

# Pneumatic Parallel Grippers

## QPG 3-Finger

QPG is a universal three-finger centric gripper featuring high repeatability and long service life, suitable for a wide range of industrial applications.

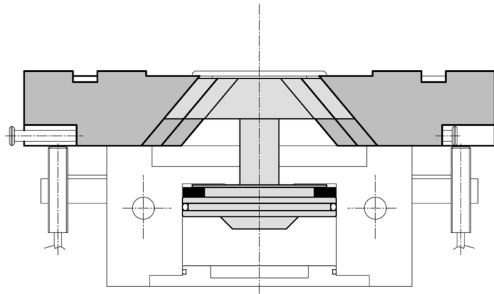
### Advantages

- Robust and lightweight housing made of hard-coated aluminum alloy.
- Sturdy T-slot with hardened steel gibs for effective jaw guidance, precise handling, and easy maintenance.
- Compact dimensions for minimal impact in space sensitive applications.
- Mounting from one side in two screw directions for versatile and flexible integration.
- Integrated permanent magnets for direct monitoring of piston movement.
- Slots for mounting and positioning of magnetic-field sensors.
- Air supply via hose-free direct connections or fitting screw connections.

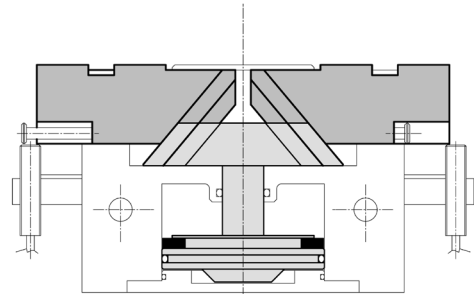


EFFECTO  
GROUP

## Open/Close Diagram

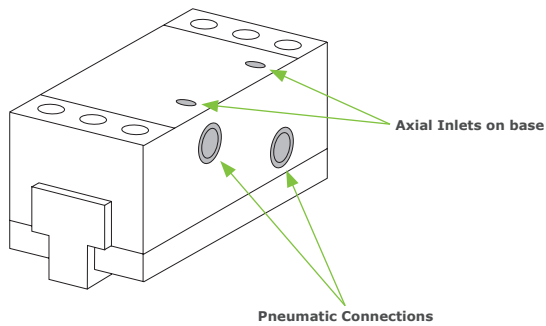


**OPEN**

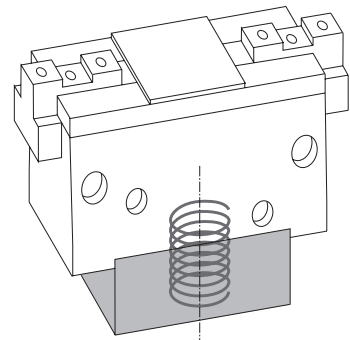


**CLOSED**

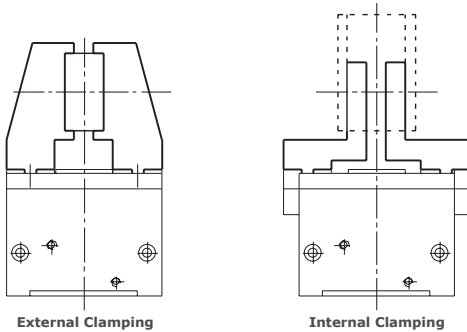
## Pneumatic Feed



## Force Maintenance Spring



## Gripping Diagram



External Clamping

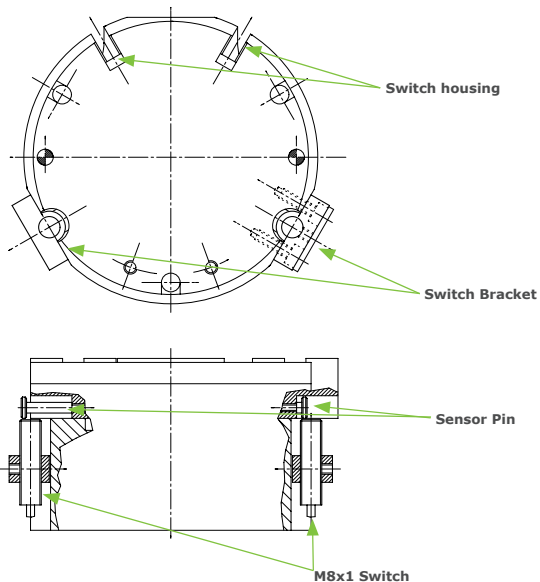
Internal Clamping

### Guidelines for the selection of a gripper model

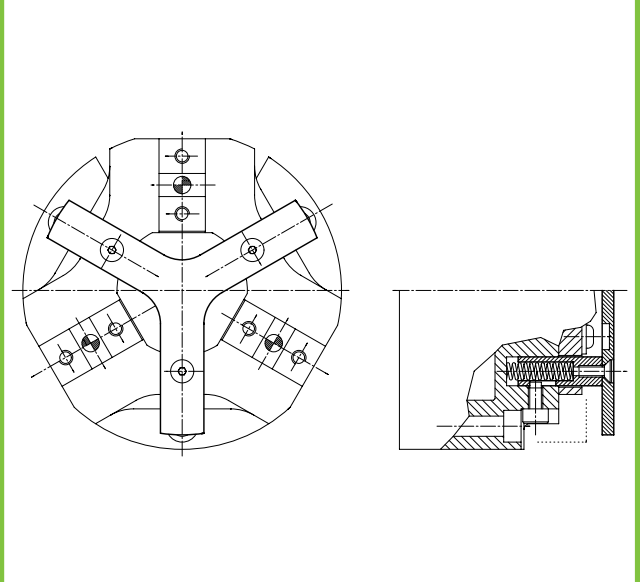
Selection of the correct gripper model depends on the workpiece's weight, the friction coefficient between the fingers and the workpiece and the required motion of the application. Due to inertial forces associated with motion, we recommend that the holding force of the gripper model should be from 10 to 20 times the workpiece's weight.

If the application presents high acceleration/deceleration or impacts during the motion, then a further safety margin should be considered.

