

- > Ø 32 ... 100 mm
- > Magnet piston as standard – provides a wide range of control options
- > Attractive clean-line design – enhances installation appearance
- > Threaded rear end covers on Ø 32 to Ø 63 mm simplify mounting
- > Threaded fixing holes in both end covers – increased mounting versatility



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting, magnetic piston, buffer cushioning

Operating pressure:

2 ... 10 bar (29 ... 145 psi)

Standard strokes:

10, 25, 50 mm

Operating temperature:

-20°C ... +80°C (-4 ... +176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:

Barrel and end covers:

anodized aluminium

Piston rods: stainless steel (martensitic)

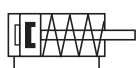
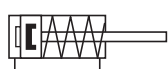
Piston and piston rod seals: PUR 'O'-rings: NBR

Technical data

Cylinder Ø (mm)	32	40	50	63	80	100
Port size	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
Piston rod Ø (mm)	12	16	20	20	25	25
Piston rod thread mm	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5
Theoretical thrusts at 6 bar outstroke (N)	437	694	1108	1800	2911	4515
Theoretical force F1 outstroke (N)	30	40	55	55	80	136
Air consumption at 6 bar outstroke (l/cm)	0,056	0,088	0,137	0,218	0,35	0,55

F1 = Final return force of spring

Cylinder variants

Symbol	Model with magnetic piston	Description	Dimensions Page
	RM/55300/M	Standard cylinder	3
	CM/55300/M	Hard chromium plated piston rod	3
	SM/55300/M	Stainless steel piston rod (Austenitic)	3
	RM/55300/MU	Extended piston rod	3

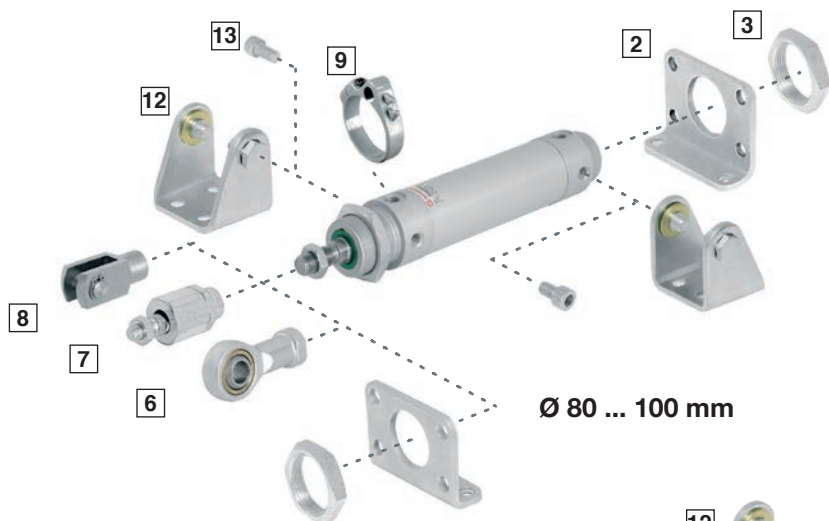
Option selector

Piston rod material	Substitute	Strokes (mm)
Stainless steel martensitic (standard)	R	50 max.
Hard chromium plated	C	
Stainless steel austenitic	S	
Cylinder Ø (mm)	Substitute	Variants (magnetic piston)
32	32	Standard
40	40	
50	50	
63	63	
80	80	
100	10	

