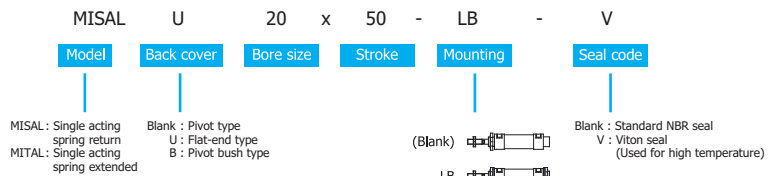


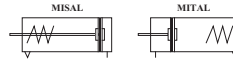
**ISO6430 Aluminum Slim Cylinder (MISAL MITAL Series)**



**Ordering Code**



**Symbol**



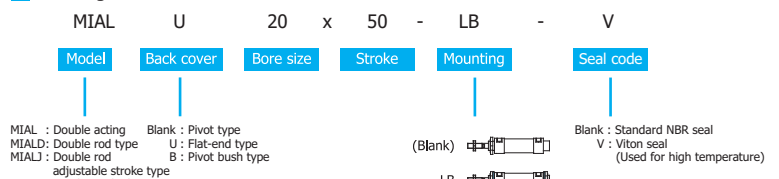
**Specifications**

Bore size	mm	20	25	32	40
Rod diameter	mm	8	10	12	16
Port size	inch	1/8	1/8	1/8	1/8
Standard stroke	mm	25~100	25~100	25~100	25~100
Maximum stroke	mm	100	100	100	100
Available stroke up	mm	150	150	150	150
Action type		Single acting			
Media		Air			
Pressure range	kgf/cm <sup>2</sup>	2.00 ~ 9.00			
Temperature range	°C	0 ~ 70 (Viton : 120)			
Speed range	mm/sec	30 ~ 800			
Back cover type		Pivot (Blank) , Flat end (U) , Pivot bush (B)			
Cushion type		Bumper			
Mounting type		Basic (Blank),Foot (LB),Flange(FA),Pivot (SDB)			
End rod type		I knuckle (I), Y knuckle (Y), Floating joint(FJ),Universal joint(EJ)			
Sensor switch type		Light in front (CS1-F), Light on top (CS1-U),Mini (CS1-S)			
Sensor switch holder		BL-20	BL-25	BL-32	BL-40
Additional variants		Stainless steel piston rod, female, extended, special thread piston rod			

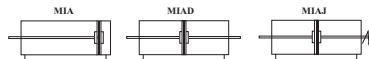
**ISO6430 Aluminum Slim Cylinder (MIAL MIALD MIALJ MIALT Series)**



**Ordering Code**



**Symbol**



**Specifications**

Bore size	mm	20	25	32	40
Rod diameter	mm	8	10	12	16
Port size	inch	1/8	1/8	1/8	1/8
MIAL standard stroke	mm	25~300	25~400	25~400	25~400
MIALD , MIALJ standard stroke	mm	25~200	25~250	25~250	25~250
MIAL maximum stroke	mm	500	500	500	500
MIALD , MIALJ maximum stroke	mm	200	250	250	250
MIAL available stroke up	mm	600	600	600	600
MIALD , MIALJ available stroke up	mm	300	300	300	300
MIALJ adjusting stroke	mm	25,50,75			
Action type		Double acting			
Media		Air			
Pressure range	kgf/cm <sup>2</sup>	1.00~9.00			
Temperature range	°C	0 ~ 70 (Viton : 120)			
MIAL speed range	mm/sec	50~800	50~800	50~800	50~800
MIALD , MIALJ speed range	mm/sec	30~800	30~800	30~800	30~800
MIAL back cover type		Pivot (Blank) , Flat end (U) , Pivot bush (B)			
MIALD , MIALJ cushion type		Bumper			
MIALD , MIALJ adjust type		Variable			
MIAL mounting type		Basic (Blank),Foot (LB),Flange(FA),Pivot (SDB)			
MIALD , MIALJ mounting type		Basic (Blank) , Foot (LB)			
End rod type		I knuckle (I), Y knuckle (Y), Floating joint(FJ),Universal joint(EJ)			
Sensor switch type		Light in front (CS1-F), Light on top (CS1-U), Mini (CS1-S)			
Sensor switch holder		BL-20	BL-25	BL-32	BL-40
Additional variants		Stainless steel piston rod, female, extended, special thread piston rod			

