | 2015                                       |                     |                     |                     |                     |                     |
| DPDM-Q-32-...-P-PA  | 2020                                       |                     |                     |                     |                     |                     |
| DPDM-Q-32-...-PA    | 2008                                       |                     |                     |                     |                     |                     |
| DPDM-Q-32-...-S-PA  | 2014                                       |                     |                     |                     |                     |                     |
| DRRD-16-180-FH-PA   | 1762                                       |                     |                     |                     |                     |                     |
| DRRD-16-180-FH-Y12A | 1875                                       |                     |                     |                     |                     |                     |
| DRRD-16-180-FH-Y14A | 1984                                       |                     |                     |                     |                     |                     |
| DRRD-16-180-FH-Y9A  | 1874                                       |                     |                     |                     |                     |                     |
| DRRD-20-180-FH-PA   | 1763                                       |                     |                     |                     |                     |                     |
| DRRD-20-180-FH-Y12A | 1877                                       |                     |                     |                     |                     |                     |
| DRRD-20-180-FH-Y14A | 1985                                       |                     |                     |                     |                     |                     |
| DRRD-20-180-FH-Y9A  | 1876                                       |                     |                     |                     |                     |                     |
| DRRD-25-180-FH-PA   | 1764                                       | •                   | •                   |                     | •                   |                     |
| DRRD-25-180-FH-Y10A | 1805                                       | •                   | •                   |                     | •                   |                     |
| DRRD-25-180-FH-Y12A | 1806                                       | •                   | •                   |                     | •                   |                     |
| DRRD-25-180-FH-Y14A | 1986                                       | •                   | •                   |                     | •                   |                     |
| DRRD-25-180-FH-Y9A  | 1804                                       | •                   | •                   |                     | •                   |                     |
| DRRD-32-180-FH-PA   | 1765                                       | •                   | •                   |                     | •                   |                     |
| DRRD-32-180-FH-Y12A | 1879                                       | •                   | •                   |                     | •                   |                     |
| DRRD-32-180-FH-Y14A | 1987                                       | •                   | •                   |                     | •                   |                     |
| DRRD-32-180-FH-Y9A  | 1878                                       | •                   | •                   |                     | •                   |                     |
| DRRD-35-180-FH-PA   | 1766                                       |                     |                     |                     |                     |                     |

