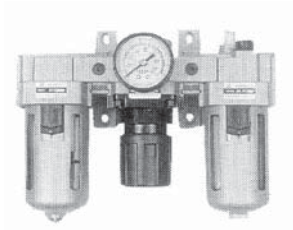
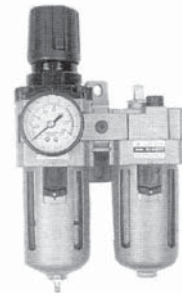


# MODULAR TYPE AIR COMBINATION SET

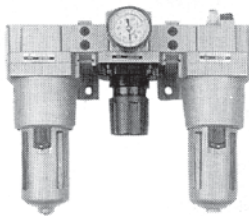
**YAC3000  
YAC4000**



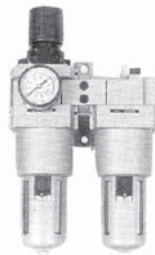
**YAC3010  
YAC4010**



**YAC5000**

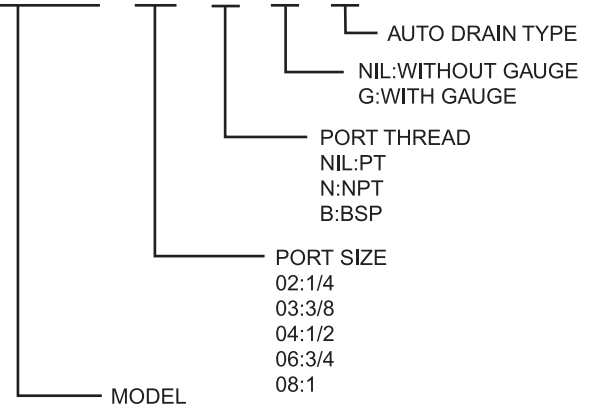


**YAC5010**

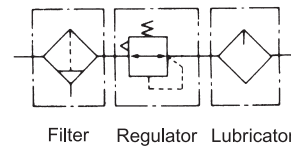


## HOW TO ORDER

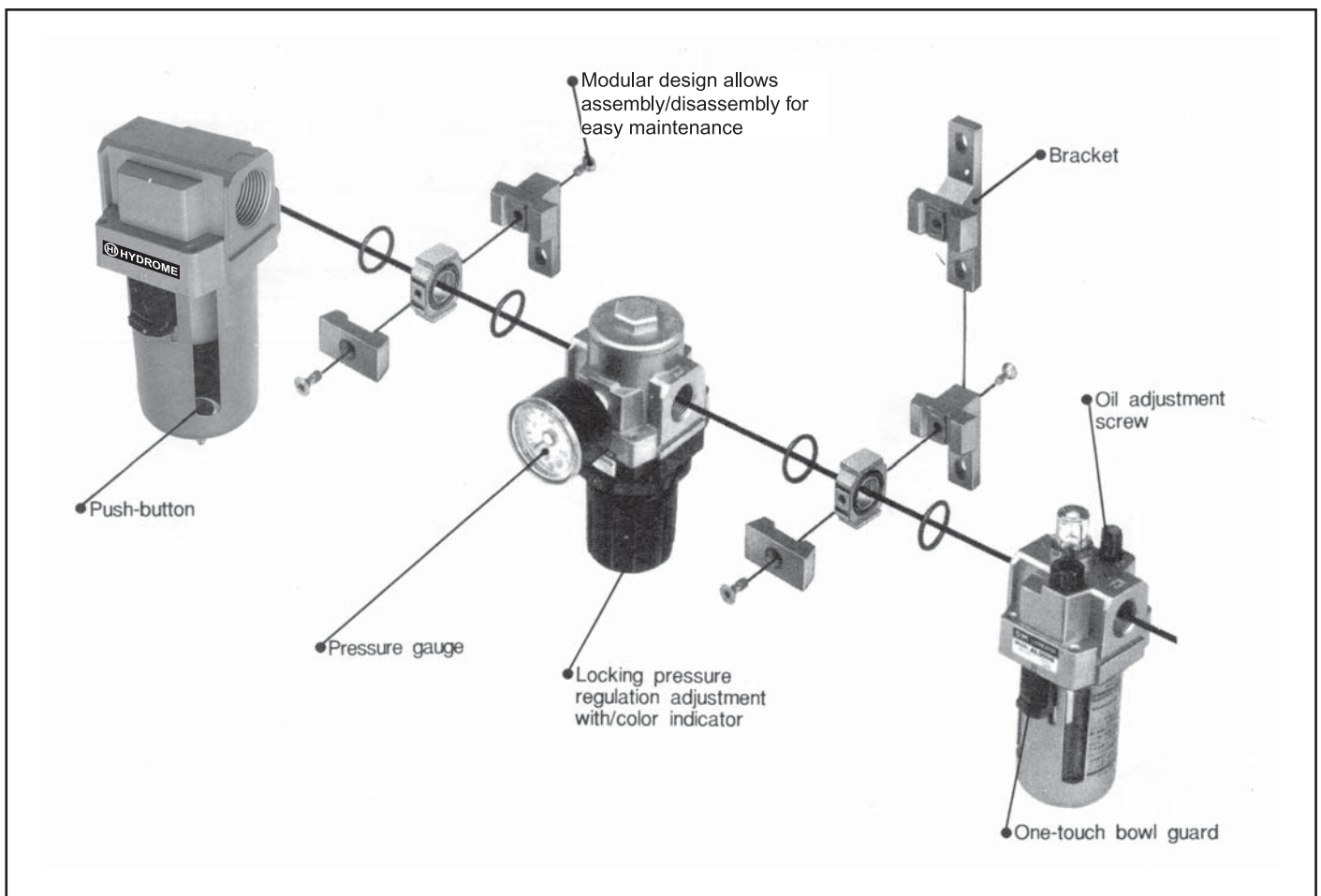
**YAC3000 - 03 - N - G - D**



## Symbol



## DECOMPOSITION



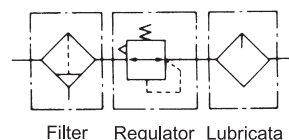
# MODULAR TYPE AIR COMBINATION SET

## SPECIFICATIONS

MODEL		YAC 3000	YAC 4000	YAC 5000
Combination	Air filter	YAF 3000	YAF 4000	YAF 5000
	Regulator	YAR 3000	YAR 4000	YAR 5000
	Lubricator	YAL 3000	YAL 4000	YAL 5000
Port size		$\frac{1}{4} \cdot \frac{3}{8}$	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	$\frac{3}{4} \cdot 1$
Port size for pressure gauge		$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
Max. supply pressure kgf/cm <sup>2</sup>		15		
Max. operating pressure kgf/cm <sup>2</sup>		9.9		
Regulating range kgf/cm <sup>2</sup>		0.5-8.5		
Max.Flow rate NI/min		2000	4000	5000
Ambient and media temperature		-5~60°C		
Filtration		Standard:5 μ m, Option: 2,10,20,40 μ m		
Recommended oil		Turbin oil ISO VG32		
Bowl material		Polycarbonate		
Construction/Regulator		Relieving type		
Weight kg		1.27	2.52	4.36
Accessories (standard)	Bowl guard	•	•	•
	Bracket	B310L	B410L	B610L

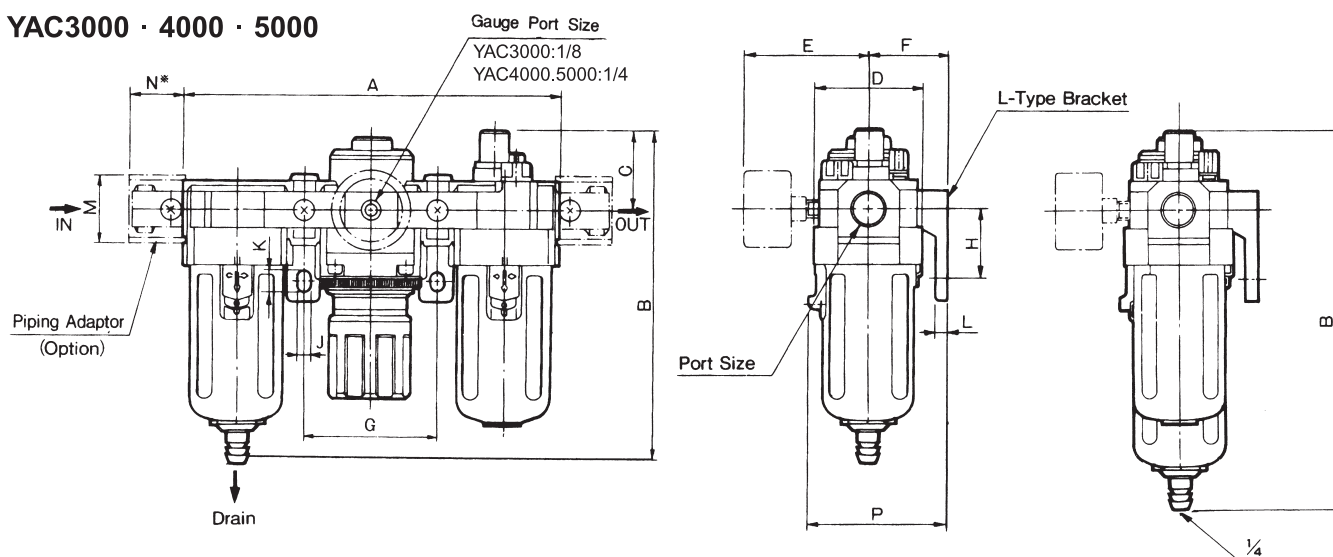
\*Conditions: Supply pressure 7kgf/cm<sup>2</sup>, setting pressure:5kgf/cm<sup>2</sup>

Symbol



## DIMENSIONS (mm)

### YAC3000 · 4000 · 5000



MODEL	PORT SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P
YAC 3000	$\frac{1}{4} \cdot \frac{3}{8}$	181	156.5	38	53	60.8	41	64	34	7	11	7	34.2	26*	70.5
YAC 4000	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	238	191.5	41	70	65.5	50	84	40	9	13	7	42.2	33*	88
YAC 5000	$\frac{3}{4} \cdot 1$	300	267	45	90	75	70	105	50	12	15.5	10	55.2	40*	115

\*Pressure Gauge 40 mm for YAC3000. 50mm for YAC4000,5000

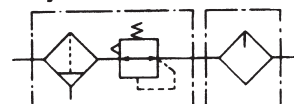
# MODULAR TYPE AIR COMBINATION SET

## SPECIFICATIONS

MODEL		YAC 3010	YAC 4010	YAC 5010
Combination	Filter Regulator	YAW 3000	YAW 4000	YAW 5000
	Lubricator	YAL 3000	YAL 4000	YAL 5000
Port size		$\frac{1}{4} \cdot \frac{3}{8}$	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	$\frac{3}{4} \cdot 1$
Port size for pressure gauge		$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
Max. supply pressure kgf/cm <sup>2</sup>		15		
Max. operating pressure kgf/cm <sup>2</sup>		9.9		
Regulating range kgf/cm <sup>2</sup>		0.5-8.5		
Max.Flow rate NI/min		1700	3000	5000
Ambient and media temperature		-5~60°C		
Filtration		Standard:5 μ m, Option: 2,10,20,40 μ m		
Recommended oil		Turbin oil ISO VG32		
Bowl material		Polycarbonate		
Construction/Regulator		Relieving type		
Weight kg		0.98	1.93	3.56
Accessories (standard)	Bowl guard	•	•	•
	Bracket	B310T	B410T	B610T

\*Conditions: Supply pressure 7kgf/cm<sup>2</sup>, setting pressure:5kgf/cm<sup>2</sup>

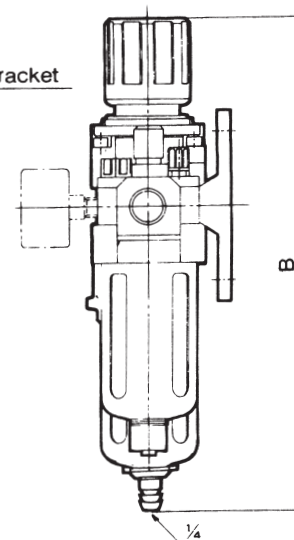
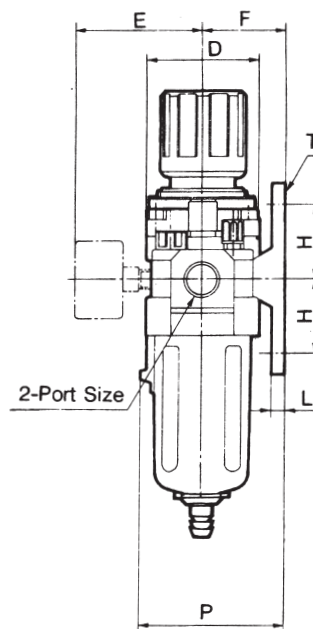
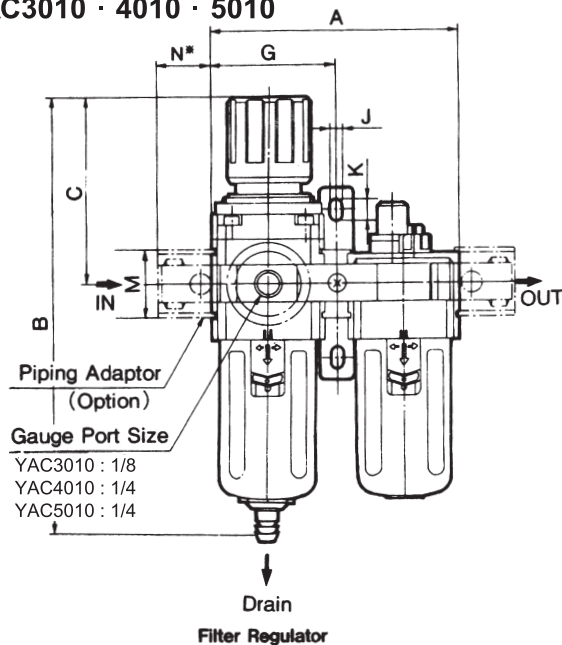
Symbol



Filter Regulator Lubricator

## DIMENSIONS (mm)

YAC3010 · 4010 · 5010

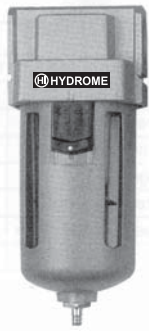


MODEL	PORT SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P
YAC 3010	$\frac{1}{4} \cdot \frac{3}{8}$	117	211	92.5	53	60.8	41	58.5	35	7	11	7	34.2	26*	70.5
YAC 4010	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	154	262.5	112	70	70.5	50	77	40	9	13	7	42.2	33*	88
YAC 5010	$\frac{3}{4} \cdot 1$	195	330	120	90	75	70	97.5	50	12	15.5	10	55.2	40*	115

\*Pressure Gauge 40 mm for YAC3010. 50mm for YAC4010.5010

# AIR FILTER

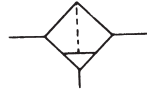
YAF3000  
YAF4000



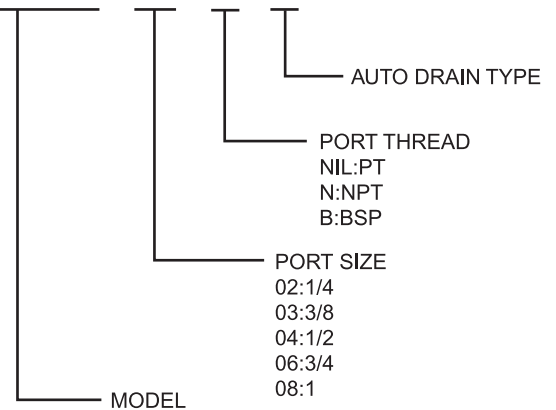
YAF5000



Symbol



## HOW TO ORDER YAF3000 - 03 - N - D



## SPECIFICATIONS

MODEL	YAF 3000	YAF 4000	YAF 5000
Port size	$\frac{1}{4} \cdot \frac{3}{8}$	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	$\frac{3}{4} \cdot 1$
Max. supply pressure kgf/cm <sup>2</sup>	15		
Max. operating pressure kgf/cm <sup>2</sup>	9.9		
Ambient and media temperature	-5~60°C		
Filtration	Standard:5 μm, Option: 2,10,20,40,70,100 μm		
Bowl material	Polycarbonate		
Bowl capacity cm <sup>3</sup>	20	45	130
Weight kg	0.24	0.45	0.99
Accessory(standard)	Bowl guard	•	•

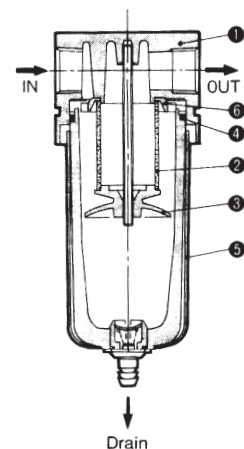
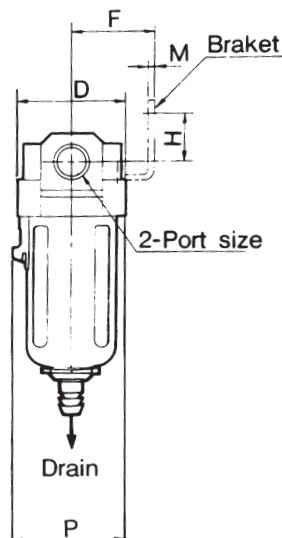
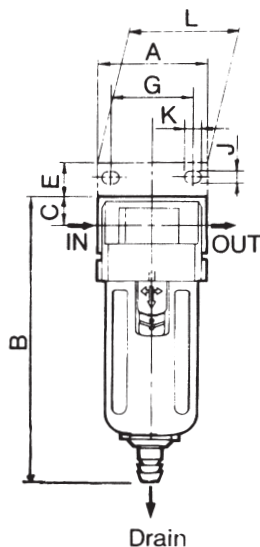
## MAIN PARTS

NO.	NAME	MATERIAL	NOTE
		YAF3000,4000,5000	
①	Body	Aluminum die casting	Platinum silver Painting

## PARTS LIST

NO.	PART NAME	MATERIAL	PART NO.		
			YAF3000	YAF4000	YAF5000
②	Filter element	Polyrex	111511-5B	11104-5B	11173-5B
③	Baffle	ABS	111522	111622	11175
④	O-ring	NBR	111512	111636	111636
⑤	Bowl assembly	Polycarbonate	C300F	C400F	C400F
⑥	Deflector	ABS	11158	11167	11176

## DIMENSIONS (mm)



MODEL	PORT SIZE	A	B	C	D	E	F	G	H	J	K	L	M	P
YAF 3000	$\frac{1}{4} \cdot \frac{3}{8}$	53	132.5	14	53	16	41	40	23	6.5	8	53	2.3	56
YAF 4000	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.3	73
YAF 5000	$\frac{3}{4} \cdot 1$	90	247	24	90	23	70	66	35	11	13	90	3.2	90

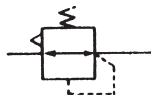


# AIR REGULATOR

YAR3000,4000,5000

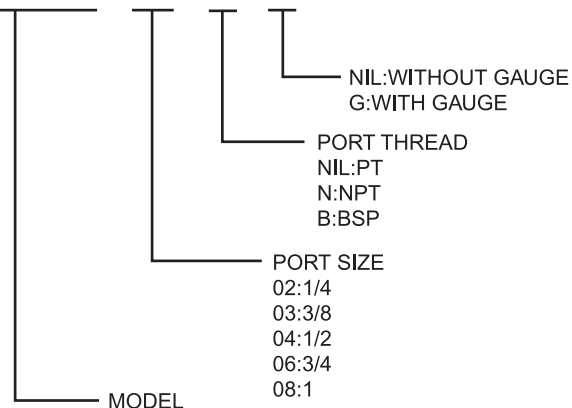


Symbol



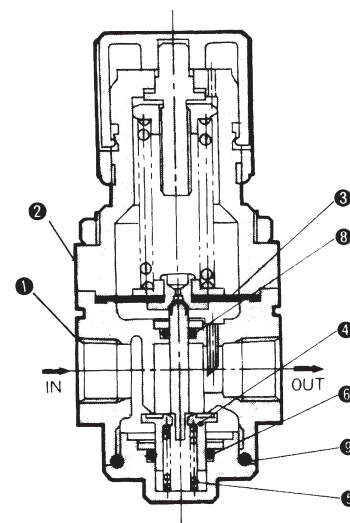
## HOW TO ORDER

YAR3000 - 03 - N - G



## SPECIFICATIONS

MODEL	YAR 3000	YAR 4000	YAR 5000
Port size	1/4 · 3/8	3/8 · 1/2 · 3/4	3/4 · 1
Max. supply pressure kgf/cm <sup>2</sup>	15		
Max. operating pressure kgf/cm <sup>2</sup>	9.9		
Regulating range kgf/cm <sup>2</sup>	0.5~8.5		
Port size for pressure gauge	1/8	1/4	1/4
Ambient and media temperature	-5~60°C		
Weight kg	0.44	0.92	1.4



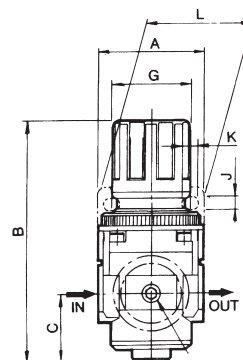
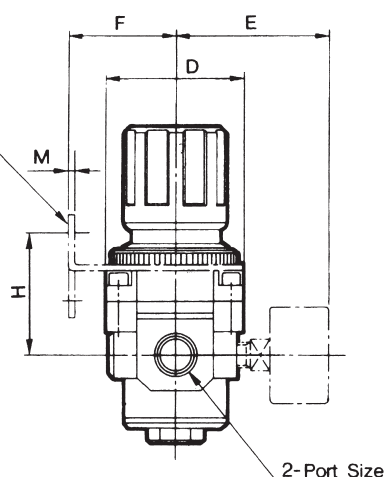
## MAIN PARTS

NO.	NAME	MATERIAL	NOTE
		YAR3000,4000,5000	
①	Body	Aluminum die casting	Platinum silver Painting
②	Bonnet	Polyacetal	Black painting

## PARTS LIST

NO.	PART NAME	MATERIAL	PART NO.		
			YAR3000	YAR4000	YAR5000
③	Diaphragm ass'y	NBR	131515A	131614A	131614A
④	Valve ass'y	Brass. NBR	13154A	13164A	13173A
⑤	Valve spring	Stainless steel	131558	131613	13174
⑥	Valve O-ring	NBR	JISB2401P14	131643	131710
⑦	Piston mini Y packing	NBR	-	-	-
⑧	O-ring	NBR	JISB2401P5	JISB2401P5	JISB2401P5
⑨	O-ring	NBR	131545	131647	JISB2401P50

Bracket



Gauge Port

YAR3000:1/8  
YAR4000:1/4  
YAR5000:1/4

## DIMENSIONS (mm)

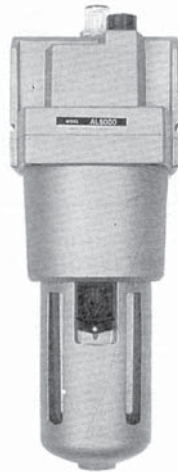
MODEL	PORT SIZE	A	B	C	D	E	F	G	H	J	K	L	M
YAR 3000	1/4 · 3/8	53	127.5	35	53	60.8	41	40	46	6.5	8	53	2.3
YAR 4000	3/8 · 1/2 · 3/4	70	149.5	37.5	70	65.5	50	54	54	8.5	10.5	70	2.3
YAR 5000	3/4 · 1	90	164	48	90	75	47	42	63	85	10.5	65	2.3

# AIR LUBRICATOR

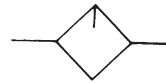
YAL3000,4000



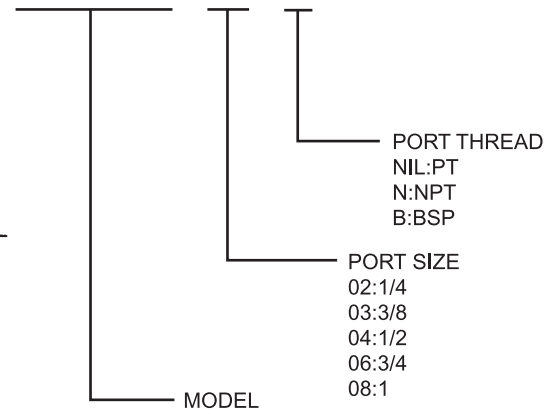
YAL5000



Symbol



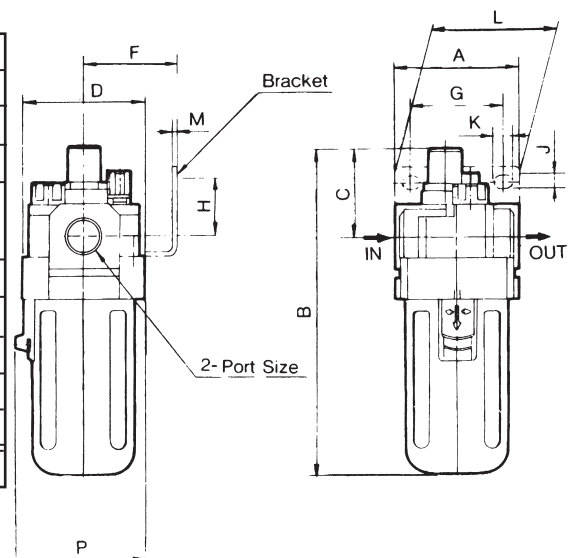
## HOW TO ORDER YAL3000 - 03 - N



## SPECIFICATIONS

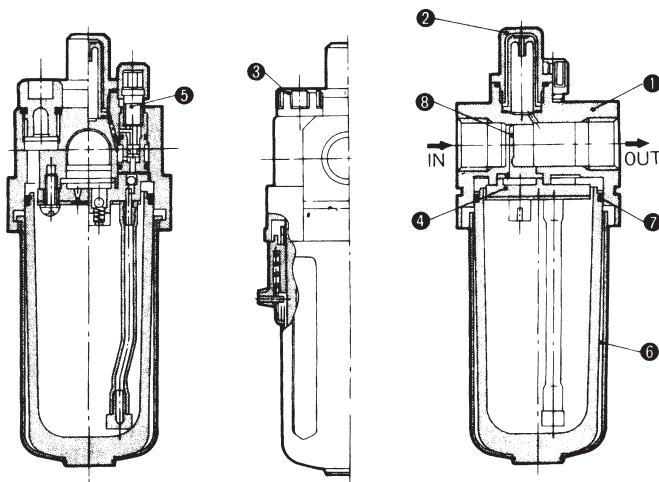
MODEL	YAL 3000	YAL 4000	YAL 5000
Port size	1/4 · 3/8	3/8 · 1/2 · 3/4	3/4 · 1
Max. supply pressure kgf/cm <sup>2</sup>	15		
Max. operating pressure kgf/cm <sup>2</sup>	9.9		
Min operating flow*NI/min	1/4 : 30 3/8 : 40	3/8 : 40 1/2 : 50	190
Bowl capacity cm <sup>3</sup>	50	130	130
Recommended oil	ISO VG32		
Ambient and media temperature	-5~60℃		
Bowl material	Polycarbonate		
Weight kg	0.27	0.49	1.08
Accessory(standard)	Bowl guard	•	•

\*Conditions: Supply pressure;5kg/cm<sup>2</sup>, Number of drop;5 drops/min,ISOVG32.



## MAIN PARTS

NO.	NAME	MATERIAL	NOTE
		YAL3000,4000,5000	
①	Body	Aluminum die casting	Platinum silver Painting



## PARTS LIST

NO.	PART NAME	MATERIAL	PART NO.		
			YAL3000	YAL4000	YAL5000
②	Sight dome ass'y	Polycarbonate	12155A	12155A	12155A
③	Filler cap ass'y	-	12159A	12164A	12164A
④	Damper guide ass'y	-	121521A	121611A	12325A
⑤	Needle valve ass'y	-	121522A	121522A	121616A
⑥	Bowl ass'y*	-	C300L	C400L	C400L
⑦	O-ring	NBR	111512	111636	111636
⑧	Damper	Synthetic resin	12158 -2(03) -1(02)	12165 -2(04) -1(03)	123210A

\*Bowl Assemblies of AL3000, AL4000 and AL5000 are fitted with bowl guard.

