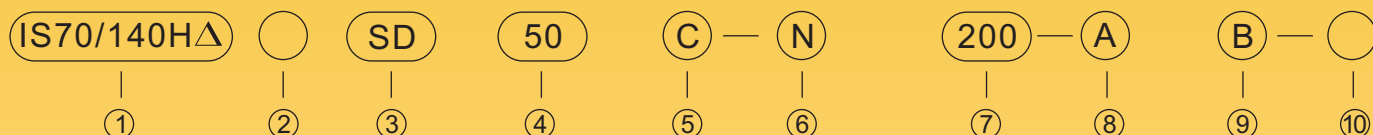


TANAIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER ORDERING GUIDE

CYLINDER TYPE NOTATION



(1) SERIES

Single rod	IS 70H	70kgf/cm ²
	IS 140H	140kgf/cm ²
Double rod	IS 70H. W	70kgf/cm ²
	IS 140H. W	140kgf/cm ²
Switch Mounted	IS 70HL	70kgf/cm ²

(2) PACKING MATERIALS

Notation	Materials	Remarks
name	materials of our company	standard dimension items
1	NBR	
2	Urethane rubber	
3	Fluorine rubber	

(3) MOUNT TYPE

SD·LA·(LB)·(FA)·(FB)·FC·FD·CA·CB·TA·TC

(4) BORE SIZE (mm)

(5) ROD TYPE C = STANDARD

Tube		Rod	
Size	HD of cylinder	B series	C series
40	φ 40	φ 22	φ 18
50	φ 50	φ 28	φ 22
63	φ 63	φ 35	φ 26
80	φ 80	φ 34	φ 35
100	φ 100	φ 55	φ 45
125	φ 125	φ 70	φ 55
140	φ 140	φ 80	φ 60
150	φ 150	φ 85	φ 65
160	φ 160	φ 90	φ 70
180	φ 180	φ 100	φ 80
200	φ 200	φ 110	φ 90
250	φ 250	φ 140	φ 110

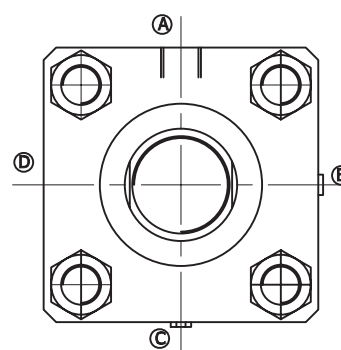
(6) CUSHION TYPE

B	Both-side cushion
R	Rod-side cushion
H	head-side cushion
N	No-cushion

(7) CYLINDER STROKE

(8) PORT POSITION : STANDARD

(9) CUSHION VALVE POSITION : STANDARD



The standard port position is A direction, and the standard cushion valve position is B direction, if necessary to change the position, make with A, B, C, D.

(10) DUST BOOT

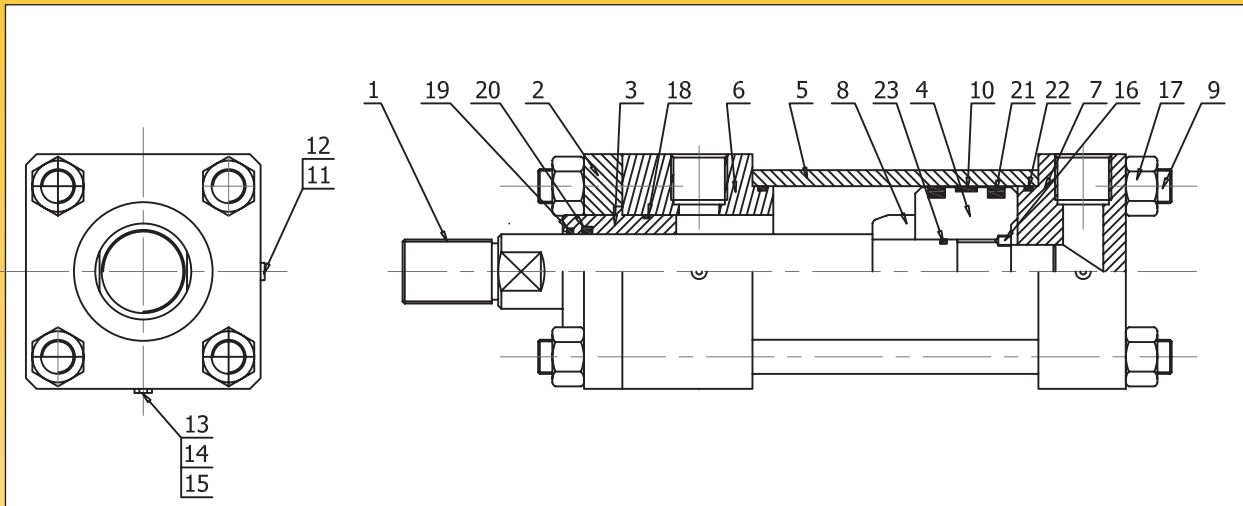
Notation	Material
J	Nylon Tarpaulin
Jn	Neoprene

△ 140H CYLINDER IS STANDARD TYPE

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER ORDERING GUIDE

INSIDE STRUCTURE DRAWINGS



PART LIST

No	Name	MATERIAL	Quantity	No.	Name	MATERIAL	Quantity
1	PISTON ROD	S45C	1	10	Wearing	TEFLON	1
2	RETAINER	SS41	1	11	cushion valve	S45C	2
3	BUSH	BC3	1	12	cushion body	SS41	2
4	PISTON	SS41	1	13	steel ball	SW	2
5	TUBE	SIKM13C	1	14	check body	SS41	2
6	ROD BLOCK	SS41	1	15	coil spring	SWP	2
7	HEAD BLOCK	SS41	1	16	set screw	SCM	1
8	CUSHION RING	S54C	1	17	tie rod nut	S45C	8
9	TIE ROD	S45C	4				

