

## COMPACT PENDANT ARM SERIES 4 SYSTEM 80, TYPE 12



### INDUSTRY STANDARDS

NEMA/IEEMAC Type 12  
IEC 60529, IP55  
DIN 40050

### APPLICATION

The Compact Series 4 System 80 Pendant Arms are heavy duty systems that are equally flexible in allowing operators to move controls into and out of position, but they can accommodate heavier weight loads. At 3.3 ft. (1 m), the Series 4 System 80 holds 337 lb. (153.2 kg).

System 80 is recommended for use with Concept HMI and ProLine Sloped Front Enclosures. The hole patterns are different from other systems; cutouts will be different.

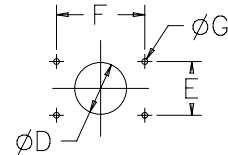
### SPECIFICATIONS

- Heavy cast steel and cast aluminum couplings and heavy-wall steel tubing provide excellent structural strength
- Each system includes multiple coupling types and three standard tube lengths (.5 m, 1 m and 2 m) which combine to form numerous configurations
- Steel tubing has 5-mm (0.2-inch) wall thickness. Tubing is cold-formed, welded square and rectangular steel tubes.
- Tubing provides structural integrity and acts as a conduit for equipment wiring
- Removable access plates (provided with set-up joint, elbow and elbow couplings) simplify cable installation inside tubing
- Heavy-duty bearings in all movable joints for convenient, smooth operation and enhanced durability to withstand stresses of repeated use
- Deep tube fittings in all couplings
- Adjustable setscrews allow for accurate alignment of supporting tubes
- Gasket is oil-resistant neoprene

### FINISH

Couplings are RAL 7035 light-gray polyester powder paint. Access plates and tubing are light-gray. Bellows are black.

### Standard Cutout for Mounting



C2804-C

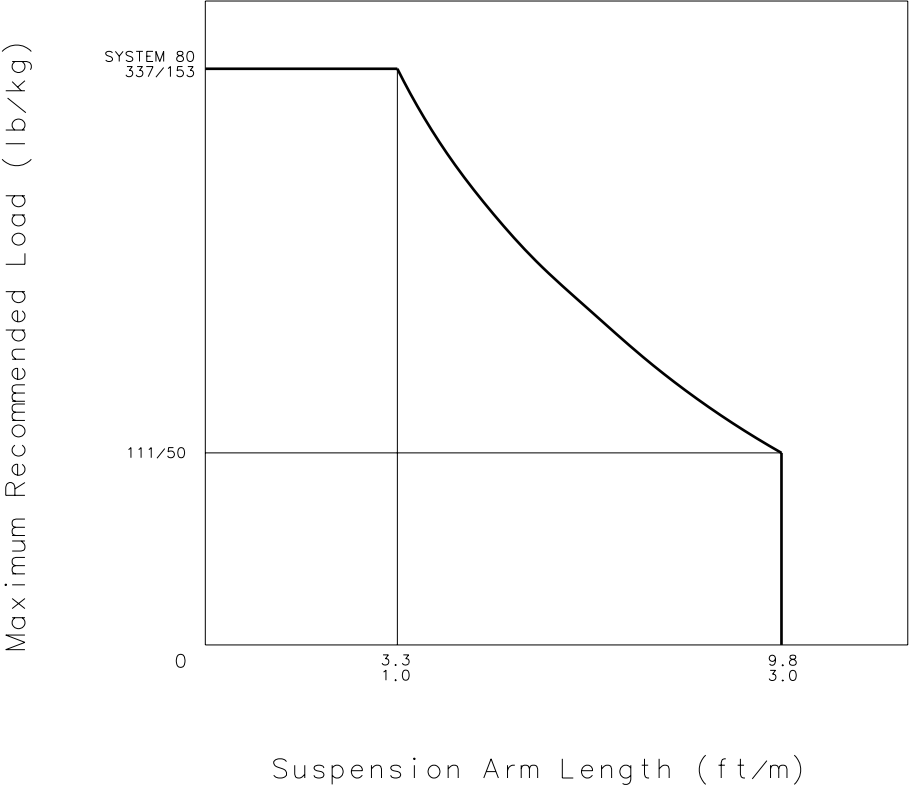
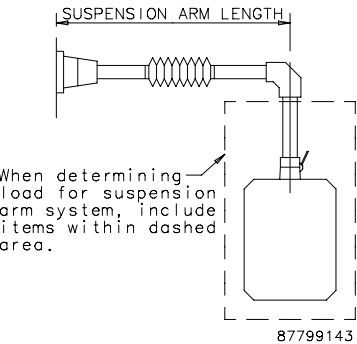
### Dimensions for Cutouts