MODEL	PORT SIZE	A	B	C	D	F	G	H	J	K	L	M	P
YAL 3000	1/4 · 3/8	53	142	38	53	41	40	23	6.5	8	53	2.3	56
YAL 4000	3/8 · 1/2 · 3/4	70	177	41	70	50	54	26	8.5	10.5	70	2.3	73
YAL 5000	3/4 · 1	90	254	45	90	70	66	35	11	13	90	3.2	90

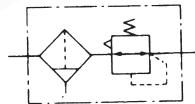
# AIR FILTER REGULATOR

**YAW3000**  
**YAW4000**

**YAW5000**

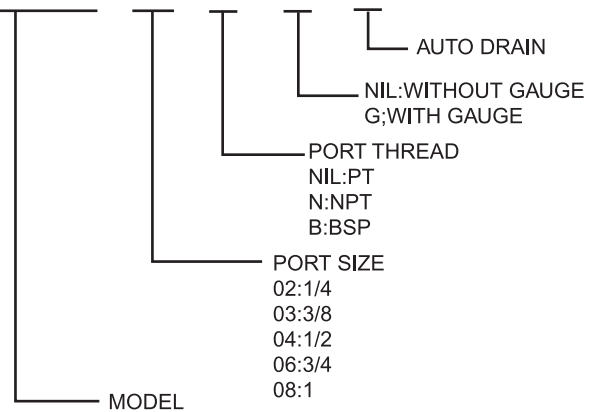


**Symbol**



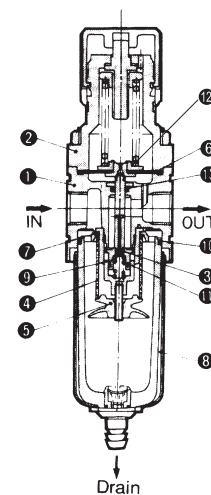
## HOW TO ORDER

**YAW3000 - 03 - N - G - D**



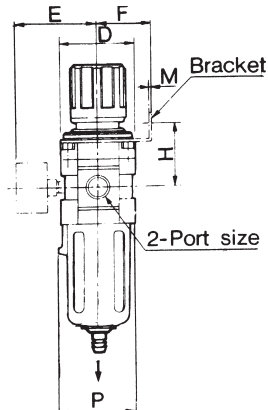
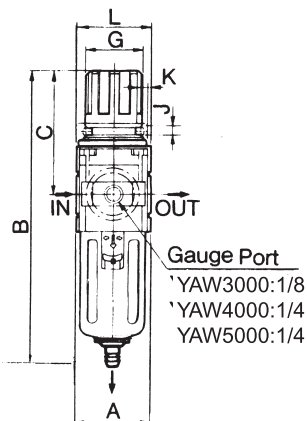
## SPECIFICATIONS

MODEL	YAW 3000	YAW 4000	YAW 5000
Port size	$\frac{1}{4} \cdot \frac{3}{8}$	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	$\frac{3}{4} \cdot 1$
Max. supply pressure kgf/cm <sup>2</sup>	15		
Max. operating pressure kgf/cm <sup>2</sup>	9.9		
Regulating range kgf/cm <sup>2</sup>	0.5 - 8.5		
Port size for pressure gauge	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
Ambient and media temperature	-5~60°C		
Filtration	Standard:5 μm, Option: 2,10,20,40 μm		
Bowl capacity cm <sup>3</sup>	20	45	130
Bowl material	Polycarbonate		
Weight kg	0.53	1.15	2.037
Accessory(standard)	Bowl guard	•	•



## MAIN PARTS

NO.	NAME	MATERIAL			NOTE
		YAW3000	YAW4000	YAW5000	
①	Body	Aluminum die casting			Platinum silver Painting
②	Bonnet	Polyacetal	Aluminum Die casting		Black painting



## PARTS LIST

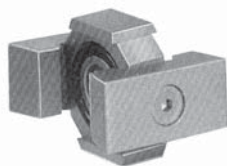
NO.	PART NAME	MATERIAL	PART NO.		
			YAW3000	YAW4000	YAW5000
③	Valve ass'y	Brass. NBR	131523A	131623A	131723A
④	Filter element	Polyrex	111511-5B	11104-5B	11173-5B
⑤	Baffle	ABS	111522	111622	11175
⑥	Diaphragm ass'y	NBR	131515A	131614A	131614A
⑦	Deflector	ABS	11158	11167	11176
⑧	Bowl ass'y	Polycarbonate	C300F	C400F	C500F
⑨	Valve spring	Stainless steel	131525	131625	131725
⑩	Case O-ring	NBR	111512	111636	111636
⑪	Valve O-ring	NBR	131544	131645	131745
⑫	Seal	NBR	-	-	-
⑬	O-ring	NBR	JISB2401P5	JISB2401P5	JISB2401P5

Condition: Bowl assemblies of AW3000, AW4000, AW5000 are fitted with bowl guard.

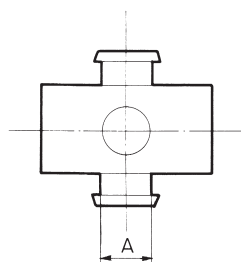
MODEL	PORT SIZE	A	B	C	φD	E	F	G	H	J	K	L	M	P
YAW 3000	$\frac{1}{4} \cdot \frac{3}{8}$	53	211	92.5	53	60.8	41	40	46	6.5	8	53	2.3	56
YAW 4000	$\frac{3}{8} \cdot \frac{1}{2} \cdot \frac{3}{4}$	70	262.5	112	70	70.5	50	54	54	8.5	10.5	70	2.3	73
YAW 5000	$\frac{3}{4} \cdot 1$	90	330	120	90	75	70	66	63	11	13	90	3.2	90

# ACCESSORIES OF AIR COMBINATION SET

## SPACER

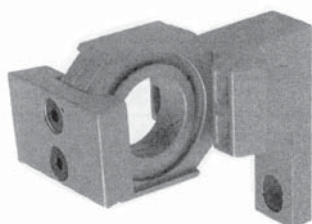


**Y30  
Y40  
Y60**



MODEL	A	APPLICABLE MODEL
Y30	11	AC3000
Y40	14	AC4000
Y60	15	AC5000

## SPACER WITH L-TYPE BRACKET

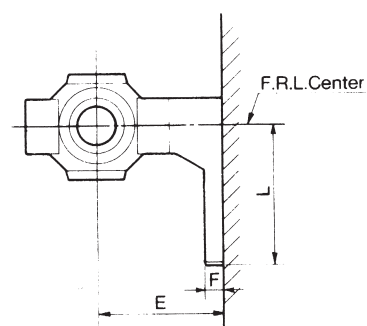
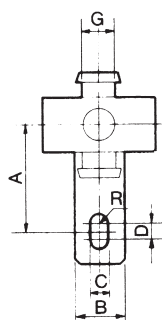


**Y30L  
Y40L  
Y60L**

### L-TYPE BRACKET

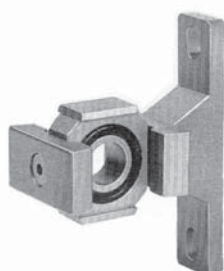


**B310L  
B410L  
B610L**



L-TYPE BRACKET	SPACER WITH L-TYPE BRACKET	A	B	C	D	E	F	G	R	L	APPLICABLE MODEL
B310L	Y30L	35	16	7	4	41	7	11	3.5	45	AC3000
B410L	Y40L	40	22	9	4	50	7	14	4.5	50	AC4000
B610L	Y60L	50	24	12	4	70	10	15	6	62.5	AC5000

## SPACER WITH T-TYPE BRACKET

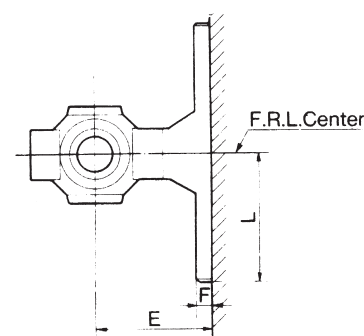
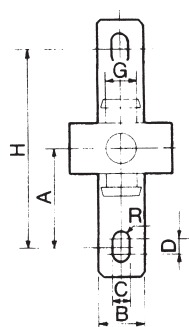


**Y30T  
Y40T  
Y60T**

### T-TYPE BRACKET



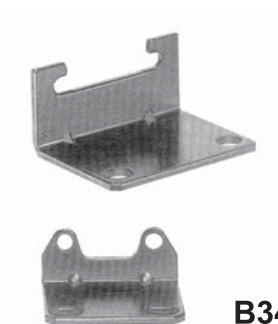
**B310T  
B410T  
B610T**



T-TYPE BRACKET	SPACER WITH T-TYPE BRACKET	A	B	C	D	E	F	G	H	R	L	APPLICABLE MODEL
B310T	Y30T	35	16	7	4	41	7	11	70	3.5	45	AC3010
B410T	Y40T	40	22	9	4	50	7	14	80	4.5	50	AC4010
B610T	Y60T	50	24	12	4	70	10	15	100	6	62.5	AC5010

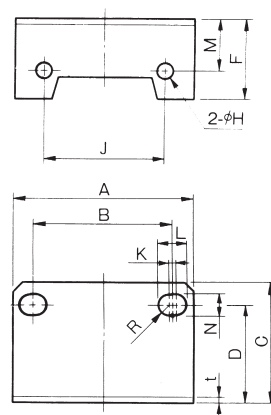
# ACCESSORIES OF AIR COMBINATION SET

## BRACKET FOR AF AL



**B440**

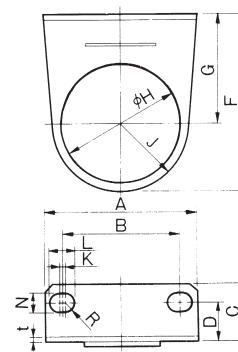
**B340**



## DIMENSIONS (mm)

MODEL	A	B	C	D	F	φH	J	K	L	M	N	R	t	MOUNTING SCREW (HEAD CAP SCREW)	APPLICABLE MODEL
B340	53	40	39	32	22.5	4.5	35	1.5	8	19	6.5	3.25	2.3	M4X8l (Hexagon socket)	AF3000,AL3000
B440	70	54	47	38	31.5	5.5	47	2	10.5	20	8.5	4.25	2.3	M5X10l (Hexagon socket)	AF4000,AL4000
B640	90	66	64	52	43	6.5	65	2	13	30	11	5.5	3.2	M6X10l (Hexagon socket)	AF5000,AL5000

## FOR AR AW



## DIMENSIONS (mm)

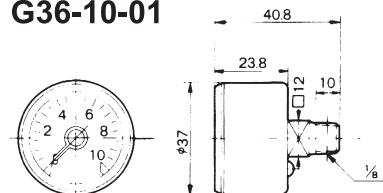
MODEL	A	B	C	D	F	G	φH	J	K	L	N	R	t	APPLICABLE MODEL
B320	53	40	21	13.5	66	41	42.5	25	1.5	8	6.5	3.25	2.3	AR3000,AW3000
B420	70	54	27	18	80	50	52.5	30	2	10.5	8.5	4.25	2.3	AR4000,AW4000

## PRESSURE GAUGE

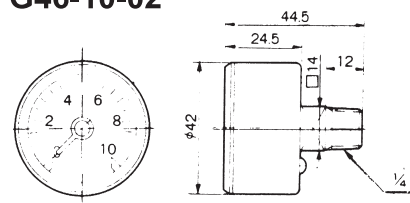
MODEL	APPLICABLE MODEL
G36-10-01	YAR3000 . YAW3000 . YAC3000 . YAC3010
G46-10-02	YAR4000 . YAW4000 . YAC4000 . YAC4010
G46-10-02	YAR5000 . YAW5000 . YAC5000 . YAC5010



**G36-10-01**



**G46-10-02**

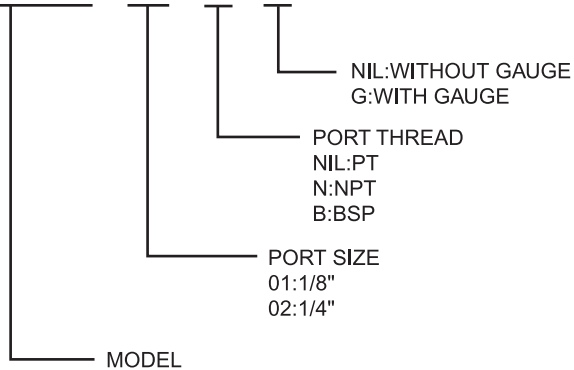




# MINI TYPE F.R.L COMBINATION

## HOW TO ORDER

**YAC2000 - 01 - N - G**



**YAR2000**



**YAW2000**



**YAF2000**



**YAL2000**



**YAC2000**



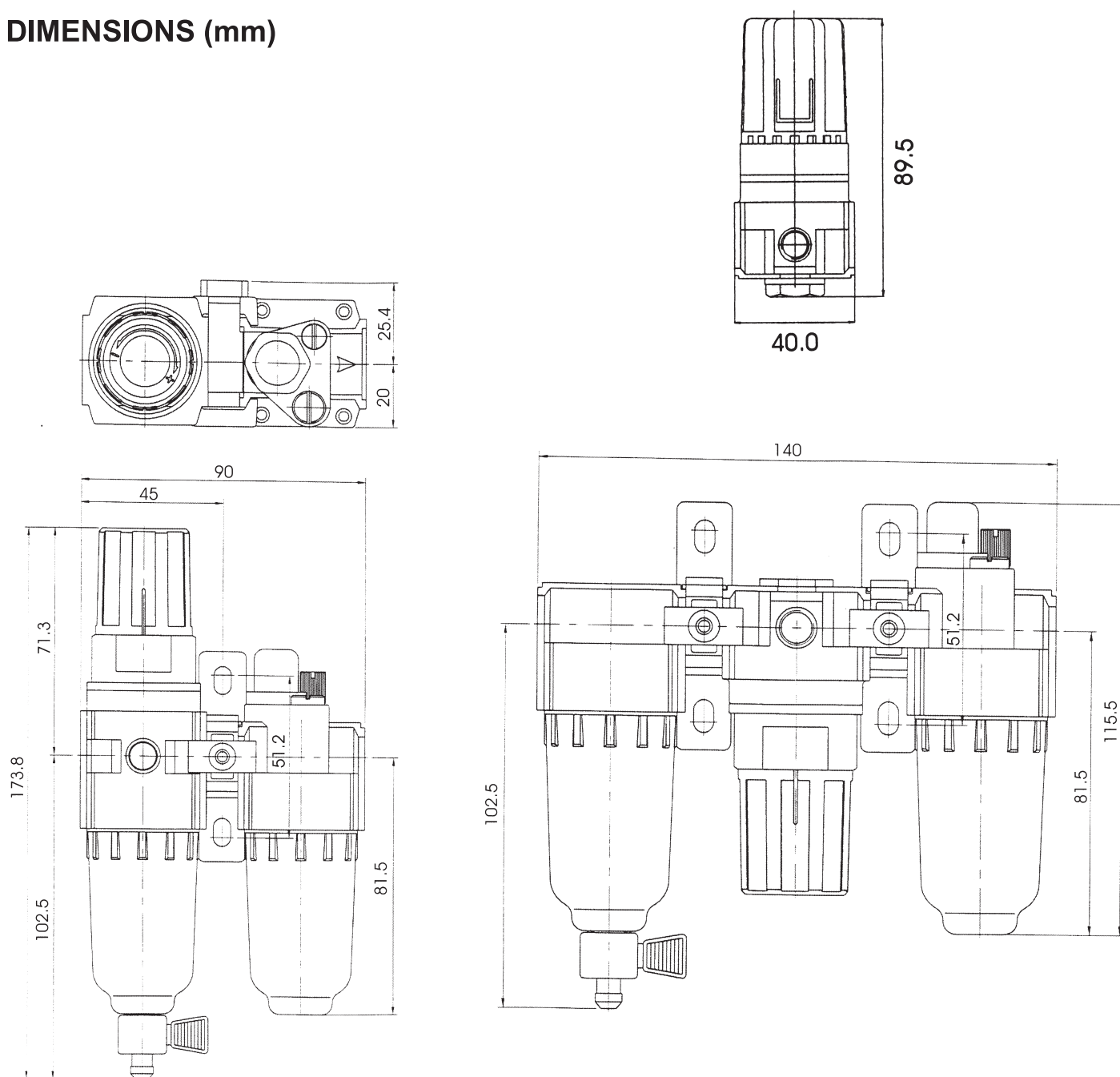
**YAC2010**



# MINI TYPE F.R.L COMBINATION

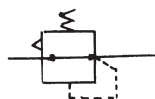
MODEL	YAC2000		YAC2010		YAW2000		YAR2000		YAF2000		YAL2000	
Port Size	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"
Max. Flow l/min.	1000	1100	1000	1100	1000	1100	1000	1100	1000	1100	1000	1100
Max. Supply pressure	10.5 kgf/cm <sup>2</sup>											
Adj. Pressure Range	0.5-9.9 kgf/cm <sup>2</sup>											
Ambient Temperature	-5~60°C											
Filtration	20 μ											
Recommended Oil	ISO VG32											
Weight kg	0.92		0.63		0.44		0.26		0.23		0.26	

## DIMENSIONS (mm)



# AIR REGULATOR, AIR AUTOMATIC DRAIN

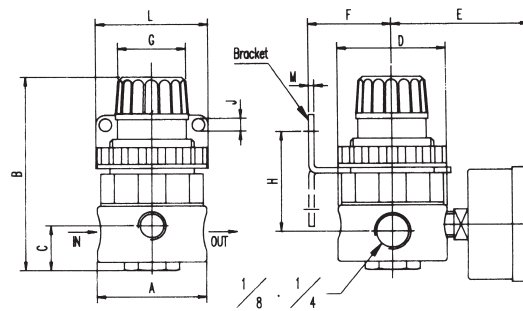
## AIR REGULATOR AR400



### HOW TO ORDER

**AR400 — 02 — N — G**

MODEL  
PORT  
02 : 1/4  
PORT THREAD  
NIL : PT  
N : NPT  
B : BSP  
NIL : WITHOUT GAUGE  
G : WITH GAUGE



MODEL	A	B	C	D	E	F	G	H	J	L	M
AR400	40	72	13	40	49	30	26	38	4.5	4.5	2

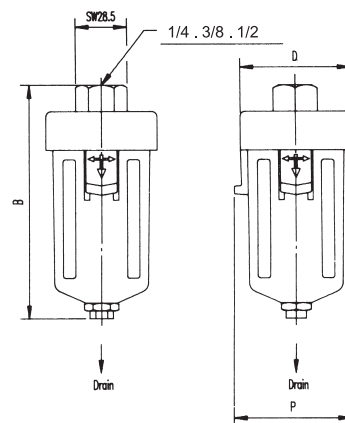
### HOW TO ORDER

**AD4000 — 02 — N**

MODEL  
PORT SIZE  
02 : 1/4  
03 : 3/8  
04 : 1/2  
PORT THREAD  
NIL : PT  
N : NPT  
B : BSP



MODEL	B	D	P
AD4000	150	70	71

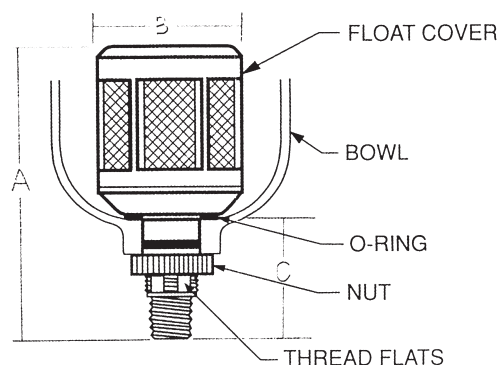


## AUTOMATIC DRAIN VALVE



YD401	AC3000
YD402	AC4000 AC5000

MODEL	A	B	C
YD401	66	31	28.6
YD402	78	41	32



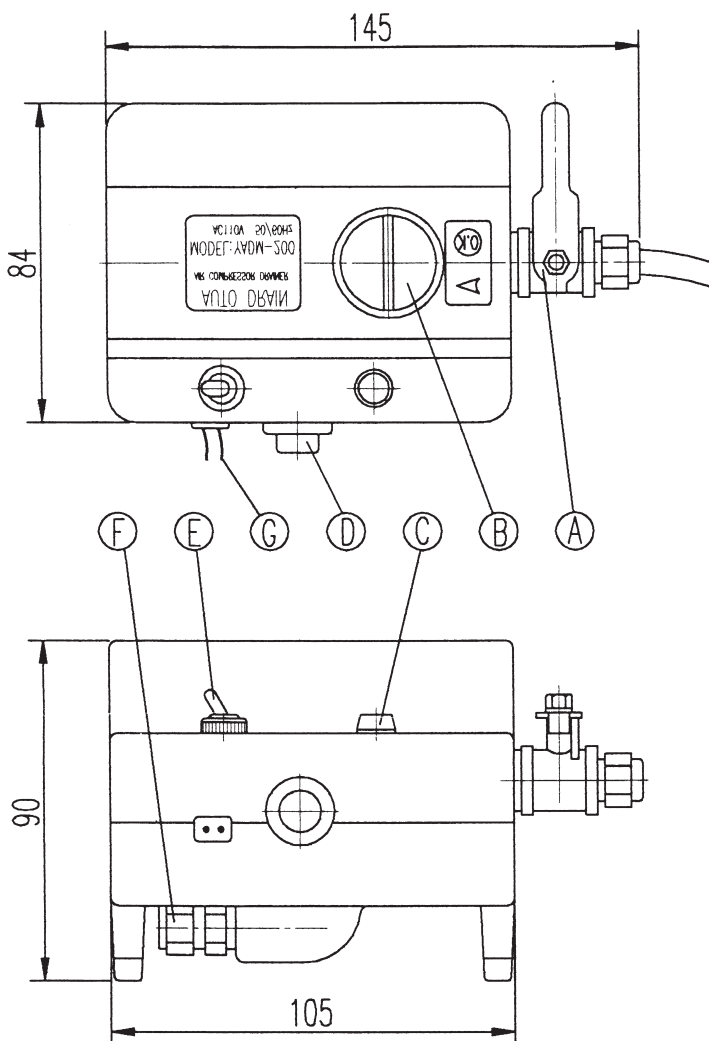
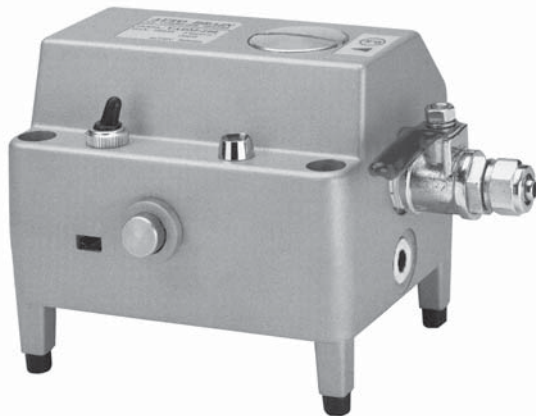
# AUTO DRAIN VALVE MOTOR DRIVEN

## YADM200

### SPECIFICATIONS

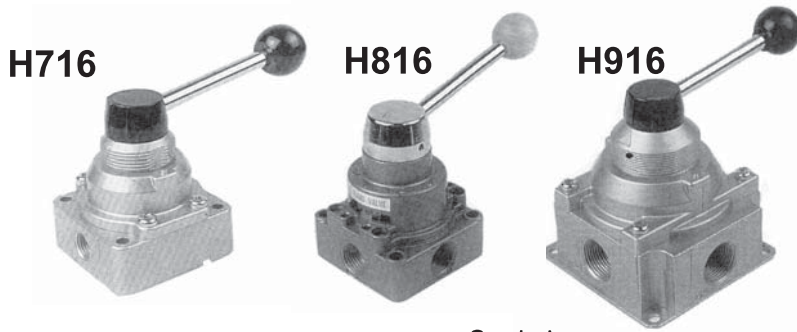
MODEL	PORT	DRAIN CYCLE	DRAIN TIME	POWER	WEIGHT
YADM-200	IN: 3/8" OUT: 1/4"	1/Min	2 Sec/1	AC110 AC220	0.72 kg

Use for : Air Compressor, Air Filter,  
Air Dryer, Air Separator  
and Piping.

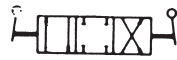


- A. BALL VALVE-(TO AIR COMPRESSOR, 230CC WATER DRAIN WHEN FULLY OPEN)
- B. WATER FILTER (WASHABLE)
- C. POWER INDICATOR
- D. PUSH BUTTON (PRESS THE BUTTON FOR WATER AND AIR DRAIN OFF IN CASE OF ELECTRICITY INTERRUPTION)
- E. SWITCH ON/OFF
- F. PU HOSE TO DITCH
- G. WIRE TO OUTLET

# HAND VALVE



Symbol



## SPECIFICATIONS

MODEL	H716	H816	H916
Port size	$\frac{1}{8} \cdot \frac{1}{4}$	$\frac{1}{4} \cdot \frac{3}{8} \cdot \frac{1}{2}$	$\frac{3}{4} \cdot 1$
Max. working pressure kgf/cm <sup>2</sup>	10		
Max. working temp.	60°C		
Hand operated degrees	45°		
Weight kg	0.6	0.83	1.43

## DIMENSIONS (mm)

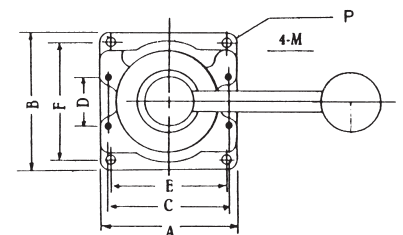
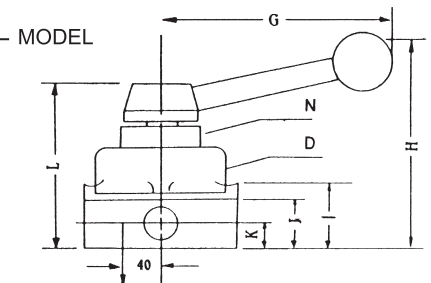
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
H716	62	62	50	26	56	50	93	90	31	23	11	73	M4XP0.7	33φ	47φ	4-6φ
H816	74	74	67	18	61	61	119	113	37	27	13	93	M5XP0.8	40φ	58φ	4-7φ
H916	108	108	92	45	92	92	120	145	46	41	19	120	M6XP1.0	52φ	82φ	4-7φ

## HOW TO ORDER

H816 — 02 — N

PORT SIZE  
02:1/4 04:1/2 08:1  
03:3/8 06:3/4

PORT THREAD NIL:PT  
N:NPT  
B:BSP



## H815



Symbol



## SPECIFICATIONS

MODEL	H815
Port size	$\frac{1}{4} \cdot \frac{3}{8}$
Max. working pressure kgf/cm <sup>2</sup>	10
Max. working temp.	60°C
Fluid	Air
Weight kg	1.01

## DIMENSIONS (mm)

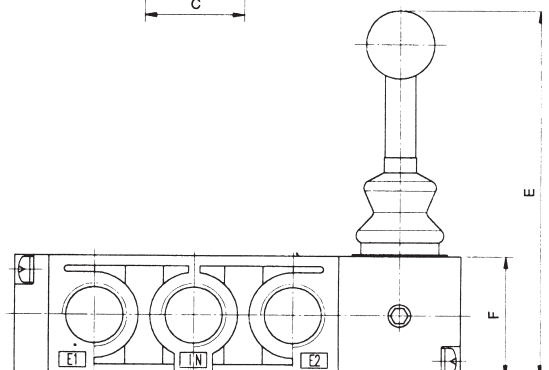
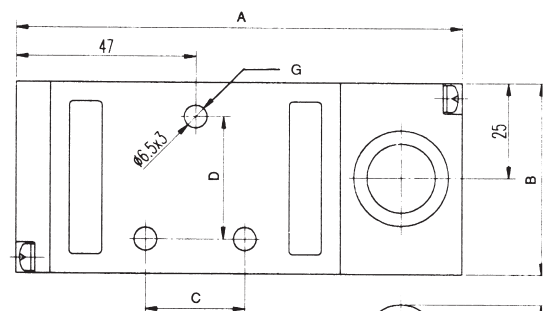
MODEL	A	B	C	D	E	F	G
H815	117	50	26	32	97	32	3-φ6.5

## HOW TO ORDER

H815 — 02 — N

PORT SIZE  
02:1/4 03:3/8

PORT THREAD NIL:PT  
N:NPT  
B:BSP



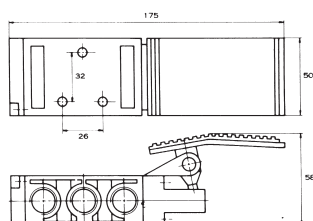
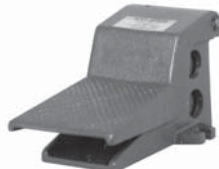
# FOOT OPERATED VALVE

## 5-WAY

**F815**

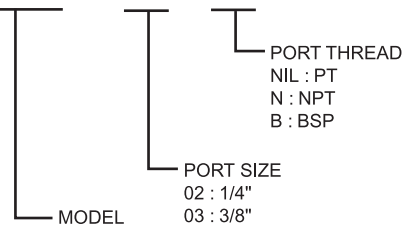


**KO256**



## HOW TO ORDER

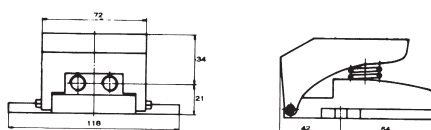
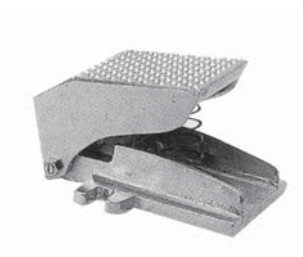
**F815 — 02 — N**



## SPECIFICATIONS :

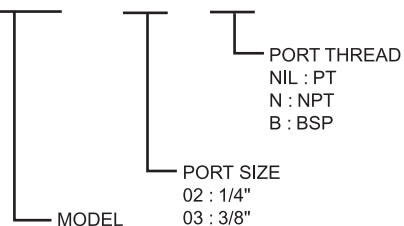
MODEL	PORT SIZE	WORKING PRESSURE	WEIGHT kg
F815-02	1/4"	0-10 kgf/cm <sup>2</sup>	1.02
F815-03	3/8"		
KO256	1/4"		0.63
KO258	3/8"		

## 3-WAY



## HOW TO ORDER

**F817 — 02 — N**



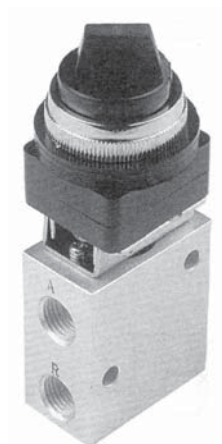
## SPECIFICATIONS :

MODEL	PORT SIZE	WORKING PRESSURE	WEIGHT kg
F817-02	1/4"	0-10 kgf/cm <sup>2</sup>	0.5
F817-03	3/8"		

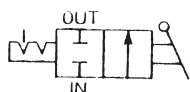
# MECHANICAL VALVE

## 2,3 way

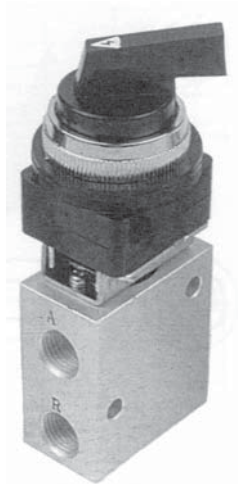
### YVM220



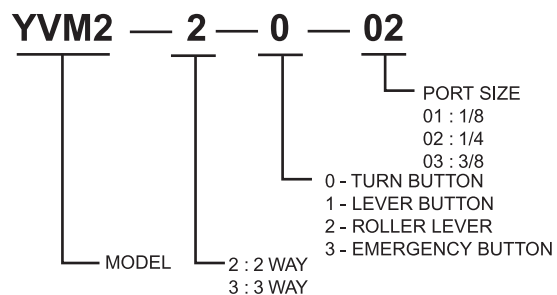
Symbol



### YVM221



## HOW TO ORDER

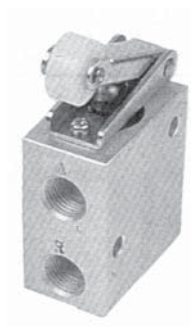
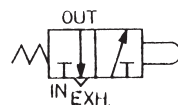
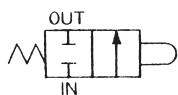