PACKING LIST

No.	18	19	20	21	22	23				
Name	BUSH O-RING	DUST SEAL		ROD PACKING		PISTON (P)	TUBE O-RING	ROD O-RING		
model	B/C	B	C	B	C	B/C	B/C	B	C	
material	NBR	NBR		URETHANE		URETHANE	NBR	NBR		
I-d quantity	1	1	1	1	1	2	2	1	1	
φ 40	G25	WD-22	WD-18	RU23-22	RU21-18	PUJ40	G35	P14	P10A	
φ 50	G30	WD-28	WD-22	RU21-28	RU23-22	PUJ50	G45	P20	P14	
φ 63	G40	WD-35	WD-28	RU20-35	RU21-28	PUJ63	G58	P22A	P20	
φ 80	G50	WD-45	WD-35	UR21-45	RU20-35	PUJ80	G75	G30	P22A	
φ 100	G80	WD-55	WD-45	RU20-55	RU21-45	PUJ100	G95	G40	G30	
φ 125	G80	G65	WD-70	WD-55	RU20-70	RU20-55	PUJ125	G120	G55	G40
φ 140	G90	G70	WD-80	WD-60	RU20-80	RU20-60	PUJ140	G135	G65	G45
φ 150	G95	G75	WD-85	WD-65	RU20-85	RU20-65	PUJ150	G145	G65	G50
φ 160	G100	G80	WD-90	WD-70	RU21-90	RU20-70	PUJ160	G150	G70	G55
φ 180	G110	G90	WD-100	WD-80	RU22-100	RU20-80	PUJ180	G170	G75	G65
φ 200	G125	G105	WD-110	WD-90	RU20-110	RU21-90	PUJ200	G190	G90	G70
φ 250	G155	G130	WD-140	WD-110	RU22-140	RU20-110	PUJ250	G240	G115	G90

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER BASIC TYPE

SD	IS 70/140 H- 2	CD 4 C/B-	6 7 ST 8 - 9 10				
STANDARD	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER

180 φ-250 φ

OVER 100 φ DRILL HOLE

Rod Diameter	ΦMF	ΦDF
φ100	φ99.5	φ12
φ110	φ109.5	φ15
φ140	φ139.5	φ15

Series	Fixing method	
	Tie rod Type	Tube Flange
IS70H	-1, 500	1, 501-2, 000
IS140H	-800	501-2, 000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					DD	□EG	EE	F	FP	E	H	HL	L	PJ	LP	□TG	W
	A	φB	KK	φM	S	A	φB	KK	φM	S													
φ40	30	φ40	M20X1.5	φ22	20	25	φ36	M16X1.5	φ18	16	M10x1.5	65	PT 3/4	12	39	47	18	141	21	88	14	45	30
φ50	35	φ46	M24X1.5	φ28	24	30	φ40	M20X1.5	φ22	20	M10x1.5	76	PT 1/2	13	47	50	56	155	26	95	15	53	30
φ63	45	φ55	M30X1.5	φ35	30	35	φ46	M24X1.5	φ28	24	M12x1.5	90	PT 1/2	14	51	54	58	163	43	92	16	63	35
φ80	60	φ65	M39X1.5	φ45	41	45	φ55	M30X1.5	φ35	30	M16x1.5	110	PT 3/4	18	54	61	64	184	49	111	20	80	35
φ100	75	φ80	M48X1.5	φ55	50	60	φ65	M39X1.5	φ45	41	M18x1.5	135	PT 3/4	20	60	65	62	192	59	112	23	102	40
φ125	95	φ95	M64X2	φ70	65	75	φ80	M48X1.5	φ55	50	M22x1.5	165	PT1	24	66	74	68	220	62	131	23	122	45
φ140	110	φ105	M72X2	φ80	75	80	φ85	M56X2	φ60	55	M24x1.5	185	PT1	26	68	74	76	230	79	139	23	138	50
φ150	115	φ110	M76X2	φ85	80	85	φ90	M60X2	φ65	60	M27x1.5	196	PT1	28	70	74	84	240	85	147	23	148	50
φ160	120	φ115	M80X2	φ90	85	95	φ95	M64X2	φ70	65	M27x1.5	210	PT1	31	73	79	84	253	89	158	26	160	55
φ180	140	φ125	M95X2	φ100	-	110	φ105	M72X2	φ80	75	M30x1.5	235	PT1 1/4	33	70	84	91	275	100	174	29	182	55
φ200	150	φ140	M100X2	φ110	-	120	φ115	M80X2	φ90	85	M33x2	262	PT1 1/2	37	79	94	91	301	115	188	34	200	55
φ250	195	φ170	M130X2	φ140	-	150	φ140	M100X2	φ110	-	M42x2	325	PT2	46	106	114	102	346	125	204	36	250	65

* NOTE PT DIMMENSION EE IS BSPT (BRITISH STANDARD PIPE TAPER)

website: www.easternpneumatics.com

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

FOOT MOUNTS

LB	IS 70/140 H- 2	CD 4 C/B-	6 7 ST 8 - 9 10				
SHAFT DIRECTION FOOT TYPE (ASSEMBLY TYPE)	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER

OVER 100 OF ROD DIAMETER DRILL HOLE

Rod Diameter	Φ MF	Φ DF
φ 100	φ 99.5	φ 12
φ 110	φ 109.5	φ 15
φ 140	φ 139.5	φ 15

180 φ - 250 φ

Series	Fixing method	Tie rod Type	Tube Flange
IS70H		φ 99.5	φ 12
IS140H		φ 111.5	φ 15