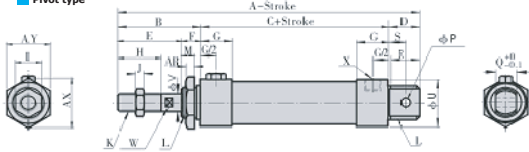
**Other Available Series**

Description	Ordering Code	Mounting type				
		LB	FA	SDB	Front mounting	Up mounting
<p>Double rod type</p> <p>MIALD</p>	<p>MIALD - 20 x 50 - LB</p> <p>LB : Mounting type 50 : Stroke 20 : Bore size MIALD : Double rod type</p>	●	●	×	×	×
<p>Adjustable stroke type</p> <p>MIALJ</p>	<p>MIALJ - 20 x 50 - 25 - LB</p> <p>LB : Mounting type 25 : 50 : Stroke 20 : Bore size MIALJ : Adjustable stroke type</p>	●	●	×	×	×

Dimensions

MISAL

Pivot type



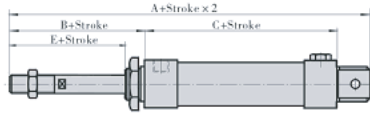
Flat-end type



Item	A		A2		B	C		D	E	F	G	H	I	J	K	L	M	P	Q	R	S	U	V	W	X	AR	AX	AY
	0-50	51-100	0-50	51-100		0-50	51-100																					
20	139	164	118	143	48	70	95	21	28	20	16	20	12	6	M8 x 1.5	M22 x 1.5	10	8	16	19	12	29	8	6	1/8"	7	33	29
25	143	168	122	147	52	70	95	21	30	22	16	22	17	6	M10 x 1.25	M22 x 1.5	12	8	16	19	12	34	10	8	1/8"	7	33	29
32	157	182	130	155	60	70	95	27	30	30	16	22	17	6	M10 x 1.25	M24 x 2.0	12	10	16	25	15	39.5	12	10	1/8"	8	37	32
40	186	211	159	184	67	92	117	27	32	35	22	24	17	7	M12 x 1.25	M30 x 2.0	12	12	20	25	15	49.5	16	14	1/4"	9	47	41

MITAL

Pivot type



Flat-end type

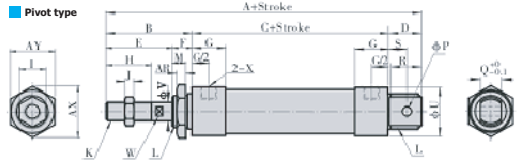


Item	A				A2				C			
	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100
20	154	164	179	189	133	143	158	168	85	95	110	120
25	158	168	183	193	137	147	162	172	85	95	110	120
32	172	182	202	212	145	155	175	185	85	95	110	125
40	201	211	231	241	174	184	204	214	107	117	137	147

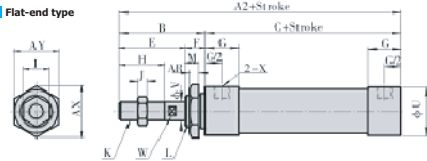
Item	A				A2				C			
	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100
20	-	-	-	-	-	-	-	-	-	-	-	-
25	174	174	184	184	153	153	163	163	101	101	111	111
32	188	188	198	198	161	161	171	171	101	101	111	111
40	195	195	205	205	168	168	178	178	101	101	111	111

