

**GRIPPERS: ANGULAR, SEMI-PARALLEL, 180° ANGULAR, PARALLEL,
THREE FINGER ANGULAR**

SECTION 4

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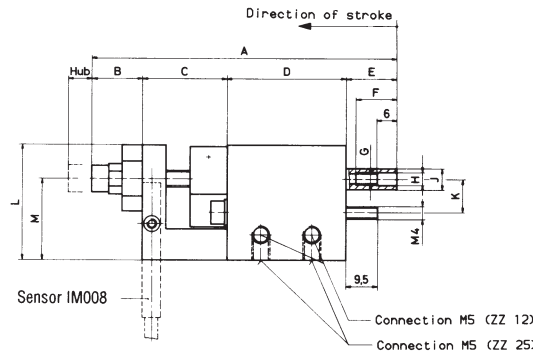
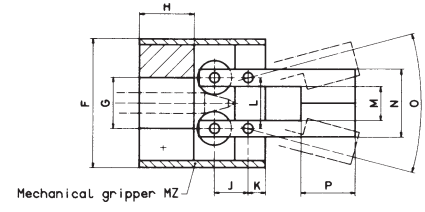
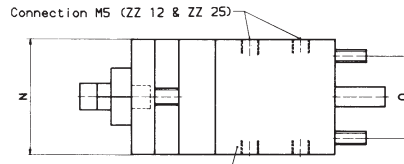
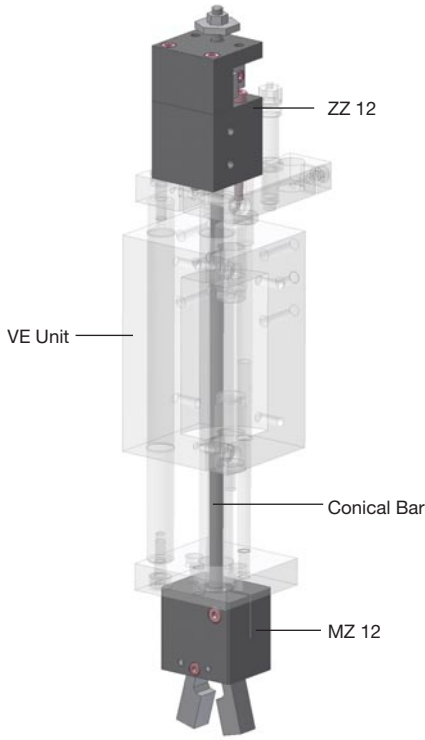
METO-FER USA

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1-888-638-6337

Mechanical Gripper (use with Hollow Shaft Units)

ZZ12 / ZZ25



Type	Piston force at 72.5 psi (5 bar)	Air consumption for each double stroke at 72.5 psi (5 bar)	Weight
ZZ 12	7 lb (31 N)	.00025 scf (0,007 NL)	.4 lb (0,2 kg)
ZZ 25	35 lb (154 N)	.00177 scf (0,05 NL)	1.1 lb (0,5 kg)

Type	Stroke	A	B	C	D	E	F	G	∅ H	∅ J	K	L	M	N	O
ZZ 12	0-7	90	15	25	35	15	12	M4	4 ^{+0,06} / _{+0,04}	6 ^{-0,010} / _{-0,025}	—	34	24	34	24
ZZ 25	0-10	94	9,5	29	45	10,5	14	M5	6 ^{+0,04} / _{+0,02}	10 ^{-0,005} / _{-0,020}	10	46	29	48	40

Order No. ZZ12 ZZ25

Sensor IM-008-NS-U2L (1 pc. to sense when gripper is closed)
 Order No. IM-008-PS-U2L

Technical data:

- Operating medium Compressed air oiled / not oiled
- Operating pressure 42.5 – 116 psi (3 – 8 bar)
- Air connection M5

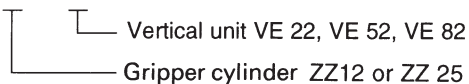
Mechanical gripper MZ

Typ	A	B	C	D	E	F	∅G	H	J	K	L	M	N	O	P	Weight	Clamping force at 72.5 psi (5 bar)	Order No.
MZ 12	63.5	37	26.5	10	30	38	15 - H7	16	10	5	15	10	20	29°	16	0.27 lb (0.12 kg)	4 lb (18 N)	MZ 12
MZ 25	114	57	57	20	40	60	20 - H7	19	20	6	30	20	40	23°	36	1.45 lb (0.66 kg)	20 lb (90 N)	MZ 25

Mechanical gripper for vertical units

Order No.