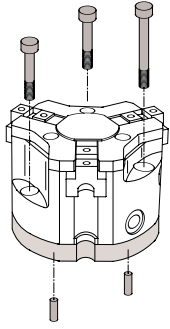
## Control Diagram



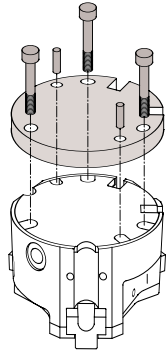
## Workpiece stabilizer



## Mounting

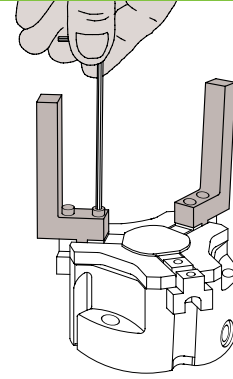


Axial Mounting - Upper Fixing

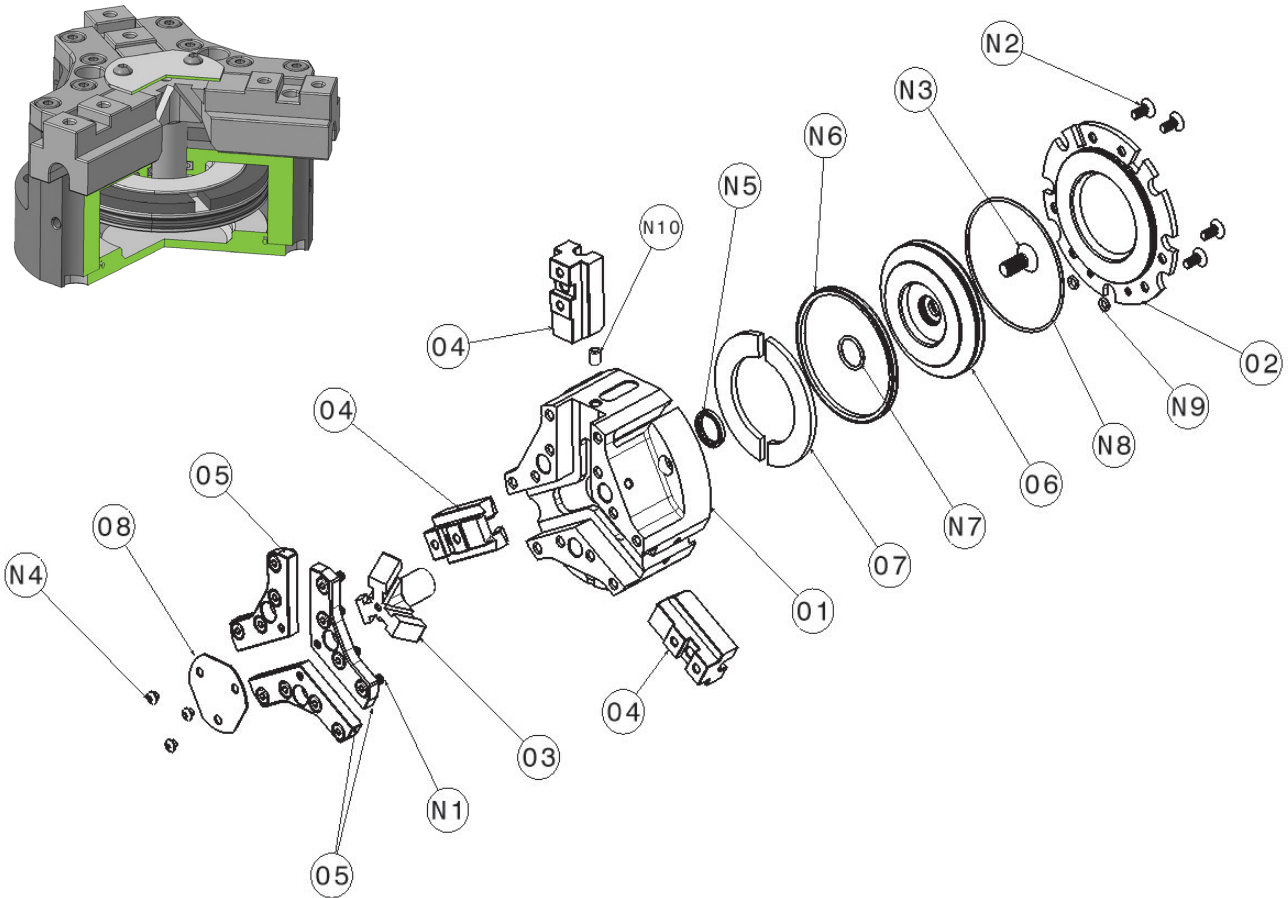


Axial Mounting - Bottom Fixing

## Fingers Mounting



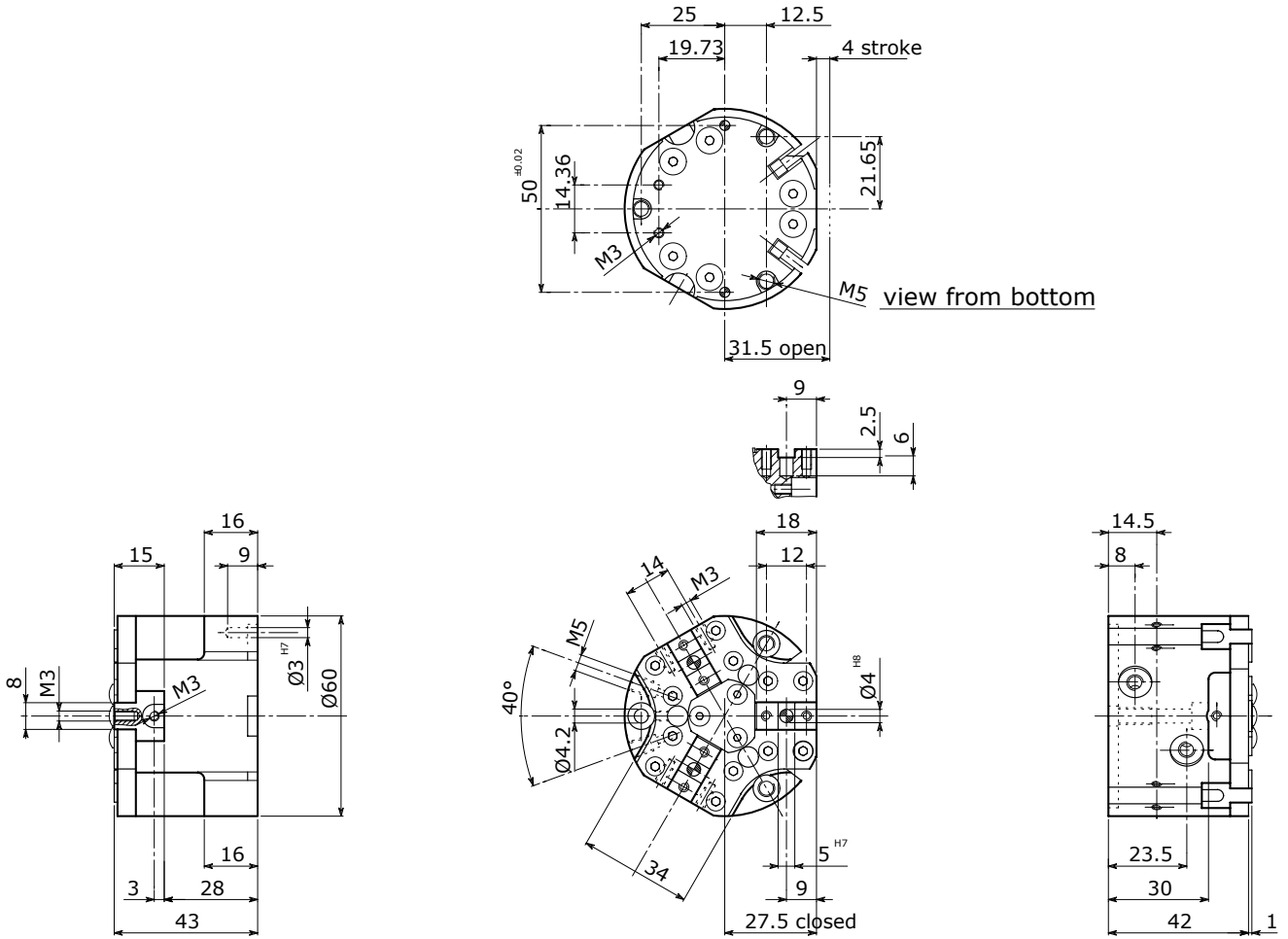
## Construction Diagram



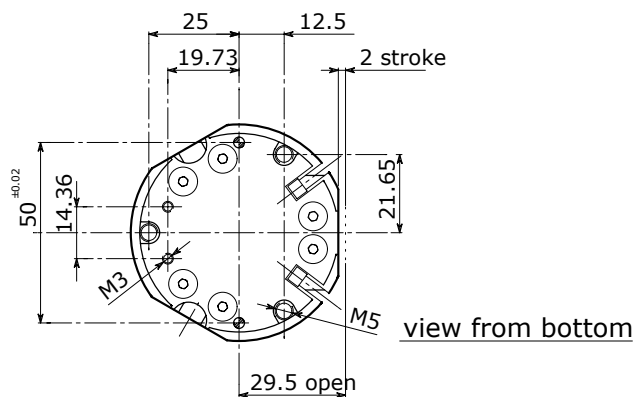
Nr.	Description	Material
01	BODY	Aluminum Alloy
02	CAP	Aluminum Alloy
03	WEDGE HOOK	Chrome Molybdenum Steel
04	JAW	Chrome Molybdenum Steel
05	GIB	Chrome Molybdenum Steel
06	PISTON	Aluminum Alloy
07	MAGNET	Rubber magnet
08	PLATE	Stainless Steel
N1	SCREW	Steel
N2	SCREW	Steel
N3	SCREW	Steel
N4	SCREW	Steel
N5	SHAFT SEAL	NBR
N6	EXT. PISTON SEAL	NBR
N7	INT. PISTON SEAL	NBR
N8	CAP SEAL	NBR
N9	AXIAL FEED SEAL	NBR
N10	LUBRICATOR	Brass



QPG 306



QPG 306 S



# TECHNICAL DATA

		QPG 306	QPG 306 S	QPG 306 NM	QPG 306 SM	QPG 306 NMA	QPG 306 SMA
Stroke per jaw	mm in	4 0.16	2 0.08	4 0.16	2 0.08	4 0.16	2 0.08
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	8.4 0.51	8.4 0.51	8.4 0.51	8.4 0.51	8.4 0.51	8.4 0.51
Closing force per jaw @ 6 bar	N lb	107 24	210 47	138 31	271 61	-	-
Opening force per jaw @ 6 bar	N lb	117 26	230 52	-	-	148 33	291 65
Total closing force @ 6 bar	N lb	321 72	630 142	414 93	813 183	-	-
Total opening force @ 6 bar	N lb	351 79	690 1559	-	-	444 100	873 196
True clamping force per jaw only with spring	N lb	-	-	31 - 43 7 - 10	61 - 85 14 - 19	31 - 43 7 - 10	61 - 85 14 - 19
Recommended workpiece weight	Kg lb	1.61 3.55	3.15 6.95	1.61 3.55	3.15 6.95	1.61 3.55	3.15 6.95
Weight	Kg lb	0.30 0.66	0.30 0.66	0.32 0.71	0.32 0.71	0.32 0.71	0.32 0.71
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

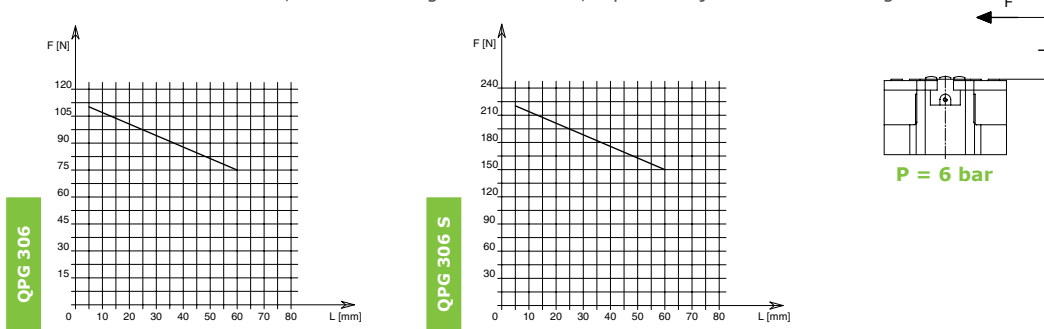
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

