

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



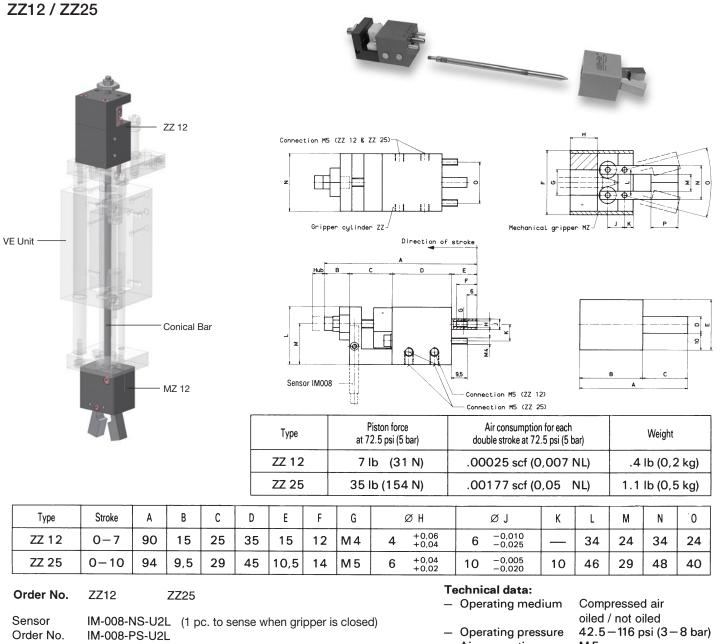
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# Mechanical Gripper (use with Hollow Shaft Units)



#### Mechanical gripper MZ

Тур	A	В	С	D	Е	F	øG	Н	J	к	L	М	Ν	0	Ρ	Weight	Clamping force	Order No.
																	at 72.5 psi (5 bar)	
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 ...

Vertical unit VE 22, VE 52, VE 82 Gripper cylinder ZZ12 or ZZ 25

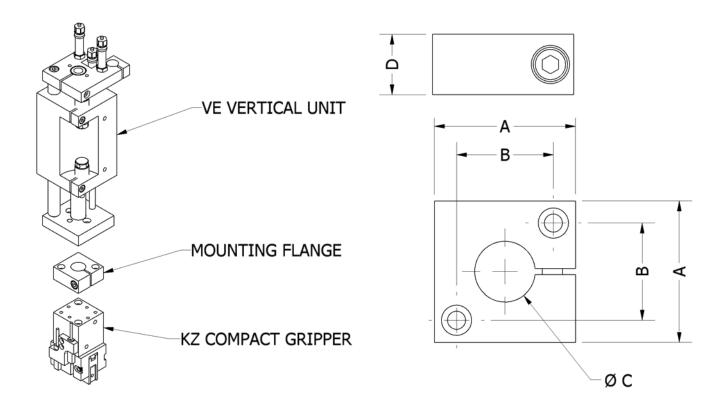
Air connection

M 5

### **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

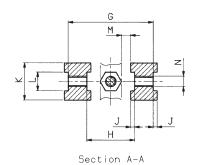
### Mounting flange for compact grippers

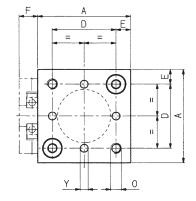


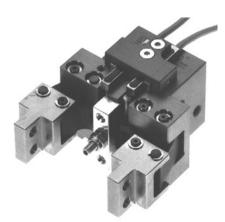
GRIPPER	Α	В	С	D	ORDER NO.
12	28	20	15-H7	12	ZB.08.010
20	35	24	15-H7	15	ZB.08.001
25	40	30	15-H7	15	ZB.08.002
32	60	40	15-H7	15	ZB.08.003
50	70	50	15-H7	15	ZB.08.008