System	80 (mm)	80 (in.)
<b>Set-Up Joint</b>		
Ø D MAX	105	4.13
E	122	4.82
F	122	4.82
Ø G	13	0.51
<b>Wall Joint or Cable Wall Joint</b>		
Ø D MAX	80	3.15
E	80	3.15
F	138	5.43
Ø G	13	0.51
<b>Wall Flange or Base Bracket</b>		
Ø D MAX	105	4.13
E	122	4.80
F	122	4.80
Ø G	13	0.51
<b>Flange Coupling or Flange Elbow Coupling</b>		
Ø D MAX	91	3.58
E	80	3.15
F	80	3.15
Ø G	7	0.26
<b>Angle Adapter Plate</b>		
Ø D MAX	91	3.58
E	80	3.15
F	120	4.72
Ø G	7	0.26

SYSTEM LOAD CAPACITY

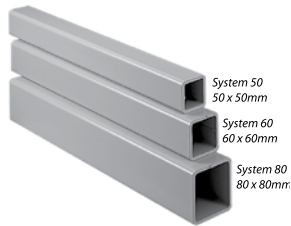
The Series 4 Pendant Arm load graph is the result of load capacity tests. Please contact Hoffman for specific application information.

Load Diagram



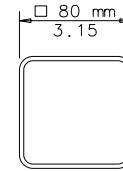
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## TUBES



Square and rectangular tubes are cold-formed, hollow, welded steel with 5-mm wall thickness. Finish is RAL 7035 light-gray polyester powder paint. Tubing provides structural integrity and acts as a conduit for equipment wiring. Available in 500-, 1000- and 2000-mm lengths. All pendant arm connections are sized to fit appropriate tube sizes.

**BULLETIN: CS4**



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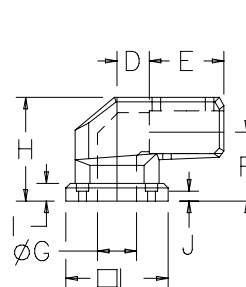
Catalog Number	System	Size mm/in.	Length mm/in.	Weight (lb.)	External Dimensions mm/in.	Wall Thickness mm/in.	Inside Cross Section (sq. cm)	Inside Cross Section (sq. in.)
CCS8T5	80	80 x 80	489	13.0	80 sq.	5	49	7.60
		3.10 x 3.10	19.25		3.15	0.20		
CCS8T10	80	80 x 80	991	24.5	80 sq.	5	49	7.60
		3.10 x 3.10	39.00		3.15	0.20		
CCS8T20	80	80 x 80	1988	49.0	80 sq.	5	49	7.60
		3.10 x 3.10	78.25		3.15	0.20		

## SET-UP JOINT

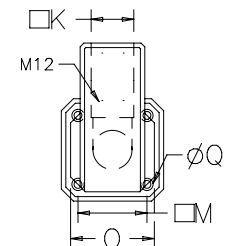


Cast iron finished with RAL 7035 light-gray polyester powder paint. Mounts equipment to horizontal surface. Permits pendant arm to be rotated or turned 306 degrees. Pivot bearing is maintenance-free. Setscrews, removable access plate and gasket are included. Mounting hardware is not provided.

**BULLETIN: CS4**



Side View



Top View

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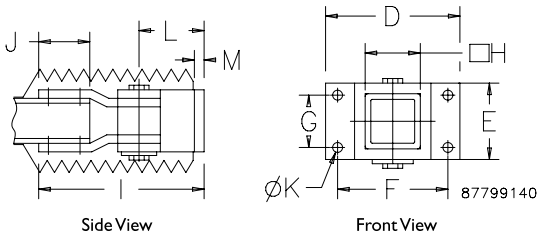
Catalog Number	System	L mm/in.	H mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	I mm/in.	J mm/in.	K mm/in.	M mm/in.	O mm/in.	Q mm/in.	Weight (lb.)
CCS8SJLG	80	174	162	56	120	107	75	25	12	80	122	152	13	45.5
		6.85	6.38	2.19	4.72	4.21	2.95	0.98	0.47	3.15	4.80	5.98	0.51	

WALL JOINT



Welded steel plate construction finished with RAL 7035 light-gray polyester powder paint. Mounts equipment to vertical surface. Swivel range is approximately 180 degrees. Includes bellows with zipper, seals and setscrews. Adjustable tension at pivot point. Rotational limiter is optional. Mounting hardware not provided.