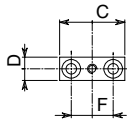
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

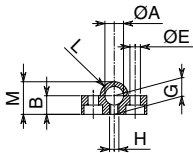


**F** = True clamping force per jaw - **L** = Reading distance  
Values read at a distance **L = 10 mm**

## Open-Closed Control Position with External Switches

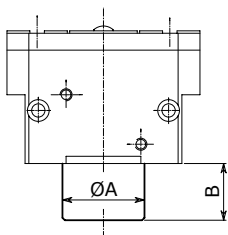


		A	B	C	D	E	F	G
<b>QPG 306/S</b>	mm	5	6	22	8	3.5	14	5.5
	in	0.2	0.2	0.9	0.3	0.1	0.6	0.2



		H	L	M
<b>QPG 306/S</b>	mm	M2.5	R4.5	10.5
	in			0.4

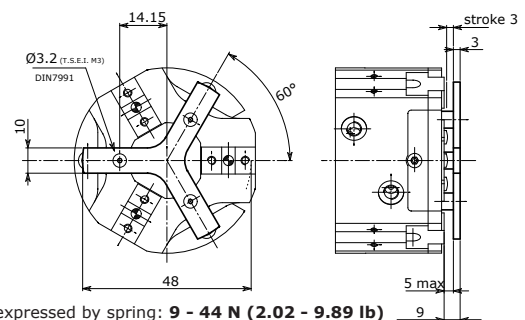
## Force Maintenance Spring



		A	B
<b>QPG 306/S</b>	mm	30	10.5
	in	1.2	0.4

Pressure **3 - 7 bar (43 - 101 psi)**

## Workpiece Stabilizer



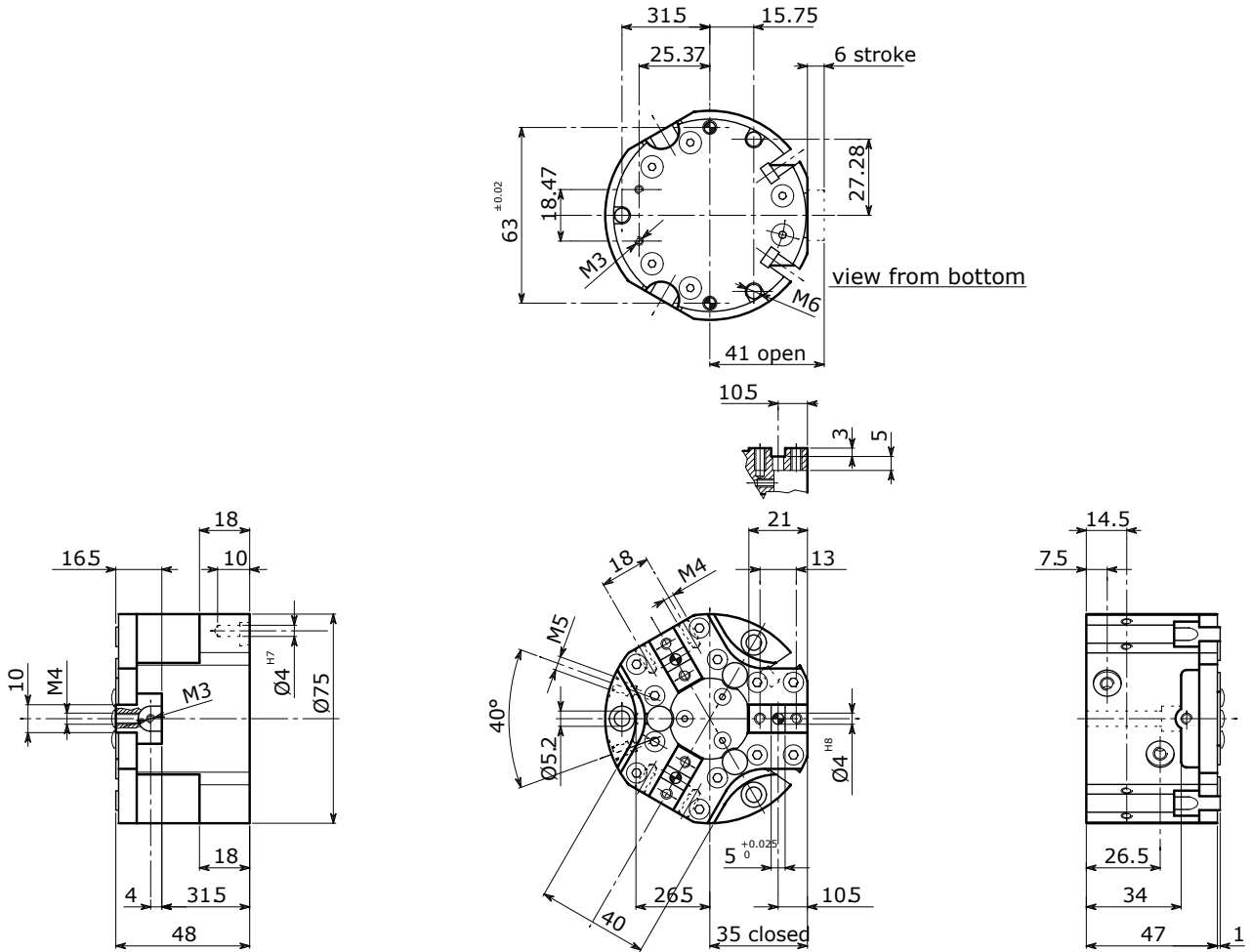
Force expressed by spring: **9 - 44 N (2.02 - 9.89 lb)**

# Dimensional Drawing

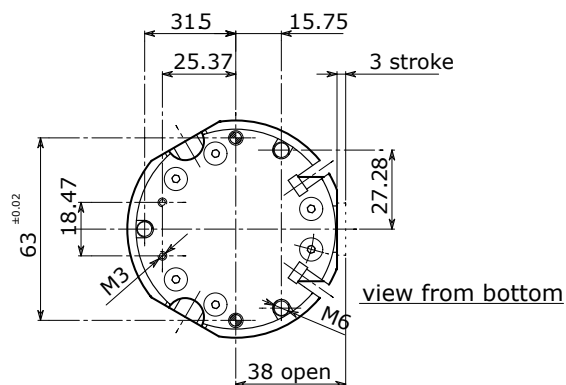


QPG 307

## QPG 307



## QPG 307 S



# TECHNICAL DATA

QPG 307

		QPG 307	QPG 307 S	QPG 307 NM	QPG 307 SM	QPG 307 NMA	QPG 307 SMA
Stroke per jaw	mm in	6 0.2	3 0.1	6 0.2	3 0.1	6 0.2	3 0.1
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	23.4 1.4	23.4 1.4	23.4 1.4	23.4 1.4	23.4 1.4	23.4 1.4
Closing force per jaw @ 6 bar	N lb	203 46	402 90	255 57	500 112	-	-
Opening force per jaw @ 6 bar	N lb	213 48	422 95	-	-	261 59	517 116
Total closing force @ 6 bar	N lb	609 137	1206 271	765 172	1500 337	-	-
Total opening force @ 6 bar	N lb	639 144	1266 285	-	-	783 176	1551 349
True clamping force per jaw only with spring	N lb	-	-	48 - 78 11 - 18	95 - 155 19 - 35	48 - 78 11 - 18	95 - 155 19 - 35
Recommended workpiece weight	Kg lb	3.05 6.72	6.03 13.29	3.05 6.72	6.03 13.29	3.05 6.72	6.03 13.29
Weight	Kg lb	0.68 1.50	0.68 1.50	0.74 1.63	0.74 1.63	0.74 1.63	0.74 1.63
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

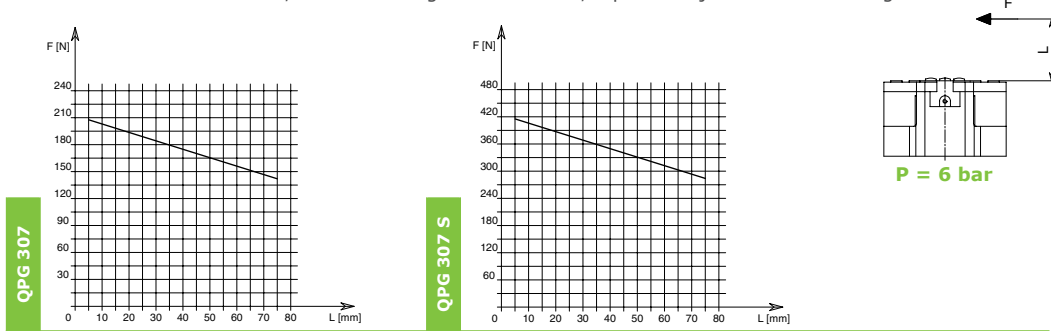
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

