## Pick and place machine HSW-12-AP-AW Part number: 562560



## **Data sheet**

size   12     dax. Incars stroke at 90° swivel angle   142/142 mm     daximum wait position module Z-stroke   15 mm     Seroke   80 mm 100 mm     ype code   HSW     Zushioning   Pneumatic shock absorber at both ends Soft characteristic curve     Adumting position   Any     Design   Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence     Position sensing   For proximity sensor     Operating presure   4 bar 8 bar     Minimum cycle time   0.8 s     Repetition accuracy end positions   +/ 0.02 mm     Operating medium   Compressed air as per ISO 8573-1:2010 [7:-+]     Information on operating and pilot media   Operation with oil lubrication possible (required for further use)     Max. torque Mx   1.5 Nm     Aax. torque Mx   1.5 Nm     Aax. torque Mx   1.5 Nm     Aax. payload   1 kg     Aaximum process fore in y direction   35 N     Product weight   3060 g     Yup of mounting   Yu a through-hole and centering sleeve     Wait position pneumatic connection   M5     Preumatic connection   M5	Feature	Value
Aax. linear stroke at 90° swivel angle   142/142 nm     Aaximum wait position module Z-stroke   15 mm     Stroke   80 mm 100 mm     Ype code   HSW     "ushioning   Pneumatic shock absorber at both ends Soft characteristic curve     Aounting position   Any     Design   Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence     Positively driven motion sequence   Por proximity sensor     Operating pressure   4 bar 8 bar     Advinum cycle time   0.8 s     Repetition accuracy end positions   +/-0.02 mm     Operating medium   Coperation with oil lubrication possible (required for further use)     Nak. torque MA   1.5 Nm     Aax. torque MA   1.5 Nm     Aax. torque MA   1.5 Nm     Aax. payload   1 kg     Aaximum process force in y direction   35 N     Product weight   3600 g     Ype of mounting   Via through-hole and centering sleeve     Wait position prometion   Mp5     Product weight   Mp6     Product weight   Mp6     Presenter Connection   Mp5     Presenterial	Working stroke	15 mm 25 mm
Haximum wait position module Z-stroke   15 mm     Pertoke   80 mm 100 mm     Ype code   HSW     Dushioning   Pneumatic shock absorber at both ends Soft characteristic curve     Mounting position   Any     Design   Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence     Position sensing   For proximity sensor     Operating pressure   4 bar 8 bar     Winimum cycle time   0.8 s     Poperating medium   Compressed ar as per ISO 8573-1:2010 [7:-:]     Information on operating and pilot media   Operation with oil lubrication possible (required for further use)     Nak. torque MX   1.5 Nm     Max. payload   1 kg     Maximum process force in y direction   35 N     Product weight   3060 g     Ype of mounting   Via through-hole and centering sleeve     Wait position pneumatic connection   M5     Presumatic connection   M5     Presumatic connection   M5     Stops material   High-alloy steel     Sta	Size	12
Estroke   80 mm 100 mm     type code   HSW     Dushioning   Pneumatic shock absorber at both ends Soft characteristic curve     Aounting position   Any     Design   Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence     Position sensing   For proximity sensor     Operating pressure   4 bar 8 bar     Winimum cycle time   0.8 s     Repetition accuracy end positions   +/-0.02 mm     Operating medium   Compressed air as per ISO 8573-1:2010 [7::]     Information on operating and pilot media   Operation with oil lubrication possible (required for further use)     Ax. torque MX   1.5 Nm     Ax. torque My   1.5 Nm     Ax. torque My   1.5 Nm     Ax. torque My   1.5 Nm     Asax, payload   1 kg     Aaxing   35 N     Theoretical force at 6 bar   35 N     Product weight   3606 g     Yope of mounting   Via through-hole and centering sleeve     Wait position pneumatic connection   M5     Stops material   High-alloy steel     Stops material   High-alloy steel     Base plate materia	Max. linear stroke at 90° swivel angle	142/142 mm
Type codeHSWCushioningPneumatic shock absorber at both ends Soft characteristic curveMounting positionAnyDesignInterar guide plus ball bearing Quarter turn actuator Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar 8 barMinimum cycle time0.8 sOperating mediumCompressed air as per ISO 8573-1:2010 [7:-:-]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Makinum process force in y direction0 * C 60 °CMax. torque MX1.5 NmMax. torque MZ1.5 NmMax. torque MZ1.5 NmMax. torque MZ35 NProtoction35 NProtoction35 NProtoctionM5ProtoctionM5Product weight3060 gYup of mountingVia through-hole and centering sleeveWait position preumatic connectionM5Preumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialWrought aluminum alloy AnodizedAnodizedWrought aluminum alloy Anodized	Maximum wait position module Z-stroke	15 mm