| Drive/volume         | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|----------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DRRD-35-180-FH-Y10A  | 1881                                       | •                   | •                   |                     | •                   |                     |
| DRRD-35-180-FH-Y12A  | 1882                                       | •                   | •                   |                     | •                   |                     |
| DRRD-35-180-FH-Y14A  | 1988                                       |                     |                     |                     |                     |                     |
| DRRD-35-180-FH-Y9A   | 1880                                       | •                   | •                   |                     | •                   |                     |
| DRRD-40-180-FH-PA    | 1767                                       | •                   | •                   |                     | •                   |                     |
| DRRD-40-180-FH-Y10A  | 1884                                       | •                   | •                   |                     | •                   |                     |
| DRRD-40-180-FH-Y12A  | 1885                                       | •                   | •                   |                     | •                   |                     |
| DRRD-40-180-FH-Y14A  | 1989                                       | •                   | •                   |                     | •                   |                     |
| DRRD-40-180-FH-Y9A   | 1883                                       | •                   | •                   |                     | •                   |                     |
| DRRD-50-180-FH-Y10A  | 1886                                       | •                   | •                   |                     | •                   |                     |
| DRRD-50-180-FH-Y12A  | 1887                                       | •                   | •                   |                     | •                   |                     |
| DRRD-50-180-FH-Y9A   | 1768                                       | •                   | •                   |                     | •                   |                     |
| DRRD-63-180-FH-Y10A  | 1888                                       | •                   | •                   |                     | •                   |                     |
| DRRD-63-180-FH-Y12A  | 1889                                       | •                   | •                   |                     | •                   |                     |
| DRRD-63-180-FH-Y9A   | 1769                                       | •                   | •                   |                     | •                   |                     |
| DRVS-16-90-P         | 1909                                       |                     |                     |                     |                     |                     |
| DRVS-16-180-P        | 1910                                       |                     |                     |                     |                     |                     |
| DRVS-16-270-P        | 1901                                       |                     |                     |                     |                     |                     |
| DRVS-25-90-P         | 1911                                       | •                   | •                   |                     | •                   |                     |
| DRVS-25-180-P        | 1912                                       | •                   | •                   |                     | •                   |                     |
| DRVS-25-270-P        | 1902                                       | •                   | •                   |                     | •                   |                     |
| DRVS-32-90-P         | 1913                                       | •                   | •                   |                     | •                   |                     |
| DRVS-32-180-P        | 1914                                       | •                   | •                   |                     | •                   |                     |
| DRVS-32-270-P        | 1903                                       | •                   | •                   |                     | •                   |                     |
| DRVS-40-90-P         | 1915                                       | •                   | •                   |                     | •                   |                     |
| DRVS-40-180-P        | 1916                                       | •                   | •                   |                     | •                   |                     |
| DRVS-40-270-P        | 1904                                       | •                   | •                   |                     | •                   |                     |
| DSBC-100-...-PA-N3   | 1707                                       |                     |                     |                     |                     |                     |
| DSBC-100-...-PP1A-N3 | 1714                                       |                     |                     |                     |                     |                     |
| DSBC-100-...-PPSA-N3 | 1631                                       |                     |                     |                     |                     |                     |
| DSBC-100-...-PPVA-N3 | 1630                                       |                     |                     |                     |                     |                     |
| DSBC-125-...-PA-N3   | 1708                                       |                     |                     |                     |                     |                     |
| DSBC-125-...-PP1A-N3 | 1715                                       |                     |                     |                     |                     |                     |
| DSBC-125-...-PPSA-N3 | 1685                                       |                     |                     |                     |                     |                     |
| DSBC-125-...-PPVA-N3 | 1684                                       |                     |                     |                     |                     |                     |
| DSBC-32-...-PA-N3    | 1702                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-32-...-PP1A-N3  | 1709                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-32-...-PPSA-N3  | 1621                                       | •                   | •                   | •                   | •                   | •                   |
| DSBC-32-...-PPVA-N3  | 1620                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-40-...-PA-N3    | 1703                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-40-...-PP1A-N3  | 1710                                       | •                   | •                   |                     | •                   | •                   |