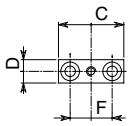
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

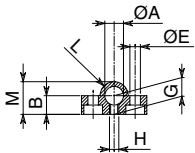


**F** = True clamping force per jaw - **L** = Reading distance  
Values read at a distance **L = 10 mm**

## Open-Closed Control Position with External Switches

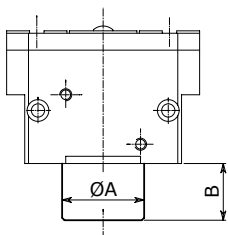


		A	B	C	D	E	F	G
<b>QPG 307/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 307/S</b>	mm	M4	R6	14
	in			0.6

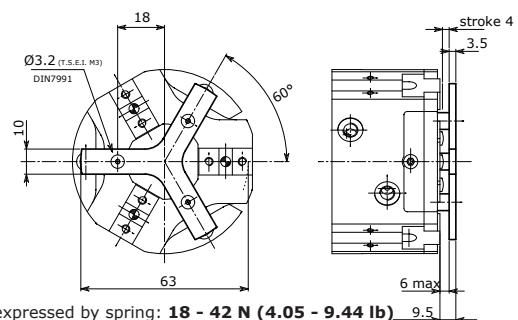
## Force Maintenance Spring



		A	B
<b>QPG 307/S</b>	mm	45	13.5
	in	1.8	0.5

Pressure **3 - 7 bar (43 - 101 psi)**

## Workpiece Stabilizer

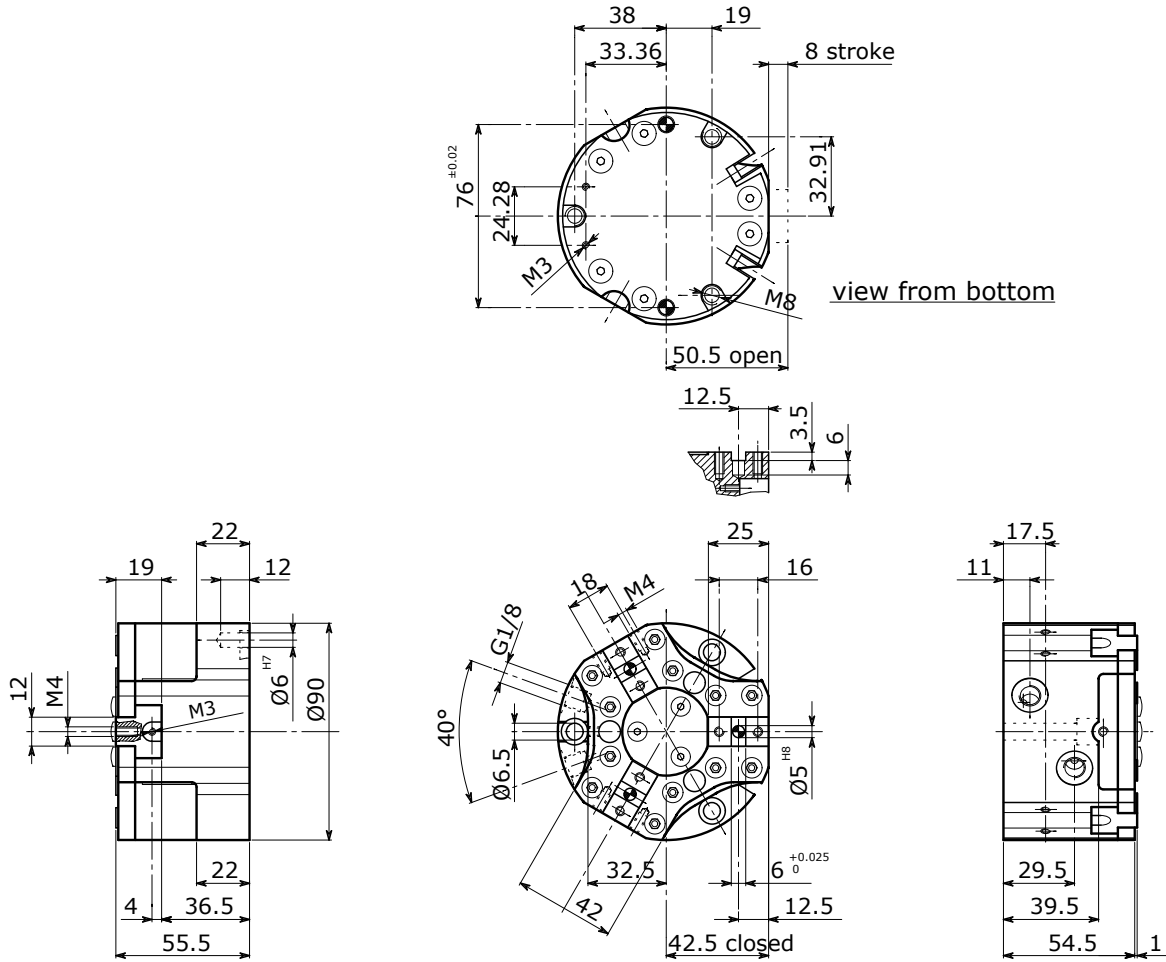


Force expressed by spring: **18 - 42 N (4.05 - 9.44 lb)**

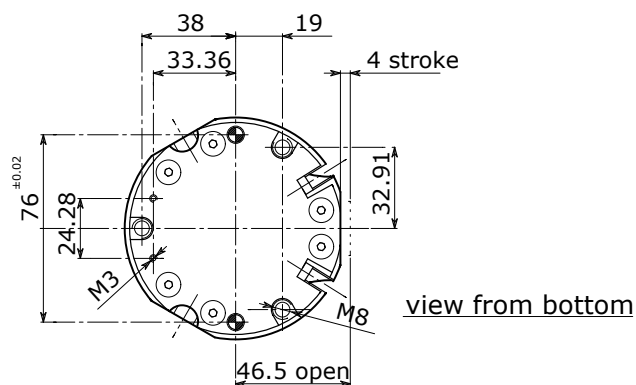
# Dimensional Drawing



## QPG 309



## QPG 309 S





# TECHNICAL DATA

QPG309

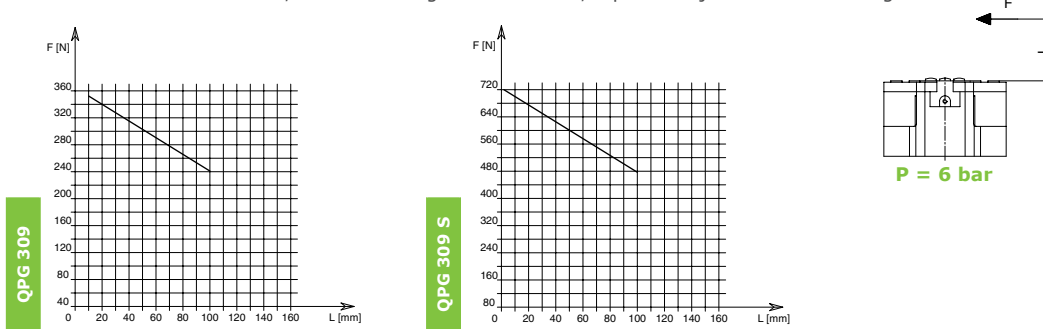
		QPG 309	QPG 309 S	QPG 309 NM	QPG 309 SM	QPG 309 NMA	QPG 309 SMA
Stroke per jaw	mm in	8 0.3	4 0.2	8 0.3	4 0.2	8 0.3	4 0.2
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	52.3 3.2	52.3 3.2	52.3 3.2	52.3 3.2	52.3 3.2	52.3 3.2
Closing force per jaw @ 6 bar	N lb	340 76	675 152	435 98	865 194	-	-
Opening force per jaw @ 6 bar	N lb	360 81	715 161	-	-	452 102	896 201
Total closing force @ 6 bar	N lb	1020 229	2025 455	1305 293	2595 583	-	-
Total opening force @ 6 bar	N lb	1080 243	2145 482	-	-	1356 305	2688 604
True clamping force per jaw only with spring	N lb	-	-	92 - 116 21 - 26	181 - 229 41 - 51	92 - 116 21 - 26	181 - 229 41 - 51
Recommended workpiece weight	Kg lb	5.10 11.24	10.13 22.33	5.10 11.24	10.13 22.33	5.10 11.24	10.13 22.33
Weight	Kg lb	1.00 2.20	1.00 2.20	1.13 2.49	1.13 2.49	1.13 2.49	1.13 2.49
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

Opening Pressure **2 - 8 bar (29 - 116 psi)**  
 Working Temperature **5 - 60 °C (41 - 140 °F)**  
 Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

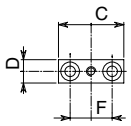
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

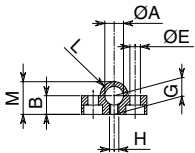


F = True clamping force per jaw - L = Reading distance  
 Values read at a distance **L = 20 mm**

