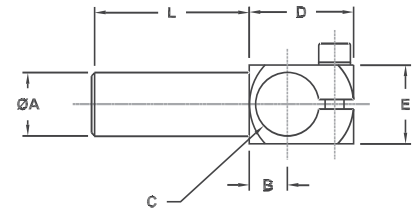
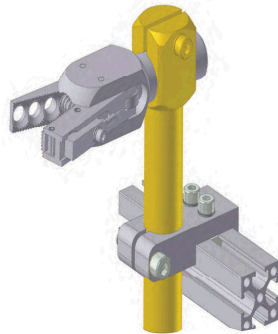




WKA... Angle Arm

WKA... Winkelarm
WKA...アングル アーム

- Extends and mounts components to mounting clamps
- Supplies 90° mounting with rotation

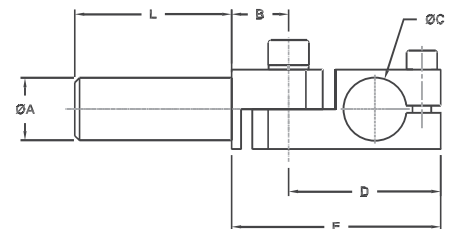
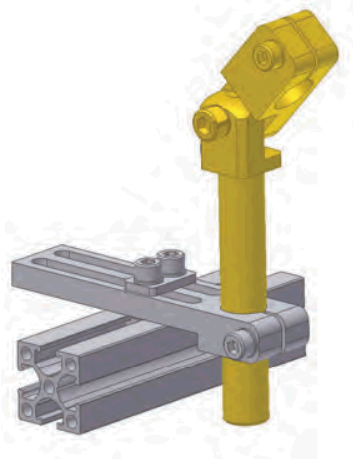


	A	B	C	D	E	L	Weight (g)	Price
WKA 10-90	10	13	10	20	16	90	22	\$16.75
WKA 14-120	14	9	14	25	22	120	21	\$20.50
WKA 20-150	20	21	20	33	25	150	92	\$27.50
WKA 30-200	30	30	30	48	32	200	224	\$32.25

GLA... Elbow Arm

GLA... Gelenkarm
GLA...エルボー アーム

- Angle adjustable elbow
- Useful for adjustment of GRZ gripper pliers and GRF gripper fingers



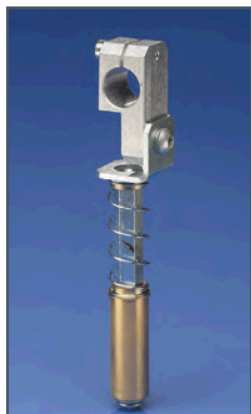
	A	B	C	D	E	L	Weight (g)	Price
GLA 10-90	10	11	10	27	40	90	36	\$19.00
GLA 14-120	14	16	14	43	54	120	70	\$28.15
GLA 20-150	20	18	20	46	64	150	150	\$38.50
GLA 20/30-150	20	17	30	52	77	150	193	\$42.75



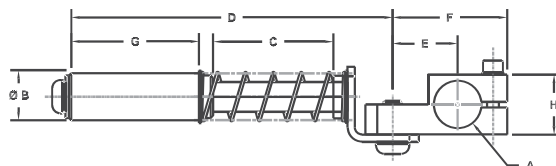
GGA... Spring Loaded Elbow Arm

GGA... Gelenkarm (gefedert)

GGA... スプリング負荷エルボ・アーム



- Angle adjustable elbow arm
- Spring loaded for part compliance

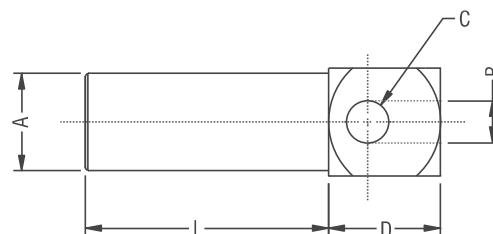
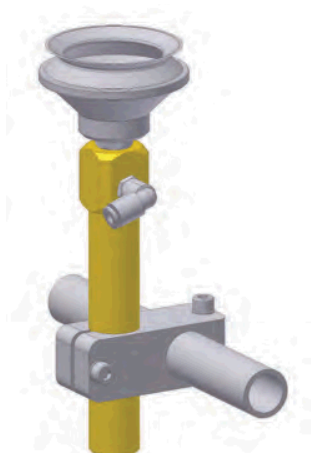


	A	B	C	D	E	F	G	H	Weight (g)	Price
GGA 14-C-15	14	14	15	75	23	40	32	19	109	\$50.00
GGA 14-C-40	14	14	40	100	23	40	32	19	121	\$50.00
GGA 20-C-20	20	20	20	107	28	49	55	25	278	\$56.00
GGA 20-C-50	20	20	50	137	28	49	55	25	311	\$59.00

GSE... Gripper Arm

GSE... Greifarm

GSE... ハンドアーム



- Extends and mounts vacuum cups to mounting clamps
- Side ported for quick-touch pneumatic hose connectors
- The recommended max torque is 50 in-lbs (5.6 N-m) on M5 screws when clamping on shafts.