## SPECIFICATIONS :

Max. Working Pressure	10 kgf/cm <sup>2</sup>
Max. Working Temperature	60°C
Hand Operated Degree	45°
Fluid	Air

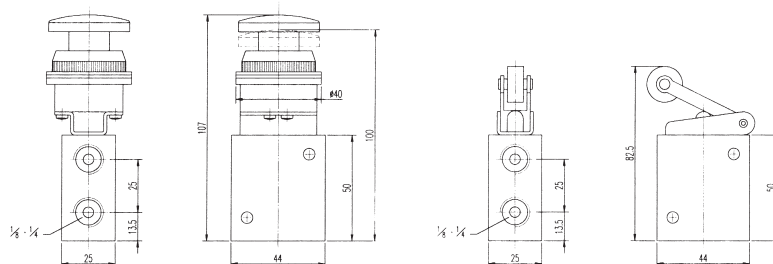
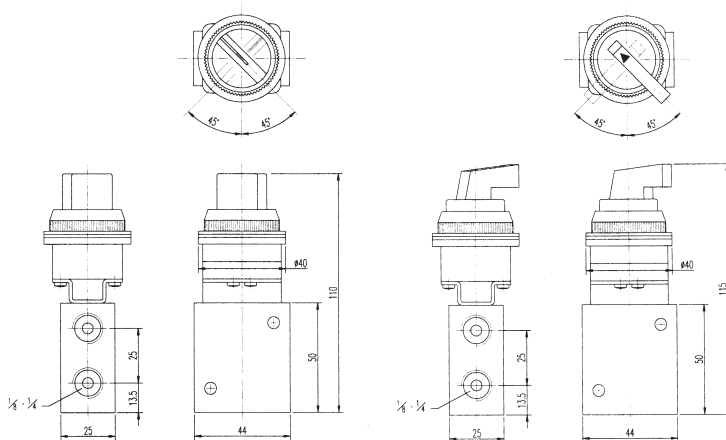
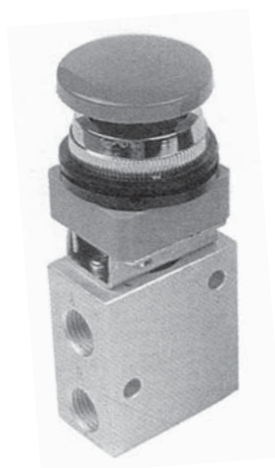
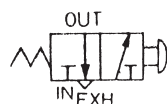
### YVM222

Symbol



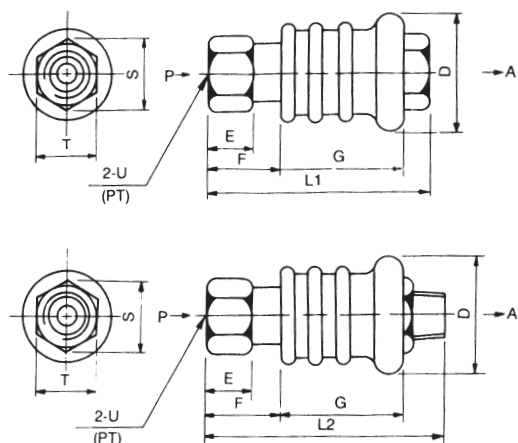
### YVM223

Symbol





# HAND SILDE VALVE, 3 PORT HAND VALVE



## HOW TO ORDER

**H 818 — ✕ — 01**

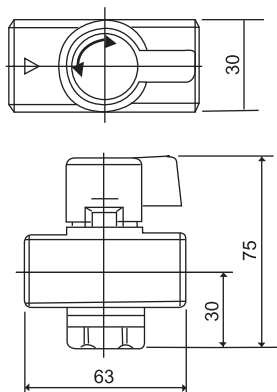
PORT SIZE  
01: 1/8"  
02: 1/4"  
03: 3/8"  
04: 1/2"

OUT SIDE  
MM: MALE → MALE  
FM: FEMALE → MALE  
MF: MALE → FEMALE  
FF: FEMALE → FEMALE

MODEL

MODEL	D	E	F	G	L <sub>1</sub>	L <sub>2</sub>	S	T	U
H818-01	25	10	16	26	51	55	16.2	14	1/8
H818-02	25	15	21	26	57	62	19.6	17	1/4
H818-03	32	15	24	31	65	70	25.4	22	3/8
H818-04	48	20	33.5	46	98	100	28.9	25	1/2

## VHS400



## HOW TO ORDER

**VHS400 — 02 — ✕**

PORT THREAD  
NIL : PT  
N : NPT  
B : BSP

PORT SIZE  
02: 1/4"  
03: 3/8"  
04: 1/2"

MODEL

## SPECIFICATIONS

MODEL	PORT	EFFECTIVE ORIFICE mm <sup>2</sup>		PRESSURE kgf/cm <sup>2</sup>
		IN → OUT	IN → EXH	
VHS400	1/4 · 3/8 · 1/2	1/4 : 20.8	34.8	1-10
		3/8 : 35.3	53.7	
		1/2 : 57	75.5	

# AIR SPEED CONTROL VALVE

## S300

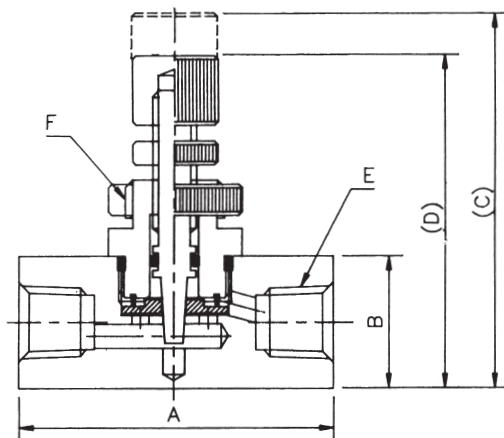
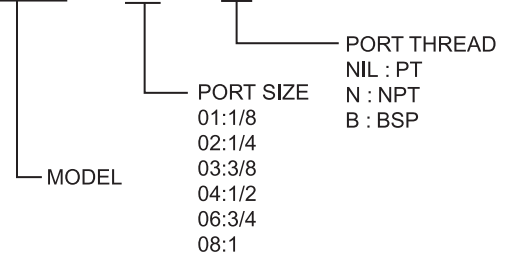


Symbol



### HOW TO ORDER

**S300 — 02 — ✖**



MODEL	PORT SIZE	A	B	C	D	E	F
S300-01	1/8"	45	19	53	46	14	8
S300-02	1/4"	45	19	53	46	14	11
S300-03	3/8"	55	25	65	55	18	15
S300-04	1/2"	60	32	68	60	22	18
S300-06	3/4"	77	51	123	102	26	26
S300-08	1"	77	51	123	102	30	31

## S500

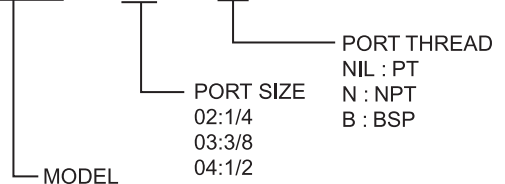


Symbol

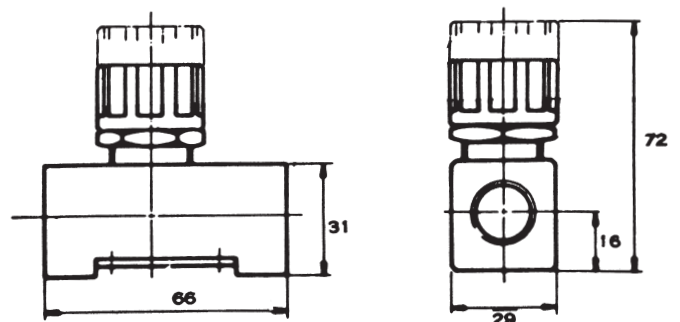


### HOW TO ORDER

**S500 — 02 — ✖**

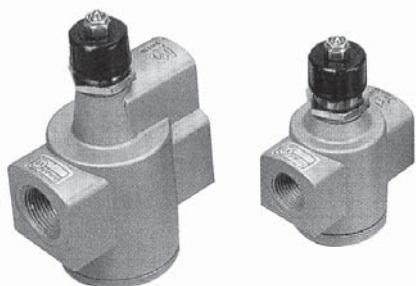


Max. working pressure	10kg/cm <sup>2</sup>
Max. working temp	60°C
Fluid	Air



# ACTUATORS SPEED CONTROLLER

## YAS SERIES



**YAS600**

**YAS500**



## HOW TO ORDER

**YAS-500** — ※ — ※

PORT THREAD  
NIL : PT  
N : NPT  
B : BSP

PORT SIZE  
04-1/2  
06-3/4  
08-1

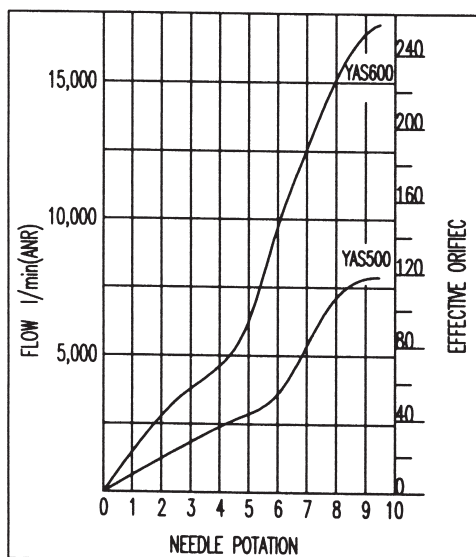
MODEL  
500 : 1/2 . 3/4  
600 : 3/4 . 1

## SPECIFICATIONS

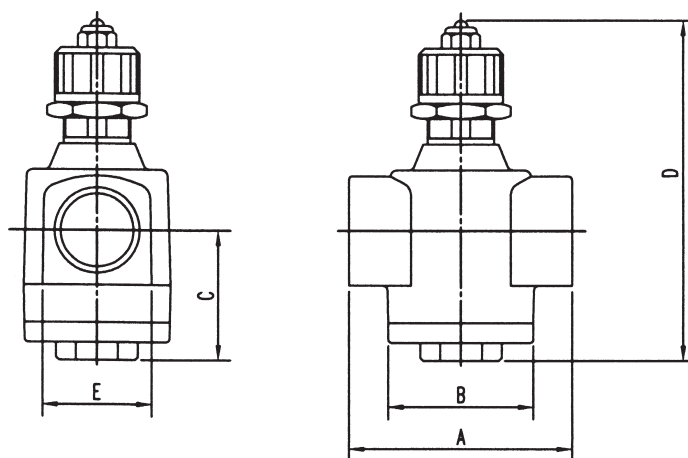
MODEL	PORT	OUT → IN		IN → OUT		FOR AIR CYLINDER BORE (mm)	WEIGHT (g)
		FLOW l/min(ANR)	ORIFICE mm <sup>2</sup>	FLOW l/min(ANR)	ORIFICE mm <sup>2</sup>		
YAS500-04	1/2	6,600	100	6,700	102	63.80,100,125	480
YAS500-06	3/4	10,100	154	8,100	123	140,160,180,200	450
YAS600-06	3/4	12,100	184	9,800	165	140,160,180,200	820
YAS600-08	1	15,100	230	16,900	258	160,180,200,250	780

Max. pressure	1.5MPa (15.3 kgf/cm <sup>2</sup> )
Max. working pressure	1MPa (10.2 kgf/cm <sup>2</sup> )
Min. working pressure	0.05MPa (0.51 kgf/cm <sup>2</sup> )
Ambient and media temperature	5-60°C
Needle rotation	9 Rotation

## FLOW CHARACTERISTICS YAS500 YAS600



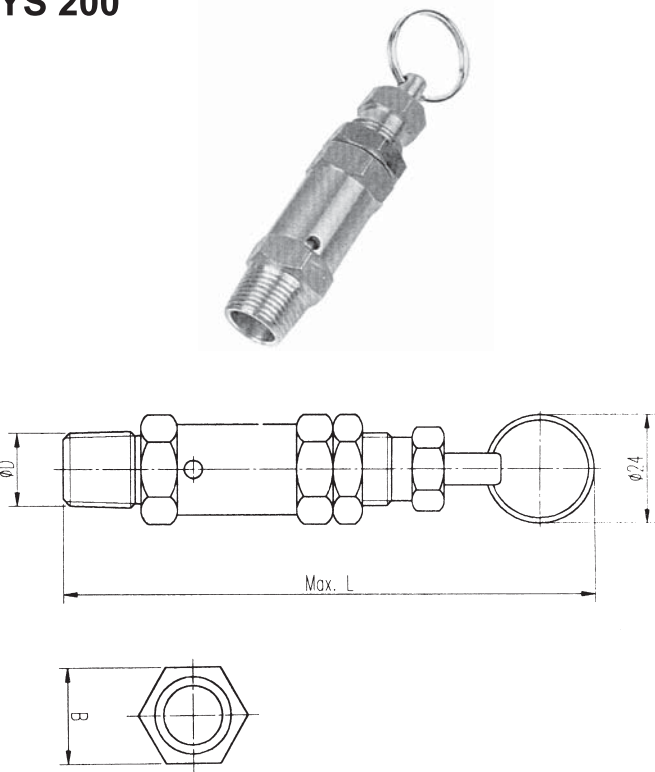
**CAUTION :**  
PLEASE NOTE IN OR OUT  
NEEDLE ROTATION 9



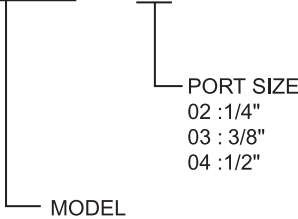
MODEL	PORT SIZE	A	B	C	D		E
					MIN.	MAX.	
YAS 500	1/2 , 3/4	74	∅48	43	110	118	36
YAS 600	3/4 , 1	90	∅60	57	147	156	44

# AIR SAFETY VALVE, CHECK VALVE, QUICK EXHAUST VALVE

## AIR SAFETY VALVE YS 200



## HOW TO ORDER YS200 — 02



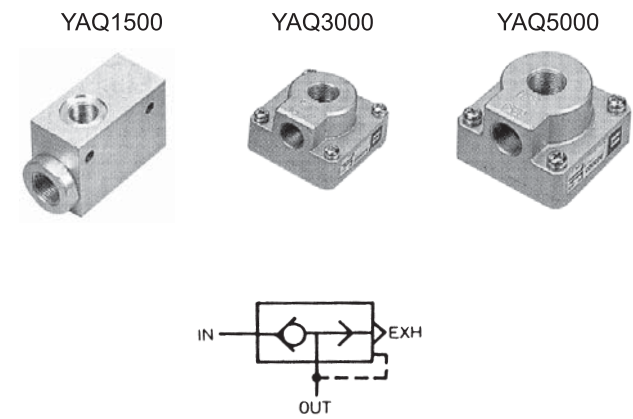
MODEL	WORKING PRESSURE	B	D	L
YS200-02	10 kgf/cm <sup>2</sup>	SW14	1/4	65
YS200-03		SW19	3/8	105
YS200-04		SW21	1/2	115

## CHECK VALVE



MODEL	PORT SIZE	WORKING PRESSURE
YAK-01	1/8	10 kgf/cm <sup>2</sup>
YAK-02	1/4	
YAK-03	3/8	
YAK-04	1/2	

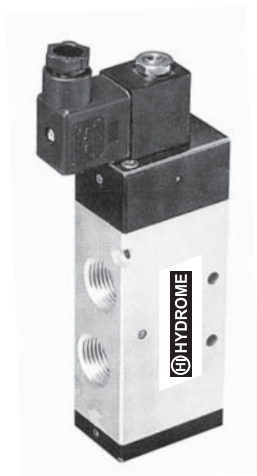
## QUICK EXHAUST VALVE



MODEL	PORT SIZE	WORKING PRESSURE
YAQ1500-01	1/8	10 kgf/cm <sup>2</sup>
YAQ1500-02	1/4	
YAQ1500-03	3/8	
YAQ3000-03	3/8	
YAQ3000-04	1/2	
YAQ5000-06	3/4	
YAQ5000-08	1	

# AIR SOLENOID VALVE, AIR VALVE

## 5/2 WAY AND 5/3 WAY 100 SERIES



## HOW TO ORDER

**4V - 1 10 - 06 - AC110V**

100 SERIES











SIZE OF PORT:  
04:M5\*0.8  
06:1/8"










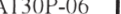
STANDARD VOLTAGE  
DC12V DC24V  
AC110V AC220V

VALVE TYPE:  
10 : Single solenoid 5/2 way  
20 : Double solenoid 5/2 way  
30C : Double solenoid 5/3 way closed center  
30E : Double solenoid 5/3 way exhaust center  
30P : Double solenoid 5/3 way pressure center

4V : 5 Way solenoid valve  
4A : 5 way air valve

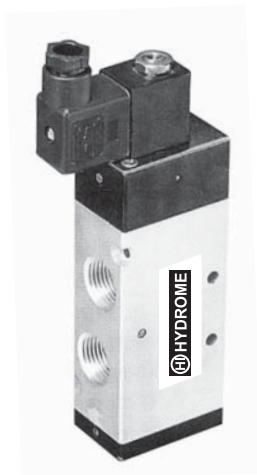
## SPECIFICATIONS

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V110-04	4V120-04	4V130C-04	4V130E-04	4V130P-04
					
	4A110-04	4A120-04	4A130C-04	4A130E-04	4A130P-04
					
Media	Air				
Operating method	Internally piloted				
Valve type	2 Positions 5 Ports		3 Positions 5 Ports		
Effective sectional area   mm <sup>2</sup> (CV)	10 (0.56)		9 (0.5)		
Port size	In = Out = Exhaust = M5*0.8				
Lubrication	Not required				
Service pressure range       kg/cm <sup>2</sup>	1.7 ~ 7.0				
Service temperature range   ℃	5 ~ 50				
Pressure resistance         kg/cm <sup>2</sup>	10.5				
Voltage change	± 10%				
Power consumption	AC : 1.3VA   DC : 1.2W				
Insulation	F Class				
Maximum frequency       cycle/sec	5				
Min. activating time       sec	0.05				

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V110-06	4V120-06	4V130C-06	4V130E-06	4V130P-06
					
	4A110-06	4A120-06	4A130C-06	4A130E-06	4A130P-06
					
Effective sectional area    mm <sup>2</sup> (CV)	12 (0.67)		9 (0.5)		
Port size	In = Out = Exhaust = 1/8"				

# AIR SOLENOID VALVE, AIR VALVE

## 5/2 WAY AND 5/3 WAY 200 SERIES



## HOW TO ORDER

**4V - 2 10 - 08 - AC110V**

200 SERIES











SIZE OF PORT:  
06:1/8"  
08:1/4"











STANDARD VOLTAGE  
DC12V DC24V  
AC110V AC220V

VALVE TYPE:  
10 : Single solenoid 5/2 way  
20 : Double solenoid 5/2 way  
30C : Double solenoid 5/3 way closed center  
30E : Double solenoid 5/3 way exhaust center  
30P : Double solenoid 5/3 way pressure center

4V : 5 Way solenoid valve  
4A : 5 way air valve

## SPECIFICATIONS

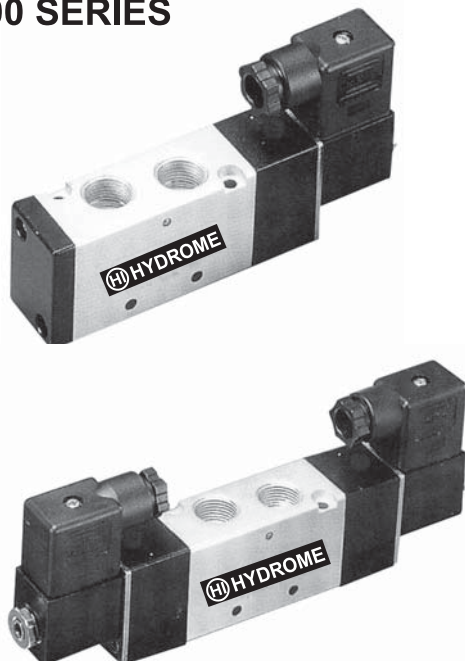
Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V210-06	4V220-06	4V230C-06	4V230E-06	4V230P-06
					
	4A210-06	4A220-06	4A230C-06	4A230E-06	4A230P-06
					
Media	Air				
Operating method	Internally piloted				
Valve type	2 Positions 5 Ports		3 Positions 5 Ports		
Effective sectional area   mm <sup>2</sup> (CV)	14 (0.78)		12 (0.67)		
Port size	In = Out = Exhaust = 1/8"				
Lubrication	Not required				
Service pressure range       kg/cm <sup>2</sup>	1.7 ~ 7.0				
Service temperature range   ℃	5 ~ 50				
Pressure resistance         kg/cm <sup>2</sup>	10.5				
Voltage change	± 10%				
Power consumption	AC : 4.5VA   DC : 3W				
Insulation	F Class				
Maximum frequency       cycle/sec	5				
Min. activating time       sec	0.05				

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V210-08	4V220-08	4V230C-08	4V230E-08	4V230P-08
					
	4A210-08	4A220-08	4A230C-08	4A230E-08	4A230P-08
					
Effective sectional area   mm <sup>2</sup> (CV)	16 (0.89)		12 (0.67)		
Port size	In = Out = 1/4”   Exhaust = 1/8”				



# AIR SOLENOID VALVE, AIR VALVE

## 5/2 WAY AND 5/3 WAY 300 SERIES



## HOW TO ORDER

**4V - 3 10 - 10 - AC110V**

300 SERIES

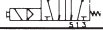

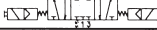
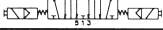

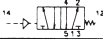

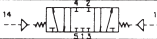


SIZE OF PORT:  
08 : 1/4"  
10 : 3/8"








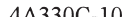


STANDARD VOLTAGE  
DC12V DC24V  
AC110V AC220V

VALVE TYPE:  
10 : Single solenoid 5/2 way  
20 : Double solenoid 5/2 way  
30C : Double solenoid 5/3 way closed center  
30E : Double solenoid 5/3 way exhaust center  
30P : Double solenoid 5/3 way pressure center

4V : 5 Way solenoid valve  
4A : 5 way air valve

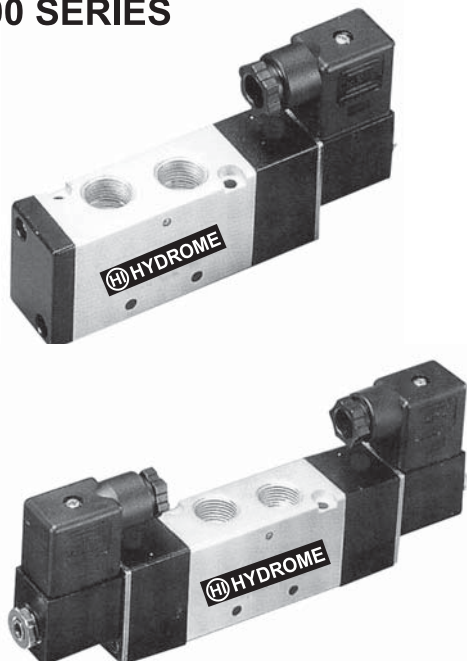
## SPECIFICATIONS

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V310-08	4V320-08	4V330C-08	4V330E-08	4V330P-08
					
	4A310-08	4A320-08	4A330C-08	4A330E-08	4A330P-08
					
Media	Air				
Operating method	Internally piloted				
Valve type	2 Positions 5 Ports		3 Positions 5 Ports		
Effective sectional area   mm <sup>2</sup> (CV)	30 (1.68)		18 (1)		
Port size	In = Out = Exhaust = 1/4”				
Lubrication	Not required				
Service pressure range       kg/cm <sup>2</sup>	1.7 ~ 7.0				
Service temperature range    °C	5 ~ 50				
Pressure resistance           kg/cm <sup>2</sup>	10.5				
Voltage change	± 10%				
Power consumption	AC : 4.5VA   DC : 3W				
Insulation	F Class				
Maximum frequency       cycle/sec	4				
Min. activating time        sec	0.05				

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V310-10	4V320-10	4V330C-10	4V330E-10	4V330P-10
					
	4A310-10	4A320-10	4A330C-10	4A330E-10	4A330P-10
					
Effective sectional area    mm <sup>2</sup> (CV)	25 (1.4)		18 (1)		
Port size	In = Out = 3/8”    Exhaust = 1/4”				

# AIR SOLENOID VALVE, AIR VALVE

## 5/2 WAY AND 5/3 WAY 400 SERIES



## HOW TO ORDER

**4V - 4 10 - 15 - AC110V**

4V : 5 Way solenoid valve  
4A : 5 way air valve




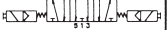



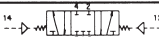
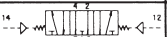

400 SERIES

VALVE TYPE:  
10 : Single solenoid 5/2 way  
20 : Double solenoid 5/2 way  
30C : Double solenoid 5/3 way closed center  
30E : Double solenoid 5/3 way exhaust center  
30P : Double solenoid 5/3 way pressure center

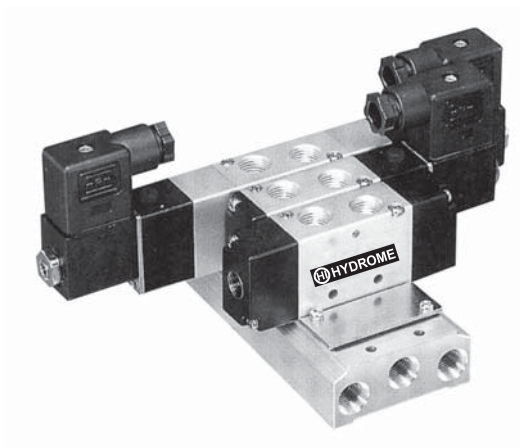
SIZE OF PORT:  
15 : 1/2"

STANDARD VOLTAGE  
DC12V DC24V  
AC110V AC220V

## SPECIFICATIONS

Solenoid	Single solenoid	Double solenoid	Double solenoid	Double solenoid	Double solenoid
Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
					
	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15
					
Media	Air				
Operating method	Internally piloted				
Valve type	2 Positions 5 Ports		3 Positions 5 Ports		
Effective sectional area   mm <sup>2</sup> (CV)	50 (2.79)		30 (1.68)		
Port size	In = Out = Exhaust = 1/2”				
Lubrication	Not required				
Service pressure range   kg/cm <sup>2</sup>	1.7 ~ 7.0				
Service temperature range   ℃	5 ~ 50				
Pressure resistance   kg/cm <sup>2</sup>	10.5				
Voltage change	± 10%				
Power consumption	AC : 4.5VA   DC : 3W				
Insulation	F Class				
Maximum frequency   cycle/sec	4				
Min. activating time   sec	0.05				

# MANIFOLD FOR 100-400 SERIES



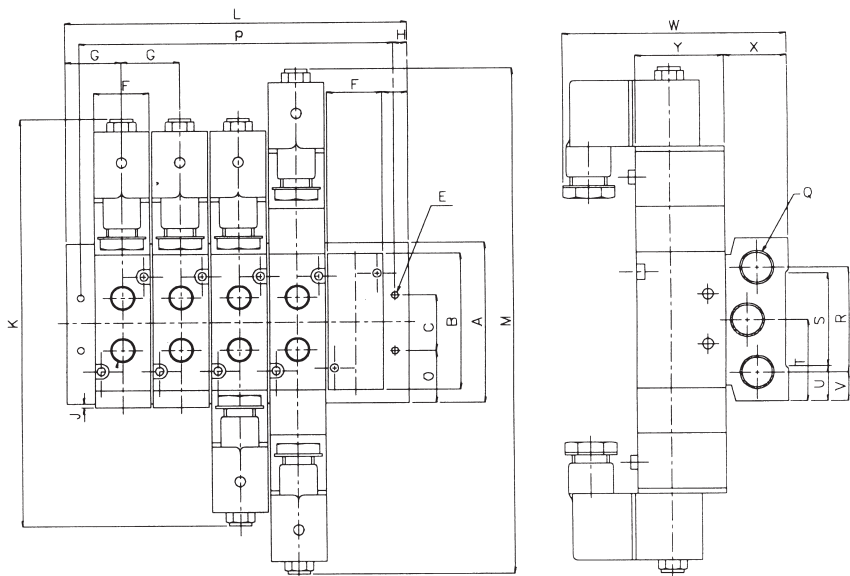
## HOW TO ORDER

**100M** — **※** **F**

NUMBER OF VALVE  
1-12 : 1-12 VALVE

100M : Manifold for 100 series  
200M : Manifold for 200 series  
300M : Manifold for 300 series  
400M : Manifold for 400 series

## DIMENSIONS



SYMBOL	A	B	C	E	F	G	H	I	J	K	L											
											1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F
100M □ F	58	43	20	18	18	19	5	10	1	138	38	57	76	95	114	133	152	171	190	209	228	247
200M □ F	60	50	21	22	22	23	6	11.5	2	115	46	69	92	115	138	161	184	207	230	253	276	299
300M □ F	75	60	26	27	27	28	6	14.5	3	225	54	82	110	138	166	194	222	250	278	306	334	362
400M □ F	100	95	32	34	34	35	7	18	3	224	63	98	133	168	203	238	273	308	—	—	—	—

SYMBOL	M	P												Q	R	S	T	U	V	W	X	Y
		1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F									
100M □ F	153	28	47	66	85	104	123	142	161	180	199	218	237	1/4"	40	22	29	9	9	79.5	25	27
200M □ F	167	34	57	80	103	126	149	172	195	218	241	264	287	1/4"	42	40	30	10	9	94	25	35
300M □ F	185	42	70	98	126	154	182	210	238	266	294	322	350	3/8"	52	53	32.5	11	12	101	31	40
400M □ F	224	49	84	119	154	189	224	259	294	—	—	—	—	1/2"	64	64	50	—	19	116	42	50