## Open-Closed Control Position with External Switches

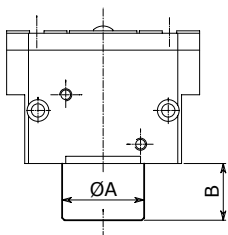


		A	B	C	D	E	F	G
<b>QPG 309/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 309/S</b>	mm	M4	R6	14
	in			0.6

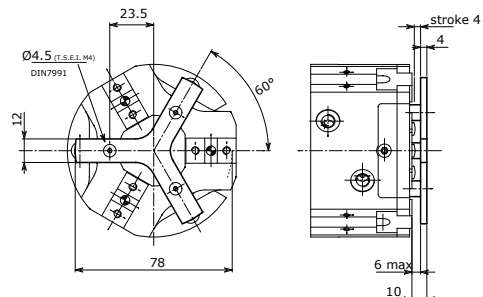
## Force Maintenance Spring



		A	B
<b>QPG 309/S</b>	mm	60	15
	in	2.4	0.6

Pressure **3 - 7 bar (43 - 101 psi)**

## Workpiece Stabilizer

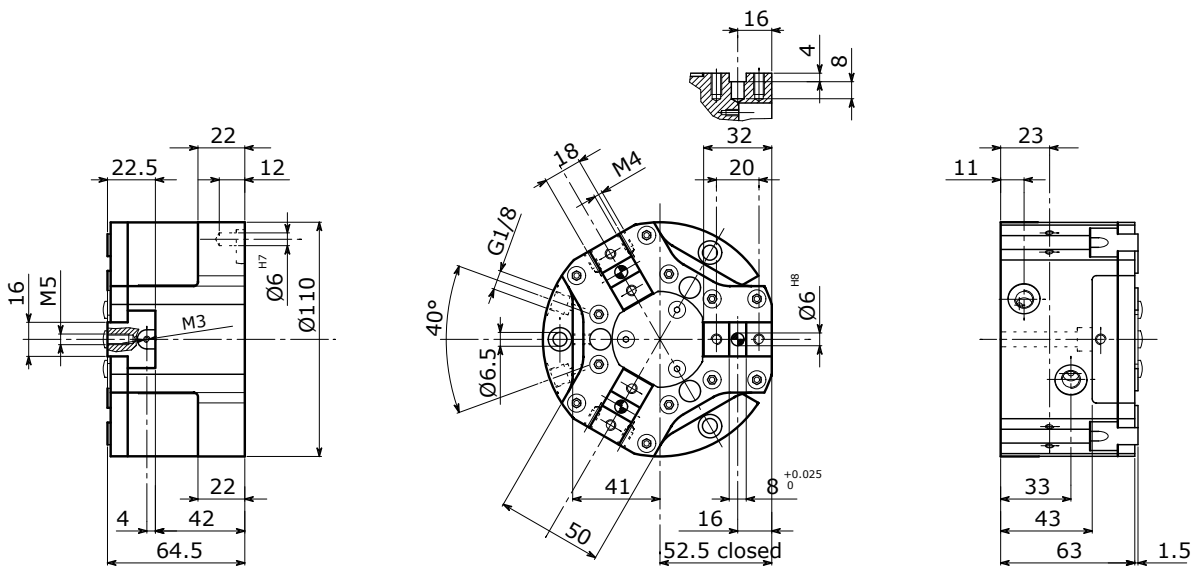
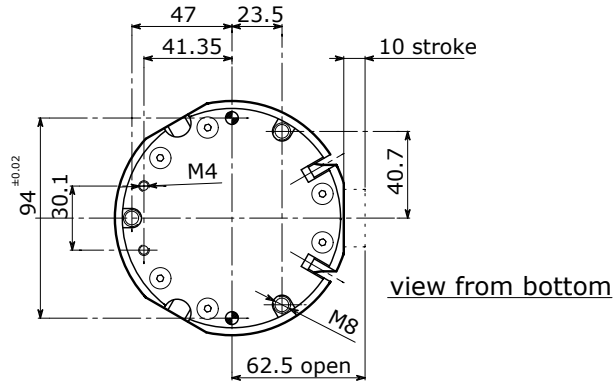


Force expressed by spring: **15 - 78 N (3.37 - 17.54 lb)**

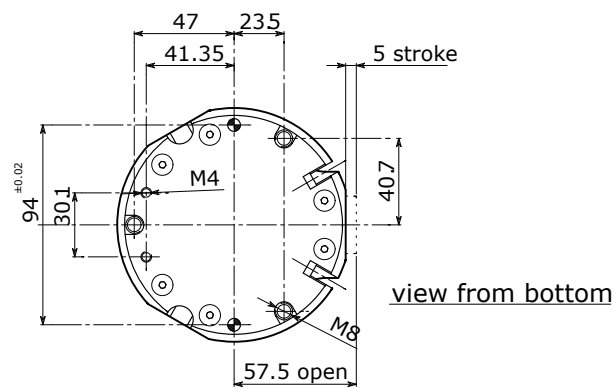
# Dimensional Drawing



## QPG 311



## QPG 311 S



# TECHNICAL DATA

		QPG 311	QPG 311 S	QPG 311 NM	QPG 311 SM	QPG 311 NMA	QPG 311 SMA
Stroke per jaw	mm in	10 0.4	5 0.2	10 0.4	5 0.2	10 0.4	5 0.2
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	108 6.6	108 6.6	108 6.6	108 6.6	108 6.6	108 6.6
Closing force per jaw @ 6 bar	N lb	565 127	1117 251	705 158	1395 314	-	-
Opening force per jaw @ 6 bar	N lb	590 133	1168 263	-	-	726 163	1437 323
Total closing force @ 6 bar	N lb	1695 381	3351 753	2115 475	4185 941	-	-
Total opening force @ 6 bar	N lb	1770 398	3504 788	-	-	2178 490	4311 969
True clamping force per jaw only with spring	N lb	-	-	136 - 210 31 - 47	269 - 416 60 - 94	136 - 210 31 - 47	269 - 416 60 - 94
Recommended workpiece weight	Kg lb	8.48 18.70	16.76 36.95	8.48 18.70	16.76 36.95	8.48 18.70	16.76 36.95
Weight	Kg lb	1.60 3.52	1.60 3.52	1.81 3.99	1.81 3.99	1.81 3.99	1.81 3.99
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

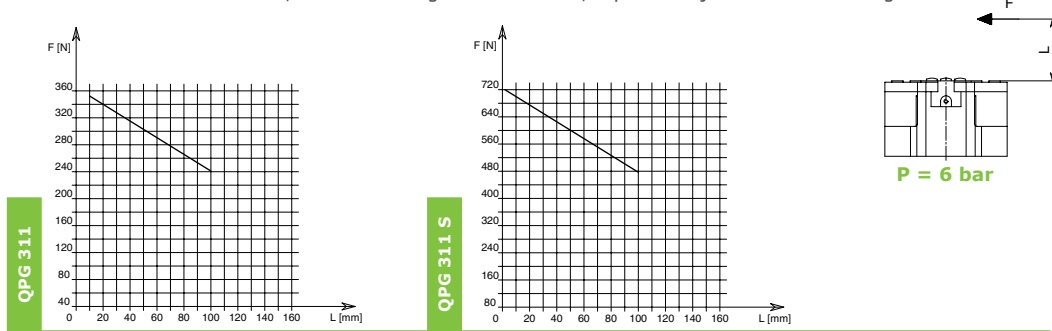
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

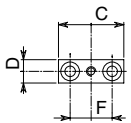
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

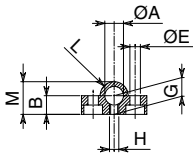


F = True clamping force per jaw - L = Reading distance  
Values read at a distance L = 20 mm

## Open-Closed Control Position with External Switches

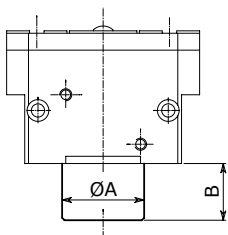


		A	B	C	D	E	F	G
<b>QPG 311/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 311/S</b>	mm	M4	R6	14
	in			0.6