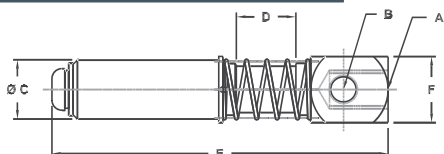
	A	B	C	D	L	Weight (g)	Price
GSE 10-M5-90	10	M5	M5	10	90	17	\$13.25
GSE 10-1/8-90	10	G 1/8"	M5	10	90	18	\$15.00
GSE 14-120	14	G 1/8"	G 1/8"	22	120	32	\$23.25
GSE 20-150	20	G 1/4"	G 1/8"	30	150	77	\$27.00
GSE 30-200	30	G 1/4"	G 1/4"	30	200	183	\$33.00
GSE 30-3/8-200	30	G 3/8"	G 1/4"	30	200	176	\$34.00



GAF... Spring Loaded Gripper Arm

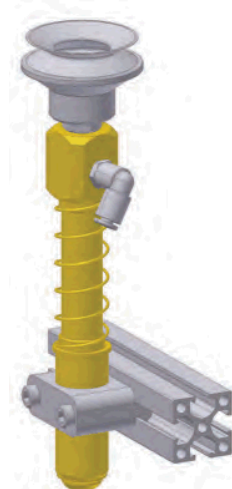
GAF... Greifarm gefedert
GAF... スプリングハンドアーム

- Extends and mounts vacuum cups to mounting clamps
- Side ported for quick-touch pneumatic hose connectors
- Spring-loaded for part compliance
- Available with clampable shaft (C) and threaded shaft (M)
- Threaded shafts include jam nuts and lock washers for plate mounting



C-Type	A	B	C	D	E	F	Weight (g)	Price
GAF 10-C-10	M5	M5	10	10	60	13	22	\$25.25
GAF 14-C-15	G 1/8"	G 1/8"	14	15	72	16	42	\$36.00
GAF 14-C-40	G 1/8"	G 1/8"	14	40	100	16	48	\$39.00
GAF 20-C-20	G 1/4"	G 1/8"	20	20	109	22	132	\$39.00
GAF 20-C-50	G 1/4"	G 1/8"	20	50	143	22	148	\$42.00
GAF 30-C-40	G 3/8"	G 1/4"	30	80	180	32	348	\$51.00
GAF 30-C-80	G 3/8"	G 1/4"	30	80	180	32	399	\$54.00

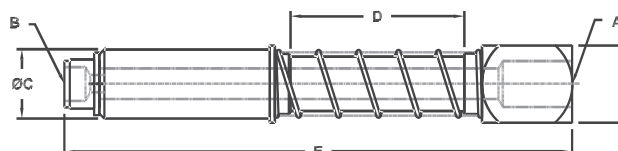
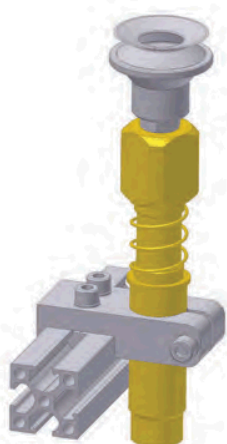
M-Type	A	B	C	D	E	F	Weight (g)	Price
GAF 10-M-10	M5	M5	M10 X 1	10	60	13	33	\$26.25
GAF 14-M-15	G 1/8"	G 1/8"	M14 X 1.5	15	72	16	55	\$36.75
GAF 14-M-40	G 1/8"	G 1/8"	M14 X 1.5	40	100	16	61	\$39.75
GAF 20-M-20	G 1/4"	G 1/8"	M20 X 1.5	20	109	22	154	\$40.00
GAF 20-M-50	G 1/4"	G 1/8"	M20 X 1.5	50	143	22	172	\$43.00
GAF 30-M-40	G 3/8"	G 1/4"	M30 X 1.5	40	152	32	432	\$53.00
GAF 30-M-80	G 3/8"	G 1/4"	M30 X 1.5	80	180	32	492	\$56.00