# AIR SOLENOID VALVE

## 3/2 WAY 3V SERIES



## HOW TO ORDER

**3V — 1 — 06 — AC110V**

3V : 3 Way solenoid valve

1 : ORIFICE SIZE:  
1-1.2mm

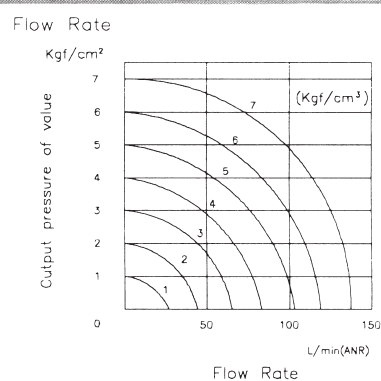
06 : SIZE OF PORT:  
06 : 1/8"

AC110V : STANDARD VOLTAGE\*  
DC12V DC24V  
AC110V AC220V

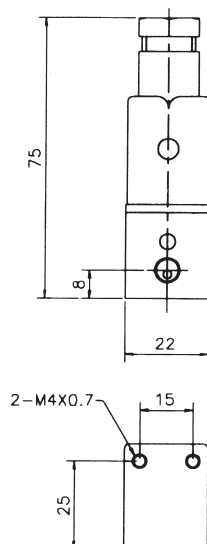
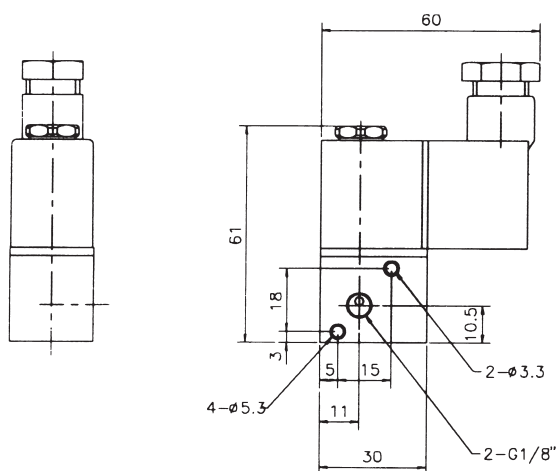
## SPECIFICATIONS

MODEL	3V1
Media	Air
Operating method	Direct acting
Function	Normally closed
Orifice size	mm 1.2
Port size	1/8"
Service pressure range	kg/cm <sup>2</sup> 0 ~ 10
Pressure resistance	kg/cm <sup>2</sup> 16
Service temperature range	°C -10 ~ 60
Voltage change	± 10%
Protection	IP00 / IP65
Power consumption	AC : 4.5VA DC : 3W
Insulation	F Class
Min. activating time	sec 0.05

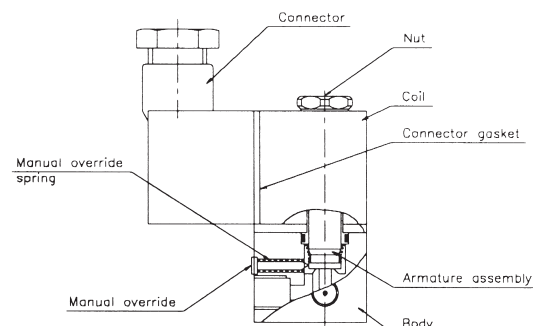
## 3 V1 FLOW CHARACTERISTICS



## DIMENSIONS



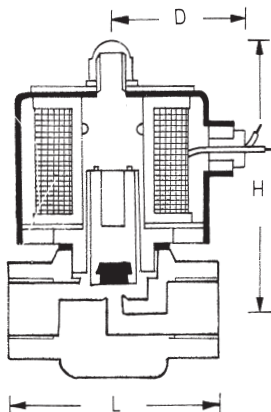
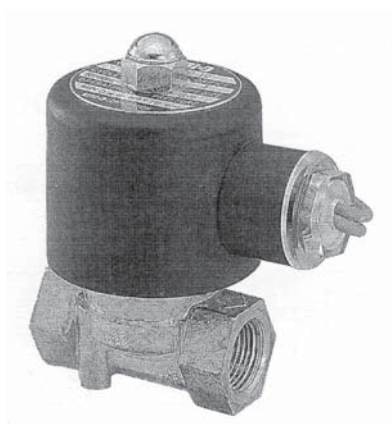
## INTERNAL STRUCTURE OF 3V1



# AIR, WATER, STEAM, OIL, GAS SOLENOID VALVE

## UD-SERIES

**MODEL: UD-6,8,10, UD-6H,8H,10H NORMALLY CLOSED**  
**FLUID: HOT WATER, WATER, AIR, OIL GAS & VACUUM.**



### MATERIAL

PARTS NAME	MATERIAL
Body	Forge Brass
Coil	Special Copper Wire
Disc	NBR O Ring
Fixed Steel	Special St. Steel
Tube	Special St. Steel
Spring	St. St. 304

### SPECIFICATION AND CHARACTER:

1. 2-WAY normally closed solenoid valve.
2. Type UD is normally closed, can direct operating without pressure. used for the fluid of Water, Air, Gas, Oil & Vacuum.
3. Standard voltage: AC 110V/220V (50/60 Hz).
4. Voltage is with  $\pm 10\%$  differential.
5. Simple size & easy assembly.
6. Other voltage of AC/DC available when required.
7. Installation: Mountable in any position without affecting operation.

### NOT FOR FLUID OF:

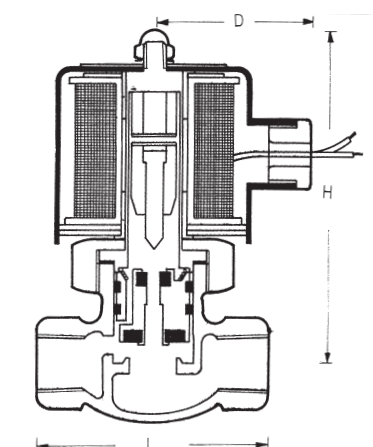
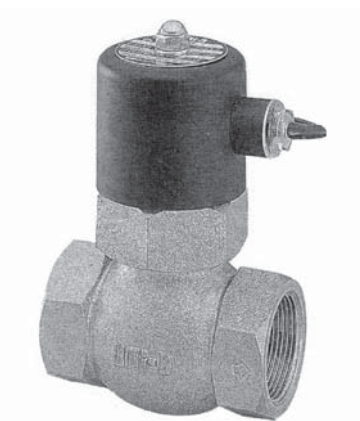
1. Liquid when heat, solid when cool.
2. Corrosive fluid.
3. Viscosity over 50 cst.
4. Temperature over 80°C of Centigrade: UD-6, UD-8 & UD-10.  
Temperature over 130°C of Centigrade: UD-6H, UD-8H & UD-10H.

### CAUTION:

1. Pipes must be washed neat and clean before fitted.
2. A Y-STRAINER has to be installed in the front of solenoid valve, that is best for long life.

## US-SERIES

**MODEL: US-15,20,25,35,40,50 NORMALLY CLOSED**  
**FLUID: STEAM, WATER & AIR**



### MATERIAL

PARTS NAME	MATERIAL
Body	Brass / Bronze
Bonnt/Nut	Brass / Bronze
Coil	Special Copper Wire
Piston	Special Copper with PTFE O Ring
Main Valve	PTFE+ 15% GF
Needle	Special St. Steel
Fixed Steel	Special St. Steel

### SPECIFICATION AND CHARACTER:

1. 2-WAY normally closed solenoid valve.
2. Type US withstand high temperature, best use for the fluid of STEAM, also for WATER & AIR.
3. Standard voltage: AC 110V/220V (50/60 Hz).
4. Voltage is with  $\pm 10\%$  differential.
5. Simple construction & easy assembly.
6. Other voltage of AC/DC available when required.
7. Installation: Mountable in level position only. (Prohibition in vertical position).

### NOT FOR FLUID OF:

1. Liquid when heat, solid when cool.
2. Corrosive fluid.
3. Viscosity over 20 cst.
4. Temperature over 185°C of Centigrade.

### CAUTION:

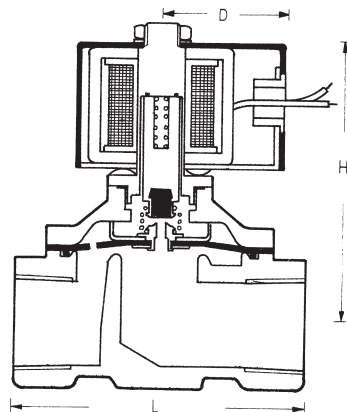
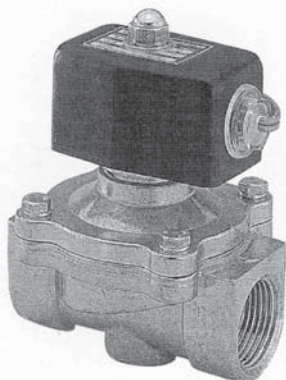
1. Pipes must be washed neat and clean before fitted.
2. A Y-STRAINER has to be installed in the front of solenoid valve, that is best for long life.



# AIR, WATER. STEAM, OIL, GAS SOLENOID VALVE

## UW-SERIES

**MODEL: UW-10,15,20,25,35,40,50 NORMALLY CLOSED**  
**FLUID: WATER, AIR, OIL, GAS & VACUUM.**



### MATERIAL

PARTS NAME	MATERIAL
Body	Forge Brass
Bonnt/Nut	Forge Brass
Coil	Special Copper Wire
Diaphragm	N.B.R.
Disc	N.B.R.
Spring	St. St. 304
Fixed Steel	Special St. Steel

### SPECIFICATION AND CHARACTER:

1. 2-WAY normally closed solenoid valve.
2. Type UW is normally closed, can direct operating without pressure.
3. For Fluid: Water, Air, Oil, Gas & Vacuum.
4. Standard voltage: AC 110V/220V (50/60 Hz).
5. Voltage is with  $\pm 10\%$  differential.
6. Other voltage of AC/DC available when required.
7. Small size, high flow, little electric power required.
8. Installation: Mountable in any position without affecting operation.

### NOT FOR FLUID OF:

1. Liquid when heat, solid when cool.
2. Corrosive fluid.
3. Viscosity over 20 cst.
4. Temperature over 80°C of Centigrade.

### CAUTION:

1. Pipes must be washed neat and clean before fitted.
2. A Y-STRAINER has to be installed in the front of solenoid valve, that is best for long life.

## REFERENCE

MODEL	CONNECTION PIPE SIZE	CV	ORIFICE mm	FLUID TEMP. °C	MAX. OPERATING PRESSURE DIFE. kgf/cm <sup>2</sup>						L mm	H mm	D mm	Weight kg
					HOT WATER	WATER	AIR	OIL	GAS	VACUUM				
UD-6	1/8"	0.23	2.5	-5°C	0-7	0-7	0-7	0-7	0-7	0-10 <sup>-6</sup> Torr	41	63	21	0.3
UD-8	1/4"	0.23	2.5	}	0-7	0-7	0-7	0-7	0-7	0-10 <sup>-6</sup> Torr	41	63	21	0.3
UD-10	3/8"	0.60	4	80°C	0-10	0-10	0-10	0-10	0-10	0-10 <sup>-6</sup> Torr	53	75	48	0.6
UD-6H	1/8"	0.18	1.2	-5°C	0-20	0-20	0-20	0-20	0-20	0-10 <sup>-6</sup> Torr	41	63	21	0.3
UD-8H	1/4"	0.18	1.2	}	0-20	0-20	0-20	0-20	0-20	0-10 <sup>-6</sup> Torr	41	63	21	0.3
UD-10H	3/8"	0.45	2.0	130°C	0-20	0-20	0-20	0-20	0-20	0-10 <sup>-6</sup> Torr	53	75	48	0.6
UW-10	3/8"	2.4	10	-5°C }	-	0-5	0-7	0-5	0-7	0-10 <sup>-4</sup> Torr	70	100	50	0.9
UW-15	1/2"	4.5	15		-	0-5	0-7	0-5	0-7	0-10 <sup>-4</sup> Torr	70	100	50	0.9
UW-20	3/4"	8.6	20		-	0-5	0-7	0-5	0-7	0-10 <sup>-4</sup> Torr	73	102	50	1.0
UW-25	1"	12	25		-	0-5	0-7	0-5	0-7	0-10 <sup>-4</sup> Torr	93	106	50	1.8
UW-35	1 1/4"	24	35		-	0-5	0-7	0-5	0-7	0-10 <sup>-3</sup> Torr	125	140	58	3.2
UW-40	1 1/2"	28	40		-	0-5	0-7	0-5	0-7	0-10 <sup>-3</sup> Torr	125	140	58	3.5
UW-50	2"	48	50		-	0-5	0-7	0-5	0-7	0-10 <sup>-3</sup> Torr	167	170	58	5.4
US-15	1/2"	4.0	17	-5°C }	0.5-15	0.5-15	0.5-15	-	-	-	82	120	58	1.7
US-20	3/4"	6.0	17		0.5-15	0.5-15	0.5-15	-	-	-	82	123	58	1.7
US-25	1"	12	22		0.5-15	0.5-15	0.5-15	-	-	-	91	130	58	2.0
US-35	1 1/4"	18	30		0.5-15	0.5-15	0.5-15	-	-	-	110	141	58	3.1
US-40	1 1/2"	22	32		0.5-15	0.5-15	0.5-15	-	-	-	111	144	58	3.3
US-50	2"	48	50		0.5-15	0.5-15	0.5-15	-	-	-	163	173	58	7.2



# AIR BLOW GUN

## AIR BLOW GUN

### AS500



## HOW TO ORDER

**AS500 — 02 — B — \***

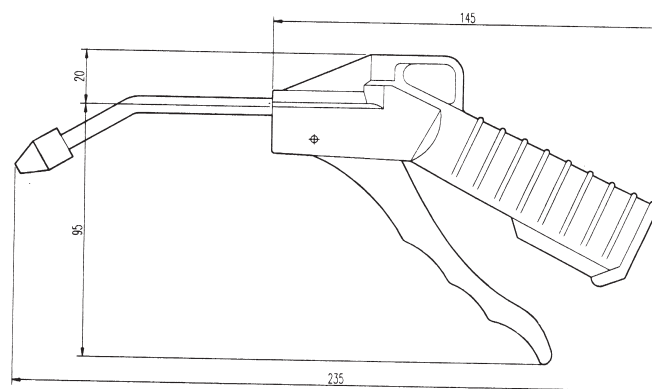
MODEL      PORT SIZE 02 : 1/4"      BRASS THREAD

PORT THREAD  
NIL : PT  
N : NPT  
B : BSP

Tube length	55 mm	Standard
Tube length	215 mm	Optional

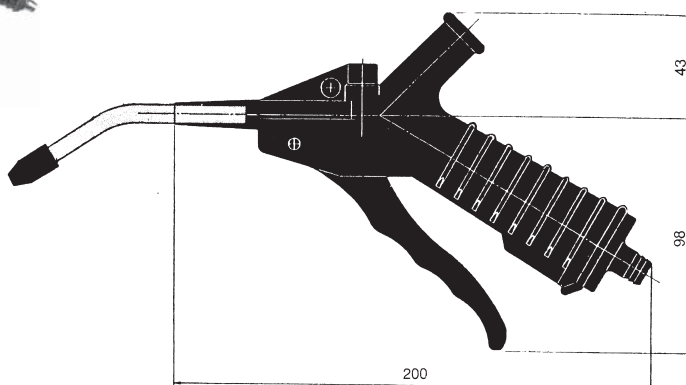
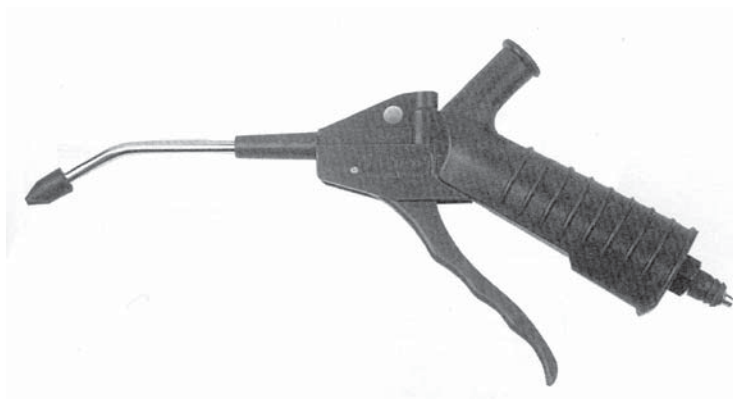
## PERFORMANCE

Max.working pressure	10 kgf/cm <sup>2</sup>
Max. working temp.	60 °C
Fluid	Air

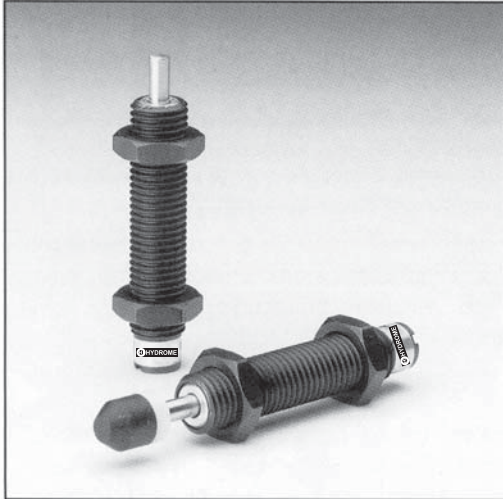


## AIR BOLW GUN WITH FILTER

### AS600



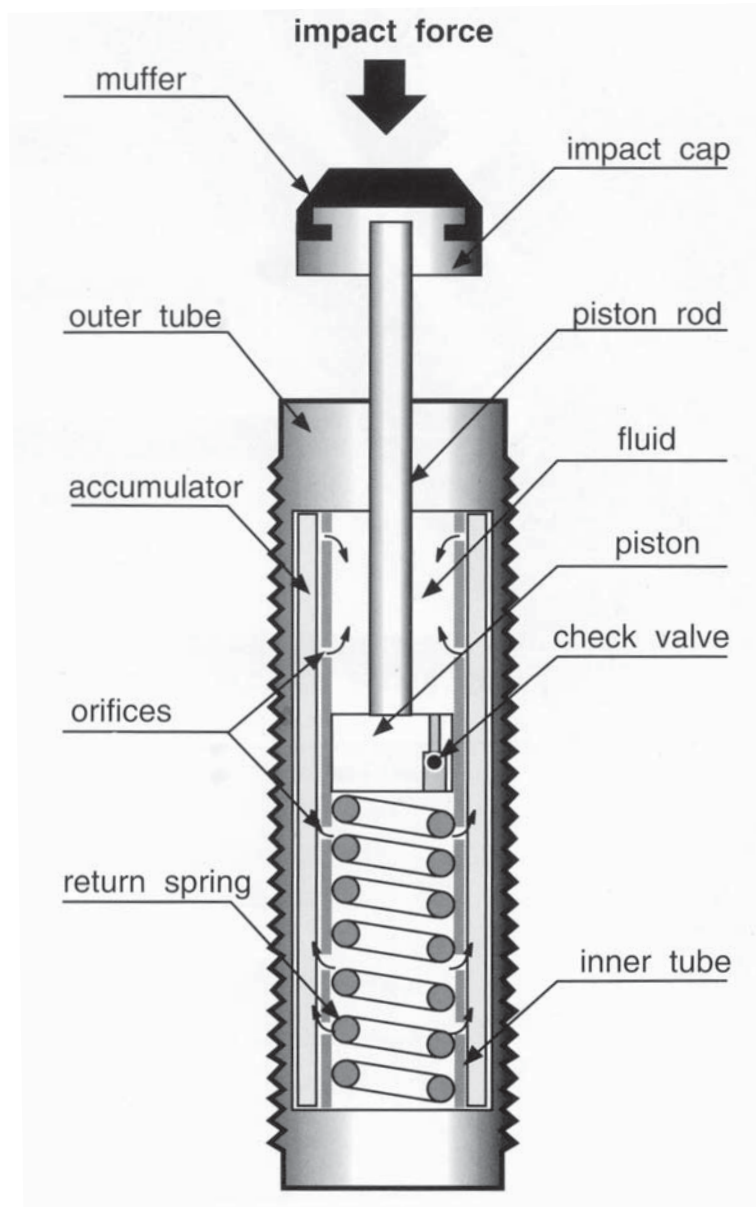
# SHOCK ABSORBER



## HOW TO ORDER

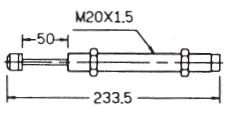
**AC** — **08** **06** — **1** — ✱  
 MODEL  
 AD : ADJUSTABLE  
 AC : NON-ADJUSTABLE  
 ACD : DOUBLE CUSHION  
 STROKE mm  
 TUBE O.D.  
 1 : HIGH IMPACT SPEED  
 2 : MEDIUM IMPACT SPEED  
 3 : LOW IMPACT SPEED  
 BLANK : WITH CAP  
 N : WITHOUT CAP

## STRUCTURE



# SHOCK ABSORBER

## AC SERIES - SELF COMPENSATION

MODEL	DIMENSIONS	MAX. EFFECTIVE MASS (kg)	MAX. ENERGY ABSORBED PER CYCLE (Nm)	MAX. IMPACT SPEED (m/s)	WITHOUT CAP	WITH CAP	FLANGE	STOP COLLAR
AC-0806		0.5~6	2	0.5~2.0	○	○	-	○
AC-1005		1~7	3	0.8~3.5	○	○	-	○
AC-1008		2~9	4	0.8~3.0	○	○	-	○
AC-1210		5~30	5	0.8~3.0	○	○	-	○
AC-1412		8~100	15	0.8~3.0	○	○	-	○
AC-1416		10~150	20	0.8~3.0	○	○	-	○
AC-2020		30~700	40	1.0~3.5	○	○	-	○
ACD-2030		40~900	45	1.0~3.5	-	○	-	○
AC-2050		600~1200	60	1.0~3.5	-	○	-	○
AC-2525		200~1500	80	1.0~4.0	-	○	-	○
AC-2540		300~2000	120	1.0~4.0	-	○	-	○
AC-3660		400~2400	250	1.0~4.0	-	○	○	○

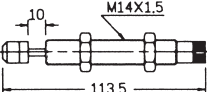
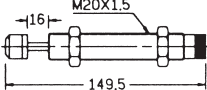
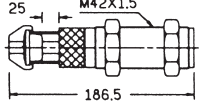
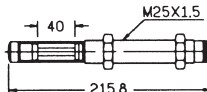
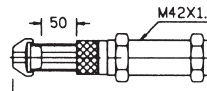
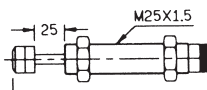
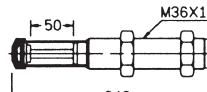
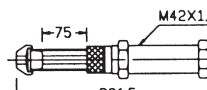
# SHOCK ABSORBER

## SPECIFICATIONS

ORDER NO.	STROKE (mm)	MAX. Nm Per CYCLE (Et)	MAX. Nm Per HOUR (Etc)	MAX. EFFECTIVE MASS (ml) kg	MAX. IMPACT SPEED (V) m/s	OPERATING TEMPERATURE (°C)	WEIGHT (g)
AC-0806-1	6	2	1200	0.5	2.0	-10~80	11
AC-0806-2	6	2	1200	2.0	1.0	-10~80	11
AC-0806-3	6	2	1200	6.0	0.5	-10~80	11
AC-1005-1	5	3	3600	1	3.0	-10~80	14
AC-1005-2	5	3	3600	3	1.5	-10~80	14
AC-1005-3	5	3	3600	7	0.8	-10~80	14
AC-1008-1	8	4	5000	2	3.0	-10~80	20
AC-1008-2	8	4	5000	4	1.5	-10~80	20
AC-1008-3	8	4	5000	9	0.8	-10~80	20
AC-1210-1	10	5	10000	5	3.0	-10~80	31.5
AC-1210-2	10	5	10000	10	1.5	-10~80	31.5
AC-1210-3	10	5	10000	30	0.8	-10~80	31.5
AC-1412-1	12	15	30000	8	3.0	-10~80	80
AC-1412-2	12	15	30000	50	1.5	-10~80	80
AC-1412-3	12	15	30000	100	0.8	-10~80	80
AC-1416-1	16	20	35000	10	3.0	-10~80	90
AC-1416-2	16	20	35000	70	1.5	-10~80	90
AC-1416-3	16	20	35000	150	0.8	-10~80	90
AC-2020-1	20	40	40000	30	3.5	-10~80	215
AC-2020-2	20	40	40000	200	2.0	-10~80	215
AC-2020-3	20	40	40000	700	1.0	-10~80	215
ACD-2030-1	30	45	55000	40	3.5	-10~80	220
ACD-2030-2	30	45	55000	300	2.0	-10~80	220
ACD-2030-3	30	45	55000	900	1.0	-10~80	220
AC-2050-1	50	60	60000	60	3.5	-10~80	300
AC-2050-2	50	60	60000	400	2.0	-10~80	300
AC-2050-3	50	60	60000	1200	1.0	-10~80	300
AC-2525-1	25	80	70000	200	4.0	-10~80	330
AC-2525-2	25	80	70000	800	2.5	-10~80	330
AC-2525-3	25	80	70000	1500	1.0	-10~80	330
AC-2540-1	40	120	75000	300	4.0	-10~80	430
AC-2540-2	40	120	75000	1200	2.5	-10~80	430
AC-2540-3	40	120	75000	2000	1.0	-10~80	430
AC-3660-1	60	250	120000	4000	4.0	-10~80	1030
AC-3660-2	60	250	120000	1500	2.5	-10~80	1030
AC-3660-3	60	250	120000	2400	1.0	-10~80	1030

# SHOCK ABSORBER

## AD SERIES - ADJUSTABLE

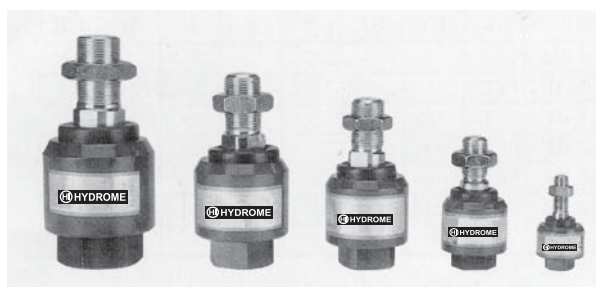
MODEL	DIMENSIONS	MAX. EFFECTIVE MASS (kg)	MAX. ENERGY ABSORBED PER CYCLE (Nm)	MAX. IMPACT SPEED (m/s)	WITHOUT CAP	WITH CAP	FLANGE	STOP COLLAR
AD-1410		80	20	3.0	○	○	-	○
AD-2016		200	25	3.5	○	○	-	○
AD-2525		400	85	3.5	-	○	-	○
AD-2540		700	100	3.5	-	○	-	○
AD-3650		1400	300	3	-	○	○	○
AD-4225		3000	260	3.5	-	○	○	-
AD-4250		4000	500	4.5	-	○	○	-
AD-4275		6000	750	4.5	-	○	○	-

## • SPECIFICATION

ORDER NO.	STROKE	MAX. Nm Per CYCLE (Et)	MAX. Nm Per HOUR (Etc)	MAX. EFFECTIVE MASS (ml) kg	MAX. IMPACT SPEED (V) m/s	OPERATING TEMPERATURE (°C)	WEIGHT (g)
AD-1410N	10	20	25000	80	3.0	-10~80	84
AD-1410	10	20	25000	80	3.0	-10~80	90
AD-2016N	16	25	30000	200	3.5	-10~80	222
AD-2016	16	25	30000	200	3.5	-10~80	230
AD-2525	25	85	70000	400	3.5	-10~80	455
AD-2540	40	100	80000	700	3.5	-10~80	1100
AD-3650	50	300	100000	1400	3	-10~80	1280
AD-4225	25	260	125000	3000	3.5	-10~80	1490
AD-4250	50	500	150000	4000	4.5	-10~80	1490
AD-4275	75	750	180000	6000	4.5	-10~80	1710



# STANDARD CYLINDER-FLOATON CONNECTOR



## HOW TO ORDER

**MFC** — **1004T**  
 MODEL                      THREAD SIZE

## FEATURES:

- The minor error connects between two shafts can be removed.
- The machining accuracy can be neglected.
- The shaft alignment's time for the error tolerance connects between two shafts can be finished and installed easily, even the newcomer can do also.
- The abnormal noise can be prohibited.
- Small in dimension but can be loaded high tension & compression.
- Long time for the machine parts and the packing in the cylinder or the rod sealing's damage can be prohibited, reduced the producing's cost.
- The compression's decrease can be prohibited.