AutominingPneumatic shock absorber at both ends Soft characteristic curveAounting positionAnyDesignLinear guide plus ball bearing Quarter turn actuator Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar 8 barAlinimum cycle time0.8 sRepetition accuracy end positions+/-0.02 mmOperating and pilot mediaOperation with oil lubrication possible (required for further use)Minimum cycle time0.8 sRepetition accuracy end positions+/-0.02 mmSperating mediumCompressed air as per ISO 8573-1:2010 [7:+:]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Max. torque Mx1.5 NmMax. torque My1.5 NmMax. torque Mz1.5 NmMax. torque Mz1.5 NmMaximum process force in y direction35 NProduct weight3060 gYupe of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Pheumatic connectionM5Pheumatic connectionM5Brign agree place materialHigh-alloy steelBase plate materialWrought aluminum alloy Anodized	Z-stroke	80 mm 100 mm
Soft characteristic curve       Adounting position     Any       Design     Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence       Position sensing     For proximity sensor       Operating pressure     4 bar 8 bar       Minimum cycle time     0.8 s       Repetition accuracy end positions     +/-0.02 mm       Operating medium     Compressed air as per ISO 8573-1:2010 [7:-·-]       Information on operating and pilot media     Operation with oil lubrication possible (required for further use)       Nubbent temperature     0 °C 60 °C       Aax. torque Mx     1.5 Nm       Aax. torque My     1.5 Nm       Aax. torque My     1.5 Nm       Aax. torque My     35 N       Andarium process force in y direction     35 N       Product weight     3060 g       Yope of mounting     Yia through-hole and centering sleeve       Wait position pneumatic connection     M5       Ansuterial     High-alloy steel       Storge material     High-alloy steel       Storge paternal     Yoroght aluminum alloy Anodized	Type code	HSW
Design   Linear guide plus ball bearing Quarter turn actuator Positively driven motion sequence     Positively driven motion sequence   Positively driven motion sequence     Positively driven motion sequence   Positively driven motion sequence     Positively driven motion sequence   4 bar 8 bar     Alimimum cycle time   0.8 s     Repetition accuracy end positions   +/-0.02 mm     Operating medium   Compressed air as per ISO 8573-1:2010 [7:]     Information on operating and pilot media   Operation with oil lubrication possible (required for further use)     Ambient temperature   0 °C 60 °C     Aax. torque Mx   1.5 Nm     Aax. torque My   1.5 Nm     Aax. torque My   1.5 Nm     Aax. torque Mz   1.5 Nm     Max. torque MZ   1.5 Nm     Aax. torque MZ   1.5 Nm     Maxingun process force i	Cushioning	
Quarter turn actuator Positively driven motion sequencePosition sensingFor proximity sensorPoperating pressure4 bar 8 barMinimum cycle time0.8 sRepetition accuracy end positions+/-0.02 mmOperating mediumCompressed air as per ISO 8573-1:2010 [7:-:-]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Ambient temperature0 °C 60 °CMax. torque Mx1.5 NmAax. torque Mz1.5 NmAax. torque Mz1.5 NmMax. torque Mz1.5 NmAax. payload1 kgMaximum process force in y direction35 NYope of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Peneumatic connectionM5PoperatialHigh-alloy steelStops materialHigh-alloy steelStops materialWrought aluminum alloy AnodizedAnodizedWrought aluminum alloy Anodized	Mounting position	Any
Abprating pressure   4 bar 8 bar     Minimum cycle time   0.8 s     Repetition accuracy end positions   +/-0.02 mm     Operating medium   Compressed air as per ISO 8573-1:2010[7:-:-]     Information on operating and pilot media   Operation with oil lubrication possible (required for further use)     Ambient temperature   0 °C 60 °C     Max. torque Mx   1.5 Nm     Max. torque My   1.5 Nm     Max. torque Mz   1.5 Nm     Max. payload   1 kg     Maximum process force in y direction   35 N     Product weight   3060 g     Ype of mounting   Via through-hole and centering sleeve     Wait position pneumatic connection   M5     Prenumatic connection   M5     Stops material   High-alloy steel     Spring pressure piece material   Wrought aluminum alloy Anodized     Retaining bracket material   Wrought aluminum alloy Anodized	Design	Quarter turn actuator
Minimum cycle time0.8 sRepetition accuracy end positions+/-0.02 mmOperating mediumCompressed air as per ISO 8573-1:2010 [7:-:-]nformation on operating and pilot mediaOperation with oil lubrication possible (required for further use)Ambient temperature0 °C 60 °CMax. torque Mx1.5 NmMax. torque My1.5 NmMax. torque Mz1.5 NmMax. torque Mz1.5 NmMax. torque Mz1.5 NmMax. payload1 kgMaximum process force in y direction35 N'reduct weight3060 g'ype of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Prenumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Position sensing	For proximity sensor