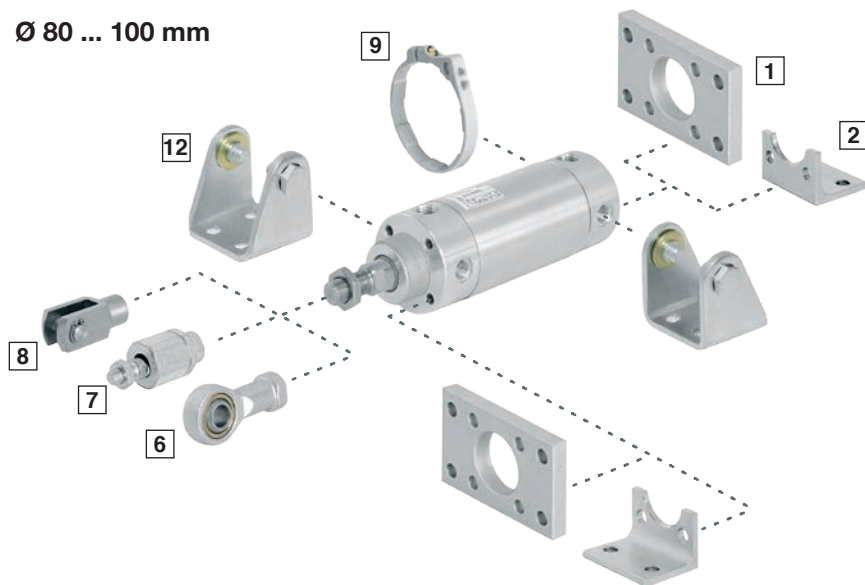
★M/553★/★/★/★/★

Substitute
M
MU
*M/553**/MU/**/****
Extension (mm)

Mountings
Ø 32 ... 63 mm



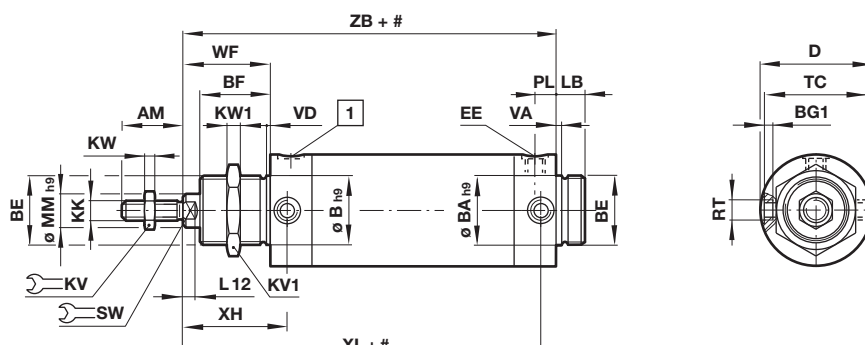
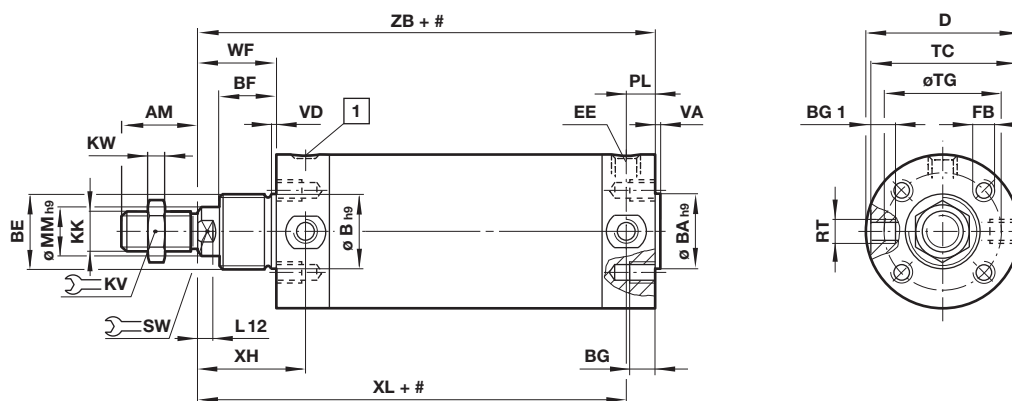
Ø 80 ... 100 mm