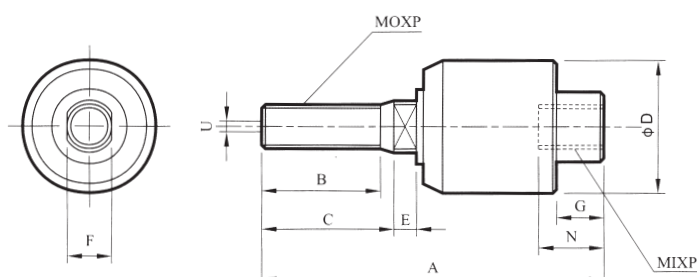


Fig.1

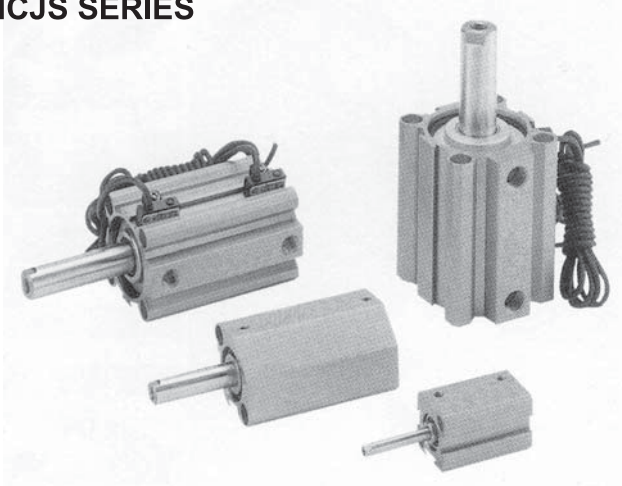
Fig.2

MODEL	CYL. DIA	MIXP	MOXP	A	B	C	D	E	F	G	H	N	Permissible U deviation	Illustration fig no.
MFC-1004T	10	M4×0.7	M4×0.7	26	10	10	12	1.5	4	4	5	5	0.5	Fig.1
MFC-1005T	10, 15	M5×0.8	M5×0.8	37	12.5	15	18	3	6	5	10	7	0.5	Fig.1
MFC-1006T	15	M6×1.0	M6×1.0	37	12.5	15	18	3	6	5	10	7	0.5	Fig.1
MFC-1008T	20	M8×1.25	M8×1.25	50	18	20	24	4	8	7	13	8	0.5	Fig.1
MFC-1010T	25, 30	M10×1.25	M10×1.25	58	20	22	26	5	10	8	17	9	0.75	Fig.1
MFC-1012T	40	M12×1.25/1.5	M12×1.25/1.5	58	20	22	28	5	12	8	17	9	0.75	Fig.1
MFC-1014T	40	M14×1.5	M14×1.5	70	20	23	35	7	14	9	22	13	1	Fig.1
MFC-1016T	50, 63	M16×1.5	M16×1.5	90	25	28	45	9	17	13	27	15	1.25	Fig.1
MFC-1018T	50, 63	M18×1.5	M18×1.5	90	25	28	45	9	17	13	27	15	1.25	Fig.1
MFC-1020T	80	M20×1.5	M20×1.5	102	29	32	53	10	22	15	32	18	2	Fig.2
MFC-1022T	80	M22×1.5	M22×1.5	102	29	32	53	10	22	15	32	18	2	Fig.2
MFC-1024T	100	M24×1.5	M24×1.5	124	35	38	61	12	26	19	41	24	2.5	Fig.2
MFC-1026T	100	M26×1.5	M26×1.5	124	35	38	61	12	26	19	41	24	2.5	Fig.2
MFC-1030T	120, 130	M30×1.5	M30×1.5	156	53	61	63	18	30	24	40	25	-	Fig.2
MFC-1036T	140, 160	M36×1.5	M36×1.6	199	64	72	75	18	36	24	48	46	-	Fig.2



# COMPACT CYLINDER

## MCJS SERIES

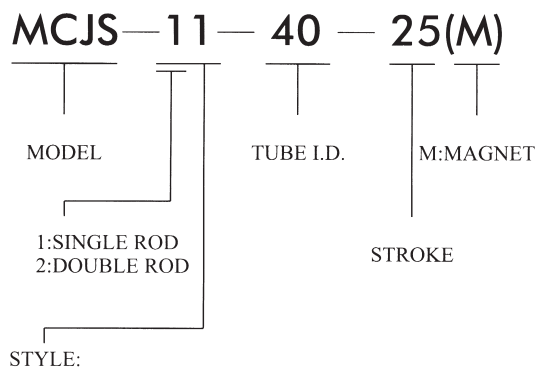


## FEATURES:

- Ultra-compact, lightweight, space-saving type.
- Available with a comprehensive selection of bore size (  $\phi$  12mm~  $\phi$  100mm) for the various needs.
- The highly accurate, air-driven push-pull work.

MODEL	MCJS		
I.D. (mm)	12, 16, 20, 25	32, 40	50, 63, 80, 100
Port size RC(PT)	M5	PT 1/8	PT 1/4
Media	Air		
Operating pressure	0.5-9.9kgf/cm <sup>2</sup>		
Proof pressure	15kgf/cm <sup>2</sup>		
Ambient temperature	5~60°C		
Cushion	With rubber cushion pad		
Lubrication	Non-lubrication		

## HOW TO ORDER



## DOUBLE ACTING — Table for Standard Stroke

	tube I.D.	stroke (mm)	Max. stroke
Single rod	$\phi$ 12	5, 10, 15, 20, 25, 30	35
	$\phi$ 16	5, 10, 15, 20, 25, 30	80
	$\phi$ 20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	80
	$\phi$ 32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	110
	$\phi$ 50~100	10, 15, 20, 25, 30, 35, 40, 45, 50	115
Dual rod	$\phi$ 12	5, 10, 15, 20, 25, 30	35
	$\phi$ 16	5, 10, 15, 20, 25, 30	70
	$\phi$ 20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	70
	$\phi$ 32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	110
	$\phi$ 50~100	10, 15, 20, 25, 30, 35, 40, 45, 50	115

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

## SINGLE ACTING — Table for Standard Stroke

tube I.D.	stroke (mm)
$\phi$ 12, 16, 20, 25, 32, 40	5, 10
$\phi$ 50	10, 20

CODE	SYMBOL	DESCRIPTION
1 1		Double acting/Male thread
1 2		Double acting/Female thread
1 3		Single acting/Normally extended male thread
1 4		Single acting/Normally extended female thread
1 5		Single acting/Normally returned male thread
1 6		Single acting/Normally returned female thread
2 1		Dual rod/Male thread
2 2		Dual rod/Female thread
2 7		Dual rod/Adjustable/Male thread Please mark "adjustable distance (mm)" at order list
2 8		Dual rod/Adjustable/Female thread Please mark "adjustable distance (mm)" at order list

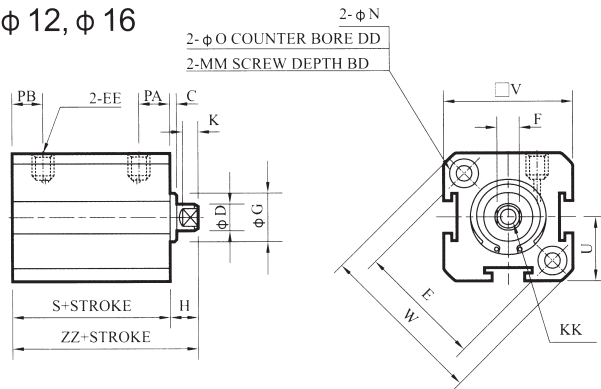
# COMPACT CYLINDER

## MCJS SERIES

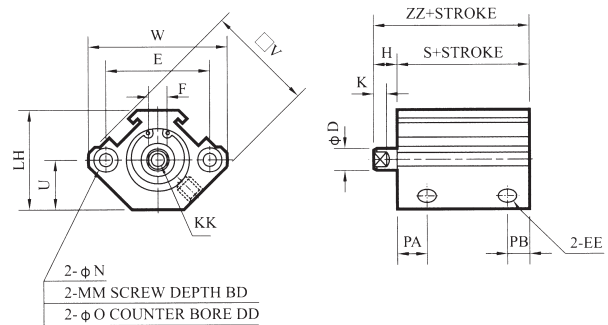
## DIMENSIONS

### MCJS-12

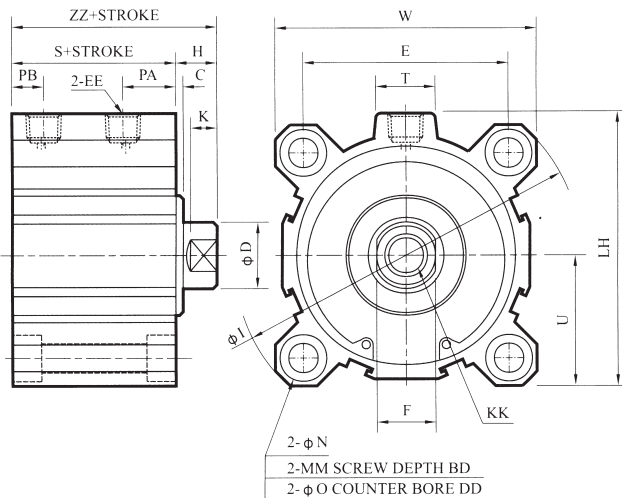
φ 12, φ 16



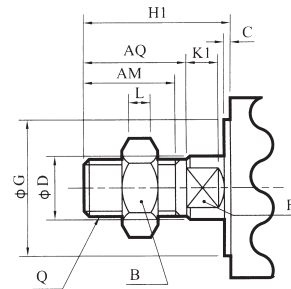
φ 20, φ 25



φ 32~φ 100



### MCJS-11



CODE TUBE I.D.	AM	AQ	B	H1	K1	L	Q
12	9	10.5	8	15.5	3	4	M5×0.8
16	9	10.5	8	15.5	3	4	M5×0.8
20	12	14	13	18.5	3	5	M8×1.25
25	15	17.5	17	22.5	3	6	M10×1.25
32	20.5	23.5	22	28.5	5	8	M14×1.5
40	20.5	23.5	22	28.5	7	8	M14×1.5
50	26	28.5	27	33.5	8	11	M18×1.5
63	26	28.5	27	33.5	8	11	M18×1.5
80	32.5	35.5	32	51	10	13	M22×1.5
100	32.5	35.5	36	55	14	16	M26×1.5

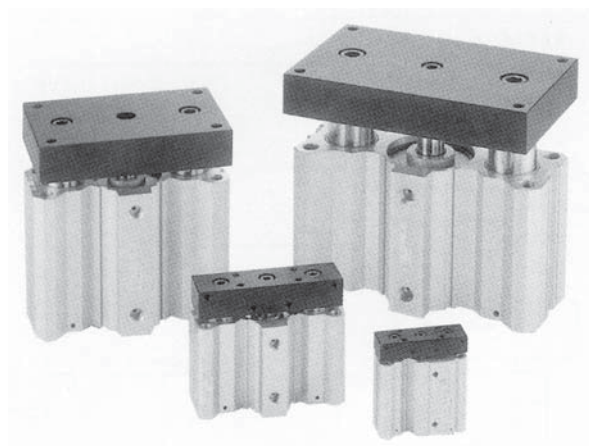
## OUTER SIZE TABLE

CODE TUBE I.D.	BD	C	D	DD	E	EE	F	G	H	I	K	KK	LH	MM	N	O	PA	PB	S(*)	T	U	V	W	ZZ(*)
12	7	1	6	3.5	22	M5×0.8	5	11 <sup>+0.1</sup>	5	-	3	M3×0.5 SCREW DEEP 6	-	M4×0.7	3.5	6	6.5	6.5	22 (17)	-	12.5	25	32	27 (22)
16	7	1.5	6	3.5	28	M5×0.8	5	11 <sup>+0.1</sup>	5.5	-	3	M3×0.5 SCREW DEEP 6	-	M4×0.7	3.5	6	7.2	7.2	28.5(18.5)	-	14.5	29	37.5	34 (24)
20	10	-	10	7	36	M5×0.8	8	-	4.5	-	3	M5×0.8 SCREW DEEP 7	30	M6×1.0	5.5	9	8	5.5	29.5(19.5)	-	15	37	47	34 (24)
25	10	-	12	7	40	M5×0.8	10	-	5	-	3	M6×1.0 SCREW DEEP 12	35	M6×1.0	5.5	9	9.5	5.5	32.5(22.5)	-	17.5	40	52	37.5(27.5)
32	10	-	16	7	34	PT 1/8	14	-	7	60	5	M8×1.25 SCREW DEEP 13	49.5	M6×1.0	5.5	9	10.5	8	33 (23)	18	22.5	-	45	40 (30)
40	10	-	16	7	40	PT 1/8	14	-	7	69	7	M8×1.25 SCREW DEEP 13	57	M6×1.0	5.5	9	11	8	39.5(29.5)	18	26	-	52	46.5(36.5)
50	14	-	20	8	50	PT 1/4	17	-	8	86	6	M10×1.5 SCREW DEEP 15	71	M8×1.25	6.8	10.5	10.5	10.5	40.5(30.5)	22	32	-	64	48.5(38.5)
63	18	-	20	10.5	60	PT 1/4	17	-	8	103	6	M10×1.5 SCREW DEEP 15	84	M10×1.5	9.2	14	14.5	10.5	46 (36)	22	38.5	-	77	54 (44)
80	22	2.5	25	11	77	PT 1/4	22	45 <sup>+0.1</sup>	15.5	131	10	M16×2 SCREW DEEP 21	102.4	M12×1.75	11	17	20	12	52 (42)	22	49	-	98	67.5(57.5)
100	22	2.5	30	11	94	PT 1/4	27	55 <sup>+0.1</sup>	19.5	156	14	M20×2.5 SCREW DEEP 27	121.5	M12×1.75	11	17.5	22	13	57.5(47.5)	22	58.5	-	117	77 (67)

●S( ) and ZZ( ) indicate the size of that without magnet ring.

# TWIN-GUIDE CYLINDER

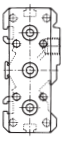
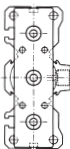


## MCGA SERIES



### FEATURES:

- Strong cylinder suitable for heavy load, for stopping work carriers of various sizes at a fixed position, and for stacking many work carriers, etc.
- The strong and thick guide rods sustain the unbalanced load.
- Designed for right-angled turn, positioning, and lifting on the conveyor line.
- Port thread BSP, NPT, are also available.

### SPECIFICATIONS:

TUBE I.D. PROPERTY	φ 20	φ 32	φ 40	φ 50	φ 63	φ 80
Model (Stop Type view)	 UP VIEW	  				
Operation type	Double acting					
Media	Air					
Working pressure	1~9kgf/cm <sup>2</sup>					
Proof pressure	15kgf/cm <sup>2</sup>					
Ambient temp	5~60℃					
Cushion	With rubber cushion pad					
Lubrication	Non-lubrication					
Port size R <sub>c</sub> (PT)	1/8(M5)*	1/8	1/8	1/4	1/4	3/8

\* ( ) : For φ 20 × 30st

## HOW TO ORDER

**MCGA — 03 — 20 × 50**

MODEL                      TUBE I.D.                      STROKE

Purpose/Type of bearing

Code	Purpose/Type of bearing
03	Stop/Slide bearing
13	Lift/Linear bush bearing*
53	Lift/Slide bearing

- Linear bush bearing type is not available as a stopper.

### TABLE FOR STANDARD STROKE

series variety	bearing type	tube I.D.	stroke (mm)									
			30	50	75	100	200	300	400	500	600	700
MCGA -03	Slide bearing	φ 20										
		φ 32										
		φ 40										
		φ 50										
		φ 63										
		φ 80										
MCGA -13	Linear bush bearing	φ 20										
		φ 32										
		φ 40										
		φ 50										
		φ 63										
		φ 80										
MCGA -53	Slide bearing	φ 20										
		φ 32										
		φ 40										
		φ 50										
		φ 63										
		φ 80										

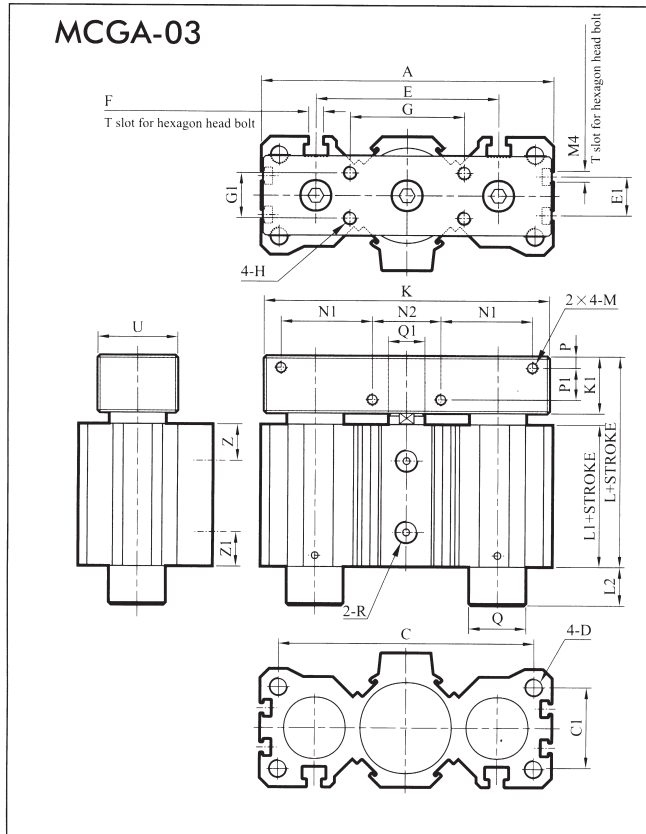
- Stroke out of specification is also available.
- Please consult us if stroke exceed 100mm.

# TWIN-GUIDE CYLINDER

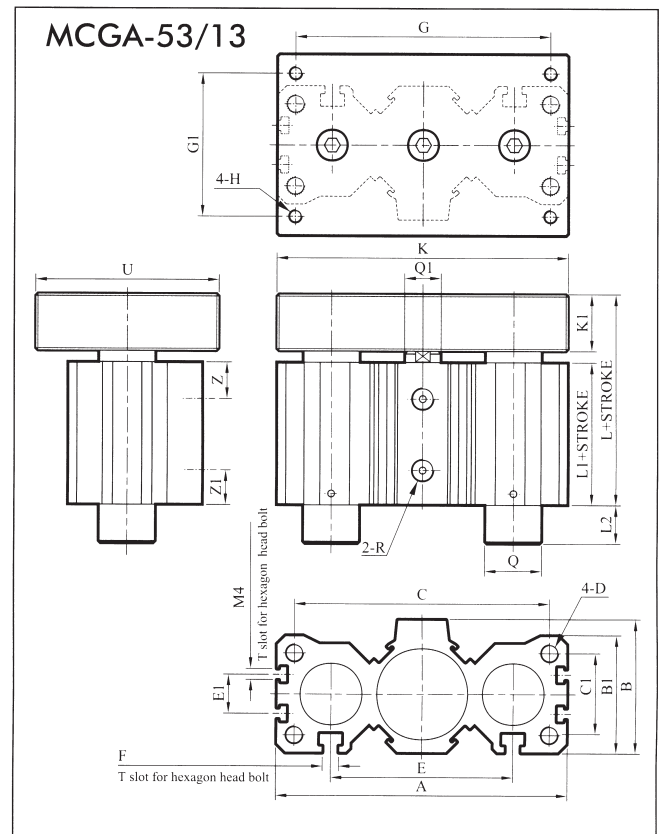
## MCGA SERIES

## DIMENSIONS

### STOP TYPE



### LIFE TYPE



### MCGA-03

CODE TUBE I.D.	A	B	B1	C	C1	D	E	E1	F	H	K1	L	L1	M	N1	N2	P	P1	Q1	R	Z	Z1	G	G1	U	K	Q	
20	75	34	32	63	20	M5×0.8×15dp	45	-	M4	M5×0.8×10dp	15	54	36	M4×0.7×8dp	22.5	20	4	6	φ10	PT 1/8	M5	11	10	32	16	25	75	φ12
32	106	51.5	45	90	30	M8×1.25×20dp	63	-	M6	M6×1.0×12dp	20	66.5	41.5	M5×0.8×10dp	32	25	5	9	φ16	PT 1/8		12	12	40	18	30	100	φ20
40	128	59	52	112	36	M8×1.25×20dp	80	-	M6	M6×1.0×12dp	25	81	51	M5×0.8×10dp	40	30	5	14	φ16	PT 1/8		16	16.5	50	20	35	125	φ25
50	150	69	62	132	45	M10×1.5×25dp	100	20	M8	M8×1.25×16dp	30	87	52	M6×1.0×12dp	37.5	50	6	16	φ20	PT 1/4		16	17.5	63	25	40	140	φ30
63	180	87	78	156	53	M12×1.75×30dp	118	25	M10	M10×1.5×20dp	35	100	60	M8×1.25×16dp	47.5	60	9	16	φ20	PT 1/4		17.5	21	80	40	60	175	φ35
80	243	110	100	212	71	M16×2.0×40dp	160	30	M12	M10×1.5×20dp	40	110.5	62.5	M10×1.5×20dp	60	80	10	18	φ25	PT 3/8		22	19.5	106	56	75	224	φ45

□ :For φ20×30st

### L2 Dimensions List

### MCGA-53/13

CODE TUBE I.D.	G	G1	U	K	Q
20	63	32	45	75	φ12(φ8)
32	90	50	70	106	φ20(φ13)
40	112	63	80	128	φ25(φ16)
50	132	71	100	150	φ30(φ20)
63	150	85	110	175	φ35(φ25)
80	212	125	150	236	φ45(φ35)

( ) :For MCGA-13 type

### MCGA-03/53

TUBE I.D.	Stroke (mm)			
	30	50	75	100
20	0	17	17	17
32	0	18.5	18.5	18.5
40	0	0	22	22
50	0	0	18	18
63	20	20	20	20
80	0	0	38.5	38.5

### MCGA-13

TUBE I.D.	Stroke (mm)			
	30	50	75	100
20	18	18	18	18
32	29.5	29.5	29.5	29.5
40	30	30	30	30
50	39	39	39	39
63	6	6	6	6
80	16	16	16	16

# AIR CYLINDER

## ISO-VDMA STANDARD CYLINDERS

### MCQV SERIES

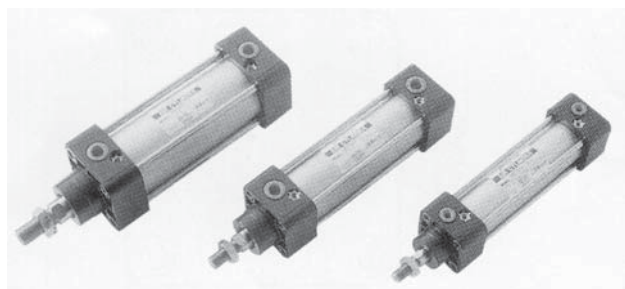


TABLE FOR STANDARD STROKE

tube I.D.	stroke (mm)
φ 32,40	50,75,100,125,150,175,200,250,300,350,400,450,500
φ 50,63	↑ 600
φ 80,100,160	↑ 600,700

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

#### FEATURES:

##### ■ NON-LUBRICATION:

Designs of oil-filled alloy special housing and bushing provide the needed self-lubrication of piston rod.

##### ■ HIGH QUALITY-LONG SERVICE LIFE:

Hard anodized aluminum cylinder tubes resist corrosion and abrasion.

##### ■ ISO-VDMA STANDARD SPECIFICATION:

Conformance to ISO-6431 & VDMA-24562 specification. Unified design, most parts of each type are interchangeable among each other.

##### ■ CYLINDER MOUNTINGS:

Available with a comprehensive selection of mountings for fixed or flexible installation.

##### ■ Port thread PT. NPT. are also available.

MODEL	MCQV
Tube I.D. (mm)	32,40,50,63,80,100,160
Media	Air
Operating pressure	0.5-9.9kgf/cm <sup>2</sup>
Proof pressure	15kgf/cm <sup>2</sup>
Ambient temperature	5~60°C

## HOW TO ORDER

MCQV—11—40—100(M)—FAC

MODEL

TUBE I.D.

M:MAGNET

MOUNTING TYPE

1:SINGLE ROD  
2:DOUBLE ROD

STROKE

STYLE:

CODE	SYMBOL	DESCRIPTION
1 1		Double acting/Male thread
2 7		Dual rod/Adjustable/Male thread (Please mark "adjustable distance(mm)" at order list)
2 1		Dual rod/Male thread

	LB
	FAC
	FBC
	CA
	CB
	CDB (+CB)
	TC
	TA
	TB

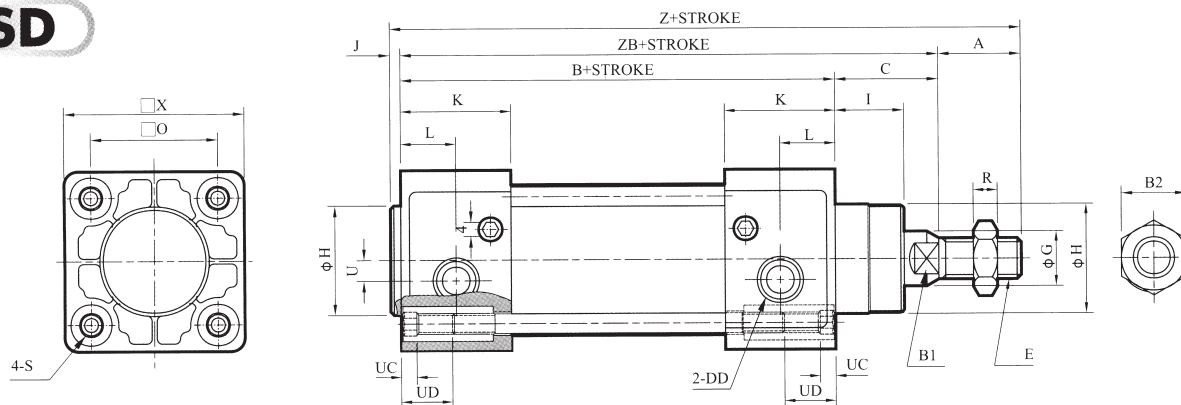


# AIR CYLINDER

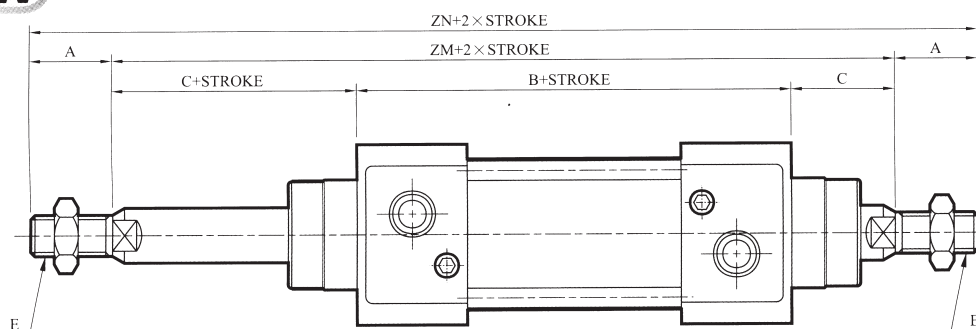
## ISO-VDMA STANDARD CYLINDERS

### MCQV SERIES

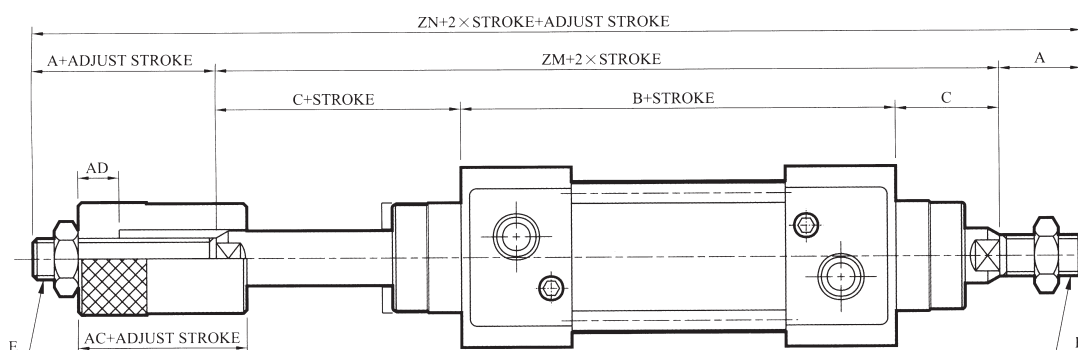
**SD**



**SDW**



**SDJ**



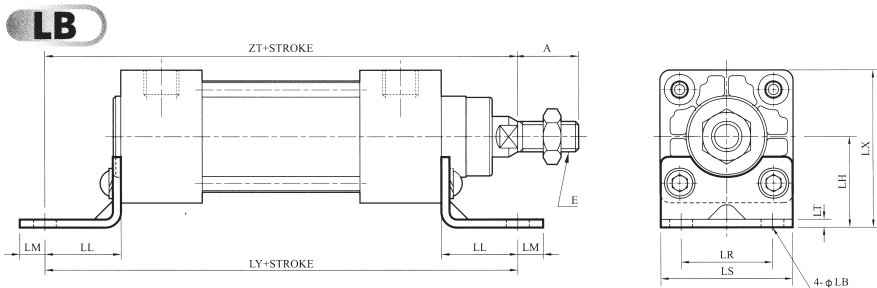
CODE TUBE I.D.	A	C	DD	E	G	H	I	J	K	L	U	O	R	S	X	B	B1	B2	UC	UD	ZB	Z	ZM	ZN	AC	AD
32	22	26	G 1/8	M10×1.25	12	30	16	4	26	13	4	32.5	6	M6×1.0	47	94	10	17	4	12	120	146	146	190	22	10
40	24	30	G 1/4	M12×1.25	16	35	20	4	30	15	4	38	7	M6×1.0	53	105	14	19	4	12	135	163	165	213	24	12
50	32	37	G 1/4	M16×1.5	20	40	25	4	30	15	4	46.5	8	M8×1.25	65	106	17	24	4	16	143	179	180	244	30	15
63	32	37	G 3/8	M16×1.5	20	45	25	4	32	16	7	56.5	8	M8×1.25	75	121	17	24	4	16	158	194	195	259	30	15
80	40	46	G 3/8	M20×1.5	25	45	32	6	38	19	7	72	12	M10×1.5	95	128	22	27	4	18	174	220	220	300	35	20
100	40	51	G 1/2	M20×1.5	25	55	35	6	40	20	7	89	12	M10×1.5	115	138	22	30	4	18	189	235	240	320	35	20



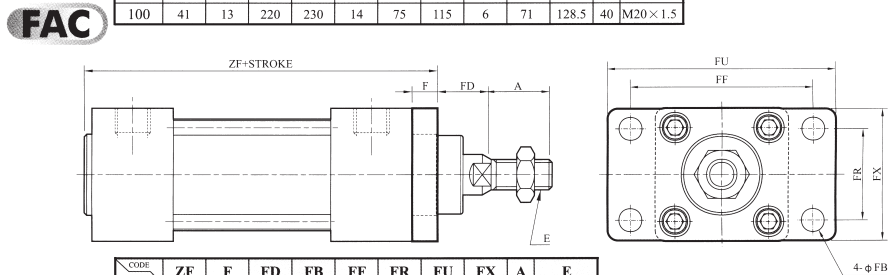
# AIR CYLINDER

## ISO-VDMA STANDARD CYLINDERS

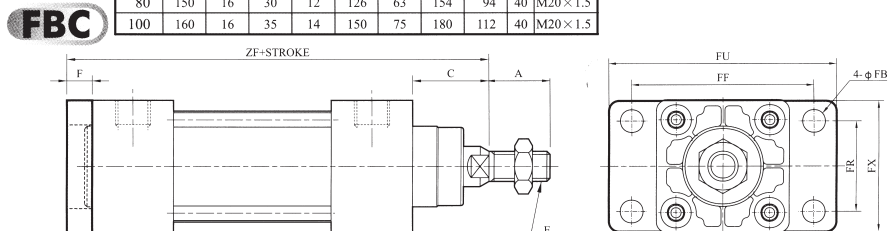
### MCQV SERIES



CODE TUBE L.D.	LL	LM	LY	ZT	LB	LR	LS	LT	LH	LX	A	E
32	24	8	142	144	7	32	47	5	32	55.5	22	M10×1.25
40	28	10	161	163	9	36	53	5	36	62.2	24	M12×1.25
50	32	10	170	175	9	45	65	5	45	77.5	32	M16×1.5
63	32	10	185	190	9	50	75	5	50	87.5	32	M16×1.5
80	41	13	210	215	12	63	95	6	63	110.5	40	M20×1.5
100	41	13	220	230	14	75	115	6	71	128.5	40	M20×1.5