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					AB	NH	AO	AT	AU	EG	EE	FP	HL	SA	AW	TR	UN	W
	A	ΦB	KK	ΦM	S	A	ΦB	KK	ΦM	S														
φ40	30	φ40	M20X1.5	φ22	20	25	φ36	M16X1.5	φ18	16	φ11	43 0.25	13	8	32	65	PT 3/4	39	141	205	230	46	69	30
φ50	35	φ46	M24X1.5	φ28	24	30	φ40	M20X1.5	φ22	20	φ14	50 0.25	15	8	35	76	PT 1/2	47	155	225	252	58	85	30
φ63	45	φ55	M30X1.5	φ35	30	35	φ46	M24X1.5	φ28	24	φ18	60 0.25	18	10	42	90	PT 1/2	51	163	247	278	65	98	35
φ80	60	φ65	M39X1.5	φ45	41	45	φ55	M30X1.5	φ35	30	φ18	72 0.25	20	12	50	110	PT 3/4	54	184	284	322	87	118	35
φ100	75	φ80	M48X1.5	φ55	50	60	φ65	M39X1.5	φ45	41	φ22	85 0.25	23	12	55	135	PT 3/4	60	192	302	342	109	150	40
φ125	95	φ95	M64X2	φ70	65	75	φ80	M48X1.5	φ55	50	φ26	105 0.25	29	15	66	165	PT1	66	220	352	396	130	175	45
φ140	110	φ105	M72X2	φ80	75	80	φ85	M56X2	φ60	55	φ26	115 0.25	30	18	70	185	PT1	68	230	370	416	145	195	50
φ150	115	φ110	M76X2	φ85	80	85	φ90	M60X2	φ65	60	φ30	123 0.25	30	18	75	196	PT1	70	240	390	438	155	210	50
φ160	120	φ115	M80X2	φ90	85	95	φ95	M64X2	φ70	65	φ33	132 0.25	35	18	75	210	PT1	73	253	403	454	170	225	55
φ180	140	φ125	M95X2	φ100	-	110	φ105	M72X2	φ80	75	φ33	148 0.25	40	20	85	235	PT1 1/4	70	275	445	-	185	243	55
φ200	150	φ140	M100X2	φ110	-	120	φ115	M80X2	φ90	85	φ36	165 0.25	40	25	98	262	PT1 1/2	79	301	497	-	206	272	55
φ250	195	φ170	M130X2	φ140	-	150	φ140	M100X2	φ110	-	φ45	208 0.25	50	35	130	325	PT2	106	346	606	-	250	335	65

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

FRONT RECTANGLE FLANGE

FA	IS 70/140 H- 2	FA 4 C/B-	6 7 ST 8 - 9 10
ROD-SIDE, SHAFT DIRECTION, FLANGE TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE
		(7) CYLINDER STROKE	(8) PORT POSITION
			(9) CUSHION VALVE POSITION
			(10) DUST BOOT COVER

OVER 100 OF ROD DIAMETER DRILL HOLE

Rod Diameter	∅MF	∅DF
∅100	∅99.5	∅12
∅110	∅109.5	∅15
∅140	∅139.5	∅15

180 ∅ - 250 ∅	Fixing method	Tie rod Type	Tube Flange
Series	IS70H	-1,500	

Notation I-D	Rod diameter (B type)					Rod diameter (C type)																		
	A	∅B	KK	∅M	S	A	∅B	KK	∅M	S	EE	F	FB	FE	HL	LL	LZ	R	TF	UF	W	WF	YP	ZR
∅40	30	∅40	M20X1.5	∅22	20	25	∅36	M16X1.5	∅18	16	PT 3/4	12	∅11	69	141	129	166	48	95	118	30	41	27	196
∅50	35	∅46	M24X1.5	∅28	24	30	∅40	M20X1.5	∅22	20	PT 1/2	13	∅14	85	155	142	182	58	115	145	30	43	30	212
∅63	45	∅55	M30X1.5	∅35	30	35	∅46	M24X1.5	∅28	24	PT 1/2	14	∅18	98	163	149	194	65	132	165	35	50	37	229
∅80	60	∅65	M39X1.5	∅45	41	45	∅55	M30X1.5	∅35	30	PT 3/4	18	∅18	118	184	166	222	87	155	190	35	53	36	257
∅100	75	∅80	M48X1.5	∅55	50	60	∅65	M39X1.5	∅45	41	PT 3/4	20	∅22	150	192	172	232	109	190	230	40	60	40	272
∅125	95	∅95	M64X2	∅70	65	75	∅80	M48X1.5	∅55	50	PT1	24	∅26	175	220	196	264	130	224	272	45	69	42	309
∅140	110	∅105	M72X2	∅80	75	80	∅85	M56X2	∅60	55	PT1	26	∅26	195	230	204	276	145	250	300	50	76	42	326
∅150	115	∅110	M76X2	∅85	80	85	∅90	M60X2	∅65	60	PT1	28	∅30	210	240	202	288	155	270	320	50	78	42	338
∅160	120	∅115	M80X2	∅90	85	95	∅95	M64X2	∅70	65	PT1	31	∅33	225	253	222	300	170	285	345	55	86	42	359
∅180	140	∅125	M95X2	∅100	-	110	∅105	M72X2	∅80	75	PT1 1/4	33	∅33	243	275	242	-	185	315	375	55	88	37	-
∅200	150	∅140	M100X2	∅110	-	120	∅115	M80X2	∅90	85	PT1 1/2	37	∅36	272	301	264	-	206	355	425	55	92	42	-
∅250	195	∅170	M130X2	∅140	-	150	∅140	M100X2	∅110	-	PT2	46	∅45	335	346	300	-	250	245	515	65	111	60	-

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER REAR RECTANGLE FLANGE

FB	IS 70/140 H- 2	FB 4 C/B-	6 7 ST 8 - 9 10				
ROD-SIDE, SHAFT DIRECTION, FLANGE TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER

Rod Diameter	∅MF	∅DF
∅100	∅99.5	∅12
∅110	∅109.5	∅15
∅140	∅139.5	∅15

180 ∅ - 250 ∅		
Series	Fixing method	Tie rod Type / Tube Flange
IS70H		-1,500 / 1,501-2,000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					EE	F	FB	FE	FP	HL	LZ	R	TF	UF	W	YR	ZF
	A	∅B	KK	∅M	S	A	∅B	KK	∅M	S													
∅40	30	∅40	M20X1.5	∅22	20	25	∅36	M16X1.5	∅18	16	PT 3/4	12	∅11	69	39	141	166	48	95	118	30	196	182
∅50	35	∅46	M24X1.5	∅28	24	30	∅40	M20X1.5	∅22	20	PT 1/2	13	∅14	85	42	155	182	58	115	145	30	212	198
∅63	45	∅55	M30X1.5	∅35	30	35	∅46	M24X1.5	∅28	24	PT 1/2	14	∅18	98	51	163	194	65	132	165	35	229	213
∅80	60	∅65	M39X1.5	∅45	41	45	∅55	M30X1.5	∅35	30	PT 3/4	18	∅18	118	54	184	222	87	155	190	35	257	237
∅100	75	∅80	M48X1.5	∅55	50	60	∅65	M39X1.5	∅45	41	PT 3/4	20	∅22	150	60	192	232	109	190	230	40	272	252
∅125	95	∅95	M64X2	∅70	65	75	∅80	M48X1.5	∅55	50	PT1	24	∅26	175	66	220	264	130	224	272	45	309	289
∅140	110	∅105	M72X2	∅80	75	80	∅85	M56X2	∅60	55	PT1	26	∅26	195	68	230	276	145	250	300	50	326	306
∅150	115	∅110	M76X2	∅85	80	85	∅90	M60X2	∅65	60	PT1	28	∅30	210	70	240	288	155	270	320	50	338	318
∅160	120	∅115	M80X2	∅90	85	95	∅95	M64X2	∅70	65	PT1	31	∅33	225	73	253	300	170	285	345	55	355	339
∅180	140	∅125	M95X2	∅100	-	110	∅105	M72X2	∅80	75	PT1 1/4	33	∅33	243	70	275	-	185	315	375	55	-	363
∅200	150	∅140	M100X2	∅110	-	120	∅115	M80X2	∅90	85	PT1 1/2	37	∅36	272	79	301	-	206	355	425	55	-	393
∅250	195	∅170	M130X2	∅140	-	150	∅140	M100X2	∅110	-	PT2	46	∅45	335	106	346	-	250	245	515	65	-	457

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

SINGLE REAR CLEVIS

CA	IS 70/140 H- 2	CA 4 C/B-	6 7 ST 8 - 9 10				
SINGLE THREAD CLEVIS TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER

OVER 100 OF ROD DIAMETER DRILL HOLE

Hoc Diameter	Φ MF	Φ DF
φ 100	φ 99.5	φ 12
φ 110	φ 109.5	φ 15
φ 140	φ 139.5	φ 15

180 φ - 250 φ

Series	Fixing method	Tie rod Type	Tube Flange
IS70H		-1, 500	1, 501-2, 000
IS140H		-800	501-2, 000

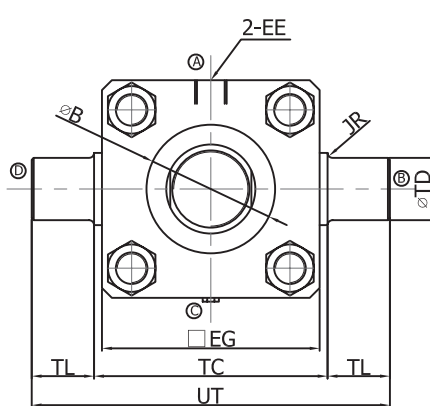
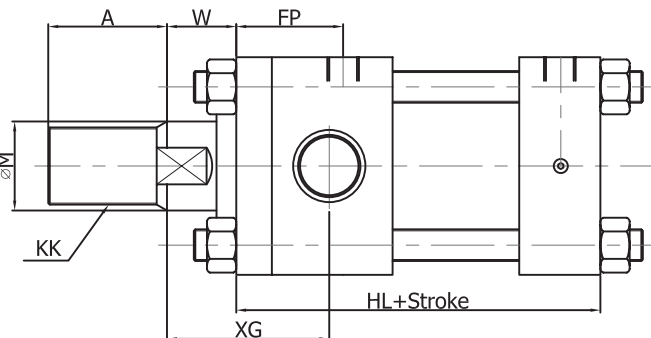
Notation I-D	Rod diameter (B type)					Rod diameter (C type)					Φ CD	□ EG	EE	EW	FI	FP	HL	L	MR	PJ	W	XD
	A	Φ B	KK	Φ M	S	A	Φ B	KK	Φ M	S												
φ 40	φ 30	φ 40	M20X1.5	φ 22	20	25	36	M16X1.5	φ 18	16	16 H9	65	PT 3/4	25 ^{-0.1} _{-0.4}	38	39	141	21	R16	88	30	209
φ 50	φ 35	φ 46	M24X1.5	φ 28	24	30	40	M20X1.5	φ 22	20	20 H9	76	PT 1/2	31.5 ^{-0.1} _{-0.4}	45	42	155	26	R20	95	30	230
φ 63	φ 45	φ 55	M30X1.5	φ 35	30	35	46	M24X1.5	φ 28	24	31.5 H9	90	PT 1/2	40 ^{-0.1} _{-0.4}	63	51	163	43	R31.5	92	35	261
φ 80	φ 60	φ 65	M39X1.5	φ 45	41	45	55	M30X1.5	φ 35	30	31.5 H9	110	PT 3/4	40 ^{-0.1} _{-0.4}	72	54	184	49	R31.5	111	35	291
φ 100	φ 15	φ 80	M48X1.5	φ 55	50	60	65	M39X1.5	φ 45	41	40 H9	135	PT 3/4	50 ^{-0.1} _{-0.4}	84	60	192	59	R40	112	40	316
φ 125	φ 95	φ 95	M64X2	φ 70	65	75	80	M48X1.5	φ 55	50	50 H9	165	PT1	63 ^{-0.1} _{-0.8}	100	66	220	62	R50	131	45	365
φ 140	φ 110	φ 105	M72X2	φ 80	75	80	85	M56X2	φ 60	55	63 H9	185	PT1	80 ^{-0.1} _{-0.8}	120	68	230	79	R63	139	50	400
φ 150	φ 115	φ 110	M76X2	φ 85	80	85	90	M60X2	φ 65	60	63 H9	196	PT1	80 ^{-0.1} _{-0.6}	122	70	240	85	R63	147	50	412
φ 160	φ 120	φ 115	M80X2	φ 90	85	95	95	M64X2	φ 70	65	71 H9	210	PT1	80 ^{-0.1} _{-0.8}	137	73	253	89	R71	158	55	445
φ 180	φ 140	φ 125	M95X2	φ 100	-	110	105	M72X2	φ 80	75	80 H9	235	PT1 1/2	100 ^{-0.1} _{-0.8}	150	70	275	100	R80	174	55	480
φ 200	φ 150	φ 140	M100X2	φ 110	-	120	115	M80X2	φ 90	85	90 H9	262	PT1 1/2	125 ^{-0.1} _{-0.8}	170	79	301	115	R90	188	55	526
φ 250	φ 195	φ 170	M130X2	φ 140	-	150	140	M100X2	φ 110	-	100 H9	325	PT2	125 ^{-0.1} _{-0.8}	185	106	346	125	R100	204	65	596