GEP... Spring Loaded Gripper Arm

GEP... Greifarm gefedert
GEP... スプリングハンドアーム

- Extends and mounts vacuum cups to mounting clamps
- End ported for quick-touch pneumatic hose connectors
- Spring-loaded for part compliance
- Available with clampable shaft (C) and threaded shaft (M)
- Threaded shafts include jam nuts and lock washers for plate mounting



C-Type	A	B	C	D	E	F	Weight (g)	Price
GEP 10-C-10	M5	M5	10	10	64	13	19	\$27.00
GEP 14-C-15	G 1/8"	M5	14	15	84	16	40	\$39.00
GEP 14-C-40	G 1/8"	M5	14	40	109	16	46	\$43.00
GEP 20-C-20	G 1/4"	G 1/8"	20	20	116	22	124	\$48.00
GEP 20-C-50	G 1/4"	G 1/8"	20	50	146	22	140	\$53.00

M-Type	A	B	C	D	E	F	Weight (g)	Price
GEP 10-M-10	M5	M5	M10 X 1	10	64	13	30	\$28.00
GEP 14-M-15	G 1/8"	M5	M14 X 1.5	15	84	16	53	\$39.75
GEP 14-M-40	G 1/8"	M5	M14 X 1.5	40	109	16	59	\$43.75
GEP 20-M-20	G 1/4"	G 1/8"	M20 X 1.5	20	116	22	148	\$49.00
GEP 20-M-50	G 1/4"	G 1/8"	M20 X 1.5	50	146	22	163	\$54.00



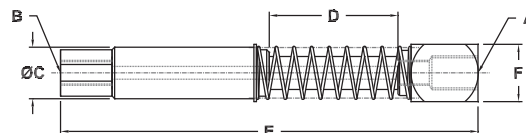
GNE... Non-Rotational Gripper Arm

GNE... Greifarm verdrehgesichert

GNE... 非回転式グリップアーム



- Extends and mounts vacuum cups to mounting clamps
- End ported for quick-touch pneumatic hose connectors
- When clamping shafts, maximum recommended torque on M5 clamping screws is 50 in-lbs (5.6 N-m)
- Available with clampable shaft (C) and threaded shaft (M)
- Threaded shafts include jam nuts and lock washers for plate mounting

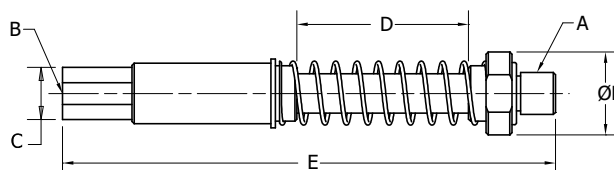


C-Type	A	B	ØC	D	E	F	Weight (g)	Price
GNE 14-C-15	G 1/8"	G 1/8"	14	15	93	16	65	\$42.50
GNE 14-C-40	G 1/8"	G 1/8"	14	40	118	16	72	\$45.00
GNE 20-C-20	G 1/4"	G 1/8"	20	20	132	22	206	\$48.00
GNE 20-C-50	G 1/4"	G 1/8"	20	50	162	22	234	\$53.50

	A	B	ØC	D	E	F	Weight (g)	Price
GNE 14-M-15	G 1/8"	G 1/8"	M14 x 1.5	15	93	16	76	\$43.50
GNE 14-M-40	G 1/8"	G 1/8"	M14 x 1.5	40	118	16	83	\$46.50

GSZ... Inline Spring Arm

GSZ... gefederter Angusszangenarm



Compatible with SAS GRZ 20-16... Sprue/Part Pliers, this spring loaded arm enables the GRZ to absorb the ejector stroke of the mold. Used when sprues and runner systems do not stay on the ejector pins after ejection from the mold.

Specifications:

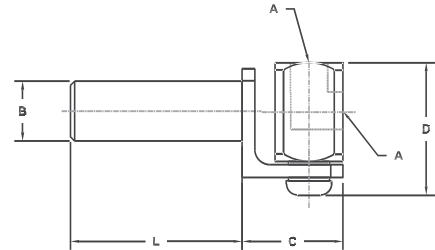
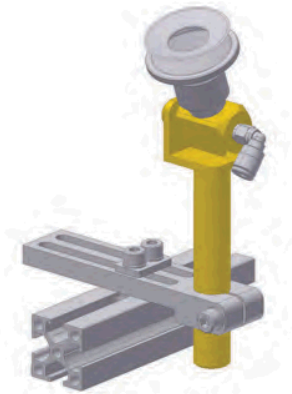
- Inline spring arm for GRZ 20-16... Part / Sprue Pliers
- End ported for quick- touch pneumatic hose connectors
- Available with clampable shafts (C) and threaded shaft (M)
- Threaded shafts include jam nut and lock washers for plate mounting