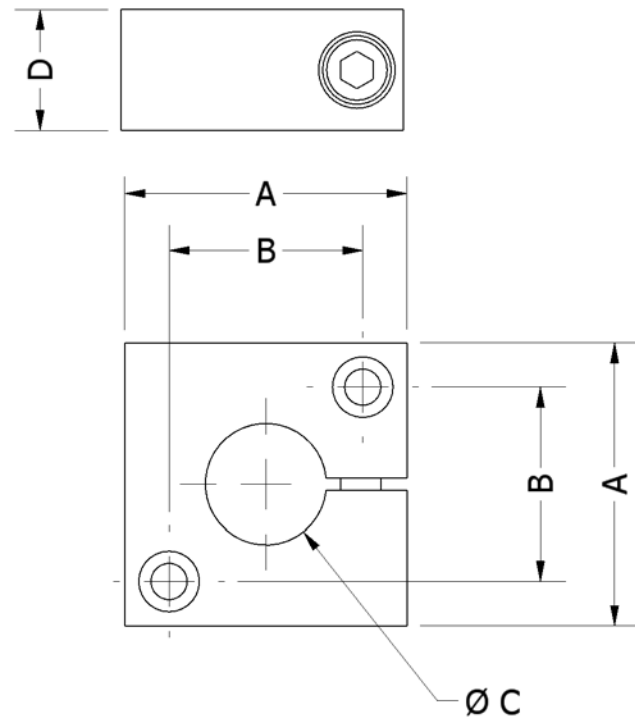
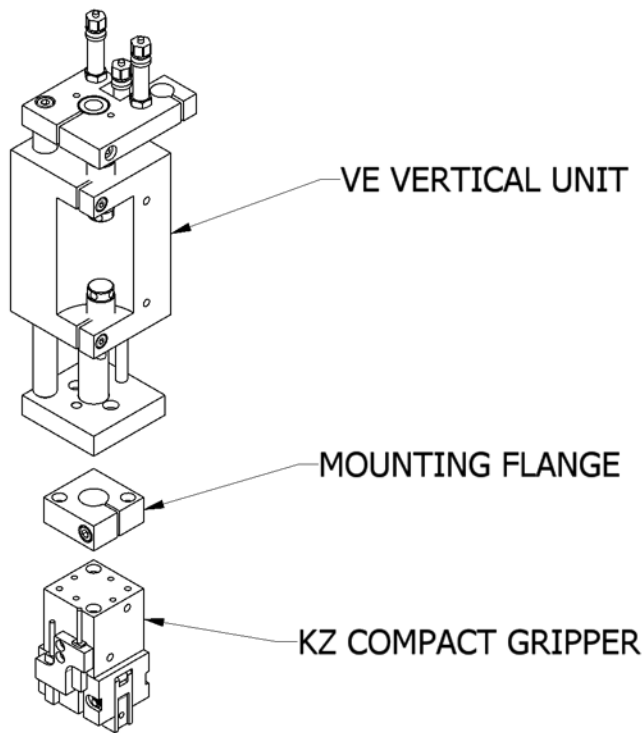
NW ... VE ...



Ordering example:

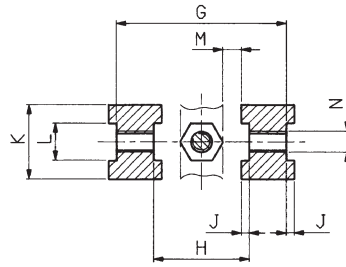
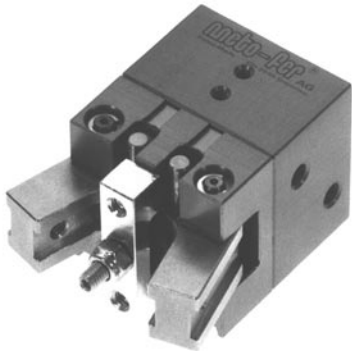
- NW 12 VE 22 NW 12 consists of: MZ 12, ZZ 12 and Conical bar
- NW 25 VE 22 NW 25 consists of: MZ 25, ZZ 25 and Conical bar, Adapter ZB 02.011 and Gripper bracket ZB 02.012

