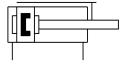
## Guided drive DFM-32-20-P-A-KF-F1A

Part number: 8118891







## **Data sheet**

Piston diameter  20 mm  32 mm  33 mm  34 mm  35 mm  35 mm  36 monthing position  36 perating position  36 perating position  37 perating position  38 perating pressure  39 perating pressure  30 perating pressure  30 perating medium  30 perating medium  30 perating and pilot medium  30 perating and pilot medium  30 perating and pilot medium  31 perating medium  32 perating pressure  33 perating medium  34 perating medium  35 perating perating and pilot medium  36 perating and pilot medium  36 perating and pilot medium  37 perating medium  38 perating medium  48 perating medium  48 perating medium  49 perating medium  40 perating and pilot medium  40 perating medium  40 perating and pilot medium  40 perating and pilot medium  40 perating medium perating perating medium p	Feature	Value
Departing mode, drive unit  Operating mode, drive unit  Operating mode, drive unit  Operating mode, drive unit  Operating position  Optional  Sociide  Recirculating ball bearing guide  Opesign  Optional  Opesign  Operating detection  Via proximity switch  Arriants  Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  Operating pressure  Operating pressure  Operating pressure  Operating pressure  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Operating medium  Corrosion resistance class CRC  Operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  Operating medium  Corrosion resistance class CRC  On corrosion stress  Corrosion resistance class CRC  On corrosion stress  Corrosion resistance class CRC  On corrosion stress  Corrosion series  Corrosion resistance class CRC  On corrosion stress  Corrosion resistance class CRC  On corrosion	Distance from centre of gravity of load to yoke plate xs	50 mm
Deparating mode, drive unit  Sude Substituting mode, drive unit  Sude Substituting position  Sudde Sesign Substituting ball bearing guide  Guidance  Via proximity switch  Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  O.15 MPa 1 MPa 1.5 bar 10 bar  Max. speed  O.8 m/s  Mode of operation  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Max. force Fy  1130 N  Max. force Fy  Max. force Fy  Max. force Fz  1130 N  Max. force Fz  Max. force Fz static  1260 N	Stroke	20 mm
Elastic cushioning ings/plates at both ends Mounting position optional Recirculating ball bearing guide Recirculating ball bearing guide Recirculating ball bearing guide Recirculating ball bearing guide Position detection Via proximity switch Variants Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Deparating pressure 0.15 MPa1 MPa 1.5 bar1 Ob bar  Max. speed 0.8 m/s  Double-acting Deparating medium Compressed air to ISO 8573-1:2010[7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Lubricated operation stress  ABS (PWIS) conformity VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class Class 7 according to ISO 14644-1  Ambient temperature  pact energy in end positions  AAX. force Fy 1130 N  Max. force Fy 1130 N  Max. force Fz Static 1260 N	Piston diameter	32 mm
Abounting position  Suide  Recirculating ball bearing guide  Recirculating ball bearing guide  Oesign  Guidance  Via proximity switch  Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  O.15 MPa1 MPa 1.5 bar10 bar  Max. speed  O.8 m/s  Double-acting  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Clear room class  Class 7 according to ISO 14644-1  Ambient temperature  Double-acting  Clear operation positions  O,4 Nm  Max. force Fy  1130 N  Max. force Fy  Max. force Fy  Max. force Fz static  1260 N	Operating mode, drive unit	Yoke
Recirculating ball bearing guide  Guidance  Position detection  Wia proximity switch  Metals with copper, zinc or nickel as main constituent are excluded fron use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  O.15 MPa1 MPa 1.5 bar10 bar  Max. speed  Mode of operation  Double-acting  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O · No corrosion stress  ABS (PWIS) conformity  VDMA24364-B1/B2-L  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  5° C60 °C  mpact energy in end positions  Max. force Fy  1130 N  Max. force Fz  Max. force Fz  1130 N  Max. force Fz  Max. force Fz  Max. force Fz  Max. force Fz Static  1260 N	Cushioning	Elastic cushioning rings/plates at both ends
Guidance Position detection Via proximity switch Variants Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steele, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure O.15 MPa1 MPa 1.5 bar10 bar  Max. speed O.8 m/s Operating medium Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress  VDMA24364-B1/B2-L  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class Class 7 according to ISO 14644-1  Ambient temperature S-6 C60 °C  mpact energy in end positions O, 4 Mm  Max. force Fy 1130 N  Max. force Fz	Mounting position	optional