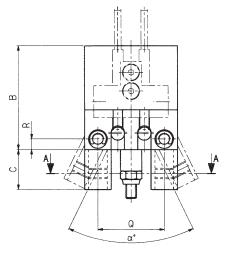
### Angular Gripper KZ

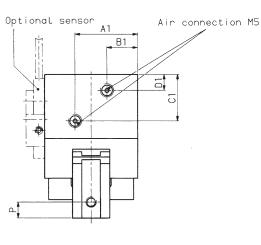








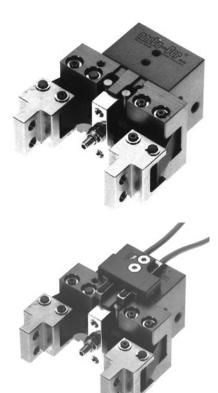


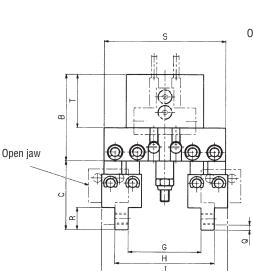


#### Mounting flange for KZ see sheet 4.013

Dir	nensi	ons for	air co	nnec	ions		]	Г	уре		Clamp	oina fo	orce	Air cons	sumpt	ion fo	r eac	h We	eight
Туре		A1	B1		C1	D1	1		780		at 72.5	-		double					3
KZ 12		18.25	9.75		4.5	6	1	ł	(Z 12		4 lb	· · · · ·	) N)	.0002	scf ((	0.004	NL)	0.3 lb (	0.12 kg)
KZ 20		23.5	11.5	5 1	7.5	6		ŀ	(Z 20		7 lb	(30	) N)	.0005	scf (0	0.014	NL)	0.6 lb (	0.25 kg)
KZ 25		26	14	1	9.5	5	1	۲	Z 25		11 lb	(48	3 N)	.0010	scf (0	0.027	NL)	0.8 lb (	0.35 kg)
*KZ 32		30	30		34	8	1	F	(Z 32		19 lb	(85	5 N)	.0025					1.10 kg)
*KZ 50		35	35		33	8	1	4	(Z 50		49 lb	(220	) N)	.0079	scf ((	).224	NL)	3.6 lb (	1.65 kg)
*for these t	ypes,	the dim	ension	s A1 &	B1 are	e equa	นี้												
Туре	А	В	С	D	E	F	G	H	J	К	L	М	. N	0	Ρ	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.		Z12 Z12D		KZ20 KZ20	D		25 25D		KZ32 KZ32		KZ5( KZ5(			vithout se = with s (IM.	senso	r bracl	ket	luded)	
Order No. (Sensors)	IN	Z12D 1-004-N 1-004-P	IS-U2I	· ·	N)	ΚZ	25D			e <b>r No.</b> sors)	IM-0	06-NS	5-U2L	(Z50D (NPN) (PNP)					
Technical -Operating -Operating -Air connection -Sensor op	medi press	ium sure	1pro	oximity	43.5 M5	- 116	3 psi (3	3 - 8 1	,		closed								

### Semi-Parallel Gripper KZP





Clamping force

at 72.5 psi (5 bar)

7 lb

11 lb

19 lb

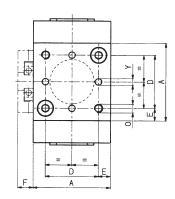
4 lb (19 N)

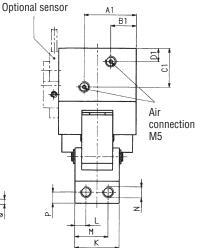
49 lb (220 N)

(30 N)

(48 N)

(85 N)





Air consumption for each

double stroke at 5 bar

.0002 scf (0.004 NL)

.0005 scf (0.014 NL)

.0010 scf (0.027 NL)

.0025 scf (0.072 NL)

.0079 scf (0.224 NL)

Weight

0.4 lb (0.18 kg)

0.7 lb (0.30 kg)

1.0 lb (0.45 kg)

3.7 lb (1.70 kg)

5.1 lb (2.30 kg)

Mounting flange for KZP see sheet 4.013

Dimensions for air connections											
Туре	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.

Туре	A	В	С	D	Е	F	G min.	G max.	H min.	H max.	J min.	J max.	к	L	М	N	. O	Ρ	Q	R	S	Т	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 KZP12D	KZP20 KZP20D	KZP25 KZP25D	KZP32 KZP32D	KZP50 KZP50D	without sensor bracket D = with sensor bracket (IM sensors not included)
Order No. (Sensors)	KZP12D IM-004-NS-I IM-004-PS-I	· /	KZP25D	Order No. (Sensors)	KZP32D IM-006-NS-I IM-006-PS-I	

Type

**KZP** 12

KZP 20 KZP 25

KZP 32

**KZP 50** 

#### **Technical data:**

-Operating medium

-Operating pressure

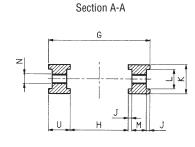
Compressed air oiled/ not oiled 43.5 - 116 psi (3 - 8 bar)