BULLETIN: CS4



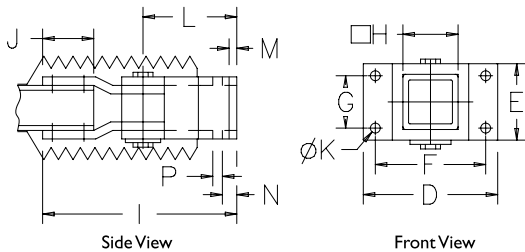
Catalog Number	System	D mm/in.	E mm/in.	F mm/in.	G mm/in.	H mm/in.	I mm/in.	J mm/in.	K mm/in.	L mm/in.	M mm/in.	Weight (lb.)
CCS8WJRLG	80	161 6.34	104 4.09	138 5.43	80 3.15	80 3.15	300 11.81	100 3.94	13 0.51	135 5.31	10 0.39	21.6

CABLE WALL JOINT



Welded steel plate construction finished with RAL 7035 light-gray polyester powder paint. Mounts equipment to vertical surface. Provides cable access to inside of pendant system from above or below. Swivel range approximately 180 degrees. Includes bellows with zipper, seal and setscrews. Adjustable tension at pivot point. Rotation limiter is optional. Mounting hardware not provided.

BULLETIN: CS4



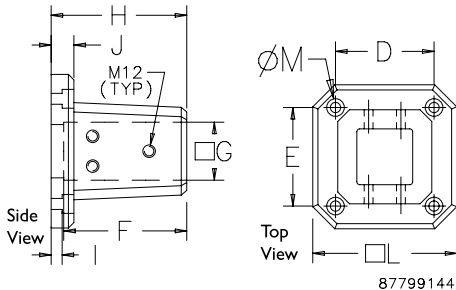
Catalog Number	System	D mm/in.	E mm/in.	F mm/in.	G mm/in.	H mm/in.	I mm/in.	J mm/in.	K mm/in.	L mm/in.	M mm/in.	N mm/in.	P mm/in.	Weight (lb.)
CCS8WJCRLG	80	165 6.50	104 4.09	138 5.43	80 3.15	80 3.15	330 12.99	100 3.94	13 0.51	165 6.50	10 0.39	20 0.79	60 2.36	20.9

WALL FLANGE



Wall Flange expands mounting options to include wall-mount as well as horizontal tube applications. Cast iron construction finished with RAL 7035 light-gray polyester powder paint. Setscrews, gasket and seals are included. Mounting hardware not provided.

BULLETIN: CS4

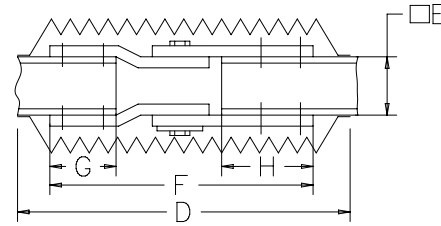


Catalog Number	System	L mm/in.	H mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	I mm/in.	J mm/in.	M mm/in.	Weight (lb.)
CCS8WFLG	80	174 6.85	160 6.30	122 4.80	122 4.80	143 5.63	80 3.15	12 0.47	25 0.98	13 0.51	20.1



Welded steel plate construction finished with RAL 7035 light-gray polyester powder paint. Mounts to pendant tube. Swivel range is approximately 180 degrees. Setscrews and bellows with zipper are included. Rotational limiter is optional.

**BULLETIN: CS4**



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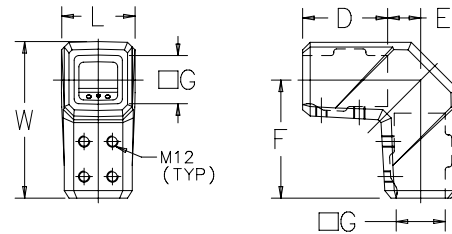
Catalog Number	System	D mm/in.	E mm/in.	F mm/in.	G mm/in.	H mm/in.	Weight (lb.)
CCS8IJRLG	80	400 15.75	80 3.15	330 12.99	100 3.94	100 3.94	21.4

## ELBOW



Cast aluminum with RAL 7035 light-gray polyester powder paint finish. Removable access plate. Setscrews and gaskets are included.