Mounting flange for compact grippers

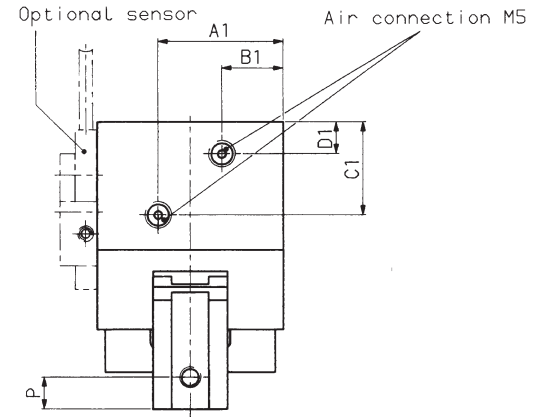
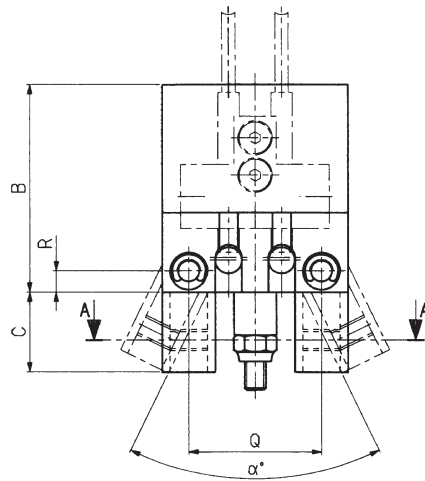
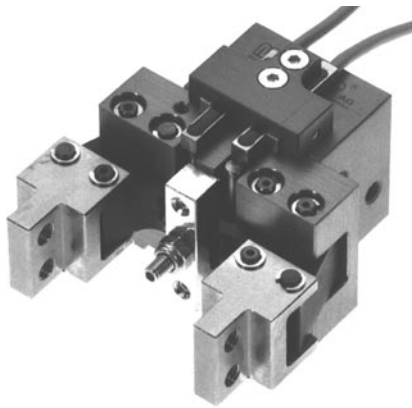
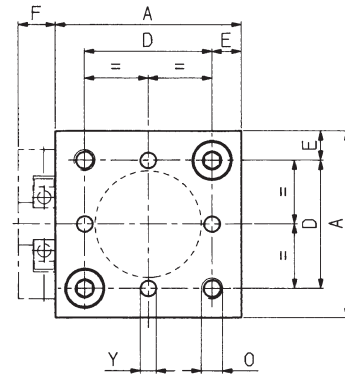


GRIPPER	A	B	C	D	ORDER NO.
...12	28	20	15-H7	12	ZB.08.010
...20	35	24	15-H7	15	ZB.08.001
...25	40	30	15-H7	15	ZB.08.002
...32	60	40	15-H7	15	ZB.08.003
...50	70	50	15-H7	15	ZB.08.008

Angular Gripper KZ



Section A-A



Mounting flange for KZ see sheet 4.013

Dimensions for air connections				
Type	A1	B1	C1	D1
KZ 12	18.25	9.75	14.5	6
KZ 20	23.5	11.5	17.5	6
KZ 25	26	14	19.5	5
*KZ 32	30	30	34	8
*KZ 50	35	35	33	8

Type	Clamping force at 72.5 psi (5 bar)	Air consumption for each double stroke at 5 bar	Weight
KZ 12	4 lb (19 N)	.0002 scf (0.004 NL)	0.3 lb (0.12 kg)
KZ 20	7 lb (30 N)	.0005 scf (0.014 NL)	0.6 lb (0.25 kg)
KZ 25	11 lb (48 N)	.0010 scf (0.027 NL)	0.8 lb (0.35 kg)
KZ 32	19 lb (85 N)	.0025 scf (0.072 NL)	2.4 lb (1.10 kg)
KZ 50	49 lb (220 N)	.0079 scf (0.224 NL)	3.6 lb (1.65 kg)