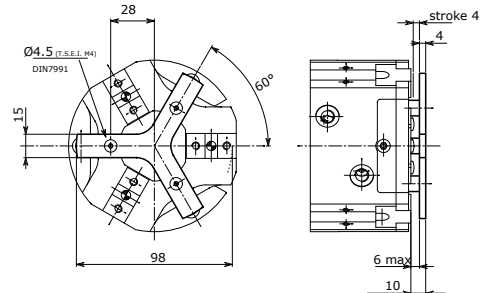
## Force Maintenance Spring



		A	B
<b>QPG 311/S</b>	mm	68	20
	in	2.7	0.8

Pressure **3 - 7 bar (43 - 101 psi)**

## Workpiece Stabilizer

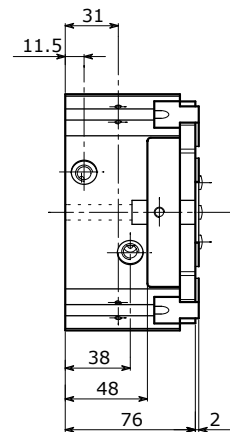
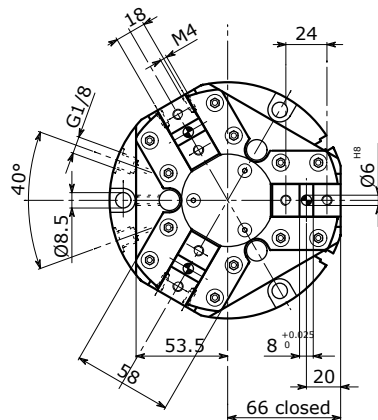
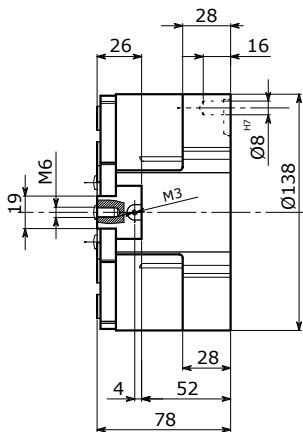
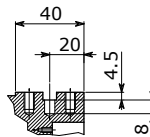
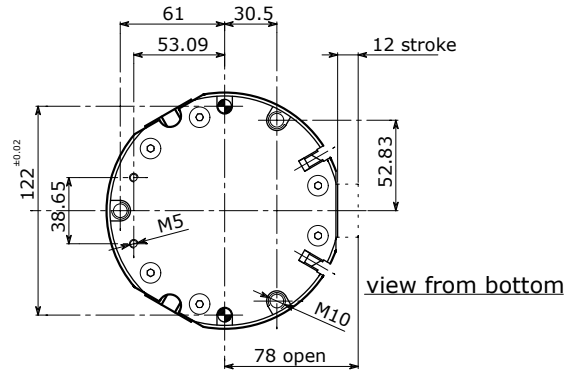


Force expressed by spring: **19 - 97 N (4.3 - 21.81 lb)**

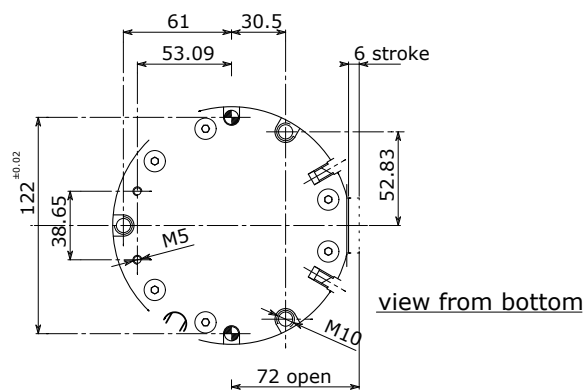
# Dimensional Drawing



## QPG 313



## QPG 313 S



# TECHNICAL DATA

		QPG 313	QPG 313 S	QPG 313 NM	QPG 313 SM	QPG 313 NMA	QPG 313 SMA
Stroke per jaw	mm in	12 0.5	6 0.2	12 0.5	6 0.2	12 0.5	6 0.2
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	225 13.7	225 13.7	225 13.7	225 13.7	225 13.7	225 13.7
Closing force per jaw @ 6 bar	N lb	983 221	1943 437	1225 275	2415 543	-	-
Opening force per jaw @ 6 bar	N lb	1010 117	1997 449	-	-	1244 280	2459 553
Total closing force @ 6 bar	N lb	2949 663	5829 1310	3675 826	7245 1629	-	-
Total opening force @ 6 bar	N lb	3030 681	5991 1347	-	-	3732 839	7377 1658
True clamping force per jaw only with spring	N lb	-	-	234 - 360 53 - 81	462 - 712 104 - 16	234 - 360 53 - 81	462 - 712 104 - 16
Recommended workpiece weight	Kg lb	14.75 32.52	29.15 64.26	14.75 32.52	29.15 64.26	14.75 32.52	29.15 64.26
Weight	Kg lb	2.80 6.16	2.80 6.16	3.25 7.17	3.25 7.17	3.25 7.17	3.25 7.17
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

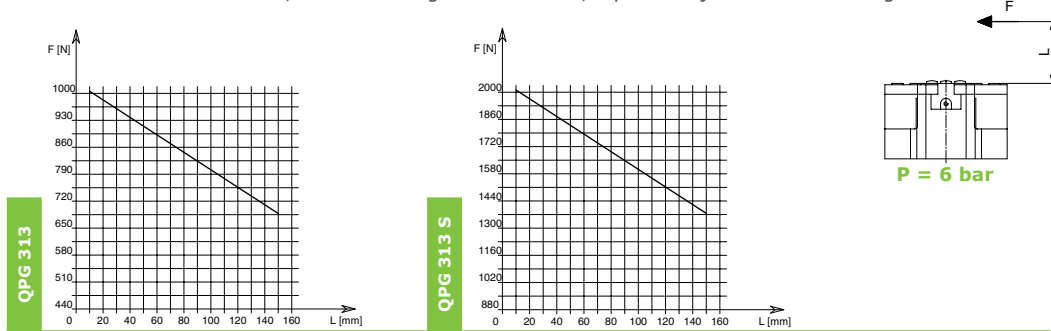
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

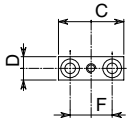
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

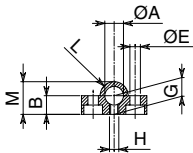


F = True clamping force per jaw - L = Reading distance  
Values read at a distance **L = 20 mm**

## Open-Closed Control Position with External Switches

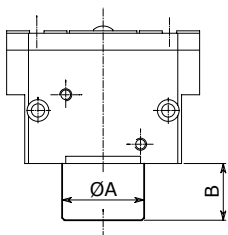


		A	B	C	D	E	F	G
<b>QPG 313/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 313/S</b>	mm	M4	R6	14
	in			0.6

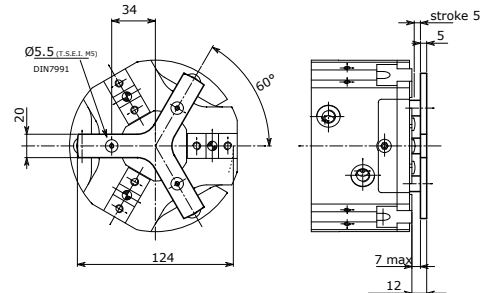
## Force Maintenance Spring



		A	B
<b>QPG 313/S</b>	mm	88	25
	in	3.5	1.0

Pressure **3 - 7 bar (43 - 101 psi)**

## Workpiece Stabilizer

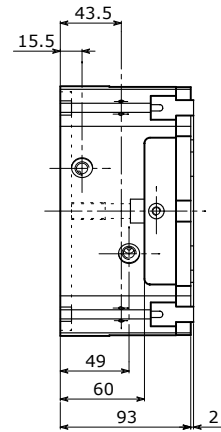
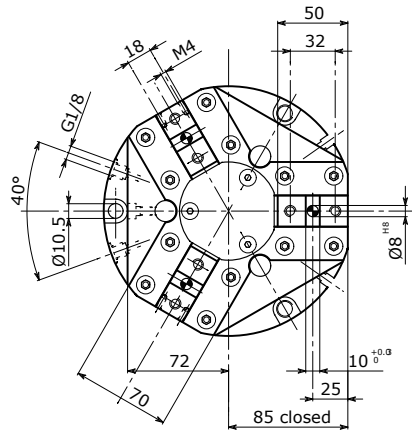
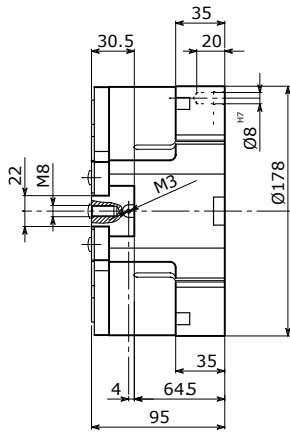
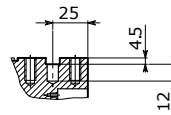
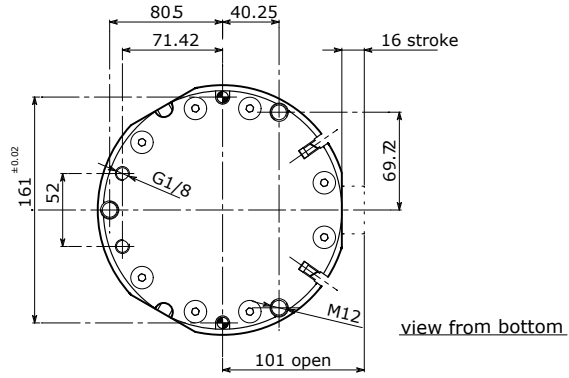