Cyl.	AK	B, G	C	F	H	L
						
	7	1	2	8	13	12
Ø	Page 4	Page 4	Page 4	Page 4	Page 4	Page 4
32	QM/8025/38	QM/55232/22	QM/55232/21	QM/8025/25	QM/55232/28	QM/55232/24
40	QM/8040/38	QM/55240/22	QM/55240/21	QM/8040/25	QM/55240/28	QM/55240/24
50	QM/8050/38	QM/55250/22	QM/55250/21	QM/8050/25	QM/55250/28	QM/55250/24
63	QM/8050/38	QM/55263/22	QM/55263/21	QM/8050/25	QM/55263/28	QM/55263/24
80	QM/8080/38	QM/55480/22	QM/55480/21	QM/8080/25	QM/55480/28	QM/55480/24
100	QM/8080/38	QM/55410/22	QM/55410/21	QM/8080/25	QM/55410/28	QM/55410/24

Cyl.	N	UF	Switch mounting	Magnetically operated switches	Service kit
					
	3	6	9		
Ø	Page 5	Page 5	Page 5	Page 6 & 7	
32	M/P29254	QM/8025/32	QM/33/432/22		QM/55332/00
40	M/P29255	QM/8040/32	QM/33/440/22		QM/55340/00
50	M/P29256	QM/8050/32	QM/33/450/22		QM/55350/00
63	M/P29256	QM/8050/32	QM/33/463/22		QM/55363/00
80	M/P34806	QM/8080/32	QM/33/480/22		QM/55380/00
100	M/P34806	QM/8080/32	QM/33/100/22		QM/55310/00

Basic dimensions
Ø 32 ... 63 mm

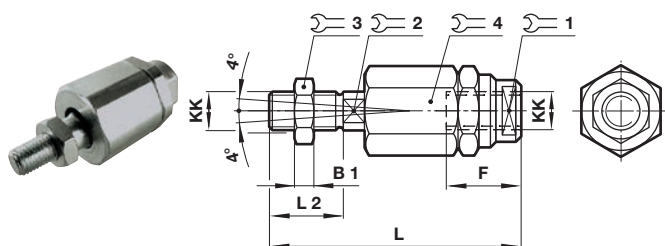
 Dimensions in mm
 Projection/First angle

Ø 80 and 100 mm

 # Stroke
 1 Filtered exhaust position,
 do not obstruct

Ø	AM	Ø B/BA h9	BE	BF	BG	BG1	D	EE	FB	KK	KV	KV1	KW	KW1	LB
32	22	30	M 30 x 1,5	30	—	6	36,5	G 1/8	—	M 10 x 1,25	17	36	5	8	14
40	24	38	M 38 x 1,5	35	—	8	45,5	G 1/4	—	M 12 x 1,25	19	46	6	10	16
50	32	45	M 45 x 1,5	38	—	9,5	55,5	G 1/4	—	M 16 x 1,5	24	55	8	10	18
63	32	45	M 45 x 1,5	38	—	10	69,5	G 3/8	—	M 16 x 1,5	24	55	8	10	18
80	40	55	M 55 x 1,5	45	14	17,5	87,5	G 3/8	M8	M 20 x 1,5	30	—	10	—	—
100	40	55	M 55 x 1,5	45	14	21,5	107,5	G 1/2	M10	M 20 x 1,5	30	—	10	—	—
Ø	L12	Ø MM h9	PL	RT	SW	Ø TC	TG	VA/VD	WF	XH	XL	ZB	kg at 0 mm	kg per 100 mm	Model
32	5,5	12	9	M 8 x 1	10	35	—	3	38	47	123	132	0,4	0,14	RM/55332/*
40	7,5	16	12	M 10 x 1	13	44	—	3	45	57	142	154	0,83	0,27	RM/55340/*
50	8,5	20	12	M 12 x 1,5	17	54	—	3	50	62	152	164	1,3	0,32	RM/55350/*
63	8,5	20	13	M 14 x 1,5	17	67	—	3	51	64	159	172	1,6	0,38	RM/55363/*
80	11,5	25	15	M 16 x 1,5	22	85,5	70	5	61	76	196	211	3,1	0,59	RM/55380/*
100	11,5	25	18,5	M 20 x 1,5	22	105,5	80	5	61	79,5	200,5	219	4,6	0,68	RM/55310/*

* Please insert stroke length.