*for these types, the dimensions A1 & B1 are equal

Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Y	α
KZ12	28	31.5	14.5	20	4	7	25	16	1.5	12	6-H7	3	M3	M4/8	5	20	3.5	ø2-EF7/5	52°
KZ20	35	39	15	24	5.5	7	32	18	1.5	14	7-H7	3.5	M4	M4/12	6	25	4	ø3-EF7/5	52°
KZ25	40	44	20	30	5	7	37	23	1.5	14	7-H7	5	M4	M5/15	8	30	4	ø4-EF7/5	58°
KZ32	60	72	32	40	10	8	56	32	2	25	12-H7	9	M6	M6/15	10	45	7	ø5-EF7/4	56°
KZ50	70	72	40	50	10	8	66	38	2	30	15-H7	9.5	M6	M8/17	15	55	9	ø5-EF7/4	60°

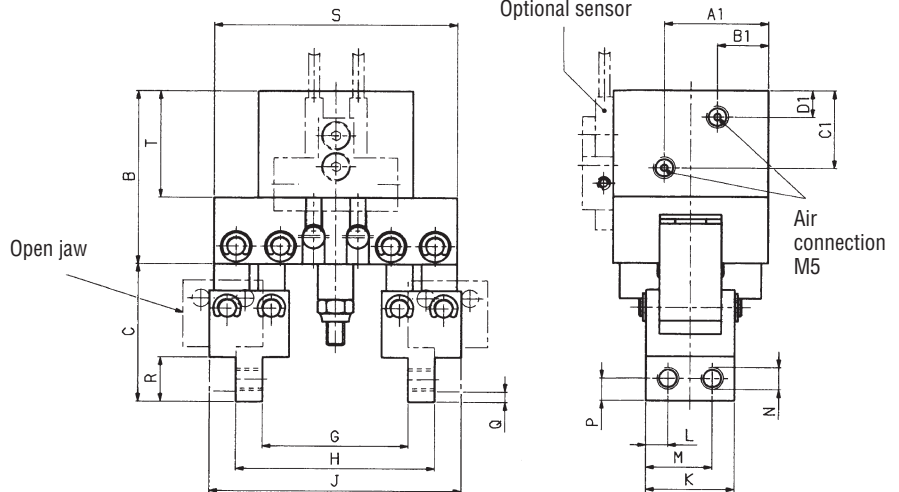
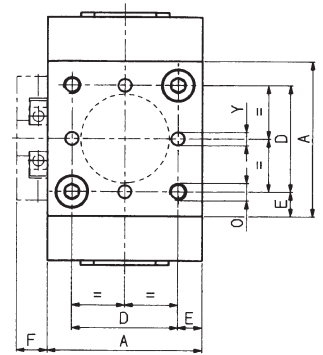
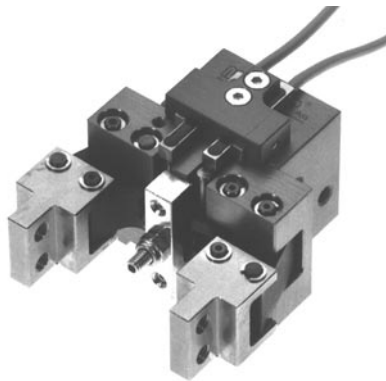
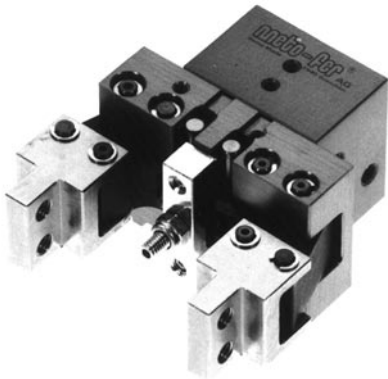
Order No. KZ12 KZ20 KZ25 KZ32 KZ50 without sensor bracket
 KZ12D KZ20D KZ25D KZ32D KZ50D D = with sensor bracket
 (IM... sensors not included)

Order No. KZ12D KZ25D KZ25D **Order No.** KZ32D KZ50D
 (Sensors) IM-004-NS-U2L (NPN) (Sensors) IM-006-NS-U2L (NPN)
 IM-004-PS-U2L (PNP) IM-006-PS-U2L (PNP)