MIAL

Pivot type



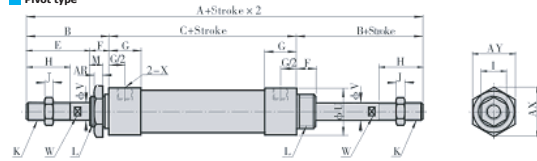
Flat-end type



Item	Bore size	A	A2	B	C	D	E	F	G	H	I	J	K	L	M	P	Q	R	S	U	V	W	X	AR	AX	AY
		0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	0-25	26-50	51-75	76-100	
20	139	118	48	70	21	28	20	16	20	12	6	M8 x 1.25	M22 x 1.5	10	8	16	19	12	29	8	6	1/8"	7	33	29	
25	143	122	52	70	21	30	22	16	22	17	6	M10 x 1.25	M22 x 1.5	12	8	16	19	12	34	10	8	1/8"	7	33	29	
32	157	130	60	70	27	30	30	16	22	17	6	M10 x 1.25	M24 x 2.0	12	10	16	25	15	39.5	12	10	1/8"	8	37	32	
40	186	159	67	92	27	32	35	22	24	17	7	M12 x 1.25	M30 x 2.0	12	12	20	25	15	49.5	16	14	1/4"	9	47	41	

MIALD

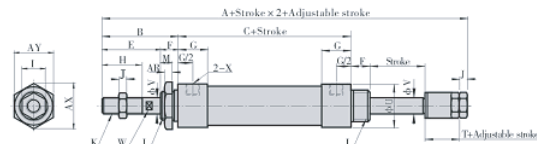
Pivot type



Item	Bore size	A	B	C	E	F	G	H	I	J	K	L	M	U	V	W	X	AR	AX	AY
		20	166	48	70	28	20	16	20	12	6	M8 x 1.25	M22 x 1.5	10	29	8	6	1/8"	7	33
25	174	52	70	30	22	16	22	17	6	M10 x 1.25	M22 x 1.5	12	34	10	8	1/8"	7	33	29	
32	190	60	70	30	30	16	22	17	6	M10 x 1.25	M24 x 2.0	12	39.5	12	10	1/8"	8	37	32	
40	226	67	92	32	35	22	24	17	7	M12 x 1.25	M30 x 2.0	12	49.5	16	14	1/4"	9	47	41	

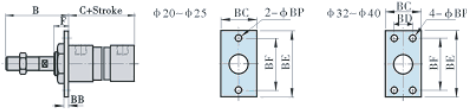
MIALJ

Pivot type



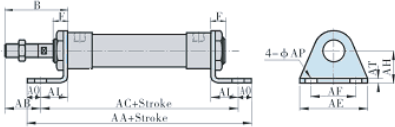
Item	Bore size	A	B	C	E	F	G	H	I	J	K	L	M	T	U	V	W	X	AR	AX	AY
		20	163	48	70	28	20	16	20	12	6	M8 x 1.25	M22 x 1.5	10	19	29	8	6	1/8"	7	33
25	171	52	70	30	22	16	22	17	6	M10 x 1.25	M22 x 1.5	12	21	34	10	8	1/8"	7	33	29	
32	187	60	70	30	30	16	22	17	6	M10 x 1.25	M24 x 2.0	12	21	35	12	10	1/8"	8	37	32	
40	218	67	92	32	35	22	24	17	7	M12 x 1.25	M30 x 2.0	12	21	41.6	16	14	1/4"	9	47	41	

**FA**



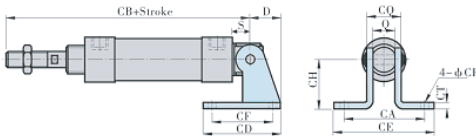
Item Bore size	B	C (MIAL)	C (MISAL)			BB	BC	BD	BE	BF	BP	F																
			0-50	51-100	101-150								0-50	51-100	101-150													
20	48	70	70	95	-	4	38	-	64	50	6.5	20																
25	52	70	70	95	-	4	38	-	64	50	6.5	22																
32	60	70	70	95	-	4	47	33	72	58	6.5	30																
40	67	92	92	117	-	4	50	36	84	70	6.5	35																