Force expressed by spring: **85 - 206 N (19.11 - 46.31 lb)**

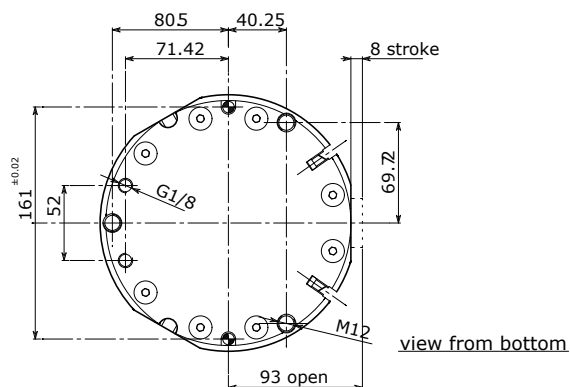
# Dimensional Drawing



## QPG 317



## QPG 317 S



# TECHNICAL DATA

		QPG 317	QPG 317 S	QPG 317 NM	QPG 317 SM	QPG 317 NMA	QPG 317 SMA
Stroke per jaw	mm in	16 0.6	8 0.3	16 0.6	8 0.3	16 0.6	8 0.3
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	549 33.5	549 33.5	549 33.5	549 33.5	549 33.5	549 33.5
Closing force per jaw @ 6 bar	N lb	1777 400	3513 790	2239 503	4427 995	-	-
Opening force per jaw @ 6 bar	N lb	1840 414	3638 818	-	-	2302 518	4552 1023
Total closing force @ 6 bar	N lb	5331 1198	10539 2369	6717 1510	13281 2986	-	-
Total opening force @ 6 bar	N lb	5520 1241	10914 2454	-	-	6906 1553	13656 3070
True clamping force per jaw only with spring	N lb	-	-	462 - 963 104 - 216	914 - 1905 206 - 428	462 - 963 104 - 216	914 - 1905 206 - 428
Recommended workpiece weight	Kg lb	26.66 58.78	52.70 116.18	26.66 58.78	52.70 116.18	26.66 58.78	52.70 116.18
Weight	Kg lb	6.00 13.20	6.00 13.20	7.30 16.09	7.30 16.09	7.30 16.09	7.30 16.09
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

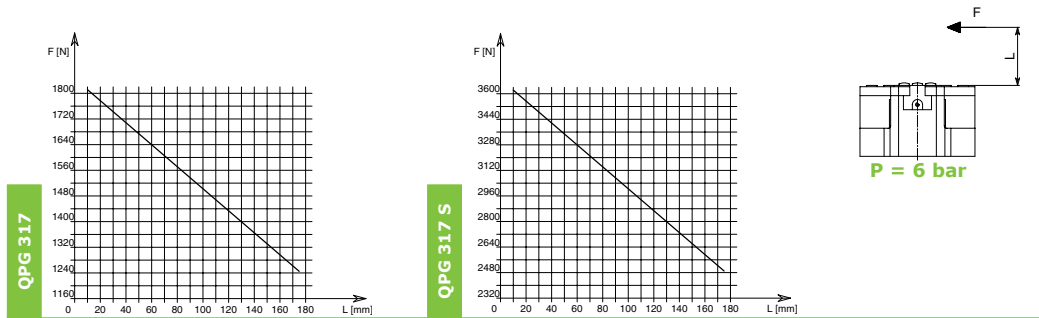
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

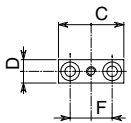
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

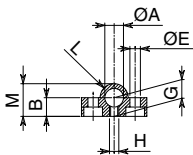


F = True clamping force per jaw - L = Reading distance  
Values read at a distance **L = 20 mm**

## Open-Closed Control Position with External Switches

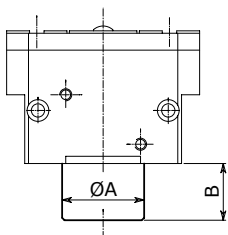


		A	B	C	D	E	F	G
<b>QPG 317/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 317/S</b>	mm	M4	R6	14
	in			0.6

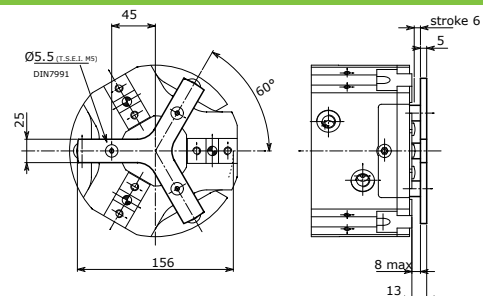
## Force Maintenance Spring



		A	B
<b>QPG 317/S</b>	mm	130	35
	in	5.1	1.4

Pressure **4 - 7 bar (58 - 101 psi)**

## Workpiece Stabilizer



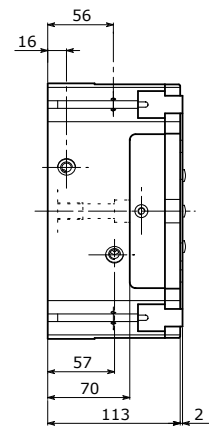
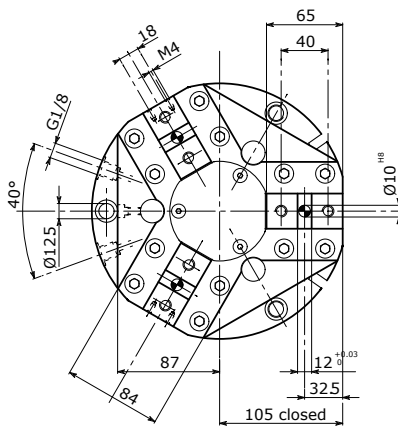
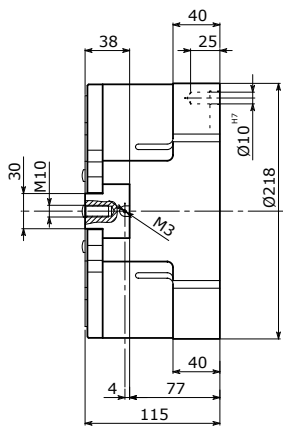
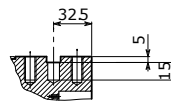
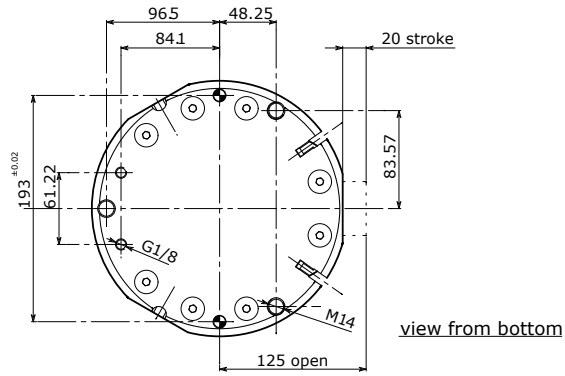
Force expressed by spring: **188 - 375 N (42.26 - 84.30 lb)**

QPG 317

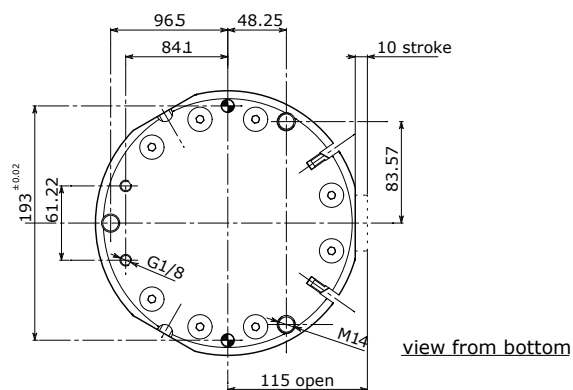
# Dimensional Drawing



## QPG 322



## QPG 322 S





# TECHNICAL DATA

		QPG 322	QPG 322 S	QPG 322 NM	QPG 322 SM	QPG 322 NMA	QPG 322 SMA
Stroke per jaw	mm in	20 0.8	10 0.4	20 0.8	10 0.4	20 0.8	10 0.4
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	949 57.9	949 57.9	949 57.9	949 57.9	949 57.9	949 57.9
Closing force per jaw @ 6 bar	N lb	2495 561	4932 1109	3211 722	6349 1427	-	-
Opening force per jaw @ 6 bar	N lb	2586 581	5112 1149	-	-	3302 742	6529 1468
Total closing force @ 6 bar	N lb	7485 1683	14796 3326	9633 2166	19047 4282	-	-
Total opening force @ 6 bar	N lb	7758 1744	15336 2448	-	-	9906 2227	19587 4403
True clamping force per jaw only with spring	N lb	-	-	716 - 1136 161 - 255	1417 - 2246 319 - 505	716 - 1136 161 - 255	1417 - 2246 319 - 505
Recommended workpiece weight	Kg lb	37.43 82.52	73.98 163.10	37.43 82.52	73.98 163.10	37.43 82.52	73.98 163.10
Weight	Kg lb	12.00 26.40	12.00 26.40	14.40 31.75	14.40 31.75	14.40 31.75	14.40 31.75
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