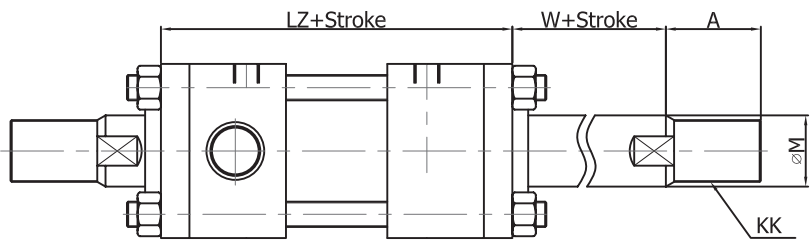
TANAIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

INTEGRAL HEAD TRUNION

TA	IS 70/140 H- 2	TA 4 C/B-	6 7 ST 8 - 9 10				
ROD-SIDE TRUNION TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER



180 φ - 250 φ

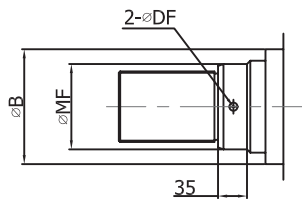
Series	Fixing method	Tie rod Type	Tube Flange
IS70H		-1, 500	1, 501-2, 000
IS140H		-800	801-2, 000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					XG	□EG	EE	FP	HL	JR	LZ	TC	TD	TL	UT	W
	A	φB	KK	φM	S	A	φB	KK	φM	S												
φ40	30	φ40	M20X1.5	φ22	20	25	φ36	M16X1.5	φ18	16	62	65	PT 3/4	39	141	R2	166	69 ⁰ _{-0.3}	φ20eg	20	109	30
φ50	35	φ46	M24X1.5	φ28	24	30	φ40	M20X1.5	φ22	20	66	76	PT 1/2	42	155	R2.5	182	85 ⁰ _{-0.35}	φ25eg	25	135	30
φ63	45	φ55	M30X1.5	φ35	30	35	φ46	M24X1.5	φ28	24	74	90	PT 1/2	51	163	R2.5	194	98 ⁰ _{-0.35}	φ31.5eg	31.5	161	35
φ80	60	φ65	M39X1.5	φ45	41	45	φ55	M30X1.5	φ35	30	82	110	PT 3/4	54	184	R2.5	222	118 ⁰ _{-0.35}	φ31.5eg	31.5	181	35
φ100	75	φ80	M48X1.5	φ55	50	60	φ65	M39X1.5	φ45	41	89	135	PT 3/4	60	192	R3	232	145 ⁰ _{-0.4}	φ40eg	40	225	40
φ125	95	φ95	M64X2	φ70	65	75	φ80	M48X1.5	φ55	50	103	165	PT1	66	220	R3	264	175 ⁰ _{-0.4}	φ50eg	50	275	45
φ140	110	φ105	M72X2	φ80	75	80	φ85	M56X2	φ60	55	112	185	PT1	68	230	R4	276	195 ⁰ _{-0.46}	φ63eg	63	321	50
φ150	115	φ110	M76X2	φ85	80	85	φ90	M60X2	φ65	60	112	196	PT1	70	240	R4	288	206 ⁰ _{-0.46}	φ63eg	63	332	50
φ160	120	φ115	M80X2	φ90	85	95	φ95	M64X2	φ70	65	126	210	PT1	73	253	R4	304	218 ⁰ _{-0.46}	φ71eg	71	360	55