Technical data:

- Operating medium Compressed air oiled/ not oiled
- Operating pressure 43.5 - 116 psi (3 - 8 bar)
- Air connection M5
- Sensor option: Two IM...proximity sensors...gripper open/ gripper closed

Semi-Parallel Gripper KZP



Mounting flange for KZP see sheet 4.013

Dimensions for air connections				
Type	A1	B1	C1	D1
KZP 12	18.25	9.75	14.5	6
KZP 20	23.5	11.5	17.5	6
KZP 25	26	14	19.5	5
*KZP 32	30	30	34	8
*KZP 50	35	35	33	8

*For these types, the dimensions A1 & B1 are equal.

Type	Clamping force at 72.5 psi (5 bar)	Air consumption for each double stroke at 5 bar	Weight
KZP 12	4 lb (19 N)	.0002 scf (0.004 NL)	0.4 lb (0.18 kg)
KZP 20	7 lb (30 N)	.0005 scf (0.014 NL)	0.7 lb (0.30 kg)
KZP 25	11 lb (48 N)	.0010 scf (0.027 NL)	1.0 lb (0.45 kg)
KZP 32	19 lb (85 N)	.0025 scf (0.072 NL)	3.7 lb (1.70 kg)
KZP 50	49 lb (220 N)	.0079 scf (0.224 NL)	5.1 lb (2.30 kg)

Type	A	B	C	D	E	F	G min.	G max.	H min.	H max.	J min.	J max.	K	L	M	N	O	P	Q	R	S	T	Y
KZP12	28	31.5	20.5	20	4	7	22.5	31	33.5	42	41.5	50	17	3.5	13.5	M4	M4/8	4	1.1	8	41	19.5	ø2-EF7/5
KZP20	35	39	31	24	5.5	7	33	45	45	57	57	69	20	5	15	M5	M4/12	5	2.3	10	55	24	ø3-EF7/5
KZP25	40	44	31	30	5	7	38	51.5	50	63.5	62	75.5	20	5	15	M5	M5/15	5	2.7	10	60	28	ø4-EF7/5
KZP32	60	72	49	40	10	8	47	68	75	96	95	116	35	10	25	M6	M6/15	7.5	2.7	15	95	44	ø5-EF7/4
KZP50	70	72	47	50	10	8	50	74	82	106	102	126	40	10	30	M6	M8/17	7.5	3	15	105	42	ø5-EF7/4