CODE TUBE L.D.	ZF	F	FD	FB	FF	FR	FU	FX	A	E
32	108	10	16	7	64	32	79	50	22	M10×1.25
40	120	10	20	9	72	36	90	52	24	M12×1.25
50	123	12	25	9	90	45	110	65	32	M16×1.5
63	138	12	25	9	100	50	125	76	32	M16×1.5
80	150	16	30	12	126	63	154	94	40	M20×1.5
100	160	16	35	14	150	75	180	112	40	M20×1.5



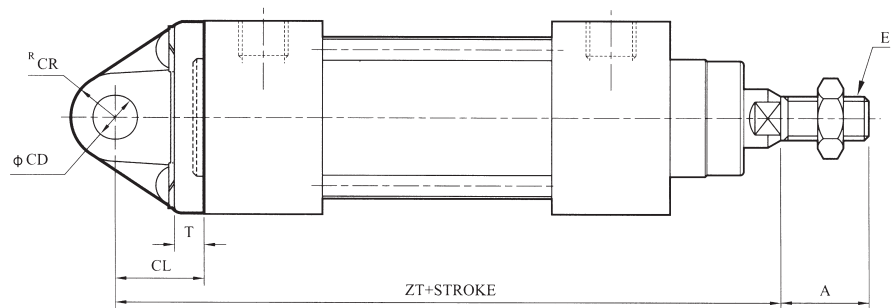
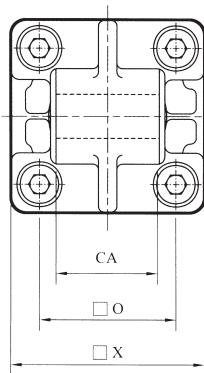
CODE TUBE L.D.	ZF	F	C	FB	FF	FR	FU	FX	A	E
32	130	10	26	7	64	32	79	50	22	M10×1.25
40	145	10	30	9	72	36	90	52	24	M12×1.25
50	155	12	37	9	90	45	110	65	32	M16×1.5
63	170	12	37	9	100	50	125	76	32	M16×1.5
80	190	16	46	12	126	63	154	94	40	M20×1.5
100	205	16	51	14	150	75	180	112	40	M20×1.5

# AIR CYLINDER

## ISO-VDMA STANDARD CYLINDERS

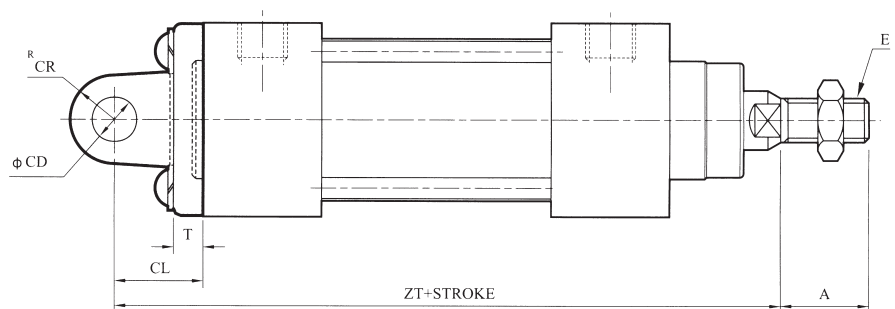
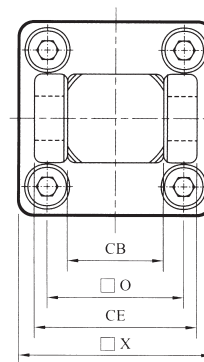
### MCQV SERIES

**CA**



CODE TUBE I.D.	ZT	O	X	CA	CD	CL	CR	T	A	E
32	142	32.5	47	26 <sup>-0.1 -0.3</sup>	10 <sup>H9</sup>	22	10.5	10	22	M10×1.25
40	160	38	53	28 <sup>-0.1 -0.3</sup>	12 <sup>H9</sup>	25	12	10	24	M12×1.25
50	170	46.5	65	32 <sup>-0.1 -0.3</sup>	12 <sup>H9</sup>	27	12	12	32	M16×1.5
63	190	56.5	75	40 <sup>-0.1 -0.3</sup>	16 <sup>H9</sup>	32	18	12	32	M16×1.5
80	210	72	95	50 <sup>-0.1 -0.3</sup>	16 <sup>H9</sup>	36	17	16	40	M20×1.5
100	230	89	115	60 <sup>-0.1 -0.3</sup>	20 <sup>H9</sup>	41	21	16	40	M20×1.5

**CB**



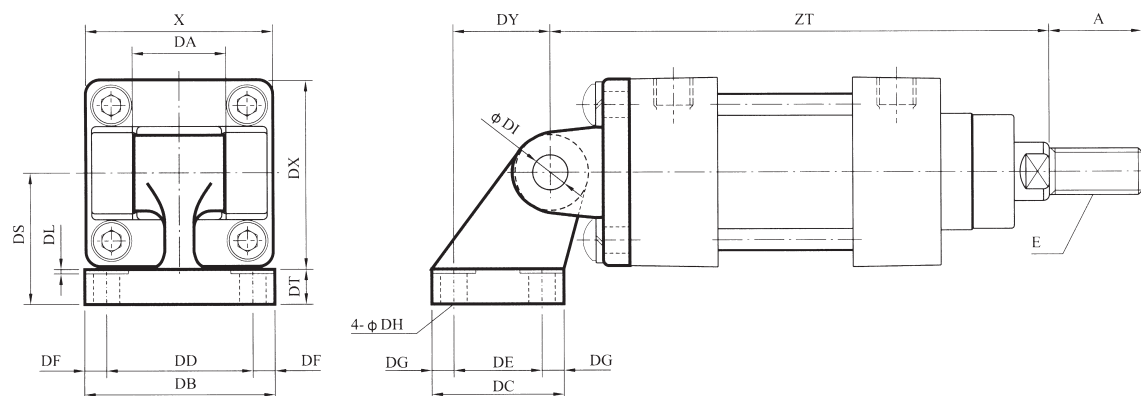
CODE TUBE I.D.	ZT	CE	O	X	CB	CD	CL	CR	T	A	E
32	142	45	32.5	47	26 <sup>-0.3 -0.1</sup>	10 <sup>H9</sup>	22	10.5	10	22	M10×1.25
40	160	52	38	53	28 <sup>+0.3 +0.1</sup>	12 <sup>H9</sup>	25	12	10	24	M12×1.25
50	170	60	46.5	65	32 <sup>-0.3 -0.1</sup>	12 <sup>H9</sup>	27	12	12	32	M16×1.5
63	190	70	56.5	75	40 <sup>+0.3 +0.1</sup>	16 <sup>H9</sup>	32	18	12	32	M16×1.5
80	210	90	72	95	50 <sup>-0.3 -0.1</sup>	16 <sup>H9</sup>	36	17	16	40	M20×1.5
100	230	110	89	115	60 <sup>+0.3 +0.1</sup>	20 <sup>H9</sup>	41	21	16	40	M20×1.5

# AIR CYLINDER

## ISO-VDMA STANDARD CYLINDERS

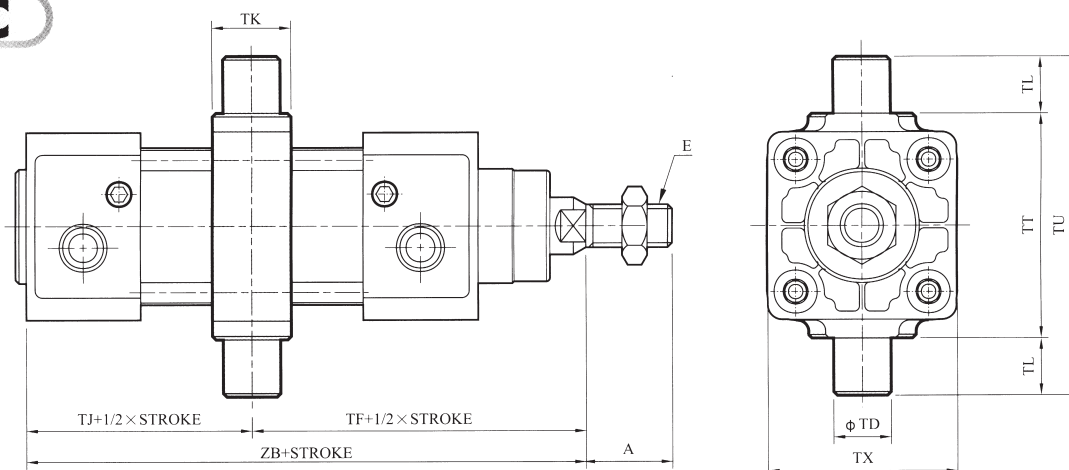
### MCQV SERIES

**CDB** (+CB)



CODE TUBE I.D.	A	X	E	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	ZT
32	22	47	M10×1.25	26	50	30	38	18	6	6	6.6	10	1.5	32	8	47.5	21	142
40	24	53	M12×1.25	28	53	34	41	22	6	6	6.6	12	1.5	36	10	52.5	24	160
50	32	65	M16×1.5	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	65.5	33	170
63	32	75	M16×1.5	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	75.5	37	190
80	40	95	M20×1.5	50	86	60	66	40	10	10	11	16	2.5	63	14	96.5	47	210
100	40	115	M20×1.5	60	96	70	76	50	10	10	11	20	2.5	71	15	113.5	55	230

**TC**



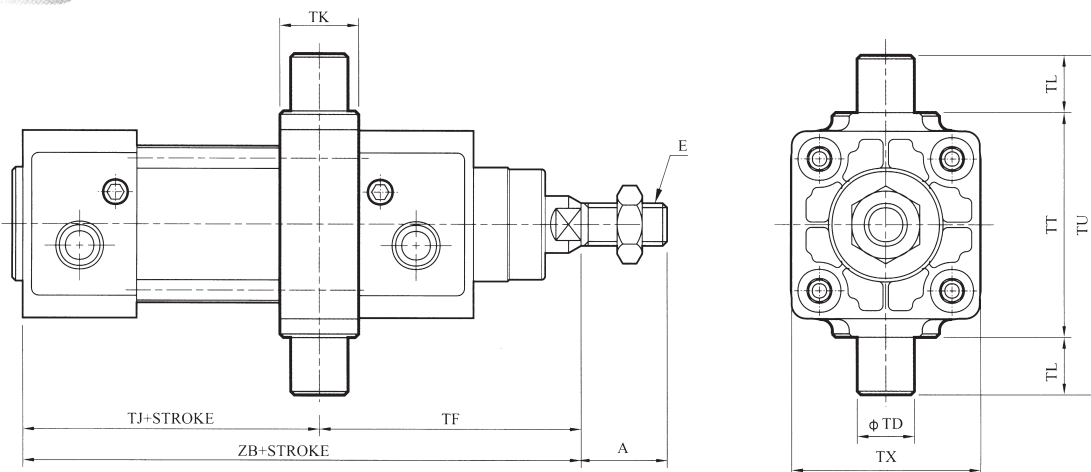
CODE TUBE I.D.	TF	TJ	ZB	TK	TD	TX	TT	TL	TU	A	E
32	73	47	120	22	12 <sup>c8</sup>	47	50	12	74	22	M10×1.25
40	82.5	52.5	135	22	16 <sup>c8</sup>	53	63	16	95	24	M12×1.25
50	90	53	143	22	16 <sup>c8</sup>	66	75	16	107	32	M16×1.5
63	97.5	60.5	158	28	20 <sup>c8</sup>	78	90	20	130	32	M16×1.5
80	110	64	174	34	20 <sup>c8</sup>	95	110	20	150	40	M20×1.5
100	120	69	189	40	25 <sup>c8</sup>	114	132	25	182	40	M20×1.5

# AIR CYLINDER

## ISO-VDMA STANDARD CYLINDERS

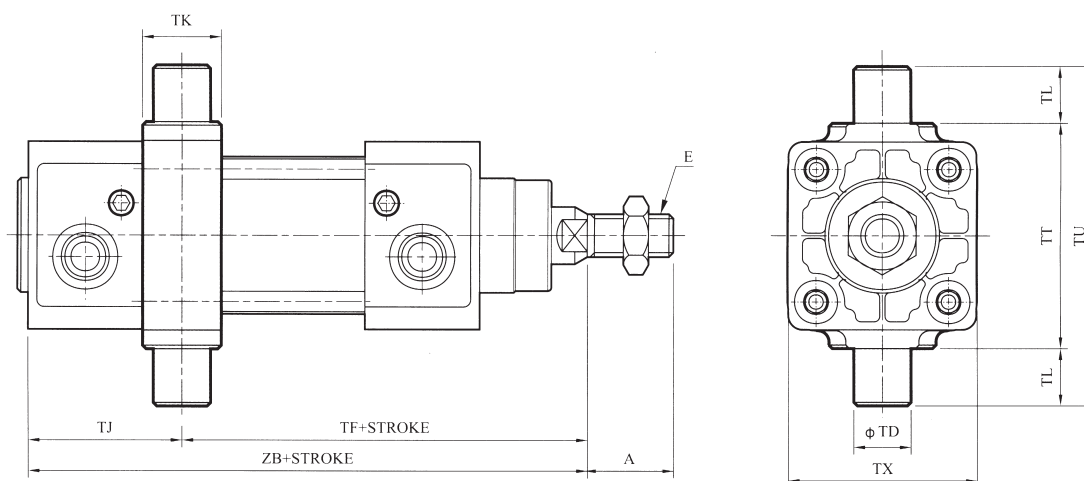
### MCQV SERIES

**TA**



CODE TUBE I.D.	TF	TJ	ZB	TK	TD	TX	TT	TL	TU	A	E
32	64	56	120	22	12 <sup>cs</sup>	47	50	12	74	22	M10×1.25
40	72	63	135	22	16 <sup>cs</sup>	53	63	16	95	24	M12×1.25
50	79	64	143	22	16 <sup>cs</sup>	66	75	16	107	32	M16×1.5
63	84	74	158	28	20 <sup>cs</sup>	78	90	20	130	32	M16×1.5
80	102	72	174	34	20 <sup>cs</sup>	95	110	20	150	40	M20×1.5
100	112	77	189	40	25 <sup>cs</sup>	114	132	25	182	40	M20×1.5

**TB**



CODE TUBE I.D.	TF	TJ	ZB	TK	TD	TX	TT	TL	TU	A	E
32	82	38	120	22	12 <sup>cs</sup>	47	50	12	74	22	M10×1.25
40	93	42	135	22	16 <sup>cs</sup>	53	63	16	95	24	M12×1.25
50	101	42	143	22	16 <sup>cs</sup>	66	75	16	107	32	M16×1.5
63	111	42	158	28	20 <sup>cs</sup>	78	90	20	130	32	M16×1.5
80	118	56	174	34	20 <sup>cs</sup>	95	110	20	150	40	M20×1.5
100	128	61	189	40	25 <sup>cs</sup>	114	132	25	182	40	M20×1.5

# AIR CYLINDER

## ISO-VDMA STANDARD PROFILE CYLINDERS

### MCQI SERIES



#### FEATURES:

##### ■ NON-LUBRICATION:

Designs of oil-filled alloy. special housing and bushing provide the needed self-lubrication of piston rod.

##### ■ HIGH QUALITY-LONG SERVICE LIFE:

Hard anodized aluminum cylinder tubes resist corrosion and abrasion.

##### ■ ISO-6431 VDMA STANDARD SPECIFICATION:

Conformance to ISO-6431 & VDMA-24562 specification.  
Unified design, most parts of each type are interchangeable among each other.

##### ■ CYLINDER MOUNTINGS:

Available with a comprehensive selection of mountings for fixed or flexible installation.

##### ■ Port thread PT. NPT. are also available.

TABLE FOR STANDARD STROKE

tube I.D.	stroke (mm)
φ 32,40	50,75,100,125,150,175,200,250,300,350,400,450,500
φ 50,63	↑ 600
φ 80,100	↑ 600,700

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

MODEL	MCQI
Tube I.D. (mm)	32,40,50,63,80,100
Media	Air
Operating pressure	0.5-9.9kgf/cm <sup>2</sup>
Proof pressure	15kgf/cm <sup>2</sup>
Ambient temperature	5~60°C

### HOW TO ORDER

MCQI — 11 — 40 — 100(M) — FAC

MODEL

TUBE I.D.

M:MAGNET

MOUNTING TYPE

1:SINGLE ROD  
2:DOUBLE ROD

STROKE

STYLE:

CODE	SYMBOL	DESCRIPTION
1 1		Double acting/Male thread
2 7		Dual rod/Adjustable/Male thread (Please mark "adjustable distance(mm)" at order list)
2 1		Dual rod/Male thread

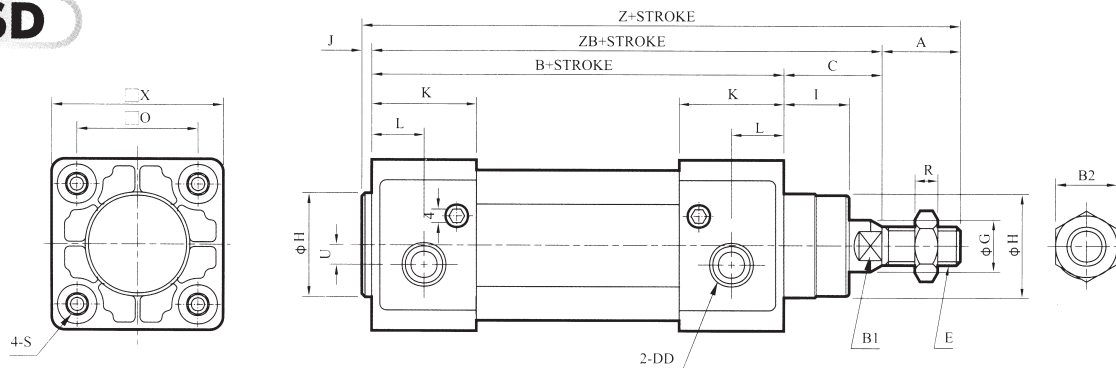
	LB
	FAC
	FBC
	CA
	CB
	CDB (+CB)
	TC
	TA
	TB

# PROFILE AIR CYLINDER

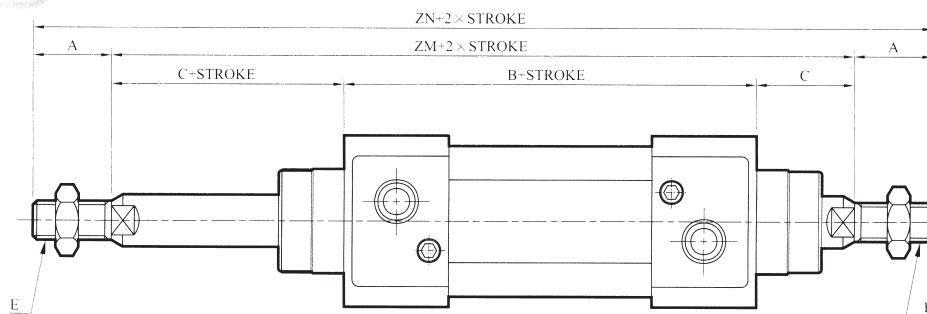
## ISO-VDMA STANDARD PROFILE CYLINDERS

### MCQI SERIES

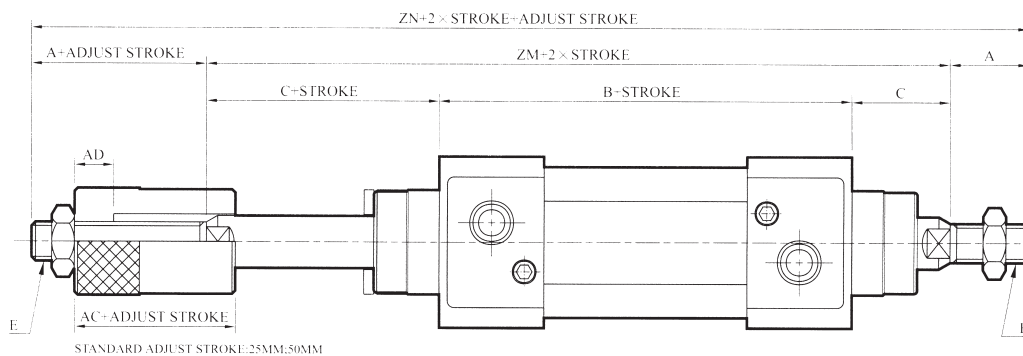
**SD**



**SDW**



**SDJ**



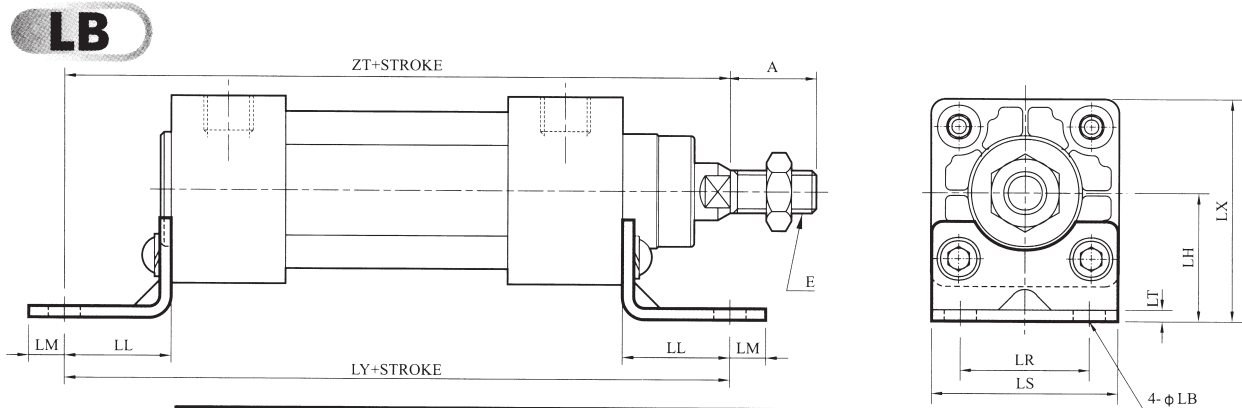
CODE TUBE I.D.	A	C	DD	E	G	H	I	J	K	L	U	O	R	S	X	B	B1	B2	ZB	Z	ZM	ZN	AC	AD
32	22	26	G 1/8	M10×1.25	12	30	16	4	26	13	4	32.5	6	M6×1.0	47	94	10	17	120	146	146	190	22	10
40	24	30	G 1/4	M12×1.25	16	35	20	4	30	15	4	38	7	M6×1.0	53	105	14	19	135	163	165	213	24	12
50	32	37	G 1/4	M16×1.5	20	40	25	4	30	15	4	46.5	8	M8×1.25	65	106	17	24	143	179	180	244	30	15
63	32	37	G 3/8	M16×1.5	20	45	25	4	32	16	7	56.5	8	M8×1.25	75	121	17	24	158	194	195	259	30	15
80	40	46	G 3/8	M20×1.5	25	45	32	6	38	19	7	72	12	M10×1.5	95	128	22	27	174	220	220	300	35	20
100	40	51	G 1/2	M20×1.5	25	55	35	6	40	20	7	89	12	M10×1.5	115	138	22	27	189	235	240	320	35	20



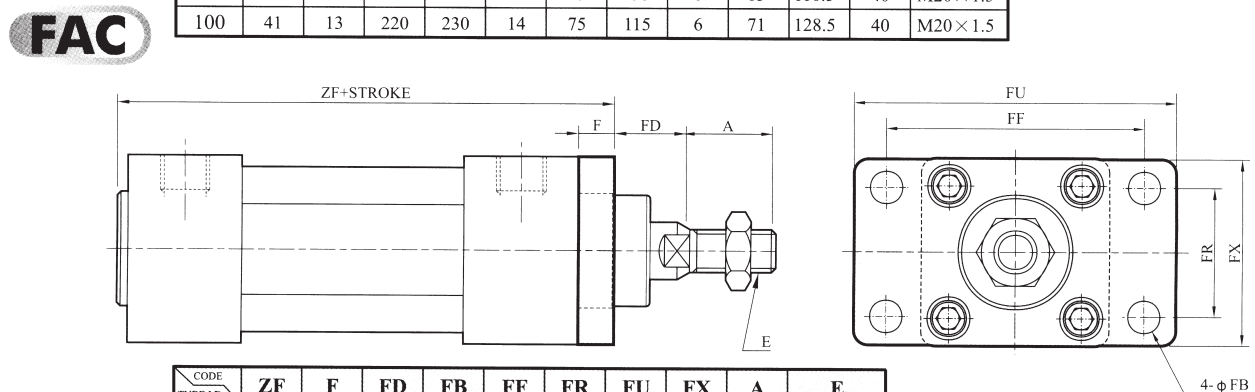
# PROFILE AIR CYLINDER

## ISO-VDMA STANDARD PROFILE CYLINDERS

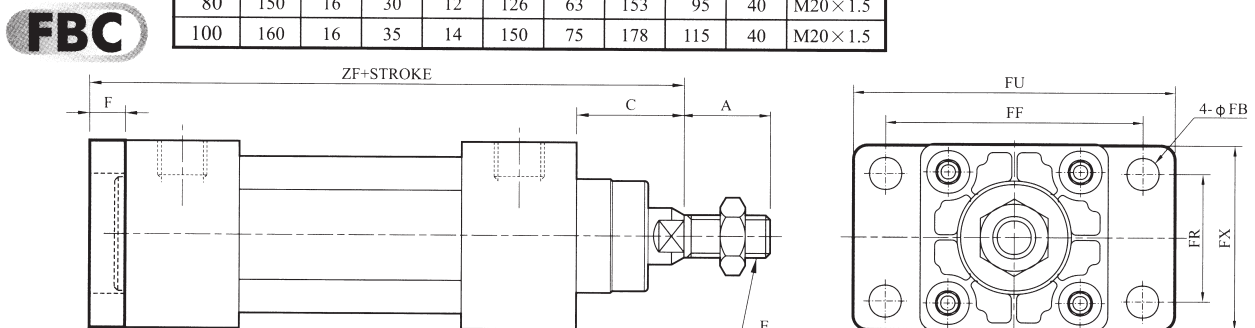
### MCQI



CODE TUBE I.D.	LL	LM	LY	ZT	LB	LR	LS	LT	LH	LX	A	E
32	24	8	142	144	7	32	47	5	32	55.5	22	M10×1.25
40	28	10	161	163	9	36	53	5	36	62.2	24	M12×1.25
50	32	10	170	175	9	45	65	5	45	77.5	32	M16×1.5
63	32	10	185	190	9	50	75	5	50	87.5	32	M16×1.5
80	41	13	210	215	12	63	95	6	63	110.5	40	M20×1.5
100	41	13	220	230	14	75	115	6	71	128.5	40	M20×1.5



CODE TUBE I.D.	ZF	F	FD	FB	FF	FR	FU	FX	A	E
32	108	10	16	7	64	32	79	50	22	M10×1.25
40	120	10	20	9	72	36	90	55	24	M12×1.25
50	123	12	25	9	90	45	110	65	32	M16×1.5
63	138	12	25	9	100	50	120	75	32	M16×1.5
80	150	16	30	12	126	63	153	95	40	M20×1.5
100	160	16	35	14	150	75	178	115	40	M20×1.5



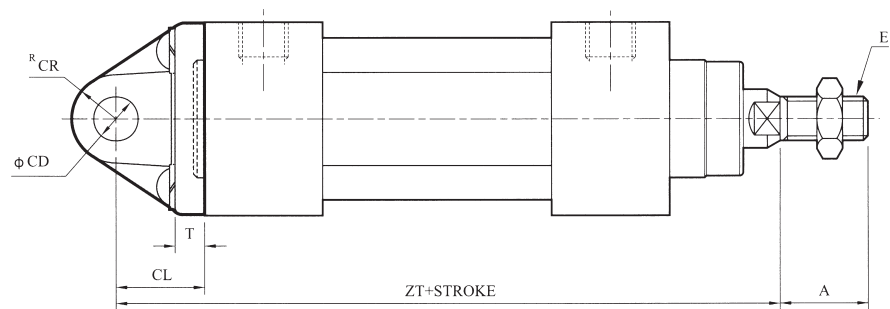
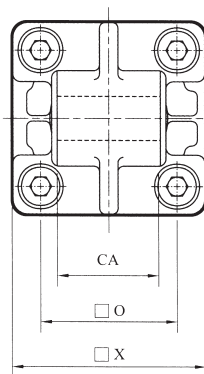
CODE TUBE I.D.	ZF	F	C	FB	FF	FR	FU	FX	A	E
32	130	10	26	7	64	32	79	50	22	M10×1.25
40	145	10	30	9	72	36	90	55	24	M12×1.25
50	155	12	37	9	90	45	110	65	32	M16×1.5
63	170	12	37	9	100	50	120	75	32	M16×1.5
80	190	16	46	12	126	63	153	95	40	M20×1.5
100	205	16	51	14	150	75	178	115	40	M20×1.5

# PROFILE AIR CYLINDER

## ISO-VDMA STANDARD PROFILE CYLINDERS

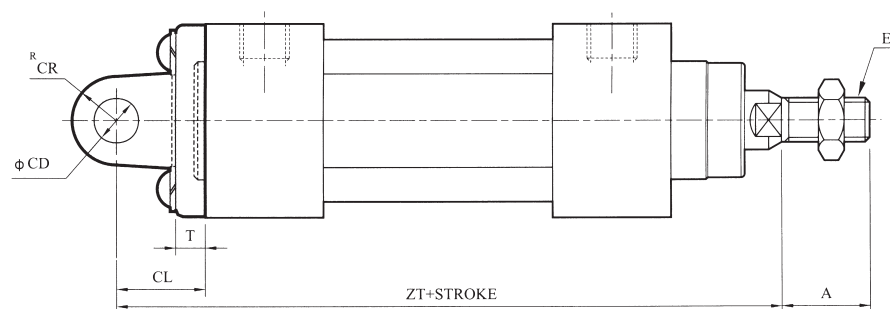
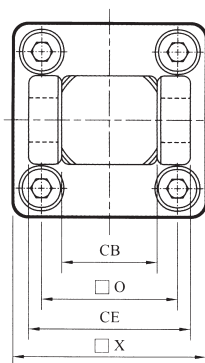
### MCQI SERIES