TAN AIR PNEUMATICS

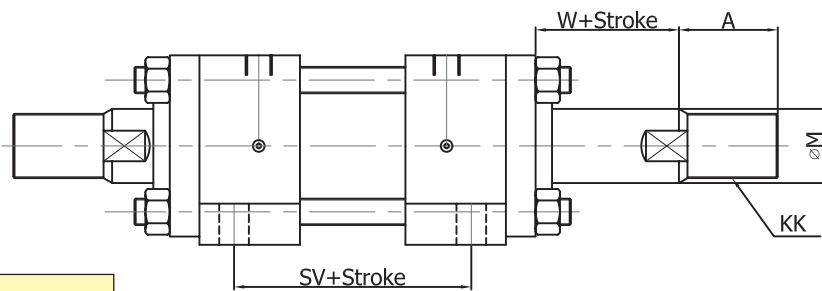
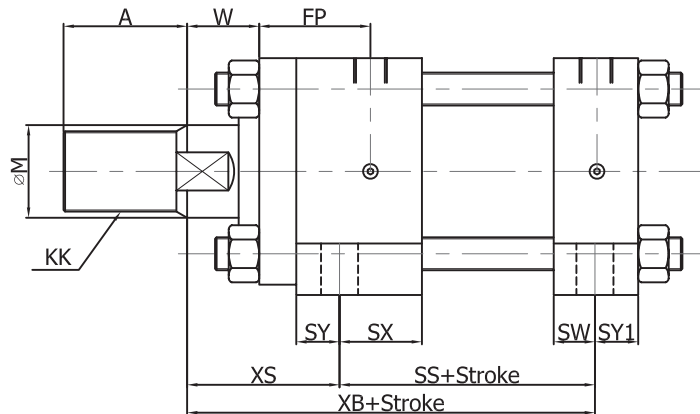
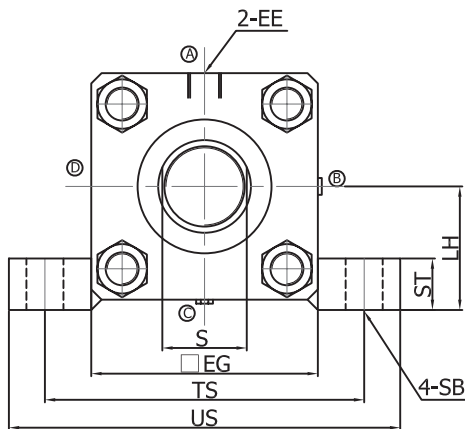
IS140H TIE ROD TYPE HYDRAULIC CYLINDER

LA SHAFT DIRECTION FOOT TYPE (ONE BODY TYPE)	IS 70/140 H- 2	LA 4 C/B-	6 7 ST 8 - 9 10			
	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE	(7) CYLINDER STROKE	(8) PORT POSITION	(9) CUSHION VALVE POSITION



OVER 100 OF ROD DIAMETER DRILL HOLE

Rod Diameter	∅MF	∅DF
∅100	∅99.5	∅12
∅110	∅109.5	∅15
∅140	∅139.5	∅15



180∅-250∅

Series	Fixing method	
	Tierod Type	Tibe Flaroe
IS70H	-1.500	1.501-2.000
IS140H	-800	801-2.000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					∅EG	EE	FP	LH	SB	SS	ST	SV	SW	SX	SY	SY1	TS	US	W	XB
	A	∅B	KK	∅M	S	A	∅B	KK	∅M	S																
∅40	30	∅40	M20X1.5	∅22	20	25	∅36	M16X1.5	∅18	16	65	PT 3/4	39	37.5	∅11	98	14	112	18	32	16	16	95	118	30	155
∅50	35	∅46	M24X1.5	∅28	24	30	∅40	M20X1.5	∅22	20	76	PT 1/2	42	45	∅14	108	17	122	14	33	22	22	115	145	30	163
∅63	45	∅55	M30X1.5	∅35	30	35	∅46	M24X1.5	∅28	24	90	PT 1/2	51	50	∅18	106	19	122	16	32	21	21	132	165	35	177
∅80	60	∅65	M39X1.5	∅45	41	45	∅55	M30X1.5	∅35	30	110	PT 3/4	54	60	∅18	124	25	144	20	40	21	21	155	190	35	198
∅100	75	∅80	M48X1.5	∅55	50	60	∅65	M39X1.5	∅45	41	135	PT 3/4	60	71	∅22	122	27	142	20	40	25	25	190	230	40	189
∅125	95	∅95	M64X2	∅70	65	75	∅80	M48X1.5	∅55	50	165	PT1	66	85	∅26	136	32	156	24	44	30	30	224	272	45	235
∅140	110	∅105	M72X2	∅80	75	80	∅85	M56X2	∅60	55	185	PT1	68	95	∅26	144	35	164	24	44	30	30	250	300	50	250
∅150	115	∅110	M76X2	∅85	80	85	∅90	M60X2	∅65	60	196	PT1	70	106	∅30	146	37	166	21	41	33	33	270	320	50	257
∅160	120	∅115	M80X2	∅90	85	95	∅95	M64X2	∅70	65	210	PT1	73	112	∅33	150	42	170	23	43	36	36	285	345	55	272
∅180	140	∅125	M95X2	∅100	-	110	∅105	M72X2	∅80	75	235	PT1 1/4	70	125	∅33	172	47	189	32	49	37	37	315	375	55	295
∅200	150	∅140	M100X2	∅110	-	120	∅115	M80X2	∅90	85	262	PT1 1/2	79	140	∅36	186	52	201	40	55	39	39	355	425	55	317
∅250	195	∅170	M130X2	∅140	-	150	∅140	M100X2	∅110	-	325	PT2	106	170	∅45	206	57	236	37	67	47	47	425	515	65	354

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

FC	IS 70/140 H- 2	FC 4 C/B-	6 7 ST 8 - 9 10
FORWARD DIRECTION ROD-SIDE, FLANGE TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE
		(7) CYLINDER STROKE	(8) PORT POSITION
		(9) CUSHION VALVE POSITION	(10) DUST BOOT COVER