**LB**



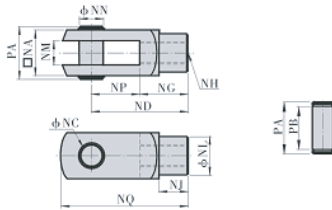
Item Bore size	B	F	AA (MIAL)	AA (MISAL)			AB	AC (MIAL)	AC (MISAL)			AE	AF	AL	AQ	AP	AT	AH
				0-50	51-100	101-150			0-50	51-100	101-150							
20	48	20	116	116	141	-	33	100	100	125	-	54	40	15	8	6.5	3	25
25	52	22	116	116	141	-	37	100	100	125	-	54	40	15	8	6.5	3	25
32	60	30	136	136	161	-	35	120	120	145	-	59	45	25	8	6.5	4	32
40	67	35	158	158	183	-	42	142	142	167	-	64	50	25	8	6.5	4.5	36

**SDB**



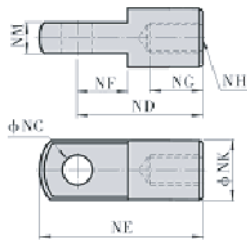
Item Bore size	D	S	Q	CA	CB (MIAL)	CB (MISAL)			CD	CE	CF	CH	CT	CP	CQ													
						0-50	51-100	101-150																				
20	21	12	16	51	130	130	155	-	48	67	32	32	3	6.5	22													
25	21	12	16	51	134	134	159	-	48	67	32	32	3	6.5	22													
32	27	15	16	51	145	145	170	-	52	67	36	36	4	6.5	24													
40	27	15	20	55	174	174	199	-	56	71	40	40	4	6.5	28													

**Y Knuckle**



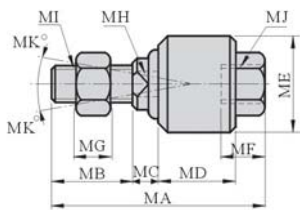
Item Bore size	NA	NC	ND	NE	NF	NG	NH	NJ	NK	NL	NM	NN	NP	NQ	PA	PB
25	19	10	40	52	15	20	M10 x 1.25	12	20	18	10	10	20	52	25	19.5
32	19	10	40	52	15	20	M10 x 1.25	12	20	18	10	10	20	52	25	19.5
40	25.4	10	45	57	15	25	M12 x 1.25	15	24	23	14	10	20	57	31	26

**I Knuckle**



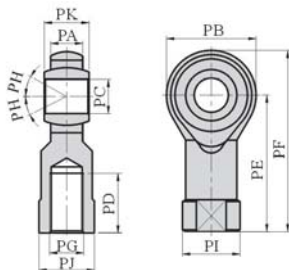
Item Bore size	NA	NC	ND	NE	NF	NG	NH	NJ	NK	NL	NM	NN	NP	NQ	PA	PB
25	19	10	40	52	15	20	M10 x 1.25	12	20	18	10	10	20	52	25	19.5
32	19	10	40	52	15	20	M10 x 1.25	12	20	18	10	10	20	52	25	19.5
40	25.4	10	45	57	15	25	M12 x 1.25	15	24	23	14	10	20	57	31	26

**Floating Joint**



Item Bore size	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK				
												20	51	20	6
25	58	22	7	21	26	11.5	7	10	M10 x 1.25	M10 x 1.25	12				
32	58	22	7	21	26	11.5	7	10	M10 x 1.25	M10 x 1.25	12				
40	58	22	8	21	28	11.5	8	12	M12 x 1.25	M12 x 1.25	12				

**Universal (Fish eye) Joint**



Item Bore size	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK				
												20	9	24	8
25	11	26	10	20	43	56	M10 x 1.25	13	19	17	14				
32	11	26	10	20	43	56	M10 x 1.25	13	19	17	14				
40	12	32	12	24	50	66	M12 x 1.25	13	22	19	16				