**BULLETIN: CS4**



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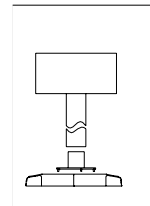
Catalog Number	System	L mm/in.	W mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	Weight (lb.)
CCS8ELLG	80	108 4.25	225 8.86	120 4.72	50 1.97	170 6.69	80 3.15	18.7

## ADAPTER PLATE



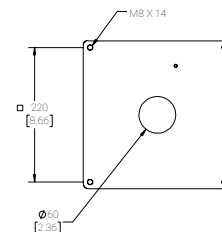
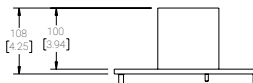
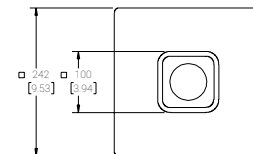
Compact Series 4 Adapter Plate is attached to the Flex Base to allow connection with the CS4 tube. Assembled Compact Series 4 system has a max weight load of 337 lb. (153.2 kg).

**BULLETIN: CS4**



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Catalog Number	System	Weight (lb.)	Weight (kg)
S2MSC4APG	80	12.52	5.7



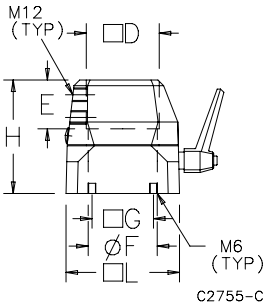
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FLANGE COUPLING



Flange Coupling mounts to enclosure, enabling enclosure to be rotated 300 degrees. Enclosure can be locked in position. Safety stop and maintenance-free bearing. Finish is RAL 7035 light-gray polyester powder paint. Includes installation instructions, setscrews, gaskets and mounting hardware.

BULLETIN: CS4



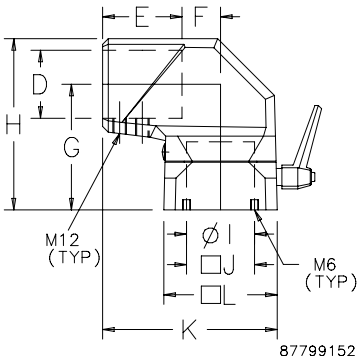
Catalog Number	System	L mm/in.	H mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	Weight (lb.)
CCS8FCLG	80	120 4.72	110 4.33	80 3.15	53 2.09	91 3.58	80 3.15	7.2

FLANGE ELBOW COUPLING



Coupling mounts to enclosure, enabling enclosure to be rotated 300 degrees. Enclosure can be locked in position. Removable access plates. Finish is RAL 7035 light-gray polyester powder paint. Setscrews, gasket and mounting hardware are included.

BULLETIN: CS4



Catalog Number	System	L mm/in.	H mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	I mm/in.	J mm/in.	K mm/in.	Weight (lb.)
CCS8FECLG	80	120 4.72	173 6.81	80 3.15	90 3.54	54 2.13	121 4.76	91 3.58	80 3.15	204 8.03	9.5

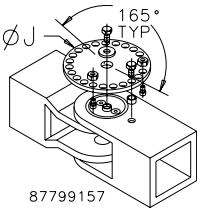
ROTATION LIMITER



Accessory for use with Wall Joint, Cable Wall Joint and Intermediate Joint. Limits the rotation of these joints which normally rotate 180 degrees. Rotation Limiter provides stops in 15-degree increments. The limiter is a heavy-duty steel disk that attaches to the pivot point on each joint. Moveable stop pins provide adjustment.

BULLETIN: CS4

Catalog Number	System	J (mm)	J (in.)	Weight (lb.)
CCS814RL	80	119	4.70	1.3





Mounts between suspension arm and HMI enclosure to provide both swivel and tilt options for machine operator. Cast aluminum assembly finished with RAL 7035 light-gray polyester powder paint. Center opening for control cables. Tilt knob allows infinite tilt adjustment from horizontal to 30 degrees. Swivel allows 300-degree maximum rotation. Setscrews, seals and enclosure mounting screws are included.