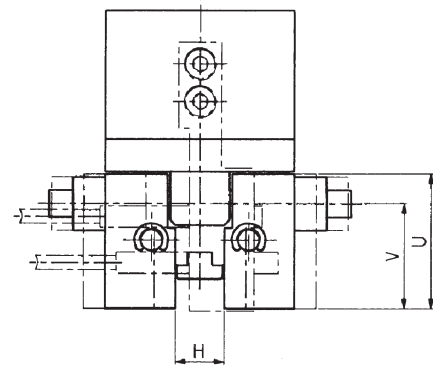
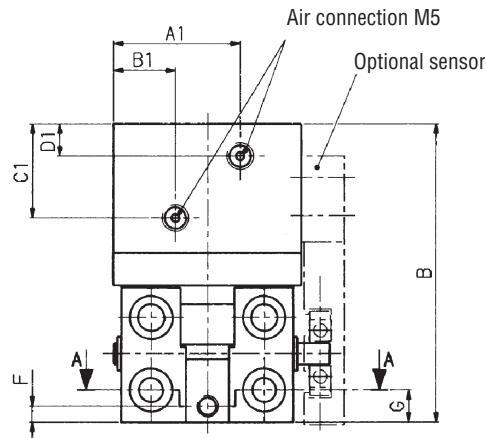
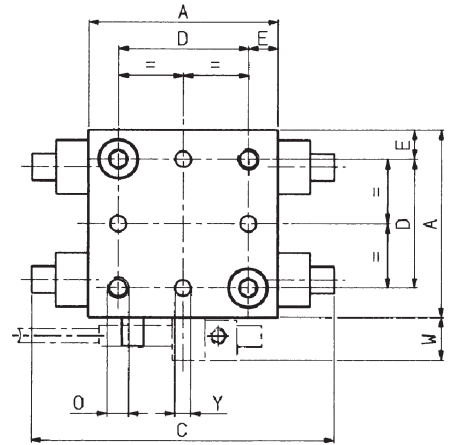
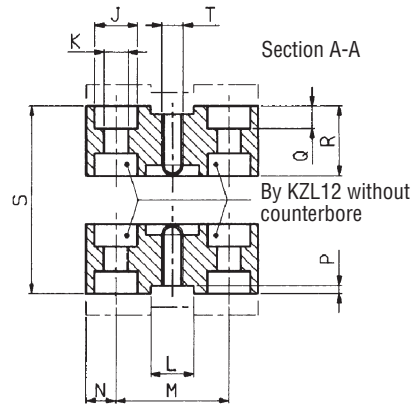
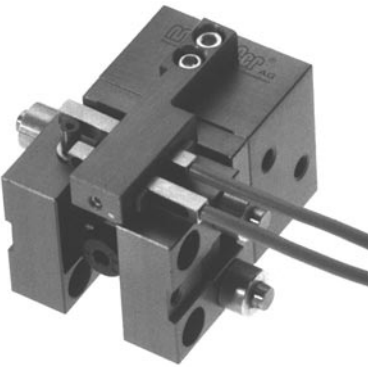
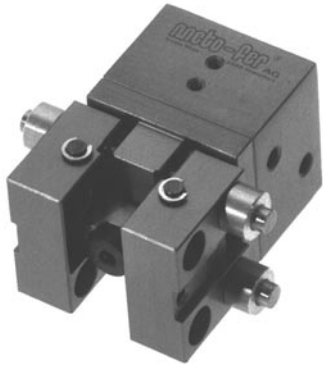
Order No. KZP12 KZP20 KZP25 KZP32 KZP50 without sensor bracket
 KZP12D KZP20D KZP25D KZP32D KZP50D D = with sensor bracket
 (IM... sensors not included)

Order No. KZP12D KZP20D KZP25D **Order No.** KZP32D KZP50D
 (Sensors) IM-004-NS-U2L (NPN) (Sensors) IM-006-NS-U2L (NPN)
 IM-004-PS-U2L (PNP) IM-006-PS-U2L (PNP)

Technical data:

- Operating medium Compressed air oiled/ not oiled
- Operating pressure 43.5 - 116 psi (3 - 8 bar)
- Air connection M5
- Sensor option: Two IM...proximity sensors...gripper open/ gripper closed

Parallel Gripper KZL



Mounting flange for KZL see sheet 4.013

Dimensions for air connections				
Type	A1	B1	C1	D1
KZL 12	18.25	9.75	14.5	6
KZL 20	23.5	11.5	17.5	6
KZL 25	26	14	19.5	5
*KZL 32	30	30	34	8
*KZL 50	35	35	33	8

*for these types, the dimensions A1 & B1 are equal

Type	Clamping force at 72.5 psi (5 bar)	Air consumption for each double stroke at 5 bar	Weight
KZL 12	7 lb (31 N)	.0002 scf (0.004 NL)	0.3 lb (0.15 kg)
KZL 20	20 lb (88 N)	.0005 scf (0.014 NL)	0.4 lb (0.20 kg)
KZL 25	31 lb (137 N)	.0010 scf (0.027 NL)	0.8 lb (0.35 kg)
KZL 32	51 lb (225 N)	.0025 scf (0.072 NL)	2.1 lb (0.95 kg)
KZL 50	124 lb (550 N)	.0079 scf (0.224 NL)	3.3 lb (1.50 kg)

Type	A	B	C	D	E	F	G	H min.	H max.	J	K	L	M	N	O	P	Q	R	S min.	S max.	T	U	V	W	Y
KZL12	28	49.5	48	20	4	7.5	7.5	8	15	6	3.5	6-H7	17	5.5	M4/8	1.2	3.2	10	28	35	M3	25	20	8	ø2-EF7/5
KZL20	35	55.5	56	24	5.5	3	6	9.5	17.5	8	4.5	8-H7	21	5.5	M4/12	1.5	4.2	13	35.5	43.5	M4	25	19.5	8	ø3-EF7/5
KZL25	40	65.5	60	30	5	4	7	10	20	8	4.5	10-H7	26	5.2	M5/15	1.5	4.2	15	40	50	M5	30	22.5	8	ø4-EF7/5
KZL32	60	87.5	90	40	10	8	8	15	31	10	5.5	12-H7	28	14	M6/15	2.5	5.2	22.5	60	76	M6	35	26.5	9.5	ø5-EF7/4
KZL50	70	102	107	50	10	16	16	20	40	11	6.6	15-H7	40	13	M8/17	2.5	6.2	25	70	90	M6	50	39	9.5	ø5-EF7/4