**CA**



CODE TUBE I.D.	ZT	O	X	CA	CD	CL	CR	T	A	E
32	142	32.5	47	26 <sup>-0.1 -0.3</sup>	10 <sup>H9</sup>	22	10.5	10	22	M10×1.25
40	160	38	53	28 <sup>-0.1 -0.3</sup>	12 <sup>H9</sup>	25	13	10	24	M12×1.25
50	170	46.5	65	32 <sup>-0.1 -0.3</sup>	12 <sup>H9</sup>	25	13	12	32	M16×1.5
63	190	56.5	75	40 <sup>-0.1 -0.3</sup>	16 <sup>H9</sup>	32	17	12	32	M16×1.5
80	210	72	95	50 <sup>-0.1 -0.3</sup>	16 <sup>H9</sup>	36	17	16	40	M20×1.5
100	230	89	115	60 <sup>-0.1 -0.3</sup>	20 <sup>H9</sup>	41	21	16	40	M20×1.5

**CB**

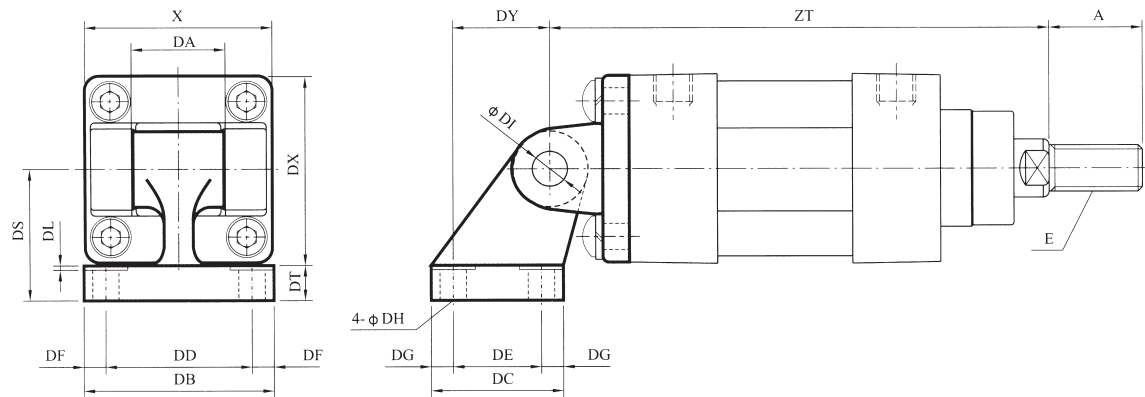


CODE TUBE I.D.	ZT	CE	O	X	CB	CD	CL	CR	T	A	E
32	142	45	32.5	47	26 <sup>+0.3 +0.1</sup>	10 <sup>H9</sup>	22	10.5	10	22	M10×1.25
40	160	52	38	53	28 <sup>+0.3 +0.1</sup>	12 <sup>H9</sup>	25	13	10	24	M12×1.25
50	170	60	46.5	65	32 <sup>+0.3 +0.1</sup>	12 <sup>H9</sup>	27	13	12	32	M16×1.5
63	190	70	56.5	75	40 <sup>+0.3 +0.1</sup>	16 <sup>H9</sup>	32	17	12	32	M16×1.5
80	210	90	72	95	50 <sup>+0.3 +0.1</sup>	16 <sup>H9</sup>	36	17	16	40	M20×1.5
100	230	110	89	115	60 <sup>+0.3 +0.1</sup>	20 <sup>H9</sup>	41	21	16	40	M20×1.5

# PROFILE AIR CYLINDER

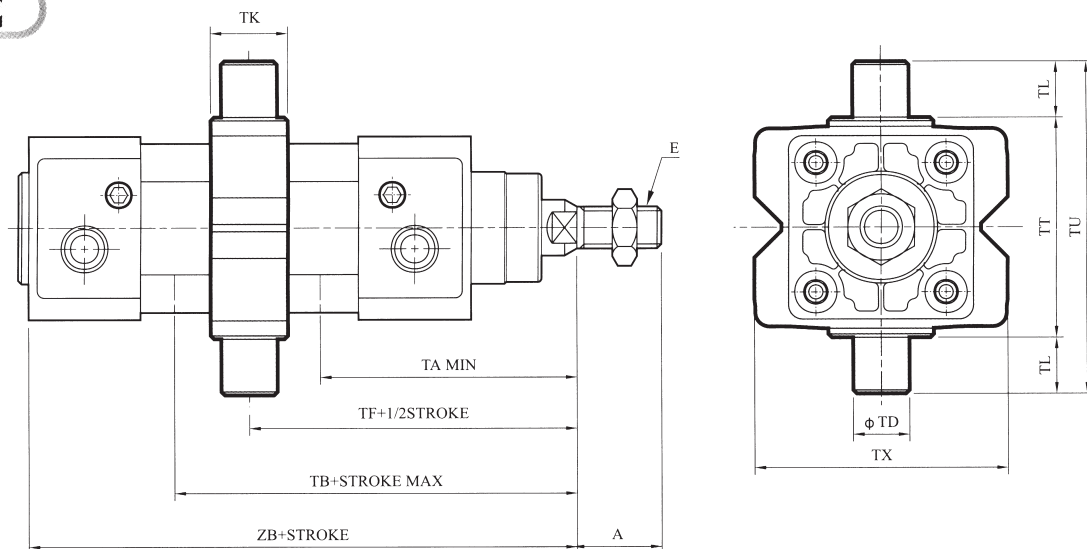
## ISO-VDMA STANDARD PROFILE CYLINDERS MCQI SERIES

**CDB** (+CB)



CODE TUBE I.D.	A	X	E	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	ZT
32	22	47	M10×1.25	26	50	30	38	18	6	6	6.6	10	1.5	32	8	47.5	21	142
40	24	53	M12×1.25	28	53	34	41	22	6	6	6.6	12	1.5	36	10	52.5	24	160
50	32	65	M16×1.5	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	65.5	33	170
63	32	75	M16×1.5	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	75.5	37	190
80	40	95	M20×1.5	50	86	60	66	40	10	10	11	16	2.5	63	14	96.5	47	210
100	40	115	M20×1.5	60	96	70	76	50	10	10	11	20	2.5	71	15	113.5	55	230

**TC**

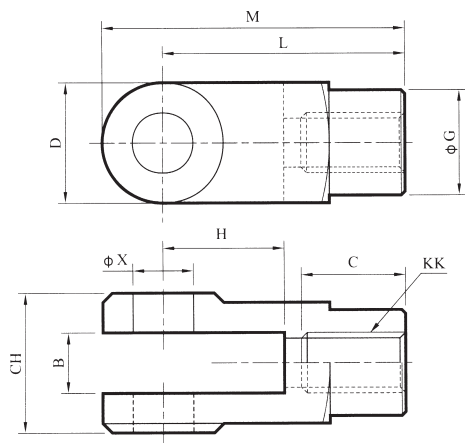


CODE TUBE I.D.	TF	TA	ZB	TK	TD	TX	TT	TL	TU	TB	A	E
32	73	73	120	22	12 <sup>ex</sup>	58	50	12	74	73	22	M10×1.25
40	82.5	77	135	28	16 <sup>ex</sup>	70	63	16	95	88	24	M12×1.25
50	90	86	143	32	16 <sup>ex</sup>	85	75	16	107	94	32	M16×1.5
63	97.5	89.5	158	35	20 <sup>ex</sup>	100	90	20	130	105.5	32	M16×1.5
80	110	107	174	40	20 <sup>ex</sup>	120	110	20	150	113	40	M20×1.5
100	120	116.5	189	45	25 <sup>ex</sup>	145	132	25	182	123.5	40	M20×1.5

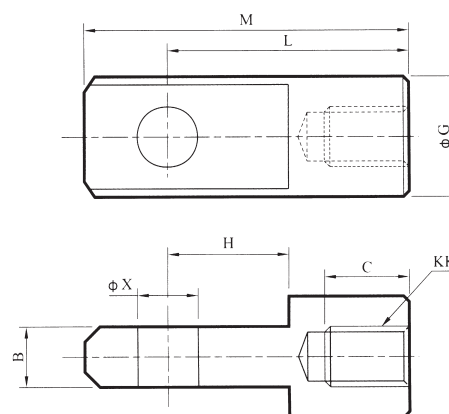
# AIR CYLINDER ACCESSORY

## FOR MCQV/MCQP SERIES

### Y CONNECTOR

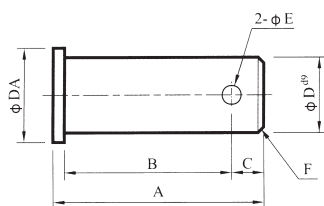


### I CONNECTOR



CODE TUBE I.D.	L		H		G		B		$X^{H9}$	KK		C		CH		M		D	
	Y	I	Y	I	Y	I	Y	I		Y	I	Y	I	Y	I	Y	I	Y	I
32	40	40	20	15	$\phi 18$	$\phi 20$	$10^{+0.3}_{-0.1}$	$10^{+0.1}_{-0.2}$	$\phi 10^{+0.04}_0$	M10×1.25	20	17	19	/	/	52	52	19	/
40	48	48	24	18	$\phi 20$	$\phi 24$	$12^{+0.3}_{+0.1}$	$12^{+0.1}_{-0.2}$	$\phi 12^{+0.04}_0$	M12×1.25	24	21	22	/	/	62	62	22	/
50	64	64	32	32	$\phi 28$	$\phi 32$	$16^{+0.3}_{+0.1}$	$16^{+0.1}_{-0.3}$	$\phi 16^{+0.04}_0$	M16×1.5	28	23	32	/	/	89	86	32	/
63	64	64	32	32	$\phi 28$	$\phi 32$	$16^{+0.3}_{+0.1}$	$16^{+0.1}_{-0.3}$	$\phi 16^{+0.04}_0$	M16×1.5	28	23	32	/	/	89	86	32	/
80	80	80	40	40	$\phi 36$	$\phi 36$	$20^{+0.3}_{+0.1}$	$20^{+0.1}_{-0.3}$	$\phi 20^{+0.05}_0$	M20×1.5	33	30	45	/	/	100	108	40	/
100	80	80	40	40	$\phi 36$	$\phi 36$	$20^{+0.3}_{+0.1}$	$20^{+0.1}_{-0.3}$	$\phi 20^{+0.05}_0$	M20×1.5	33	30	45	/	/	100	108	40	/

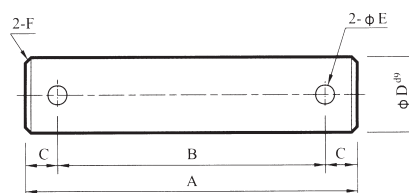
### PIN FOR Y.I CONNECTOR



#### FOR Y.I CONNECTOR

CODE TUBE I.D.	A	B	C	$D^9$	E	F	DA	SPLIT PIN
32	30	25	3.5	$\phi 10^{+0.06}_{-0.09}$	3.2	1	14	3.2×20L
40	37	30	5	$\phi 12^{+0.06}_{-0.09}$	3.2	1	16	3.2×20L
50 63	47	37	7	$\phi 16^{+0.05}_{-0.09}$	4	1	22	4×25L
80 100	62	50	8	$\phi 20^{+0.06}_{-0.11}$	5	1.5	30	5×35L

### PIN FOR CA.CB

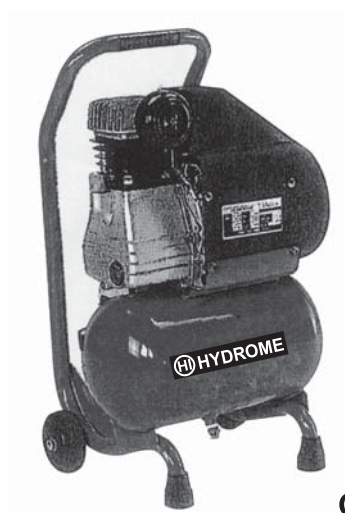


#### FOR CA.CB

CODE TUBE I.D.	A	B	C	$D^9$	E	F	SPLIT PIN
32	69	55	7	$\phi 10^{+0.05}_{-0.09}$	4	1.0	4×20L
40	76	62	7	$\phi 12^{+0.05}_{-0.09}$	4	1.0	4×20L
50	84	70	7	$\phi 12^{+0.05}_{-0.09}$	4	1.0	4×20L
63	94	80	7	$\phi 16^{+0.05}_{-0.09}$	4	1.0	4×30L
80	117	100	8.5	$\phi 16^{+0.05}_{-0.09}$	5	1.5	5×30L
100	137	120	8.5	$\phi 20^{+0.05}_{-0.09}$	5	1.5	5×35L

# AIR COMPRESSOR

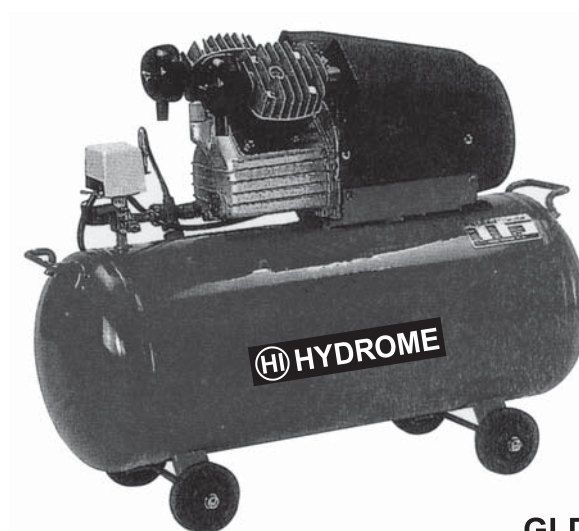
## ELECTRIC DIRECT COUPLED TYPE



**GLD-10**



**GLD-15  
GLD-20**



**GLD-30  
GLD-40**

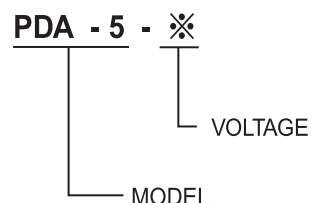
## SPECIFICATIONS

MODEL	POWER		CAP.	SPEED	CYL	W.P	M.P	TANK CAP	N.W.	L X W X H
	HP	KW	l/min	R.P.M.	NO	Kg/Cm <sup>2</sup>	Kg/Cm <sup>2</sup>	Liter	Kg	cm
GLD-10	1	0.75	100	1450	1	9	10	10	23	43X34X64
GLD-15	1½"	1.1	126	1450	1	9	10	25	26	62X33X61
GLD-20	2	1.5	180	2900	1	9	10	25	28	62X33X61
GLD-30	3	2.2	250	1450	2	9	10	50	37	72X35X65
GLD-40	4	3	350	1450	2	9	10	50	41	72X35X65

# REFRIGERATED AIR DRYER



## HOW TO ORDER



## AIR COOLING TYPE

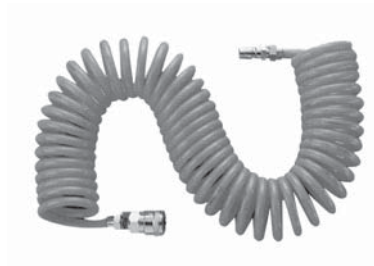
MODEL	PDA-5	PDA-10	PDA-15	PDA-20	PDA-25	PDA-30	PDA-40	PDA-50	PDA-75	PDA-100	PDA-150
Handled volume Nm³/min SCFM	0.5	1	1.5	2	2.5	3	4	5	7.5	10	15
	17	35	53	71	88	105	141	177	265	353	530
Pressure used	Max. pressure used: 10kg/cm <sup>2</sup> G, other high pressure specification (20-210 kg/cm <sup>2</sup> G)										
Inlet air temperature	80°C (176° F) Order of other temperature setting is welome.										
Pressure dew point	1.7°C(35° F)corresponding to atmosphere dew point-23.3°C(-10° F)										
HP of freezer	1/3	1/2	1/2	3/4	3/4	1	1	1½	3	3	4
Power source	220V 1PH 60/50HZ								220/380V 3PH 60HZ/50HZ		
Condenser cooling method	Air cooling										
Air adapter diameter	1/2"	3/4"	3/4"	1"	1"	1½"	1½"	2"	3"	3"	4"
Length mm	700	700	800	800	800	1050	1050	1250	1250	1250	1650
Width mm	450	450	450	600	600	450	600	600	700	700	800
Height mm	700	700	800	850	850	950	950	1250	1500	1500	1650
Specification of cooling HP	1/8	1/8	1/8	1/4	1/4	1/8x2	1/8x2	1/8x4	1/8x4	1/8x4	1/8x4

## WATER COOLING TYPE

MODEL	PDW-30	PDW-50	PDW-75	PDW-100	PDW-150	PDW-200	PDW-250	PDW-300	PDW-400	PDW-500	PDW-600
Handled volume Nm <sup>3</sup> /min SCFM	3	5	7.5	10	15	20	25	30	40	50	60
	105	177	265	353	530	706	883	1060	1412	1765	2118
Pressure used	Max. pressure used: 10kg/cm <sup>2</sup> G, other high pressure specification (20-210 kg/cm <sup>2</sup> G)										
Inlet air temperature	80℃ (176° F) Order of other temperature setting is welome.										
Pressure dew point	1.7℃(35° F)corresponding to atmosphere dew point-23.3℃(-10° F)										
HP of freezer	1	1½	3	3	4	4	5	5	7½	7½	10
Power source	220V 1PH 60/50HZ		220/380V 3PH 60HZ/50HZ								
Condenser cooling method	Water cooling										
Air adapter diameter	1½	2"	3"	3"	4"	4"	5"	5"	6"	6"	6"
Length mm	1050	1050	1250	1250	1500	1500	1700	1700	2000	2000	2000
Width mm	450	450	700	700	700	700	700	700	900	900	1200
Height mm	950	950	1250	1250	1300	1300	1500	1500	1800	1800	1800
Cooling water volume GPM	30	40	50	50	90	90	150	150	210	210	250



# AIR HOSE



## PU TUBE

MODEL	O. D. (mm)	I. D. (mm)	PACKING (ROLL)
PU-0320	3	2	200M
PU-0425	4	2.5	200M
PU-0420	4	2	200M
PU-0530	5	3	200M
PU-0640	6	4	200M
PU-0860	8	6	100M
PU-0850	8	5	100M
PU-1065	10	6.5	100M
PU-1180	11	8	100M
PU-1280	12	8	100M
PU-1613	16	13	100M
PU-1612	16	12	100M
PU-1/4	6.35	4.2	200M
PU-3/8	9.5	6.5	100M
PU-1/2	12.7	9.6	100M

## NYLON TUBE

MODEL	O. D. (mm)	I. D. (mm)	PACKING (ROLL)
NY-0425	4	2.5	200M
NY-0420	4	2	200M
NY-0640	6	4	100M
NY-0860	8	6	100M
NY-1075	10	7.5	100M
NY-1290	12	9	100M
NY-1/4	6.35	4.57	100M
NY-3/8	9.53	6.99	100M
NY-1/2	12.7	9.53	100M

## PE TUBE

MODEL	O. D. (mm)	I. D. (mm)	PACKING (ROLL)
PE-0425	4	2.5	200M
PE-0420	4	2	200M
PE-0640	6	4	100M
PE-0860	8	6	100M
PE-1075	10	7.5	100M
PE-1290	12	9	100M
PE-1/4	6.35	4.57	100M
PE-3/8	9.53	6.99	100M
PE-1/2	12.7	9.53	100M

# AIR SILENCER, AIR SILENCER THROTTLE VALVE

## PLASTIC SILENCER



MODEL	PIPE SIZE
PS-01	1/8
PS-02	1/4
PS-03	3/8
PS-04	1/2
PS-06	3/4
PS-08	1"

## BRASS SILENCER



MODEL	PIPE SIZE
SBA-M5	M5 X 0.8
SBA-01	1/8
SBA-02	1/4
SBA-03	3/8
SBA-04	1/2
SBA-06	3/4
SBA-08	1"

## SILENCER THROTTLE VALVE



MODEL	PIPE SIZE
SBR-01	1/8
SBR-02	1/4
SBR-03	3/8
SBR-04	1/2

## SILENCER THROTTLE VALVE



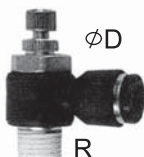
MODEL	PIPE SIZE
SBC-01	1/8
SBC-02	1/4
SBC-03	3/8
SBC-04	1/2


## FLAT BRASS SILENCER

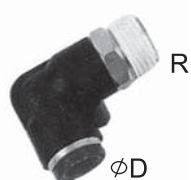


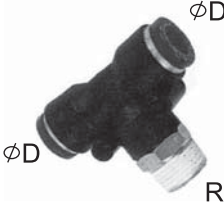
MODEL	PIPE SIZE
SBP-M5	M5 X 0.8
SBP-01	1/8
SBP-02	1/4
SBP-03	3/8
SBP-04	1/2
SBP-06	3/4
SBP-08	1"


# LABOR - SAVING QUICK JOINT

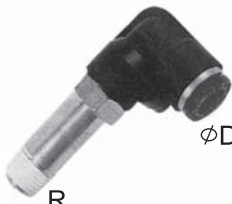
JSC

Model JSC φD-R
JSC 4-M5
JSC 4-01 (5/32-01)
JSC 4-02 (5/32-02)
JSC 6-M5 (1/4-M5)
JSC 6-01 (1/4-01)
JSC 6-02 (1/4-02)
JSC 6-03 (1/4-03)
JSC 6-04 (1/4-04)
JSC 8-01 (5/16-01)
JSC 8-02 (5/16-02)
JSC 8-03 (5/16-03)
JSC 8-04 (5/16-04)
JSC 10-01 (3/8-01)
JSC 10-02 (3/8-02)
JSC 10-03 (3/8-03)
JSC 10-04 (3/8-04)
JSC 12-02 (1/2-02)
JSC 12-03 (1/2-03)
JSC 12-04 (1/2-04)


PC

Model PC φD-R
PC 4-M5
PC 4-01 (5/32-01)
PC 4-02 (5/32-02)
PC 6-M5 (1/4-M5)
PC 6-01 (1/4-01)
PC 6-02 (1/4-02)
PC 6-03 (1/4-03)
PC 6-04 (1/4-04)
PC 8-01 (5/16-01)
PC 8-02 (5/16-02)
PC 8-03 (5/16-03)
PC 8-04 (5/16-04)
PC 10-01 (3/8-01)
PC 10-02 (3/8-02)
PC 10-03 (3/8-03)
PC 10-04 (3/8-04)
PC 12-02 (1/2-02)
PC 12-03 (1/2-03)
PC 12-04 (1/2-04)


PL

Model PL φD-R
PL 4-M5
PL 4-01 (5/32-01)
PL 4-02 (5/32-02)
PL 6-M5 (1/4-M5)
PL 6-01 (1/4-01)
PL 6-02 (1/4-02)
PL 6-03 (1/4-03)
PL 6-04 (1/4-04)
PL 8-01 (5/16-01)
PL 8-02 (5/16-02)
PL 8-03 (5/16-03)
PL 8-04 (5/16-04)
PL 10-01 (3/8-01)
PL 10-02 (3/8-02)
PL 10-03 (3/8-03)
PL 10-04 (3/8-04)
PL 12-02 (1/2-02)
PL 12-03 (1/2-03)
PL 12-04 (1/2-04)


PB

Model PB φD-R
PB 4-M5
PB 4-01 (5/32-01)
PB 4-02 (5/32-02)
PB 6-M5 (1/4-M5)
PB 6-01 (1/4-01)
PB 6-02 (1/4-02)
PB 6-03 (1/4-03)
PB 6-04 (1/4-04)
PB 8-01 (5/16-01)
PB 8-02 (5/16-02)
PB 8-03 (5/16-03)
PB 8-04 (5/16-04)
PB 10-01 (3/8-01)
PB 10-02 (3/8-02)
PB 10-03 (3/8-03)
PB 10-04 (3/8-04)
PB 12-02 (1/2-02)
PB 12-03 (1/2-03)
PB 12-04 (1/2-04)


PD

Model PD φD-R
PD 4-M5
PD 4-01 (5/32-01)
PD 4-02 (5/32-02)
PD 6-M5 (1/4-M5)
PD 6-01 (1/4-01)
PD 6-02 (1/4-02)
PD 6-03 (1/4-03)
PD 6-04 (1/4-04)
PD 8-01 (5/16-01)
PD 8-02 (5/16-02)
PD 8-03 (5/16-03)
PD 8-04 (5/16-04)
PD 10-01 (3/8-01)
PD 10-02 (3/8-02)
PD 10-03 (3/8-03)
PD 10-04 (3/8-04)
PD 12-02 (1/2-02)
PD 12-03 (1/2-03)
PD 12-04 (1/2-04)

PLL

Model PLL φD-R
PLL 4-M5
PLL 4-01 (5/32-01)
PLL 4-02 (5/32-02)
PLL 6-01 (1/4-01)
PLL 6-02 (1/4-02)
PLL 6-03 (1/4-03)
PLL 8-01 (5/16-01)
PLL 8-02 (5/16-02)
PLL 8-03 (5/16-03)
PLL 10-02 (3/8-02)
PLL 10-03 (3/8-03)
PLL 12-02 (1/2-02)
PLL 12-03 (1/2-03)
PLL 12-04 (1/2-04)

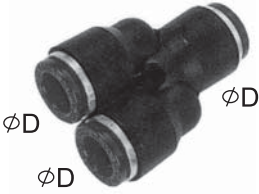
PX

Model PX φD-R
PX 4-M5
PX 4-01 (5/32-01)
PX 4-02 (5/32-02)
PX 6-M5 (1/4-M5)
PX 6-01 (1/4-01)
PX 6-02 (1/4-02)
PX 6-03 (1/4-03)
PX 8-01 (5/16-01)
PX 8-02 (5/16-02)
PX 8-03 (5/16-03)
PX 10-02 (3/8-02)
PX 10-03 (3/8-03)
PX 10-04 (3/8-04)
PX 12-02 (1/2-02)
PX 12-03 (1/2-03)
PX 12-04 (1/2-04)


PCF

Model PCF φD-R
PCF 4-M5
PCF 4-01 (5/32-01)
PCF 6-01 (1/4-01)
PCF 6-02 (1/4-02)
PCF 6-03 (1/4-03)
PCF 8-01 (5/16-01)
PCF 8-02 (5/16-02)
PCF 8-03 (5/16-03)
PCF 10-01 (3/8-01)
PCF 10-02 (3/8-02)
PCF 10-03 (3/8-03)
PCF 10-04 (3/8-04)
PCF 12-02 (1/2-02)
PCF 12-03 (1/2-03)
PCF 12-04 (1/2-04)


PLF

Model PLF φD-R
PLF 4-M5
PLF 4-01 (5/32-01)
PLF 4-02 (5/32-02)
PLF 6-M5 (1/4-M5)
PLF 6-01 (1/4-01)
PLF 6-02 (1/4-02)
PLF 6-03 (1/4-03)
PLF 6-04 (1/4-04)
PLF 8-01 (5/16-01)
PLF 8-02 (5/16-02)
PLF 8-03 (5/16-03)
PLF 8-04 (5/16-04)
PLF 10-01 (3/8-01)
PLF 10-02 (3/8-02)
PLF 10-03 (3/8-03)
PLF 10-04 (3/8-04)
PLF 12-02 (1/2-02)
PLF 12-03 (1/2-03)
PLF 12-04 (1/2-04)


PH

Model PH φD-R
PH 4-M5
PH 4-01 (5/32-01)
PH 4-02 (5/32-02)
PH 6-M5 (1/4-M5)
PH 6-01 (1/4-01)
PH 6-02 (1/4-02)
PH 6-03 (1/4-03)
PH 8-01 (5/16-01)
PH 8-02 (5/16-02)
PH 8-03 (5/16-03)
PH 10-01 (3/8-01)
PH 10-02 (3/8-02)
PH 10-03 (3/8-03)
PH 10-04 (3/8-04)
PH 12-02 (1/2-02)
PH 12-03 (1/2-03)
PH 12-04 (1/2-04)


# LABOR - SAVING QUICK JOINT


PY

Model PY $\phi D$
PY-4 (5/32)
PY-6 (1/4)
PY-8 (5/16)
PY-10 (3/8)
PY-12 (1/2)


PU

Model PU $\phi D$
PU-4 (5/32)
PU-6 (1/4)
PU-8 (5/16)
PU-10 (3/8)
PU-12 (1/2)

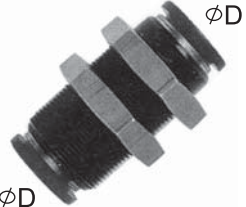
PE

Model PE $\phi D$
PE-4 (5/32)
PE-6 (1/4)
PE-8 (5/16)
PE-10 (3/8)
PE-12 (1/2)

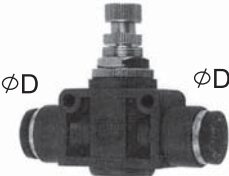
PV

Model PV $\phi D$
PV-4 (5/32)
PV-6 (1/4)
PV-8 (5/16)
PV-10 (3/8)
PV-12 (1/2)

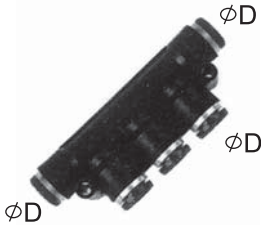
PN

Model PN $\phi D_1 - \phi D_2$
PN6-4 (1/4-4)
PN8-6 (5/16-1/4)
PN10-8 (3/8-5/16)
PN12-10 (1/2-3/8)

PG

Model PG $\phi D_1 - \phi D_2$
PG6-4 (1/4-4)
PG8-6 (5/16-1/4)
PG10-8 (3/8-5/16)
PG12-10 (1/2-3/8)

