Parallel gripper DHPC-20-A-NC-Z-1 Part number: 8116833

Data sheet

Stroke per gripper jaws5 mmMax. replacement accuracy0.2 mmMax. angular gripper jaw backlash ax, ay0 degWax. gripper jaw backlash Sz0 mmRotationally symmetrical0.2 mmRotationally symmetrical0.02 mmNumber of gripper jaws2Drive systemPneumaticMouting positionoptionalMode of operationSingle-actingClosedClosedGripper functionParallelSripper force back-upDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosting frequency of gripper3 HzMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. consing time at 0.6 MPa (6 bar, 87 psi)86 msOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumCompressed air to ISO 8573-1:2010[7:4:4]Ambient temperature-0 vC60 °C	Feature	Value
Max. replacement accuracy 0.2 mm Max. angular gripper jaw backlash ax, ay 0 deg Max. gripper jaw backlash 5z 0 mm Rotationally symmetrical 0.2 mm Robustionally symmetrical 0.2 mm Robustionally symmetrical 0.2 mm Number of gripper jaws 2 Drive system Pneumatic Mounting position optional Mode of operation Single-acting Closed Gripper function Parallel Drive system During closing Design Connection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequence Suide Ball guide Position detection Via proximity switch Operating pressure 0.25 MPa0.8 MPa .2.5 bar 8 bar .36.25 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) 86 ms Min. conging time at 0.6 MPa (6 bar, 87 psi) 86 ms 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	Size	20
Max. angular gripper jaw backlash ax, ay 0 deg Max. gripper jaw backlash Sz 0 mm Rotationally symmetrical 0.2 mm Repetition accuracy, gripper 0.02 mm Number of gripper jaws 2 Drive system Pneumatic Mounting position optional Mode of operation Single-acting Closed Gripper function Parallel Gripper force back-up During closing Design Connection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide Position detection Via proximity switch Operating pressure 2.5 bar0.8 MPa 2.5 bar16 bri Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 ps) 86 ms Min. closing time at 0.6 MPa (6 bar, 87 ps) 36 ms Min. operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation opscible (in which case lubricated operation will always be required) Corrosion resistance class CRC 0 - No corrosion stress Not ecoles CRC Consolon resistance class	Stroke per gripper jaws	5 mm
Max. gripper jaw backlash Sz 0 mm Rotationally symmetrical 0.2 mm Repetition accuracy, gripper 0.02 mm Number of gripper jaws 2 Drive system Pneumatic Mounting position optional Mode of operation Single-acting Closed Gripper function Parallel Gripper force back-up During closing Design Connection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operate motion sequence Guide Ball guide Position detection Via proximity switch Operating pressure 0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 36 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 38 ms 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 0 - No corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Ambient temperature -10 °C60 °C	Max. replacement accuracy	0.2 mm
Rotationally symmetrical 0.2 mm Repetition accuracy, gripper 0.02 mm Number of gripper jaws 2 Drive system Pneumatic Mounting position optional Mode of operation Single-acting Closed Gripper function Parallel Gripper force back-up During closing Design Connection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide Position detection Via proximity switch Operating pressure 0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 36 ms Min. olign time at 0.6 MPa (6 bar, 87 psi) 38 ms 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 0 - No corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Ambient temperature -10 °C60 °C	Max. angular gripper jaw backlash ax, ay	0 deg
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Number of gripper jaws2Drive systemPneumaticMounting positionoptionalMode of operationSingle-acting ClosedGripper functionParallelGripper functionDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating pressure0.25 MPa08 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Rotationally symmetrical	0.2 mm
Drive systemPneumaticMounting positionoptionalMode of operationSingle-acting ClosedGripper functionParallelGripper force back-upDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompersed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Repetition accuracy, gripper	0.02 mm
Mounting positionoptionalMode of operationSingle-acting ClosedGripper functionParallelGripper force back-upDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Number of gripper jaws	2
Mode of operationSingle-acting ClosedGripper functionParallelGripper force back-upDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. closing time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Drive system	Pneumatic
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Gripper force back-upDuring closingDesignConnection via mounting spigot Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Mode of operation	
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Lever Side mounting method for gripper fingers Force pilot operated motion sequenceGuideBall guidePosition detectionVia proximity switchOperating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Gripper force back-up	During closing
Position detectionVia proximity switchOperating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Design	Lever Side mounting method for gripper fingers
Operating pressure0.25 MPa0.8 MPa 2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Guide	Ball guide
2.5 bar8 bar 36.25 psi116 psiMax. operating frequency of gripper3 HzMin. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Position detection	Via proximity switch
Min. opening time at 0.6 MPa (6 bar, 87 psi)86 msMin. closing time at 0.6 MPa (6 bar, 87 psi)38 msOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC0 - No corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °C	Operating pressure	2.5 bar8 bar
Min. closing time at 0.6 MPa (6 bar, 87 psi) 38 ms 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 0 - No corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Ambient temperature -10 °C60 °C	Max. operating frequency of gripper	3 Hz
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 0 - No corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Ambient temperature -10 °C60 °C	Min. opening time at 0.6 MPa (6 bar, 87 psi)	86 ms
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LABS (PWIS) conformity VDMA24364-B2-L Ambient temperature -10 °C60 °C	Note on operating and pilot medium	
Ambient temperature -10 °C60 °C	Corrosion resistance class CRC	0 - No corrosion stress
	LABS (PWIS) conformity	VDMA24364-B2-L
Total gripping force, opening, 0.6MPa (6bar, 87 psi) 170.9 N	Ambient temperature	-10 °C60 °C
	Total gripping force, opening, 0.6MPa (6bar, 87 psi)	170.9 N

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Feature	Value
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	85.5 N
Mass moment of inertia	0.574 kgcm ²
Max. force on gripper jaw Fz static	101.3 N
Max. torque at gripper Mx static	1.43 Nm
Max. torque at gripper My static	1.3 Nm
Max. torque at gripper Mz static	1.3 Nm
Product weight	270 g
Type of mounting	Either: Direct mounting via through-hole Direct mounting via thread On mounting frame Via through-hole and dowel pin Via female thread and dowel pin
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material housing	Anodised aluminium
Material gripper jaws	High-alloy stainless steel