Position detection  Via proximity switch  Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  O.15 MPa10 Mpa 1.5 bar10 bar  Max. speed  O.8 m/s  Double-acting  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  CABS (PWIS) conformity  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Clean room class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  O,4 Nm  Max. force Fy  1130 N  Max. force Fy  1130 N  Max. force Fz  1130 N  Max. force Fz  1130 N  Max. force Fz  Max. force Fz static  1260 N	Guide	Recirculating ball bearing guide
Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  O.15 MPa1 MPa 1.5 bar10 bar  Max. speed  Mode of operation  Double-acting  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  Max. force Fy 1130 N  Max. force Fz static	Design	Guidance
use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Deparating pressure  O.8 m/s  Max. speed  O.8 m/s  Mode of operation  Double-acting  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  ABS (PWIS) conformity  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  0,4 Nm  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz static  1260 N	Position detection	Via proximity switch
1.5 bar10 bar  Max. speed  0.8 m/s  Double-acting  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  0 - No corrosion stress  CABS (PWIS) conformity  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Cleanroom class  Cleanroom energy in end positions  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz static  1260 N	Variants	
Double-acting Operating medium Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress  ABS (PWIS) conformity VDMA24364-B1/B2-L Suitability for the production of Li-ion batteries Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils Cleanroom class Class 7 according to ISO 14644-1 Ambient temperature -5 °C60 °C mpact energy in end positions 0,4 Nm Max. force Fy 1130 N Max. force Fy static 1260 N Max. force Fz 1130 N Max. force Fz 1130 N Max. force Fz static	Operating pressure	
Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  ABS (PWIS) conformity  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  0,4 Nm  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz static	Max. speed	0.8 m/s
Lubricated operation possible (in which case lubricated operation will always be required)  Corrosion resistance class CRC  O - No corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  Max. force Fy  1130 N  Max. force Fz  1130 N  Max. force Fz tatic  1260 N	Mode of operation	Double-acting
always be required)  O - No corrosion stress  ABS (PWIS) conformity  VDMA24364-B1/B2-L  Suitability for the production of Li-ion batteries  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  Max. force Fy  1130 N  Max. force Fz  1130 N  Max. force Fz static  1260 N	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
ABS (PWIS) conformity  VDMA24364-B1/B2-L  Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  0,4 Nm  Max. force Fy  1130 N  Max. force Fz static  1260 N  Max. force Fz static  1260 N	Note on operating and pilot medium	
Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz static  1260 N	Corrosion resistance class CRC	0 - No corrosion stress
from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils  Cleanroom class  Class 7 according to ISO 14644-1  Ambient temperature  -5 °C60 °C  mpact energy in end positions  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz static  1260 N	LABS (PWIS) conformity	VDMA24364-B1/B2-L
Ambient temperature -5 °C60 °C  mpact energy in end positions 0,4 Nm  Max. force Fy 1130 N  Max. force Fy static 1260 N  Max. force Fz tatic 1260 N	Suitability for the production of Li-ion batteries	from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and
mpact energy in end positions  0,4 Nm  Max. force Fy  1130 N  Max. force Fy static  1260 N  Max. force Fz  1130 N  Max. force Fz  1130 N	Cleanroom class	Class 7 according to ISO 14644-1
Max. force Fy       1130 N         Max. force Fy static       1260 N         Max. force Fz       1130 N         Max. force Fz static       1260 N	Ambient temperature	-5 °C60 °C
Max. force Fy static 1260 N Max. force Fz 1130 N Max. force Fz static 1260 N	Impact energy in end positions	0,4 Nm
Max. force Fz 1130 N Max. force Fz static 1260 N	Max. force Fy	1130 N
Max. force Fz static 1260 N	Max. force Fy static	1260 N
	Max. force Fz	1130 N
Max. moment Mx 44.09 Nm	Max. force Fz static	1260 N
	Max. moment Mx	44.09 Nm

Feature	Value
Max. torque Mx static	49.14 Nm
Max. moment My	18.66 Nm
Max. torque My static	20.79 Nm
Max. moment Mz	18.66 Nm
Max. torque Mz static	20.79 Nm
Max. permissible torque load Mx as a function of stroke	9.62 Nm
Max. effective load dependent upon stroke at defined distance xs	155 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	415 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	482 N
Moving mass	875 g
Product weight	1627 g
Centre of gravity of moving mass as a function of stroke	26.3 mm
alternative connections	See product drawing
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy
Material seals	NBR
Material housing	Wrought aluminium alloy
Material piston rod	High-alloy stainless steel