PEG

Model PEG $\phi D_1 - \phi D_2$
PEG6-4 (1/4-4)
PEG8-6 (5/16-1/4)
PEG10-8 (3/8-5/16)
PEG12-10 (1/2-3/8)



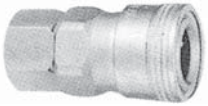





PM

Model PM $\phi D$
PM-4(5/32)
PM-6(1/4)
PM-8(5/16)
PM-10(3/8)
PM-12(1/2)

PA

Model PA $\phi D$
PA-4 (5/32)
PA-6 (1/4)
PA-8 (5/16)
PA-10 (3/8)
PA-12 (1/2)

PKG

Model PKG $\phi D$
PKG-4 (5/32)
PKG-6 (1/4)
PKG-8 (5/16)
PKG-10 (3/8)



# QUICK COUPLER, MULTI-PASS QUICK COUPLER

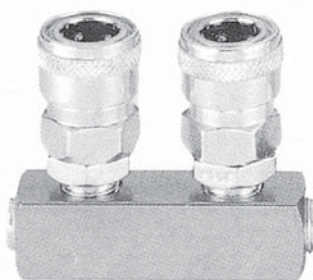
20SH	5/16" (HOSE)			20PH	5/16" (HOSE)
30SH	3/8" (HOSE)			30PH	3/8" (HOSE)
40SH	1/2" (HOSE)			40PH	1/2" (HOSE)
20SF	1/4" (PT)			20PF	1/4" (PT)
30SF	3/8" (PT)			30PF	3/8" (PT)
40SF	1/2" (PT)			40PF	1/2" (PT)
20SM	1/4" (PT)			20PM	1/4" (PT)
30SM	3/8" (PT)			30PM	3/8" (PT)
40SM	1/2" (PT)			40PM	1/2" (PT)
20SP	5 × 8mm			20PP	5 × 8mm
30SP	6.5 × 10mm			30PP	6.5 × 10mm
40SP	8 × 12mm			40PP	8 × 12mm



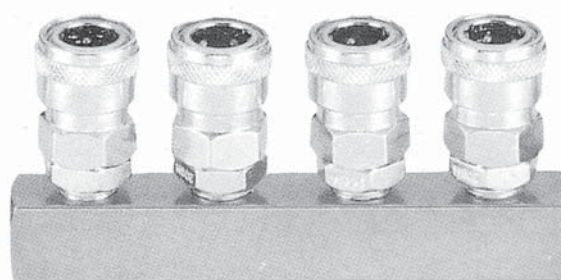
**SMV-1/4**



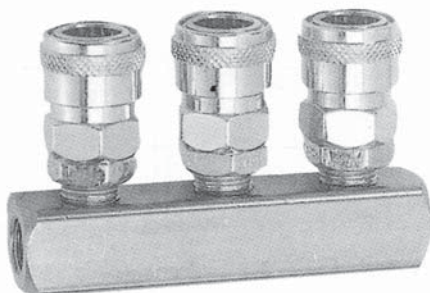
**SMY-1/4.3/8**



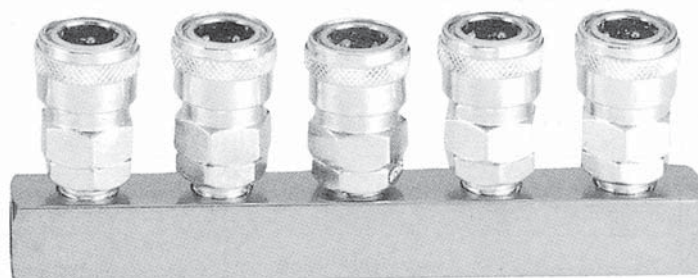
**SML-1/4.3/8.1/2**



**SMM-1/4.3/8.1/2**



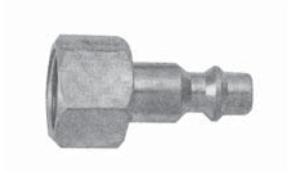

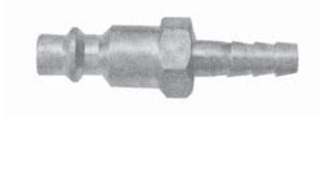
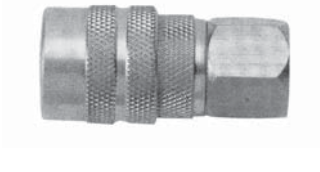
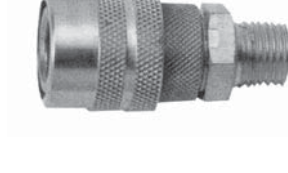

**SMT-1/4.3/8.1/2**



**SMX-1/4.3/8.1/2**

# NPT TYPE QUICK COUPLER

## NPT TYPE (U.S.A)

MODEL	THREAD NPT	HOSE	PICTURE
AN-02PF	1/4		<b>FEMALE</b> 
AN-03PF	3/8		
AN-04PF	1/2		
AN-02PM	1/4		<b>MALE</b> 
AN-03PM	3/8		
AN-04PM	1/2		
AN-02PH		5/16	<b>HOSE</b> 
AN-03PH		3/8	
AN-04PH		1/2	
AM-02AF	1/4		<b>FEMALE</b> 
AM-03AF	3/8		
AM-04AF	1/2		
AM-02AM	1/4		<b>MALE</b> 
AM-03AM	3/8		
AM-04AM	1/2		
AM-02AH		5/16	<b>HOSE</b> 
AM-03AH		3/8	
AM-04AH		1/2	



# BRASS JOINT

H : HOSE

M : MALE

F : FEMALE

## FEMALE/TUBE CONNECTOR

MODEL	SIZE	A	B	PACKING(pcs)
P-1	1/4"F X 5/16"H	1/4"F	5/16"H	200
P-2	3/8"F X 3/8"H	3/8"F	3/8"H	100



## HEX.PLUG

MODEL	SIZE	A	PACKING(pcs)
P-3-1	1/8"M	1/8"M	100
P-3-2	1/4"M	1/4"M	100
P-3	3/8"M	3/8"M	50
P-4-1	1/2"M	1/2"M	50
P-4	3/4"M	3/4"M	30
P-4-2	1"M	1"M	30



## MALE/FEMALE ADAPTOR

MODEL	SIZE	A	B	PACKING(pcs)
P-5	1/8"F X 1/8"M	1/8"F	1/8"M	100
P-5-1	1/8"F X 1/4"M	1/8"F	1/4"M	100
P-5-2	1/8"F X 3/8"M	1/8"F	3/8"M	50
P-6-1	1/4"F X 1/8"M	1/4"F	1/8"M	100
P-6-2	1/4"F X 1/4"M	1/4"F	1/4"M	100
P-6-3	1/4"F X 3/8"M	1/4"F	3/8"M	100
P-6-4	1/4"F X 1/2"M	1/4"F	1/2"M	50
P-7	3/8"F X 1/8"M	3/8"F	1/8"M	50
P-7-1	3/8"F X 1/4"M	3/8"F	1/4"M	50
P-7-2	3/8"F X 3/8"M	3/8"F	3/8"M	50
P-7-3	3/8"F X 1/2"M	3/8"F	1/2"M	30
P-8-1	1/2"F X 1/4"M	1/2"F	1/4"M	30
P-8-2	1/2"F X 3/8"M	1/2"F	3/8"M	30
P-8	1/2"F X 1/2"M	1/2"F	1/2"M	30



## NIPPLE

MODEL	SIZE	A	B	PACKING(pcs)
P-10	1/8"M X 1/8"M	1/8"M	1/8"M	100
P-11	1/4"M X 1/8"M	1/4"M	1/8"M	100
P-12	1/4"M X 1/4"M	1/4"M	1/4"M	100
P-13-1	3/8"M X 1/8"M	3/8"M	1/8"M	100
P-13-2	3/8"M X 1/4"M	3/8"M	1/4"M	100
P-13	3/8"M X 3/8"M	3/8"M	3/8"M	100
P-14-0	1/2"M X 1/8"M	1/2"M	1/8"M	50
P-14-1	1/2"M X 1/4"M	1/2"M	1/4"M	50
P-14-2	1/2"M X 3/8"M	1/2"M	3/8"M	50
P-14-3	1/2"M X 1/2"M	1/2"M	1/2"M	50
P-14-4	3/4"M X 1/2"M	3/4"M	1/2"M	30
P-14	3/4"M X 3/4"M	3/4"M	3/4"M	30
P-14-6	1"M X 3/4"M	1"M	3/4"M	30
P-14-7	1"M X 1"M	1"M	1"M	20
P-14-8	1"M X 1/2"M	1"M	1/2"M	30
P-14-9	3/4"M X 1/4"M	3/4"M	1/4"M	30
P-14-5	3/4"M X 3/8"M	3/4"M	3/8"M	30



# BRASS JOINT

H : HOSE

M : MALE

F : FEMALE

## MALE/TUBE ADAPTOR



MODEL	SIZE	A	B	PACKING(pcs)
P-15-1	M5M X 4m/mH	M5M	4m/mH	100
P-15-2	M5M X 6m/mH	M5M	6m/mH	100
P-15-3	1/8"M X 1/8"H	1/8"M	1/8"H	100
P-15-0	1/8"M X 3/16"H	1/8"M	3/16"H	100
P-15	1/8"M X 1/4"H	1/8"M	1/4"H	100
P-17	1/8"M X 5/16"H	1/8"M	5/16"H	100
P-17-1	1/8"M X 3/8"H	1/8"M	3/8"H	100
P-17-2	1/8"M X 1/2"H	1/8"M	1/2"H	100
P-18-1	1/4"M X 3/16"H	1/4"M	3/16"H	100
P-18-2	1/4"M X 1/4"H	1/4"M	1/4"H	100
P-18	1/4"M X 5/16"H	1/4"M	5/16"H	100
P-19	1/4"M X 3/8"H	1/4"M	3/8"H	100
P-19-1	1/4"M X 1/2"H	1/4"M	1/2"H	100
P-19-2	1/4"M X 5/8"H	1/4"M	5/8"H	50
P-20-1	3/8"M X 1/4"H	3/8"M	1/4"H	50
P-20	3/8"M X 5/16"H	3/8"M	5/16"H	50
P-21	3/8"M X 3/8"H	3/8"M	3/8"H	50
P-21-1	3/8"M X 1/2"H	3/8"M	1/2"H	50
P-21-2	3/8"M X 5/8"H	3/8"M	5/8"H	50
P-21-3	3/8"M X 3/4"H	3/8"M	3/4"H	50
P-22-1	1/2"M X 3/16"H	1/2"M	3/16"H	50
P-22-2	1/2"M X 1/4"H	1/2"M	1/4"H	50
P-22	1/2"M X 5/16"H	1/2"M	5/16"H	50
P-23	1/2"M X 3/8"H	1/2"M	3/8"H	50
P-24	1/2"M X 1/2"H	1/2"M	1/2"H	50
P-24-1	1/2"M X 5/8"H	1/2"M	5/8"H	50
P-24-2	1/2"M X 3/4"H	1/2"M	3/4"H	50
P-24-3	3/4"M X 3/4"H	3/4"M	3/4"H	30
P-24-4	3/4"M X 3/8"H	3/4"M	3/8"H	30
P-24-5	3/4"M X 1/2"H	3/4"M	1/2"H	30
P-24-6	3/4"M X 5/8"H	3/4"M	5/8"H	30
P-24-7	3/4"M X 1"H	3/4"M	1"H	20
P-24-8	1"M X 3/4"H	1"M	3/4"H	20
P-24-9	1"M X 1"H	1"M	1"H	20
P-24-10	3/8"M X 5/16"H	3/4"M	5/16"H	30
P-24-11	1/2"M X 1"H	1/2"M	1"H	30
P-24-12	1"M X 3/8"H	1"M	3/8"H	20
P-24-13	1"M X 1/2"H	1"M	1/2"H	20
P-24-14	1"M X 5/8"H	1"M	5/8"H	20
P-24-12	1"M X 3/8"H	1"M	3/8"H	20

## WHITWORTH



MODEL	SIZE	A	B	PACKING(pcs)
P-16-0	W3/8"M X 5/16"H	W3/8"M	5/16"H	50
P-16-1	W3/8"M X 3/8"H	W3/8"M	3/8"H	100
P-16-2	W3/8"M X 1/2"H	W3/8"M	1/2"H	100
P-16-3	W1/2"M X 3/8"H	W1/2"M	3/8"H	50
P-16-4	W1/2"M X 1/2"H	W1/2"M	1/2"H	50

# BRASS JOINT

H : HOSE

M : MALE

F : FEMALE

## MALE/FEMALE BUSHING



MODEL	SIZE	A	B	PACKING(pcs)
P-43	1/4"M X 1/8"F	1/4"M	1/8"F	100
P-44	3/8"M X 1/8"F	3/8"M	1/8"F	100
P-45	3/8"M X 1/4"F	3/8"M	1/4"F	100
P-45-1	1/2"M X 1/8"F	1/2"M	1/8"F	50
P-46	1/2"M X 1/4"F	1/2"M	1/4"F	50
P-47	1/2"M X 3/8"F	1/2"M	3/8"F	50
P-48	3/4"M X 3/8"F	3/4"M	3/8"F	50
P-49	3/4"M X 1/2"F	3/4"M	1/2"F	50
P-49-1	3/4"M X 1/4"F	3/4"M	1/4"F	50
P-49-2	1"M X 1/2"F	1"M	1/2"F	20
P-49-3	1"M X 3/4"F	1"M	3/4"F	20
P-49-4	1"M X 1/4"F	1"M	1/4"F	20
P-49-5	1"M X 3/8"F	1"M	3/8"F	

## DOUBLE FEMALE SLEEVE



MODEL	SIZE	A	B	PACKING(pcs)
P-50	1/8"F X 1/8"F	1/8"F	1/8"F	100
P-51	1/4"F X 1/8"F	1/4"F	1/8"F	100
P-52	1/4"F X 1/4"F	1/4"F	1/4"F	100
P-53	3/8"F X 1/4"F	3/8"F	1/4"F	50
P-54	3/8"F X 3/8"F	3/8"F	3/8"F	50
P-55	1/2"F X 1/4"F	1/2"F	1/4"F	30
P-56	1/2"F X 3/8"F	1/2"F	3/8"F	30
P-57	1/2"F X 1/2"F	1/2"F	1/2"F	30
P-57-1	3/4"F X 3/4"F	3/4"F	3/4"F	20
P-52-1	3/8"F X 1/8"F	3/8"F	1/8"F	50
P-57-2	3/4"F X 3/8"F	3/4"F	3/8"F	20
P-57-3	3/4"F X 1/2"F	3/4"F	1/2"F	20

## FEMALE/TUBE ADAPTOR



MODEL	SIZE	A	B	PACKING(pcs)
P-58-0	1/8"F X 5/16"H	1/8"F	5/16"H	100
P-58	1/4"F X 5/16"H	1/4"F	5/16"H	100
P-58-1	1/8"F X 1/4"H	1/8"F	1/4"H	100
P-58-3	1/8"F X 3/8"H	1/8"F	3/8"H	100
P-58-2	1/4"F X 1/4"H	1/4"F	1/4"H	100
P-59-0	1/4"F X 1/2"H	1/4"F	1/2"H	100
P-59	1/4"F X 3/8"H	1/4"F	3/8"H	100
P-59-1	3/8"F X 5/16"H	3/8"F	5/16"H	50
P-59-2	3/8"F X 3/8"H	3/8"F	3/8"H	50
P-59-3	3/8"F X 1/2"H	3/8"F	1/2"H	50
P-59-4	1/2"F X 5/16"H	1/2"F	5/16"H	50
P-59-5	1/2"F X 1/2"H	1/2"F	1/2"H	50
P-59-6	1/2"F X 5/8"H	1/2"F	5/8"H	50
P-59-7	1/2"F X 3/4"H	1/2"F	3/4"H	30
P-59-8	1/2"F X 3/8"H	1/2"F	3/8"H	50

# PU, PE, NYLON TUBES QUICK BRASS CONNECTOR

M : MALE U : TUBE

## STRAIGHT CONNECTOR-TUBE



MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-001	U1/4"U X 1/4"U	1/4"U	1/4"U	U6mmU	6mmU	6mmU	100
A-002	U5/16"U X 5/16"U	5/16"U	5/16"U	U8mmU	8mmU	8mmU	50
A-003	U3/8"U X 3/8"U	3/8"U	3/8"U	U10mmU	10mmU	10mmU	50
A-004	U1/2"U X 1/2"U	1/2"U	1/2"U	U12mmU	12mmU	12mmU	50

## ELBOW CONNECTOR-TUBE



MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-005	L1/4"U X 1/4"U	1/4"U	1/4"U	L6mmU	6mmU	6mmU	50
A-006	L5/16"U X 5/16"U	5/16"U	5/16"U	L8mmU	8mmU	8mmU	50
A-007	L3/8"U X 3/8"U	3/8"U	3/8"U	L10mmU	10mmU	10mmU	50
A-008	L1/2"U X 1/2"U	1/2"U	1/2"U	L12mmU	12mmU	12mmU	50

## T CONNECTOR-TUBE



MODEL	INCH				METRIC				PACKING (pcs)
	SIZE	A	B	C	SIZE	A	B	C	
A-009	T1/4"U X 1/4"U X 1/4"U	1/4"U	1/4"U	1/4"U	-	-	-	-	50
A-010	T5/16"U X 5/16"U X 5/16"U	5/16"U	5/16"U	5/16"U	-	-	-	-	50
A-011	T3/8"U X 3/8"U X 3/8"U	3/8"U	3/8"U	3/8"U	T10mmU	10mmU	10mmU	10mmU	50
A-012	T1/2"U X 1/2"U X 1/2"U	1/2"U	1/2"U	1/2"U	T12mmU	12mmU	12mmU	12mmU	30

## STRAIGHT CONNECTOR-MALE/TUBE



MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-013	1/8"M X 1/4"U	1/8"M	1/4"U	1/8"M X 6U	1/8"M	6U	100
A-014-1	1/8"M X 5/16"U	1/8"M	5/16"U	1/8"M X 8U	1/8"M	8U	100
A-014-2	1/8"M X 3/8"U	1/8"M	3/8"U	1/8"M X 10U	1/8"M	10U	100
A-014	1/4"M X 1/4"U	1/4"M	1/4"U	1/4"M X 6U	1/4"M	6U	100
A-015	1/4"M X 5/16"U	1/4"M	5/16"U	1/4"M X 8U	1/4"M	8U	100
A-016	1/4"M X 3/8"U	1/4"M	3/8"U	1/4"M X 10U	1/4"M	10U	50
A-016-1	1/4"M X 1/2"U	1/4"M	1/2"U	1/4"M X 12U	1/4"M	12U	50
A-017-1	3/8"M X 1/4"U	3/8"M	1/4"U	3/8"M X 6U	3/8"M	6U	50
A-017-2	3/8"M X 5/16"U	3/8"M	5/16"U	3/8"M X 8U	3/8"M	8U	50
A-017	3/8"M X 3/8"U	3/8"M	3/8"U	3/8"M X 10U	3/8"M	10U	50
A-018	3/8"M X 1/2"U	3/8"M	1/2"U	3/8"M X 12U	3/8"M	12U	50
A-019-1	1/2"M X 1/4"U	1/2"M	1/4"U	1/2"M X 6U	1/2"M	6U	50
A-019-2	1/2"M X 5/16"U	1/2"M	5/16"U	1/2"M X 8U	1/2"M	8U	50
A-019-3	1/2"M X 3/8"U	1/2"M	3/8"U	1/2"M X 10U	1/2"M	10U	50
A-019-4	1/2"M X 1/2"U	1/2"M	1/2"U	1/2"M X 12U	1/2"M	12U	50

# PU, PE, NYLON TUBES QUICK BRASS CONNECTOR

M : MALE U : TUBE

## STRAIGHT CONNECTOR- FEMALE/TUBE



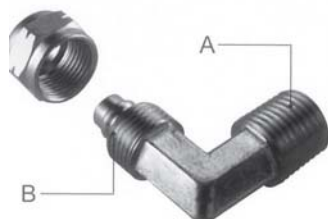
MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-020	1/8"F X 1/4"U	1/8"F	1/4"U	1/8"F X 6U	1/8"F	6U	100
A-021	1/4"F X 1/4"U	1/4"F	1/4"U	1/4"F X 6U	1/4"F	6U	100
A-022	1/4"F X 5/16"U	1/4"F	5/16"U	1/4"F X 8U	1/4"F	8U	50
A-023	1/4"F X 3/8"U	1/4"F	3/8"U	1/4"F X 10U	1/4"F	10U	50
A-024-1	3/8"F X 1/4"U	3/8"F	1/4"U	3/8"F X 6U	3/8"F	6U	50
A-024-2	3/8"F X 5/16"U	3/8"F	5/16"U	3/8"F X 8U	3/8"F	8U	50
A-024	3/8"F X 3/8"U	3/8"F	3/8"U	3/8"F X 10U	3/8"F	10U	50
A-025	3/8"F X 1/2"U	3/8"F	1/2"U	3/8"F X 12U	3/8"F	12U	50
A-025-1	1/2"F X 1/4"U	1/2"F	1/4"U	1/2"F X 6U	1/2"F	6U	30
A-025-2	1/2"F X 5/16"U	1/2"F	5/16"U	1/2"F X 8U	1/2"F	8U	30
A-025-3	1/2"F X 3/8"U	1/2"F	3/8"U	1/2"F X 10U	1/2"F	10U	30
A-025-4	1/2"F X 1/2"U	1/2"F	1/2"U	1/2"F X 12U	1/2"F	12U	30

## ELBOW CONNECTOR- FEMALE/TUBE



MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-026	1/8"F X 1/4"U	1/8"F	1/4"U	1/8"F X 6U	1/8"F	6U	50
A-026-1	1/8"F X 5/16"U	1/8"F	5/16"U	1/8"F X 8U	1/8"F	8U	50
A-027	1/4"F X 1/4"U	1/4"F	1/4"U	1/4"F X 6U	1/4"F	6U	50
A-028	1/4"F X 5/16"U	1/4"F	5/16"U	1/4"F X 8U	1/4"F	8U	50
A-029	1/4"F X 3/8"U	1/4"F	3/8"U	1/4"F X 10U	1/4"F	10U	50
A-029-1	1/4"F X 1/2"U	1/4"F	1/2"U	1/4"F X 12U	1/4"F	12U	50
A-030-1	3/8"F X 1/4"U	3/8"F	1/4"U	3/8"F X 6U	3/8"F	6U	50
A030-2	3/8"F X 5/16"U	3/8"F	5/16"U	3/8"F X 8U	3/8"F	8U	50
A-030-3	3/8"F X 3/8"U	3/8"F	3/8"U	3/8"F X 10U	3/8"F	10U	50
A-030	3/8"F X 1/2"U	3/8"F	1/2"U	3/8"F X 12U	3/8"F	12U	50

## ELBOW CONNECTOR- MALE/TUBE



MODEL	INCH			METRIC			PACKING (pcs)
	SIZE	A	B	SIZE	A	B	
A-031	1/8"M X 1/4"U	1/8"M	1/4"U	1/8"M X 6U	1/8"M	6U	100
A-032-1	1/8"M X 5/16"U	1/8"M	5/16"U	1/8"M X 8U	1/8"M	8U	100
A-032-2	1/8"M X 3/8"U	1/8"M	3/8"U	1/8"M X 10U	1/8"M	10U	100
A-032	1/4"M X 1/4"U	1/4"M	1/4"U	1/4"M X 6U	1/4"M	6U	100
A-033	1/4"M X 5/16"U	1/4"M	5/16"U	1/4"M X 8U	1/4"M	8U	50
A-034	1/4"M X 3/8"U	1/4"M	3/8"U	1/4"M X 10U	1/4"M	10U	50
A-034-1	1/4"M X 1/2"U	1/4"M	1/2"U	1/4"M X 12U	1/4"M	12U	50
A-035-1	3/8"M X 1/4"U	3/8"M	1/4"U	3/8"M X 6U	3/8"M	6U	50
A-035-2	3/8"M X 5/16"U	3/8"M	5/16"U	3/8"M X 8U	3/8"M	8U	50
A-035	3/8"M X 3/8"U	3/8"M	3/8"U	3/8"M X 10U	3/8"M	10U	50
A-036-1	3/8"M X 1/2"U	3/8"M	1/2"U	3/8"M X 12U	3/8"M	12U	50
A-036-2	1/2"M X 1/4"U	1/2"M	1/4"U	1/2"M X 6U	1/2"M	6U	50
A-036-3	1/2"M X 5/16"U	1/2"M	5/16"U	1/2"M X 8U	1/2"M	8U	50
A-036-4	1/2"M X 3/8"U	1/2"M	3/8"U	1/2"M X 10U	1/2"M	10U	50
A-036	1/2"M X 1/2"U	1/2"M	1/2"U	1/2"M X 12U	1/2"M	12U	50

# PU, PE, NYLON TUBES QUICK BRASS CONNECTOR

M : MALE U : TUBE

## T CONNECTOR- MALE/TUBE/TUBE



MODEL	INCH				METRIC				PACKING (pcs)
	SIZE	A	B	C	SIZE	A	B	C	
A-037	1/8"M X 1/4"U X 1/4"U	1/8"M	1/4"U	1/4"U	1/8"M X 6U X 6U	1/8"M	6U	6U	50
A-037-1	1/8"M X 5/16"U X 5/16"U	1/8"M	5/16"U	5/16"U	1/8"M X 8U X 8U	1/8"M	8U	8U	50
A-038	1/4"M X 1/4"U X 1/4"U	1/4"M	1/4"U	1/4"U	1/4"M X 6U X 6U	1/4"M	6U	6U	50
A-039	1/4"M X 5/16"U X 5/16"U	1/4"M	5/16"U	5/16"U	1/4"M X 8U X 8U	1/4"M	8U	8U	50
A-040	1/4"M X 3/8"U X 3/8"U	1/4"M	3/8"U	3/8"U	1/4"M X 10U X 10U	1/4"M	10U	10U	50
A-041-1	1/4"M X 1/2"U X 1/2"U	1/4"M	1/2"U	1/2"U	1/4"M X 12U X 12U	1/4"M	12U	12U	50
A-041-2	3/8"M X 5/16"U X 5/16"U	3/8"M	5/16"U	5/16"U	3/8"M X 8U X 8U	3/8"M	8U	8U	50
A-041	3/8"M X 3/8"U X 3/8"U	3/8"M	3/8"U	3/8"U	3/8"M X 10U X 10U	3/8"M	10U	10U	50
A-042-1	3/8"M X 1/2"U X 1/2"U	3/8"M	1/2"U	1/2"U	3/8"M X 12U X 12U	3/8"M	12U	12U	50
A-042-2	1/2"M X 3/8"U X 3/8"U	1/2"M	3/8"U	3/8"U	1/2"M X 10U X 10U	1/2"M	10U	10U	50
A-042	1/2"M X 1/2"U X 1/2"U	1/2"M	1/2"U	1/2"U	1/2"M X 12U X 12U	1/2"M	12U	12U	50
A-042-1A	3/8"M X 1/4"U X 1/4"U	3/8"M	1/4"U	1/4"U	3/8"M X 6U X 6U	3/8"M	6U	6U	50

## T CONNECTOR- MALE/TUBE/TUBE



MODEL	INCH				METRIC				PACKING (pcs)
	SIZE	A	B	C	SIZE	A	B	C	
A-043	1/8"M X 1/4"U X 1/4"U	1/8"M	1/4"U	1/4"U	1/8"M X 6U X 6U	1/8"M	6U	6U	50
A-044-1	1/8"M X 5/16"U X 5/16"U	1/8"M	5/16"U	5/16"U	1/8"M X 8U X 8U	1/8"M	8U	8U	50
A-044	1/4"M X 1/4"U X 1/4"U	1/4"M	1/4"U	1/4"U	1/4"M X 6U X 6U	1/4"M	6U	6U	50
A-045	1/4"M X 5/16"U X 5/16"U	1/4"M	5/16"U	5/16"U	1/4"M X 8U X 8U	1/4"M	8U	8U	50
A-046	1/4"M X 3/8"U X 3/8"U	1/4"M	3/8"U	3/8"U	1/4"M X 10U X 10U	1/4"M	10U	10U	50
A-047-1	1/4"M X 1/2"U X 1/2"U	1/4"M	1/2"U	1/2"U	1/4"M X 12U X 12U	1/4"M	12U	12U	50
A-047-2	3/8"M X 1/4"U X 1/4"U	3/8"M	1/4"U	1/4"U	3/8"M X 6U X 6U	3/8"M	6U	6U	50
A-047-3	3/8"M X 5/16"U X 5/16"U	3/8"M	5/16"U	5/16"U	3/8"M X 8U X 8U	3/8"M	8U	8U	50
A-047	3/8"M X 3/8"U X 3/8"U	3/8"M	3/8"U	3/8"U	3/8"M X 10U X 10U	3/8"M	10U	10U	50
A-048-1	3/8"M X 1/2"U X 1/2"U	3/8"M	1/2"U	1/2"U	3/8"M X 12U X 12U	3/8"M	12U	12U	50
A-048-2	1/2"M X 1/4"U X 1/4"U	1/2"M	1/4"U	1/4"U	1/2"M X 6U X 6U	1/2"M	6U	6U	50
A-048-3	1/2"M X 5/16"U X 5/16"U	1/2"M	5/16"U	5/16"U	1/2"M X 8U X 8U	1/2"M	8U	8U	50
A-048-4	1/2"M X 3/8"U X 3/8"U	1/2"M	3/8"U	3/8"U	1/2"M X 10U X 10U	1/2"M	10U	10U	50
A-048	1/2"M X 1/2"U X 1/2"U	1/2"M	1/2"U	1/2"U	1/2"M X 12U X 12U	1/2"M	12U	12U	50

## HEXAGON NUT



MODEL	INCH		METRIC		PACKING (pcs)
	SIZE	A	SIZE	B	
A-049	1/4"U	1/4"U	-	-	
A-050	5/16"U	5/16"U	-	-	
A-051	3/8"U	3/8"U	-	-	
A-051-1	1/2"U	1/2"U	-	-	
A-052	-	-	6mmU	6mmU	
A-053	-	-	8mmU	8mmU	
A-054	-	-	10mmU	10mmU	
A-055	-	-	12mmU	12mmU	