Type	A	B	C	D	E	F	G	Weight (g)	Price
GSZ 14-C-15	G 1/8	G 1/8	14	15	88	19	193	72	\$42.50
GSZ 14-C-40	G 1/8	G 1/8	14	15	113	19	217	68	\$45.50
GSZ 14-M-15	G 1/8	G 1/8	M14 x 1.5	40	88	19	193	72	\$43.50
GSZ 14-M-40	G 1/8	G 1/8	M14 x 1.5	40	113	19	217	80	\$46.50
GSZ 20-C-20	G 1/8	G 1/8	20	20	102	22	206	136	\$48.00
GSZ 20-M-20	G 1/8	G 1/8	M20 x 1.5	20	102	22	206	~	\$48.00



GGE... Elbow Gripper Arm

GGE... Gelenkgreifarm
GGE... センサー付ハンドアーム



- Extends and mounts vacuum cups to mounting clamps
- Side ported for quick-touch pneumatic hose connectors
- Top bracket adjusts angle to match contour of part
- When clamping shafts, maximum recommended torque on M5 clamping screws is 50 in-lbs (5.6 N-m)
- One-piece arm for high strength applications
- "Green" EOAT application

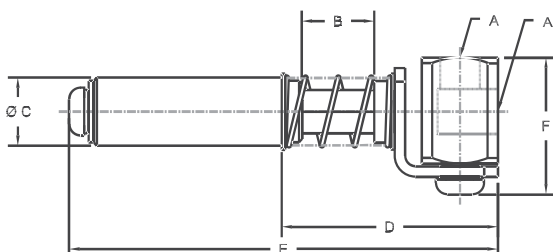
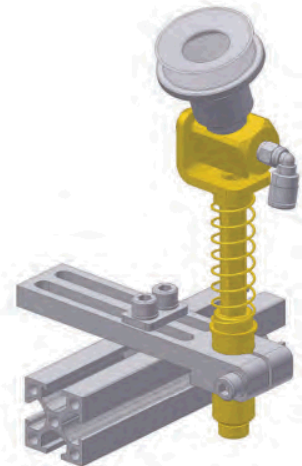
	A	B	C	D	L	Weight (g)	Price
GGE 10-90	M5	10	17	24	90	21	\$22.75
GGE 14-120	G 1/8"	14	24	31	120	45	\$32.00
GGE 20-150	G 1/4"	20	30	40	150	105	\$33.50
GGE 30-200	G 1/4"	30	33	45	200	181	\$44.25

GGs... Spring Loaded Non-Rotational Gripper Arm

GGs... Greifarm gefedert & verdrehgesichert



- Extends and mounts vacuum cups to mounting clamps
- SFX Type includes a proximity sensor for compliance and top of stack detection
- Side ported for quick-touch pneumatic hose connectors
- Top bracket adjusts angle to match contour of part
- Spring-loaded for part compliance
- Available with clampable shaft (C), threaded shaft (M), and Bearing Type (B)
- Threaded shafts include jam nuts and lock washers for plate mounting
- Bearing Type offers super smooth operation
- "Green" EOAT application



C-Type	A	B	C (Dia/Thread)	D	E	F	Weight (g)	Price
GGs 10-C-10	M5	10	10	34	64	22	34	\$33.50
GGs 14-C-15	G 1/8"	15	14	51	88	31	93	\$45.50
GGs 14-C-40	G 1/8"	40	14	76	113	31	105	\$49.25
GGs 14-C-40 SFX*	G 1/8"	40	14	76	113	31	~	\$158.60
GGs 20-C-20	G 1/4"	20	20	63	125	40	251	\$51.00
GGs 20-C-50	G 1/4"	50	20	93	155	40	283	\$54.00

** With RRK-TL-W3MB1 Sensor
See "Sensors, Connectors, and Accessories" section for sensor specifications and offerings.

M-Type	A	B	C (Dia/Thread)	D	E	F	Weight (g)	Price
GGs 10-M-10	M5	10	M10 X 1	34	64	22	46	\$34.75
GGs 14-M-15	G 1/8"	15	M14 X 1.5	51	88	31	104	\$46.50
GGs 14-M-40	G 1/8"	40	M14 X 1.5	76	113	31	117	\$48.50
GGs 20-M-20	G 1/4"	20	M20 X 1.5	63	125	40	275	\$52.75
GGs 20-M-50	G 1/4"	50	M20 X 1.5	93	155	40	307	\$55.25