OVER 100 OF ROD DIAMETER DRILL HOLE

Rod Diameter	Φ MF	Φ DF
φ 100	φ 99.5	φ 12
φ 110	φ 109.5	φ 15
φ 140	φ 139.5	φ 15

180 φ - 250 φ

Series	Fixing method	
	Tierod Type	Tibe Flaroe
IS70H	-1.500	1.501-2.000
IS140H	-800	801-2.000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					EE	F	FB	HL	LL	LZ	R	TF	□UF	W	WF	YP
	A	ΦB	KK	ΦM	S	A	ΦB	KK	ΦM	S												
φ40	30	φ40	M20X1.5	φ22	20	25	φ36	M16X1.5	φ18	16	PT3/4	12	φ11	141	129	166	46	95	118	30	44	27
φ50	35	φ46	M24X1.5	φ28	24	30	φ40	M20X1.5	φ22	20	PT 1/2	13	φ14	155	142	182	58	115	145	30	43	30
φ63	45	φ55	M30X1.5	φ35	30	35	φ46	M24X1.5	φ28	24	PT 1/2	14	φ18	163	149	184	65	132	165	35	50	37
φ80	60	φ65	M39X1.5	φ45	41	45	φ55	M30X1.5	φ35	30	PT3/4	18	φ18	184	166	222	87	155	190	35	53	36
φ100	75	φ80	M48X1.5	φ55	50	60	φ65	M39X1.5	φ45	41	PT3/4	20	φ22	192	172	232	109	190	230	40	60	40
φ125	95	φ95	M64X2	φ70	65	75	φ80	M48X1.5	φ55	50	PT1	24	φ26	220	196	264	130	224	272	45	69	42
φ140	110	φ105	M72X2	φ80	75	80	φ85	M56X2	φ60	55	PT1	26	φ26	230	204	276	145	250	300	50	76	42
φ150	115	φ110	M76X2	φ85	80	85	φ90	M60X2	φ65	60	PT1	28	φ30	240	212	288	155	270	320	50	76	42
φ160	120	φ115	M80X2	φ90	85	95	φ95	M64X2	φ70	65	PT1	31	φ33	253	222	304	170	285	345	55	86	42
φ180	140	φ125	M95X2	φ100	-	110	φ105	M72X2	φ80	75	PT1 1/4	33	φ33	275	242	-	185	315	375	55	88	37
φ200	150	φ140	M100X2	φ110	-	120	φ115	M80X2	φ90	85	PT1 1/2	37	φ36	301	264	-	206	355	425	55	92	42
φ250	195	φ170	M130X2	φ140	-	150	φ140	M100X2	φ110	-	PT2	46	φ45	346	300	-	250	425	515	65	111	60

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

FD	IS 70/140 H- 2	FD 4 C/B-	6 7 ST 8 - 9 10
FORWARD DIRECTION HEAD-SIDE, FLANGE TYPE	(2) PACKING MATERIALS	(4) INSIDE DIAMETER OF CYLINDER	(6) CUSHION TYPE
		(7) CYLINDER STROKE	(8) PORT POSITION
			(9) CUSHION VALVE POSITION
			(10) DUST BOOT COVER

OVER 100 OF ROD DIAMETER DRILL HOLE

Rod Diameter	∅MF	∅DF
∅100	∅99.5	∅12
∅110	∅109.5	∅15
∅140	∅139.5	∅15

180 ∅ - 250 ∅

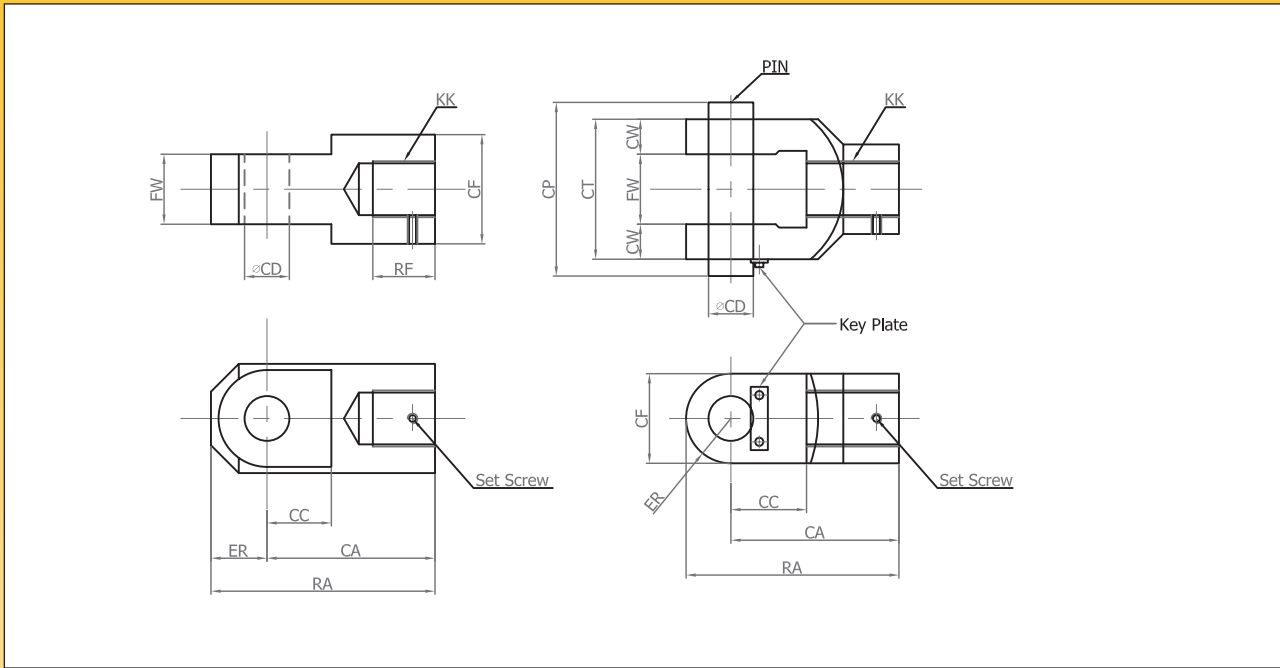
Series	Fixing method	Tie rod Type	Tube Flange
IS70H		-1, 500	1, 501-2, 000
IS140H		-800	801-2, 000