| Drive/volume             | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|--------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                          |                                            |                     |                     |                     |                     |                     |
| DSBC-40-...-PPSA-N3      | 1623                                       | •                   | •                   | •                   | •                   | •                   |
| DSBC-40-...-PPVA-N3      | 1622                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-50-...-PA-N3        | 1704                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-50-...-PP1A-N3      | 1711                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-50-...-PPSA-N3      | 1625                                       | •                   | •                   | •                   | •                   | •                   |
| DSBC-50-...-PPVA-N3      | 1624                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-63-...-PA-N3        | 1705                                       | •                   | •                   |                     | •                   |                     |
| DSBC-63-...-PP1A-N3      | 1712                                       | •                   | •                   |                     | •                   |                     |
| DSBC-63-...-PPSA-N3      | 1627                                       | •                   | •                   |                     | •                   |                     |
| DSBC-63-...-PPVA-N3      | 1626                                       | •                   | •                   |                     | •                   |                     |
| DSBC-80-...-PA-N3        | 1706                                       |                     |                     |                     |                     |                     |
| DSBC-80-...-PP1A-N3      | 1713                                       |                     |                     |                     |                     |                     |
| DSBC-80-...-PPSA-N3      | 1629                                       |                     |                     |                     |                     |                     |
| DSBC-80-...-PPVA-N3      | 1628                                       |                     |                     |                     |                     |                     |
| DSBC-L1-100-...-PA-N3    | 1933                                       |                     |                     |                     |                     |                     |
| DSBC-L1-125-...-PA-N3    | 1934                                       |                     |                     |                     |                     |                     |
| DSBC-L1-32-...-PA-N3     | 1836                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-L1-40-...-PA-N3     | 1839                                       |                     |                     |                     |                     | •                   |
| DSBC-L1-50-...-PA-N3     | 1929                                       | •                   | •                   |                     | •                   | •                   |
| DSBC-L1-63-...-PA-N3     | 1931                                       | •                   | •                   |                     | •                   |                     |
| DSBC-L1-80-...-PA-N3     | 1932                                       |                     |                     |                     |                     |                     |
| DSBF-C-100-...-PA-N3-R   | 1693                                       |                     |                     |                     |                     |                     |
| DSBF-C-100-...-PPSA-N3-R | 1544                                       |                     |                     |                     |                     |                     |
| DSBF-C-100-...-PPVA-N3-R | 1409                                       |                     |                     |                     |                     |                     |
| DSBF-C-125-...-PA-N3-R   | 1694                                       |                     |                     |                     |                     |                     |
| DSBF-C-125-...-PPSA-N3-R | 1683                                       |                     |                     |                     |                     |                     |
| DSBF-C-125-...-PPVA-N3-R | 1682                                       |                     |                     |                     |                     |                     |
| DSBF-C-32-...-PA-N3-R    | 1688                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-32-...-PPSA-N3-R  | 1401                                       | •                   | •                   | •                   | •                   |                     |
| DSBF-C-32-...-PPVA-N3-R  | 1400                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-40-...-PA-N3-R    | 1689                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-40-...-PPSA-N3-R  | 1403                                       | •                   | •                   | •                   | •                   |                     |
| DSBF-C-40-...-PPVA-N3-R  | 1402                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-50-...-PA-N3-R    | 1690                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-50-...-PPSA-N3-R  | 1405                                       | •                   | •                   | •                   | •                   |                     |
| DSBF-C-50-...-PPVA-N3-R  | 1404                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-63-...-PA-N3-R    | 1691                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-63-...-PPSA-N3-R  | 1407                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-63-...-PPVA-N3-R  | 1406                                       | •                   | •                   |                     | •                   |                     |
| DSBF-C-80-...-PA-N3-R    | 1692                                       |                     |                     |                     |                     |                     |
| DSBF-C-80-...-PPSA-N3-R  | 1543                                       |                     |                     |                     |                     |                     |