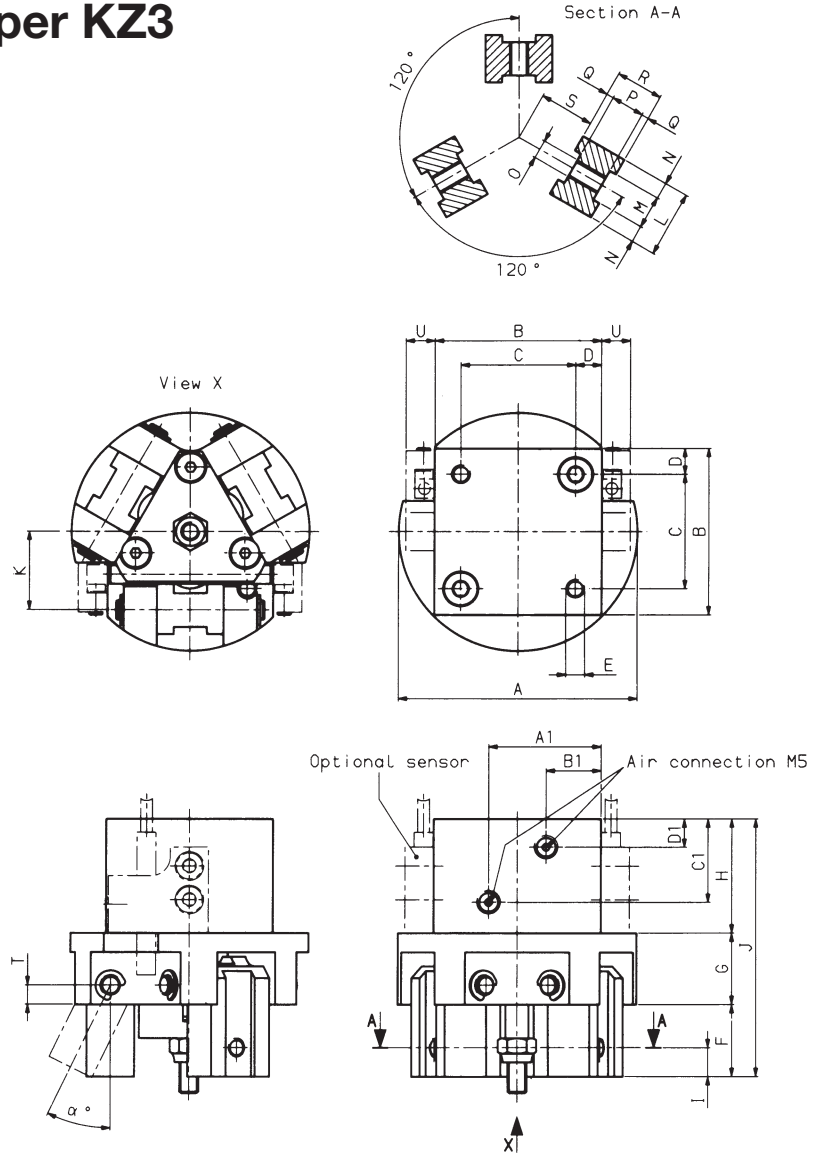
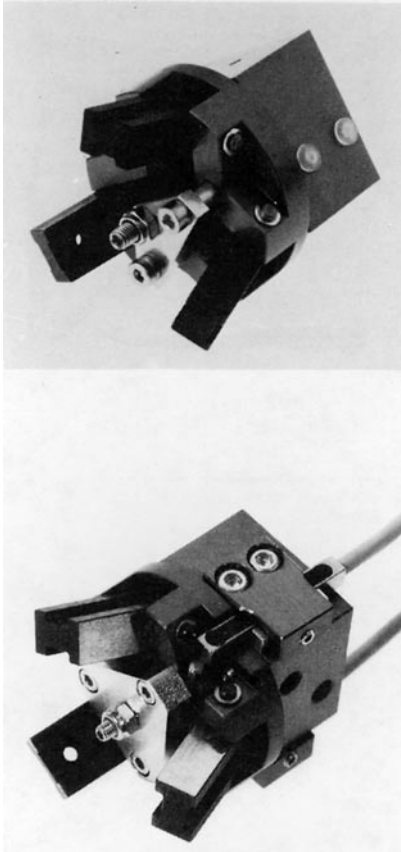
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 KZL12D KZL20D KZL25D KZL32D KZL50D D = with sensor bracket
 (IM... sensors not included)