Notation I-D	Rod diameter (B type)					Rod diameter (C type)					EE	F	FB	FP	HL	LZ	R	TF	∅UF	W	ZH
	A	∅B	KK	∅M	S	A	∅B	KK	∅M	S											
∅40	30	∅40	M20X1.5	∅22	20	25	∅36	M16X1.5	∅18	16	PT 3/4	12	∅11	39	141	166	46	95	118	30	183
∅50	35	∅46	M24X1.5	∅28	24	30	∅40	M20X1.5	∅22	20	PT 1/2	13	∅14	42	155	182	58	115	145	30	197
∅63	45	∅55	M30X1.5	∅35	30	35	∅46	M24X1.5	∅28	24	PT 1/2	14	∅18	51	163	184	65	132	165	35	212
∅80	60	∅65	M39X1.5	∅45	41	45	∅55	M30X1.5	∅35	30	PT 3/4	18	∅18	54	184	222	87	155	190	35	237
∅100	75	∅80	M48X1.5	∅55	50	60	∅65	M39X1.5	∅45	41	PT 3/4	20	∅22	60	192	232	109	190	230	40	252
∅125	95	∅95	M64X2	∅70	65	75	∅80	M48X1.5	∅55	50	PT1	24	∅26	66	220	264	130	224	272	45	389
∅140	110	∅105	M72X2	∅80	75	80	∅85	M56X2	∅60	55	PT1	26	∅26	68	230	276	145	250	300	50	306
∅150	115	∅110	M76X2	∅85	80	85	∅90	M60X2	∅65	60	PT1	28	∅30	70	240	288	155	270	320	50	318
∅160	120	∅115	M80X2	∅90	85	95	∅95	M64X2	∅70	65	PT1	31	∅33	73	253	304	170	285	345	55	343
∅180	140	∅125	M95X2	∅100	-	110	∅105	M72X2	∅80	75	PT1 1/4	33	∅33	70	275	-	185	315	375	55	361
∅200	150	∅140	M100X2	∅110	-	120	∅115	M80X2	∅90	85	PT1 1/2	37	∅36	79	301	-	206	355	425	55	393
∅250	195	∅170	M130X2	∅140	-	150	∅140	M100X2	∅110	-	PT2	46	∅45	106	346	-	250	425	515	65	457

TAN AIR PNEUMATICS

IS140H TIE ROD TYPE HYDRAULIC CYLINDER

FRONT CLEVIS OPTIONS



Notation I-D	CA	CC		CD		CF		CP	CT	CW	ER		FW		KK		RA			RF	
		Srge threec	Srge threec	Srge threec	Douole threec	Srge threec	Srge threec				Srge threec	Srge threec	Srge threec	Douole threec	B	C	Srge threec	Srge threec	Srge threec	Srge threec	
φ 40	60	28	27	φ 16 H10	φ 16 $\frac{H9}{10}$	39	32	62	50	12.5	20	R16	25 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	25 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M20X1.5	M16X1.5	80	76	32	27	
φ 50	70	28	32	φ 20 H10	φ 20 $\frac{H9}{10}$	49	40	76.5	63.5	16	25	R20	31.5 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	31.5 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M24X1.5	M20X1.5	95	90	37	32	
φ 63	115	43	50	φ 31.5 H10	φ 31.5 $\frac{H9}{10}$	62	60	93	80	20	35	R30	40 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	40 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M30X1.5	M21X1.5	150	145	47	37	
φ 80	115	43	50	φ 31.5 H10	φ 31.5 $\frac{H9}{10}$	62	60	93	80	20	35	R30	40 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	40 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M39X1.5	M30X1.5	150	145	62	47	
φ 100	145	55	60	φ 40 H10	φ 40 $\frac{H9}{10}$	79	80	117	100	25	40	40	50 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	50 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M48X1.5	M39X1.5	185	185	77	62	
φ 125	180	65	70	φ 50 H10	φ 50 $\frac{H9}{10}$	100	100	143	126	31.5	50	50	53 $\begin{smallmatrix} -0.1 \\ -0.4 \end{smallmatrix}$	53 $\begin{smallmatrix} +0.4 \\ +0.1 \end{smallmatrix}$	M64X2	M48X1.5	230	230	97	77	
φ 140	225	85	90	φ 63 H10	φ 63 $\frac{H9}{10}$	130	120	183	160	40	65	65	80 $\begin{smallmatrix} -0.1 \\ -0.8 \end{smallmatrix}$	80 $\begin{smallmatrix} +0.8 \\ +0.1 \end{smallmatrix}$	M72X2	M56X2	290	290	112	82	
φ 150	225	85	90	φ 63 H10	φ 63 $\frac{H9}{10}$	130	120	183	160	40	65	65	80 $\begin{smallmatrix} -0.1 \\ -0.8 \end{smallmatrix}$	80 $\begin{smallmatrix} +0.8 \\ +0.1 \end{smallmatrix}$	M76X2	M60X2	290	290	117	87	
φ 160	240	90	100	φ 71 H10	φ 71 $\frac{H9}{10}$	140	140	183	160	40	70	70	80 $\begin{smallmatrix} -0.1 \\ -0.8 \end{smallmatrix}$	80 $\begin{smallmatrix} +0.5 \\ +0.1 \end{smallmatrix}$	M80X2	M64X2	310	310	122	97	

LOCK NUT

Notation I-D	B rod type locknut				C rod type locknut			
	M	B	C	H	M	B	C	H
φ 40	M20X1.5	27	31.2	12	M16X1.5	22	25.4	10
φ 50	M24X1.5	32	37.0	14	M20X1.5	27	31.2	12
φ 63	M30X1.5	41	47.3	17	M24X1.5	32	37.0	14
φ 80	M39X1.5	55	63.5	20	M30X1.5	41	47.3	17
φ 100	M48X1.5	70	80.8	26	M39X1.5	55	63.5	20
φ 125	M64X2	90	104	35	M48X1.5	70	80.8	26
φ 140	M72X2	100	115	38	M56X2	80	92.4	35
φ 150	M76X2	105	121	40	M60X2	85	98.1	33
φ 160	M80X2	110	127	43	M64X2	90	104	35