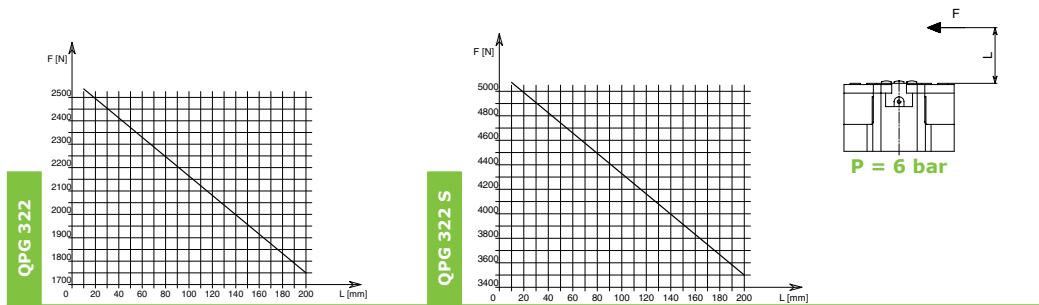
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

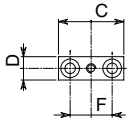
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

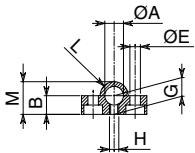


F = True clamping force per jaw - L = Reading distance  
Values read at a distance L = 20 mm

## Open-Closed Control Position with External Switches

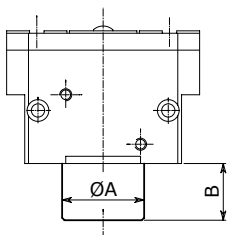


		A	B	C	D	E	F	G
<b>QPG 322/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 322/S</b>	mm	M4	R6	14
	in			0.6

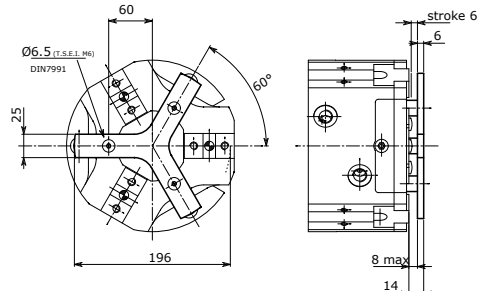
## Force Maintenance Spring



		A	B
<b>QPG 322/S</b>	mm	150	47
	in	6.0	1.9

Pressure **4 - 7 bar (58 - 101 psi)**

## Workpiece Stabilizer



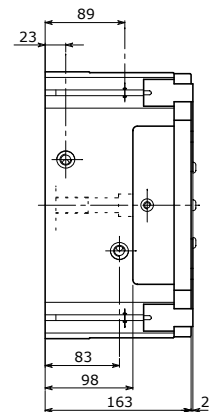
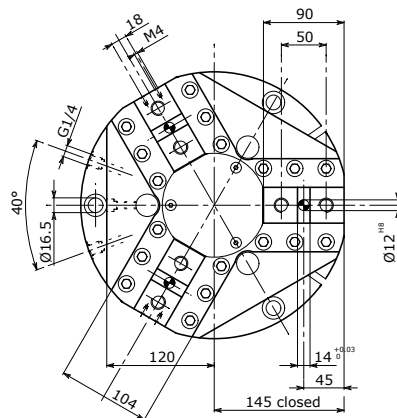
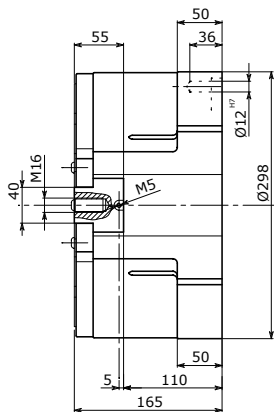
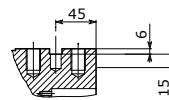
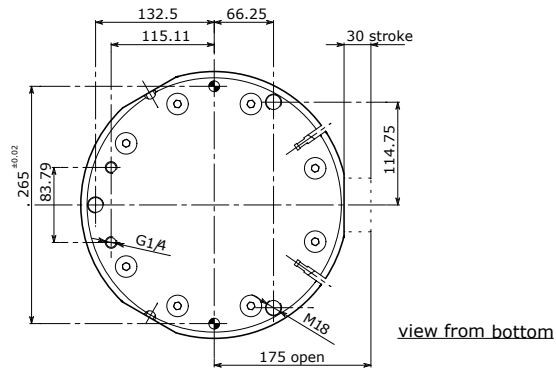
Force expressed by spring: **268 - 610 N (60.25 - 137.13 lb)**

QPG 322

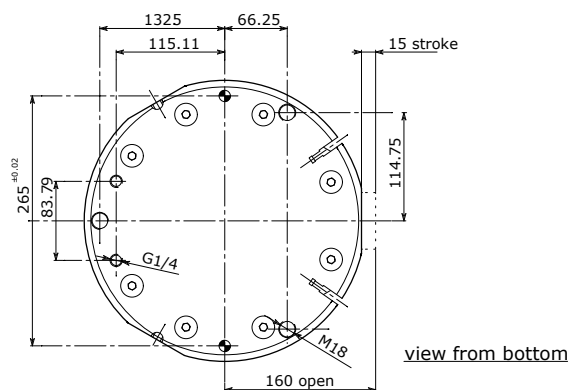
# Dimensional Drawing



## QPG 330



## QPG 330 S



# TECHNICAL DATA

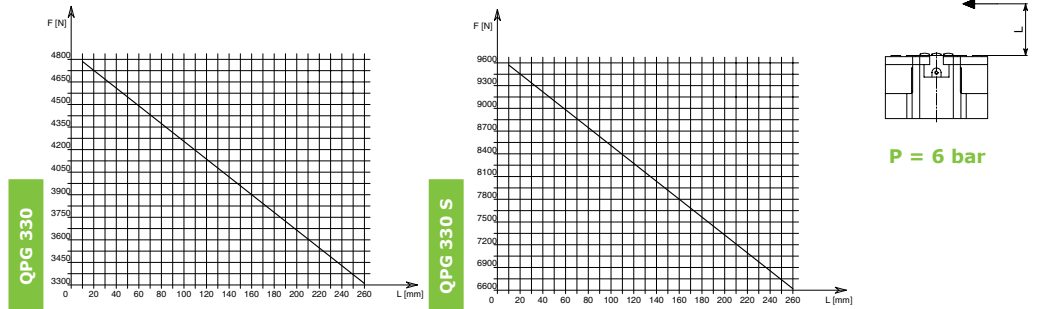
		QPG 330	QPG 330 S	QPG 330 NM	QPG 330 SM	QPG 330 NMA	QPG 330 SMA
Stroke per jaw	mm in	30 1.2	15 0.6	30 1.2	15 0.6	30 1.2	15 0.6
Fluid consumption double stroke	cm <sup>3</sup> in <sup>3</sup>	2692 164	2692 164	2692 164	2692 164	2692 164	2692 164
Closing force per jaw @ 6 bar	N lb	4727 1063	9343 2100	Special design, available only upon request			
Opening force per jaw @ 6 bar	N lb	4888 1099	9663 2172				
Total closing force @ 6 bar	N lb	14181 3188	28029 6301				
Total opening force @ 6 bar	N lb	14664 3297	28989 6517				
True clamping force per jaw only with spring	N lb	-	-				
Recommended workpiece weight	Kg lb	70.91 156.33	140.15 308.98				
Weight	Kg lb	30.00 66.00	30.00 66.00				
Repeat accuracy	mm in	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004	± 0.01 ± 0.0004

\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

Opening Pressure **2 - 8 bar (29 - 116 psi)**  
 Working Temperature **5 - 60 °C (41 - 140 °F)**  
 Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

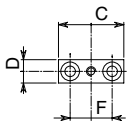
## Clamping Force Diagram

**Note:** "L" value, where the diagram's line ends, represents jaws' maximum length.

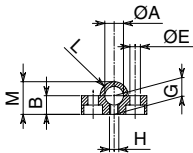


F = True clamping force per jaw - L = Reading distance  
 Values read at a distance L = 20 mm

## Open-Closed Control Position with External Switches

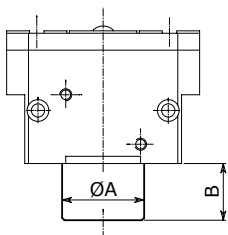


		A	B	C	D	E	F	G
<b>QPG 330/S</b>	mm	8	8	28	10	4.5	18	8
	in	0.3	0.3	1.1	0.4	0.2	0.7	0.3



		H	L	M
<b>QPG 330/S</b>	mm	M4	R6	14
	in			0.6

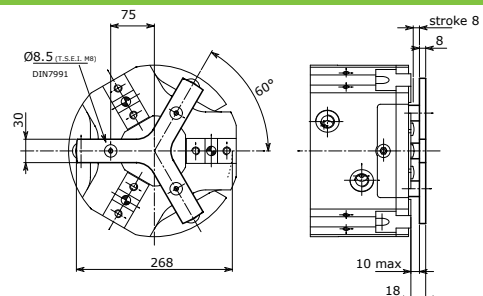
## Force Maintenance Spring



		A	B
<b>QPG 330/S</b>	mm	Special design, available only upon request	
	in		

Pressure **4 - 7 bar (58 - 101 psi)**

## Workpiece Stabilizer



Force expressed by spring: **268 - 610 N (60.25 - 137.13 lb)**



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