

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



#### **INDUSTRY STANDARDS**

NEMA/EEMAC 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.

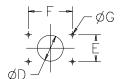
#### **SPECIFICATIONS**

- 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 coldformed, 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

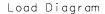
#### **Dimensions for Cutouts**

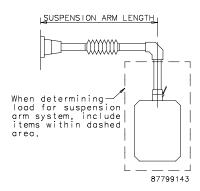
System	80 (mm)	80 (in.)
Set-Up Joint	80 (IIIII)	ou (III.)
Ø D MAX	105	4.13
E	122	4.82
F	122	4.82
ØG	13	0.51
Wall Joint or Cable Wall Joint		
Ø D MAX	80	3.15
E	80	3.15
F	138	5.43
ØG	13	0.51
Wall Flange or Base Bracket		
Ø D MAX	105	4.13
E	122	4.80
F	122	4.80
ØG	13	0.51
Flange Coupling or Flange Elbow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

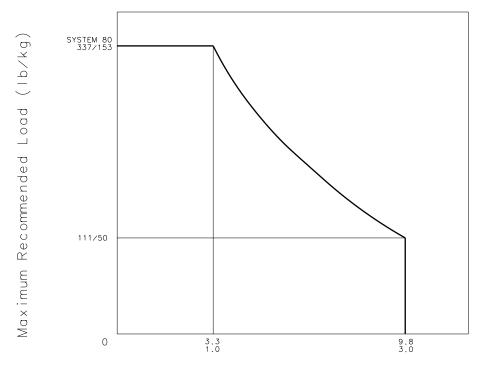


## **SYSTEM LOAD CAPACITY**

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







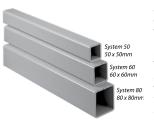
Suspension Arm Length (ft/m)

89001155

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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.

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		Size	Length		External Dimensions	Wall Thickness		
Catalog Number	System	mm/in.	mm/in.	Weight (lb.)	mm/in.	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		

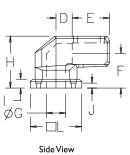
#### **SET-UP JOINT**

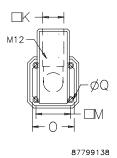


Cast iron finished with RAL 7035 light-gray polyester powder paint. Mounts equipment to horizontal surface. Permits pendant arm to be rotated or turned 306 degrees. Pivot bearing is maintenance-free. Setscrews, removable access plate and gasket are included. Mounting hardware is not provided.

**BULLETIN: CS4** 







Top View

		L	Н	D	E	F	G		J	K	М	0	Q	
Catalog Number	System	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**

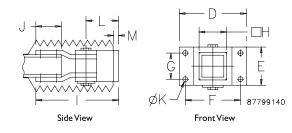


Welded steel plate construction finished with RAL 7035 light-gray polyester powder paint. Mounts equipment to vertical surface. Swivel range is approximately 180 degrees.

Includes bellows with zipper, seals and setscrews. Adjustable tension at pivot point. Rotational limiter is optional. Mounting hardware not provided.

#### **BULLETIN: CS4**





		D	E	F	G	Н	1	J	K	L	М	
Catalog Number	System	mm/in.	Weight (lb.)									
CCS8WJRLG	80	161	104	138	80	80	300	100	13	135	10	21.6
		6.34	4.09	5.43	3.15	3.15	11.81	3.94	0.51	5.31	0.39	

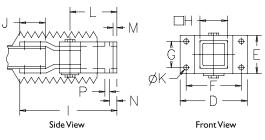
#### **CABLE WALL JOINT**



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** 





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

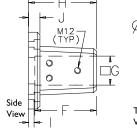
#### **WALL FLANGE**

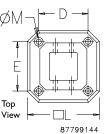


Wall Flange expands mounting options to include wall-mount as well as horizontal tube applications. Cast iron construction finished with RAL 7035 light-gray polyester powder paint. Setscrews, gasket and seals are included. Mounting hardware not provided.

#### **BULLETIN: CS4**







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

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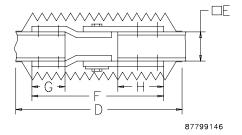




Welded steel plate construction finished with RAL 7035 light-gray polyester powder paint. Mounts to pendant tube. Swivel range is approximately 180 degrees. Setscrews and bellows with zipper are included. Rotational limiter is optional.

#### **BULLETIN: CS4**





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

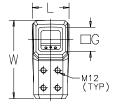
#### **ELBOW**

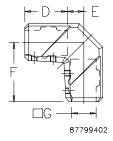


Cast aluminum with RAL 7035 lightgray polyester powder paint finish. Removable access plate. Setscrews and gaskets are included.