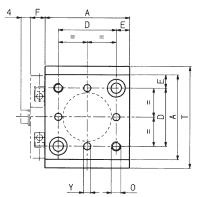
-Air connection

M5 -Sensor option: Two IM...proximity sensors...gripper open/ gripper closed

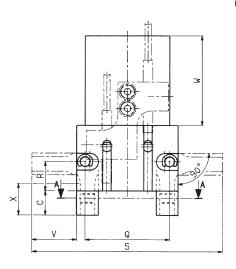
### 180° Angular Gripper KZ 180

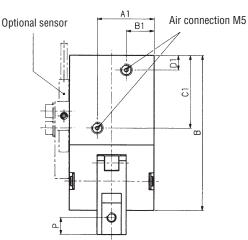












#### Mounting flange for KZ 180 see sheet 4.013

Dimensions for air connections											
A1	B1	C1	D1								
18.25	9.75	24.5	6								
23.5	11.5	30	6								
26	14	35	5								
30	30	50.5	7.2								
35	35	58.5	8.5								
	A1 18.25 23.5 26 30	A1   B1     18.25   9.75     23.5   11.5     26   14     30   30	A1   B1   C1     18.25   9.75   24.5     23.5   11.5   30     26   14   35     30   30   50.5								

Туре	Clamping force	Air consumption for each	Weight
	at 72.5 psi (5 bar)	double stroke at 5 bar	
KZ 180/12	4 lb (16 N)	.0006 scf (0.016 NL)	0.3 lb (0.15 kg)
KZ 180/20	11 lb (49 N)	.0022 scf (0.063 NL)	0.7 lb (0.30 kg)
KZ 180/25	20 lb (87 N)		1.0 lb (0.45 kg)
KZ 180/32	30 lb (135 N)		2.6 lb (1.25 kg)
KZ 180/50	65 lb (291 N)	.0276 scf (0.782 NL)	4.5 lb (2.05 kg)

without sensor bracket

D = with sensor bracket

KZ180/32D KZ180/50D

IM-006-NS-U2L (NPN)

IM-006-PS-U2L (PNP)

(IM... sensors not included)

for these types, the dimensions A1 & B1 are equal

Туре	A	В	С	D	Е	F	G	Н	J	Κ	L	М	Ν	0	Ρ	Q	R	S	Т	U	V	W	Х	Y
KZ180/12	28	52	10	20	4	6	30	18	1	12	8-H7	4	M4	M4/8	5	25	9	63	30	6	16	29.5	10.5	ø2-EF7/5
KZ180/20	35	64	10	24	5.5	6	42	24	1.5	12	8-H7	6	M4	M4/12	7	35	12	79	42	9	18.5	37	13	ø3-EF7/5
KZ180/25	40	76.5	13	30	5	6	47	29	1.5	14	10-H7	6	M5	M5/15	8	40	13.5	93	50	9	21.5	43.5	15	ø4-EF7/5
KZ180/32	60	108.5	20	40	10	8	65	39	2	25	12-H7	9	M6	M6/15	10	55	20	135	68	13	33.5	59.5	24	ø5-EF7/4
KZ180/50	70	125.5	33	50	10	8	77	47	2.5	30	15-H7	10	M6	M8/17	15	65	23.5	178	80	15	49	67.5	35	ø5-EF7/4

Order No.	KZ180/12 KZ180/12D	KZ180/20 KZ180/20D	KZ180/25 KZ180/25D	KZ180/32 KZ180/32D	KZ180/50 KZ180/50D
,	IM-004-NS-U IM-004-PS-U	· · ·	KZ180/25D		<b>Order No.</b> (Sensors)
Technical dat	a:				

-Operating medium

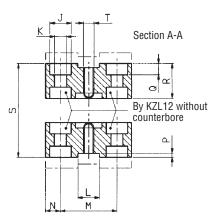
Compressed air oiled/ not oiled -Operating pressure 43.5 - 116 psi (3 - 8 bar) M5

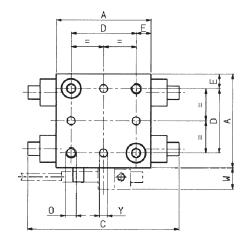
-Air connection

-Sensor option: Two IM...proximity sensors...gripper open/ gripper closed

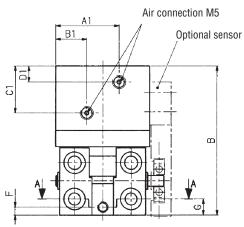
### Parallel Gripper KZL

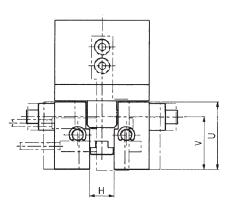












#### Mounting flange for KZL see sheet 4.013

Dimensions for air connections											
Туре	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

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

	Туре	А	в	с	D	Е	F	G	H min.	H max.	J	к	L	М	N	0	Ρ	Q	R	S min.	S max.	Т	υ	v	w	Y
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	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	М3	25	20	8	ø2-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	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
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	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