Order No. KZL12D KZL20D KZL25D **Order No.** KZL32D, KZL50D
 (Sensors) IM-004-NS-U2L (NPN) (Sensors) IM-006-NS-U2L (NPN)
 IM-004-PS-U2L (PNP) IM-006-PS-U2L (PNP)

Technical data:

- Operating medium Compressed air oiled/ not oiled
- Operating pressure 43.5 - 116 psi (3 - 8 bar)
- Air connection M5
- Sensor option: Two IM...proximity sensors... gripper open / gripper closed

Three Finger Angular Gripper KZ3



Mounting flange for KZ3 see sheet 4.013

Dimensions for air connections				
Type	A1	B1	C1	D1
KZ 3/12	18.25	9.75	14.5	6
KZ 3/20	23.5	11.5	17.5	6
KZ 3/25	26	14	19.5	5
*KZ 3/32	30	30	34	8
*KZ 3/50	35	35	33	8

*for these types, the dimensions A1 & B1 are equal

Type	Clamping force at 72.5 psi (5 bar)	Air consumption for each double stroke at 5 bar	Weight
KZ 3/12	4 lb (19 N)	.0002 scf (0.004 NL)	0.3 lb (0.15 kg)
KZ 3/20	7 lb (30 N)	.0005 scf (0.014 NL)	0.6 lb (0.25 kg)
KZ 3/25	11 lb (48 N)	.0010 scf (0.027 NL)	0.9 lb (0.40 kg)
KZ 3/32	19 lb (85 N)	.0025 scf (0.072 NL)	3.1 lb (1.40 kg)
KZ 3/50	49 lb (220 N)	.0079 scf (0.224 NL)	4.4 lb (2.00 kg)

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	α
KZ 3/12	40	28	20	4	M4/8	14.5	12	19.5	5	46	13.5	12	6-H7	3	M3	4.5	1.5	7.5	10	3.5	6	26°
KZ 3/20	50	35	24	5.5	M4/12	15	15	24	6	54	16.5	14	7-H7	3.5	M4	7	1.5	10	11.5	4	6	26°
KZ 3/25	55	40	30	5	M5/15	20	16	28	8	64	19.5	14	7-H7	3.5	M4	7	1.5	10	14.5	4	6	29°
KZ 3/32	90	60	40	10	M6/15	32	28	44	10	104	30	25	12-H7	6.5	M6	12	2	16	21.5	7	8	28°
KZ 3/50	100	70	50	10	M8/17	40	30	42	15	112	36	30	15-H7	7.5	M6	14	2	18	25.5	9	8	30°

Order No. KZ3/12 KZ3/20 KZ3/25 KZ3/32 KZ3/50 without sensor bracket
 KZ3/12D KZ3/20D KZ3/25D KZ3/32D KZ3/50D D = with sensor bracket
 (IM... sensors not included)

Order No. KZ3/12D KZ3/20D KZ3/25D **Order No.** KZ3/32D KZ3/50D
 (Sensors) IM-004-NS-U2L (NPN) (Sensors) IM-006-NS-U2L (NPN)
 IM-004-PS-U2L (PNP) IM-006-PS-U2L (PNP)

Technical data:

- Operating medium Compressed air oiled/ not oiled
- Operating pressure 43.5 - 116 psi (3 - 8 bar)
- Air connection M5
- Sensor option: Two IM...proximity sensors... gripper open / gripper closed