| Drive/volume             | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|--------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DSBF-C-80-...-PPVA-N3-R  | 1408                                       |                     |                     |                     |                     |                     |
| DSNU-16-...-P-A          | 136                                        | •                   |                     |                     | •                   |                     |
| DSNU-16-...-P-A+FEN-GF   | 238                                        | •                   |                     |                     | •                   |                     |
| DSNU-16-...-P-A+FEN-KF   | 247                                        | •                   |                     |                     | •                   |                     |
| DSNU-16-...-PPS          | 1219                                       | •                   |                     |                     | •                   |                     |
| DSNU-16-...-PPS-A        | 1212                                       | •                   |                     |                     | •                   |                     |
| DSNU-16-...-PPV-A        | 124                                        | •                   |                     |                     | •                   |                     |
| DSNU-16-...-PPV-A+FEN-GF | 237                                        | •                   |                     |                     | •                   |                     |
| DSNU-16-...-S-P-A        | 2312                                       |                     |                     |                     |                     |                     |
| DSNU-16-...-S-PPS-A      | 2313                                       |                     |                     |                     |                     |                     |
| DSNU-20-...-P-A          | 137                                        | •                   |                     |                     | •                   |                     |
| DSNU-20-...-P-A+FEN-GF   | 239                                        | •                   |                     |                     | •                   |                     |
| DSNU-20-...-P-A+FEN-KF   | 248                                        | •                   |                     |                     | •                   |                     |
| DSNU-20-...-PPS          | 1220                                       | •                   |                     |                     | •                   |                     |
| DSNU-20-...-PPS-A        | 1213                                       | •                   |                     |                     | •                   |                     |
| DSNU-20-...-PPV-A        | 139                                        | •                   |                     |                     | •                   |                     |
| DSNU-20-...-PPV-A+FEN-GF | 240                                        | •                   |                     |                     | •                   |                     |
| DSNU-20-...-S-P-A        | 2314                                       |                     |                     |                     |                     |                     |
| DSNU-20-...-S-PPS-A      | 2315                                       |                     |                     |                     |                     |                     |
| DSNU-25-...-P-A          | 138                                        | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-P-A+FEN-GF   | 242                                        | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-P-A+FEN-KF   | 251                                        | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-PPS          | 1221                                       | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-PPS-A        | 1214                                       | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-PPV-A        | 123                                        | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-PPV-A+FEN-GF | 241                                        | •                   | •                   |                     | •                   |                     |
| DSNU-25-...-S-P-A        | 2316                                       |                     |                     |                     |                     |                     |
| DSNU-25-...-S-PPS-A      | 2317                                       |                     |                     |                     |                     |                     |
| DSNU-32-...-P-A          | 833                                        | •                   | •                   |                     | •                   |                     |
| DSNU-32-...-PPS          | 1095                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-32-...-PPS-A        | 1215                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-32-...-PPV-A        | 837                                        | •                   | •                   |                     | •                   |                     |
| DSNU-40-...-P-A          | 834                                        | •                   | •                   |                     | •                   |                     |
| DSNU-40-...-PPS          | 1094                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-40-...-PPS-A        | 1216                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-40-...-PPV-A        | 838                                        | •                   | •                   |                     | •                   |                     |
| DSNU-50-...-P-A          | 835                                        | •                   | •                   |                     | •                   |                     |
| DSNU-50-...-PPS          | 1093                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-50-...-PPS-A        | 1217                                       | •                   | •                   | •                   | •                   |                     |
| DSNU-50-...-PPV-A        | 839                                        | •                   | •                   |                     | •                   |                     |
| DSNU-63-...-P-A          | 836                                        | •                   | •                   |                     | •                   |                     |

| Drive/volume                       | Value for system parameter<br>“drive type” | MA#07 <sup>2)</sup> | MA#08 <sup>3)</sup> | MA#11 <sup>4)</sup> | MA#12 <sup>5)</sup> | MA#33 <sup>6)</sup> |
|------------------------------------|--------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DSNU-63-...-PPS                    | 1082                                       | •                   | •                   |                     | •                   |                     |
| DSNU-63-...-PPS-A                  | 1218                                       | •                   | •                   |                     | •                   |                     |
| DSNU-63-...-PPV-A                  | 840                                        | •                   | •                   |                     | •                   |                     |
| User-defined drive 1 <sup>7)</sup> | -2                                         |                     |                     |                     |                     |                     |
| User-defined drive 2 <sup>7)</sup> | -3                                         |                     |                     |                     |                     |                     |
| User-defined drive 3 <sup>7)</sup> | -4                                         |                     |                     |                     |                     |                     |
| User-defined drive 4 <sup>7)</sup> | -5                                         |                     |                     |                     |                     |                     |
| User-defined drive 5 <sup>7)</sup> | -6                                         |                     |                     |                     |                     |                     |
| User-defined drive 6 <sup>7)</sup> | -7                                         |                     |                     |                     |                     |                     |
| User-defined drive 7 <sup>7)</sup> | -8                                         |                     |                     |                     |                     |                     |
| User-defined drive 8 <sup>7)</sup> | -9                                         |                     |                     |                     |                     |                     |

Tab. 1 Supported Drives

<sup>1)</sup>For special applications, all selection options can be enabled for all Motion Apps by using the optional system setting “Access to extended drive list”.