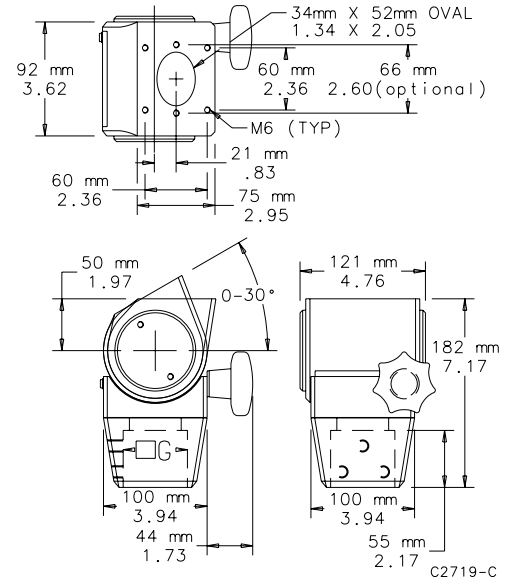
**Maximum load for overhead applications is 110 lb. (50 kg).**

**BULLETIN: CS4**



Catalog Number	System	G (mm)	G (in.)	Weight (lb.)
CCS8STBLG	80	80	3.15	7

Not recommended to be used in combination with base with cutout for sloped-front PBSK66 or PBSK66SS.

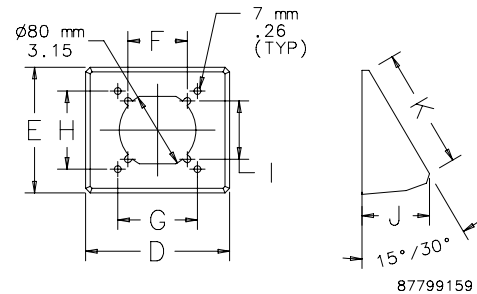


## ANGLE ADAPTER PLATE



Cast aluminum finished with RAL 7035 light-gray polyester powder paint. Provides connection between enclosure and flange coupling. Includes gasket and installation hardware.

**BULLETIN: CS4**



Catalog Number	System	Angle	D mm/in.	E mm/in.	F mm/in.	G mm/in.	H mm/in.	I mm/in.	J mm/in.	K mm/in.	Weight (lb.)
CCS568AA15LG	50, 60, 80	15°	148 5.83	127 5.00	60 2.36	80 3.15	80 3.15	60 2.36	39 1.54	118 4.65	1.0
CCS568AA30LG	50, 60, 80	30°	148 5.83	127 5.00	60 2.36	80 3.15	80 3.15	60 2.36	66 2.66	120 4.72	1.3

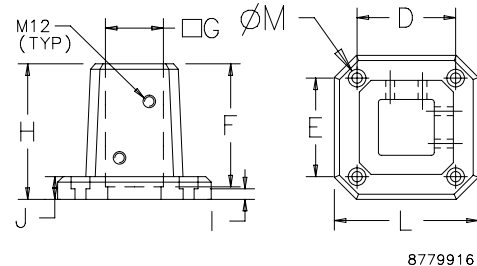
For CCS14AA15LG, system 80/140, 15-degree angle, 3.6 lb., see Angle Adapter Plate System 80/140 dimension drawing for dimension information.

## BASE BRACKET



For vertical-tube mounting or to mount tube to floor. Bracket is cast iron finished with RAL 7035 light-gray polyester powder paint. Setscrews, gasket and seals are included. Mounting hardware not provided.

**BULLETIN: CS4**



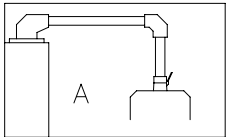
Catalog Number	System	L mm/in.	H mm/in.	D mm/in.	E mm/in.	F mm/in.	G mm/in.	I mm/in.	J mm/in.	M mm/in.	Weight (lb.)
CCS8BBLG	80	174 6.85	160 6.30	122 4.80	122 4.80	143 5.63	80 3.15	12 0.47	25 0.98	13 0.51	20.4

SYSTEM CONFIGURATIONS

Note to Specifier:

Select suspension system sizing using the Compact Series 4 System 80 load capacity chart.

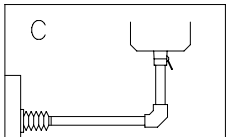
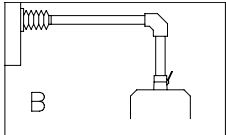
- 1. Tube catalog numbers are not included in configuration tables.
- 2. There are multiple configurations possible with many of the options shown. Components can be inverted. For illustration purposes, configurations may show how components can be inverted or used with varying enclosure couplings.