Mountings

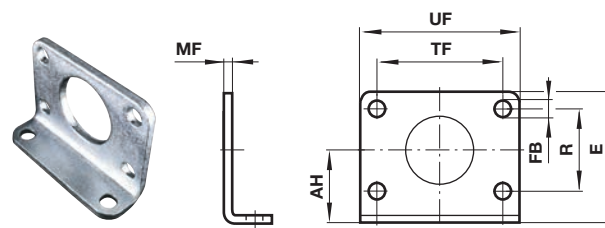
Piston rod swivel AK



Ø	KK	B1	F	L	L2	1	2	3	4	kg	Model (AK)
32	M10x1,25	5	26	73	20	19	12	17	30	0,20	QM/8025/38
40	M12x1,25	6	26	77	24	19	12	19	30	0,20	QM/8040/38
50/63	M16x1,5	8	34	106	32	30	19	24	42	0,65	QM/8050/38
80/100	M20x1,5	10	42	122	40	30	19	30	42	0,72	QM/8080/38

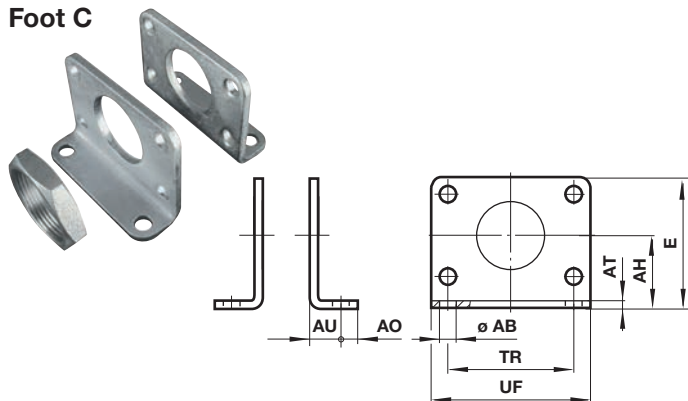
Rear flange B, front flange G

Dimensions in mm
Projection/First angle



Ø	AH	E	Ø FB	MF	R	TF	UF	kg	Model
32	28	49	7	4	28	52	66	0,11	QM/55232/22
40	33	58	9	5	30	60	80	0,19	QM/55240/22
50	40	70	9	5	40	70	90	0,25	QM/55250/22
63	45	80	9	5	50	76	96	0,33	QM/55263/22
80	56	100	12	8	—	120	150	0,81	QM/55480/22
100	66	120	14	8	—	130	170	1,10	QM/55410/22

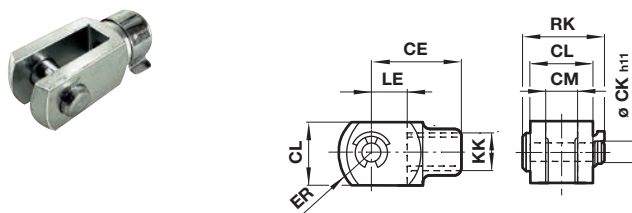
Foot C



Ø	Ø AB	AH	AO	AT	AU	E	TR	UF	kg	Model
32	7	28	7	4	14	49	52	66	0,25	QM/55232/21
40	9	33	10	5	20	58	60	80	0,44	QM/55240/21
50	9	40	10	5	20	70	70	90	0,59	QM/55250/21
63	9	45	10	5	20	80	76	96	0,73	QM/55263/21
80	12	56	15	5	45	100	63	90	0,67	QM/55480/21
100	14	66	20	5	45	120	75	113	1,00	QM/55410/21