#### **BULLETIN: CS4**







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



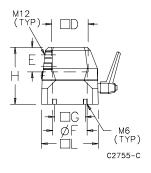
#### **FLANGE COUPLING**



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** 





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

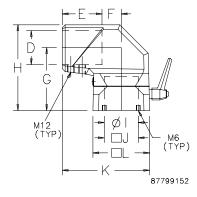
#### **FLANGE ELBOW COUPLING**



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** 





		L	Н	D	E	F	G	1	J	K	
Catalog Number	System	mm/in.	Weight (lb.)								
CCS8FECLG	80	120	173	80	90	54	121	91	80	204	9.5
		4.72	6.81	3.15	3.54	2.13	4.76	3.58	3.15	8.03	

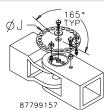
#### **ROTATION LIMITER**



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** 

Ostala a Namahan	Contant	1()	1/: \	Weight
Catalog Number	System	J (mm)	J (in.)	(lb.)
CCS814RL	80	119	4.70	1.3



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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.

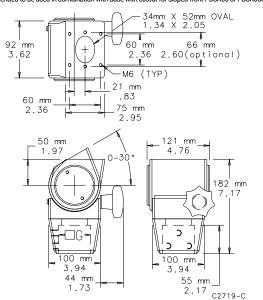
Maximum load for overhead applications is 110 lb. (50 kg).

**BULLETIN: CS4** 



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

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

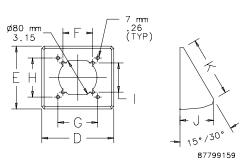


## **ANGLE ADAPTER PLATE**



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** 



			D	Е	F	G	Н		J	K	
Catalog Number	System	Angle	mm/in.	Weight (lb.)							
CCS568AA15LG	50, 60, 80	15°	148	127	60	80	80	60	39	118	1.0
			5.83	5.00	2.36	3.15	3.15	2.36	1.54	4.65	
CCS568AA30LG	50, 60, 80	30°	148	127	60	80	80	60	66	120	1.3
			5.83	5.00	2 36	3 15	3 15	2 36	2 66	4 72	

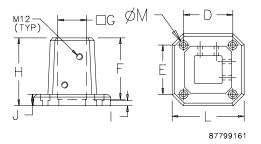
For CCS14AA15LG, system 80/140, 15-degree angle, 3.6 lb., see Angle Adapter Plate System 80/140 dimension drawing for dimension information.

#### **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** 



		L	Н	D	E	F	G	- 1	J	М	
Catalog Number	System	mm/in.	Weight (lb.)								
CCS8BBLG	80	174	160	122	122	143	80	12	25	13	20.4
		6.85	6.30	4.80	4.80	5.63	3.15	0.47	0.98	0.51	



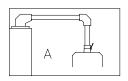
#### **SYSTEM CONFIGURATIONS**

- Note to Specifier:

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

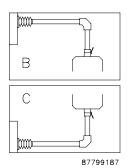
  1. Tube catalog numbers are not included in configuration tables.

  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.



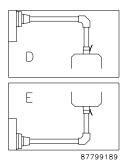
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Description	Qty.	Catalog Number
Set-up joint	1	CCS8SJLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt	1	CCS8FCLG CCS8STBLG



**BANDC** 

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

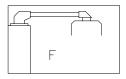


**DANDE** 

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

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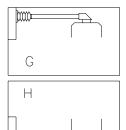
F

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

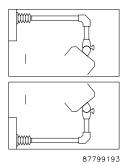
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## **GANDH**



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

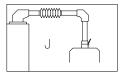


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Description	Qty.	Catalog Number	
Wall joint or Cable wall joint	1	CCS8WJRLG CCS8WJCRLG	
Elbow	1	CCS8ELLG	
Swivel tilt <sup>a</sup>	1	CCS8STBLG	

 $<sup>^{\</sup>rm a}$ Maximum load for overhead applications is 110 lb. (50 kg) including enclosure.





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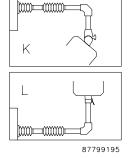
#### J

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

## **KANDL**

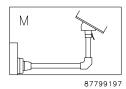
Description	Qty.	Catalog Number
Wall joint or Cable wall joint	1	CCS8WJRLG CCS8WJCRLG
Intermediate joint	1	CCS8IJRLG
Elbow	1	CCS8ELLG
Flange coupling or Swivel tilt <sup>a</sup>	1 1	CCS8FCLG CCS8STBLG

 $<sup>^{\</sup>mathrm{a}}\mathrm{Maximum}$  load for overhead applications is 110 lb. (50 kg) including enclosure.



## M

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



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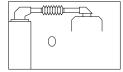




#### N

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





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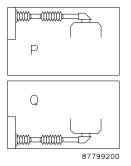
 Description
 Qty.
 Catalog Number

 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



# **Notes**