<sup>2)</sup>MA#07: Motion App “Presetting of travel time”

<sup>3)</sup>MA#08: Motion App “Selectable pressure level (ECO)”

<sup>4)</sup>MA#11: Motion App “Soft stop”

<sup>5)</sup>MA#12: Motion App “Leakage diagnostics”

<sup>6)</sup>MA#33: Motion App “Positioning”

<sup>7)</sup>The possibility to select user-defined drives and the access to their definition is enabled by activating the optional system setting “Access to extended drive list”. Notes on the parameterisation of user-defined drives: see following section.

## Notes on the parameterisation of user-defined drives

To support special applications with drive combinations or drives that are not included in the list of supported drives, it is possible to store up to eight user-defined drives on the device. The physical properties of a user-defined drive are defined using the parameters for describing user-defined drives (→ Motion Terminal VTEM manual, function and parameterisation).

In general, the physical properties should be taken from the product data sheet of the drive to be used or determined by measurement. If some of the values cannot be determined, the corresponding parameters can be specified with a realistic approximate value within the required value range, depending on the relevance for the Motion App to be operated.

| Parameter                                       | Relevance and effect in case of incorrect parameterisation                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Piston diameter<br>(inner diameter of cylinder) | correct value required                                                                                                                                                                                                                                                                                                                                   |
| Piston rod diameter                             | correct value required;<br>value = 0 for rodless drives                                                                                                                                                                                                                                                                                                  |
| Piston mass                                     | irrelevant for operation with MA#08;<br>influence negligible with high load masses                                                                                                                                                                                                                                                                       |
| Piston rod mass                                 | irrelevant for operation with MA#08;<br>value = 0 for rodless drives;<br>influence negligible with high load masses                                                                                                                                                                                                                                      |
| Dead volume                                     | irrelevant for operation with MA#07, MA#11 or MA#12;<br>when operating with MA#08, inaccurate values reduce performance, especially when using large drives or short tubes;<br>when operating with MA#33, inaccurate values reduce positioning accuracy for target positions near the ends of the drive                                                  |
| Pneumatic conductance                           | irrelevant for operation with MA#07, MA#08, MA#11, MA#12 or MA#33;<br>realistic first estimation value: 10 l/(s × bar)                                                                                                                                                                                                                                   |
| Coulomb friction force                          | irrelevant for operation with MA#07, MA#08, MA#11 or MA#12;<br>when operating with MA#33, inaccurate values (up to about 50 % deviation) can be compensated for by identification of the friction as part of the teach-in run; greater deviations reduce the quality of the positioning movement;<br>realistic first estimation value: 20 ... 30 N       |
| Viscous friction coefficient                    | irrelevant for operation with MA#07, MA#08, MA#11 or MA#12;<br>when operating with MA#33, inaccurate values (up to about 50 % deviation) can be compensated for by identification of the friction as part of the teach-in run; greater deviations reduce the quality of the positioning movement;<br>realistic first estimation value: 20 ... 50 N/(m/s) |

| <b>Parameter</b>                        | <b>Relevance and effect in case of incorrect parameterisation</b>                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum impact energy                   | irrelevant for operation with MA#07, MA#08, MA#11 or MA#12; when operating with MA#33, too low values falsify the identification of both the dynamic sensor properties and the friction as part of the teach-in run and thus reduce the quality of the positioning movement; too high values can lead to increased impact velocities in the end positions during the teach-in run and thus increase the risk of a defect on the drive |
| Effective range of end position damping | irrelevant for operation with MA#07, MA#08, MA#11 or MA#12; when operating with MA#33, incorrect values falsify the identification of the friction as part of the teach-in run and thus reduce the quality of the positioning movement                                                                                                                                                                                                |

Tab. 2 Notes on the parameterisation of user-defined drives