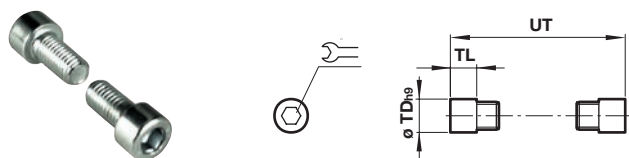
Piston rod clevis F

Conforms to DIN ISO 8140



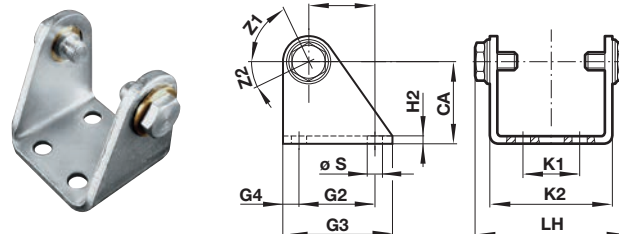
Ø	KK	CE	Ø CK h11	CL	CM	ER	LE	RK	kg	Model (F)
32	M10x1,25	40	10	20	10	16	20	28	0,09	QM/8025/25
40	M12x1,25	48	12	24	12	19	24	32	0,13	QM/8040/25
50/63	M16x1,5	64	16	32	16	25	32	41,5	0,33	QM/8050/25
80/100	M20x1,5	80	20	40	20	32	40	50	0,67	QM/8080/25

End cover trunnion H

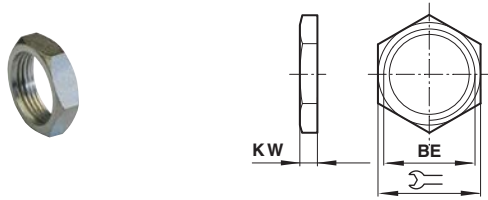


Ø	Ø TDh9	TL	UT	kg	Model
32	10	8	51	0,02	QM/55232/28
40	12	9,5	63	0,03	QM/55240/28
50	14	11	76	0,05	QM/55250/28
63	16	13	93	0,07	QM/55263/28
80	18	13	111,5	0,09	QM/55480/28
100	20	13	131,5	0,25	QM/55410/28

Rear hinge L



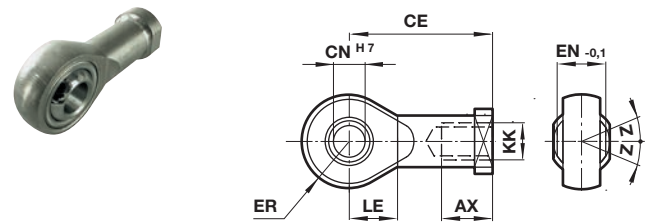
Ø	CA	G	1	2	3	4	Ø S	H2	K	1	2	LH	Z	1	2	Model
32	35	20	24	40	8	7	4	20	46,5	59,5	202°	36°	QM/55232/24			
40	40	27	30	50	10	9	5	28	56,5	71	197°	33°	QM/55240/24			
50	45	30	34	54	10	9	5	36	68,5	83	196°	31°	QM/55250/24			
63	50	34	35	65	15	9	5	42	82,5	99	191°	25°	QM/55263/24			
80	65	47,5	55	80	12,5	11	6	55	102,5	125,5	193°	27°	QM/55480/24			
100	77	63	70	100	15	11	6	70	122,5	145,5	192°	27°	QM/55410/24			

Nose nut N


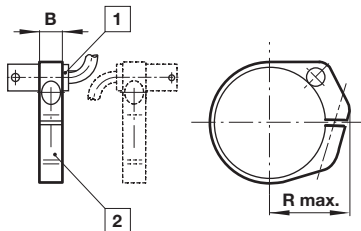
Ø	BE		KW	kg	Model
32	M30 x 1,5	36	8	0,03	M/P29254
40	M38 x 1,5	46	10	0,06	M/P29255
50/63	M45 x 1,5	55	10	0,08	M/P29256
80/100	M55 x 1,5	60	13	0,25	M/P34806

Universal piston rod eye UF
Conforms to DIN ISO 8139

Dimensions in mm
 Projection/First angle



Ø	Thread KK	AX	CE	Ø CN H7	EN- 0,1	ER	LE	Z	kg	Model
32	M10x1,25	20	43	10	14	14	15	13°	0,09	QM/8025/32
40	M12x1,25	22	50	12	16	16	17	13°	0,13	QM/8040/32
50/63	M16x1,5	28	64	16	21	21	22	15°	0,33	QM/8050/32
80/100	M20x1,5	33	77	20	25	25	26	15°	0,67	QM/8080/32