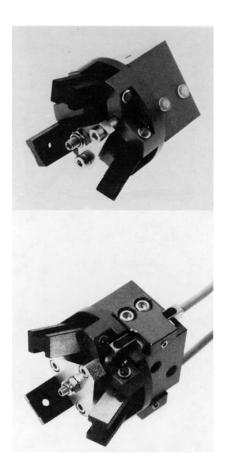
Order No.	KZL12 KZL12D	KZL20 KZL20D	KZL25 KZL25D	KZL32 KZL32D	KZL50 KZL50D	without sensor bracket D = with sensor bracket (IM… sensors not included)
Order No. (Sensors)	KZL12D IM-004-NS-U IM-004-PS-U	· · ·	KZL25D	<b>Order No.</b> (Sensors)	KZL32D, KZL IM-006-NS- IM-006-PS-I	U2L (NPN)

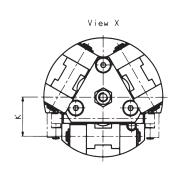
#### Technical data:

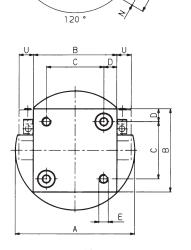
-Operating medium	Compressed air oiled/ not oiled
-Operating pressure	43.5 - 116 psi (3 - 8 bar)
-Air connection	M5

-Sensor option: Two IM...proximity sensors... gripper open / gripper closed

## Three Finger Angular Gripper KZ3

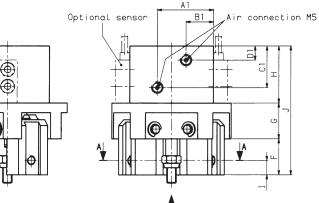






Section A-A

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Mounting flange for KZ3 see sheet 4.013

Mounting f	lange	e tor k	<z3 9<="" th=""><th>see s</th><th>heet 4.0</th><th>13</th><th></th><th></th><th></th><th>~</th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th><th>x</th><th></th><th></th><th></th><th></th></z3>	see s	heet 4.0	13				~	-							x				
C	imen	sions	s for	air co	nnectior	ns	Туре					Clamping force Air consu					nptio	n for	each	Weight		
Туре		A1		B1	C1	D1						at 72.5 psi (5 bar) double stro						at 5	bar	, J		
KZ 3/12		18.2	5 9	9.75	14.5	6	KZ 3/12					lb (19	N)	.00	D2 sc	f (0.0	0.3 lb	) (0.1	5 kg)			
KZ 3/20							KZ 3/20					7	lb (30	N)		05 sc		0.6 lb				
KZ 3/25		26		14	19.5	5	KZ 3/25					11	lb (48	N)				027 N		0.9 lb	) (0.4	0 kg)
*KZ 3/32		30		30	34	8	1		ΚZ	3/32		19	lb (85	N)	.002	25 sc	f (0.0	072 N	L)	3.1 lb	1.4	0 kg)
*KZ 3/50		35		35	33	8	1		κz	3/50		49	lb (220	N)	.00	79 sc	f (0.2	224 N	L)	4.4 lb	(2.0	0 kg) <sup>.</sup>
*for these types, the dimensions A1 & B1 are equal																						
Туре	Α	в	С	D	Е	F	G	н	1	J	к	L	М	N	0	Р	Q	R	S	Т	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.		Z3/1 Z3/1	_		Z3/20 Z3/20D		Z3/25 KZ3/32 Z3/25D KZ3/32D					KZ3/50 without sensor bracket KZ3/50D D = with sensor bracket										
		20/ 1	20		20/200	IX.	20/2	00		20/02	.0	(IM sensors not included)										
Order No.	K	Z3/12	2D	K	Z3/20D	K	Z3/2	5D	0	rder	No.	KZ3/32D KŽ3/50D										
(Sensors)	IN	<b>/I-</b> 004	I-NS	-U2L	(NPN)					Senso		IM-006-NS-U2L (NPN)										
IM-004-PS-U2L (PNP)									(-		,	IM-006-PS-U2L (PNP)										
Technical	data	:													(	/						
-Operating	med	ium			Co	mpres	sed	air oile	ed/	not o	iled											
-Operating	6 psi (3 - 8 bar)																					
-Air connec	•				M5					,												
-Sensor op		Two	IM	nrox			ari	nner o	ner	) / ari	nner	പറം	d									
001301 00	non.	1 000			inning Ser	13013.1	· gri		per	i / gii	pper	01030	u									

Subject to change without notice (September 2012)