Repetition accuracy end positions+/-0.02 mmOperating mediumCompressed air as per ISO 8573-1:2010 [7:-:]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Ambient temperature0 °C 60 °CMax. torque Mx1.5 NmMax. torque My1.5 NmMax. torque Mz1.5 NmMax. torque Mz1.5 NmMax. payload1 kgMaximum process force in y direction35 NTheoretical force at 6 bar35 NProduct weight3060 gYope of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Preumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Operating pressure	4 bar 8 bar
Operating mediumCompressed air as per ISO 8573-1:2010 [7:]nformation on operating and pilot mediaOperation with oil lubrication possible (required for further use)Ambient temperature0 °C 60 °CAax. torque Mx1.5 NmAax. torque My1.5 NmAax. torque Mz1.5 NmMax. torque Mz1.5 NmMax. payload1 kgMaximum process force in y direction35 NTheoretical force at 6 bar35 NProduct weight3060 gYope of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Preumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Minimum cycle time	0.8 s
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Max. torque Mz1.5 NmMax. payload1 kgMaximum process force in y direction35 NTheoretical force at 6 bar35 NProduct weight3060 gType of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Pneumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Max. torque Mx	1.5 Nm
Max. payload1 kgMaximum process force in y direction35 NTheoretical force at 6 bar35 NProduct weight3060 gType of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Pneumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialHigh-alloy steelBase plate materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Max. torque My	1.5 Nm
Maximum process force in y direction   35 N     Theoretical force at 6 bar   35 N     Product weight   3060 g     Type of mounting   Via through-hole and centering sleeve     Wait position pneumatic connection   M5     Preumatic connection   M5     Stops material   High-alloy steel     Spring pressure piece material   High-alloy steel     Base plate material   Wrought aluminum alloy Anodized     Retaining bracket material   Wrought aluminum alloy Anodized	Max. torque Mz	1.5 Nm
Theoretical force at 6 bar35 NProduct weight3060 gType of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Pneumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialHigh-alloy steelBase plate materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Max. payload	1 kg
Product weight3060 gType of mountingVia through-hole and centering sleeveNait position pneumatic connectionM5Pneumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialHigh-alloy steelBase plate materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Maximum process force in y direction	35 N
Type of mountingVia through-hole and centering sleeveWait position pneumatic connectionM5Pneumatic connectionM5Stops materialHigh-alloy steelSpring pressure piece materialHigh-alloy steelBase plate materialWrought aluminum alloy AnodizedRetaining bracket materialWrought aluminum alloy Anodized	Theoretical force at 6 bar	35 N
Wait position pneumatic connection   M5     Pneumatic connection   M5     Stops material   High-alloy steel     Spring pressure piece material   High-alloy steel     Base plate material   Wrought aluminum alloy Anodized     Retaining bracket material   Wrought aluminum alloy Anodized	Product weight	3060 g
Pneumatic connection   M5     Stops material   High-alloy steel     Spring pressure piece material   High-alloy steel     Base plate material   Wrought aluminum alloy Anodized     Retaining bracket material   Wrought aluminum alloy Anodized	Type of mounting	Via through-hole and centering sleeve
Stops material   High-alloy steel     Spring pressure piece material   High-alloy steel     Base plate material   Wrought aluminum alloy Anodized     Retaining bracket material   Wrought aluminum alloy Anodized	Wait position pneumatic connection	M5
Spring pressure piece material High-alloy steel   Base plate material Wrought aluminum alloy Anodized   Retaining bracket material Wrought aluminum alloy Anodized	Pneumatic connection	M5
Base plate material Wrought aluminum alloy Anodized Wrought aluminum alloy Anodized Wrought aluminum alloy Anodized	Stops material	High-alloy steel
Anodized   Retaining bracket material Wrought aluminum alloy   Anodized	Spring pressure piece material	High-alloy steel
Anodized	Base plate material	
Cross guide material Tempered steel	Retaining bracket material	
	Cross guide material	Tempered steel

**FESTO** 

Feature	Value
Swivel lever material	Case-hardened steel Burnished
Link material	Case-hardened steel Hardened
Sensor rail material	Wrought aluminum alloy Anodized
Fixed link material	Wrought aluminum alloy Anodized
Setting screw material	High-alloy steel