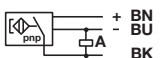
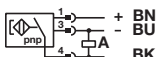
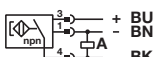
Switch mounting
QM/33/XXX/22


- 1 Magnetically operated switch
 2 Switch mounting bracket

Ø	B	R max.	Model
32	10	29	QM/33/432/22
40	10	32	QM/33/440/22
50	10	38	QM/33/450/22
63	10	46	QM/33/463/22
80	12	54	QM/33/480/22
100	10	59	QM/33/100/22

[illegible]

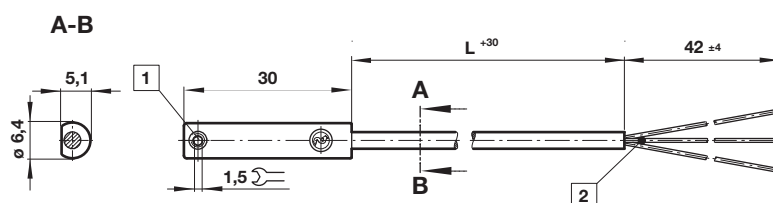
Technical data - Solid state - additional informations see data sheet N/en 4.3.007

Symbol	Voltage (V d.c.)	Current maximum (mA)	Function	Operating temperature (°C)	LED	Protection class	Plug	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAP/*V
	10 ... 30	150	PNP	-40 ... +80	•	IP68	—	5	PUR 3 x 0,14	37	M/50/EAP/5U
	10 ... 30	150	PNP	-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CP *1)
	10 ... 30	150	PNP	-40 ... +80	•	IP67	M12 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CC *1)
	10 ... 30	150	NPN	-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAN/*V
	10 ... 30	150	Closer	-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAN/CP *1)

* Insert cable length; *1) Plug-in connector below; Color code: BK = black, BN = brown, BU = blue

Drawings

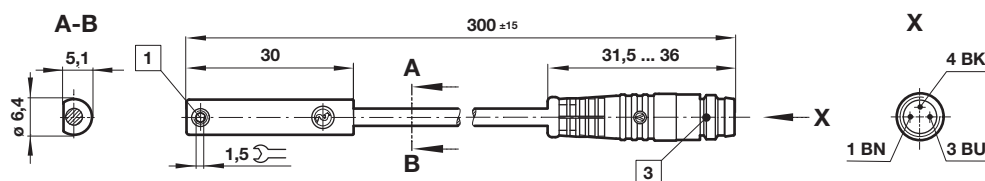
M/50/EAP/*V,
M/50/EAN/*V
Cable length L = 2, 5 or 10 m



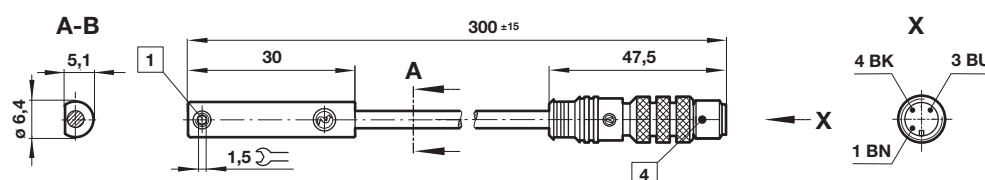
Dimensions in mm
Projection/First angle



M/50/EAP/CP,
M/50/EAN/CP



M/50/EAP/CC



- 1 Fixing screw
- 2 Color code: BK = black; BN = brown; BU = blue
- 3 Plug M8 x 1
- 4 Plug M12 x 1

Accessories

Plug-in connector cable with nut



Outer cover	Cable length (m)	Weight (kg)	Connector	Connector
PVC 3 x 0,25	5 m	0,18	M8 x 1	M/P73001/5
PUR 3 x 0,25	5 m	0,18	M8 x 1	M/P73002/5
PUR 3 x 0,34	5 m	0,21	M12 x 1	M/P34594/5

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

»Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI NORGRN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.