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A

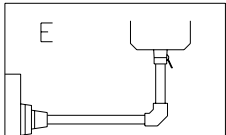
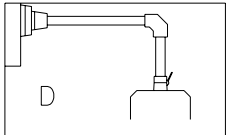
Description	Qty.	Catalog Number
Set-up joint	1	CCS8SJLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt	1	CCS8FCLG CCS8STBLG



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B AND C

Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1	CCS8WJRLG CCS8WJCRLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt	1	CCS8FCLG CCS8STBLG

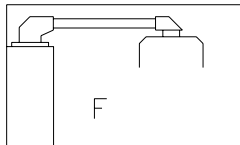


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D AND E

Description	Qty.	Catalog Number
Wall flange	1	CCS8WFLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt	1	CCS8FCLG CCS8STBLG

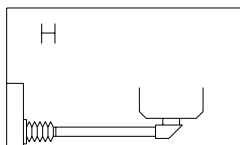
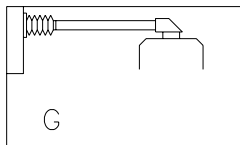




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## F

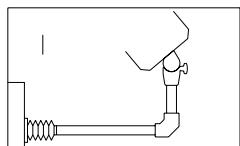
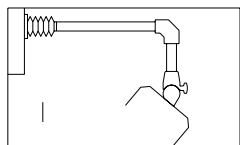
Description	Qty.	Catalog Number
Set-up joint	1	CCS8SJLG
Flange elbow coupling	1	CCS8FECLG



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## G AND H

Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1 1	CCS8WJRLG CCS8WJCRLG
Flange elbow coupling	1	CCS8FECLG

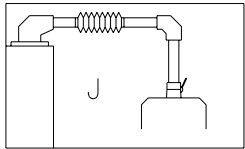


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## I

Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1 1	CCS8WJRLG CCS8WJCRLG
Elbow	1	CCS8ELLG
Swivel tilt <sup>a</sup>	1	CCS8STBLG

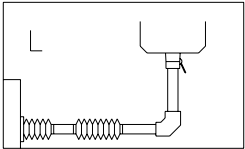
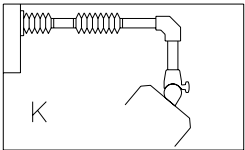
<sup>a</sup>Maximum load for overhead applications is 110 lb. (50 kg) including enclosure.



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J

Description	Qty.	Catalog Number
Set-up joint	1	CCS8SJLG
Intermediate joint	1	CCS8IJRLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt	1	CCS8FCLG CCS8STBLG

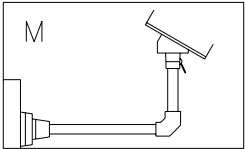


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K AND L

Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1	CCS8WJRLG CCS8WJCRLG
Intermediate joint	1	CCS8IJRLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt <sup>a</sup>	1	CCS8FCLG CCS8STBLG

<sup>a</sup>Maximum load for overhead applications is 110 lb. (50 kg) including enclosure.

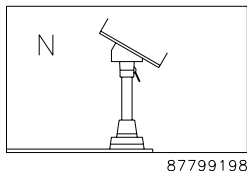


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M

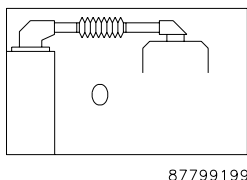
Description	Qty.	Catalog Number
Wall flange	1	CCS8WFLG
Elbow	1	CCS8ELLG
Flange coupling	1	CCS8FCLG

## N



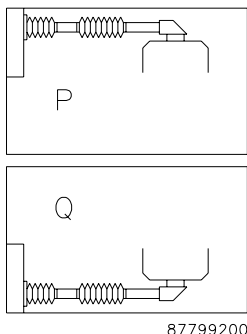
Description	Qty.	Catalog Number
Base bracket	1	CCS8BBLG
Flange coupling	1	CCS8FCLG
Angle adapter 15° or Angle adapter 30°	1 1	CCS568AA15LG CCS568AA30LG

## O



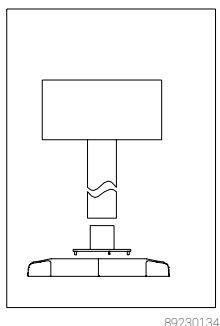
Description	Qty.	Catalog Number
Set-up joint	1	CCS8SJLG
Intermediate joint	1	CCS8IJRLG
Flange elbow coupling	1	CCS8FECLG

## P AND Q



Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1 1	CCS8WJRLG CCS8WJCRLG
Intermediate joint	1	CCS8IJRLG
Flange elbow coupling	1	CCS8FCLG

## R



## R

Description	Qty.	Catalog Number
Adapter Plate	1	S2MSC4APG

Notes